

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

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DOCUMENT SUBMITTAL FORM

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

UST FACILITY INFORMATION:

Honeywell Engines Product Center Facility Name 0-002227 Facility ID
 111 South 34th Street Street Address 0393.02 - .10, .15-.20 LUST Number(s)
 Phoenix City 85034 Zip Code Maricopa County

PERSON RESPONSIBLE FOR SUBMITTING DOCUMENT:

Troy Kennedy Name
 101 Columbia Turnpike Street Address Morristown, NJ City 07962 Zip Code
(973) 455-4297 Telephone (daytime)

PERSON CATEGORY

ADEQ ID #

- UST owner 4875
 UST operator _____
 UST volunteer _____
 Property owner _____

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

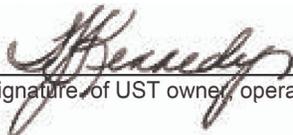
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| <input type="checkbox"/> * 14 day report (suspected release) | <input type="checkbox"/> * Free Product Report | <input type="checkbox"/> * Addendum (check related document type) |
| <input type="checkbox"/> * 90 day report (suspected release) | 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

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

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


 Signature of UST owner, operator or volunteer

5/27/10
 Date

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

Remediation Portfolio Director
 Title

Honeywell

Health, Safety, Environment and Remediation
101 Columbia Turnpike Solvay-4
Morristown, NJ 07962
(973) 455-4279

May 27, 2010

By FedEx

Mark W. Lucas
Case Manager – LUST Enforcement Unit
Inspections & Compliance Section
Waste Programs Division
Arizona Department of Environmental Quality
1110 W. Washington Street, #4415A-3
Phoenix, AZ 85007

Re: *First Quarter 2010 Remediation Status Report*
LUST File #0393.02-.10, .15-.20
Facility ID #0-002227

Dear Mr. Lucas:

Honeywell is submitting this First Quarter 2010 Remediation Status Report in accordance with requirements in the Arizona Department of Environmental Quality's (ADEQ) Corrective Action Plan (CAP) Final Approval letter dated October 7, 2005, and CAP modification approval letters dated December 20, 2005, March 7, 2006, September 28, 2006, March 27, 2007, and February 29, 2008.

If you should have any questions or require discussion, please contact me at 973-455-4279 or Doug Ashline at 480-295-3940. For your convenience, my e-mail address is troy.j.meyer@honeywell.com and Doug's is douglas.ashline@ch2m.com.

Sincerely,



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

Mr. Lucas
May 27, 2010
Page 2 of 2

Copies w/attachment:

Sherri Zendri, ADEQ (electronic copy)
Joellen Meitl, ADEQ (electronic copy)
Jamey Watt, USEPA (electronic copy)
Rebecca Godley, City of Phoenix Aviation
Ben Lane, City of Phoenix Aviation (electronic copy)
Donn Stoltzfus, City of Phoenix (electronic copy)
Joe Francis, City of Phoenix Aviation (electronic copy)
Mark Kuhn, Applied Remedial Technologies, Inc. (electronic copy)
Peter Mock, Peter Mock Groundwater Consulting (electronic copy)
John Kuiper, AMEC (electronic copy)
Mary Moore, Lindon Park Neighborhood Association
Mario Castaneda, Gateway Community College (electronic copy)
Rick Loewen, Honeywell
John Mojka, Honeywell (electronic copy)

Final Report

First Quarter 2010 Remediation Status Report

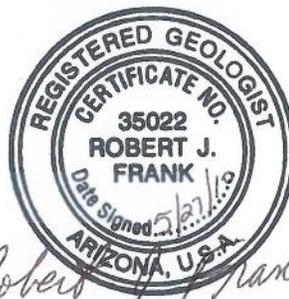
Honeywell 34th Street Facility
Phoenix, Arizona
Facility ID No. 0-002227
LUST File Nos. 0393.02-.10, .15-.20

Prepared for
Honeywell International Inc.

May 2010



Expires 6-30-2010



Expires 6-30-2012

Prepared by



CH2MHILL

Executive Summary

This quarterly status report summarizes the ongoing underground storage tank remediation and monitoring activities conducted during First Quarter 2010 for Leaking Underground Storage Tank File Nos. 0393.02-.10, .15-.20, Facility ID No. 0-002227 at the Honeywell International Inc. (Honeywell) 34th Street Aerospace Engines Product Center (Facility or Honeywell facility). Remedial activities to address free-phase petroleum hydrocarbons detected below the eastern portion of the Honeywell facility and the northern portion of Phoenix Sky Harbor International Airport include manual pumping of free-product from existing groundwater monitoring wells, and the extraction and treatment of soil vapors by the Arizona Department of Environmental Quality-approved biologically-enhanced soil vapor extraction (BSVE) system.

ES.1 BSVE Remediation and Free Product Recovery

As of the end of First Quarter 2010, 36 injection/extraction wells were operating in extraction mode with an average soil vapor extraction rate of approximately 1,334 cubic feet per minute for the quarter. The system operated for approximately 1,450 hours between January 1, 2010 and March 31, 2010, with about 360,000 pounds of hydrocarbons estimated to have been removed from the subsurface through biodegradation and treatment of extracted vapors during this period (approximately 5,000 pounds per day). From commencement of the initial ramp-up period (May 27, 2009) through the end of the First Quarter 2010, approximately 1,161,000 pounds of hydrocarbons were estimated to have been removed. Additionally, the BSVE system has removed an estimated 227 pounds of chlorinated volatile organic compounds (VOCs) from the subsurface as of the end of the First Quarter 2010 (48 pounds during the quarter). Air injection testing began during the First Quarter 2010, and full-scale injection is anticipated to commence in the Second Quarter 2010. Increased injection rates will be used to further enhance biological degradation of the petroleum hydrocarbons in the vadose zone.

In addition to the mass removed by the BSVE system, approximately 4 gallons of free product were directly recovered from groundwater wells during First Quarter 2010, increasing the total volume of free product recovered to-date (since June 1999) to 7,289 gallons.

ES.2 Vadose Zone Monitoring

Vadose zone monitoring is conducted to evaluate the operation of the BSVE system and includes the collection of soil vapor samples for VOC analysis and field parameter measurements. The First Quarter 2010 vadose zone monitoring indicated:

- No monitoring locations had VOC concentrations exceeding either the BSVE operation vapor action levels or the long-term vapor action levels.

- No subsurface utility vaults exhibited detectable lower explosive limit (LEL) measurements (all <1 percent volume per volume).
- One shallow subsurface location (P-26-U) in the Phase C area exhibited an LEL measurement exceeding 100 percent of the LEL (February 9, 2010).
- VOC and methane concentrations generally decreased compared to Fourth Quarter 2009 concentrations.
- The BSVE system is effectively bringing oxygen into the deeper portions of the vadose zone.

ES.3 Groundwater Monitoring

Groundwater monitoring consists of monthly (and biweekly when applicable) water-level and free-product thickness measurements and quarterly groundwater sampling (for VOCs and petroleum hydrocarbons). Notable aspects of the First Quarter 2010 groundwater monitoring included:

- Free product was only observed in monitoring wells that previously contained free product; no free-product thicknesses measured during the quarter exceeded historical maximum values. The maximum thickness measured during the quarter was 1.53 feet (ASE-107A), measured during the quarterly event on March 1, 2010.
- March 2010 water levels were variable with respect to December 2009 water levels. Water levels declined an average of 0.22 foot in 32 monitoring wells, rose an average of 0.30 foot in 23 monitoring wells, and remained unchanged in one monitoring well. Groundwater flow directions remained similar to previous quarters (southwesterly).
- VOC and petroleum hydrocarbon detections in groundwater were similar in magnitude and quantity to Fourth Quarter 2009.

ES.4 Contingency Triggers and Measures

The following is the list of the contingency triggers for First Quarter 2010 and the resulting measures taken:

- Water levels collected on March 1, 2010 were between 7 feet and 17 feet higher than water levels collected on December 1, 2004 (historical low), thus the contingency relative to groundwater levels remained triggered. For Phases A and B, Honeywell will continue injection and extraction operations in Second Quarter 2010. For the Phase C design, Honeywell raised the elevation of the top of the well screens to accommodate the current groundwater levels and future potential rises in groundwater levels in this area. The Phase C wells were installed in Fourth Quarter 2010; the initial design was modified to include three additional injection/extraction wells, bringing the total injection/extraction well count to 10. For Phase D, Honeywell continues to work in cooperation with the City of Phoenix to evaluate appropriate remedial alternatives.

- Free-product thicknesses exceeding the Corrective Action Plan metric of 0.1 foot occurred in four monitoring wells (ASE-67A, ASE-107A, ASE-111A, and ASE-115A). As such, free-product monitoring and manual recovery (as needed) was conducted biweekly during the quarter at those monitoring wells.
- The free-product thickness in monitoring well ASE-107A (located on Phoenix Sky Harbor International Airport property) exceeded the Corrective Action Plan metric of 0.75 foot for installing a dedicated, automatic free-product pump. However, a dedicated, automatic free-product pump was not installed in monitoring well ASE-107A because installation of recovery equipment in that well would cause disruption to airport operations. Free-product monitoring and manual recovery (if needed) is conducted biweekly at this monitoring well, however these activities could not be conducted on February 3, 2010 and February 18, 2010 due to restricted access.
- Percent LEL measurements exceeded the LEL threshold in one shallow soil vapor monitoring location (P-26-U) in Phase C during First Quarter 2010. As a result of the exceedance, monitoring was conducted in the surrounding vaults (ELE-VLT-02 and FBO-VLT-01) on February 11, 2010. Percent-LEL measurements at these vault locations were all below the detection limit of 1 percent volume per volume.

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Acronyms and Abbreviations

µg/L	micrograms per liter
ADEQ	Arizona Department of Environmental Quality
BSVE	biologically-enhanced soil vapor extraction
BSVE O&M Manual	<i>Operation and Maintenance Manual for the Biologically-enhanced Soil Vapor Extraction System, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File No. 0393.02-.10, .15-.17</i>
BSVE O&M Plan	<i>Operation and Maintenance Plan for the BSVE Air Pollution Control Equipment, Honeywell 34th Street System, Phoenix, Arizona</i>
BTU	British thermal unit
CAP	Corrective Action Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COP	City of Phoenix
DQE	data quality evaluation
Facility	Honeywell 34 th Street Facility
Honeywell	Honeywell International Inc.
LEL	lower explosive limit
LUST	leaking underground storage tank
LUST FSP	Leaking Underground Storage Tank Field Sampling Plan
MCAQD	Maricopa County Air Quality Department
MCL	maximum contaminant level
MTBE	methyl tert-butyl ether
PSHIA	Phoenix Sky Harbor International Airport
TCA	trichloroethane
TCE	trichloroethene
TPH	total petroleum hydrocarbons
TRPH	total recoverable petroleum hydrocarbon
TTA	target treatment area

USEPA	United States Environmental Protection Agency
UST	underground storage tank
VAL	vapor action level
VAL-BSVE	vapor action level for biologically-enhanced soil vapor extraction
VAL-LT	long-term vapor action level
VOC	volatile organic compound

1.0 Introduction

1.1 Scope and Purpose

This quarterly status report summarizes the ongoing underground storage tank (UST) remediation and monitoring activities conducted during First Quarter 2010 for Leaking Underground Storage Tank (LUST) File Nos. 0393.02-.10, .15-.20, Facility ID No. 0-002227 at the Honeywell International Inc. (Honeywell) 34th Street Aerospace Engines Product Center (Facility or Honeywell facility).

This report is being submitted pursuant to reporting requirements in the Arizona Department of Environmental Quality (ADEQ) letter dated October 7, 2005 (ADEQ, 2005a) issuing final approval of Honeywell's Corrective Action Plan (CAP) (CH2M HILL, 2004a-b) and in accordance with ADEQ's CAP modification approval letters dated December 20, 2005 (ADEQ, 2005b); March 7, 2006 (ADEQ, 2006a); September 28, 2006 (ADEQ, 2006b); March 27, 2007 (ADEQ, 2007); and February 29, 2008 (ADEQ, 2008a). The status report now includes a summary of the operations and related soil vapor sampling data for the biologically-enhanced soil vapor extraction (BSVE) system that began initial soil vapor extraction operations on May 27, 2009. The BSVE system is currently in the initial system ramp-up period, which will continue until adequate methane has been extracted and the injection program can be safely initiated. The injection testing program was initiated during the First Quarter 2010. It is anticipated the BSVE system will be fully operational in the Second Quarter 2010, which includes full-scale extraction and air injection in Phases A and B consistent with the objectives in the Design Basis Report. Additional injection/extraction wells in Phase C are anticipated to be brought online during Third Quarter 2010.

1.2 Background

The Honeywell facility is located within Operable Unit 2 of the Motorola 52nd Street Superfund Site at 111 South 34th Street in Phoenix, Arizona and has been used as a manufacturing and testing facility for the production of aircraft engines and auxiliary equipment since 1951. Figure 1-1 illustrates the Facility location and layout. (All figures are provided at the end of this report.)

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

- Remediate soil contamination in the vadose zone, the petroleum hydrocarbon smear zone, and the free-product pool using BSVE.

- Supplement BSVE remediation by selectively removing free product from existing groundwater monitoring wells using a combination of manual and automatic (where necessary) liquid pumping.
- Per ADEQ's October 7, 2005 CAP final approval letter (ADEQ, 2005a), following completion of free-product removal to the maximum extent practicable, the most appropriate remediation method for dissolved-phase groundwater contamination associated with Honeywell's UST program will be revisited with ADEQ to ensure coordination with the remedy selected for the regional chlorinated volatile organic compound (VOC) plume being evaluated by ADEQ's Federal Projects Unit and the United States Environmental Protection Agency (USEPA). The selected alternative presented in the CAP includes monitored natural attenuation to address any remaining dissolved-phase groundwater contamination after aggressive source removal is complete.

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

Initial ramp-up of the BSVE system is addressing soil vapor (primarily methane) impacts on the Honeywell-owned property north of Air Lane (Phase A) and Honeywell-operated property leased from the City of Phoenix (COP) south of Air Lane (Phase B). Thirty-six soil vapor extraction wells were brought online sequentially during the initial system ramp-up period, which commenced on May 27, 2009. The final extraction well in Phases A and B was brought online on October 15, 2009. Following the initiation of pilot testing activities conducted in May 2006, as presented in the Air Injection Pilot Test Report (CH2M HILL, 2006), the potential for methane migration during injection was determined to be significant. Therefore, it was determined that, initially, only extraction would occur until methane levels in shallow vapor points and the deeper subsurface had been adequately reduced and aerobic conditions had been induced. Full operation of the BSVE system in an area is considered to be achieved when all wells in Phases A and B have actively extracted, equipment performance has been fully assessed in both extraction and injection modes, and injection of air has occurred throughout the well network consistent with the *Operations and Maintenance Manual for the Biologically-enhanced Soil Vapor Extraction System, Honeywell 34th Street System, Phoenix, Arizona* (BSVE O&M Manual) (CH2M HILL, 2009b).

Construction associated with the expansion of the BSVE system onto the northern portion of Phoenix Sky Harbor International Airport (PSHIA) property, north of Runway 8-26 (Phase C), began in Fourth Quarter 2009 with the installation of the process and process monitoring wells (Figure 1-2). Trenching, piping, and manifolding the Phase C wells to the Facility fence-line began on March 10, 2010 and is anticipated to be completed in July 2010. Phase C extraction is anticipated to commence in Third Quarter 2010. Remedial measures in the area south of Runway 8-26 (Phase D) are being evaluated in coordination with the COP.

Figure 1-2 illustrates the location of BSVE Phases A through D relative to the BSVE target treatment area (TTA).

1.3 Summary of Activities

This quarterly periodic status report summarizes the Corrective Action Plan activities conducted or completed between January 1, 2010 and March 31, 2010 (First Quarter 2010).

1.3.1 Deliverables

An updated list of deliverables submitted since August 23, 2002 (the date the Site Characterization Report was submitted to ADEQ) through First Quarter 2010 is included as Appendix A.

1.3.2 Biologically-enhanced Soil Vapor Extraction Remediation

Initial system ramp-up and operation of the BSVE treatment equipment in Phases A and B commenced on May 27, 2009. As of the end of First Quarter 2010 (March 31, 2010), each of the 36 injection/extraction wells located in Phases A and B has been operated in extraction mode. The BSVE system averaged a total soil vapor extraction rate of approximately 1,334 standard cubic feet per minute for the operational time during First Quarter 2010. This extraction rate continues to be lower than initially expected due to the elevated water table and the partially submerged well screens in some areas of the system; however, based on initial soil-gas monitoring, it appears that the subsurface air flow has been adequate to aerate (oxygen greater than 5 percent) the subsurface in the vicinity of almost all process monitoring wells.

Air injection testing commenced on February 11, 2010. Initial shakedown and testing of the air injection is being performed in three phases. Each phase of testing includes a group of five interior wells being operated in injection mode for approximately two weeks at a time before rotating the injection wells to a different well group (or Phase). As of the end of First Quarter 2010, air injection testing had been initiated in Phase A: (BV-2N, BV-14N, ASE-20A, ASE-39A, and ASE-57A) and briefly in Phase B (BV-5, BV-7N, BV-9N, BV-17N, and ASE-66A). This injection system testing will provide initial indications of the effects of injection in the interior of the BSVE TTA to guide operations during full-scale operation. Air injection testing is scheduled to continue through May 2010, and the results of the testing will be included in the Second Quarter 2010 Remediation Status Report. Full scale operations in Phases A and B are expected to commence in Second Quarter 2010.

Air flow from extraction wells is influenced by the applied blower vacuum, the available (unsaturated) well screen, the type of subsurface material in which the well is completed, and the length and condition of piping between the blower and the well. Of these factors, the available well screen is the one that is directly affected by elevated water levels. Because the water levels are currently higher than they were during the BSVE design stage, this elevated water level condition has exerted some control over the total air flow available. In addition, the BSVE system has experienced a greater accumulation of condensation in the manifold piping than expected due to the colder winter ambient air temperatures, and cool overnight temperatures during the fall and spring. This condensation has contributed to limiting the amount of flow that can be processed at the system. It is expected that higher

overall air flows can be achieved during the warmest time of the year and when the water table has begun its anticipated seasonal drop during the mid-summer months.

Initial extraction from the 36 injection/extraction wells in Phases A and B has successfully removed the majority of elevated levels of methane across the BSVE TTA. As of the end of First Quarter 2010, methane levels in the deep vadose zone within Phases A and B are all below 1 percent volume per volume.

Field improvements in First Quarter 2010, such as the installation of surface connections for the measurement of Venturi differential pressures with portable pressure gauges and the installation of additional flow control valves, resulted in improved capabilities to directly measure flow and lowered flow measurement thresholds at injection/extraction wells.

All compliance sampling and monitoring associated with the Title V Air Permit (#V97008) and the Class A Wastewater Discharge Permit (#0812-1510) were conducted and were within approved conditions.

1.3.3 Vadose Zone Monitoring

The quarterly soil vapor sampling event was conducted from February 5, 2010 through February 19, 2010. The next sampling event is scheduled for May 6, 2010 through May 21, 2010. A summary of the results is provided in Section 3.2.

Oxygen uptake testing was conducted February 16, 2010 through February 17, 2010 and March 22, 2010 through March 28, 2010. The results of the oxygen uptake testing are presented in the technical memoranda provided in Appendix B.

1.3.4 Free-product Monitoring/Recovery

Three monthly free-product measurement/recovery rounds and three additional rounds of manual free-product-specific monitoring/recovery were conducted during First Quarter 2010. A summary of the total gallons of free product recovered during the reporting period and the total gallons of free product recovered since Honeywell began free-product recovery operations is provided in Section 2.2.

1.3.5 Groundwater Monitoring

The quarterly UST groundwater sampling event was conducted from March 8, 2010 through March 17, 2010. Three monthly water-level measurement events were conducted during the quarter on January 7, February 3, and March 1, 2010. A summary of the results is provided in Section 3.4.2. The next quarterly UST groundwater sampling event is scheduled for June 7, 2010 through June 18, 2010, and the next three monthly water-level measurement events are scheduled for April 5, May 7, and June 4, 2010.

2.0 Site Remediation Activities

This section summarizes the scope and results of remediation activities associated with Honeywell's CAP (CH2M HILL, 2004a-b) that were conducted during First Quarter 2010. The activities include vadose zone and smear zone remediation using the BSVE system supplemented with direct liquid free-product recovery from non-BSVE system wells, where applicable.

2.1 Vadose Zone Remediation

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

2.1.1 Biologically-enhanced Soil Vapor Extraction System

Initial BSVE system ramp-up in Phases A and B commenced on May, 27 2009. Details of the system status and performance, including a summary of mass removal, are provided below. An operational data snapshot for the BSVE system injection/extraction wells and process monitoring wells, based on February/March 2010 monitoring data, is provided in Figure 2-1. Graphs showing temporal trends in flow rates and vacuums at the BSVE injection/extraction wells are provided in Appendix C along with a summary table of the data.

BSVE System Status and Performance, First Quarter 2010:

Number of wells in extraction mode in Phases A and B (at close of quarter):	36
Number of wells in injection testing mode in Phases A and B (during the quarter):	100
Number of extraction wells brought online this quarter in Phases A and B:	0
Number of injection wells brought online temporarily during this quarter in Phases A and B:	10
Number of extraction wells remaining to be brought online in Phases A and B:	0
Anticipated full startup date based on progress to date:	Second Quarter 2010 (includes full-scale extraction and air injection in Phases A and B consistent with the objectives in the Design Basis Report)
Total system operating time for the quarter:	1,453 hours
Average total extraction rate for the quarter ^a :	1,334 cubic feet per minute
Average total injection rate for the quarter (during injection testing):	57 cubic feet per minute
Total mass removed for the quarter by volatilization (by BTU calculation) ^b :	202,477 pounds

BSVE System Status and Performance, First Quarter 2010:

Total mass removed for the quarter by biodegradation (based on extracted oxygen concentrations) ^c :	154,768 pounds
Total mass removed for the quarter by biodegradation (based on in situ respiration) ^d :	181,285 pounds
Total mass removed for the quarter (volatilization and biodegradation-based on extracted oxygen concentrations):	357,245 pounds
Total mass removed from beginning of initial ramp-up period (May 27, 2009) through the end of the quarter (volatilization and biodegradation-based on extracted oxygen concentrations):	1,161,461 pounds
Average daily mass removal rate for the quarter ^e :	5,384 pounds per day
Average daily mass removal since BSVE operations commenced ^e :	4,957 pounds per day
Total mass of chlorinated VOCs removed ^f for the quarter:	48 pounds
Total mass of chlorinated VOCs removed ^f from beginning of initial ramp-up period (May 27, 2009) through the end of the quarter ^g :	227 pounds

^a The average total extraction rate for the quarter was calculated by averaging the total extraction rate recordings for the system, obtained at 5-minute intervals, over the total operational time for the quarterly reporting period.

^b Total mass removed via volatilization was estimated based on British thermal unit (BTU) consumption as measured at the thermal oxidation unit following the equation presented in *Soil Vapor Field Parameter Collection and Interpretation Technical Memorandum* attached as Appendix C to the *Third Quarter 2009 Remediation Status Report* (CH2M HILL, 2009c). The mass volatilized during the quarter was estimated based on the system uptime during the quarterly period.

^c Total mass removed via biodegradation based on oxygen concentrations was estimated following the equation presented in BSVE O&M Manual (CH2M HILL, 2009b). Total biodegraded mass for the quarter using this calculation was estimated based on extracted oxygen concentrations and flow rate.

^d Total mass removed via biodegradation using in situ respiration measurements and calculated by applying oxygen uptake rates from performance monitoring wells during periodic system shut-downs was estimated following the equation presented in BSVE O&M Manual (CH2M HILL, 2009b). These rates are averaged to produce a representative rate for the entire site. The degradation rate is then estimated using this sitewide rate.

^e Average daily mass removal was estimated from the total mass removed divided by the number of calendar days in the reporting period less any periods of system shutdown exceeding 72 hours in duration. Periods of system shutdown interrupted by aborted re-starts (i.e. attempted restarts which last 30 minutes or less) are considered a continuous system shutdown.

^f Total mass of chlorinated VOCs removed = [Total concentration chlorinated VOCs]*[Flow rate]*[Time of operation]*[Conversion factor between cubic feet and liters]/[Conversion factor between micrograms and pounds]. Chlorinated VOCs included in the calculation are trichloroethene, cis-1,2-dichloroethene, vinyl chloride, 1,1,1-trichloroethane, 1,1-dichloroethane, and 1,1-dichloroethene.

^g The minor difference between total mass of chlorinated VOCs removed from the beginning of initial ramp-up period (May 27, 2009) through the end of Fourth Quarter 2009, as reported in the *Fourth Quarter 2009 Remediation Status Report* (CH2M HILL, 2010a) and this report is due to using the maximum-detected analyte between duplicate analytical samples instead of using the analyte concentrations from the non-duplicate sample in the calculation.

Cumulative mass removal via biodegradation (based on extracted oxygen concentrations, as described in the BSVE O&M Manual [CH2M HILL, 2009b]) and cumulative mass removal via volatilization (using BTU consumption, as described in Appendix C of the *Third Quarter 2009 Remediation Status Report, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20* [CH2M HILL, 2009c]) are presented in Figure 2-2. This graph shows the total mass of hydrocarbons removed since initial BSVE system ramp-up commenced on May 27, 2009. A second method for calculating the total mass removed by biodegradation was performed for comparison purposes to evaluate the

biodegradation calculations based on oxygen concentrations versus those based on oxygen uptake rates measured during respiration testing. The total mass removal using in situ respiration measurements takes into account the full volume within the BSVE TTA, and applies the average of rates taken throughout this volume. It is recognized that this full volume approach may not correspond well to the volume intrinsic to the extraction flow oxygen-based method and that the difference in estimates may be due to this volume difference.

It should be noted that during the initial ramp-up period, the biodegradation estimate includes some biodegradation that occurred earlier (pre-extraction); it is only after the soil gas is well-purged from the subsurface that these estimates became representative of ongoing biodegradation rates. The total mass removal by biodegradation estimates were updated to use the daily BSVE inlet oxygen field measurements instead of the quarterly oxygen analytical results. As part of this modification, the calculations for mass removal by biodegradation for both the First Quarter 2010 and from the May 27, 2009 commencement date through the end of the quarter were modified accordingly.

As indicated in Honeywell's CAP (CH2M HILL, 2004a-b), the BSVE system also has a positive effect on the chlorinated VOCs found in the subsurface beneath the Facility. As presented in the table above, the BSVE system has removed approximately 227 pounds of chlorinated VOCs from the subsurface as of the end of the First Quarter 2010. Further discussion of the field measurements of oxygen and methane and soil vapor sampling is provided below in Section 3.1.

A summary of planned or unplanned system shutdowns occurring during First Quarter 2010 is provided below.

Summary of BSVE System Shutdowns, First Quarter 2010:

Date	Duration	Planned or Unplanned	Reason or Cause
01/01/10-01/02/10	29 hours, 30 minutes	Unplanned	Flame would not light on thermox, low scrubber flow
01/04/10	19 hours	Unplanned	Power outage
01/05/10-01/06/10	1 hour, 45 minutes	Unplanned	Scrubber low flow FIT-501 input/output alarms
01/08/10-01/16/10	193 hours, 45 minutes	Planned	Planned semi-annual and quarterly maintenance
01/17/10-01/25/10	216 hours	Unplanned	Potassium permanganate media treatment capacity evaluation and media replacement
01/26/10-01/27/10	20 hours	Unplanned	Scrubber low flow FIT-501 input/output alarms
01/28/10	15 minutes	Unplanned	Conductivity probe malfunction
01/30/10	1 hour, 15 minutes	Unplanned	Scrubber low flow FIT-501 input/output alarms
01/31/10	12 hours, 45 minutes	Unplanned	FALL-500 scrubber low flow alarm

Summary of BSVE System Shutdowns, First Quarter 2010:

Date	Duration	Planned or Unplanned	Reason or Cause
02/01/10	2 hours, 49 minutes	Planned	Test scrubber pressure switch and rewire scrubber recirculation mag-meter back to PLC
02/02/10	39 minutes	Unplanned	Scrubber low flow FIT-501 input/output alarm
02/04/10	8 minutes	Planned	Replace surge protector for scrubber recirculation flow meter
02/04/10- 02/05/10	14 minutes	Unplanned	YA-100 Hi Ext flow alarm
02/11/10	23 minutes	Unplanned	YA-100 Hi Ext flow alarm
02/13/10	40 minutes	Unplanned	YA-100 Hi Ext flow alarm
02/14/10	35 minutes	Unplanned	YA-100 Hi Ext flow alarm
02/16/10	25 hours, 9 minutes	Planned	Sampling of potassium permanganate adsorption vessels
02/23/10	2 hours, 32 minutes	Unplanned	Low-pressure oxidizer outlet flow
02/25/10	9 minutes	Unplanned	Change filters in PDIT-202 inline air filter housing
03/02/10	14 hours, 20 minutes	Planned	Collect potassium permanganate adsorption media samples
03/09/10	37 minutes	Unplanned	Scrubber recirculation flow meter malfunction
03/15/10	1 hour	Unplanned	System off float in lift station went bad
03/18/10	2 hours, 10 minutes	Unplanned	FIT-101 input/output alarm, low-low discharge pH alarm, YA-100 Hi Ext flow alarm
3/22/10	20 minutes	Unplanned	YA-100 Hi Ext flow alarm
3/22/10 – 3/29/10	157 hours, 55 minutes	Planned	Planned quarterly maintenance
3/29/10	2hours, 49 minutes	Unplanned	FIT-101 input/output alarms

Additional items of interest include:

- Air injection testing throughout the Phase A and Phase B well network commenced during First Quarter 2010 and is expected to be fully implemented during Second Quarter 2010. As required by Section 34.A.4 of the Facility's Title V Air Permit, air injection rates will not exceed 50 percent of the vapor extraction rates and, in accordance with the BSVE O&M Manual (CH2M HILL, 2009b), extraction will continue in perimeter wells to confirm vapor migration control. In the future, when shallow and deep vapor concentrations have been reduced or when the Phase C wells are available for extraction, injection in Phase B perimeter wells may also be conducted.

2.1.2 Phase C and Phase D Activities

For Phase C the COP's General Contractor, Kiewit Western Co. (Kiewit), is performing the remedial construction consistent with the COP-approved Phase C design package

developed by CH2M HILL. These construction activities include trenching and installation of below-grade piping, valves, vaults, low-point drains, and other system components to connect 10 injection/extraction wells located in Phase C to the BSVE system. The locations of Phase C injection/extraction wells are presented in Figure 1-2. The COP issued Kiewit a Notice to Proceed with Phase C construction activities on February 11, 2010 following final approval of their Federal Aviation Administration Construction Safety Plan, and mobilization occurred on March 8, 2010. As of March 31, 2010, approximately 50 percent of the mainline trench has been completed. Phase C wells are anticipated to be brought online in Third Quarter 2010.

For Phase D, Honeywell continues to work in cooperation with the COP to evaluate appropriate remedial alternatives. On February 26, 2010, Honeywell submitted the *Phase D Remedial Alternatives Detailed Evaluation Report* (CH2M HILL, 2010b) to the COP for consideration and evaluation.

2.1.3 Proposed Updates to the Biologically-enhanced Soil Vapor Extraction Operations and Maintenance Documents

A revision to the *Operation and Maintenance Plan for the BSVE Air Pollution Control Equipment, Honeywell 34th Street System, Phoenix, Arizona* (BSVE O&M Plan) (CH2M HILL, 2008a) will be submitted to Maricopa County Air Quality Department (MCAQD) during Second Quarter 2010 for review and approval. The revision will include updates to the periodic maintenance sheets to reflect changes in maintenance schedules based on system runtime and process optimization. The update also clarified certain items related to monitoring and treatment equipment.

A revision to the BSVE O&M Manual (CH2M HILL, 2009b) will be submitted to ADEQ during Second Quarter 2010. The BSVE O&M Manual is being updated to include commencement of Phase C operations, maintenance, and monitoring tasks; full-scale air injection details; and updates to the oxygen uptake testing and in situ respiration testing programs. The most current version of the BSVE O&M Manual is available at the BSVE trailer located on the Honeywell facility.

2.1.4 Biologically-enhanced Soil Vapor Extraction Permit Compliance

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

Compliance activities during First Quarter 2010 included:

- Preparation of 12-month rolling and monthly emission estimates for December 2009, January 2009, and February 2010 for the BSVE emission sources, included in the monthly reports maintained in the Facility's air permit files (January 2010 estimates were included in the semiannual monitoring report discussed below). As required by Sections 21 and 34.G of the air permit, the information contained in the December 2009 monthly report was incorporated into the semiannual monitoring report, covering the reporting period from July 27, 2009 to January 26, 2010, that was submitted to MCAQD on February 25, 2010 (see next bullet). The January 2010 12-month rolling and monthly

emission estimates and other required monthly data were included in the semiannual monitoring report. The information contained in the February 2010 monthly report will be incorporated into the next semiannual monitoring report, covering the reporting period from January 27, 2010 through July 26, 2010, due to MCAQD by August 28, 2010.

- Submission of a semiannual monitoring report to MCAQD on February 25, 2010 for the reporting period July 27, 2009 to January 26, 2010. This report included the BSVE emissions estimates, summary of operating parameters, analytical data collected from the system during the reporting period, and copies of supporting documentation.
- Submission of the December, January, and February 2010 Monthly Compliance Monitoring Reports to the COP, in accordance with Section C of the Wastewater Discharge Permit, on January 20, February 19, and March 25, 2010, respectively. These reports included the nature and concentration of the pollutants, the measured maximum and average daily flows, and the results of all samples collected during the calendar month for the BSVE Compliance Sampling Point 1510.12.
- Collection of the First Quarter 2010 wastewater compliance samples at BSVE Wastewater Compliance Sampling Point No. 1510.12 by the COP Pollution Control Division.
- The media in the potassium permanganate adsorption units was replaced in February 2010 during the scheduled quarterly maintenance shutdown. The change out was triggered as a result of an inspection of the two units, conducted in January 2010, that provided visual evidence that the potassium permanganate adsorption units may have been affected by operating conditions. Subsequent testing by third-party laboratories confirmed the effective treatment capacity of the media in both units was greatly reduced and nearly spent. All operational limitations and standards of the potassium permanganate units specified in the air permit were conducted and within approved limits.

2.2 Free-product Recovery

Free product is recovered from any groundwater monitoring well with a measured free-product thickness exceeding 0.1 foot. Additionally, free product is recovered biweekly from groundwater monitoring wells containing confirmed free-product thicknesses greater than 0.1 foot, per Section 2.3 of the ADEQ-approved *Groundwater Sampling and Free-product Monitoring and Recovery Plan, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17* (LUST FSP) (CH2M HILL, 2008b). The LUST FSP is also included as Volume 4 of the BSVE O&M Manual (CH2M HILL, 2009b). Only two monitoring wells, ASE-67A and ASE-107A, met the criteria (confirmed exceedances of the 0.1 foot free-product thickness metric) for formal inclusion in the biweekly manual recovery program during First Quarter 2010. Additionally, free product was recovered from monitoring wells ASE-111A and ASE-115A as a result of unconfirmed exceedances of the 0.1 foot free-product thickness metric on February 3, 2010 and March 1, 2010, respectively. As a result of these initial exceedances, ASE-111A and ASE-115A were placed in the biweekly monitoring/recovery program for a 6-week evaluation period.

No automated skimmers are currently required in any well pursuant to the requirements of the CAP (free-product thicknesses in monitoring wells greater than 0.75 foot). Since the

establishment of the metric in the CAP (approved on October 17, 2005), only one monitoring well (ASE-107A) located on PSHIA property has contained free-product thicknesses exceeding the 0.75-foot metric. However, pursuant to discussions with ADEQ's Case Manager for the LUST Enforcement Unit and the COP in June 2007 (the initial occurrence of a metric exceedance in a monitoring well located on PSHIA property) and subject to PSHIA operations' site access approval, Honeywell will continue biweekly manual free-product recovery in monitoring well ASE-107A when the free-product thickness exceeds 0.1 foot because installation of automated recovery equipment would cause disruption to PSHIA operations. Historically, free-product thicknesses exceeded 0.75 foot on PSHIA property in three additional monitoring wells (ASE-89A, ASE-90A, and ASE-102A) prior to the existence of the CAP metric. Since October 2005, free-product thicknesses in those wells have not been greater than 0.13 foot. A summary of free-product recovery during the quarter is provided below.

Summary of Free-product Recovery, First Quarter 2010:

Number of wells containing an automated skimmer system:	0
Number of wells included in biweekly manual recovery:	2 (January), 3 (February), 4 (March)
Well from which greatest amount recovered during the quarter:	ASE-107A (2.6 gallons)
Total volume of free product recovered this quarter:	3.7 gallons
Total volume of free product recovered to-date (since June 1, 1999):	7,289 gallons

Table 2-1 provides details on the amount of free product recovered at each monitoring well that historically has had measurable free product, including the current quarter's recovery of 3.7 gallons from monitoring wells ASE-67A, ASE-107A, ASE-111A, and ASE-115A. (All tables are provided at the end of the report.)

As of the end of First Quarter 2010, free product will continue to be recovered biweekly using a portable free-product pump, when free-product thicknesses exceed 0.1 foot, from monitoring well ASE-107A and from monitoring well ASE-115A, which is still under evaluation for formal inclusion in the biweekly manual recovery program. Monitoring well ASE-67A was removed from the biweekly recovery program following the end of First Quarter 2010 due to sustained free-product thickness measurements below 0.1 foot (discussed in more detail in Section 3.3). In addition to the biweekly manual recovery program, free product will be recovered during the monthly measurement rounds from any well that contains greater than 0.1 foot of free product during Second Quarter 2010.

3.0 Monitoring Activities

This section describes soil vapor, groundwater, and free-product monitoring data collected as part of Honeywell's ongoing UST monitoring program. Because there were no additional groundwater monitoring wells installed or associated soil samples collected during the reporting period (January 1, 2010 to March 31, 2010), this section does not include a discussion of soil data.

3.1 Work Conducted

Soil vapor monitoring conducted during First Quarter 2010 included:

- Collection of 23 soil vapor samples (does not include field duplicates) from process monitoring wells (not injection/extraction wells). Samples were analyzed for VOCs using United States Environmental Protection Agency (USEPA) Method TO-15 as part of the quarterly soil vapor monitoring event conducted in accordance with the BSVE O&M Manual (CH2M HILL, 2009b).
- Collection of the annual soil vapor samples from the Phases A and B and Phase C injection/extraction wells during the quarterly-soil vapor monitoring event in accordance with Section 34.C.4 of the Air Permit and Section 8.0 of the BSVE O&M Manual (CH2M HILL, 2009b). These samples were analyzed for VOCs using USEPA Method TO-15 and gasoline-range hydrocarbons using USEPA Method SW8015M.
- Collection of soil vapor samples from the PSHIA and Honeywell groundwater monitoring wells and the PSHIA and Honeywell subsurface utility vaults, identified in the BSVE O&M Manual (CH2M HILL, 2009b), as part of the quarterly soil vapor monitoring event. These samples were analyzed for VOCs using USEPA Method TO-15.
- Collection of field parameter measurements (methane, percent-LEL, oxygen, carbon dioxide, and TPH readings). These measurements were obtained from 82 process monitoring locations (i.e., process monitoring wells, injection/extraction wells, and total extracted gas) at daily, weekly, monthly, or quarterly frequencies, as stipulated in the BSVE O&M Manual (CH2M HILL, 2009b) based on monitoring location type and/or oxygen measurement levels. Percent relative humidity and temperature field measurements (where functional thermocouples are available) were also obtained at the process monitoring wells.
- Collection of field parameter measurements (methane, percent-LEL, oxygen, carbon dioxide, and TPH readings) from 128 non-process soil vapor monitoring locations (i.e., vaults, manholes, sentinel wells, sub-slabs, and other monitoring wells) as part of the quarterly soil vapor monitoring event conducted in accordance with the BSVE O&M Manual (CH2M HILL, 2009b).
- Collection of 17 soil vapor samples (including two field duplicates) to verify the accuracy of the field measurements as part of the quarterly soil vapor monitoring event

conducted in accordance with the BSVE O&M Manual (CH2M HILL, 2009b). Eleven process monitoring locations (BSVE inlet, injection/extraction wells, and process monitoring wells) were analyzed for total petroleum hydrocarbons (TPH) and methane using USEPA Method TO-3M and for oxygen and carbon dioxide using Method ASTM 1946. Six non-process monitoring locations (sentinel wells and a sub-slab well) were analyzed for methane using USEPA Method TO-3M.

- Performance of the quarterly field measurement monitoring event for oxygen, carbon dioxide, methane, and percent-LEL at the PSHIA monitoring wells and subsurface utility vaults, conducted in accordance with the BSVE O&M Manual (CH2M HILL, 2009b). These measurements were collected on February 11, 2010.

Free-product thickness monitoring conducted during First Quarter 2010 included:

- Collection of monthly free-product thickness measurements from 56 groundwater monitoring wells and biweekly measurements from two groundwater monitoring wells in January, three wells in February, and four wells in March 2010, in accordance with the LUST FSP (CH2M HILL, 2008b). The monthly rounds were conducted on January 7, February 3, and March 1, 2010.

Groundwater monitoring conducted during First Quarter 2010 included:

- Collection of monthly groundwater elevation measurements from 56 monitoring wells on January 7, February 3, and March 1, 2010, in accordance with the LUST FSP (CH2M HILL, 2008b).
- Collection of groundwater samples from 47 groundwater monitoring wells between March 8, and March 17, 2010 in accordance with the LUST FSP (CH2M HILL, 2008b). These samples were analyzed for VOCs using USEPA Method SW8260B and TPH using USEPA Method SW8015. A groundwater sample collected from Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) monitoring well ASE-84A was included in the analytical data evaluation to support the delineation of the methyl tert-butyl ether (MTBE) plume. Groundwater samples were not collected from nine monitoring wells because of insufficient water or the presence of free product in the monitoring well as discussed in Section 3.4.2.
- As discussed in Section 1.2 and shown in Figure 1-3, 11 groundwater monitoring wells previously included in the UST monitoring well network are now connected to the BSVE system and are no longer included in the monthly groundwater elevation measurements and quarterly groundwater quality sampling event.

3.2 Vadose Zone Monitoring

Vadose zone monitoring during First Quarter 2010 included the collection of field parameter measurements, as listed above, and soil vapor samples for VOC analysis using USEPA Method TO-15, gasoline range hydrocarbons analysis using USEPA Method SW8015M, TPH analysis using USEPA Method TO-3M, and carbon dioxide analysis using Method ASTM 1946. Tables 3-1 and 3-2 present a summary of the USEPA Method TO-15 detected analytes for the soil vapor samples collected from within the BSVE TTA during operation of

the BSVE system, along with a comparison of the analytical results to the applicable BSVE operation vapor action levels (VALs-BSVE). Tables 3-3 and 3-4 present a summary of the USEPA Method TO-15 detected analytes for the soil vapor samples collected from locations outside the BSVE TTA, along with a comparison of the analytical results to the applicable long-term VALs (VAL-LT). Vapor action levels (VALs) were developed as part of the focused human health risk assessment for the Facility using standard USEPA methods and assumptions, as presented in Section 8.6.2 of the BSVE O&M Manual (CH2M HILL, 2009b). No VALs-BSVE or VALs-LT were exceeded during First Quarter 2010. Table 3-5 presents the USEPA Method TO-15 and Method SW8015M detected analytical results for the BSVE injection/extraction wells. The soil vapor analytical reports and data quality evaluation (DQE) are provided in Appendix D.

A summary of the field parameter measurement activities at process and non-process monitoring locations is presented in Table 3-6. Table 3-7 presents the soil vapor confirmation sampling comparing the field monitoring results using the RKI Eagle™ portable gas detector (oxygen, carbon dioxide, methane, and TPH) with laboratory analytical results for USEPA Methods TO-3M and ASTM 1946, as described in Table 8-1 and Table 8-2 of the BSVE O&M Manual (CH2M HILL, 2009b), at selected process and non-process locations. Figures showing oxygen, methane, and TPH distributions in the shallow and deep vadose zone for First Quarter 2010 are presented in Appendix E. Graphs showing temporal trends for TPH and oxygen concentrations in process monitoring wells are provided in Appendix F along with a summary table of the data. A summary of the process and non-process soil vapor monitoring results is provided below.

Summary of Process and Non-process Vapor Monitoring, First Quarter 2010:

Total number of process monitoring well samples collected for laboratory analysis (does not include field duplicates):	23
Total number of injection/extraction well and total extracted gas samples collected for laboratory analysis (does not include field duplicates):	47
Total number of non-process monitoring well (i.e., sentinel well, sub-slab, and multi-port monitoring points) samples collected for laboratory analysis (does not include field duplicates):	61
Number of shallow (<15 feet below ground surface) monitoring points with VALs-BSVE exceedances:	0
Number of deep (≥15 feet below ground surface) monitoring points with VALs-BSVE exceedances:	0
Number of shallow (<15 feet below ground surface) monitoring points with VALs-LT exceedances:	0
Number of deep (≥15 feet below ground surface) monitoring points with VALs-LT exceedances:	0
Total number of vaults or manholes sampled for laboratory analysis (does not include field duplicates):	0
Number of vaults or manholes with vault air action level exceedances:	Not Applicable
Number of vaults requiring COP notification (>10% LEL measurement):	0
Number of shallow subsurface locations requiring COP notification (>20% LEL measurement):	1 (P-26-U)

Additional items of interest include:

- Overall, methane concentrations observed during First Quarter 2010 using either field measurements or sampling and analysis by USEPA Method TO-3 (presented in Table 3-6 and Table 3-7) decreased when compared to Fourth Quarter 2009 methane concentrations, indicating that the BSVE system continues to have a positive impact on methane concentrations. Nineteen of the 20 deep vadose process monitoring well ports in Phases A and B exhibited methane concentrations less than 1 percent volume per volume; process monitoring well PMW-5-ML had a methane concentration of 6 percent. All of the deep sentinel well locations monitored had methane concentrations less than 1 percent volume per volume. Additionally, 35 of the 36 Phase A and B injection/extraction wells had methane concentrations less than 1 percent volume per volume; injection/extraction well BV-20N had a methane concentration of 1.6 percent volume per volume on February 16, 2010. The methane concentration in this location decreased to 0.62 percent on March 16, 2010.
- One shallow monitoring location (P-26-U) in the Phase C area North of Runway 8-26, exhibited an LEL measurement greater than 100 percent of the LEL on February 9, 2010. Whenever 20 percent or more of the LEL is detected in a shallow monitoring location, LEL measurements in surrounding vaults (ELE-VLT-02 and FBO-VLT-01) are monitored in accordance with Section 8.4 of the BSVE O&M Manual (CH2M HILL, 2009b). All surrounding vaults were found to be below the LEL detection limit of 1 percent.
- Recently-installed process monitoring wells PMW-14 and PMW-15, and injection/extraction wells BV-26N through BV-33N (installed in November/December 2009) were monitored and sampled for the first time in First Quarter 2010. This monitoring and sampling will be used as baseline data in the Phase C area for comparison after injection/extraction wells in this area are brought online (anticipated in Third Quarter 2010). Soil vapor data collected from recently-installed Phase C wells was generally consistent with historical data for the area, with the exception of elevated concentrations of methane above 1 percent volume per volume in deep soil vapor monitoring locations BV-33N (12 percent) and PMW-14-ML (1.7 percent). Figure E-4 in Appendix E presents the deep methane distribution based on soil vapor data collected in the Fourth Quarter 2009 and the First Quarter 2010. Oxygen concentration data collected from recently-installed injection/extraction well BV-26N indicated that the area of the deep vadose zone with oxygen below 2.5 percent extends into a larger area than previously indicated by Fourth Quarter 2009 data; this is presented in Figure E-2 in Appendix E.
- The maximum concentration of benzene measured in the vadose zone during the First Quarter 2010 was 200 micrograms per liter ($\mu\text{g}/\text{L}$) at injection/extraction well ASE-53A. For non-process monitoring locations, the maximum concentration of benzene was measured during the First Quarter 2010 11 $\mu\text{g}/\text{L}$ at monitoring well P-24-M.
- Oxygen in the deep vadose zone increased from Fourth Quarter 2009. Deep oxygen was above 5 percent in all but three (ASE-51A, BV-8N, and ASE-60A) of the 49 locations monitored in Phases A and B. Increasing oxygen concentrations are anticipated to continue as additional injection is performed and as Phase C injection/extraction wells are brought online.

- Opportunistic in situ respiration testing conducted in February 2010 indicated an average oxygen uptake rate of 2.5 percent per day among deep process monitoring wells in Phases A and B. A second in situ respiration test conducted in March 2010 at shallow, intermediate, and deep ports of process monitoring wells indicated oxygen uptake rates are highest in deep vadose zone, where maximum oxygen uptake rates ranged from 1.2 to 2.3 percent oxygen per day. An average oxygen uptake rate for the entire vadose zone, including intermediate and shallow ports showing less oxygen consumption was calculated to be 0.30 percent oxygen per day based on the March 2010 in situ respiration testing. Additional information on oxygen uptake testing and results is located in Appendix B.
- Oxygen concentrations exceeded 10 percent for three consecutive weekly readings in the upper, mid, and mid-lower port of process monitoring well PMW-2. As a result, the monitoring frequency was reduced from weekly to monthly for this well, as described in Table 8-1 of the BSVE O&M Manual (CH2M HILL, 2009b). As of the end of First Quarter 2010, weekly monitoring continues in the mid-lower ports of process monitoring wells PMW-4, PMW-5, and the lower port of process monitoring well PMW-10. Each of these locations had oxygen concentrations at or below 9.5 percent.
- Carbon dioxide, TPH, and methane measured with field instruments correlated well with the concentrations obtained from analytical samples, as presented in Table 3-7. The comparison between field oxygen readings and laboratory results for oxygen indicate field readings are lower than laboratory results. However, oxygen values reported by the laboratory included concentrations exceeding the atmospheric oxygen concentration of 20.9 percent, indicating an upward bias in laboratory oxygen results.
- Process monitoring well PMW-14-U, a recently installed well located to the west of the Phase C injection/extraction wells, was not monitored during the First Quarter 2010 soil vapor sampling event in accordance with Table 8-1 of the BSVE O&M Manual (CH2M HILL, 2009b). During attempted monitoring at this location, the technician was unable to obtain vapor flow from the well. A pipe snake was inserted into the sampling port, and no obvious obstructions were identified. It was determined that reinstallation of the well would be necessary. This reinstallation will occur prior to the Second Quarter 2010 soil vapor sampling event.
- Soil vapor monitoring in the Phase D area was not conducted during the First Quarter 2010 soil vapor sampling event due to restricted access by the COP. These locations are scheduled for monitoring during the Second Quarter 2010 soil vapor sampling event.
- Following completion of the air injection testing phase in May 2010, and with the completion of modeling to design the specific well rotation program for full-scale operation, air injection will transition to full-scale operation consistent with the BSVE O&M Manual (CH2M HILL, 2009b) during Second Quarter 2010.
- Air injection testing was partially completed in the First Quarter 2010 and identified a need for valve modifications to improve the piping manifold between injection and extraction lines at some wells. Valve modifications were performed in March 2010, and air injection testing will be completed in the Second Quarter 2010.

- Air injection was tested initially in injection/extraction well BV-2N from February 11 to February 21, 2010. Phase A injection testing was conducted at wells BV-2N, BV-14N, ASE-20A, ASE-39A, and ASE-57A from February 22 to March 5, 2010, and Phase B injection testing was conducted at wells BV-5, BV-7N, BV-9N, BV-17N, and ASE-66A from March 8 to March 12, 2010. Data collected during air injection testing are presented in Table 3-6.
- During air injection testing, nearby wells and vaults were monitored to look for potentially problematic migration of deep contamination towards the ground surface. All process monitoring wells within 200 feet of an injection well were monitored for field parameters, and all utility vaults within 100 feet of an injection well were monitored. Select utility vaults on the northern portion of PSHIA were also monitored during air injection testing (ELE-VLT-02, ELE-VLT-03, ELE-VLT-06, FBO-VLT-01, and FBO-VLT-02). No detectable LEL was observed in utility vaults during air injection testing, and no significant changes in process monitoring well soil vapor were observed. To date, no potentially problematic migration has been observed; a complete evaluation of air injection testing will be included in the Second Quarter 2010 Remediation Status Report following the completion of air injection testing.
- The Second Quarter 2010 soil vapor monitoring is scheduled to be conducted from May 6, 2010 through May 21, 2010. This monitoring includes collection of the soil vapor samples for VOC analysis using USEPA Method TO-15 and field parameter measurements, as described in Tables 8-1 and 8-2 of the BSVE O&M Manual (CH2M HILL, 2009b).
- An in situ respiration test is scheduled for Second Quarter 2010 during the planned annual shutdown event. In situ respiration testing involves measuring changes of oxygen levels in the soil gas. Based on the resulting oxygen consumption rates, previously calculated hydrocarbon degradation rates will be validated. These degradation rates can be used to estimate the rates of site cleanup under aerobic conditions.

3.3 Free-product Monitoring

Free-product monitoring during First Quarter 2010 included the collection of free-product thickness measurements in accordance with the LUST FSP (CH2M HILL, 2008b). In general, any monitoring well with a free-product thickness less than 0.1 foot is measured monthly, and any monitoring well with a free-product thickness greater than 0.1 foot is measured biweekly. Table 3-8 provides free-product thickness measurements collected during the reporting period for all monitoring wells where free product has been observed historically. Some wells containing free product during the quarter also had completely submerged well screens at the time of measurement. These wells are identified in Table 3-8. A comparison of the historical maximum free-product thickness measurements to the March 2010 free-product thickness measurements is provided in Table 3-9, and the maximum free-product thickness measured during the quarter for each groundwater monitoring well is plotted along with the historical areal extent of the free product in Figure 3-1. A summary of the free-product monitoring for the quarter is provided below.

Summary of Free-product Monitoring, First Quarter 2010:

Number of wells measured monthly:	56 ^a
Number of wells measured biweekly:	2 (January), 3 (February) ^b , 4 (March)
Number of wells containing free product during the quarter:	14
Number of wells containing free product during quarterly measurement round on March 1, 2010:	7
Number of wells historically having contained free product:	32
Maximum thickness measured during the quarter:	1.53 feet (ASE-107A – 3/1/10)
Maximum thickness measured during the quarterly measurement round on March 1, 2010:	1.53 foot (ASE-107A)
Number of wells with measurements exceeding 0.75-foot thickness threshold for automatic skimmer installation if thickness was confirmed (see text for discussion):	1 (ASE-107A – 1/07/10, 1/20/10, 3/01/10, 3/19/10)
Any new historical high measurements for individual monitoring wells?	No
Free product measured for the first time in any wells?	No

^a Free-product measurements were not obtained during the February monitoring round for 20 monitoring wells located on PSHIA property due to restricted access.

^b A free-product measurement was not obtained during the February biweekly monitoring/recovery round for monitoring well ASE-107A, located on PSHIA property, due to restricted access.

Additional items of interest include:

- As of the end of the previous quarter (Fourth Quarter 2009), the monitoring wells included in the biweekly free-product monitoring and recovery program included ASE-67A and ASE-107A. During First Quarter 2010, beginning with the measurement on February 18, 2010, monitoring well ASE-67A maintained free-product thicknesses below 0.1 foot for a six-week period (concluding on April 5, 2010). As a result, monitoring well ASE-67A was moved from biweekly monitoring to monthly monitoring. One-time free-product thicknesses exceeding 0.1 foot were measured in monitoring wells ASE-111A and ASE-115A on February 3, 2010 and March 1, 2010, respectively. Subsequent free-product thickness measurements in monitoring well ASE-111A during the quarter (over a six-week period) remained below 0.1 foot and, as such, monitoring well ASE-111A remains in the monthly free-product monitoring program. Subsequent free-product thickness measurements in monitoring well ASE-115A also remained below 0.1 foot for the remainder of the quarter; however, the evaluation period for this well extends into Second Quarter 2010. As of the end of First Quarter 2010, the monitoring wells included in the biweekly free-product monitoring and recovery program include ASE-107A and ASE-115A (under evaluation).
- Although free-product thickness measurements in groundwater monitoring well ASE-107A exceeded the 0.75 foot CAP metric during the quarter, an automated skimmer was not installed in this PSHIA-located monitoring well. Pursuant to discussions with ADEQ's Case Manager for the LUST Enforcement Unit and the COP in June 2007 (the initial occurrence of a metric exceedance in a monitoring well located on PSHIA property) and subject to PSHIA operations' site access approval, Honeywell will continue biweekly manual free-product recovery in monitoring well ASE-107A when

the free-product thickness exceeds 0.1 foot because installation of automated recovery equipment would cause disruption to PSHIA operations at this time.

- Historical free-product thickness measurements in Honeywell's monitoring wells show that the cross-gradient extent of the free-product pool can be defined historically by groundwater monitoring wells ASE-54A and ASE-66A to the northwest and by monitoring wells BC-7A and ASE-127A to the southeast. The upgradient (northeast) extent of the free-product pool can be delineated by monitoring wells ASE-59A, ASE-60A, and ASE-61A. According to the historical thickness measurements, the downgradient (south-southwest) extent of the free-product pool can be defined by monitoring wells ASE-46A, PL-201A, ASE-62A, ASE-65A, ASE-126A, ASE-97A, BC-8B, ASE-95A, ASE-124A, ASE-106A, ASE-100A, ASE-101A, ASE-128A, ASE-98A, ASE-99A, ASE-110A, ASE-109A, ASE-123A, ASE-122A, ASE-112A, and ASE-105A, as shown in Figure 3-1. Monitoring wells ASE-108A (installed in March 2005) and ASE-116A (installed in December 2005) have never contained free product but, given their locations either very near a monitoring well containing free product (ASE-108A) or between sets of monitoring wells containing free product (ASE-116A), these wells remain within the historical extent of free-product delineation illustrated in Figure 3-1 and as part of the BSVE TTA for the approved remedy.

3.4 Groundwater Monitoring

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

3.4.1 Groundwater Elevations

In accordance with the ADEQ-approved LUST FSP (CH2M HILL, 2008b), Honeywell collects monthly water level measurements in monitoring wells associated with the CAP. As part of Honeywell's overall groundwater monitoring program, water levels are also measured quarterly in all other Honeywell groundwater monitoring wells. This section presents the results of the March 2010 groundwater monitoring event, including an evaluation of the groundwater levels and related groundwater flow directions in the area associated with the CAP. The March 2010 groundwater elevations and associated water level contours are presented in Figure 3-2 for the eastern portion of the Honeywell facility and PSHIA property for Sub-unit A. A comparison between the March 2010 water level elevations to the previous quarter's elevations is presented in Table 3-10. Hydrographs illustrating water level elevations over time for each of Honeywell's UST monitoring wells are included in Appendix G. A summary of the groundwater elevation evaluation for the quarterly water level round is provided below.

Summary of Groundwater Elevations, First Quarter 2010:

Number of wells associated with the CAP monitored during quarterly round:	56
Percentage of wells with water-level rises compared to last quarterly round:	41 percent
Minimum rise in water levels:	0.03 foot (ASE-95A)
Maximum rise in water levels:	1.05 feet (ASE-128A)

Summary of Groundwater Elevations, First Quarter 2010:

Average rise in water levels:	0.30 foot
Percentage of wells with declining water levels compared to last quarterly round:	57 percent
Minimum decline in water levels:	0.02 foot (ASE-125A)
Maximum decline in water levels:	0.33 feet (ASE-105A, ASE-112A)
Average decline in water levels:	0.22 foot
Percentage of wells with no water level change compared to last quarterly round:	2 percent
Overall change in water levels since December 2004 (historical low):	Between 7 and 17 feet higher

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

Compared to the previous quarterly water level monitoring round conducted in December 2009, water levels in March 2010 fell in 32 groundwater monitoring wells, rose in 23 groundwater monitoring wells, and remained unchanged in one groundwater monitoring well associated with the CAP, as indicated in Table 3-10.

3.4.2 Groundwater Quality

In accordance with Honeywell's LUST FSP Section 2.1 (Groundwater Monitoring and Sampling Frequency) and Section 2.2 (Groundwater Analysis) (CH2M HILL, 2008b), Honeywell performs quarterly evaluations of the groundwater quality in the area associated with the CAP. Groundwater data presented in this section were generated from samples collected during the First Quarter 2010 groundwater sampling event conducted in March 2010. Analytical results for the UST monitoring wells sampled are discussed below and are presented in Table 3-11.

Groundwater samples were not collected from monitoring wells ASE-19A and BC-18 during the March 2010 sampling event because there was not a sufficient amount of groundwater in the monitoring well casings to collect representative samples. Consistent with the LUST FSP Section 2.1 (Groundwater Monitoring and Sampling Frequency) (CH2M HILL, 2008b), which was approved by ADEQ on October 21, 2008 (ADEQ, 2008b), groundwater samples were also not collected from eight monitoring wells containing free product in the well casing at the time of water-quality sampling (ASE-67A, ASE-89A, ASE-91A, ASE-92A, ASE-102A, ASE-107A, ASE-111A, and ASE-115A).

Plan view concentration plots are provided for those jet fuel compounds that were detected at concentrations exceeding established standards during the quarter. Figures 3-3 through 3-6 present plan view concentration plots of the following constituents based on the March 2010 sampling event:

- Benzene
- MTBE
- Naphthalene
- Total recoverable petroleum hydrocarbons (TRPH)

These plots present concentration contours that delineate areas exceeding regulatory standards or guidance levels and standard laboratory detection limits, except for the plot of TRPH, which includes order of magnitude concentration contours starting with 1,000 µg/L, which is equal to the laboratory reporting limit. The plots contain contours for both the current and previous quarter, allowing for the evaluation of plume changes and stability.

Graphs illustrating concentrations of benzene, MTBE, and naphthalene over time for each of Honeywell's UST monitoring wells are included in Appendix G, and a brief discussion of these compounds' results (and those of TRPH) from the March 2010 sampling event is presented below. Complete laboratory analytical reports and the DQE for all groundwater samples collected during First Quarter 2010 are contained in Appendix H.

In addition to the petroleum hydrocarbon-related compounds discussed above, Appendix I of this report also presents plots of total trichloroethene (TCE) (sum of TCE and its daughter products cis-1,2-dichloroethene and vinyl chloride) and total trichloroethane (TCA) (sum of 1,1,1-TCA and its daughter products 1,1-dichloroethane, 1,1-dichloroethene, and chloroethane). These compounds are noted as primary contaminants of concern for the overall Motorola 52nd Street Superfund site. Honeywell continues to evaluate the benefits of the BSVE system in addressing the chlorinated VOCs found in the subsurface (see Section 2.1.1).

Further discussions of non-fuel VOC detections in groundwater, including detections of chlorinated VOCs in groundwater at and around the Honeywell facility, are included in Honeywell's annual CERCLA groundwater monitoring reports associated with the Facility's focused feasibility study and its obligations under the Administrative Order on Consent with ADEQ's Federal Projects Unit (ADEQ, 1999). The most recent groundwater monitoring report was submitted to ADEQ's Federal Projects Unit in April 2010 (CH2M HILL, 2010c).

A summary of the groundwater analytical results for benzene, MTBE, naphthalene, and TRPH are provided below followed by a brief discussion of each contaminant. Concentrations of other BTEX compounds (toluene, ethylbenzene, and xylenes) did not exceed any ADEQ Tier 1 corrective action standards and are not discussed further.

Summary of Groundwater Analytical Results, First Quarter 2010:

Number of UST wells sampled (includes CERCLA well ASE-84A):	47
Maximum benzene concentration detected during the quarter:	1,400 µg/L (ASE-63A)
Greatest increase in benzene concentration from previous quarter:	6.9 µg/L (ASE-58A)
Greatest decrease in benzene concentration from previous quarter:	108 µg/L (ASE-116A)
Number of wells with benzene concentrations exceeding USEPA maximum contaminant level of 5 µg/L:	10
Maximum MTBE concentration detected during the quarter:	160 µg/L (ASE-90A)
Greatest increase in MTBE concentration from previous quarter:	20 µg/L (BC-8B)
Greatest decrease in MTBE concentration from previous quarter:	29 µg/L (ASE-116A)
Number of wells with MTBE concentrations exceeding ADEQ-recommended Tier 1 remedial level of 94 µg/L:	3

Summary of Groundwater Analytical Results, First Quarter 2010:

Number of wells with MTBE concentrations exceeding ADEQ's investigative level of 20 µg/L:	9
Maximum naphthalene concentration detected during the quarter:	190 µg/L (ASE-63A)
Greatest increase in naphthalene concentration from previous quarter:	50 µg/L (ASE-63A)
Greatest decrease in naphthalene concentration from previous quarter:	28.4 µg/L (ASE-55A)
Number of wells with naphthalene concentrations exceeding ADEQ health-based guidance level of 280 µg/L:	0
Number of wells with naphthalene concentrations exceeding ADEQ Tier 1 Corrective Action standard of 6.5 µg/L:	9
Maximum TRPH concentration detected during the quarter:	39,000 µg/L (ASE-55A)
Greatest increase in TRPH concentration from previous quarter:	34,300 µg/L (ASE-55A)
Greatest decrease in TRPH concentration from previous quarter:	400 µg/L (ASE-108A)

3.4.2.1 Benzene

Benzene was detected in groundwater throughout the eastern portion of the Honeywell facility and on PSHIA property in March 2010, generally consistent with the historical areal extent of the free-product pool and historical groundwater data. The maximum concentration of benzene in March 2010 occurred in monitoring well ASE-63A (1,400 µg/L), as shown in Figure 3-3. This concentration was the same as the previous quarter's maximum benzene concentration (1,400 µg/L) that also occurred in monitoring well ASE-63A. Consistent with the data from December 2009 and prior sampling rounds, the highest benzene concentrations in March 2010 occurred in monitoring wells associated with the Area 2 fuel farm (1,400 µg/L at ASE-63A, 540 µg/L at ASE-38A, 73 µg/L at ASE-37A and 72 µg/L at ASE-116A). Concentrations of benzene exceeding the USEPA maximum contaminant level (MCL) (5 µg/L) were detected on the Honeywell facility in March 2010 and historically beneath the northern portion of PSHIA, as shown in Figure 3-3.

The March 2010 benzene concentrations were generally similar to the December 2009 benzene concentrations, with some variability across the monitored area. Benzene was detected in one monitoring well in March 2010 that did not have a detectable level of benzene in December 2009 (1.1 µg/L at BC-8B). Conversely, benzene was not detected in two monitoring wells in March 2010 that had detectable concentrations of benzene during the previous sampling round conducted in December 2009 (1.1 µg/L at monitoring well ASE-98A and 0.5 µg/L at monitoring well ASE-103A). The one-time detections of benzene in monitoring wells ASE-98A and ASE-103A in December 2009 are believed to be the result of equipment contamination based on an evaluation of the December sampling event and results, and the subsequent lack of detectable levels of benzene in these wells in March 2010.

Given the southwesterly direction of groundwater flow in the area, the extent of benzene concentrations associated with releases from the Honeywell facility exceeding the MCL continues to be delineated in all directions. The upgradient (northeast) extent is delineated by monitoring wells ASE-60A and ASE-61A. The cross-gradient extent is delineated by monitoring wells PL-2101 and ASE-54A to the northwest and by monitoring wells

ASE-127A and BC-7A to the southeast, as illustrated in Figure 3-3. The downgradient (south-southwest) extent of benzene exceeding the MCL is delineated by monitoring wells ASE-62A, ASE-55A, ASE-126A, ASE-97A, BC-8B, ASE-95A, ASE-124A, ASE-96A, ASE-106A, ASE-99A, ASE-110A, and ASE-113A. Additional monitoring wells downgradient of the Honeywell facility did not contain detectable levels of benzene, as indicated in Figure 3-3. The areal extent of the benzene plume has generally not changed since quarterly UST groundwater monitoring began in December 2005, indicating that the benzene plume associated with releases from the Honeywell facility is stable.

3.4.2.2 Methyl Tert-Butyl Ether

Consistent with previous sampling rounds, MTBE was detected in groundwater samples collected from the eastern portion of the Honeywell facility and PSHIA property in March 2010. The maximum concentration of MTBE in March 2010 occurred in monitoring well ASE-90A (160 µg/L), as shown in Figure 3-4. This concentration was higher than the December 2009 maximum MTBE concentration (120 µg/L) that was detected in monitoring well BC-8B. Monitoring well ASE-90A was not sampled in December 2009 due to the presence of free product in the well at the time of sampling.

Concentrations of MTBE exceeding its ADEQ-recommended Tier 1 remedial level of 94 µg/L – the remedial level that should be used when an existing drinking water receptor is not affected or is not potentially affected by MTBE (ADEQ, 2002) – were detected beneath the northern portion of PSHIA in March 2010 (140 µg/L at BC-8B and 160 µg/L at ASE-90A) and historically beneath the Honeywell facility, as shown in Figure 3-4.

In general, changes in concentrations of MTBE in March 2010 were variable compared to the previous quarter for monitoring wells located on the Honeywell facility and PSHIA property. In March 2010, MTBE was not detected in two monitoring wells that had detectable concentrations of MTBE during the previous sampling round conducted in December 2009 (0.7 µg/L at monitoring well ASE-84A and 1.6 µg/L at monitoring well ASE-106A).

Given the south-southwesterly direction of groundwater flow in the area, the extent of MTBE concentrations exceeding its Tier 1 remedial level (94 µg/L) is delineated in all directions. The upgradient (northeast) extent is delineated by monitoring wells ASE-60A and ASE-61A. The cross-gradient extent is delineated by monitoring wells ASE-68A and PL-2101 to the northwest and by monitoring wells ASE-116A, ASE-38A, ASE-37A, ASE-63A, ASE-127A, ASE-64A and ASE-105A to the southeast. The downgradient (south-southwest) extent of MTBE exceeding its Tier 1 remedial level is delineated by monitoring wells PL-201A, ASE-108A, PL-105A, ASE-97A, ASE-95A, ASE-124A, ASE-100A, ASE-96A, ASE-101A, and ASE-106A. Additional monitoring wells on and downgradient of the Honeywell facility did not contain detectable levels of MTBE.

Based on the March 2010 data, the extent of the MTBE plume on PSHIA property continues to be delineated to 20 µg/L (ADEQ's investigative level) to the southwest, south, southeast, and east by monitoring wells ASE-125A, ASE-129A, ASE-95A, ASE-103A, ASE-124A, ASE-100A, ASE-128A, ASE-101A, ASE-99A, ASE-106A, ASE-114A, ASE-113A, ASE-112A, and ASE-105A. West of monitoring wells ASE-126A and BC-18, the March 2010 MTBE plume is delineated to 20 µg/L by Honeywell CERCLA monitoring well ASE-84A (<0.5

µg/L). This well is not associated with the CAP; however, as discussed in the *First Quarter Status Report for 2009, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20* (CH2M HILL, 2009d), Honeywell is now collecting quarterly groundwater samples from monitoring well ASE-84A to evaluate the extent of the MTBE plume on PSHIA property west of monitoring wells ASE-126A and BC-18.

3.4.2.3 Naphthalene

Naphthalene was detected in groundwater at the Honeywell facility and beneath PSHIA property at locations generally consistent with where it has historically been observed, as shown in Figure 3-5. The maximum concentration of naphthalene in March 2010 occurred in monitoring well ASE-63A (190 µg/L) located south of the Area 2 fuel farm. This concentration was greater than the December 2009 maximum naphthalene concentration (140 µg/L), also detected in monitoring well ASE-63A. Other naphthalene concentrations detected in monitoring wells in March 2010 ranged from 2.9 µg/L (ASE-58A) to 35 µg/L (ASE-38A); there were no concentrations detected that exceeded the ADEQ-recommended health-based guidance level (280 µg/L). As such, there is no 280 µg/L contour illustrated in Figure 3-5.

Given the southwesterly direction of groundwater flow in the area, the extent of naphthalene concentrations exceeding the ADEQ Tier 1 corrective action standard of 6.5 µg/L is delineated in all directions. The upgradient (northeast) extent is delineated by monitoring wells ASE-60A and ASE-61A. The cross-gradient extent is delineated by monitoring wells ASE-68A, PL-2101, and ASE-54A to the northwest and by monitoring wells ASE-127A and BC-7A to the southeast, as illustrated in Figure 3-5. The downgradient (south-southwest) extent of naphthalene exceeding 6.5 µg/L is delineated by monitoring wells ASE-58A, PL-201A, ASE-62A, ASE-55A, ASE-126A, ASE-97A, ASE-95A BC-8B, ASE-124A, ASE-90A, ASE-96A, ASE-106A, ASE-99A, ASE-110A, and ASE-114A. Additional monitoring wells downgradient of the Honeywell facility did not contain detectable levels of naphthalene, as indicated in Figure 3-5. The areal extent of the naphthalene plume has generally not changed since quarterly UST groundwater monitoring began in December 2005, indicating that the naphthalene plume associated with releases from the Honeywell facility is stable.

3.4.2.4 Total Recoverable Petroleum Hydrocarbons

Consistent with previous sampling rounds, TRPH was detected in groundwater samples collected from the eastern portion of the Honeywell facility in March 2010. The maximum concentration of TRPH in March 2010 occurred in monitoring well ASE-55A (39,000 µg/L), as shown in Figure 3-6. This concentration was higher than the December 2009 maximum TRPH concentration (4,700 µg/L) that also occurred in monitoring well ASE-55A. Concentrations of TRPH exceeding the reporting limit of 1,000 µg/L were detected on the Honeywell facility in March 2010 and historically beneath the northern portion of PSHIA, as shown in Figure 3-6.

In general, changes in concentrations of TRPH in March 2010 were variable compared to the previous quarter for monitoring wells located on the Honeywell facility and PSHIA property.

Given the southwesterly direction of groundwater flow in the area, the extent of TRPH concentrations exceeding the reporting limit of 1,000 µg/L continues to be delineated in all directions. The upgradient (northeast) extent is delineated by monitoring wells ASE-60A and ASE-61A. The cross-gradient extent is delineated by monitoring wells ASE-68A, PL-2101, and ASE-54A to the northwest and by monitoring wells ASE-116A, ASE-38A, ASE-37A, ASE-127A and BC-7A to the southeast, as illustrated in Figure 3-6. The downgradient (south-southwest) extent of TRPH exceeding 1,000 µg/L is delineated by monitoring wells ASE-58A, PL-201A, ASE-62A, ASE-65A, ASE-126A, ASE-97A, ASE-95A, BC-8B, ASE-124A, ASE-96A, ASE-106A, ASE-99A, ASE-110A, and ASE-105A. Additional monitoring wells downgradient of the Honeywell facility did not contain detectable levels of TRPH, as indicated in Figure 3-6.

3.5 Data Quality Evaluation

Routine verification of 100 percent of the laboratory data was performed on First Quarter 2010 soil vapor and groundwater sampling data in accordance with Section 7.1 of the *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2007). The analytical verification process included a review of chain-of-custody records, sample holding times, trip blank and equipment blank results, field duplicate sample results, laboratory reagent blank results, and matrix spike/matrix spike duplicate results. The DQEs are presented in Appendix D (soil vapor) and Appendix H (groundwater), and the overall findings are summarized below.

3.5.1 Summary of Soil Vapor Data Quality Evaluation Findings

The following summary highlights the precision, accuracy, representativeness, completeness, and comparability findings for First Quarter 2010 soil vapor data:

- No data were rejected, and completeness was 100 percent for all method/analyte combinations.
- No data were qualified due to low-level blank contamination.
- Samples were analyzed diluted, resulting in raised reporting limits for non-detected analytes.
- Field duplicate relative-percent-difference exceedances were observed for USEPA Methods SW8015M, TO-3M, and TO-15; 40 results were qualified as estimated.
- One laboratory duplicate relative-percent-difference exceedance was observed for USEPA Method SW8015M; one result was qualified as estimated.
- Surrogate recovery exceedances were observed for USEPA Methods TO-3M and TO-15; 30 results were qualified as estimated.
- Overall, the precision and accuracy of the data, as measured by field and laboratory quality control indicators, indicates that the data are usable for project objectives.

3.5.2 Summary of Groundwater Data Quality Evaluation Findings

The following summary highlights the precision, accuracy, representativeness, completeness, and comparability findings for First Quarter 2010 groundwater data:

- No data were rejected, and completeness was 100 percent for all method/analyte combinations.
- No data were qualified due to low-level blank contamination.
- Samples were analyzed diluted for USEPA Method SW8260B and SW8015B, resulting in raised reporting limits for non-detected analytes.
- Initial and continuing calibration exceedances were observed for USEPA Method SW8260B; 32 results were qualified as estimated.
- A laboratory control sample recovery exceedance was observed for USEPA Method SW8260B; one result was qualified as estimated.
- Overall, the precision and accuracy of the data, as measured by field and laboratory quality control indicators, indicates that the data are usable for project objectives.

4.0 Contingency Triggers and Measures

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

Percent LEL measurements exceeding the 20 percent LEL threshold occurred in the shallow soil vapor monitoring location P-26-U, located in the Phase C Area during First Quarter 2010, as shown in Table 3-6. These data are consistent with historical data dating back to July 2005. As a result of the LEL measurement during First Quarter 2010 and consistent with procedures set forth in Section 8.4 of the BSVE O&M Manual (CH2M HILL, 2009b), monitoring was conducted in the surrounding vaults (ELE-VLT-02 and FBO-VLT-01) on February 11, 2010. Percent-LEL measurements at these vault locations were below the detection limit of 1 percent. Once remedial efforts begin in Phase C, the concentrations of combustible gases that led to the LEL exceedance at this location are expected to decrease. Multiport monitoring well P-26 will continue to be monitored quarterly as part of the soil vapor monitoring program.

Water levels collected on March 1, 2010 were between 7 feet and 17 feet higher than water levels collected on December 1, 2004 (historical low), thus the contingency relative to groundwater levels remained triggered. This trigger was first documented in the *Second Quarter 2009 Remediation Status Report, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20* (CH2M HILL, 2009a). As reported during Second Quarter 2009, Honeywell evaluated the impact of rising groundwater levels in the Phase C and Phase D areas. For Phase C, the design was modified to include three additional injection/extraction wells, bringing the total well count to 10. Additionally, Honeywell adjusted the Phase C wells' locations to maximize their influence in the Phase D area and raised the elevation of the top of the well screens to accommodate the current groundwater levels and future potential rises in groundwater levels in this area. All of the new Phase C wells were installed in Fourth Quarter 2009. Construction on the piping and connection to the BSVE system began on March 8, 2010 and is scheduled to continue into the Second Quarter 2010. Startup of Phase C is anticipated in the Third Quarter 2010. For Phase D, Honeywell continues to work in cooperation with the COP to evaluate appropriate remedial alternatives. On February 26, 2010, Honeywell submitted the *Phase D Remedial Alternatives Detailed Evaluation Report* (CH2M HILL, 2010b) to the COP for consideration and evaluation.

Confirmed free-product thicknesses exceeding the CAP metric of 0.1 foot occurred in two monitoring wells (ASE-67A and ASE-107A) during First Quarter 2010, as shown in Table 3-8. As such, free-product monitoring was conducted biweekly during the quarter, and manual recovery of free product from monitoring wells ASE-67A and ASE-107A occurred whenever free-product thicknesses exceeded 0.1 foot. Toward the end of First Quarter 2010, monitoring well ASE-67A maintained free-product thicknesses below 0.1 foot (for a six-week period), and as a result was moved from biweekly monitoring to monthly monitoring. One-time free-product thicknesses exceeding 0.1 foot were measured in monitoring wells ASE-111A and ASE-115A on February 3, 2010 and March 1, 2010, respectively. Free product was recovered from these wells at the time of these measurements (0.20 gallon of free product was manually recovered from monitoring well ASE-111A and 0.25 gallon of free product was manually recovered from monitoring well ASE-115A). Subsequent free-product thickness measurements in monitoring well ASE-111A during the quarter (over a 6-week period) remained below 0.1 foot and, as such, monitoring well ASE-111A remains in the monthly free-product monitoring program. Subsequent free-product thickness measurements in monitoring well ASE-115A also remained below 0.1 foot for the remainder of the quarter; however, the evaluation period for this well extends into Second Quarter 2010.

As described in Section 3.3, the free-product thickness in monitoring well ASE-107A exceeded the CAP metric of 0.75 foot for installing a dedicated, automatic free-product pump during First Quarter 2010. As stated in Table 4-1, a dedicated, automatic free-product skimming pump was not installed in monitoring well ASE-107A because installation of recovery equipment, requiring electricity or some alternative form of power and a storage vessel, in that well would cause disruption to airport operations. Pursuant to discussions with ADEQ's Case Manager for the LUST Enforcement Unit and the COP in June 2007 (in regard to the initial occurrence of a metric exceedance in monitoring well ASE 107A), Honeywell plans to continue biweekly manual free-product recovery, as required for confirmed exceedances of the 0.1 foot CAP metric, from monitoring well ASE-107A (subject to PSHIA operations' site access approval) whenever free-product thicknesses in monitoring well ASE-107A exceed a thickness of 0.75 foot. In the future, however, Honeywell may include the option to install automatic free-product skimmer equipment in appropriate monitoring wells, including ASE-107A, located south of PSHIA runway 8-26 as part of the remedial design for Phase D.

5.0 References

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- _____. 2008b. Letter from Mr. Mark W. Lucas and Mr. Eric M. Wilson/ADEQ to Ms. Troy Kennedy/Honeywell. "Field Sampling Plan Approval, LUST File #0393.02-.10, .15-.17, Facility ID #0-002227; Honeywell, 111 South 34th Street, Phoenix, Arizona." October 21.
- CH2M HILL. 2004a. *Revised Corrective Action Plan, Honeywell 34th Street Facility, Phoenix, Arizona. ADEQ Facility No 0-002227, LUST File Nos. 0393.02 through 0393.10*. July.

- _____. 2004b. Letter from Thomas J. Mooney/CH2M HILL, on behalf of Honeywell, to Mr. Mark Lucas/ADEQ. "Response to ADEQ comments dated September 30, 2004 on Honeywell's Revised Corrective Action Plan, dated July 30, 2004, Honeywell 34th Street Facility, Phoenix, Arizona." November 15.
- _____. 2006. *Air Injection Pilot Test Report, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.* October 20.
- _____. 2007. *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona.* September 20.
- _____. 2008a. *Operation and Maintenance Plan for the BSVE Air Pollution Control Equipment, Honeywell 34th Street Facility, Phoenix, Arizona.* October 17.
- _____. 2008b. *Groundwater Sampling and Free-product Monitoring and Recovery Plan, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.* October 3.
- _____. 2009a. *Second Quarter 2009 Remediation Status Report, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20.* August 31.
- _____. 2009b. *Operation and Maintenance Manual for the Biologically-enhanced Soil Vapor Extraction System, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File No. 0393.02-.10, .15-.17.* December 30.
- _____. 2009c. *Third Quarter 2009 Remediation Status Report, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20.* November 25.
- _____. 2009d. *First Quarter Status Report for 2009, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20.* May 28.
- _____. 2010a. *Fourth Quarter 2009 Remediation Status Report, Honeywell 34th Street Facility, Phoenix, Arizona, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20.* March 1.
- _____. 2010b. *Phase D Remedial Alternatives Detailed Evaluation Report, Honeywell 34th Street Facility, Phoenix, Arizona.* February 26.
- _____. 2010c. *September 2009 Annual Groundwater Monitoring Report, Honeywell 34th Street Facility, Phoenix, Arizona.* April 30.

Tables

TABLE 2-1

Free-product Recovery Details, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Well	Gallons Recovered during First Quarter 2010	Total Gallons Recovered via Skimming through First Quarter 2010
ASE-19A	0	50
ASE-20A	NA	4,104
ASE-37A	0	2
ASE-38A	0	47
ASE-39A	NA	0.7
ASE-41A	NA	27
ASE-51A	NA	105
ASE-52A	0	20
ASE-53A	NA	481
ASE-55A	0	3
ASE-56A	NA	663
ASE-57A	NA	685
ASE-58A	0	0
ASE-63A	0	0
ASE-64A	0	32
ASE-67A	0.6	353
ASE-68A	0	75
ASE-89A	0	139
ASE-90A	0	7
ASE-91A	0	0
ASE-92A	0	0
ASE-96A	0	1
ASE-102A	0	147
ASE-107A	2.6	35
ASE-111A	0.2	14
ASE-113A	0	0
ASE-114A	0	0.4
ASE-115A	0.25	3
ASE-130A	0	0.3
PL-101A	NA	291
PL-105A	0	6
PL-2101	0	0.02
Total	3.7	7,289

Notes:

This table includes all wells that have historically had measureable free product.

Rounding may affect totals shown in far right column and totals at bottom of table.

NA = Not available due to connection to the BSVE system.

TABLE 3-1

Summary of TO-15 Detected Analytical Results for Soil-vapor Samples - Comparison of Shallow Monitoring Points (<15 feet) to BSVE Shallow Vapor Action Levels, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	BZ	CHCL3	C12DCE	EBZ	C6HT	PCE	TOL	TCE	124TMBZ	135TMBZ	mp-XYL	o-XYL	XYL
Tier 1 Vapor Action Levels :		20	7	3,383	63	37,714	27	280,857	79	397	340	39,429	39,320	39,429
Tier 2 Vapor Action Levels :		202	68	3,383	631	37,714	268	280,857	788	397	340	39,429	39,320	39,429
Multi-port Monitoring Wells														
P-24-U	02/11/10	<0.019	0.034	<0.024	0.12	<0.021	<0.041	<0.023	<0.033	0.52	0.16	0.12	<0.026	0.12
P-25-U	02/09/10	<0.0032	<0.005	<0.004	<0.0044	<0.0036	0.063	<0.0038	0.0083	0.0058	<0.005	<0.0044	<0.0044	<0.0088
P-26-U	02/09/10	0.079	<0.094	<0.077	<0.084	<0.068	<0.13	<0.073	<0.1	<0.095	<0.095	<0.084	<0.084	<0.17
P-30-U	02/11/10	<0.0033	<0.0051	<0.0041	<0.0045	<0.0036	<0.007	<0.0039	<0.0056	<0.0051	<0.0051	<0.0045	<0.0045	<0.009
Process Monitoring Wells														
PMW-1-U	02/10/10	0.016	<0.0058	<0.0047	0.017	0.008	<0.008	<0.0045	0.024	0.12	0.037	0.045	0.0086	0.054
PMW-2-U	02/11/10	<0.0035	<0.0053	<0.0043	0.013	<0.0038	<0.0074	<0.0041	0.0059	0.2	0.036	0.045	<0.0047	0.045
PMW-3-U	02/12/10	<0.01	<0.016	<0.013	0.048	0.021	<0.022	<0.012	<0.017	0.32	0.068	0.096	<0.014	0.096
PMW-4-U	02/10/10	0.017	0.0063	<0.0046	0.019	0.0085	<0.0078	<0.0044	0.03	0.13	0.045	0.053	0.01	0.064
PMW-5-U	02/05/10	0.11	<0.074	<0.06	0.21	<0.054	<0.1	<0.057	<0.082	1.9	0.8	0.64	0.12	0.76
PMW-6-U	02/11/10	<0.0034	<0.0052	<0.0042	<0.0046	<0.0038	<0.0072	<0.004	<0.0057	0.039	0.0055	0.0078	<0.0046	0.0078
PMW-7-U	02/08/10	<0.0034	<0.0052	<0.0042	<0.0046	<0.0038	<0.0073	<0.004	<0.0057	0.01	<0.0053	<0.0046	<0.0046	<0.0093
PMW-8-U	02/08/10	<0.0035	<0.0053	<0.0043	<0.0047	<0.0038	<0.0074	<0.0041	<0.0058	0.011	<0.0053	<0.0047	<0.0047	<0.0094
PMW-9-U	02/05/10	0.057	<0.012	<0.0095	0.087	0.033	<0.016	0.029	0.029	0.52	0.16	0.25	0.067	0.32
PMW-10-U	02/10/10	0.015	<0.0056	<0.0046	0.019	0.0075	<0.0078	<0.0043	0.044	0.13	0.045	0.053	0.01	0.063
Sub-slab														
P-31	02/17/10	0.004	<0.0055	<0.0045	0.0094	0.0047	<0.0076	<0.0042	<0.006	0.14	0.029	0.034	<0.0049	0.034
P-32	02/16/10	<0.0037	<0.0056	0.011	0.034 J	0.11 J	0.067	<0.0044	1.7 J	0.54 J	0.12 J	0.13 J	0.011	0.14 J
P-33	02/17/10	<0.0037	<0.0057	<0.0046	<0.0051	<0.0041	0.075	<0.0044	0.041	0.038	0.0077	0.0079	<0.0051	0.0079
P-35	02/17/10	0.011	<0.014	<0.012	0.045	0.028	5.9	<0.011	0.77	0.31	0.11	0.13	0.021	0.15
P-36	02/17/10	<0.0034	<0.0052	<0.0042	0.0056	<0.0037	0.032	0.0044	0.037	0.093	0.019	0.022	<0.0046	0.022
P-37	02/17/10	<0.0036	<0.0055	<0.0045	<0.0049	<0.004	<0.0076	<0.0042	0.029	0.12	0.028	0.019	<0.0049	0.019
P-38	02/17/10	0.059	<0.058	<0.047	0.36	0.22	0.17	<0.045	0.071	2.1	0.82	1.1	0.15	1.2
P-39	02/17/10	<0.0035	<0.0054	<0.0044	0.022	0.016	0.013	0.0051	0.0079	0.3	0.079	0.086	0.0087	0.094
SVV-1	02/16/10	<0.011	<0.017	<0.014	0.12	0.097	<0.024	<0.013	0.028	0.99	0.23	0.4	0.034	0.43
SVV-2	02/17/10	<0.037	<0.057	<0.046	0.13	0.055	<0.079	<0.044	<0.063	0.92	0.34	0.36	0.057	0.41
SVV-3	02/17/10	0.019	<0.015	<0.012	0.077	0.038	<0.02	<0.011	<0.016	0.47	0.17	0.21	0.037	0.24
SVV-4	02/17/10	<0.0094	<0.014	<0.012	0.035	0.015	0.037	<0.011	<0.016	0.25	0.086	0.099	0.016	0.11

Notes:

All results are reported in micrograms per liter.
 Maximum detected concentration between primary samples and field duplicates is shown. If an analyte is not detected in both the primary and field duplicate sample and the reporting limits differ, the lower of the two reporting limits is shown.
 < = Not detected at the reported detection limit

- J = Estimated value
- BZ = Benzene
- CHCL3 = Chloroform
- C12DCE = cis-1,2-Dichloroethene
- EBZ = Ethylbenzene
- C6HT = n-Hexane
- PCE = Tetrachloroethene
- TOL = Toluene
- TCE = Trichloroethene
- 124TMBZ = 1,2,4-Trimethylbenzene
- 135TMBZ = 1,3,5-Trimethylbenzene
- mp-XYL = Xylenes, m & p
- o-XYL = Xylenes, o
- XYL = Total xylenes

TABLE 3-2

Summary of TO-15 Detected Analytical Results for Soil-vapor Samples - Comparison of Deep Monitoring Points (≥15 feet) to BSVE Deep Vapor Action Levels, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	BZ	CHCL3	C12DCE	EBZ	C6HT	MTBE	PCE	TOL	TCE	124TMBZ	135TMBZ	mp-XYL	o-XYL	XYL
Tier 1 Vapor Action Levels :		21	7	3,531	66	38,350	622	28	291,289	82	418	358	41,081	40,781	41,081
Tier 2 Vapor Action Levels :		209	70	3,531	658	38,350	6,218	280	291,289	820	418	358	41,081	40,781	41,081
Groundwater Monitoring Wells															
ASE-54A	02/09/10	<0.48	<0.74	<0.6	2.3	2.6	<0.55	<1	0.58	4.8	9.8	3.1	12	<0.66	12
ASE-60A	02/08/10	<0.28	<0.43	3	<0.38	<0.31	<0.32	<0.6	<0.33	25	1.3	<0.44	<0.38	<0.38	<0.77
Multi-port Monitoring Wells															
P-24-M	02/11/10	11	<1.3	<1	<1.1	1	<0.94	<1.8	<0.98	<1.4	<1.3	<1.3	<1.1	<1.1	<2.3
P-24-L	02/11/10	0.12	<0.067	<0.054	0.071	<0.048	<0.049	<0.093	<0.052	<0.074	0.4	0.12	0.085	<0.059	0.085
P-25-M	02/09/10	<0.003	0.0093	0.0042	<0.0041	<0.0033	<0.0034	0.092	0.009	0.13	0.016	<0.0047	0.029	0.0093	0.038
P-25-L	02/09/10	0.068	<0.0045	<0.0037	0.025	0.013	0.0094	0.0064	0.0065	0.012	0.051	0.017	0.039	0.0067	0.046
P-26-M	02/09/10	<0.0092	<0.014	<0.011	<0.012	<0.01	0.2	<0.019	<0.011	<0.015	<0.014	<0.014	<0.012	<0.012	<0.025
P-26-L	02/09/10	<0.063	<0.096	<0.078	<0.085	<0.069	0.36	<0.13	<0.074	<0.11	<0.096	<0.096	<0.085	<0.085	<0.17
P-30-M	02/11/10	<0.81	<1.2	<1	17	<0.89	<0.91	<1.7	<0.95	<1.4	<1.2	<1.2	1.4	<1.1	1.4
P-30-L	02/11/10	<0.13	<0.2	<0.16	0.42	<0.14	<0.14	<0.27	<0.15	<0.22	<0.2	<0.2	<0.17	<0.17	<0.35
Process Monitoring Wells															
PMW-1-M	02/10/10	0.014	<0.0058	<0.0047	0.015	0.0071	<0.0043	<0.0081	<0.0045	0.019	0.1	0.032	0.043	0.0081	0.051
PMW-2-M	02/11/10	<0.0035	0.013	<0.0044	<0.0048	<0.0039	<0.004	<0.0075	<0.0041	<0.0059	0.099	0.015	0.017	<0.0048	0.017
PMW-3-M	02/12/10	<0.0031	<0.0048	<0.0039	0.042	0.018	<0.0035	<0.0066	<0.0037	0.0074	0.19	0.049	0.088	0.0062	0.094
PMW-4-M	02/10/10	0.014	0.2	<0.0046	0.017	0.0075	<0.0042	<0.0078	<0.0044	0.024	0.12	0.04	0.048	0.0098	0.057
PMW-5-M	02/05/10	0.03	<0.02	<0.016	0.071	0.022	<0.015	<0.028	0.016	<0.022	0.62	0.24	0.21	0.044	0.26
PMW-6-M	02/11/10	<0.0036	<0.0054	<0.0044	<0.0048	<0.0039	<0.004	<0.0076	<0.0042	<0.006	0.024	<0.0055	0.0054	<0.0048	0.0054
PMW-7-M	02/08/10	<0.0032	0.014	<0.004	<0.0043	<0.0035	<0.0036	<0.0068	<0.0038	<0.0054	0.0057	<0.0049	<0.0043	<0.0043	<0.0087
PMW-8-M	02/08/10	<0.0035	<0.0053	<0.0043	<0.0047	<0.0038	<0.0039	<0.0074	<0.0041	<0.0058	0.0083	<0.0053	<0.0047	<0.0047	<0.0094
PMW-9-M	02/05/10	0.043	<0.018	<0.015	0.062	0.029	<0.013	<0.025	0.022	0.021	0.43	0.13	0.18	0.047	0.22
PMW-10-M	02/05/10	0.1	<0.018	<0.015	0.14	0.06	<0.013	0.031	0.05	0.12	0.85	0.28	0.42	0.12	0.54
PMW-14-M	02/11/10	0.01	<0.0051	<0.0041	0.01	0.024	<0.0037	0.0085	<0.0039	0.011	0.088	0.029	0.03	0.0064	0.036

Notes:

All results are reported in micrograms per liter.

Maximum detected concentration between primary samples and field duplicates is shown. If an analyte is not detected in both the primary and field duplicate sample and the reporting limits differ, the lower of the two reporting limits is shown.

< = Not detected at the reported detection limit

BZ = Benzene

CHCL3 = Chloroform

C12DCE = cis-1,2-Dichloroethene

EBZ = Ethylbenzene

C6HT = n-Hexane

MTBE = Methyl tert-butyl ether

PCE = Tetrachloroethene

TOL = Toluene

TCE = Trichloroethene

124TMBZ = 1,2,4-Trimethylbenzene

135TMBZ = 1,3,5-Trimethylbenzene

mp-XYL = Xylenes, m & p

o-XYL = Xylenes, o

XYL = Total xylenes

TABLE 3-3

Summary of TO-15 Detected Analytical Results for Soil-vapor Samples - Comparison of Shallow Monitoring Points (<15 feet) to Long-term Shallow Vapor Action Levels, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	BZ	CHCL3	EBZ	C6HT	PCE	TCE	124TMBZ	135TMBZ	mp-XYL	o-XYL	XYL
Tier 1 Vapor Action Levels :		5	2	17	9,889	7	21	107	91	10,422	10,322	10,422
Tier 2 Vapor Action Levels :		53	18	167	9,889	71	208	107	91	10,422	10,322	10,422
Process Monitoring Wells												
PMW-15-U	02/08/10	<0.0031	<0.0048	<0.0043	<0.0035	<0.0067	<0.0053	0.005	<0.0048	<0.0043	<0.0043	<0.0086
Sentinel Wells												
P-28-U	02/11/10	<0.0031	<0.0048	<0.0042	<0.0034	0.02	<0.0052	<0.0048	<0.0048	<0.0042	<0.0042	<0.0085
P-46-U	02/09/10	0.076	<0.034	0.099	0.053	<0.047	0.047	0.86	0.29	0.28	0.068	0.35
P-47	02/09/10	0.054	<0.017	0.051	0.024	<0.024	0.047	0.44	0.14	0.15	0.034	0.18
SMW-1-U	02/09/10	<0.003	<0.0046	<0.0041	<0.0033	<0.0064	<0.0051	0.011	<0.0047	<0.0041	<0.0041	<0.0083
SMW-3-U	02/09/10	<0.0035	0.055	<0.0048	<0.0039	<0.0075	<0.0059	<0.0054	<0.0054	<0.0048	<0.0048	<0.0096
SMW-4-U	02/10/10	0.015	0.015	0.021	0.0088	0.034	1.1	0.16	0.052	0.059	0.011	0.071
SMW-5-U	02/10/10	<0.0034	<0.0052	<0.0046	<0.0037	0.17	<0.0057	<0.0052	<0.0052	<0.0046	<0.0046	<0.0092
SMW-6-U	02/10/10	0.018	<0.006	0.028	0.012	<0.0083	0.037	0.2	0.063	0.078	0.016	0.093
SMW-7-U	02/10/10	0.038	<0.012	0.058	0.023	<0.016	0.026	0.35	0.12	0.16	0.033	0.19
SMW-8-U	02/10/10	<0.0031	<0.0047	<0.0042	<0.0034	0.058	0.024	0.0057	<0.0048	<0.0042	<0.0042	<0.0084
SMW-12-U	02/09/10	<0.0033	<0.0051	<0.0045	<0.0036	0.017	<0.0056	<0.0051	<0.0051	<0.0045	<0.0045	<0.009
Sub-slab												
P-41	02/16/10	<0.0036	0.012	0.023	<0.004	0.013	0.26	0.3	0.071	0.083	0.0063	0.089

Notes:

All results are reported in micrograms per liter.

Maximum detected concentration between primary samples and field duplicates is shown. If an analyte is not detected in both the primary and field duplicate sample and the reporting limits differ, the lower of the two reporting limits is shown.

< = Not detected at the reported detection limit

BZ = Benzene

CHCL3 = Chloroform

EBZ = Ethylbenzene

C6HT = n-Hexane

PCE = Tetrachloroethene

TCE = Trichloroethene

124TMBZ = 1,2,4-Trimethylbenzene

135TMBZ = 1,3,5-Trimethylbenzene

mp-XYL = Xylenes, m & p

o-XYL = Xylenes, o

XYL = Total xylenes

TABLE 3-4

Summary of TO-15 Detected Analytical Results for Soil-vapor Samples - Comparison of Deep Monitoring Points (≥15 feet) to Long-term Deep Vapor Action Levels, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	BZ	CHCL3	C12DCE	EBZ	C6HT	MTBE	PCE	TOL	TCE	124TMBZ	135TMBZ	VC	mp-XYL	o-XYL	XYL
Tier 1 Vapor Action Levels :		6	2	1,045	19	10,524	176	8	84,158	24	128	109	10	12,075	11,782	12,075
Tier 2 Vapor Action Levels :		60	20	1,045	194	10,524	1,761	83	84,158	240	128	109	104	12,075	11,782	12,075
Process Monitoring Wells																
PMW-15-M	02/08/10	<0.003	<0.0046	<0.0038	<0.0041	<0.0033	<0.0034	0.013	<0.0036	<0.0051	<0.0047	<0.0047	<0.0024	<0.0041	<0.0041	<0.0083
Sentinel Wells																
BC-7A	02/12/10	<0.0032	0.038	<0.004	0.0055	0.0047	<0.0036	0.42	<0.0038	0.036	0.036	0.0081	<0.0026	0.018	<0.0044	0.018
BC-18	02/10/10	<0.018	0.077	0.6	<0.024	<0.02	<0.02	0.41	<0.021	2.5	<0.027	<0.027	<0.014	<0.024	<0.024	<0.048
PL-102A	02/09/10	0.044 J	0.098 J	<0.015	0.082 J	<0.014	<0.014	<0.026	<0.015	<0.021	0.65 J	0.18 J	<0.0099	0.2 J	0.019	0.2 J
PL-2102	02/09/10	<0.48	<0.73	<0.59	2.6	3	<0.54	<1	<0.56	<0.8	1.9	<0.73	<0.38	1.5	<0.65	1.5
ASE-61A	02/08/10	0.5	0.23	<0.071	0.18	0.084	<0.064	2.1	<0.067	13	1.2	0.38	<0.046	0.4	0.12	0.52
P-28-M	02/11/10	<0.0034	0.012	<0.0043	<0.0047	<0.0038	<0.0039	0.26	<0.0041	0.027	<0.0053	<0.0053	<0.0027	<0.0047	<0.0047	<0.0093
P-28-L	02/11/10	<0.0033	0.014	<0.004	<0.0044	<0.0036	<0.0037	0.24	<0.0038	0.015	<0.005	<0.005	<0.0026	<0.0044	<0.0044	<0.0089
P-46-M	02/09/10	<0.14	<0.22	<0.18	<0.19	<0.16	<0.16	<0.3	<0.17	<0.24	4	1.1	<0.11	0.45	<0.19	0.45
P-46-L	02/09/10	0.068	0.18	0.075	0.12	<0.052	<0.053	0.58	<0.056	3.3	2.5	0.76	<0.038	0.35	0.11	0.46
SMW-1-M	02/09/10	<0.0033	<0.0051	<0.0041	<0.0045	<0.0037	<0.0038	<0.0071	<0.0039	<0.0056	<0.0051	<0.0051	<0.0027	<0.0045	<0.0045	<0.0091
SMW-1-L	02/09/10	<0.19	<0.3	<0.24	0.32	<0.21	<0.22	<0.41	<0.23	2	<0.3	<0.3	<0.15	<0.26	<0.26	<0.53
SMW-2-M	02/09/10	<0.0039	0.011	<0.0048	<0.0053	<0.0043	<0.0044	<0.0083	<0.0046	<0.0066	<0.006	<0.006	<0.0031	<0.0053	<0.0053	<0.011
SMW-3-M	02/09/10	<0.0037	<0.0056	<0.0045	<0.005	<0.004	<0.0041	<0.0078	<0.0043	<0.0062	<0.0056	<0.0056	<0.0029	<0.005	<0.005	<0.0099
SMW-3-L	02/09/10	0.013	0.18	<0.0043	0.0078	<0.0038	<0.0039	0.083	<0.0041	0.065	0.008	<0.0053	<0.0028	<0.0047	<0.0047	<0.0094
SMW-4-M	02/10/10	0.023	0.043	<0.0053	0.014	0.0059	<0.0048	0.027	<0.005	1.3	0.12	0.038	<0.0034	0.041	0.0074	0.048
SMW-4-L	02/10/10	0.028	0.07	<0.0055	0.029	0.012	<0.005	0.18	0.0054	15	0.19	0.061	0.012	0.077	0.015	0.092
SMW-5-M	02/10/10	<0.0036	<0.0055	<0.0045	<0.0049	<0.004	<0.0041	0.51	<0.0042	0.0064	<0.0055	<0.0055	<0.0029	<0.0049	<0.0049	<0.0098
SMW-6-M	02/10/10	0.01	<0.006	<0.0049	0.016	0.0063	<0.0044	0.009	<0.0046	0.027	0.13	0.041	<0.0031	0.044	0.0088	0.053
SMW-6-L	02/10/10	0.016	0.085	0.31	0.019	0.0085	<0.0047	0.3	0.0065	3.1	<0.0064	0.047	0.0038	0.053	0.011	0.064
SMW-7-M	02/10/10	0.021	<0.0064	<0.0052	0.03	0.011	<0.0047	<0.0089	0.0059	0.014	0.21	0.068	<0.0033	0.085	0.017	0.1
SMW-7-L	02/10/10	0.012	0.059	0.21	0.018	0.0065	0.0048	0.13	<0.004	3	0.13	0.044	<0.0027	0.048	0.0095	0.058
SMW-8-M	02/10/10	<0.003	0.0052	<0.0037	<0.0041	<0.0033	<0.0034	0.085	0.0046	0.18	<0.0046	<0.0046	<0.0024	<0.0041	<0.0041	<0.0081
SMW-12-M	02/09/10	<0.0031	<0.0048	<0.0039	<0.0042	<0.0034	<0.0035	0.1	<0.0037	<0.0052	<0.0048	<0.0048	<0.0025	<0.0042	<0.0042	<0.0085

Notes:

All results are reported in micrograms per liter.

Maximum detected concentration between primary samples and field duplicates is shown. If an analyte is not detected in both the primary and field duplicate sample and the reporting limits differ, the lower of the two reporting limits is shown.

< = Not detected at the reported detection limit

J = Estimated value

BZ = Benzene

CHCL3 = Chloroform

C12DCE = cis-1,2-Dichloroethene

EBZ = Ethylbenzene

C6HT = n-Hexane

MTBE = Methyl tert-butyl ether

PCE = Tetrachloroethene

TOL = Toluene

TCE = Trichloroethene

124TMBZ = 1,2,4-Trimethylbenzene

135TMBZ = 1,3,5-Trimethylbenzene

VC = Vinyl chloride

mp-XYL = Xylenes, m & p

o-XYL = Xylenes, o

XYL = Total xylenes

TABLE 3-5

Summary of TO-15 Detected Analytical Results and Gasoline Range Hydrocarbons by SW8015 for BSVE Injection/Extraction Well Soil-vapor Samples, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	GASC6C10 ^a	BZ	CHCL3	DCA	DCE	C12DCE	EBZ	TCFM	DCDFM	TCTFE	MTBE	PCE	TOL	111TCA	TCE	VC	mp-XYL	o-XYL	XYL
BC-8B	02/10/10	<49	<0.0031	0.017	0.14	0.033	<0.0039	<0.0042	0.0068	<0.0048	0.058	<0.0035	0.091	<0.0037	<0.0053	0.042	<0.0025	<0.0042	<0.0042	<0.0085
BV-1N	02/16/10	110	<0.038	<0.059	0.19	<0.048	<0.048	0.061	<0.067	<0.059	<0.092	<0.043	<0.081	<0.045	<0.065	<0.064	<0.031	<0.052	<0.052	<0.1
BV-2N	02/11/10	1,000	<0.8	<1.2	1.4	<0.99	<0.99	19	<1.4	<1.2	<1.9	<0.9	<1.7	<0.94	<1.4	<1.3	<0.64	31	1.9	33
BV-3N	02/16/10	130	0.06	0.65	0.25	<0.052	<0.052	<0.057	<0.074	<0.065	<0.1	<0.048	<0.09	<0.05	0.74	0.13	<0.034	0.11	<0.057	0.11
BV-4N	02/15/10	1,000	3.1	<1.3	1.1	<1	<1	7.6	<1.5	<1.3	<2	<0.93	17	<0.98	5.4	2.1	<0.66	30	3.4	34
BV-5	02/18/10	490	2.9	<0.62	<0.51	<0.5	<0.5	<0.55	<0.71	<0.63	<0.97	2.2	<0.86	<0.48	<0.69	<0.68	<0.33	0.61	<0.55	0.61
BV-6N	02/15/10	1,400	16	<1.2	10	<0.96	<0.96	42	<1.4	<1.2	<1.9	<0.87	<1.6	3.5	<1.3	<1.3	<0.62	72	8.2	81
BV-7N	02/15/10	2,400	160	<1.2	17	1.6	<0.99	30	<1.4	<1.2	24	87	<1.7	50	<1.4	<1.3	<0.64	240	80	320
BV-8N	02/19/10	510	1.3	<1.3	9.6	<1.1	<1.1	<1.2	<1.5	<1.3	4.8	<0.98	<1.8	<1	<1.5	<1.5	<0.69	6.1	<1.2	6.1
BV-9N	02/16/10	430	<0.24	<0.36	<0.3	<0.3	<0.3	<0.32	<0.42	<0.37	<0.57	<0.27	<0.51	<0.28	<0.41	<0.4	<0.19	<0.32	<0.32	<0.65
BV-10N	02/16/10	770	<0.42	<0.64	1.2	<0.52	<0.52	1.1	<0.74	<0.65	<1	<0.48	<0.9	<0.5	0.92	<0.71	<0.34	1.9	<0.57	1.9
BV-11N	02/16/10	<49	0.006	0.042	<0.0043	<0.0042	<0.0042	0.0056	0.0077	<0.0052	0.0099	<0.0038	0.04	<0.004	<0.0058	<0.0057	<0.0027	0.019	<0.0046	0.019
BV-12N	02/16/10	360	<0.2	<0.31	<0.25	<0.25	<0.25	<0.27	<0.35	<0.31	<0.48	<0.23	<0.43	<0.24	<0.34	<0.34	<0.16	<0.27	<0.27	<0.54
BV-13N	02/16/10	170	<0.15	<0.22	<0.19	<0.18	<0.18	<0.2	<0.26	<0.23	<0.35	<0.17	<0.31	<0.17	<0.25	0.65	<0.12	<0.2	<0.2	<0.4
BV-14N	02/18/10	720	57	<1.2	<1	<0.99	<0.99	28	<1.4	<1.2	<1.9	8.3	<1.7	<0.94	<1.4	<1.3	<0.64	16	<1.1	16
BV-15N	02/16/10	50	0.0099	0.026	<0.0045	0.011	<0.0044	0.0092	0.0065	<0.0054	0.0085	<0.004	0.098	<0.0041	0.013	0.017	<0.0028	0.025	0.0051	0.03
BV-16N	02/15/10	830	5.5	<1.2	8	<0.97	<0.97	<1.1	<1.4	<1.2	3.4	1.9	<1.7	<0.92	<1.3	<1.3	<0.63	1.1	<1.1	1.1
BV-17N	02/18/10	210	0.079	<0.1	<0.085	<0.083	<0.083	0.59 J	<0.12	<0.1	<0.16	<0.075	<0.14	<0.079	<0.11	<0.11	<0.053	1.9 J	0.45 J	2.4 J
BV-18N	02/12/10	620	1.7	<1.3	<1.1	<1.1	<1.1	<1.2	<1.5	<1.3	<2.1	<0.98	<1.8	<1	2.3	<1.5	<0.69	2.2	<1.2	2.2
BV-19N	02/19/10	870	0.91	<1.3	<1.1	<1.1	<1.1	<1.2	<1.5	<1.4	<2.1	<0.99	<1.9	<1	<1.5	<1.5	<0.7	<1.2	<1.2	<2.4
BV-20N	02/16/10	730	0.58	<0.59	<0.49	<0.48	<0.48	1.1	<0.68	<0.6	<0.93	<0.44	<0.82	<0.46	<0.66	<0.65	<0.31	1.2	<0.53	1.2
BV-21N	02/19/10	1,500	21	<1.3	13	<1	34	53	<1.5	<1.3	<2	<0.94	<1.8	13	<1.4	110	5.6	180	51	230
BV-22N	02/12/10	510	<0.3	<0.47	0.48	<0.38	<0.38	2.1	<0.54	<0.47	<0.73	<0.34	1.2	<0.36	<0.52	<0.51	<0.24	3.4	<0.41	3.4
BV-23N	02/12/10	900	0.49	<0.61	1.2	<0.5	1.7	5.1	<0.7	<0.62	<0.96	<0.45	<0.85	0.76	<0.68	5.3	<0.32	9.8	1.6	11
BV-24N	02/12/10	480 J	<0.39	<0.6	<0.5	<0.49	<0.49	2.4	<0.69	<0.61	<0.94	<0.44	<0.83	<0.46	<0.67	<0.66	<0.31	5.2	0.77	6
BV-25N	02/12/10	850	<0.87	<1.3	<1.1	<1.1	<1.1	21	<1.5	<1.3	<2.1	<0.98	<1.8	<1	<1.5	<1.5	<0.69	32	4	36
BV-26N	02/10/10	<49	0.11	0.086	0.59	0.19	<0.022	0.036	0.038	<0.028	0.26	0.085	0.2	<0.021	<0.031	0.3	<0.014	0.053	<0.024	0.053
BV-27N	02/10/10	880	7.2	<1.2	<0.97	<0.95	<0.95	<1	<1.3	<1.2	<1.8	1.2	<1.6	<0.9	<1.3	<1.3	<0.61	<1	<1	<2.1
BV-28N	02/10/10	65	<0.037	<0.056	<0.047	<0.046	<0.046	<0.05	<0.065	<0.057	<0.088	<0.042	<0.078	<0.043	<0.063	<0.062	<0.029	<0.05	<0.05	<0.1
BV-29N	02/09/10	<49	<0.0032	0.02	<0.004	<0.0039	<0.0039	<0.0043	0.036	0.012	0.05	<0.0036	0.18	<0.0037	<0.0054	<0.0053	<0.0025	<0.0043	<0.0043	<0.0086
BV-30N	02/11/10	<49	0.52	<0.058	<0.048	<0.047	<0.047	<0.052	<0.067	<0.059	<0.092	0.11	<0.081	<0.045	<0.065	<0.064	<0.031	0.066	<0.052	0.066
BV-31N	02/11/10	---	0.042	<0.063	<0.052	<0.051	<0.051	0.07	<0.073	<0.064	<0.099	<0.047	0.093	<0.049	<0.071	<0.07	<0.033	0.14	<0.056	0.14
BV-31N	02/19/10	75	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BV-32N	02/11/10	<49	<0.041	<0.063	0.14	<0.051	<0.051	<0.056	<0.072	<0.064	<0.099	<0.047	0.089	<0.049	<0.07	0.094	<0.033	<0.056	<0.056	<0.11
BV-33N	02/11/10	710	1.6	<0.31	<0.26	<0.25	<0.25	<0.28	<0.36	<0.32	<0.49	<0.23	<0.44	<0.24	<0.35	<0.34	<0.16	<0.28	<0.28	<0.56
PL-101A	02/12/10	52	<0.14	<0.21	<0.18	<0.17	<0.17	<0.19	<0.24	<0.21	<0.33	<0.16	<0.29	<0.16	<0.24	<0.23	<0.11	0.2	<0.19	0.2
ASE-20A	02/18/10	2,700 J	5	<4	<3.3	<3.2	37	28	<4.6	<4	<6.3	<2.9	<5.5	7	<4.5	63	<2.1	89	19	110
ASE-39A	02/12/10	1,600	2.6	<1.3	<1.1	<1	<1	<1.1	<1.5	<1.3	<2	10	<1.8	<0.99	<1.4	<1.4	<0.67	<1.1	<1.1	<2.3
ASE-41A	02/12/10	200	<0.12	<0.19	<0.16	<0.15	<0.15	0.39	<0.22	<0.19	<0.3	<0.14	0.39	<0.15	<0.21	<0.21	<0.099	0.68	<0.17	0.68
ASE-46A	02/19/10	180	<0.22	<0.34	<0.28	<0.27	<0.27	<0.3	<0.39	<0.34	<0.53	<0.25	<0.47	<0.26	<0.38	<0.37	<0.18	0.35	<0.3	0.35
ASE-51A	02/18/10	1,100	27	<1.1	8.4	<0.93	<0.93	15	<1.3	<1.2	<1.8	4.2	<1.6	<0.88	<1.3	<1.3	<0.6	<1	<1	<2
ASE-53A	02/15/10	3,100	200	<1.2	<1	<0.99	<0.99	46	<1.4	<1.2	<1.9	72	<1.7	<0.95	<1.4	<1.3	<0.64	<1.1	<1.1	<2.2
ASE-56A	02/19/10	720	0.9	<0.62	<0.52	<0.51	<0.51	<0.55	<0.72	<0.63	<0.98	<0.46	<0.87	<0.48	<0.7	<0.69	<0.33	<0.55	<0.55	<1.1
ASE-57A	02/18/10	440	4.5	<1.2	2.9	<0.96	<0.96	9.8	<1.4	<1.2	<1.8	<0.87	<1.6	<0.91	<1.3	<1.3	<0.62	28	1.6	30
ASE-59A	02/11/10	340	30	<1.2	30	<0.99	<0.99	3.6	<1.4	<1.2	12	1.5	<1.7	<0.95	<1.4	<1.3	<0.64	18	5.5	24
ASE-66A	02/18/10	530	<0.8	<1.2	<1	<0.99	<0.99	5.9	<1.4	<1.2	<1.9	<0.9	<1.7	<0.95	<1.4	<1.3	<0.64	31	3	34
ASE-97A	02/10/10	310	0.15	<0.2	0.9	<0.16	<0.16	0.28	<0.23	<0.2	<0.31	<0.15	<0.28	<0.15	<0.22	<0.22	0.17	<0.18	<0.18	<0.35

TABLE 3-5

Summary of TO-15 Detected Analytical Results and Gasoline Range Hydrocarbons by SW8015 for BSVE Injection/Extraction Well Soil-vapor Samples, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Notes:

^aGasoline Hydrocarbons: C6-C10 was analyzed by method SW8015 and reported in parts per million by volume. All other analytes were analyzed by method TO-15 and reported in micrograms per liter. Maximum detected concentration between primary samples and field duplicates is shown. If an analyte is not detected in both the primary and field duplicate sample and the reporting limits differ, the lower of the two reporting limits is shown.

--- = Not analyzed

< = Not detected at the reported detection limit

J = Estimated value

GASC6C10 = Gasoline Hydrocarbons: C6-C10

BZ = Benzene

CHCL3 = Chloroform

DCA = 1,1-Dichloroethane

DCE = 1,1-Dichloroethene

C12DCE = cis-1,2-Dichloroethene

EBZ = Ethylbenzene

TCFM = Trichlorofluoromethane

DCDFM = Dichlorodifluoromethane

TCTFE = 1,1,2-Trichlorotrifluoroethane

MTBE = Methyl tert-butyl ether

PCE = Tetrachloroethene

TOL = Toluene

111TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

VC = Vinyl chloride

mp-XYL = Xylenes, m & p

o-XYL = Xylenes, o

XYL = Total xylenes

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
BSVE Air Treatment System													
BSVE-INLET	01/01/10	0:47	NA	NA	17.2	3.2	2,307.0	0.061	55.0	-42.0	1,427.9 ^b	NM	NM
BSVE-INLET	01/02/10	17:38	NA	NA	15.7	3.4	4,977.0	0.13	67.0	-35.2	1,313.3 ^b	NM	NM
BSVE-INLET	01/03/10	0:39	NA	NA	16.8	3.5	3,997.0	0.05	59.0	-40.0	1,294.9 ^b	NM	NM
BSVE-INLET	01/04/10	1:11	NA	NA	17.1	3.2	2,632.0	0.062	60.0	-48.0	1,442.8 ^b	NM	NM
BSVE-INLET	01/05/10	0:57	NA	NA	16.3	3.5	3,475.0	0.095	62.0	-46.0	1,369.2 ^b	NM	35.0
BSVE-INLET	01/05/10	10:11	NA	NA	16.4	3.4	3,262.0	NM	NM	NM	1,369.2 ^b	NM	NM
BSVE-INLET	01/06/10	1:14	NA	NA	16.8	3.3	3,020.0	0.093	57.0	-50.0	1,353.5 ^b	NM	32.2
BSVE-INLET	01/07/10	1:00	NA	NA	17.3	3.0	3,407.0	0.087	69.0	-48.0	1,435.7 ^b	NM	32.2
BSVE-INLET	01/08/10	0:58	NA	NA	17.3	3.1	2,805.0	0.089	53.0	-48.0	1,484.1 ^b	NM	34.4
BSVE-INLET	01/26/10	1:20	NA	NA	7.9	7.0	18,148.4	0.85	>100.0	-18.0	1,092.3 ^b	NM	23.9
BSVE-INLET	01/27/10	14:40	NA	NA	11.9	5.5	10,822.5	0.35	>100.0	-16.3	1,098.6 ^b	NM	23.9
BSVE-INLET	01/28/10	0:50	NA	NA	13.0	5.0	10,757.4	0.42	90.0	-16.0	1,094.7 ^b	NM	26.7
BSVE-INLET	01/29/10	0:59	NA	NA	14.6	4.8	8,013.1	0.29	83.0	-16.0	1,096.7 ^b	NM	26.7
BSVE-INLET	01/30/10	0:54	NA	NA	15.2	4.5	6,872.0	0.23	82.0	-27.0	1,394.4 ^b	NM	32.2
BSVE-INLET	01/31/10	0:46	NA	NA	15.8	4.2	5,422.0	0.18	76.0	-30.0	1,407.6 ^b	NM	NM
BSVE-INLET	02/01/10	0:55	NA	NA	15.8	4.3	4,503.0	0.1	56.0	-35.0	1,386.2 ^b	NM	32.8
BSVE-INLET	02/01/10	0:55	NA	NA	15.8	4.3	4,503.0	NM	NM	NM	1,386.2 ^b	NM	NM
BSVE-INLET	02/02/10	0:53	NA	NA	15.8	4.1	4,054.0	0.15	53.0	-30.0	1,377.0 ^b	NM	35.0
BSVE-INLET	02/03/10	0:53	NA	NA	15.3	4.4	5,022.0	0.15	76.0	-40.0	1,347.8 ^b	NM	NM
BSVE-INLET	02/04/10	0:40	NA	NA	15.9	4.2	4,320.0	0.12	71.0	-40.0	1,414.2 ^b	NM	35.0
BSVE-INLET	02/05/10	0:43	NA	NA	15.8	4.3	4,254.0	0.11	81.0	-42.0	1,379.6 ^b	NM	37.8
BSVE-INLET	02/06/10	0:30	NA	NA	15.9	4.1	3,671.0	0.094	65.0	-50.0	1,434.4 ^b	NM	NM
BSVE-INLET	02/07/10	0:51	NA	NA	16.2	3.9	3,499.0	0.094	>100.0	-44.1	1,390.3 ^b	NM	NM
BSVE-INLET	02/08/10	0:59	NA	NA	16.2	3.8	3,503.0	0.095	94.0	-44.1	1,359.5 ^b	NM	37.8
BSVE-INLET	02/09/10	0:51	NA	NA	16.7	3.7	3,228.0	0.084	86.0	-46.0	1,408.4 ^b	NM	37.8
BSVE-INLET	02/10/10	0:37	NA	NA	16.7	3.7	3,256.0	0.085	77.0	-44.0	1,444.5 ^b	NM	29.4
BSVE-INLET	02/11/10	0:50	NA	NA	16.9	3.6	3,279.0	0.077	78.0	-46.0	1,421.2 ^b	NM	29.4
BSVE-INLET	02/12/10	1:22	NA	NA	16.8	3.7	3,532.0	0.076	81.0	-52.0	1,448.0 ^b	NM	32.2

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
BSVE Air Treatment System													
BSVE-INLET	02/13/10	0:36	NA	NA	16.9	3.6	3,291.0	0.079	66.0	-56.0	1,412.2 ^b	NM	NM
BSVE-INLET	02/14/10	1:29	NA	NA	16.9	3.7	3,535.0	0.076	80.0	-59.0	1,514.5 ^b	NM	NM
BSVE-INLET	02/15/10	0:53	NA	NA	16.8	3.6	3,422.0	0.068	80.0	-47.0	1,360.2 ^b	NM	37.8
BSVE-INLET	02/16/10	0:50	NA	NA	16.8	3.4	2,905.0	0.071	77.0	-50.0	1,384.9 ^b	NM	35.0
BSVE-INLET	02/17/10	16:42	NA	NA	14.5	3.8	NM	NM	NM	-54.9	1,414.4 ^b	NM	NM
BSVE-INLET	02/18/10	0:40	NA	NA	15.9	3.7	2,927.0	0.081	79.0	-55.0	1,369.5 ^b	NM	35.0
BSVE-INLET	02/19/10	0:46	NA	NA	16.6	3.5	3,203.0	0.073	77.0	-55.0	1,407.3 ^b	NM	37.8
BSVE-INLET	02/19/10	15:55	NA	NA	15.2	3.3	400.0	<0.00075	1.0	-58.0	1,407.3 ^b	NM	NM
BSVE-INLET	02/20/10	0:41	NA	NA	16.5	3.4	3,005.0	0.058	84.0	-60.0	1,407.2 ^b	NM	NM
BSVE-INLET	02/21/10	0:38	NA	NA	17.3	3.3	2,787.0	0.066	48.0	-60.0	1,392.7 ^b	NM	NM
BSVE-INLET	02/22/10	1:16	NA	NA	17.0	3.2	2,563.0	0.041	57.0	-63.3	1,384.3 ^b	NM	37.8
BSVE-INLET	02/23/10	0:54	NA	NA	17.3	3.0	2,100.0	0.048	26.0	NM	1,377.2 ^b	NM	38.0
BSVE-INLET	02/24/10	0:45	NA	NA	17.2	3.2	2,063.0	0.055	35.0	-48.7	1,262.8 ^b	NM	NM
BSVE-INLET	02/25/10	0:37	NA	NA	17.4	3.1	2,414.0	0.047	35.0	-50.0	1,324.5 ^b	NM	NM
BSVE-INLET	02/26/10	0:46	NA	NA	18.4	2.4	1,502.0	0.025	32.0	-60.0	1,404.8 ^b	NM	NM
BSVE-INLET	02/27/10	1:03	NA	NA	17.6	2.9	1,930.0	0.041	45.0	-38.0	1,396.4 ^b	NM	NM
BSVE-INLET	02/28/10	1:13	NA	NA	17.6	2.9	2,233.0	0.058	31.0	-61.4	1,387.4 ^b	NM	NM
BSVE-INLET	03/01/10	1:26	NA	NA	18.0	2.8	1,900.0	0.042	33.0	-55.2	1,365.0 ^b	NM	34.0
BSVE-INLET	03/01/10	1:26	NA	NA	18.0	2.8	1,900.0	NM	NM	NM	1,365.0 ^b	NM	NM
BSVE-INLET	03/02/10	0:33	NA	NA	17.6	2.8	1,762.0	0.046	41.0	-66.0	1,398.0 ^b	NM	NM
BSVE-INLET	03/03/10	0:54	NA	NA	16.2	3.4	2,647.0	0.056	68.0	-60.0	1,387.7 ^b	NM	NM
BSVE-INLET	03/04/10	0:48	NA	NA	17.3	2.9	1,700.0	0.024	32.0	-57.4	1,406.6 ^b	NM	38.0
BSVE-INLET	03/05/10	0:41	NA	NA	17.2	2.9	1,800.0	0.036	33.0	-57.7	1,383.0 ^b	NM	38.0
BSVE-INLET	03/06/10	0:40	NA	NA	17.1	2.9	1,948.0	0.054	37.0	-53.4	1,407.0 ^b	NM	NM
BSVE-INLET	03/07/10	0:27	NA	NA	17.3	2.9	1,925.0	0.036	37.0	-53.0	1,358.6 ^b	NM	NM
BSVE-INLET	03/08/10	0:51	NA	NA	17.0	3.0	1,916.0	0.034	35.0	-51.0	1,255.9 ^b	NM	34.0
BSVE-INLET	03/09/10	0:50	NA	NA	18.2	2.7	1,950.0	0.034	27.0	-45.1	1,341.6 ^b	NM	32.0
BSVE-INLET	03/10/10	0:52	NA	NA	18.6	2.6	1,768.0	0.04	22.0	-47.0	1,254.0 ^b	NM	31.0

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
BSVE Air Treatment System													
BSVE-INLET	03/11/10	12:58	NA	NA	18.6	2.7	1,558.0	0.03	21.0	-43.8	1,394.3 ^b	NM	32.0
BSVE-INLET	03/12/10	0:54	NA	NA	18.3	2.5	1,560.0	0.024	20.0	-52.0	1,365.9 ^b	NM	33.0
BSVE-INLET	03/13/10	0:53	NA	NA	17.7	2.6	1,723.0	0.034	27.0	-45.0	1,320.6 ^b	NM	35.0
BSVE-INLET	03/14/10	0:53	NA	NA	17.9	2.7	1,910.0	0.036	24.0	-52.8	1,280.8 ^b	NM	36.0
BSVE-INLET	03/15/10	0:50	NA	NA	17.6	2.6	1,791.0	0.029	20.0	-60.1	1,258.5 ^b	NM	36.0
BSVE-INLET	03/16/10	0:49	NA	NA	17.5	2.8	1,778.0	0.029	27.0	-52.6	1,458.6 ^b	NM	39.0
BSVE-INLET	03/17/10	0:55	NA	NA	17.6	2.6	1,660.0	0.026	31.0	-54.6	1,524.4 ^b	NM	39.0
BSVE-INLET	03/18/10	1:05	NA	NA	17.2	2.7	1,998.0	0.028	27.0	-54.9	1,530.5 ^b	NM	40.0
BSVE-INLET	03/19/10	0:48	NA	NA	16.8	2.8	1,939.0	0.032	34.0	-57.0	1,344.8 ^b	NM	40.0
BSVE-INLET	03/20/10	0:37	NA	NA	17.5	2.7	1,689.0	0.031	28.0	-53.3	1,304.8 ^b	NM	40.0
BSVE-INLET	03/21/10	0:32	NA	NA	17.6	2.7	1,735.0	0.019	24.0	-53.0	1,226.8 ^b	NM	38.0
BSVE-INLET	03/22/10	0:49	NA	NA	17.5	2.6	1,726.0	0.022	24.0	-44.0	1,207.8 ^b	NM	40.0
BSVE-INLET	03/29/10	10:24	NA	NA	14.1	3.2	4,867.0	0.13	32.0	-79.0	680.7 ^b	NM	42.0
BSVE-INLET	03/30/10	1:01	NA	NA	15.6	2.8	2,310.0	0.056	27.0	-41.2	483.4 ^b	NM	29.0
BSVE-INLET	03/31/10	1:08	NA	NA	15.2	3.2	2,856.0	0.049	59.0	-50.1	1,278.9 ^b	NM	40.0
Injection/Extraction Wells													
BC-8B	02/10/10	4:45	51-96	71.40	12.8	5.6	<5.0	<0.00075	<1.0	-0.3	NM	NM	NM
BV-1N	01/26/10	11:15	55-105	NA	10.1	6.2	3,684.8	0.19	12.0	-9.3 ^d	63	NM	NM
BV-1N	02/16/10	13:13	55-105	NA	15.0	3.6	<5.0	<0.00075	<1.0	-12.0 ^d	89	NM	NM
BV-1N	03/16/10	11:04	55-105	NA	15.0	3.1	<5.0	<0.00075	<1.0	-22.8 ^d	89	NM	NM
BV-2N	01/28/10	11:49	55-105	NA	12.5	4.3	14,252.5	0.45	>100.0	-13.4 ^d	40	NM	NM
BV-2N	02/11/10	13:01	55-105	NA	17.6	2.4	980.0	<0.00075	4.0	-31.5 ^d	26	NM	NM
BV-2N	03/16/10	14:30	55-105	NA	17.4	1.2	190.0	<0.00075	<1.0	-37.6 ^d	42	NM	NM
BV-3N	01/08/10	11:13	55-105	NA	19.9	1.8	311.2	0.0053	5.0	-25.1 ^d	178	NM	NM
BV-3N	02/16/10	9:49	55-105	NA	19.1	1.6	<5.0	<0.00075	<1.0	-15.0 ^d	99	NM	NM
BV-3N	03/17/10	14:56	55-105	NA	19.4	1.0	<5.0	<0.00075	<1.0	-9.5 ^d	99	NM	NM
BV-4N	01/07/10	11:11	55-105	NA	17.0	3.4	6,103.0	0.13	>100.0	-17.5 ^d	60	NM	NM
BV-4N	02/15/10	10:50	55-105	NA	16.6	2.9	2,000.0	0.013	9.0	-20.0 ^d	60	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Injection/Extraction Wells													
BV-4N	03/16/10	8:23	55-105	NA	17.6	2.4	890.0	<0.00075	4.0	-17.0 ^d	69	NM	NM
BV-5	01/28/10	11:08	46-66	NA	11.4	4.7	5,741.5	0.3	66.0	-9.1 ^d	44	NM	NM
BV-5	02/18/10	13:45	46-66	NA	16.6	2.3	730.0	0.016	1.0	-20.0 ^d	99	NM	NM
BV-5	03/08/10	10:28	46-66	NA	18.6	2.5	580.0	0.019	2.0	-19.0 ^d	103	NM	NM
BV-6N	01/07/10	13:32	55-105	NA	14.5	4.5	7,505.9	0.14	>100.0	-11.5 ^d	70	NM	NM
BV-6N	02/15/10	10:21	55-105	NA	15.7	4.2	2,600.0	0.031	12.0	-26.0 ^d	34	NM	NM
BV-6N	03/09/10	11:55	55-105	NA	17.1	<0.1	2,700.0	0.097	12.0	-29.1 ^d	103	NM	NM
BV-7N	01/07/10	14:56	55-105	NA	<0.1	12.8	34,037.7	1.1	>100.0	-1.8 ^d	60	NM	NM
BV-7N	02/15/10	9:51	55-105	NA	5.4	11.3	7,827.5	0.45	37.2	-5.0 ^d	30	NM	NM
BV-7N	03/08/10	14:54	55-105	NA	10.9	9.1	3,750.0	0.022	17.0	-5.4 ^d	49	NM	NM
BV-8N	01/08/10	8:45	55-105	NA	<0.1	12.6	14,534.0	0.33	>100.0	-1.7 ^d	7	NM	NM
BV-8N	02/19/10	11:06	55-105	NA	3.3	10.3	2,962.4	0.096	13.9	-0.5 ^d	28	NM	NM
BV-8N	03/09/10	10:50	55-105	NA	11.7	5.1	2,400.0	0.055	12.0	-14.0 ^d	44	NM	NM
BV-9N	01/26/10	14:06	55-105	NA	11.5	4.0	4,434.3	0.2	53.0	-12.6 ^d	34	NM	NM
BV-9N	02/16/10	8:19	55-105	NA	18.3	2.3	530.0	<0.00075	2.0	-32.0 ^d	77	NM	NM
BV-9N	03/08/10	8:18	55-105	NA	18.7	2.3	440.0	0.01	2.0	-46.0 ^d	63	NM	NM
BV-10N	01/26/10	12:03	55-95	NA	1.9	10.0	5,350.5	0.2	68.0	-5.9 ^d	44	NM	NM
BV-10N	02/16/10	13:48	55-95	NA	5.6	8.1	674.5	<0.0012	3.3	-23.0 ^d	71	NM	NM
BV-10N	03/16/10	13:00	55-95	NA	5.2	7.5	654.2	<0.0016	2.2	-23.0 ^d	45	NM	NM
BV-11N	01/28/10	14:15	55-95	NA	14.3	4.5	1,419.0	0.071	9.0	-11.7 ^d	40	NM	NM
BV-11N	02/16/10	11:43	55-95	NA	14.2	2.1	<5.0	<0.00075	<1.0	-5.0 ^d	44	NM	NM
BV-11N	03/15/10	11:08	55-95	NA	12.9	4.2	<5.0	<0.00075	<1.0	-2.0 ^d	12	NM	NM
BV-12N	01/28/10	13:47	55-105	NA	13.1	4.8	4,717.6	0.16	84.0	-10.8 ^d	16	NM	NM
BV-12N	02/16/10	10:34	55-105	NA	15.2	3.5	220.0	<0.00075	1.0	-6.0 ^d	20	NM	NM
BV-12N	03/15/10	9:04	55-105	NA	15.6	3.4	<5.0	<0.00075	<1.0	-4.0 ^d	40	NM	NM
BV-13N	01/26/10	15:12	55-95	NA	15.7	3.6	166.5	0.0018	5.0	-13.0 ^d	34	NM	NM
BV-13N	02/16/10	9:04	55-95	NA	18.3	2.6	10.0	<0.00075	<1.0	-51.0 ^d	84	NM	NM
BV-13N	03/17/10	14:18	55-95	NA	17.9	2.0	150.0	<0.00075	<1.0	-43.0 ^d	44	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Injection/Extraction Wells													
BV-14N	01/07/10	14:06	55-105	NA	13.3	5.4	11,576.3	0.3	>100.0	-11.1 ^d	70	NM	NM
BV-14N	02/16/10	8:50	55-105	NA	14.0	5.5	3,600.0	0.18	7.0	-30.0 ^d	60	NM	NM
BV-14N	03/09/10	13:47	55-105	NA	14.5	4.8	3,150.0	0.17	15.0	-32.0 ^d	44	NM	NM
BV-15N	01/28/10	14:40	55-85	NA	16.4	4.5	60.3	<0.000028	5.0	-12.3 ^d	18	NM	NM
BV-15N	02/16/10	11:10	55-85	NA	16.2	3.9	<5.0	<0.00075	<1.0	-5.0 ^d	44	NM	NM
BV-15N	03/15/10	10:27	55-85	NA	15.9	3.7	<5.0	<0.00075	<1.0	-3.0 ^d	44	NM	NM
BV-16N	01/28/10	7:53	55-105	NA	3.0	10.6	8,520.4	0.23	>100.0	-11.2 ^d	52	NM	NM
BV-16N	02/15/10	9:20	55-105	NA	12.2	6.7	1,850.0	<0.00075	9.0	-20.0 ^d	89	NM	NM
BV-16N	03/17/10	8:10	55-105	NA	14.4	4.6	670.0	<0.00075	3.0	-24.6 ^d	49	NM	NM
BV-17N	01/08/10	10:28	55-105	NA	19.0	0.9	864.2	0.021	20.0	-10.5 ^d	58	NM	NM
BV-17N	02/18/10	11:12	55-105	NA	19.1	0.7	330.0	0.018	<1.0	-2.0 ^d	99	NM	NM
BV-17N	03/08/10	8:59	55-105	NA	20.8	0.8	480.0	0.033	2.0	-1.9 ^d	118	NM	NM
BV-18N	01/07/10	10:06	55-105	NA	17.3	3.2	2,495.0	0.042	68.0	-17.7 ^d	50	NM	NM
BV-18N	02/12/10	11:23	55-105	68.75	16.6	2.7	1,150.0	<0.00075	5.0	-23.0 ^d	50	NM	NM
BV-18N	03/16/10	7:25	55-105	NA	17.5	2.3	550.0	<0.00075	2.0	-18.0 ^d	56	NM	NM
BV-19N	01/26/10	10:06	55-105	NA	4.1	9.3	27,248.3	1.4	>100.0	-10.5 ^d	40	NM	NM
BV-19N	02/19/10	14:51	55-105	NA	9.6	5.5	7,362.1	0.77	34.2	-15.0 ^d	56	NM	NM
BV-19N	03/16/10	9:36	55-105	NA	10.2	5.0	6,650.0	0.78	29.0	-13.3 ^d	52	NM	NM
BV-20N	01/26/10	9:18	55-105	NA	2.2	10.2	98,752.1	4.3	>100.0	-10.8 ^d	60	NM	NM
BV-20N	02/16/10	13:13	55-105	NA	9.2	6.6	12,032.4	1.6	1.3	-22.3 ^d	45	NM	NM
BV-20N	03/16/10	8:57	55-105	NA	8.2	6.6	4,744.3	0.62	23.4	-18.0 ^d	63	NM	NM
BV-21N	01/26/10	15:10	55-105	NA	5.7	6.8	34,911.1	0.91	>100.0	-9.8 ^d	55	NM	NM
BV-21N	02/19/10	14:02	55-105	NA	14.7	3.7	3,350.0	<0.00075	16.0	-36.0 ^d	44	NM	NM
BV-21N	03/04/10	13:11	55-105	NA	15.1	3.4	4,700.0	0.27	22.0	-44.1 ^d	51	NM	NM
BV-22N	01/07/10	10:39	55-105	NA	18.0	2.4	1,793.0	0.053	40.0	-18.1 ^d	46	NM	NM
BV-22N	02/12/10	11:46	55-105	NA	17.7	2.2	870.0	<0.00075	4.0	-19.0 ^d	27	NM	NM
BV-22N	03/16/10	7:49	55-105	NA	18.7	1.6	50.0	<0.00015	<1.0	-17.0 ^d	66	NM	NM
BV-23N	01/28/10	8:48	55-105	NA	11.7	6.0	7,497.1	0.25	86.0	-11.0 ^d	89	NM	NM

TABLE 3-6

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Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Injection/Extraction Wells													
BV-23N	02/12/10	9:07	55-105	NA	16.5	4.0	1,300.0	0.036	6.0	-13.0 ^d	63	NM	NM
BV-23N	03/17/10	11:25	55-105	NA	16.1	2.6	170.0	<0.00075	<1.0	-22.4 ^d	99	NM	NM
BV-24N	01/28/10	9:20	55-105	NA	13.4	6.4	1,421.1	0.011	32.0	-7.3 ^d	69	NM	NM
BV-24N	02/12/10	9:55	55-105	NA	17.9	2.6	640.0	<0.00075	2.0	-13.2 ^d	75	NM	NM
BV-24N	03/17/10	8:31	55-105	NA	18.0	2.0	<5.0	<0.00075	<1.0	-21.9 ^d	58	NM	NM
BV-25N	01/07/10	11:53	55-105	NA	17.1	3.4	1,911.0	0.01	76.0	-11.7 ^d	32	NM	NM
BV-25N	02/12/10	10:32	55-105	NA	17.6	2.8	1,150.0	<0.00075	5.0	-18.0 ^d	55	NM	NM
BV-25N	03/09/10	13:22	55-105	NA	19.0	2.0	1,500.0	0.093	7.0	-27.0 ^d	72	NM	NM
PL-101A	01/28/10	13:23	35-75	NA	16.4	3.6	381.3	0.01	11.0	-7.9 ^d	59	NM	NM
PL-101A	02/12/10	14:23	35-75	NA	18.6	2.0	<5.0	<0.00075	<1.0	-10.0 ^d	89	NM	NM
PL-101A	03/18/10	10:58	35-75	NA	17.9	1.9	<5.0	<0.00075	<1.0	-9.7 ^d	99	NM	NM
ASE-20A	01/26/10	14:16	61-81	NA	4.9	6.8	11,463.5	0.38	>100.0	-10.3 ^d	79	NM	NM
ASE-20A	02/18/10	10:01	61-81	NA	16.3	3.4	6,200.0	0.12	12.0	-25.0 ^d	72	NM	NM
ASE-20A	03/17/10	12:07	61-81	NA	15.8	2.5	3,750.0	<0.00075	17.0	-17.0 ^d	82	NM	NM
ASE-39A	01/28/10	12:57	55-105	NA	8.6	7.8	25,605.2	0.7	>100.0	-9.3 ^d	15	NM	NM
ASE-39A	02/12/10	15:01	55-105	NA	13.5	4.9	3,200.0	0.075	15.0	-30.0 ^d	44	NM	NM
ASE-39A	03/15/10	8:41	55-105	NA	16.0	3.4	1,550.0	0.033	7.0	-38.0 ^d	59	NM	NM
ASE-41A	01/07/10	9:31	60-90	NA	20.0	1.5	238.6	0.0078	9.0	-7.5 ^d	70	NM	NM
ASE-41A	02/12/10	10:59	60-90	NA	18.2	1.7	340.0	0.0052	1.0	-10.0 ^d	80	NM	NM
ASE-41A	03/09/10	14:23	60-90	NA	18.6	1.8	530.0	0.061	2.0	-10.5 ^d	44	NM	NM
ASE-46A	01/26/10	15:54	54.7-79.7	NA	15.4	2.7	1,559.0	0.062	16.0	-11.0 ^d	99	NM	NM
ASE-46A	02/19/10	15:22	54.7-79.7	NA	17.7	1.2	<5.0	<0.00075	<1.0	-12.0 ^d	86	NM	NM
ASE-46A	03/16/10	11:28	54.7-79.7	NA	18.3	1.0	<5.0	<0.00075	<1.0	-9.7 ^d	95	NM	NM
ASE-51A	01/27/10	15:53	55.6-80.6	NA	0.9	14.3	34,816.7	1.6	>100.0	-11.0 ^d	20	NM	NM
ASE-51A	02/18/10	8:09	55.6-80.6	NA	1.6	14.1	5,415.8	0.24	9.8	-12.0 ^d	66	NM	NM
ASE-51A	03/04/10	13:45	55.6-80.6	NA	2.6	11.9	NM	NM	NM	-11.0 ^d	89	NM	NM
ASE-51A	03/17/10	7:26	55.6-80.6	NA	5.8	11.2	2,842.4	<0.0013	12.4	-18.3 ^d	72	NM	NM
ASE-53A	01/28/10	8:20	53.8-78.8	NA	5.8	11.8	71,506.9	2.9	>100.0	-11.1 ^d	44	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Injection/Extraction Wells													
ASE-53A	02/15/10	7:50	53.8-78.8	NA	9.3	8.8	12,172.8	0.81	60.1	-24.0 ^d	56	NM	NM
ASE-53A	03/04/10	14:13	53.8-78.8	NA	8.9	7.6	9,428.6	0.58	42.9	-20.2 ^d	63	NM	NM
ASE-56A	01/27/10	16:06	55.4-80.4	NA	9.9	6.1	6,172.7	0.041	>100.0	-12.8 ^d	44	NM	NM
ASE-56A	02/19/10	11:56	55.4-80.4	NA	15.8	3.5	<5.0	<0.00075	<1.0	-51.0 ^d	77	NM	NM
ASE-56A	03/04/10	12:13	55.4-80.4	NA	16.1	3.3	1,100.0	0.034	5.0	-53.3 ^d	99	NM	NM
ASE-57A	01/28/10	10:33	55.1-80.1	NA	11.0	7.1	29,553.2	0.4	>100.0	-5.3 ^d	52	NM	NM
ASE-57A	02/18/10	12:18	55.1-80.1	NA	17.1	2.7	1,900.0	0.049	1.0	-10.0 ^d	99	NM	NM
ASE-57A	03/15/10	8:03	55.1-80.1	NA	17.3	2.6	2,250.0	0.051	10.0	-14.0 ^d	99	NM	NM
ASE-59A	01/08/10	9:50	61-91	NA	1.4	13.4	7,862.7	0.25	90.0	-4.8 ^d	10	NM	NM
ASE-59A	02/11/10	11:20	61-91	NA	3.7	12.2	594.8	<0.0012	1.6	-4.9 ^d	50	NM	NM
ASE-59A	03/18/10	11:47	61-91	NA	10.2	6.5	1,600.0	<0.00075	7.0	-18.1 ^d	69	NM	NM
ASE-66A	01/07/10	12:55	60.5-90.5	NA	16.9	2.9	1,778.0	0.0086	72.0	-12.6 ^d	19	NM	NM
ASE-66A	02/18/10	9:32	60.5-90.5	NA	17.4	2.7	1,100.0	<0.00075	2.0	-27.0 ^d	35	NM	NM
ASE-66A	03/08/10	11:01	60.5-90.5	NA	18.5	2.6	600.0	<0.00075	2.0	-59.0 ^d	69	NM	NM
ASE-97A	02/10/10	2:33	51-111	78.21	0.8	11.1	3,654.5	0.34	3.0	0.0	NM	NM	NM
BV-26N	02/10/10	1:49	51-86	78.56	1.5	10.9	<17.3	<0.0026	<3.5	-0.1	NM	NM	NM
BV-27N	02/10/10	0:59	50-105	72.36	<0.1	9.6	70,000.0	2.5	>100.0	-0.1	NM	NM	NM
BV-28N	02/10/10	0:18	50-105	73.01	0.3	6.6	305.2	0.04	<3.8	-0.1	NM	NM	NM
BV-29N	02/09/10	23:36	51.5-91.5	71.59	9.4	5.5	40.4	0.006	<2.0	0.0	NM	NM	NM
BV-30N	02/11/10	9:28	50-105	70.94	0.2	10.9	3,201.0	0.35	6.4	-0.3	NM	NM	NM
BV-31N	02/11/10	8:33	50-105	70.68	4.8	9.3	640.3	0.087	<1.8	-0.3	NM	NM	NM
BV-31N	02/19/10	8:57	50-105	70.28	4.7	9.5	2,117.0	0.26	3.7	-0.7	NM	NM	NM
BV-32N	02/11/10	10:45	48.5-88.5	78.07	10.6	7.0	<5.0	<0.00075	<1.0	-0.3	NM	NM	NM
BV-33N	02/11/10	9:59	50-105	71.02	<0.1	9.0	86,191.8	12	>100.0	-0.4	NM	NM	NM
Process Monitoring Wells													
PMW-1-U	01/05/10	9:55	5-10	--- ^c	20.4	0.2	13.2	<0.000028	<1.0	-0.1	NM	99.5	NM
PMW-1-U	02/10/10	16:26	5-10	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	-0.1	NM	59.4	NM
PMW-1-U	03/01/10	13:10	5-10	--- ^c	20.8	0.1	<5.0	<0.00075	<1.0	-0.1	NM	90.7	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Process Monitoring Wells													
PMW-1-U	03/10/10	12:12	5-10	--- ^c	20.3	0.1	<5.0	<0.00075	<1.0	-0.1	NM	56.8	NM
PMW-1-U	03/12/10	11:50	5-10	--- ^c	20.1	<0.1	<5.0	<0.00075	<1.0	0.0	NM	57.5	NM
PMW-1-M	01/05/10	10:16	20-25	--- ^c	20.5	0.2	7.8	<0.000028	<1.0	-0.1	NM	99.8	26.0
PMW-1-M	02/10/10	16:45	20-25	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	-0.1	NM	57.4	27.4
PMW-1-M	03/01/10	13:29	20-25	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	-0.1	NM	93.5	27.4
PMW-1-M	03/10/10	12:25	20-25	--- ^c	20.0	0.1	<5.0	<0.00075	<1.0	-0.1	NM	55.0	28.2
PMW-1-M	03/12/10	12:03	20-25	--- ^c	20.2	<0.1	<5.0	<0.00075	<1.0	0.0	NM	64.4	27.2
PMW-1-ML	01/04/10	9:20	55-75	68.07	17.3	3.0	2,371.0	0.0089	92.0	-1.6	NM	88.2	26.3
PMW-1-ML	02/11/10	14:01	55-75	68.23	18.1	2.7	780.0	<0.00075	<1.0	-1.0	NM	65.0	26.2
PMW-1-ML	03/01/10	13:54	55-75	68.04	19.2	1.1	1,500.0	<0.00075	7.0	-1.0	NM	99.9	26.8
PMW-1-ML	03/10/10	7:56	55-75	67.79	20.9	1.1	1,500.0	0.022	7.0	-1.0	NM	99.9	26.0
PMW-1-ML	03/12/10	12:16	55-75	67.78	18.1	1.3	980.0	<0.00075	4.0	0.0	NM	63.0	26.8
PMW-2-U	01/05/10	8:50	5-10	--- ^c	20.8	0.3	34.6	0.000072	<1.0	-0.1	NM	82.7	NM
PMW-2-U	02/11/10	14:51	5-10	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.1	NM	48.5	NM
PMW-2-U	02/23/10	13:20	5-10	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	0.0	NM	89.8	NM
PMW-2-U	02/25/10	9:02	5-10	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.2	NM	76.2	NM
PMW-2-U	03/03/10	9:53	5-10	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	-0.1	NM	94.8	NM
PMW-2-U	03/05/10	7:28	5-10	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	-0.1	NM	83.2	NM
PMW-2-U	03/10/10	12:59	5-10	--- ^c	19.8	0.1	<5.0	<0.00075	<1.0	-0.1	NM	56.6	NM
PMW-2-U	03/12/10	13:44	5-10	--- ^c	19.4	0.1	<5.0	<0.00075	<1.0	0.0	NM	89.3	NM
PMW-2-M	01/05/10	9:06	20-25	--- ^c	20.7	0.3	22.7	0.00017	<1.0	-1.5	NM	86.2	25.8
PMW-2-M	02/11/10	15:16	20-25	--- ^c	20.9	0.3	<5.0	<0.00075	<1.0	-0.1	NM	60.1	28.3
PMW-2-M	02/23/10	13:34	20-25	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	0.0	NM	92.7	27.7
PMW-2-M	02/25/10	9:16	20-25	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.2	NM	85.2	27.8
PMW-2-M	03/03/10	10:10	20-25	--- ^c	20.7	0.1	<5.0	<0.00075	<1.0	-0.2	NM	80.0	28.2
PMW-2-M	03/05/10	7:42	20-25	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.1	NM	87.8	27.7
PMW-2-M	03/10/10	13:11	20-25	--- ^c	19.6	0.1	<5.0	<0.00075	<1.0	-0.1	NM	57.5	28.6
PMW-2-M	03/12/10	13:28	20-25	--- ^c	19.6	0.1	<5.0	<0.00075	<1.0	-0.5	NM	53.4	28.0

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Process Monitoring Wells													
PMW-2-ML	01/04/10	9:55	55-75	68.21	7.6	9.8	3,967.0	0.043	>100.0	-0.8	NM	92.7	26.0
PMW-2-ML	01/11/10	13:00	55-75	68.02	5.8	9.4	3,545.6	0.044	>100.0	0.1	NM	98.1	NM
PMW-2-ML	01/20/10	11:15	55-75	68.45	2.3	10.8	5,102.2	0.082	>100.0	-1.2	NM	97.3	NM
PMW-2-ML	01/27/10	8:39	55-75	68.39	20.5	0.5	153.0	0.0014	11.0	0.0	NM	92.3	NM
PMW-2-ML	02/04/10	16:38	55-75	68.48	5.6	11.8	1,482.2	<0.0012	1.6	-2.1	NM	33.4	26.5
PMW-2-ML	02/08/10	7:30	55-75	68.43	9.2	10.4	3,752.5	0.057	100.0	-1.1	NM	99.9	26.1
PMW-2-ML	02/16/10	7:01	55-75	68.33	8.9	8.7	2,381.2	0.015	>100.0	-0.1	NM	68.5	26.0
PMW-2-ML	02/23/10	13:53	55-75	68.27	10.1	7.6	1,950.0	<0.00075	9.0	-1.2	NM	99.9	26.5
PMW-2-ML	02/25/10	9:40	55-75	68.26	11.8	7.4	3,200.0	<0.00075	15.0	-1.9	NM	99.7	26.3
PMW-2-ML	03/03/10	13:40	55-75	68.04	13.5	5.7	2,050.0	<0.00075	9.0	-0.7	NM	49.2	27.8
PMW-2-ML	03/05/10	12:30	55-75	NA	14.6	5.1	1,500.0	<0.00075	7.0	-0.6	NM	58.6	26.3
PMW-2-ML	03/10/10	13:39	55-75	67.85	11.0	5.7	1,550.0	<0.00075	7.0	-0.7	NM	81.1	26.6
PMW-2-ML	03/12/10	14:00	55-75	67.80	11.8	4.5	1,100.0	<0.00075	5.0	-0.8	NM	61.0	27.7
PMW-2-ML	03/15/10	14:46	55-75	67.72	5.9	7.7	519.2	<0.0011	1.4	0.0	NM	44.5	28.0
PMW-3-U	01/06/10	11:17	5-10	--- ^c	20.1	0.6	21.5	0.00028	<1.0	-0.2	NM	99.9	NM
PMW-3-U	02/12/10	10:39	5-10	--- ^c	20.9	0.5	<5.0	<0.00075	<1.0	-0.1	NM	76.1	NM
PMW-3-U	02/23/10	12:22	5-10	--- ^c	20.9	0.5	35.0	<0.00075	<1.0	0.0	NM	89.9	NM
PMW-3-U	02/25/10	10:12	5-10	--- ^c	20.9	0.6	<5.0	<0.00075	<1.0	-0.1	NM	79.7	NM
PMW-3-U	03/03/10	10:35	5-10	--- ^c	20.9	0.5	55.0	0.003	<1.0	-0.3	NM	66.6	NM
PMW-3-U	03/05/10	11:14	5-10	--- ^c	20.3	0.2	<5.0	<0.00075	<1.0	-0.2	NM	74.9	NM
PMW-3-M	01/06/10	11:36	20-25	--- ^c	20.8	0.3	5.8	<0.000028	<1.0	-0.2	NM	99.8	NM
PMW-3-M	02/12/10	11:01	20-25	--- ^c	20.9	0.3	<5.0	<0.00075	<1.0	-0.1	NM	71.6	28.6
PMW-3-M	02/23/10	12:38	20-25	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.1	NM	92.3	28.2
PMW-3-M	02/25/10	10:29	20-25	--- ^c	20.9	0.3	<5.0	<0.00075	<1.0	-0.2	NM	92.0	27.7
PMW-3-M	03/03/10	10:51	20-25	--- ^c	20.9	0.2	35.0	0.0022	<1.0	-0.2	NM	50.3	30.1
PMW-3-M	03/05/10	11:25	20-25	--- ^c	20.0	0.5	<5.0	<0.00075	<1.0	-0.2	NM	63.9	28.1
PMW-3-ML	01/06/10	12:22	55-75	68.49	19.8	1.4	8,752.0	0.32	>100.0	-1.7	NM	98.6	NM
PMW-3-ML	02/11/10	11:58	55-75	68.32	19.7	1.0	7,450.0	<0.00075	<1.0	-1.2	NM	71.3	26.2

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Process Monitoring Wells													
PMW-3-ML	02/23/10	12:59	55-75	67.98	19.2	1.0	2,800.0	<0.00075	13.0	-1.2	NM	99.9	26.9
PMW-3-ML	02/25/10	10:48	55-75	68.15	20.4	1.0	2,950.0	<0.00075	13.0	-0.9	NM	99.9	26.5
PMW-3-ML	03/03/10	13:19	55-75	67.96	19.7	0.7	1,750.0	<0.00075	8.0	-0.5	NM	88.0	27.0
PMW-3-ML	03/05/10	12:00	55-75	NA	19.2	0.8	1,650.0	<0.00075	8.0	-0.5	NM	74.8	26.6
PMW-4-U	01/05/10	10:34	4.5-9	--- ^c	19.6	0.9	7.9	<0.000028	<1.0	-0.1	NM	97.6	NM
PMW-4-U	02/10/10	15:23	4.5-9	--- ^c	20.9	0.6	<5.0	<0.00075	<1.0	-0.1	NM	64.5	NM
PMW-4-U	03/01/10	11:26	4.5-9	--- ^c	20.9	0.5	15.0	<0.00075	<1.0	-0.1	NM	97.8	NM
PMW-4-U	03/10/10	11:34	4.5-9	--- ^c	20.3	0.5	<5.0	<0.00075	<1.0	0.0	NM	54.2	NM
PMW-4-U	03/12/10	10:58	4.5-9	--- ^c	20.2	0.5	<5.0	<0.00075	<1.0	-0.9	NM	57.1	NM
PMW-4-M	01/05/10	10:56	20-25	--- ^c	19.2	0.8	<0.5	<0.000028	<1.0	-0.1	NM	96.5	26.3
PMW-4-M	02/10/10	15:46	20-25	--- ^c	20.9	0.6	<5.0	<0.00075	<1.0	-0.1	NM	65.5	26.8
PMW-4-M	03/01/10	11:43	20-25	--- ^c	20.9	0.3	50.0	<0.00075	<1.0	-0.1	NM	92.5	26.8
PMW-4-M	03/10/10	11:45	20-25	--- ^c	20.1	0.4	<5.0	<0.00075	<1.0	0.0	NM	56.8	26.2
PMW-4-M	03/12/10	11:10	20-25	--- ^c	20.1	0.3	<5.0	<0.00075	<1.0	0.0	NM	54.0	26.2
PMW-4-ML	01/04/10	10:41	55-75	64.53	4.4	12.0	3,187.5	0.043	>100.0	0.0	NM	95.3	26.2
PMW-4-ML	01/11/10	12:15	55-75	64.69	3.6	12.8	3,659.6	0.027	>100.0	0.0	NM	99.9	NM
PMW-4-ML	01/20/10	12:10	55-75	64.82	<0.1	14.0	6,115.2	0.11	>100.0	0.0	NM	91.7	NM
PMW-4-ML	01/27/10	9:39	55-75	64.72	<0.1	14.1	7,548.0	0.33	>100.0	0.0	NM	99.9	NM
PMW-4-ML	02/04/10	13:25	55-75	64.73	9.6	9.0	616.4	<0.0011	<1.5	-3.0	NM	NM	28.2
PMW-4-ML	02/08/10	7:59	55-75	64.75	16.9	3.9	4.3	<0.000028	16.0	-0.3	NM	99.9	26.3
PMW-4-ML	02/15/10	15:03	55-75	64.60	11.5	7.8	2,254.3	0.0068	>100.0	-0.1	NM	49.2	27.0
PMW-4-ML	02/23/10	10:08	55-75	64.55	8.8	9.4	<5.0	<0.00075	68.0	0.0	NM	97.2	27.4
PMW-4-ML	03/01/10	12:02	55-75	64.43	8.6	8.8	1,281.3	<0.00096	5.1	-0.2	NM	99.9	27.2
PMW-4-ML	03/10/10	7:26	55-75	64.03	8.9	9.6	1,620.0	<0.0009	7.2	-0.2	NM	99.9	26.3
PMW-4-ML	03/12/10	11:28	55-75	64.00	10.2	7.0	500.0	<0.00075	2.0	-0.2	NM	78.2	26.4
PMW-4-ML	03/15/10	14:48	55-75	63.82	8.6	7.5	<6.1	<0.00091	<1.2	0.0	NM	48.4	28.5
PMW-4-ML	03/22/10	14:50	55-75	63.51	13.7	NM	NM	NM	NM	NM	NM	55.4	28.4
PMW-5-U	01/05/10	12:26	5-10	--- ^c	19.4	1.5	<0.5	<0.000028	<1.0	0.0	NM	99.9	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Process Monitoring Wells													
PMW-5-U	02/05/10	14:48	5-10	--- ^c	20.4	1.1	<5.0	<0.00075	<1.0	-1.4	NM	60.6	NM
PMW-5-U	02/23/10	10:53	5-10	--- ^c	20.9	1.2	140.0	0.013	<1.0	0.0	NM	67.7	NM
PMW-5-U	02/25/10	11:16	5-10	--- ^c	20.9	1.1	<5.0	<0.00075	<1.0	-0.1	NM	92.7	NM
PMW-5-U	03/03/10	11:44	5-10	--- ^c	20.2	0.9	<5.0	<0.00075	<1.0	0.0	NM	66.5	NM
PMW-5-U	03/05/10	10:07	5-10	--- ^c	20.6	<0.1	<5.0	<0.00075	<1.0	-0.1	NM	68.1	NM
PMW-5-M	01/05/10	12:40	20-25	--- ^c	19.9	0.7	<0.5	<0.000028	<1.0	-0.1	NM	90.3	26.7
PMW-5-M	02/05/10	15:45	20-25	--- ^c	20.8	0.5	30.0	0.0037	<1.0	-1.4	NM	69.8	29.2
PMW-5-M	02/23/10	11:15	20-25	--- ^c	20.9	0.4	70.0	0.0052	<1.0	-1.2	NM	72.8	28.8
PMW-5-M	02/25/10	11:29	20-25	--- ^c	20.9	0.4	<5.0	<0.00075	<1.0	-0.1	NM	88.3	27.9
PMW-5-M	03/03/10	11:57	20-25	--- ^c	20.7	0.4	<5.0	<0.00075	<1.0	-0.2	NM	40.2	28.6
PMW-5-M	03/05/10	10:16	20-25	--- ^c	20.9	<0.1	<5.0	<0.00075	<1.0	-0.2	NM	72.3	28.8
PMW-5-ML	01/04/10	12:07	55-75	65.71	6.8	8.9	65,565.0	2.9	>100.0	0.8	NM	NM	27.7
PMW-5-ML	01/11/10	11:35	55-75	65.20	6.0	10.1	103,991.2	3.3	>100.0	0.1	NM	99.9	NM
PMW-5-ML	01/20/10	13:09	55-75	66.03	3.1	10.8	92,732.9	3.2	>100.0	0.0	NM	99.9	NM
PMW-5-ML	01/27/10	10:52	55-75	65.93	1.9	11.9	124,339.5	3.8	>100.0	0.0	NM	99.8	NM
PMW-5-ML	02/04/10	15:08	55-75	65.93	5.1	10.4	45,402.3	6.0	90.8	-2.3	NM	69.7	29.3
PMW-5-ML	02/08/10	8:36	55-75	65.94	6.6	11.2	82,578.5	2.7	>100.0	-0.5	NM	99.8	26.2
PMW-5-ML	02/16/10	8:48	55-75	65.83	7.5	11.8	78,256.0	2.6	>100.0	-0.3	NM	60.1	26.4
PMW-5-ML	02/23/10	11:44	55-75	65.71	7.3	9.8	24,500.0	0.6	24.0	0.0	NM	99.0	27.8
PMW-5-ML	02/25/10	11:52	55-75	65.65	14.1	9.6	17,000.0	0.6	81.0	-0.2	NM	99.9	26.4
PMW-5-ML	03/03/10	12:11	55-75	65.44	5.7	9.2	26,328.6	3.2	>100.0	-0.5	NM	79.0	27.2
PMW-5-ML	03/05/10	13:39	55-75	64.34	5.8	9.0	26,290.2	2.9	>100.0	-1.7	NM	69.2	28.3
PMW-5-ML	03/10/10	6:47	55-75	65.15	7.2	9.7	25,819.2	3.2	>100.0	-2.1	NM	99.9	26.2
PMW-5-ML	03/15/10	13:24	55-75	64.90	6.5	8.5	15,176.5	1.7	73.4	0.0	NM	49.5	28.6
PMW-5-ML	03/22/10	11:32	55-75	64.52	7.6	24.4	16,453.6	1.5	79.5	NM	NM	50.9	28.4
PMW-6-U	01/05/10	11:38	5-10	--- ^c	20.1	0.3	<0.5	<0.000028	<1.0	-0.2	NM	91.7	NM
PMW-6-U	02/11/10	16:02	5-10	--- ^c	20.9	0.3	<5.0	<0.00075	<1.0	-0.2	NM	73.5	NM
PMW-6-U	02/23/10	14:20	5-10	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.2	NM	66.8	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Process Monitoring Wells													
PMW-6-U	02/25/10	12:20	5-10	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.2	NM	99.9	NM
PMW-6-U	03/03/10	11:13	5-10	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.2	NM	60.9	NM
PMW-6-U	03/05/10	10:29	5-10	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.2	NM	87.5	NM
PMW-6-M	01/05/10	11:59	20-25	--- ^c	20.1	0.3	<0.5	<0.000028	<1.0	-0.3	NM	97.6	NM
PMW-6-M	02/11/10	16:23	20-25	--- ^c	20.9	0.3	<5.0	<0.00075	<1.0	-0.2	NM	69.0	29.7
PMW-6-M	02/23/10	14:35	20-25	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.2	NM	79.7	29.9
PMW-6-M	02/25/10	12:29	20-25	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.2	NM	93.5	29.2
PMW-6-M	03/03/10	11:25	20-25	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	-0.3	NM	54.0	29.7
PMW-6-M	03/05/10	10:41	20-25	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.2	NM	88.2	28.9
PMW-6-ML	01/04/10	11:36	55-75	67.45	18.1	2.2	18,069.0	0.16	>100.0	0.7	NM	97.2	27.8
PMW-6-ML	01/11/10	10:58	55-75	68.03	16.7	2.9	35,461.0	0.47	>100.0	0.0	NM	98.2	NM
PMW-6-ML	02/12/10	9:24	55-75	68.18	18.9	3.3	11,250.0	<0.00075	1.1	-3.8	NM	88.4	27.1
PMW-6-ML	02/23/10	14:52	55-75	67.98	17.3	2.9	5,600.0	0.19	26.0	-1.0	NM	98.6	28.2
PMW-6-ML	02/25/10	12:50	55-75	67.86	18.6	2.7	4,750.0	0.069	22.0	-0.8	NM	99.9	27.7
PMW-6-ML	03/03/10	14:06	55-75	67.69	16.0	2.9	5,450.0	0.22	26.0	-0.5	NM	44.0	28.0
PMW-6-ML	03/05/10	13:05	55-75	67.96	15.2	3.3	6,200.0	0.25	29.0	-0.5	NM	68.9	28.7
PMW-7-U	01/05/10	12:57	5-10	--- ^c	20.2	0.6	14.7	0.00012	<1.0	0.0	NM	87.2	NM
PMW-7-U	02/08/10	16:01	5-10	--- ^c	20.8	0.5	<5.0	<0.00075	<1.0	-0.5	NM	43.0	NM
PMW-7-U	03/01/10	10:20	5-10	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	0.0	NM	99.0	NM
PMW-7-M	01/05/10	13:10	20-25	--- ^c	20.1	1.0	17.9	0.000072	<1.0	-0.1	NM	89.7	26.8
PMW-7-M	02/08/10	16:28	20-25	--- ^c	20.6	0.6	<5.0	<0.00075	<1.0	-0.5	NM	23.3	29.8
PMW-7-M	03/01/10	10:38	20-25	--- ^c	20.7	0.5	<5.0	<0.00075	<1.0	-0.1	NM	89.9	30.2
PMW-7-ML	01/04/10	12:45	55-75	65.86	13.9	5.4	306.9	0.0022	23.0	-1.0	NM	NM	27.9
PMW-7-ML	02/08/10	17:26	55-75	66.21	15.9	4.6	<5.0	<0.00075	<1.0	-0.5	NM	30.0	27.3
PMW-7-ML	03/01/10	10:58	55-75	65.65	14.7	4.9	<5.0	<0.00075	<1.0	-0.2	NM	99.9	28.3
PMW-8-U	01/06/10	9:50	5-10	--- ^c	21.3	0.1	13.4	<0.000028	<1.0	-0.1	NM	99.9	NM
PMW-8-U	02/08/10	11:57	5-10	--- ^c	20.7	0.1	<5.0	<0.00075	<1.0	-0.6	NM	59.8	NM
PMW-8-U	03/01/10	7:40	5-10	--- ^c	20.9	<0.1	<5.0	<0.00075	<1.0	-0.1	NM	81.6	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Process Monitoring Wells													
PMW-8-M	01/06/10	10:06	20.5-25.5	--- ^c	20.7	0.1	7.9	<0.000028	<1.0	-0.1	NM	99.9	19.8
PMW-8-M	02/08/10	12:32	20.5-25.5	--- ^c	20.3	0.1	<5.0	<0.00075	<1.0	-0.6	NM	55.8	29.7
PMW-8-M	03/01/10	7:50	20.5-25.5	--- ^c	20.9	<0.1	<5.0	<0.00075	<1.0	-0.2	NM	99.2	28.3
PMW-8-ML	01/06/10	10:33	55-75	69.43	18.5	2.5	1,248.0	0.059	5.0	-1.9	NM	99.9	20.7
PMW-8-ML	02/08/10	15:15	55-75	69.61	17.0	2.5	1,250.0	0.16	5.0	-3.0	NM	13.0	28.7
PMW-8-ML	03/01/10	8:10	55-75	68.84	19.1	1.9	110.0	0.014	<1.0	-2.0	NM	99.9	28.1
PMW-9-U	01/05/10	13:31	5-10	--- ^c	19.3	0.3	<0.5	<0.000028	<1.0	-0.1	NM	99.9	NM
PMW-9-U	02/05/10	11:16	5-10	--- ^c	20.8	0.1	<5.0	<0.00075	<1.0	0.0	NM	86.5	NM
PMW-9-U	03/01/10	9:22	5-10	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	-0.2	NM	85.3	NM
PMW-9-M	01/05/10	13:44	20.5-25.5	--- ^c	19.6	0.1	<0.5	<0.000028	<1.0	-0.2	NM	99.6	26.9
PMW-9-M	02/05/10	11:47	20.5-25.5	--- ^c	20.7	0.1	<5.0	<0.00075	<1.0	-0.5	NM	73.4	30.4
PMW-9-M	03/01/10	9:38	20.5-25.5	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	-0.3	NM	98.0	28.7
PMW-9-ML	01/04/10	15:05	51.5-71.5	71.40	11.7	6.1	4,754.4	0.08	>100.0	-1.4	NM	91.3	27.9
PMW-9-ML	01/11/10	10:14	51.5-71.5	71.17	10.2	7.2	3,824.8	0.05	>100.0	-0.1	NM	94.8	NM
PMW-9-ML	02/05/10	12:34	51.5-71.5	71.18	10.2	7.5	1,800.0	0.006	3.0	-2.0	NM	84.3	29.4
PMW-9-ML	03/01/10	9:58	51.5-71.5	71.16	11.9	6.5	2,600.0	0.033	12.0	-1.2	NM	99.7	27.3
PMW-10-U	01/05/10	14:13	5-10	--- ^c	18.7	1.7	2.5	<0.000028	<1.0	-0.1	NM	94.2	NM
PMW-10-U	02/10/10	14:10	5-10	--- ^c	20.9	<0.1	<5.0	<0.00075	<1.0	-0.1	NM	60.5	NM
PMW-10-U	03/01/10	8:33	5-10	--- ^c	20.4	1.1	10.0	<0.00075	<1.0	-0.2	NM	87.7	NM
PMW-10-M	01/05/10	14:30	20-25	--- ^c	16.0	3.9	<0.5	<0.000028	<1.0	0.1	NM	97.7	27.9
PMW-10-M	02/05/10	10:16	20-25	--- ^c	14.9	3.9	45.0	<0.00075	<1.0	-0.8	NM	57.1	30.7
PMW-10-M	03/01/10	8:45	20-25	--- ^c	17.2	3.1	<5.0	<0.00075	<1.0	-0.2	NM	99.3	29.4
PMW-10-L	01/04/10	14:06	55-80	78.04	5.1	7.6	266.1	0.002	11.0	-1.3	NM	83.2	28.0
PMW-10-L	01/11/10	9:36	55-80	79.22	5.2	8.0	15.1	<0.000083	<1.0	-1.3	NM	99.9	NM
PMW-10-L	01/20/10	9:56	55-80	79.33	4.8	7.6	<1.5	<0.000083	<1.0	-0.2	NM	99.8	NM
PMW-10-L	01/27/10	11:46	55-80	78.42	8.0	5.9	115.2	0.0017	12.0	0.0	NM	93.7	NM
PMW-10-L	02/04/10	10:09	55-80	79.30	6.9	7.0	195.3	0.011	<1.6	-0.6	NM	93.3	27.1
PMW-10-L	02/08/10	9:30	55-80	78.34	5.2	8.2	<1.4	<0.000078	<1.0	0.1	NM	89.7	27.0

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Process Monitoring Wells													
PMW-10-L	02/16/10	9:43	55-80	78.96	4.9	7.9	16.7	<0.00011	2.0	-0.2	NM	75.1	27.3
PMW-10-L	02/22/10	11:04	55-80	NA	5.2	8.0	31.4	<0.000078	<1.0	0.0	NM	99.9	27.3
PMW-10-L	03/01/10	9:02	55-80	78.39	4.6	8.3	<7.9	<0.0012	<1.6	-0.3	NM	99.9	26.7
PMW-10-L	03/10/10	8:39	55-80	77.94	4.6	8.4	NM	NM	NM	-0.1	NM	98.9	26.6
PMW-10-L	03/16/10	13:31	55-80	77.60	3.5	7.4	<9.5	<0.0014	<1.9	0.0	NM	31.4	28.7
PMW-10-L	03/22/10	10:26	55-80	77.18	5.2	21.0	<7.6	<0.0011	<1.5	NM	NM	75.2	28.1
PMW-14-M	02/11/10	11:33	20-25	NA	18.7	1.3	<5.0	<0.00075	<1.0	-0.1	NM	99.9	30.1
PMW-14-ML	02/11/10	12:02	50-75	NA	1.1	8.4	12,432.6	1.7	23.0	-0.2	NM	99.9	28.0
PMW-15-U	02/08/10	22:52	5-10	NA	19.2	0.7	<5.0	<0.00075	<1.0	-0.1	NM	99.9	NM
PMW-15-M	02/08/10	23:11	20-25	NA	18.9	1.7	<5.0	<0.00075	<1.0	-0.1	NM	99.9	29.2
PMW-15-ML	02/08/10	23:36	50-65	NA	12.1	5.2	<5.0	<0.00075	<1.0	-0.1	NM	99.9	27.3
Sentinel Wells													
BC-7A	02/12/10	16:35	39-76	65.30	12.5	6.3	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
BC-18	02/10/10	3:12	60-80	NA	1.4	6.1	262.9	0.0098	<2.2	0.0	NM	NM	NM
PL-102A	02/09/10	14:30	37-77	65.33	5.2	5.3	239.2	0.027	<1.5	0.0	NM	NM	NM
PL-2102	02/09/10	12:59	35-75	67.45	8.4	8.6	982.1	<0.00096	1.3	-0.2	NM	NM	NM
ASE-61A	02/08/10	14:46	60.5-90.5	NA	6.2	9.6	205.8	0.029	<1.5	-0.1	NM	NM	NM
P-28-U	02/11/10	7:40	6-11	--- ^c	20.4	2.6	<5.0	<0.00075	<1.0	-0.1	NM	NM	NM
P-28-M	02/11/10	8:05	43-48	--- ^c	17.3	5.3	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
P-28-L	02/11/10	8:24	58-78	67.50	16.5	6.4	<5.0	<0.00075	<1.0	-0.3	NM	NM	NM
P-46-U	02/09/10	9:37	6-11	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	0.1	NM	NM	NM
P-46-M	02/09/10	10:01	45-50	--- ^c	20.3	0.9	<5.0	<0.00075	<1.0	-0.3	NM	NM	NM
P-46-L	02/09/10	10:24	57-92	NA	9.1	10.2	155.6	0.013	<1.3	-1.0	NM	NM	NM
P-47	02/09/10	11:20	6-11	--- ^c	20.1	0.9	<5.0	<0.00075	<1.0	-0.1	NM	NM	NM
SMW-1-U	02/09/10	9:49	5-9	--- ^c	20.9	0.3	<5.0	<0.00075	<1.0	-0.5	NM	NM	NM
SMW-1-M	02/09/10	10:20	20-25	--- ^c	NM	0.4	<5.0	<0.00075	<1.0	-0.5	NM	NM	NM
SMW-1-L	02/09/10	11:07	55-95	66.02	13.7	4.8	<5.0	<0.00075	<1.0	-0.5	NM	NM	NM
SMW-2-M	02/09/10	13:35	20-25	--- ^c	20.9	0.3	<5.0	<0.00075	<1.0	-0.1	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Sentinel Wells													
SMW-3-U	02/09/10	15:03	5-9	--- ^c	20.8	0.5	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-3-M	02/09/10	15:30	20-25	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-3-L	02/09/10	16:06	55-95	65.33	16.1	4.4	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-4-U	02/10/10	10:31	5-9	--- ^c	17.5	2.9	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-4-M	02/10/10	10:52	20-25	--- ^c	18.4	2.3	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-4-L	02/10/10	11:13	55-95	66.38	11.2	7.3	<5.0	<0.00075	<1.0	-0.1	NM	NM	NM
SMW-5-U	02/10/10	14:01	5-9	--- ^c	20.4	0.5	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-5-M	02/10/10	14:24	20-25	--- ^c	20.1	0.9	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-6-U	02/10/10	9:02	5-9	--- ^c	20.9	0.4	<5.0	<0.00075	<1.0	0.1	NM	NM	NM
SMW-6-M	02/10/10	9:23	20-25	--- ^c	20.9	0.5	<5.0	<0.00075	<1.0	-0.1	NM	NM	NM
SMW-6-L	02/10/10	9:46	55-95	68.35	17.8	4.4	<5.0	<0.00075	<1.0	-0.3	NM	NM	NM
SMW-7-U	02/10/10	7:24	5-9	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	-0.1	NM	NM	NM
SMW-7-M	02/10/10	7:47	20-25	--- ^c	20.9	0.2	<5.0	<0.00075	<1.0	-0.1	NM	NM	NM
SMW-7-L	02/10/10	8:14	55-95	NA	14.4	5.5	<5.0	<0.00075	<1.0	-0.2	NM	NM	NM
SMW-8-U	02/10/10	3:41	5-9	--- ^c	13.9	3.1	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-8-M	02/10/10	3:58	20-25	--- ^c	14.1	4.0	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-12-U	02/09/10	5:05	5-9	--- ^c	15.4	3.1	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SMW-12-M	02/09/10	5:19	20-25	--- ^c	11.9	5.7	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
Multi-port Monitoring Wells													
P-24-U	02/11/10	12:38	7-12	--- ^c	13.4	3.7	<5.0	<0.00075	<1.0	0.0	NM	82.8	NM
P-24-M	02/11/10	12:56	53-58	--- ^c	<0.1	9.7	212,727.3	26	>100.0	0.0	NM	98.8	NM
P-24-L	02/11/10	13:40	68-118	70.36	14.5	1.8	37,300.0	5.0	74.0	-0.2	NM	99.9	NM
P-25-U	02/09/10	3:33	7-12	--- ^c	17.8	2.5	<5.0	<0.00075	<1.0	-0.2	NM	99.9	NM
P-25-M	02/09/10	3:53	53-58	--- ^c	14.0	5.6	<5.0	<0.00075	<1.0	0.0	NM	99.9	NM
P-25-L	02/09/10	4:19	70-105	72.68	16.1	3.7	<5.0	<0.00075	<1.0	-0.1	NM	99.9	NM
P-26-U	02/09/10	1:36	5.25-10.25	--- ^c	<0.1	5.5	83,200.0	4.0	>100.0	0.0	NM	99.9	NM
P-26-M	02/09/10	2:01	53-58	--- ^c	<0.1	7.3	43,034.5	5.5	86.1	-0.3	NM	99.9	NM
P-26-L	02/09/10	2:39	68-118	73.76	<0.1	7.7	66,717.0	8.9	>100.0	0.0	NM	99.9	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Multi-port Monitoring Wells													
P-30-U	02/11/10	9:12	6-11	--- ^c	20.9	0.4	<5.0	<0.00075	<1.0	-0.1	NM	NM	NM
P-30-M	02/11/10	9:33	50-55	--- ^c	17.2	4.9	720.0	<0.00075	3.0	-0.5	NM	NM	NM
P-30-L	02/11/10	9:50	60-90	67.91	17.8	4.5	<5.0	<0.00075	<1.0	-1.0	NM	NM	NM
Groundwater Monitoring Wells													
ASE-54A	02/09/10	11:56	55.5-80.5	67.78	9.5	7.5	780.0	0.0009	1.2	-0.4	NM	NM	NM
ASE-60A	02/08/10	15:30	61-91	NA	0.5	10.1	365.7	<0.0014	<1.9	-0.1	NM	NM	NM
ASE-105A	02/09/10	1:16	70-105	71.24	8.6	5.2	<11.2	<0.0017	<2.2	-0.1	NM	NM	NM
ASE-112A	02/09/10	0:23	68-93	72.23	9.5	5.0	<9.8	<0.0015	<2.0	-0.1	NM	NM	NM
Manhole													
SW-MH-01	02/11/10	14:34	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
SW-MH-02	02/11/10	14:17	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
Sub-slab													
P-31	02/17/10	10:17	5.5-6	--- ^c	20.4	0.1	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
P-32	02/16/10	15:42	5.5-6	--- ^c	20.4	0.4	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
P-33	02/17/10	12:28	5.5-6	--- ^c	20.9	0.5	75.0	0.01	<1.0	0.0	NM	NM	NM
P-35	02/17/10	12:17	5.5-6	--- ^c	16.2	1.3	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
P-36	02/17/10	10:52	5.5-6	--- ^c	20.4	0.5	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
P-37	02/17/10	11:49	5.5-6	--- ^c	20.9	0.1	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
P-38	02/17/10	9:44	5.5-6	--- ^c	20.9	0.5	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
P-39	02/17/10	9:39	5.5-6	--- ^c	19.2	1.2	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
P-41	02/16/10	14:27	5.5-6	--- ^c	20.3	1.1	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SVV-1	02/16/10	13:57	4.75-5.25	--- ^c	20.9	0.3	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SVV-2	02/17/10	10:19	5-5.5	--- ^c	20.8	0.2	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SVV-3	02/17/10	11:17	5-5.5	--- ^c	10.8	6.0	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
SVV-4	02/17/10	11:39	5-5.5	--- ^c	19.4	0.6	<5.0	<0.00075	<1.0	0.0	NM	NM	NM
PSHIA Utility Vaults													
ELE-VLT-01	02/11/10	14:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/11/10	14:25	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
PSHIA Utility Vaults													
ELE-VLT-02	02/11/10	15:32	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/12/10	8:15	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/19/10	9:06	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/20/10	8:10	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/21/10	7:46	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/22/10	7:55	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/23/10	8:02	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/24/10	8:35	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/25/10	8:08	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	02/26/10	7:49	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	03/02/10	8:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	03/03/10	8:18	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	03/05/10	8:20	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	03/08/10	12:15	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	03/09/10	8:29	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	03/10/10	10:14	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	03/11/10	9:32	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-02	03/12/10	8:25	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/11/10	14:12	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/11/10	15:37	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/12/10	8:20	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/19/10	9:11	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/20/10	8:16	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/21/10	7:50	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/22/10	8:02	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/23/10	8:08	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/24/10	8:43	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	02/25/10	8:14	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
PSHIA Utility Vaults													
ELE-VLT-03	02/26/10	7:55	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	03/02/10	8:20	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	03/03/10	8:24	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	03/05/10	8:28	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	03/08/10	12:18	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	03/09/10	8:38	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	03/10/10	10:04	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	03/11/10	9:36	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-03	03/12/10	8:23	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-04	02/11/10	14:09	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-05	02/11/10	14:07	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/11/10	14:03	NA	NA	20.9	<0.1	45.0	0.0067	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/11/10	15:39	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/12/10	8:22	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/19/10	9:16	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/20/10	8:18	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/21/10	7:54	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/22/10	8:05	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/23/10	8:10	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/24/10	8:53	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/25/10	8:16	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	02/26/10	7:57	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	03/02/10	8:38	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	03/03/10	8:30	NA	NA	20.1	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	03/05/10	8:40	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	03/08/10	12:10	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	03/09/10	8:42	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	03/10/10	10:00	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

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Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
PSHIA Utility Vaults													
ELE-VLT-06	03/11/10	9:40	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-06	03/12/10	8:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-07	02/11/10	14:05	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-08	02/11/10	14:00	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
ELE-VLT-09	02/11/10	13:59	NA	NA	20.9	<0.1	35.0	0.0052	<1.0	NM	NM	NM	NM
ELE-VLT-10	02/11/10	13:56	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/11/10	14:23	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/11/10	15:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/12/10	8:16	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/19/10	9:08	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/20/10	8:13	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/21/10	7:48	NA	NA	20.9	<0.1	5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/22/10	7:57	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/23/10	8:04	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/24/10	8:38	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/25/10	8:10	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	02/26/10	7:51	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	03/02/10	8:32	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	03/03/10	8:20	NA	NA	20.9	0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	03/05/10	8:23	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	03/08/10	12:20	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	03/09/10	8:26	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	03/10/10	10:12	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	03/11/10	9:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-01	03/12/10	8:28	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/11/10	14:14	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/11/10	15:35	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/12/10	8:18	NA	NA	20.9	<0.1	15.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
PSHIA Utility Vaults													
FBO-VLT-02	02/19/10	9:13	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/20/10	8:20	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/21/10	7:52	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/22/10	8:00	NA	NA	20.9	<0.1	35.0	0.0052	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/23/10	8:06	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/24/10	8:46	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/25/10	8:12	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	02/26/10	7:53	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	03/02/10	8:23	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	03/03/10	8:27	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	03/05/10	8:32	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	03/08/10	12:24	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	03/09/10	8:35	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	03/10/10	10:06	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	03/11/10	9:39	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-02	03/12/10	8:34	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
FBO-VLT-03	02/11/10	13:57	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
Honeywell Utility Vaults													
VLT-1093	02/08/10	8:49	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	02/11/10	16:40	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	02/12/10	5:53	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	02/19/10	10:55	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	02/20/10	7:39	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	02/21/10	7:27	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	02/22/10	8:59	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	02/23/10	7:32	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	02/24/10	9:25	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	02/25/10	7:45	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Honeywell Utility Vaults													
VLT-1093	02/26/10	7:26	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	03/02/10	9:07	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	03/03/10	9:18	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1093	03/05/10	9:18	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/08/10	8:48	NA	NA	20.9	0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/11/10	16:20	NA	NA	20.9	0.2	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/12/10	6:00	NA	NA	20.9	<0.1	5.0	0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/19/10	10:56	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/20/10	7:37	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/21/10	7:29	NA	NA	20.9	<0.1	25.0	0.0037	<1.0	NM	NM	NM	NM
VLT-1094	02/22/10	8:57	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/23/10	7:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/24/10	9:29	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/25/10	7:48	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	02/26/10	7:24	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	03/02/10	8:58	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	03/03/10	9:15	NA	NA	20.9	0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1094	03/05/10	9:21	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/08/10	8:46	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/11/10	16:25	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/12/10	6:10	NA	NA	20.9	<0.1	5.0	0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/19/10	10:58	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/20/10	7:35	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/21/10	7:25	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/22/10	8:50	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/23/10	7:27	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/24/10	9:39	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	02/25/10	7:42	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Honeywell Utility Vaults													
VLT-1095	02/26/10	7:20	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	03/02/10	8:54	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	03/03/10	7:50	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1095	03/05/10	9:15	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/08/10	8:45	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/11/10	16:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/12/10	6:20	NA	NA	20.9	<0.1	15.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/19/10	11:00	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/20/10	7:42	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/21/10	7:31	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/22/10	8:55	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/23/10	7:28	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/24/10	9:43	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/25/10	7:50	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	02/26/10	7:22	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	03/02/10	9:03	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	03/03/10	9:10	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1100	03/05/10	9:23	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1115	02/08/10	8:44	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1134	02/08/10	8:37	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1135	02/08/10	8:35	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1141	02/08/10	8:40	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1142	02/08/10	8:39	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1143	02/08/10	8:38	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1144	02/08/10	8:42	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1149	02/08/10	8:33	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1150	02/08/10	8:31	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1153	02/08/10	8:24	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Honeywell Utility Vaults													
VLT-1154	02/08/10	8:25	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1155	02/08/10	8:26	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1156	02/08/10	8:22	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1156	02/11/10	16:45	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1156	02/12/10	6:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1160	02/08/10	8:54	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1164	02/08/10	8:19	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1165	02/08/10	8:20	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1269	02/08/10	8:13	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1270	02/08/10	8:15	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1272	02/08/10	8:12	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-1273	02/08/10	8:10	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2007	02/08/10	9:33	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2008	02/08/10	9:34	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2012	02/08/10	8:57	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2013	02/08/10	8:59	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2013	03/08/10	16:07	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2013	03/09/10	9:20	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2013	03/10/10	10:25	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2013	03/11/10	10:00	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2013	03/12/10	8:50	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2032	02/08/10	9:28	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2046	02/08/10	9:25	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2064	03/08/10	16:02	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2064	03/09/10	9:33	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2064	03/10/10	10:33	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2064	03/11/10	10:05	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2064	03/12/10	9:08	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Honeywell Utility Vaults													
VLT-2124	03/08/10	15:50	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2124	03/09/10	9:28	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2124	03/10/10	10:28	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2124	03/11/10	10:07	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2124	03/12/10	9:02	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2125	03/08/10	15:53	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2125	03/09/10	9:25	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2125	03/10/10	10:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2125	03/11/10	10:12	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2125	03/12/10	9:05	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2126	02/08/10	9:22	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2127	02/08/10	9:23	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2144	02/08/10	9:20	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2144	02/22/10	4:25	NA	NA	20.9	<0.1	25.0	0.0037	<1.0	NM	NM	NM	NM
VLT-2144	02/23/10	7:46	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2144	02/24/10	9:50	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2144	02/25/10	7:55	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2144	02/26/10	7:31	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2144	03/02/10	9:12	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2144	03/03/10	9:13	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2144	03/05/10	9:30	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2145	02/08/10	9:18	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2145	02/22/10	4:30	NA	NA	20.9	<0.1	30.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2145	02/23/10	7:44	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2145	02/24/10	9:47	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2145	02/25/10	7:58	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2145	02/26/10	7:33	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2145	03/02/10	9:15	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Time	Screen Interval (ft bgs)	Depth to Water (ft bmp)	Oxygen (%)	Carbon Dioxide (%)	TPH (ppm)	Methane (%V/V)	LEL (%V/V)	Pressure ^a (inH ₂ O)	Flow Rate (scfm)	Relative Humidity (%)	Temperature (°C)
Honeywell Utility Vaults													
VLT-2145	03/03/10	9:27	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2145	03/05/10	9:33	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-2178	02/08/10	9:31	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3006	02/08/10	9:14	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3007A	02/08/10	9:04	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3007B	02/08/10	9:05	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3008A	02/08/10	9:06	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3008B	02/08/10	9:07	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3009	02/08/10	9:08	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3010A	02/08/10	9:09	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3010B	02/08/10	9:10	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3023	02/08/10	9:12	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-3053	02/08/10	9:16	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-B102-N-1	02/08/10	8:17	NA	NA	20.9	0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-B102-W-1	02/08/10	8:51	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-B102-W-1	02/11/10	16:10	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-B102-W-1	02/12/10	5:40	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-B102-W-2	02/08/10	8:50	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-B102-W-2	02/11/10	16:15	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM
VLT-B102-W-2	02/12/10	5:43	NA	NA	20.9	<0.1	<5.0	<0.00075	<1.0	NM	NM	NM	NM

TABLE 3-6

Summary of Field Parameter Measurements for Process and Non-process Soil-vapor Monitoring Network, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Notes:

a = Unless otherwise noted, the pressure shown is static pressure at the wellhead prior to purging

b = Flow rate (FIT-100) is measured continuously by the control system (SCADA). Flow rate reported is the measurement closest to the collection time of the BSVE inlet field measurements.

c = Water level below the bottom of the well

d = Wellhead pressure measured during extraction from well

For Rkl Eagle readings, %Methane (as methane) = Methane in ppm (calibrated with propane) *100/(1000000*0.67)

For Micro-FID readings, %Methane (as methane) = Methane in ppm (calibrated with propane) *100/(1000000*1.8)

%V/V = percent volume per volume

% = percent

°C = degree Celsius

ft bgs = feet below ground surface

ft bmp = feet below measuring point

inH₂O = inches of water

LEL = lower explosive limit

ppm = parts per million

PSHIA = Phoenix Sky Harbor International Airport

NM = not measured

NA = not applicable

scfm = standard cubic feet per minute

TPH = total petroleum hydrocarbons

TABLE 3-7

Comparison of Portable Gas Detector Field Results to Analytical Laboratory Results, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Location Type	Date Collected	Field Results Oxygen (%)	Laboratory Results Oxygen (%)	Field Results Carbon Dioxide (%)	Laboratory Results Carbon Dioxide (%)	Field Results TPH (µg/L)	Laboratory Results TPH (µg/L)	Field Results Methane (%)	Laboratory Results Methane (%)
Process Locations										
BSVE-INLET	BSVE Air Treatment System	02/19/10	16.6	26	3.5	5	721	2,763	0.073	0.15
BV-1N	Injection/Extraction Wells	02/16/10	15.0	18	3.6	3.9	<9	66	<0.00075	0.0061
BV-3N	Injection/Extraction Wells	02/16/10	19.1	25	1.6	2.1	<9	126	<0.00075	0.007
BV-9N	Injection/Extraction Wells	02/16/10	18.3	20	2.3	2.3	956	319	<0.00075	0.012
BV-10N	Injection/Extraction Wells	02/16/10	5.6	9.4	8.1	9.2	1,220	2,091	<0.0012	0.23
BV-13N	Injection/Extraction Wells	02/16/10	18.3	20	2.6	2.6	18	161	<0.00075	0.0014
BV-19N	Injection/Extraction Wells	02/19/10	9.6	14	5.5	6.5	13,300	10,181	0.77	1.4
ASE-46A	Injection/Extraction Wells	02/19/10	17.7	24	1.2	1.4	<9	88	<0.00075	0.0058
PMW-9-U	Process Monitoring Wells	02/05/10	20.8	23	0.1	<0.24	<9	<19	<0.00075	<0.00012
PMW-9-M	Process Monitoring Wells	02/05/10	20.7	23	0.1	<0.25	<9	<20	<0.00075	<0.00012
Non-Process Locations										
P-32	Sub-slab	02/16/10	20.4	NA	0.4	NA	<9	2.1 *	<0.00075	0.00032
SMW-2-M	Sentinel Wells	02/09/10	20.9	NA	0.3	NA	<9	5.0 *	<0.00075	0.00076
SMW-4-U	Sentinel Wells	02/10/10	17.5	NA	2.9	NA	<9	2.7 *	<0.00075	0.00041
SMW-4-M	Sentinel Wells	02/10/10	18.4	NA	2.3	NA	<9	3.6 *	<0.00075	0.00055
SMW-4-L	Sentinel Wells	02/10/10	11.2	NA	7.3	NA	<9	1.6 *	<0.00075	0.00024

Notes:

A GEM™ 2000 gas detector was used to collect the carbon dioxide data.

A Photovac MicroFID was used to collect flame ionization detector (FID) readings. TPH field results were derived from the FID readings as defined in Appendix C of the *Third Quarter 2009 Remediation Status Report* (CH2M HILL, 2009).

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

For RKI Eagle readings, %Methane (as methane) = Methane in ppm (calibrated with propane) *100/(1000000*0.67)

For Micro-FID readings, %Methane (as methane) = Methane in ppm (calibrated with propane) *100/(1000000*1.8)

* Methane was the only TO-3 compound analyzed.

% = percent

µg/L = micrograms per liter

BSVE = biologically-enhanced soil-vapor extraction

NA = not applicable

TPH = total petroleum hydrocarbons

TABLE 3-8

Summary of Free-product Thickness Measurements, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Well	01/07/10	01/20/10	02/03/10	02/18/10	03/01/10	03/19/10
ASE-19A	0.03	NM	0.02	NM	0	NM
ASE-37A	0	NM	0	NM	0	NM
ASE-38A	0	NM	0	NM	0	NM
ASE-52A	0.01	NM	0	NM	0	NM
ASE-55A	0	NM	0	NM	0	NM
ASE-58A	0	NM	0	NM	0	NM
ASE-63A	0	NM	0	NM	0	NM
ASE-64A	0.01	NM	0.01	NM	0	NM
ASE-67A	0.71	0.18	0.20	0.03	0.04	0.02
ASE-68A	0	NM	0	NM	0	NM
ASE-89A	0.01 ^a	NM	0.01 ^a	NM	0.02 ^a	NM
ASE-90A	0 ^a	NM	0.01 ^a	NM	0 ^a	NM
ASE-91A	0.01 ^a	NM	0.01 ^a	NM	0.01 ^a	NM
ASE-92A	0.08 ^a	NM	0.03 ^a	NM	0.06 ^a	NM
ASE-96A	0 ^a	NM	NM ^b	NM	0 ^a	NM
ASE-102A	0.05 ^a	NM	NM ^b	NM	0.06 ^a	NM
ASE-107A	1.00 ^a	0.84 ^a	NM ^b	NM ^b	1.53 ^a	1.14 ^a
ASE-111A	0.09	NM	0.34	0.01	0	0.01
ASE-113A	0	NM	NM ^b	NM	0	NM
ASE-114A	0.01	NM	NM ^b	NM	0	NM
ASE-115A	0.07	NM	0.09	NM	0.14	0.09
ASE-130A	0.01	NM	0	NM	0	NM
PL-105A	0	NM	0	NM	0	NM
PL-2101	0	NM	0	NM	0	NM

Notes:

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

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

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

Free-product thickness measurements in feet.

NM = Free-product thickness not measured.

^aWell screen submerged at the time of measurement.

^bNot measured due to restricted access.

TABLE 3-9

Comparison of Historical Maximum Free-product Thickness Measurements to March 2010 Free-product Thickness Measurements, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Well	Historical Maximum Free-product Thickness		March 2010 Free-product Thickness Measurements	
	Date	Thickness	03/01/10	03/19/10
Monitoring Wells Located on Honeywell Property North of Air Lane				
ASE-19A	02/10/00	3.00	0	NM
ASE-20A	01/07/03	2.20	NA	NA
ASE-37A	01/20/05	0.53	0	NM
ASE-38A	07/21/04	1.73	0	NM
ASE-39A	11/28/01	1.33	NA	NA
ASE-51A	12/19/01	3.42	NA	NA
ASE-52A	02/22/02	1.80	0	NM
ASE-53A	11/28/01	1.79	NA	NA
ASE-56A	03/21/02	1.90	NA	NA
ASE-57A	03/20/02	3.07	NA	NA
ASE-67A	07/26/05	4.52	0.04	0.02
ASE-68A	06/27/02	3.13	0	NM
ASE-111A	10/03/07	2.25	0	0.01
ASE-115A	11/28/07	0.41	0.14	0.09
PL-101A	03/06/02	1.41	NA	NA
PL-2101	06/14/00	0.44	0	NM
Monitoring Wells Located on Honeywell Property South of Air Lane				
ASE-41A	07/09/03	3.50	NA	NA
ASE-55A	10/19/05	0.81	0	NM
ASE-58A	05/07/08	0.01	0	NM
ASE-63A	09/09/04	0.02	0	NM
ASE-64A	07/09/03	1.95	0	NM
ASE-91A	10/03/07	0.05	0.01	NM
ASE-92A	11/03/04	0.24	0.06	NM
ASE-130A	01/07/09	0.16	0	NM
PL-105A	04/30/03	1.07	0	NM
Monitoring Wells Located on PSHIA Property				
ASE-89A	08/02/04	1.60	0.02	NM
ASE-90A	10/06/04	1.23	0	NM
ASE-96A	11/03/04	0.48	0	NM
ASE-102A	01/26/05	4.27	0.06	NM
ASE-107A	07/04/07	1.87	1.53	1.14
ASE-113A	05/18/05	0.01	0	NM
ASE-114A	02/05/09	0.26	0	NM

Notes:

This table includes all wells that have historically had measureable free product.

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

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

Free-product thickness measurements in feet.

Dates listed are the most recent dates on which the historical maximum free-product thickness was measured.

NA = Measurement not available due to connection to the BSVE system.

NM = Free-product thickness not measured.

PSHIA = Phoenix Sky Harbor International Airport

TABLE 3-10

Comparison between December 2009 and March 2010 Water-level Elevations, First Quarter 2010
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Groundwater Elevation		Difference ^a (feet)
	12/3/2009 (ft amsl)	3/1/2010 (ft amsl)	
ASE-19A	1,053.32	1,053.12	-0.20
ASE-37A	1,056.29	1,056.08	-0.21
ASE-38A	1,056.63	1,056.38	-0.25
ASE-52A	1,056.01	1,055.80	-0.21
ASE-54A	1,051.56	1,051.32	-0.24
ASE-55A	1,047.16	1,047.26	0.10
ASE-58A	1,050.01	1,049.83	-0.18
ASE-60A	1,057.22	1,056.92	-0.30
ASE-61A	1,057.59	1,057.29	-0.30
ASE-62A	1,047.93	1,047.73	-0.20
ASE-63A	1,054.41	1,054.67	0.26
ASE-64A	1,050.07	1,050.54	0.47
ASE-65A	1,037.64	1,037.44	-0.20
ASE-67A	1,056.08	1,055.77	-0.31
ASE-68A	1,052.35	1,052.21	-0.14
ASE-89A	1,049.49	1,049.19	-0.30
ASE-90A	1,048.23	1,048.16	-0.07
ASE-91A	1,048.98	1,048.72	-0.26
ASE-92A	1,049.48	1,049.24	-0.24
ASE-95A	1,039.00	1,039.03	0.03
ASE-96A	1,047.36	1,047.46	0.10
ASE-97A	1,039.04	1,038.84	-0.20
ASE-98A	1,042.77	1,043.28	0.51
ASE-99A	1,044.45	1,045.07	0.62
ASE-100A	1,039.89	1,040.07	0.18
ASE-101A	1,042.85	1,043.13	0.28
ASE-102A	1,046.08	1,046.42	0.34
ASE-103A	1,038.12	1,038.27	0.15
ASE-105A	1,049.97	1,049.64	-0.33
ASE-106A	1,047.38	1,047.57	0.19
ASE-107A	1,048.88	1,048.92	0.04
ASE-108A	1,047.82	1,047.62	-0.20
ASE-109A	1,049.77	1,050.14	0.37
ASE-110A	1,048.11	1,048.62	0.51
ASE-111A	1,056.75	1,056.47	-0.28
ASE-112A	1,050.20	1,049.87	-0.33
ASE-113A	1,050.21	1,050.38	0.17
ASE-114A	1,049.51	1,049.78	0.27
ASE-115A	1,056.88	1,056.61	-0.27
ASE-116A	1,056.57	1,056.30	-0.27
ASE-122A	1,050.93	1,051.15	0.22
ASE-123A	1,051.20	1,051.53	0.33
ASE-124A	1,039.65	1,039.65	0.00
ASE-125A	1,035.81	1,035.79	-0.02
ASE-126A	1,037.61	1,037.46	-0.15
ASE-127A	1,053.78	1,053.92	0.14

TABLE 3-10

Comparison between December 2009 and March 2010 Water-level Elevations, First Quarter 2010
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Groundwater Elevation		Difference^a (feet)
	12/3/2009 (ft amsl)	3/1/2010 (ft amsl)	
ASE-128A	1,042.32	1,043.37	1.05
ASE-129A	1,036.54	1,036.60	0.06
ASE-130A	1,050.15	1,049.87	-0.28
BC-7A	1,054.58	1,055.01	0.43
BC-8B	1,047.50	1,047.36	-0.14
BC-18	1,036.72	1,036.52	-0.20
PL-105A	1,048.12	1,047.93	-0.19
PL-201A	1,049.10	1,048.88	-0.22
PL-2101	1,051.91	1,051.66	-0.25
PL-2102	1,051.71	1,051.48	-0.23

Notes:

^a Difference column calculated by subtracting December 2009 water-level elevations from March 2010 water-level elevations. Negative results indicate lower water-level elevations, signifying a falling water table over the reporting period; positive results indicate higher water-level elevations, signifying a rising water table over the reporting period.

ft amsl = Feet above mean sea level

TABLE 3-11
 Summary of SW8260 and SW8015 Detected Analytical Results for Groundwater Quality Samples, First Quarter 2010
 Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	111TCA	DCA	DCE	124TMBZ	135TMBZ	BZ	BDCM	BBZ	CD	DBCMA	CET	CHCL3	C12DCE	EBZ	IPBZ	MTBE	NAPH	n-PBZ	o-XYL	p-IPT	s-BBZ	t-BBZ
ASE-37A	03/17/10	<0.5	<0.5	<0.5	2.1	<0.5	73	<0.5	1.2	<0.5	<0.5	<1.0	<0.5	<0.5	0.7	8.3	7.0	6.8	6.1	<0.5	<0.5	2.0	<0.5
ASE-38A	03/17/10	<3.6	<3.6	<3.6	<3.6	<3.6	540	<3.6	<3.6	<3.6	<3.6	<7.1	<3.6	<3.6	8.1	14	12	35	11	<3.6	<3.6	<3.6	<3.6
ASE-52A	03/16/10	<0.5	4.9	1.1	16	1.1	78	<0.5	1.7	<0.5	<0.5	<1.0	1.4	<0.5	8.1	4.1	19	17	4.4	<0.5	1.4	1.7	<0.5
ASE-54A	03/16/10	<0.5	0.7	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	1.1	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-55A	03/10/10	<0.5	1.8	<0.5	2.9	0.9	2.7	0.9	3.0	<0.5	0.6	<1.0	1.3	<0.5	2.6	7.1	8.8	4.6	4.4	<0.5	<0.5	2.0	0.5
ASE-58A	03/09/10	<0.5	5.1	<0.5	<0.5	<0.5	13	<0.5	1.0	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	3.3	2.8	2.9	1.1	<0.5	<0.5	1.6	<0.5
ASE-60A	03/16/10	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<1.0	8.2	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-61A	03/10/10	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	1.2	<0.5	<0.5	0.6	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-62A	03/09/10	<0.5	7.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	5.1	<2.0	0.6	<0.5	<0.5	<0.5	<0.5
ASE-63A	03/10/10	<10	<10	<10	<10	<10	1,400	<10	10	<10	<10	<20	<10	<10	<10	78	66	190	58	<10	<10	<10	<10
ASE-64A	03/10/10	<0.5	<0.5	<0.5	30	11	4.1	<0.5	3.4	<0.5	<0.5	<1.0	<0.5	<0.5	33	54	<0.5	27	26	<0.5	2.5	7.3	1.4
ASE-65A	03/09/10	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.7	0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-68A	03/16/10	<0.5	15	<0.5	<0.5	<0.5	4.3	<0.5	0.5	1.3	<0.5	<1.0	<0.5	0.8	<0.5	1.4	38	<2.0	0.9	<0.5	<0.5	0.8	0.6
ASE-84A	03/11/10	<0.5	2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.7	<0.5	<0.5	0.5	<0.5	<2.0	0.5	<0.5	<0.5	<0.5	<0.5
ASE-90A	03/08/10	<1.3	<1.3	<1.3	<1.3	<1.3	17	<1.3	1.6	<1.3	<1.3	<2.5	<1.3	<2.5	<1.3	4.2	160	<5.0	4.3	<1.3	<1.3	1.5	<1.3
ASE-95A	03/11/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	18	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-96A	03/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	49	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-97A	03/11/10	<0.5	11	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	0.7	<0.5	0.7	19	<2.0	0.7	<0.5	<0.5	<0.5	<0.5
ASE-98A	03/08/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-99A	03/08/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-100A	03/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-101A	03/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	0.6	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-103A	03/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-105A	03/08/10	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	1.6	0.8	<0.5	<2.0	0.6	<0.5	<0.5	0.5	<0.5
ASE-106A	03/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-108A	03/09/10	8.7	15	11	<0.5	<0.5	25	<0.5	3.2	<0.5	<0.5	1.8	<0.5	1.2	<0.5	6.5	33	8.1	5.4	<0.5	<0.5	2.6	<0.5
ASE-109A	03/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-110A	03/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-112A	03/08/10	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	2.5	<0.5	<2.0	0.7	<0.5	<0.5	1.7	<0.5
ASE-113A	03/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-114A	03/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-116A	03/17/10	<0.5	<0.5	0.5	<0.5	<0.5	72	<0.5	0.9	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	10	10	11	8.0	<0.5	<0.5	1.4	<0.5
ASE-122A	03/15/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-123A	03/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-124A	03/14/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	6.2	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-125A	03/11/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-126A	03/11/10	<0.5	10	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	1.0	<0.5	1.3	31	<2.0	0.6	<0.5	<0.5	1.0	<0.5
ASE-127A	03/10/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-128A	03/08/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 3-11
 Summary of SW8260 and SW8015 Detected Analytical Results for Groundwater Quality Samples, First Quarter 2010
 Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	111TCA	DCA	DCE	124TMBZ	135TMBZ	BZ	BDCM	BBZ	CD	DBCMA	CET	CHCL3	C12DCE	EBZ	IPBZ	MTBE	NAPH	n-PBZ	o-XYL	p-IPT	s-BBZ	t-BBZ
ASE-129A	03/12/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
ASE-130A	03/09/10	<0.5	1.6	<0.5	11	1.3	90	<0.5	3.7	<0.5	<0.5	1.9	<0.5	<0.5	17	11	150	27	9.6	<0.5	1.5	3.2	0.9
BC-7A	03/10/10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
BC-8B	03/11/10	<1.0	4.5	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1.1	140	<4.0	1.1	<1.0	<1.0	<1.0	<1.0
PL-105A	03/09/10	<0.5	15	<0.5	0.9	<0.5	46	<0.5	7.4	<0.5	<0.5	2.8	<0.5	0.9	0.9	17	66	14	16	0.7	<0.5	4.8	0.7
PL-201A	03/09/10	<0.5	18	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	0.8	<0.5	<0.5	16	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
PL-2101	03/16/10	<0.5	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	1.4	<2.0	<0.5	<0.5	<0.5	0.8	<0.5
PL-2102	03/10/10	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.9	<0.5	<0.5	1.3	<0.5	<2.0	0.9	<0.5	<0.5	<0.5	<0.5

TABLE 3-11

Summary of SW8260 and SW8015 Detected Analytical Results for Groundwater Quality Samples, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	TPH					
		PCE	C10-C22	TCE	VC	mp-XYL	XYL
ASE-37A	03/17/10	<0.5	<1,000	0.7	<0.5	<0.5	<0.5
ASE-38A	03/17/10	<3.6	<1,000	<3.6	<3.6	<3.6	<3.6
ASE-52A	03/16/10	1.1	<1,000	2.6	<0.5	4.6	4.6
ASE-54A	03/16/10	0.9	<1,000	1.9	<0.5	<0.5	<0.5
ASE-55A	03/10/10	0.6	39,000	<0.5	<0.5	4.5	4.5
ASE-58A	03/09/10	<0.5	<1,000	1.0	0.5	<0.5	<0.5
ASE-60A	03/16/10	1.0	<1,000	19	<0.5	<0.5	<0.5
ASE-61A	03/10/10	2.0	<1,000	1.0	<0.5	<0.5	<0.5
ASE-62A	03/09/10	<0.5	<1,000	1.0	0.5	<0.5	<0.5
ASE-63A	03/10/10	<10	2,100	<10	<10	<10	<10
ASE-64A	03/10/10	<0.5	2,800	<0.5	<0.5	59	59
ASE-65A	03/09/10	0.6	<1,000	2.7	<0.5	<0.5	<0.5
ASE-68A	03/16/10	<0.5	<1,000	0.5	4.3	<0.5	<0.5
ASE-84A	03/11/10	<0.5	<1,000	2.4	<0.5	<0.5	<0.5
ASE-90A	03/08/10	<1.3	1,800	<1.3	<1.3	<1.3	<1.3
ASE-95A	03/11/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-96A	03/15/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-97A	03/11/10	<0.5	<1,000	1.5	0.7	<0.5	<0.5
ASE-98A	03/08/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-99A	03/08/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-100A	03/12/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-101A	03/12/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-103A	03/12/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-105A	03/08/10	<0.5	<1,000	<0.5	<0.5	0.7	0.7
ASE-106A	03/15/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-108A	03/09/10	<0.5	1,000	4.1	1.6	<0.5	<0.5
ASE-109A	03/12/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-110A	03/12/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-112A	03/08/10	0.8	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-113A	03/15/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-114A	03/15/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-116A	03/17/10	1.1	<1,000	1.8	<0.5	<0.5	<0.5
ASE-122A	03/15/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-123A	03/12/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-124A	03/14/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-125A	03/11/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-126A	03/11/10	<0.5	<1,000	1.5	0.8	<0.5	<0.5
ASE-127A	03/10/10	0.6	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-128A	03/08/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5

TABLE 3-11

Summary of SW8260 and SW8015 Detected Analytical Results for Groundwater Quality Samples, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Sample Date	TPH					
		PCE	C10-C22	TCE	VC	mp-XYL	XYL
ASE-129A	03/12/10	<0.5	<1,000	<0.5	<0.5	<0.5	<0.5
ASE-130A	03/09/10	<0.5	1,600	<0.5	<0.5	5.7	5.7
BC-7A	03/10/10	0.9	<1,000	<0.5	<0.5	<0.5	<0.5
BC-8B	03/11/10	<1.0	<1,000	2.8	<1.0	<1.0	<1.0
PL-105A	03/09/10	<0.5	14,000	<0.5	1.8	<0.5	0.7
PL-201A	03/09/10	<0.5	<1,000	<0.5	1.7	<0.5	<0.5
PL-2101	03/16/10	<0.5	<1,000	0.9	1.1	<0.5	<0.5
PL-2102	03/10/10	0.9	<1,000	1.3	<0.5	0.8	0.8

Notes:

All results are reported in micrograms per liter.

Maximum detected concentration between primary samples and field duplicates is shown. If an analyte is not detected in both the primary and field duplicate sample and the reporting limits differ, the lower of the two reporting limits is shown.

111TCA = 1,1,1-Trichloroethane

124TMBZ = 1,2,4-Trimethylbenzene

135TMBZ = 1,3,5-Trimethylbenzene

BBZ = Butylbenzene

BDCM = Bromodichloromethane

BZ = Benzene

C12DCE = cis-1,2-Dichloroethene

CD = Carbon disulfide

CET = Chloroethane

CHCL3 = Chloroform

DBCMA = Chlorodibromomethane

DCA = 1,1-Dichloroethane

DCE = 1,1-Dichloroethene

EBZ = Ethylbenzene

IPBZ = Isopropylbenzene

mp-XYL = Xylenes, m & p

MTBE = Methyl tert-butyl ether

NAPH = Naphthalene

n-PBZ = n-Propylbenzene

o-XYL = o-Xylene

PCE = Tetrachloroethene

p-IPT = p-Isopropyltoluene

s-BBZ = sec-Butylbenzene

t-BBZ = tert-Butylbenzene

TCE = Trichloroethene

TPH C10-C22 = Total Petroleum Hydrocarbons, Carbon Range C10-C22

VC = Vinyl chloride

XYL = Total xylenes

TABLE 4-1
Contingency Triggers and Contingency Measures, First Quarter 2010
Honeywell 34th Street Facility, Phoenix, Arizona

Contingency Trigger	Trigger	Quarterly Observations	Contingency Triggered	Contingency Measure(s) Taken	
Vadose Zone					
Changing Site Conditions	Water Levels, Contaminant Type or Distribution, Estimated Contaminant Mass	Re-evaluate the remedial strategy approach if a change in the site conditions impacting the propriety or efficacy of the selected remedy occurs.	No significant changes from previous quarter.	No	--
Performance Metrics Cannot Be Maintained for 3 Continuous Months.	Biodegradation Rate	Significant Decreases	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred (anticipated Second Quarter 2010).	--	--
		Rates Not Consistent with Achieving the Remediation Standards within the Prescribed times of system startup.	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred (anticipated Second Quarter 2010).	--	--
	TPH in Soil Vapor	Failure of TPH concentrations in soil-vapor to decline or problematic rebound.	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred (anticipated Second Quarter 2010).	--	--
	Temperature	Subsurface reductions greater than 50% of the observed temperature rise.	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred (anticipated Second Quarter 2010).	--	--
	Subsurface Moisture	Drying of the soils in the deep vadose zone to the point that biodegradation is greatly reduced or not possible.	These metrics will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred (anticipated Second Quarter 2010).	--	--
	Groundwater Levels	Failure to decrease in any consecutive 12-month period during BSVE operations.	The groundwater levels will be evaluated prior to the first 12-month period of BSVE operations following completion of the initial ramp-up period and summarized in the First Quarter 2011 Remediation Status Report.	--	--
	Mass Removal Rates	Failure to achieve and maintain a removal rate of initially, 2,000 pounds per day of TPH within 12 months of initiation (Honeywell only), and then 3,000 pound per day of TPH within 12 months of startup of the combined system (Honeywell and PSHIA).	The mass removal rates will be evaluated prior to the first 12-month period of full-scale BSVE operations (extraction and injection) and summarized in the first quarterly status report after achieving full-scale operations.	--	--
Toxicity and Safety Standards	Soil-vapor Concentrations of Methane or Any Petroleum Hydrocarbon	Exceed 20% of LEL in vadose zone	The 20% LEL threshold was exceeded at one shallow soil-vapor location, P-26-U, in the Phase C Area during First Quarter 2010. Increased monitoring of soil gas continues as the result of earlier detections.	Yes	Surrounding vaults (ELE-VLT-02, and FBO-VLT-01) were measured, and the LEL measurements were below detection limits. Quarterly monitoring of these locations will continue to monitor trends.
	Fuel Related COCs	Exceed Risk-Based Corrective Action Standards determined by Risk Assessment	These standards will be evaluated within 18 months of system startup.	--	--
Remediation Standards	Soil-vapor Concentrations of VOCs	Soil-vapor concentrations of benzene exceed 340 µg/L in the vadose zone	These standards will be evaluated within 18 months of system startup.	--	--
	Soil-vapor Concentrations of COCs	Soil-vapor concentrations of COCs exceed risk-based corrective action standards determined by risk assessment in the deep vadose zone.	These standards will be fully evaluated within 18 months of system startup. Among the 61 non-process soil-vapor monitoring wells and 23 process soil-vapor monitoring wells sampled, no risk based corrective action standards (i.e., Tier 1 or Tier 2 VALs) were exceeded.	--	--
	Soil-vapor Concentrations of Oxygen	Soil-vapor concentrations of oxygen shall not exceed 5% by volume in the deep vadose zone.	These standards will be evaluated within 18 months of system startup.	--	--
	Methane	Soil-vapor concentrations of methane exceed 1% by volume in the deep vadose zone.	These standards will be evaluated within 18 months of system startup.	--	--

TABLE 4-1

Contingency Triggers and Contingency Measures, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Contingency Trigger	Trigger	Quarterly Observations	Contingency Triggered	Contingency Measure(s) Taken
Free-product Jet Fuel				
Free-product Thickness	During any 24-month period of remedial operation, free-product thicknesses in any well increases.	This trigger will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred (anticipated Second Quarter 2010).	--	--
	Wells with confirmed free-product thicknesses in excess of 0.75 foot.	Free-product thickness measurements exceeding 0.75 foot were recorded for monitoring well ASE-107A during First Quarter 2010 (on 1/7/10, 1/20/10, 3/1/10, and 3/19/10).	Yes	A dedicated, automatic free-product skimming pump is not installed at ASE-107A because installation of recovery equipment, requiring electricity or some alternative form of power and a storage vessel, in this well would cause disruption to airport operations. Pursuant to discussions with ADEQ's Case Manager for the LUST Enforcement Unit and the COP in June 2007 (in regard to the initial occurrence of a metric exceedance in monitoring well ASE 107A), Honeywell manually recovered free product from monitoring well ASE-107A on a biweekly basis (whenever free product thickness measurements exceeded 0.1 foot) during First Quarter 2010. Honeywell plans to continue biweekly manual free-product recovery, as required for confirmed exceedances of the 0.1 foot CAP metric, from monitoring well ASE 107A (subject to PSHIA operations' site access approval) whenever free product thicknesses in monitoring well ASE-107A exceed a thickness of 0.75 foot.
	Wells with free product in excess of 0.1 foot but less than 0.75 foot.	Free-product thicknesses exceeding 0.1 foot but less than 0.75 foot occurred in four monitoring wells (ASE-67A, ASE-111A, and ASE-115A) during the quarter.	Yes	Manual recovery of free product was conducted biweekly in monitoring wells ASE-67A during First Quarter 2010 (when measured thicknesses exceeded 0.1 foot). Initial exceedances of the 0.1 foot free-product thickness metric were recorded during First Quarter 2010 for monitoring wells ASE-111A (on 2/3/10) and ASE-115A (on 3/1/10), and free product was manually recovered (0.20 foot and 0.25 foot, respectively) a the time of these measurements. As a result of these initial exceedances, monitoring wells ASE-111A and ASE-115A were monitored biweekly for a second (confirmatory) free-product thickness measurement exceeding 0.1 foot within a six-week period. Subsequent free-product thickness measurements in monitoring well ASE-111A during the quarter remained below 0.1 foot and, as such, it remains in the monthly free-product monitoring program. Subsequent free-product thickness measurements in monitoring well ASE-115A also remained below 0.1 foot for the remainder of the quarter, however the evaluation period for this well extends into Second Quarter 2010.
Groundwater Levels	Groundwater levels in any given 12-month period are substantially above the levels of December 2004.	March 1, 2010 water levels are between 7 feet and 17 feet higher than December 1, 2004 water levels.	Yes	This trigger was first documented in the <i>Second Quarter 2009 Remediation Status Report</i> (CH2M HILL, 2009a). As reported during Second Quarter 2009, Honeywell evaluated the impact of rising groundwater levels in the Phase C and D areas. For Phase C, the design was modified to include three additional injection/extraction wells, bringing the total well count to 10. Additionally, Honeywell adjusted the Phase C wells' locations to maximize their influence in the Phase D area, and raised the elevation of the top of the wells' screens to accommodate the current groundwater levels and future rises in groundwater levels in this area. All of the new Phase C wells were installed in Fourth Quarter 2009. Construction on the piping and connection to the BSVE system began on March 8, 2010. For Phase D, Honeywell continues to work in cooperation with the COP to evaluate appropriate alternatives. On February 26, 2010 Honeywell submitted the <i>Phase D Remedial Alternatives Detailed Evaluation Report</i> (CH2M HILL, 2010b) to the COP for consideration and evaluation, including identification of the potential disruption to PSHIA operations.
Minimization of Remedial Time	Free-product thickness is not reduced to less than 0.01 feet within 10 years.	This trigger will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred (anticipated Second Quarter 2010).	--	--

TABLE 4-1

Contingency Triggers and Contingency Measures, First Quarter 2010

Honeywell 34th Street Facility, Phoenix, Arizona

Contingency Trigger	Trigger	Quarterly Observations	Contingency Triggered	Contingency Measure(s) Taken
Performance Metrics	Wells with Automatic Free-product Extraction Systems	Automated free-product recovery will cease when free-product thicknesses fall below 0.75 foot and product recovery rates diminish to less than 2 gallons per month for 2 consecutive months.	No	--
	Wells with Manual Free Product Recovery	<p>Less than 0.1 foot of free product is present and less than 2 gallons per month are recovered for 3 consecutive months.</p> <p>Well has between 0.1 and 0.75 foot of free product, which after 6 months of attempted recovery, does not yield a minimum of 2 gallons in at least 1 month.</p>	Yes	At the end of First Quarter 2010, monitoring well ASE-67A was transferred from the biweekly monitoring/recovery program to the monthly monitoring program.
Commingled Plumes	Honeywell free-product plume has commingled or is threatening to commingle with other free-product plumes beneath PSHIA.	This trigger will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred (anticipated Second Quarter 2010). However, there was no evidence of plume commingling during the quarter.	--	--
Changing Site Conditions	Significant variations in water levels, contaminant type or distribution, estimated contaminant mass, and/or lithology type containing the majority of contaminant mass.	This trigger will be evaluated after the initial system ramp-up period has been completed and BSVE start-up has occurred (anticipated Second Quarter 2010). However, there were no significant variations in site conditions from the previous quarter.	--	--

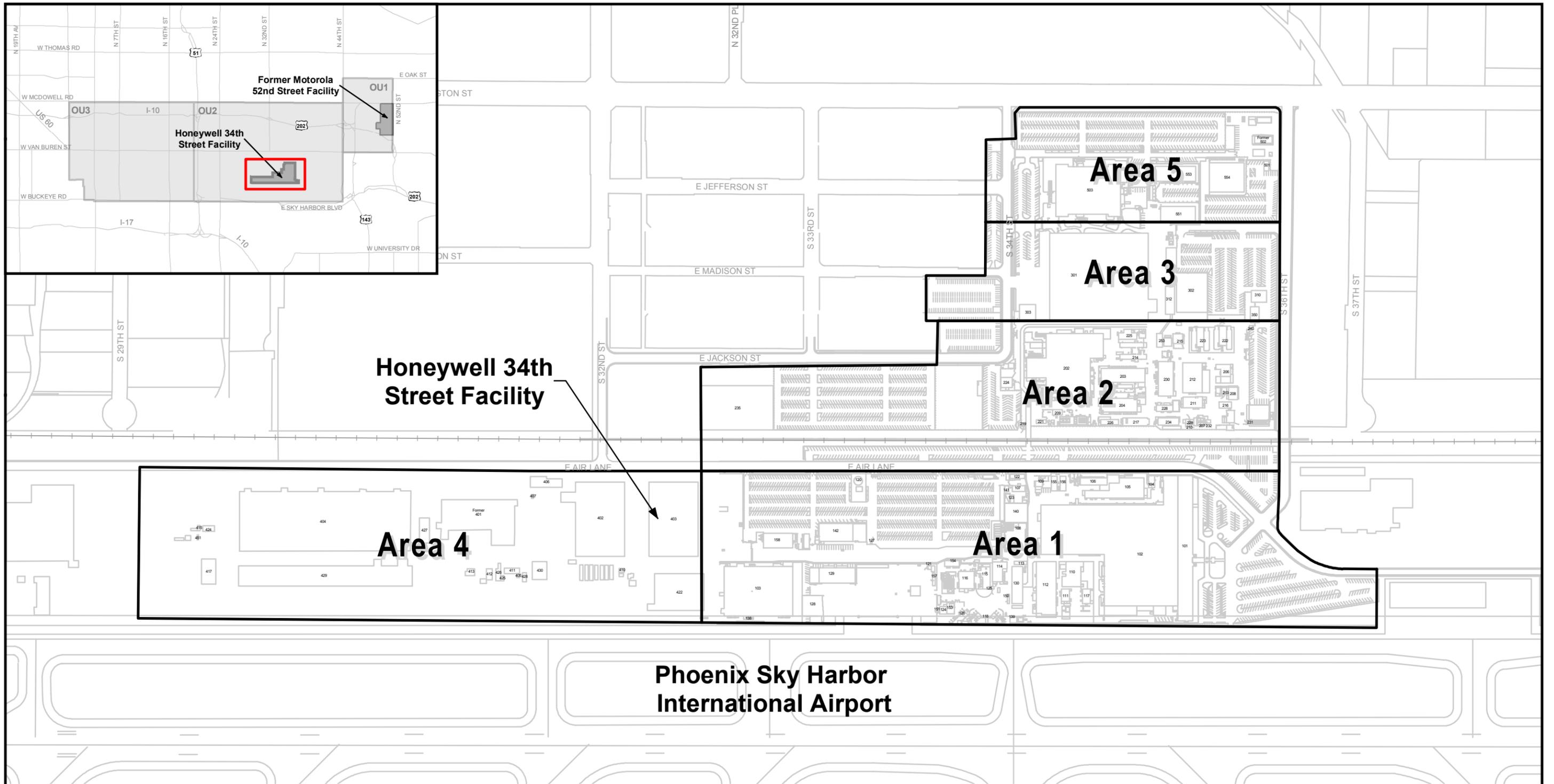
Dissolved Phase Contaminants of Concern

Dissolved phase COC triggers will be evaluated following approval of the groundwater component of Honeywell's CAP.

Notes:

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

Figures



Legend

- Street and Airport Features
- +— Railroad
- ▭ Operational Area Boundaries
- ▭ Honeywell Buildings

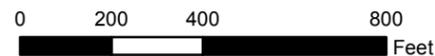
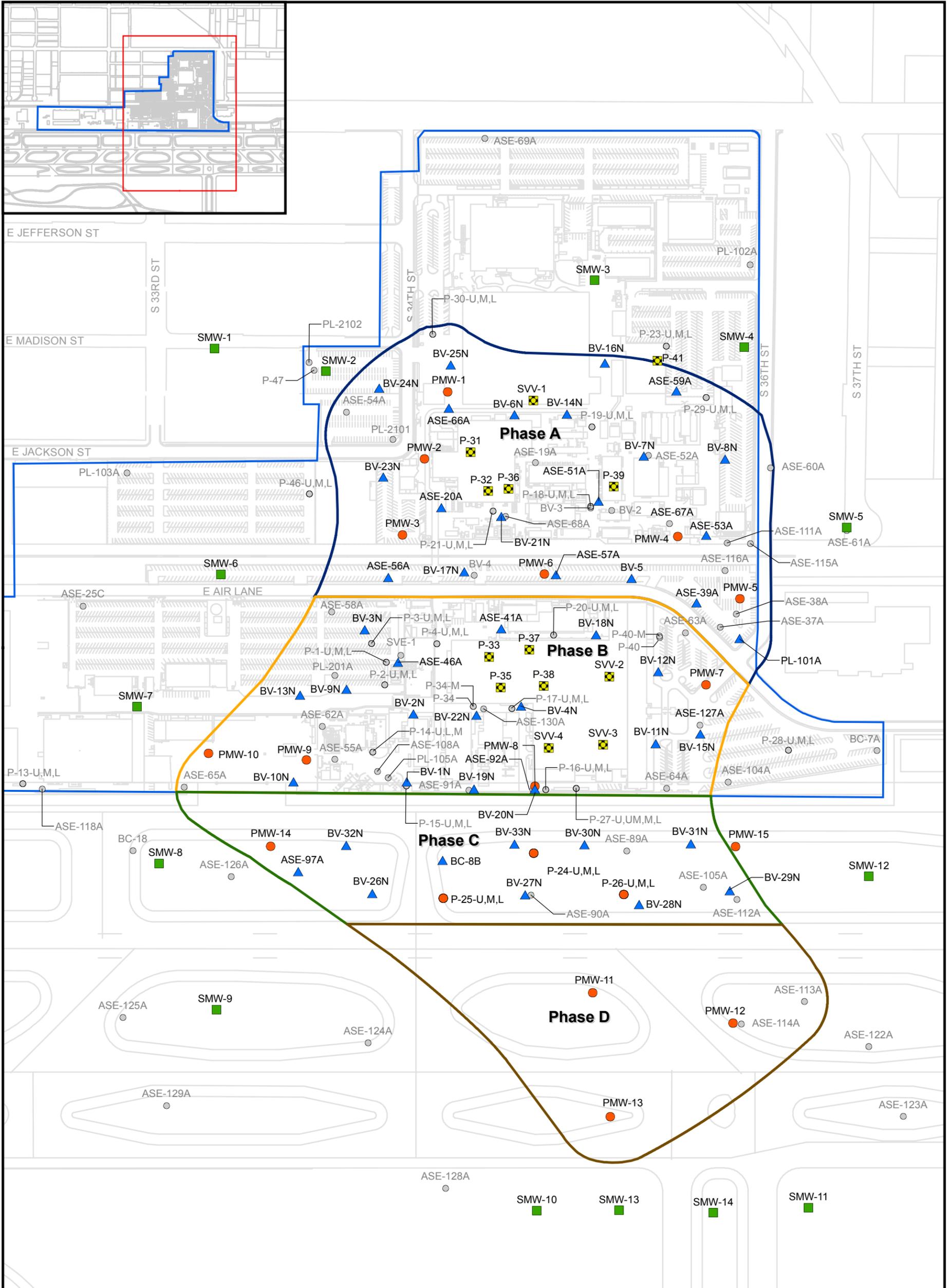


FIGURE 1-1
FACILITY LOCATION AND LAYOUT
Honeywell 34th Street Facility
Phoenix, Arizona



Legend

- ▲ Injection/Extraction Well
- Process Monitoring Well
- Sentinel Monitoring Well
- Honeywell Monitoring Well
- Existing Sub-slab Monitoring Well
- Honeywell-owned Property, Phase A
- Honeywell-leased Property, Phase B
- PSHIA Property North of Runway 8-26, Phase C
- PSHIA Property South of Runway 8-26, Phase D

Notes:
 1. BSVE = Biologically-enhanced Soil-vapor Extraction
 2. Phase C Injection/Extraction Wells not currently connected to the BSVE system.
 3. Groundwater wells with a top of screen less than or equal to 75 feet below ground surface presented in figure.
 4. Utility Vault, and Manhole Monitoring locations not presented.

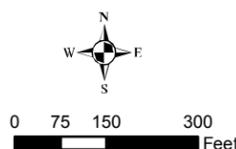
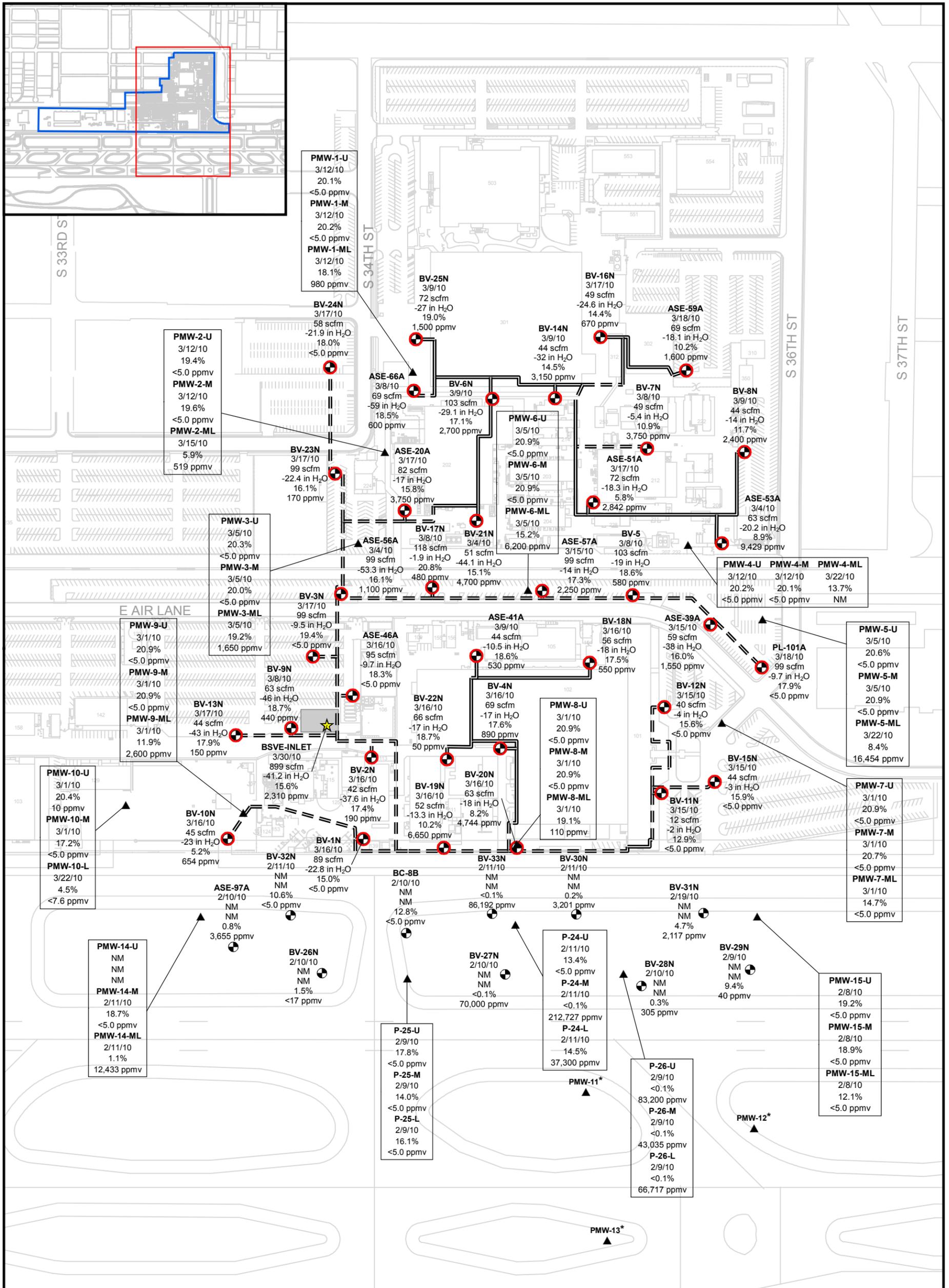


FIGURE 1-2
BSVE SYSTEM SOIL-VAPOR
MONITORING WELL NETWORK
Honeywell 34th Street Facility
Phoenix, Arizona



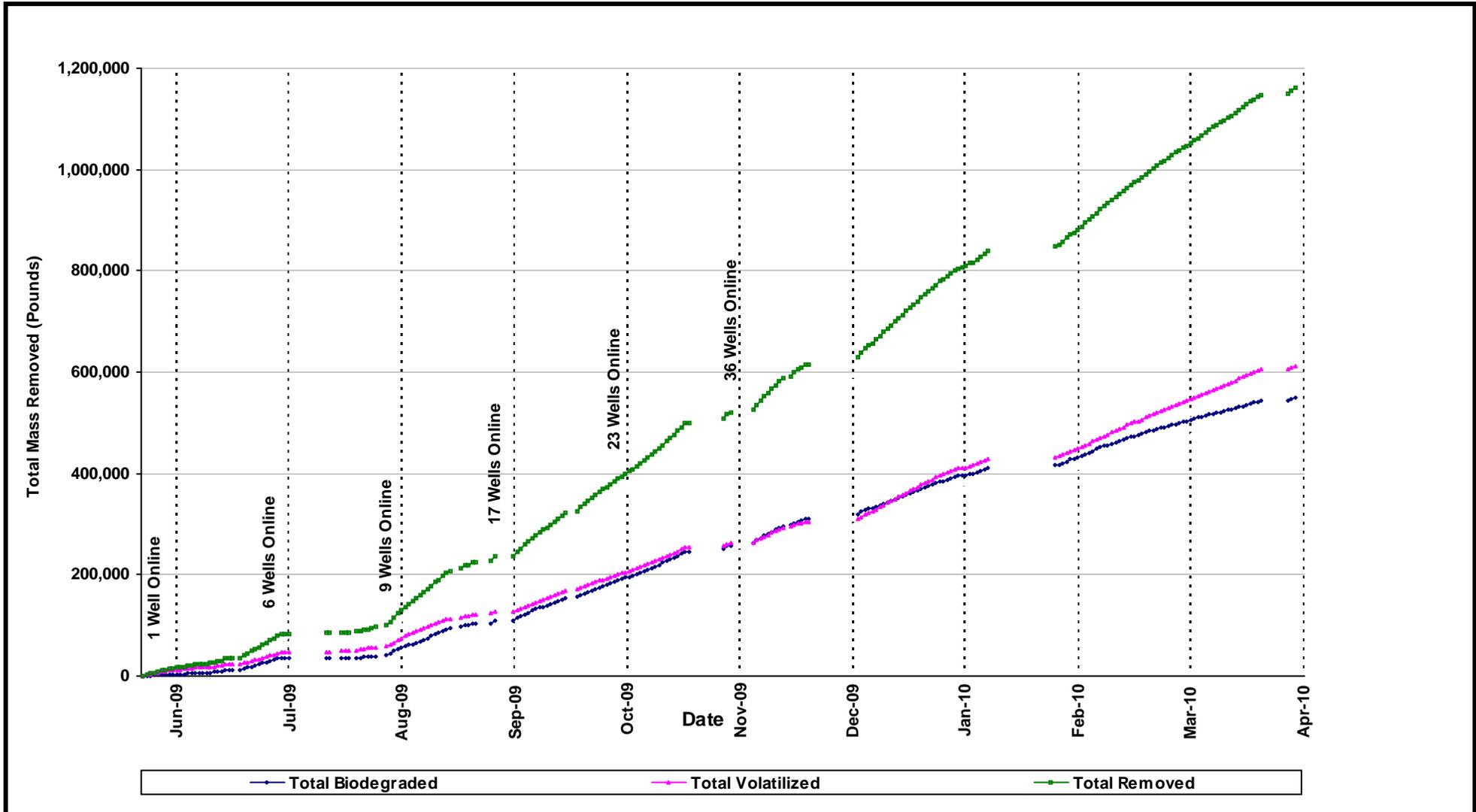
Legend

- ★ BSVE Inlet
 - BSVE Injection/Extraction Well (Offline)
 - ⊕ BSVE Injection/Extraction Well (Extraction Mode)
 - ▲ Process Monitoring Well
 - Above Grade Piping
 - == Below Grade Piping
- | | | | | | | | | | | | |
|-----------------|-------------|---------|-----------------|---------|-----------|---------------------------|--------|-------|--------|-----------|-----|
| BV-1N | Location ID | 3/16/10 | Monitoring Date | 89 scfm | Flow Rate | -22.8 in H ₂ O | Vacuum | 15.0% | Oxygen | <5.0 ppmv | TPH |
| PMW-10-L | Location ID | 3/22/10 | Monitoring Date | 4.5% | Oxygen | <7.6 ppmv | TPH | | | | |



- Notes:**
- BSVE = Biologically-enhanced Soil-vapor Extraction
 - TPH = Total Petroleum Hydrocarbons
 - scfm = standard cubic feet per minute
 - in H₂O = inches of water
 - % = percent
 - ppmv = parts per million volume
 - NM = Not Measured
 - All Phase A and B BSVE wells connected as of October 2009.
 - Phase C Injection/Extraction wells not currently connected to the BSVE system.
 - * Indicates location was not monitored during First Quarter 2010.

FIGURE 2-1
BSVE WELL AND
PROCESS MONITORING WELL
OPERATIONAL DATA
FIRST QUARTER 2010
Honeywell 34th Street Facility
Phoenix, Arizona



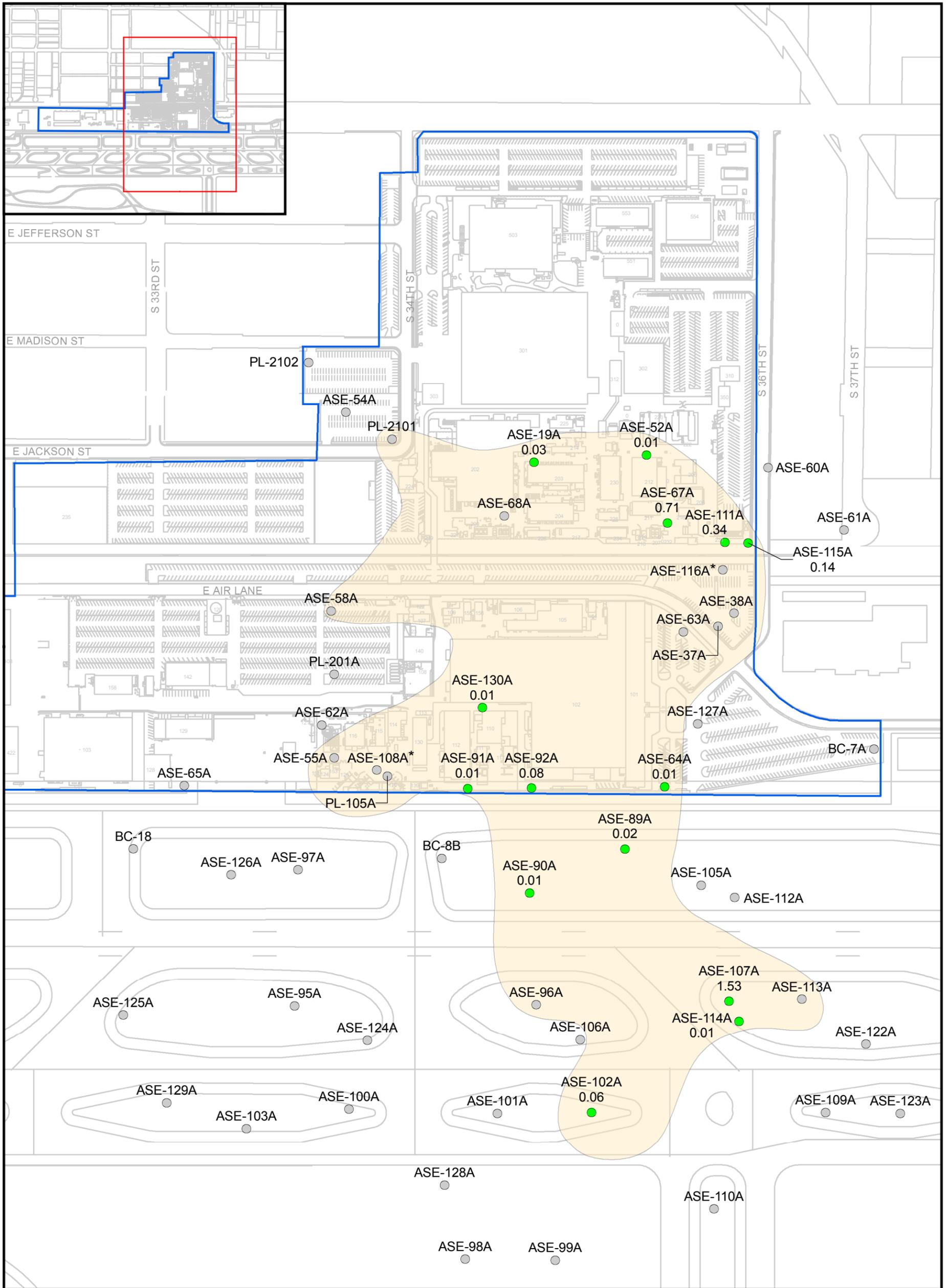
Notes:

1. Total mass removed via biodegradation was estimated based on oxygen concentrations following the equation presented in BSVE O&M Manual (CH2M HILL, 2009b)
2. Total mass removed via volatilization was estimated based on British thermal unit (BTU) consumption as measured at the Thermal Oxidation unit following the equation presented in "Soil Vapor Field Parameter Collection and Interpretation Technical Memorandum" attached as Appendix C to the *Third Quarter 2009 Remediation Status Report* (CH2M HILL, 2009c).

**FIGURE 2-2
CUMULATIVE MASS REMOVAL BY BIODEGRADATION AND
VOLATILIZATION**

*Honeywell 34th Street Facility
Phoenix, Arizona*





Legend

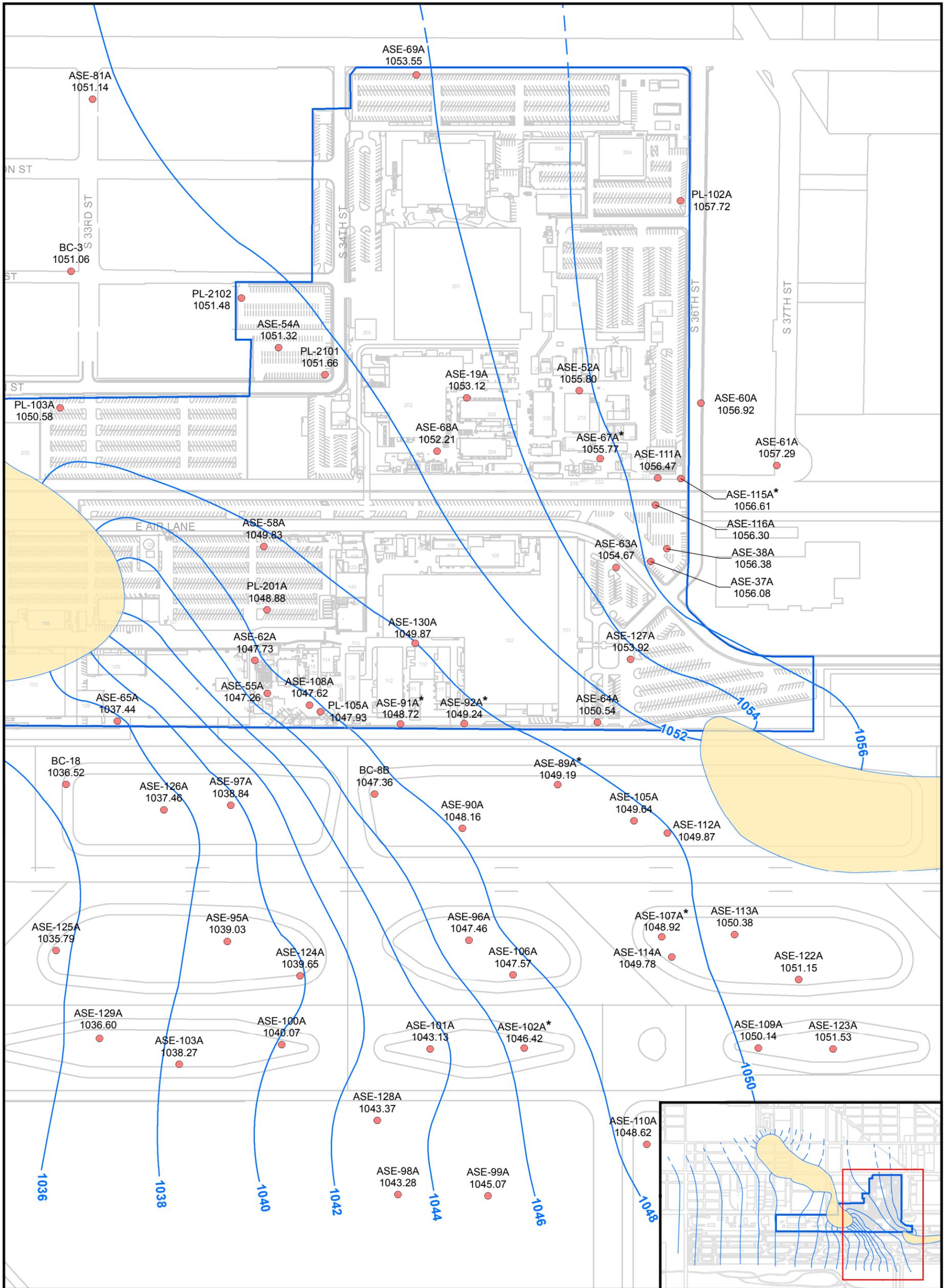
- Free Product Detected (thickness provided in feet)
- Free Product Not Detected
- Street and Airport Features
- Honeywell Facility
- Historical Free-Product Extent (as of March 31, 2010)



Notes:
 1. The maximum free-product thickness measurement collected during the quarter is posted for monitoring wells that contained free product during the quarter.
 2. * Free product has not been observed in monitoring wells ASE-108A and ASE-116A. These wells are included within the historical free-product extent due to their proximity to wells that have contained free product.

**FIGURE 3-1
 MAXIMUM
 FREE-PRODUCT THICKNESS
 FIRST QUARTER 2010**
*Honeywell 34th Street Facility
 Phoenix, Arizona*





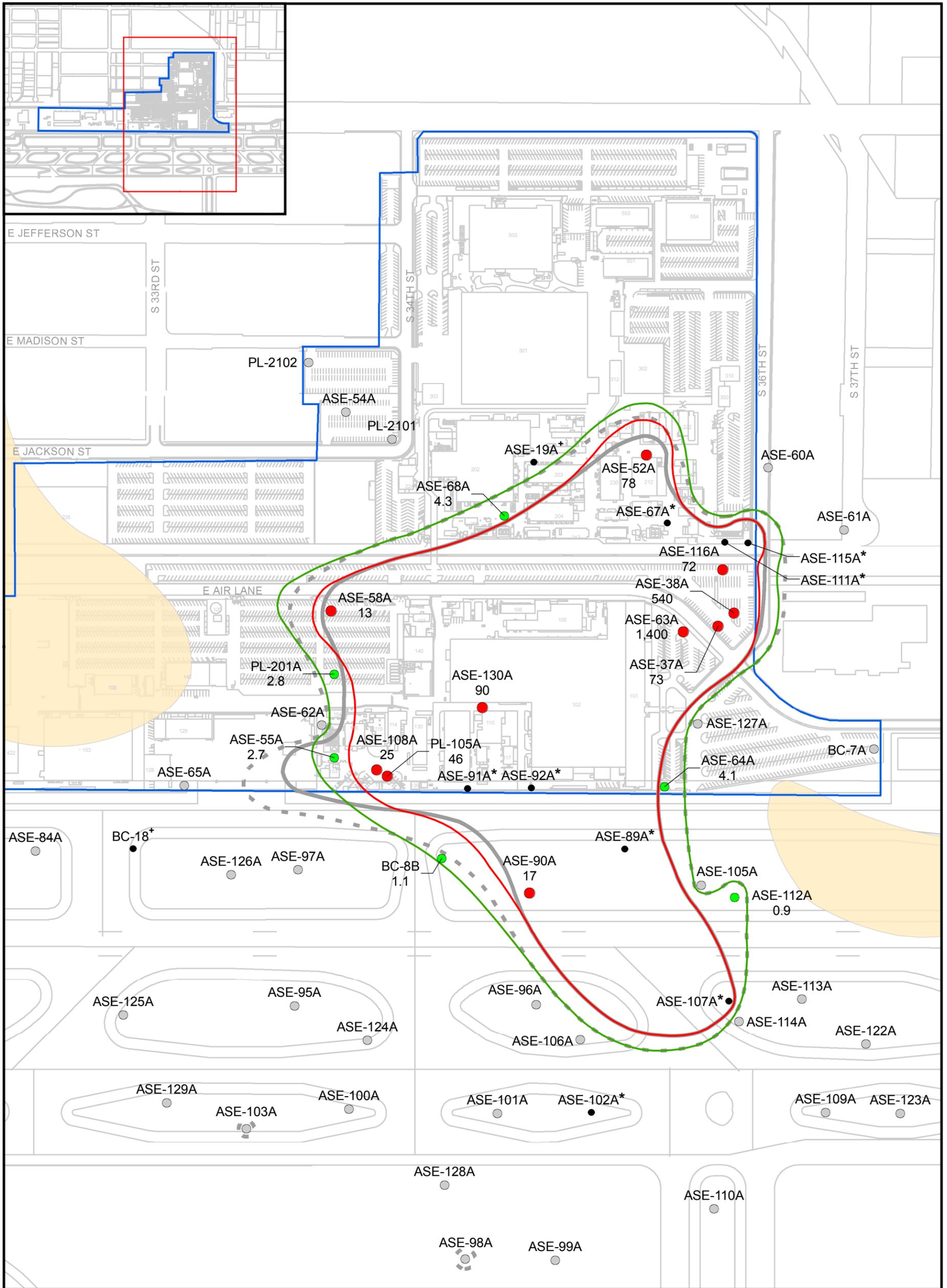
Legend

- ASE-128A 1043.37 Well Identifier
Water-level Elevation, in feet above mean sea level
- Water-level Contours (ft amsl)
(dashed where inferred)
- Honeywell Facility
- Honeywell Bedrock Rise



Notes:
 1. All measurements recorded on March 1, 2010.
 2. * Monitoring well contained free product. Value represents corrected water-level elevation based on a free-product specific gravity of 0.81. Value not used to produce contours.

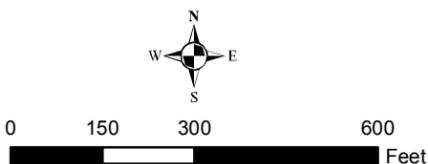
FIGURE 3-2
WATER-LEVEL CONTOURS
MARCH 2010
SUB-UNIT A
Honeywell 34th Street Facility
Phoenix, Arizona



Legend

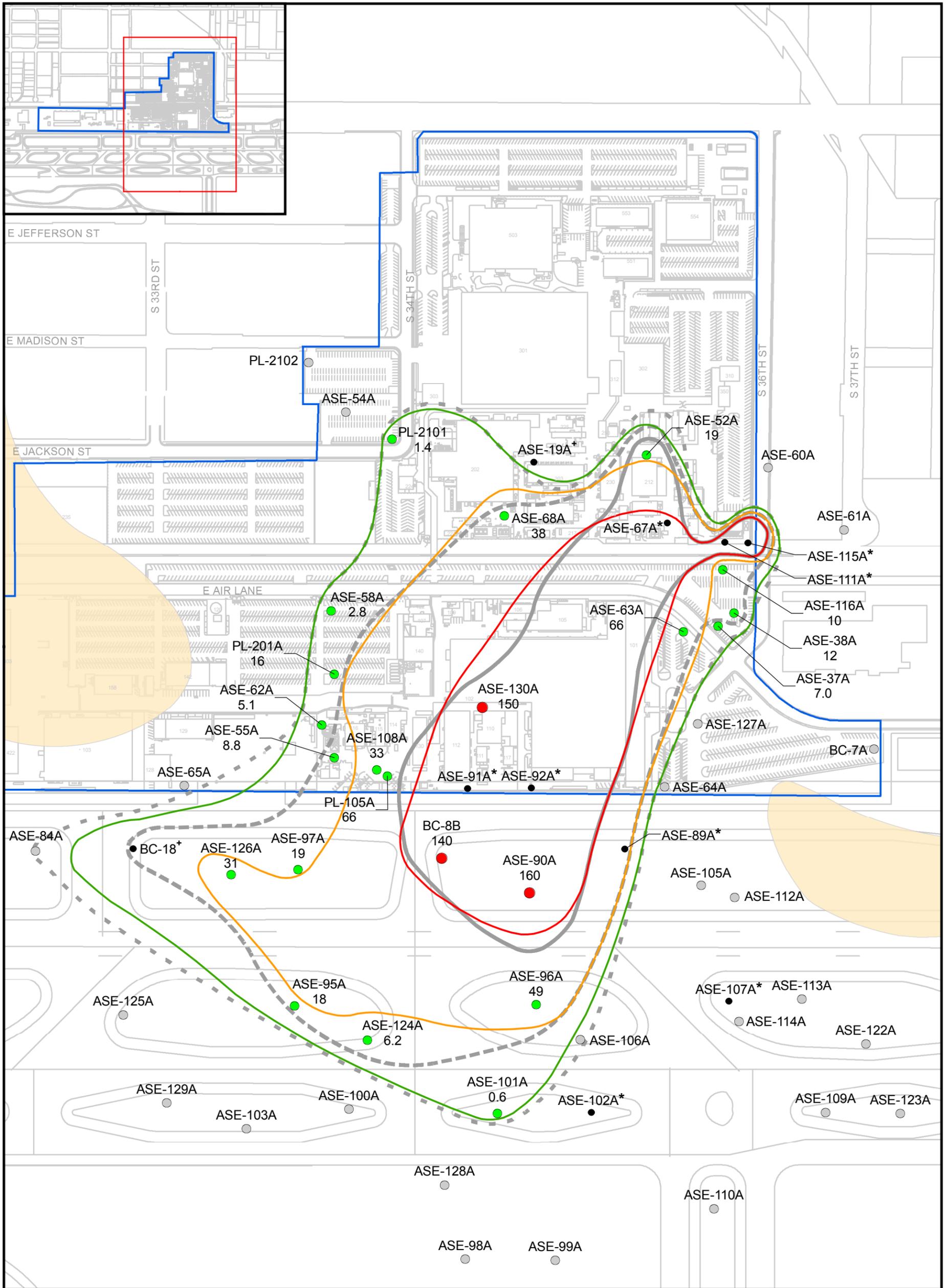
- Compound Not Detected
- Compound Detected (µg/L)
- Regulatory Standard Exceeded
- Well Not Sampled
- Street and Airport Features
- ▭ Honeywell Facility
- ▭ Honeywell Bedrock Rise

- March 2010**
- ▭ Not Detected Above Reporting Limit
 - ▭ 5 µg/L
- December 2009**
- ▭ Not Detected Above Reporting Limit
 - ▭ 5 µg/L



Notes:
 1. µg/L = micrograms per liter
 2. Exceedance value is 5 µg/L.
 3. Samples collected between March 8, 2010 and March 17, 2010.
 4. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
 5. * Indicates monitoring well not sampled due to insufficient water in well.

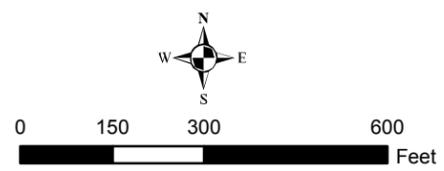
FIGURE 3-3
BENZENE
MARCH 2010
GROUNDWATER PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona



Legend

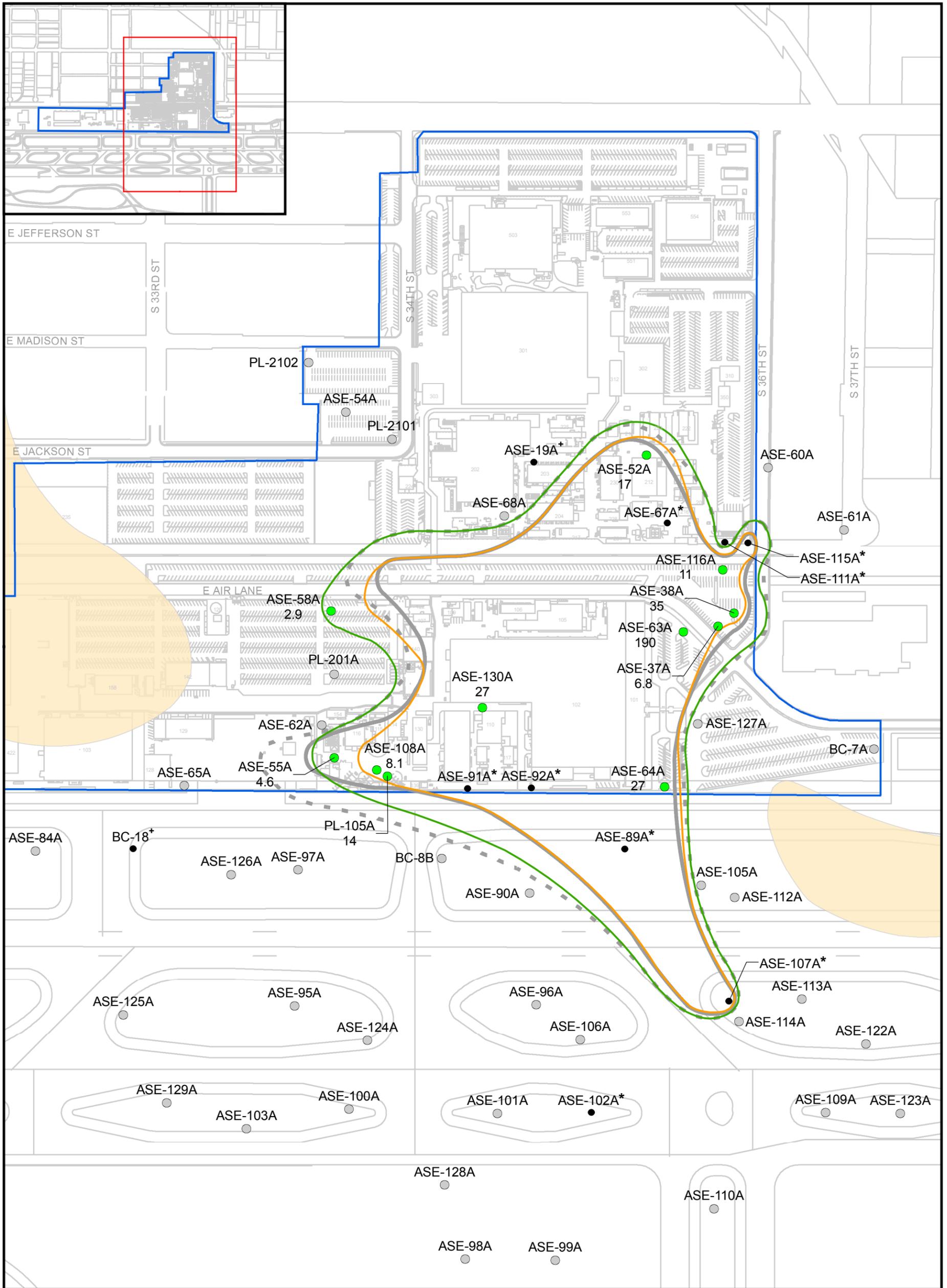
- Compound Not Detected
- Compound Detected (µg/L)
- Regulatory Guidance Level Exceeded
- Well Not Sampled
- Street and Airport Features
- Honeywell Facility
- Honeywell Bedrock Rise

- March 2010**
- Not Detected Above Reporting Limit
 - 20 µg/L
 - 94 µg/L
- December 2009**
- Not Detected Above Reporting Limit
 - 20 µg/L
 - 94 µg/L



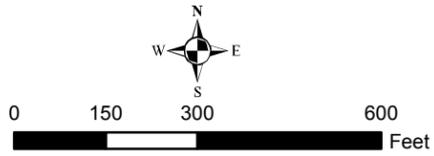
Notes:
 1. µg/L = micrograms per liter
 2. Exceedance value is 94 µg/L.
 3. The Arizona Department of Environmental Quality Investigative Level is 20 µg/L.
 4. Samples collected between March 8, 2010 and March 17, 2010.
 5. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
 6. * Indicates monitoring well not sampled due to insufficient water in well.

FIGURE 3-4
METHYL TERT-BUTYL ETHER
MARCH 2010
GROUNDWATER PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona



Legend

- Compound Not Detected
- Compound Detected (µg/L)
- Well Not Sampled
- Street and Airport Features
- Honeywell Facility
- Honeywell Bedrock Rise
- March 2010**
- Not Detected Above Reporting Limit
- 6.5 µg/L
- December 2009**
- Not Detected Above Reporting Limit
- 6.5 µg/L



Notes:
 1. µg/L = micrograms per liter
 2. Exceedance value is 280 µg/L.
 3. The Arizona Department of Environmental Quality Tier 1 Corrective Action Standard is 6.5 µg/L.
 4. Samples collected between March 8, 2010 and March 17, 2010.
 5. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
 6. * Indicates monitoring well not sampled due to insufficient water in well.

FIGURE 3-5
NAPHTHALENE
MARCH 2010
GROUNDWATER PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona

Appendix A
Status of Deliverables

APPENDIX A

Status of Deliverables

The following is a list of deliverables submitted through First Quarter 2010, since the Site Characterization Report (dated August 23, 2002) was submitted to ADEQ:

- On March 1, 2010, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Fourth Quarter 2009 Remediation Status Report, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20.*
- On December 30, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ an updated *Operation and Maintenance Plan for the Biologically-enhanced Soil Vapor Extraction System, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File No. 0393.02-.10, .15-.20.*
- On November 25, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Third Quarter 2009 Remediation Status Report, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20.*
- On September 18, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a copy of MCAQD's approval letters for the four BSVE performance test protocols (dated August 20, 2009) and the Response to Comments on Test Plans for Performance Testing and 14-day notification letter that was submitted to MCAQD on September 11, 2009.
- On August 31, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Quarter 2009 Remediation Status Report, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20.*
- On July 23, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a copy of the four BSVE performance test protocols that were submitted to MCAQD on July 21, 2009.
- On May 28, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Quarter Status Report for 2009, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20.*
- On May 12, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Operation and Maintenance Plan for the Biologically-enhanced Soil Vapor Extraction System, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File No. 0393.02-.10, .15-.17.*
- On February 27, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Fourth Quarter Status Report for 2008, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.20.*
- On February 10, 2009, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Response to January 6, 2009 Comments on the Operation and Maintenance Manual for the Biologically-enhanced Soil Vapor Extraction System, Honeywell 34th Street Facility, LUST File #0393.02-.10, .15-.20.*

- On December 19, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Baseline Soil Vapor Sampling Report, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.20.*
- On December 1, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Third Quarter Status Report for 2008, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On November 20, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the draft *Startup Plan for the Biologically Enhanced Soil Vapor Extraction System, Honeywell 34th Street Facility.*
- On November 7, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Final Biologically-enhanced Soil Vapor Extraction System Operations and Maintenance Plan, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On October 24, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Baseline Soil Vapor Sampling Report, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On October 3, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Groundwater Sampling and Free-product Monitoring and Recovery Plan, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On September 26, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a technical memorandum titled, *Investigation of Concrete Conduit Encountered During BSVE Construction, Honeywell 34th Street Facility, Phoenix, Arizona.*
- On August 26, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Quarter Status Report for 2008, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On June 17, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Honeywell 34th Street Facility, BSVE North of Runway 8-26 Phase Design Basis Report (PSHIA side), Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On May 23, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Quarter Status Report for 2008, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On April 18, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ an update to the *Non-Process Soil Vapor Monitoring Program, Honeywell 34th Street Facility, Facility ID #0-002227, LUST File #0393.02-.10, .15-.17.*
- On February 26, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Fourth Quarter Status Report for 2007, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On February 20, 2008, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Biologically-Enhanced Soil Vapor Extraction Underground Process Pipeline Installation – Soil Observation Plan.*

- On February 19, 2008, Honeywell submitted a letter to ADEQ requesting approval for modification to the approved CAP to revise the BSVE remediation project schedule based on receipt of Maricopa County's approval of Honeywell's air permit modification.
- On November 21, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Third Quarter Status Report for 2007, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On August 22, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Quarter Status Report for 2007, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On August 17, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Non-Process Soil Vapor Monitoring Program, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On August 17, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a courtesy copy of the revised BSVE design package that was submitted to the COP Development Services Department on August 9, 2007 and the Aviation Department's Tenant Improvement group on August 10, 2007. This package was composed of design drawings, specifications, and a Tenant Improvement Plan.
- On May 23, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Quarter Status Report for 2007, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On May 15, 2007, Honeywell submitted to ADEQ a technical memorandum titled, *Evaluation of Well Dilution Effects, Honeywell 34th Street Facility and Phoenix Sky Harbor International Airport, Phoenix, Arizona.*
- On April 30, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a courtesy copy of the BSVE design package that was submitted to the COP Development Services Department and the Aviation Department's Tenant Improvement group. This package was composed of design drawings, specifications, and a Tenant Improvement Plan.
- On March 19, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Biologically Enhanced SVE with Product Recovery System Design Basis Report Honeywell International 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On February 27, 2007, Honeywell submitted a letter to ADEQ requesting approval for modification to the approved CAP to reflect delays in obtaining the BSVE air permit and adjust the frequency of manual free-product monitoring and recovery.
- On February 27, 2007, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Fourth Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15-.17.*
- On November 29, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Third Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*

- On November 29, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Field Sampling Plan for PSHIA Subsurface Utility Vaults for Baseline Air Sampling Using EPA Method TO-15, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*
- On October 20, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Air Injection Pilot Test Report Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*
- On September 15, 2006, Honeywell submitted a letter to ADEQ proposing to modify the scheduled submittal dates of quarterly status reports such that future reports are submitted to ADEQ no later than 60 days following the end of each calendar quarter.
- On August 3, 2006, Honeywell submitted to ADEQ a letter “Modification to Final Air Injection Pilot Test Work Plan, dated October 4, 2005,” that explained the method for conducting a short-term pilot test and the plan for implementation on PSHIA Property.
- On July 20, 2006, Honeywell submitted to ADEQ a letter that explained the status of the pilot test, Honeywell’s agreement with the City of Phoenix to evaluate the BSVE design (assuming 8-percent oxygen utilization rate) and the status of the air permit applications.
- On July 14, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Second Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*
- On April 14, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *First Quarter Status Report for 2006, Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File Nos. 0393.02-.10, .15.*
- On March 2, 2006, Honeywell submitted to ADEQ the *Proposed Modification to Honeywell’s Groundwater Sampling, Free Product Monitoring and Recovery Plan – Total Recoverable Petroleum Hydrocarbons Analytical Method, LUST File #0393.02-.10, .15, Facility ID #0-002227.*
- On January 16, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Quarterly Status Report, Quarter 1 (October 17, 2005 to January 15, 2006), Honeywell 34th Street Facility, Facility ID No. 0-002227, LUST File No. 0393.02-.10, .15.*
- On January 13, 2006, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Soil Vapor Field Sampling Report, Honeywell 34th Street Facility, 111 S. 34th Street, Phoenix, Arizona.*
- On December 9, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *LUST Field Sampling Plan – Groundwater Sampling, Free Product Monitoring and Recovery Plan.*
- On December 7, 2005, CH2M HILL, on behalf of Honeywell, submitted to Maricopa County (1) the Revised Air Permit Application for BSVE and (2) the Air Permitting Evaluation for Air Injection Pilot Study. On December 19, 2005, copies of the Revised Air Permit Application for BSVE were sent to ADEQ, City of Phoenix Aviation Department, and USEPA.

- On November 17, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's LUST Enforcement Unit a letter that explained the reasons for the differences in the timeline for "Startup and Initial Testing" presented in the revised schedule (Revised Figure 32, attachment to the November 2, 2005 letter) and the original schedule in the CAP.
- On November 2, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's LUST Enforcement Unit a letter that provided a status update on several aspects of the CAP implementation and on the conditions established in ADEQ's October 7, 2005 CAP approval letter. Attachments to this letter included: (1) revised Figure 32 – Remedial Alternative 3 Implementation Schedule, (2) free-product thickness map, October 2005, (3) list of site characterization activities since submittal of the *Site Characterization Report*, (4) updated site characterization figures and tables, (5) boring logs, and (6) a compact disc containing analytical and monitoring well measurement data.
- On October 20, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Work Plan for Additional Characterization of LUST File #0393.15 – JP-4 Fuel Pipeline Release at the Honeywell 34th Street Facility*.
- On October 4, 2005, Honeywell submitted to ADEQ the *Final Air Injection Pilot Test Work Plan, Honeywell 34th Street Facility and Phoenix Sky Harbor International Airport North Airfield, Phoenix, Arizona*.
- On September 19, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Quality Assurance Project Plan, Honeywell 34th Street Facility*.
- On September 7, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Work Plan for Phase III Monitoring Well Installation on Honeywell Leasehold and Phoenix Sky Harbor International Airport, Honeywell 34th Street Facility*.
- On August 22, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Work Plan for Installation of Multi Level Soil Vapor Monitoring Wells and Shallow/Sub-slab Soil Vapor Monitoring Points, Honeywell 34th Street Facility*.
- On July 11, 2005, CH2M HILL, on behalf of Honeywell, submitted to ADEQ the *Soil Vapor Baseline Sampling and Analysis Plan, Honeywell 34th Street Facility*.
- On July 1, 2005, Honeywell submitted to ADEQ's Tank Programs Division the *Free Product Report – LUST File #0393.15 – JP-4 Fuel Line from UST #203*.
- On June 13, 2005, Honeywell submitted to ADEQ's Tank Programs Division the *Initial Site Characterization Report – LUST File #0393.15 – JP-4 Fuel Line from UST #203*.
- On March 29, 2005, Honeywell submitted to ADEQ's Tank Programs Division the *14-day Report – LUST File #0393.15 – JP-4 Fuel Line from UST #203*.
- On November 15, 2004, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's UST Corrective Action Section responses to ADEQ's September 30, 2004 comments on Honeywell's July 30, 2004 *Revised Corrective Action Plan*. The corresponding replacement pages of the revised text, tables, and figures of the Revised CAP were also submitted.

- On July 30, 2004, CH2M HILL, on behalf of Honeywell, submitted the *Revised Corrective Action Plan* to ADEQ's UST Corrective Action Section. The revised CAP supersedes and replaces the original July 18, 2003, CAP.
- On May 27, 2004, Honeywell submitted a three-ring binder to ADEQ's UST Corrective Action Section titled *Supporting Material, UST Informal Settlement Conference, May 28, 2004*.
- On May 7, 2003, CH2M HILL, on behalf of Honeywell, submitted to ADEQ a technical memorandum titled *Summary of Results from the Bioventing/SVE Pilot Study February 24 through March 1, 2003*.
- On May 1, 2003, Honeywell submitted to ADEQ's UST Corrective Action Section the *Free-product Report, Honeywell International Inc., 34th Street Facility, Phoenix, Arizona, Facility ID# 0-002227, LUST File Nos. 0393.02 -.10*.
- On December 18, 2002, Honeywell submitted to ADEQ's UST Corrective Action Section *Supplemental Site Characterization Information for the Honeywell International Inc., 34th Street Facility, Phoenix, Arizona, Facility ID# 0-002227, LUST File Nos. 0393.02 -.10*.
- On August 23, 2002, CH2M HILL, on behalf of Honeywell, submitted to ADEQ's UST Corrective Action Section the *Site Characterization Report*.

Appendix B
Oxygen Uptake Testing Technical Memoranda

Supplemental *In-Situ* Respiration Test Interpretation BSVE System Honeywell 34th Street Facility, Phoenix, Arizona

PREPARED FOR: Doug Ashline/PHX

PREPARED BY: Jim Hartley/SAC

COPIES:

DATE: March 16, 2010

An objective of the biologically-enhanced soil vapor extraction (BSVE) system is to remove hydrocarbons through *in-situ* bioremediation. The effective rate of bio-respiration can be estimated from the rate of oxygen consumption when the BSVE system is inactive; in 2010, there are plans to conduct two formal *in-situ* respiration tests (from all 30 process monitoring well [PMW] ports in Phases A & B) and up to four supplemental tests during unscheduled system downtimes.

This memorandum presents the data collected from the first *in-situ* respiration test of 2010 (ISR 2010-01), performed Monday, February 15 to Wednesday, February 17. During this time, the BSVE system was turned off and was not extracting or injecting soil vapor for approximately 24 hours, starting at about 2:30 p.m. on Tuesday, February 16.

For ISR 2010-01, the lower ports of the PMWs were selected as the pool to consider for supplemental measurement, as those most likely to show oxygen decay over a short period. Of these, ports were selected that would have a starting oxygen concentration above 7 percent (to allow at least two data points for decay, 2 percent apart and still above 5 percent oxygen). The weekly PMW measurements collected on Monday, February 15 and Tuesday morning, February 16 were screened. Of these, only one deep PMW port had steady state concentrations below the threshold (PMW-10-L: 4.9 percent).

The remaining nine ports were sampled for oxygen within 4 hours of the start of the shutdown on Tuesday afternoon, about 18 hours after the shutdown, on Wednesday morning, and about 24 hours after the shutdown, early Wednesday afternoon. The measured values are presented in Table 1.

These data were evaluated for the oxygen uptake rate observed between 2:30 p.m. on Tuesday and the final reading approximately 24 hours later. As no direct measurements of oxygen were obtained directly before the time of shutdown (2:30 p.m.), the immediate previous values (weekly monitoring) were assumed to represent the initial value.

TABLE 1
 Summary of Oxygen Uptake, February 16 – 18, 2010

PMW	Weekly Monitoring			Tuesday Afternoon		Wednesday Morning		Wednesday Afternoon	
	Date	Time	Oxygen	Time	Oxygen	Time	Oxygen	Time	Oxygen
1	16-Feb	10:47	19.1%	17:04	18.1%	8:23	17.6%	13:47	18.2%
2	16-Feb	7:01	8.9%	16:10	9.5%	8:03	9.5%	13:25	9.4%
3	16-Feb	10:05	19.4%	18:00	18.3%	8:43	17.9%	14:10	16.7%
4	15-Feb	15:02	11.5%	17:25	9.3%	9:04	7.1%	14:11	6.5%
5	16-Feb	8:48	7.5%	16:20	6.6%	7:55	6.3%	12:59	5.6%
6	16-Feb	9:45	17.5%	16:50	17.1%	8:25	16.5%	13:26	15.8%
7	16-Feb	9:28	16.2%	16:35	15.5%	8:11	15.4%	13:11	14.9%
8	16-Feb	9:06	18.7%	17:03	17.6%	8:47	17.1%	13:40	16.1%
9	16-Feb	8:50	13.8%	17:23	12.6%	8:58	10.9%	13:53	10.0%

The initial values were taken as the starting point, the Wednesday afternoon values as the ending point, and the elapsed time was taken as the difference between the time of the ending point measurement and the system shut down time of 2:30 p.m. on Tuesday. The results are presented as % Oxygen decay per day (%O₂/day) in Table 2.

TABLE 2
 Summary of Oxygen Decay Rates

PMW	Monitoring Period (days)	Measured Oxygen Decay	Decay Rate (%/day)
1	0.999	0.9%	0.90%
2	0.998	-0.5%	-0.50%
3	0.999	2.7%	2.70%
4	0.999	5.0%	5.00%
5	0.997	1.9%	1.91%
6	0.998	1.7%	1.70%
7	0.998	1.3%	1.30%
8	0.999	2.6%	2.60%
9	0.999	3.8%	3.80%

As seen from in Table 2, the highest rates of oxygen decay were observed in PMW-4-ML and PMW-9-ML in the central-northeast and south-west areas of the site. Moderately high

values were observed in PMW-3-ML and PMW-8-ML in the central-west and the south-central areas. Smaller rates of decay were seen at PMW-5-ML (central-far east), PMW-6-ML (central), PMW-7-ML (central-southeast), and PMW-1-ML (northwest). PMW-2-ML was observed to have an increase of oxygen during this 24-hour period and likely has a greater influence from barometric effects than consumptive decay.

The mean decay value measured during this test, computed for the positive values above, is about 2.5 percent/day.

While these values provide an indication of trends, a longer duration test (during a formal shutdown test) will provide confirmation and more definitive quantification.

Report of *In-Situ* Respiration Testing, March 2010 Honeywell 34th Street Facility, Phoenix, Arizona

PREPARED FOR: Doug Ashline/PHX
PREPARED BY: Baine Foehr/PHX, Jim Hartley/SAC
DATE: April 24, 2010

An objective of the biologically enhanced soil vapor extraction (BSVE) system is to remove hydrocarbons through *in-situ* bioremediation. The effective rate of bio-respiration can be estimated from the rate of oxygen consumption when the BSVE system is inactive; in 2010, there are plans to conduct two formal oxygen uptake tests (from all 30 process monitoring well [PMW] ports in Phases A & B) and up to four opportunistic tests during unscheduled system downtimes.

This memorandum presents the data collected from the first formal *in-situ* respiration test of 2010 (ISR 2010-02), performed Monday, March 22 to Sunday, March 28. During this time, the BSVE system was turned off and was not extracting or injecting soil vapor for approximately 6 days, starting at about 6:00 p.m. on Monday, March 22, 2010.

For ISR 2010-02, all 30 PMW ports in Phases A and B were monitored for oxygen decay. Weekly PMW measurements collected during the day on Monday, March 22 were collected to serve as baseline measurements and were screened for continued oxygen monitoring. Of these, ports were selected that would have a starting oxygen concentration above 7 percent (to allow at least two data points for decay, 2 percent apart and still above 5 percent oxygen). Of these, only one deep PMW port had steady-state concentrations below the threshold (PMW-10-L: 4.5 percent). The remaining 29 PMWs were included in the subsequent analysis.

The remaining 29 ports were monitored for oxygen in the mornings and afternoon of each day of the test, starting the morning of Tuesday, March 23, within about 12 hours of the start of the shutdown (on Monday evening). Monitoring was continued at ports with oxygen concentrations more than 5 percent and was not continued if less than 5 percent (until the final reading). During morning oxygen monitoring, ports with oxygen concentrations between 5 percent and 7.5 percent were monitored again at midday. Starting the morning of Wednesday, March 24, monitoring was discontinued at ports where oxygen concentrations declined less than 0.5 percent or increased since baseline monitoring. The measured values are presented in Table 1.

At the time of the test, weather conditions and the associated barometric flux appears to have affected the measured concentrations of subsurface oxygen, especially in shallower ports. The week of this monitoring was one of two storm systems. To account for these effects, the individual plots of oxygen response are plotted for all ports of each probe, together with the barometric values, as shown in the attached Figures B-1 through B-5. The decision of which measurements to use as the starting point for estimating the oxygen decay

over the entire sampling period considered that the weekly measurements, collected before shutdown but during a dramatically falling barometer, generally produced lower oxygen concentrations than during the post-shutdown Tuesday morning measurements, when the barometer had stabilized. For this reason, the Tuesday morning measurements were used as the starting point.

Several probes had values measured during the period of the testing, but the starting and ending values were the only values available for all 30 monitored probes. We therefore estimated the respiration rates on the basis of the most complete data set (start - finish over 5 days, two data point line). This provides a slightly lower overall rate than if individual probes with more data were estimated by best-fit regression. Given the meteorological variation of this week, it is not discernible whether the higher rate by regression is due to a more complete data set or barometric flux. For this reason, the more uniform treatment of all data, from start to finish, was selected so that all rates would have the same basis.

The most significant oxygen decay occurred within the deep zone of the vadose zone. Figure B-6 shows all deep ports of the 10 monitored PMWs together with the barometric flux during that period. The pattern of decay varies according to the PMW location, with PMW-4ML (2.3 percent/day), PMW-3L (1.5 percent/day), and PMW-2ML (1.2 percent/day) producing the most consistent decays, start-to-finish. The calculation of these rates is shown in Table 2.

The method employed for using this information to estimate the mass degradation rate for the entire site takes the average decay rate for all ports and applies it to the entire treatment volume. The rate used as the average of all ports is 0.30 percent/day. The calculation of this average is shown in Table 3.

Tables

TABLE 1
BSVE Planned Respiration Test (O2 Uptake) Results, March 22 - 28, 2010

Location	Depth	3/22/2010		3/23/2010				3/24/2010				3/25/2010				3/26/2010				3/27/2010				3/28/2010					
		O2 %	Time	O2 %	Time	O2 %	Time	O2 %	Time	O2 %	Time	O2 %	Time	O2 %	Time	O2 %	Time	O2 %	Time	O2 %	Time	O2 %	Time	O2 %	Time				
PMW-1	U	20.9	15:00	20.9	9:35	--	--	20.9	16:07	20.7	9:30	--	--	20.6	16:35	--	--	--	--	--	--	--	--	--	--	19.8	10:26		
	M	20.9	15:03	20.9	9:47	--	--	20.9	16:13	20.8	9:35	--	--	20.6	16:38	--	--	--	--	--	--	--	--	--	--	19.8	10:29		
	ML	19.5	15:08	19.6	9:57	--	--	19.4	16:21	18.8	9:41	--	--	18.2	16:42	18.3	8:00	17.9	15:42	18.0	7:20	17.3	14:35	17.6	8:40	16.7	16:36	16.2	10:35
PMW-2	U	20.9	15:15	20.9	11:24	--	--	20.9	17:20	20.6	8:55	--	--	20.9	16:22	--	--	--	--	--	--	--	--	--	--	20.1	10:43		
	M	20.9	15:18	20.9	11:30	--	--	20.9	17:27	20.6	9:09	--	--	20.8	16:26	--	--	--	--	--	--	--	--	--	--	20.1	10:48		
	ML	9.6	15:24	12.2	11:40	--	--	12.2	17:34	10.2	9:20	--	--	10.0	16:33	9.6	9:50	10.2	15:28	9.3	6:58	8.7	14:45	7.8	8:48	7.3	16:43	6.4	10:53
PMW-3	U	19.8	14:15	20.3	10:15	--	--	20.6	16:28	20.5	9:49	--	--	20.3	16:00	--	--	--	--	--	--	--	--	--	--	19.5	9:48		
	M	20.1	14:18	20.3	10:25	--	--	20.6	16:34	20.7	9:54	--	--	20.5	16:04	--	--	--	--	--	--	--	--	--	--	19.4	9:53		
	ML	19.1	14:25	19.5	10:38	--	--	19.4	16:41	17.7	9:59	--	--	17.2	16:10	16.2	8:20	15.6	15:15	14.0	7:32	14.4	14:20	14.0	9:06	13.0	16:18	12.2	10:00
PMW-4	U	20.5	14:37	20.3	11:42	--	--	20.9	17:02	20.7	10:08	--	--	20.5	16:55	--	--	--	--	--	--	--	--	--	--	19.5	10:13		
	M	20.9	14:40	20.2	11:35	--	--	20.9	17:08	20.6	10:12	--	--	20.3	16:58	20.3	8:40	20.1	15:53	20.1	7:43	20.2	14:52	--	--	--	--	19.0	10:17
	ML	13.7	14:50	12.7	11:27	--	--	11.9	17:15	8.8	10:17	--	--	8.2	17:05	7.0	8:46	6.6	16:00	4.9	7:55	4.8	15:00	--	--	--	--	1.1	10:22
PMW-5	U	20.2	13:44	20.3	10:40	--	--	20.0	17:20	20.7	9:47	--	--	20.0	17:02	--	--	19.0	16:18	--	--	--	--	--	--	20.2	10:30		
	M	20.3	13:50	20.2	10:50	--	--	20.0	17:27	20.4	9:53	--	--	20.1	17:07	--	--	19.2	16:23	--	--	--	--	--	--	20.2	10:35		
	ML	8.4	14:03	7.3	11:04	7.1	14:38	6.8	17:39	6.9	10:04	6.5	13:54	6.3	17:17	6.8	9:10	9.1	16:31	6.8	8:07	7.4	14:59	6.0	9:35	NA	NA	5.8	10:55
PMW-6	U	20.1	14:17	20.6	10:03	--	--	20.5	16:50	20.2	11:00	--	--	20.3	16:39	--	--	--	--	--	--	--	--	--	--	20.5	11:03		
	M	20.1	14:24	20.6	10:10	--	--	20.5	16:56	20.2	11:05	--	--	20.2	16:45	--	--	--	--	--	--	--	--	--	--	20.3	11:08		
	ML	17.9	14:38	17.4	10:25	--	--	16.8	17:06	15.9	11:15	--	--	15.6	16:55	15.8	8:55	15.2	16:15	14.7	7:57	14.2	14:49	14.4	9:46	13.6	17:12	14.0	11:27
PMW-7	U	20.4	12:55	20.5	11:18	--	--	20.5	16:16	20.3	10:30	--	--	20.1	16:10	--	--	--	--	--	--	--	--	--	--	20.1	10:05		
	M	20.0	13:10	20.3	11:24	--	--	20.3	16:23	20.1	10:35	--	--	20.0	16:17	--	--	--	--	--	--	--	--	--	--	20.1	10:09		
	ML	16.1	13:25	16.1	11:32	--	--	16.0	16:35	15.6	10:46	--	--	15.7	16:30	16.2	10:15	15.9	16:45	16.6	8:18	15.2	15:13	15.5	9:23	15.5	16:56	15.8	10:22
PMW-8	U	19.6	13:39	19.1	10:25	--	--	20.3	16:16	20.5	9:58	--	--	19.6	16:05	20.7	9:20	19.4	15:07	20.9	7:31	19.5	14:26	20.9	8:34	20.5	16:20	20.8	9:45
	M	19.6	13:43	18.9	10:21	--	--	20.3	16:10	20.7	10:05	--	--	19.8	16:10	20.8	9:25	19.6	15:11	20.9	7:38	19.6	14:33	20.9	8:41	20.5	16:25	20.8	9:52
	ML	19.9	13:34	15.6	10:16	--	--	16.8	16:04	15.4	10:11	--	--	14.5	16:16	14.4	9:32	12.9	15:17	12.6	7:45	11.8	14:39	13.6	8:46	12.9	16:32	12.4	10:00
PMW-9	U	19.1	15:26	20.6	10:43	--	--	20.2	16:40	20.3	11:10	--	--	19.7	16:28	20.5	10:01	19.4	15:27	20.5	10:02	19.8	14:03	20.9	9:11	20.2	16:45	20.3	11:12
	M	19.2	15:30	20.7	10:48	--	--	19.8	16:34	20.2	11:17	--	--	19.4	16:34	20.4	10:07	19.0	15:32	20.3	10:06	19.0	14:08	20.6	9:16	19.8	16:51	19.8	11:18
	ML	13.5	15:21	15.1	10:38	--	--	13.7	16:28	10.8	11:24	--	--	10.0	16:44	9.5	10:14	9.4	15:39	8.5	10:15	8.2	14:16	10.9	9:22	10.4	16:57	10.1	11:25
PMW-10	U	18.4	15:41	20.0	10:57	--	--	19.3	16:56	19.0	11:36	--	--	18.8	16:52	18.8	10:33	18.4	15:48	19.5	9:50	19.2	14:00	19.6	9:32	19.1	17:06	19.3	11:35
	M	12.7	15:45	15.9	11:05	--	--	15.0	16:49	14.1	11:44	--	--	13.8	17:00	14.1	10:40	13.4	15:55	14.3	9:54	13.8	14:05	16.1	9:38	15.5	17:14	15.9	11:41
	L	4.5	15:38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.5	11:48

Notes:
NA = Not Accessible
-- = Not Measured

TABLE 2

Calculation of Individual Oxygen Decay Rates, Deep PMW Ports

	PMW-1-ML	PMW-2-ML	PMW-3-ML	PMW-4-ML	PMW-5-ML	PMW-6-ML	PMW-7-ML	PMW-8-ML	PMW-9-ML	PMW-10-L
Starting Oxygen Concentration (percent):	19.5	9.6	19.1	13.7	8.4	17.9	16.1	19.9	13.5	4.5
Ending Oxygen Concentration (percent):	16.2	6.4	12.2	1.1	5.8	14	15.8	12.4	10.1	8.5
Oxygen Decay Rate (percent per day):	0.7	1.2	1.5	2.3	0.3	0.7	0.1	0.6	1.0	-0.7

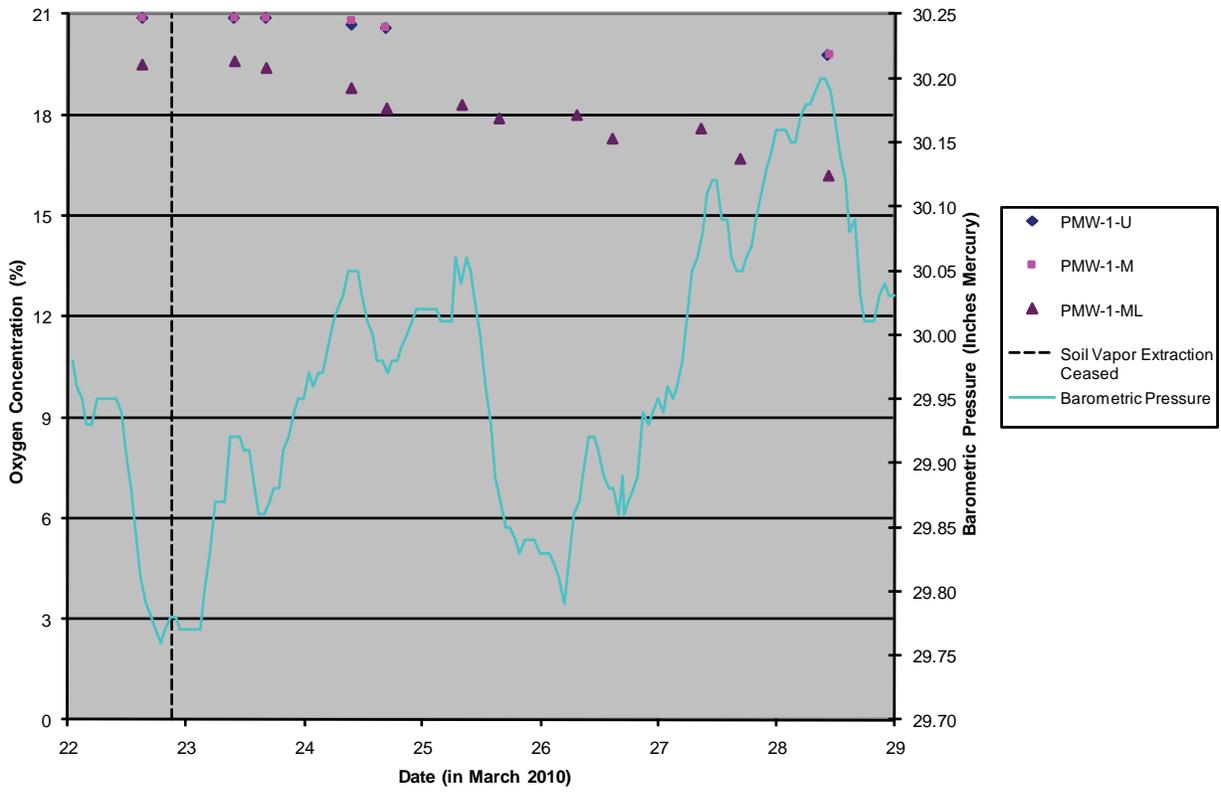
TABLE 3
Summary of Oxygen Decay for All Ports Monitored

Decimal Date ^a	Elapsed Time (Days) ^b	PMW-1-U	PMW-2-U	PMW-3-U	PMW-4-U	PMW-5-U	PMW-6-U	PMW-7-U	PMW-8-U	PMW-9-U	PMW-10-U	PMW-1-M	PMW-2-M	PMW-3-M	PMW-4-M	PMW-5-M	PMW-6-M	PMW-7-M	PMW-8-M	PMW-9-M	PMW-10-M	PMW-1-ML	PMW-2-ML	PMW-3-ML	PMW-4-ML	PMW-5-ML	PMW-6-ML	PMW-7-ML	PMW-8-ML	PMW-9-ML	PMW-10-L	
22.65	-0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.5	
23.40	0.52	20.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
23.41	0.53	--	--	--	--	--	--	--	--	--	--	20.9	--	--	--	--	--	--	--	--	--	19.6	--	--	--	--	--	--	--	--	--	
23.42	0.54	--	--	--	--	--	20.6	--	--	--	--	--	--	--	--	--	20.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
23.43	0.55	--	--	20.3	--	--	--	--	19.1	--	--	--	--	20.3	--	--	--	--	18.9	--	--	--	--	--	--	--	--	17.4	--	15.6	--	
23.44	0.57	--	--	--	--	20.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19.5	--	--	--	--	--	15.1	--	
23.45	0.57	--	--	--	--	--	--	--	--	20.6	--	--	--	--	--	20.2	--	--	--	20.7	--	--	--	--	--	--	--	--	--	--	--	
23.46	0.58	--	--	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--	--	--	15.9	--	--	--	--	7.3	--	--	--	--	--	
23.47	0.60	--	--	--	--	--	--	20.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
23.48	0.60	--	20.9	--	--	--	--	--	--	--	--	--	20.9	--	20.2	--	--	20.3	--	--	--	--	--	--	12.7	--	--	16.1	--	--	--	
23.49	0.61	--	--	--	20.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.2	--	--	--	--	--	--	--	--	
28.41	5.53	--	--	19.5	--	--	--	--	20.8	--	--	--	--	19.4	--	--	--	--	20.8	--	--	--	--	--	--	--	--	--	--	--	--	
28.42	5.54	--	--	--	--	--	--	20.1	--	--	--	--	--	--	--	--	--	20.1	--	--	--	--	--	12.2	--	--	--	--	12.4	--	--	
28.43	5.55	19.8	--	--	19.5	--	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--	--	--	1.1	--	--	15.8	--	--	--	--	
28.44	5.56	--	--	--	--	20.2	--	--	--	--	--	19.8	--	--	20.2	--	--	--	--	--	16.2	--	--	--	--	--	--	--	--	--	--	
28.45	5.57	--	20.1	--	--	--	--	--	--	--	--	--	20.1	--	--	--	--	--	--	--	--	6.4	--	--	5.8	--	--	--	--	--	--	
28.46	5.59	--	--	--	--	--	20.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
28.46	5.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
28.47	5.59	--	--	--	--	--	--	--	--	20.3	--	--	--	--	--	--	--	--	--	19.8	--	--	--	--	--	--	--	--	--	--	--	--
28.48	5.60	--	--	--	--	--	--	--	--	--	19.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	--	--	10.1	--	--
28.49	5.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.9	--	--	--	--	--	--	--	--	--	8.5	
First Oxygen Concentration (percent):		20.9	20.9	20.3	20.3	20.3	20.6	20.5	19.1	20.6	20	20.9	20.9	20.3	20.2	20.2	20.6	20.3	18.9	20.7	15.9	19.6	12.2	19.5	12.7	7.3	17.4	16.1	15.6	15.1	4.5	
Final Oxygen Concentration (percent):		19.8	20.1	19.5	19.5	20.2	20.5	20.1	20.8	20.3	19.3	19.8	20.1	19.4	19	20.2	20.3	20.1	20.8	19.8	15.9	16.2	6.4	12.2	1.1	5.8	14	15.8	12.4	10.1	8.5	
Oxygen Decay (percent per day):		0.2	0.2	0.2	0.2	0.0	0.0	0.1	-0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.0	0.1	0.0	-0.4	0.2	0.0	0.7	1.2	1.5	2.3	0.3	0.7	0.1	0.6	1.0	-0.7	
Average Oxygen Decay (percent per day)^c:		0.30																														

Notes:
 -- = Not Measured
^a Date in March 2010
^b Value represents the elapsed time in decimal fractions of days since system shutdown and the start of the in-situ respiration testing.
^c Value represents the average oxygen decay rate of all ports listed in this table.

Figures

Oxygen in PMW-1



Oxygen in PMW-2

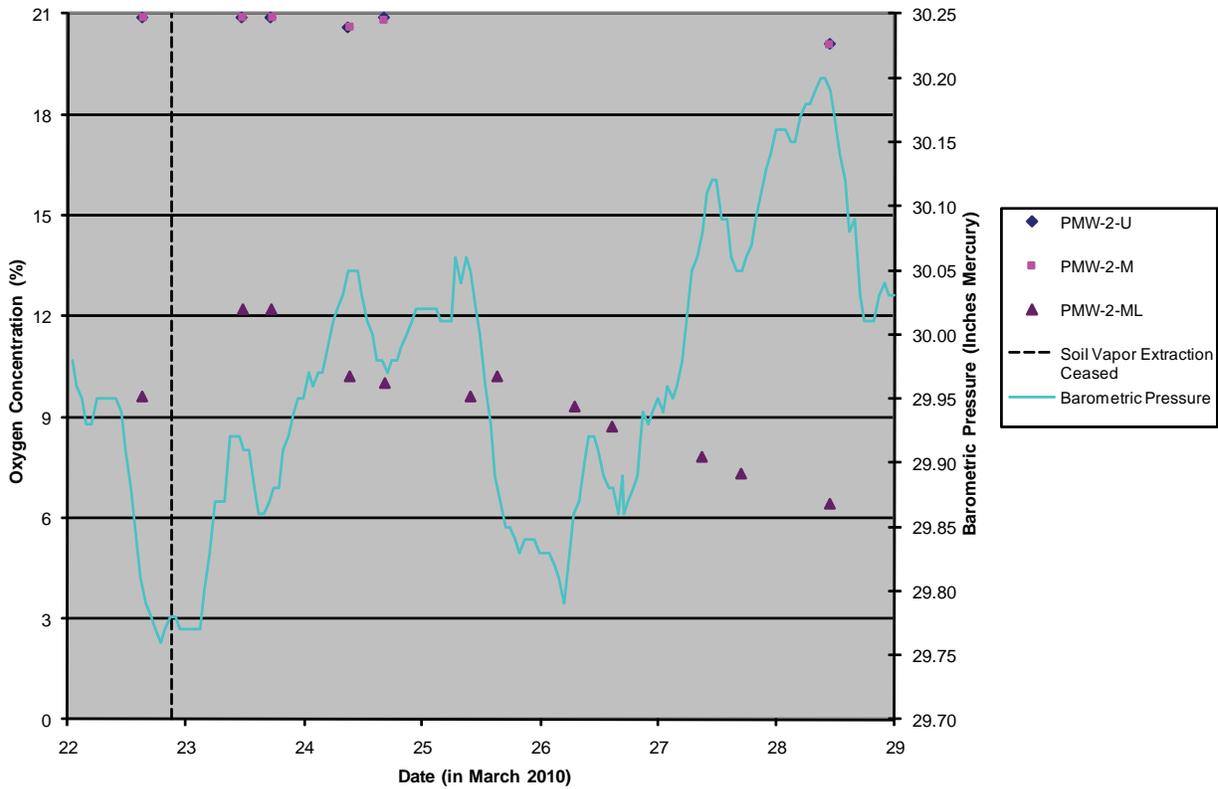
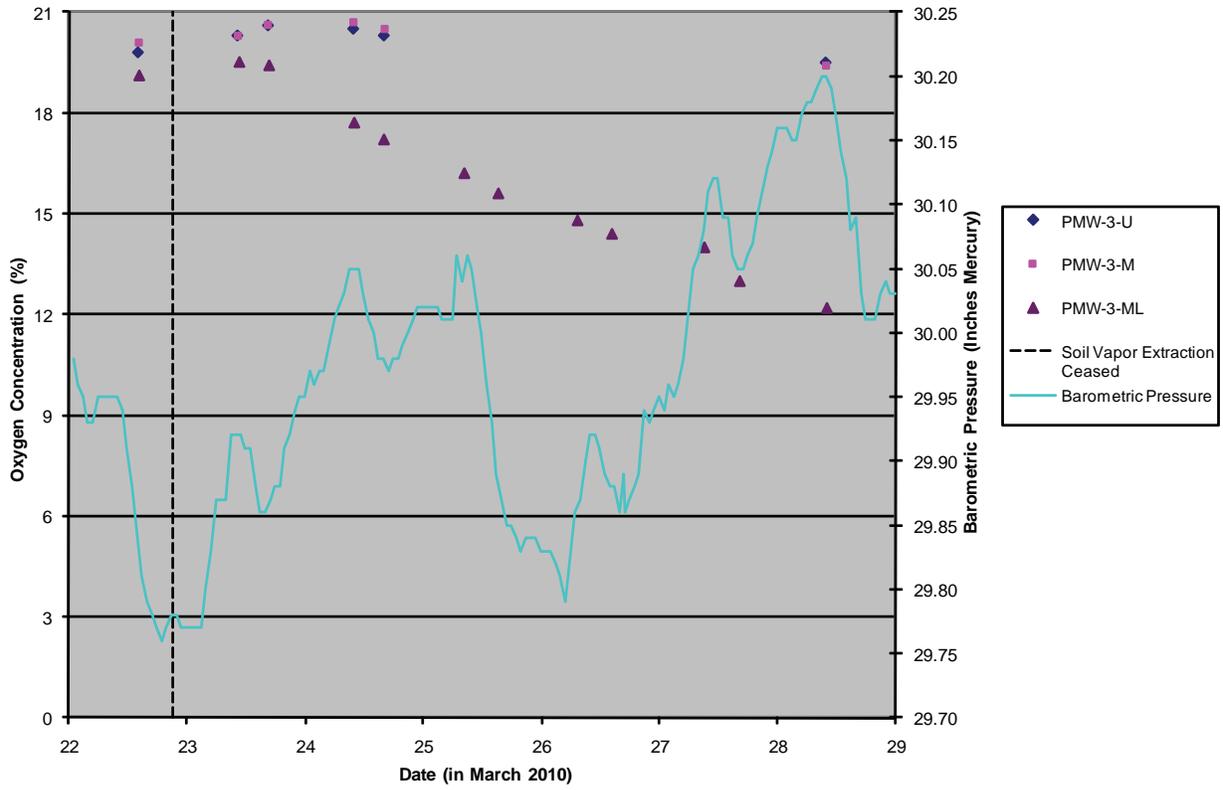


Figure B-1
Oxygen Uptake in PMW-1 and PMW-2
Honeywell 34th Street Facility
Phoenix, Arizona

Oxygen in PMW-3



Oxygen in PMW-4

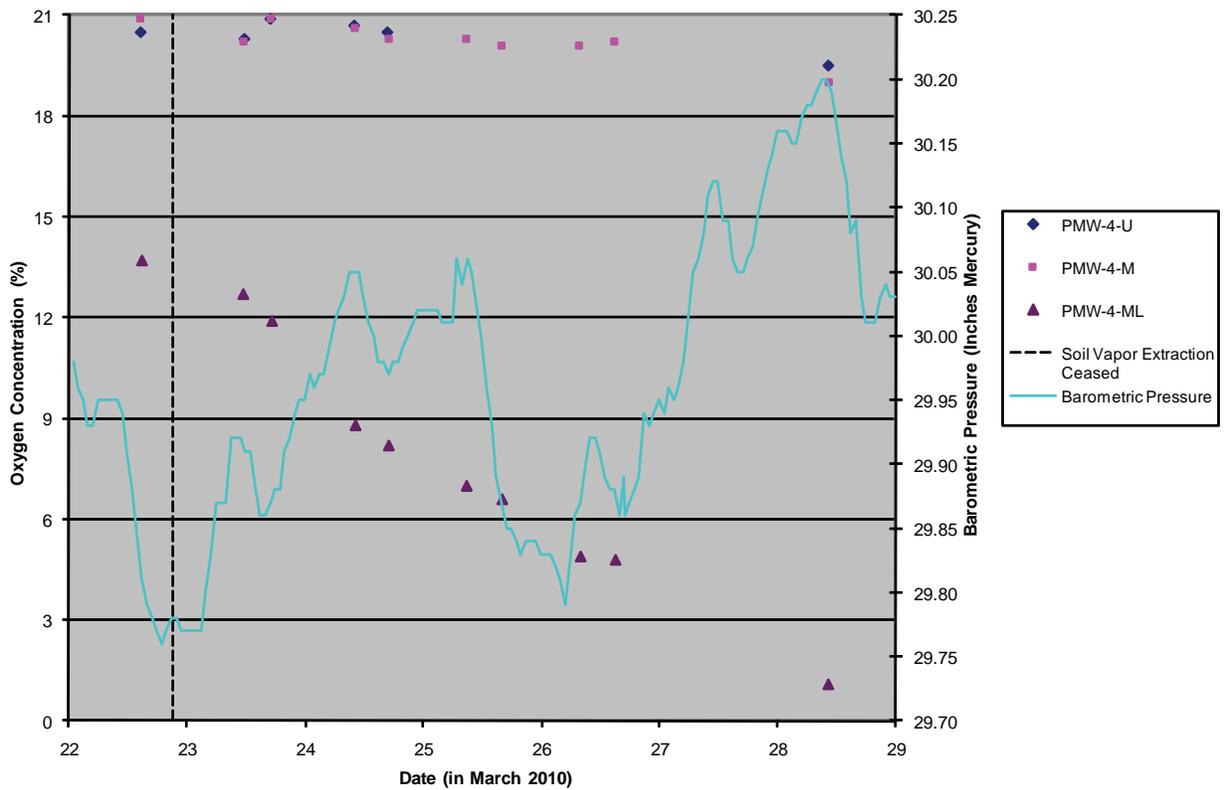
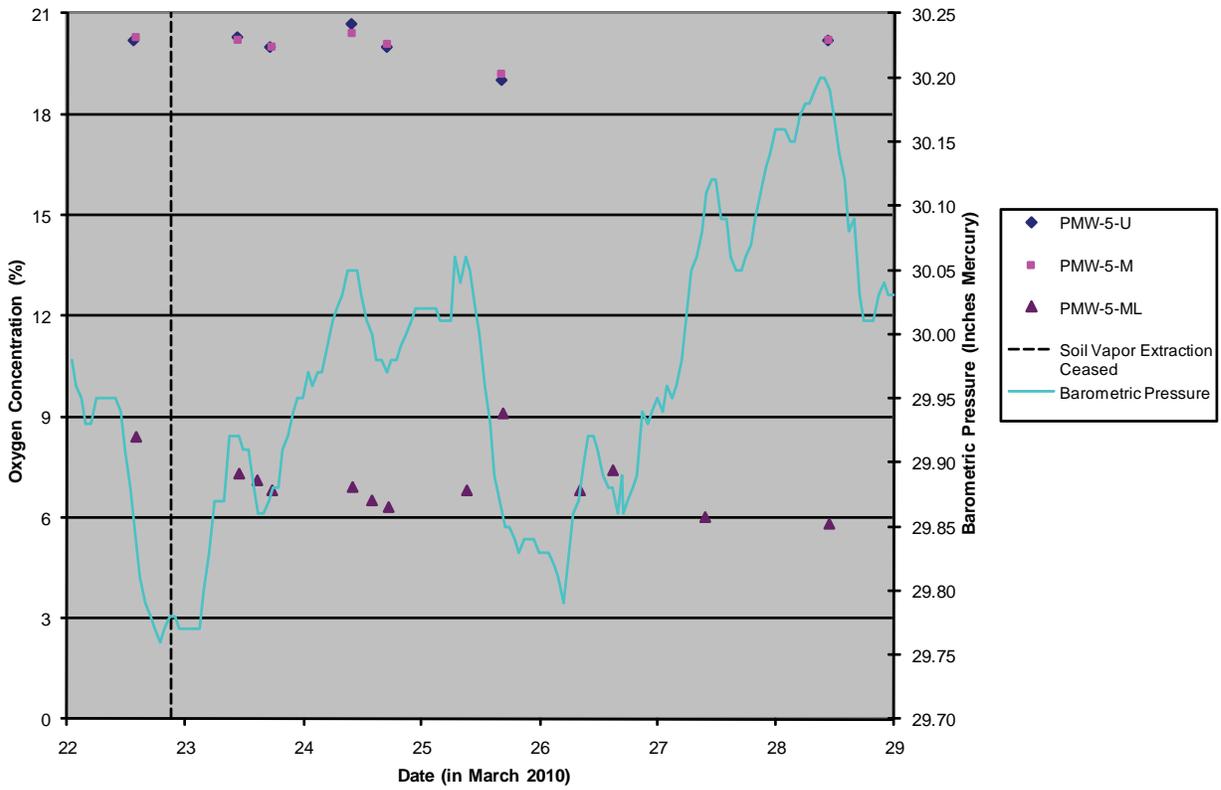


Figure B-2
Oxygen Uptake in PMW-3 and PMW-4
Honeywell 34th Street Facility
Phoenix, Arizona

Oxygen in PMW-5



Oxygen in PMW-6

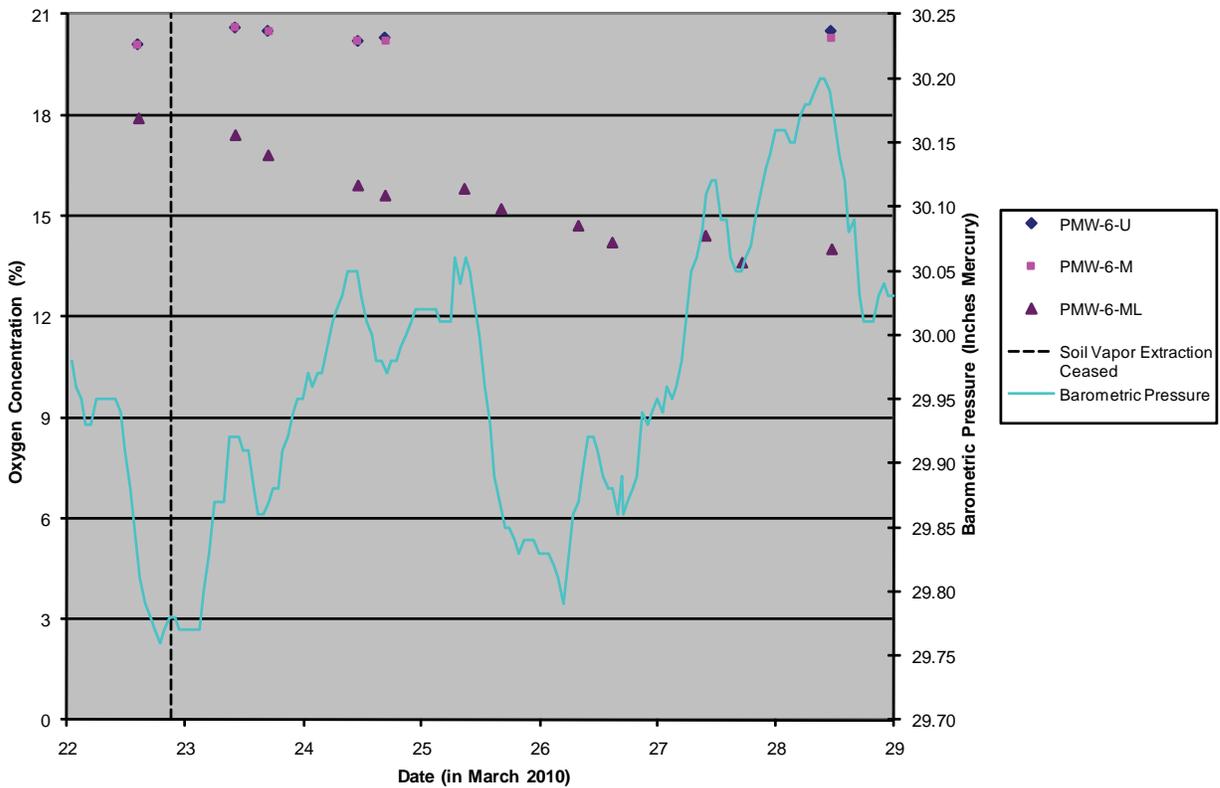
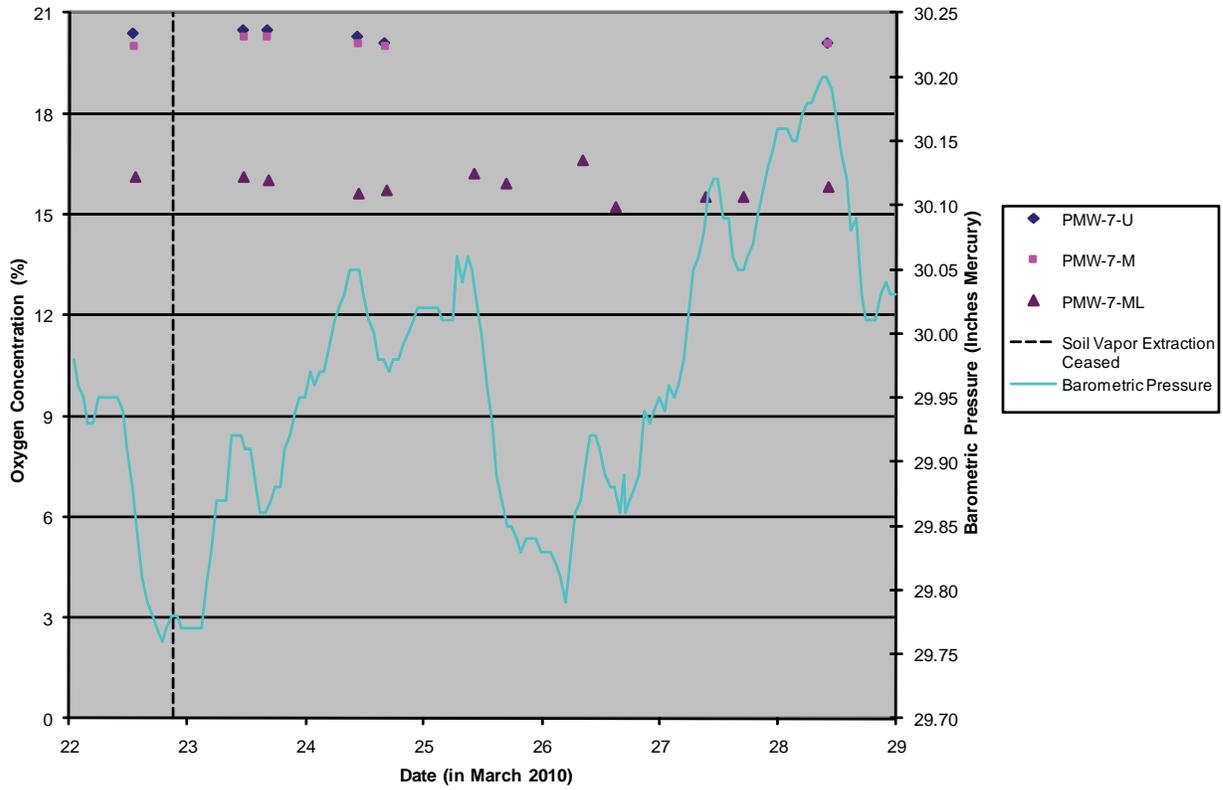


Figure B-3
Oxygen Uptake in PMW-5 and PMW-6
Honeywell 34th Street Facility
Phoenix, Arizona

Oxygen in PMW-7



Oxygen in PMW-8

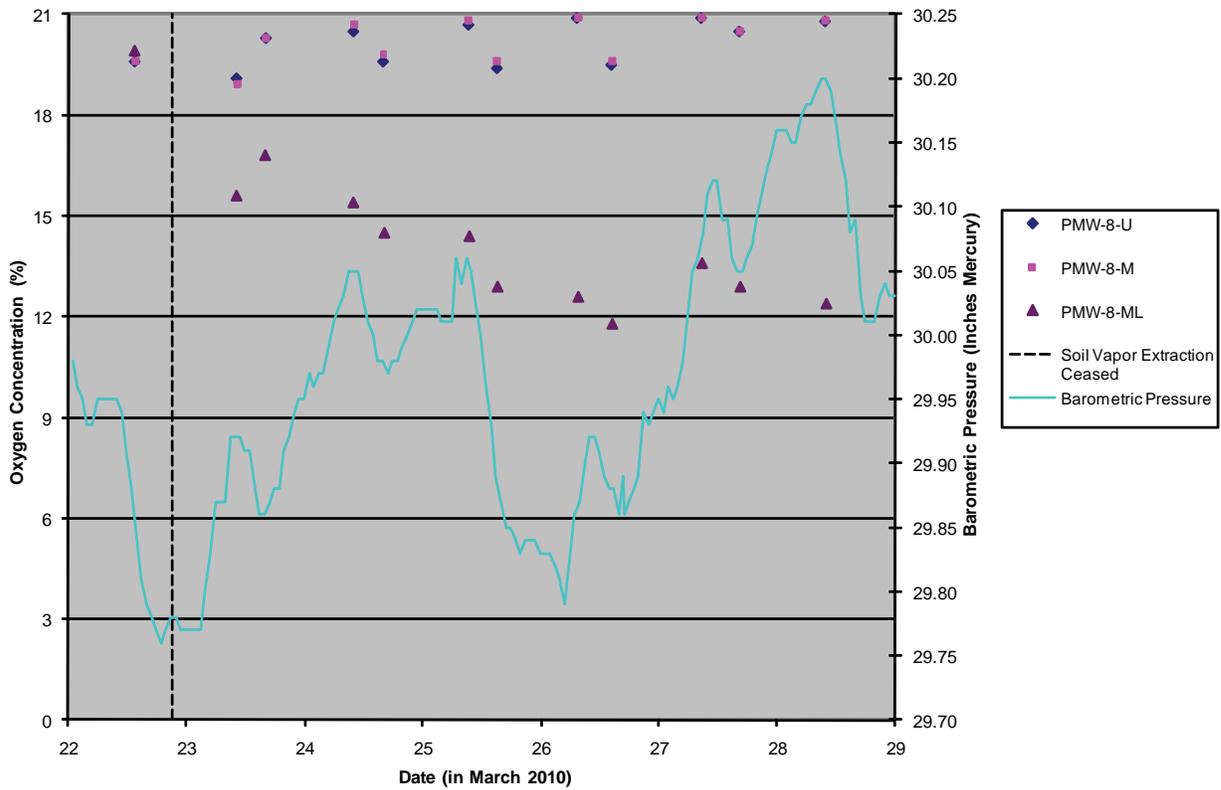
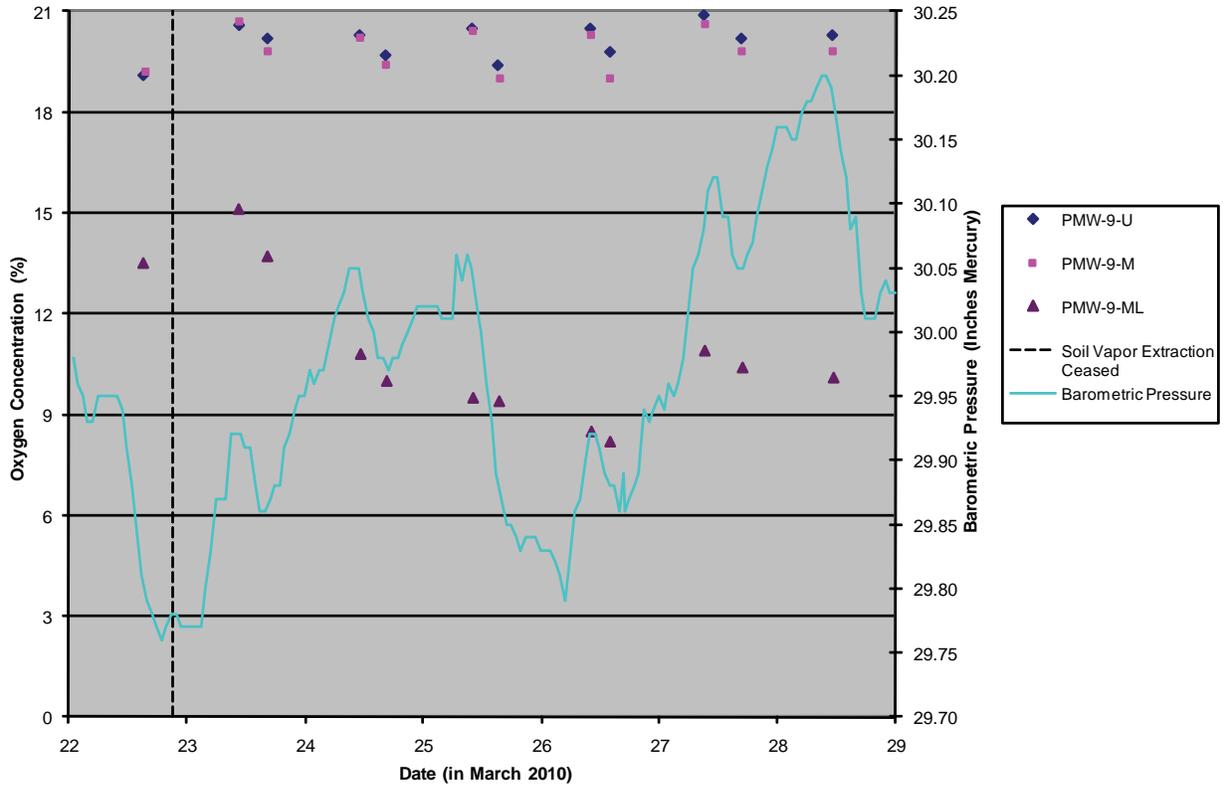


Figure B-4
Oxygen Uptake in PMW-7 and PMW-8
Honeywell 34th Street Facility
Phoenix, Arizona

Oxygen in PMW-9



Oxygen in PMW-10

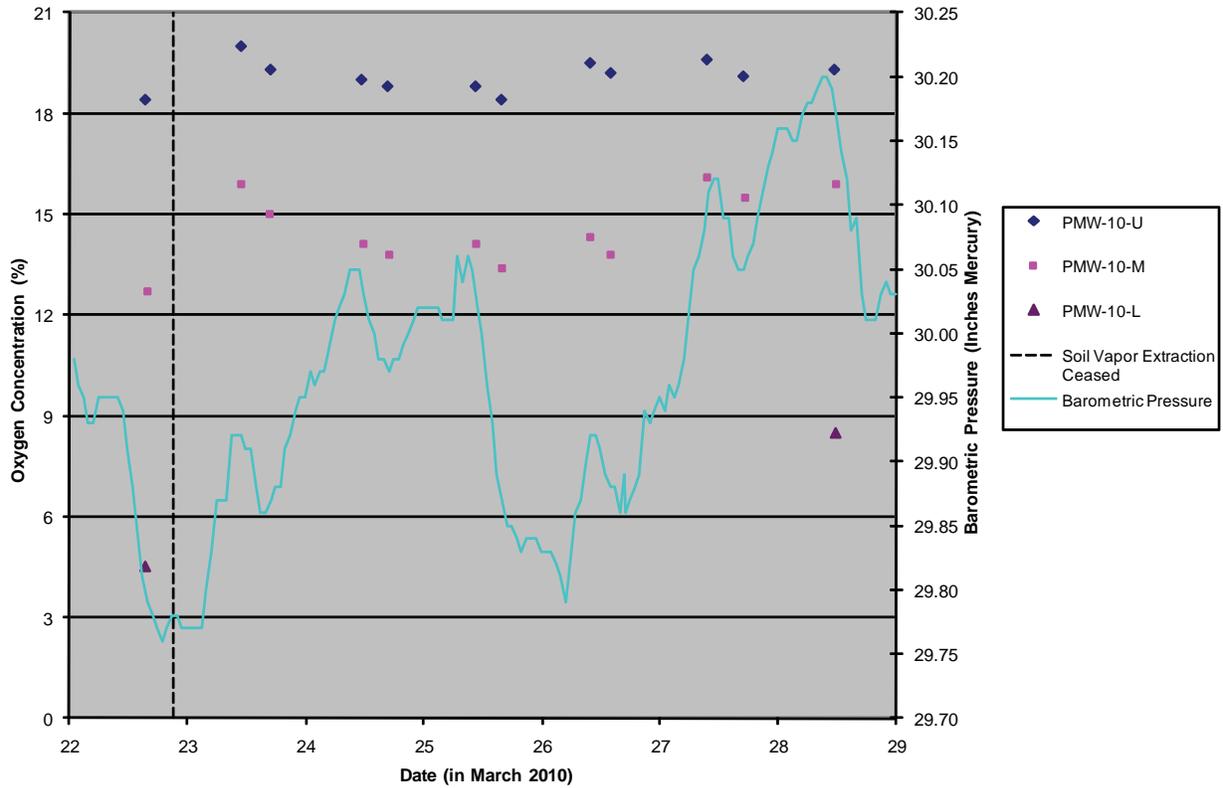


Figure B-5
 Oxygen Uptake in PMW-9 and PMW-10
 Honeywell 34th Street Facility
 Phoenix, Arizona

Oxygen in Lower Ports

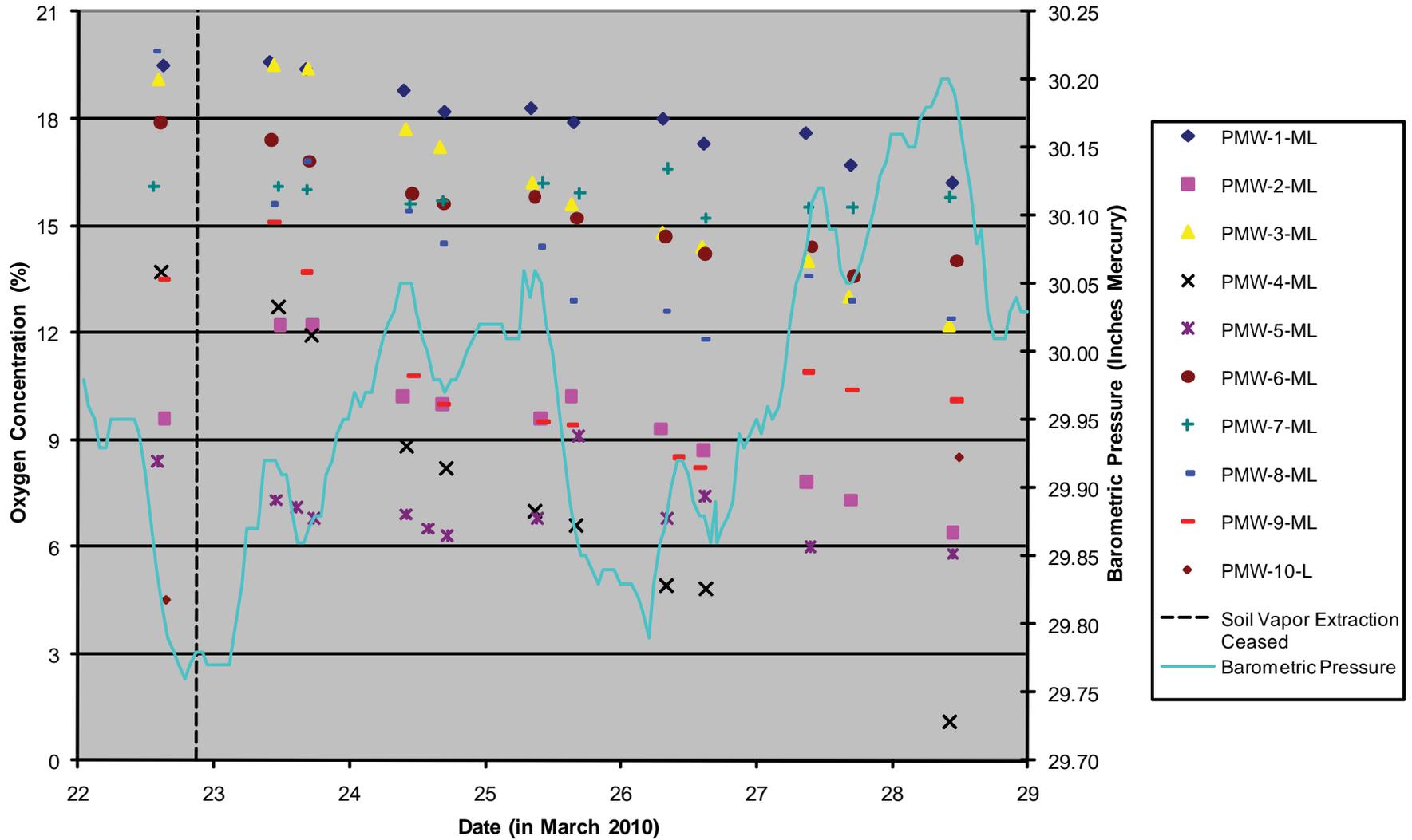
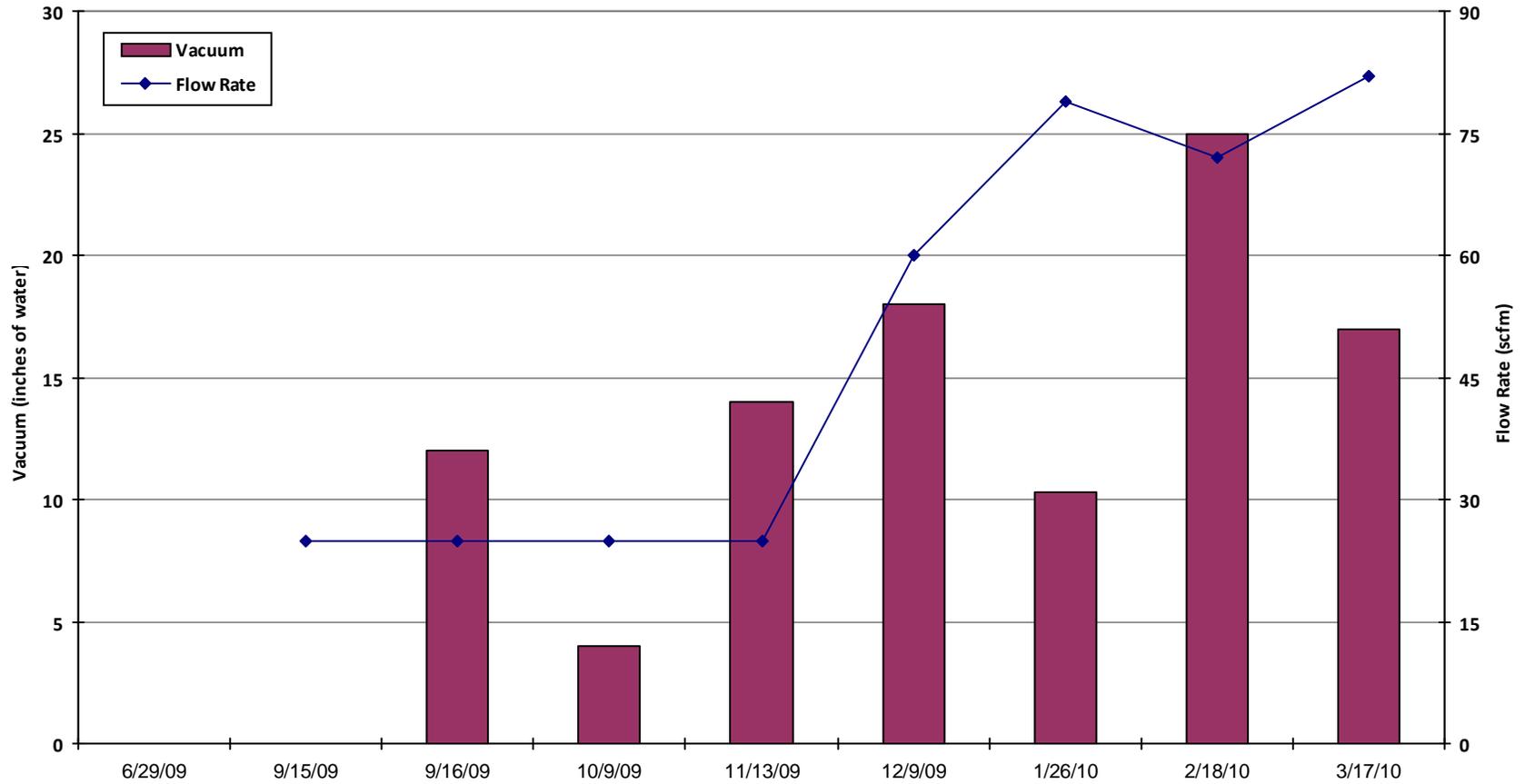


Figure B-6
Oxygen Uptake in Deep Process Monitoring Well Ports
Honeywell 34th Street Facility
Phoenix, Arizona

Appendix C
Flow Rates and Vacuums for
Injection/Extraction Wells

ASE-20A



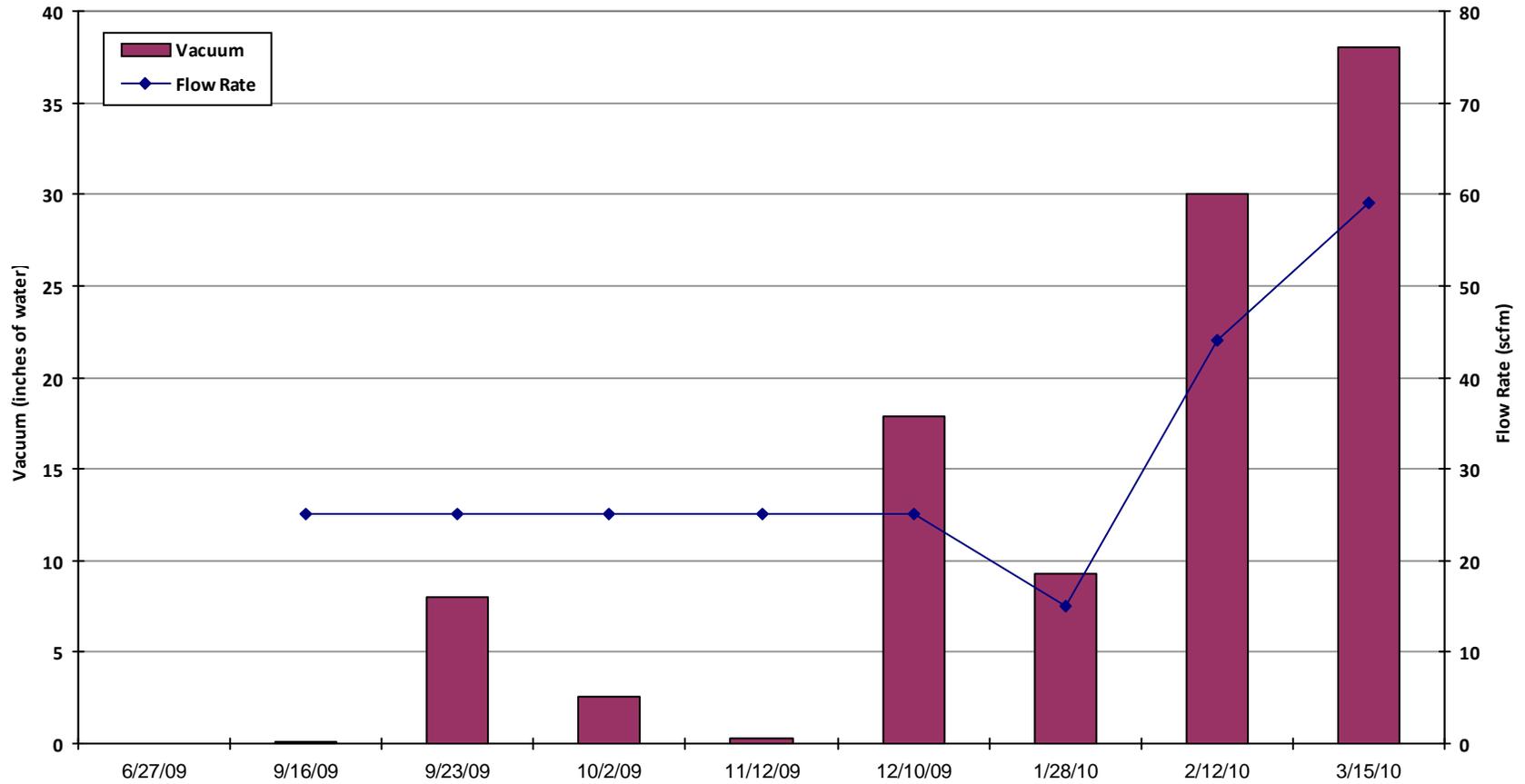
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-1
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



ASE-39A



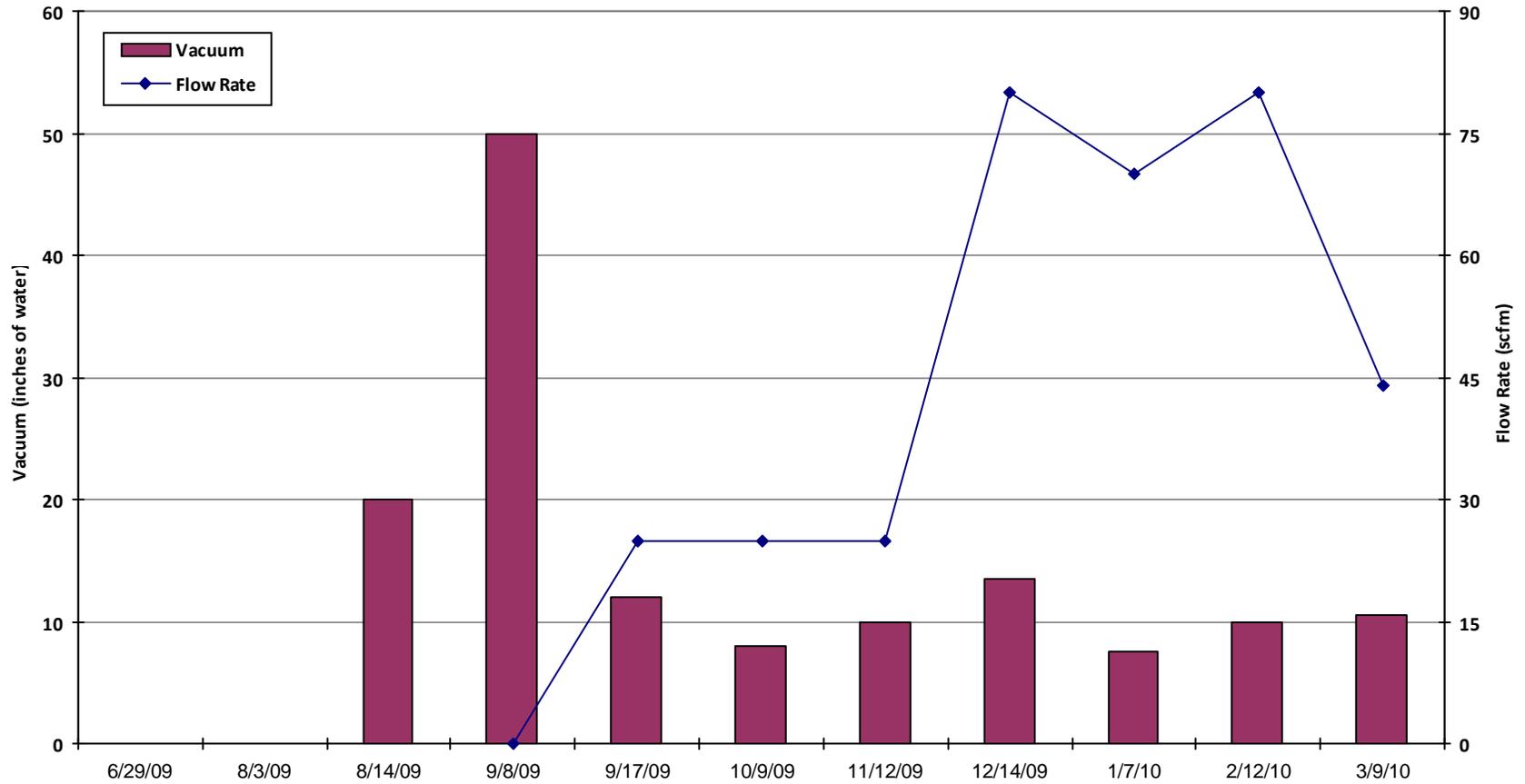
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-2
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



ASE-41A



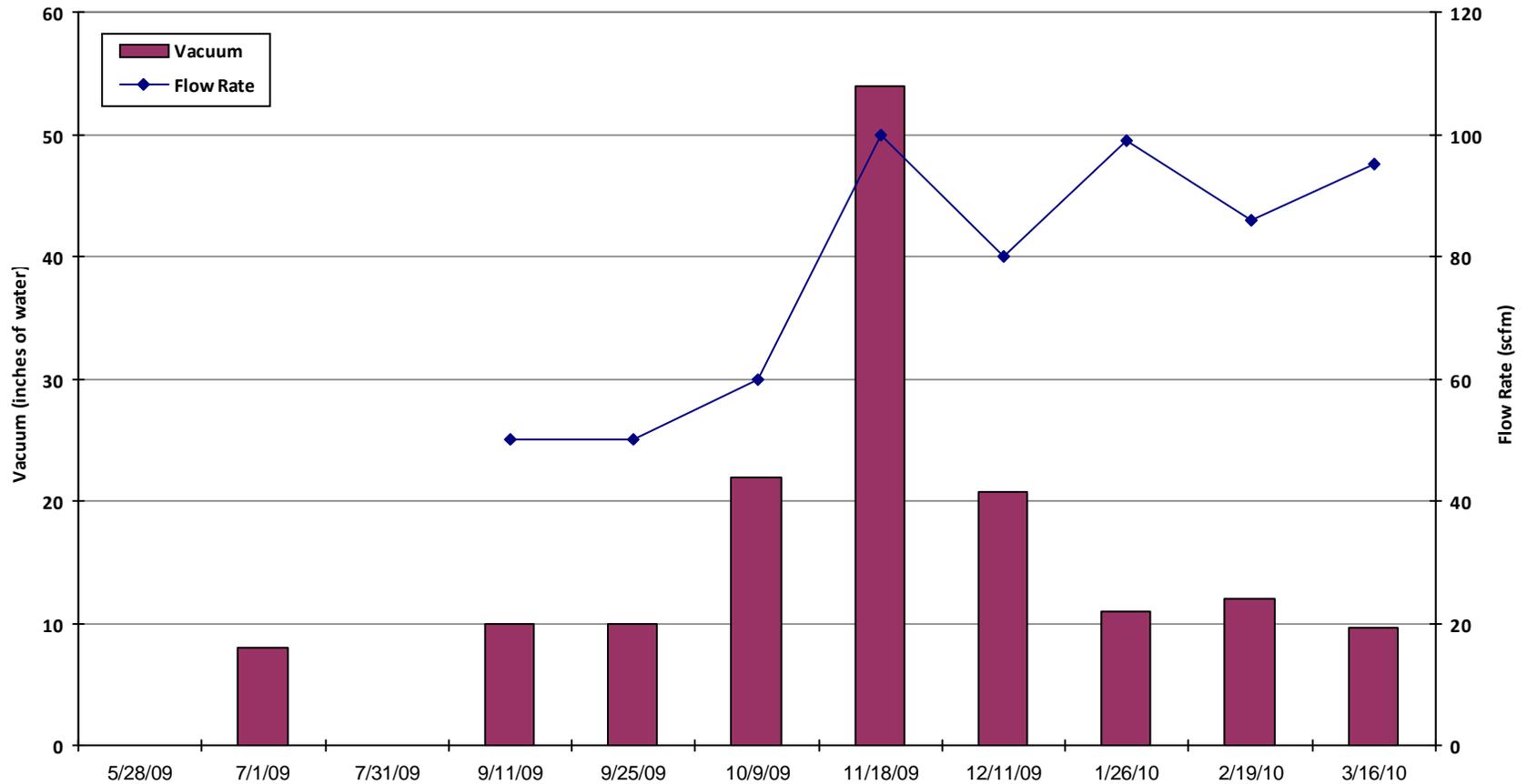
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-3
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



ASE-46A



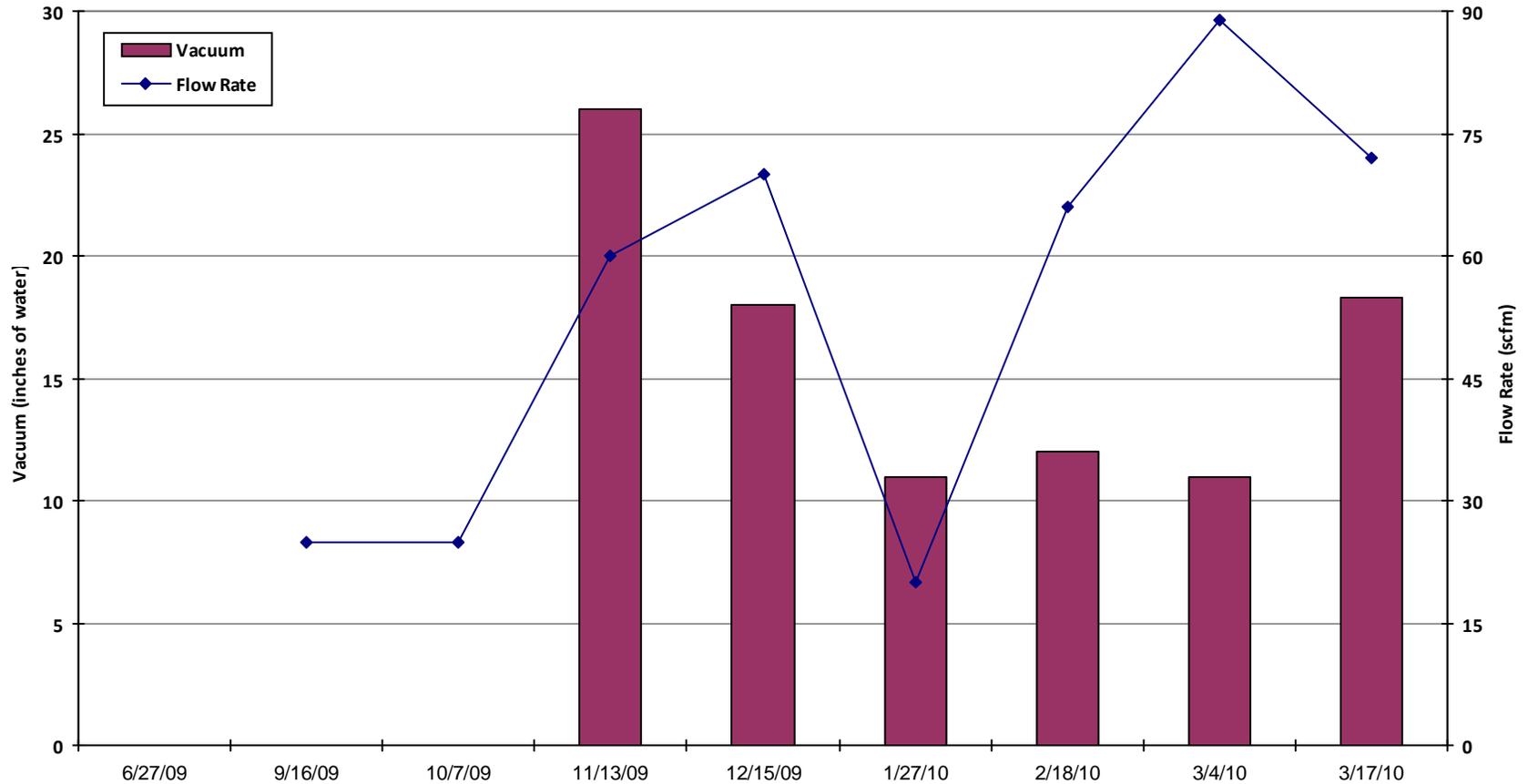
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-4
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



ASE-51A



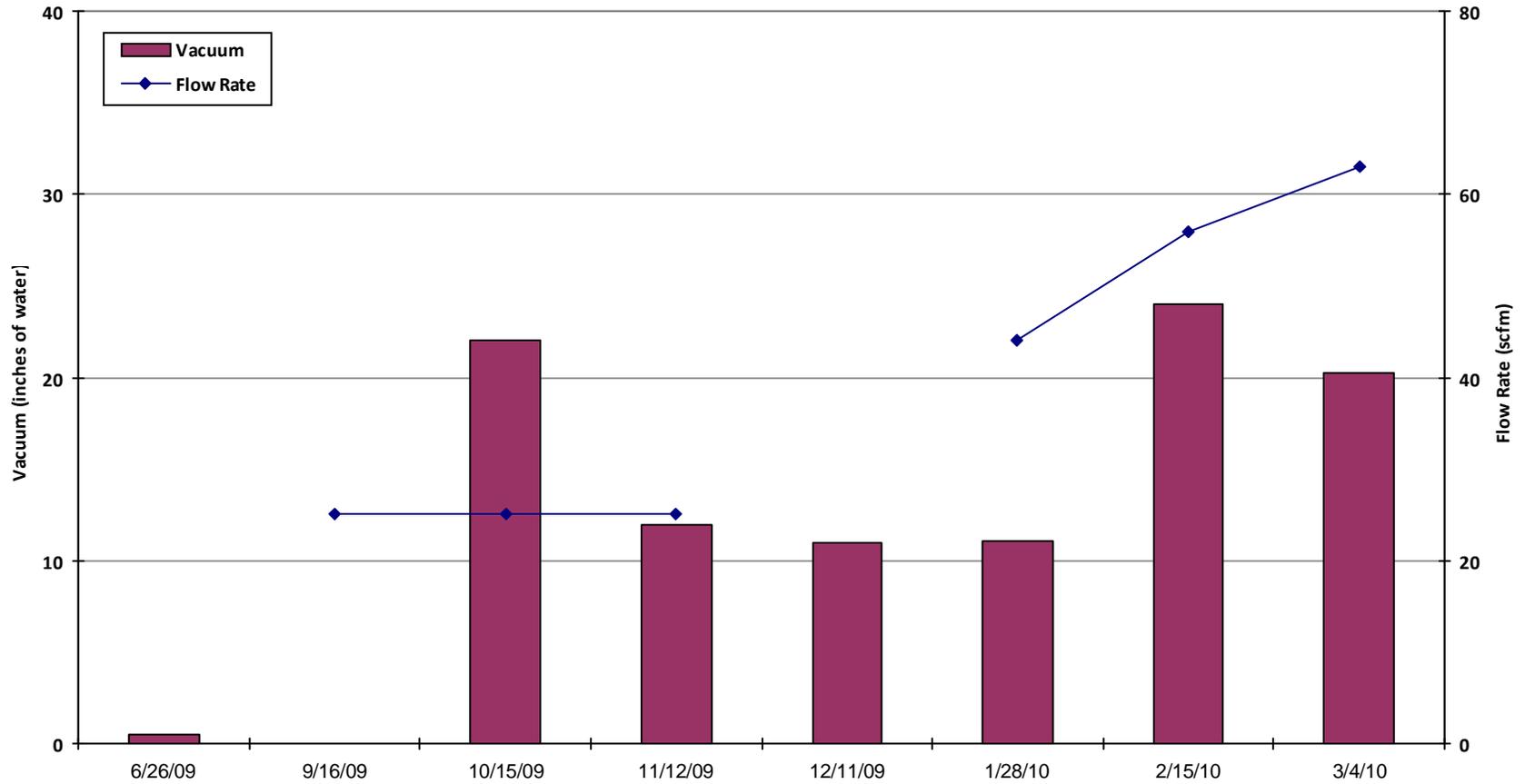
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-5
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



ASE-53A



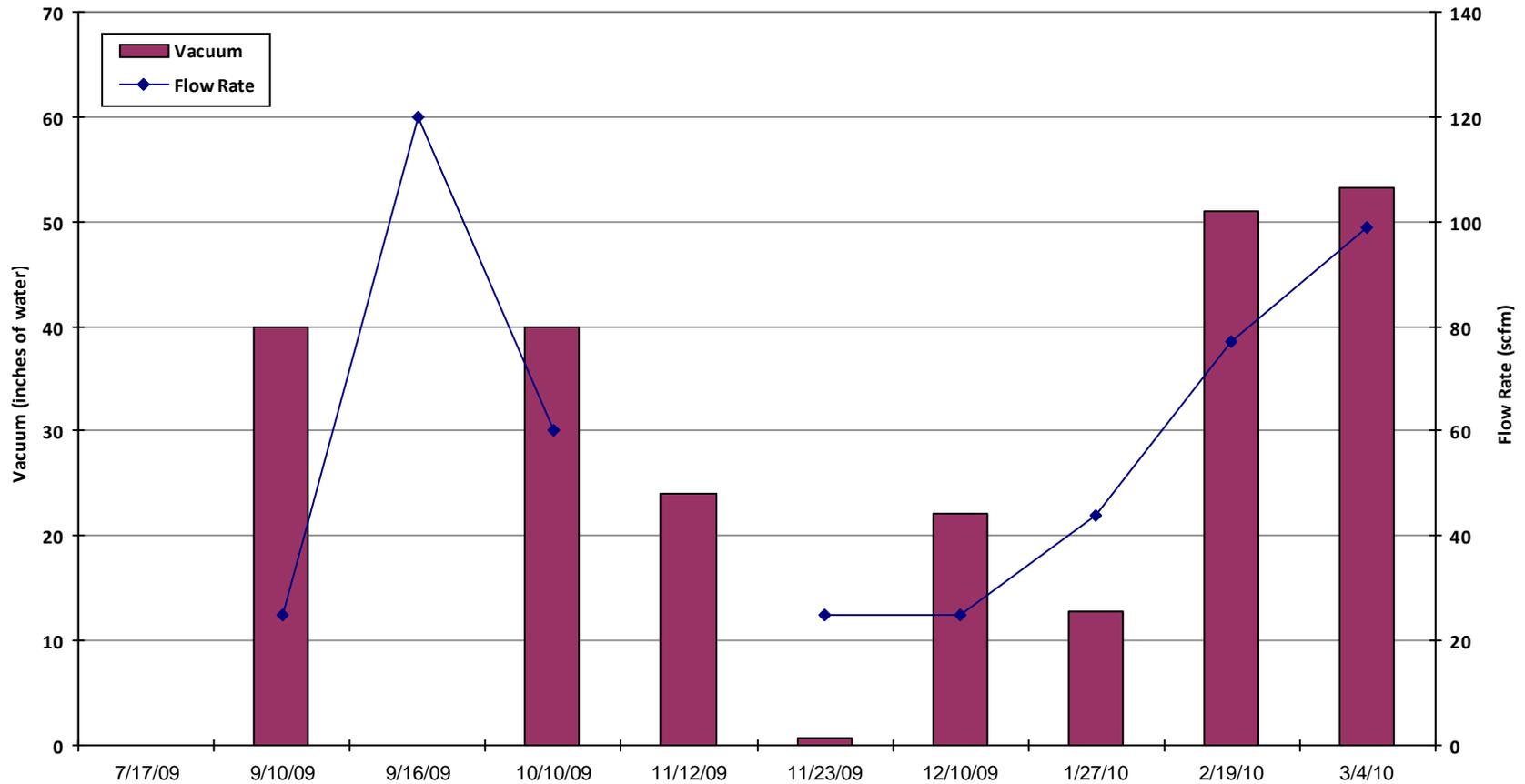
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-6
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



ASE-56A



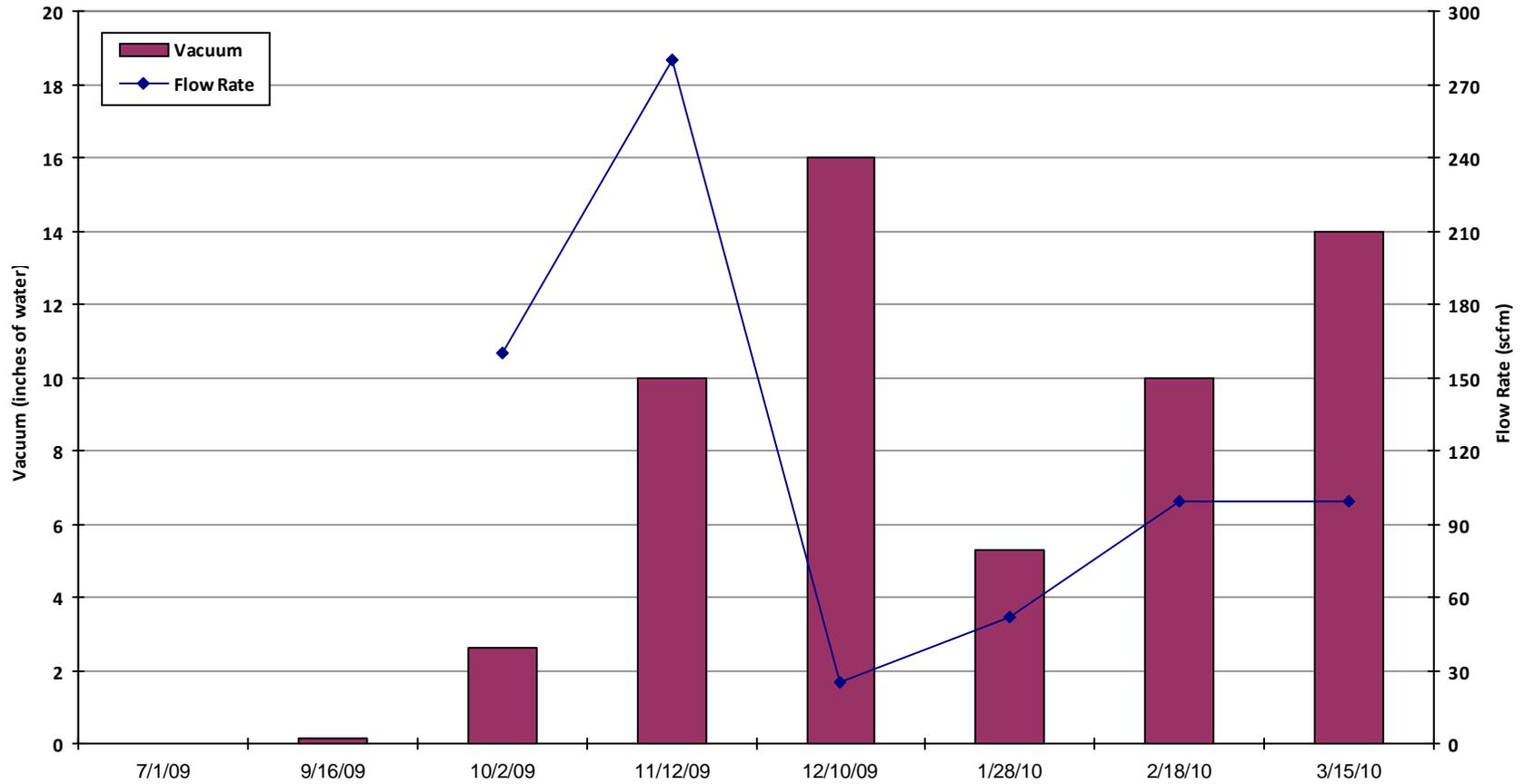
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-7
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



ASE-57A



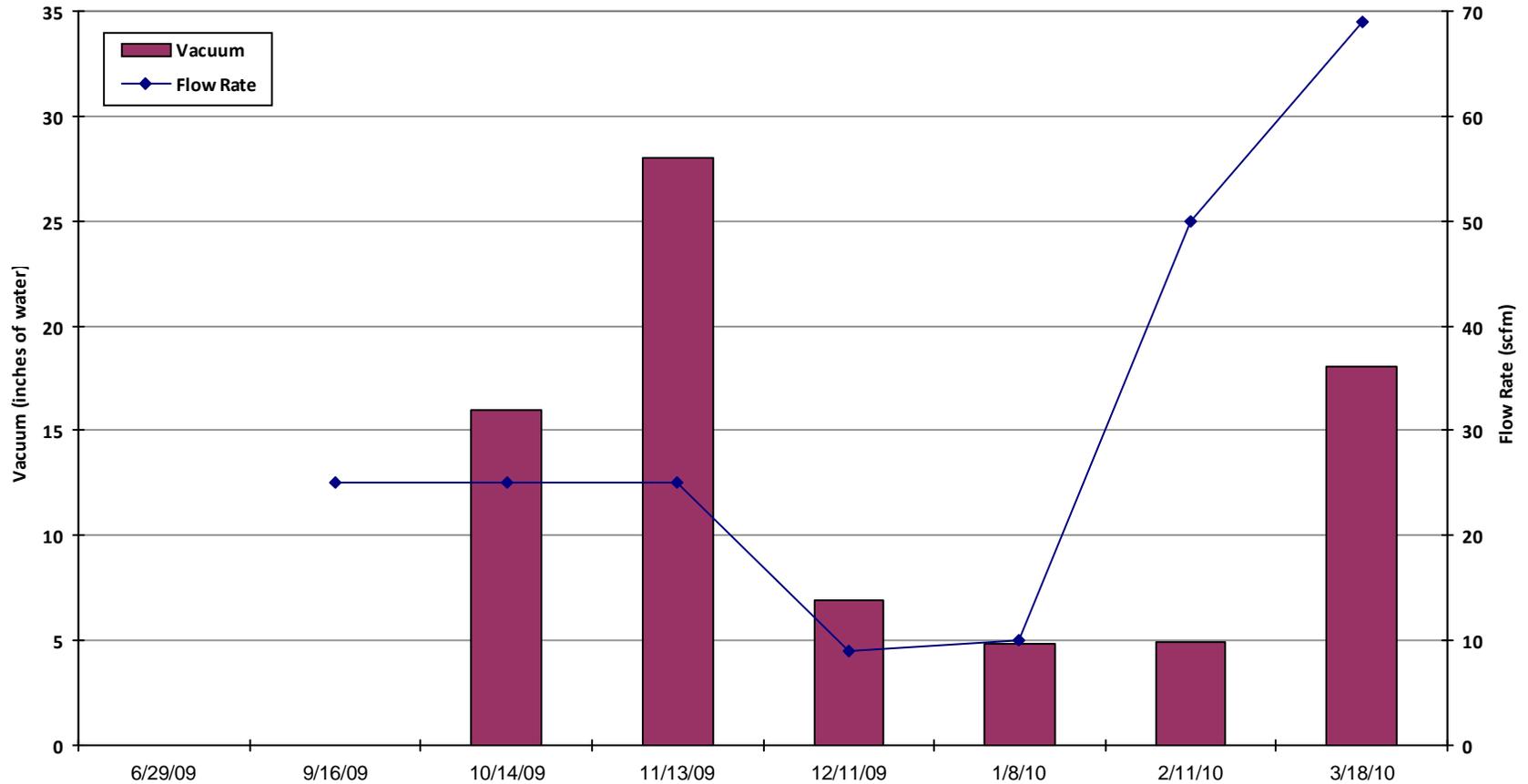
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-8
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



ASE-59A



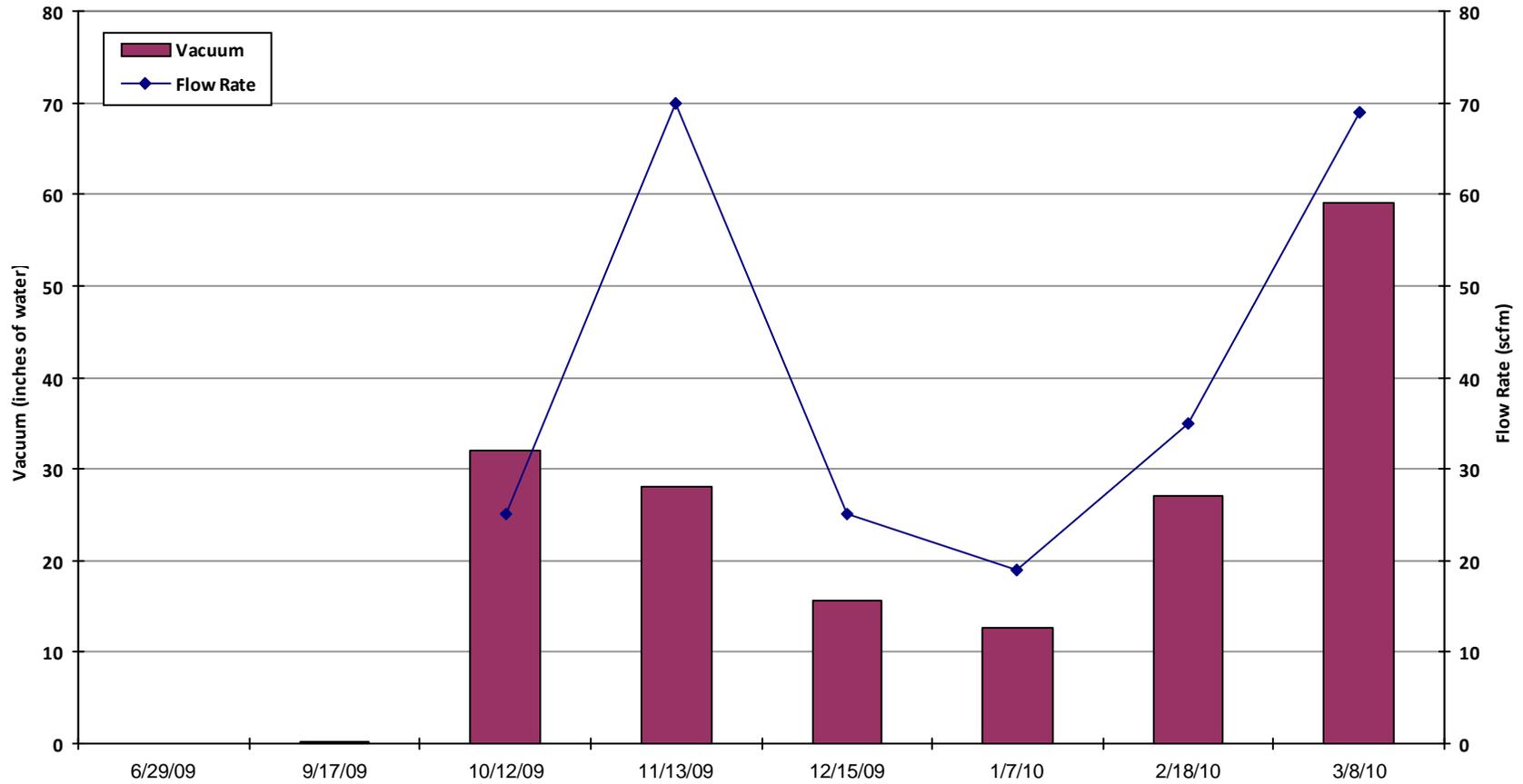
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-9
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



ASE-66A



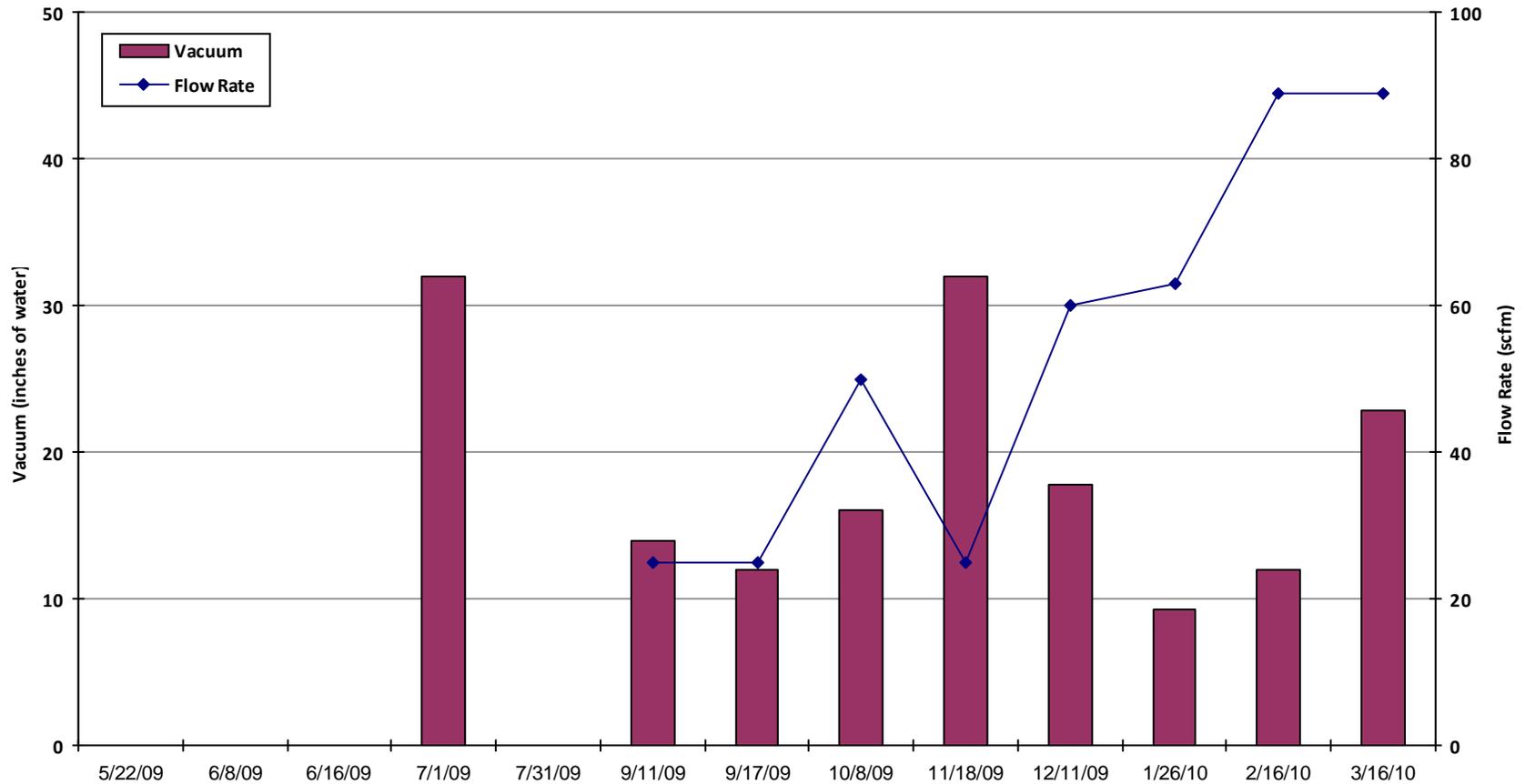
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-10
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-1N

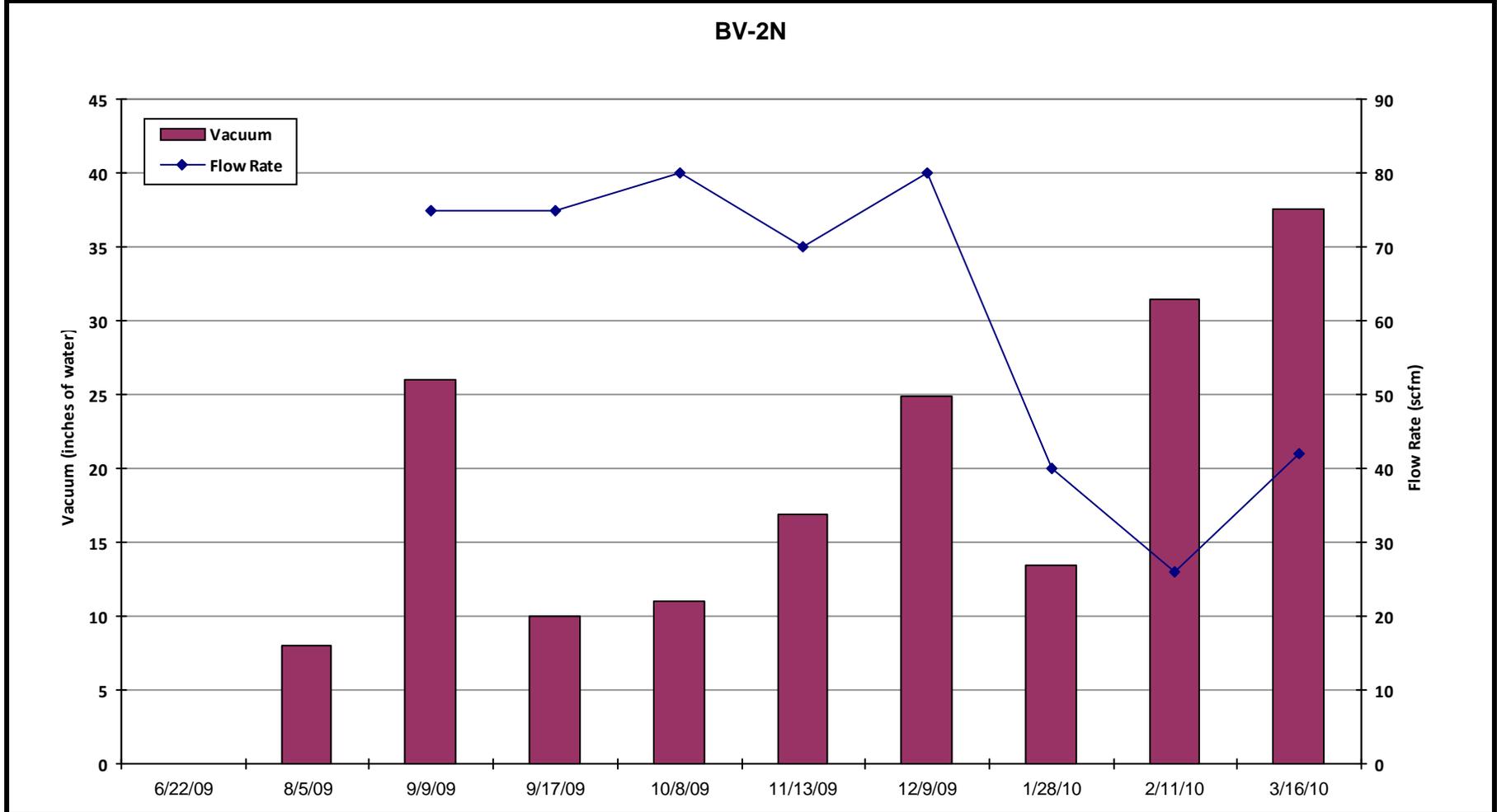


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-11
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona





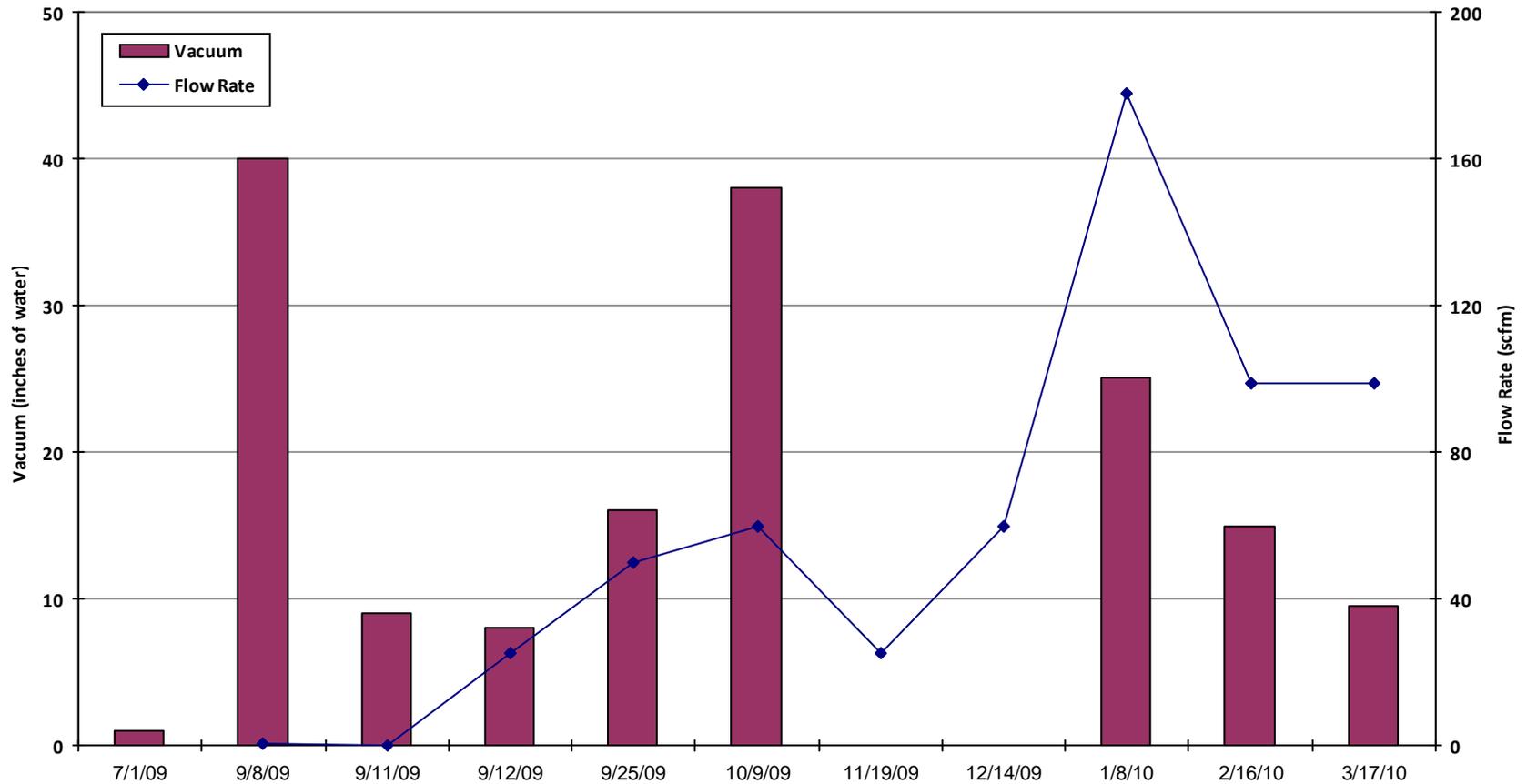
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-12
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-3N

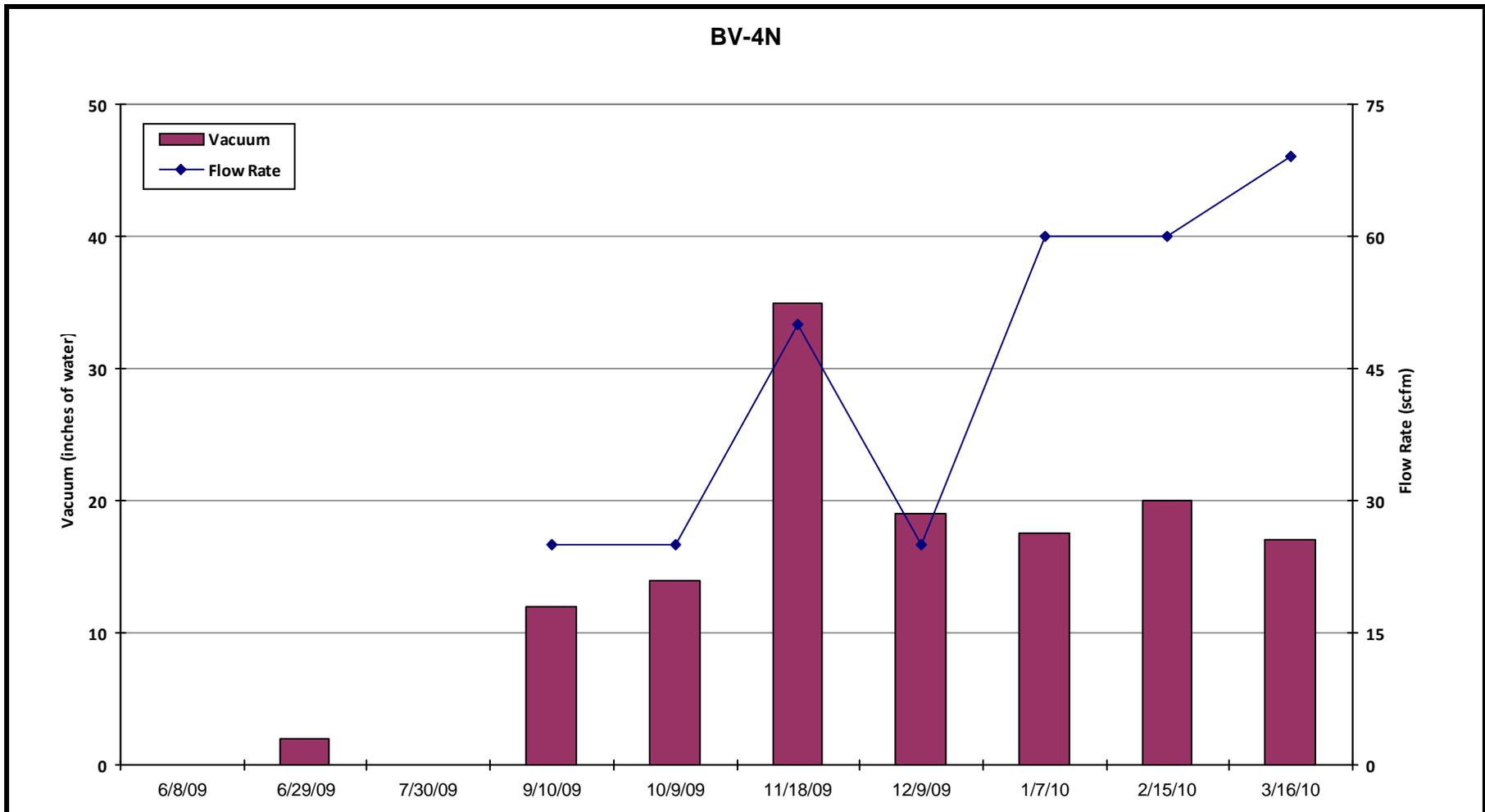


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-13
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona





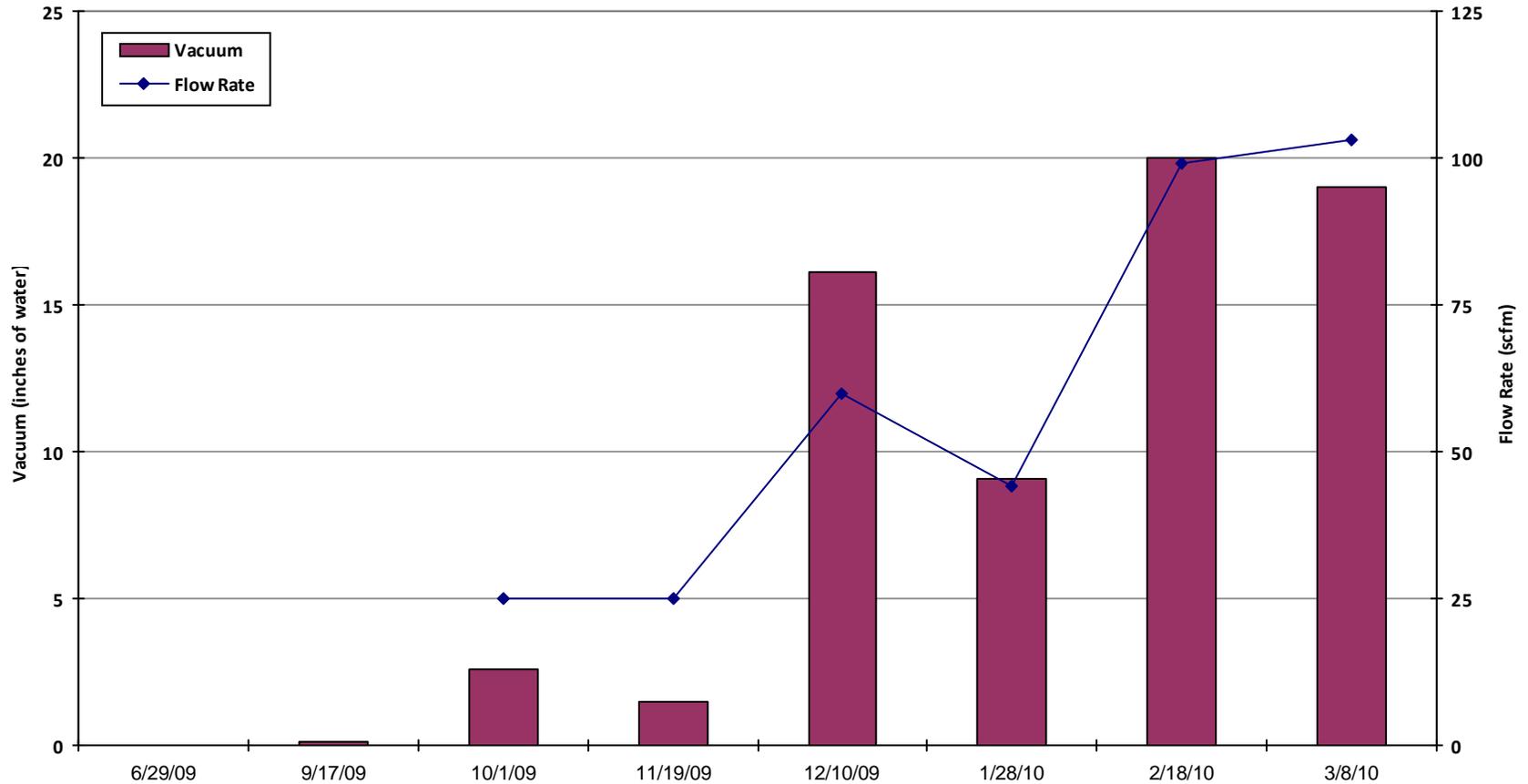
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-14
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-5

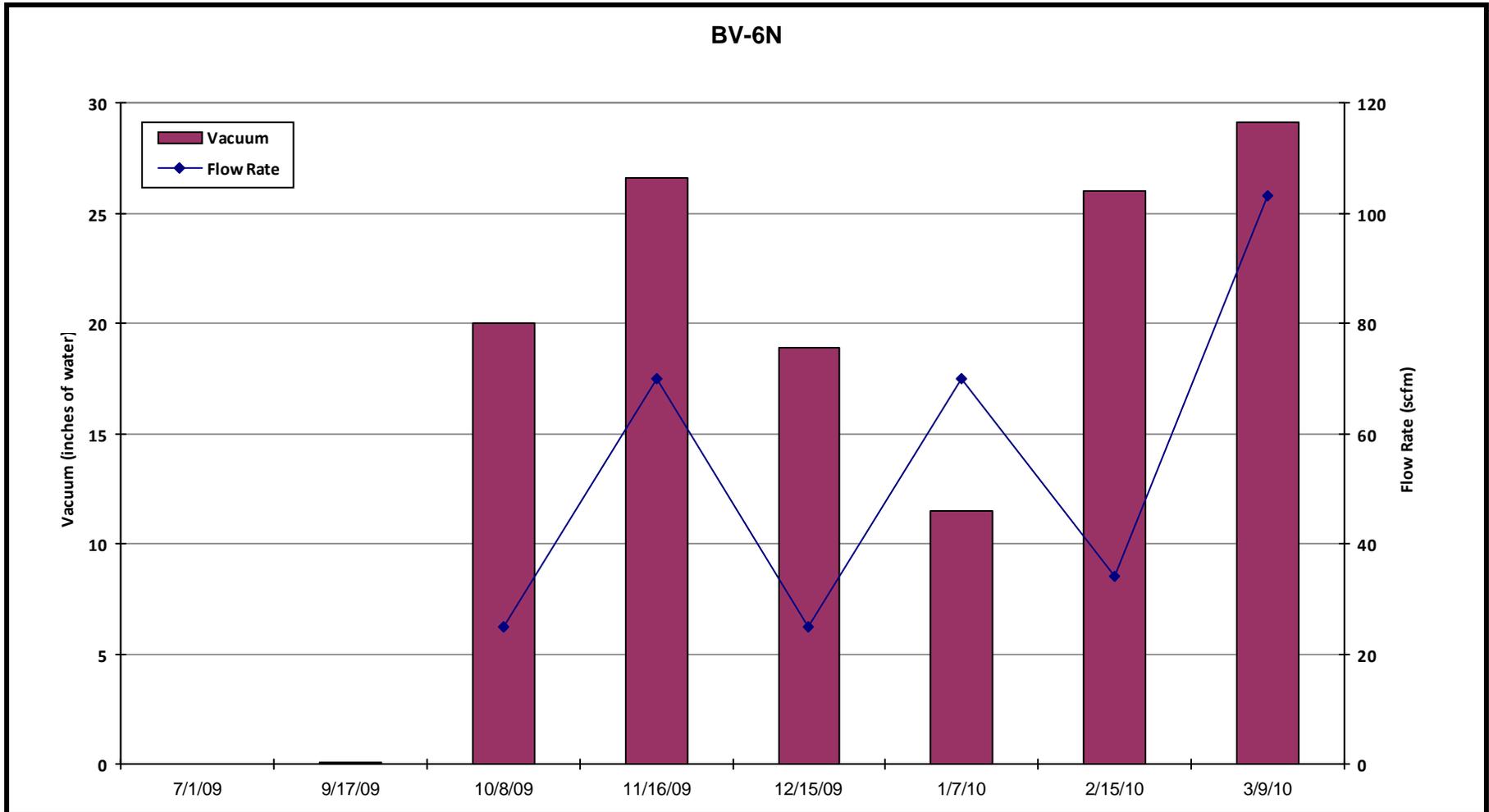


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-15
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona





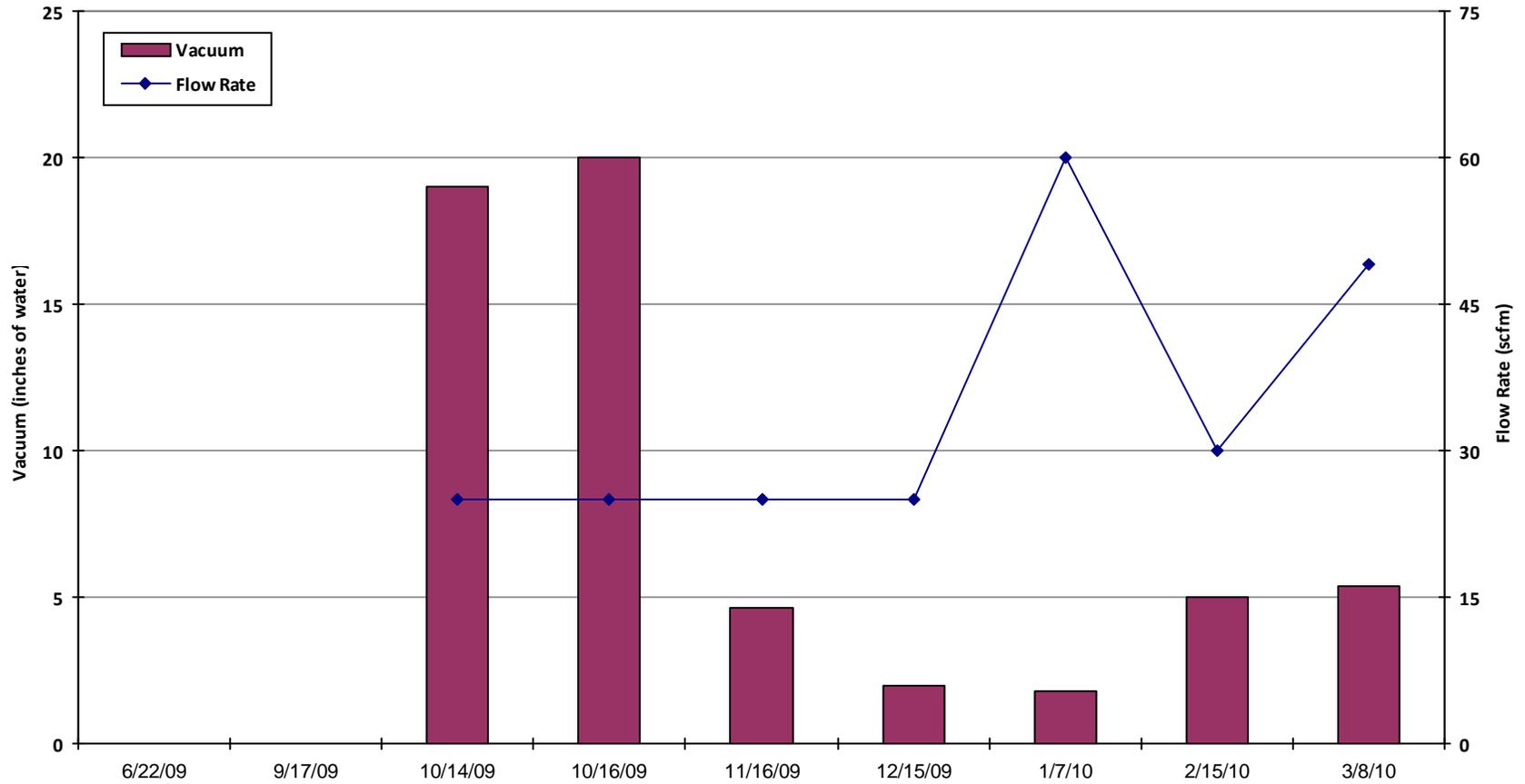
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-16
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

BV-7N



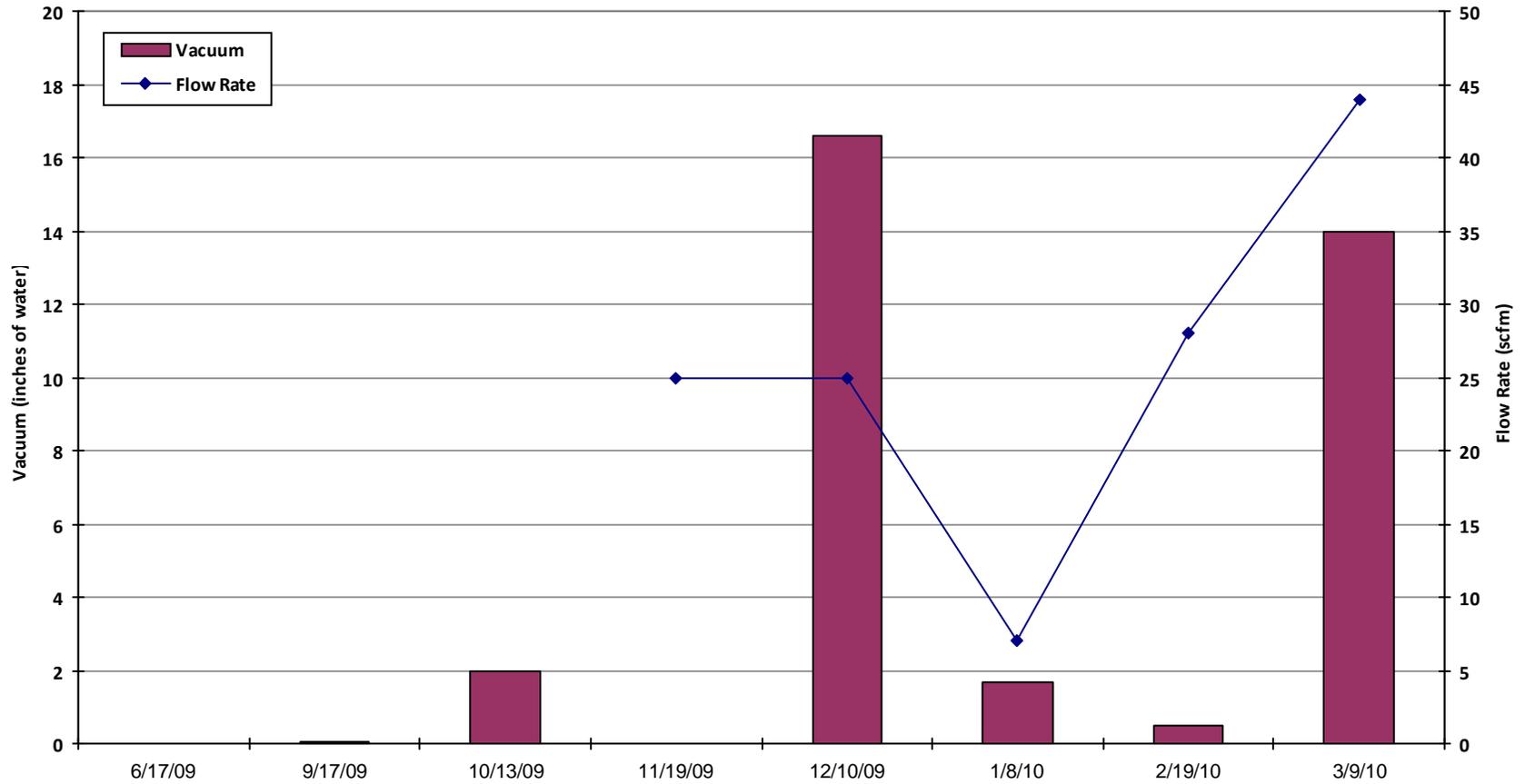
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-17
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-8N



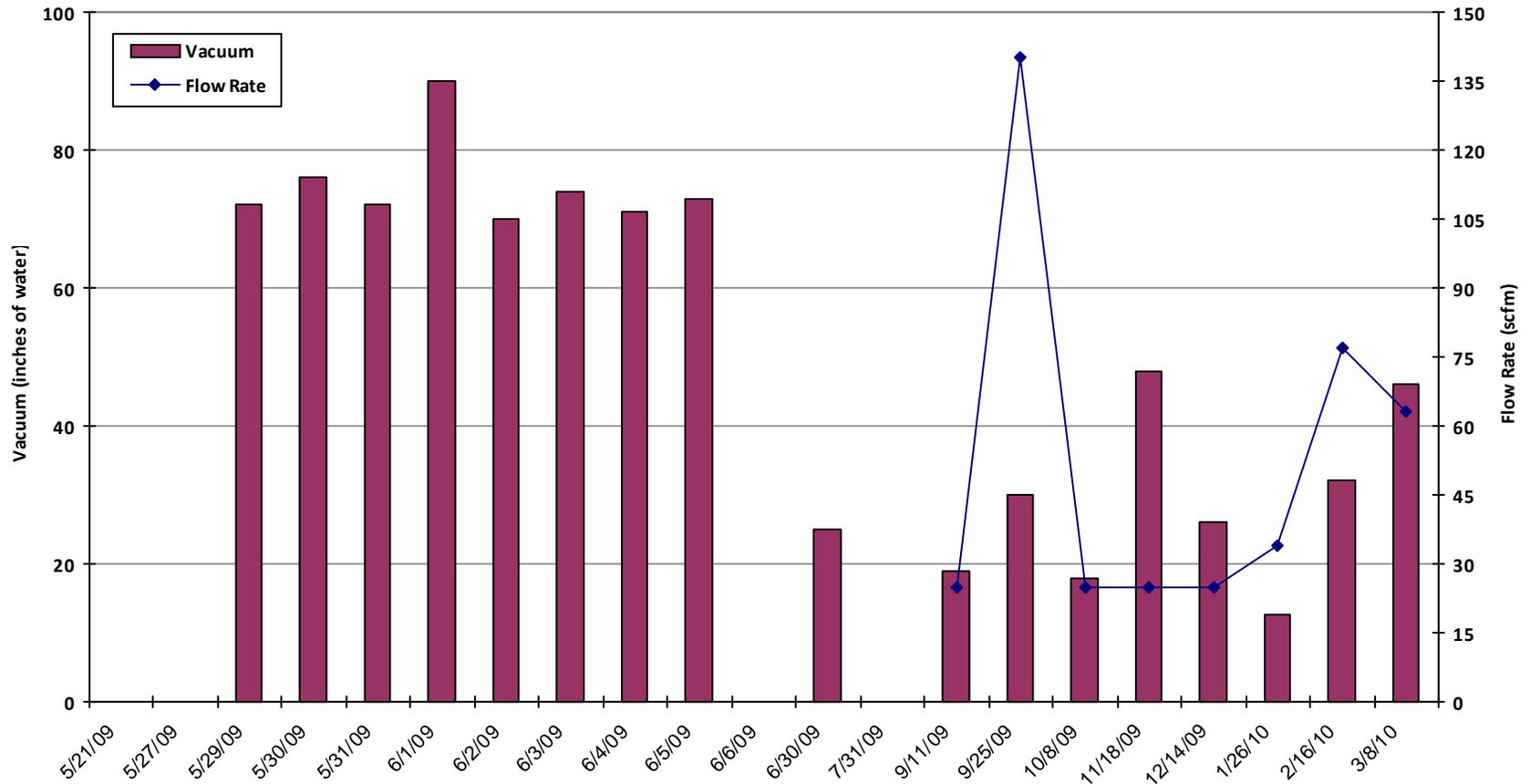
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-18
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-9N



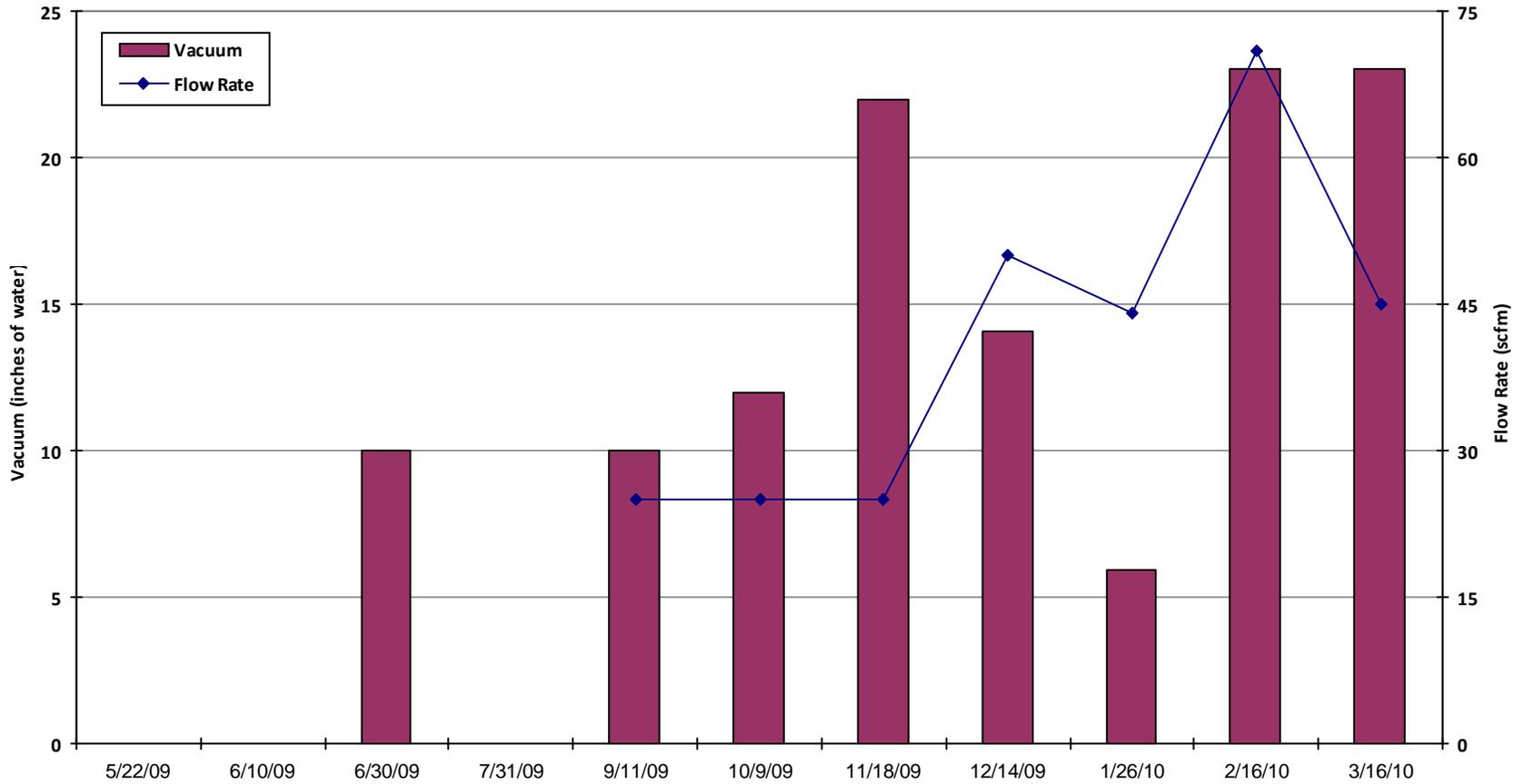
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-19
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-10N

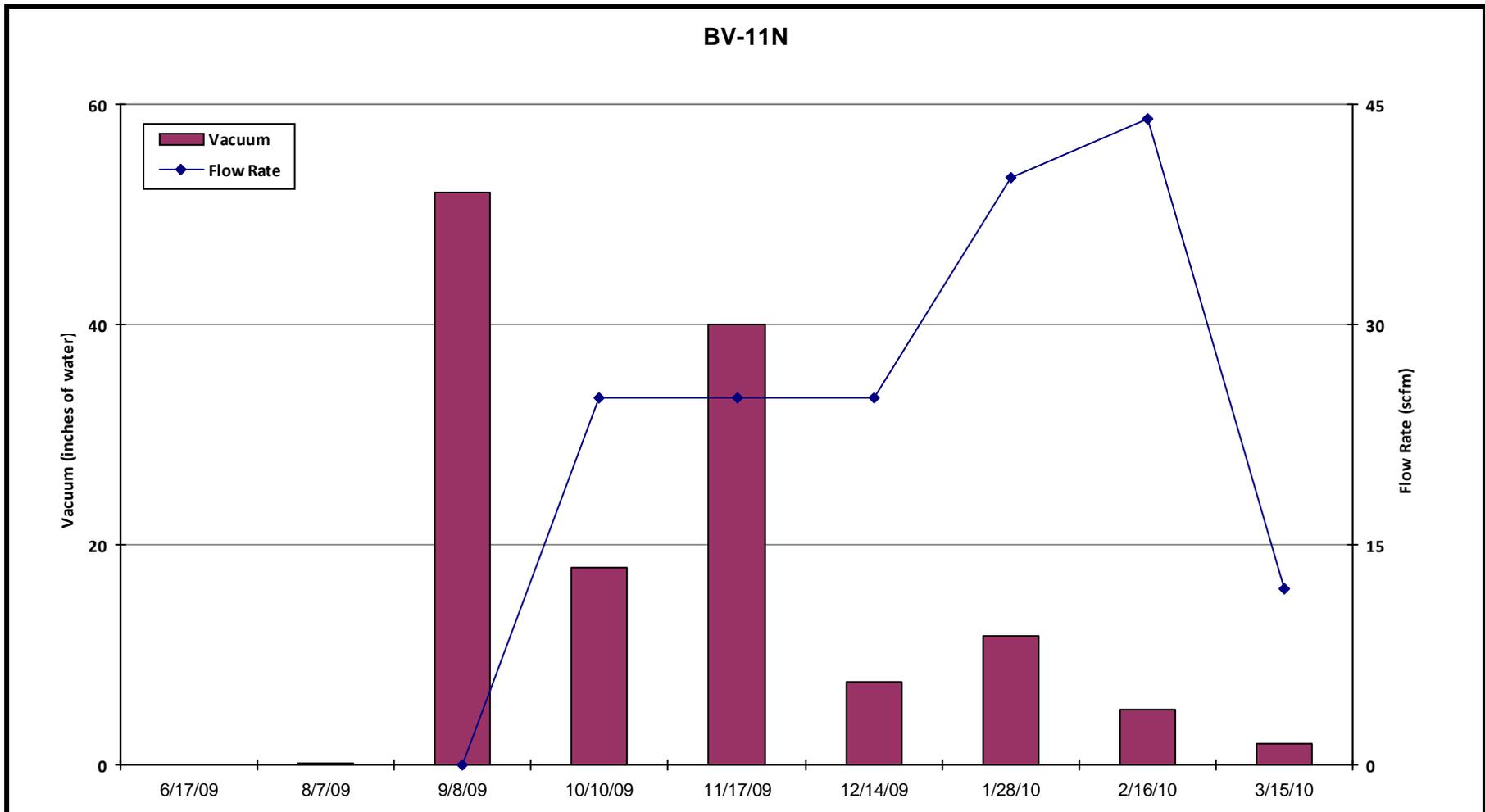


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-20
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona





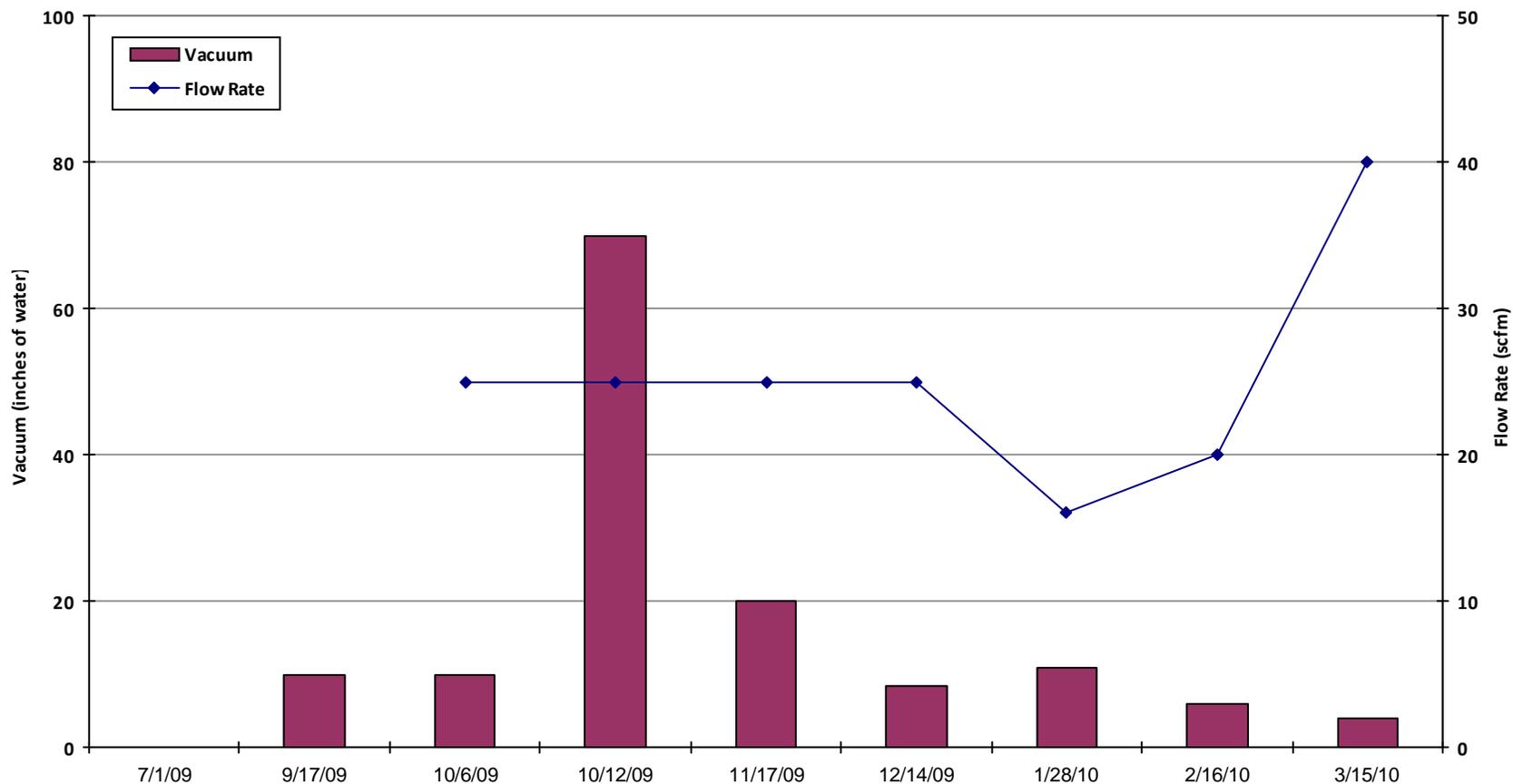
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-21
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

BV-12N



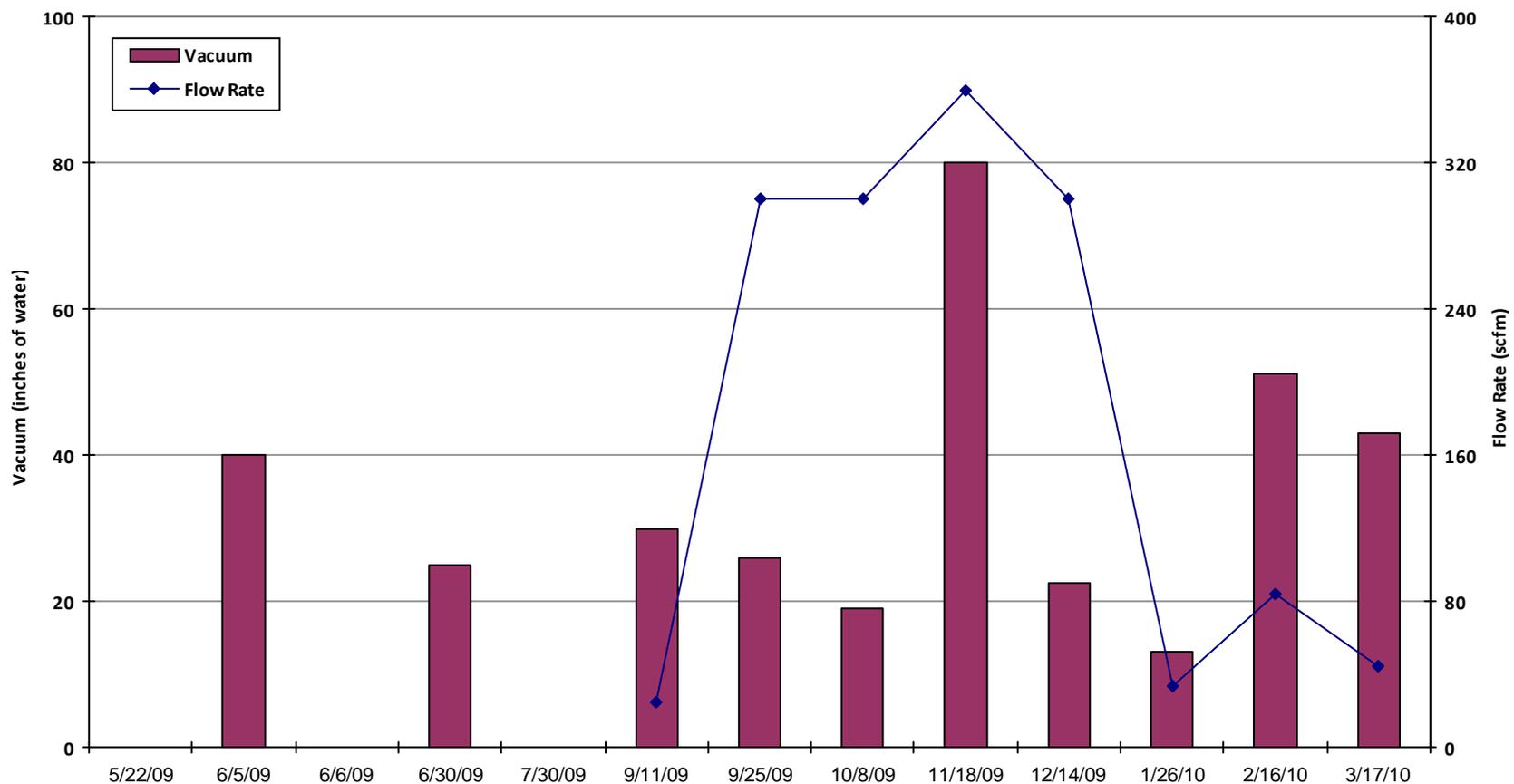
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-22
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-13N



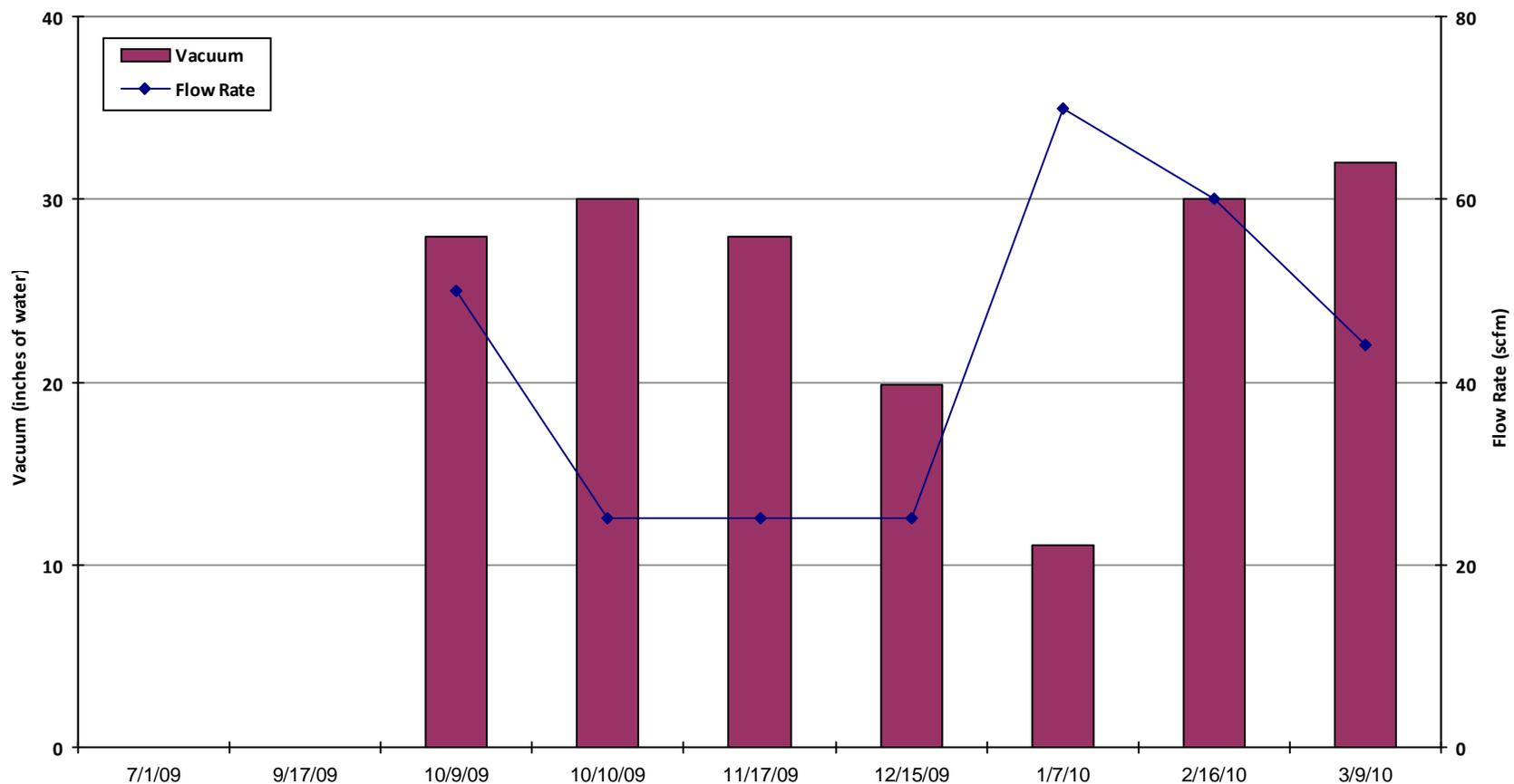
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-23
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-14N



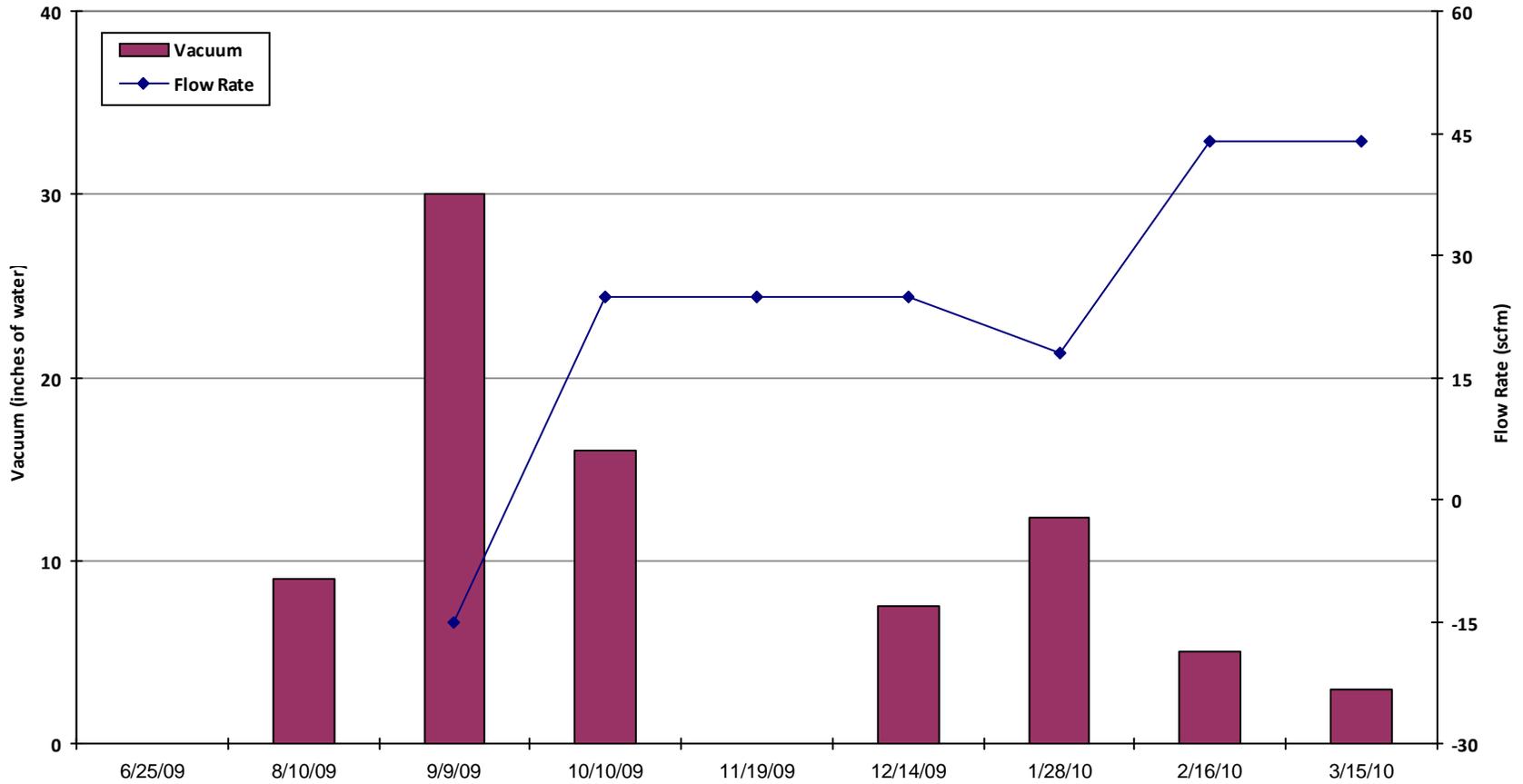
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-24
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-15N

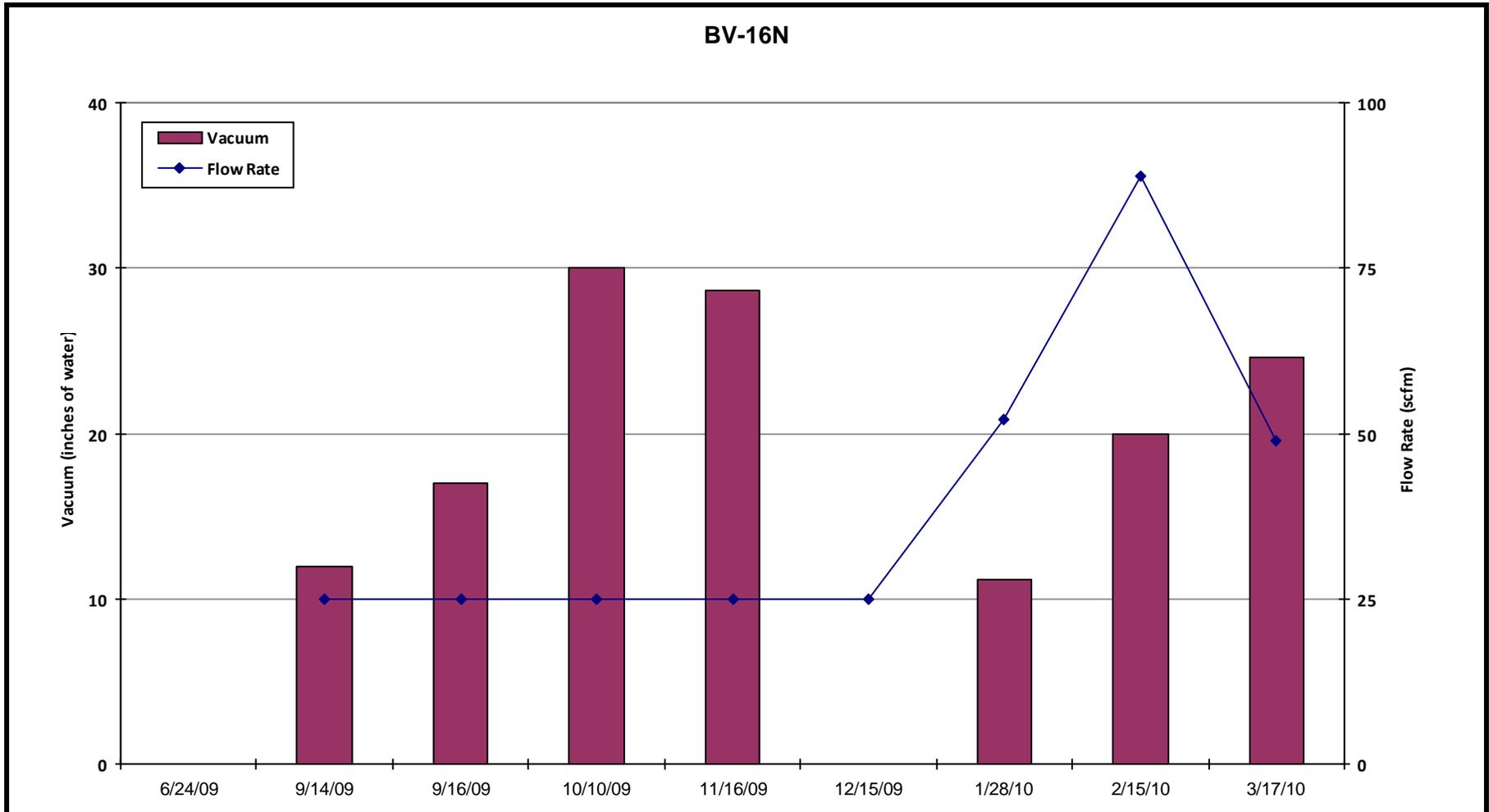


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-25
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



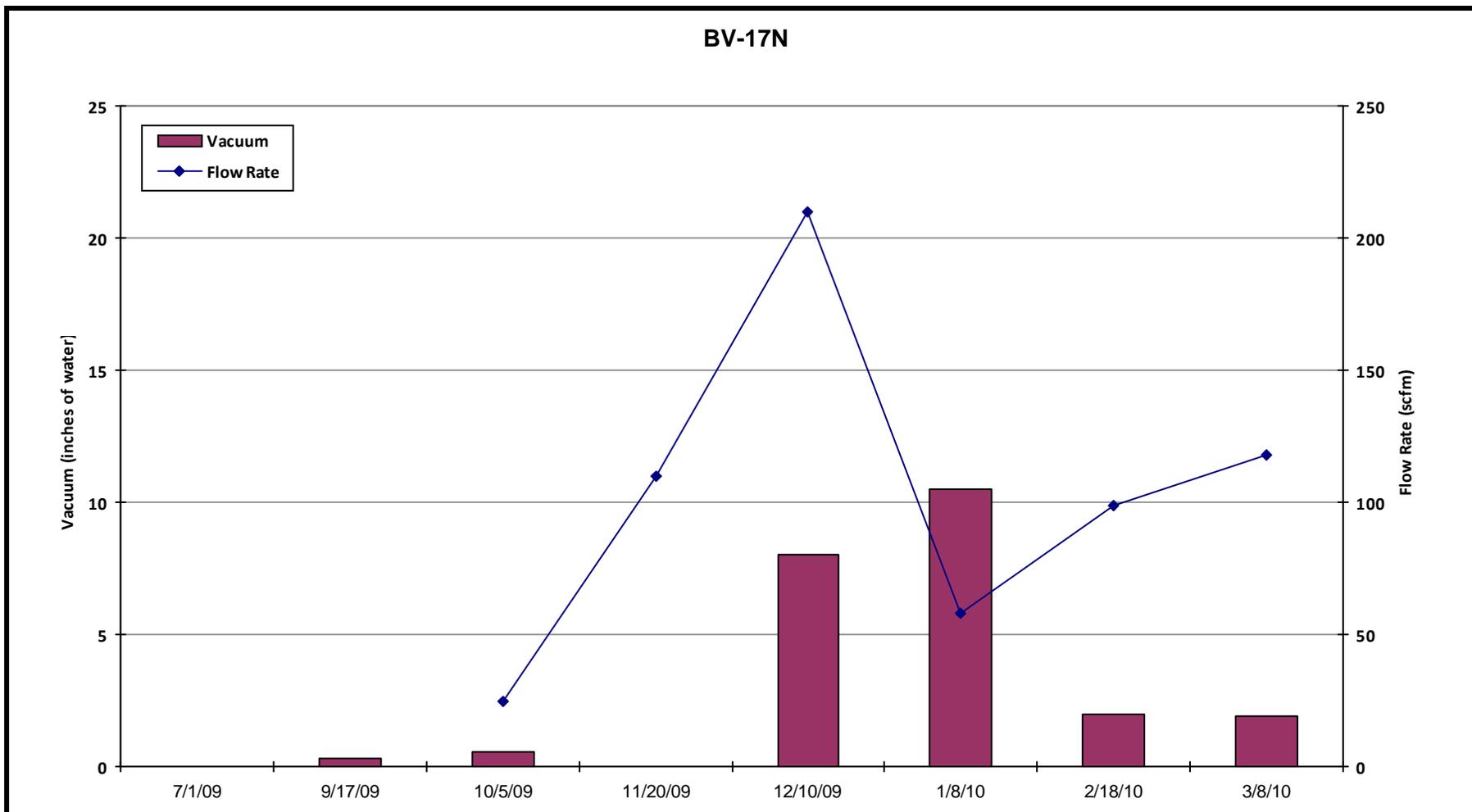


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-26
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona

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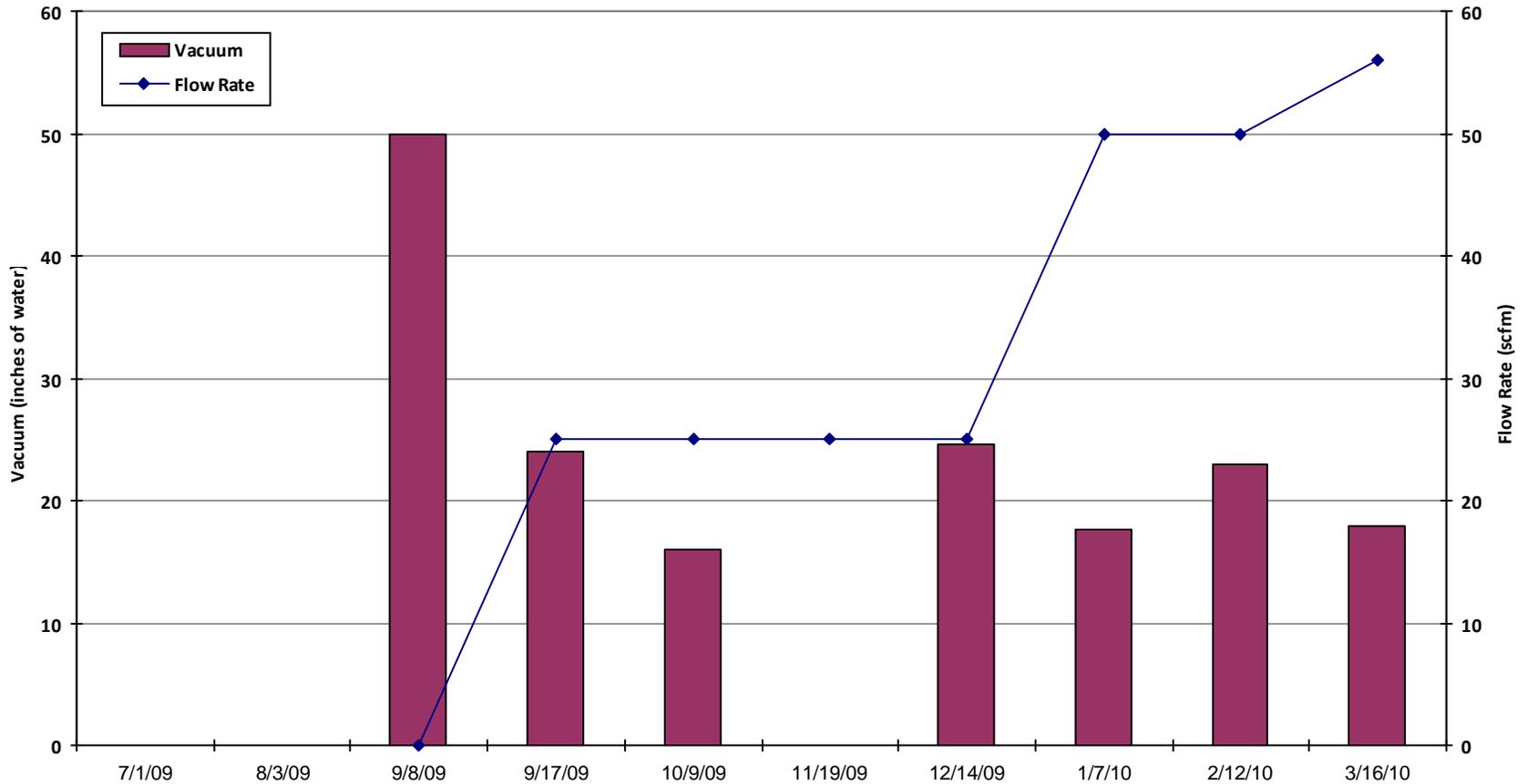
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-27
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-18N



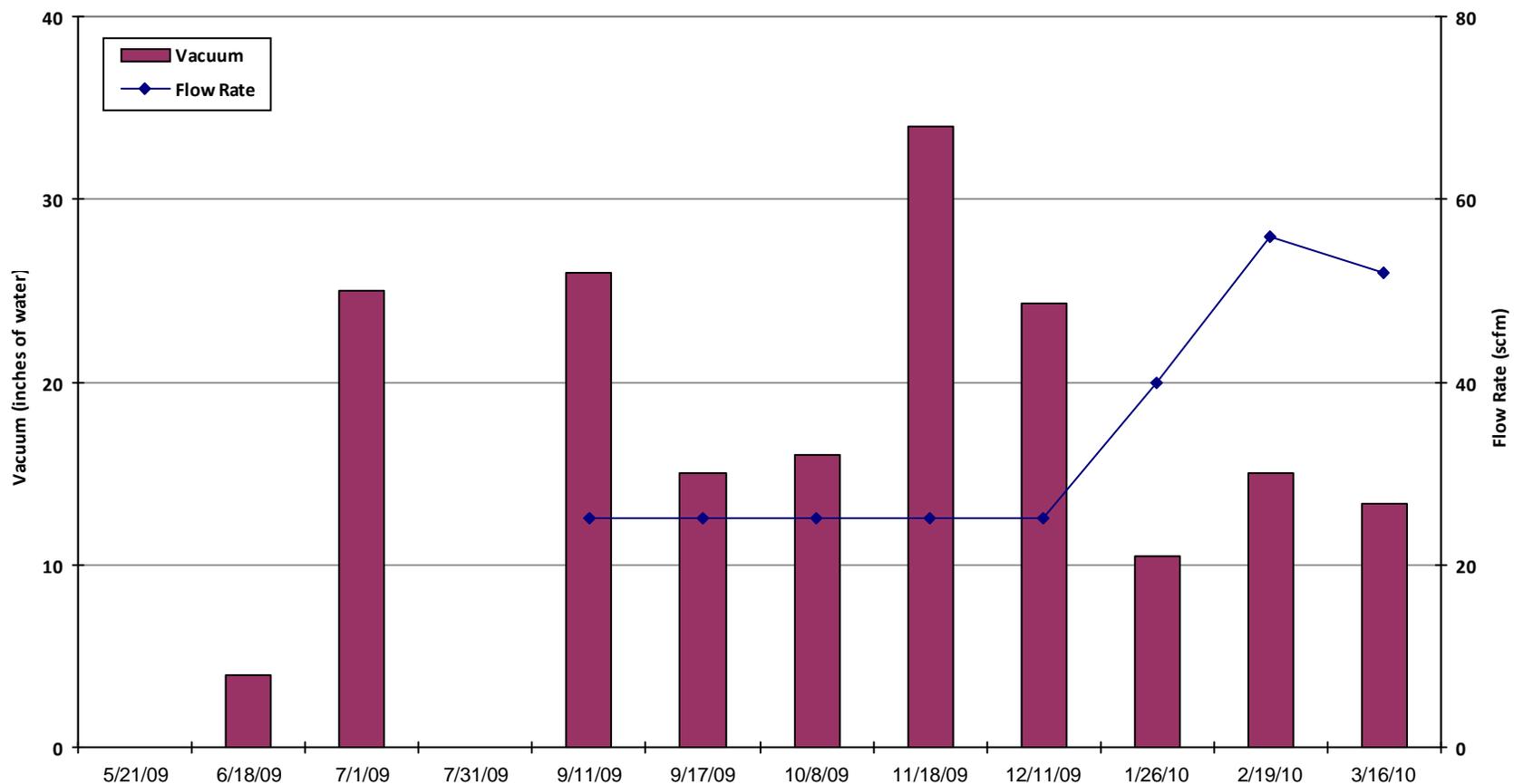
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-28
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-19N

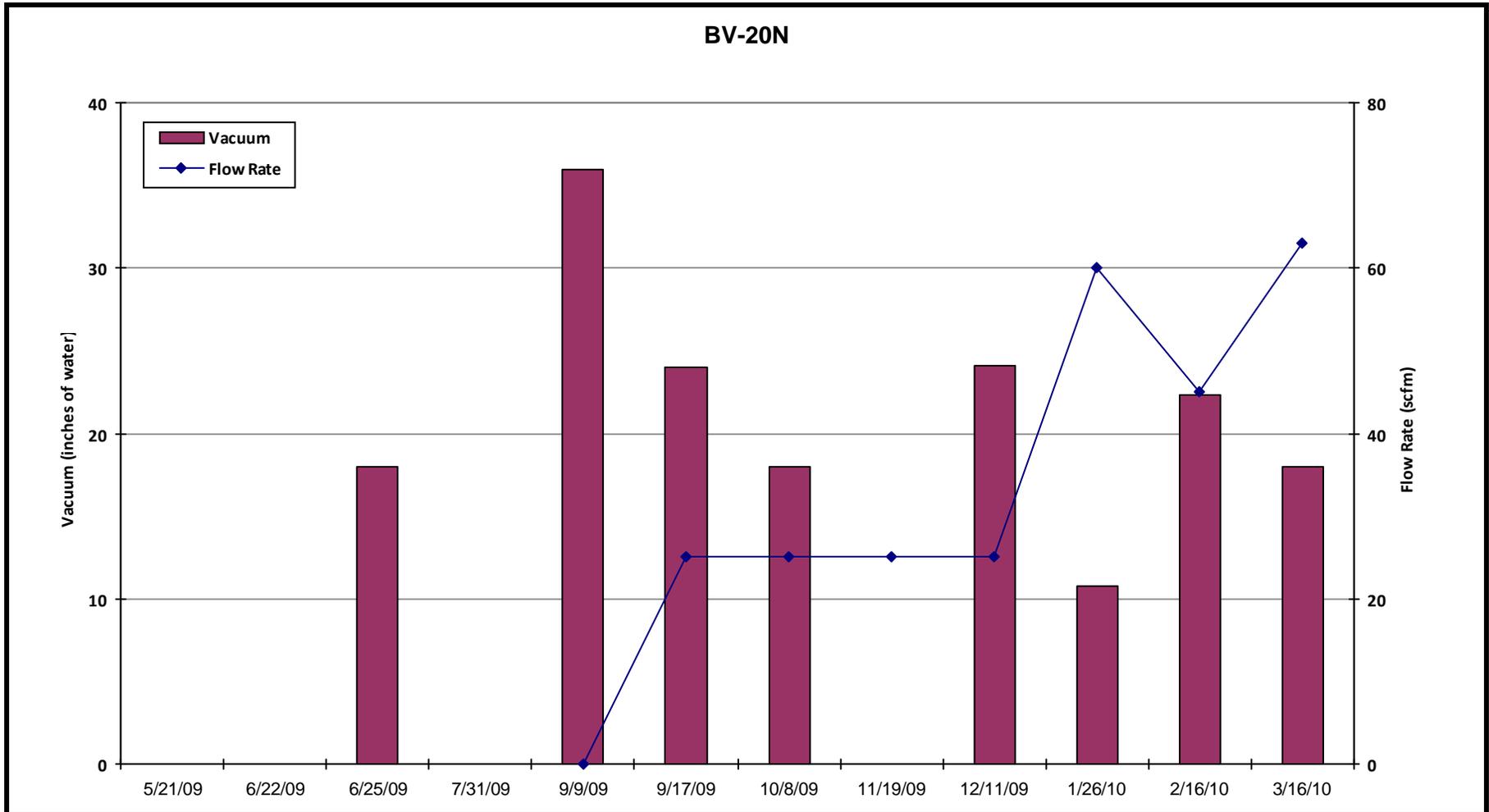


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-29
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



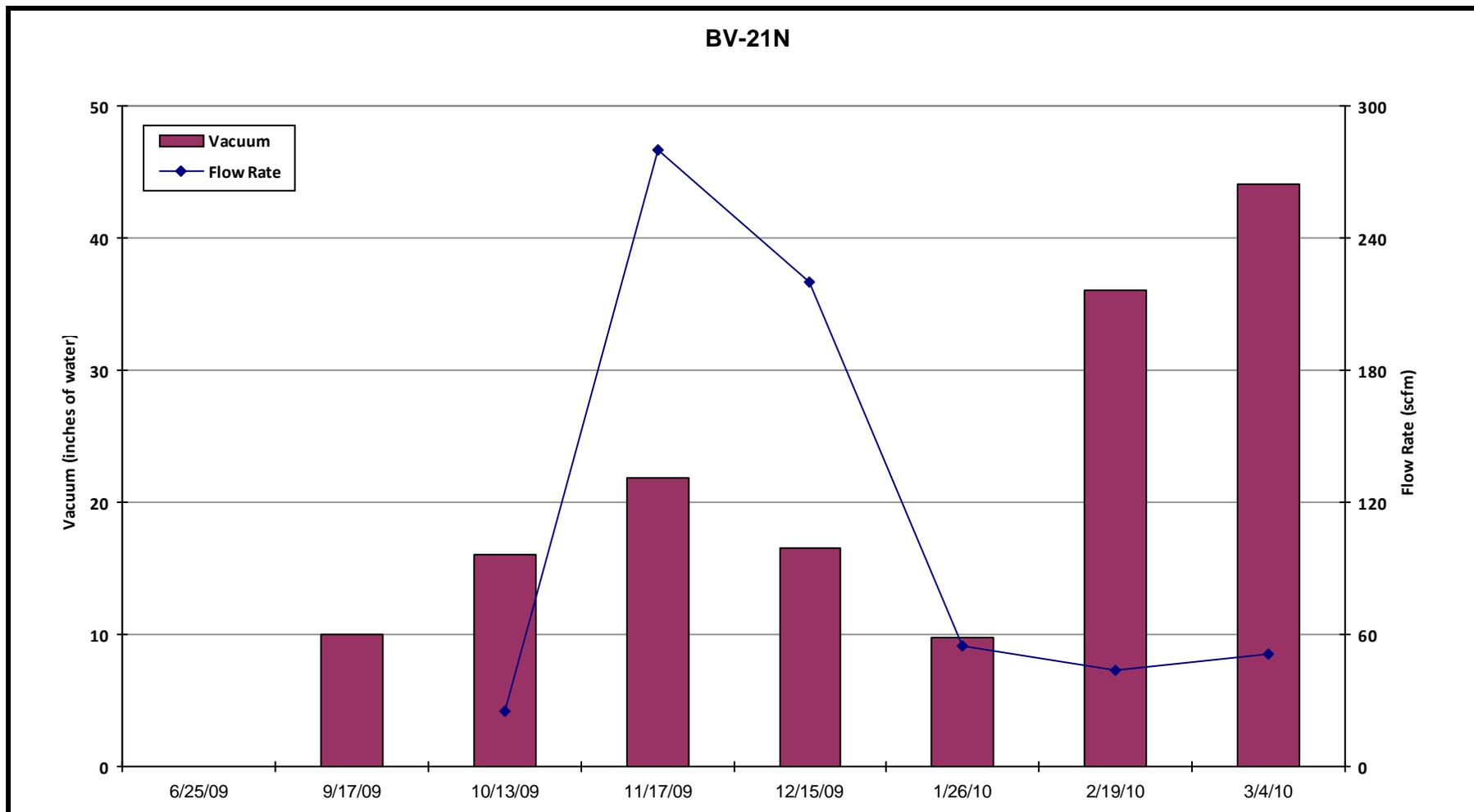


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-30
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona

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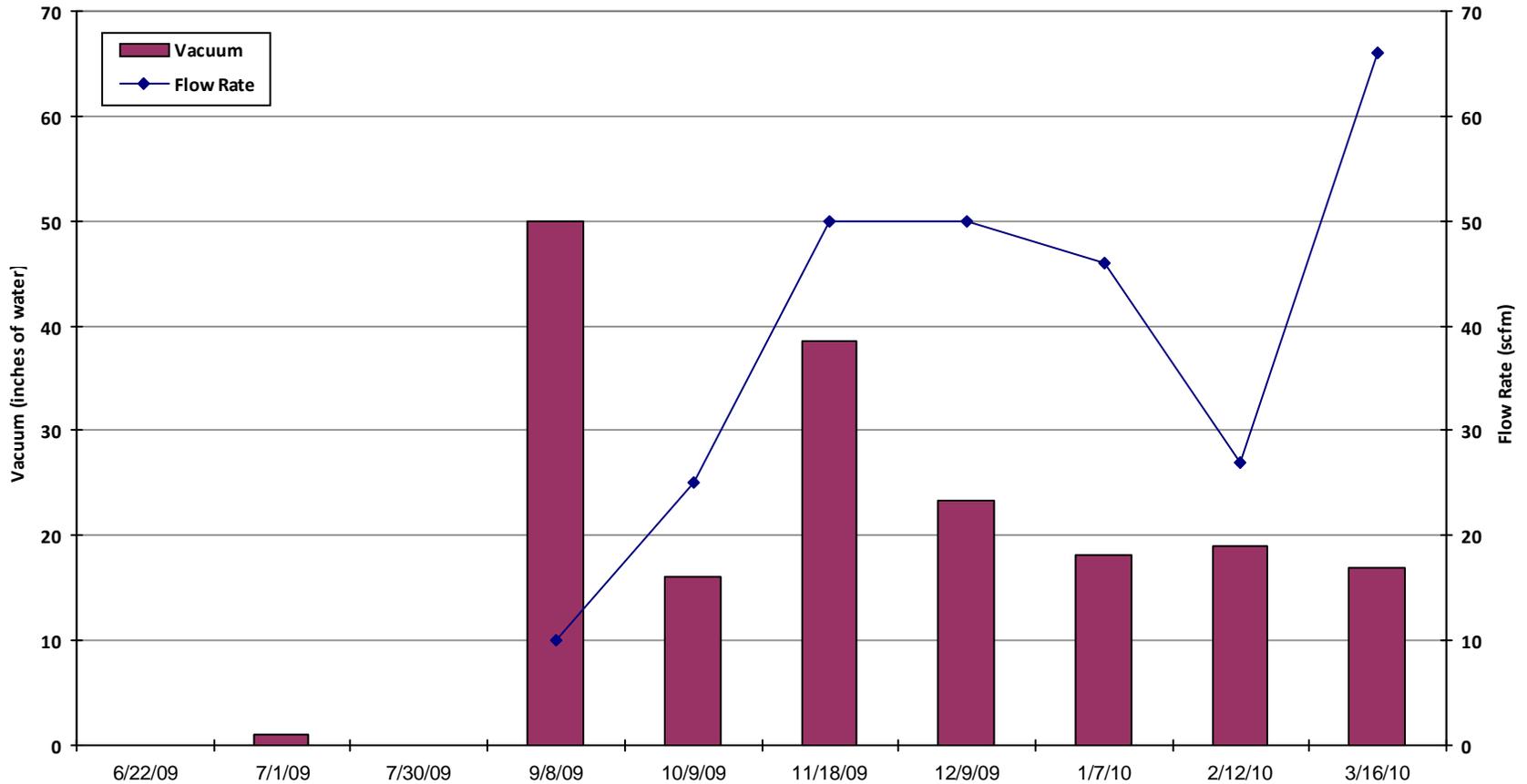
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-31
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



BV-22N

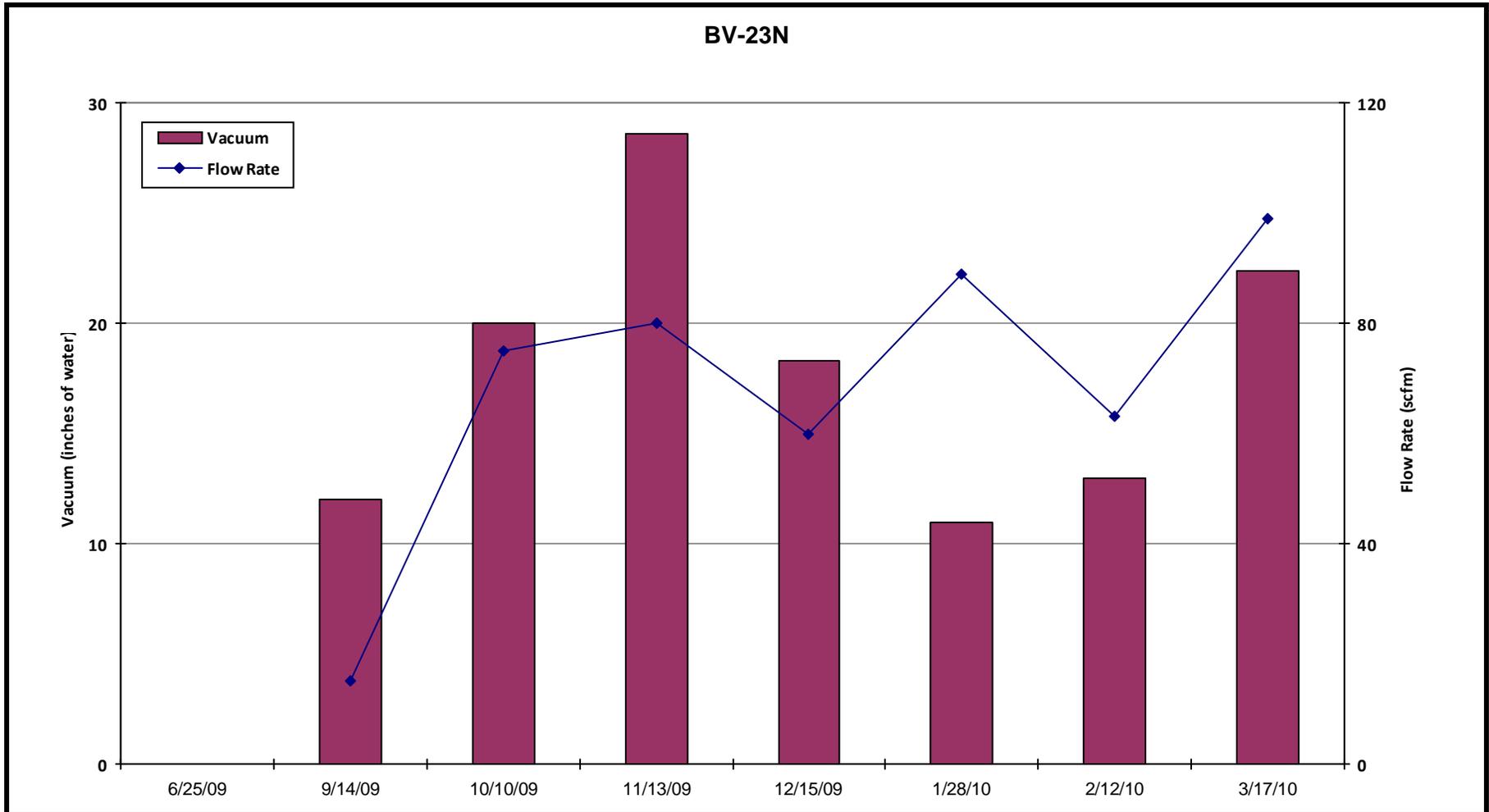


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-32
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



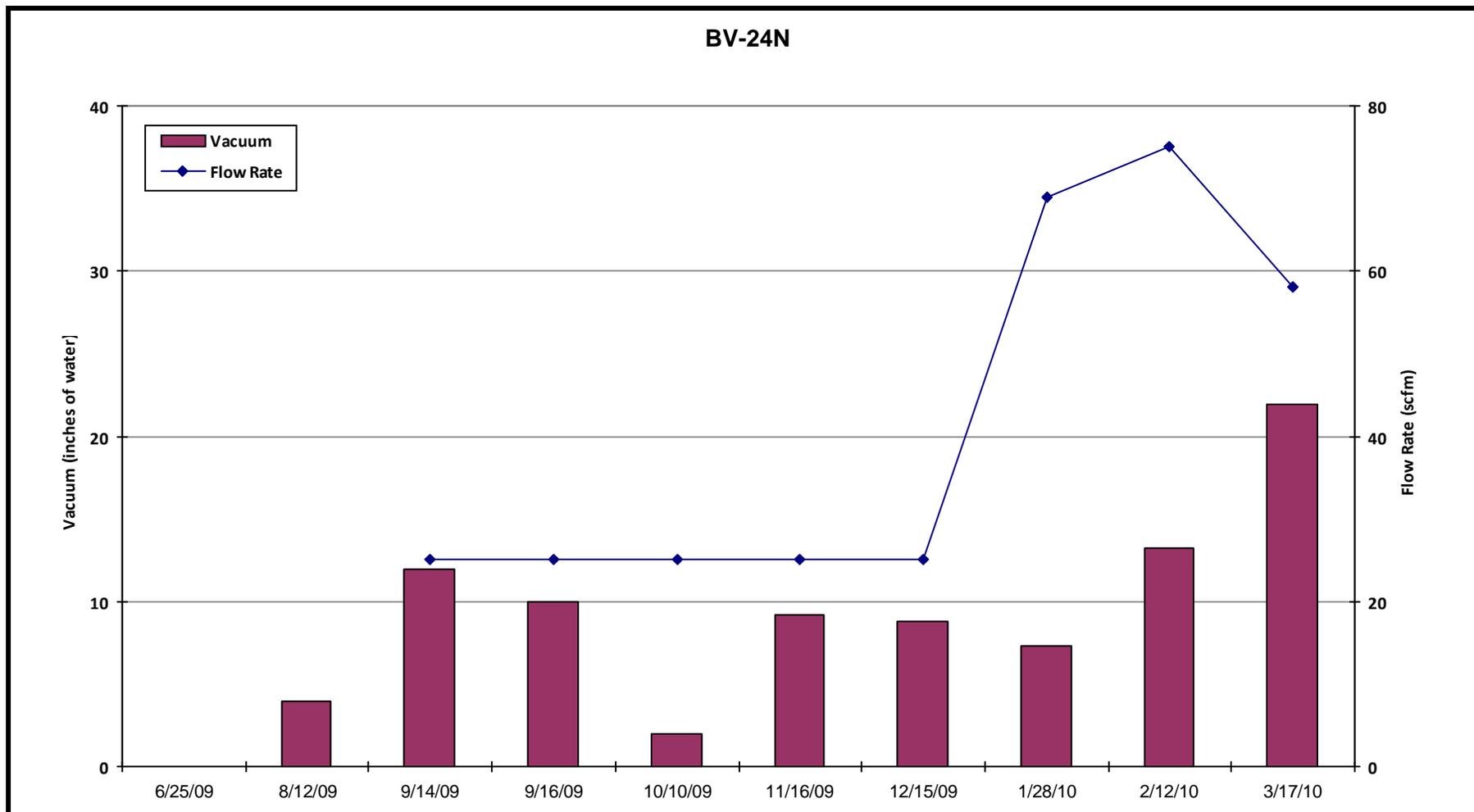


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-33
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



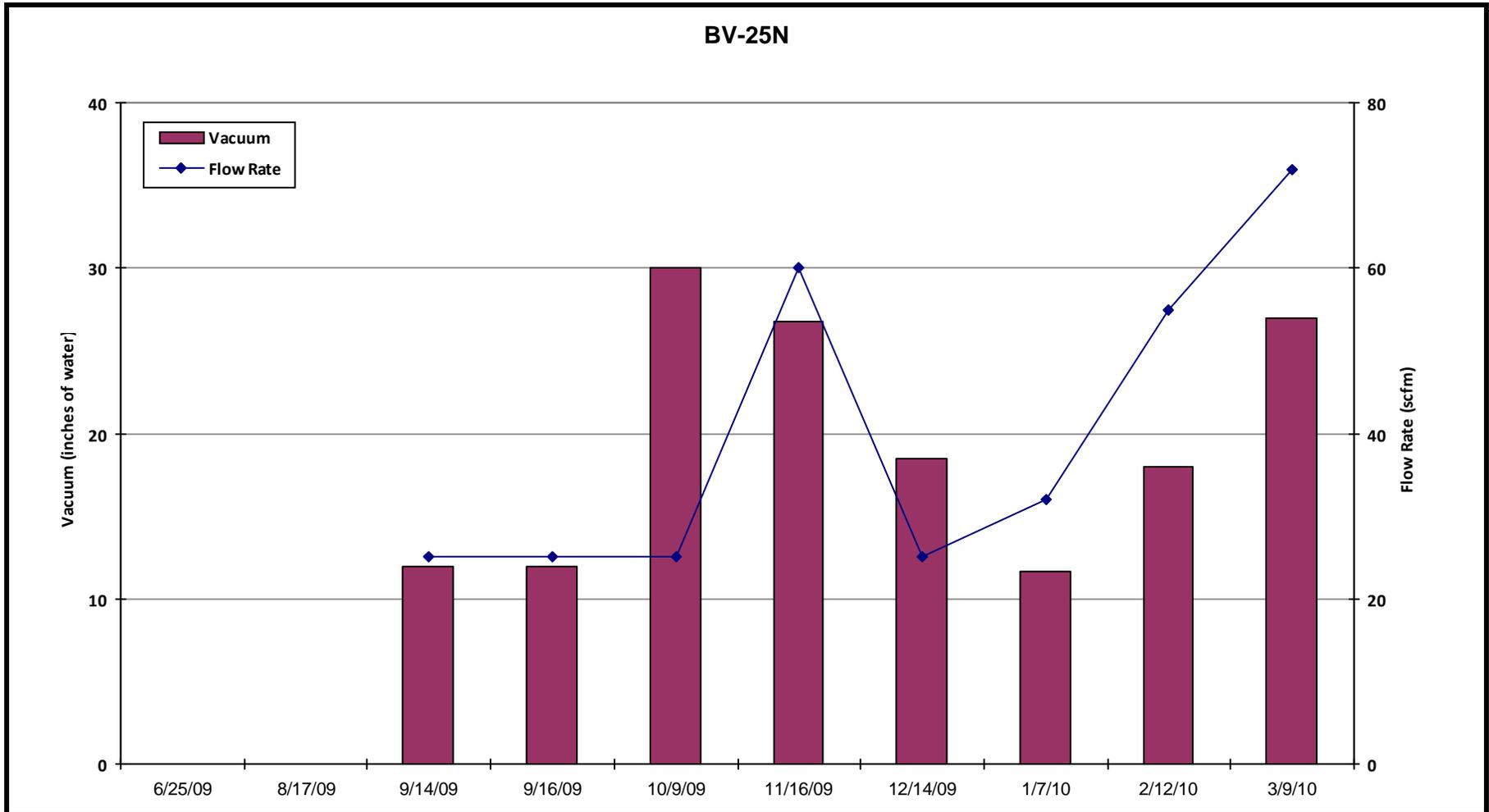


Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-34
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona

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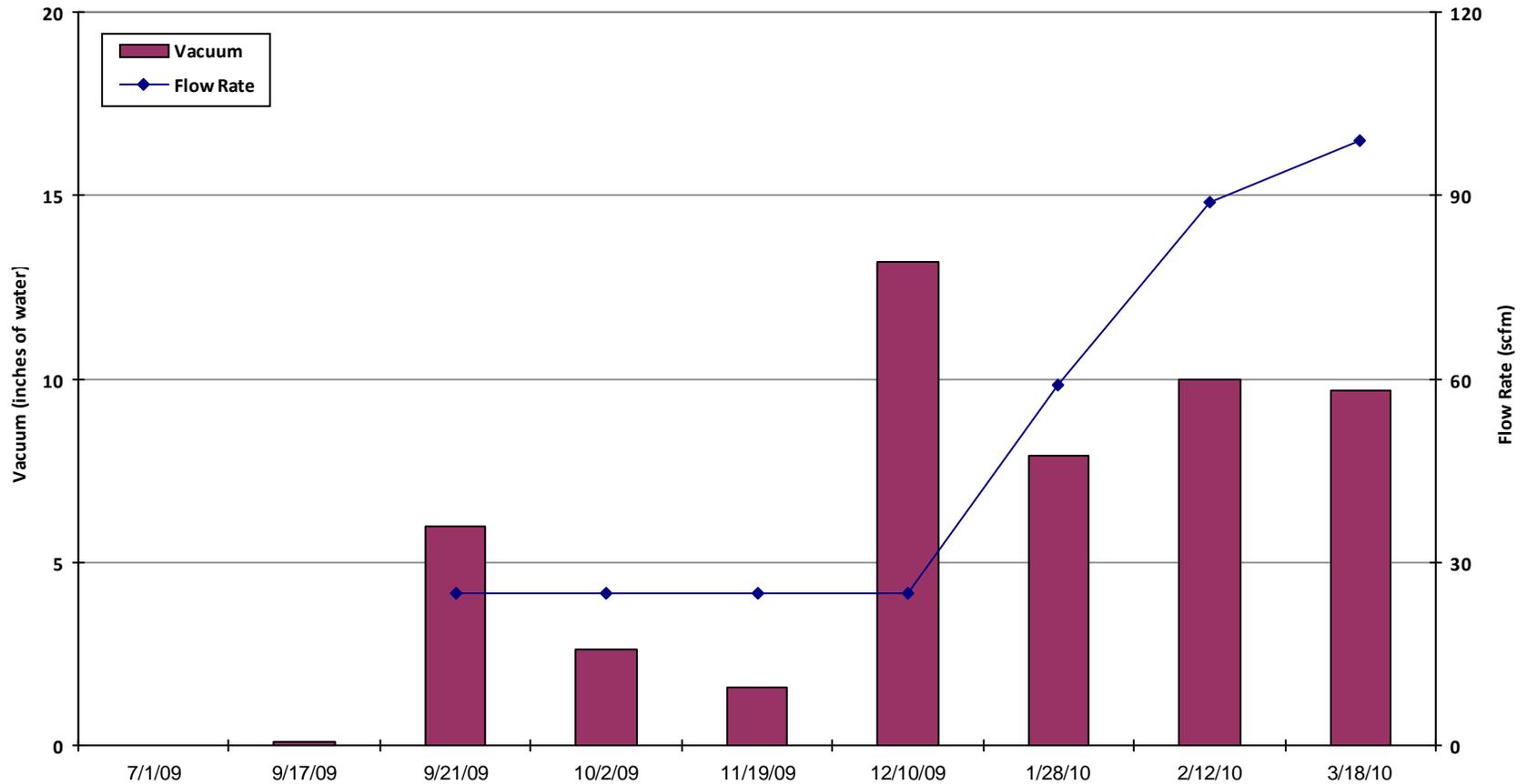
Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-35
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona

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PL-101A



Notes:

1. Graph includes available data for the time period May 1, 2009 through Mar 31, 2010. Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data. Data collected prior to these improvements is presented for completeness.
2. Negative vacuums, if any, indicate positive pressure.
3. Atmospheric pressure exists at zero inches of water.
4. If the flow rate is a less than value, half the given value is plotted (e.g. <50 plots at 25)
5. scfm = standard cubic feet per minute.

FIGURE C-36
FLOW RATES AND VACUUMS
FOR INJECTION/EXTRACTION WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



TABLE C-1

Summary of Flow Rates and Pressures for Injection/Extraction Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Pressure (inches of water)	Flow Rate (scfm)
ASE-20A	06/29/09	0.04	NM
	09/15/09	0.07	<50
	09/16/09	-12	<50
	10/09/09	-4	<50
	11/13/09	-14	<50
	12/09/09	-18	60
	01/26/10	-10.3	79
	02/18/10	-25	72
	03/17/10	-17	82
ASE-39A	06/27/09	0.01	NM
	09/16/09	-0.05	<50
	09/23/09	-8	<50
	10/02/09	-2.6	<50
	11/12/09	-0.25	<50
	12/10/09	-17.9	<50
	01/28/10	-9.3	15
	02/12/10	-30	44
	03/15/10	-38	59
ASE-41A	06/29/09	0	NM
	08/03/09	0	NM
	08/14/09	-20	NM
	09/08/09	-50	0
	09/17/09	-12	<50
	10/09/09	-8	<50
	11/12/09	-10	<50
	12/14/09	-13.5	80
	01/07/10	-7.5	70
	02/12/10	-10	80
03/09/10	-10.5	44	
ASE-46A	05/28/09	0	NM
	07/01/09	-8	NM
	07/31/09	0	NM
	09/11/09	-10	50
	09/25/09	-10	50
	10/09/09	-22	60
	11/18/09	-54	100
	12/11/09	-20.7	80
	01/26/10	-11	99
	02/19/10	-12	86
03/16/10	-9.7	95	

TABLE C-1

Summary of Flow Rates and Pressures for Injection/Extraction Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Pressure (inches of water)	Flow Rate (scfm)
ASE-51A	06/27/09	0.08	NM
	09/16/09	0.06	<50
	10/07/09	0	<50
	11/13/09	-26	60
	12/15/09	-18	70
	01/27/10	-11	20
	02/18/10	-12	66
	03/04/10	-11	89
	03/17/10	-18.3	72
ASE-53A	06/26/09	-0.5	NM
	09/16/09	0.01	<50
	10/15/09	-22	<50
	11/12/09	-12	<50
	12/11/09	-11	NM
	01/28/10	-11.1	44
	02/15/10	-24	56
	03/04/10	-20.2	63
ASE-56A	07/17/09	0	NM
	09/10/09	-40	25
	09/16/09	0.07	120
	10/10/09	-40	60
	11/12/09	-24	NM
	11/23/09	-0.7	<50
	12/10/09	-22.2	<50
	01/27/10	-12.8	44
	02/19/10	-51	77
03/04/10	-53.3	99	
ASE-57A	07/01/09	0.07	NM
	09/16/09	-0.17	NM
	10/02/09	-2.6	160
	11/12/09	-10	280
	12/10/09	-16	<50
	01/28/10	-5.3	52
	02/18/10	-10	99
	03/15/10	-14	99
ASE-59A	06/29/09	0	NM
	09/16/09	-0.04	<50
	10/14/09	-16	<50
	11/13/09	-28	<50
	12/11/09	-6.9	9
	01/08/10	-4.8	10
	02/11/10	-4.9	50
	03/18/10	-18.1	69

TABLE C-1

Summary of Flow Rates and Pressures for Injection/Extraction Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Pressure (inches of water)	Flow Rate (scfm)
ASE-66A	06/29/09	0.02	NM
	09/17/09	-0.19	NM
	10/12/09	-32	<50
	11/13/09	-28	70
	12/15/09	-15.7	<50
	01/07/10	-12.6	19
	02/18/10	-27	35
	03/08/10	-59	69
ASE-97A	09/11/09	NM	3.8
	12/10/09	NM	3.5
	02/10/10	-0.03	NM
	03/11/10	NM	3.8
BC-8B	06/01/09	0	NM
	09/11/09	NM	3.2
	11/05/09	0	NM
	12/10/09	NM	2.8
	02/10/10	-0.28	NM
	03/11/10	NM	3.2
BV-1N	05/22/09	0.05	NM
	06/08/09	-0.05	NM
	06/16/09	3	NM
	07/01/09	-32	NM
	07/31/09	0	NM
	09/11/09	-14	<50
	09/17/09	-12	<50
	10/08/09	-16	50
	11/18/09	-32	<50
	12/11/09	-17.8	60
	01/26/10	-9.3	63
	02/16/10	-12	89
	03/16/10	-22.8	89
	BV-2N	06/22/09	0
08/05/09		-8	NM
09/09/09		-26	75
09/17/09		-10	75
10/08/09		-11	80
11/13/09		-16.9	70
12/09/09		-24.9	80
01/28/10		-13.4	40
02/11/10		-31.5	26
03/16/10		-37.6	42

TABLE C-1

Summary of Flow Rates and Pressures for Injection/Extraction Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Pressure (inches of water)	Flow Rate (scfm)
BV-3N	07/01/09	-1	NM
	09/08/09	-40	0.5
	09/11/09	-9	0
	09/12/09	-8	<50
	09/25/09	-16	50
	10/09/09	-38	60
	11/19/09	-0.05	<50
	12/14/09	NM	60
	01/08/10	-25.1	178
	02/16/10	-15	99
	03/17/10	-9.5	99
BV-4N	06/08/09	-0.05	NM
	06/29/09	-2	NM
	07/30/09	0	NM
	09/10/09	-12	<50
	10/09/09	-14	<50
	11/18/09	-34.9	50
	12/09/09	-19	<50
	01/07/10	-17.5	60
	02/15/10	-20	60
	03/16/10	-17	69
BV-5	06/29/09	0	NM
	09/17/09	-0.15	NM
	10/01/09	-2.6	<50
	11/19/09	-1.5	<50
	12/10/09	-16.1	60
	01/28/10	-9.1	44
	02/18/10	-20	99
	03/08/10	-19	103
BV-6N	07/01/09	-0.025	NM
	09/17/09	-0.11	NM
	10/08/09	-20	<50
	11/16/09	-26.6	70
	12/15/09	-18.9	<50
	01/07/10	-11.5	70
	02/15/10	-26	34
	03/09/10	-29.1	103
BV-7N	06/22/09	0	NM
	09/17/09	0.05	NM
	10/14/09	-19	<50
	10/16/09	-20	<50
	11/16/09	-4.6	<50
	12/15/09	-2	<50
	01/07/10	-1.8	60
	02/15/10	-5	30
	03/08/10	-5.4	49

TABLE C-1

Summary of Flow Rates and Pressures for Injection/Extraction Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Pressure (inches of water)	Flow Rate (scfm)
BV-8N	06/17/09	0	NM
	09/17/09	-0.05	NM
	10/13/09	-2	NM
	11/19/09	0	<50
	12/10/09	-16.6	<50
	01/08/10	-1.7	7
	02/19/10	-0.5	28
	03/09/10	-14	44
BV-9N	05/21/09	0	NM
	05/27/09	1.55	NM
	05/29/09	-72	NM
	05/30/09	-76	NM
	05/31/09	-72	NM
	06/01/09	-90	NM
	06/02/09	-70	NM
	06/03/09	-74	NM
	06/04/09	-71	NM
	06/05/09	-73	NM
	06/06/09	NM	NM
	06/30/09	-25	NM
	07/31/09	-0.05	NM
	09/11/09	-19	<50
	09/25/09	-30	140
	10/08/09	-18	<50
	11/18/09	-48	<50
	12/14/09	-26.1	<50
	01/26/10	-12.6	34
	02/16/10	-32	77
03/08/10	-46	63	
BV-10N	05/22/09	0.05	NM
	06/10/09	0	NM
	06/30/09	-10	NM
	07/31/09	0	NM
	09/11/09	-10	<50
	10/09/09	-12	<50
	11/18/09	-22	<50
	12/14/09	-14.1	50
	01/26/10	-5.9	44
	02/16/10	-23	71
03/16/10	-23	45	

TABLE C-1

Summary of Flow Rates and Pressures for Injection/Extraction Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Pressure (inches of water)	Flow Rate (scfm)
BV-11N	06/17/09	0	NM
	08/07/09	-0.2	NM
	09/08/09	-52	0
	10/10/09	-18	<50
	11/17/09	-40	<50
	12/14/09	-7.5	<50
	01/28/10	-11.7	40
	02/16/10	-5	44
	03/15/10	-2	12
BV-12N	07/01/09	7.1	NM
	09/17/09	-10	NM
	10/06/09	-10	<50
	10/12/09	-70	<50
	11/17/09	-20	<50
	12/14/09	-8.3	<50
	01/28/10	-10.8	16
	02/16/10	-6	20
	03/15/10	-4	40
BV-13N	05/22/09	0	NM
	06/05/09	-40	NM
	06/06/09	NM	NM
	06/30/09	-25	NM
	07/30/09	0	NM
	09/11/09	-30	<50
	09/25/09	-26	>300
	10/08/09	-19	>300
	11/18/09	-80	>360
	12/14/09	-22.4	>300
	01/26/10	-13	34
	02/16/10	-51	84
	03/17/10	-43	44
BV-14N	07/01/09	0	NM
	09/17/09	0.01	NM
	10/09/09	-28	50
	10/10/09	-30	<50
	11/17/09	-28	<50
	12/15/09	-19.9	<50
	01/07/10	-11.1	70
	02/16/10	-30	60
	03/09/10	-32	44

TABLE C-1

Summary of Flow Rates and Pressures for Injection/Extraction Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Pressure (inches of water)	Flow Rate (scfm)
BV-15N	06/25/09	0	NM
	08/10/09	-9	NM
	09/09/09	-30	-15
	10/10/09	-16	<50
	11/19/09	-0.01	<50
	12/14/09	-7.5	<50
	01/28/10	-12.3	18
	02/16/10	-5	44
	03/15/10	-3	44
BV-16N	06/24/09	0.01	NM
	09/14/09	-12	<50
	09/16/09	-17	<50
	10/10/09	-30	<50
	11/16/09	-28.6	<50
	12/15/09	NM	<50
	01/28/10	-11.2	52
	02/15/10	-20	89
	03/17/10	-24.6	49
BV-17N	07/01/09	0	NM
	09/17/09	-0.3	NM
	10/05/09	-0.56	<50
	11/20/09	NM	110
	12/10/09	-8	210
	01/08/10	-10.5	58
	02/18/10	-2	99
	03/08/10	-1.9	118
BV-18N	07/01/09	0.04	NM
	08/03/09	0	NM
	09/08/09	-50	0
	09/17/09	-24	<50
	10/09/09	-16	<50
	11/19/09	0	<50
	12/14/09	-24.6	<50
	01/07/10	-17.7	50
	02/12/10	-23	50
03/16/10	-18	56	
BV-19N	05/21/09	0.2	NM
	06/18/09	-4	NM
	07/01/09	-25	NM
	07/31/09	0	NM
	09/11/09	-26	<50
	09/17/09	-15	<50
	10/08/09	-16	<50
	11/18/09	-34	<50
	12/11/09	-24.3	<50
	01/26/10	-10.5	40
	02/19/10	-15	56
	03/16/10	-13.3	52

TABLE C-1

Summary of Flow Rates and Pressures for Injection/Extraction Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Pressure (inches of water)	Flow Rate (scfm)
BV-20N	05/21/09	0.1	NM
	06/22/09	0.03	NM
	06/25/09	-18	NM
	07/31/09	0	NM
	09/09/09	-36	0
	09/17/09	-24	<50
	10/08/09	-18	<50
	11/19/09	0	<50
	12/11/09	-24.1	<50
	01/26/10	-10.8	60
	02/16/10	-22.3	45
	03/16/10	-18	63
BV-21N	06/25/09	0	NM
	09/17/09	-10	NM
	10/13/09	-16	<50
	11/17/09	-21.9	280
	12/15/09	-16.5	220
	01/26/10	-9.8	55
	02/19/10	-36	44
	03/04/10	-44.1	51
BV-22N	06/22/09	0.03	NM
	07/01/09	-1	NM
	07/30/09	0	NM
	09/08/09	-50	10
	10/09/09	-16	<50
	11/18/09	-38.5	50
	12/09/09	-23.3	50
	01/07/10	-18.1	46
	02/12/10	-19	27
	03/16/10	-17	66
BV-23N	06/25/09	0.02	NM
	09/14/09	-12	<30
	10/10/09	-20	75
	11/13/09	-28.6	80
	12/15/09	-18.3	60
	01/28/10	-11	89
	02/12/10	-13	63
	03/17/10	-22.4	99
BV-24N	06/25/09	-0.04	NM
	08/12/09	-4	NM
	09/14/09	-12	<50
	09/16/09	-10	<50
	10/10/09	-2	<50
	11/16/09	-9.2	<50
	12/15/09	-8.8	<50
	01/28/10	-7.3	69
	02/12/10	-13.2	75
	03/17/10	-21.9	58

TABLE C-1

Summary of Flow Rates and Pressures for Injection/Extraction Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	Pressure (inches of water)	Flow Rate (scfm)
BV-25N	06/25/09	0	NM
	08/17/09	0.05	NM
	09/14/09	-12	<50
	09/16/09	-12	<50
	10/09/09	-30	<50
	11/16/09	-26.8	60
	12/14/09	-18.5	<50
	01/07/10	-11.7	32
	02/12/10	-18	55
	03/09/10	-27	72
PL-101A	07/01/09	0.02	NM
	09/17/09	-0.1	NM
	09/21/09	-6	<50
	10/02/09	-2.6	<50
	11/19/09	-1.6	<50
	12/10/09	-13.2	<50
	01/28/10	-7.9	59
	02/12/10	-10	89
	03/18/10	-9.7	99
BV-26N	02/10/10	-0.07	NM
BV-27N	02/10/10	-0.1	NM
BV-28N	02/10/10	-0.05	NM
BV-29N	02/09/10	-0.02	NM
BV-30N	02/11/10	-0.29	NM
BV-31N	02/11/10	-0.28	NM
	02/19/10	-0.7	NM
BV-32N	02/11/10	-0.25	NM
BV-33N	02/11/10	-0.42	NM

Field improvements conducted in the First Quarter 2010 resulted in improved pressure versus flow data.
 Data collected prior to these improvements is presented for completeness.
 scfm = standard cubic feet per minute
 NM = not measured

Appendix D
Data Quality Evaluation and
Laboratory Analytical Reports - Soil Vapor

Data Quality Evaluation Report – First Quarter 2010 Soil-vapor Monitoring

Introduction

The objective of this data quality evaluation (DQE) report is to assess the data quality of analytical results for soil-vapor samples collected at the Honeywell International Inc. 34th Street Aerospace Engines Product Center. Samples were collected and analyzed to support performance evaluation of the biologically-enhanced soil-vapor extraction system (BSVE). The data may also be used to support future activities such as feasibility studies, risk assessments, fate and transport modeling, and remedial actions. The basis for this assessment includes: individual method requirements, guidelines from the United States Environmental Protection Agency (USEPA) *Contract Laboratory National Functional Guidelines for Organic Data Review* (USEPA, 1999), and the *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona (QAPP)* (CH2M HILL, 2007). This DQE report is intended as a general data quality assessment designed to summarize data issues.

The First Quarter 2009 soil-vapor sampling event was conducted in compliance with the updated QAPP entitled *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2007) and the QAPP addendum entitled *Quality Assurance Project Plan, Addendum 1, Honeywell 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2009), both approved by the Arizona Department of Environmental Quality on December 1, 2009. The QAPP addendum addresses the methods presented in this DQE.

Analytical Data

This DQE report covers 132 normal samples and 13 field duplicates. A list of samples and collection dates is included in Attachment D-1 at the end of this DQE report. Samples were collected between February 5 and February 19, 2010. These sample results were reported as 14 sample delivery groups (SDG) listed in Table D-1. The analyses were performed by Curtis & Tompkins Laboratory in Berkeley, California (CTBERK) and TestAmerica Analytical Testing Corporation in Phoenix, Arizona (TAMP).

TABLE D-1
 SDGs by Laboratory

SDG	Lab
218259	CTBERK
218329	CTBERK
218411	CTBERK
218479	CTBERK
PTB0615	TAMP
PTB0790	TAMP
PTB0791	TAMP
PTB0886	TAMP
PTB0910	TAMP
PTB0990	TAMP
PTB0991	TAMP
PTB1154	TAMP
PTB1209	TAMP
PTB1210	TAMP

Four methods were used to analyze the environmental samples. Samples were collected and shipped by overnight carrier to CTBERK or hand-delivered to TAMP for analysis. Samples were analyzed for one or more of the analytes/methods shown in Table D-2.

TABLE D-2
 Analytical Parameters by Laboratory

Parameter	Method	Lab
Volatile Organic Compounds	TO-15	CTBERK
Total Petroleum Hydrocarbon Speciation	TO-3M	CTBERK
Carbon Dioxide and Oxygen	ASTM D1946	CTBERK
Gasoline Hydrocarbons (C ₆ -C ₁₀)	SW8015M	TAMP

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

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

The assessment of data from TAMP included a review of: (1) the chain-of-custody documentation; (2) holding-time compliance; (3) the required field and laboratory quality

control samples; (4) flagging for method blanks; (5) LCS/LCSD recoveries; and, (6) laboratory duplicate precision.

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

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

The data flags are defined below:

- J = Analyte was present but reported value may not be accurate or precise.
- R = The result was rejected.
- U = Analyte was analyzed for but not detected at the specified detection limit.
- UJ = Analyte was not detected above the detection limit objective. However, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Findings

The overall summaries of the data validation findings are contained in the following sections below and summarized in Attachment D-2 at the end of this DQE report. Both the text section and Attachment D-2 contain only the instances where criteria exceedances impact data qualification (resulting in a validation flag being added to the data).

Holding Times

All holding-time criteria were met.

Sample Quantitation

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

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

TABLE D-3
 Samples Analyzed Diluted

Method	Sample ID	Dilution Factor(s)	Method	Sample ID	Dilution Factor(s)
SW8015M	ASE-20A-10Q1	5	TO-15	BV-4N-10Q1	518.4
SW8015M	ASE-51A-10Q1	5	TO-15	BV-6N-10Q1	484.8
SW8015M	ASE-53A-10Q1	5	TO-15	BV-7N-10Q1	501.6, 5016
SW8015M	BSVE-SVM-10Q1-013	5	TO-15	BV-8N-10Q1	542.4
SW8015M	BV-21N-10Q1	5	TO-15	P-24-M-10Q1	520.8
SW8015M	BV-6N-10Q1	5	TO-15	P-26-M-10Q1	5.730
SW8015M	BV-7N-10Q1	5	TO-15	P-30-L-10Q1	80.40
SW8015M	BV-8N-10Q1	5	TO-15	P-30-M-10Q1	504.0
TO-15	ASE-39A-10Q1	528.0	TO-15	P-35-10Q1	5.820
TO-15	ASE-41A-10Q1	77.60	TO-15	P-36-10Q1	4.240
TO-15	ASE-51A-10Q1	468.0	TO-15	P-46-M-10Q1	89.20
TO-15	ASE-53A-10Q1	501.6	TO-15	P-47-10Q1	7.140
TO-15	ASE-57A-10Q1	482.4	TO-15	PL-101A-10Q1	86.80
TO-15	ASE-59A-10Q1	501.6, 836.0	TO-15	PL-102A-10Q1	7.740
TO-15	ASE-66A-10Q1	501.6	TO-15	PMW-10-M-10Q1	7.320
TO-15	ASE-97A-10Q1	81.40	TO-15	PMW-3-U-10Q1	6.390
TO-15	BSVE-SVM-10Q1-004	5.790	TO-15	PMW-5-M-10Q1	8.250
TO-15	BSVE-SVM-10Q1-011	4.620	TO-15	PMW-5-U-10Q1	48.80
TO-15	BSVE-SVM-10Q1-015	86.40	TO-15	PMW-9-M-10Q1	7.440
TO-15	BV-13N-10Q1	91.60	TO-15	PMW-9-U-10Q1	4.800
TO-15	BV-14N-10Q1	499.2	TO-15	SMW-4-M-10Q1	5.340
TO-15	BV-16N-10Q1	489.6	TO-15	SMW-6-L-10Q1	7.770
TO-15	BV-17N-10Q1	41.80	TO-15	SMW-7-L-10Q1	6.390
TO-15	BV-18N-10Q1	542.4	TO-15	SMW-7-U-10Q1	4.840
TO-15	BV-19N-10Q1	549.6	TO-15	SVV-1-10Q1	6.960
TO-15	BV-21N-10Q1	520.8	TO-15	SVV-3-10Q1	6.030
TO-15	BV-25N-10Q1	542.4	TO-15	SVV-4-10Q1	5.880
TO-15	BV-27N-10Q1	477.6	TO-3M	BV-13N-10Q1	4.050
TO-15	BV-2N-10Q1	499.2	TO-15	BV-4N-10Q1	518.4

Calibration

All initial and continuing calibration criteria were met.

Method Blanks

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

Field Blanks

Field blanks were not collected with this event.

Field Duplicates

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

TABLE D-4
List of Field Duplicates

Field Duplicate Sample ID	Associated Parent Sample ID
BSVE-SVM-10Q1-001	PMW-6-M-10Q1
BSVE-SVM-10Q1-002	PMW-5-U-10Q1
BSVE-SVM-10Q1-004	P-26-M-10Q1
BSVE-SVM-10Q1-006	BC-18-10Q1
BSVE-SVM-10Q1-008	P-28-U-10Q1
BSVE-SVM-10Q1-009	PL-102A-10Q1
BSVE-SVM-10Q1-010	SMW-5-U-10Q1
BSVE-SVM-10Q1-011	P-32-10Q1
BSVE-SVM-10Q1-012	BV-1N-10Q1
BSVE-SVM-10Q1-013	ASE-20A-10Q1
BSVE-SVM-10Q1-014	ASE-56A-10Q1
BSVE-SVM-10Q1-015	BV-17N-10Q1
BSVE-SVM-10Q1-016	BV-26N-10Q1

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

The RPD of gasoline range hydrocarbons C₆C₁₀ was above the acceptance criterion for one field duplicate set for Method SW8015M. Two detected results for the normal and field duplicate were qualified as estimated and flagged “J.”

The RPD of C₆₊ as n-hexane was above the acceptance criterion for one field duplicate set for Method TO-3M. Two detected results for the normal and field duplicate were qualified as estimated and flagged “J.”

The RPDs of 10 analytes were above the acceptance criteria for one or more of three field duplicate sets for Method TO-15. Thirty-five detected results for the normals and field duplicates were qualified as estimated and flagged “J”; one non-detected result for a normal sample was qualified as estimated and flagged “UJ.”

These qualified results are presented in more detail in Attachment D-2.

Laboratory Duplicates

The RPD of gasoline range hydrocarbons C₆-C₁₀ was above the acceptance criterion in one laboratory duplicate set for Method SW8015M. One detected result in the normal sample was qualified as estimated and flagged “J.” This qualified result is presented in more detail in Attachment D-2.

Surrogates

All surrogates recovery criteria were met with the following exceptions:

- A surrogate was recovered less than the lower control limit in sample BV-1N-10Q1 for Method TO-3M, indicating associated sample results are possibly biased low. Five associated non-detected results were qualified as estimated and flagged “UJ.”
- A surrogate was recovered less than the lower control limit in sample BV-1N-10Q1 for Method TO-15, indicating associated sample results are possibly biased low. One associated detected result was qualified as estimated and flagged “J”; 24 associated non-detected results were qualified as estimated and flagged “UJ.”

Laboratory Control Samples

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

Internal Standards

All internal standard criteria were met.

Tentatively Identified Compounds

Tentatively identified compounds were not reported by the laboratory.

Chain of Custody

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

Overall Assessment

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

1. No data were rejected and completeness was 100 percent for all method/analyte combinations.
2. No data were qualified due to low-level blank contamination.
3. Samples were analyzed diluted resulting in raised RLs for non-detected analytes.
4. Field duplicate RPD exceedances were observed for Methods SW8015M, TO-3M and TO-15; 40 results were qualified as estimated.
5. One laboratory duplicate RPD exceedance was observed for Method SW8015M; one result was qualified as estimated.
6. Surrogate recovery exceedances were observed for Methods TO-3M and TO-15; 30 results were qualified as estimated.

7. Overall, the precision and accuracy of the data, as measured by field and laboratory quality control indicators, indicates that the data are usable for project objectives.

References

CH2M HILL 2007. *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona*. September 20.

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

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

ATTACHMENT D-1

Samples Associated with DQE

 SAMPLES ASSOCIATED WITH DQE

Field Sample ID	Sample Date	Sample Type
BSVE-SVM-10Q1-002	02/05/2010	FD
BSVE-SVM-10Q1-004	02/09/2010	FD
BSVE-SVM-10Q1-009	02/09/2010	FD
BSVE-SVM-10Q1-016	02/10/2010	FD
BSVE-SVM-10Q1-006	02/10/2010	FD
BSVE-SVM-10Q1-010	02/10/2010	FD
BSVE-SVM-10Q1-001	02/11/2010	FD
BSVE-SVM-10Q1-008	02/11/2010	FD
BSVE-SVM-10Q1-012	02/16/2010	FD
BSVE-SVM-10Q1-011	02/16/2010	FD
BSVE-SVM-10Q1-013	02/18/2010	FD
BSVE-SVM-10Q1-015	02/18/2010	FD
BSVE-SVM-10Q1-014	02/19/2010	FD
PMW-5-U-10Q1	02/05/2010	REG
PMW-9-M-10Q1	02/05/2010	REG
PMW-9-U-10Q1	02/05/2010	REG
PMW-10-M-10Q1	02/05/2010	REG
PMW-5-M-10Q1	02/05/2010	REG
PMW-8-M-10Q1	02/08/2010	REG
PMW-7-U-10Q1	02/08/2010	REG
PMW-7-M-10Q1	02/08/2010	REG
PMW-15-U-10Q1	02/08/2010	REG
ASE-61A-10Q1	02/08/2010	REG
PMW-15-M-10Q1	02/08/2010	REG
PMW-8-U-10Q1	02/08/2010	REG
ASE-60A-10Q1	02/08/2010	REG
PL-102A-10Q1	02/09/2010	REG
P-25-L-10Q1	02/09/2010	REG
PL-2102-10Q1	02/09/2010	REG
P-47-10Q1	02/09/2010	REG
P-46-U-10Q1	02/09/2010	REG
P-46-M-10Q1	02/09/2010	REG
P-46-L-10Q1	02/09/2010	REG
P-26-M-10Q1	02/09/2010	REG

SAMPLES ASSOCIATED WITH DOE

Field Sample ID	Sample Date	Sample Type
P-25-M-10Q1	02/09/2010	REG
P-26-U-10Q1	02/09/2010	REG
BV-29N-10Q1	02/09/2010	REG
ASE-54A-10Q1	02/09/2010	REG
P-25-U-10Q1	02/09/2010	REG
SMW-3-M-10Q1	02/09/2010	REG
SMW-3-L-10Q1	02/09/2010	REG
SMW-2-M-10Q1	02/09/2010	REG
SMW-1-U-10Q1	02/09/2010	REG
P-26-L-10Q1	02/09/2010	REG
SMW-1-M-10Q1	02/09/2010	REG
SMW-1-L-10Q1	02/09/2010	REG
SMW-12-U-10Q1	02/09/2010	REG
SMW-3-U-10Q1	02/09/2010	REG
SMW-12-M-10Q1	02/09/2010	REG
SMW-4-L-10Q1	02/10/2010	REG
SMW-6-M-10Q1	02/10/2010	REG
SMW-5-U-10Q1	02/10/2010	REG
SMW-5-M-10Q1	02/10/2010	REG
SMW-4-M-10Q1	02/10/2010	REG
SMW-6-U-10Q1	02/10/2010	REG
BV-26N-10Q1	02/10/2010	REG
BV-27N-10Q1	02/10/2010	REG
BV-28N-10Q1	02/10/2010	REG
SMW-4-U-10Q1	02/10/2010	REG
PMW-4-M-10Q1	02/10/2010	REG
ASE-97A-10Q1	02/10/2010	REG
PMW-1-U-10Q1	02/10/2010	REG
PMW-1-M-10Q1	02/10/2010	REG
SMW-6-L-10Q1	02/10/2010	REG
BC-18-10Q1	02/10/2010	REG
SMW-7-L-10Q1	02/10/2010	REG
BC-8B-10Q1	02/10/2010	REG
PMW-10-U-10Q1	02/10/2010	REG
PMW-4-U-10Q1	02/10/2010	REG
SMW-8-U-10Q1	02/10/2010	REG
SMW-8-M-10Q1	02/10/2010	REG
SMW-7-U-10Q1	02/10/2010	REG
SMW-7-M-10Q1	02/10/2010	REG

SAMPLES ASSOCIATED WITH DOE

Field Sample ID	Sample Date	Sample Type
BV-31N-10Q1	02/11/2010	REG
BV-32N-10Q1	02/11/2010	REG
P-24-L-10Q1	02/11/2010	REG
ASE-59A-10Q1	02/11/2010	REG
BV-33N-10Q1	02/11/2010	REG
BV-30N-10Q1	02/11/2010	REG
P-30-L-10Q1	02/11/2010	REG
P-24-M-10Q1	02/11/2010	REG
P-30-U-10Q1	02/11/2010	REG
PMW-6-U-10Q1	02/11/2010	REG
PMW-6-M-10Q1	02/11/2010	REG
PMW-14-M-10Q1	02/11/2010	REG
BV-2N-10Q1	02/11/2010	REG
P-30-M-10Q1	02/11/2010	REG
P-28-U-10Q1	02/11/2010	REG
P-28-M-10Q1	02/11/2010	REG
P-28-L-10Q1	02/11/2010	REG
PMW-2-M-10Q1	02/11/2010	REG
P-24-U-10Q1	02/11/2010	REG
PMW-2-U-10Q1	02/11/2010	REG
BV-22N-10Q1	02/12/2010	REG
ASE-39A-10Q1	02/12/2010	REG
ASE-41A-10Q1	02/12/2010	REG
PL-101A-10Q1	02/12/2010	REG
BV-18N-10Q1	02/12/2010	REG
BV-25N-10Q1	02/12/2010	REG
BC-7A-10Q1	02/12/2010	REG
PMW-3-U-10Q1	02/12/2010	REG
BV-23N-10Q1	02/12/2010	REG
BV-24N-10Q1	02/12/2010	REG
PMW-3-M-10Q1	02/12/2010	REG
BV-6N-10Q1	02/15/2010	REG
BV-7N-10Q1	02/15/2010	REG
BV-4N-10Q1	02/15/2010	REG
BV-16N-10Q1	02/15/2010	REG
ASE-53A-10Q1	02/15/2010	REG
BV-12N-10Q1	02/16/2010	REG
P-41-10Q1	02/16/2010	REG
P-32-10Q1	02/16/2010	REG

SAMPLES ASSOCIATED WITH DOE

Field Sample ID	Sample Date	Sample Type
SVV-1-10Q1	02/16/2010	REG
BV-20N-10Q1	02/16/2010	REG
BV-13N-10Q1	02/16/2010	REG
BV-9N-10Q1	02/16/2010	REG
BV-3N-10Q1	02/16/2010	REG
BV-10N-10Q1	02/16/2010	REG
BV-11N-10Q1	02/16/2010	REG
BV-1N-10Q1	02/16/2010	REG
BV-15N-10Q1	02/16/2010	REG
SVV-3-10Q1	02/17/2010	REG
SVV-2-10Q1	02/17/2010	REG
SVV-4-10Q1	02/17/2010	REG
P-35-10Q1	02/17/2010	REG
P-31-10Q1	02/17/2010	REG
P-33-10Q1	02/17/2010	REG
P-36-10Q1	02/17/2010	REG
P-37-10Q1	02/17/2010	REG
P-39-10Q1	02/17/2010	REG
P-38-10Q1	02/17/2010	REG
ASE-57A-10Q1	02/18/2010	REG
ASE-51A-10Q1	02/18/2010	REG
BV-5-10Q1	02/18/2010	REG
ASE-20A-10Q1	02/18/2010	REG
BV-14N-10Q1	02/18/2010	REG
BV-17N-10Q1	02/18/2010	REG
ASE-66A-10Q1	02/18/2010	REG
BV-21N-10Q1	02/19/2010	REG
BV-31N-10Q1B	02/19/2010	REG
BSVE-INLET-10Q1	02/19/2010	REG
ASE-46A-10Q1	02/19/2010	REG
BV-8N-10Q1	02/19/2010	REG
BV-19N-10Q1	02/19/2010	REG
ASE-56A-10Q1	02/19/2010	REG

Notes:

FD = Field duplicate

REG = Regular sample

Validation Findings

VALIDATION FINDINGS

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8015M	ASE-20A-10Q1	GASOLINE HYDROCARBONS: C6-C10	2700	ppmV	J	FD
TO-15	BSVE-SVM-10Q1-009	1,2,4-TRIMETHYLBENZENE	650	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-009	1,3,5-TRIMETHYLBENZENE	180	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-009	BENZENE	44	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-009	CHLOROFORM	98	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-009	ETHYLBENZENE	82	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-009	XYLENES, M & P	200	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-009	XYLENES, TOTAL	200	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-011	1,2,4-TRIMETHYLBENZENE	220	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-011	1,3,5-TRIMETHYLBENZENE	52	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-011	ETHYLBENZENE	19	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-011	N-HEXANE	110	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-011	TRICHLOROETHENE	1700	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-011	XYLENES, M & P	65	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-011	XYLENES, TOTAL	75	µg/m ³	J	FD
TO-3M	BSVE-SVM-10Q1-012	C6+ as n-Hexane	14	µg/L	J	FD
SW8015M	BSVE-SVM-10Q1-013	GASOLINE HYDROCARBONS: C6-C10	1900	ppmV	J	FD
TO-15	BSVE-SVM-10Q1-015	ETHYLBENZENE	590	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-015	O-XYLENE	450	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-015	XYLENES, M & P	1900	µg/m ³	J	FD
TO-15	BSVE-SVM-10Q1-015	XYLENES, TOTAL	2400	µg/m ³	J	FD
TO-15	BV-17N-10Q1	ETHYLBENZENE	220	µg/m ³	J	FD
TO-15	BV-17N-10Q1	O-XYLENE	150	µg/m ³	J	FD
TO-15	BV-17N-10Q1	XYLENES, M & P	660	µg/m ³	J	FD
TO-15	BV-17N-10Q1	XYLENES, TOTAL	810	µg/m ³	J	FD
TO-15	BV-1N-10Q1	1,1,1-TRICHLOROETHANE	65	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	1,1-DICHLOROETHANE	180	µg/m ³	J	SSL
TO-15	BV-1N-10Q1	1,1-DICHLOROETHENE	48	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	1,2-DICHLOROETHANE	49	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	1,4-DICHLOROBENZENE	72	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	1,4-DIOXANE	43	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	BENZENE	38	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	CARBON TETRACHLORIDE	75	µg/m ³	UJ	SSL

VALIDATION FINDINGS

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
TO-15	BV-1N-10Q1	CHLOROETHANE	32	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	CHLOROFORM	59	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	CIS-1,2-DICHLOROETHENE	48	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	ETHYLBENZENE	52	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	FREON 113	92	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	FREON 12	59	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	METHYL TERT-BUTYL ETHER	43	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	METHYLENE CHLORIDE	42	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	O-XYLENE	52	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	TETRACHLOROETHENE	81	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	TOLUENE	45	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	TRANS-1,2-DICHLOROETHENE	48	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	TRICHLOROETHENE	64	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	TRICHLOROFLUOROMETHANE	67	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	VINYL CHLORIDE	31	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	XYLENES, M & P	52	µg/m ³	UJ	SSL
TO-15	BV-1N-10Q1	XYLENES, TOTAL	100	µg/m ³	UJ	SSL
TO-3M	BV-1N-10Q1	C2 as Ethane	2.5	µg/L	UJ	SSL
TO-3M	BV-1N-10Q1	C3 as Propane	3.6	µg/L	UJ	SSL
TO-3M	BV-1N-10Q1	C4 as n-Butane	4.8	µg/L	UJ	SSL
TO-3M	BV-1N-10Q1	C5 as n-Pentane	5.9	µg/L	UJ	SSL
TO-3M	BV-1N-10Q1	C6 as n-Hexane	7.0	µg/L	UJ	SSL
TO-3M	BV-1N-10Q1	C6+ as n-Hexane	7.9	µg/L	J	FD
SW8015M	BV-24N-10Q1	GASOLINE HYDROCARBONS: C6-C10	480	ppmV	J	LDP
TO-15	P-32-10Q1	1,2,4-TRIMETHYLBENZENE	540	µg/m ³	J	FD
TO-15	P-32-10Q1	1,3,5-TRIMETHYLBENZENE	120	µg/m ³	J	FD
TO-15	P-32-10Q1	ETHYLBENZENE	34	µg/m ³	J	FD
TO-15	P-32-10Q1	N-HEXANE	4.1	µg/m ³	UJ	FD
TO-15	P-32-10Q1	TRICHLOROETHENE	1000	µg/m ³	J	FD
TO-15	P-32-10Q1	XYLENES, M & P	130	µg/m ³	J	FD
TO-15	P-32-10Q1	XYLENES, TOTAL	140	µg/m ³	J	FD
TO-15	PL-102A-10Q1	1,2,4-TRIMETHYLBENZENE	290	µg/m ³	J	FD
TO-15	PL-102A-10Q1	1,3,5-TRIMETHYLBENZENE	90	µg/m ³	J	FD
TO-15	PL-102A-10Q1	BENZENE	25	µg/m ³	J	FD
TO-15	PL-102A-10Q1	CHLOROFORM	69	µg/m ³	J	FD
TO-15	PL-102A-10Q1	ETHYLBENZENE	42	µg/m ³	J	FD
TO-15	PL-102A-10Q1	XYLENES, M & P	110	µg/m ³	J	FD
TO-15	PL-102A-10Q1	XYLENES, TOTAL	130	µg/m ³	J	FD

VALIDATION FINDINGS

Method	NativeID	Analyte	Final Result	Units	Final Flag	Validation Reason
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Notes:

FD = Field duplicate relative percent difference criterion exceeded
LDP = Laboratory duplicate relative percent difference criterion exceeded
SSL = Surrogate recovery less than the lower control limit
ppmV = Parts per million by volume
µg/L = Micrograms per liter
µg/m³ = Micrograms per cubic meter



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 218259
ANALYTICAL REPORT

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 371451.SV.99.IS.0109
Location : BSVE QTR SVM
Level : III

Table with 4 columns: Sample ID, Lab ID, Sample ID, Lab ID. Lists various sample identifiers and their corresponding lab IDs.

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

Signature: Senior Program Manager

Date: 03/02/2010

CASE NARRATIVE

Laboratory number: 218259
Client: CH2M Hill
Project: 371451.SV.99.IS.0109
Location: BSVE QTR SVM
Request Date: 02/11/10
Samples Received: 02/11/10

This data package contains sample and QC results for thirty eight air samples, requested for the above referenced project on 02/11/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

Volatile Organics in Air by MS (EPA TO-15):

High recovery was observed for 1,2,4-trimethylbenzene in the BSD for batch 160177; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.

High RPD was observed for benzene in the BS/BSD for batch 160248; this analyte was not detected at or above the RL in the associated samples.

BV-28N-10Q1 (lab # 218259-002) was diluted due to high non-target analytes.

Many samples were diluted due to problematic matrix.

No other analytical problems were encountered.

Volatile Organics in Air GC (ASTM D1946 and EPA TO-3):

No analytical problems were encountered.

Chain of Custody

218259

Curtis & Tompkins Laboratories		Honeywell										Chain Of Custody / Analysis Request	
2223 5th St. Berkeley, CA 94710 510-204-2221		Privileged & Confidential		Tuesdai Powers, Critigen Melanie West, Critigen		Sky Harbor AZ		Phase: Sampling Program		Lab Proj # (SDG):		AESI Ref: 40210.49633	
Sampling Co.: CH2MHILL		EDD To:		Sampler: <i>Lars Peterson</i>		Location of Site: Phoenix, AZ		Preservative: 0 0 0 0		Lab ID		COC#: 37380	
Client Contact: (name, co., address) CH2M HILL 2825 South Plaza Drive, Suite 300 Tempe, AZ 85282		Analysis Turnaround Time (TAT): 10		Full Report TAT: 10		VOCs (TO-15)		Field Filtered Sample ?		Site Name:		Lab Job #	
Preliminary Data To: Tuesdai Powers, Critigen, Melanie West, Critigen		Sample Receipt Acknowledgement To: Tuesdai Powers, Critigen, Melanie West, Critigen		Hard Copy To: Tuesdai Powers and Melanie West, Critigen		Invoice To: Honeywell/Copy Berney Kidd		Composite/Grab		Authorized User: Honeywell		CTBERK	
Sample Identification		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		SKYHARBOR	
Location ID		Start Depth (ft)		End Depth (ft)		Field Sample ID		Units		Sampling Method (code)		Canister Serial No.	
1	BV-24N	51.5	71.59	8V-24N-1001	SV	2/9/10	2339	AIR	REG 1	G	N	X	00128
2	BV-25N	50.0	73.01	8V-25N-1001	SV	2/10/10	0022	AIR	REG 1	G	N	X	00073
3	BV-27N	50.0	73.36	8V-27N-1001	SV	2/10/10	0113	AIR	REG 1	G	N	X	00137
4	BV-26N	51.0	74.58	8V-26N-1001	SV	2/10/10	0154	AIR	REG 1	G	N	X	00065
5	ASE-97A	51.0	78.21	8VE-SVM-1001-016	SV	2/10/10	0100	AIR	REG 1	G	N	X	00149
6	BC-18	60.0	80.0	8E-97A-1001	SV	2/10/10	0236	AIR	REG 1	G	N	X	00188
7	SMW-8	5.0	9.0	8C-18-1001	SV	2/10/10	0314	AIR	REG 1	G	N	X	00131
8	SMW-8	20.0	25.0	8VE-SVM-1001-006	SV	2/10/10	0200	AIR	REG 1	G	N	X	00193
9	SMW-8	51.0	71.40	8M-8-V-1001	SV	2/10/10	0343	AIR	REG 1	G	N	X	00178
10	BC-8B	51.0	71.40	8M-8-M-1001	SV	2/10/10	0354	AIR	REG 1	G	N	X	00182
11	BC-8B	51.0	71.40	8B-8B-1001	SV	2/10/10	0447	AIR	REG 1	G	N	X	00102
12													

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
<i>Jill Lars Peterson</i>	CH2M HILL	<i>Bernie Foehn</i>	CH2M HILL	Cooler Temp.	
<i>Bernie Foehn</i>	CH2M HILL	<i>FedeX</i>		Condition	Custody Seals Intact

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

Recd by: [Signature]
 2-11-10 13:15
 CT

218259

Curtis & Tompkins Laboratories 2323 8th St. Berkeley, CA 94710 510-204-2221		Honeywell Chain Of Custody / Analysis Request		AESI Ref: 40210.49633 COC#: 37380											
Privileged & Confidential Tuesday Powers, Critigen Melanie West, Critigen		Sky Harbor AZ		Lab Proj # (SDG): Lab ID: CTBERK Site ID: SKYHARBOR											
EDD To: Tuesday Powers, Critigen Melanie West, Critigen		Location of Site: Phoenix, AZ		Phase: Sampling Program BSYE QTR SVM											
Sampler: M. May		Preservative: 0 0 0 0		Lab Job # Authorized User: Honeywell											
PO #: 5101516 Analysis Turnaround Time (TAT): 10 Consultant		Field Filtered Sample ? Composite/Grab		Text & Excel File Drive Order											
Full Report TAT: 10		VOCs (TO-15) Methane (TO-3M) TPH (TO-3M) OZ and COZ (ASTM 1946)		Copyright AESI Version 8.0 Unauthorized use strictly prohibited.											
Sample Date		Sample Time		Sample Type											
Sample Matrix		Sample Purpose		Sample # of Cont.											
Sample ID		Field Sample ID		Units											
Start Depth (ft)		End Depth (ft)		Sampling Method (code)											
Location ID		Field Sample ID		Canister Serial No.											
12	PMW-9-U	5	10	PMW-9-U-1091	SV	2-5-10 1116	AIR	reg	1	G	N	X	X	X	00136
13	PMW-9-M	20	25	PMW-9-M-1091	SV	2-5-10 1147	AIR	reg	1	G	N	X	X	X	00190
14	PMW-10-M	20	25	PMW-10-M-1091	SV	2-5-10 1024	AIR	reg	1	G	N	X	X	X	00139
15	PMW-5-U	5	10	PMW-5-U-1091	SV	2-5-10 1455	AIR	reg	1	G	N	X	X	X	00164
16	PMW-5-M	20	25	PMW-5-M-1091	SV	2-5-10 1549	AIR	reg	1	G	N	X	X	X	00160
17	BSYE-5-U	5	10	BSYE-5-U-1091-002	SV	2-5-10 1500	AIR	reg	1	G	N	X	X	X	00081
18															
19															
20															
21															
22															
Relinquished by: CH2MHILL Date/Time: 2-5-10 1640 Company: Berman Feuch		Received by: CH2MHILL Date/Time: 2/5/10 Company: CH2MHILL		Condition: CH2MHILL Cooler Temp.											
Relinquished by: Berman Feuch Date/Time: 2/10/10 Company: Berman Feuch		Received by: Fed Ex Date/Time: 2-11-10 Company:		Condition: Cooler Temp.											
Preservatives: (Other, Specify): 0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 pH<2); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 pH<2); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)															

REC'D BY: *[Signature]*
 2-11-10 CTT
 1315

218259

Curtis & Tompkins Laboratories		Honeywell		Chain Of Custody / Analysis Request		AESI Ref: 40210.49633	
2323 5th St. Berkeley, CA 94710 510-204-2221		Privileged & Confidential		Site Name: Sky Harbor AZ		COC#: 37380	
Sampling Co.: CH2MHILL		Tuesdai Powers, Critigen Melanie West, Critigen		Phase: Sampling Program		Lab Proj # (SDG):	
Client Contact: (name, co., address) CH2M HILL 2625 South Plaza Drive, Suite 300 Tempe, AZ 85282		Sampler: M. M. G. M. Analysis Turnaround Time (TAT): 10		Location of Site: Phoenix, AZ		Lab ID	
Preliminary Data To: Tuesdai Powers, Critigen, Melanie West, Critigen		Full Report TAT: 10		Preservative: 0 0 0 0		Site ID	
Sample Receipt Acknowledgement To: Tuesdai Powers, Critigen, Melanie West, Critigen				Field Filtered Sample ?		Lab Job #	
Hard Copy To: Tuesdai Powers and Melanie West, Critigen				Composites/Grab		Authorized User: Honeywell	
Invoice To: Honeywell/Copy Berney Kidd				Units		Text & Excel File Drive Excel & Text File Order	
Sample Identification		Sample Matrix		Sample Purpose		Sampling Method (code)	
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Canister Serial No.
28 1 PMW-8-U	5	10	PMW-8-U-1001	2-8-10	1200	SV	00191
29 2 PMW-8-M	20	25	PMW-8-M-1001	2-8-10	1230	SV	00135
30 3 PMW-7-U	5	10	PMW-7-U-1001	2-8-10	1606	SV	00192
31 4 PMW-7-M	20	25	PMW-7-M-1001	2-8-10	1632	SV	00144
32 5 SMW-1-U	5	9	SMW-1-U-1001	2-9-10	0957	SV	00067
33 6 SMW-1-M	20	25	SMW-1-M-1001	2-9-10	1024	SV	00061
34 7 SMW-1-L	55	95	SMW-1-L-1001	2-9-10	1110	SV	00197
35 8 SMW-2-M	20	25	SMW-2-M-1001	2-9-10	1336	SV	00058
36 9 SMW-3-U	5	9	SMW-3-U-1001	2-9-10	1504	SV	00196
37 10 SMW-3-M	20	25	SMW-3-M-1001	2-9-10	1533	SV	00101
38 11 SMW-3-L	55	95	SMW-3-L-1001	2-9-10	1610	SV	00099
12							

Relinquished by: <i>[Signature]</i>	Company: CH2MHILL	Received by: <i>[Signature]</i>	Company: CH2MHILL
Date/Time: 2-9-10 1800	Date/Time: 2/9/10 1800	Condition: Cooler Temp.	Condition: Cooler Temp.
Relinquished by: <i>[Signature]</i>	Company: CH2MHILL	Received by: <i>[Signature]</i>	Company: CH2MHILL
Date/Time: 2/10/10 1500	Date/Time: 2-11-10 13:15	Condition: Cooler Temp.	Condition: Cooler Temp.

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

4

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218259 Date Received 2-11-10 Number of coolers 2 BX'S
Client CH2M TAZ Project BSVE QTR SUM

Date Opened 2-11-10 By (print) S. EVANS (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX MSTR # YES NO
Shipping info 8717 5796 8243

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many 2 EA Name SIGNATURE Date 2-10-10

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels

7. Temperature documentation:

Type of ice used: Wet Blue/Gel None Temp(C)

- Samples Received on ice & cold without a temperature blank
Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

Blank lines for handwritten comments.

Laboratory Job Number 218259

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-29N-10Q1	Diln Fac:	1.990
Lab ID:	218259-001	Batch#:	160125
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/18/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.5	D1
Chloroethane	ND	1.0	ND	2.6	D1
1,1-Dichloroethene	ND	1.0	ND	3.9	D1
1,1-Dichloroethane	ND	1.0	ND	4.0	D1
MTBE	ND	1.0	ND	3.6	D1
cis-1,2-Dichloroethene	ND	1.0	ND	3.9	D1
n-Hexane	ND	1.0	ND	3.5	D1
Chloroform	4.2	1.0	20	4.9	D1
Benzene	ND	1.0	ND	3.2	D1
Trichloroethene	ND	1.0	ND	5.3	D1
Toluene	ND	1.0	ND	3.7	D1
Tetrachloroethene	26	1.0	180	6.7	D1
Ethylbenzene	ND	1.0	ND	4.3	D1
m,p-Xylenes	ND	1.0	ND	4.3	D1
o-Xylene	ND	1.0	ND	4.3	D1
1,3,5-Trimethylbenzene	ND	1.0	ND	4.9	D1
1,2,4-Trimethylbenzene	3.0	1.0	15	4.9	D1
Xylene (total)	ND	2.0	ND	8.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-28N-10Q1	Diln Fac:	23.04
Lab ID:	218259-002	Batch#:	160456
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/28/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	12	ND	29	D1
Chloroethane	ND	12	ND	30	D1
1,1-Dichloroethene	ND	12	ND	46	D1
1,1-Dichloroethane	ND	12	ND	47	D1
MTBE	ND	12	ND	42	D1
cis-1,2-Dichloroethene	ND	12	ND	46	D1
n-Hexane	ND	12	ND	41	D1
Chloroform	ND	12	ND	56	D1
Benzene	ND	12	ND	37	D1
Trichloroethene	ND	12	ND	62	D1
Toluene	ND	12	ND	43	D1
Tetrachloroethene	ND	12	ND	78	D1
Ethylbenzene	ND	12	ND	50	D1
m,p-Xylenes	ND	12	ND	50	D1
o-Xylene	ND	12	ND	50	D1
1,3,5-Trimethylbenzene	ND	12	ND	57	D1
1,2,4-Trimethylbenzene	ND	12	ND	57	D1
Xylene (total)	ND	23	ND	100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	105	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-27N-10Q1	Diln Fac:	477.6
Lab ID:	218259-003	Batch#:	160456
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/27/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	240	ND	610	D1
Chloroethane	ND	240	ND	630	D1
1,1-Dichloroethene	ND	240	ND	950	D1
1,1-Dichloroethane	ND	240	ND	970	D1
MTBE	340	240	1,200	860	D1
cis-1,2-Dichloroethene	ND	240	ND	950	D1
n-Hexane	ND	240	ND	840	D1
Chloroform	ND	240	ND	1,200	D1
Benzene	2,300	240	7,200	760	D1
Trichloroethene	ND	240	ND	1,300	D1
Toluene	ND	240	ND	900	D1
Tetrachloroethene	ND	240	ND	1,600	D1
Ethylbenzene	ND	240	ND	1,000	D1
m,p-Xylenes	ND	240	ND	1,000	D1
o-Xylene	ND	240	ND	1,000	D1
1,3,5-Trimethylbenzene	ND	240	ND	1,200	D1
1,2,4-Trimethylbenzene	ND	240	ND	1,200	D1
Xylene (total)	ND	480	ND	2,100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	124	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-26N-10Q1	Diln Fac:	11.40
Lab ID:	218259-004	Batch#:	160347
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	5.7	ND	15	D1
Chloroethane	ND	5.7	ND	15	D1
1,1-Dichloroethene	47	5.7	190	23	D1
1,1-Dichloroethane	150	5.7	590	23	D1
MTBE	24	5.7	85	21	D1
cis-1,2-Dichloroethene	ND	5.7	ND	23	D1
n-Hexane	14	5.7	48	20	D1
Chloroform	18	5.7	86	28	D1
Benzene	33	5.7	100	18	D1
Trichloroethene	55	5.7	300	31	D1
Toluene	ND	5.7	ND	21	D1
Tetrachloroethene	30	5.7	200	39	D1
Ethylbenzene	7.4	5.7	32	25	D1
m,p-Xylenes	11	5.7	48	25	D1
o-Xylene	ND	5.7	ND	25	D1
1,3,5-Trimethylbenzene	ND	5.7	ND	28	D1
1,2,4-Trimethylbenzene	14	5.7	70	28	D1
Xylene (total)	11	5.7	48	25	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	125	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-016	Diln Fac:	11.28
Lab ID:	218259-005	Batch#:	160347
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	5.6	ND	14	D1
Chloroethane	ND	5.6	ND	15	D1
1,1-Dichloroethene	45	5.6	180	22	D1
1,1-Dichloroethane	140	5.6	560	23	D1
MTBE	23	5.6	81	20	D1
cis-1,2-Dichloroethene	ND	5.6	ND	22	D1
n-Hexane	17	5.6	59	20	D1
Chloroform	16	5.6	80	28	D1
Benzene	36	5.6	110	18	D1
Trichloroethene	51	5.6	270	30	D1
Toluene	ND	5.6	ND	21	D1
Tetrachloroethene	26	5.6	180	38	D1
Ethylbenzene	8.4	5.6	36	24	D1
m,p-Xylenes	12	5.6	53	24	D1
o-Xylene	ND	5.6	ND	24	D1
1,3,5-Trimethylbenzene	ND	5.6	ND	28	D1
1,2,4-Trimethylbenzene	14	5.6	68	28	D1
Xylene (total)	12	11	53	49	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	120	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-97A-10Q1	Diln Fac:	81.40
Lab ID:	218259-006	Batch#:	160456
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/28/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	65	41	170	100	D1
Chloroethane	ND	41	ND	110	D1
1,1-Dichloroethene	ND	41	ND	160	D1
1,1-Dichloroethane	220	41	900	160	D1
MTBE	ND	41	ND	150	D1
cis-1,2-Dichloroethene	ND	41	ND	160	D1
n-Hexane	200	41	700	140	D1
Chloroform	ND	41	ND	200	D1
Benzene	45	41	150	130	D1
Trichloroethene	ND	41	ND	220	D1
Toluene	ND	41	ND	150	D1
Tetrachloroethene	ND	41	ND	280	D1
Ethylbenzene	64	41	280	180	D1
m,p-Xylenes	ND	41	ND	180	D1
o-Xylene	ND	41	ND	180	D1
1,3,5-Trimethylbenzene	ND	41	ND	200	D1
1,2,4-Trimethylbenzene	43	41	210	200	D1
Xylene (total)	ND	81	ND	350	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	111	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BC-18-10Q1	Diln Fac:	11.16
Lab ID:	218259-007	Batch#:	160177
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/19/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	5.6	ND	14	D2
Chloroethane	ND	5.6	ND	15	D2
1,1-Dichloroethene	160	5.6	640	22	D2
1,1-Dichloroethane	680	5.6	2,700	23	D2
MTBE	ND	5.6	ND	20	D2
cis-1,2-Dichloroethene	150	5.6	580	22	D2
n-Hexane	ND	5.6	ND	20	D2
Chloroform	15	5.6	74	27	D2
Benzene	ND	5.6	ND	18	D2
Trichloroethene	470	5.6	2,500	30	D2
Toluene	ND	5.6	ND	21	D2
Tetrachloroethene	59	5.6	400	38	D2
Ethylbenzene	ND	5.6	ND	24	D2
m,p-Xylenes	ND	5.6	ND	24	D2
o-Xylene	ND	5.6	ND	24	D2
1,3,5-Trimethylbenzene	ND	5.6	ND	27	D2
1,2,4-Trimethylbenzene	ND	5.6	ND	27	D2 L1
Xylene (total)	ND	11	ND	48	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	115	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-006	Diln Fac:	11.16
Lab ID:	218259-008	Batch#:	160177
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/19/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	5.6	ND	14	D2
Chloroethane	ND	5.6	ND	15	D2
1,1-Dichloroethene	170	5.6	660	22	D2
1,1-Dichloroethane	710	5.6	2,900	23	D2
MTBE	ND	5.6	ND	20	D2
cis-1,2-Dichloroethene	150	5.6	600	22	D2
n-Hexane	ND	5.6	ND	20	D2
Chloroform	16	5.6	77	27	D2
Benzene	ND	5.6	ND	18	D2
Trichloroethene	410	5.6	2,200	30	D2
Toluene	ND	5.6	ND	21	D2
Tetrachloroethene	61	5.6	410	38	D2
Ethylbenzene	ND	5.6	ND	24	D2
m,p-Xylenes	ND	5.6	ND	24	D2
o-Xylene	ND	5.6	ND	24	D2
1,3,5-Trimethylbenzene	ND	5.6	ND	27	D2
1,2,4-Trimethylbenzene	ND	5.6	ND	27	D2 L1
Xylene (total)	ND	11	ND	48	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	114	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-8-U-10Q1	Diln Fac:	1.940
Lab ID:	218259-009	Batch#:	160404
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/26/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.97	ND	2.5	D1
Chloroethane	ND	0.97	ND	2.6	D1
1,1-Dichloroethene	ND	0.97	ND	3.8	D1
1,1-Dichloroethane	1.8	0.97	7.3	3.9	D1
MTBE	ND	0.97	ND	3.5	D1
cis-1,2-Dichloroethene	ND	0.97	ND	3.8	D1
n-Hexane	ND	0.97	ND	3.4	D1
Chloroform	ND	0.97	ND	4.7	D1
Benzene	ND	0.97	ND	3.1	D1
Trichloroethene	4.4	0.97	24	5.2	D1
Toluene	ND	0.97	ND	3.7	D1
Tetrachloroethene	8.6	0.97	58	6.6	D1
Ethylbenzene	ND	0.97	ND	4.2	D1
m,p-Xylenes	ND	0.97	ND	4.2	D1
o-Xylene	ND	0.97	ND	4.2	D1
1,3,5-Trimethylbenzene	ND	0.97	ND	4.8	D1
1,2,4-Trimethylbenzene	1.2	0.97	5.7	4.8	D1
Xylene (total)	ND	1.9	ND	8.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	109	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-8-M-10Q1	Diln Fac:	1.870
Lab ID:	218259-010	Batch#:	160404
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/26/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.94	ND	2.4	D1
Chloroethane	ND	0.94	ND	2.5	D1
1,1-Dichloroethene	5.9	0.94	24	3.7	D1
1,1-Dichloroethane	21	0.94	86	3.8	D1
MTBE	ND	0.94	ND	3.4	D1
cis-1,2-Dichloroethene	ND	0.94	ND	3.7	D1
n-Hexane	ND	0.94	ND	3.3	D1
Chloroform	1.1	0.94	5.2	4.6	D1
Benzene	ND	0.94	ND	3.0	D1
Trichloroethene	34	0.94	180	5.0	D1
Toluene	1.2	0.94	4.6	3.5	D1
Tetrachloroethene	12	0.94	85	6.3	D1
Ethylbenzene	ND	0.94	ND	4.1	D1
m,p-Xylenes	ND	0.94	ND	4.1	D1
o-Xylene	ND	0.94	ND	4.1	D1
1,3,5-Trimethylbenzene	ND	0.94	ND	4.6	D1
1,2,4-Trimethylbenzene	ND	0.94	ND	4.6	D1
Xylene (total)	ND	1.9	ND	8.1	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BC-8B-10Q1	Diln Fac:	1.950
Lab ID:	218259-011	Batch#:	160404
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/26/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.98	ND	2.5	D1
Chloroethane	ND	0.98	ND	2.6	D1
1,1-Dichloroethene	8.4	0.98	33	3.9	D1
1,1-Dichloroethane	35	0.98	140	3.9	D1
MTBE	ND	0.98	ND	3.5	D1
cis-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
n-Hexane	ND	0.98	ND	3.4	D1
Chloroform	3.4	0.98	17	4.8	D1
Benzene	ND	0.98	ND	3.1	D1
Trichloroethene	7.7	0.98	42	5.2	D1
Toluene	ND	0.98	ND	3.7	D1
Tetrachloroethene	13	0.98	91	6.6	D1
Ethylbenzene	ND	0.98	ND	4.2	D1
m,p-Xylenes	ND	0.98	ND	4.2	D1
o-Xylene	ND	0.98	ND	4.2	D1
1,3,5-Trimethylbenzene	ND	0.98	ND	4.8	D1
1,2,4-Trimethylbenzene	ND	0.98	ND	4.8	D1
Xylene (total)	ND	2.0	ND	8.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-9-U-10Q1	Diln Fac:	4.800
Lab ID:	218259-012	Batch#:	160404
Matrix:	Air	Sampled:	02/05/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/26/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	2.4	ND	6.1	D1
Chloroethane	ND	2.4	ND	6.3	D1
1,1-Dichloroethene	ND	2.4	ND	9.5	D1
1,1-Dichloroethane	ND	2.4	ND	9.7	D1
MTBE	ND	2.4	ND	8.7	D1
cis-1,2-Dichloroethene	ND	2.4	ND	9.5	D1
n-Hexane	9.4	2.4	33	8.5	D1
Chloroform	ND	2.4	ND	12	D1
Benzene	18	2.4	57	7.7	D1
Trichloroethene	5.4	2.4	29	13	D1
Toluene	7.7	2.4	29	9.0	D1
Tetrachloroethene	ND	2.4	ND	16	D1
Ethylbenzene	20	2.4	87	10	D1
m,p-Xylenes	58	2.4	250	10	D1
o-Xylene	15	2.4	67	10	D1
1,3,5-Trimethylbenzene	33	2.4	160	12	D1
1,2,4-Trimethylbenzene	110	2.4	520	12	D1
Xylene (total)	73	4.8	320	21	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	107	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-9-M-10Q1	Diln Fac:	7.440
Lab ID:	218259-013	Batch#:	160404
Matrix:	Air	Sampled:	02/05/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/26/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	3.7	ND	9.5	D1
Chloroethane	ND	3.7	ND	9.8	D1
1,1-Dichloroethene	ND	3.7	ND	15	D1
1,1-Dichloroethane	ND	3.7	ND	15	D1
MTBE	ND	3.7	ND	13	D1
cis-1,2-Dichloroethene	ND	3.7	ND	15	D1
n-Hexane	8.2	3.7	29	13	D1
Chloroform	ND	3.7	ND	18	D1
Benzene	14	3.7	43	12	D1
Trichloroethene	4.0	3.7	21	20	D1
Toluene	5.8	3.7	22	14	D1
Tetrachloroethene	ND	3.7	ND	25	D1
Ethylbenzene	14	3.7	62	16	D1
m,p-Xylenes	40	3.7	180	16	D1
o-Xylene	11	3.7	47	16	D1
1,3,5-Trimethylbenzene	26	3.7	130	18	D1
1,2,4-Trimethylbenzene	88	3.7	430	18	D1
Xylene (total)	51	7.4	220	32	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	116	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-10-M-10Q1	Diln Fac:	7.320
Lab ID:	218259-014	Batch#:	160404
Matrix:	Air	Sampled:	02/05/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/26/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	3.7	ND	9.4	D1
Chloroethane	ND	3.7	ND	9.7	D1
1,1-Dichloroethene	4.0	3.7	16	15	D1
1,1-Dichloroethane	11	3.7	45	15	D1
MTBE	ND	3.7	ND	13	D1
cis-1,2-Dichloroethene	ND	3.7	ND	15	D1
n-Hexane	17	3.7	60	13	D1
Chloroform	ND	3.7	ND	18	D1
Benzene	31	3.7	100	12	D1
Trichloroethene	23	3.7	120	20	D1
Toluene	13	3.7	50	14	D1
Tetrachloroethene	4.6	3.7	31	25	D1
Ethylbenzene	33	3.7	140	16	D1
m,p-Xylenes	97	3.7	420	16	D1
o-Xylene	27	3.7	120	16	D1
1,3,5-Trimethylbenzene	56	3.7	280	18	D1
1,2,4-Trimethylbenzene	170	3.7	850	18	D1
Xylene (total)	120	7.3	540	32	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	114	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-5-U-10Q1	Diln Fac:	48.80
Lab ID:	218259-015	Batch#:	160461
Matrix:	Air	Sampled:	02/05/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/28/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	24	ND	62	D1
Chloroethane	ND	24	ND	64	D1
1,1-Dichloroethene	ND	24	ND	97	D1
1,1-Dichloroethane	ND	24	ND	99	D1
MTBE	ND	24	ND	88	D1
cis-1,2-Dichloroethene	ND	24	ND	97	D1
n-Hexane	ND	24	ND	86	D1
Chloroform	ND	24	ND	120	D1
Benzene	35	24	110	78	D1
Trichloroethene	ND	24	ND	130	D1
Toluene	ND	24	ND	92	D1
Tetrachloroethene	ND	24	ND	170	D1
Ethylbenzene	49	24	210	110	D1
m,p-Xylenes	140	24	620	110	D1
o-Xylene	26	24	110	110	D1
1,3,5-Trimethylbenzene	160	24	800	120	D1
1,2,4-Trimethylbenzene	390	24	1,900	120	D1
Xylene (total)	170	49	730	210	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	117	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-5-M-10Q1	Diln Fac:	8.250
Lab ID:	218259-016	Batch#:	160404
Matrix:	Air	Sampled:	02/05/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/26/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	4.1	ND	11	D1
Chloroethane	ND	4.1	ND	11	D1
1,1-Dichloroethene	ND	4.1	ND	16	D1
1,1-Dichloroethane	ND	4.1	ND	17	D1
MTBE	ND	4.1	ND	15	D1
cis-1,2-Dichloroethene	ND	4.1	ND	16	D1
n-Hexane	6.2	4.1	22	15	D1
Chloroform	ND	4.1	ND	20	D1
Benzene	9.3	4.1	30	13	D1
Trichloroethene	ND	4.1	ND	22	D1
Toluene	4.2	4.1	16	16	D1
Tetrachloroethene	ND	4.1	ND	28	D1
Ethylbenzene	16	4.1	71	18	D1
m,p-Xylenes	49	4.1	210	18	D1
o-Xylene	10	4.1	44	18	D1
1,3,5-Trimethylbenzene	49	4.1	240	20	D1
1,2,4-Trimethylbenzene	130	4.1	620	20	D1
Xylene (total)	59	8.3	260	36	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	111	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-002	Diln Fac:	30.48
Lab ID:	218259-017	Batch#:	160456
Matrix:	Air	Sampled:	02/05/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/27/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	15	ND	39	D1
Chloroethane	ND	15	ND	40	D1
1,1-Dichloroethene	ND	15	ND	60	D1
1,1-Dichloroethane	ND	15	ND	62	D1
MTBE	ND	15	ND	55	D1
cis-1,2-Dichloroethene	ND	15	ND	60	D1
n-Hexane	ND	15	ND	54	D1
Chloroform	ND	15	ND	74	D1
Benzene	26	15	82	49	D1
Trichloroethene	ND	15	ND	82	D1
Toluene	ND	15	ND	57	D1
Tetrachloroethene	ND	15	ND	100	D1
Ethylbenzene	48	15	210	66	D1
m,p-Xylenes	150	15	640	66	D1
o-Xylene	28	15	120	66	D1
1,3,5-Trimethylbenzene	150	15	720	75	D1
1,2,4-Trimethylbenzene	370	15	1,800	75	D1
Xylene (total)	180	30	760	130	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	105	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-61A-10Q1	Diln Fac:	35.64
Lab ID:	218259-018	Batch#:	160456
Matrix:	Air	Sampled:	02/08/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/27/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	18	ND	46	D2
Chloroethane	ND	18	ND	47	D2
1,1-Dichloroethene	20	18	79	71	D2
1,1-Dichloroethane	ND	18	ND	72	D2
MTBE	ND	18	ND	64	D2
cis-1,2-Dichloroethene	ND	18	ND	71	D2
n-Hexane	24	18	84	63	D2
Chloroform	48	18	230	87	D2
Benzene	160	18	500	57	D2
Trichloroethene	2,400	18	13,000	96	D2
Toluene	ND	18	ND	67	D2
Tetrachloroethene	310	18	2,100	120	D2
Ethylbenzene	42	18	180	77	D2
m,p-Xylenes	92	18	400	77	D2
o-Xylene	28	18	120	77	D2
1,3,5-Trimethylbenzene	77	18	380	88	D2
1,2,4-Trimethylbenzene	250	18	1,200	88	D2
Xylene (total)	120	36	520	150	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	113	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-60A-10Q1	Diln Fac:	177.0
Lab ID:	218259-019	Batch#:	160456
Matrix:	Air	Sampled:	02/08/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/27/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	89	ND	230	D1
Chloroethane	ND	89	ND	230	D1
1,1-Dichloroethene	ND	89	ND	350	D1
1,1-Dichloroethane	ND	89	ND	360	D1
MTBE	ND	89	ND	320	D1
cis-1,2-Dichloroethene	750	89	3,000	350	D1
n-Hexane	ND	89	ND	310	D1
Chloroform	ND	89	ND	430	D1
Benzene	ND	89	ND	280	D1
Trichloroethene	4,700	89	25,000	480	D1
Toluene	ND	89	ND	330	D1
Tetrachloroethene	ND	89	ND	600	D1
Ethylbenzene	ND	89	ND	380	D1
m,p-Xylenes	ND	89	ND	380	D1
o-Xylene	ND	89	ND	380	D1
1,3,5-Trimethylbenzene	ND	89	ND	440	D1
1,2,4-Trimethylbenzene	270	89	1,300	440	D1
Xylene (total)	ND	180	ND	770	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	90	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-46-U-10Q1	Diln Fac:	13.86
Lab ID:	218259-020	Batch#:	160404
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/26/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	6.9	ND	18	D1
Chloroethane	ND	6.9	ND	18	D1
1,1-Dichloroethene	ND	6.9	ND	27	D1
1,1-Dichloroethane	ND	6.9	ND	28	D1
MTBE	ND	6.9	ND	25	D1
cis-1,2-Dichloroethene	ND	6.9	ND	27	D1
n-Hexane	15	6.9	53	24	D1
Chloroform	ND	6.9	ND	34	D1
Benzene	24	6.9	76	22	D1
Trichloroethene	8.7	6.9	47	37	D1
Toluene	ND	6.9	ND	26	D1
Tetrachloroethene	ND	6.9	ND	47	D1
Ethylbenzene	23	6.9	99	30	D1
m,p-Xylenes	65	6.9	280	30	D1
o-Xylene	16	6.9	68	30	D1
1,3,5-Trimethylbenzene	59	6.9	290	34	D1
1,2,4-Trimethylbenzene	170	6.9	860	34	D1
Xylene (total)	80	14	350	60	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	115	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-46-M-10Q1	Diln Fac:	89.20
Lab ID:	218259-021	Batch#:	160456
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/28/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	45	ND	110	D1
Chloroethane	ND	45	ND	120	D1
1,1-Dichloroethene	ND	45	ND	180	D1
1,1-Dichloroethane	ND	45	ND	180	D1
MTBE	ND	45	ND	160	D1
cis-1,2-Dichloroethene	ND	45	ND	180	D1
n-Hexane	ND	45	ND	160	D1
Chloroform	ND	45	ND	220	D1
Benzene	ND	45	ND	140	D1
Trichloroethene	ND	45	ND	240	D1
Toluene	ND	45	ND	170	D1
Tetrachloroethene	ND	45	ND	300	D1
Ethylbenzene	ND	45	ND	190	D1
m,p-Xylenes	100	45	450	190	D1
o-Xylene	ND	45	ND	190	D1
1,3,5-Trimethylbenzene	230	45	1,100	220	D1
1,2,4-Trimethylbenzene	820	45	4,000	220	D1
Xylene (total)	100	89	450	390	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-46-L-10Q1	Diln Fac:	29.64
Lab ID:	218259-022	Batch#:	160456
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/28/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	15	ND	38	D1
Chloroethane	ND	15	ND	39	D1
1,1-Dichloroethene	ND	15	ND	59	D1
1,1-Dichloroethane	20	15	80	60	D1
MTBE	ND	15	ND	53	D1
cis-1,2-Dichloroethene	19	15	75	59	D1
n-Hexane	ND	15	ND	52	D1
Chloroform	37	15	180	72	D1
Benzene	21	15	68	47	D1
Trichloroethene	610	15	3,300	80	D1
Toluene	ND	15	ND	56	D1
Tetrachloroethene	85	15	580	100	D1
Ethylbenzene	28	15	120	64	D1
m,p-Xylenes	82	15	350	64	D1
o-Xylene	25	15	110	64	D1
1,3,5-Trimethylbenzene	160	15	760	73	D1
1,2,4-Trimethylbenzene	510	15	2,500	73	D1
Xylene (total)	110	30	460	130	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	115	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-47-10Q1	Diln Fac:	7.140
Lab ID:	218259-023	Batch#:	160347
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/25/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	3.6	ND	9.1	D1
Chloroethane	ND	3.6	ND	9.4	D1
1,1-Dichloroethene	ND	3.6	ND	14	D1
1,1-Dichloroethane	ND	3.6	ND	14	D1
MTBE	ND	3.6	ND	13	D1
cis-1,2-Dichloroethene	ND	3.6	ND	14	D1
n-Hexane	6.9	3.6	24	13	D1
Chloroform	ND	3.6	ND	17	D1
Benzene	17	3.6	54	11	D1
Trichloroethene	8.8	3.6	47	19	D1
Toluene	ND	3.6	ND	13	D1
Tetrachloroethene	ND	3.6	ND	24	D1
Ethylbenzene	12	3.6	51	16	D1
m,p-Xylenes	34	3.6	150	16	D1
o-Xylene	7.8	3.6	34	16	D1
1,3,5-Trimethylbenzene	29	3.6	140	18	D1
1,2,4-Trimethylbenzene	90	3.6	440	18	D1
Xylene (total)	42	7.1	180	31	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	128	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-54A-10Q1	Diln Fac:	303.6
Lab ID:	218259-024	Batch#:	160461
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/28/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	150	ND	390	D1
Chloroethane	ND	150	ND	400	D1
1,1-Dichloroethene	ND	150	ND	600	D1
1,1-Dichloroethane	360	150	1,500	610	D1
MTBE	ND	150	ND	550	D1
cis-1,2-Dichloroethene	ND	150	ND	600	D1
n-Hexane	730	150	2,600	540	D1
Chloroform	ND	150	ND	740	D1
Benzene	ND	150	ND	480	D1
Trichloroethene	890	150	4,800	820	D1
Toluene	150	150	580	570	D1
Tetrachloroethene	ND	150	ND	1,000	D1
Ethylbenzene	530	150	2,300	660	D1
m,p-Xylenes	2,700	150	12,000	660	D1
o-Xylene	ND	150	ND	660	D1
1,3,5-Trimethylbenzene	630	150	3,100	750	D1
1,2,4-Trimethylbenzene	2,000	150	9,800	750	D1
Xylene (total)	2,700	300	12,000	1,300	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	106	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PL-2102-10Q1	Diln Fac:	297.6
Lab ID:	218259-025	Batch#:	160461
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/28/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	150	ND	380	D1
Chloroethane	ND	150	ND	390	D1
1,1-Dichloroethene	ND	150	ND	590	D1
1,1-Dichloroethane	260	150	1,000	600	D1
MTBE	ND	150	ND	540	D1
cis-1,2-Dichloroethene	ND	150	ND	590	D1
n-Hexane	860	150	3,000	520	D1
Chloroform	ND	150	ND	730	D1
Benzene	ND	150	ND	480	D1
Trichloroethene	ND	150	ND	800	D1
Toluene	ND	150	ND	560	D1
Tetrachloroethene	ND	150	ND	1,000	D1
Ethylbenzene	600	150	2,600	650	D1
m,p-Xylenes	350	150	1,500	650	D1
o-Xylene	ND	150	ND	650	D1
1,3,5-Trimethylbenzene	ND	150	ND	730	D1
1,2,4-Trimethylbenzene	380	150	1,900	730	D1
Xylene (total)	350	300	1,500	1,300	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PL-102A-10Q1	Diln Fac:	7.740
Lab ID:	218259-026	Batch#:	160347
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/25/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	3.9	ND	9.9	D1
Chloroethane	ND	3.9	ND	10	D1
1,1-Dichloroethene	ND	3.9	ND	15	D1
1,1-Dichloroethane	ND	3.9	ND	16	D1
MTBE	ND	3.9	ND	14	D1
cis-1,2-Dichloroethene	ND	3.9	ND	15	D1
n-Hexane	ND	3.9	ND	14	D1
Chloroform	14	3.9	69	19	D1
Benzene	7.7	3.9	25	12	D1
Trichloroethene	ND	3.9	ND	21	D1
Toluene	ND	3.9	ND	15	D1
Tetrachloroethene	ND	3.9	ND	26	D1
Ethylbenzene	9.8	3.9	42	17	D1
m,p-Xylenes	25	3.9	110	17	D1
o-Xylene	4.4	3.9	19	17	D1
1,3,5-Trimethylbenzene	18	3.9	90	19	D1
1,2,4-Trimethylbenzene	59	3.9	290	19	D1
Xylene (total)	29	7.7	130	34	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	130	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-009	Diln Fac:	27.60
Lab ID:	218259-027	Batch#:	160456
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/28/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	14	ND	35	D1
Chloroethane	ND	14	ND	36	D1
1,1-Dichloroethene	ND	14	ND	55	D1
1,1-Dichloroethane	ND	14	ND	56	D1
MTBE	ND	14	ND	50	D1
cis-1,2-Dichloroethene	ND	14	ND	55	D1
n-Hexane	ND	14	ND	49	D1
Chloroform	20	14	98	67	D1
Benzene	14	14	44	44	D1
Trichloroethene	ND	14	ND	74	D1
Toluene	ND	14	ND	52	D1
Tetrachloroethene	ND	14	ND	94	D1
Ethylbenzene	19	14	82	60	D1
m,p-Xylenes	46	14	200	60	D1
o-Xylene	ND	14	ND	60	D1
1,3,5-Trimethylbenzene	37	14	180	68	D1
1,2,4-Trimethylbenzene	130	14	650	68	D1
Xylene (total)	46	28	200	120	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	111	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-8-U-10Q1	Diln Fac:	2.170
Lab ID:	218259-028	Batch#:	160248
Matrix:	Air	Sampled:	02/08/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/23/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.3	D1
1,1-Dichloroethane	ND	1.1	ND	4.4	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	ND	1.1	ND	5.3	D1
Benzene	ND	1.1	ND	3.5	D1 R7
Trichloroethene	ND	1.1	ND	5.8	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	ND	1.1	ND	7.4	D1
Ethylbenzene	ND	1.1	ND	4.7	D1
m,p-Xylenes	ND	1.1	ND	4.7	D1
o-Xylene	ND	1.1	ND	4.7	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.3	D1
1,2,4-Trimethylbenzene	2.3	1.1	11	5.3	D1
Xylene (total)	ND	2.2	ND	9.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-8-M-10Q1	Diln Fac:	2.170
Lab ID:	218259-029	Batch#:	160248
Matrix:	Air	Sampled:	02/08/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.3	D1
1,1-Dichloroethane	ND	1.1	ND	4.4	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	ND	1.1	ND	5.3	D1
Benzene	ND	1.1	ND	3.5	D1 R7
Trichloroethene	ND	1.1	ND	5.8	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	ND	1.1	ND	7.4	D1
Ethylbenzene	ND	1.1	ND	4.7	D1
m,p-Xylenes	ND	1.1	ND	4.7	D1
o-Xylene	ND	1.1	ND	4.7	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.3	D1
1,2,4-Trimethylbenzene	1.7	1.1	8.3	5.3	D1
Xylene (total)	ND	2.2	ND	9.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-7-U-10Q1	Diln Fac:	2.140
Lab ID:	218259-030	Batch#:	160248
Matrix:	Air	Sampled:	02/08/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
1,1-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	ND	1.1	ND	4.3	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	ND	1.1	ND	5.2	D1
Benzene	ND	1.1	ND	3.4	D1 R7
Trichloroethene	ND	1.1	ND	5.7	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	ND	1.1	ND	7.3	D1
Ethylbenzene	ND	1.1	ND	4.6	D1
m,p-Xylenes	ND	1.1	ND	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.3	D1
1,2,4-Trimethylbenzene	2.1	1.1	10	5.3	D1
Xylene (total)	ND	2.1	ND	9.3	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-7-M-10Q1	Diln Fac:	2.000
Lab ID:	218259-031	Batch#:	160248
Matrix:	Air	Sampled:	02/08/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.6	D1
1,1-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.0	D1
MTBE	ND	1.0	ND	3.6	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	ND	1.0	ND	3.5	D1
Chloroform	2.9	1.0	14	4.9	D1
Benzene	ND	1.0	ND	3.2	D1 R7
Trichloroethene	ND	1.0	ND	5.4	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	ND	1.0	ND	6.8	D1
Ethylbenzene	ND	1.0	ND	4.3	D1
m,p-Xylenes	ND	1.0	ND	4.3	D1
o-Xylene	ND	1.0	ND	4.3	D1
1,3,5-Trimethylbenzene	ND	1.0	ND	4.9	D1
1,2,4-Trimethylbenzene	1.2	1.0	5.7	4.9	D1
Xylene (total)	ND	2.0	ND	8.7	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-1-U-10Q1	Diln Fac:	1.900
Lab ID:	218259-032	Batch#:	160248
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.95	ND	2.4	D1
Chloroethane	ND	0.95	ND	2.5	D1
1,1-Dichloroethene	ND	0.95	ND	3.8	D1
1,1-Dichloroethane	ND	0.95	ND	3.8	D1
MTBE	ND	0.95	ND	3.4	D1
cis-1,2-Dichloroethene	ND	0.95	ND	3.8	D1
n-Hexane	ND	0.95	ND	3.3	D1
Chloroform	ND	0.95	ND	4.6	D1
Benzene	ND	0.95	ND	3.0	D1 R7
Trichloroethene	ND	0.95	ND	5.1	D1
Toluene	ND	0.95	ND	3.6	D1
Tetrachloroethene	ND	0.95	ND	6.4	D1
Ethylbenzene	ND	0.95	ND	4.1	D1
m,p-Xylenes	ND	0.95	ND	4.1	D1
o-Xylene	ND	0.95	ND	4.1	D1
1,3,5-Trimethylbenzene	ND	0.95	ND	4.7	D1
1,2,4-Trimethylbenzene	2.3	0.95	11	4.7	D1
Xylene (total)	ND	1.9	ND	8.3	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-1-M-10Q1	Diln Fac:	2.090
Lab ID:	218259-033	Batch#:	160248
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.7	D1
Chloroethane	ND	1.0	ND	2.8	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	ND	1.0	ND	3.7	D1
Chloroform	ND	1.0	ND	5.1	D1
Benzene	ND	1.0	ND	3.3	D1 R7
Trichloroethene	ND	1.0	ND	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	ND	1.0	ND	7.1	D1
Ethylbenzene	ND	1.0	ND	4.5	D1
m,p-Xylenes	ND	1.0	ND	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	ND	1.0	ND	5.1	D1
1,2,4-Trimethylbenzene	ND	1.0	ND	5.1	D1
Xylene (total)	ND	2.1	ND	9.1	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-1-L-10Q1	Diln Fac:	121.2
Lab ID:	218259-034	Batch#:	160456
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/27/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	61	ND	150	D1
Chloroethane	ND	61	ND	160	D1
1,1-Dichloroethene	ND	61	ND	240	D1
1,1-Dichloroethane	ND	61	ND	250	D1
MTBE	ND	61	ND	220	D1
cis-1,2-Dichloroethene	ND	61	ND	240	D1
n-Hexane	ND	61	ND	210	D1
Chloroform	ND	61	ND	300	D1
Benzene	ND	61	ND	190	D1
Trichloroethene	380	61	2,000	330	D1
Toluene	ND	61	ND	230	D1
Tetrachloroethene	ND	61	ND	410	D1
Ethylbenzene	74	61	320	260	D1
m,p-Xylenes	ND	61	ND	260	D1
o-Xylene	ND	61	ND	260	D1
1,3,5-Trimethylbenzene	ND	61	ND	300	D1
1,2,4-Trimethylbenzene	ND	61	ND	300	D1
Xylene (total)	ND	120	ND	530	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	94	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-2-M-10Q1	Diln Fac:	2.440
Lab ID:	218259-035	Batch#:	160248
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.1	D1
Chloroethane	ND	1.2	ND	3.2	D1
1,1-Dichloroethene	ND	1.2	ND	4.8	D1
1,1-Dichloroethane	ND	1.2	ND	4.9	D1
MTBE	ND	1.2	ND	4.4	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.8	D1
n-Hexane	ND	1.2	ND	4.3	D1
Chloroform	2.3	1.2	11	6.0	D1
Benzene	ND	1.2	ND	3.9	D1 R7
Trichloroethene	ND	1.2	ND	6.6	D1
Toluene	ND	1.2	ND	4.6	D1
Tetrachloroethene	ND	1.2	ND	8.3	D1
Ethylbenzene	ND	1.2	ND	5.3	D1
m,p-Xylenes	ND	1.2	ND	5.3	D1
o-Xylene	ND	1.2	ND	5.3	D1
1,3,5-Trimethylbenzene	ND	1.2	ND	6.0	D1
1,2,4-Trimethylbenzene	ND	1.2	ND	6.0	D1
Xylene (total)	ND	2.4	ND	11	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-3-U-10Q1	Diln Fac:	2.200
Lab ID:	218259-036	Batch#:	160248
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.4	D1
1,1-Dichloroethane	ND	1.1	ND	4.5	D1
MTBE	ND	1.1	ND	4.0	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
n-Hexane	ND	1.1	ND	3.9	D1
Chloroform	11	1.1	55	5.4	D1
Benzene	ND	1.1	ND	3.5	D1 R7
Trichloroethene	ND	1.1	ND	5.9	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	ND	1.1	ND	7.5	D1
Ethylbenzene	ND	1.1	ND	4.8	D1
m,p-Xylenes	ND	1.1	ND	4.8	D1
o-Xylene	ND	1.1	ND	4.8	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.4	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.4	D1
Xylene (total)	ND	2.2	ND	9.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-3-M-10Q1	Diln Fac:	2.290
Lab ID:	218259-037	Batch#:	160248
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
1,1-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	ND	1.1	ND	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	ND	1.1	ND	4.0	D1
Chloroform	ND	1.1	ND	5.6	D1
Benzene	ND	1.1	ND	3.7	D1 R7
Trichloroethene	ND	1.1	ND	6.2	D1
Toluene	ND	1.1	ND	4.3	D1
Tetrachloroethene	ND	1.1	ND	7.8	D1
Ethylbenzene	ND	1.1	ND	5.0	D1
m,p-Xylenes	ND	1.1	ND	5.0	D1
o-Xylene	ND	1.1	ND	5.0	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.6	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.6	D1
Xylene (total)	ND	2.3	ND	9.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-3-L-10Q1	Diln Fac:	2.170
Lab ID:	218259-038	Batch#:	160347
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/11/10
Units (M):	ug/m3	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
1,1-Dichloroethene	8.8	1.1	35	4.3	D1
1,1-Dichloroethane	5.0	1.1	20	4.4	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	38	1.1	180	5.3	D1
Benzene	4.2	1.1	13	3.5	D1
Trichloroethene	12	1.1	65	5.8	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	12	1.1	83	7.4	D1
Ethylbenzene	1.8	1.1	7.8	4.7	D1
m,p-Xylenes	ND	1.1	ND	4.7	D1
o-Xylene	ND	1.1	ND	4.7	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.3	D1
1,2,4-Trimethylbenzene	1.6	1.1	8.0	5.3	D1
Xylene (total)	ND	2.2	ND	9.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC532975	Diln Fac:	1.000
Matrix:	Air	Batch#:	160125
Units (V):	ppbv	Analyzed:	02/18/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160125
Units (V):	ppbv	Analyzed:	02/18/10
Diln Fac:	1.000		

Type: BS Lab ID: QC532976

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	11.11	111	70-130		
Chloroethane	10.00	11.70	117	70-130		
1,1-Dichloroethene	10.00	11.57	116	60-145		
1,1-Dichloroethane	10.00	11.37	114	48-145		
MTBE	10.00	12.61	126	70-130		
cis-1,2-Dichloroethene	10.00	11.02	110	70-130		
n-Hexane	10.00	10.93	109	70-130		
Chloroform	10.00	11.72	117	70-130		
Benzene	10.00	8.073	81	70-130		
Trichloroethene	10.00	8.709	87	70-130		
Toluene	10.00	10.90	109	70-130		
Tetrachloroethene	10.00	10.98	110	70-130		
Ethylbenzene	10.00	11.85	119	70-130		
m,p-Xylenes	20.00	21.81	109	70-130		
o-Xylene	10.00	11.38	114	70-130		
1,3,5-Trimethylbenzene	10.00	11.94	119	70-130		
1,2,4-Trimethylbenzene	10.00	12.75	127	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	92	70-130		

Type: BSD Lab ID: QC532977

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	10.87	109	70-130	2	25		
Chloroethane	10.00	10.44	104	70-130	11	25		
1,1-Dichloroethene	10.00	10.59	106	60-145	9	11		
1,1-Dichloroethane	10.00	10.36	104	48-145	9	25		
MTBE	10.00	11.22	112	70-130	12	25		
cis-1,2-Dichloroethene	10.00	10.22	102	70-130	8	25		
n-Hexane	10.00	10.14	101	70-130	8	25		
Chloroform	10.00	10.85	109	70-130	8	25		
Benzene	10.00	8.207	82	70-130	2	25		
Trichloroethene	10.00	9.149	91	70-130	5	25		
Toluene	10.00	10.62	106	70-130	3	25		
Tetrachloroethene	10.00	10.58	106	70-130	4	25		
Ethylbenzene	10.00	11.72	117	70-130	1	25		
m,p-Xylenes	20.00	22.05	110	70-130	1	25		
o-Xylene	10.00	11.22	112	70-130	1	25		
1,3,5-Trimethylbenzene	10.00	12.00	120	70-130	0	25		
1,2,4-Trimethylbenzene	10.00	12.88	129	70-130	1	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	96	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC533166	Diln Fac:	1.000
Matrix:	Air	Batch#:	160177
Units (V):	ppbv	Analyzed:	02/19/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	L1
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160177
Units (V):	ppbv	Analyzed:	02/19/10
Diln Fac:	1.000		

Type: BS Lab ID: QC533167

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	10.24	102	70-130		
Chloroethane	10.00	10.80	108	70-130		
1,1-Dichloroethene	10.00	10.94	109	60-145		
1,1-Dichloroethane	10.00	10.54	105	48-145		
MTBE	10.00	11.31	113	70-130		
cis-1,2-Dichloroethene	10.00	10.38	104	70-130		
n-Hexane	10.00	9.927	99	70-130		
Chloroform	10.00	10.58	106	70-130		
Benzene	10.00	10.32	103	70-130		
Trichloroethene	10.00	11.99	120	70-130		
Toluene	10.00	10.76	108	70-130		
Tetrachloroethene	10.00	10.75	108	70-130		
Ethylbenzene	10.00	11.77	118	70-130		
m,p-Xylenes	20.00	21.72	109	70-130		
o-Xylene	10.00	11.15	112	70-130		
1,3,5-Trimethylbenzene	10.00	11.72	117	70-130		
1,2,4-Trimethylbenzene	10.00	12.78	128	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	97	70-130		

Type: BSD Lab ID: QC533168

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	9.757	98	70-130	5	25		
Chloroethane	10.00	11.03	110	70-130	2	25		
1,1-Dichloroethene	10.00	11.34	113	60-145	4	11		
1,1-Dichloroethane	10.00	11.20	112	48-145	6	25		
MTBE	10.00	11.99	120	70-130	6	25		
cis-1,2-Dichloroethene	10.00	10.82	108	70-130	4	25		
n-Hexane	10.00	10.57	106	70-130	6	25		
Chloroform	10.00	11.17	112	70-130	5	25		
Benzene	10.00	11.10	111	70-130	7	25		
Trichloroethene	10.00	12.07	121	70-130	1	25		
Toluene	10.00	11.08	111	70-130	3	25		
Tetrachloroethene	10.00	10.93	109	70-130	2	25		
Ethylbenzene	10.00	12.13	121	70-130	3	25		
m,p-Xylenes	20.00	22.11	111	70-130	2	25		
o-Xylene	10.00	11.52	115	70-130	3	25		
1,3,5-Trimethylbenzene	10.00	12.07	121	70-130	3	25		
1,2,4-Trimethylbenzene	10.00	13.12	131	* 70-130	3	25	L1	

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	96	70-130		

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC533417	Diln Fac:	1.000
Matrix:	Air	Batch#:	160248
Units (V):	ppbv	Analyzed:	02/23/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	R7
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	96	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160248
Units (V):	ppbv	Analyzed:	02/23/10
Diln Fac:	1.000		

Type: BS Lab ID: QC533418

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	10.13	101	70-130		
Chloroethane	10.00	9.784	98	70-130		
1,1-Dichloroethene	10.00	9.877	99	60-145		
1,1-Dichloroethane	10.00	9.681	97	48-145		
MTBE	10.00	10.65	106	70-130		
cis-1,2-Dichloroethene	10.00	9.417	94	70-130		
n-Hexane	10.00	9.442	94	70-130		
Chloroform	10.00	10.14	101	70-130		
Benzene	10.00	7.786	78	70-130		
Trichloroethene	10.00	8.762	88	70-130		
Toluene	10.00	9.909	99	70-130		
Tetrachloroethene	10.00	10.56	106	70-130		
Ethylbenzene	10.00	10.84	108	70-130		
m,p-Xylenes	20.00	19.84	99	70-130		
o-Xylene	10.00	10.15	102	70-130		
1,3,5-Trimethylbenzene	10.00	10.81	108	70-130		
1,2,4-Trimethylbenzene	10.00	11.37	114	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	97	70-130		

Type: BSD Lab ID: QC533419

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	9.084	91	70-130	11	25		
Chloroethane	10.00	10.20	102	70-130	4	25		
1,1-Dichloroethene	10.00	10.30	103	60-145	4	11		
1,1-Dichloroethane	10.00	9.978	100	48-145	3	25		
MTBE	10.00	11.17	112	70-130	5	25		
cis-1,2-Dichloroethene	10.00	9.928	99	70-130	5	25		
n-Hexane	10.00	9.794	98	70-130	4	25		
Chloroform	10.00	10.41	104	70-130	3	25		
Benzene	10.00	10.14	101	70-130	26	25	*	R7
Trichloroethene	10.00	11.12	111	70-130	24	25		
Toluene	10.00	9.686	97	70-130	2	25		
Tetrachloroethene	10.00	10.50	105	70-130	1	25		
Ethylbenzene	10.00	10.60	106	70-130	2	25		
m,p-Xylenes	20.00	19.26	96	70-130	3	25		
o-Xylene	10.00	9.772	98	70-130	4	25		
1,3,5-Trimethylbenzene	10.00	10.74	107	70-130	1	25		
1,2,4-Trimethylbenzene	10.00	11.45	114	70-130	1	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	93	70-130		

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC533819	Diln Fac:	1.000
Matrix:	Air	Batch#:	160347
Units (V):	ppbv	Analyzed:	02/24/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160347
Units (V):	ppbv	Analyzed:	02/24/10
Diln Fac:	1.000		

Type: BS Lab ID: QC533820

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	10.27	103	70-130		
Chloroethane	10.00	9.486	95	70-130		
1,1-Dichloroethene	10.00	9.956	100	60-145		
1,1-Dichloroethane	10.00	9.932	99	48-145		
MTBE	10.00	10.73	107	70-130		
cis-1,2-Dichloroethene	10.00	9.776	98	70-130		
n-Hexane	10.00	9.144	91	70-130		
Chloroform	10.00	10.36	104	70-130		
Benzene	10.00	7.540	75	70-130		
Trichloroethene	10.00	8.254	83	70-130		
Toluene	10.00	9.448	94	70-130		
Tetrachloroethene	10.00	10.03	100	70-130		
Ethylbenzene	10.00	10.17	102	70-130		
m,p-Xylenes	20.00	19.05	95	70-130		
o-Xylene	10.00	9.582	96	70-130		
1,3,5-Trimethylbenzene	10.00	10.23	102	70-130		
1,2,4-Trimethylbenzene	10.00	11.17	112	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	98	70-130		

Type: BSD Lab ID: QC533821

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	10.23	102	70-130	0	25		
Chloroethane	10.00	9.718	97	70-130	2	25		
1,1-Dichloroethene	10.00	10.04	100	60-145	1	11		
1,1-Dichloroethane	10.00	10.08	101	48-145	2	25		
MTBE	10.00	10.66	107	70-130	1	25		
cis-1,2-Dichloroethene	10.00	9.846	98	70-130	1	25		
n-Hexane	10.00	9.136	91	70-130	0	25		
Chloroform	10.00	10.47	105	70-130	1	25		
Benzene	10.00	7.659	77	70-130	2	25		
Trichloroethene	10.00	8.481	85	70-130	3	25		
Toluene	10.00	9.513	95	70-130	1	25		
Tetrachloroethene	10.00	10.17	102	70-130	1	25		
Ethylbenzene	10.00	10.39	104	70-130	2	25		
m,p-Xylenes	20.00	19.17	96	70-130	1	25		
o-Xylene	10.00	9.645	96	70-130	1	25		
1,3,5-Trimethylbenzene	10.00	10.61	106	70-130	4	25		
1,2,4-Trimethylbenzene	10.00	11.25	112	70-130	1	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	99	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC534008	Diln Fac:	1.000
Matrix:	Air	Batch#:	160404
Units (V):	ppbv	Analyzed:	02/25/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160404
Units (V):	ppbv	Analyzed:	02/25/10
Diln Fac:	1.000		

Type: BS Lab ID: QC534009

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	9.656	97	70-130		
Chloroethane	10.00	9.653	97	70-130		
1,1-Dichloroethene	10.00	9.823	98	60-145		
1,1-Dichloroethane	10.00	9.606	96	48-145		
MTBE	10.00	10.34	103	70-130		
cis-1,2-Dichloroethene	10.00	9.712	97	70-130		
n-Hexane	10.00	8.927	89	70-130		
Chloroform	10.00	10.07	101	70-130		
Benzene	10.00	8.660	87	70-130		
Trichloroethene	10.00	9.867	99	70-130		
Toluene	10.00	9.353	94	70-130		
Tetrachloroethene	10.00	10.06	101	70-130		
Ethylbenzene	10.00	10.34	103	70-130		
m,p-Xylenes	20.00	19.15	96	70-130		
o-Xylene	10.00	9.668	97	70-130		
1,3,5-Trimethylbenzene	10.00	10.23	102	70-130		
1,2,4-Trimethylbenzene	10.00	10.97	110	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	100	70-130		

Type: BSD Lab ID: QC534010

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	10.20	102	70-130	5	25		
Chloroethane	10.00	9.750	98	70-130	1	25		
1,1-Dichloroethene	10.00	9.946	99	60-145	1	11		
1,1-Dichloroethane	10.00	9.635	96	48-145	0	25		
MTBE	10.00	10.59	106	70-130	2	25		
cis-1,2-Dichloroethene	10.00	9.734	97	70-130	0	25		
n-Hexane	10.00	9.065	91	70-130	2	25		
Chloroform	10.00	10.11	101	70-130	0	25		
Benzene	10.00	7.560	76	70-130	14	25		
Trichloroethene	10.00	8.740	87	70-130	12	25		
Toluene	10.00	9.434	94	70-130	1	25		
Tetrachloroethene	10.00	10.16	102	70-130	1	25		
Ethylbenzene	10.00	10.42	104	70-130	1	25		
m,p-Xylenes	20.00	19.10	96	70-130	0	25		
o-Xylene	10.00	9.873	99	70-130	2	25		
1,3,5-Trimethylbenzene	10.00	10.24	102	70-130	0	25		
1,2,4-Trimethylbenzene	10.00	11.05	110	70-130	1	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	98	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC534220	Diln Fac:	1.000
Matrix:	Air	Batch#:	160456
Units (V):	ppbv	Analyzed:	02/27/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	96	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160456
Units (V):	ppbv	Analyzed:	02/27/10
Diln Fac:	1.000		

Type: BS Lab ID: QC534221

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	9.916	99	70-130		
Chloroethane	10.00	9.369	94	70-130		
1,1-Dichloroethene	10.00	9.814	98	60-145		
1,1-Dichloroethane	10.00	9.796	98	48-145		
MTBE	10.00	10.66	107	70-130		
cis-1,2-Dichloroethene	10.00	9.627	96	70-130		
n-Hexane	10.00	9.168	92	70-130		
Chloroform	10.00	10.18	102	70-130		
Benzene	10.00	10.10	101	70-130		
Trichloroethene	10.00	11.19	112	70-130		
Toluene	10.00	9.386	94	70-130		
Tetrachloroethene	10.00	10.10	101	70-130		
Ethylbenzene	10.00	10.26	103	70-130		
m,p-Xylenes	20.00	18.99	95	70-130		
o-Xylene	10.00	9.464	95	70-130		
1,3,5-Trimethylbenzene	10.00	10.22	102	70-130		
1,2,4-Trimethylbenzene	10.00	10.79	108	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	100	70-130		

Type: BSD Lab ID: QC534222

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	9.765	98	70-130	2	25		
Chloroethane	10.00	9.550	96	70-130	2	25		
1,1-Dichloroethene	10.00	10.17	102	60-145	4	11		
1,1-Dichloroethane	10.00	9.869	99	48-145	1	25		
MTBE	10.00	10.81	108	70-130	1	25		
cis-1,2-Dichloroethene	10.00	9.734	97	70-130	1	25		
n-Hexane	10.00	9.415	94	70-130	3	25		
Chloroform	10.00	10.34	103	70-130	2	25		
Benzene	10.00	10.30	103	70-130	2	25		
Trichloroethene	10.00	11.67	117	70-130	4	25		
Toluene	10.00	9.580	96	70-130	2	25		
Tetrachloroethene	10.00	10.08	101	70-130	0	25		
Ethylbenzene	10.00	10.11	101	70-130	1	25		
m,p-Xylenes	20.00	18.69	93	70-130	2	25		
o-Xylene	10.00	9.456	95	70-130	0	25		
1,3,5-Trimethylbenzene	10.00	10.04	100	70-130	2	25		
1,2,4-Trimethylbenzene	10.00	10.61	106	70-130	2	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	97	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC534241	Diln Fac:	1.000
Matrix:	Air	Batch#:	160461
Units (V):	ppbv	Analyzed:	02/28/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160461
Units (V):	ppbv	Analyzed:	02/28/10
Diln Fac:	1.000		

Type: BS Lab ID: QC534242

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	9.814	98	70-130		
Chloroethane	10.00	8.972	90	70-130		
1,1-Dichloroethene	10.00	9.722	97	60-145		
1,1-Dichloroethane	10.00	9.646	96	48-145		
MTBE	10.00	10.56	106	70-130		
cis-1,2-Dichloroethene	10.00	9.683	97	70-130		
n-Hexane	10.00	9.002	90	70-130		
Chloroform	10.00	10.29	103	70-130		
Benzene	10.00	10.09	101	70-130		
Trichloroethene	10.00	11.06	111	70-130		
Toluene	10.00	9.549	95	70-130		
Tetrachloroethene	10.00	10.27	103	70-130		
Ethylbenzene	10.00	10.25	102	70-130		
m,p-Xylenes	20.00	18.64	93	70-130		
o-Xylene	10.00	9.503	95	70-130		
1,3,5-Trimethylbenzene	10.00	10.24	102	70-130		
1,2,4-Trimethylbenzene	10.00	10.77	108	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	97	70-130		

Type: BSD Lab ID: QC534243

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	9.644	96	70-130	2	25		
Chloroethane	10.00	8.970	90	70-130	0	25		
1,1-Dichloroethene	10.00	9.683	97	60-145	0	11		
1,1-Dichloroethane	10.00	9.547	95	48-145	1	25		
MTBE	10.00	10.51	105	70-130	0	25		
cis-1,2-Dichloroethene	10.00	9.687	97	70-130	0	25		
n-Hexane	10.00	9.073	91	70-130	1	25		
Chloroform	10.00	10.44	104	70-130	1	25		
Benzene	10.00	10.13	101	70-130	0	25		
Trichloroethene	10.00	11.46	115	70-130	4	25		
Toluene	10.00	9.255	93	70-130	3	25		
Tetrachloroethene	10.00	9.936	99	70-130	3	25		
Ethylbenzene	10.00	10.06	101	70-130	2	25		
m,p-Xylenes	20.00	18.39	92	70-130	1	25		
o-Xylene	10.00	9.416	94	70-130	1	25		
1,3,5-Trimethylbenzene	10.00	9.907	99	70-130	3	25		
1,2,4-Trimethylbenzene	10.00	10.52	105	70-130	2	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	99	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200061530002 File : 042_002 Time : 11-FEB-2010 17:30

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	91839	16.47	
75	30% - 66% of mass 95	237217	42.53	
95		557769	100.00	
96	5% - 9% of mass 95	38075	6.83	
173	< 2% of mass 174	107	0.04	
174	50% - 120% of mass 95	285940	51.26	
175	4% - 9% of mass 174	16963	5.93	
176	93% - 101% of mass 174	277915	97.19	
177	5% - 9% of mass 176	19028	6.85	

CURTIS & TOMPKINS BFB TUNE FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200070871005 File : 048_005 Time : 18-FEB-2010 05:11

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	67381	15.34	
75	30% - 66% of mass 95	181242	41.25	
95		439377	100.00	
96	5% - 9% of mass 95	29053	6.61	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	229821	52.31	
175	4% - 9% of mass 174	13216	5.75	
176	93% - 101% of mass 174	222753	96.92	
177	5% - 9% of mass 176	12989	5.83	

CURTIS & TOMPKINS BFB TUNE FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200072428002 File : 050_002 Time : 19-FEB-2010 08:09

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	77089	15.98	
75	30% - 66% of mass 95	191976	39.81	
95		482288	100.00	
96	5% - 9% of mass 95	34838	7.22	
173	< 2% of mass 174	320	0.13	
174	50% - 120% of mass 95	246310	51.07	
175	4% - 9% of mass 174	15655	6.36	
176	93% - 101% of mass 174	247604	100.53	
177	5% - 9% of mass 176	14724	5.95	

CURTIS & TOMPKINS BFB TUNE FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200078866004 File : 054_004 Time : 23-FEB-2010 18:26

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	80835	14.33	
75	30% - 66% of mass 95	228721	40.56	
95		563977	100.00	
96	5% - 9% of mass 95	34156	6.06	
173	< 2% of mass 174	78	0.03	
174	50% - 120% of mass 95	307251	54.48	
175	4% - 9% of mass 174	18198	5.92	
176	93% - 101% of mass 174	310196	100.96	
177	5% - 9% of mass 176	20085	6.47	

CURTIS & TOMPKINS BFB TUNE FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200079897001 File : 055_001 Time : 24-FEB-2010 11:37

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	80924	15.17	
75	30% - 66% of mass 95	224168	42.03	
95		533373	100.00	
96	5% - 9% of mass 95	27847	5.22	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	295820	55.46	
175	4% - 9% of mass 174	22749	7.69	
176	93% - 101% of mass 174	285959	96.67	
177	5% - 9% of mass 176	17424	6.09	

CURTIS & TOMPKINS BFB TUNE FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200081781001 File : 056_001 Time : 25-FEB-2010 18:03

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	85719	16.09	
75	30% - 66% of mass 95	227962	42.79	
95		532687	100.00	
96	5% - 9% of mass 95	34190	6.42	
173	< 2% of mass 174	99	0.03	
174	50% - 120% of mass 95	302502	56.79	
175	4% - 9% of mass 174	21088	6.97	
176	93% - 101% of mass 174	286642	94.76	
177	5% - 9% of mass 176	15691	5.47	

CURTIS & TOMPKINS BFB TUNE FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200083830002 File : 058_002 Time : 27-FEB-2010 06:10

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	81688	13.74	
75	30% - 66% of mass 95	231151	38.87	
95		594695	100.00	
96	5% - 9% of mass 95	36396	6.12	
173	< 2% of mass 174	0	0.00	
174	50% - 120% of mass 95	317359	53.37	
175	4% - 9% of mass 174	19901	6.27	
176	93% - 101% of mass 174	306616	96.61	
177	5% - 9% of mass 176	18550	6.05	

CURTIS & TOMPKINS BFB TUNE FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200085508001 File : 059_001 Time : 28-FEB-2010 09:08

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	74438	13.16	
75	30% - 66% of mass 95	228199	40.33	
95		565766	100.00	
96	5% - 9% of mass 95	34199	6.04	
173	< 2% of mass 174	381	0.13	
174	50% - 120% of mass 95	294316	52.02	
175	4% - 9% of mass 174	21632	7.35	
176	93% - 101% of mass 174	292506	99.39	
177	5% - 9% of mass 176	20775	7.10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218259 MSAIR Air: EPA TO-15

Inst : MSAIR01
 Calnum : 1200061530001
 Units : nL/L

Date : 11-FEB-2010 21:28
 X Axis : R

Level	File	Seqnum	Sample ID	Sample ID	Analyzed	Stds
L1	042_006	1200061530006	NONE	11-FEB-2010	21:28	S13990 (6X), S13985 (15X)
L2	042_007	1200061530007	NONE	11-FEB-2010	22:29	S13990 (2X), S13985 (15X)
L3	042_008	1200061530008	NONE	11-FEB-2010	23:28	S13984 (6X), S13985 (15X)
L4	042_009	1200061530009	NONE	12-FEB-2010	00:29	S13984 (2X), S13985 (15X)
L5	042_010	1200061530010	NONE	12-FEB-2010	01:28	S13984, S13985 (15X)
L6	042_011	1200061530011	NONE	12-FEB-2010	02:28	S13983 (6X), S13985 (15X)
L7	042_012	1200061530012	NONE	12-FEB-2010	03:28	S13983 (3X), S13985 (15X)
L8	042_013	1200061530013	NONE	12-FEB-2010	04:28	S13983 (2X), S13985 (15X)
L9	042_014	1200061530014	NONE	12-FEB-2010	05:27	S13983, S13985 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Vinyl Chloride	2.7447	2.5879	2.9217	2.5065	2.5743	3.3789	2.9715	2.8173	2.5907	AVRG		0.35866		2.7882	10	0.99	30	
Chloroethane	0.2388m	0.1890	0.2638	0.2793	0.2665	0.3606	0.3065	0.2719	0.2003	AVRG		3.78647		0.2641	20	0.99	30	
1,1-Dichloroethene	3.5636	3.2130	4.4345	3.9541	3.5559	4.7304	3.8663	3.5850	2.9834	AVRG		0.26560		3.7651	15	0.99	30	
1,1-Dichloroethane	4.2593	3.9362	5.1910	4.6086	4.2382	5.5509	4.6873	4.4035	4.1535	AVRG		0.21936		4.5587	11	0.99	30	
MTBE	3.4196	2.9501	3.5831	3.1358	2.8812	3.4512	2.9438	2.6077	2.2012	AVRG		0.33120		3.0193	15	0.99	30	
cis-1,2-Dichloroethene	1.1871	1.2275	2.0814	1.8984	1.6916	2.4676	2.0046	1.7953	1.4762	AVRG		0.56856		1.7588	24	0.99	30	
n-Hexane	2.8621	2.4224	2.7825	2.4749	2.2652	2.7385	2.3187	2.1684	1.9507	AVRG		0.40940		2.4426	12	0.99	30	
Chloroform	6.6228	5.5657	6.5731	5.7667	4.9559	6.3067	5.1919	4.6378	3.7531	AVRG		0.18228		5.4860	17	0.99	30	
Benzene	0.4585	0.5066	0.4557	0.5133	0.3394	0.4144	0.3396	0.4176		AVRG		2.32219		0.4306	15	0.99	30	
Trichloroethene	0.4847	0.6091	0.5522	0.6465	0.4560	0.5780	0.4889	0.6448	0.4138	AVRG		1.84655		0.5415	16	0.99	30	
Toluene	1.4370	1.4217	1.9660	1.6727	1.5811	1.9473	1.6765	1.4781	1.2770	AVRG		0.62252		1.6064	15	0.99	30	
Tetrachloroethene	0.5725	0.5005	0.6127	0.5373	0.5029	0.5876	0.4695	0.4253	0.3582	AVRG		1.97087		0.5074	16	0.99	30	
Ethylbenzene	1.4826	1.4730	2.3223	1.9985	1.8643	2.2411	1.8362	1.5533	1.2288	AVRG		0.56250		1.7778	21	0.99	30	
m,p-Xylenes	1.8006	1.9195	2.5821	2.0957	1.8434	2.1557	1.6379	1.3408		AVRG		0.52030		1.9220	19	0.99	30	
o-Xylene	1.6466	1.7905	2.3923	1.9718	1.7197	1.9027	1.4352	1.2447		AVRG		0.56723		1.7629	20	0.99	30	
1,3,5-Trimethylbenzene	1.6477	1.9921	2.7357	2.2174	2.0018	2.4186	1.9077	1.6155	1.2930	AVRG		0.50478		1.9811	22	0.99	30	
1,2,4-Trimethylbenzene	1.0972	1.3538	2.2884	2.0200	1.8206	2.2234	1.7111	1.4116	1.0903	AVRG		0.59934		1.6685	27	0.99	30	
Bromofluorobenzene	0.8701	0.8586	0.8709	0.8486	0.8434	0.8732	0.8637	0.8124	0.8006	AVRG		1.17779		0.8490	3	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Vinyl Chloride	0.167	-2	0.500	-7	1.667	5	5.000	-10	10.00	-8	16.67	21	33.33	7	50.00	1	100.0	-7
Chloroethane	0.167	-10	0.500	-28	1.667	0	5.000	6	10.00	1	16.67	37	33.33	16	50.00	3	100.0	-24
1,1-Dichloroethene	0.167	-5	0.500	-15	1.667	18	5.000	5	10.00	-6	16.67	26	33.33	3	50.00	-5	100.0	-21
1,1-Dichloroethane	0.167	-7	0.500	-14	1.667	14	5.000	1	10.00	-7	16.67	22	33.33	3	50.00	-3	100.0	-9
MTBE	0.167	13	0.500	-2	1.667	19	5.000	4	10.00	-5	16.67	14	33.33	-2	50.00	-14	100.0	-27
cis-1,2-Dichloroethene	0.167	-33	0.500	-30	1.667	18	5.000	8	10.00	-4	16.67	40	33.33	14	50.00	2	100.0	-16
n-Hexane	0.167	17	0.500	-1	1.667	14	5.000	1	10.00	-7	16.67	12	33.33	-5	50.00	-11	100.0	-20
Chloroform	0.167	21	0.500	1	1.667	20	5.000	5	10.00	-10	16.67	15	33.33	-5	50.00	-15	100.0	-32
Benzene	0.167	6	0.500	18	1.667	6	5.000	19	10.00	-21	16.67	-4	33.33	-21	50.00	-3		
Trichloroethene	0.167	-10	0.500	12	1.667	2	5.000	19	10.00	-16	16.67	7	33.33	-10	50.00	19	100.0	-24
Toluene	0.167	-11	0.500	-11	1.667	22	5.000	4	10.00	-2	16.67	21	33.33	4	50.00	-8	100.0	-21
Tetrachloroethene	0.167	13	0.500	-1	1.667	21	5.000	6	10.00	-1	16.67	16	33.33	-7	50.00	-16	100.0	-29
Ethylbenzene	0.167	-17	0.500	-17	1.667	31	5.000	12	10.00	5	16.67	26	33.33	3	50.00	-13	100.0	-31
m,p-Xylenes	0.333	-6	1.000	0	3.333	34	10.00	9	20.00	-4	33.33	12	66.67	-15	100.0	-30		
o-Xylene	0.167	-7	0.500	2	1.667	36	5.000	12	10.00	-2	16.67	8	33.33	-19	50.00	-29		
1,3,5-Trimethylbenzene	0.167	-17	0.500	1	1.667	38	5.000	12	10.00	1	16.67	22	33.33	-4	50.00	-18	100.0	-35
1,2,4-Trimethylbenzene	0.167	-34	0.500	-19	1.667	37	5.000	21	10.00	9	16.67	33	33.33	3	50.00	-15	100.0	-35
Bromofluorobenzene	10.00	2	10.00	1	10.00	3	10.00	0	10.00	-1	10.00	3	10.00	2	10.00	-4	10.00	-6

SJD 02/17/10 [Bromomethane]: Corrected automatically drawn baseline in NONE (042_006).

SJD 02/17/10 [Chloroethane]: Corrected automatically drawn baseline in NONE (042_006).

SJD 02/17/10 [Ethanol]: Combined split peak in multiple levels.

SJD 02/17/10 [Ethanol]: Corrected automatically drawn baseline in multiple levels.

SJD 02/17/10 [Acetone]: Corrected automatically drawn baseline in multiple levels.

SJD 02/17/10 [trans-1,2-Dichloroethene]: Corrected automatically drawn baseline in NONE (042_006).

m=manual integration

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

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1200061530001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1200061530001

Cal Date : 11-FEB-2010

ICV 1200061530016 (042_016 12-FEB-2010) stds: S13981, S13985 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Vinyl Chloride	10.00	8.582	nL/L	-14	30	
Chloroethane	10.00	10.91	nL/L	9	30	
1,1-Dichloroethene	10.00	9.985	nL/L	0	30	
1,1-Dichloroethane	10.00	9.465	nL/L	-5	30	
MTBE	10.00	10.29	nL/L	3	30	
cis-1,2-Dichloroethene	10.00	9.705	nL/L	-3	30	
n-Hexane	10.00	9.448	nL/L	-6	30	
Chloroform	10.00	9.512	nL/L	-5	30	
Benzene	10.00	8.162	nL/L	-18	30	
Trichloroethene	10.00	8.718	nL/L	-13	30	
Toluene	10.00	9.945	nL/L	-1	30	
Tetrachloroethene	10.00	10.15	nL/L	2	30	
Ethylbenzene	10.00	11.15	nL/L	11	30	
m,p-Xylenes	20.00	20.01	nL/L	0	30	
o-Xylene	10.00	10.38	nL/L	4	30	
1,3,5-Trimethylbenzene	10.00	11.07	nL/L	11	30	
1,2,4-Trimethylbenzene	10.00	11.85	nL/L	19	30	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC532976 IDF : 1.0
 Seqnum : 1200070871008.1 File : 048_008 Time : 18-FEB-2010 08:10
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	3.0956	10.00	11.11	nL/L	11	30	0.0500	u
Chloroethane	0.2641	0.3088	10.00	11.70	nL/L	17	30	0.0500	u
1,1-Dichloroethene	3.7651	4.3562	10.00	11.57	nL/L	16	30	0.0500	u
1,1-Dichloroethane	4.5587	5.1793	10.00	11.37	nL/L	14	30	0.0500	u
MTBE	3.0193	3.8051	10.00	12.61	nL/L	26	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.9385	10.00	11.02	nL/L	10	30	0.0500	u
n-Hexane	2.4426	2.6688	10.00	10.93	nL/L	9	30	0.0500	u
Chloroform	5.4860	6.4279	10.00	11.72	nL/L	17	30	0.0500	u
Benzene	0.4306	0.3476	10.00	8.073	nL/L	-19	30	0.0500	u
Trichloroethene	0.5415	0.4716	10.00	8.709	nL/L	-13	30	0.0500	u
Toluene	1.6064	1.7509	10.00	10.90	nL/L	9	30	0.0500	u
Tetrachloroethene	0.5074	0.5568	10.00	10.98	nL/L	10	30	0.0500	u
Ethylbenzene	1.7778	2.1071	10.00	11.85	nL/L	19	30	0.0500	u
m,p-Xylenes	1.9220	2.0966	20.00	21.81	nL/L	9	30	0.0500	u
o-Xylene	1.7629	2.0057	10.00	11.38	nL/L	14	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.3649	10.00	11.94	nL/L	19	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	2.1267	10.00	12.75	nL/L	27	30	0.0500	u
Bromofluorobenzene	0.8490	0.7788	10.00	9.171	nL/L	-8	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	286718	-26.34	27.20	27.26	0.06
1,4-Difluorobenzene	2458000	2992000	21.72	31.88	31.97	0.09
Chlorobenzene-d5	2767000	2288000	-17.31	41.82	41.89	0.08

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC533167 IDF : 1.0
 Seqnum : 1200072428003.1 File : 050_003 Time : 19-FEB-2010 09:11
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.8544	10.00	10.24	nL/L	2	30	0.0500	u
Chloroethane	0.2641	0.2852	10.00	10.80	nL/L	8	30	0.0500	u
1,1-Dichloroethene	3.7651	4.1153	10.00	10.94	nL/L	9	30	0.0500	u
1,1-Dichloroethane	4.5587	4.8016	10.00	10.54	nL/L	5	30	0.0500	u
MTBE	3.0193	3.4135	10.00	11.31	nL/L	13	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.8249	10.00	10.38	nL/L	4	30	0.0500	u
n-Hexane	2.4426	2.4240	10.00	9.927	nL/L	-1	30	0.0500	u
Chloroform	5.4860	5.8051	10.00	10.58	nL/L	6	30	0.0500	u
Benzene	0.4306	0.4440	10.00	10.32	nL/L	3	30	0.0500	u
Trichloroethene	0.5415	0.6494	10.00	11.99	nL/L	20	30	0.0500	u
Toluene	1.6064	1.7284	10.00	10.76	nL/L	8	30	0.0500	u
Tetrachloroethene	0.5074	0.5453	10.00	10.75	nL/L	8	30	0.0500	u
Ethylbenzene	1.7778	2.0923	10.00	11.77	nL/L	18	30	0.0500	u
m,p-Xylenes	1.9220	2.0882	20.00	21.72	nL/L	9	30	0.0500	u
o-Xylene	1.7629	1.9663	10.00	11.15	nL/L	12	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.3215	10.00	11.72	nL/L	17	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	2.1327	10.00	12.78	nL/L	28	30	0.0500	u
Bromofluorobenzene	0.8490	0.8199	10.00	9.653	nL/L	-3	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	324889	-16.53	27.20	27.26	0.06
1,4-Difluorobenzene	2458000	2322000	-5.53	31.88	31.95	0.07
Chlorobenzene-d5	2767000	2404000	-13.12	41.82	41.88	0.07

SJD 02/25/10 [4-Ethyltoluene]: Picked or reassigned peak. [general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC533418 IDF : 1.0
 Seqnum : 1200078866006.1 File : 054_006 Time : 23-FEB-2010 20:23
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.8246	10.00	10.13	nL/L	1	30	0.0500	u
Chloroethane	0.2641	0.2583	10.00	9.784	nL/L	-2	30	0.0500	u
1,1-Dichloroethene	3.7651	3.7172	10.00	9.877	nL/L	-1	30	0.0500	u
1,1-Dichloroethane	4.5587	4.4130	10.00	9.681	nL/L	-3	30	0.0500	u
MTBE	3.0193	3.2155	10.00	10.65	nL/L	6	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.6560	10.00	9.417	nL/L	-6	30	0.0500	u
n-Hexane	2.4426	2.3056	10.00	9.442	nL/L	-6	30	0.0500	u
Chloroform	5.4860	5.5606	10.00	10.14	nL/L	1	30	0.0500	u
Benzene	0.4306	0.3351	10.00	7.786	nL/L	-22	30	0.0500	u
Trichloroethene	0.5415	0.4744	10.00	8.762	nL/L	-12	30	0.0500	u
Toluene	1.6064	1.5915	10.00	9.909	nL/L	-1	30	0.0500	u
Tetrachloroethene	0.5074	0.5355	10.00	10.56	nL/L	6	30	0.0500	u
Ethylbenzene	1.7778	1.9264	10.00	10.84	nL/L	8	30	0.0500	u
m,p-Xylenes	1.9220	1.9065	20.00	19.84	nL/L	-1	30	0.0500	u
o-Xylene	1.7629	1.7898	10.00	10.15	nL/L	2	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.1410	10.00	10.81	nL/L	8	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.8962	10.00	11.37	nL/L	14	30	0.0500	u
Bromofluorobenzene	0.8490	0.8215	10.00	9.673	nL/L	-3	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	360754	-7.32	27.20	27.23	0.03
1,4-Difluorobenzene	2458000	3360000	36.70	31.88	31.93	0.05
Chlorobenzene-d5	2767000	2717000	-1.81	41.82	41.85	0.04

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC533820 IDF : 1.0
 Seqnum : 1200079897003.1 File : 055_003 Time : 24-FEB-2010 13:34
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.8626	10.00	10.27	nL/L	3	30	0.0500	m u
Chloroethane	0.2641	0.2505	10.00	9.486	nL/L	-5	30	0.0500	u
1,1-Dichloroethene	3.7651	3.7468	10.00	9.956	nL/L	0	30	0.0500	u
1,1-Dichloroethane	4.5587	4.5278	10.00	9.932	nL/L	-1	30	0.0500	u
MTBE	3.0193	3.2393	10.00	10.73	nL/L	7	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.7192	10.00	9.776	nL/L	-2	30	0.0500	u
n-Hexane	2.4426	2.2328	10.00	9.144	nL/L	-9	30	0.0500	u
Chloroform	5.4860	5.6795	10.00	10.36	nL/L	4	30	0.0500	u
Benzene	0.4306	0.3245	10.00	7.540	nL/L	-25	30	0.0500	u
Trichloroethene	0.5415	0.4468	10.00	8.254	nL/L	-17	30	0.0500	u
Toluene	1.6064	1.5168	10.00	9.448	nL/L	-6	30	0.0500	u
Tetrachloroethene	0.5074	0.5085	10.00	10.03	nL/L	0	30	0.0500	u
Ethylbenzene	1.7778	1.8077	10.00	10.17	nL/L	2	30	0.0500	u
m,p-Xylenes	1.9220	1.8304	20.00	19.05	nL/L	-5	30	0.0500	u
o-Xylene	1.7629	1.6887	10.00	9.582	nL/L	-4	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.0272	10.00	10.23	nL/L	2	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.8632	10.00	11.17	nL/L	12	30	0.0500	u
Bromofluorobenzene	0.8490	0.8342	10.00	9.826	nL/L	-2	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	329081	-15.45	27.20	27.24	0.04
1,4-Difluorobenzene	2458000	3149000	28.11	31.88	31.93	0.05
Chlorobenzene-d5	2767000	2647000	-4.34	41.82	41.85	0.04

SJD 03/01/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV.
[general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC534009 IDF : 1.0
 Seqnum : 1200081781002.2 File : 056_002 Time : 25-FEB-2010 19:01
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.6917	10.00	9.656	nL/L	-3	30	0.0500	m u
Chloroethane	0.2641	0.2549	10.00	9.653	nL/L	-3	30	0.0500	u
1,1-Dichloroethene	3.7651	3.6969	10.00	9.823	nL/L	-2	30	0.0500	u
1,1-Dichloroethane	4.5587	4.3778	10.00	9.606	nL/L	-4	30	0.0500	u
MTBE	3.0193	3.1212	10.00	10.34	nL/L	3	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.7079	10.00	9.712	nL/L	-3	30	0.0500	u
n-Hexane	2.4426	2.1798	10.00	8.927	nL/L	-11	30	0.0500	u
Chloroform	5.4860	5.5234	10.00	10.07	nL/L	1	30	0.0500	u
Benzene	0.4306	0.3728	10.00	8.660	nL/L	-13	30	0.0500	u
Trichloroethene	0.5415	0.5344	10.00	9.867	nL/L	-1	30	0.0500	u
Toluene	1.6064	1.5022	10.00	9.353	nL/L	-6	30	0.0500	u
Tetrachloroethene	0.5074	0.5104	10.00	10.06	nL/L	1	30	0.0500	u
Ethylbenzene	1.7778	1.8382	10.00	10.34	nL/L	3	30	0.0500	u
m,p-Xylenes	1.9220	1.8410	20.00	19.15	nL/L	-4	30	0.0500	u
o-Xylene	1.7629	1.7040	10.00	9.668	nL/L	-3	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.0272	10.00	10.23	nL/L	2	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.8296	10.00	10.97	nL/L	10	30	0.0500	u
Bromofluorobenzene	0.8490	0.8516	10.00	10.03	nL/L	0	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	342180	-12.09	27.20	27.22	0.02
1,4-Difluorobenzene	2458000	2747000	11.76	31.88	31.91	0.03
Chlorobenzene-d5	2767000	2682000	-3.07	41.82	41.84	0.03

SJD 03/01/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV.
[general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC534221 IDF : 1.0
 Seqnum : 1200083830003.1 File : 058_003 Time : 27-FEB-2010 07:10
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.7643	10.00	9.916	nL/L	-1	30	0.0500	m u
Chloroethane	0.2641	0.2474	10.00	9.369	nL/L	-6	30	0.0500	u
1,1-Dichloroethene	3.7651	3.6930	10.00	9.814	nL/L	-2	30	0.0500	u
1,1-Dichloroethane	4.5587	4.4646	10.00	9.796	nL/L	-2	30	0.0500	u
MTBE	3.0193	3.2192	10.00	10.66	nL/L	7	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.6929	10.00	9.627	nL/L	-4	30	0.0500	u
n-Hexane	2.4426	2.2387	10.00	9.168	nL/L	-8	30	0.0500	u
Chloroform	5.4860	5.5828	10.00	10.18	nL/L	2	30	0.0500	u
Benzene	0.4306	0.4347	10.00	10.10	nL/L	1	30	0.0500	u
Trichloroethene	0.5415	0.6057	10.00	11.19	nL/L	12	30	0.0500	u
Toluene	1.6064	1.5072	10.00	9.386	nL/L	-6	30	0.0500	u
Tetrachloroethene	0.5074	0.5120	10.00	10.10	nL/L	1	30	0.0500	u
Ethylbenzene	1.7778	1.8229	10.00	10.26	nL/L	3	30	0.0500	u
m,p-Xylenes	1.9220	1.8253	20.00	18.99	nL/L	-5	30	0.0500	u
o-Xylene	1.7629	1.6678	10.00	9.464	nL/L	-5	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.0236	10.00	10.22	nL/L	2	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.7997	10.00	10.79	nL/L	8	30	0.0500	u
Bromofluorobenzene	0.8490	0.8514	10.00	10.03	nL/L	0	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	369349	-5.11	27.20	27.32	0.12
1,4-Difluorobenzene	2458000	2620000	6.59	31.88	32.00	0.12
Chlorobenzene-d5	2767000	2920000	5.53	41.82	41.92	0.11

SJD 03/02/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/02/10 [Bromomethane]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/02/10 [n-Heptane]: Picked or reassigned peak. [general version]

SJD 03/02/10 [1,4-Dioxane]: Picked or reassigned peak. [general version]

SJD 03/02/10 [4-Ethyltoluene]: Picked or reassigned peak. [general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218259 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC534242 IDF : 1.0
 Seqnum : 1200085508003.1 File : 059_003 Time : 28-FEB-2010 11:07
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.7356	10.00	9.814	nL/L	-2	30	0.0500	m u
Chloroethane	0.2641	0.2369	10.00	8.972	nL/L	-10	30	0.0500	u
1,1-Dichloroethene	3.7651	3.6587	10.00	9.722	nL/L	-3	30	0.0500	u
1,1-Dichloroethane	4.5587	4.3949	10.00	9.646	nL/L	-4	30	0.0500	u
MTBE	3.0193	3.1866	10.00	10.56	nL/L	6	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.7027	10.00	9.683	nL/L	-3	30	0.0500	u
n-Hexane	2.4426	2.1983	10.00	9.002	nL/L	-10	30	0.0500	u
Chloroform	5.4860	5.6426	10.00	10.29	nL/L	3	30	0.0500	u
Benzene	0.4306	0.4342	10.00	10.09	nL/L	1	30	0.0500	u
Trichloroethene	0.5415	0.5988	10.00	11.06	nL/L	11	30	0.0500	u
Toluene	1.6064	1.5332	10.00	9.549	nL/L	-5	30	0.0500	u
Tetrachloroethene	0.5074	0.5206	10.00	10.27	nL/L	3	30	0.0500	u
Ethylbenzene	1.7778	1.8206	10.00	10.25	nL/L	2	30	0.0500	u
m,p-Xylenes	1.9220	1.7906	20.00	18.64	nL/L	-7	30	0.0500	u
o-Xylene	1.7629	1.6747	10.00	9.503	nL/L	-5	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.0274	10.00	10.24	nL/L	2	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.7957	10.00	10.77	nL/L	8	30	0.0500	u
Bromofluorobenzene	0.8490	0.8213	10.00	9.673	nL/L	-3	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	355863	-8.57	27.20	27.24	0.04
1,4-Difluorobenzene	2458000	2582000	5.04	31.88	31.94	0.06
Chlorobenzene-d5	2767000	2770000	0.11	41.82	41.86	0.05

SJD 03/02/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV.
[general version]

SJD 03/02/10 [Bromomethane]: Integrated to match integration of ICAL and CCV.
[general version]

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200070871

Date : 02/17/10
 Sequence : MSAIR01 048

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	IB	NONE	291992	27.27	2617000	31.97	2298000	41.89
003	CCV	NONE	259052	27.27	2831000	31.96	2152000	41.89
006	IB	NONE	294068	27.28	2240000	31.96	2293000	41.88
007	LOQ	217565-003	304531	27.26	2238000	31.94	2317000	41.87
008	CCV/BS	QC532976	286718	27.26	2992000	31.97	2288000	41.89
009	BSD	QC532977	308454	27.26	2905000	31.96	2271000	41.88
010	BLANK	QC532975	285181	27.28	2284000	31.96	2240000	41.88
011	SAMPLE	218259-001	288014	27.26	2875000	31.96	2236000	41.88
012	SAMPLE	218259-003	2780 *	27.11	2056000	32.10	10372 *	42.01
013	SAMPLE	218259-007	174647 *	27.25	1388000 *	31.92	1516000 *	41.87
014	SAMPLE	218259-008	173744 *	27.25	1425000 *	31.94	1541000 *	41.88
015	SAMPLE	218259-009	160344 *	27.26	1450000 *	31.95	1560000 *	41.88
016	SAMPLE	218259-010	168229 *	27.26	1805000	31.96	1687000	41.88
017	SAMPLE	218259-011	172159 *	27.26	1560000	31.95	1728000	41.88
018	SAMPLE	218259-012	195041 *	27.27	1681000	31.95	1679000	41.89
019	SAMPLE	218259-013	221060 *	27.27	1751000	31.95	1844000	41.88
020	SAMPLE	218259-014	240311	27.26	2095000	31.95	1752000	41.88
021	SAMPLE	218259-016	243356	27.27	1885000	31.95	1782000	41.88
022	SAMPLE	218259-018	248733	27.26	1932000	31.95	1661000	41.88
023	SAMPLE	218259-020	245432	27.27	2268000	31.95	1603000 *	41.89
024	SAMPLE	218259-007	253891	27.26	2494000	31.95	1934000	41.88
025	IB	NONE	254379	27.27	2602000	31.96	2058000	41.88

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200072428

Date : 02/19/10
 Sequence : MSAIR01 050

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
003	CCV/BS	QC533167	324889	27.26	2322000	31.95	2404000	41.88
004	BSD	QC533168	310905	27.26	2265000	31.95	2376000	41.88
005	BLANK	QC533166	304624	27.27	2239000	31.96	2396000	41.88
006	LOQ	217565-003	290029	27.27	3037000	31.96	2387000	41.88
007	SAMPLE	218259-009	309853	27.27	2282000	31.95	2459000	41.88
008	SAMPLE	218259-010	313476	27.26	2275000	31.95	2357000	41.88
009	SAMPLE	218259-011	309530	27.25	2247000	31.94	2418000	41.87
010	SAMPLE	218259-012	311572	27.26	2264000	31.95	2035000	41.88
011	SAMPLE	218259-013	314132	27.27	2294000	31.95	2096000	41.88
012	SAMPLE	218259-020	291578	27.27	2214000	31.95	2044000	41.88
013	SAMPLE	218259-007	302753	27.26	2644000	31.96	2334000	41.88
014	SAMPLE	218259-008	295112	27.26	2900000	31.96	2261000	41.88
015	SAMPLE	218259-018	311791	27.26	3022000	31.96	2468000	41.89

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200078866

Date : 02/23/10
 Sequence : MSAIR01 054

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
003	IB	NONE	344847	27.25	3321000	31.94	2712000	41.86
005	IB	NONE	342315	27.24	3370000	31.94	2640000	41.86
006	CCV/BS	QC533418	360754	27.23	3360000	31.93	2717000	41.85
007	BSD	QC533419	346166	27.23	2562000	31.92	2730000	41.85
008	BLANK	QC533417	326988	27.25	3272000	31.95	2614000	41.86
009	SAMPLE	218259-028	333654	27.24	3239000	31.94	2669000	41.86
010	SAMPLE	218259-029	329906	27.25	3277000	31.94	2710000	41.86
011	SAMPLE	218259-030	328004	27.24	2487000	31.93	2641000	41.85
012	SAMPLE	218259-031	321874	27.24	2428000	31.91	2586000	41.85
013	SAMPLE	218259-032	323609	27.24	2430000	31.93	2614000	41.85
014	SAMPLE	218259-033	323817	27.24	3055000	31.94	2622000	41.86
015	SAMPLE	218259-035	313163	27.24	3157000	31.94	2678000	41.86
016	SAMPLE	218259-036	314387	27.24	2410000	31.93	2617000	41.85
017	SAMPLE	218259-037	311217	27.24	2429000	31.92	2576000	41.85
018	SAMPLE	218259-038	319083	27.23	3183000	31.93	2608000	41.85

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200079897

Date : 02/24/10
 Sequence : MSAIR01 055

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	IB	NONE	308919	27.24	3101000	31.95	2603000	41.86
003	CCV/BS	QC533820	329081	27.24	3149000	31.93	2647000	41.85
004	BSD	QC533821	324437	27.24	3066000	31.93	2600000	41.86
005	BLANK	QC533819	294160	27.24	3071000	31.94	2529000	41.86
006	SAMPLE	218259-038	322236	27.23	3131000	31.93	2720000	41.85
007	SAMPLE	218259-006	326100	27.24	3252000	31.95	2205000	41.88
008	SAMPLE	218259-023	230151 *	27.22	1729000	31.89	2176000	41.83
009	SAMPLE	218259-027	264117	27.21	2044000	31.89	2244000	41.83
010	SAMPLE	218259-028	269898	27.22	2154000	31.89	2379000	41.83
011	SAMPLE	218259-004	281319	27.21	2889000	31.91	2316000	41.84
012	SAMPLE	218259-005	300176	27.20	3087000	31.90	2477000	41.83
013	SAMPLE	218259-015	304653	27.21	3050000	31.91	2140000	41.83
014	SAMPLE	218259-017	296663	27.21	3089000	31.91	2356000	41.84
015	SAMPLE	218259-021	312770	27.22	2318000	31.90	2443000	41.83
016	SAMPLE	218259-022	310764	27.21	3141000	31.90	2540000	41.83
017	SAMPLE	218259-006	312878	27.22	3211000	31.95	2070000	41.86
018	SAMPLE	218259-023	233714	27.22	2046000	31.91	2269000	41.84
019	SAMPLE	218259-026	283429	27.21	2450000	31.91	2427000	41.84

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200081781

Date : 02/25/10
 Sequence : MSAIR01 056

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	CCV/BS	QC534009	342180	27.22	2747000	31.91	2682000	41.84
003	BSD	QC534010	338416	27.24	3155000	31.93	2739000	41.86
004	BLANK	QC534008	325530	27.25	3104000	31.94	2717000	41.86
005	LOQ	217565-003	340549	27.25	2758000	31.94	2741000	41.86
006	LOQ	217565-003	333449	27.25	3327000	31.94	2761000	41.86
007	SAMPLE	218259-009	347229	27.24	3350000	31.94	2824000	41.86
008	SAMPLE	218259-010	340616	27.24	2492000	31.92	2711000	41.85
009	SAMPLE	218259-011	342761	27.23	3258000	31.93	2852000	41.86
010	SAMPLE	218259-012	323276	27.27	2587000	31.96	2435000	41.89
011	SAMPLE	218259-013	328690	27.28	3012000	31.96	2498000	41.89
012	SAMPLE	218259-014	334912	27.27	2494000	31.95	2306000	41.89
013	SAMPLE	218259-016	322239	27.27	2451000	31.94	2284000	41.88
014	SAMPLE	218259-020	310446	27.27	2391000	31.94	2193000	41.88
015	SAMPLE	218259-015	291650	27.27	3039000	31.97	2332000	41.89
016	SAMPLE	218259-012	280008	27.30	2637000	31.99	2464000	41.91
017	SAMPLE	218259-013	292642	27.30	3097000	32.00	2664000	41.90
018	SAMPLE	218259-014	319982	27.29	3117000	31.99	2537000	41.91
019	SAMPLE	218259-016	305656	27.30	3227000	32.00	2548000	41.91
020	SAMPLE	218259-020	291524	27.30	3161000	32.00	2460000	41.91
021	SAMPLE	218259-020	296790	27.29	3147000	31.99	2686000	41.91

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200083830

Date : 02/27/10
 Sequence : MSAIR01 058

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
003	CCV/BS	QC534221	369349	27.32	2620000	32.00	2920000	41.92
004	BSD	QC534222	365931	27.32	2618000	32.01	2936000	41.92
005	BLANK	QC534220	338696	27.34	3336000	32.05	2840000	41.94
006	SAMPLE	218259-002	328294	27.30	2595000	31.97	2980000	41.90
007	SAMPLE	218259-019	337543	27.30	3044000	31.99	2488000	41.91
008	SAMPLE	218259-034	315811	27.30	3111000	31.99	2678000	41.91
009	SAMPLE	218259-006	338924	27.30	3403000	32.00	2369000	41.91
010	SAMPLE	218259-024	319490	27.30	3296000	32.01	2482000	41.91
011	SAMPLE	218259-025	304177	27.30	3279000	32.00	2517000	41.91
012	SAMPLE	218259-003	321060	27.28	3253000	31.98	2121000	41.89
013	SAMPLE	218259-017	336323	27.27	3240000	31.97	2766000	41.89
014	SAMPLE	218259-018	332689	27.27	3284000	31.97	2792000	41.89
015	SAMPLE	218259-022	331908	27.26	3259000	31.97	2749000	41.89
016	SAMPLE	218259-002	326671	27.27	3402000	31.97	2514000	41.89
017	SAMPLE	218259-027	321473	27.27	3117000	31.98	2710000	41.89
018	SAMPLE	218259-015	319730	27.27	3202000	31.97	2790000	41.89
019	SAMPLE	218259-021	316739	27.28	3195000	31.97	2715000	41.89
020	SAMPLE	218259-006	290886	27.27	2519000	31.96	1915000	41.88

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200085508

Date : 02/28/10
 Sequence : MSAIR01 059

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	IB	NONE	311753	27.25	3186000	31.94	2661000	41.86
003	CCV/BS	QC534242	355863	27.24	2582000	31.94	2770000	41.86
004	BSD	QC534243	351749	27.24	2548000	31.92	2814000	41.85
005	BLANK	QC534241	304610	27.25	3217000	31.95	2609000	41.87
006	SAMPLE	218259-015	327923	27.25	2574000	31.93	2723000	41.86
007	SAMPLE	218259-024	309986	27.24	3221000	31.95	2272000	41.87
008	SAMPLE	218259-025	308556	27.25	3235000	31.94	2291000	41.87

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200061530

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/11/10 16:31

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	042_001	X	BFB			02/11/10 16:31	1.0	1
002	042_002	TUN	BFB			02/11/10 17:30	1.0	1
003	042_003	X	NONE			02/11/10 18:29	1.0	2 1
004	042_004	IB	NONE			02/11/10 19:29	1.0	1
005	042_005	IB	CALIB IB			02/11/10 20:28	1.0	1
006	042_006	ICAL	NONE			02/11/10 21:28	1.0	3 1
007	042_007	ICAL	NONE			02/11/10 22:29	1.0	3 1
008	042_008	ICAL	NONE			02/11/10 23:28	1.0	2 1
009	042_009	ICAL	NONE			02/12/10 00:29	1.0	2 1
010	042_010	ICAL	NONE			02/12/10 01:28	1.0	2 1
011	042_011	ICAL	NONE			02/12/10 02:28	1.0	4 1
012	042_012	ICAL	NONE			02/12/10 03:28	1.0	4 1
013	042_013	ICAL	NONE			02/12/10 04:28	1.0	4 1
014	042_014	ICAL	NONE			02/12/10 05:27	1.0	4 1
015	042_015	IB	NONE			02/12/10 06:26	1.0	1
016	042_016	ICV	NONE			02/12/10 07:26	1.0	5 1

SJD 02/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 16.

Analyst: SJD Date: 02/17/10 Reviewer: BO Date: 02/17/10

Standards used: 1=S13985 2=S13984 3=S13990 4=S13983 5=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200070871

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/17/10 16:43

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	048_001	TUN	BFB			02/17/10 16:43	1.0	1	
002	048_002	IB	NONE			02/17/10 17:41	1.0	1	
003	048_003	CCV	NONE			02/17/10 18:39	1.0	2 1	
005	048_005	TUN	BFB			02/18/10 05:11	1.0	1	
006	048_006	IB	NONE	Air		02/18/10 06:10	1.0	1	
007	048_007	LOQ	217565-003	Air	16125	02/18/10 07:10	1.0	1 3	
008	048_008	CCV/BS	QC532976	Air	160125	02/18/10 08:10	1.0	4 1	
009	048_009	BSD	QC532977	Air	160125	02/18/10 09:09	1.0	4 1	
010	048_010	BLANK	QC532975	Air	160125	02/18/10 10:09	1.0	1	
011	048_011	SAMPLE	218259-001	Air	160125	02/18/10 13:50	1.99	1	
012	048_012	SAMPLE	218259-003	Air	160125	02/18/10 14:48	1.99	1	12:MEK=17000
013	048_013	SAMPLE	218259-007	Air	160125	02/18/10 15:47	1.86	1	2:DCA11=320
014	048_014	SAMPLE	218259-008	Air	160125	02/18/10 16:45	1.86	1	2:DCA11=320
015	048_015	SAMPLE	218259-009	Air	160125	02/18/10 17:45	1.94	1	
016	048_016	SAMPLE	218259-010	Air	160125	02/18/10 18:43	1.87	1	
017	048_017	SAMPLE	218259-011	Air	160125	02/18/10 19:43	1.95	1	
018	048_018	SAMPLE	218259-012	Air	160125	02/18/10 20:42	2.400	1	
019	048_019	SAMPLE	218259-013	Air	160125	02/18/10 21:43	2.48	1	
020	048_020	SAMPLE	218259-014	Air	160125	02/18/10 22:45	2.44	1	
021	048_021	SAMPLE	218259-016	Air	160125	02/18/10 23:46	2.75	1	
022	048_022	SAMPLE	218259-018	Air	160125	02/19/10 00:48	2.97	1	1:TCE=580
023	048_023	SAMPLE	218259-020	Air	160125	02/19/10 01:50	2.31	1	
024	048_024	SAMPLE	218259-007	Air	160125	02/19/10 02:52	1.86	1	2:DCA11=290
025	048_025	IB	NONE			02/19/10 03:54	1.0	1	

SJD 03/02/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 25.

Analyst: SJD Date: 03/02/10 Reviewer: BO Date: 03/02/10

Standards used: 1=S13985 2=S13984 3=S13990 4=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200072428

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/19/10 07:08

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	050_001	TUN	BFB			02/19/10 07:08	1.0	1
002	050_002	TUN	BFB	Air		02/19/10 08:09	1.0	1
003	050_003	CCV/BS	QC533167	Air	160177	02/19/10 09:11	1.0	2 1
004	050_004	BSD	QC533168	Air	160177	02/19/10 10:12	1.0	2 1
005	050_005	BLANK	QC533166	Air	160177	02/19/10 11:13	1.0	1
006	050_006	LOQ	217565-003	Air	160177	02/19/10 12:22	1.0	2 1
007	050_007	SAMPLE	218259-009	Air	160177	02/19/10 13:23	1.94	1
008	050_008	SAMPLE	218259-010	Air	160177	02/19/10 14:25	1.87	1
009	050_009	SAMPLE	218259-011	Air	160177	02/19/10 15:26	1.95	1
010	050_010	SAMPLE	218259-012	Air	160177	02/19/10 16:28	2.400	1
011	050_011	SAMPLE	218259-013	Air	160177	02/19/10 17:29	2.48	1
012	050_012	SAMPLE	218259-020	Air	160177	02/19/10 18:30	4.62	1
013	050_013	SAMPLE	218259-007	Air	160177	02/19/10 19:31	11.16	1
014	050_014	SAMPLE	218259-008	Air	160177	02/19/10 20:34	11.16	1
015	050_015	SAMPLE	218259-018	Air	160177	02/19/10 21:36	35.64	1

SJD 03/01/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 15.

Analyst: SJD Date: 03/02/10 Reviewer: BO Date: 03/02/10

Standards used: 1=S13985 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200078866

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/23/10 15:32

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	054_001	TUN	BFB			02/23/10 15:32	1.0	1
002	054_002	TUN	BFB			02/23/10 16:30	1.0	1
003	054_003	IB	NONE			02/23/10 17:28	1.0	1
004	054_004	TUN	BFB			02/23/10 18:26	1.0	1
005	054_005	IB	NONE			02/23/10 19:24	1.0	1
006	054_006	CCV/BS	QC533418	Air	160248	02/23/10 20:23	1.0	2 1
007	054_007	BSD	QC533419	Air	160248	02/23/10 21:23	1.0	2 1
008	054_008	BLANK	QC533417	Air	160248	02/23/10 22:22	1.0	1
009	054_009	SAMPLE	218259-028	Air	160248	02/23/10 23:22	2.17	1
010	054_010	SAMPLE	218259-029	Air	160248	02/24/10 00:22	2.17	1
011	054_011	SAMPLE	218259-030	Air	160248	02/24/10 01:22	2.14	1
012	054_012	SAMPLE	218259-031	Air	160248	02/24/10 02:21	2.0	1
013	054_013	SAMPLE	218259-032	Air	160248	02/24/10 03:21	1.900	1
014	054_014	SAMPLE	218259-033	Air	160248	02/24/10 04:21	2.09	1
015	054_015	SAMPLE	218259-035	Air	160248	02/24/10 05:21	2.44	1
016	054_016	SAMPLE	218259-036	Air	160248	02/24/10 06:20	2.200	1
017	054_017	SAMPLE	218259-037	Air	160248	02/24/10 07:20	2.29	1
018	054_018	SAMPLE	218259-038	Air	160248	02/24/10 08:20	2.17	1

SJD 03/02/10 : adjusted tune prior to 054_004

SJD 03/02/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 18.

Analyst: SJD Date: 03/02/10 Reviewer: BO Date: 03/02/10

Standards used: 1=S13985 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200079897

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/24/10 11:37

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	055_001	TUN	BFB			02/24/10 11:37	1.0	1	
002	055_002	IB	NONE			02/24/10 12:36	1.0	1	
003	055_003	CCV/BS	QC533820	Air	160347	02/24/10 13:34	1.0	2 1	
004	055_004	BSD	QC533821	Air	160347	02/24/10 14:32	1.0	2 1	
005	055_005	BLANK	QC533819	Air	160347	02/24/10 15:31	1.0	1	
006	055_006	SAMPLE	218259-038	Air	160347	02/24/10 16:47	2.17	1	
007	055_007	SAMPLE	218259-006	Air	160347	02/24/10 17:45	5.76	1	4:CYHEXANE=450
008	055_008	SAMPLE	218259-023	Air	160347	02/24/10 18:44	7.14	1	
009	055_009	SAMPLE	218259-027	Air	160347	02/24/10 19:43	6.900	1	
010	055_010	SAMPLE	218259-028	Air	160347	02/24/10 20:43	6.51	1	
011	055_011	SAMPLE	218259-004	Air	160347	02/24/10 21:42	11.40	1	
012	055_012	SAMPLE	218259-005	Air	160347	02/24/10 22:43	11.28	1	
013	055_013	SAMPLE	218259-015	Air	160347	02/24/10 23:44	14.64	1	1:PCA=19
014	055_014	SAMPLE	218259-017	Air	160347	02/25/10 00:45	15.24	1	
015	055_015	SAMPLE	218259-021	Air	160347	02/25/10 01:45	13.38	1	
016	055_016	SAMPLE	218259-022	Air	160347	02/25/10 02:46	14.82	1	
017	055_017	SAMPLE	218259-006	Air	160347	02/25/10 03:47	23.04	1	2:CYHEXANE=270
018	055_018	SAMPLE	218259-023	Air	160347	02/25/10 10:34	7.14	1	
019	055_019	SAMPLE	218259-026	Air	160347	02/25/10 11:32	7.74	1	

SJD 03/02/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 19.

Analyst: SJD Date: 03/02/10 Reviewer: BO Date: 03/02/10

Standards used: 1=S13985 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200081781

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/25/10 18:03

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	056_001	TUN	BFB			02/25/10 18:03	1.0	1
002	056_002	CCV/BS	QC534009	Air	160404	02/25/10 19:01	1.0	2 1
003	056_003	BSD	QC534010	Air	160404	02/25/10 19:59	1.0	2 1
004	056_004	BLANK	QC534008	Air	160404	02/25/10 20:57	1.0	1
005	056_005	LOQ	217565-003	Air	160404	02/25/10 22:52	1.0	3 1
006	056_006	LOQ	217565-003	Air	160404	02/25/10 23:50	1.0	3 1
007	056_007	SAMPLE	218259-009	Air	160404	02/26/10 00:50	1.94	1
008	056_008	SAMPLE	218259-010	Air	160404	02/26/10 01:49	1.87	1
009	056_009	SAMPLE	218259-011	Air	160404	02/26/10 02:49	1.95	1
010	056_010	SAMPLE	218259-012	Air	160404	02/26/10 03:48	2.400	1
011	056_011	SAMPLE	218259-013	Air	160404	02/26/10 04:48	2.48	1
012	056_012	SAMPLE	218259-014	Air	160404	02/26/10 05:48	2.44	1
013	056_013	SAMPLE	218259-016	Air	160404	02/26/10 06:48	2.75	1
014	056_014	SAMPLE	218259-020	Air	160404	02/26/10 07:48	2.31	1
015	056_015	SAMPLE	218259-015	Air	160404	02/26/10 08:48	29.28	1
016	056_016	SAMPLE	218259-012	Air	160404	02/26/10 11:33	4.800	1
017	056_017	SAMPLE	218259-013	Air	160404	02/26/10 12:33	7.44	1
018	056_018	SAMPLE	218259-014	Air	160404	02/26/10 13:33	7.32	1
019	056_019	SAMPLE	218259-016	Air	160404	02/26/10 14:32	8.25	1
020	056_020	SAMPLE	218259-020	Air	160404	02/26/10 15:31	6.93	1
021	056_021	SAMPLE	218259-020	Air	160404	02/26/10 16:31	13.86	1

SJD 03/02/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 21.

Analyst: SJD Date: 03/02/10 Reviewer: BO Date: 03/02/10

Standards used: 1=S13985 2=S13981 3=S13990

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200083830

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/27/10 05:10

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	058_001	TUN	BFB			02/27/10 05:10	1.0	1
002	058_002	TUN	BFB			02/27/10 06:10	1.0	1
003	058_003	CCV/BS	QC534221	Air	160456	02/27/10 07:10	1.0	2 1
004	058_004	BSD	QC534222	Air	160456	02/27/10 08:09	1.0	2 1
005	058_005	BLANK	QC534220	Air	160456	02/27/10 09:09	1.0	1
006	058_006	SAMPLE	218259-002	Air	160456	02/27/10 15:32	115.2	1
007	058_007	SAMPLE	218259-019	Air	160456	02/27/10 16:31	177.0	1
008	058_008	SAMPLE	218259-034	Air	160456	02/27/10 17:31	121.2	1
009	058_009	SAMPLE	218259-006	Air	160456	02/27/10 18:30	244.2	1
010	058_010	SAMPLE	218259-024	Air	160456	02/27/10 19:31	607.2	1
011	058_011	SAMPLE	218259-025	Air	160456	02/27/10 20:32	595.2	1
012	058_012	SAMPLE	218259-003	Air	160456	02/27/10 21:33	477.6	1
013	058_013	SAMPLE	218259-017	Air	160456	02/27/10 22:34	30.48	1
014	058_014	SAMPLE	218259-018	Air	160456	02/27/10 23:35	35.64	1
015	058_015	SAMPLE	218259-022	Air	160456	02/28/10 00:36	29.64	1
016	058_016	SAMPLE	218259-002	Air	160456	02/28/10 01:36	23.04	1
017	058_017	SAMPLE	218259-027	Air	160456	02/28/10 02:37	27.60	1
018	058_018	SAMPLE	218259-015	Air	160456	02/28/10 03:38	97.60	1
019	058_019	SAMPLE	218259-021	Air	160456	02/28/10 04:37	89.20	1
020	058_020	SAMPLE	218259-006	Air	160456	02/28/10 05:37	81.40	1

1:CYHEXANE=200

1:HXO2=56

SJD 03/02/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

Analyst: SJD Date: 03/02/10 Reviewer: BO Date: 03/02/10

Standards used: 1=S13985 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200085508

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/28/10 09:08

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	059_001	TUN	BFB			02/28/10 09:08	1.0	1
002	059_002	IB	NONE			02/28/10 10:07	1.0	1
003	059_003	CCV/BS	QC534242	Air	160461	02/28/10 11:07	1.0	2 1
004	059_004	BSD	QC534243	Air	160461	02/28/10 12:07	1.0	2 1
005	059_005	BLANK	QC534241	Air	160461	02/28/10 13:07	1.0	1
006	059_006	SAMPLE	218259-015	Air	160461	02/28/10 21:51	48.80	1
007	059_007	SAMPLE	218259-024	Air	160461	02/28/10 22:51	303.6	1
008	059_008	SAMPLE	218259-025	Air	160461	02/28/10 23:52	297.6	1

SJD 03/02/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 8.

Analyst: SJD Date: 03/02/10 Reviewer: BO Date: 03/02/10

Standards used: 1=S13985 2=S13981

AIR SAMPLE PREP

Prep'd by / Date	SAMPLE ID	CAN ID	Initial Pressure (PSIG)	Final Pressure (PSIG)	Dilution Factor	Comments
5002/2/10	218072-001	C00158	13.52	23.74	1.76x	
	-002	C00072	12.75	23.56	1.85x	
	-003	C00069	13.08	23.46	1.79x	
	-004	C00080	13.24	23.55	1.78x	
	-005	C00095	14.49	23.93	1.65x	
	218080-001	C00173	11.92	26.28	2.20x	
	-002	C00171	11.47	24.63	2.15x	
	-003	C00163	12.90	24.79	1.92x	
	BLANK	C00048	—	—	1x	
	5002/4/10	218143-001	C00092	14.91	24.37	1.63x
BLANK		C00291	—	—	1x	
218143-001		C00212	1.5 added	30.0 total added	32.7x	20x of 1.63x can C00092
5002/4/10	218143-001	C00015	1.5 added	30.0 total added	654x	20x of 32.7x can C00212
	218143-001	C00092	14.65	26.33	2.93x	1.80x of 1.63x
5002/4/10	218143-001	C00044	1.5 added	30.0 total added	13080x	20x of 654x can C00015
	218080-003	C00022	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00163
5002/8/10	218180-001	C00195	14.48	23.52	1.62x	
	BLANK	C00292	—	—	1x	
	218180-001	C00006	1.5 added	30.0 total added	32.4x	20x of can C00195
	218180-001	C00009	1.5 added	30.0 total added	648	20x of can C00006
	218180-001	C00223	1.5 added	30.0 total added	12960x	20x of can C00009
APP 2/1/10	218180-001	C00195	16.93	27.10	2.59x	1.6x of 1.62x
	Blank	C00240	—	—	1x	
ET 2-10-10	Test Sample	C00147	14.64	27.70	1.89x	
ET 2-11-10	217598-1	C00233	19.74	24.70	2.16x	1.25x of 1.73
	217598-2	C00034	20.26	25.00	2.15x	1.23x of 1.75
	BLANK	C00240	—	—	1x	
ET-2-12	218259-012	C00136	10.43	25.05	2.40x	
	013	C00109	10.19	25.30	2.48x	
	015	C00058	10.28	25.10	2.44x	
	Blank	C00240	—	—	1x	
	218259-001	C00128	12.96	25.75	1.99x	
	218259-002	C00093	13.02	25.04	1.92x	
	218259-003	C00137	13.02	25.87	1.99x	
	218259-004	C00065	13.17	25.03	1.9x	

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PROJECT Air Sample Prep

Prepared by/date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
ET 2-12	218259-005	C00149	13.33	25.10	1.88x	
	-006	C00188	13.18	25.33	1.92x	
	-007	C00131	13.45	25.08	1.86x	
	-008	C00193	13.50	25.13	1.86x	
	-009	C00178	12.95	25.09	1.94x	
	-010	C00182	13.45	25.17	1.87x	
	-011	C00102	12.92	25.13	1.95x	
	-012					ET 2-12
	-013					ET 2-12
	-014	C00139	10.33	25.18	2.44x	
	-015	C00164	10.38	25.32	2.44x	
	-016	C00160	9.12	25.08	2.75x	
	-017	C00081 C00111 ET 2-12	9.93	25.23	2.54x	
	-018	C00111	8.68	25.03	2.97x	
	-019	C00145	8.57	25.33	2.95x	
	✓ -020	C00071	10.88	25.19	2.31x	
	-021					ET 2-12
	-022					ET 2-12
	Blank	C00292	---	---	1x	
	218259-012	C00136				ET 2-12
-013						
218259-021						
-022						
-023						
-024						
-025						
-026						
-027						
-028						
-029						
-030						
-031						
-032						
-033						
-034						

Data Not Used ET 2-12

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Date

Filled by/date	Sample ID	Can ID	(psig) Initial Pressure	(psig) Final Pressure	Dilation Factor	Comments	
ET 2-12	218259-021	C00050	11.25	25.05	2.23x		
	-022	C00078	10.24	25.26	2.47x		
	-023	C00194	10.57	25.19	2.38x		
	-024	C00096	10.03	25.36	2.53x		
	-025	C00114	10.25	25.39	2.48x		
	-026	C00151	9.78	25.20	2.58x		
	-027	C00172	10.77	25.34	2.3x		
	-028	C00191	11.71	25.38	2.17x		
	-029	C00135	11.58	25.09	2.17x		
	-030	C00192	11.81	25.28	2.14x		
	-031	C00144	12.64	25.33	2.00x		
	-032	C00067	13.32	25.27	2.31x		
	-033	C00061	12.23	25.55	2.09x		
	-034	C00197	12.47	25.20	2.02x		
	-036	C00196	11.78	25.98	2.2x		
	-037	C00121	11.07	25.34	2.27x		
	▽	-038	C00099	11.72	25.43	2.17x	
	ET 2-17-10	218329-018	C00069	9.46	25.89		
	-047	C00117	9.83	26.3		Not Used	
	-050	C00088	9.83	26.3		ET 2-17-10	
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.83	26.3	2.67x		
	-050	C00088	9.46	26.4	2.79x		
5/8 2/16/10	218072-004	C00018	1.5 added	30.0 ^{totally} added	35.6x	20x of 1.78x can C0008 Blank made on 7th	
ET 2-18-10	Blank	C00240	—	—	1x		
ET 2-22-10	218411-026	C00154	11.10	25.85	2.23x		
	-027	C00170	10.93	25.24	2.31x		
	-033	C00254	9.95	24.80	2.49x		
	-034	C00259	10.64	24.32	2.29x		
	-035	C00290	11.27	24.77	2.20x		
	-039	C00086	12.24	24.48	2.00x		
	-040	C00140	11.40	25.14	2.20x		
	▽	-041	C00123	11.14	24.50	2.20x	
	Blank	C00240	—	—	1x		

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AIR SAMPLE PREP

Prepped by / Date	SAMPLE ID	CAN ID	Initial Pressure (PSIG)	Final Pressure (PSIG)	Dilution Factor	Comments
502/2/10	218072-001	C00158	13.52	23.74	1.76x	
	-002	C00072	12.75	23.56	1.85x	
	-003	C00069	13.08	23.46	1.79x	
	-004	C00080	13.24	23.55	1.78x	
	-005	C00095	14.49	23.93	1.65x	
502/2/10	218080-001	C00173	11.92	26.28	2.20x	
	-002	C00171	11.47	24.63	2.15x	
	-003	C00163	12.90	24.79	1.92x	
	BLANK	C00048	—	—	1x	
502/4/10	218143-001	C00092	14.91	24.37	1.63x	
	BLANK	C00291	—	—	1x	
502/4/10	218143-001	C00212	1.5 added	30.0 total added	32.7x	20x of 1.63x can C00092
	218143-001	C00015	1.5 added	30.0 total	654x	20x of 32.7x can C00212
APR 24/10	218143-001	C00092	14.65	26.33	2.93x	1.80x of 1.63x
502/4/10	218143-001	C00044	1.5 added	30.0 total added	13080x	20x of 654x can C00015
	218080-003	C00022	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00163
502/8/10	218180-001	C00195	14.48	23.52	1.62x	
	BLANK	C00292	—	—	1x	
	218180-001	C00006	1.5 added	30.0 total added	32.4x	20x of can C00195
502/8/10	218180-001	C00009	1.5 added	30.0 total added	648	20x of can C00006
	218180-001	C00223	1.5 added	30.0 total added	12960x	20x of can C00009
	APR 24/10	218180-001	C00195	16.93	27.10	2.59x
	Blank	C00240	—	—	1x	
ET-2-10-0	Test Sample	C00147	14.64	27.70	1.89x	
ET-2-11-10	217598-1	C00233	19.74	24.70	2.16x	1.25x of 1.73
	217598-2	C00034	20.26	25.00	2.15x	1.23x of 1.75
	BLANK	C00240	—	—	1x	
ET-2-12	218259-012	C00136	10.43	25.05	2.40x	
	013	C00109	10.19	25.30	2.48x	
	015	C00058	10.28	25.10	2.44x	
	Blank	C00240	—	—	1x	
	218259-001	C00128	12.96	25.75	1.99x	
	218259-002	C00093	13.02	25.04	1.92x	
	218259-003	C00137	13.02	25.87	1.99x	
	218259-004	C00065	13.17	25.03	1.9x	

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PROJECT Air Sample Prep

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Prepared by/date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
ET 2-12	218259-005	C00149	13.33	25.10	1.88x	
	-006	C00188	13.18	25.33	1.92x	
	-007	C00131	13.45	25.08	1.86x	
	-008	C00193	13.50	25.13	1.86x	
	-009	C00178	12.95	25.09	1.94x	
	-010	C00182	13.45	25.17	1.87x	
	-011	C00102	12.92	25.15	1.95x	
	-012					ET 2-12
	-013					ET 2-12
	-014	C00139	10.33	25.18	2.44x	
	-015	C00164	10.38	25.32	2.44x	
	-016	C00160	9.12	25.08	2.75x	
	-017	C00081 C00141 ET 2-12	9.93	25.23	2.54x	
	-018	C00111	8.68	25.83	2.97x	
	-019	C00145	8.57	25.33	2.95x	
	V-020	C00071	10.88	25.19	2.31x	
	-021					ET 2-12
	-022					ET 2-12
	Blank	C00292	—	—	1x	
	218259-012	C00136				ET 2-12
-013						
218259-021						
-022						
-023						
-024						
-025						
-026						
-027						
-028						
-029						
-030						
-031						
-032						
-033						
-034						

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Prepped by/date	Sample ID	Can ID	(psig) Initial Pressure	(psig) Final Pressure	Dilution Factor	Comments
ET 2-12	218259-021	C00050	11.25	25.05	2.23x	
	-022	C00078	10.24	25.26	2.47x	
	-023	C00194	10.57	25.19	2.38x	
	-024	C00096	10.03	25.36	2.53x	
	-025	C00114	10.25	25.39	2.48x	
	-026	C00151	9.78	25.20	2.58x	
	-027	C00172	10.77	25.34	2.3x	
	-028	C00191	11.71	25.38	2.17x	
	-029	C00135	11.58	25.09	2.17x	
	-030	C00192	11.81	25.28	2.14x	
	-031	C00144	12.64	25.33	2.00x	
	-032	C00067	13.32	25.27	1.819x	
	-033	C00061	12.23	25.55	2.07x	
	-034	C00197	12.47	25.20	2.02x	
	-036	C00196	11.78	25.98	2.2x	
	-037	C00121	11.07	25.34	2.29x	
	-038	C00099	11.72	25.43	2.17x	
	ET-2-17-10	218329-018	C00069	9.46	25.89	
	-047	C00117	9.83	26.3		Not Used
	-050	C00088	9.83	26.3		ET 2-17-10
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.3	2.67x	
	-050	C00088	9.46	26.4	2.79x	
2/16/10	218072-004	C00018	1.5 added	30.0 ^{total added}	35.6x	20x of 1.78x can C0008 Blank made on 17th
ET 2-18-10	Blank	C00240			1x	
ET 2-22-10	218411-026	C00154	11.10	25.85	2.33x	
	-027	C00170	10.93	25.24	2.31x	
	-033	C00254	9.95	24.80	2.49x	
	-034	C00259	10.64	24.32	2.29x	
	-035	C00290	11.27	24.77	2.20x	
	-039	C00086	12.24	24.48	2.00x	
	-040	C00148	11.40	25.14	2.20x	
	-041	C00123	11.14	24.50	2.20x	
	Blank	C00240			1x	

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AIR SAMPLE PREP

Prepped by / Date	SAMPLE ID	CAN ID	Initial Pressure (PSIG)	Final Pressure (PSIG)	Dilution Factor	Comments
SEP 2/2/10	218072-001	C00158	13.52	23.74	1.76x	
	-002	C00072	12.75	23.56	1.85x	
	-003	C00069	13.08	23.46	1.79x	
	-004	C00080	13.24	23.55	1.78x	
	-005	C00095	14.49	23.93	1.65x	
SEP 2/2/10	218080-001	C00173	11.92	26.28	2.20x	
	-002	C00171	11.47	24.63	2.15x	
	-003	C00163	12.90	24.79	1.92x	
	BLANK	C00048	—	—	1x	
SEP 2/4/10	218143-001	C00092	14.91	24.37	1.63x	
	BLANK	C00291	—	—	1x	
SEP 2/4/10	218143-001	C00212	1.5 added	30.0 total added	32.7x	20x of 1.63x can C00092
	218143-001	C00015	1.5 added	30.0 total	654x	20x of 32.7x can C00212
SEP 2/4/10	218143-001	C00092	14.65	26.33	2.93x	1.80x of 1.63x
SEP 2/4/10	218143-001	C00044	1.5 added	30.0 total added	13080x	20x of 654x can C00015
	218080-003	C00022	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00163
SEP 2/8/10	218180-001	C00195	14.48	23.52	1.62x	
	BLANK	C00292	—	—	1x	
	218180-001	C00006	1.5 added	30.0 total added	32.4x	20x of can C00195
	218180-001	C00009	1.5 added	30.0 total added	648	20x of can C00006
SEP 2/8/10	218180-001	C00223	1.5 added	30.0 total added	12960x	20x of can C00009
	218180-001	C00195	16.93	27.10	2.59x	1.6x of 1.62x
	Blank	C00240	—	—	1x	
ET 2-10-10	Test Sample	C00147	14.64	27.70	1.89x	
ET 2-11-10	217598-1	C00233	19.74	24.70	2.16x	1.25x of 1.73
	217598-2	C00034	20.26	25.00	2.15x	1.23x of 1.75
	BLANK	C00240	—	—	1x	
ET 2-12	218259-012	C00136	10.43	25.05	2.40x	
	013	C00109	10.19	25.30	2.48x	
	015	C00058	10.28	25.10	2.44x	
	Blank	C00240	—	—	1x	
	218259-001	C00128	12.96	25.75	1.99x	
	218259-002	C00093	13.02	25.04	1.92x	
	218259-003	C00137	13.02	25.87	1.99x	
	218259-004	C00065	13.17	25.03	1.9x	

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PROJECT Air Sample Prep

Prepared by/date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments	
ET 2-12	218259-005	C00149	13.33	25.10	1.80x		
	-006	C00188	13.18	25.33	1.92x		
	-007	C00131	13.45	25.08	1.86x		
	-008	C00193	13.50	25.13	1.86x		
	-009	C00178	12.95	25.09	1.94x		
	-010	C00182	13.45	25.17	1.87x		
	-011	C00102	12.92	25.13	1.95x		
	-012					ET 2-12	
	-013					ET 2-12	
	-014	C00139	10.33	25.18	2.44x		
	-015	C00164	10.38	25.32	2.44x		
	-016	C00160	9.12	25.08	2.75x		
	-017	C00081 C00111 ET 2-12	9.93	25.23	2.54x		
	-018	C00111	8.68	25.03	2.97x		
	-019	C00145	8.57	25.33	2.95x		
	✓ -020	C00071	10.88	25.19	2.31x		
	-021					ET 2-12	
	-022					ET 2-12	
		Blank	C00292	—	—	1x	
		218259-012	C00136				ET 2-12
		-013					ET 2-12
	218259-021						
	-022						
	-023						
	-024						
	-025						
	-026						
	-027						
	-028						
	-029						
	-030						
	-031						
	-032						
	-033						
	-034						

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Prepped by/date	Sample ID	Can ID	(psig) Initial Pressure	(psig) Final Pressure	Dilution Factor	Comments	
ET 2-12	218259-021	C00050	11.25	25.05	2.23x		
	-022	C00078	10.24	25.26	2.47x		
	-023	C00144	10.57	25.19	2.38x		
	-024	C00096	10.03	25.36	2.53x		
	-025	C00114	10.25	25.39	2.48x		
	-026	C00151	9.78	25.20	2.58x		
	-027	C00172	10.97	25.34	2.3x		
	-028	C00191	11.71	25.38	2.17x		
	-029	C00135	11.58	25.09	2.17x		
	-030	C00192	11.81	25.28	2.14x		
	-031	C00144	12.64	25.33	2.00x		
	-032	C00067	13.32	25.27	1.81x		
	-033	C00061	12.23	25.55	2.09x		
	-034	C00197	12.47	25.20	2.02x		
	-036	C00196	11.78	25.98	2.2x		
	-037	C00121	11.07	25.34	2.29x		
	▽	▽ -038	C00099	11.72	25.43	2.17x	
	ET 2-17-10	218329-018	C00069	9.46	25.89		
	-047	C00117	8.83	26.3		Not used	
	-050	C00088	9.83	26.3		ET 2-17-10	
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x		
↓	-049	C00117	9.83	26.3	2.67x		
↓	-050	C00088	9.46	26.4	2.79x		
5/8 2/18/10	218072-004	C00018	1.5 added	30.0 ^{total added}	35.6x	20x of 1.78x can C0008 Blank made on 7th	
ET 2-18-10	Blank	C00240	—	—	1x		
ET 2-22-10	218411-026	C00154	11.10	25.85	2.33x		
↓	-027	C00170	10.93	25.24	2.31x		
↓	-028	C00254	9.95	24.80	2.49x		
↓	-034	C00259	10.64	24.32	2.29x		
↓	-035	C00290	11.27	24.77	2.20x		
↓	-039	C00086	12.24	24.48	2.00x		
↓	-040	C00140	11.40	25.14	2.26x		
↓	▽ -041	C00123	11.14	24.50	2.20x		
↓	Blank	C00240	—	—	1x		

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AIR SAMPLE PREP

Prepped by / Date	SAMPLE ID	CAN ID	Initial Pressure (PSIG)	Final Pressure (PSIG)	Dilution Factor	Comments
SOB 2/2/10	218072-001	C00158	13.52	23.74	1.76x	
	-002	C00072	12.75	23.56	1.85x	
	-003	C00069	13.08	23.46	1.79x	
	-004	C00080	13.24	23.55	1.78x	
	-005	C00095	14.49	23.93	1.65x	
SOB 2/4/10	218080-001	C00173	11.92	26.28	2.20x	
	-002	C00171	11.47	24.63	2.15x	
	-003	C00163	12.90	24.79	1.92x	
	BLANK	C00048	—	—	1x	
SOB 2/4/10	218143-001	C00092	14.91	24.37	1.63x	
	BLANK	C00291	—	—	1x	
	218143-001	C00212	1.5 added	30.0 total added	32.7x	20x of 1.63x can C00092
	218143-001	C00015	1.5 added	30.0 total	654x	20x of 32.7x can C00212
APR 24/10	218143-001	C00092	14.65	26.33	2.93x	1.80x of 1.63x
SOB 2/4/10	218143-001	C00044	1.5 added	30.0 total added	13080x	20x of 654x can C00015
	218080-003	C00022	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00163
SOB 2/8/10	218180-001	C00195	14.48	23.52	1.62x	
	BLANK	C00292	—	—	1x	
	218180-001	C00006	1.5 added	30.0 total added	32.4x	20x of can C00195
	218180-001	C00009	1.5 added	30.0 total added	648	20x of can C00006
	218180-001	C00223	1.5 added	30.0 total added	12960x	20x of can C00009
APR 24/10	218180-001	C00195	16.93	27.10	2.59x	1.6x of 1.62x
	Blank	C00240	—	—	1x	
ET 2-10-10	Test Sample	C00147	14.64	27.70	1.89x	
ET 2-11-10	217598-1	C00233	19.74	24.70	2.16x	1.25x of 1.73
	217598-2	C00034	20.26	25.00	2.15x	1.23x of 1.75
	BLANK	C00240	—	—	1x	
ET-2-12	218259-012	C00136	10.43	25.05	2.40x	
	013	C00109	10.19	25.30	2.48x	
	015	C00058	10.28	25.10	2.44x	
	Blank	C00240	—	—	1x	
	218259-001	C00128	12.96	25.75	1.99x	
	218259-002	C00093	13.02	25.04	1.92x	
	218259-003	C00137	13.02	25.87	1.99x	
	218259-004	C00065	13.17	25.03	1.9x	

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Prepared by/Date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
ET 2-12	218259-005	C00149	13.33	25.10	1.88x	
	-006	C00188	13.18	25.33	1.92x	
	-007	C00131	13.45	25.08	1.86x	
	-008	C00193	13.50	25.13	1.86x	
	-009	C00178	12.95	25.09	1.94x	
	-010	C00182	13.45	25.17	1.87x	
	-011	C00102	12.92	25.13	1.95x	
	-012					ET 2-12
	-013					ET 2-12
	-014	C00139	10.33	25.18	2.44x	
	-015	C00164	10.38	25.32	2.44x	
	-016	C00160	9.12	25.08	2.75x	
	-017	C00081 C00111 ET 2-12	9.93	25.23	2.54x	
	-018	C00111	8.68	25.03	2.97x	
	-019	C00145	8.57	25.33	2.95x	
	✓ -020	C00071	10.88	25.19	2.31x	
	-021					ET 2-12
	-022					ET 2-12
	Blank	C00292	—	—	1x	
	218259-012	C00136				ET 2-12
	-013					
	218259-021					
-022						
-023						
-024						
-025						
-026						
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Prepped by/date	Sample ID	Can ID	(psig) Inlet Pressure	(psig) Final Pressure	Dilution Factor	Comments
ET 2-12	218259-021	C00050	11.25	25.05	2.23x	
	-022	C00078	10.24	25.26	2.47x	
	-023	C00144	10.57	25.19	2.38x	
	-024	C00096	10.03	25.36	2.53x	
	-025	C00114	10.25	25.39	2.48x	
	-026	C00151	9.78	25.20	2.58x	
	-027	C00172	10.97	25.34	2.3x	
	-028	C00191	11.71	25.38	2.17x	
	-029	C00135	11.58	25.09	2.17x	
	-030	C00142	11.81	25.28	2.14x	
	-031	C00144	12.64	25.33	2.00x	
	-032	C00067	13.32	25.27	1.81x	
	-033	C00061	12.23	25.55	2.09x	
	-034	C00197	12.47	25.20	2.02x	
	-036	C00196	11.78	25.98	2.2x	
	-037	C00121	11.07	25.34	2.29x	
	-038	C00099	11.72	25.43	2.17x	
	ET 2-17-10	218329-048	C00069	9.46	25.89	
-047	C00117	9.83	26.3			
-050	C00088	9.83	26.3			
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.3	2.67x	
	-050	C00088	9.46	26.4	2.79x	
5/18/10	218072-004	C00018	1.5 added	30.0 ^{total added}	35.6x	20x of 1.78x can C0008 Blank made on 7th
ET 2-18-10	Blank	C06240	—	—	1x	
ET 2-22-10	218411-026	C00154	11.10	25.85	2.33x	
	-027	C00170	10.93	25.24	2.31x	
	-028	C00254	9.95	24.80	2.49x	
	-034	C00259	10.64	24.32	2.29x	
	-035	C00290	11.27	24.77	2.20x	
	-039	C00086	12.24	24.48	2.00x	
	-040	C00140	11.40	25.14	2.20x	
	-041	C00123	11.14	24.50	2.20x	
	Blank	C06240	—	—	1x	

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Prepped By / date	Sample ID	Can ID	(PSI) Initial Pres.	(PSI) Final Pres.	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x → 2.42x		
	-043	C00161	10.16	26.56	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00662	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.57		
	-048	C00664	9.37	25.51	2.72x		
	-049	C00117	9.83	26.30	2.67x		
	-050	C00088	9.46	26.4	2.77x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
		Blank	C00237 C00240	—	—	1x	
	Soo 2/22/10	Blank	C00048	—	—	1x	
	Blank	C00271	—	—	1x		
Soo ET	218259-002	C00208	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093	
	-003	C00231			39.8x	20x of 1.99x can C00137	
	-004	C00020			38x	20x of 1.90x can C00065	
	-005	C00017			37.6x	20x of 1.88x can C00149	
	-019	C00019			59x	20x of 2.95x can C00145	
	-024	C00045			50.6x	20x of 2.53x can C00096	
	-025	C00230			47.6x 49.6x	20x of 2.48x can C00114	
	-034	C00028			40.4x	20x of 2.02x can C00187	
ET 2-23	218411-001	C00250	11.99	25.12	2.09x		
	-002	C00269	12.34	25.36	2.05x		
	-003	C00160	11.19	25.32	2.26x		
	-004	C00260	12.17	24.88	1.94x		
	-005	C00241	11.24	25.42	2.26x		
	-006	C00244	8.24	26.18	3.18x		

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AIR SAMPLE PREP

Prepped by / Date	SAMPLE ID	CAN ID	Initial Pressure (PSIG)	Final Pressure (PSIG)	Dilution Factor	Comments
SOB 2/2/10	218072-001	C00158	13.52	23.74	1.76x	
	-002	C00072	12.75	23.56	1.85x	
	-003	C00069	13.08	23.46	1.79x	
	-004	C00080	13.24	23.55	1.78x	
	-005	C00095	14.49	23.93	1.65x	
	218080-001	C00173	11.92	26.28	2.20x	
	-002	C00171	11.47	24.63	2.15x	
	-003	C00163	12.90	24.79	1.92x	
	BLANK	C00048	—	—	1x	
	SOB 2/4/10	218143-001	C00092	14.91	24.37	1.63x
BLANK		C00291	—	—	1x	
218143-001		C00212	1.5 added	30.0 total added	32.7x	20x of 1.63x can C00092
SOB 2/4/10	218143-001	C00015	1.5 added	30.0 total added	654x	20x of 32.7x can C00212
	218143-001	C00092	14.65	26.33	2.93x	1.80x of 1.63x
SOB 2/4/10	218143-001	C00044	1.5 added	30.0 total added	13080x	20x of 654x can C00015
	218080-003	C00022	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00163
SOB 2/8/10	218180-001	C00195	14.48	23.52	1.62x	
	BLANK	C00292	—	—	1x	
	218180-001	C00006	1.5 added	30.0 total added	32.4x	20x of can C00195
	218180-001	C00009	1.5 added	30.0 total added	648	20x of can C00006
SOB 2/8/10	218180-001	C00223	1.5 added	30.0 total added	12960x	20x of can C00009
	218180-001	C00195	16.93	27.10	2.59x	1.6x of 1.62x
SOB 2/11/10	Blank	C00240	—	—	1x	
	ET 2-10-10 Test Sample	C00147	14.64	27.70	1.89x	
ET 2-11-10	217598-1	C00233	19.74	24.70	2.16x	1.25x of 1.73
	217598-2	C00034	20.26	25.00	2.15x	1.23x of 1.75
	BLANK	C00240	—	—	1x	
ET-2-12	218259-012	C00136	10.43	25.05	2.40x	
	013	C00109	10.19	25.30	2.48x	
	015	C00058	10.28	25.10	2.44x	
	Blank	C00240	—	—	1x	
	218259-001	C00128	12.96	25.75	1.99x	
	218259-002	C00093	13.02	25.04	1.92x	
	218259-003	C00137	13.02	25.87	1.99x	
	218259-004	C00065	13.17	25.03	1.9x	

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Prepared by/date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
ET 2-12	218259-005	C00149	13.33	25.10	1.88x	
	-006	C00188	13.18	25.33	1.92x	
	-007	C00131	13.45	25.08	1.86x	
	-008	C00193	13.50	25.13	1.86x	
	-009	C00178	12.95	25.09	1.94x	
	-010	C00182	13.45	25.17	1.87x	
	-011	C00102	12.92	25.15	1.95x	
	-012					ET 2-12
	-013					ET 2-12
	-014	C00139	10.33	25.18	2.44x	
	-015	C00164	10.38	25.32	2.44x	
	-016	C00160	9.12	25.08	2.75x	
	-017	C00081 C00111 ET 2-12	9.93	25.23	2.54x	
	-018	C00111	8.68	25.83	2.97x	
	-019	C00145	8.57	25.33	2.95x	
	✓ -020	C00071	10.88	25.19	2.31x	
	-021					ET 2-12
	-022					ET 2-12
	Blank	C00292	---	---	1x	
	218259-012	C00136				ET 2-12
218259-021	-013					ET 2-12
	-022					
	-023					
	-024					
	-025					
	-026					
	-027					
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Prepped by/date	Sample ID	Can ID	(psig) Initial Pressure	(psig) Final Pressure	Dilation Factor	Comments
ET 2-12	218259-021	C00050	11.25	25.05	2.23x	
	-022	C00078	10.24	25.26	2.47x	
	-023	C00194	10.57	25.19	2.38x	
	-024	C00096	10.03	25.36	2.53x	
	-025	C00114	10.25	25.39	2.48x	
	-026	C00151	9.78	25.20	2.58x	
	-027	C00172	10.77	25.24	2.3x	
	-028	C00191	11.71	25.38	2.17x	
	-029	C00135	11.58	25.09	2.17x	
	-030	C00192	11.81	25.28	2.14x	
	-031	C00144	12.64	25.33	2.00x	
	-032	C00067	13.32	25.27	2.319x	
	-033	C00061	12.23	25.55	2.09x	
	-034	C00197	12.47	25.20	2.02x	
	-036	C00196	11.78	25.98	2.2x	
	-037	C00121	11.07	25.34	2.29x	
	-038	C00099	11.72	25.43	2.17x	
	ET 2-17-10	218329-040	C00069	9.46	25.89	
	-049	C00117	9.83	26.3		Not used
	-050	C00088	9.83	26.3		ET 2-17-10
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.3	2.67x	
	-050	C00088	9.46	26.4	2.79x	
5/28 2/16/10	218072-004	C00018	1.5 added	30.0 ^{total added}	35.6x	20x of 1.78x can C0008 Blank made on 17th
ET 2-18-10	Blank	C00240	—	—	1x	
ET 2-22-10	218411-026	C00154	11.10	25.85	2.233x	
	-027	C00170	10.93	25.24	2.31x	
	-028	C00254	9.95	24.80	2.49x	
	-034	C00259	10.64	24.32	2.29x	
	-035	C00240	11.27	24.77	2.20x	
	-039	C00086	12.24	24.48	2.00x	
	-040	C00148	11.40	25.14	2.20x	
	-041	C00123	11.14	24.50	2.20x	
	Blank	C00240	—	—	1x	

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Prepped By / date	Sample ID	Can ID	Initial Pres. (Psi)	Final Pres. (Psi)	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x → 2.42x		
	-043	C00161	10.16	26.50	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00062	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.59		
	-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.83	26.30	2.67x		
	-050	C00088	9.46	26.4	2.79x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
		Blank	C00237 C00240	—	—	1x	
	500 2/22/10	Blank	C00048	—	—	1x	
	Blank	C00221	—	—	1x		
500 ET	218259-002	C00208	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093	
	-003	C00231			39.8x	20x of 1.99x can C00137	
	-004	C00020			38x	20x of 1.90x can C00085	
	-005	C00017			37.6x	20x of 1.88x can C00149	
	-019	C00019			59x	20x of 2.95x can C00145	
	-024	C00045			50.6x	20x of 2.53x can C00096	
	-025	C00230			49.6x 49.6x	20x of 2.48x can C00114	
	-034	C00028			40.4x	20x of 2.02x can C00197	
ET 2-23	218411-001	C00250	11.99	25.12	2.09x		
	-002	C00269	12.34	25.36	2.05x		
	-003	C00100	11.19	25.32	2.26x		
	-004	C00260	12.17	24.88	1.94x		
	-005	C00241	11.24	25.42	2.26x		
	-006	C00249	8.24	26.18	3.18x	Continued on Page	

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AIR SAMPLE PREP

Prepared by / date	SAMPLE ID	CAN ID	Initial Pressure (PSIG)	Final Pressure (PSIG)	Dilution Factor	Comments
SO2 2/2/10	218072-001	C00158	13.52	23.74	1.76x	
	-002	C00072	12.75	23.56	1.85x	
	-003	C00069	13.08	23.46	1.79x	
	-004	C00080	13.24	23.55	1.78x	
	-005	C00095	14.49	23.93	1.65x	
	218080-001	C00173	11.92	26.28	2.20x	
	-002	C00171	11.47	24.63	2.15x	
	-003	C00163	12.90	24.79	1.92x	
	BLANK	C00048	—	—	1x	
	SO2 2/4/10	218143-001	C00092	14.91	24.37	1.63x
BLANK		C00291	—	—	1x	
218143-001		C00212	1.5 added	30.0 total added	32.7x	20x of 1.63x can C00092
SO2 2/4/10	218143-001	C00015	1.5 added	30.0 total added	654x	20x of 32.7x can C00212
	218143-001	C00092	14.65	26.33	2.93x	1.80x of 1.63x
SO2 2/4/10	218143-001	C00044	1.5 added	30.0 total added	13080x	20x of 654x can C00015
	218080-003	C00022	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00163
SO2 2/8/10	218180-001	C00195	14.48	23.52	1.62x	
	BLANK	C00292	—	—	1x	
	218180-001	C00006	1.5 added	30.0 total added	32.4x	20x of can C00195
	218180-001	C00009	1.5 added	30.0 total added	648	20x of can C00006
	218180-001	C00223	1.5 added	30.0 total added	12960x	20x of can C00009
APP 2/11/10	218180-001	C00195	16.93	27.10	2.59x	1.6x of 1.62x
	Blank	C00240	—	—	1x	
ET 2-10-10	Test Sample	C00147	14.64	27.70	1.89x	
ET 2-11-10	217598-1	C00233	19.74	24.70	2.16x	1.25x of 1.73
	217598-2	C00034	20.26	25.00	2.15x	1.23x of 1.75
	BLANK	C00240	—	—	1x	
ET-2-12	218259-012	C00136	10.43	25.05	2.40x	
	013	C00109	10.19	25.30	2.48x	
	015	C00058	10.28	25.10	2.44x	
	Blank	C00240	—	—	1x	
	218259-001	C00128	12.96	25.75	1.99x	
	218259-002	C00093	13.02	25.04	1.92x	
	218259-003	C00137	13.02	25.87	1.99x	
	218259-004	C00065	13.17	25.03	1.9x	

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Prepared by/date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
ET 2-12	218259-005	C00149	13.33	25.10	1.80x	
	-006	C00188	13.48	25.33	1.92x	
	-007	C00131	13.45	25.08	1.86x	
	-008	C00193	13.50	25.13	1.86x	
	-009	C00178	12.95	25.09	1.94x	
	-010	C00182	13.45	25.17	1.87x	
	-011	C00102	12.92	25.13	1.95x	
	-012					ET 2-12
	-013					ET 2-12
	-014	C00139	10.33	25.18	2.44x	
	-015	C00164	10.38	25.32	2.44x	
	-016	C00160	9.12	25.08	2.75x	
	-017	C00081 C00111 ET 2-12	9.93	25.23	2.54x	
	-018	C00111	8.68	25.03	2.97x	
	-019	C00145	8.57	25.33	2.95x	
	✓ -020	C00071	10.88	25.19	2.31x	
	-021					ET 2-12
	-022					ET 2-12
	Blank	C00292	---	---	1x	
	218259-012	C00136				ET 2-12
-013					ET 2-12	
218259-021						
-022						
-023						
-024						
-025						
-026						
-027						
-028						
-029						
-030						
-031						
-032						
-033						
-034						

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Prepped by/date	Sample ID	Can ID	(PSI-g) Initial Pressure	(PSI-g) Final Pressure	Dilation Factor	Comments
ET 2-12	218259-021	C00050	11.25	25.05	2.23x	
	-022	C00078	10.24	25.26	2.47x	
	-023	C00194	10.57	25.19	2.38x	
	-024	C00096	10.03	25.36	2.53x	
	-025	C00114	10.25	25.39	2.48x	
	-026	C00151	9.78	25.20	2.58x	
	-027	C00172	10.97	25.34	2.3x	
	-028	C00191	11.71	25.38	2.17x	
	-029	C00135	11.58	25.09	2.17x	
	-030	C00192	11.81	25.28	2.14x	
	-031	C00144	12.64	25.33	2.00x	
	-032	C00067	13.32	25.27	1.81x	
	-033	C00061	12.23	25.55	2.09x	
	-034	C00197	12.47	25.20	2.02x	
	-036	C00196	11.78	25.98	2.2x	
	-037	C00121	11.07	25.34	2.29x	
	-038	C00091	11.72	25.43	2.17x	
	ET 2-17-10	218329-048	C00069	9.46	25.69	
	-049	C00117	9.83	26.3		ET 2-17-10
	-050	C00088	9.83	26.3		
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.3	2.67x	
	-050	C00088	9.46	26.4	2.79x	
5/8 2/16/10	218072-004	C00018	1.5 added	30.0 ^{total added}	35.6x	20x of 1.78x can C0008 Blank made on 17th
ET 2-18-10	Blank	C06240	—	—	1x	
ET 2-22-10	218411-026	C00154	11.10	25.85	2.33x	
	-027	C00170	10.93	25.24	2.31x	
	-023	C00254	9.95	24.80	2.49x	
	-034	C00259	10.64	24.32	2.29x	
	-035	C00290	11.27	24.77	2.20x	
	-039	C00586	12.24	24.48	2.00x	
	-040	C00148	11.40	25.14	2.20x	
	-041	C00123	11.14	24.50	2.20x	
	Blank	C06240	—	—	1x	

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Prepped By/Date	Sample ID	Can ID	Initial Pres. (Psi)	Final Pres. (Psi)	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x → 2.42x		
	-043	C00161	10.16	26.50	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00062	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.59		
	-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.83	26.30	2.67x		
	-050	C00088	9.46	26.4	2.79x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
		Blank	C00237 C00240	—	—	1x	
	500 2/22/10	Blank	C00098	—	—	1x	
	Blank	C00281	—	—	1x		
500 ET	218259-002	C00208	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093	
	-003	C00231	—	—	39.8x	20x of 1.99x can C00137	
	-004	C00020	—	—	38x	20x of 1.90x can C00065	
	-005	C00017	—	—	37.6x	20x of 1.88x can C00189	
	-019	C00019	—	—	59x	20x of 2.95x can C00145	
	-024	C00045	—	—	50.6x	20x of 2.53x can C00096	
	-025	C00230	—	—	49.6x 49.6x	20x of 2.48x can C00114	
	-034	C00028	—	—	40.4x	20x of 2.02x can C00197	
ET 2-23	218411-001	C00250	11.99	25.12	2.09x		
	-002	C00269	12.34	25.36	2.05x		
	-003	C00100	11.19	25.32	2.26x		
	-004	C00260	12.17	24.88	1.94x		
	-005	C00241	11.24	25.42	2.26x		
	-006	C00249	8.24	26.18	3.18x	Continued on Page	

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Prepped by/date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218411-042					ET 2-23
SOS 2/23/10	BLANK	C00010	—	—	1x	
↓	BLANK	C00038	—	—	1x	
ET 2-25	218479 ^{SOS}	C00162	11.10	25.14	2.26x	
	218479-002	C00070	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00178 C00178	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00103	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.65	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
↓	-012	C00264	11.81	25.57	2.16x	
ET 2-25	BLANK	C00240	—	—	1x	
SOS 2/27/10	218259-015	C00007	15 added	70.0 total added	48.8x	20x of 2.44x can C00164
↓	-021	C00217	↓	↓	44.6x	20x of 2.23x can C00055
SOS	-006	C	1.5 added	34.82 total added	—	can of 1.52x can C00188
SOS 2/27/10	218259-006	C00219	15 added	31.82 total added	40.7x	21.2x of 1.92x can C00188

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Prepped by / Date	SAMPLE ID	CAN ID	Initial Pressure (PSIG)	Final Pressure (PSIG)	Dilution Factor	Comments
SOB 2/2/10	218072-001	C00058	13.52	23.74	1.76x	
	-002	C00072	12.75	23.56	1.85x	
	-003	C00069	13.08	23.46	1.79x	
	-004	C00080	13.24	23.55	1.78x	
	-005	C00095	14.49	23.93	1.65x	
	218080-001	C00173	11.92	26.28	2.20x	
	-002	C00171	11.47	24.63	2.15x	
	-003	C00163	12.90	24.79	1.92x	
	BLANK	C00048	—	—	1x	
	SOB 2/4/10	218143-001	C00092	14.91	24.37	1.63x
BLANK		C00291	—	—	1x	
218143-001		C00212	1.5 added	30.0 total added	32.7x	20x of 1.63x can C00092
SOB 2/4/10	218143-001	C00015	1.5 added	30.0 total added	654x	20x of 32.7x can C00212
	218143-001	C00092	14.65	26.33	2.93x	1.80x of 1.63x
SOB 2/4/10	218143-001	C00044	1.5 added	30.0 total added	13080x	20x of 654x can C00015
	218080-003	C00022	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00163
SOB 2/8/10	218180-001	C00195	14.48	23.52	1.62x	
	BLANK	C00292	—	—	1x	
	218180-001	C00006	1.5 added	30.0 total added	32.4x	20x of can C00195
	218180-001	C00009	1.5 added	30.0 total added	648	20x of can C00006
SOB 2/8/10	218180-001	C00228	1.5 added	30.0 total added	12960x	20x of can C00009
	218180-001	C00195	16.93	27.10	2.59x	1.6x of 1.62x
SOB 2/11/10	Blank	C00240	—	—	1x	
	ET 2-10-10 Test Sample	C00197	14.64	27.70	1.89x	
ET 2-11-10	217598-1	C00233	19.74	24.70	2.16x	1.25x of 1.73
	217598-2	C00034	20.26	25.00	2.15x	1.23x of 1.75
	BLANK	C00240	—	—	1x	
ET-2-12	218259-012	C00136	10.43	25.05	2.40x	
	013	C00109	10.19	25.30	2.48x	
	015	C00058	10.28	25.10	2.44x	
	Blank	C00240	—	—	1x	
	218259-001	C00128	12.96	25.75	1.99x	
	218259-002	C00093	13.02	25.04	1.92x	
	218259-003	C00137	13.02	25.87	1.99x	
	218259-004	C00065	13.17	25.03	1.9x	

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Prepared by/date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
ET 2-12	218259-005	C00149	13.33	25.10	1.88x	
	-006	C00188	13.18	25.33	1.92x	
	-007	C00131	13.45	25.08	1.86x	
	-008	C00193	13.50	25.13	1.86x	
	-009	C00178	12.95	25.09	1.94x	
	-010	C00182	13.45	25.17	1.87x	
	-011	C00102	12.92	25.13	1.95x	
	-012					ET 2-12
	-013					ET 2-12
	-014	C00139	10.33	25.18	2.44x	
	-015	C00164	10.38	25.32	2.44x	
	-016	C00160	9.12	25.08	2.75x	
	-017	C00081 C00111 ET 2-12	9.93	25.23	2.54x	
	-018	C00111	8.68	25.03	2.97x	
	-019	C00145	8.57	25.33	2.95x	
	V-020	C00071	10.88	25.19	2.31x	
	-021					ET 2-12
	-022					ET 2-12
	Blank	C00292	---	---	1x	
	218259-012	C00136				ET 2-12
-013						
218259-021						
-022						
-023						
-024						
-025						
-026						
-027						
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-029						
-030						
-031						
-032						
-033						
-034						

Data Not Used ET 2-12

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Prepped by/date	Sample ID	Can ID	CPST(g) Initial Pressure	CPST(g) Final Pressure	Dilution Factor	Comments
ET 2-7-10	218259-021	C00050	11.25	25.05	2.23x	
	-022	C00078	10.24	25.26	2.47x	
	-023	C00194	10.57	25.19	2.38x	
	-024	C00096	10.03	25.36	2.53x	
	-025	C00114	10.25	25.39	2.48x	
	-026	C00151	9.78	25.20	2.58x	
	-027	C00172	10.77	25.34	2.3x	
	-028	C00191	11.71	25.38	2.17x	
	-029	C00135	11.58	25.09	2.17x	
	-030	C00192	11.81	25.28	2.14x	
	-031	C00144	12.64	25.83	2.00x	
	-032	C00067	13.32	25.27	1.81x	
	-033	C00061	12.23	25.55	2.09x	
	-034	C00197	12.47	25.20	2.02x	
	-036	C00196	11.78	25.98	2.2x	
	-037	C00121	11.07	25.34	2.29x	
	-038	C00099	11.72	25.43	2.17x	
	ET-2-17-10	218329-048	C00069	9.46	25.89	
	-049	C00117	9.83	26.3		ET 2-17-10
	-050	C00088	9.83	26.3		
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.3	2.67x	
	-050	C00088	9.46	26.4	2.79x	
2/16/10	218072-004	C00018	1.5 added	30.0 ^{total} added	35.6x	20x of 1.78x can C0008 Blank made on 17th
ET 2-18-10	Blank	C06240	—	—	1x	
ET 2-22-10	218411-026	C00154	11.10	25.85	2.23x	
	-027	C00170	10.93	25.24	2.31x	
	-033	C00254	9.95	24.80	2.49x	
	-034	C00259	10.64	24.32	2.29x	
	-035	C00290	11.27	24.77	2.20x	
	-039	C00086	12.24	24.48	2.00x	
	-040	C00148	11.40	25.14	2.20x	
	-041	C00123	11.14	24.50	2.20x	
	Blank	C06240	—	—	1x	

Continued on Page

Read and Understood By

Signed

Date

Signed

Date

Prepped By/Date	Sample ID	Can ID	Initial Pres. (Psi)	Final Pres. (Psi)	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x 2.42x		
	-043	C00161	10.16	26.50	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00062	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.57		
	-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.83	26.30	2.67x		
	-050	C00088	9.46	26.4	2.79x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
		Blank	C00287 C00280	—	—	1x	
	500 2/22/10	Blank	C00098	—	—	1x	
	Blank	C00281	—	—	1x		
500 ET	218259-002	C00208	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093	
	-003	C00231			39.8x	20x of 1.99x can C00137	
	-004	C00020			38x	20x of 1.90x can C00065	
	-005	C00017			37.6x	20x of 1.88x can C00189	
	-019	C00019			59x	20x of 2.95x can C00145	
	-024	C00045			50.6x	20x of 2.53x can C00096	
	-025	C00230			49.6x 49.6x	20x of 2.48x can C00114	
	-034	C00028			40.4x	20x of 2.02x can C00197	
ET 2-23	218411-001	C00250	11.99	25.12	2.09x		
	-002	C00269	12.34	25.36	2.05x		
	-003	C00100	11.19	25.32	2.26x		
	-004	C00260	12.17	24.88	1.94x		
	-005	C00241	11.24	25.42	2.26x		
	-006	C00249	8.24	26.18	3.18x		

Continued on Page

Read and Understood By

Signed

Date

Signed

Date

Prepped by/date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218411-042					ET 2-23
SOP 2/23/10	BLANK	C00010	—	—	1x	
↓	BLANK	C00038	—	—	1x	
ET 2-25	218477 ⁰⁰¹	C00162	11.10	25.14	2.26x	
	218477-002	C00070	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00178 C00129	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00103	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.65	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	↓ -012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
SOP 2/27/10	218259-015	C00007	15 added	20.0 total added	48.8x	20x of 2.44x can C00164
↓	↓ -021	C00217	↓	↓	44.6x	20x of 2.23x can C00085
SOP	↓ -006	C	1.5 added	30.92 total added		20x of 1.92x can C00188
SOP 2/27/10	218259-006	C00219	15 added	31.82 total added	40.7x	21.2x of 1.92x can C00188

Continued on Page

Read and Understood By

Signed

Date

Signed

Date

Laboratory Job Number 218259

ANALYTICAL REPORT

Volatile Organics in Air GC

Matrix: Air

Analysis of Reformed Gas

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	PMW-9-U-10Q1	Diln Fac:	2.400
Lab ID:	218259-012	Batch#:	160003
Matrix:	Air	Sampled:	02/05/10
RL:	0.24	Received:	02/11/10
Units:	ppmv	Analyzed:	02/12/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	ND	2,400	ND	D2
Oxygen	230,000	2,400	23	D2

ND= Not Detected

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	PMW-9-U-10Q1	Diln Fac:	2.400
Lab ID:	218259-012	Batch#:	160003
Matrix:	Air	Sampled:	02/05/10
Result (M):	ND	Received:	02/11/10
Units:	ppmv	Analyzed:	02/12/10
Units (M):	ug/L		

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	1.2	0.79	D2
C1-C2 as Ethane	ND	2.4	3.0	D2
C2-C3 as Propane	ND	2.4	4.3	D2
C3-C4 as n-Butane	ND	2.4	5.7	D2
C4-C5 as n-Pentane	ND	2.4	7.1	D2
C5-C6 as n-Hexane	ND	2.4	8.5	D2
C6+ as n-Hexane	ND	2.4	8.5	D2

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Analysis of Reformed Gas

Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	PMW-9-M-10Q1	Diln Fac:	2.480
Lab ID:	218259-013	Batch#:	160003
Matrix:	Air	Sampled:	02/05/10
RL:	0.25	Received:	02/11/10
Units:	ppmv	Analyzed:	02/12/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	ND	2,500	ND	D1
Oxygen	230,000	2,500	23	D1

ND= Not Detected

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	PMW-9-M-10Q1	Diln Fac:	2.480
Lab ID:	218259-013	Batch#:	160003
Matrix:	Air	Sampled:	02/05/10
Result (M):	ND	Received:	02/11/10
Units:	ppmv	Analyzed:	02/12/10
Units (M):	ug/L		

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	1.2	0.81	D1
C1-C2 as Ethane	ND	2.5	3.1	D1
C2-C3 as Propane	ND	2.5	4.5	D1
C3-C4 as n-Butane	ND	2.5	5.9	D1
C4-C5 as n-Pentane	ND	2.5	7.3	D1
C5-C6 as n-Hexane	ND	2.5	8.7	D1
C6+ as n-Hexane	ND	2.5	8.7	D1

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Analyte:	Methane-TO3	Diln Fac:	2.440
Field ID:	SMW-2-M-10Q1	Batch#:	160003
Lab ID:	218259-035	Sampled:	02/09/10
Matrix:	Air	Received:	02/11/10
Units:	ppmv	Analyzed:	02/12/10
Units (M):	ug/L		

Result	RL	Result (M)	RL	ADEQ Flags
7.6	1.2	5.0	0.80	D1

RL= Reporting Limit

Result M= Result in Mass Units

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Type:	BLANK	Units:	ppmv
Lab ID:	QC532478	Units (Mol %):	MOL %
Matrix:	Air	Diln Fac:	1.000
Result (Mol %):	ND	Batch#:	160003
RL:	0.10	Analyzed:	02/12/10

Analyte	Result	RL	ADEQ Flags
Carbon Dioxide	ND	1,000	
Oxygen	ND	1,000	

ND= Not Detected

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC532479	Batch#:	160003
Matrix:	Air	Analyzed:	02/12/10
Units:	ppmv		

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Carbon Dioxide	2,000	2,037	102	70-130		
Oxygen	2,000	2,033	102	70-130		

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Type:	BLANK	Units:	ppmv
Lab ID:	QC532480	Units (Mol %):	MOL %
Matrix:	Air	Diln Fac:	1.000
Result (Mol %):	ND	Batch#:	160003
RL:	0.10	Analyzed:	02/12/10

Analyte	Result	RL	ADEQ Flags
Carbon Dioxide	ND	1,000	
Oxygen	ND	1,000	

ND= Not Detected

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Type:	BLANK	Units (M):	ug/L
Lab ID:	QC532480	Diln Fac:	1.000
Matrix:	Air	Batch#:	160003
Result (M):	ND	Analyzed:	02/12/10
Units:	ppmv		

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	0.50	0.33	
C1-C2 as Ethane	ND	1.0	1.2	
C2-C3 as Propane	ND	1.0	1.8	
C3-C4 as n-Butane	ND	1.0	2.4	
C4-C5 as n-Pentane	ND	1.0	3.0	
C5-C6 as n-Hexane	ND	1.0	3.5	
C6+ as n-Hexane	ND	1.0	3.5	

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	PMW-9-U-10Q1	Units (Mol %):	MOL %
Type:	SDUP	Diln Fac:	2.400
MSS Lab ID:	218259-012	Batch#:	160003
Lab ID:	QC532483	Sampled:	02/05/10
Matrix:	Air	Received:	02/11/10
RL:	0.2400	Analyzed:	02/12/10
Units:	ppmv		

Analyte	MSS Result	Result	RL	Result (Mol %)	RPD	Lim	ADEQ	Flags
Carbon Dioxide	<2,400	ND	2,400	ND	NC	30	D1	
Oxygen	234,600	230,700	2,400	23.07	2	30	D1	

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

RPD= Relative Percent Difference

Result Mol %= Result in Mole Percent

Batch QC Report

Volatile Organics in Air			
Lab #:	218259	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	PMW-9-U-10Q1	Units (M):	ug/L
Type:	SDUP	Diln Fac:	2.400
MSS Lab ID:	218259-012	Batch#:	160003
Lab ID:	QC532483	Sampled:	02/05/10
Matrix:	Air	Received:	02/11/10
Result (M):	ND	Analyzed:	02/12/10
Units:	ppmv		

Analyte	MSS Result	Result	RL	RL	RPD	Lim	ADEQ	Flags
Methane-TO3	<1.200	ND	1.200	0.7872	NC	30	D1	
C1-C2 as Ethane	<2.400	ND	2.400	2.952	NC	30	D1	
C2-C3 as Propane	<2.400	ND	2.400	4.329	NC	30	D1	
C3-C4 as n-Butane	<2.400	ND	2.400	5.705	NC	30	D1	
C4-C5 as n-Pentane	<2.400	ND	2.400	7.082	NC	30	D1	
C5-C6 as n-Hexane	<2.400	ND	2.400	8.459	NC	30	D1	
C6+ as n-Hexane	<2.400	ND	2.400	8.459	NC	30	D1	

NC= Not Calculated

ND= Not Detected

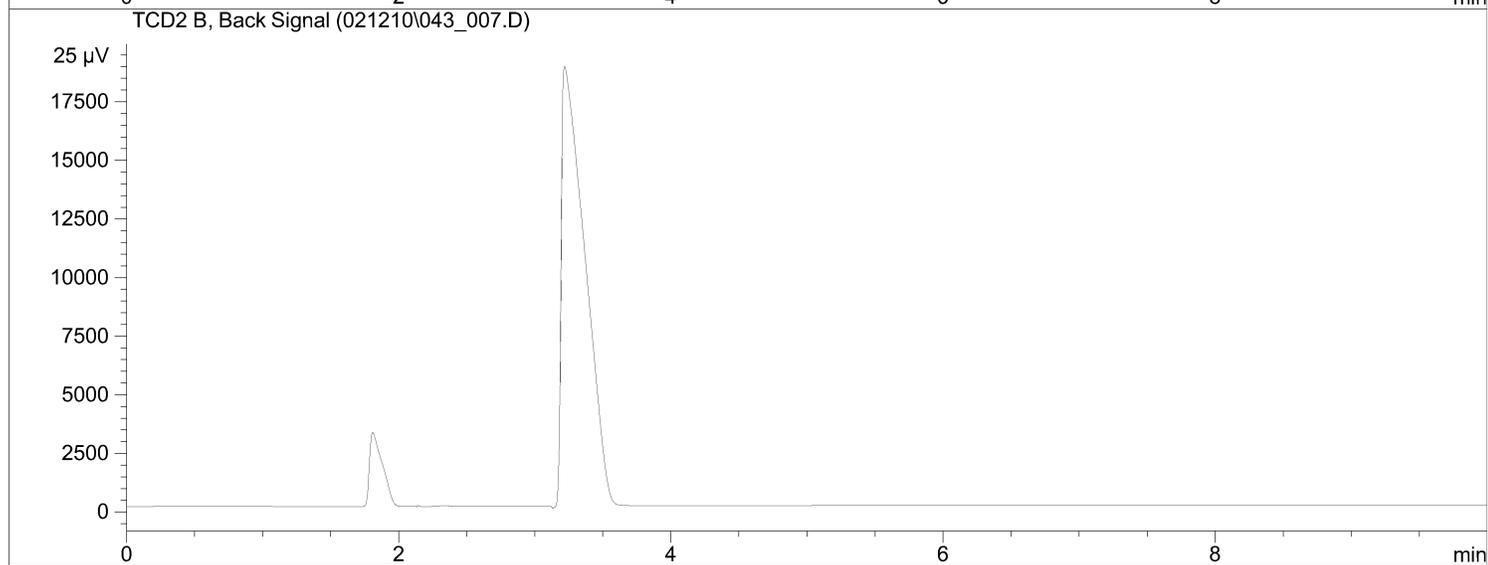
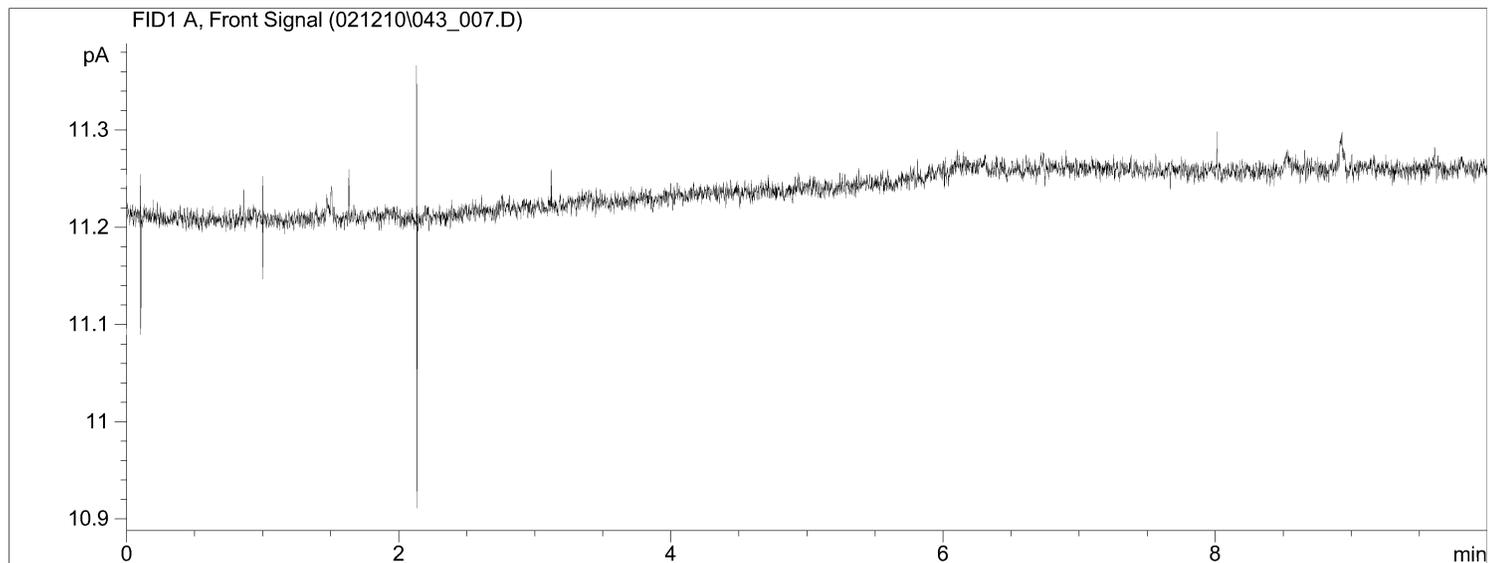
RL= Reporting Limit

RPD= Relative Percent Difference

Result M= Result in Mass Units

Sample Name: mss.218259-012,16003,2.4

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/12/2010 11:23:44 AM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_121009.M
Last changed : 2/12/2010 11:15:27 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



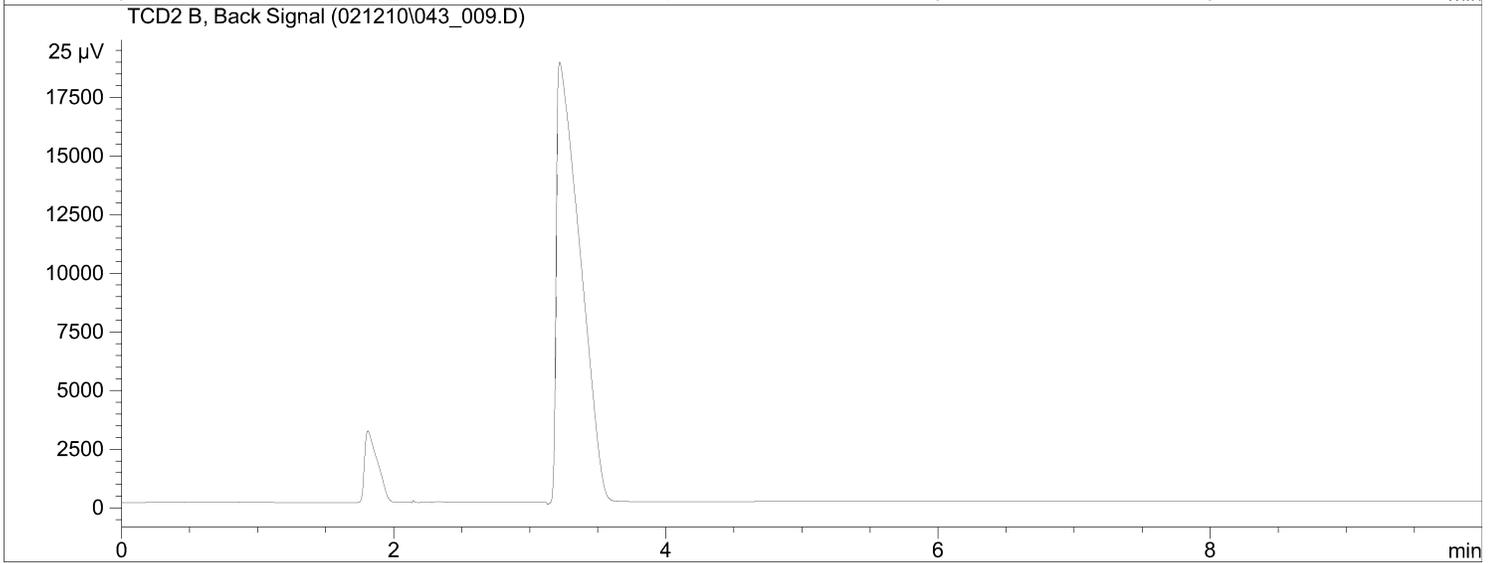
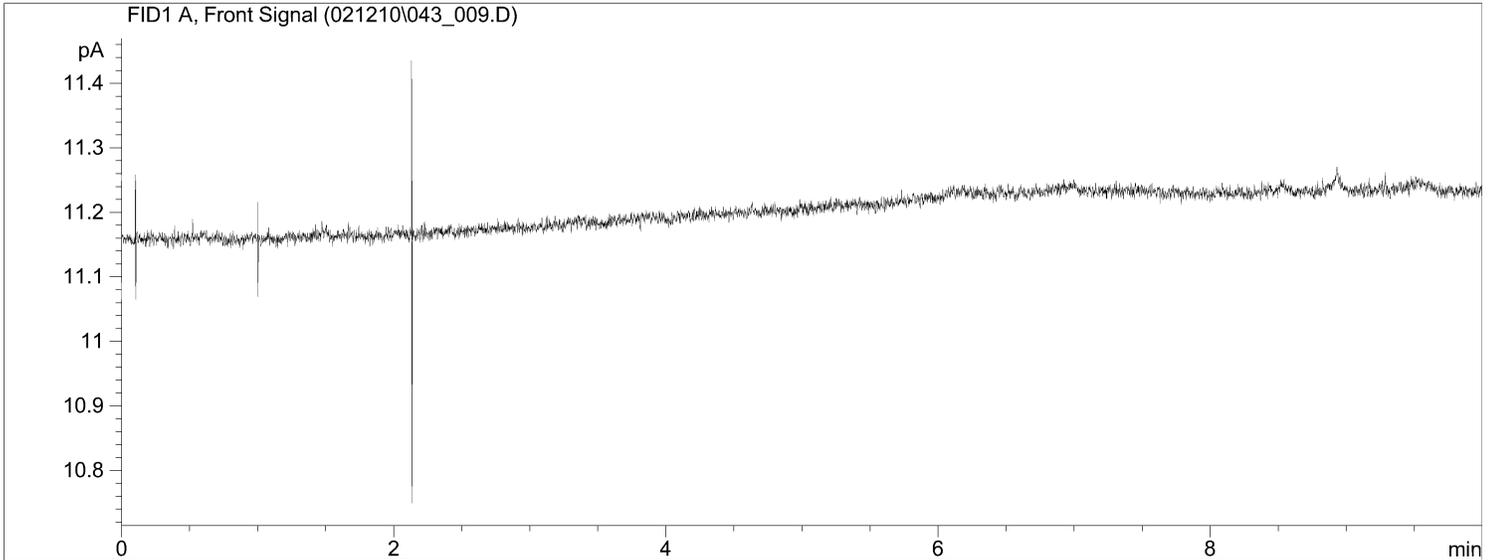
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External Standard Report
=====

Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Sample Name: 218259-013,160003,2.48

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/12/2010 12:31:48 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_121009.M
Last changed : 2/12/2010 12:03:45 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



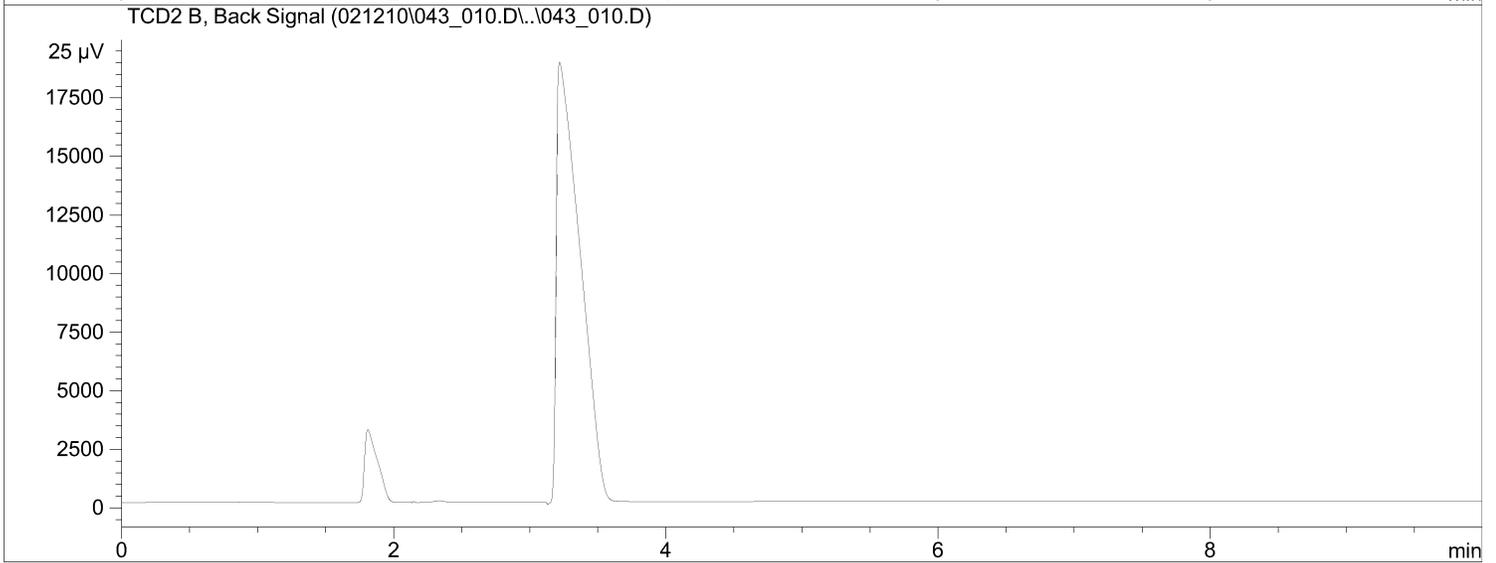
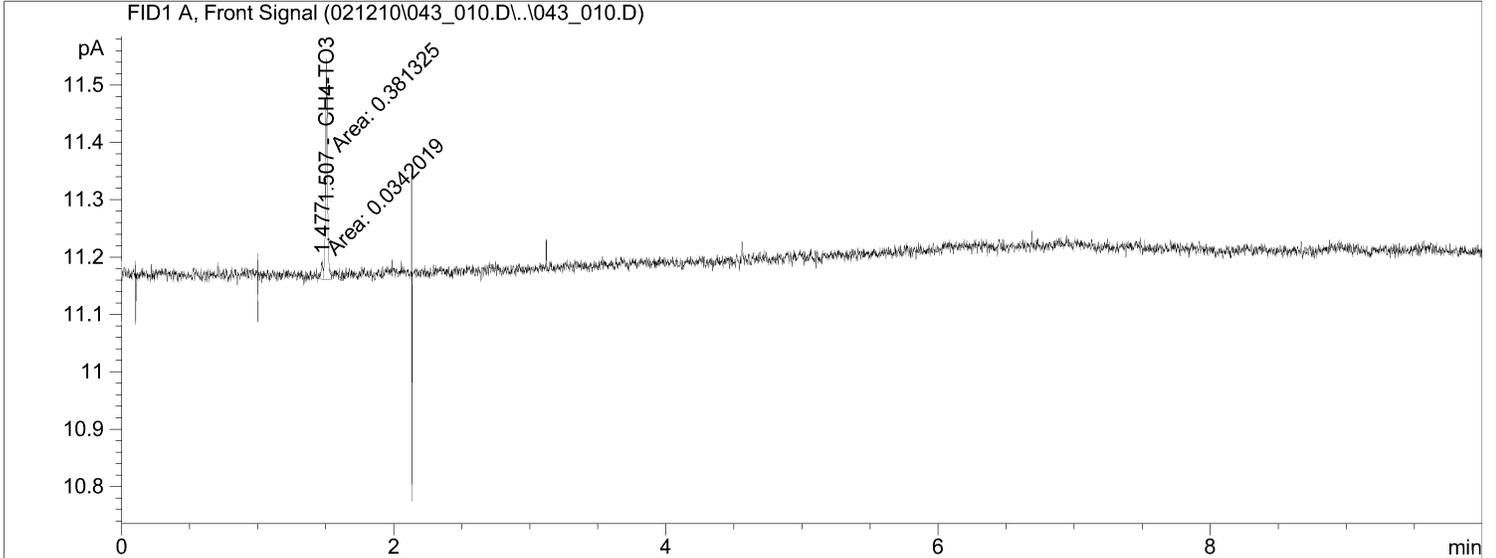
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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Sample Name: 218259-035,160003,2.44

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/12/2010 12:55:28 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_121009.M
Last changed : 2/12/2010 12:46:54 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



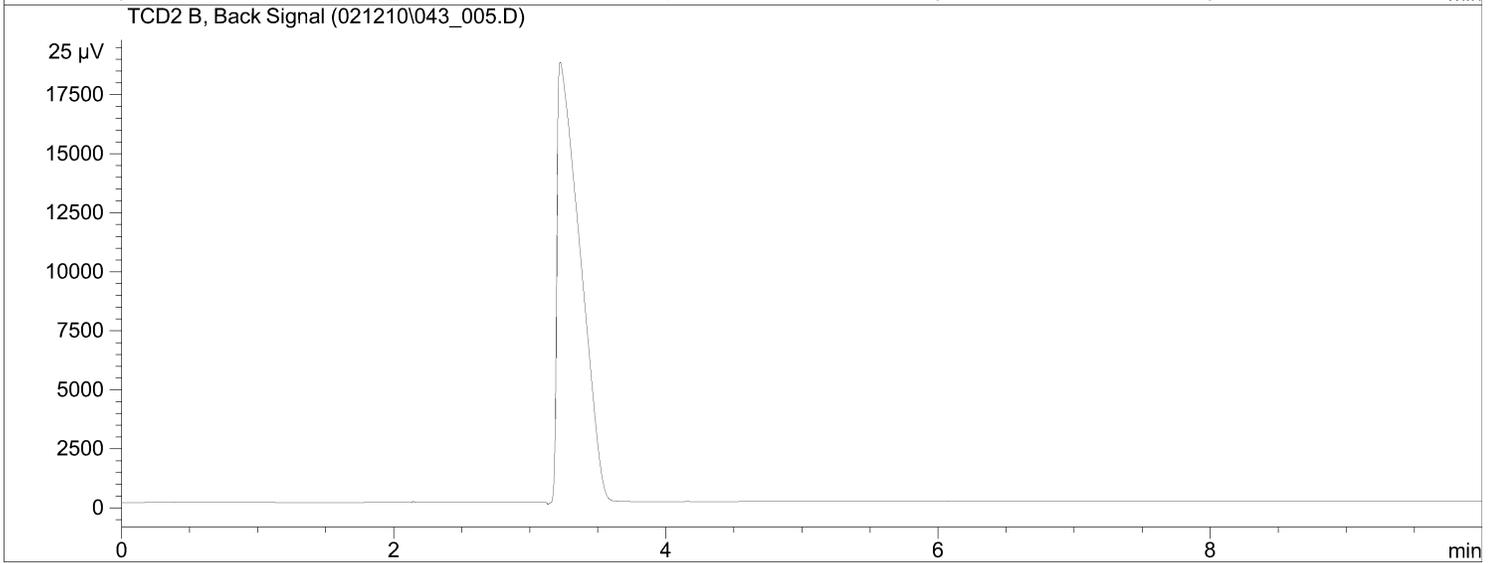
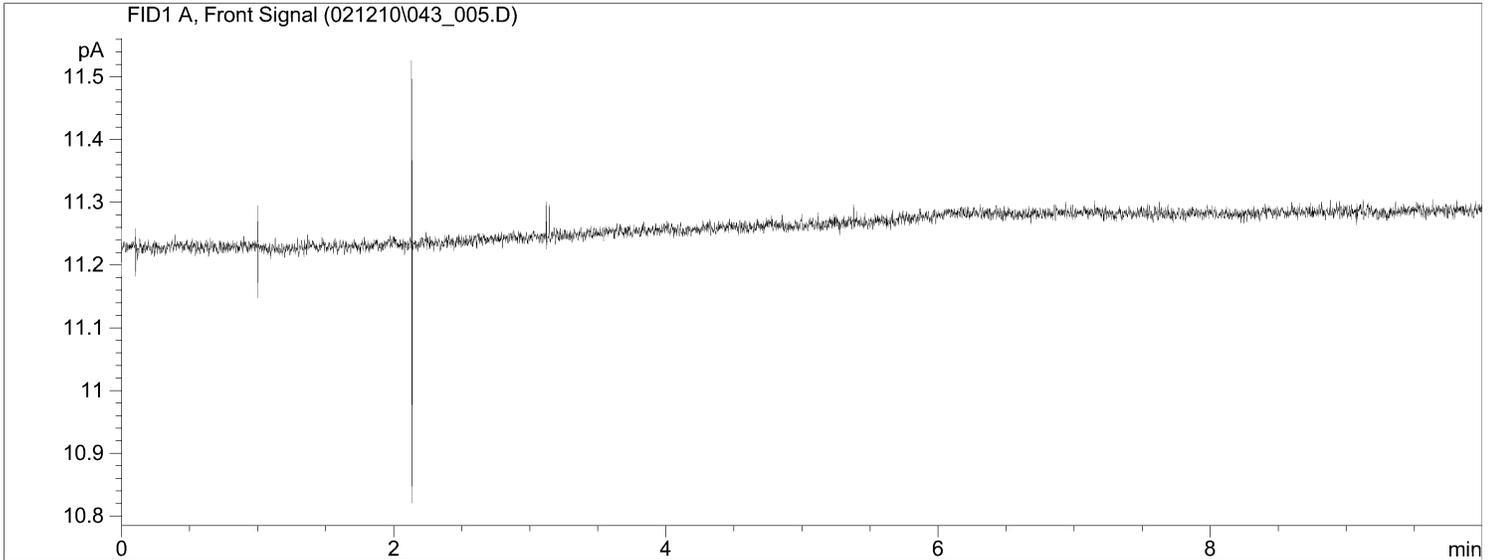
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External Standard Report
=====

Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Sample Name: blank,qc532480,160003,1

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/12/2010 10:39:50 AM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_121009.M
Last changed : 2/12/2010 10:29:32 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA

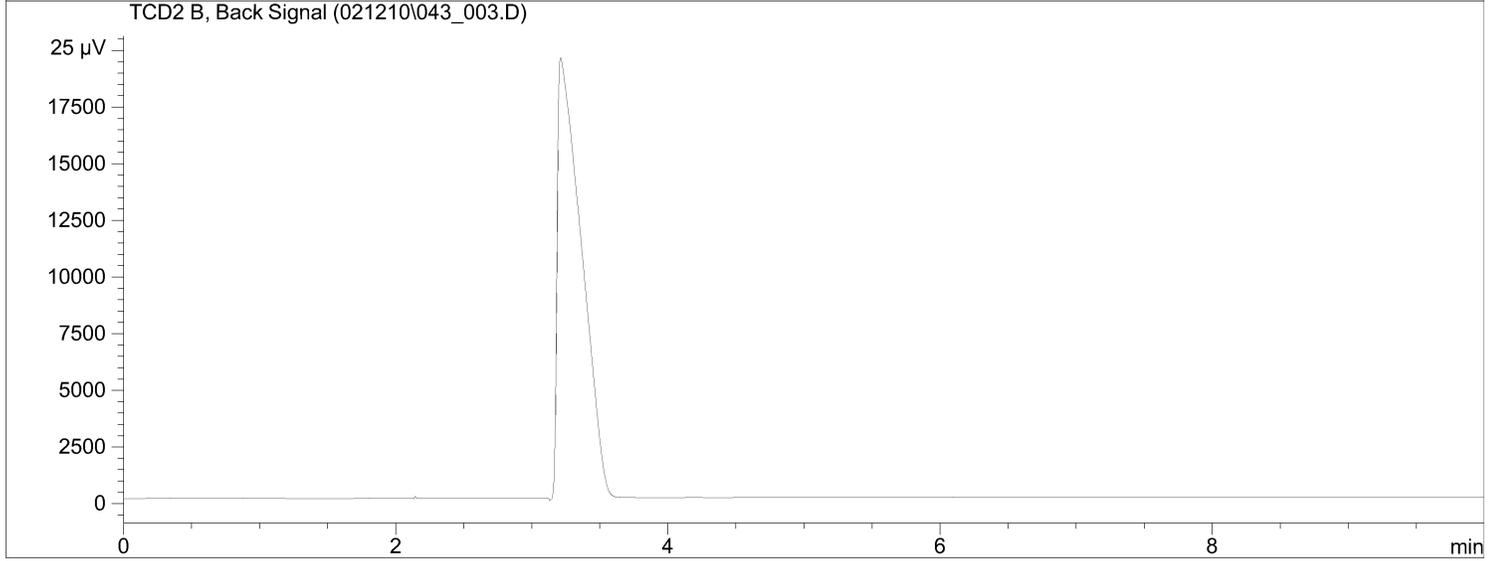
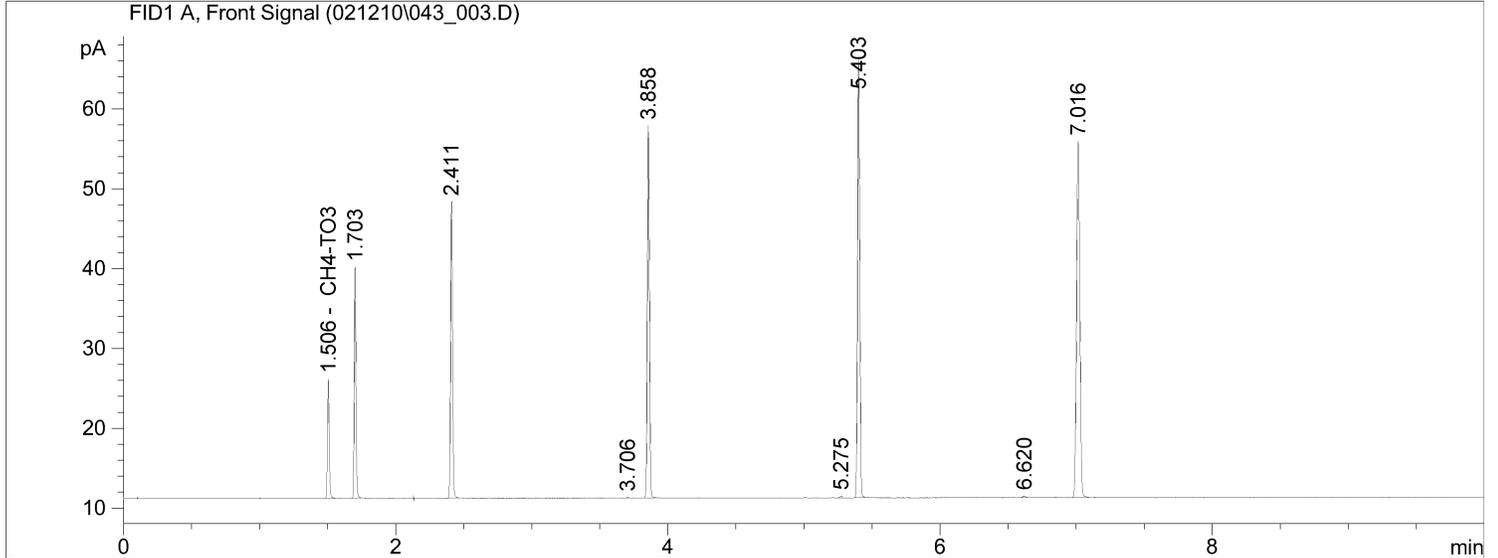


=====
External Standard Report
=====

Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/12/2010 09:53:30 AM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_121009.M
Last changed : 2/12/2010 09:27:05 AM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



=====
External Standard Report
=====

Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218259 GCAIR Air: ASTM D1946

Inst : GC28
 Calnum : 1309434246001
 Units : uL/L

Date : 28-OCT-2009 13:50
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	301_006	1309434246006		28-OCT-2009 13:50	S13246
L2	301_007	1309434246007		28-OCT-2009 14:17	S13247
L3	301_008	1309434246008		28-OCT-2009 14:50	S13248
L4	301_009	1309434246009		28-OCT-2009 15:11	S13249
L5	301_010	1309434246010		28-OCT-2009 15:33	S13250
L6	301_011	1309434246011		28-OCT-2009 16:02	S13251

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	Flg
Oxygen	B		0.2310	0.2147	0.2147	0.2063	0.1979	AVRG		4.69612		0.2129	6	.99	
Carbon Dioxide	B		0.2502	0.2589	0.2542	0.2539	0.2416m	AVRG		3.97217		0.2518	3	.99	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Oxygen	B			500.0	8	2000	1	5000	1	10000	-3	2E+5	-7
Carbon Dioxide	B			500.0	-1	2000	3	5000	1	10000	1	2E+5	-4

m>manual integration

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218259 GCAIR Air: EPA TO-3

Inst : GC28
 Calnum : 1309497539003
 Units : uL/L

Date : 11-DEC-2009 12:37
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	345_002	1309497539002		11-DEC-2009 12:37	S13381
L2	345_003	1309497539003		11-DEC-2009 13:00	S13382
L3	345_004	1309497539004		11-DEC-2009 13:18	S13383
L4	345_005	1309497539005		11-DEC-2009 13:35	S13384
L5	345_006	1309497539006		11-DEC-2009 13:53	S13385
L6	345_007	1309497539007		11-DEC-2009 14:16	S13386
L7	345_008	1309497539008		11-DEC-2009 14:36	S13387
L8	345_009	1309497539009		11-DEC-2009 16:08	S13388

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Methane-TO3	A	0.1314	0.1225	0.1271	0.1208	0.1197	0.1183	0.1197	0.1242	AVRG		8.13190		0.1230	4	.99	30	
C1-C2 as Ethane	A	0.2344	0.2246	0.2351	0.2214	0.2192				AVRG		4.40634		0.2269	3	.99	30	
C2-C3 as Propane	A	0.3733	0.3403	0.3520	0.3349	0.3314				AVRG		2.88691		0.3464	5	.99	30	
C3-C4 as n-Butane	A	0.5160	0.4525	0.4696	0.4450	0.4404				AVRG		2.15194		0.4647	7	.99	30	
C4-C5 as n-Pentane	A	0.6216	0.5643	0.5844	0.5569	0.5515				AVRG		1.73685		0.5758	5	.99	30	
C5-C6 as n-Hexane	A	0.7502	0.6699	0.6955	0.6640	0.6573				AVRG		1.45477		0.6874	6	.99	30	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Methane-TO3	A	0.500	7	10.00	0	100.0	3	501.0	-2	1002	-3	9980	-4	2E+5	-3	5E+5	1
C1-C2 as Ethane	A	0.500	3	10.00	-1	100.0	4	505.5	-2	1011	-3						
C2-C3 as Propane	A	0.500	8	10.00	-2	100.0	2	501.0	-3	1002	-4						
C3-C4 as n-Butane	A	0.500	11	10.00	-3	100.0	1	502.5	-4	1005	-5						
C4-C5 as n-Pentane	A	0.500	8	10.00	-2	100.0	2	500.0	-3	1000	-4						
C5-C6 as n-Hexane	A	0.500	9	10.00	-3	100.0	1	498.5	-3	997.0	-4						

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218259 GCAIR Air
EPA TO-3

Inst : GC28

Calnum : 1309497539003

Cal Date : 11-DEC-2009

ICV 1309497539011 (345_011 11-DEC-2009) stds: S13375

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Methane-TO3	A	1000	1017	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218259 GCAIR Air
ASTM D1946

Inst : GC28 IDF : 1.0
 Seqnum : 1300062447013.1 File : 043_013 Time : 12-FEB-2010 14:21
 Cal : 1309434246001 Caldate : 28-OCT-2009
 Standards: S14010

Analyte	Ch	Avg		Spiked	Quant	Units	%D	Max %D	Flags
		RF/CF	RF/CF						
Oxygen	B	0.2129	0.2496	2000	2344	uL/L	17	30	
Carbon Dioxide	B	0.2518	0.3055	2000	2427	uL/L	21	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218259 GCAIR Air
EPA TO-3

Inst : GC28
 Seqnum : 1300062447014.1 File : 043_014
 Cal : 1309497539003 Caldate : 11-DEC-2009
 Standards: S13824

IDF : 1.0
 Time : 12-FEB-2010 14:50

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1230	0.1286	100.0	104.6	uL/L	5	30	
C1-C2 as Ethane	A	0.2269	0.2381	100.0	104.9	uL/L	5	30	
C2-C3 as Propane	A	0.3464	0.3567	100.0	103.0	uL/L	3	30	
C3-C4 as n-Butane	A	0.4647	0.4751	100.0	102.2	uL/L	2	30	
C4-C5 as n-Pentane	A	0.5758	0.5938	100.0	103.1	uL/L	3	30	
C5-C6 as n-Hexane	A	0.6874	0.7049	100.0	102.5	uL/L	3	30	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1300062447

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 02/12/10 08:47

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	043_001	IB	IB			02/12/10 08:47	1.0		
002	043_002	CCV/LCS	QC532479	Air	160003	02/12/10 09:12	1.0	1	
003	043_003	CCV/BS	QC532481	Air	160003	02/12/10 09:53	1.0	2	
004	043_004	BSD	QC532482	Air	160003	02/12/10 10:14	1.0	2	1:N=1000000
005	043_005	BLANK	QC532480	Air	160003	02/12/10 10:39	1.0		
006	043_006	BLANK	QC532478	Air	160003	02/12/10 11:00	1.0		
007	043_007	MSS	218259-012	Air	160003	02/12/10 11:23	2.400		
008	043_008	SDUP	QC532483	Air	160003	02/12/10 11:48	2.400		
009	043_009	SAMPLE	218259-013	Air	160003	02/12/10 12:31	2.48		
010	043_010	SAMPLE	218259-035	Air	160003	02/12/10 12:55	2.44		
011	043_011	X				02/12/10 13:20	1.0	1	1:N=1100000
012	043_012	IB	IB			02/12/10 14:04	1.0		1:N=1100000
013	043_013	CCV				02/12/10 14:21	1.0	3	
014	043_014	CCV				02/12/10 14:50	1.0	2	

APP 02/16/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 014.

Analyst: APP Date: 02/16/10 Reviewer: SJD Date: 03/02/10

Standards used: 1=S14001 2=S13824 3=S14010

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309434246

Instrument : GC28
 Method : ASTM D1946

Begun : 10/28/09 11:55

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	301_001	IB	IB			10/28/09 11:55	1.0	
002	301_002	IB	IB			10/28/09 12:15	1.0	
003	301_003	IB	IB			10/28/09 12:40	1.0	
004	301_004	IB	HE BLANK			10/28/09 13:05	1.0	
005	301_005	ICAL	CALBLANK			10/28/09 13:26	1.0	
006	301_006	ICAL				10/28/09 13:50	1.0	1
007	301_007	ICAL				10/28/09 14:17	1.0	2
008	301_008	ICAL				10/28/09 14:50	1.0	3
009	301_009	ICAL				10/28/09 15:11	1.0	4
010	301_010	ICAL				10/28/09 15:33	1.0	5
011	301_011	ICAL				10/28/09 16:02	1.0	6

APP 11/12/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 011.

Analyst: APP Date: 11/12/09 Reviewer: SJD Date: 11/12/09

Standards used: 1=S13246 2=S13247 3=S13248 4=S13249 5=S13250 6=S13251

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309497539

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 12/11/09 12:19

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	345_001	IB	IB			12/11/09 12:19	1.0	
002	345_002	ICAL				12/11/09 12:37	1.0	1
003	345_003	ICAL				12/11/09 13:00	1.0	2
004	345_004	ICAL				12/11/09 13:18	1.0	3
005	345_005	ICAL				12/11/09 13:35	1.0	4
006	345_006	ICAL				12/11/09 13:53	1.0	5
007	345_007	ICAL				12/11/09 14:16	1.0	6
008	345_008	ICAL				12/11/09 14:36	1.0	7
009	345_009	ICAL				12/11/09 16:08	1.0	8
010	345_010	IB	IB			12/11/09 16:29	1.0	
011	345_011	ICV				12/11/09 16:47	1.0	9

APP 12/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 011.

Analyst: APP Date: 12/14/09 Reviewer: SJD Date: 01/20/10

Standards used: 1=S13381 2=S13382 3=S13383 4=S13384 5=S13385 6=S13386 7=S13387 8=S13388 9=S13375

Prepped by / Date	SAMPLE ID	CAN ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
SO2 2/2/10	218072-001	C00158	13.52	23.74	1.76x	
	-002	C00072	12.75	23.56	1.85x	
	-003	C00069	13.08	23.46	1.79x	
	-004	C00080	13.24	23.55	1.78x	
	-005	C00095	14.49	23.73	1.65x	
SO2 2/4/10	218080-001	C00173	11.92	26.28	2.20x	
	-002	C00171	11.47	24.63	2.15x	
	-003	C00163	12.90	24.79	1.92x	
	BLANK	C00048	—	—	1x	
SO2 2/4/10	218143-001	C00092	14.91	24.37	1.63x	
	BLANK	C00291	—	—	1x	
	218143-001	C00212	1.5 added	30.0 total added	32.7x	20x of 1.63x can C00092
	218143-001	C00015	1.5 added	30.0 total added	654x	20x of 32.7x can C00212
Air 2/4/10	218143-001	C00092	14.65	26.33	2.93x	1.80x of 1.63x
SO2 2/4/10	218143-001	C00044	1.5 added	30.0 total added	13080x	20x of 654x can C00015
	218080-003	C00022	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00163
SO2 2/8/10	218180-001	C00195	14.48	23.52	1.62x	
	BLANK	C00292	—	—	1x	
	218180-001	C00006	1.5 added	30.0 total added	32.4x	20x of can C00195
	218180-001	C00009	1.5 added	30.0 total added	648	20x of can C00006
	218180-001	C00228	1.5 added	30.0 total added	12960x	20x of can C00009
APP 2/9/10	218180-001	C00195	16.93	27.10	2.59x	1.6x of 1.62x
	BLANK	C00240	—	—	1x	
ET 2-10	Test Sample	C00187	14.64	27.70	1.89x	
ET 2-11-10	217598-1	C00233	19.74	24.70	2.16x	1.25x of 1.73
	217598-2	C00034	20.26	25.00	2.15x	1.23x of 1.75
	BLANK	C00240	—	—	1x	
ET 2-12	218259-012	C00136	10.43	25.05	2.40x	
	013	C00109	10.17	25.30	2.48x	
	015	C00058	10.28	25.10	2.44x	
	Blank	C00240	—	—	1x	
	218259-001	C00128	12.96	25.75	1.99x	
	218259-002	C00093	13.02	25.04	1.92x	
	218259-003	C00137	13.02	25.87	1.99x	
	218259-004	C00065	13.17	25.03	1.9x	

Continued on Page

Read and Understood By

Signed

Date

Signed

Date



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





Laboratory Job Number 218329
ANALYTICAL REPORT

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 371451.SV.99.IS.0109
Location : BSVE QTR SVM
Level : III

Table with 4 columns: Sample ID, Lab ID, Sample ID, Lab ID. Lists various sample identifiers and their corresponding lab IDs.

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

Signature: Senior Program Manager

Date: 03/09/2010

CASE NARRATIVE

Laboratory number: 218329
Client: CH2M Hill
Project: 371451.SV.99.IS.0109
Location: BSVE QTR SVM
Request Date: 02/16/10
Samples Received: 02/16/10

This data package contains sample and QC results for fifty three air samples, requested for the above referenced project on 02/16/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

Volatile Organics in Air by MS (EPA TO-15):

Because of residual vacuum in the canisters, high internal standard responses were observed for bromochloromethane in the method blank for batch 160581 and the method blank for batch 160620.

Many samples were diluted due to problematic matrix.

No other analytical problems were encountered.

Volatile Organics in Air GC (EPA TO-3):

No analytical problems were encountered.

Chain of Custody

218329

Curtis & Tompkins Laboratories		Honeywell Chain Of Custody / Analysis Request									
2523 5th St. Berkeley, CA 94710 510-204-2221		Privileged & Confidential		Sky Harbor AZ		Phase: Sampling Program		BSVE QTR SVM		AESI Ref: 40210.49633	
Sampling Co.: CH2M-HILL		Tuesdai Powers, Critigen Melanie West, Critigen		Phoenix, AZ						COC#: 37380	
Client Contact: (name, co., address) CH2M-HILL		Sampler: <i>Travis Co. Dr. 5-1-2002</i>		Preservative: 0 0 0 0						Lab Proj # (SDG):	
2525 South Plaza Drive, Suite 300 Tempe, AZ 85282		Analysis Turnaround Time (TAT): Consultant		VOCs (TO-15)						Lab ID	
Preliminary Data To: Tuesdai Powers, Critigen, Melanie West, Critigen		Full Report TAT: 10		Field Filtered Sample ?						CTBERK	
Sample Receipt Acknowledgement To: Tuesdai Powers, Critigen, Melanie West, Critigen				Composite/Grab						SKYHARBOR	
Hard Copy To: Tuesdai Powers and Melanie West, Critigen				Units						Lab Job #	
Invoice To: Honeywell/Copy Berney Kidd				# of Cont.						Authorized User: Honeywell	
Sample Identification		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose	
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID								Sampling Method (code)
1 P-28-U	6	11	P-28-U-10Q1	021110 0747	SV	AIR	REG	1			Canister Serial No.
2 P-28-M	43	48	P-28-M-10Q1	021110 0806	SU	AIR	REG	1			272
3 P-28-L	58	65	P-28-L-10Q1	021110 0826	SU	AIR	REG	1			254
4 P-30-U	6	11	P-30-U-10Q1	021110 0814	SU	AIR	REG	1			277
5 P-30-M	60	65	P-30-M-10Q1	021110 0934	SU	AIR	REG	1			76
6 P-30-L	60	68	P-30-L-10Q1	021110 0952	SU	AIR	REG	1			234
7 ASE-SYM	61	91	ASE-SYM-10Q1	021110 1134	SU	AIR	REG	1			286
8 BU-2N	55	105	BU-2N-10Q1	021110 1306	SU	AIR	REG	1			237
9	-	-	BSVE-SYM-10Q1-08	021110 1	SU	AIR	REG	1			126
10											143
11											
12											
Relinquished by	Company	CH2M HILL	Received by	Company	CH2M HILL	Condition	Custody Seals Intact				
	Date/Time	0215 10 1310		Date/Time	0215 10 1310	Cooler Temp.					
Relinquished by	Company	CH2M HILL	Received by	Company		Condition	Custody Seals Intact				
	Date/Time	0215 10 1308		Date/Time		Cooler Temp.					
Preservatives: (Other: Specify):											

REC'D: *[Signature]* 2-16-10 10:00 CFT

123456789

218329

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

Honeywell
 Chain Of Custody / Analysis Request

Privileged & Confidential

Sampling Co.: CH2MHILL
Client Contact (name, co., address): CH2MHILL
 2625 South Plaza Drive, Suite 300
 Tempe, AZ 85282

Site Name: Sky Harbor AZ
Location of Site: Phoenix, AZ

PO #: 5101516
Analysis Turnaround Time (TAT): 10
Consultant: M. Maymy

Sample Date: 2-12-10
Sample Time: 1044
Sample Type: SV
Sample Matrix: AIR
Sample Purpose: reg

Sample Identification:
 Location ID: PMW-3-V, PMW-3-M, BC-7A
 Start Depth (ft): 5, 20, 39
 End Depth (ft): 10, 35, 65
 Field Sample ID: PMW-3-V-1001, PMW-3-M-1001, BC-7A-1001

Units: G, N, X
Composite/Grab: Field Filtered Sample? X, X, X

Preservative: 0, 0, 0
Authorized User: Honeywell

Phase: Sampling Program
Sampling Method (code): 00358, 00377, 00267

Canister Serial No.: 00358, 00377, 00267

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Text & Excel File Drive
 Order

Lab Proj # (SDG):
Lab ID:
Site ID:
Lab Job #:
Authorized User: Honeywell

AESI Ref: 40210.49633
COC#: 37380

Relinquished by: CH2M Hill
Received by: Baine Foeck
Date/Time: 2/12/10 1706

Relinquished by: Baine Foeck
Received by: FedEx
Date/Time: 2/15/10 1400

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

Company: CH2M Hill
Date/Time: 2/12/10 1706
Company: Baine Foeck
Date/Time: 2/15/10 1400

Condition: Cooler Temp.
Condition: Cooler Temp.

Custody Seals Intact:
Custody Seals Intact:

Rec'd: J. Foeck
2-16-10 1000 CFT

218324

Curtis & Tompkins Laboratories		Honeywell		Chain of Custody / Analysis Request	
2323 8th St. Berkeley, CA 94710 510-204-2221		Privileged & Confidential		AESI Ref: 40210.49633 COC#: 37380	
Sampling Co.: CH2M HILL		Tuesdai Powers, Critigen Melanie West, Critigen		Lab Proj # (SDG):	
Client Contact: (name, co., address)		Lars Peterson		Lab ID	
CH2M HILL 2625 South Plaza Drive, Suite 300 Tempe, AZ 85282		Analysis Turnaround Time (TAT): 10		Site ID	
Preliminary Data To: Tuesdai Powers, Critigen, Melanie West, Critigen		Consultant		Lab Job #	
Sample Receipt Acknowledgement To: Tuesdai Powers, Critigen, Melanie West, Critigen		Full Report TAT: 10		Authorized User: Honeywell	
Hard Copy To: Tuesdai Powers and Melanie West, Critigen				Text & Excel File Drive Order	
Invoice To: Honeywell/Copy Benney Kidd				Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.	
Sample Identification		Sample Matrix		Sampling Method (code)	
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time
1	BV-31N	50.0	70.68	BV-31N-10Q1	2/11/10 0834
2	BV-30N	50.0	70.94	BV-30N-10Q1	2/11/10 0934
3	BV-33N	50.0	71.02	BV-33N-10Q1	2/11/10 1008
4	BV-32N	48.5	78.07	BV-32N-10Q1	2/11/10 1048
5	PW-14	20.0	25.0	PW-14-M-10Q1	2/11/10 1136
6	P-24	7.0	12.0	P-24-U-10Q1	2/11/10 1241
7	P-24	53.0	58.0	P-24-M-10Q1	2/11/10 1304
8	P-24	68.0	70.36	P-24-L-10Q1	2/11/10 1342
9					
10					
11					
12					
Relinquished by: Lars Peterson		Company: CH2M HILL		Received by: Christine Hill	
Date/Time: 2/11/10 1610		Date/Time: 2/11/10 1600		Cooler Temp.	
Relinquished by: Basim Fakh		Company: CH2M HILL		Condition	
Date/Time: 2/15/10 1900		Date/Time: Fed Ex		Cooler Temp.	
Preservatives: (Other, Specify):		0 (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4 Deg C); 11 (4C NaOH (pH<2) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O5); 13 (Zn Acetate), sp (Special Instructions)		Custody Seals Intact	

REC'D: *Lars Peterson*
2-16-10 10:00
CJT

218329

Curtis & Tompkins Laboratories		Honeywell		Chain Of Custody / Analysis Request		AESI Ref: 40210.49633							
2323 5th St. Berkeley, CA 94710 510-204-2221		Privileged & Confidential		Sky Harbor AZ		COC#: 37380							
Sampling Co.: CH2MHILL		Tuesdai Powers, Critigen Melanie West, Critigen		Phoenix, AZ		Lab Proj # (SDG):							
Client Contact: (name, co., address)		Lars Peterson		Phase: Sampling Program		Lab ID							
CH2M HILL 2625 South Plaza Drive, Suite 300 Tempe, AZ 85282		5101516 Consultant		0 0 0 0		Site ID							
Preliminary Data To: Tuesdai Powers, Critigen, Melanie West, Critigen		Analysis Turnaround Time (TAT): 10		Methane (TO-3M)		Lab Job #							
Sample Receipt: Tuesdai Powers, Critigen, Melanie West, Critigen		Full Report TAT: 10		VOCs (TO-15)		Authorized User: Honeywell							
Acknowledgement To: Tuesdai Powers, Critigen, Melanie West, Critigen				Field Filtered Sample ?		Text & Excel File Drive							
Hard Copy To: Tuesdai Powers and Melanie West, Critigen				Composite/Grab		Excel & Text File Order							
Invoice To: Honeywell/Copy Barney Kidd				Units		Copyright AESI: Version 8.0 Unauthorised use strictly prohibited.							
Location ID	Start Depth (ft)	End Depth (ft)	Sample Identification	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	Sample # of Cont.	Units	Sampling Method (code)	Canister Serial No.
1	PMW-15	5	10	PMW-15-U-10Q1	2/8/10	2252	SV	AIR	REG	1	G		00124
2	PMW-15	20	25	PMW-15-M-10Q1	2/8/10	2311	SV	AIR	REG	1	G		00107
3	P-26	5-25	10-25	P-26-U-10Q1	2/9/10	0146	SV	AIR	REG	1	G		00068
4	P-26	53	58	P-26-M-10Q1	2/9/10	0207	SV	AIR	REG	1	G		00075
5				BSVE-SVM-10Q1-004	2/9/10	0001	SV	AIR	REG	1	G		00098
6	P-26	58	73-76	P-26-L-10Q1	2/9/10	0243	SV	AIR	REG	1	G		00116
7	P-25	7	12	P-25-U-10Q1	2/9/10	0335	SV	AIR	REG	1	G		00190
8	P-25	53	58	P-25-M-10Q1	2/9/10	0356	SV	AIR	REG	1	G		00066
9	P-25	70	73-68	P-25-L-10Q1	2/9/10	0420	SV	AIR	REG	1	G		00184
10	SMW-12	5	9	SMW-12-U-10Q1	2/9/10	0507	SV	AIR	REG	1	G		00119
11	SMW-12	20	25	SMW-12-M-10Q1	2/9/10	0522	SV	AIR	REG	1	G		00141
12													

Relinquished by	Company	Received by	Company	Condition	Custody Seals Intact
Lars Peterson	CH2M Hill	Barney Kidd	CH2M Hill	Cooler Temp.	
Barney Kidd	CH2M Hill	Barney Kidd	CH2M Hill	Condition	

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

REC'D: *[Signature]* 2-16-10 1000

218329

Curtis & Tompkins Laboratories

2323 5th St.
Berkeley, CA 94710
510-204-2221

Honeywell

Chain Of Custody / Analysis Request

AESI Ref: 40210.49633
COC# 37380

Privileged & Confidential
 EDD To: Tuesdai Powers, Critigen Melanie West, Critigen
 Sampler: 5101516
 PO # Analysis Turnaround Time (TAT): 10
 Consultant
 Full Report TAT: 10

Client Contact: (name, co., address)
 CH2M HILL
 2625 South Plaza Drive, Suite 300
 Tempe, AZ 85282
 Preliminary Data To: Tuesdai Powers, Critigen, Melanie West, Critigen
 Sample Receipt: Tuesdai Powers, Critigen, Melanie West, Critigen
 Acknowledgement To: Tuesdai Powers, Critigen, Melanie West, Critigen
 Hard Copy To: Tuesdai Powers and Melanie West, Critigen
 Invoice To: Honeywell/Copy Bemei Kidd

Site Name: Sky Harbor AZ
 Location of Site: Phoenix, AZ
 Phase: Sampling Program
 BSVY QTR SVM
 Lab ID: CTBERK
 Site ID: SKYHARBOR
 Lab Job #: Honeywell
 Authorized User: Excel & Text File Order

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Location ID	Sample Identification		Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Composite/Grab	Field Filtered Sample ?	Preservative	Methane (TO-3M)	TPH (TO-3M)	OZ and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.
	Start Depth (ft)	End Depth (ft)																
1	PMW-10-U	5	10	PMW-10-U-10Q1	2-10-10	1410	SV	AIR	reg	1								00138
2	PMW-4-U	5	10	PMW-4-U-10Q1	2-10-10	1524	SV	AIR	reg	1								00159
3	PMW-4-M	20	25	PMW-4-M-10Q1	2-10-10	1547	SV	AIR	reg	1								00280
4	PMW-1-U	5	10	PMW-1-U-10Q1	2-10-10	1628	SV	AIR	reg	1								00267
5	PMW-1-M	20	25	PMW-1-M-10Q1	2-10-10	1647	SV	AIR	reg	1								00288
6	PMW-2-U	5	10	PMW-2-U-10Q1	2-10-10	1455	SV	AIR	reg	1								00261
7	PMW-2-M	20	25	PMW-2-M-10Q1	2-10-10	1520	SV	AIR	reg	1								00252
8	PMW-6-M	20	25	PMW-6-M-10Q1	2-10-10	1628	SV	AIR	reg	1								00265
9	PMW-6-U	5	10	PMW-6-U-10Q1	2-10-10	1606	SV	AIR	reg	1								00246
10	PMW-6-M	20	25	BSVY-SVM-10Q1-10Q1	2-10-10	1630	SV	AIR	reg	1								00242
11																		
12																		

Relinquished by: *[Signature]* Company: CH2M Hill Date/Time: 2-11-10 1700 Received by: Boris Feche Company: CH2M Hill Date/Time: 2-11-10 1700
 Relinquished by: *[Signature]* Company: CH2M Hill Date/Time: 2/15/10 1500 Received by: Fed Ex Company: CH2M Hill Date/Time: 2-16-10 1000

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

REC'D: *[Signature]*
 2-16-10 CFT
 1000

218329

Curtis & Tompkins Laboratories		Honeywell		Chain Of Custody / Analysis Request							
2323 5th St. Berkeley, CA 94710 510-204-2221		Privileged & Confidential		Site Name: Sky Harbor AZ							
Sampling Co.: CH2MHILL		Tuesdai Powers, Critigen Melanie West, Critigen		Phase: Sampling Program							
Client Contact: (name, co., address)		Trail Contingents Lopez		Location of Site: Phoenix, AZ							
CH2MHILL		5101516		BSVE QTR SVM							
2625 South Plaza Drive, Suite 300 Tempe, AZ 85282		Analysits Turnaround Time (TAT): 10		Lab ID							
Preliminary Data To: Tuesdai Powers, Critigen, Melanie West, Critigen		Consultant		Site ID							
Sample Receipt: Tuesdai Powers, Critigen, Melanie West, Critigen				Lab Job #							
Acknowledgement To: Tuesdai Powers, Critigen, Melanie West, Critigen				Authorized User: Honeywell							
Hard Copy To: Tuesdai Powers and Melanie West, Critigen		Full Report TAT: 10		Text & Excel File Drive Excel & Text File Order							
Invoice To: Honeywell/Copy Berney Kidd				Copyright AESI Version 8.0 Unauthorized use strictly prohibited.							
Sample Identification			Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	Sample # of Cont.	Units	Sampling Method (code)	Canister Serial No.
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID								
1 SMW-7-U	5	9	SMW-7-U-10Q1	021010	0727	AIR	REG	1	G	N	125
2 SMW-7-M	20	25	SMW-7-M-10Q1	021010	0749	AIR	REG	1	G	N	101
3 SMW-7-L	55	95	SMW-7-L-10Q1	021010	0816	AIR	REG	1	G	N	130
4 SMW-6-U	5	9	SMW-6-U-10Q1	021010	0903	AIR	REG	1	G	N	62
5 SMW-6-M	20	25	SMW-6-M-10Q1	021010	0945	AIR	REG	1	G	N	120
6 SMW-6-L	55	68	SMW-6-L-10Q1	021010	0948	AIR	REG	1	G	N	152
7 SMW-4-U	5	9	SMW-4-U-10Q1	021010	1034	AIR	REG	1	G	N	64
8 SMW-4-M	20	25	SMW-4-M-10Q1	021010	1054	AIR	REG	1	G	N	117
9 SMW-4-L	55	66	SMW-4-L-10Q1	021010	1115	AIR	REG	1	G	N	88
10 SMW-5-U	5	9	SMW-5-U-10Q1	021010	1402	AIR	REG	1	G	N	283
11 SMW-5-M	20	25	SMW-5-M-10Q1	021010	1427	AIR	REG	1	G	N	281
12	-	-	BSVE-3-M-10Q1-010	021010	1441	AIR	REG	1	G	N	285
Relinquished by: [Signature]		Company: CH2MHILL		Received by: [Signature]		Company: CH2MHILL		Condition: Cooler Temp.		Custody Seals Intact	
Relinquished by: [Signature]		Date/Time: 02/15/10 1310		Received by: [Signature]		Company: CH2MHILL		Date/Time: 2/15/10 1430		Condition: Cooler Temp.	
Relinquished by: [Signature]		Date/Time: 2/15/10 1530		Received by: [Signature]		Company: CH2MHILL		Date/Time: 2/15/10 1530		Condition: Cooler Temp.	
Preservatives: (Other, Specify):											

REC'D: [Signature]
2-16-10 1000 CPT

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218329 Date Received 2-16-10 Number of coolers 3 BX'S
Client CH2MTA2 Project BSVE QTR SVM

Date Opened 2-16-10 By (print) S. EVANS (sign) [Signature]
Date Logged in J By (print) J (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX MSTR # YES NO
Shipping info 7955 3364 2729

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many 2 EA Name SIGNATURE Date 2-15-10

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:

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

Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? _____ YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 218329

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-28-U-10Q1	Diln Fac:	2.070
Lab ID:	218329-001	Batch#:	160471
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/01/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	ND	1.0	ND	5.1	D1
Benzene	ND	1.0	ND	3.3	D1
Trichloroethene	ND	1.0	ND	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	2.9	1.0	20	7.0	D1
Ethylbenzene	ND	1.0	ND	4.5	D1
m,p-Xylenes	ND	1.0	ND	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	ND	1.0	ND	5.1	D1
1,2,4-Trimethylbenzene	ND	1.0	ND	5.1	D1
Xylene (total)	ND	2.1	ND	9.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-28-M-10Q1	Diln Fac:	2.150
Lab ID:	218329-002	Batch#:	160471
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/01/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
1,1-Dichloroethene	5.4	1.1	21	4.3	D1
1,1-Dichloroethane	ND	1.1	ND	4.4	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	2.5	1.1	12	5.2	D1
Benzene	ND	1.1	ND	3.4	D1
Trichloroethene	4.9	1.1	27	5.8	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	38	1.1	260	7.3	D1
Ethylbenzene	ND	1.1	ND	4.7	D1
m,p-Xylenes	ND	1.1	ND	4.7	D1
o-Xylene	ND	1.1	ND	4.7	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.3	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.3	D1
Xylene (total)	ND	2.2	ND	9.3	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-28-L-10Q1	Diln Fac:	2.040
Lab ID:	218329-003	Batch#:	160471
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/01/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
1,1-Dichloroethene	6.9	1.0	27	4.0	D1
1,1-Dichloroethane	ND	1.0	ND	4.1	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	2.9	1.0	14	5.0	D1
Benzene	ND	1.0	ND	3.3	D1
Trichloroethene	2.9	1.0	15	5.5	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	36	1.0	240	6.9	D1
Ethylbenzene	ND	1.0	ND	4.4	D1
m,p-Xylenes	ND	1.0	ND	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	ND	1.0	ND	5.0	D1
1,2,4-Trimethylbenzene	ND	1.0	ND	5.0	D1
Xylene (total)	ND	2.0	ND	8.9	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-30-U-10Q1	Diln Fac:	2.070
Lab ID:	218329-004	Batch#:	160581
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/03/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	ND	1.0	ND	5.1	D1
Benzene	ND	1.0	ND	3.3	D1
Trichloroethene	ND	1.0	ND	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	ND	1.0	ND	7.0	D1
Ethylbenzene	ND	1.0	ND	4.5	D1
m,p-Xylenes	ND	1.0	ND	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	ND	1.0	ND	5.1	D1
1,2,4-Trimethylbenzene	ND	1.0	ND	5.1	D1
Xylene (total)	ND	2.1	ND	9.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-30-M-10Q1	Diln Fac:	504.0
Lab ID:	218329-005	Batch#:	160620
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/05/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	250	ND	640	D1
Chloroethane	ND	250	ND	660	D1
1,1-Dichloroethene	ND	250	ND	1,000	D1
1,1-Dichloroethane	ND	250	ND	1,000	D1
MTBE	ND	250	ND	910	D1
cis-1,2-Dichloroethene	ND	250	ND	1,000	D1
n-Hexane	ND	250	ND	890	D1
Chloroform	ND	250	ND	1,200	D1
Benzene	ND	250	ND	810	D1
Trichloroethene	ND	250	ND	1,400	D1
Toluene	ND	250	ND	950	D1
Tetrachloroethene	ND	250	ND	1,700	D1
Ethylbenzene	4,000	250	17,000	1,100	D1
m,p-Xylenes	320	250	1,400	1,100	D1
o-Xylene	ND	250	ND	1,100	D1
1,3,5-Trimethylbenzene	ND	250	ND	1,200	D1
1,2,4-Trimethylbenzene	ND	250	ND	1,200	D1
Xylene (total)	320	250	1,400	1,100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	80	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-30-L-10Q1	Diln Fac:	80.40
Lab ID:	218329-006	Batch#:	160681
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	40	ND	100	D1
Chloroethane	ND	40	ND	110	D1
1,1-Dichloroethene	ND	40	ND	160	D1
1,1-Dichloroethane	ND	40	ND	160	D1
MTBE	ND	40	ND	140	D1
cis-1,2-Dichloroethene	ND	40	ND	160	D1
n-Hexane	ND	40	ND	140	D1
Chloroform	ND	40	ND	200	D1
Benzene	ND	40	ND	130	D1
Trichloroethene	ND	40	ND	220	D1
Toluene	ND	40	ND	150	D1
Tetrachloroethene	ND	40	ND	270	D1
Ethylbenzene	97	40	420	170	D1
m,p-Xylenes	ND	40	ND	170	D1
o-Xylene	ND	40	ND	170	D1
1,3,5-Trimethylbenzene	ND	40	ND	200	D1
1,2,4-Trimethylbenzene	ND	40	ND	200	D1
Xylene (total)	ND	80	ND	350	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	112	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-59A-10Q1	Batch#:	160681
Lab ID:	218329-007	Sampled:	02/11/10
Matrix:	Air	Received:	02/16/10
Units (V):	ppbv	Analyzed:	03/06/10
Units (M):	ug/m3		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	ADEQ Flags
Vinyl Chloride	ND	250	ND	640	501.6	D2
Chloroethane	ND	250	ND	660	501.6	D2
1,1-Dichloroethene	ND	250	ND	990	501.6	D2
1,1-Dichloroethane	7,300	250	30,000	1,000	501.6	D2
MTBE	400	250	1,500	900	501.6	D2
cis-1,2-Dichloroethene	ND	250	ND	990	501.6	D2
n-Hexane	41,000	420	140,000	1,500	836.0	D1
Chloroform	ND	250	ND	1,200	501.6	D2
Benzene	9,300	250	30,000	800	501.6	D2
Trichloroethene	ND	250	ND	1,300	501.6	D2
Toluene	ND	250	ND	950	501.6	D2
Tetrachloroethene	ND	250	ND	1,700	501.6	D2
Ethylbenzene	830	250	3,600	1,100	501.6	D2
m,p-Xylenes	4,200	250	18,000	1,100	501.6	D2
o-Xylene	1,300	250	5,500	1,100	501.6	D2
1,3,5-Trimethylbenzene	2,600	250	13,000	1,200	501.6	D2
1,2,4-Trimethylbenzene	6,300	250	31,000	1,200	501.6	D2
Xylene (total)	5,500	500	24,000	2,200	501.6	D2

Surrogate	%REC	Limits	Diln Fac	ADEQ Flags
Bromofluorobenzene	104	70-130	501.6	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-2N-10Q1	Diln Fac:	499.2
Lab ID:	218329-008	Batch#:	160620
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/05/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	250	ND	640	D1
Chloroethane	ND	250	ND	660	D1
1,1-Dichloroethene	ND	250	ND	990	D1
1,1-Dichloroethane	340	250	1,400	1,000	D1
MTBE	ND	250	ND	900	D1
cis-1,2-Dichloroethene	ND	250	ND	990	D1
n-Hexane	12,000	250	43,000	880	D1
Chloroform	ND	250	ND	1,200	D1
Benzene	ND	250	ND	800	D1
Trichloroethene	ND	250	ND	1,300	D1
Toluene	ND	250	ND	940	D1
Tetrachloroethene	ND	250	ND	1,700	D1
Ethylbenzene	4,400	250	19,000	1,100	D1
m,p-Xylenes	7,100	250	31,000	1,100	D1
o-Xylene	430	250	1,900	1,100	D1
1,3,5-Trimethylbenzene	1,500	250	7,500	1,200	D1
1,2,4-Trimethylbenzene	5,900	250	29,000	1,200	D1
Xylene (total)	7,600	500	33,000	2,200	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	121	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-008	Diln Fac:	1.950
Lab ID:	218329-009	Batch#:	160471
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.98	ND	2.5	D1
Chloroethane	ND	0.98	ND	2.6	D1
1,1-Dichloroethene	ND	0.98	ND	3.9	D1
1,1-Dichloroethane	ND	0.98	ND	3.9	D1
MTBE	ND	0.98	ND	3.5	D1
cis-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
n-Hexane	ND	0.98	ND	3.4	D1
Chloroform	ND	0.98	ND	4.8	D1
Benzene	ND	0.98	ND	3.1	D1
Trichloroethene	ND	0.98	ND	5.2	D1
Toluene	ND	0.98	ND	3.7	D1
Tetrachloroethene	2.9	0.98	19	6.6	D1
Ethylbenzene	ND	0.98	ND	4.2	D1
m,p-Xylenes	ND	0.98	ND	4.2	D1
o-Xylene	ND	0.98	ND	4.2	D1
1,3,5-Trimethylbenzene	ND	0.98	ND	4.8	D1
1,2,4-Trimethylbenzene	ND	0.98	ND	4.8	D1
Xylene (total)	ND	2.0	ND	8.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-3-U-10Q1	Diln Fac:	6.390
Lab ID:	218329-010	Batch#:	160581
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/04/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	3.2	ND	8.2	D1
Chloroethane	ND	3.2	ND	8.4	D1
1,1-Dichloroethene	ND	3.2	ND	13	D1
1,1-Dichloroethane	ND	3.2	ND	13	D1
MTBE	ND	3.2	ND	12	D1
cis-1,2-Dichloroethene	ND	3.2	ND	13	D1
n-Hexane	5.9	3.2	21	11	D1
Chloroform	ND	3.2	ND	16	D1
Benzene	ND	3.2	ND	10	D1
Trichloroethene	ND	3.2	ND	17	D1
Toluene	ND	3.2	ND	12	D1
Tetrachloroethene	ND	3.2	ND	22	D1
Ethylbenzene	11	3.2	48	14	D1
m,p-Xylenes	22	3.2	96	14	D1
o-Xylene	ND	3.2	ND	14	D1
1,3,5-Trimethylbenzene	14	3.2	68	16	D1
1,2,4-Trimethylbenzene	66	3.2	320	16	D1
Xylene (total)	22	6.4	96	28	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-3-M-10Q1	Diln Fac:	1.950
Lab ID:	218329-011	Batch#:	160471
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/01/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.98	ND	2.5	D1
Chloroethane	ND	0.98	ND	2.6	D1
1,1-Dichloroethene	ND	0.98	ND	3.9	D1
1,1-Dichloroethane	ND	0.98	ND	3.9	D1
MTBE	ND	0.98	ND	3.5	D1
cis-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
n-Hexane	5.2	0.98	18	3.4	D1
Chloroform	ND	0.98	ND	4.8	D1
Benzene	ND	0.98	ND	3.1	D1
Trichloroethene	1.4	0.98	7.4	5.2	D1
Toluene	ND	0.98	ND	3.7	D1
Tetrachloroethene	ND	0.98	ND	6.6	D1
Ethylbenzene	9.7	0.98	42	4.2	D1
m,p-Xylenes	20	0.98	88	4.2	D1
o-Xylene	1.4	0.98	6.2	4.2	D1
1,3,5-Trimethylbenzene	9.9	0.98	49	4.8	D1
1,2,4-Trimethylbenzene	39	0.98	190	4.8	D1
Xylene (total)	22	2.0	94	8.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	112	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BC-7A-10Q1	Diln Fac:	2.020
Lab ID:	218329-012	Batch#:	160471
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/01/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
1,1-Dichloroethene	19	1.0	73	4.0	D1
1,1-Dichloroethane	2.1	1.0	8.6	4.1	D1
MTBE	ND	1.0	ND	3.6	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	1.3	1.0	4.7	3.6	D1
Chloroform	7.7	1.0	38	4.9	D1
Benzene	ND	1.0	ND	3.2	D1
Trichloroethene	6.7	1.0	36	5.4	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	62	1.0	420	6.9	D1
Ethylbenzene	1.3	1.0	5.5	4.4	D1
m,p-Xylenes	4.1	1.0	18	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	1.6	1.0	8.1	5.0	D1
1,2,4-Trimethylbenzene	7.2	1.0	36	5.0	D1
Xylene (total)	4.1	2.0	18	8.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-31N-10Q1	Diln Fac:	25.92
Lab ID:	218329-013	Batch#:	160581
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/04/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	13	ND	33	D1
Chloroethane	ND	13	ND	34	D1
1,1-Dichloroethene	ND	13	ND	51	D1
1,1-Dichloroethane	ND	13	ND	52	D1
MTBE	ND	13	ND	47	D1
cis-1,2-Dichloroethene	ND	13	ND	51	D1
n-Hexane	25	13	89	46	D1
Chloroform	ND	13	ND	63	D1
Benzene	13	13	42	41	D1
Trichloroethene	ND	13	ND	70	D1
Toluene	ND	13	ND	49	D1
Tetrachloroethene	14	13	93	88	D1
Ethylbenzene	16	13	70	56	D1
m,p-Xylenes	31	13	140	56	D1
o-Xylene	ND	13	ND	56	D1
1,3,5-Trimethylbenzene	22	13	110	64	D1
1,2,4-Trimethylbenzene	74	13	360	64	D1
Xylene (total)	31	26	140	110	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	111	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-30N-10Q1	Diln Fac:	23.88
Lab ID:	218329-014	Batch#:	160581
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/04/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	12	ND	31	D1
Chloroethane	ND	12	ND	32	D1
1,1-Dichloroethene	ND	12	ND	47	D1
1,1-Dichloroethane	ND	12	ND	48	D1
MTBE	30	12	110	43	D1
cis-1,2-Dichloroethene	ND	12	ND	47	D1
n-Hexane	25	12	89	42	D1
Chloroform	ND	12	ND	58	D1
Benzene	160	12	520	38	D1
Trichloroethene	ND	12	ND	64	D1
Toluene	ND	12	ND	45	D1
Tetrachloroethene	ND	12	ND	81	D1
Ethylbenzene	ND	12	ND	52	D1
m,p-Xylenes	15	12	66	52	D1
o-Xylene	ND	12	ND	52	D1
1,3,5-Trimethylbenzene	ND	12	ND	59	D1
1,2,4-Trimethylbenzene	42	12	210	59	D1
Xylene (total)	15	12	66	52	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	107	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-33N-10Q1	Diln Fac:	128.4
Lab ID:	218329-015	Batch#:	160681
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	64	ND	160	D1
Chloroethane	ND	64	ND	170	D1
1,1-Dichloroethene	ND	64	ND	250	D1
1,1-Dichloroethane	ND	64	ND	260	D1
MTBE	ND	64	ND	230	D1
cis-1,2-Dichloroethene	ND	64	ND	250	D1
n-Hexane	86	64	300	230	D1
Chloroform	ND	64	ND	310	D1
Benzene	500	64	1,600	210	D1
Trichloroethene	ND	64	ND	340	D1
Toluene	ND	64	ND	240	D1
Tetrachloroethene	ND	64	ND	440	D1
Ethylbenzene	ND	64	ND	280	D1
m,p-Xylenes	ND	64	ND	280	D1
o-Xylene	ND	64	ND	280	D1
1,3,5-Trimethylbenzene	ND	64	ND	320	D1
1,2,4-Trimethylbenzene	ND	64	ND	320	D1
Xylene (total)	ND	130	ND	560	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	122	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-32N-10Q1	Diln Fac:	25.80
Lab ID:	218329-016	Batch#:	160581
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/04/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	13	ND	33	D1
Chloroethane	ND	13	ND	34	D1
1,1-Dichloroethene	ND	13	ND	51	D1
1,1-Dichloroethane	36	13	140	52	D1
MTBE	ND	13	ND	47	D1
cis-1,2-Dichloroethene	ND	13	ND	51	D1
n-Hexane	ND	13	ND	45	D1
Chloroform	ND	13	ND	63	D1
Benzene	ND	13	ND	41	D1
Trichloroethene	17	13	94	69	D1
Toluene	ND	13	ND	49	D1
Tetrachloroethene	13	13	89	87	D1
Ethylbenzene	ND	13	ND	56	D1
m,p-Xylenes	ND	13	ND	56	D1
o-Xylene	ND	13	ND	56	D1
1,3,5-Trimethylbenzene	ND	13	ND	63	D1
1,2,4-Trimethylbenzene	27	13	130	63	D1
Xylene (total)	ND	26	ND	110	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	94	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-14-M-10Q1	Diln Fac:	2.070
Lab ID:	218329-017	Batch#:	160471
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	1.6	1.0	6.5	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	6.7	1.0	24	3.6	D1
Chloroform	ND	1.0	ND	5.1	D1
Benzene	3.2	1.0	10	3.3	D1
Trichloroethene	2.1	1.0	11	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	1.3	1.0	8.5	7.0	D1
Ethylbenzene	2.4	1.0	10	4.5	D1
m,p-Xylenes	6.9	1.0	30	4.5	D1
o-Xylene	1.5	1.0	6.4	4.5	D1
1,3,5-Trimethylbenzene	6.0	1.0	29	5.1	D1
1,2,4-Trimethylbenzene	18	1.0	88	5.1	D1
Xylene (total)	8.4	2.1	36	9.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-24-U-10Q1	Diln Fac:	12.12
Lab ID:	218329-018	Batch#:	160581
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/04/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	6.1	ND	15	D1
Chloroethane	ND	6.1	ND	16	D1
1,1-Dichloroethene	ND	6.1	ND	24	D1
1,1-Dichloroethane	ND	6.1	ND	25	D1
MTBE	ND	6.1	ND	22	D1
cis-1,2-Dichloroethene	ND	6.1	ND	24	D1
n-Hexane	ND	6.1	ND	21	D1
Chloroform	7.0	6.1	34	30	D1
Benzene	ND	6.1	ND	19	D1
Trichloroethene	ND	6.1	ND	33	D1
Toluene	ND	6.1	ND	23	D1
Tetrachloroethene	ND	6.1	ND	41	D1
Ethylbenzene	28	6.1	120	26	D1
m,p-Xylenes	27	6.1	120	26	D1
o-Xylene	ND	6.1	ND	26	D1
1,3,5-Trimethylbenzene	33	6.1	160	30	D1
1,2,4-Trimethylbenzene	110	6.1	520	30	D1
Xylene (total)	27	12	120	53	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	121	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-24-M-10Q1	Diln Fac:	520.8
Lab ID:	218329-019	Batch#:	160620
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/05/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	260	ND	670	D1
Chloroethane	ND	260	ND	690	D1
1,1-Dichloroethene	ND	260	ND	1,000	D1
1,1-Dichloroethane	ND	260	ND	1,100	D1
MTBE	ND	260	ND	940	D1
cis-1,2-Dichloroethene	ND	260	ND	1,000	D1
n-Hexane	300	260	1,000	920	D1
Chloroform	ND	260	ND	1,300	D1
Benzene	3,300	260	11,000	830	D1
Trichloroethene	ND	260	ND	1,400	D1
Toluene	ND	260	ND	980	D1
Tetrachloroethene	ND	260	ND	1,800	D1
Ethylbenzene	ND	260	ND	1,100	D1
m,p-Xylenes	ND	260	ND	1,100	D1
o-Xylene	ND	260	ND	1,100	D1
1,3,5-Trimethylbenzene	ND	260	ND	1,300	D1
1,2,4-Trimethylbenzene	ND	260	ND	1,300	D1
Xylene (total)	ND	520	ND	2,300	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	117	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-24-L-10Q1	Diln Fac:	27.36
Lab ID:	218329-020	Batch#:	160581
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/04/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	14	ND	35	D1
Chloroethane	ND	14	ND	36	D1
1,1-Dichloroethene	ND	14	ND	54	D1
1,1-Dichloroethane	15	14	62	55	D1
MTBE	ND	14	ND	49	D1
cis-1,2-Dichloroethene	ND	14	ND	54	D1
n-Hexane	ND	14	ND	48	D1
Chloroform	ND	14	ND	67	D1
Benzene	37	14	120	44	D1
Trichloroethene	ND	14	ND	74	D1
Toluene	ND	14	ND	52	D1
Tetrachloroethene	ND	14	ND	93	D1
Ethylbenzene	16	14	71	59	D1
m,p-Xylenes	20	14	85	59	D1
o-Xylene	ND	14	ND	59	D1
1,3,5-Trimethylbenzene	24	14	120	67	D1
1,2,4-Trimethylbenzene	82	14	400	67	D1
Xylene (total)	20	14	85	59	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	117	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-15-U-10Q1	Diln Fac:	1.970
Lab ID:	218329-021	Batch#:	160471
Matrix:	Air	Sampled:	02/08/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/01/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.99	ND	2.5	D1
Chloroethane	ND	0.99	ND	2.6	D1
1,1-Dichloroethene	ND	0.99	ND	3.9	D1
1,1-Dichloroethane	ND	0.99	ND	4.0	D1
MTBE	ND	0.99	ND	3.6	D1
cis-1,2-Dichloroethene	ND	0.99	ND	3.9	D1
n-Hexane	ND	0.99	ND	3.5	D1
Chloroform	ND	0.99	ND	4.8	D1
Benzene	ND	0.99	ND	3.1	D1
Trichloroethene	ND	0.99	ND	5.3	D1
Toluene	ND	0.99	ND	3.7	D1
Tetrachloroethene	ND	0.99	ND	6.7	D1
Ethylbenzene	ND	0.99	ND	4.3	D1
m,p-Xylenes	ND	0.99	ND	4.3	D1
o-Xylene	ND	0.99	ND	4.3	D1
1,3,5-Trimethylbenzene	ND	0.99	ND	4.8	D1
1,2,4-Trimethylbenzene	1.0	0.99	5.0	4.8	D1
Xylene (total)	ND	2.0	ND	8.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	96	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-15-M-10Q1	Diln Fac:	1.900
Lab ID:	218329-022	Batch#:	160471
Matrix:	Air	Sampled:	02/08/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/01/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.95	ND	2.4	D1
Chloroethane	ND	0.95	ND	2.5	D1
1,1-Dichloroethene	ND	0.95	ND	3.8	D1
1,1-Dichloroethane	ND	0.95	ND	3.8	D1
MTBE	ND	0.95	ND	3.4	D1
cis-1,2-Dichloroethene	ND	0.95	ND	3.8	D1
n-Hexane	ND	0.95	ND	3.3	D1
Chloroform	ND	0.95	ND	4.6	D1
Benzene	ND	0.95	ND	3.0	D1
Trichloroethene	ND	0.95	ND	5.1	D1
Toluene	ND	0.95	ND	3.6	D1
Tetrachloroethene	2.0	0.95	13	6.4	D1
Ethylbenzene	ND	0.95	ND	4.1	D1
m,p-Xylenes	ND	0.95	ND	4.1	D1
o-Xylene	ND	0.95	ND	4.1	D1
1,3,5-Trimethylbenzene	ND	0.95	ND	4.7	D1
1,2,4-Trimethylbenzene	ND	0.95	ND	4.7	D1
Xylene (total)	ND	1.9	ND	8.3	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-26-U-10Q1	Diln Fac:	38.60
Lab ID:	218329-023	Batch#:	160620
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/04/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	19	ND	49	D1
Chloroethane	ND	19	ND	51	D1
1,1-Dichloroethene	ND	19	ND	77	D1
1,1-Dichloroethane	ND	19	ND	78	D1
MTBE	ND	19	ND	70	D1
cis-1,2-Dichloroethene	ND	19	ND	77	D1
n-Hexane	ND	19	ND	68	D1
Chloroform	ND	19	ND	94	D1
Benzene	25	19	79	62	D1
Trichloroethene	ND	19	ND	100	D1
Toluene	ND	19	ND	73	D1
Tetrachloroethene	ND	19	ND	130	D1
Ethylbenzene	ND	19	ND	84	D1
m,p-Xylenes	ND	19	ND	84	D1
o-Xylene	ND	19	ND	84	D1
1,3,5-Trimethylbenzene	ND	19	ND	95	D1
1,2,4-Trimethylbenzene	ND	19	ND	95	D1
Xylene (total)	ND	39	ND	170	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	91	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-26-M-10Q1	Diln Fac:	5.730
Lab ID:	218329-024	Batch#:	160620
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/05/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	2.9	ND	7.3	D1
Chloroethane	ND	2.9	ND	7.6	D1
1,1-Dichloroethene	ND	2.9	ND	11	D1
1,1-Dichloroethane	ND	2.9	ND	12	D1
MTBE	56	2.9	200	10	D1
cis-1,2-Dichloroethene	ND	2.9	ND	11	D1
n-Hexane	ND	2.9	ND	10	D1
Chloroform	ND	2.9	ND	14	D1
Benzene	ND	2.9	ND	9.2	D1
Trichloroethene	ND	2.9	ND	15	D1
Toluene	ND	2.9	ND	11	D1
Tetrachloroethene	ND	2.9	ND	19	D1
Ethylbenzene	ND	2.9	ND	12	D1
m,p-Xylenes	ND	2.9	ND	12	D1
o-Xylene	ND	2.9	ND	12	D1
1,3,5-Trimethylbenzene	ND	2.9	ND	14	D1
1,2,4-Trimethylbenzene	ND	2.9	ND	14	D1
Xylene (total)	ND	5.7	ND	25	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	88	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-004	Diln Fac:	5.790
Lab ID:	218329-025	Batch#:	160620
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/05/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	2.9	ND	7.4	D1
Chloroethane	ND	2.9	ND	7.6	D1
1,1-Dichloroethene	ND	2.9	ND	11	D1
1,1-Dichloroethane	ND	2.9	ND	12	D1
MTBE	51	2.9	180	10	D1
cis-1,2-Dichloroethene	ND	2.9	ND	11	D1
n-Hexane	ND	2.9	ND	10	D1
Chloroform	ND	2.9	ND	14	D1
Benzene	ND	2.9	ND	9.2	D1
Trichloroethene	ND	2.9	ND	16	D1
Toluene	ND	2.9	ND	11	D1
Tetrachloroethene	ND	2.9	ND	20	D1
Ethylbenzene	ND	2.9	ND	13	D1
m,p-Xylenes	ND	2.9	ND	13	D1
o-Xylene	ND	2.9	ND	13	D1
1,3,5-Trimethylbenzene	ND	2.9	ND	14	D1
1,2,4-Trimethylbenzene	ND	2.9	ND	14	D1
Xylene (total)	ND	5.8	ND	25	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-26-L-10Q1	Diln Fac:	39.20
Lab ID:	218329-026	Batch#:	160620
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/05/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	20	ND	50	D1
Chloroethane	ND	20	ND	52	D1
1,1-Dichloroethene	ND	20	ND	78	D1
1,1-Dichloroethane	ND	20	ND	79	D1
MTBE	100	20	360	71	D1
cis-1,2-Dichloroethene	ND	20	ND	78	D1
n-Hexane	ND	20	ND	69	D1
Chloroform	ND	20	ND	96	D1
Benzene	ND	20	ND	63	D1
Trichloroethene	ND	20	ND	110	D1
Toluene	ND	20	ND	74	D1
Tetrachloroethene	ND	20	ND	130	D1
Ethylbenzene	ND	20	ND	85	D1
m,p-Xylenes	ND	20	ND	85	D1
o-Xylene	ND	20	ND	85	D1
1,3,5-Trimethylbenzene	ND	20	ND	96	D1
1,2,4-Trimethylbenzene	ND	20	ND	96	D1
Xylene (total)	ND	39	ND	170	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-25-U-10Q1	Diln Fac:	2.030
Lab ID:	218329-027	Batch#:	160471
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/01/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
1,1-Dichloroethene	ND	1.0	ND	4.0	D1
1,1-Dichloroethane	1.2	1.0	4.9	4.1	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.0	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	ND	1.0	ND	5.0	D1
Benzene	ND	1.0	ND	3.2	D1
Trichloroethene	1.5	1.0	8.3	5.5	D1
Toluene	ND	1.0	ND	3.8	D1
Tetrachloroethene	9.2	1.0	63	6.9	D1
Ethylbenzene	ND	1.0	ND	4.4	D1
m,p-Xylenes	ND	1.0	ND	4.4	D1
o-Xylene	ND	1.0	ND	4.4	D1
1,3,5-Trimethylbenzene	ND	1.0	ND	5.0	D1
1,2,4-Trimethylbenzene	1.2	1.0	5.8	5.0	D1
Xylene (total)	ND	2.0	ND	8.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	114	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-25-M-10Q1	Diln Fac:	1.900
Lab ID:	218329-028	Batch#:	160471
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.95	ND	2.4	D1
Chloroethane	ND	0.95	ND	2.5	D1
1,1-Dichloroethene	30	0.95	120	3.8	D1
1,1-Dichloroethane	90	0.95	370	3.8	D1
MTBE	ND	0.95	ND	3.4	D1
cis-1,2-Dichloroethene	1.1	0.95	4.2	3.8	D1
n-Hexane	ND	0.95	ND	3.3	D1
Chloroform	1.9	0.95	9.3	4.6	D1
Benzene	ND	0.95	ND	3.0	D1
Trichloroethene	24	0.95	130	5.1	D1
Toluene	2.4	0.95	9.0	3.6	D1
Tetrachloroethene	14	0.95	92	6.4	D1
Ethylbenzene	ND	0.95	ND	4.1	D1
m,p-Xylenes	6.7	0.95	29	4.1	D1
o-Xylene	2.1	0.95	9.3	4.1	D1
1,3,5-Trimethylbenzene	ND	0.95	ND	4.7	D1
1,2,4-Trimethylbenzene	3.2	0.95	16	4.7	D1
Xylene (total)	8.8	1.9	38	8.3	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	105	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-25-L-10Q1	Diln Fac:	1.860
Lab ID:	218329-029	Batch#:	160471
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.93	ND	2.4	D1
Chloroethane	ND	0.93	ND	2.5	D1
1,1-Dichloroethene	ND	0.93	ND	3.7	D1
1,1-Dichloroethane	3.8	0.93	15	3.8	D1
MTBE	2.6	0.93	9.4	3.4	D1
cis-1,2-Dichloroethene	ND	0.93	ND	3.7	D1
n-Hexane	3.6	0.93	13	3.3	D1
Chloroform	ND	0.93	ND	4.5	D1
Benzene	21	0.93	68	3.0	D1
Trichloroethene	2.2	0.93	12	5.0	D1
Toluene	1.7	0.93	6.5	3.5	D1
Tetrachloroethene	0.94	0.93	6.4	6.3	D1
Ethylbenzene	5.8	0.93	25	4.0	D1
m,p-Xylenes	9.0	0.93	39	4.0	D1
o-Xylene	1.5	0.93	6.7	4.0	D1
1,3,5-Trimethylbenzene	3.4	0.93	17	4.6	D1
1,2,4-Trimethylbenzene	10	0.93	51	4.6	D1
Xylene (total)	11	1.9	46	8.1	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	112	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-12-U-10Q1	Diln Fac:	2.070
Lab ID:	218329-030	Batch#:	160471
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.0	ND	2.6	D1
Chloroethane	ND	1.0	ND	2.7	D1
1,1-Dichloroethene	ND	1.0	ND	4.1	D1
1,1-Dichloroethane	ND	1.0	ND	4.2	D1
MTBE	ND	1.0	ND	3.7	D1
cis-1,2-Dichloroethene	ND	1.0	ND	4.1	D1
n-Hexane	ND	1.0	ND	3.6	D1
Chloroform	ND	1.0	ND	5.1	D1
Benzene	ND	1.0	ND	3.3	D1
Trichloroethene	ND	1.0	ND	5.6	D1
Toluene	ND	1.0	ND	3.9	D1
Tetrachloroethene	2.6	1.0	17	7.0	D1
Ethylbenzene	ND	1.0	ND	4.5	D1
m,p-Xylenes	ND	1.0	ND	4.5	D1
o-Xylene	ND	1.0	ND	4.5	D1
1,3,5-Trimethylbenzene	ND	1.0	ND	5.1	D1
1,2,4-Trimethylbenzene	ND	1.0	ND	5.1	D1
Xylene (total)	ND	2.1	ND	9.0	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-12-M-10Q1	Diln Fac:	1.950
Lab ID:	218329-031	Batch#:	160471
Matrix:	Air	Sampled:	02/09/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.98	ND	2.5	D1
Chloroethane	ND	0.98	ND	2.6	D1
1,1-Dichloroethene	ND	0.98	ND	3.9	D1
1,1-Dichloroethane	ND	0.98	ND	3.9	D1
MTBE	ND	0.98	ND	3.5	D1
cis-1,2-Dichloroethene	ND	0.98	ND	3.9	D1
n-Hexane	ND	0.98	ND	3.4	D1
Chloroform	ND	0.98	ND	4.8	D1
Benzene	ND	0.98	ND	3.1	D1
Trichloroethene	ND	0.98	ND	5.2	D1
Toluene	ND	0.98	ND	3.7	D1
Tetrachloroethene	15	0.98	100	6.6	D1
Ethylbenzene	ND	0.98	ND	4.2	D1
m,p-Xylenes	ND	0.98	ND	4.2	D1
o-Xylene	ND	0.98	ND	4.2	D1
1,3,5-Trimethylbenzene	ND	0.98	ND	4.8	D1
1,2,4-Trimethylbenzene	ND	0.98	ND	4.8	D1
Xylene (total)	ND	2.0	ND	8.5	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-10-U-10Q1	Diln Fac:	2.300
Lab ID:	218329-032	Batch#:	160471
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	2.9	D1
Chloroethane	ND	1.2	ND	3.0	D1
1,1-Dichloroethene	ND	1.2	ND	4.6	D1
1,1-Dichloroethane	ND	1.2	ND	4.7	D1
MTBE	ND	1.2	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
n-Hexane	2.1	1.2	7.5	4.1	D1
Chloroform	ND	1.2	ND	5.6	D1
Benzene	4.7	1.2	15	3.7	D1
Trichloroethene	8.1	1.2	44	6.2	D1
Toluene	ND	1.2	ND	4.3	D1
Tetrachloroethene	ND	1.2	ND	7.8	D1
Ethylbenzene	4.3	1.2	19	5.0	D1
m,p-Xylenes	12	1.2	53	5.0	D1
o-Xylene	2.4	1.2	10	5.0	D1
1,3,5-Trimethylbenzene	9.1	1.2	45	5.7	D1
1,2,4-Trimethylbenzene	26	1.2	130	5.7	D1
Xylene (total)	15	2.3	63	10	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-4-U-10Q1	Diln Fac:	2.310
Lab ID:	218329-033	Batch#:	160471
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.0	D1
1,1-Dichloroethene	ND	1.2	ND	4.6	D1
1,1-Dichloroethane	ND	1.2	ND	4.7	D1
MTBE	ND	1.2	ND	4.2	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
n-Hexane	2.4	1.2	8.5	4.1	D1
Chloroform	1.3	1.2	6.3	5.6	D1
Benzene	5.3	1.2	17	3.7	D1
Trichloroethene	5.6	1.2	30	6.2	D1
Toluene	ND	1.2	ND	4.4	D1
Tetrachloroethene	ND	1.2	ND	7.8	D1
Ethylbenzene	4.4	1.2	19	5.0	D1
m,p-Xylenes	12	1.2	53	5.0	D1
o-Xylene	2.4	1.2	10	5.0	D1
1,3,5-Trimethylbenzene	9.1	1.2	45	5.7	D1
1,2,4-Trimethylbenzene	27	1.2	130	5.7	D1
Xylene (total)	15	2.3	64	10	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	107	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-4-M-10Q1	Diln Fac:	2.310
Lab ID:	218329-034	Batch#:	160471
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.0	D1
1,1-Dichloroethene	ND	1.2	ND	4.6	D1
1,1-Dichloroethane	ND	1.2	ND	4.7	D1
MTBE	ND	1.2	ND	4.2	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
n-Hexane	2.1	1.2	7.5	4.1	D1
Chloroform	41	1.2	200	5.6	D1
Benzene	4.3	1.2	14	3.7	D1
Trichloroethene	4.6	1.2	24	6.2	D1
Toluene	ND	1.2	ND	4.4	D1
Tetrachloroethene	ND	1.2	ND	7.8	D1
Ethylbenzene	3.9	1.2	17	5.0	D1
m,p-Xylenes	11	1.2	48	5.0	D1
o-Xylene	2.3	1.2	9.8	5.0	D1
1,3,5-Trimethylbenzene	8.1	1.2	40	5.7	D1
1,2,4-Trimethylbenzene	23	1.2	120	5.7	D1
Xylene (total)	13	2.3	57	10	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	117	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-1-U-10Q1	Diln Fac:	2.370
Lab ID:	218329-035	Batch#:	160530
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.1	D1
1,1-Dichloroethene	ND	1.2	ND	4.7	D1
1,1-Dichloroethane	ND	1.2	ND	4.8	D1
MTBE	ND	1.2	ND	4.3	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.7	D1
n-Hexane	2.3	1.2	8.0	4.2	D1
Chloroform	ND	1.2	ND	5.8	D1
Benzene	4.9	1.2	16	3.8	D1
Trichloroethene	4.5	1.2	24	6.4	D1
Toluene	ND	1.2	ND	4.5	D1
Tetrachloroethene	ND	1.2	ND	8.0	D1
Ethylbenzene	3.9	1.2	17	5.1	D1
m,p-Xylenes	10	1.2	45	5.1	D1
o-Xylene	2.0	1.2	8.6	5.1	D1
1,3,5-Trimethylbenzene	7.6	1.2	37	5.8	D1
1,2,4-Trimethylbenzene	24	1.2	120	5.8	D1
Xylene (total)	12	2.4	54	10	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	120	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-1-M-10Q1	Diln Fac:	2.380
Lab ID:	218329-036	Batch#:	160530
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.1	D1
1,1-Dichloroethene	ND	1.2	ND	4.7	D1
1,1-Dichloroethane	ND	1.2	ND	4.8	D1
MTBE	ND	1.2	ND	4.3	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.7	D1
n-Hexane	2.0	1.2	7.1	4.2	D1
Chloroform	ND	1.2	ND	5.8	D1
Benzene	4.3	1.2	14	3.8	D1
Trichloroethene	3.6	1.2	19	6.4	D1
Toluene	ND	1.2	ND	4.5	D1
Tetrachloroethene	ND	1.2	ND	8.1	D1
Ethylbenzene	3.4	1.2	15	5.2	D1
m,p-Xylenes	9.9	1.2	43	5.2	D1
o-Xylene	1.9	1.2	8.1	5.2	D1
1,3,5-Trimethylbenzene	6.6	1.2	32	5.8	D1
1,2,4-Trimethylbenzene	21	1.2	100	5.8	D1
Xylene (total)	12	2.4	51	10	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	119	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-2-U-10Q1	Diln Fac:	2.170
Lab ID:	218329-037	Batch#:	160530
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.3	D1
1,1-Dichloroethane	ND	1.1	ND	4.4	D1
MTBE	ND	1.1	ND	3.9	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.3	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	ND	1.1	ND	5.3	D1
Benzene	ND	1.1	ND	3.5	D1
Trichloroethene	1.1	1.1	5.9	5.8	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	ND	1.1	ND	7.4	D1
Ethylbenzene	3.0	1.1	13	4.7	D1
m,p-Xylenes	10	1.1	45	4.7	D1
o-Xylene	ND	1.1	ND	4.7	D1
1,3,5-Trimethylbenzene	7.3	1.1	36	5.3	D1
1,2,4-Trimethylbenzene	41	1.1	200	5.3	D1
Xylene (total)	10	2.2	45	9.4	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-2-M-10Q1	Diln Fac:	2.200
Lab ID:	218329-038	Batch#:	160530
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.4	D1
1,1-Dichloroethane	ND	1.1	ND	4.5	D1
MTBE	ND	1.1	ND	4.0	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
n-Hexane	ND	1.1	ND	3.9	D1
Chloroform	2.7	1.1	13	5.4	D1
Benzene	ND	1.1	ND	3.5	D1
Trichloroethene	ND	1.1	ND	5.9	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	ND	1.1	ND	7.5	D1
Ethylbenzene	ND	1.1	ND	4.8	D1
m,p-Xylenes	4.0	1.1	17	4.8	D1
o-Xylene	ND	1.1	ND	4.8	D1
1,3,5-Trimethylbenzene	3.0	1.1	15	5.4	D1
1,2,4-Trimethylbenzene	20	1.1	99	5.4	D1
Xylene (total)	4.0	2.2	17	9.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-6-M-10Q1	Diln Fac:	2.240
Lab ID:	218329-039	Batch#:	160530
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
1,1-Dichloroethene	ND	1.1	ND	4.4	D1
1,1-Dichloroethane	ND	1.1	ND	4.5	D1
MTBE	ND	1.1	ND	4.0	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
n-Hexane	ND	1.1	ND	3.9	D1
Chloroform	ND	1.1	ND	5.5	D1
Benzene	ND	1.1	ND	3.6	D1
Trichloroethene	ND	1.1	ND	6.0	D1
Toluene	ND	1.1	ND	4.2	D1
Tetrachloroethene	ND	1.1	ND	7.6	D1
Ethylbenzene	ND	1.1	ND	4.9	D1
m,p-Xylenes	ND	1.1	ND	4.9	D1
o-Xylene	ND	1.1	ND	4.9	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.5	D1
1,2,4-Trimethylbenzene	3.8	1.1	19	5.5	D1
Xylene (total)	ND	2.2	ND	9.7	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PMW-6-U-10Q1	Diln Fac:	2.130
Lab ID:	218329-040	Batch#:	160530
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
1,1-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	ND	1.1	ND	4.3	D1
MTBE	ND	1.1	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	ND	1.1	ND	3.8	D1
Chloroform	ND	1.1	ND	5.2	D1
Benzene	ND	1.1	ND	3.4	D1
Trichloroethene	ND	1.1	ND	5.7	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	ND	1.1	ND	7.2	D1
Ethylbenzene	ND	1.1	ND	4.6	D1
m,p-Xylenes	1.8	1.1	7.8	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	1.1	1.1	5.5	5.2	D1
1,2,4-Trimethylbenzene	8.0	1.1	39	5.2	D1
Xylene (total)	1.8	1.1	7.8	4.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-001	Diln Fac:	2.230
Lab ID:	218329-041	Batch#:	160530
Matrix:	Air	Sampled:	02/11/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	2.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.4	D1
1,1-Dichloroethane	ND	1.1	ND	4.5	D1
MTBE	ND	1.1	ND	4.0	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
n-Hexane	ND	1.1	ND	3.9	D1
Chloroform	ND	1.1	ND	5.4	D1
Benzene	ND	1.1	ND	3.6	D1
Trichloroethene	ND	1.1	ND	6.0	D1
Toluene	ND	1.1	ND	4.2	D1
Tetrachloroethene	ND	1.1	ND	7.6	D1
Ethylbenzene	ND	1.1	ND	4.8	D1
m,p-Xylenes	1.2	1.1	5.4	4.8	D1
o-Xylene	ND	1.1	ND	4.8	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.5	D1
1,2,4-Trimethylbenzene	4.8	1.1	24	5.5	D1
Xylene (total)	1.2	1.1	5.4	4.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-7-U-10Q1	Diln Fac:	4.840
Lab ID:	218329-042	Batch#:	160581
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/04/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	2.4	ND	6.2	D1
Chloroethane	ND	2.4	ND	6.4	D1
1,1-Dichloroethene	ND	2.4	ND	9.6	D1
1,1-Dichloroethane	ND	2.4	ND	9.8	D1
MTBE	ND	2.4	ND	8.7	D1
cis-1,2-Dichloroethene	ND	2.4	ND	9.6	D1
n-Hexane	6.5	2.4	23	8.5	D1
Chloroform	ND	2.4	ND	12	D1
Benzene	12	2.4	38	7.7	D1
Trichloroethene	4.8	2.4	26	13	D1
Toluene	ND	2.4	ND	9.1	D1
Tetrachloroethene	ND	2.4	ND	16	D1
Ethylbenzene	13	2.4	58	11	D1
m,p-Xylenes	37	2.4	160	11	D1
o-Xylene	7.6	2.4	33	11	D1
1,3,5-Trimethylbenzene	24	2.4	120	12	D1
1,2,4-Trimethylbenzene	71	2.4	350	12	D1
Xylene (total)	45	4.8	190	21	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	107	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-7-M-10Q1	Diln Fac:	2.610
Lab ID:	218329-043	Batch#:	160530
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/03/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.3	ND	3.3	D1
Chloroethane	ND	1.3	ND	3.4	D1
1,1-Dichloroethene	ND	1.3	ND	5.2	D1
1,1-Dichloroethane	ND	1.3	ND	5.3	D1
MTBE	ND	1.3	ND	4.7	D1
cis-1,2-Dichloroethene	ND	1.3	ND	5.2	D1
n-Hexane	3.1	1.3	11	4.6	D1
Chloroform	ND	1.3	ND	6.4	D1
Benzene	6.5	1.3	21	4.2	D1
Trichloroethene	2.7	1.3	14	7.0	D1
Toluene	1.6	1.3	5.9	4.9	D1
Tetrachloroethene	ND	1.3	ND	8.9	D1
Ethylbenzene	7.0	1.3	30	5.7	D1
m,p-Xylenes	20	1.3	85	5.7	D1
o-Xylene	3.9	1.3	17	5.7	D1
1,3,5-Trimethylbenzene	14	1.3	68	6.4	D1
1,2,4-Trimethylbenzene	42	1.3	210	6.4	D1
Xylene (total)	24	2.6	100	11	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-7-L-10Q1	Batch#:	160530
Lab ID:	218329-044	Sampled:	02/10/10
Matrix:	Air	Received:	02/16/10
Units (V):	ppbv	Analyzed:	03/03/10
Units (M):	ug/m3		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.7	2.130	D2
Chloroethane	ND	1.1	ND	2.8	2.130	D2
1,1-Dichloroethene	130	1.1	510	4.2	2.130	D2
1,1-Dichloroethane	340	3.2	1,400	13	6.390	D2
MTBE	1.3	1.1	4.8	3.8	2.130	D2
cis-1,2-Dichloroethene	53	1.1	210	4.2	2.130	D2
n-Hexane	1.9	1.1	6.5	3.8	2.130	D2
Chloroform	12	1.1	59	5.2	2.130	D2
Benzene	3.7	1.1	12	3.4	2.130	D2
Trichloroethene	560	3.2	3,000	17	6.390	D2
Toluene	ND	1.1	ND	4.0	2.130	D2
Tetrachloroethene	19	1.1	130	7.2	2.130	D2
Ethylbenzene	4.1	1.1	18	4.6	2.130	D2
m,p-Xylenes	11	1.1	48	4.6	2.130	D2
o-Xylene	2.2	1.1	9.5	4.6	2.130	D2
1,3,5-Trimethylbenzene	8.9	1.1	44	5.2	2.130	D2
1,2,4-Trimethylbenzene	27	1.1	130	5.2	2.130	D2
Xylene (total)	13	2.1	58	9.2	2.130	D2

Surrogate	%REC	Limits	Diln Fac	ADEQ Flags
Bromofluorobenzene	130	70-130	2.130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-6-U-10Q1	Diln Fac:	2.460
Lab ID:	218329-045	Batch#:	160530
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/03/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.1	D1
Chloroethane	ND	1.2	ND	3.2	D1
1,1-Dichloroethene	ND	1.2	ND	4.9	D1
1,1-Dichloroethane	ND	1.2	ND	5.0	D1
MTBE	ND	1.2	ND	4.4	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.9	D1
n-Hexane	3.3	1.2	12	4.3	D1
Chloroform	ND	1.2	ND	6.0	D1
Benzene	5.8	1.2	18	3.9	D1
Trichloroethene	6.9	1.2	37	6.6	D1
Toluene	ND	1.2	ND	4.6	D1
Tetrachloroethene	ND	1.2	ND	8.3	D1
Ethylbenzene	6.5	1.2	28	5.3	D1
m,p-Xylenes	18	1.2	78	5.3	D1
o-Xylene	3.7	1.2	16	5.3	D1
1,3,5-Trimethylbenzene	13	1.2	63	6.0	D1
1,2,4-Trimethylbenzene	41	1.2	200	6.0	D1
Xylene (total)	22	2.5	93	11	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-6-M-10Q1	Diln Fac:	2.450
Lab ID:	218329-046	Batch#:	160530
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/03/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.1	D1
Chloroethane	ND	1.2	ND	3.2	D1
1,1-Dichloroethene	ND	1.2	ND	4.9	D1
1,1-Dichloroethane	ND	1.2	ND	5.0	D1
MTBE	ND	1.2	ND	4.4	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.9	D1
n-Hexane	1.8	1.2	6.3	4.3	D1
Chloroform	ND	1.2	ND	6.0	D1
Benzene	3.2	1.2	10	3.9	D1
Trichloroethene	5.0	1.2	27	6.6	D1
Toluene	ND	1.2	ND	4.6	D1
Tetrachloroethene	1.3	1.2	9.0	8.3	D1
Ethylbenzene	3.8	1.2	16	5.3	D1
m,p-Xylenes	10	1.2	44	5.3	D1
o-Xylene	2.0	1.2	8.8	5.3	D1
1,3,5-Trimethylbenzene	8.4	1.2	41	6.0	D1
1,2,4-Trimethylbenzene	27	1.2	130	6.0	D1
Xylene (total)	12	2.5	53	11	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	117	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-6-L-10Q1	Batch#:	160530
Lab ID:	218329-047	Sampled:	02/10/10
Matrix:	Air	Received:	02/16/10
Units (V):	ppbv	Analyzed:	03/03/10
Units (M):	ug/m3		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	ADEQ Flags
Vinyl Chloride	1.5	1.3	3.8	3.3	2.590	D2
Chloroethane	ND	1.3	ND	3.4	2.590	D2
1,1-Dichloroethene	53	1.3	210	5.1	2.590	D2
1,1-Dichloroethane	3.7	1.3	15	5.2	2.590	D2
MTBE	ND	1.3	ND	4.7	2.590	D2
cis-1,2-Dichloroethene	79	1.3	310	5.1	2.590	D2
n-Hexane	2.4	1.3	8.5	4.6	2.590	D2
Chloroform	17	1.3	85	6.3	2.590	D2
Benzene	5.1	1.3	16	4.1	2.590	D2
Trichloroethene	580	3.9	3,100	21	7.770	D2
Toluene	1.7	1.3	6.5	4.9	2.590	D2
Tetrachloroethene	45	1.3	300	8.8	2.590	D2
Ethylbenzene	4.3	1.3	19	5.6	2.590	D2
m,p-Xylenes	12	1.3	53	5.6	2.590	D2
o-Xylene	2.5	1.3	11	5.6	2.590	D2
1,3,5-Trimethylbenzene	9.6	1.3	47	6.4	2.590	D2
1,2,4-Trimethylbenzene	ND	1.3	ND	6.4	2.590	D2
Xylene (total)	15	2.6	64	11	2.590	D2

Surrogate	%REC	Limits	Diln Fac	ADEQ Flags
Bromofluorobenzene	102	70-130	2.590	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-4-U-10Q1	Diln Fac:	2.720
Lab ID:	218329-048	Batch#:	160530
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/03/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.4	ND	3.5	D2
Chloroethane	ND	1.4	ND	3.6	D2
1,1-Dichloroethene	ND	1.4	ND	5.4	D2
1,1-Dichloroethane	3.5	1.4	14	5.5	D2
MTBE	ND	1.4	ND	4.9	D2
cis-1,2-Dichloroethene	ND	1.4	ND	5.4	D2
n-Hexane	2.5	1.4	8.8	4.8	D2
Chloroform	3.1	1.4	15	6.6	D2
Benzene	4.6	1.4	15	4.3	D2
Trichloroethene	210	1.4	1,100	7.3	D2
Toluene	ND	1.4	ND	5.1	D2
Tetrachloroethene	5.0	1.4	34	9.2	D2
Ethylbenzene	4.8	1.4	21	5.9	D2
m,p-Xylenes	14	1.4	59	5.9	D2
o-Xylene	2.6	1.4	11	5.9	D2
1,3,5-Trimethylbenzene	11	1.4	52	6.7	D2
1,2,4-Trimethylbenzene	32	1.4	160	6.7	D2
Xylene (total)	16	2.7	71	12	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-4-M-10Q1	Units (M):	ug/m3
Lab ID:	218329-049	Sampled:	02/10/10
Matrix:	Air	Received:	02/16/10
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Vinyl Chloride	ND	1.3	ND	3.4	2.670	160530	03/03/10	D2	
Chloroethane	ND	1.3	ND	3.5	2.670	160530	03/03/10	D2	
1,1-Dichloroethene	ND	1.3	ND	5.3	2.670	160530	03/03/10	D2	
1,1-Dichloroethane	6.3	1.3	25	5.4	2.670	160530	03/03/10	D2	
MTBE	ND	1.3	ND	4.8	2.670	160530	03/03/10	D2	
cis-1,2-Dichloroethene	ND	1.3	ND	5.3	2.670	160530	03/03/10	D2	
n-Hexane	1.7	1.3	5.9	4.7	2.670	160530	03/03/10	D2	
Chloroform	8.9	1.3	43	6.5	2.670	160530	03/03/10	D2	
Benzene	7.1	1.3	23	4.3	2.670	160530	03/03/10	D2	
Trichloroethene	250	2.7	1,300	14	5.340	160581	03/04/10	D1	
Toluene	ND	1.3	ND	5.0	2.670	160530	03/03/10	D2	
Tetrachloroethene	4.0	1.3	27	9.1	2.670	160530	03/03/10	D2	
Ethylbenzene	3.3	1.3	14	5.8	2.670	160530	03/03/10	D2	
m,p-Xylenes	9.4	1.3	41	5.8	2.670	160530	03/03/10	D2	
o-Xylene	1.7	1.3	7.4	5.8	2.670	160530	03/03/10	D2	
1,3,5-Trimethylbenzene	7.7	1.3	38	6.6	2.670	160530	03/03/10	D2	
1,2,4-Trimethylbenzene	25	1.3	120	6.6	2.670	160530	03/03/10	D2	
Xylene (total)	11	2.7	48	12	2.670	160530	03/03/10	D2	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Bromofluorobenzene	114	70-130	2.670	160530	03/03/10		

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-4-L-10Q1	Units (M):	ug/m3
Lab ID:	218329-050	Sampled:	02/10/10
Matrix:	Air	Received:	02/16/10
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Vinyl Chloride	4.5	1.4	12	3.6	2.790	160530	03/03/10	D2	
Chloroethane	ND	1.4	ND	3.7	2.790	160530	03/03/10	D2	
1,1-Dichloroethene	6.6	1.4	26	5.5	2.790	160530	03/03/10	D2	
1,1-Dichloroethane	630	17	2,500	68	33.48	160581	03/04/10	D2	
MTBE	ND	1.4	ND	5.0	2.790	160530	03/03/10	D2	
cis-1,2-Dichloroethene	ND	1.4	ND	5.5	2.790	160530	03/03/10	D2	
n-Hexane	3.3	1.4	12	4.9	2.790	160530	03/03/10	D2	
Chloroform	14	1.4	70	6.8	2.790	160530	03/03/10	D2	
Benzene	8.9	1.4	28	4.5	2.790	160530	03/03/10	D2	
Trichloroethene	2,700	17	15,000	90	33.48	160581	03/04/10	D2	
Toluene	1.4	1.4	5.4	5.3	2.790	160530	03/03/10	D2	
Tetrachloroethene	26	1.4	180	9.5	2.790	160530	03/03/10	D2	
Ethylbenzene	6.7	1.4	29	6.1	2.790	160530	03/03/10	D2	
m,p-Xylenes	18	1.4	77	6.1	2.790	160530	03/03/10	D2	
o-Xylene	3.5	1.4	15	6.1	2.790	160530	03/03/10	D2	
1,3,5-Trimethylbenzene	12	1.4	61	6.9	2.790	160530	03/03/10	D2	
1,2,4-Trimethylbenzene	38	1.4	190	6.9	2.790	160530	03/03/10	D2	
Xylene (total)	21	2.8	92	12	2.790	160530	03/03/10	D2	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Bromofluorobenzene	103	70-130	2.790	160530	03/03/10		

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-5-U-10Q1	Diln Fac:	2.260
Lab ID:	218329-051	Batch#:	160581
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/03/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
1,1-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	ND	1.1	ND	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	ND	1.1	ND	4.0	D1
Chloroform	ND	1.1	ND	5.5	D1
Benzene	ND	1.1	ND	3.6	D1
Trichloroethene	ND	1.1	ND	6.1	D1
Toluene	ND	1.1	ND	4.3	D1
Tetrachloroethene	24	1.1	170	7.7	D1
Ethylbenzene	ND	1.1	ND	4.9	D1
m,p-Xylenes	ND	1.1	ND	4.9	D1
o-Xylene	ND	1.1	ND	4.9	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.6	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.6	D1
Xylene (total)	ND	2.3	ND	9.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	96	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SMW-5-M-10Q1	Diln Fac:	2.250
Lab ID:	218329-052	Batch#:	160581
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/03/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
1,1-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	ND	1.1	ND	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	ND	1.1	ND	4.0	D1
Chloroform	ND	1.1	ND	5.5	D1
Benzene	ND	1.1	ND	3.6	D1
Trichloroethene	1.2	1.1	6.4	6.0	D1
Toluene	ND	1.1	ND	4.2	D1
Tetrachloroethene	75	1.1	510	7.6	D1
Ethylbenzene	ND	1.1	ND	4.9	D1
m,p-Xylenes	ND	1.1	ND	4.9	D1
o-Xylene	ND	1.1	ND	4.9	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.5	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.5	D1
Xylene (total)	ND	2.3	ND	9.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	93	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-010	Diln Fac:	2.110
Lab ID:	218329-053	Batch#:	160581
Matrix:	Air	Sampled:	02/10/10
Units (V):	ppbv	Received:	02/16/10
Units (M):	ug/m3	Analyzed:	03/03/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
1,1-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	ND	1.1	ND	4.3	D1
MTBE	ND	1.1	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	ND	1.1	ND	3.7	D1
Chloroform	ND	1.1	ND	5.2	D1
Benzene	ND	1.1	ND	3.4	D1
Trichloroethene	ND	1.1	ND	5.7	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	25	1.1	170	7.2	D1
Ethylbenzene	ND	1.1	ND	4.6	D1
m,p-Xylenes	ND	1.1	ND	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	ND	1.1	ND	5.2	D1
1,2,4-Trimethylbenzene	ND	1.1	ND	5.2	D1
Xylene (total)	ND	2.1	ND	9.2	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	93	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC534279	Diln Fac:	1.000
Matrix:	Air	Batch#:	160471
Units (V):	ppbv	Analyzed:	03/01/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160471
Units (V):	ppbv	Analyzed:	03/01/10
Diln Fac:	1.000		

Type: BS Lab ID: QC534280

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	9.770	98	70-130		
Chloroethane	10.00	9.008	90	70-130		
1,1-Dichloroethene	10.00	9.798	98	60-145		
1,1-Dichloroethane	10.00	9.667	97	48-145		
MTBE	10.00	10.68	107	70-130		
cis-1,2-Dichloroethene	10.00	9.550	96	70-130		
n-Hexane	10.00	9.082	91	70-130		
Chloroform	10.00	10.13	101	70-130		
Benzene	10.00	10.03	100	70-130		
Trichloroethene	10.00	11.18	112	70-130		
Toluene	10.00	9.458	95	70-130		
Tetrachloroethene	10.00	10.18	102	70-130		
Ethylbenzene	10.00	10.18	102	70-130		
m,p-Xylenes	20.00	19.05	95	70-130		
o-Xylene	10.00	9.535	95	70-130		
1,3,5-Trimethylbenzene	10.00	9.982	100	70-130		
1,2,4-Trimethylbenzene	10.00	10.82	108	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	98	70-130		

Type: BSD Lab ID: QC534281

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	10.08	101	70-130	3	25		
Chloroethane	10.00	9.080	91	70-130	1	25		
1,1-Dichloroethene	10.00	9.935	99	60-145	1	11		
1,1-Dichloroethane	10.00	9.917	99	48-145	3	25		
MTBE	10.00	10.93	109	70-130	2	25		
cis-1,2-Dichloroethene	10.00	9.830	98	70-130	3	25		
n-Hexane	10.00	9.279	93	70-130	2	25		
Chloroform	10.00	10.65	107	70-130	5	25		
Benzene	10.00	10.12	101	70-130	1	25		
Trichloroethene	10.00	11.22	112	70-130	0	25		
Toluene	10.00	9.392	94	70-130	1	25		
Tetrachloroethene	10.00	10.34	103	70-130	2	25		
Ethylbenzene	10.00	10.52	105	70-130	3	25		
m,p-Xylenes	20.00	19.02	95	70-130	0	25		
o-Xylene	10.00	9.653	97	70-130	1	25		
1,3,5-Trimethylbenzene	10.00	10.06	101	70-130	1	25		
1,2,4-Trimethylbenzene	10.00	11.08	111	70-130	2	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	100	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC534525	Diln Fac:	1.000
Matrix:	Air	Batch#:	160530
Units (V):	ppbv	Analyzed:	03/02/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160530
Units (V):	ppbv	Analyzed:	03/02/10
Diln Fac:	1.000		

Type: BS Lab ID: QC534526

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	10.21	102	70-130		
Chloroethane	10.00	9.329	93	70-130		
1,1-Dichloroethene	10.00	9.895	99	60-145		
1,1-Dichloroethane	10.00	9.968	100	48-145		
MTBE	10.00	11.20	112	70-130		
cis-1,2-Dichloroethene	10.00	9.958	100	70-130		
n-Hexane	10.00	9.703	97	70-130		
Chloroform	10.00	10.82	108	70-130		
Benzene	10.00	10.10	101	70-130		
Trichloroethene	10.00	11.67	117	70-130		
Toluene	10.00	9.562	96	70-130		
Tetrachloroethene	10.00	10.74	107	70-130		
Ethylbenzene	10.00	10.67	107	70-130		
m,p-Xylenes	20.00	19.37	97	70-130		
o-Xylene	10.00	9.822	98	70-130		
1,3,5-Trimethylbenzene	10.00	10.70	107	70-130		
1,2,4-Trimethylbenzene	10.00	11.16	112	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	100	70-130		

Type: BSD Lab ID: QC534527

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	10.47	105	70-130	2	25		
Chloroethane	10.00	9.370	94	70-130	0	25		
1,1-Dichloroethene	10.00	10.39	104	60-145	5	11		
1,1-Dichloroethane	10.00	10.21	102	48-145	2	25		
MTBE	10.00	11.40	114	70-130	2	25		
cis-1,2-Dichloroethene	10.00	10.41	104	70-130	4	25		
n-Hexane	10.00	9.721	97	70-130	0	25		
Chloroform	10.00	11.18	112	70-130	3	25		
Benzene	10.00	10.55	106	70-130	4	25		
Trichloroethene	10.00	11.67	117	70-130	0	25		
Toluene	10.00	9.313	93	70-130	3	25		
Tetrachloroethene	10.00	10.20	102	70-130	5	25		
Ethylbenzene	10.00	10.33	103	70-130	3	25		
m,p-Xylenes	20.00	19.20	96	70-130	1	25		
o-Xylene	10.00	9.492	95	70-130	3	25		
1,3,5-Trimethylbenzene	10.00	10.42	104	70-130	3	25		
1,2,4-Trimethylbenzene	10.00	11.17	112	70-130	0	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	99	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC534716	Diln Fac:	1.000
Matrix:	Air	Batch#:	160581
Units (V):	ppbv	Analyzed:	03/03/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	E7
Chloroethane	ND	0.50	ND	1.3	E7
1,1-Dichloroethene	ND	0.50	ND	2.0	E7
1,1-Dichloroethane	ND	0.50	ND	2.0	E7
MTBE	ND	0.50	ND	1.8	E7
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	E7
n-Hexane	ND	0.50	ND	1.8	E7
Chloroform	ND	0.50	ND	2.4	E7
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160581
Units (V):	ppbv	Analyzed:	03/03/10
Diln Fac:	1.000		

Type: BS Lab ID: QC534717

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	11.15	112	70-130		
Chloroethane	10.00	9.698	97	70-130		
1,1-Dichloroethene	10.00	10.54	105	60-145		
1,1-Dichloroethane	10.00	10.64	106	48-145		
MTBE	10.00	12.07	121	70-130		
cis-1,2-Dichloroethene	10.00	10.55	106	70-130		
n-Hexane	10.00	10.10	101	70-130		
Chloroform	10.00	11.58	116	70-130		
Benzene	10.00	10.05	101	70-130		
Trichloroethene	10.00	11.73	117	70-130		
Toluene	10.00	9.746	97	70-130		
Tetrachloroethene	10.00	10.97	110	70-130		
Ethylbenzene	10.00	10.70	107	70-130		
m,p-Xylenes	20.00	19.50	97	70-130		
o-Xylene	10.00	9.832	98	70-130		
1,3,5-Trimethylbenzene	10.00	10.64	106	70-130		
1,2,4-Trimethylbenzene	10.00	11.23	112	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	98	70-130		

Type: BSD Lab ID: QC534718

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	11.01	110	70-130	1	25		
Chloroethane	10.00	9.652	97	70-130	0	25		
1,1-Dichloroethene	10.00	10.81	108	60-145	3	11		
1,1-Dichloroethane	10.00	10.63	106	48-145	0	25		
MTBE	10.00	11.82	118	70-130	2	25		
cis-1,2-Dichloroethene	10.00	10.50	105	70-130	0	25		
n-Hexane	10.00	10.40	104	70-130	3	25		
Chloroform	10.00	11.68	117	70-130	1	25		
Benzene	10.00	9.854	99	70-130	2	25		
Trichloroethene	10.00	11.64	116	70-130	1	25		
Toluene	10.00	9.983	100	70-130	2	25		
Tetrachloroethene	10.00	11.02	110	70-130	1	25		
Ethylbenzene	10.00	10.84	108	70-130	1	25		
m,p-Xylenes	20.00	19.72	99	70-130	1	25		
o-Xylene	10.00	10.04	100	70-130	2	25		
1,3,5-Trimethylbenzene	10.00	10.88	109	70-130	2	25		
1,2,4-Trimethylbenzene	10.00	11.60	116	70-130	3	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	98	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC534852	Diln Fac:	1.000
Matrix:	Air	Batch#:	160620
Units (V):	ppbv	Analyzed:	03/04/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	E7
Chloroethane	ND	0.50	ND	1.3	E7
1,1-Dichloroethene	ND	0.50	ND	2.0	E7
1,1-Dichloroethane	ND	0.50	ND	2.0	E7
MTBE	ND	0.50	ND	1.8	E7
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	E7
n-Hexane	ND	0.50	ND	1.8	E7
Chloroform	ND	0.50	ND	2.4	E7
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	92	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160620
Units (V):	ppbv	Analyzed:	03/04/10
Diln Fac:	1.000		

Type: BS Lab ID: QC534853

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	10.90	109	70-130		
Chloroethane	10.00	9.526	95	70-130		
1,1-Dichloroethene	10.00	10.38	104	60-145		
1,1-Dichloroethane	10.00	10.49	105	48-145		
MTBE	10.00	11.86	119	70-130		
cis-1,2-Dichloroethene	10.00	10.51	105	70-130		
n-Hexane	10.00	10.21	102	70-130		
Chloroform	10.00	11.68	117	70-130		
Benzene	10.00	10.35	104	70-130		
Trichloroethene	10.00	11.87	119	70-130		
Toluene	10.00	9.692	97	70-130		
Tetrachloroethene	10.00	11.18	112	70-130		
Ethylbenzene	10.00	10.83	108	70-130		
m,p-Xylenes	20.00	19.30	97	70-130		
o-Xylene	10.00	10.00	100	70-130		
1,3,5-Trimethylbenzene	10.00	10.81	108	70-130		
1,2,4-Trimethylbenzene	10.00	11.29	113	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	98	70-130		

Type: BSD Lab ID: QC534854

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	10.70	107	70-130	2	25		
Chloroethane	10.00	9.500	95	70-130	0	25		
1,1-Dichloroethene	10.00	10.56	106	60-145	2	11		
1,1-Dichloroethane	10.00	10.43	104	48-145	1	25		
MTBE	10.00	11.72	117	70-130	1	25		
cis-1,2-Dichloroethene	10.00	10.34	103	70-130	2	25		
n-Hexane	10.00	9.980	100	70-130	2	25		
Chloroform	10.00	11.51	115	70-130	1	25		
Benzene	10.00	10.03	100	70-130	3	25		
Trichloroethene	10.00	11.91	119	70-130	0	25		
Toluene	10.00	9.614	96	70-130	1	25		
Tetrachloroethene	10.00	10.60	106	70-130	5	25		
Ethylbenzene	10.00	10.41	104	70-130	4	25		
m,p-Xylenes	20.00	19.18	96	70-130	1	25		
o-Xylene	10.00	9.775	98	70-130	2	25		
1,3,5-Trimethylbenzene	10.00	10.45	105	70-130	3	25		
1,2,4-Trimethylbenzene	10.00	11.13	111	70-130	1	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	94	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC535077	Diln Fac:	1.000
Matrix:	Air	Batch#:	160681
Units (V):	ppbv	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Diln Fac:	1.000
Units (V):	ppbv	Batch#:	160681

Type: BS Analyzed: 03/05/10
 Lab ID: QC535078

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	11.53	115	70-130		
Chloroethane	10.00	10.31	103	70-130		
1,1-Dichloroethene	10.00	11.43	114	60-145		
1,1-Dichloroethane	10.00	11.29	113	48-145		
MTBE	10.00	12.76	128	70-130		
cis-1,2-Dichloroethene	10.00	11.28	113	70-130		
n-Hexane	10.00	10.68	107	70-130		
Chloroform	10.00	12.37	124	70-130		
Benzene	10.00	10.53	105	70-130		
Trichloroethene	10.00	12.02	120	70-130		
Toluene	10.00	10.55	105	70-130		
Tetrachloroethene	10.00	11.77	118	70-130		
Ethylbenzene	10.00	11.79	118	70-130		
m,p-Xylenes	20.00	21.01	105	70-130		
o-Xylene	10.00	10.79	108	70-130		
1,3,5-Trimethylbenzene	10.00	11.93	119	70-130		
1,2,4-Trimethylbenzene	10.00	12.10	121	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	99	70-130		

Type: BSD Analyzed: 03/06/10
 Lab ID: QC535079

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	11.73	117	70-130	2	25		
Chloroethane	10.00	10.41	104	70-130	1	25		
1,1-Dichloroethene	10.00	11.92	119	60-145	4	11		
1,1-Dichloroethane	10.00	11.71	117	48-145	4	25		
MTBE	10.00	13.01	130	70-130	2	25		
cis-1,2-Dichloroethene	10.00	11.32	113	70-130	0	25		
n-Hexane	10.00	11.09	111	70-130	4	25		
Chloroform	10.00	12.77	128	70-130	3	25		
Benzene	10.00	10.60	106	70-130	1	25		
Trichloroethene	10.00	12.01	120	70-130	0	25		
Toluene	10.00	10.56	106	70-130	0	25		
Tetrachloroethene	10.00	12.03	120	70-130	2	25		
Ethylbenzene	10.00	11.42	114	70-130	3	25		
m,p-Xylenes	20.00	21.10	105	70-130	0	25		
o-Xylene	10.00	10.73	107	70-130	0	25		
1,3,5-Trimethylbenzene	10.00	11.58	116	70-130	3	25		
1,2,4-Trimethylbenzene	10.00	12.32	123	70-130	2	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	96	70-130		

RPD= Relative Percent Difference
 Result V= Result in volume units
 Page 1 of 1

CURTIS & TOMPKINS BFB TUNE FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200061530002 File : 042_002 Time : 11-FEB-2010 17:30

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	91839	16.47	
75	30% - 66% of mass 95	237217	42.53	
95		557769	100.00	
96	5% - 9% of mass 95	38075	6.83	
173	< 2% of mass 174	107	0.04	
174	50% - 120% of mass 95	285940	51.26	
175	4% - 9% of mass 174	16963	5.93	
176	93% - 101% of mass 174	277915	97.19	
177	5% - 9% of mass 176	19028	6.85	

CURTIS & TOMPKINS BFB TUNE FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200087070001 File : 060_001 Time : 01-MAR-2010 11:10

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	73562	13.92	
75	30% - 66% of mass 95	212003	40.11	
95		528557	100.00	
96	5% - 9% of mass 95	32868	6.22	
173	< 2% of mass 174	264	0.09	
174	50% - 120% of mass 95	289919	54.85	
175	4% - 9% of mass 174	19097	6.59	
176	93% - 101% of mass 174	285106	98.34	
177	5% - 9% of mass 176	19396	6.80	

CURTIS & TOMPKINS BFB TUNE FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200088706001 File : 061_001 Time : 02-MAR-2010 13:26

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	64166	12.54	
75	30% - 66% of mass 95	212598	41.56	
95		511556	100.00	
96	5% - 9% of mass 95	31781	6.21	
173	< 2% of mass 174	416	0.15	
174	50% - 120% of mass 95	281396	55.01	
175	4% - 9% of mass 174	13404	4.76	
176	93% - 101% of mass 174	283853	100.87	
177	5% - 9% of mass 176	15359	5.41	

CURTIS & TOMPKINS BFB TUNE FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200090299001 File : 062_001 Time : 03-MAR-2010 14:59

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	69947	13.26	
75	30% - 66% of mass 95	208344	39.48	
95		527702	100.00	
96	5% - 9% of mass 95	37783	7.16	
173	< 2% of mass 174	10	0.00	
174	50% - 120% of mass 95	287367	54.46	
175	4% - 9% of mass 174	18224	6.34	
176	93% - 101% of mass 174	287984	100.21	
177	5% - 9% of mass 176	19708	6.84	

CURTIS & TOMPKINS BFB TUNE FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200091686001 File : 063_001 Time : 04-MAR-2010 16:06

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	54168	12.18	
75	30% - 66% of mass 95	161232	36.25	
95		444745	100.00	
96	5% - 9% of mass 95	27592	6.20	
173	< 2% of mass 174	374	0.16	
174	50% - 120% of mass 95	234743	52.78	
175	4% - 9% of mass 174	13881	5.91	
176	93% - 101% of mass 174	236008	100.54	
177	5% - 9% of mass 176	15244	6.46	

CURTIS & TOMPKINS BFB TUNE FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200093531002 File : 064_002 Time : 05-MAR-2010 22:51

Standards: S13985 (15X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	62683	13.62	
75	30% - 66% of mass 95	173518	37.71	
95		460151	100.00	
96	5% - 9% of mass 95	27003	5.87	
173	< 2% of mass 174	18	0.01	
174	50% - 120% of mass 95	267360	58.10	
175	4% - 9% of mass 174	17515	6.55	
176	93% - 101% of mass 174	254706	95.27	
177	5% - 9% of mass 176	18145	7.12	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218329 MSAIR Air: EPA TO-15

Inst : MSAIR01
 Calnum : 1200061530001
 Units : nL/L

Date : 11-FEB-2010 21:28
 X Axis : R

Level	File	Seqnum	Sample ID	Sample ID	Analyzed	Stds
L1	042_006	1200061530006	NONE	11-FEB-2010	21:28	S13990 (6X), S13985 (15X)
L2	042_007	1200061530007	NONE	11-FEB-2010	22:29	S13990 (2X), S13985 (15X)
L3	042_008	1200061530008	NONE	11-FEB-2010	23:28	S13984 (6X), S13985 (15X)
L4	042_009	1200061530009	NONE	12-FEB-2010	00:29	S13984 (2X), S13985 (15X)
L5	042_010	1200061530010	NONE	12-FEB-2010	01:28	S13984, S13985 (15X)
L6	042_011	1200061530011	NONE	12-FEB-2010	02:28	S13983 (6X), S13985 (15X)
L7	042_012	1200061530012	NONE	12-FEB-2010	03:28	S13983 (3X), S13985 (15X)
L8	042_013	1200061530013	NONE	12-FEB-2010	04:28	S13983 (2X), S13985 (15X)
L9	042_014	1200061530014	NONE	12-FEB-2010	05:27	S13983, S13985 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Vinyl Chloride	2.7447	2.5879	2.9217	2.5065	2.5743	3.3789	2.9715	2.8173	2.5907	AVRG		0.35866		2.7882	10	0.99	30	
Chloroethane	0.2388m	0.1890	0.2638	0.2793	0.2665	0.3606	0.3065	0.2719	0.2003	AVRG		3.78647		0.2641	20	0.99	30	
1,1-Dichloroethene	3.5636	3.2130	4.4345	3.9541	3.5559	4.7304	3.8663	3.5850	2.9834	AVRG		0.26560		3.7651	15	0.99	30	
1,1-Dichloroethane	4.2593	3.9362	5.1910	4.6086	4.2382	5.5509	4.6873	4.4035	4.1535	AVRG		0.21936		4.5587	11	0.99	30	
MTBE	3.4196	2.9501	3.5831	3.1358	2.8812	3.4512	2.9438	2.6077	2.2012	AVRG		0.33120		3.0193	15	0.99	30	
cis-1,2-Dichloroethene	1.1871	1.2275	2.0814	1.8984	1.6916	2.4676	2.0046	1.7953	1.4762	AVRG		0.56856		1.7588	24	0.99	30	
n-Hexane	2.8621	2.4224	2.7825	2.4749	2.2652	2.7385	2.3187	2.1684	1.9507	AVRG		0.40940		2.4426	12	0.99	30	
Chloroform	6.6228	5.5657	6.5731	5.7667	4.9559	6.3067	5.1919	4.6378	3.7531	AVRG		0.18228		5.4860	17	0.99	30	
Benzene	0.4585	0.5066	0.4557	0.5133	0.3394	0.4144	0.3396	0.4176		AVRG		2.32219		0.4306	15	0.99	30	
Trichloroethene	0.4847	0.6091	0.5522	0.6465	0.4560	0.5780	0.4889	0.6448	0.4138	AVRG		1.84655		0.5415	16	0.99	30	
Toluene	1.4370	1.4217	1.9660	1.6727	1.5811	1.9473	1.6765	1.4781	1.2770	AVRG		0.62252		1.6064	15	0.99	30	
Tetrachloroethene	0.5725	0.5005	0.6127	0.5373	0.5029	0.5876	0.4695	0.4253	0.3582	AVRG		1.97087		0.5074	16	0.99	30	
Ethylbenzene	1.4826	1.4730	2.3223	1.9985	1.8643	2.2411	1.8362	1.5533	1.2288	AVRG		0.56250		1.7778	21	0.99	30	
m,p-Xylenes	1.8006	1.9195	2.5821	2.0957	1.8434	2.1557	1.6379	1.3408		AVRG		0.52030		1.9220	19	0.99	30	
o-Xylene	1.6466	1.7905	2.3923	1.9718	1.7197	1.9027	1.4352	1.2447		AVRG		0.56723		1.7629	20	0.99	30	
1,3,5-Trimethylbenzene	1.6477	1.9921	2.7357	2.2174	2.0018	2.4186	1.9077	1.6155	1.2930	AVRG		0.50478		1.9811	22	0.99	30	
1,2,4-Trimethylbenzene	1.0972	1.3538	2.2884	2.0200	1.8206	2.2234	1.7111	1.4116	1.0903	AVRG		0.59934		1.6685	27	0.99	30	
Bromofluorobenzene	0.8701	0.8586	0.8709	0.8486	0.8434	0.8732	0.8637	0.8124	0.8006	AVRG		1.17779		0.8490	3	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Vinyl Chloride	0.167	-2	0.500	-7	1.667	5	5.000	-10	10.00	-8	16.67	21	33.33	7	50.00	1	100.0	-7
Chloroethane	0.167	-10	0.500	-28	1.667	0	5.000	6	10.00	1	16.67	37	33.33	16	50.00	3	100.0	-24
1,1-Dichloroethene	0.167	-5	0.500	-15	1.667	18	5.000	5	10.00	-6	16.67	26	33.33	3	50.00	-5	100.0	-21
1,1-Dichloroethane	0.167	-7	0.500	-14	1.667	14	5.000	1	10.00	-7	16.67	22	33.33	3	50.00	-3	100.0	-9
MTBE	0.167	13	0.500	-2	1.667	19	5.000	4	10.00	-5	16.67	14	33.33	-2	50.00	-14	100.0	-27
cis-1,2-Dichloroethene	0.167	-33	0.500	-30	1.667	18	5.000	8	10.00	-4	16.67	40	33.33	14	50.00	2	100.0	-16
n-Hexane	0.167	17	0.500	-1	1.667	14	5.000	1	10.00	-7	16.67	12	33.33	-5	50.00	-11	100.0	-20
Chloroform	0.167	21	0.500	1	1.667	20	5.000	5	10.00	-10	16.67	15	33.33	-5	50.00	-15	100.0	-32
Benzene	0.167	6	0.500	18	1.667	6	5.000	19	10.00	-21	16.67	-4	33.33	-21	50.00	-3		
Trichloroethene	0.167	-10	0.500	12	1.667	2	5.000	19	10.00	-16	16.67	7	33.33	-10	50.00	19	100.0	-24
Toluene	0.167	-11	0.500	-11	1.667	22	5.000	4	10.00	-2	16.67	21	33.33	4	50.00	-8	100.0	-21
Tetrachloroethene	0.167	13	0.500	-1	1.667	21	5.000	6	10.00	-1	16.67	16	33.33	-7	50.00	-16	100.0	-29
Ethylbenzene	0.167	-17	0.500	-17	1.667	31	5.000	12	10.00	5	16.67	26	33.33	3	50.00	-13	100.0	-31
m,p-Xylenes	0.333	-6	1.000	0	3.333	34	10.00	9	20.00	-4	33.33	12	66.67	-15	100.0	-30		
o-Xylene	0.167	-7	0.500	2	1.667	36	5.000	12	10.00	-2	16.67	8	33.33	-19	50.00	-29		
1,3,5-Trimethylbenzene	0.167	-17	0.500	1	1.667	38	5.000	12	10.00	1	16.67	22	33.33	-4	50.00	-18	100.0	-35
1,2,4-Trimethylbenzene	0.167	-34	0.500	-19	1.667	37	5.000	21	10.00	9	16.67	33	33.33	3	50.00	-15	100.0	-35
Bromofluorobenzene	10.00	2	10.00	1	10.00	3	10.00	0	10.00	-1	10.00	3	10.00	2	10.00	-4	10.00	-6

SJD 02/17/10 [Bromomethane]: Corrected automatically drawn baseline in NONE (042_006).

SJD 02/17/10 [Chloroethane]: Corrected automatically drawn baseline in NONE (042_006).

SJD 02/17/10 [Ethanol]: Combined split peak in multiple levels.

SJD 02/17/10 [Ethanol]: Corrected automatically drawn baseline in multiple levels.

SJD 02/17/10 [Acetone]: Corrected automatically drawn baseline in multiple levels.

SJD 02/17/10 [trans-1,2-Dichloroethene]: Corrected automatically drawn baseline in NONE (042_006).

m=manual integration

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

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1200061530001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1200061530001

Cal Date : 11-FEB-2010

ICV 1200061530016 (042_016 12-FEB-2010) stds: S13981, S13985 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Vinyl Chloride	10.00	8.582	nL/L	-14	30	
Chloroethane	10.00	10.91	nL/L	9	30	
1,1-Dichloroethene	10.00	9.985	nL/L	0	30	
1,1-Dichloroethane	10.00	9.465	nL/L	-5	30	
MTBE	10.00	10.29	nL/L	3	30	
cis-1,2-Dichloroethene	10.00	9.705	nL/L	-3	30	
n-Hexane	10.00	9.448	nL/L	-6	30	
Chloroform	10.00	9.512	nL/L	-5	30	
Benzene	10.00	8.162	nL/L	-18	30	
Trichloroethene	10.00	8.718	nL/L	-13	30	
Toluene	10.00	9.945	nL/L	-1	30	
Tetrachloroethene	10.00	10.15	nL/L	2	30	
Ethylbenzene	10.00	11.15	nL/L	11	30	
m,p-Xylenes	20.00	20.01	nL/L	0	30	
o-Xylene	10.00	10.38	nL/L	4	30	
1,3,5-Trimethylbenzene	10.00	11.07	nL/L	11	30	
1,2,4-Trimethylbenzene	10.00	11.85	nL/L	19	30	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC534280 IDF : 1.0
 Seqnum : 1200087070002.1 File : 060_002 Time : 01-MAR-2010 12:10
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.7233	10.00	9.770	nL/L	-2	30	0.0500	m u
Chloroethane	0.2641	0.2378	10.00	9.008	nL/L	-10	30	0.0500	u
1,1-Dichloroethene	3.7651	3.6874	10.00	9.798	nL/L	-2	30	0.0500	u
1,1-Dichloroethane	4.5587	4.4047	10.00	9.667	nL/L	-3	30	0.0500	u
MTBE	3.0193	3.2250	10.00	10.68	nL/L	7	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.6795	10.00	9.550	nL/L	-4	30	0.0500	u
n-Hexane	2.4426	2.2178	10.00	9.082	nL/L	-9	30	0.0500	u
Chloroform	5.4860	5.5577	10.00	10.13	nL/L	1	30	0.0500	u
Benzene	0.4306	0.4315	10.00	10.03	nL/L	0	30	0.0500	u
Trichloroethene	0.5415	0.6051	10.00	11.18	nL/L	12	30	0.0500	u
Toluene	1.6064	1.5189	10.00	9.458	nL/L	-5	30	0.0500	u
Tetrachloroethene	0.5074	0.5163	10.00	10.18	nL/L	2	30	0.0500	u
Ethylbenzene	1.7778	1.8092	10.00	10.18	nL/L	2	30	0.0500	u
m,p-Xylenes	1.9220	1.8307	20.00	19.05	nL/L	-5	30	0.0500	u
o-Xylene	1.7629	1.6805	10.00	9.535	nL/L	-5	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	1.9772	10.00	9.982	nL/L	0	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.8047	10.00	10.82	nL/L	8	30	0.0500	u
Bromofluorobenzene	0.8490	0.8290	10.00	9.762	nL/L	-2	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	337368	-13.33	27.20	27.24	0.04
1,4-Difluorobenzene	2458000	2431000	-1.10	31.88	31.91	0.03
Chlorobenzene-d5	2767000	2673000	-3.40	41.82	41.85	0.04

SJD 03/02/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV.
[general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC534526 IDF : 1.0
 Seqnum : 1200088706002.1 File : 061_002 Time : 02-MAR-2010 14:26
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.8459	10.00	10.21	nL/L	2	30	0.0500	m u
Chloroethane	0.2641	0.2463	10.00	9.329	nL/L	-7	30	0.0500	u
1,1-Dichloroethene	3.7651	3.7241	10.00	9.895	nL/L	-1	30	0.0500	u
1,1-Dichloroethane	4.5587	4.5428	10.00	9.968	nL/L	0	30	0.0500	u
MTBE	3.0193	3.3800	10.00	11.20	nL/L	12	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.7512	10.00	9.958	nL/L	0	30	0.0500	u
n-Hexane	2.4426	2.3693	10.00	9.703	nL/L	-3	30	0.0500	u
Chloroform	5.4860	5.9350	10.00	10.82	nL/L	8	30	0.0500	u
Benzene	0.4306	0.4348	10.00	10.10	nL/L	1	30	0.0500	u
Trichloroethene	0.5415	0.6315	10.00	11.67	nL/L	17	30	0.0500	u
Toluene	1.6064	1.5355	10.00	9.562	nL/L	-4	30	0.0500	u
Tetrachloroethene	0.5074	0.5446	10.00	10.74	nL/L	7	30	0.0500	u
Ethylbenzene	1.7778	1.8957	10.00	10.67	nL/L	7	30	0.0500	u
m,p-Xylenes	1.9220	1.8618	20.00	19.37	nL/L	-3	30	0.0500	u
o-Xylene	1.7629	1.7311	10.00	9.822	nL/L	-2	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.1202	10.00	10.70	nL/L	7	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.8616	10.00	11.16	nL/L	12	30	0.0500	u
Bromofluorobenzene	0.8490	0.8505	10.00	10.02	nL/L	0	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	313903	-19.35	27.20	27.27	0.07
1,4-Difluorobenzene	2458000	2369000	-3.62	31.88	31.94	0.06
Chlorobenzene-d5	2767000	2521000	-8.89	41.82	41.88	0.07

SJD 03/03/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/03/10 [Bromomethane]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/03/10 [4-Ethyltoluene]: Picked or reassigned peak. [general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC534717 IDF : 1.0
 Seqnum : 1200090299003.1 File : 062_003 Time : 03-MAR-2010 16:59
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	3.1091	10.00	11.15	nL/L	12	30	0.0500	m u
Chloroethane	0.2641	0.2561	10.00	9.698	nL/L	-3	30	0.0500	u
1,1-Dichloroethene	3.7651	3.9661	10.00	10.54	nL/L	5	30	0.0500	u
1,1-Dichloroethane	4.5587	4.8479	10.00	10.64	nL/L	6	30	0.0500	u
MTBE	3.0193	3.6427	10.00	12.07	nL/L	21	30	0.0500	m u
cis-1,2-Dichloroethene	1.7588	1.8555	10.00	10.55	nL/L	6	30	0.0500	u
n-Hexane	2.4426	2.4662	10.00	10.10	nL/L	1	30	0.0500	u
Chloroform	5.4860	6.3492	10.00	11.58	nL/L	16	30	0.0500	u
Benzene	0.4306	0.4326	10.00	10.05	nL/L	1	30	0.0500	u
Trichloroethene	0.5415	0.6352	10.00	11.73	nL/L	17	30	0.0500	u
Toluene	1.6064	1.5650	10.00	9.746	nL/L	-3	30	0.0500	u
Tetrachloroethene	0.5074	0.5563	10.00	10.97	nL/L	10	30	0.0500	u
Ethylbenzene	1.7778	1.9020	10.00	10.70	nL/L	7	30	0.0500	u
m,p-Xylenes	1.9220	1.8736	20.00	19.50	nL/L	-3	30	0.0500	u
o-Xylene	1.7629	1.7329	10.00	9.832	nL/L	-2	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.1083	10.00	10.64	nL/L	6	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.8724	10.00	11.23	nL/L	12	30	0.0500	u
Bromofluorobenzene	0.8490	0.8321	10.00	9.802	nL/L	-2	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	293736	-24.53	27.20	27.27	0.07
1,4-Difluorobenzene	2458000	2360000	-3.99	31.88	31.95	0.07
Chlorobenzene-d5	2767000	2531000	-8.53	41.82	41.88	0.07

SJD 03/05/10 [Propylene]: Integrated to match integration of ICAL and CCV. [general version]
 SJD 03/05/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV. [general version]
 SJD 03/05/10 [Ethanol]: Corrected fronting or tailing peak integration. [general version]
 SJD 03/05/10 [4-Ethyltoluene]: Picked or reassigned peak. [general version]
 SJD 03/05/10 [MTBE]: Picked or reassigned peak. [general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC534853 IDF : 1.0
 Seqnum : 1200091686003.1 File : 063_003 Time : 04-MAR-2010 18:06
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	3.0380	10.00	10.90	nL/L	9	30	0.0500	m u
Chloroethane	0.2641	0.2515	10.00	9.526	nL/L	-5	30	0.0500	u
1,1-Dichloroethene	3.7651	3.9035	10.00	10.38	nL/L	4	30	0.0500	u
1,1-Dichloroethane	4.5587	4.7816	10.00	10.49	nL/L	5	30	0.0500	u
MTBE	3.0193	3.5800	10.00	11.86	nL/L	19	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.8477	10.00	10.51	nL/L	5	30	0.0500	u
n-Hexane	2.4426	2.4919	10.00	10.21	nL/L	2	30	0.0500	u
Chloroform	5.4860	6.4098	10.00	11.68	nL/L	17	30	0.0500	u
Benzene	0.4306	0.4457	10.00	10.35	nL/L	4	30	0.0500	u
Trichloroethene	0.5415	0.6429	10.00	11.87	nL/L	19	30	0.0500	u
Toluene	1.6064	1.5568	10.00	9.692	nL/L	-3	30	0.0500	u
Tetrachloroethene	0.5074	0.5672	10.00	11.18	nL/L	12	30	0.0500	u
Ethylbenzene	1.7778	1.9245	10.00	10.83	nL/L	8	30	0.0500	u
m,p-Xylenes	1.9220	1.8552	20.00	19.30	nL/L	-3	30	0.0500	u
o-Xylene	1.7629	1.7629	10.00	10.00	nL/L	0	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.1419	10.00	10.81	nL/L	8	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.8840	10.00	11.29	nL/L	13	30	0.0500	u
Bromofluorobenzene	0.8490	0.8339	10.00	9.821	nL/L	-2	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	281286	-27.73	27.20	27.24	0.04
1,4-Difluorobenzene	2458000	2282000	-7.16	31.88	31.93	0.05
Chlorobenzene-d5	2767000	2396000	-13.41	41.82	41.86	0.05

SJD 03/06/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV.
[general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218329 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC535078 IDF : 1.0
 Seqnum : 1200093531003.1 File : 064_003 Time : 05-MAR-2010 23:51
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	3.2145	10.00	11.53	nL/L	15	30	0.0500	m u
Chloroethane	0.2641	0.2721	10.00	10.31	nL/L	3	30	0.0500	u
1,1-Dichloroethene	3.7651	4.3024	10.00	11.43	nL/L	14	30	0.0500	u
1,1-Dichloroethane	4.5587	5.1443	10.00	11.29	nL/L	13	30	0.0500	u
MTBE	3.0193	3.8511	10.00	12.76	nL/L	28	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.9830	10.00	11.28	nL/L	13	30	0.0500	u
n-Hexane	2.4426	2.6072	10.00	10.68	nL/L	7	30	0.0500	u
Chloroform	5.4860	6.7850	10.00	12.37	nL/L	24	30	0.0500	u
Benzene	0.4306	0.4532	10.00	10.53	nL/L	5	30	0.0500	u
Trichloroethene	0.5415	0.6507	10.00	12.02	nL/L	20	30	0.0500	u
Toluene	1.6064	1.6934	10.00	10.55	nL/L	5	30	0.0500	u
Tetrachloroethene	0.5074	0.5969	10.00	11.77	nL/L	18	30	0.0500	u
Ethylbenzene	1.7778	2.0952	10.00	11.79	nL/L	18	30	0.0500	u
m,p-Xylenes	1.9220	2.0190	20.00	21.01	nL/L	5	30	0.0500	u
o-Xylene	1.7629	1.9009	10.00	10.79	nL/L	8	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.3634	10.00	11.93	nL/L	19	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	2.0184	10.00	12.10	nL/L	21	30	0.0500	u
Bromofluorobenzene	0.8490	0.8433	10.00	9.932	nL/L	-1	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	279144	-28.28	27.20	27.27	0.07
1,4-Difluorobenzene	2458000	2299000	-6.47	31.88	31.95	0.07
Chlorobenzene-d5	2767000	2342000	-15.36	41.82	41.88	0.07

SJD 03/06/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/06/10 [Bromomethane]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/06/10 [4-Ethyltoluene]: Picked or reassigned peak. [general version]

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200087070

Date : 03/01/10
 Sequence : MSAIR01 060

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	CCV/BS	QC534280	337368	27.24	2431000	31.91	2673000	41.85
003	BSD	QC534281	327641	27.23	2471000	31.92	2621000	41.85
004	BLANK	QC534279	295669	27.25	3045000	31.94	2557000	41.86
005	SAMPLE	218329-001	315694	27.24	2385000	31.90	2555000	41.84
006	SAMPLE	218329-002	313640	27.23	2394000	31.92	2524000	41.85
007	SAMPLE	218329-003	315475	27.23	2457000	31.93	2582000	41.86
008	SAMPLE	218329-004	294998	27.27	2424000	31.94	2527000	41.88
009	SAMPLE	218329-011	318346	27.24	2457000	31.92	2592000	41.85
010	SAMPLE	218329-012	311463	27.23	2398000	31.92	2578000	41.85
011	SAMPLE	218329-021	295572	27.24	2403000	31.93	2598000	41.86
012	SAMPLE	218329-022	307346	27.24	2384000	31.91	2601000	41.84
013	SAMPLE	218329-027	310212	27.26	2381000	31.95	2586000	41.88
014	SAMPLE	218329-028	325150	27.27	2382000	31.94	2680000	41.88
015	SAMPLE	218329-009	298547	27.26	2369000	31.94	2585000	41.88
016	SAMPLE	218329-017	303692	27.27	2413000	31.94	2541000	41.88
017	SAMPLE	218329-029	307784	27.28	2382000	31.96	2424000	41.89
018	SAMPLE	218329-030	302078	27.28	2381000	31.95	2570000	41.88
019	SAMPLE	218329-031	309763	27.26	2643000	31.96	2667000	41.89
020	SAMPLE	218329-032	295669	27.27	2411000	31.94	2553000	41.88
021	SAMPLE	218329-033	292435	27.27	2373000	31.95	2521000	41.88
022	SAMPLE	218329-034	294237	27.27	2384000	31.96	2523000	41.89

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200088706

Date : 03/02/10
 Sequence : MSAIR01 061

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	CCV/BS	QC534526	313903	27.27	2369000	31.94	2521000	41.88
003	BSD	QC534527	307163	27.26	2344000	31.94	2602000	41.88
004	BLANK	QC534525	281238	27.28	2348000	31.96	2526000	41.89
005	SAMPLE	218329-035	298727	27.27	2374000	31.95	2605000	41.89
006	SAMPLE	218329-036	293813	27.26	2378000	31.95	2508000	41.88
007	SAMPLE	218329-037	300612	27.26	2354000	31.95	2579000	41.88
008	SAMPLE	218329-038	298029	27.26	2967000	31.96	2537000	41.89
009	SAMPLE	218329-039	300824	27.24	2391000	31.93	2567000	41.85
010	SAMPLE	218329-040	293415	27.27	2406000	31.96	2499000	41.89
011	SAMPLE	218329-041	293388	27.27	2329000	31.94	2517000	41.88
012	SAMPLE	218329-042	280348	27.27	2416000	31.95	2400000	41.89
013	SAMPLE	218329-043	292771	27.28	2387000	31.96	2525000	41.89
014	SAMPLE	218329-044	311169	27.27	2386000	31.95	2505000	41.89
015	SAMPLE	218329-045	298080	27.26	2385000	31.94	2498000	41.88
016	SAMPLE	218329-046	287844	27.28	2412000	31.96	2566000	41.89
017	SAMPLE	218329-047	314991	27.26	2360000	31.95	2541000	41.89
018	SAMPLE	218329-048	287105	27.26	2356000	31.95	2543000	41.88
019	SAMPLE	218329-049	281912	27.26	2337000	31.94	2593000	41.88
020	SAMPLE	218329-050	292908	27.26	2390000	31.96	2456000	41.89
021	SAMPLE	218329-042	258856	27.27	2372000	31.94	2503000	41.88
022	SAMPLE	218329-044	295235	27.26	2339000	31.94	2617000	41.88
023	SAMPLE	218329-047	296686	27.26	2369000	31.94	2567000	41.88

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200090299

Date : 03/03/10
 Sequence : MSAIR01 062

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	IB		262798	27.28	3004000	31.98	2357000	41.89
003	CCV/BS	QC534717	293736	27.27	2360000	31.95	2531000	41.88
004	BSD	QC534718	290763	27.27	2422000	31.96	2493000	41.89
005	BLANK	QC534716	906090 *	27.35	2502000	32.07	2034000	41.92
006	SAMPLE	218329-004	291741	27.27	2387000	31.95	2474000	41.88
007	SAMPLE	218432-001	1047000 *	27.32	3008000	32.06	2412000	41.91
008	SAMPLE	218329-051	283155	27.27	3073000	31.97	2386000	41.89
009	SAMPLE	218329-052	291508	27.26	3111000	31.97	2551000	41.88
010	SAMPLE	218329-053	272381	27.25	2558000	31.94	2392000	41.86
011	SAMPLE	218329-042	264709	27.25	2355000	31.93	2465000	41.86
012	SAMPLE	218329-049	279046	27.24	2888000	31.94	2479000	41.86
013	SAMPLE	218329-010	284925	27.25	2458000	31.94	2444000	41.86
014	SAMPLE	218329-018	292825	27.24	3145000	31.94	2382000	41.87
015	SAMPLE	218329-050	280231	27.24	2962000	31.95	2519000	41.86
016	SAMPLE	218329-013	266625	27.23	2999000	31.95	2044000	41.87
017	SAMPLE	218329-014	277505	27.24	2968000	31.95	2306000	41.87
018	SAMPLE	218329-016	277898	27.24	3026000	31.95	2042000	41.86
019	SAMPLE	218329-020	279161	27.24	2997000	31.97	2286000	41.87
020	SAMPLE	218329-024	265486	27.23	2998000	31.94	2427000	41.86
021	SAMPLE	218329-018	258203	27.24	2938000	31.94	2393000	41.86
022	SAMPLE	218329-023	258297	27.25	3012000	31.95	2237000	41.87
023	SAMPLE	218329-026	241835	27.24	2921000	31.94	2153000	41.86

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200091686

Date : 03/04/10
 Sequence : MSAIR01 063

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	IB	NONE	800370 *	27.31	2364000	32.04	1836000	41.88
003	CCV/BS	QC534853	281286	27.24	2282000	31.93	2396000	41.86
004	BSD	QC534854	284811	27.24	2307000	31.91	2480000	41.84
005	BLANK	QC534852	747718 *	27.32	2396000	32.04	1863000	41.89
006	SAMPLE	218432-001	1979 *	27.28	8148 *	32.03	10512 *	41.88
007	SAMPLE	218432-001	933591 *	27.29	2874000	32.03	2245000	41.88
008	SAMPLE	218329-023	238932	27.25	2907000	31.95	1809000	41.87
009	SAMPLE	218329-026	255076	27.25	2975000	31.94	1947000	41.87
011	SAMPLE	218329-025	262340	27.24	2949000	31.94	2245000	41.87
012	SAMPLE	218329-005	256670	27.26	2949000	31.98	2011000	41.88
013	SAMPLE	218329-006	254212	27.26	2872000	31.99	2459000	41.88
014	SAMPLE	218329-007	847515 *	27.31	2520000	32.04	2087000	41.88
015	SAMPLE	218329-008	237742	27.25	3008000	31.95	1957000	41.86
016	SAMPLE	218329-015	253091	27.25	2877000	31.99	2155000	41.87
017	SAMPLE	218329-019	267595	27.26	2966000	31.99	1863000	41.88
018	SAMPLE	218329-024	254439	27.24	2321000	31.90	2292000	41.85

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200093531

Date : 03/05/10
 Sequence : MSAIR01 064

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
003	CCV/BS	QC535078	279144	27.27	2299000	31.95	2342000	41.88
004	BSD	QC535079	270534	27.27	2288000	31.96	2352000	41.89
005	BLANK	QC535077	244757	27.28	2967000	31.99	2273000	41.90
006	SAMPLE	218411-028	271592	27.27	2604000	31.96	2379000	41.89
007	SAMPLE	218411-029	275477	27.27	2278000	31.96	2371000	41.89
008	SAMPLE	218411-030	257866	27.26	2235000	31.96	2298000	41.89
009	SAMPLE	218411-031	260273	27.31	2217000	31.98	2386000	41.90
010	SAMPLE	218411-032	263491	27.30	2223000	31.97	2373000	41.90
011	SAMPLE	218411-037	266494	27.28	2236000	31.96	2255000	41.89
012	SAMPLE	218411-038	249976	27.26	2153000	31.95	2310000	41.89
013	SAMPLE	218329-006	250439	27.28	2878000	31.97	2341000	41.90
014	SAMPLE	218329-007	247247	27.27	2999000	31.99	2147000	41.91
015	SAMPLE	218329-015	255761	27.28	3104000	31.98	1876000	41.90
016	SAMPLE	218329-007	230096 *	27.31	2188000	31.96	2390000	41.90
017	SAMPLE	218411-030	252261	27.30	2243000	31.96	2466000	41.89
018	CANCHECK	NONE	248427	27.31	2233000	32.00	2441000	41.91
019	CANCHECK	NONE	239422	27.31	2963000	32.01	2386000	41.92
020	SAMPLE	218329-007	242765	27.31	2814000	32.00	2488000	41.91

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200061530

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/11/10 16:31

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	042_001	X	BFB			02/11/10 16:31	1.0	1
002	042_002	TUN	BFB			02/11/10 17:30	1.0	1
003	042_003	X	NONE			02/11/10 18:29	1.0	2 1
004	042_004	IB	NONE			02/11/10 19:29	1.0	1
005	042_005	IB	CALIB IB			02/11/10 20:28	1.0	1
006	042_006	ICAL	NONE			02/11/10 21:28	1.0	3 1
007	042_007	ICAL	NONE			02/11/10 22:29	1.0	3 1
008	042_008	ICAL	NONE			02/11/10 23:28	1.0	2 1
009	042_009	ICAL	NONE			02/12/10 00:29	1.0	2 1
010	042_010	ICAL	NONE			02/12/10 01:28	1.0	2 1
011	042_011	ICAL	NONE			02/12/10 02:28	1.0	4 1
012	042_012	ICAL	NONE			02/12/10 03:28	1.0	4 1
013	042_013	ICAL	NONE			02/12/10 04:28	1.0	4 1
014	042_014	ICAL	NONE			02/12/10 05:27	1.0	4 1
015	042_015	IB	NONE			02/12/10 06:26	1.0	1
016	042_016	ICV	NONE			02/12/10 07:26	1.0	5 1

SJD 02/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 16.

Analyst: SJD Date: 02/17/10 Reviewer: BO Date: 02/17/10

Standards used: 1=S13985 2=S13984 3=S13990 4=S13983 5=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200087070

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/01/10 11:10

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	060_001	TUN	BFB			03/01/10 11:10	1.0	1
002	060_002	CCV/BS	QC534280	Air	160471	03/01/10 12:10	1.0	2 1
003	060_003	BSD	QC534281	Air	160471	03/01/10 13:10	1.0	2 1
004	060_004	BLANK	QC534279	Air	160471	03/01/10 14:10	1.0	1
005	060_005	SAMPLE	218329-001	Air	160471	03/01/10 15:34	2.07	1
006	060_006	SAMPLE	218329-002	Air	160471	03/01/10 16:34	2.15	1
007	060_007	SAMPLE	218329-003	Air	160471	03/01/10 17:33	2.04	1
008	060_008	SAMPLE	218329-004	Air	160471	03/01/10 18:32	2.07	1
009	060_009	SAMPLE	218329-011	Air	160471	03/01/10 19:32	1.95	1
010	060_010	SAMPLE	218329-012	Air	160471	03/01/10 20:32	2.02	1
011	060_011	SAMPLE	218329-021	Air	160471	03/01/10 21:32	1.97	1
012	060_012	SAMPLE	218329-022	Air	160471	03/01/10 22:32	1.900	1
013	060_013	SAMPLE	218329-027	Air	160471	03/01/10 23:32	2.03	1
014	060_014	SAMPLE	218329-028	Air	160471	03/02/10 00:32	1.900	1
015	060_015	SAMPLE	218329-009	Air	160471	03/02/10 01:32	1.95	1
016	060_016	SAMPLE	218329-017	Air	160471	03/02/10 02:31	2.07	1
017	060_017	SAMPLE	218329-029	Air	160471	03/02/10 03:31	1.86	1
018	060_018	SAMPLE	218329-030	Air	160471	03/02/10 04:30	2.07	1
019	060_019	SAMPLE	218329-031	Air	160471	03/02/10 05:30	1.95	1
020	060_020	SAMPLE	218329-032	Air	160471	03/02/10 06:30	2.300	1
021	060_021	SAMPLE	218329-033	Air	160471	03/02/10 07:29	2.31	1
022	060_022	SAMPLE	218329-034	Air	160471	03/02/10 08:29	2.31	1

SJD 03/02/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

Analyst: SJD Date: 03/02/10 Reviewer: BO Date: 03/02/10

Standards used: 1=S13985 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200088706

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/02/10 13:26

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	061_001	TUN	BFB			03/02/10 13:26	1.0	1
002	061_002	CCV/BS	QC534526	Air	160530	03/02/10 14:26	1.0	2 1
003	061_003	BSD	QC534527	Air	160530	03/02/10 15:26	1.0	2 1
004	061_004	BLANK	QC534525	Air	160530	03/02/10 16:25	1.0	1
005	061_005	SAMPLE	218329-035	Air	160530	03/02/10 17:24	2.37	1 1:ISOPROH=100
006	061_006	SAMPLE	218329-036	Air	160530	03/02/10 18:23	2.38	1 1:ISOPROH=100
007	061_007	SAMPLE	218329-037	Air	160530	03/02/10 19:21	2.17	1
008	061_008	SAMPLE	218329-038	Air	160530	03/02/10 20:21	2.200	1
009	061_009	SAMPLE	218329-039	Air	160530	03/02/10 21:20	2.24	1
010	061_010	SAMPLE	218329-040	Air	160530	03/02/10 22:20	2.13	1
011	061_011	SAMPLE	218329-041	Air	160530	03/02/10 23:20	2.23	1
012	061_012	SAMPLE	218329-042	Air	160530	03/03/10 00:19	2.42	1
013	061_013	SAMPLE	218329-043	Air	160530	03/03/10 01:19	2.61	1
014	061_014	SAMPLE	218329-044	Air	160530	03/03/10 02:18	2.13	1 2:TCE=210
015	061_015	SAMPLE	218329-045	Air	160530	03/03/10 03:18	2.46	1
016	061_016	SAMPLE	218329-046	Air	160530	03/03/10 04:17	2.45	1
017	061_017	SAMPLE	218329-047	Air	160530	03/03/10 05:17	2.59	1 1:TCE=170
018	061_018	SAMPLE	218329-048	Air	160530	03/03/10 06:17	2.72	1
019	061_019	SAMPLE	218329-049	Air	160530	03/03/10 07:17	2.67	1 1:TCE=110
020	061_020	SAMPLE	218329-050	Air	160530	03/03/10 08:17	2.79	1 3:TCE=710
021	061_021	SAMPLE	218329-042	Air	160530	03/03/10 11:06	4.84	1
022	061_022	SAMPLE	218329-044	Air	160530	03/03/10 12:06	6.39	1
023	061_023	SAMPLE	218329-047	Air	160530	03/03/10 13:06	7.77	1

SJD 03/03/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 23.

Analyst: SJD Date: 03/03/10 Reviewer: BO Date: 03/04/10

Standards used: 1=S13985 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200090299

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/03/10 14:59

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	062_001	TUN	BFB			03/03/10 14:59	1.0	1
002	062_002	IB		Air		03/03/10 15:59	1.0	1
003	062_003	CCV/BS	QC534717	Air	160581	03/03/10 16:59	1.0	2 1
004	062_004	BSD	QC534718	Air	160581	03/03/10 17:58	1.0	2 1
005	062_005	BLANK	QC534716	Air	160581	03/03/10 18:57	1.0	1
006	062_006	SAMPLE	218329-004	Air	160581	03/03/10 19:56	2.07	1
007	062_007	SAMPLE	218432-001	Air	160581	03/03/10 20:56	1.0	1
008	062_008	SAMPLE	218329-051	Air	160581	03/03/10 21:55	2.26	1
009	062_009	SAMPLE	218329-052	Air	160581	03/03/10 22:55	2.25	1
010	062_010	SAMPLE	218329-053	Air	160581	03/03/10 23:55	2.11	1
011	062_011	SAMPLE	218329-042	Air	160581	03/04/10 00:54	4.84	1
012	062_012	SAMPLE	218329-049	Air	160581	03/04/10 01:54	5.34	1
013	062_013	SAMPLE	218329-010	Air	160581	03/04/10 02:54	6.39	1
014	062_014	SAMPLE	218329-018	Air	160581	03/04/10 03:53	6.06	1
015	062_015	SAMPLE	218329-050	Air	160581	03/04/10 04:53	33.48	1
016	062_016	SAMPLE	218329-013	Air	160581	03/04/10 05:54	25.92	1
017	062_017	SAMPLE	218329-014	Air	160581	03/04/10 06:55	23.88	1
018	062_018	SAMPLE	218329-016	Air	160581	03/04/10 07:55	25.80	1
019	062_019	SAMPLE	218329-020	Air	160581	03/04/10 08:56	27.36	1
020	062_020	SAMPLE	218329-024	Air	160581	03/04/10 10:57	22.92	1
021	062_021	SAMPLE	218329-018	Air	160581	03/04/10 11:58	12.12	1
022	062_022	SAMPLE	218329-023	Air	160581	03/04/10 12:59	115.8	1
023	062_023	SAMPLE	218329-026	Air	160581	03/04/10 13:58	117.6	1

SJD 03/07/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 23.

Analyst: SJD Date: 03/07/10 Reviewer: BO Date: 03/08/10

Standards used: 1=S13985 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200091686

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/04/10 16:06

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	063_001	TUN	BFB			03/04/10 16:06	1.0	1	
002	063_002	IB	NONE			03/04/10 17:06	1.0	1	
003	063_003	CCV/BS	QC534853	Air	160620	03/04/10 18:06	1.0	2 1	
004	063_004	BSD	QC534854	Air	160620	03/04/10 19:06	1.0	2 1	
005	063_005	BLANK	QC534852	Air	160620	03/04/10 20:05	1.0	1	
006	063_006	SAMPLE	218432-001	Air	160620	03/04/10 21:05	1.0	1	26:DCA12=18000
007	063_007	SAMPLE	218432-001	Air	160620	03/04/10 22:05	1.0	1	
008	063_008	SAMPLE	218329-023	Air	160620	03/04/10 23:05	38.60	1	
009	063_009	SAMPLE	218329-026	Air	160620	03/05/10 00:05	39.20	1	1:ACE=120
011	063_011	SAMPLE	218329-025	Air	160620	03/05/10 02:04	5.79	1	
012	063_012	SAMPLE	218329-005	Air	160620	03/05/10 03:04	504.0	1	
013	063_013	SAMPLE	218329-006	Air	160620	03/05/10 04:05	482.4	1	
014	063_014	SAMPLE	218329-007	Air	160620	03/05/10 05:05	501.6	1	
015	063_015	SAMPLE	218329-008	Air	160620	03/05/10 06:06	499.2	1	1:MMETHACRY=54
016	063_016	SAMPLE	218329-015	Air	160620	03/05/10 07:07	513.6	1	
017	063_017	SAMPLE	218329-019	Air	160620	03/05/10 08:08	520.8	1	2:CYHEXANE=260
018	063_018	SAMPLE	218329-024	Air	160620	03/05/10 10:46	5.73	1	

SJD 03/06/10 : data file 063_010 corrupted by data analysis software. RR sample

SJD 03/07/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 18.

Analyst: SJD Date: 03/07/10 Reviewer: BO Date: 03/08/10

Standards used: 1=S13985 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200093531

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/05/10 21:52

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	064_001	TUN	BFB			03/05/10 21:52	1.0	1	
002	064_002	TUN	BFB			03/05/10 22:51	1.0	1	
003	064_003	CCV/BS	QC535078	Air	160681	03/05/10 23:51	1.0	2 1	
004	064_004	BSD	QC535079	Air	160681	03/06/10 00:51	1.0	2 1	
005	064_005	BLANK	QC535077	Air	160681	03/06/10 01:51	1.0	1	
006	064_006	SAMPLE	218411-028	Air	160681	03/06/10 02:51	2.22	1	
007	064_007	SAMPLE	218411-029	Air	160681	03/06/10 03:51	2.25	1	
008	064_008	SAMPLE	218411-030	Air	160681	03/06/10 04:50	2.12	1	2:DCA11=150
009	064_009	SAMPLE	218411-031	Air	160681	03/06/10 05:50	2.25	1	
010	064_010	SAMPLE	218411-032	Air	160681	03/06/10 06:50	2.34	1	
011	064_011	SAMPLE	218411-037	Air	160681	03/06/10 07:50	2.200	1	
012	064_012	SAMPLE	218411-038	Air	160681	03/06/10 08:49	2.11	1	1:ISOPROH=110
013	064_013	SAMPLE	218329-006	Air	160681	03/06/10 09:49	80.40	1	
014	064_014	SAMPLE	218329-007	Air	160681	03/06/10 10:49	501.6	1	2:CYHEXANE=120
015	064_015	SAMPLE	218329-015	Air	160681	03/06/10 11:50	128.4	1	1:CYHEXANE=180
016	064_016	SAMPLE	218329-007	Air	160681	03/06/10 12:50	836.0	1	
017	064_017	SAMPLE	218411-030	Air	160681	03/06/10 13:50	4.24	1	
018	064_018	CANCHECK	NONE			03/06/10 14:50	1.0	3	
019	064_019	CANCHECK	NONE			03/06/10 15:50	1.0	3	
020	064_020	SAMPLE	218329-007	Air	160681	03/06/10 16:49	836.0	3	

SJD 03/07/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

SJD 03/07/10 : Changed ISTD canister prior to run 064_018

Analyst: SJD Date: 03/07/10 Reviewer: BO Date: 03/08/10

Standards used: 1=S13985 2=S13981 3=S14127

PROJECT

AIR SAMPLE PREP LOG

Notebook No. 012875

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Prepped by / date	Sample ID	Can ID	(PSI) Initial Pres.	(PSI) Final Pres.	Dilution Factor	Comments
ET 2-22-10	218329-001	C00272	11.99	24.87	2.07x	
	-002	C00289	11.63	25.06	2.15x	
	-003	C00277	12.35	25.24	2.04x	
	-004	C00276	12.29	25.50	2.07x	
	-005	C00284	12.28	25.84	2.10x	
	-006	C00286	12.43	25.04	2.01x	
	-007	C00287	11.67	24.40	2.07x	
	-008	C00126	11.68	24.30	2.08x	
	-009	C00143	12.58	24.60	1.95x	
	-010	C00258	11.54	24.53	2.13x	
	-011	C00279	12.86	25.10	1.87x ET → 1.95x	
	-012	C00257	12.03	24.27	2.02x	
	-013	C00278	12.12	26.15	2.16x	
	-014	C00276	12.23	24.30	1.99x	
	-015	C00271	12.13	24.62	2.03x	
	-016	C00268	12.12	26.09	2.15x	
	-017	C00270	12.08	25.03	2.07x	
	-018	C00280	12.38	24.96	2.02x	
	-019	C00273	11.73	25.48	2.17x	
	-020	C00266	11.13	25.38	2.28x	
	-021	C00124	12.84	25.25	1.97x	
	-022	C00167	13.08	24.88	1.90x	
	-023	C00068	12.92	24.98	1.93x	
	-024	C00075	13.09	25.00	1.91x	
	-025	C00098	13.11	25.30	1.93x	
	-026	C00116	13.05	25.62	1.96x	
	-027	C00190	12.48	25.37	2.03x	
	-028	C00066	13.05	24.80	1.90x	
	-029	C00184	13.47	25.12	1.86x	
	-030	C00119	12.40	25.79	2.07x	
	-031	C00141	13.04	25.39	1.95x	
	-032	C00138	10.92	25.10	2.30x	
	-033	C00159	10.76	24.95	2.31x	
	-034	C00282	10.68	24.72	2.31x	
	-035	C00267	10.60	25.17	2.37x	

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Prepped By / date	Sample ID	Can ID	Initial pres. (PSI)	Final Pres. (PSI)	Dilution Factor	Comments
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x	
	-037	C00261	11.53	25.04	2.17x	
	-038	C00252	11.66	25.63	2.20x	
	-039	C00265	11.56	25.89	2.24x	
	-040	C00246	12.17	25.97	2.13x	
	-041	C00242	11.44	25.52	2.23x	
	-042	C00125	10.47	25.39	2.45x 2.42x	
	-043	C00161	10.16	26.50	2.61x	
	-044	C00130	11.83	25.21	2.13x	
	-045	C00662	10.25	25.25	2.46	
	-046	C00120	10.34	25.39	2.45x	
	-047	C00152	9.76	25.28	2.57	
	-048	C00664	9.37	25.51	2.72x	
	-049	C00117	9.83	26.30	2.67x	
	-050	C00088	9.46	26.4	2.77x	
	-051	C00283	11.27	25.50	2.26x	
	-052	C00281	11.70	26.30	2.25x	
	-053	C00285	11.78	24.92	2.11x	
	Blank	C00237 C00240			1x	
	Soo 2/22/10	Blank	C00048			1x
	Blank	C00211			1x	
Soo ET	218259-002	C00205	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093
	-003	C00231			39.8x	20x of 1.99x can C00137
	-004	C00020			38x	20x of 1.90x can C00065
	-005	C00017			37.6x	20x of 1.88x can C00199
	-019	C00019			59x	20x of 2.95x can C00145
	-024	C00045			50.6x	20x of 2.53x can C00096
	-025	C00230			49.6x 40.4x	20x of 2.02x can C00114
	-034	C0028			40.4x	20x of 2.02x can C00117
ET 2-23	218411-001	C00250	11.99	25.12	2.09x	
	-002	C00269	12.34	25.36	2.05x	
	-003	C00160	11.19	25.32	2.26x	
	-004	C00260	12.17	24.88	1.94x	
	-005	C00241	11.24	25.42	2.26x	
	-006	C00249	8.24	26.18	3.18x	

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Prepared by / date	Sample ID	Can ID	(PSIS)		Dilution Factor	Comments
			Initial Pres.	Final Pres.		
ET 2-22-0	218329-001	C00272	11.99	24.87	2.07x	
	-002	C00289	11.63	25.06	2.15x	
	-003	C00277	12.35	25.24	2.04x	
	-004	C00076	12.29	25.50	2.07x	
	-005	C00284	12.28	25.84	2.10x	
	-006	C00286	12.43	25.04	2.01x	
	-007	C00287	11.67	24.40	2.09x	
	-008	C00126	11.68	24.30	2.08x	
	-009	C00143	12.58	24.60	1.95x	
	-010	C00258	11.54	24.53	2.13x	
	-011	C00279	12.86	25.10	1.87x ET → 1.95x	
	-012	C00257	12.03	24.27	2.02x	
	-013	C00278	12.12	26.15	2.16x	
	-014	C00276	12.23	24.30	1.99x	
	-015	C00271	12.13	24.62	2.03x	
	-016	C00268	12.12	26.09	2.15x	
	-017	C00270	12.08	25.03	2.07x	
	-018	C00280	12.38	24.96	2.02x	
	-019	C00273	11.73	25.48	2.17x	
	-020	C00266	11.13	25.38	2.28x	
	-021	C00124	12.84	25.25	1.97x	
	-022	C00167	13.08	24.88	1.90x	
	-023	C00068	12.92	24.98	1.93x	
	-024	C00075	13.09	25.00	1.91x	
	-025	C00098	13.11	25.30	1.93x	
	-026	C00116	13.05	25.62	1.96x	
	-027	C00190	12.48	25.37	2.03x	
	-028	C00066	13.05	24.80	1.90x	
	-029	C00184	13.47	25.12	1.86x	
	-030	C00119	12.40	25.79	2.07x	
	-031	C00141	13.04	25.39	1.95x	
	-032	C00138	10.92	25.10	2.30x	
	-033	C00159	10.76	24.95	2.31x	
	-034	C00282	10.68	24.72	2.31x	
	-035	C00267	10.60	25.17	2.37x	

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Prepped By / date	Sample ID	Can ID	Initial pres. (PSI)	Final Pres (PSI)	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x 2.42x		
	-043	C00161	10.16	26.50	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00662	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.57		
	-048	C00664	9.37	25.51	2.72x		
	-049	C00117	9.83	26.30	2.67x		
	-050	C00688	9.46	26.4	2.77x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
	Blank	C00237 C00210				1x	
	Soo 2/22/10	Blank	C00048			1x	
	Blank	C00211			1x		
Soo ET	218259-002	C00205	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00693	
	-003	C00231			39.8x	20x of 1.99x can C00137	
	-004	C00020			38x	20x of 1.90x can C00665	
	-005	C00017			37.6x	20x of 1.88x can C00199	
	-019	C00018			59x	20x of 2.95x can C00145	
	-024	C00045			50.6x	20x of 2.53x can C0096	
	-025	C00230			49.6x 49.6x	20x of 2.48x can C00114	
	-034	C00028			40.4x	20x of 2.02x can C00187	
ET 2-23	218411-001	C00250	11.99	25.12	2.09x		
	-002	C00269	12.34	25.36	2.05x		
	-003	C00100	11.19	25.32	2.26x		
	-004	C00260	12.17	24.88	1.94x		
	-005	C00241	11.24	25.42	2.26x		
	-006	C00249	8.24	26.18	3.18x		

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Prepped by / date	Sample ID	Can ID	(psi) Initial Pres.	(psi) Final Pres.	Dilution Factor	Comments
ET 2-22-10	218329-001	C00272	11.99	24.87	2.07x	
	-002	C00289	11.63	25.06	2.15x	
	-003	C00277	12.35	25.24	2.04x	
	-004	C00076	12.29	25.50	2.07x	
	-005	C00284	12.28	25.84	2.10x	
	-006	C00286	12.43	25.04	2.01x	
	-007	C00287	11.67	24.40	2.09x	
	-008	C00126	11.68	24.30	2.08x	
	-009	C0043	12.58	24.60	1.95x	
	-010	C00258	11.54	24.53	2.13x	
	-011	C00279	12.86	25.10	1.87x ET → 1.95x	
	-012	C00257	12.03	24.27	2.02x	
	-013	C00278	12.12	26.15	2.16x	
	-014	C00276	12.23	24.30	1.99x	
	-015	C00271	12.13	24.62	2.03x	
	-016	C00268	12.12	26.09	2.15x	
	-017	C00270	12.08	25.03	2.07x	
	-018	C00280	12.38	24.96	2.02x	
	-019	C00273	11.73	25.48	2.17x	
	-020	C00266	11.13	25.38	2.28x	
	-021	C00124	12.84	25.25	1.97x	
	-022	C00167	13.08	24.88	1.90x	
	-023	C00068	12.92	24.98	1.93x	
	-024	C00075	13.09	25.00	1.91x	
	-025	C00098	13.11	25.30	1.93x	
	-026	C00116	13.05	25.62	1.96x	
	-027	C00190	12.48	25.37	2.03x	
	-028	C00066	13.05	24.80	1.90x	
	-029	C00184	13.47	25.12	1.86x	
	-030	C00119	12.40	25.79	2.07x	
	-031	C00141	13.04	25.39	1.95x	
	-032	C00138	10.92	25.10	2.30x	
	-033	C00159	10.76	24.95	2.31x	
	-034	C00282	10.68	24.72	2.31x	
	-035	C00267	10.60	25.17	2.37x	

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Prepped By / date	Sample ID	Can ID	Initial pres. (PSI)	Final pres. (PSI)	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x 2.42x		
	-043	C00161	10.16	26.50	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00062	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.57		
	-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.82	26.30	2.67x		
	-050	C00088	9.46	26.4	2.79x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
	Blank	C00237 C00210				1x	
	500 2/22/10	Blank	C00048			1x	
Blank	C00211				1x		
500 ET	218259-002	C00205	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00073	
	-003	C00231			39.8x	20x of 1.99x can C00137	
	-004	C00020			38x	20x of 1.90x can C00065	
	-005	C00017			37.6x	20x of 1.88x can C00199	
	-019	C00019			59x	20x of 2.95x can C00145	
	-024	C00045			50.6x	20x of 2.53x can C00096	
	-025	C00230			49.6x 49.6x	20x of 2.48x can C00114	
	-034	C00028			40.4x	20x of 2.02x can C00197	
	ET 2-23	218411-001	C00250	11.99	25.12	2.09x	
		-002	C00269	12.34	25.36	2.05x	
-003		C00100	11.19	25.32	2.26x		
-004		C00260	12.17	24.88	1.94x		
-005		C00241	11.24	25.42	2.26x		
-006		C00249	8.24	26.18	3.18x		

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Prepped by/date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218411-042					ET 2-23
Sos 2/23/10	BLANK	C00010	—	—	1x	
	BLANK	C00038	—	—	1x	
ET 2-25	218479-001	C00162	11.10	25.14	2.26x	
	218479-002	C00070	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00178 C00178	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00103	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.65	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	-012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
Sos 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x	20x of 2.44x can C00164
	-021	C00217	↓	↓	47.6x	20x of 2.23x can C00180
	-006	C	1.5 added	30.82 total added	—	20x of 1.92x can C00188
Sos 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x	21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x	
	-002	C00012	12.34	25.01	2.03x	
	Blank	C00240	—	—	1x	ET 3-3
	Blank	C00292	—	—	1x	
Sos 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x	20x of 2.10x can C00284
	-006	C00213	↓	↓	40.2x	20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x	20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x	20x of 2.08x can C00126
	-015	C00235	↓	31.63 total added	42.8x	21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x	20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x	20x of 1.93x can C00068
	-026	C00036	↓	↓	39.2x	20x of 1.96x can C00116
Sos 3/5/10	218432-001	C00232	13.56	22.58	1.67x	refill can
	218329-007	C00034	1.5 added	30.0 total added	83.6x	20x of 4.18x can C00016

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Accepted by / date	Sample ID	Can ID	(PSIS) Initial Pres.	(PSIS) Final Pres.	Dilution Factor	Comments
ET 2-22-0	218329-001	C00272	11.99	24.87	2.07x	
	-002	C00287	11.63	25.06	2.15x	
	-003	C00277	12.35	25.24	2.04x	
	-004	C00076	12.29	25.50	2.07x	
	-005	C00284	12.28	25.84	2.10x	
	-006	C00286	12.43	25.04	2.01x	
	-007	C00287	11.67	24.40	2.07x	
	-008	C00126	11.68	24.30	2.08x	
	-009	C00143	12.58	24.60	1.95x	
	-010	C00258	11.54	24.53	2.13x	
	-011	C00279	12.86	25.10	1.87x ET → 1.95x	
	-012	C00257	12.03	24.27	2.02x	
	-013	C00278	12.12	26.15	2.16x	
	-014	C00276	12.23	24.30	1.99x	
	-015	C00271	12.13	24.62	2.03x	
	-016	C00268	12.12	26.09	2.15x	
	-017	C00270	12.08	25.03	2.07x	
	-018	C00280	12.38	24.96	2.02x	
	-019	C00273	11.73	25.48	2.17x	
	-020	C00266	11.13	25.38	2.28x	
	-021	C00124	12.84	25.25	1.97x	
	-022	C00167	13.08	24.88	1.90x	
	-023	C00068	12.92	24.98	1.93x	
	-024	C00075	13.09	25.00	1.91x	
	-025	C00098	13.11	25.30	1.93x	
	-026	C00116	13.05	25.62	1.96x	
	-027	C00190	12.48	25.37	2.03x	
	-028	C00066	13.05	24.80	1.90x	
	-029	C00184	13.47	25.12	1.86x	
	-030	C00119	12.40	25.79	2.07x	
	-031	C00141	13.04	25.39	1.95x	
	-032	C00138	10.92	25.10	2.30x	
	-033	C00159	10.76	24.95	2.31x	
	-034	C00282	10.68	24.72	2.31x	
	-035	C00267	10.60	25.17	2.37x	

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Date

Prepped By / date	Sample ID	Can ID	(PSI) Initial pres.	(PSI) Final Pres	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x → 2.42x		
	-043	C00161	10.16	26.50	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00062	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.59		
	-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.83	26.30	2.67x		
	-050	C00088	9.46	26.4	2.79x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
	Blank	C00237 C00240				1x	
	Soo 2/22/10	Blank	C00048			1x	
Blank		C00211			1x		
Blank		C00211			1x		
Soo ET	218259-002	C00205	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093	
	-003	C00231			39.8x	20x of 1.99x can C00137	
	-004	C00020			38x	20x of 1.90x can C00065	
	-005	C00017			37.6x	20x of 1.88x can C00199	
	-019	C00019			59x	20x of 2.95x can C00145	
	-024	C00045			50.6x	20x of 2.53x can C00096	
	-025	C00230			47 49.6x	20x of 2.48x can C00114	
	-034	C00028			40.4x	20x of 2.02x can C00197	
	ET 2-23	218411-001	C00250	11.99	25.12	2.09x	
		-002	C00269	2.34	25.36	2.05x	
-003		C00100	11.19	25.32	2.26x		
-004		C00260	12.17	24.88	1.94x		
-005		C00241	11.24	25.42	2.26x		
-006		C00249	8.24	26.18	3.18x		

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Prepped by/date	Sample ID	Can ID	PSII Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218444-012					ET 2-23
SOP 2/23/10	BLANK	C00010	—	—	1x	
	BLANK	C00038	—	—	1x	
ET 2-25	218477-001	C00162	11.10	25.14	2.26x	
	218477-002	C00070	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00178	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00103	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.05	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	-012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
SOP 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x	20x of 2.44x can C00164
	-021	C00217	↓	↓	44.6x	20x of 2.23x can C00080
	-006	C	1.5 added	30.82 total added	—	20x of 1.92x can C00188
SOP 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x	21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x	
	-002	C00012	12.34	25.01	2.03x	
	Blank	C00240	—	—	1x	ET 3-3
	Blank	C00292	—	—	1x	
SOP 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x	20x of 2.19x can C00284
	-006	C00213	↓	↓	40.2x	20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x	20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x	20x of 2.08x can C00286
	-015	C00235	↓	31.63 total added	42.8x	21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x	20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x	20x of 1.93x can C00068
	-026	C00036	↓	↓	39.2x	20x of 1.96x can C00116
SOP 3/5/10	218432-001	C00232	13.56	22.58	1.67x	refill can
	218329-007	C00034	1.5 added	30.0 total added	83.6x	20x of 4.18x can C00016

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PROJECT

AIR SAMPLE PREP LOG

Notebook No. BK2875

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Prepped by / date	Sample ID	Can ID	(PSI) Initial Pres.	(PSI) Final Pres.	Dilution Factor	Comments
ET 2-22-0	218329-001	C00272	11.99	24.87	2.07x	
	-002	C00289	11.63	25.06	2.15x	
	-003	C00277	12.35	25.24	2.04x	
	-004	C00076	12.29	25.50	2.07x	
	-005	C00284	12.28	25.84	2.10x	
	-006	C00286	12.43	25.04	2.01x	
	-007	C00287	11.67	24.46	2.09x	
	-008	C00126	11.68	24.30	2.08x	
	-009	C0043	12.58	24.60	1.95x	
	-010	C00258	11.54	24.53	2.13x	
	-011	C00279	12.86	25.10	1.87x ET → 1.95x	
	-012	C00257	12.03	24.27	2.02x	
	-013	C00278	12.12	26.15	2.16x	
	-014	C00276	12.23	24.30	1.99x	
	-015	C00271	12.13	24.62	2.03x	
	-016	C00268	12.12	26.09	2.15x	
	-017	C00270	12.08	25.03	2.07x	
	-018	C00280	12.38	24.96	2.02x	
	-019	C00273	11.73	25.48	2.17x	
	-020	C00266	11.13	25.38	2.28x	
	-021	C00124	12.84	25.25	1.97x	
	-022	C00167	13.08	24.88	1.90x	
	-023	C00068	12.92	24.98	1.93x	
	-024	C00075	13.09	25.00	1.91x	
	-025	C00098	13.11	25.30	1.93x	
	-026	C00116	13.05	25.62	1.96x	
	-027	C00190	12.48	25.37	2.03x	
	-028	C00066	13.05	24.80	1.90x	
	-029	C00184	13.47	25.12	1.86x	
	-030	C00119	12.40	25.79	2.07x	
	-031	C00141	13.04	25.39	1.95x	
	-032	C00138	10.92	25.10	2.30x	
	-033	C00159	10.76	24.95	2.31x	
	-034	C00282	10.68	24.72	2.31x	
	-035	C00267	10.60	25.17	2.37x	

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Date _____

Prepped By / date	Sample ID	Can ID	Initial pres. (psi)	Final Pres (psi)	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x 2.42x		
	-043	C00101	10.16	26.50	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00062	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.59		
	-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.83	26.30	2.67x		
	-050	C00088	9.46	26.4	2.79x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
		Blank	C00237 C00210	—	—	1x	
	500 2/22/10	Blank	C00098	—	—	1x	
	Blank	C00281	—	—	1x		
500 ET	218259-002	C00205	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093	
	-003	C00231			39.8x	20x of 1.97x can C00097	
	-004	C00020			38x	20x of 1.90x can C00065	
	-005	C00017			37.6x	20x of 1.88x can C00189	
	-019	C00019			59x	20x of 2.95x can C00145	
	-024	C00095			50.6x	20x of 2.53x can C00096	
	-025	C00230			49.6x 49.6x	20x of 2.48x can C00114	
	-034	C00028			40.4x	20x of 2.02x can C00187	
ET 2-23	218411-001	C00250	11.99	25.12	2.09x		
	-002	C00269	12.34	25.36	2.05x		
	-003	C00100	11.19	25.32	2.26x		
	-004	C00260	12.17	24.88	1.94x		
	-005	C00241	11.24	25.42	2.26x		
	-006	C00249	8.24	26.18	3.18x		

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Prepped by	date	Sample ID	Can ID	(PSIG) Initial Pres.	(PSIG) Final Pres.	Dilution Factor	Comments
ET	2-23	218411-007	C00247	11.62	25.21	2.17x	
		-008	C00251	12.06	26.50	2.59x 2.20x	
		-009	C00166	12.44	25.10	2.02	
		-010	C00057	12.80	25.02	1.95x	
		-011	C00115	12.24	25.47	2.08x	
		-012	C00649	12.50	26.17	2.09x	
		-013	C00255	12.27	25.69	2.09x	
		-014	C00056	12.19	24.93	2.04x	
		-015	C00087	12.44	25.05	2.01x	
		-016	C00180	11.98	25.35	2.12x	
		-017	C00083	12.02	26.00	2.16x	
		-018	C00579	12.06	25.10	2.08x	
		-019	C00150	13.07	25.96	1.99x	
		-020	C0042	12.79	24.85	1.94	
		-021	C00187	12.74	25.58	2.01x	
		-022	C00263	12.91	25.30	1.96x	
		-023	C00156	12.82	24.93	1.94x	
		-024	C00052	11.02	25.62	2.32x	
		-025	C00189	11.45	25.79	2.25x	
		-026	C00077	11.16	25.48		
		-027	C00167	11.62	26.13		ET 2-23
		-028	C00097	11.46	25.48	2.22x	
		-029	C00167	11.62	26.13	2.25x	
		-030	C00127	11.60	24.60	2.12x	
		-031	C00059	11.18	25.14	2.25x	
		-032	C00245	11.42	26.71	2.34x	
		-033					
		-034					ET 2-23
		-035					
		-036	C00274	11.83	24.76	2.09x	
		-037	C00262	12.24	25.98	2.20x	
		-038	C00244	11.77	25.86	2.11x	
		-039					
		-040					ET 2-23
		-041					

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Date

Prepped by / date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218411-012					ET 2-23
Sos 2/23/10	BLANK	C00010	—	—	1x	
↓	BLANK	C00038	—	—	1x	
ET 2-25	218477-001	C00062	11.10	25.4	2.26x	
	218477-002	C00070	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00176	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00103	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.05	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	-012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
Sos 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x	20x of 2.44x can C00164
↓	-021	C00217	↓	↓	44.6x	20x of 2.23x can C00050
↓	-006	C	1.5 added	30.0 total added	40.7x	20x of 1.8x can C00188
Sos 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x	21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x	
↓	-002	C00012	12.34	25.01	2.03x	
↓	Blank	C00240	—	—	1x	ET 3-3
↓	Blank	C00292	—	—	1x	
Sos 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x	20x of 2.10x can C00284
	-006	C00213	↓	↓	40.2x	20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x	20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x	20x of 2.08x can C00126
	-015	C00235	↓	31.63 total added	42.8x	21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x	20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x	20x of 1.93x can C00068
	-026	C00036	↓	↓	39.3x	20x of 1.96x can C00116
Sos 3/5/10	218432-001	C00232	13.56	22.58	1.67x	refill can
↓	218329-007	C00034	1.5 added	30.0 total added	83.6x	20x of 4.18x can C00016

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Date

Laboratory Job Number 218329

ANALYTICAL REPORT

Volatile Organics in Air GC

Matrix: Air

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Analyte:	Methane-TO3	Diln Fac:	2.720
Field ID:	SMW-4-U-10Q1	Batch#:	160099
Lab ID:	218329-048	Sampled:	02/10/10
Matrix:	Air	Received:	02/16/10
Units:	ppmv	Analyzed:	02/17/10
Units (M):	ug/L		

Result	RL	Result (M)	RL	ADEQ Flags
4.2	1.4	2.7	0.89	D2

RL= Reporting Limit

Result M= Result in Mass Units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Analyte:	Methane-TO3	Diln Fac:	2.670
Field ID:	SMW-4-M-10Q1	Batch#:	160099
Lab ID:	218329-049	Sampled:	02/10/10
Matrix:	Air	Received:	02/16/10
Units:	ppmv	Analyzed:	02/17/10
Units (M):	ug/L		

Result	RL	Result (M)	RL	ADEQ Flags
5.4	1.3	3.6	0.88	D1

RL= Reporting Limit

Result M= Result in Mass Units

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Analyte:	Methane-TO3	Diln Fac:	2.790
Field ID:	SMW-4-L-10Q1	Batch#:	160099
Lab ID:	218329-050	Sampled:	02/10/10
Matrix:	Air	Received:	02/16/10
Units:	ppmv	Analyzed:	02/17/10
Units (M):	ug/L		

Result	RL	Result (M)	RL	ADEQ Flags
2.4	1.4	1.6	0.92	D1

RL= Reporting Limit

Result M= Result in Mass Units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Analyte:	Methane-TO3	Units (M):	ug/L
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC532884	Batch#:	160099
Matrix:	Air	Analyzed:	02/17/10
Units:	ppmv		

Result	RL	Result (M)	RL	ADEQ Flags
ND	0.50	ND	0.33	

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Analyte:	Methane-TO3	Diln Fac:	1.000
Matrix:	Air	Batch#:	160099
Units:	ppmv	Analyzed:	02/17/10

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
BS	QC532885	100.0	103.8	104	70-130				
BSD	QC532886	100.0	119.2	119	70-130	14	20		

RPD= Relative Percent Difference

Batch QC Report

Volatile Organics in Air			
Lab #:	218329	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Analyte:	Methane-TO3	Units (M):	ug/L
Field ID:	SMW-4-U-10Q1	Diln Fac:	2.720
Type:	SDUP	Batch#:	160099
MSS Lab ID:	218329-048	Sampled:	02/10/10
Lab ID:	QC532887	Received:	02/16/10
Matrix:	Air	Analyzed:	02/17/10
Units:	ppmv		

MSS Result	Result	RL	Result (M)	RL	RPD	Lim	ADEQ	Flags
4.178	4.336	1.360	2.845	0.8922	4	30	D2	

RL= Reporting Limit

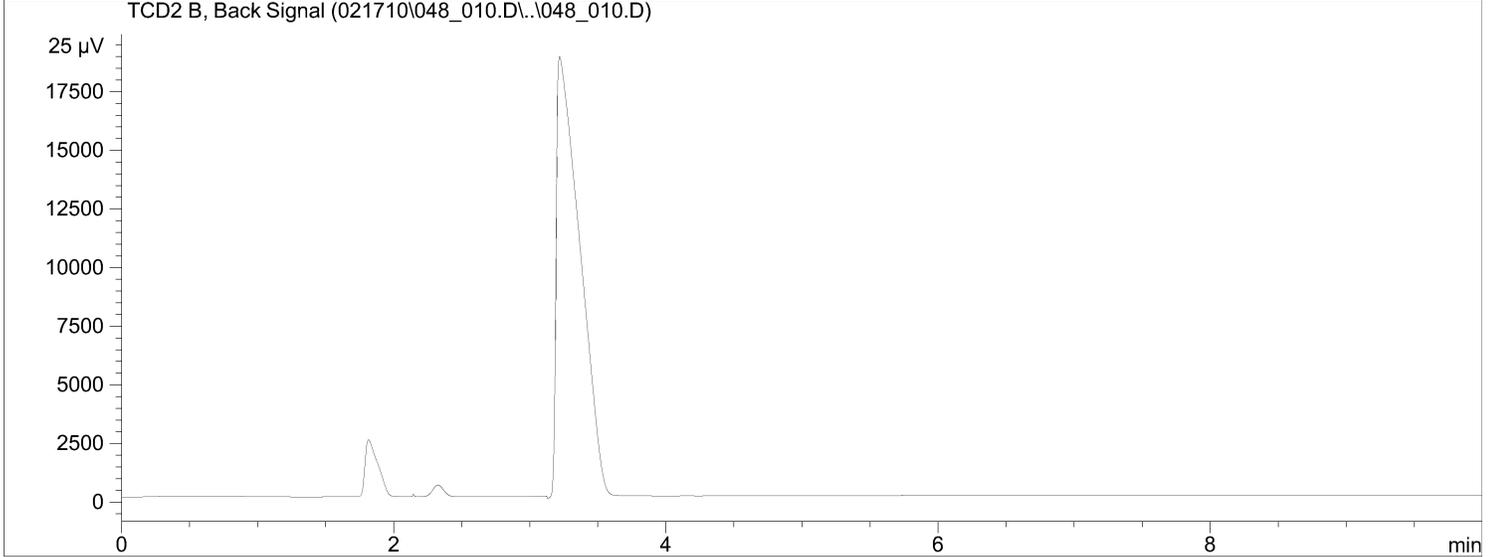
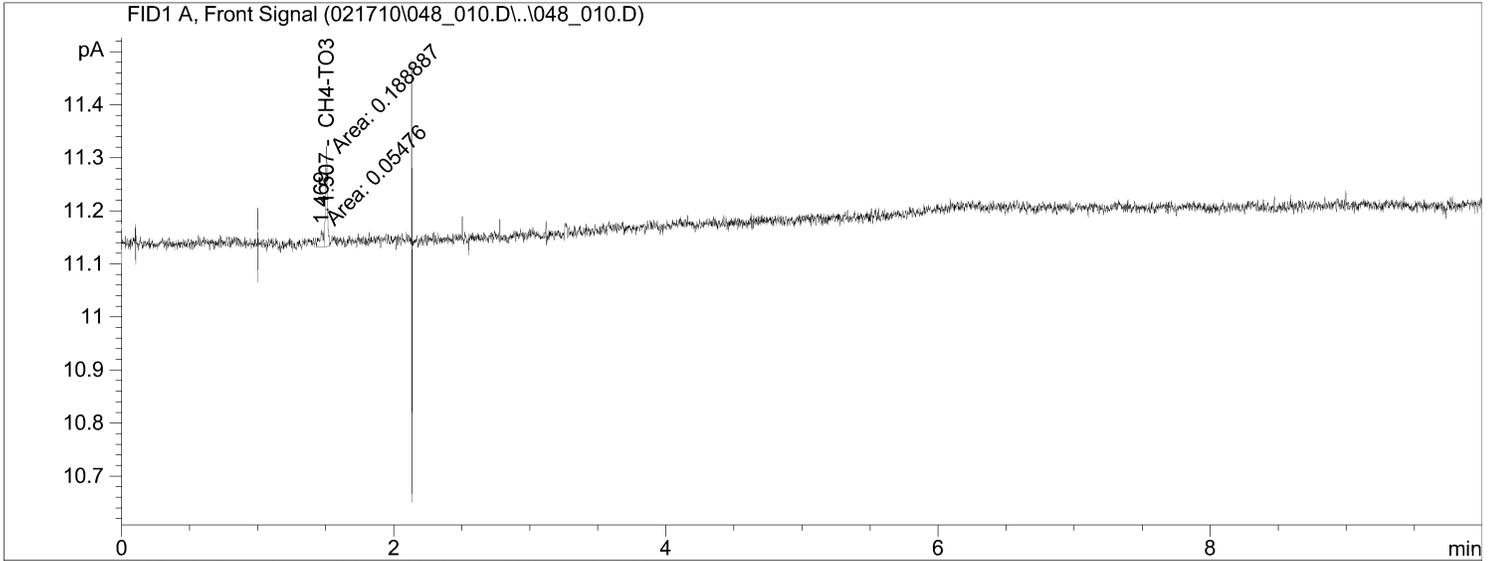
RPD= Relative Percent Difference

Result M= Result in Mass Units

Sample Name: mss.218329-048,160099,2.72

```

=====
Acq. Operator   : GC28 RGA
Acq. Instrument : GC28                      Location : Vial 1
Injection Date  : 2/17/2010 02:44:24 PM
                                           Inj Volume : Manually
Acq. Method     : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed    : 2/17/2010 02:01:20 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed    : 12/11/2009 04:39:29 PM by GC28 RGA
    
```



External Standard Report

```

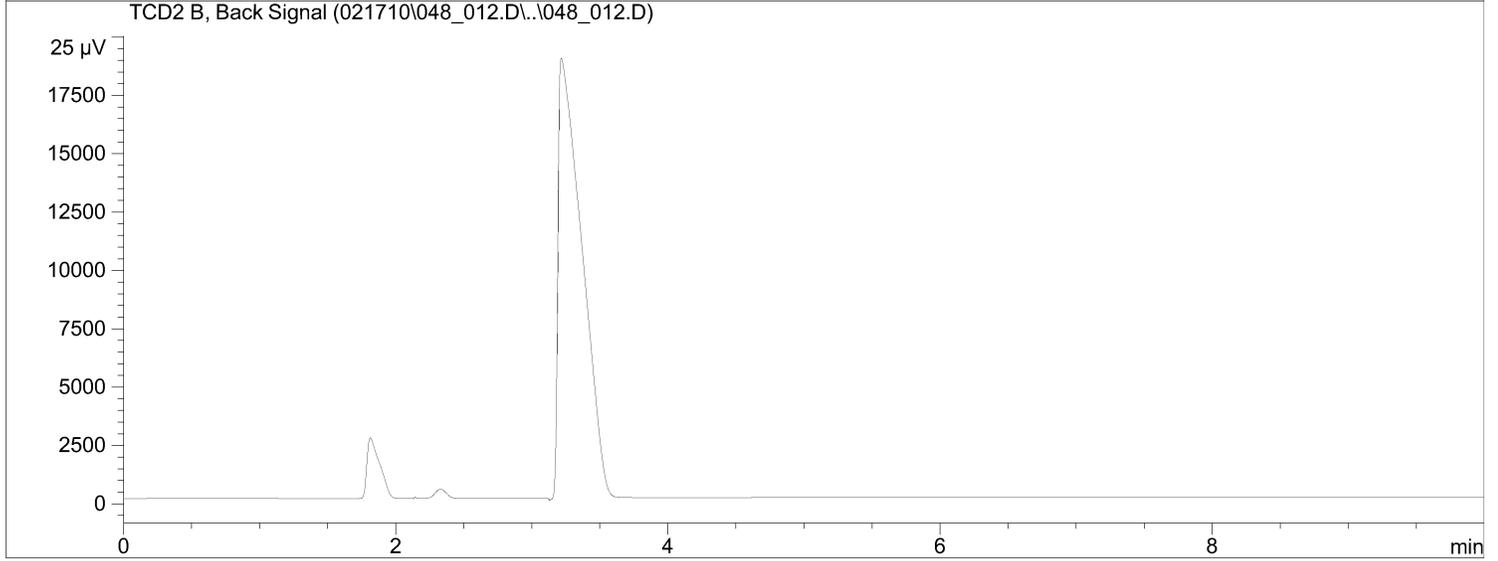
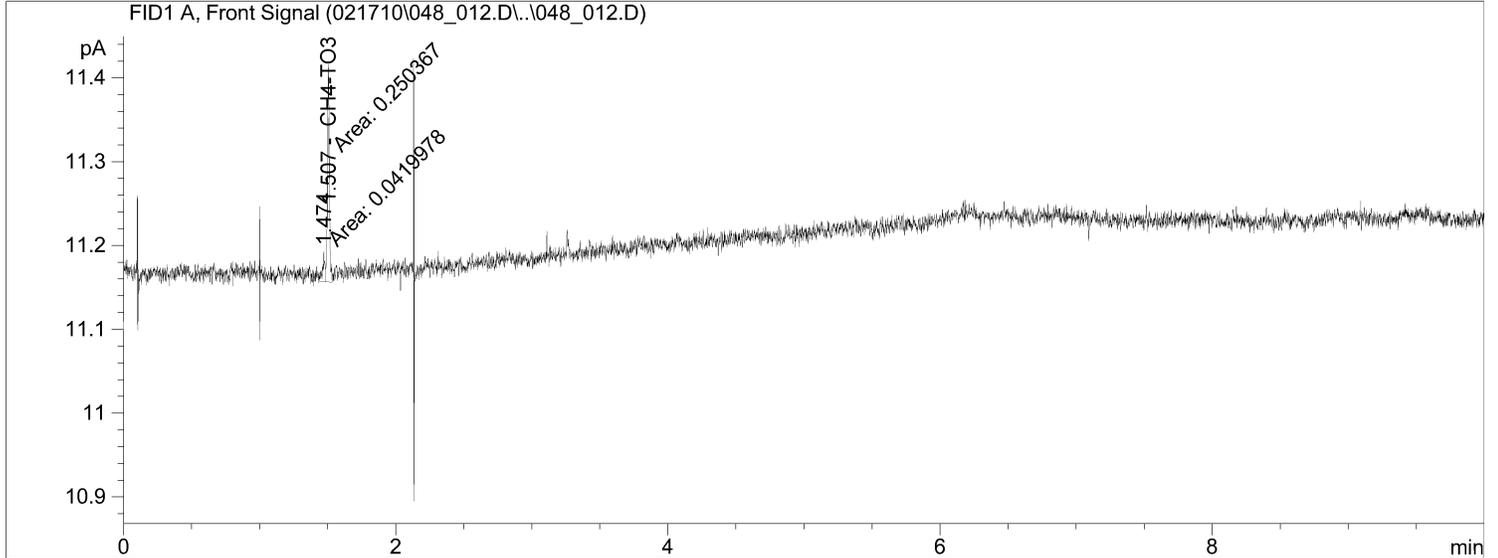
Sorted By      : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier     : 1.0000
Dilution       : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.507	FM	1.88887e-1	8.13190	1.53601		CH4-TO3

Sample Name: 218329-049,160099,2.67

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/17/2010 03:35:31 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 2/17/2010 03:35:30 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



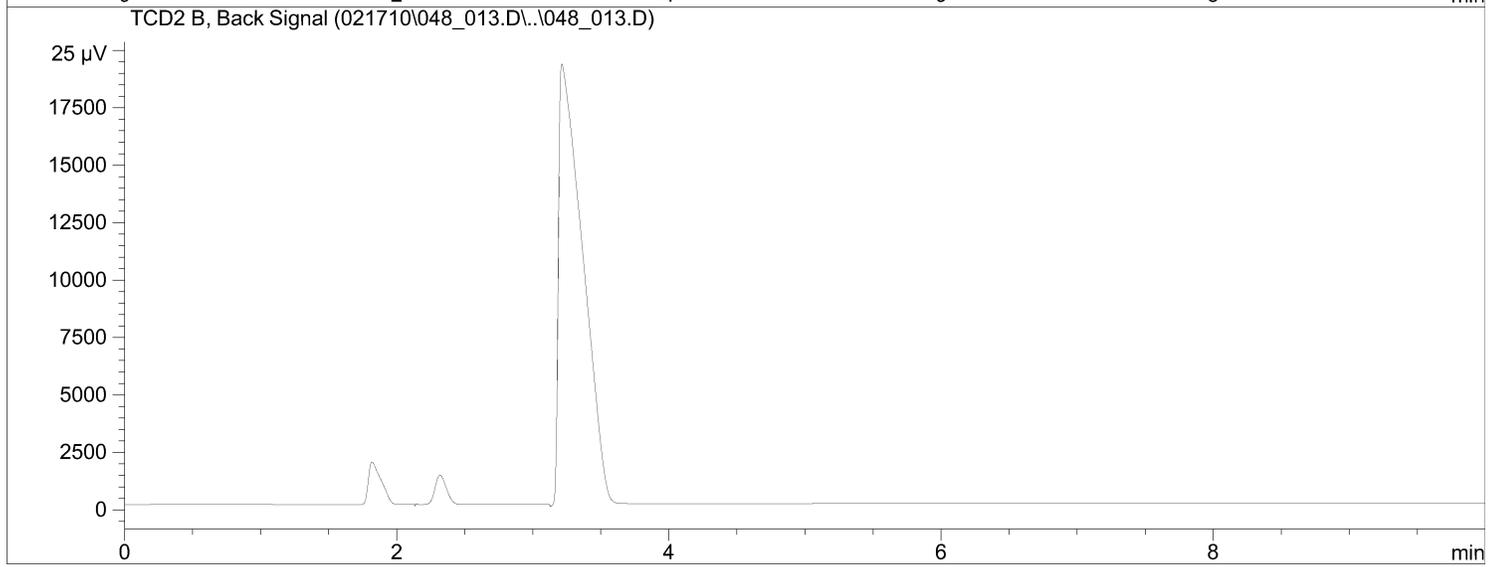
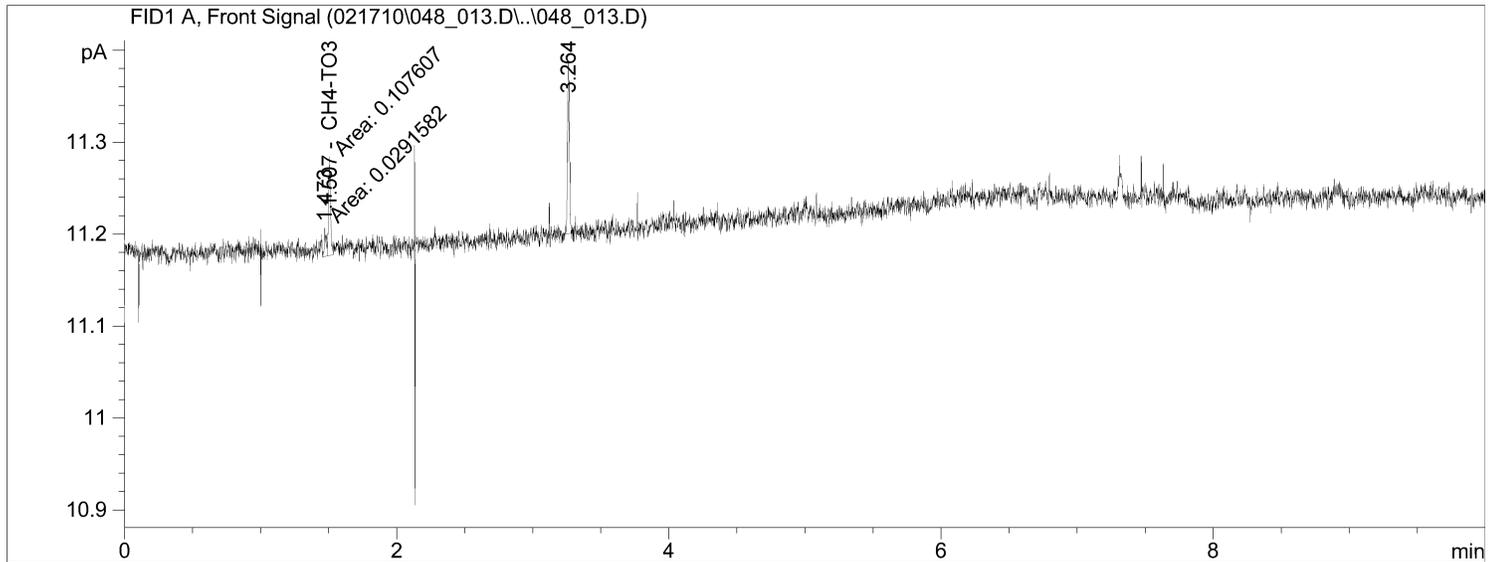
=====
External Standard Report
=====

Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Sample Name: 218329-050,160099,2.79

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/17/2010 03:55:06 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 2/17/2010 03:55:05 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



=====
External Standard Report
=====

Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

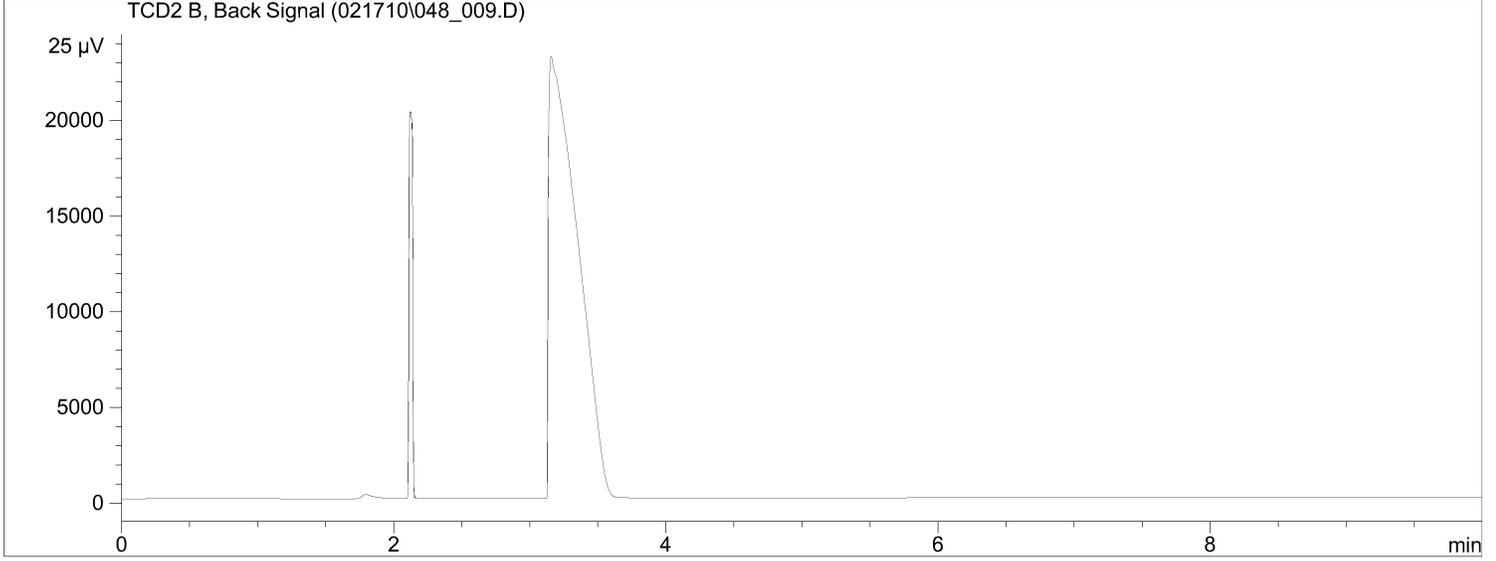
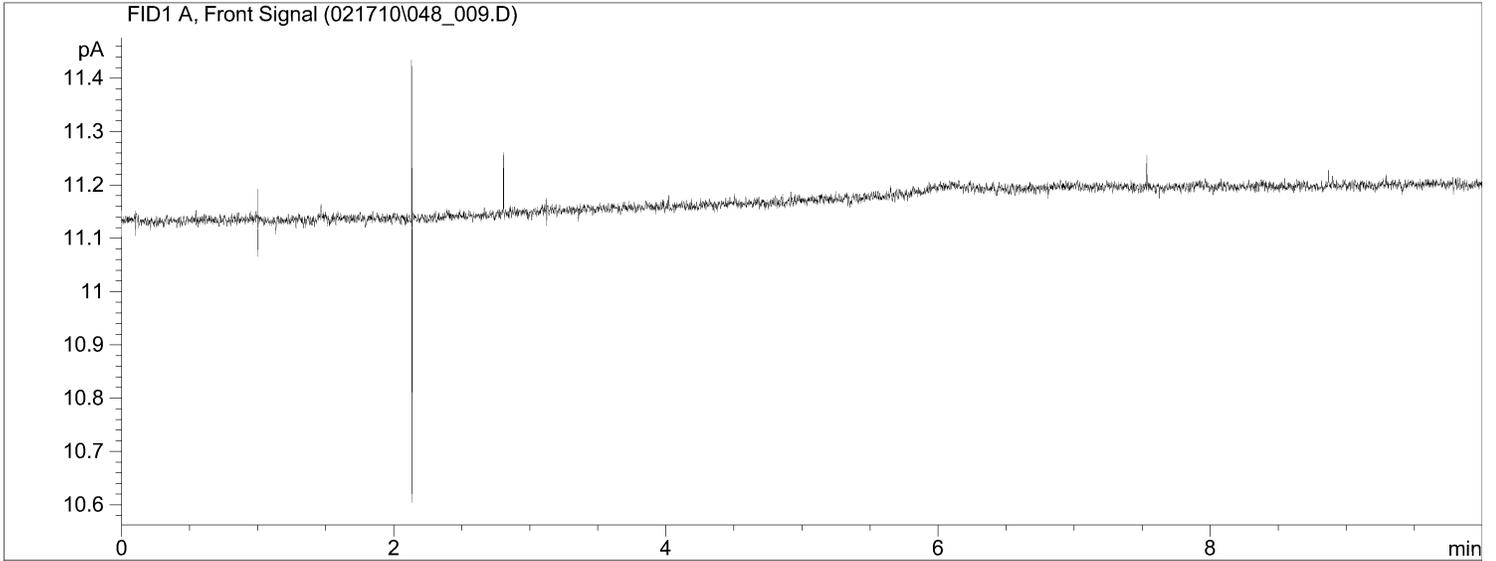
Signal 1: FID1 A, Front Signal

Sample Name: blank,qc532884,160099,1

```

=====
Acq. Operator   : GC28 RGA
Acq. Instrument : GC28                      Location : Vial 1
Injection Date  : 2/17/2010 01:46:17 PM
                                           Inj Volume : Manually

Acq. Method     : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed    : 2/17/2010 12:13:15 PM by GC28 RGA
Analysis Method  : C:\CHEM32\1\METHODS\TO3_121109.M
Last changed    : 12/11/2009 04:27:22 PM by GC28 RGA
    
```



External Standard Report

```

Sorted By      : Signal
Calib. Data Modified : 12/11/2009 04:27:14 PM
Multiplier     : 1.0000
Dilution       : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs
    
```

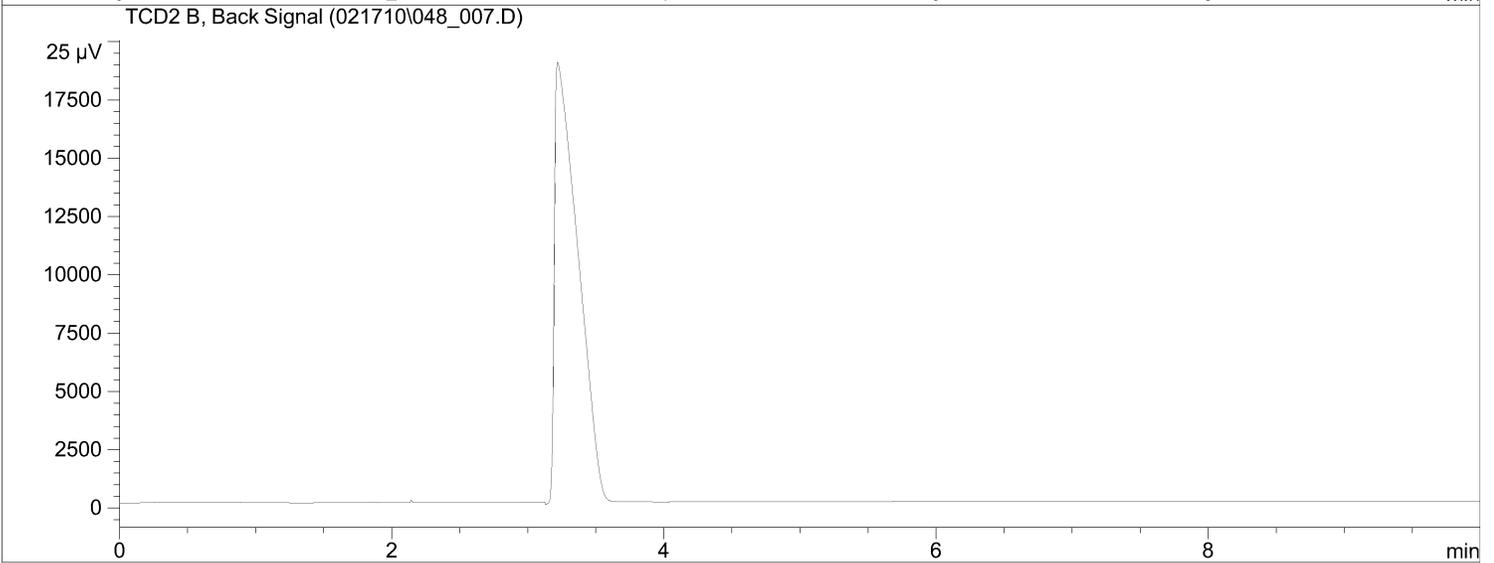
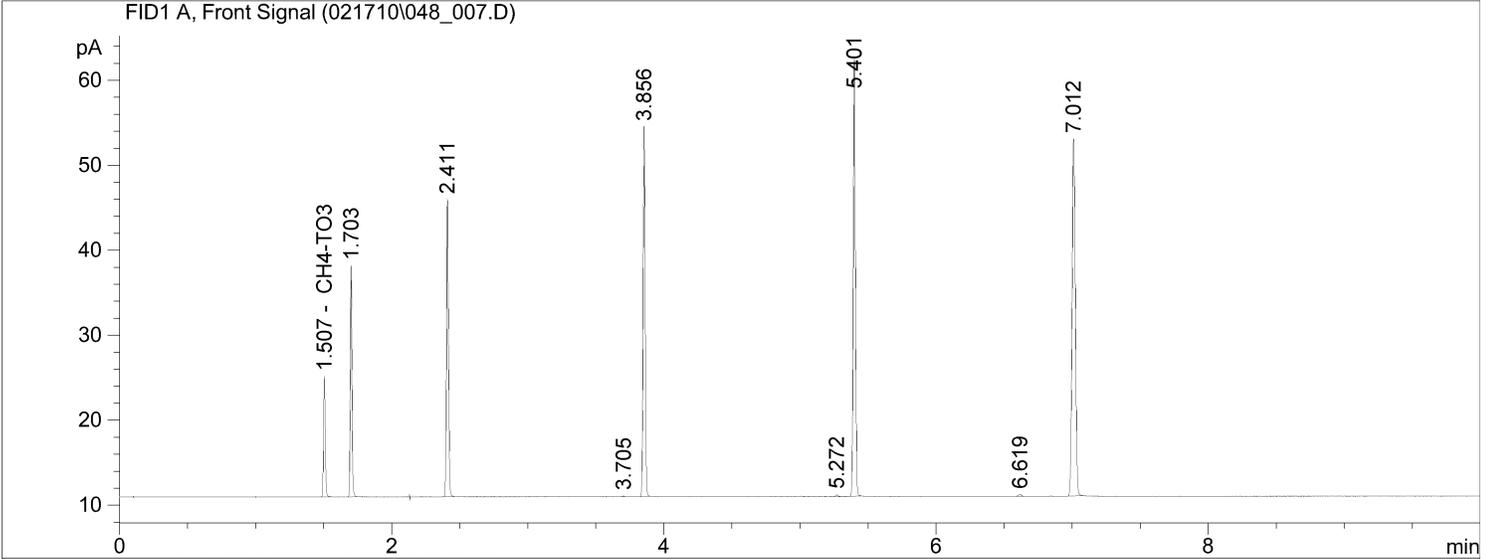
Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.508	-	-	-	-	-	CH4-TO3
1.703	-	-	-	-	-	Ethane

Sample Name: bs.qc532885,160003,s13824,1

```

=====
Acq. Operator   : GC28 RGA
Acq. Instrument : GC28                      Location : Vial 1
Injection Date  : 2/17/2010 11:37:10 AM
                                           Inj Volume : Manually
Acq. Method     : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed    : 2/17/2010 11:24:16 AM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed    : 12/11/2009 04:39:29 PM by GC28 RGA
    
```



External Standard Report

```

Sorted By      : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier     : 1.0000
Dilution       : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.507	BB	12.77031	8.13190	103.84686		CH4-TO3

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218329 GCAIR Air: EPA TO-3

Inst : GC28
 Calnum : 1309497539003
 Units : uL/L

Date : 11-DEC-2009 12:37
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	345_002	1309497539002		11-DEC-2009 12:37	S13381
L2	345_003	1309497539003		11-DEC-2009 13:00	S13382
L3	345_004	1309497539004		11-DEC-2009 13:18	S13383
L4	345_005	1309497539005		11-DEC-2009 13:35	S13384
L5	345_006	1309497539006		11-DEC-2009 13:53	S13385
L6	345_007	1309497539007		11-DEC-2009 14:16	S13386
L7	345_008	1309497539008		11-DEC-2009 14:36	S13387
L8	345_009	1309497539009		11-DEC-2009 16:08	S13388

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Methane-TO3	A	0.1314	0.1225	0.1271	0.1208	0.1197	0.1183	0.1197	0.1242	AVRG		8.13190		0.1230	4	.99	30	
C1-C2 as Ethane	A	0.2344	0.2246	0.2351	0.2214	0.2192				AVRG		4.40634		0.2269	3	.99	30	
C2-C3 as Propane	A	0.3733	0.3403	0.3520	0.3349	0.3314				AVRG		2.88691		0.3464	5	.99	30	
C3-C4 as n-Butane	A	0.5160	0.4525	0.4696	0.4450	0.4404				AVRG		2.15194		0.4647	7	.99	30	
C4-C5 as n-Pentane	A	0.6216	0.5643	0.5844	0.5569	0.5515				AVRG		1.73685		0.5758	5	.99	30	
C5-C6 as n-Hexane	A	0.7502	0.6699	0.6955	0.6640	0.6573				AVRG		1.45477		0.6874	6	.99	30	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Methane-TO3	A	0.500	7	10.00	0	100.0	3	501.0	-2	1002	-3	9980	-4	2E+5	-3	5E+5	1
C1-C2 as Ethane	A	0.500	3	10.00	-1	100.0	4	505.5	-2	1011	-3						
C2-C3 as Propane	A	0.500	8	10.00	-2	100.0	2	501.0	-3	1002	-4						
C3-C4 as n-Butane	A	0.500	11	10.00	-3	100.0	1	502.5	-4	1005	-5						
C4-C5 as n-Pentane	A	0.500	8	10.00	-2	100.0	2	500.0	-3	1000	-4						
C5-C6 as n-Hexane	A	0.500	9	10.00	-3	100.0	1	498.5	-3	997.0	-4						

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218329 GCAIR Air
EPA TO-3

Inst : GC28

Calnum : 1309497539003

Cal Date : 11-DEC-2009

ICV 1309497539011 (345_011 11-DEC-2009) stds: S13375

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Methane-TO3	A	1000	1017	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218329 GCAIR Air
EPA TO-3

Inst : GC28
 Seqnum : 1300069644015
 Cal : 1309497539003
 Standards: S13824

IDF : 1.0
 Time : 17-FEB-2010 16:40

File : 048_015
 Caldate : 11-DEC-2009

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1230	0.1539	100.0	125.1	uL/L	25	30	
C1-C2 as Ethane	A	0.2269	0.2839	100.0	125.1	uL/L	25	30	
C2-C3 as Propane	A	0.3464	0.4257	100.0	122.9	uL/L	23	30	
C3-C4 as n-Butane	A	0.4647	0.5668	100.0	122.0	uL/L	22	30	
C4-C5 as n-Pentane	A	0.5758	0.7096	100.0	123.2	uL/L	23	30	
C5-C6 as n-Hexane	A	0.6874	0.8415	100.0	122.4	uL/L	22	30	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1300069644

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 02/17/10 08:44

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	048_001	IB	IB			02/17/10 08:44	1.0		1:N=1200000
002	048_002	ICAL				02/17/10 09:07	1.0	1	
003	048_003	ICAL				02/17/10 09:34	1.0	2	
004	048_004	ICAL				02/17/10 09:57	1.0	3	
005	048_005	ICAL				02/17/10 10:16	1.0	4	
006	048_006	IB	IB			02/17/10 10:46	1.0		
007	048_007	CCV/BS	QC532885	Air	160099	02/17/10 11:37	1.0	5	
008	048_008	BSD	QC532886	Air	160099	02/17/10 11:58	1.0	5	
009	048_009	BLANK	QC532884	Air	160099	02/17/10 13:46	1.0		1:N=1100000
010	048_010	MSS	218329-048	Air	160099	02/17/10 14:44	2.72		
011	048_011	SDUP	QC532887	Air	160099	02/17/10 15:03	2.72		
012	048_012	SAMPLE	218329-049	Air	160099	02/17/10 15:35	2.67		
013	048_013	SAMPLE	218329-050	Air	160099	02/17/10 15:55	2.79		
014	048_014	IB	IB			02/17/10 16:20	1.0		
015	048_015	CCV				02/17/10 16:40	1.0	5	

APP 02/18/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 015.

Analyst: APP Date: 02/18/10 Reviewer: SJD Date: 03/02/10

Standards used: 1=S14025 2=S14024 3=S14023 4=S14022 5=S13824

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309497539

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 12/11/09 12:19

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	345_001	IB	IB			12/11/09 12:19	1.0	
002	345_002	ICAL				12/11/09 12:37	1.0	1
003	345_003	ICAL				12/11/09 13:00	1.0	2
004	345_004	ICAL				12/11/09 13:18	1.0	3
005	345_005	ICAL				12/11/09 13:35	1.0	4
006	345_006	ICAL				12/11/09 13:53	1.0	5
007	345_007	ICAL				12/11/09 14:16	1.0	6
008	345_008	ICAL				12/11/09 14:36	1.0	7
009	345_009	ICAL				12/11/09 16:08	1.0	8
010	345_010	IB	IB			12/11/09 16:29	1.0	
011	345_011	ICV				12/11/09 16:47	1.0	9

APP 12/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 011.

Analyst: APP Date: 12/14/09 Reviewer: SJD Date: 01/20/10

Standards used: 1=S13381 2=S13382 3=S13383 4=S13384 5=S13385 6=S13386 7=S13387 8=S13388 9=S13375

Prepped by/Date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Deletion Factor	Comments
ET 2-12	218259-021	C00050	11.25	25.05	2.23x	
	-022	C00078	10.24	25.26	2.47x	
	-023	C00144	10.57	25.19	2.38x	
	-024	C00096	10.03	25.36	2.53x	
	-025	C00114	10.25	25.39	2.48x	
	-026	C00151	9.78	25.20	2.58x	
	-027	C00172	10.97	25.34	2.3x	
	-028	C00191	11.71	25.38	2.17x	
	-029	C00135	11.58	25.09	2.17x	
	-030	C00192	11.81	25.28	2.14x	
	-031	C00144	12.64	25.33	2.00x	
	-032	C00067	13.32	25.27	2.81x	
	-033	C00061	12.23	25.55	2.09x	
	-034	C00197	12.47	25.20	2.02x	
	-036	C00196	11.78	25.98	2.2x	
	-037	C00121	11.07	25.34	2.29x	
	-038	C00094	11.72	25.43	2.17x	
ET-2-17-10	218329-040	C00069	9.46	25.89		
	-047	C00117	9.83	26.3		Not used
	-050	C00088	9.83	26.3		ET 2-17-10
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.3	2.67x	
	-050	C00088	9.46	26.4	2.79x	
5/88 2/16/10	218072-004	C00018	1.5 added	30.0 total added	35.6x	20x of 1.78x can C00080
ET 2-18-10	Blank	C06240	—	—	1x	Blank made on 7th

Continued on Page

Read and Understood By

Signed

Date

Signed

Date



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 218411
ANALYTICAL REPORT**

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 371451.SV.99.IS.0109
Location : BSVE QTR SVM
Level : III

<u>Sample ID</u>	<u>Lab ID</u>	<u>Sample ID</u>	<u>Lab ID</u>
BV-23N-10Q1	218411-001	SVV-4-10Q1	218411-022
BV-24N-10Q1	218411-002	P-35-10Q1	218411-023
BV-25N-10Q1	218411-003	SVV-1-10Q1	218411-024
ASE-41A-10Q1	218411-004	P-41-10Q1	218411-025
BV-18N-10Q1	218411-005	P-32-10Q1	218411-026
BV-22N-10Q1	218411-006	BSVE-SVM-10Q1-011	218411-027
PL-101A-10Q1	218411-007	P-39-10Q1	218411-028
ASE-39A-10Q1	218411-008	P-31-10Q1	218411-029
BV-20N-10Q1	218411-009	P-36-10Q1	218411-030
ASE-51A-10Q1	218411-010	P-37-10Q1	218411-031
BV-14N-10Q1	218411-011	P-33-10Q1	218411-032
ASE-66A-10Q1	218411-012	BV-9N-10Q1	218411-033
BV-17N-10Q1	218411-013	BV-13N-10Q1	218411-034
ASE-20A-10Q1	218411-014	BV-3N-10Q1	218411-035
ASE-57A-10Q1	218411-015	BV-12N-10Q1	218411-036
BV-5-10Q1	218411-016	BV-15N-10Q1	218411-037
BSVE-SVM-10Q1-015	218411-017	BV-11N-10Q1	218411-038
BSVE-SVM-10Q1-013	218411-018	BV-1N-10Q1	218411-039
P-38-10Q1	218411-019	BV-10N-10Q1	218411-040
SVV-2-10Q1	218411-020	BSVE-SVM-10Q1-012	218411-041
SVV-3-10Q1	218411-021		

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

Signature: _____
Senior Program Manager

Date: 04/02/2010

CASE NARRATIVE

Laboratory number: 218411
Client: CH2M Hill
Project: 371451.SV.99.IS.0109
Location: BSVE QTR SVM
Request Date: 02/19/10
Samples Received: 02/19/10

This data package contains sample and QC results for forty one air samples, requested for the above referenced project on 02/19/10. See attached cooler receipt form for any sample receipt problems or discrepancies. Report reissued 4/2/10 to revise a sample ID.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

Volatile Organics in Air by MS (EPA TO-15):

Low surrogate recovery was observed for bromofluorobenzene in BV-1N-10Q1 (lab # 218411-039), due to matrix interference.

Many samples were diluted due to problematic matrix.

Many samples were diluted due to passive grab sampling.

ASE-39A-10Q1 (lab # 218411-008) and BV-12N-10Q1 (lab # 218411-036) were diluted due to high non-target analytes.

No other analytical problems were encountered.

Volatile Organics in Air GC (ASTM D1946 and EPA TO-3):

No analytical problems were encountered.

Chain of Custody

218411

Curtis & Tompkins Laboratories				Honeywell				Chain Of Custody / Analysis Request				AESL Ref: 40210.4633						
2325 5th St. Berkeley, CA 94710 510-304-2221				Privileged & Confidential				AESL Ref: 40210.4633				COCE# 37380						
Sampling Co.: CH2M HILL				Site Name: Sky Harbor AZ				Phase: Sampling Program				Lab Proj # (SDG):						
Client Contact: (name, co., address)				Location of Site: Phoenix, AZ				BSVE QTR SVM				Lab ID						
CH2M HILL				Preservatives: 0 0 0 0								Site ID						
2625 South Plaza Drive, Suite 300 Tempe, AZ 85282				Analysis Turnaround Time (TAT): 10								Lab Job #						
Preliminary Data To: [Redacted]				Full Report TAT: 10								Authorized User: Honeywell						
Sample Receipt Acknowledgement To: [Redacted]												Text & Excel File Only						
Hard Copy To: Tuesday Powers and Melanie West, Crifigen												Copyright AESL: Version 8.3. Unauthorized use is strictly prohibited.						
Invoice To: Honeywell/Copy Barney Kidd												Sampling Method (Code)						
Sample Identification		Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Compos/Analyte	Field Filtered Sample?	VOCs (TO-15)	Methane (TO-3M)	TPH (TO-3M)	CO2 and CO2 (ASTM 1946)	Canister Serial No.
1	BU-23N	55	105	BU-23N-1001	02/12/10	0907	SV	AIR	REG	1	G		N	X				250
2	BU-24N	55	105	BU-24N-1001	02/12/10	0957	SU	AIR	REG	1	G		N	X				269
3	BU-25N	55	105	BU-25N-1001	02/12/10	1035	SU	AIR	REG	1	G		N	X				100
4	ASE-11A	60	90	ASE-11A-1001	02/12/10	1057	SU	AIR	REG	1	G		N	X				260
5	BU-18N	55	105	BU-18N-1001	02/12/10	1124	SU	AIR	REG	1	G		N	X				241
6	BU-22N	55	105	BU-22N-1001	02/12/10	1150	SU	AIR	REG	1	G		N	X				249
7	PL-101A	35	75	PL-101A-1001	02/12/10	1430	SU	AIR	REG	1	G		N	X				247
8	ASE-31A	55	65	ASE-31A-1001	02/12/10	1505	SU	AIR	REG	1	G		N	X				251
9																		
10																		
11																		
12																		

Relinquished by: [Signature]	Company: CH2M HILL	Received by: [Signature]	Condition: Clean
Date/Time: 02/15/10	Date/Time: 02/15/10	Condition: Cooler Temp.	
Relinquished by: [Signature]	Company: CH2M HILL	Received by: [Signature]	Condition: Clean
Date/Time: 02/16/10	Date/Time: 02/16/10	Condition: Cooler Temp.	

Preservatives: (Other: Specify):

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

218411

Amended 2/18/11

Honeywell Chain of Custody / Analysis Request											
Curtis & Tompkins Laboratories		Honeywell		Site Name:		City:		State:		Country:	
2323 8th St. Berkeley, CA 94710 916-204-2221		HONEYWELL		Tucson Powers and Malaria West, Citigen		Phoenix, AZ		Arizona, AZ		USA	
Client Contact: (name, co., address) CH2M HILL 2825 South Plaza Drive, Suite 300 Tempe, AZ 85282		EDD To: Tucson Powers and Malaria West, Citigen		Location of Site:		Phase:		Sampling Program:		Lab Proj # (SDG):	
Sample: J. J. Lopez		Sample Date: 5/10/10		VOCs (TO-15)		Methane (TO-14)		TPH (TO-3M)		Lab ID	
Analysis Turnaround Time (TAT): 10		Sample Type: SV		Units:		Preservative: 0 0 0 0		Authorized User: Honeywell		Lab Job #	
Full Report TAT: 10		Sample Matrix: AIR		Sample Purpose:		Plate Filtered Sample?		Copyright ABB Version 1.0		Custodian	
Sample Identification		Sample Data		Sample Type		Sample Matrix		Sample Purpose		# of Cont.	
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Canister Serial No.
1 ASE-51A	55.6	80.6	ASE-51A-1001	2-18-10	0819	SV	AIR	REG	1	G	00057
2 BU-14N	55	105	BU-14N-1001	2-18-10	0852	SU	AIR	REG	1	G	00115
3 ASE-66A	60.5	90.5	ASE-66A-1001	2-18-10	0934	SU	AIR	REG	1	G	00049
4 BU-17N	55	105	BU-17N-1001	2-18-10	1121	SU	AIR	REG	1	G	00255
5 ASE-57A	61	81	ASE-57A-1001	2-18-10	1005	SU	AIR	REG	1	G	00056
6 ASE-57A	55.1	80.1	ASE-57A-1001	2-18-10	1021	SU	AIR	REG	1	G	00097
7 ASE-8V-S	46	66	BU-S-1001	2-18-10	1352	SU	AIR	REG	1	G	00180
8	-	-	BU-S-1001-1001	2-18-10	-	SU	AIR	REG	1	G	00083
9	-	-	BU-S-1001-1001	2-18-10	-	SU	AIR	REG	1	G	00079
10											
11											
12											
Retrieved by: [Signature]		Company: CH2M HILL		Received by: [Signature]		Company: [Signature]		Condition: [Signature]		Custody Seals Intact	
Retrieved by: [Signature]		Company: CH2M HILL		Received by: [Signature]		Company: [Signature]		Condition: [Signature]		Custody Seals Intact	
Preservatives: (Other: See body):		Date/Time: 2/18/10		Date/Time: 2/18/10		Date/Time: 2/18/10		Date/Time: 2/18/10		Date/Time: 2/18/10	
0 (none); 1 (4 Deg C); 2 (HClO3 pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 pH<2); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 pH<2); 4 Deg C); 11 (4C NaOH (pH>12) & Acetic Acid); 12 (4C H2SO4 (pH<2) & Na2SO3); 13 (2n Acetate); sp (special instructions)											

218411

Curtis & Tompkins Laboratories 2323 5th St. Berkeley, CA 94710 510-504-2221		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 40210.49633 COC#: 37280															
Sampling Co.: CH2M HILL Client Contact: (name, co., address) CH2M HILL 2625 South Plaza Drive, Suite 300 Tempe, AZ 85282 Preliminary Data To: [Redacted] Sample Receipt: [Redacted] Acknowledgement To: [Redacted] Hard Copy To: [Redacted] Invoice To: [Redacted]		Privileged & Confidential EDO To: [Redacted] Sampler: L-ASJ Peterson PG #: 5101518 Analysis Turnaround Time (TAT): 10 Consultant: [Redacted]		Site Name: Sky Harbor, AZ Location of Site: Phoenix, AZ Preservatives: 0 0 0 0 0 Field Filtered Sample? [Redacted]		Phase: Sampling Program BSVF QTR SVM		Lab Proj # (SDG): Lab ID: Site ID: Lab Job #: Authorized User: Honeywell Text & Excel File Drive - [Redacted]		Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.		Canister Serial No.															
Sample Identification		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		# of Cont.		Units		Sampling Method (code)		Canister Serial No.									
Location ID		Start Depth (ft)		End Depth (ft)		Field Sample ID		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		# of Cont.		Units		Sampling Method (code)		Canister Serial No.			
19-	P-38	5.5	6.0	6.0	P-38-10Q1	2/17/10	0946	SV	AIR	REG	1	GN	X														
20-	SVV-2	5.5	6.0	6.0	SVV-2-10Q1	2/17/10	1021	SV	AIR	REG	1	GN	X														
21-	SVV-3	5.0	5.5	5.5	SVV-3-10Q1	2/17/10	1120	SV	AIR	REG	1	GN	X														
22-	SVV-4	5.0	5.5	5.5	SVV-4-10Q1	2/17/10	1141	SV	AIR	REG	1	GN	X														
23-	P-35	5.5	6.0	6.0	P-35-10Q1	2/17/10	1219	SV	AIR	REG	1	GN	X														
	P-33	5.5	6.0	6.0	P-33-10Q1	2/17/10		SV	AIR	REG	1	GN	X														
7																											
8																											
9																											
10																											
11																											
12																											
Relinquished by [Signature]		Company CH2M Hill		Received by [Signature]		Company CH2M Hill		Condition Cooler Temp.		Custody Seals Intact		Date/Time 2-17-10 1500		Date/Time 2-18-10 1555		Date/Time		Date/Time		Condition Cooler Temp.		Custody Seals Intact		Date/Time		Date/Time	
Relinquished by [Signature]		Company CH2M Hill		Received by [Signature]		Company CH2M Hill		Condition Cooler Temp.		Custody Seals Intact		Date/Time 2-18-10 1600		Date/Time		Date/Time		Condition Cooler Temp.		Custody Seals Intact		Date/Time		Date/Time			
Preservatives: (Other, Specify):		0 (none), 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH, Zn Acetate); 6 (NaOH, Zn Acetate); 7 (H2SO4 pH<2); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 pH<2); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)																									

218411

Curtis & Tompkins Laboratories 2223 5th St. Berkeley, CA 94710 510-204-2221		Honeywell Chain Of Custody / Analysis Request										AESL Ref: 40210-49633 COCK 37380			
Sampling Co.: CH2M HILL Client Contact: (name, co., address) CH2M HILL 2625 South Plaza Drive, Suite 300 Tempe, AZ 85282		Privileged & Confidential EDD To: Tuesday Powers, Critigen Melanie West, Critigen		Site Name: Sky Harbor AZ Location of Site: Phoenix, AZ		Phase: Sampling Program BESVE QTR SVM		Lab ID		Lab Job #		Lab Pro # (SDG):		CTBERK	
Sampiler: <i>Travis Lopez</i>		Analyst: <i>Travis Lopez</i>		Preservative: 0 0 0 0		Field Filtered Sample ?		Methane (TO-3M)		TPH (TO-3M)		O2 and CO2 (ASTM 1946)		SKYHARBOR	
PO # 5101518		Analysis Turnaround Time (TAT): 10		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		Honeywell	
Consultant		Full Report TAT: 10		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		Honeywell	
Invoice To: Honeywell/Copy Benny K&D		Sample Identification		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		Honeywell	
Location ID		Start Depth (ft)		End Depth (ft)		Field Sample ID		Units		Compos/Grab		Field Filtered Sample ?		Copyright AESL Version 4.0. Manualized use hereby prohibited.	
37	1	BU-1N	55	105	BU-1N-1001	02-16-10	0821	SV	AIR	REG	1	SV	X	X	254
38	2	BU-13N	55	95	BU-13N-1001	02-16-10	0910	SU	AIR	REG	1	SU	X	X	259
39	3	BU-3N	55	105	BU-3N-1001	02-16-10	0953	SU	AIR	REG	1	SU	X	X	290
40	4	BU-13N	55	105	BU-13N-1001	02-16-10	1057	SU	AIR	REG	1	SU	X	X	274
41	5	BU-15N	55	85	BU-15N-1001	02-16-10	1113	SU	AIR	REG	1	SU	X	X	262
42	6	BU-11N	55	95	BU-11N-1001	02-16-10	1146	SU	AIR	REG	1	SU	X	X	244
43	7	BU-1N	55	105	BU-1N-1001	02-16-10	1315	SU	AIR	REG	1	SU	X	X	86
44	8	BU-10N	55	95	BU-10N-1001	02-16-10	1358	SU	AIR	REG	1	SU	X	X	148
45	9	-	-	-	BU-E-SUN-1001	02-16-10	1414	SU	AIR	REG	1	SU	X	X	123
10	10														
11	11														
12	12														

Relinquished by: *[Signature]* Company: CH2M HILL Date/Time: 02-18-2010 1450 Condition: Cooler Temp. Custody Seals Intact

Relinquished by: *[Signature]* Company: CH2M HILL Date/Time: 02-18-2010 1600 Condition: Cooler Temp. Custody Seals Intact

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

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218411 Date Received 2/19/10 Number of ^{BOX} coolers 3
 Client CH2M HILL Project B9VE QTR SVIA

Date Opened 2/19/10 By (print) M. Villanueva (sign) [Signature]
 Date Logged in 2/20/10 By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
 Shipping info FEDEX 8705 4294 3017

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
 How many 8 Name DELTA TUBE Date 2/19/10

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:

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

Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? _____ YES NO

If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? _____ YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

#14 IDK ON SAMPLE ASE-20A-10Q1

Laboratory Job Number 218411

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-23N-10Q1	Diln Fac:	250.8
Lab ID:	218411-001	Batch#:	160722
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	130	ND	320	D1
Chloroethane	ND	130	ND	330	D1
1,1-Dichloroethene	ND	130	ND	500	D1
1,1-Dichloroethane	310	130	1,200	510	D1
MTBE	ND	130	ND	450	D1
cis-1,2-Dichloroethene	420	130	1,700	500	D1
n-Hexane	9,500	130	33,000	440	D1
Chloroform	ND	130	ND	610	D1
Benzene	150	130	490	400	D1
Trichloroethene	980	130	5,300	670	D1
Toluene	200	130	760	470	D1
Tetrachloroethene	ND	130	ND	850	D1
Ethylbenzene	1,200	130	5,100	540	D1
m,p-Xylenes	2,300	130	9,800	540	D1
o-Xylene	360	130	1,600	540	D1
1,3,5-Trimethylbenzene	1,900	130	9,100	620	D1
1,2,4-Trimethylbenzene	5,900	130	29,000	620	D1
Xylene (total)	2,600	250	11,000	1,100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	111	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-24N-10Q1	Diln Fac:	246.0
Lab ID:	218411-002	Batch#:	160722
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	120	ND	310	D1
Chloroethane	ND	120	ND	320	D1
1,1-Dichloroethene	ND	120	ND	490	D1
1,1-Dichloroethane	ND	120	ND	500	D1
MTBE	ND	120	ND	440	D1
cis-1,2-Dichloroethene	ND	120	ND	490	D1
n-Hexane	480	120	1,700	430	D1
Chloroform	ND	120	ND	600	D1
Benzene	ND	120	ND	390	D1
Trichloroethene	ND	120	ND	660	D1
Toluene	ND	120	ND	460	D1
Tetrachloroethene	ND	120	ND	830	D1
Ethylbenzene	560	120	2,400	530	D1
m,p-Xylenes	1,200	120	5,200	530	D1
o-Xylene	180	120	770	530	D1
1,3,5-Trimethylbenzene	1,100	120	5,200	600	D1
1,2,4-Trimethylbenzene	2,300	120	12,000	600	D1
Xylene (total)	1,400	250	6,000	1,100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-25N-10Q1	Diln Fac:	542.4
Lab ID:	218411-003	Batch#:	160722
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	270	ND	690	D1
Chloroethane	ND	270	ND	720	D1
1,1-Dichloroethene	ND	270	ND	1,100	D1
1,1-Dichloroethane	ND	270	ND	1,100	D1
MTBE	ND	270	ND	980	D1
cis-1,2-Dichloroethene	ND	270	ND	1,100	D1
n-Hexane	1,700	270	6,000	960	D1
Chloroform	ND	270	ND	1,300	D1
Benzene	ND	270	ND	870	D1
Trichloroethene	ND	270	ND	1,500	D1
Toluene	ND	270	ND	1,000	D1
Tetrachloroethene	ND	270	ND	1,800	D1
Ethylbenzene	4,700	270	21,000	1,200	D1
m,p-Xylenes	7,300	270	32,000	1,200	D1
o-Xylene	930	270	4,000	1,200	D1
1,3,5-Trimethylbenzene	2,500	270	12,000	1,300	D1
1,2,4-Trimethylbenzene	9,300	270	46,000	1,300	D1
Xylene (total)	8,200	540	36,000	2,400	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-41A-10Q1	Diln Fac:	77.60
Lab ID:	218411-004	Batch#:	160722
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/08/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	39	ND	99	D1
Chloroethane	ND	39	ND	100	D1
1,1-Dichloroethene	ND	39	ND	150	D1
1,1-Dichloroethane	ND	39	ND	160	D1
MTBE	ND	39	ND	140	D1
cis-1,2-Dichloroethene	ND	39	ND	150	D1
n-Hexane	300	39	1,100	140	D1
Chloroform	ND	39	ND	190	D1
Benzene	ND	39	ND	120	D1
Trichloroethene	ND	39	ND	210	D1
Toluene	ND	39	ND	150	D1
Tetrachloroethene	58	39	390	260	D1
Ethylbenzene	90	39	390	170	D1
m,p-Xylenes	160	39	680	170	D1
o-Xylene	ND	39	ND	170	D1
1,3,5-Trimethylbenzene	170	39	810	190	D1
1,2,4-Trimethylbenzene	610	39	3,000	190	D1
Xylene (total)	160	78	680	340	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	121	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-18N-10Q1	Diln Fac:	542.4
Lab ID:	218411-005	Batch#:	160722
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	270	ND	690	D1
Chloroethane	ND	270	ND	720	D1
1,1-Dichloroethene	ND	270	ND	1,100	D1
1,1-Dichloroethane	ND	270	ND	1,100	D1
MTBE	ND	270	ND	980	D1
cis-1,2-Dichloroethene	ND	270	ND	1,100	D1
n-Hexane	1,500	270	5,100	960	D1
Chloroform	ND	270	ND	1,300	D1
Benzene	520	270	1,700	870	D1
Trichloroethene	ND	270	ND	1,500	D1
Toluene	ND	270	ND	1,000	D1
Tetrachloroethene	ND	270	ND	1,800	D1
Ethylbenzene	ND	270	ND	1,200	D1
m,p-Xylenes	500	270	2,200	1,200	D1
o-Xylene	ND	270	ND	1,200	D1
1,3,5-Trimethylbenzene	430	270	2,100	1,300	D1
1,2,4-Trimethylbenzene	1,600	270	7,900	1,300	D1
Xylene (total)	500	270	2,200	1,200	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	120	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-22N-10Q1	Diln Fac:	190.8
Lab ID:	218411-006	Batch#:	160722
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	95	ND	240	D1
Chloroethane	ND	95	ND	250	D1
1,1-Dichloroethene	ND	95	ND	380	D1
1,1-Dichloroethane	120	95	480	390	D1
MTBE	ND	95	ND	340	D1
cis-1,2-Dichloroethene	ND	95	ND	380	D1
n-Hexane	ND	95	ND	340	D1
Chloroform	ND	95	ND	470	D1
Benzene	ND	95	ND	300	D1
Trichloroethene	ND	95	ND	510	D1
Toluene	ND	95	ND	360	D1
Tetrachloroethene	170	95	1,200	650	D1
Ethylbenzene	480	95	2,100	410	D1
m,p-Xylenes	780	95	3,400	410	D1
o-Xylene	ND	95	ND	410	D1
1,3,5-Trimethylbenzene	1,100	95	5,600	470	D1
1,2,4-Trimethylbenzene	2,600	95	13,000	470	D1
Xylene (total)	780	190	3,400	830	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	116	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	PL-101A-10Q1	Diln Fac:	86.80
Lab ID:	218411-007	Batch#:	160765
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/10/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	43	ND	110	D1
Chloroethane	ND	43	ND	110	D1
1,1-Dichloroethene	ND	43	ND	170	D1
1,1-Dichloroethane	ND	43	ND	180	D1
MTBE	ND	43	ND	160	D1
cis-1,2-Dichloroethene	ND	43	ND	170	D1
n-Hexane	ND	43	ND	150	D1
Chloroform	ND	43	ND	210	D1
Benzene	ND	43	ND	140	D1
Trichloroethene	ND	43	ND	230	D1
Toluene	ND	43	ND	160	D1
Tetrachloroethene	ND	43	ND	290	D1
Ethylbenzene	ND	43	ND	190	D1
m,p-Xylenes	45	43	200	190	D1
o-Xylene	ND	43	ND	190	D1
1,3,5-Trimethylbenzene	96	43	470	210	D1
1,2,4-Trimethylbenzene	340	43	1,700	210	D1
Xylene (total)	45	43	200	190	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	110	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-39A-10Q1	Diln Fac:	528.0
Lab ID:	218411-008	Batch#:	160722
Matrix:	Air	Sampled:	02/12/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	260	ND	670	D1
Chloroethane	ND	260	ND	700	D1
1,1-Dichloroethene	ND	260	ND	1,000	D1
1,1-Dichloroethane	ND	260	ND	1,100	D1
MTBE	2,900	260	10,000	950	D1
cis-1,2-Dichloroethene	ND	260	ND	1,000	D1
n-Hexane	310	260	1,100	930	D1
Chloroform	ND	260	ND	1,300	D1
Benzene	810	260	2,600	840	D1
Trichloroethene	ND	260	ND	1,400	D1
Toluene	ND	260	ND	990	D1
Tetrachloroethene	ND	260	ND	1,800	D1
Ethylbenzene	ND	260	ND	1,100	D1
m,p-Xylenes	ND	260	ND	1,100	D1
o-Xylene	ND	260	ND	1,100	D1
1,3,5-Trimethylbenzene	ND	260	ND	1,300	D1
1,2,4-Trimethylbenzene	ND	260	ND	1,300	D1
Xylene (total)	ND	530	ND	2,300	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-20N-10Q1	Diln Fac:	242.4
Lab ID:	218411-009	Batch#:	160765
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/10/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	120	ND	310	D1
Chloroethane	ND	120	ND	320	D1
1,1-Dichloroethene	ND	120	ND	480	D1
1,1-Dichloroethane	ND	120	ND	490	D1
MTBE	ND	120	ND	440	D1
cis-1,2-Dichloroethene	ND	120	ND	480	D1
n-Hexane	380	120	1,300	430	D1
Chloroform	ND	120	ND	590	D1
Benzene	180	120	580	390	D1
Trichloroethene	ND	120	ND	650	D1
Toluene	ND	120	ND	460	D1
Tetrachloroethene	ND	120	ND	820	D1
Ethylbenzene	250	120	1,100	530	D1
m,p-Xylenes	280	120	1,200	530	D1
o-Xylene	ND	120	ND	530	D1
1,3,5-Trimethylbenzene	ND	120	ND	600	D1
1,2,4-Trimethylbenzene	350	120	1,700	600	D1
Xylene (total)	280	240	1,200	1,100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	109	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-51A-10Q1	Diln Fac:	468.0
Lab ID:	218411-010	Batch#:	160765
Matrix:	Air	Sampled:	02/18/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/10/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	230	ND	600	D2
Chloroethane	ND	230	ND	620	D2
1,1-Dichloroethene	ND	230	ND	930	D2
1,1-Dichloroethane	2,100	230	8,400	950	D2
MTBE	1,200	230	4,200	840	D2
cis-1,2-Dichloroethene	ND	230	ND	930	D2
n-Hexane	44,000	230	160,000	820	D2
Chloroform	ND	230	ND	1,100	D2
Benzene	8,400	230	27,000	750	D2
Trichloroethene	ND	230	ND	1,300	D2
Toluene	ND	230	ND	880	D2
Tetrachloroethene	ND	230	ND	1,600	D2
Ethylbenzene	3,500	230	15,000	1,000	D2
m,p-Xylenes	ND	230	ND	1,000	D2
o-Xylene	ND	230	ND	1,000	D2
1,3,5-Trimethylbenzene	ND	230	ND	1,200	D2
1,2,4-Trimethylbenzene	260	230	1,300	1,200	D2
Xylene (total)	ND	470	ND	2,000	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	95	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-14N-10Q1	Units (M):	ug/m3
Lab ID:	218411-011	Sampled:	02/18/10
Matrix:	Air	Received:	02/19/10
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Vinyl Chloride	ND	250	ND	640	499.2	160765	03/10/10	D2	
Chloroethane	ND	250	ND	660	499.2	160765	03/10/10	D2	
1,1-Dichloroethene	ND	250	ND	990	499.2	160765	03/10/10	D2	
1,1-Dichloroethane	ND	250	ND	1,000	499.2	160765	03/10/10	D2	
MTBE	2,300	250	8,300	900	499.2	160765	03/10/10	D2	
cis-1,2-Dichloroethene	ND	250	ND	990	499.2	160765	03/10/10	D2	
n-Hexane	55,000	830	190,000	2,900	1,664	160838	03/11/10	D1	
Chloroform	ND	250	ND	1,200	499.2	160765	03/10/10	D2	
Benzene	18,000	250	57,000	800	499.2	160765	03/10/10	D2	
Trichloroethene	ND	250	ND	1,300	499.2	160765	03/10/10	D2	
Toluene	ND	250	ND	940	499.2	160765	03/10/10	D2	
Tetrachloroethene	ND	250	ND	1,700	499.2	160765	03/10/10	D2	
Ethylbenzene	6,400	250	28,000	1,100	499.2	160765	03/10/10	D2	
m,p-Xylenes	3,700	250	16,000	1,100	499.2	160765	03/10/10	D2	
o-Xylene	ND	250	ND	1,100	499.2	160765	03/10/10	D2	
1,3,5-Trimethylbenzene	420	250	2,100	1,200	499.2	160765	03/10/10	D2	
1,2,4-Trimethylbenzene	2,400	250	12,000	1,200	499.2	160765	03/10/10	D2	
Xylene (total)	3,700	500	16,000	2,200	499.2	160765	03/10/10	D2	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Bromofluorobenzene	102	70-130	499.2	160765	03/10/10		

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-66A-10Q1	Diln Fac:	501.6
Lab ID:	218411-012	Batch#:	160838
Matrix:	Air	Sampled:	02/18/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/11/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	250	ND	640	D1
Chloroethane	ND	250	ND	660	D1
1,1-Dichloroethene	ND	250	ND	990	D1
1,1-Dichloroethane	ND	250	ND	1,000	D1
MTBE	ND	250	ND	900	D1
cis-1,2-Dichloroethene	ND	250	ND	990	D1
n-Hexane	3,900	250	14,000	880	D1
Chloroform	ND	250	ND	1,200	D1
Benzene	ND	250	ND	800	D1
Trichloroethene	ND	250	ND	1,300	D1
Toluene	ND	250	ND	950	D1
Tetrachloroethene	ND	250	ND	1,700	D1
Ethylbenzene	1,400	250	5,900	1,100	D1
m,p-Xylenes	7,100	250	31,000	1,100	D1
o-Xylene	690	250	3,000	1,100	D1
1,3,5-Trimethylbenzene	3,600	250	18,000	1,200	D1
1,2,4-Trimethylbenzene	8,700	250	43,000	1,200	D1
Xylene (total)	7,700	500	34,000	2,200	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	122	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-17N-10Q1	Diln Fac:	41.80
Lab ID:	218411-013	Batch#:	160838
Matrix:	Air	Sampled:	02/18/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/11/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	21	ND	53	D1
Chloroethane	ND	21	ND	55	D1
1,1-Dichloroethene	ND	21	ND	83	D1
1,1-Dichloroethane	ND	21	ND	85	D1
MTBE	ND	21	ND	75	D1
cis-1,2-Dichloroethene	ND	21	ND	83	D1
n-Hexane	1,300	21	4,700	74	D1
Chloroform	ND	21	ND	100	D1
Benzene	25	21	79	67	D1
Trichloroethene	ND	21	ND	110	D1
Toluene	ND	21	ND	79	D1
Tetrachloroethene	ND	21	ND	140	D1
Ethylbenzene	51	21	220	91	D1
m,p-Xylenes	150	21	660	91	D1
o-Xylene	35	21	150	91	D1
1,3,5-Trimethylbenzene	140	21	670	100	D1
1,2,4-Trimethylbenzene	410	21	2,000	100	D1
Xylene (total)	190	42	810	180	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	121	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-20A-10Q1	Diln Fac:	1,632
Lab ID:	218411-014	Batch#:	160765
Matrix:	Air	Sampled:	02/18/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/10/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	820	ND	2,100	D2
Chloroethane	ND	820	ND	2,200	D2
1,1-Dichloroethene	ND	820	ND	3,200	D2
1,1-Dichloroethane	ND	820	ND	3,300	D2
MTBE	ND	820	ND	2,900	D2
cis-1,2-Dichloroethene	9,200	820	37,000	3,200	D2
n-Hexane	110,000	820	380,000	2,900	D2
Chloroform	ND	820	ND	4,000	D2
Benzene	1,600	820	5,000	2,600	D2
Trichloroethene	12,000	820	63,000	4,400	D2
Toluene	1,800	820	6,900	3,100	D2
Tetrachloroethene	ND	820	ND	5,500	D2
Ethylbenzene	6,100	820	27,000	3,500	D2
m,p-Xylenes	19,000	820	82,000	3,500	D2
o-Xylene	4,000	820	17,000	3,500	D2
1,3,5-Trimethylbenzene	5,300	820	26,000	4,000	D2
1,2,4-Trimethylbenzene	17,000	820	81,000	4,000	D2
Xylene (total)	23,000	1,600	99,000	7,100	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	118	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-57A-10Q1	Diln Fac:	482.4
Lab ID:	218411-015	Batch#:	160838
Matrix:	Air	Sampled:	02/18/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/11/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	240	ND	620	D2
Chloroethane	ND	240	ND	640	D2
1,1-Dichloroethene	ND	240	ND	960	D2
1,1-Dichloroethane	720	240	2,900	980	D2
MTBE	ND	240	ND	870	D2
cis-1,2-Dichloroethene	ND	240	ND	960	D2
n-Hexane	27,000	240	96,000	850	D2
Chloroform	ND	240	ND	1,200	D2
Benzene	1,400	240	4,500	770	D2
Trichloroethene	ND	240	ND	1,300	D2
Toluene	ND	240	ND	910	D2
Tetrachloroethene	ND	240	ND	1,600	D2
Ethylbenzene	2,200	240	9,800	1,000	D2
m,p-Xylenes	6,500	240	28,000	1,000	D2
o-Xylene	380	240	1,600	1,000	D2
1,3,5-Trimethylbenzene	2,100	240	10,000	1,200	D2
1,2,4-Trimethylbenzene	7,200	240	35,000	1,200	D2
Xylene (total)	6,900	480	30,000	2,100	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	117	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-5-10Q1	Diln Fac:	254.4
Lab ID:	218411-016	Batch#:	160765
Matrix:	Air	Sampled:	02/18/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/10/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	130	ND	330	D1
Chloroethane	ND	130	ND	340	D1
1,1-Dichloroethene	ND	130	ND	500	D1
1,1-Dichloroethane	ND	130	ND	510	D1
MTBE	610	130	2,200	460	D1
cis-1,2-Dichloroethene	ND	130	ND	500	D1
n-Hexane	380	130	1,300	450	D1
Chloroform	ND	130	ND	620	D1
Benzene	910	130	2,900	410	D1
Trichloroethene	ND	130	ND	680	D1
Toluene	ND	130	ND	480	D1
Tetrachloroethene	ND	130	ND	860	D1
Ethylbenzene	ND	130	ND	550	D1
m,p-Xylenes	140	130	610	550	D1
o-Xylene	ND	130	ND	550	D1
1,3,5-Trimethylbenzene	ND	130	ND	630	D1
1,2,4-Trimethylbenzene	410	130	2,000	630	D1
Xylene (total)	140	130	610	550	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	108	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-015	Diln Fac:	86.40
Lab ID:	218411-017	Batch#:	160722
Matrix:	Air	Sampled:	02/18/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	43	ND	110	D1
Chloroethane	ND	43	ND	110	D1
1,1-Dichloroethene	ND	43	ND	170	D1
1,1-Dichloroethane	ND	43	ND	170	D1
MTBE	ND	43	ND	160	D1
cis-1,2-Dichloroethene	ND	43	ND	170	D1
n-Hexane	1,600	43	5,800	150	D1
Chloroform	ND	43	ND	210	D1
Benzene	ND	43	ND	140	D1
Trichloroethene	ND	43	ND	230	D1
Toluene	ND	43	ND	160	D1
Tetrachloroethene	ND	43	ND	290	D1
Ethylbenzene	140	43	590	190	D1
m,p-Xylenes	440	43	1,900	190	D1
o-Xylene	100	43	450	190	D1
1,3,5-Trimethylbenzene	370	43	1,800	210	D1
1,2,4-Trimethylbenzene	1,100	43	5,600	210	D1
Xylene (total)	550	86	2,400	380	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	107	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-013	Diln Fac:	1,664
Lab ID:	218411-018	Batch#:	160765
Matrix:	Air	Sampled:	02/18/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/10/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	830	ND	2,100	D2
Chloroethane	ND	830	ND	2,200	D2
1,1-Dichloroethene	ND	830	ND	3,300	D2
1,1-Dichloroethane	ND	830	ND	3,400	D2
MTBE	ND	830	ND	3,000	D2
cis-1,2-Dichloroethene	9,300	830	37,000	3,300	D2
n-Hexane	110,000	830	390,000	2,900	D2
Chloroform	ND	830	ND	4,100	D2
Benzene	1,600	830	5,000	2,700	D2
Trichloroethene	12,000	830	62,000	4,500	D2
Toluene	1,800	830	7,000	3,100	D2
Tetrachloroethene	ND	830	ND	5,600	D2
Ethylbenzene	6,300	830	28,000	3,600	D2
m,p-Xylenes	20,000	830	89,000	3,600	D2
o-Xylene	4,300	830	19,000	3,600	D2
1,3,5-Trimethylbenzene	5,600	830	28,000	4,100	D2
1,2,4-Trimethylbenzene	17,000	830	83,000	4,100	D2
Xylene (total)	25,000	1,700	110,000	7,200	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	117	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-38-10Q1	Diln Fac:	23.88
Lab ID:	218411-019	Batch#:	160686
Matrix:	Air	Sampled:	02/17/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/08/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	12	ND	31	D1
Chloroethane	ND	12	ND	32	D1
1,1-Dichloroethene	ND	12	ND	47	D1
1,1-Dichloroethane	ND	12	ND	48	D1
MTBE	ND	12	ND	43	D1
cis-1,2-Dichloroethene	ND	12	ND	47	D1
n-Hexane	61	12	220	42	D1
Chloroform	ND	12	ND	58	D1
Benzene	19	12	59	38	D1
Trichloroethene	13	12	71	64	D1
Toluene	ND	12	ND	45	D1
Tetrachloroethene	25	12	170	81	D1
Ethylbenzene	83	12	360	52	D1
m,p-Xylenes	240	12	1,100	52	D1
o-Xylene	35	12	150	52	D1
1,3,5-Trimethylbenzene	170	12	820	59	D1
1,2,4-Trimethylbenzene	430	12	2,100	59	D1
Xylene (total)	280	24	1,200	100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SVV-2-10Q1	Diln Fac:	23.28
Lab ID:	218411-020	Batch#:	160686
Matrix:	Air	Sampled:	02/17/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/08/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	12	ND	30	D1
Chloroethane	ND	12	ND	31	D1
1,1-Dichloroethene	ND	12	ND	46	D1
1,1-Dichloroethane	ND	12	ND	47	D1
MTBE	ND	12	ND	42	D1
cis-1,2-Dichloroethene	ND	12	ND	46	D1
n-Hexane	16	12	55	41	D1
Chloroform	ND	12	ND	57	D1
Benzene	ND	12	ND	37	D1
Trichloroethene	ND	12	ND	63	D1
Toluene	ND	12	ND	44	D1
Tetrachloroethene	ND	12	ND	79	D1
Ethylbenzene	30	12	130	51	D1
m,p-Xylenes	82	12	360	51	D1
o-Xylene	13	12	57	51	D1
1,3,5-Trimethylbenzene	69	12	340	57	D1
1,2,4-Trimethylbenzene	190	12	920	57	D1
Xylene (total)	95	23	410	100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	113	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SVV-3-10Q1	Diln Fac:	6.030
Lab ID:	218411-021	Batch#:	160686
Matrix:	Air	Sampled:	02/17/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/07/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	3.0	ND	7.7	D1
Chloroethane	ND	3.0	ND	8.0	D1
1,1-Dichloroethene	ND	3.0	ND	12	D1
1,1-Dichloroethane	ND	3.0	ND	12	D1
MTBE	ND	3.0	ND	11	D1
cis-1,2-Dichloroethene	ND	3.0	ND	12	D1
n-Hexane	11	3.0	38	11	D1
Chloroform	ND	3.0	ND	15	D1
Benzene	5.9	3.0	19	9.6	D1
Trichloroethene	ND	3.0	ND	16	D1
Toluene	ND	3.0	ND	11	D1
Tetrachloroethene	ND	3.0	ND	20	D1
Ethylbenzene	18	3.0	77	13	D1
m,p-Xylenes	48	3.0	210	13	D1
o-Xylene	8.5	3.0	37	13	D1
1,3,5-Trimethylbenzene	34	3.0	170	15	D1
1,2,4-Trimethylbenzene	96	3.0	470	15	D1
Xylene (total)	56	6.0	240	26	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	107	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SVV-4-10Q1	Diln Fac:	5.880
Lab ID:	218411-022	Batch#:	160686
Matrix:	Air	Sampled:	02/17/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/07/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	2.9	ND	7.5	D1
Chloroethane	ND	2.9	ND	7.8	D1
1,1-Dichloroethene	ND	2.9	ND	12	D1
1,1-Dichloroethane	ND	2.9	ND	12	D1
MTBE	ND	2.9	ND	11	D1
cis-1,2-Dichloroethene	ND	2.9	ND	12	D1
n-Hexane	4.3	2.9	15	10	D1
Chloroform	ND	2.9	ND	14	D1
Benzene	ND	2.9	ND	9.4	D1
Trichloroethene	ND	2.9	ND	16	D1
Toluene	ND	2.9	ND	11	D1
Tetrachloroethene	5.4	2.9	37	20	D1
Ethylbenzene	8.1	2.9	35	13	D1
m,p-Xylenes	23	2.9	99	13	D1
o-Xylene	3.7	2.9	16	13	D1
1,3,5-Trimethylbenzene	17	2.9	86	14	D1
1,2,4-Trimethylbenzene	51	2.9	250	14	D1
Xylene (total)	26	5.9	110	26	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	119	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-35-10Q1	Batch#:	160686
Lab ID:	218411-023	Sampled:	02/17/10
Matrix:	Air	Received:	02/19/10
Units (V):	ppbv	Analyzed:	03/07/10
Units (M):	ug/m3		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	ADEQ Flags
Vinyl Chloride	ND	2.9	ND	7.4	5.820	D2
Chloroethane	ND	2.9	ND	7.7	5.820	D2
1,1-Dichloroethene	ND	2.9	ND	12	5.820	D2
1,1-Dichloroethane	ND	2.9	ND	12	5.820	D2
MTBE	ND	2.9	ND	10	5.820	D2
cis-1,2-Dichloroethene	ND	2.9	ND	12	5.820	D2
n-Hexane	8.1	2.9	28	10	5.820	D2
Chloroform	ND	2.9	ND	14	5.820	D2
Benzene	3.5	2.9	11	9.3	5.820	D2
Trichloroethene	140	2.9	770	16	5.820	D2
Toluene	ND	2.9	ND	11	5.820	D2
Tetrachloroethene	870	5.8	5,900	39	11.64	D2
Ethylbenzene	10	2.9	45	13	5.820	D2
m,p-Xylenes	30	2.9	130	13	5.820	D2
o-Xylene	4.9	2.9	21	13	5.820	D2
1,3,5-Trimethylbenzene	22	2.9	110	14	5.820	D2
1,2,4-Trimethylbenzene	63	2.9	310	14	5.820	D2
Xylene (total)	35	5.8	150	25	5.820	D2

Surrogate	%REC	Limits	Diln Fac	ADEQ Flags
Bromofluorobenzene	109	70-130	5.820	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	SVV-1-10Q1	Diln Fac:	6.960
Lab ID:	218411-024	Batch#:	160686
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/07/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	3.5	ND	8.9	D1
Chloroethane	ND	3.5	ND	9.2	D1
1,1-Dichloroethene	ND	3.5	ND	14	D1
1,1-Dichloroethane	ND	3.5	ND	14	D1
MTBE	ND	3.5	ND	13	D1
cis-1,2-Dichloroethene	ND	3.5	ND	14	D1
n-Hexane	28	3.5	97	12	D1
Chloroform	ND	3.5	ND	17	D1
Benzene	ND	3.5	ND	11	D1
Trichloroethene	5.3	3.5	28	19	D1
Toluene	ND	3.5	ND	13	D1
Tetrachloroethene	ND	3.5	ND	24	D1
Ethylbenzene	27	3.5	120	15	D1
m,p-Xylenes	92	3.5	400	15	D1
o-Xylene	7.8	3.5	34	15	D1
1,3,5-Trimethylbenzene	47	3.5	230	17	D1
1,2,4-Trimethylbenzene	200	3.5	990	17	D1
Xylene (total)	99	7.0	430	30	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	115	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-41-10Q1	Diln Fac:	2.250
Lab ID:	218411-025	Batch#:	160686
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/07/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
1,1-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	4.3	1.1	17	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	ND	1.1	ND	4.0	D1
Chloroform	2.4	1.1	12	5.5	D1
Benzene	ND	1.1	ND	3.6	D1
Trichloroethene	49	1.1	260	6.0	D1
Toluene	ND	1.1	ND	4.2	D1
Tetrachloroethene	2.0	1.1	13	7.6	D1
Ethylbenzene	5.3	1.1	23	4.9	D1
m,p-Xylenes	19	1.1	83	4.9	D1
o-Xylene	1.4	1.1	6.3	4.9	D1
1,3,5-Trimethylbenzene	14	1.1	71	5.5	D1
1,2,4-Trimethylbenzene	61	1.1	300	5.5	D1
Xylene (total)	20	2.3	89	9.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	112	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-32-10Q1	Diln Fac:	2.330
Lab ID:	218411-026	Batch#:	160686
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/07/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.0	D2
Chloroethane	ND	1.2	ND	3.1	D2
1,1-Dichloroethene	ND	1.2	ND	4.6	D2
1,1-Dichloroethane	ND	1.2	ND	4.7	D2
MTBE	ND	1.2	ND	4.2	D2
cis-1,2-Dichloroethene	ND	1.2	ND	4.6	D2
n-Hexane	ND	1.2	ND	4.1	D2
Chloroform	ND	1.2	ND	5.7	D2
Benzene	ND	1.2	ND	3.7	D2
Trichloroethene	190	1.2	1,000	6.3	D2
Toluene	ND	1.2	ND	4.4	D2
Tetrachloroethene	9.8	1.2	67	7.9	D2
Ethylbenzene	7.8	1.2	34	5.1	D2
m,p-Xylenes	30	1.2	130	5.1	D2
o-Xylene	2.6	1.2	11	5.1	D2
1,3,5-Trimethylbenzene	24	1.2	120	5.7	D2
1,2,4-Trimethylbenzene	110	1.2	540	5.7	D2
Xylene (total)	32	2.3	140	10	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	104	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-011	Batch#:	160686
Lab ID:	218411-027	Sampled:	02/16/10
Matrix:	Air	Received:	02/19/10
Units (V):	ppbv	Analyzed:	03/07/10
Units (M):	ug/m3		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.0	2.310	D2
Chloroethane	ND	1.2	ND	3.0	2.310	D2
1,1-Dichloroethene	ND	1.2	ND	4.6	2.310	D2
1,1-Dichloroethane	ND	1.2	ND	4.7	2.310	D2
MTBE	ND	1.2	ND	4.2	2.310	D2
cis-1,2-Dichloroethene	2.9	1.2	11	4.6	2.310	D2
n-Hexane	31	1.2	110	4.1	2.310	D2
Chloroform	ND	1.2	ND	5.6	2.310	D2
Benzene	ND	1.2	ND	3.7	2.310	D2
Trichloroethene	310	2.3	1,700	12	4.620	D2
Toluene	ND	1.2	ND	4.4	2.310	D2
Tetrachloroethene	9.8	1.2	67	7.8	2.310	D2
Ethylbenzene	4.3	1.2	19	5.0	2.310	D2
m,p-Xylenes	15	1.2	65	5.0	2.310	D2
o-Xylene	2.2	1.2	9.7	5.0	2.310	D2
1,3,5-Trimethylbenzene	11	1.2	52	5.7	2.310	D2
1,2,4-Trimethylbenzene	44	1.2	220	5.7	2.310	D2
Xylene (total)	17	2.3	75	10	2.310	D2

Surrogate	%REC	Limits	Diln Fac	ADEQ Flags
Bromofluorobenzene	109	70-130	2.310	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-39-10Q1	Diln Fac:	2.220
Lab ID:	218411-028	Batch#:	160681
Matrix:	Air	Sampled:	02/17/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
1,1-Dichloroethene	ND	1.1	ND	4.4	D1
1,1-Dichloroethane	ND	1.1	ND	4.5	D1
MTBE	ND	1.1	ND	4.0	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
n-Hexane	4.6	1.1	16	3.9	D1
Chloroform	ND	1.1	ND	5.4	D1
Benzene	ND	1.1	ND	3.5	D1
Trichloroethene	1.5	1.1	7.9	6.0	D1
Toluene	1.4	1.1	5.1	4.2	D1
Tetrachloroethene	1.9	1.1	13	7.5	D1
Ethylbenzene	5.1	1.1	22	4.8	D1
m,p-Xylenes	20	1.1	86	4.8	D1
o-Xylene	2.0	1.1	8.7	4.8	D1
1,3,5-Trimethylbenzene	16	1.1	79	5.5	D1
1,2,4-Trimethylbenzene	62	1.1	300	5.5	D1
Xylene (total)	22	2.2	94	9.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	119	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-31-10Q1	Diln Fac:	2.250
Lab ID:	218411-029	Batch#:	160681
Matrix:	Air	Sampled:	02/17/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
1,1-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	ND	1.1	ND	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	1.3	1.1	4.7	4.0	D1
Chloroform	ND	1.1	ND	5.5	D1
Benzene	1.2	1.1	4.0	3.6	D1
Trichloroethene	ND	1.1	ND	6.0	D1
Toluene	ND	1.1	ND	4.2	D1
Tetrachloroethene	ND	1.1	ND	7.6	D1
Ethylbenzene	2.2	1.1	9.4	4.9	D1
m,p-Xylenes	7.9	1.1	34	4.9	D1
o-Xylene	ND	1.1	ND	4.9	D1
1,3,5-Trimethylbenzene	5.9	1.1	29	5.5	D1
1,2,4-Trimethylbenzene	29	1.1	140	5.5	D1
Xylene (total)	7.9	2.3	34	9.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	103	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-36-10Q1	Batch#:	160681
Lab ID:	218411-030	Sampled:	02/17/10
Matrix:	Air	Received:	02/19/10
Units (V):	ppbv	Analyzed:	03/06/10
Units (M):	ug/m3		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.7	2.120	D2
Chloroethane	ND	1.1	ND	2.8	2.120	D2
1,1-Dichloroethene	22	1.1	86	4.2	2.120	D2
1,1-Dichloroethane	320	2.1	1,300	8.6	4.240	D2
MTBE	ND	1.1	ND	3.8	2.120	D2
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	2.120	D2
n-Hexane	ND	1.1	ND	3.7	2.120	D2
Chloroform	ND	1.1	ND	5.2	2.120	D2
Benzene	ND	1.1	ND	3.4	2.120	D2
Trichloroethene	6.9	1.1	37	5.7	2.120	D2
Toluene	1.2	1.1	4.4	4.0	2.120	D2
Tetrachloroethene	4.7	1.1	32	7.2	2.120	D2
Ethylbenzene	1.3	1.1	5.6	4.6	2.120	D2
m,p-Xylenes	5.1	1.1	22	4.6	2.120	D2
o-Xylene	ND	1.1	ND	4.6	2.120	D2
1,3,5-Trimethylbenzene	3.9	1.1	19	5.2	2.120	D2
1,2,4-Trimethylbenzene	19	1.1	93	5.2	2.120	D2
Xylene (total)	5.1	2.1	22	9.2	2.120	D2

Surrogate	%REC	Limits	Diln Fac	ADEQ Flags
Bromofluorobenzene	102	70-130	2.120	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-37-10Q1	Diln Fac:	2.250
Lab ID:	218411-031	Batch#:	160681
Matrix:	Air	Sampled:	02/17/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.9	D1
Chloroethane	ND	1.1	ND	3.0	D1
1,1-Dichloroethene	ND	1.1	ND	4.5	D1
1,1-Dichloroethane	ND	1.1	ND	4.6	D1
MTBE	ND	1.1	ND	4.1	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.5	D1
n-Hexane	ND	1.1	ND	4.0	D1
Chloroform	ND	1.1	ND	5.5	D1
Benzene	ND	1.1	ND	3.6	D1
Trichloroethene	5.3	1.1	29	6.0	D1
Toluene	ND	1.1	ND	4.2	D1
Tetrachloroethene	ND	1.1	ND	7.6	D1
Ethylbenzene	ND	1.1	ND	4.9	D1
m,p-Xylenes	4.4	1.1	19	4.9	D1
o-Xylene	ND	1.1	ND	4.9	D1
1,3,5-Trimethylbenzene	5.7	1.1	28	5.5	D1
1,2,4-Trimethylbenzene	25	1.1	120	5.5	D1
Xylene (total)	4.4	2.3	19	9.8	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	P-33-10Q1	Diln Fac:	2.340
Lab ID:	218411-032	Batch#:	160681
Matrix:	Air	Sampled:	02/17/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.2	ND	3.0	D1
Chloroethane	ND	1.2	ND	3.1	D1
1,1-Dichloroethene	ND	1.2	ND	4.6	D1
1,1-Dichloroethane	ND	1.2	ND	4.7	D1
MTBE	ND	1.2	ND	4.2	D1
cis-1,2-Dichloroethene	ND	1.2	ND	4.6	D1
n-Hexane	ND	1.2	ND	4.1	D1
Chloroform	ND	1.2	ND	5.7	D1
Benzene	ND	1.2	ND	3.7	D1
Trichloroethene	7.6	1.2	41	6.3	D1
Toluene	ND	1.2	ND	4.4	D1
Tetrachloroethene	11	1.2	75	7.9	D1
Ethylbenzene	ND	1.2	ND	5.1	D1
m,p-Xylenes	1.8	1.2	7.9	5.1	D1
o-Xylene	ND	1.2	ND	5.1	D1
1,3,5-Trimethylbenzene	1.6	1.2	7.7	5.8	D1
1,2,4-Trimethylbenzene	7.8	1.2	38	5.8	D1
Xylene (total)	1.8	1.2	7.9	5.1	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-9N-10Q1	Diln Fac:	149.4
Lab ID:	218411-033	Batch#:	160722
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	75	ND	190	D1
Chloroethane	ND	75	ND	200	D1
1,1-Dichloroethene	ND	75	ND	300	D1
1,1-Dichloroethane	ND	75	ND	300	D1
MTBE	ND	75	ND	270	D1
cis-1,2-Dichloroethene	ND	75	ND	300	D1
n-Hexane	110	75	390	260	D1
Chloroform	ND	75	ND	360	D1
Benzene	ND	75	ND	240	D1
Trichloroethene	ND	75	ND	400	D1
Toluene	ND	75	ND	280	D1
Tetrachloroethene	ND	75	ND	510	D1
Ethylbenzene	ND	75	ND	320	D1
m,p-Xylenes	ND	75	ND	320	D1
o-Xylene	ND	75	ND	320	D1
1,3,5-Trimethylbenzene	ND	75	ND	370	D1
1,2,4-Trimethylbenzene	140	75	670	370	D1
Xylene (total)	ND	150	ND	650	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	116	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-13N-10Q1	Diln Fac:	91.60
Lab ID:	218411-034	Batch#:	160722
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/08/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	46	ND	120	D1
Chloroethane	ND	46	ND	120	D1
1,1-Dichloroethene	ND	46	ND	180	D1
1,1-Dichloroethane	ND	46	ND	190	D1
MTBE	ND	46	ND	170	D1
cis-1,2-Dichloroethene	ND	46	ND	180	D1
n-Hexane	51	46	180	160	D1
Chloroform	ND	46	ND	220	D1
Benzene	ND	46	ND	150	D1
Trichloroethene	120	46	650	250	D1
Toluene	ND	46	ND	170	D1
Tetrachloroethene	ND	46	ND	310	D1
Ethylbenzene	ND	46	ND	200	D1
m,p-Xylenes	ND	46	ND	200	D1
o-Xylene	ND	46	ND	200	D1
1,3,5-Trimethylbenzene	ND	46	ND	230	D1
1,2,4-Trimethylbenzene	69	46	340	230	D1
Xylene (total)	ND	92	ND	400	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	117	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-3N-10Q1	Diln Fac:	26.40
Lab ID:	218411-035	Batch#:	160686
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/08/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	13	ND	34	D1
Chloroethane	ND	13	ND	35	D1
1,1-Dichloroethene	ND	13	ND	52	D1
1,1-Dichloroethane	61	13	250	53	D1
MTBE	ND	13	ND	48	D1
cis-1,2-Dichloroethene	ND	13	ND	52	D1
n-Hexane	74	13	260	47	D1
Chloroform	130	13	650	64	D1
Benzene	19	13	60	42	D1
Trichloroethene	24	13	130	71	D1
Toluene	ND	13	ND	50	D1
Tetrachloroethene	ND	13	ND	90	D1
Ethylbenzene	ND	13	ND	57	D1
m,p-Xylenes	25	13	110	57	D1
o-Xylene	ND	13	ND	57	D1
1,3,5-Trimethylbenzene	20	13	100	65	D1
1,2,4-Trimethylbenzene	53	13	260	65	D1
Xylene (total)	25	13	110	57	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	92	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-12N-10Q1	Diln Fac:	125.4
Lab ID:	218411-036	Batch#:	160722
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	63	ND	160	D1
Chloroethane	ND	63	ND	170	D1
1,1-Dichloroethene	ND	63	ND	250	D1
1,1-Dichloroethane	ND	63	ND	250	D1
MTBE	ND	63	ND	230	D1
cis-1,2-Dichloroethene	ND	63	ND	250	D1
n-Hexane	ND	63	ND	220	D1
Chloroform	ND	63	ND	310	D1
Benzene	ND	63	ND	200	D1
Trichloroethene	ND	63	ND	340	D1
Toluene	ND	63	ND	240	D1
Tetrachloroethene	ND	63	ND	430	D1
Ethylbenzene	ND	63	ND	270	D1
m,p-Xylenes	ND	63	ND	270	D1
o-Xylene	ND	63	ND	270	D1
1,3,5-Trimethylbenzene	ND	63	ND	310	D1
1,2,4-Trimethylbenzene	ND	63	ND	310	D1
Xylene (total)	ND	130	ND	540	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	89	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-15N-10Q1	Diln Fac:	2.200
Lab ID:	218411-037	Batch#:	160681
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.8	D1
Chloroethane	ND	1.1	ND	2.9	D1
1,1-Dichloroethene	2.9	1.1	11	4.4	D1
1,1-Dichloroethane	ND	1.1	ND	4.5	D1
MTBE	ND	1.1	ND	4.0	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.4	D1
n-Hexane	2.4	1.1	8.5	3.9	D1
Chloroform	5.4	1.1	26	5.4	D1
Benzene	3.1	1.1	9.9	3.5	D1
Trichloroethene	3.1	1.1	17	5.9	D1
Toluene	ND	1.1	ND	4.1	D1
Tetrachloroethene	14	1.1	98	7.5	D1
Ethylbenzene	2.1	1.1	9.2	4.8	D1
m,p-Xylenes	5.7	1.1	25	4.8	D1
o-Xylene	1.2	1.1	5.1	4.8	D1
1,3,5-Trimethylbenzene	4.4	1.1	22	5.4	D1
1,2,4-Trimethylbenzene	15	1.1	75	5.4	D1
Xylene (total)	6.9	2.2	30	9.6	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	94	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-11N-10Q1	Diln Fac:	2.110
Lab ID:	218411-038	Batch#:	160681
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	1.1	ND	2.7	D1
Chloroethane	ND	1.1	ND	2.8	D1
1,1-Dichloroethene	ND	1.1	ND	4.2	D1
1,1-Dichloroethane	ND	1.1	ND	4.3	D1
MTBE	ND	1.1	ND	3.8	D1
cis-1,2-Dichloroethene	ND	1.1	ND	4.2	D1
n-Hexane	ND	1.1	ND	3.7	D1
Chloroform	8.6	1.1	42	5.2	D1
Benzene	1.9	1.1	6.0	3.4	D1
Trichloroethene	ND	1.1	ND	5.7	D1
Toluene	ND	1.1	ND	4.0	D1
Tetrachloroethene	5.9	1.1	40	7.2	D1
Ethylbenzene	1.3	1.1	5.6	4.6	D1
m,p-Xylenes	4.4	1.1	19	4.6	D1
o-Xylene	ND	1.1	ND	4.6	D1
1,3,5-Trimethylbenzene	3.9	1.1	19	5.2	D1
1,2,4-Trimethylbenzene	14	1.1	71	5.2	D1
Xylene (total)	4.4	2.1	19	9.2	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-1N-10Q1	Diln Fac:	24.00
Lab ID:	218411-039	Batch#:	160686
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/08/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	12	ND	31	D1
Chloroethane	ND	12	ND	32	D1
1,1-Dichloroethene	ND	12	ND	48	D1
1,1-Dichloroethane	45	12	180	49	D1
MTBE	ND	12	ND	43	D1
cis-1,2-Dichloroethene	ND	12	ND	48	D1
n-Hexane	ND	12	ND	42	D1
Chloroform	ND	12	ND	59	D1
Benzene	ND	12	ND	38	D1
Trichloroethene	ND	12	ND	64	D1
Toluene	ND	12	ND	45	D1
Tetrachloroethene	ND	12	ND	81	D1
Ethylbenzene	ND	12	ND	52	D1
m,p-Xylenes	ND	12	ND	52	D1
o-Xylene	ND	12	ND	52	D1
1,3,5-Trimethylbenzene	ND	12	ND	59	D1
1,2,4-Trimethylbenzene	28	12	140	59	D1
Xylene (total)	ND	24	ND	100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	65 *	70-130	S7

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-10N-10Q1	Diln Fac:	264.0
Lab ID:	218411-040	Batch#:	160838
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/11/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	130	ND	340	D1
Chloroethane	ND	130	ND	350	D1
1,1-Dichloroethene	ND	130	ND	520	D1
1,1-Dichloroethane	300	130	1,200	530	D1
MTBE	ND	130	ND	480	D1
cis-1,2-Dichloroethene	ND	130	ND	520	D1
n-Hexane	230	130	810	470	D1
Chloroform	ND	130	ND	640	D1
Benzene	ND	130	ND	420	D1
Trichloroethene	ND	130	ND	710	D1
Toluene	ND	130	ND	500	D1
Tetrachloroethene	ND	130	ND	900	D1
Ethylbenzene	260	130	1,100	570	D1
m,p-Xylenes	440	130	1,900	570	D1
o-Xylene	ND	130	ND	570	D1
1,3,5-Trimethylbenzene	ND	130	ND	650	D1
1,2,4-Trimethylbenzene	370	130	1,800	650	D1
Xylene (total)	440	260	1,900	1,100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	102	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-012	Diln Fac:	26.40
Lab ID:	218411-041	Batch#:	160722
Matrix:	Air	Sampled:	02/16/10
Units (V):	ppbv	Received:	02/19/10
Units (M):	ug/m3	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	13	ND	34	D1
Chloroethane	ND	13	ND	35	D1
1,1-Dichloroethene	ND	13	ND	52	D1
1,1-Dichloroethane	48	13	190	53	D1
MTBE	ND	13	ND	48	D1
cis-1,2-Dichloroethene	ND	13	ND	52	D1
n-Hexane	ND	13	ND	47	D1
Chloroform	ND	13	ND	64	D1
Benzene	ND	13	ND	42	D1
Trichloroethene	ND	13	ND	71	D1
Toluene	ND	13	ND	50	D1
Tetrachloroethene	ND	13	ND	90	D1
Ethylbenzene	14	13	61	57	D1
m,p-Xylenes	ND	13	ND	57	D1
o-Xylene	ND	13	ND	57	D1
1,3,5-Trimethylbenzene	ND	13	ND	65	D1
1,2,4-Trimethylbenzene	44	13	220	65	D1
Xylene (total)	ND	26	ND	110	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	80	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC535077	Diln Fac:	1.000
Matrix:	Air	Batch#:	160681
Units (V):	ppbv	Analyzed:	03/06/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	97	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Diln Fac:	1.000
Units (V):	ppbv	Batch#:	160681

Type: BS Analyzed: 03/05/10
 Lab ID: QC535078

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	11.53	115	70-130		
Chloroethane	10.00	10.31	103	70-130		
1,1-Dichloroethene	10.00	11.43	114	60-145		
1,1-Dichloroethane	10.00	11.29	113	48-145		
MTBE	10.00	12.76	128	70-130		
cis-1,2-Dichloroethene	10.00	11.28	113	70-130		
n-Hexane	10.00	10.68	107	70-130		
Chloroform	10.00	12.37	124	70-130		
Benzene	10.00	10.53	105	70-130		
Trichloroethene	10.00	12.02	120	70-130		
Toluene	10.00	10.55	105	70-130		
Tetrachloroethene	10.00	11.77	118	70-130		
Ethylbenzene	10.00	11.79	118	70-130		
m,p-Xylenes	20.00	21.01	105	70-130		
o-Xylene	10.00	10.79	108	70-130		
1,3,5-Trimethylbenzene	10.00	11.93	119	70-130		
1,2,4-Trimethylbenzene	10.00	12.10	121	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	99	70-130		

Type: BSD Analyzed: 03/06/10
 Lab ID: QC535079

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	11.73	117	70-130	2	25		
Chloroethane	10.00	10.41	104	70-130	1	25		
1,1-Dichloroethene	10.00	11.92	119	60-145	4	11		
1,1-Dichloroethane	10.00	11.71	117	48-145	4	25		
MTBE	10.00	13.01	130	70-130	2	25		
cis-1,2-Dichloroethene	10.00	11.32	113	70-130	0	25		
n-Hexane	10.00	11.09	111	70-130	4	25		
Chloroform	10.00	12.77	128	70-130	3	25		
Benzene	10.00	10.60	106	70-130	1	25		
Trichloroethene	10.00	12.01	120	70-130	0	25		
Toluene	10.00	10.56	106	70-130	0	25		
Tetrachloroethene	10.00	12.03	120	70-130	2	25		
Ethylbenzene	10.00	11.42	114	70-130	3	25		
m,p-Xylenes	20.00	21.10	105	70-130	0	25		
o-Xylene	10.00	10.73	107	70-130	0	25		
1,3,5-Trimethylbenzene	10.00	11.58	116	70-130	3	25		
1,2,4-Trimethylbenzene	10.00	12.32	123	70-130	2	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	96	70-130		

RPD= Relative Percent Difference
 Result V= Result in volume units
 Page 1 of 1

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC535095	Diln Fac:	1.000
Matrix:	Air	Batch#:	160686
Units (V):	ppbv	Analyzed:	03/07/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160686
Units (V):	ppbv	Analyzed:	03/07/10
Diln Fac:	1.000		

Type: BS Lab ID: QC535096

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	10.79	108	70-130		
Chloroethane	10.00	9.951	100	70-130		
1,1-Dichloroethene	10.00	10.61	106	60-145		
1,1-Dichloroethane	10.00	10.79	108	48-145		
MTBE	10.00	11.12	111	70-130		
cis-1,2-Dichloroethene	10.00	10.80	108	70-130		
n-Hexane	10.00	10.52	105	70-130		
Chloroform	10.00	10.96	110	70-130		
Benzene	10.00	10.26	103	70-130		
Trichloroethene	10.00	11.91	119	70-130		
Toluene	10.00	9.504	95	70-130		
Tetrachloroethene	10.00	10.79	108	70-130		
Ethylbenzene	10.00	10.34	103	70-130		
m,p-Xylenes	20.00	18.94	95	70-130		
o-Xylene	10.00	9.466	95	70-130		
1,3,5-Trimethylbenzene	10.00	10.47	105	70-130		
1,2,4-Trimethylbenzene	10.00	11.16	112	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	99	70-130		

Type: BSD Lab ID: QC535097

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	10.75	107	70-130	0	25		
Chloroethane	10.00	10.09	101	70-130	1	25		
1,1-Dichloroethene	10.00	10.33	103	60-145	3	11		
1,1-Dichloroethane	10.00	10.49	105	48-145	3	25		
MTBE	10.00	10.87	109	70-130	2	25		
cis-1,2-Dichloroethene	10.00	10.42	104	70-130	4	25		
n-Hexane	10.00	10.36	104	70-130	2	25		
Chloroform	10.00	10.68	107	70-130	3	25		
Benzene	10.00	9.250	93	70-130	10	25		
Trichloroethene	10.00	10.50	105	70-130	13	25		
Toluene	10.00	9.268	93	70-130	3	25		
Tetrachloroethene	10.00	10.44	104	70-130	3	25		
Ethylbenzene	10.00	10.36	104	70-130	0	25		
m,p-Xylenes	20.00	18.13	91	70-130	4	25		
o-Xylene	10.00	9.402	94	70-130	1	25		
1,3,5-Trimethylbenzene	10.00	10.38	104	70-130	1	25		
1,2,4-Trimethylbenzene	10.00	11.16	112	70-130	0	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	97	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC535230	Diln Fac:	1.000
Matrix:	Air	Batch#:	160722
Units (V):	ppbv	Analyzed:	03/08/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160722
Units (V):	ppbv	Analyzed:	03/08/10
Diln Fac:	1.000		

Type: BS Lab ID: QC535231

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	10.56	106	70-130		
Chloroethane	10.00	9.036	90	70-130		
1,1-Dichloroethene	10.00	10.22	102	60-145		
1,1-Dichloroethane	10.00	10.33	103	48-145		
MTBE	10.00	10.67	107	70-130		
cis-1,2-Dichloroethene	10.00	10.12	101	70-130		
n-Hexane	10.00	9.854	99	70-130		
Chloroform	10.00	10.53	105	70-130		
Benzene	10.00	8.721	87	70-130		
Trichloroethene	10.00	9.756	98	70-130		
Toluene	10.00	9.465	95	70-130		
Tetrachloroethene	10.00	10.77	108	70-130		
Ethylbenzene	10.00	10.25	103	70-130		
m,p-Xylenes	20.00	19.03	95	70-130		
o-Xylene	10.00	9.686	97	70-130		
1,3,5-Trimethylbenzene	10.00	10.52	105	70-130		
1,2,4-Trimethylbenzene	10.00	11.40	114	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	102	70-130		

Type: BSD Lab ID: QC535232

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	10.63	106	70-130	1	25		
Chloroethane	10.00	9.375	94	70-130	4	25		
1,1-Dichloroethene	10.00	10.50	105	60-145	3	11		
1,1-Dichloroethane	10.00	10.39	104	48-145	1	25		
MTBE	10.00	10.92	109	70-130	2	25		
cis-1,2-Dichloroethene	10.00	10.41	104	70-130	3	25		
n-Hexane	10.00	10.17	102	70-130	3	25		
Chloroform	10.00	10.67	107	70-130	1	25		
Benzene	10.00	9.084	91	70-130	4	25		
Trichloroethene	10.00	10.56	106	70-130	8	25		
Toluene	10.00	9.253	93	70-130	2	25		
Tetrachloroethene	10.00	10.26	103	70-130	5	25		
Ethylbenzene	10.00	10.13	101	70-130	1	25		
m,p-Xylenes	20.00	18.20	91	70-130	4	25		
o-Xylene	10.00	9.450	95	70-130	2	25		
1,3,5-Trimethylbenzene	10.00	10.25	102	70-130	3	25		
1,2,4-Trimethylbenzene	10.00	10.97	110	70-130	4	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	100	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC535421	Diln Fac:	1.000
Matrix:	Air	Batch#:	160765
Units (V):	ppbv	Analyzed:	03/09/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	101	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200061530002 File : 042_002 Time : 11-FEB-2010 17:30

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	91839	16.47	
75	30% - 66% of mass 95	237217	42.53	
95		557769	100.00	
96	5% - 9% of mass 95	38075	6.83	
173	< 2% of mass 174	107	0.04	
174	50% - 120% of mass 95	285940	51.26	
175	4% - 9% of mass 174	16963	5.93	
176	93% - 101% of mass 174	277915	97.19	
177	5% - 9% of mass 176	19028	6.85	

CURTIS & TOMPKINS BFB TUNE FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200093531002 File : 064_002 Time : 05-MAR-2010 22:51

Standards: S13985 (15X)

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	62683	13.62	
75	30% - 66% of mass 95	173518	37.71	
95		460151	100.00	
96	5% - 9% of mass 95	27003	5.87	
173	< 2% of mass 174	18	0.01	
174	50% - 120% of mass 95	267360	58.10	
175	4% - 9% of mass 174	17515	6.55	
176	93% - 101% of mass 174	254706	95.27	
177	5% - 9% of mass 176	18145	7.12	

CURTIS & TOMPKINS BFB TUNE FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200095292001 File : 065_001 Time : 07-MAR-2010 04:12

Standards: S14127

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	70285	12.91	
75	30% - 66% of mass 95	197486	36.28	
95		544360	100.00	
96	5% - 9% of mass 95	33920	6.23	
173	< 2% of mass 174	645	0.21	
174	50% - 120% of mass 95	302277	55.53	
175	4% - 9% of mass 174	25684	8.50	
176	93% - 101% of mass 174	297404	98.39	
177	5% - 9% of mass 176	20669	6.95	

SJD 03/07/10 : Fixed Standard Id

CURTIS & TOMPKINS BFB TUNE FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200097576001 File : 067_001 Time : 08-MAR-2010 18:16

Standards: S14127

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	85350	15.36	
75	30% - 66% of mass 95	206696	37.19	
95		555779	100.00	
96	5% - 9% of mass 95	36501	6.57	
173	< 2% of mass 174	1660	0.50	
174	50% - 120% of mass 95	331946	59.73	
175	4% - 9% of mass 174	15976	4.81	
176	93% - 101% of mass 174	318557	95.97	
177	5% - 9% of mass 176	21302	6.69	

CURTIS & TOMPKINS BFB TUNE FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200099066001 File : 068_001 Time : 09-MAR-2010 19:06

Standards: S14127

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	62313	12.77	
75	30% - 66% of mass 95	197296	40.43	
95		488024	100.00	
96	5% - 9% of mass 95	33599	6.88	
173	< 2% of mass 174	473	0.17	
174	50% - 120% of mass 95	283196	58.03	
175	4% - 9% of mass 174	17992	6.35	
176	93% - 101% of mass 174	286019	101.00	
177	5% - 9% of mass 176	18004	6.29	

CURTIS & TOMPKINS BFB TUNE FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200101747001 File : 070_001 Time : 11-MAR-2010 15:47

Standards: S14127

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	66142	12.78	
75	30% - 66% of mass 95	201390	38.91	
95		517560	100.00	
96	5% - 9% of mass 95	31391	6.07	
173	< 2% of mass 174	663	0.22	
174	50% - 120% of mass 95	305720	59.07	
175	4% - 9% of mass 174	19435	6.36	
176	93% - 101% of mass 174	286280	93.64	
177	5% - 9% of mass 176	14949	5.22	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218411 MSAIR Air: EPA TO-15

Inst : MSAIR01
 Calnum : 1200061530001
 Units : nL/L

Date : 11-FEB-2010 21:28
 X Axis : R

Level	File	Seqnum	Sample ID	Sample ID	Analyzed	Stds
L1	042_006	1200061530006	NONE	11-FEB-2010	21:28	S13990 (6X), S13985 (15X)
L2	042_007	1200061530007	NONE	11-FEB-2010	22:29	S13990 (2X), S13985 (15X)
L3	042_008	1200061530008	NONE	11-FEB-2010	23:28	S13984 (6X), S13985 (15X)
L4	042_009	1200061530009	NONE	12-FEB-2010	00:29	S13984 (2X), S13985 (15X)
L5	042_010	1200061530010	NONE	12-FEB-2010	01:28	S13984, S13985 (15X)
L6	042_011	1200061530011	NONE	12-FEB-2010	02:28	S13983 (6X), S13985 (15X)
L7	042_012	1200061530012	NONE	12-FEB-2010	03:28	S13983 (3X), S13985 (15X)
L8	042_013	1200061530013	NONE	12-FEB-2010	04:28	S13983 (2X), S13985 (15X)
L9	042_014	1200061530014	NONE	12-FEB-2010	05:27	S13983, S13985 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Vinyl Chloride	2.7447	2.5879	2.9217	2.5065	2.5743	3.3789	2.9715	2.8173	2.5907	AVRG		0.35866		2.7882	10	0.99	30	
Chloroethane	0.2388m	0.1890	0.2638	0.2793	0.2665	0.3606	0.3065	0.2719	0.2003	AVRG		3.78647		0.2641	20	0.99	30	
1,1-Dichloroethene	3.5636	3.2130	4.4345	3.9541	3.5559	4.7304	3.8663	3.5850	2.9834	AVRG		0.26560		3.7651	15	0.99	30	
1,1-Dichloroethane	4.2593	3.9362	5.1910	4.6086	4.2382	5.5509	4.6873	4.4035	4.1535	AVRG		0.21936		4.5587	11	0.99	30	
MTBE	3.4196	2.9501	3.5831	3.1358	2.8812	3.4512	2.9438	2.6077	2.2012	AVRG		0.33120		3.0193	15	0.99	30	
cis-1,2-Dichloroethene	1.1871	1.2275	2.0814	1.8984	1.6916	2.4676	2.0046	1.7953	1.4762	AVRG		0.56856		1.7588	24	0.99	30	
n-Hexane	2.8621	2.4224	2.7825	2.4749	2.2652	2.7385	2.3187	2.1684	1.9507	AVRG		0.40940		2.4426	12	0.99	30	
Chloroform	6.6228	5.5657	6.5731	5.7667	4.9559	6.3067	5.1919	4.6378	3.7531	AVRG		0.18228		5.4860	17	0.99	30	
Benzene	0.4585	0.5066	0.4557	0.5133	0.3394	0.4144	0.3396	0.4176		AVRG		2.32219		0.4306	15	0.99	30	
Trichloroethene	0.4847	0.6091	0.5522	0.6465	0.4560	0.5780	0.4889	0.6448	0.4138	AVRG		1.84655		0.5415	16	0.99	30	
Toluene	1.4370	1.4217	1.9660	1.6727	1.5811	1.9473	1.6765	1.4781	1.2770	AVRG		0.62252		1.6064	15	0.99	30	
Tetrachloroethene	0.5725	0.5005	0.6127	0.5373	0.5029	0.5876	0.4695	0.4253	0.3582	AVRG		1.97087		0.5074	16	0.99	30	
Ethylbenzene	1.4826	1.4730	2.3223	1.9985	1.8643	2.2411	1.8362	1.5533	1.2288	AVRG		0.56250		1.7778	21	0.99	30	
m,p-Xylenes	1.8006	1.9195	2.5821	2.0957	1.8434	2.1557	1.6379	1.3408		AVRG		0.52030		1.9220	19	0.99	30	
o-Xylene	1.6466	1.7905	2.3923	1.9718	1.7197	1.9027	1.4352	1.2447		AVRG		0.56723		1.7629	20	0.99	30	
1,3,5-Trimethylbenzene	1.6477	1.9921	2.7357	2.2174	2.0018	2.4186	1.9077	1.6155	1.2930	AVRG		0.50478		1.9811	22	0.99	30	
1,2,4-Trimethylbenzene	1.0972	1.3538	2.2884	2.0200	1.8206	2.2234	1.7111	1.4116	1.0903	AVRG		0.59934		1.6685	27	0.99	30	
Bromofluorobenzene	0.8701	0.8586	0.8709	0.8486	0.8434	0.8732	0.8637	0.8124	0.8006	AVRG		1.17779		0.8490	3	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Vinyl Chloride	0.167	-2	0.500	-7	1.667	5	5.000	-10	10.00	-8	16.67	21	33.33	7	50.00	1	100.0	-7
Chloroethane	0.167	-10	0.500	-28	1.667	0	5.000	6	10.00	1	16.67	37	33.33	16	50.00	3	100.0	-24
1,1-Dichloroethene	0.167	-5	0.500	-15	1.667	18	5.000	5	10.00	-6	16.67	26	33.33	3	50.00	-5	100.0	-21
1,1-Dichloroethane	0.167	-7	0.500	-14	1.667	14	5.000	1	10.00	-7	16.67	22	33.33	3	50.00	-3	100.0	-9
MTBE	0.167	13	0.500	-2	1.667	19	5.000	4	10.00	-5	16.67	14	33.33	-2	50.00	-14	100.0	-27
cis-1,2-Dichloroethene	0.167	-33	0.500	-30	1.667	18	5.000	8	10.00	-4	16.67	40	33.33	14	50.00	2	100.0	-16
n-Hexane	0.167	17	0.500	-1	1.667	14	5.000	1	10.00	-7	16.67	12	33.33	-5	50.00	-11	100.0	-20
Chloroform	0.167	21	0.500	1	1.667	20	5.000	5	10.00	-10	16.67	15	33.33	-5	50.00	-15	100.0	-32
Benzene	0.167	6	0.500	18	1.667	6	5.000	19	10.00	-21	16.67	-4	33.33	-21	50.00	-3		
Trichloroethene	0.167	-10	0.500	12	1.667	2	5.000	19	10.00	-16	16.67	7	33.33	-10	50.00	19	100.0	-24
Toluene	0.167	-11	0.500	-11	1.667	22	5.000	4	10.00	-2	16.67	21	33.33	4	50.00	-8	100.0	-21
Tetrachloroethene	0.167	13	0.500	-1	1.667	21	5.000	6	10.00	-1	16.67	16	33.33	-7	50.00	-16	100.0	-29
Ethylbenzene	0.167	-17	0.500	-17	1.667	31	5.000	12	10.00	5	16.67	26	33.33	3	50.00	-13	100.0	-31
m,p-Xylenes	0.333	-6	1.000	0	3.333	34	10.00	9	20.00	-4	33.33	12	66.67	-15	100.0	-30		
o-Xylene	0.167	-7	0.500	2	1.667	36	5.000	12	10.00	-2	16.67	8	33.33	-19	50.00	-29		
1,3,5-Trimethylbenzene	0.167	-17	0.500	1	1.667	38	5.000	12	10.00	1	16.67	22	33.33	-4	50.00	-18	100.0	-35
1,2,4-Trimethylbenzene	0.167	-34	0.500	-19	1.667	37	5.000	21	10.00	9	16.67	33	33.33	3	50.00	-15	100.0	-35
Bromofluorobenzene	10.00	2	10.00	1	10.00	3	10.00	0	10.00	-1	10.00	3	10.00	2	10.00	-4	10.00	-6

SJD 02/17/10 [Bromomethane]: Corrected automatically drawn baseline in NONE (042_006).

SJD 02/17/10 [Chloroethane]: Corrected automatically drawn baseline in NONE (042_006).

SJD 02/17/10 [Ethanol]: Combined split peak in multiple levels.

SJD 02/17/10 [Ethanol]: Corrected automatically drawn baseline in multiple levels.

SJD 02/17/10 [Acetone]: Corrected automatically drawn baseline in multiple levels.

SJD 02/17/10 [trans-1,2-Dichloroethene]: Corrected automatically drawn baseline in NONE (042_006).

m=manual integration

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

Page 2 of 2

1200061530001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1200061530001

Cal Date : 11-FEB-2010

ICV 1200061530016 (042_016 12-FEB-2010) stds: S13981, S13985 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Vinyl Chloride	10.00	8.582	nL/L	-14	30	
Chloroethane	10.00	10.91	nL/L	9	30	
1,1-Dichloroethene	10.00	9.985	nL/L	0	30	
1,1-Dichloroethane	10.00	9.465	nL/L	-5	30	
MTBE	10.00	10.29	nL/L	3	30	
cis-1,2-Dichloroethene	10.00	9.705	nL/L	-3	30	
n-Hexane	10.00	9.448	nL/L	-6	30	
Chloroform	10.00	9.512	nL/L	-5	30	
Benzene	10.00	8.162	nL/L	-18	30	
Trichloroethene	10.00	8.718	nL/L	-13	30	
Toluene	10.00	9.945	nL/L	-1	30	
Tetrachloroethene	10.00	10.15	nL/L	2	30	
Ethylbenzene	10.00	11.15	nL/L	11	30	
m,p-Xylenes	20.00	20.01	nL/L	0	30	
o-Xylene	10.00	10.38	nL/L	4	30	
1,3,5-Trimethylbenzene	10.00	11.07	nL/L	11	30	
1,2,4-Trimethylbenzene	10.00	11.85	nL/L	19	30	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC535078 IDF : 1.0
 Seqnum : 1200093531003.2 File : 064_003 Time : 05-MAR-2010 23:51
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S13985 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	3.2145	10.00	11.53	nL/L	15	30	0.0500	m u
Chloroethane	0.2641	0.2721	10.00	10.31	nL/L	3	30	0.0500	u
1,1-Dichloroethene	3.7651	4.3024	10.00	11.43	nL/L	14	30	0.0500	u
1,1-Dichloroethane	4.5587	5.1443	10.00	11.29	nL/L	13	30	0.0500	u
MTBE	3.0193	3.8511	10.00	12.76	nL/L	28	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.9830	10.00	11.28	nL/L	13	30	0.0500	u
n-Hexane	2.4426	2.6072	10.00	10.68	nL/L	7	30	0.0500	u
Chloroform	5.4860	6.7850	10.00	12.37	nL/L	24	30	0.0500	u
Benzene	0.4306	0.4532	10.00	10.53	nL/L	5	30	0.0500	u
Trichloroethene	0.5415	0.6507	10.00	12.02	nL/L	20	30	0.0500	u
Toluene	1.6064	1.6934	10.00	10.55	nL/L	5	30	0.0500	u
Tetrachloroethene	0.5074	0.5969	10.00	11.77	nL/L	18	30	0.0500	u
Ethylbenzene	1.7778	2.0952	10.00	11.79	nL/L	18	30	0.0500	u
m,p-Xylenes	1.9220	2.0190	20.00	21.01	nL/L	5	30	0.0500	u
o-Xylene	1.7629	1.9009	10.00	10.79	nL/L	8	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.3634	10.00	11.93	nL/L	19	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	2.0184	10.00	12.10	nL/L	21	30	0.0500	u
Bromofluorobenzene	0.8490	0.8433	10.00	9.932	nL/L	-1	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	279144	-28.28	27.20	27.27	0.07
1,4-Difluorobenzene	2458000	2299000	-6.47	31.88	31.95	0.07
Chlorobenzene-d5	2767000	2342000	-15.36	41.82	41.88	0.07

SJD 03/06/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/06/10 [Bromomethane]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/06/10 [4-Ethyltoluene]: Picked or reassigned peak. [general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC535096 IDF : 1.0
 Seqnum : 1200095292004.2 File : 065_004 Time : 07-MAR-2010 07:10
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S14127 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	3.0076	10.00	10.79	nL/L	8	30	0.0500	m u
Chloroethane	0.2641	0.2627	10.00	9.951	nL/L	0	30	0.0500	u
1,1-Dichloroethene	3.7651	3.9922	10.00	10.61	nL/L	6	30	0.0500	u
1,1-Dichloroethane	4.5587	4.9170	10.00	10.79	nL/L	8	30	0.0500	u
MTBE	3.0193	3.3572	10.00	11.12	nL/L	11	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.8983	10.00	10.80	nL/L	8	30	0.0500	u
n-Hexane	2.4426	2.5693	10.00	10.52	nL/L	5	30	0.0500	u
Chloroform	5.4860	6.0145	10.00	10.96	nL/L	10	30	0.0500	u
Benzene	0.4306	0.4416	10.00	10.26	nL/L	3	30	0.0500	u
Trichloroethene	0.5415	0.6449	10.00	11.91	nL/L	19	30	0.0500	u
Toluene	1.6064	1.5260	10.00	9.504	nL/L	-5	30	0.0500	u
Tetrachloroethene	0.5074	0.5469	10.00	10.79	nL/L	8	30	0.0500	u
Ethylbenzene	1.7778	1.8383	10.00	10.34	nL/L	3	30	0.0500	u
m,p-Xylenes	1.9220	1.8200	20.00	18.94	nL/L	-5	30	0.0500	u
o-Xylene	1.7629	1.6683	10.00	9.466	nL/L	-5	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.0737	10.00	10.47	nL/L	5	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.8607	10.00	11.16	nL/L	12	30	0.0500	u
Bromofluorobenzene	0.8490	0.8372	10.00	9.863	nL/L	-1	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	324382	-16.66	27.20	27.27	0.07
1,4-Difluorobenzene	2458000	2439000	-0.77	31.88	31.94	0.06
Chlorobenzene-d5	2767000	2728000	-1.41	41.82	41.88	0.07

SJD 03/08/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/08/10 [Bromomethane]: Integrated to match integration of ICAL and CCV. [general version]

SJD 03/08/10 [4-Ethyltoluene]: Picked or reassigned peak. [general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC535231 IDF : 1.0
 Seqnum : 1200097576002.1 File : 067_002 Time : 08-MAR-2010 19:16
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S14127 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.9444	10.00	10.56	nL/L	6	30	0.0500	m u
Chloroethane	0.2641	0.2386	10.00	9.036	nL/L	-10	30	0.0500	u
1,1-Dichloroethene	3.7651	3.8466	10.00	10.22	nL/L	2	30	0.0500	u
1,1-Dichloroethane	4.5587	4.7099	10.00	10.33	nL/L	3	30	0.0500	u
MTBE	3.0193	3.2182	10.00	10.67	nL/L	7	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.7796	10.00	10.12	nL/L	1	30	0.0500	u
n-Hexane	2.4426	2.4062	10.00	9.854	nL/L	-1	30	0.0500	u
Chloroform	5.4860	5.7745	10.00	10.53	nL/L	5	30	0.0500	u
Benzene	0.4306	0.3754	10.00	8.721	nL/L	-13	30	0.0500	u
Trichloroethene	0.5415	0.5280	10.00	9.756	nL/L	-2	30	0.0500	u
Toluene	1.6064	1.5200	10.00	9.465	nL/L	-5	30	0.0500	u
Tetrachloroethene	0.5074	0.5463	10.00	10.77	nL/L	8	30	0.0500	u
Ethylbenzene	1.7778	1.8225	10.00	10.25	nL/L	3	30	0.0500	u
m,p-Xylenes	1.9220	1.8284	20.00	19.03	nL/L	-5	30	0.0500	u
o-Xylene	1.7629	1.7074	10.00	9.686	nL/L	-3	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.0830	10.00	10.52	nL/L	5	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.9025	10.00	11.40	nL/L	14	30	0.0500	u
Bromofluorobenzene	0.8490	0.8701	10.00	10.25	nL/L	2	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	327821	-15.78	27.20	27.25	0.05
1,4-Difluorobenzene	2458000	2877000	17.05	31.88	31.94	0.06
Chlorobenzene-d5	2767000	2625000	-5.13	41.82	41.86	0.05

SJD 03/09/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV.
[general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC535422 IDF : 1.0
 Seqnum : 1200099066003.1 File : 068_003 Time : 09-MAR-2010 21:06
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S13981, S14127 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	2.8768	10.00	10.32	nL/L	3	30	0.0500	m u
Chloroethane	0.2641	0.2301	10.00	8.713	nL/L	-13	30	0.0500	u
1,1-Dichloroethene	3.7651	3.7643	10.00	9.997	nL/L	0	30	0.0500	u
1,1-Dichloroethane	4.5587	4.6085	10.00	10.11	nL/L	1	30	0.0500	u
MTBE	3.0193	3.2414	10.00	10.74	nL/L	7	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.7615	10.00	10.02	nL/L	0	30	0.0500	u
n-Hexane	2.4426	2.3207	10.00	9.504	nL/L	-5	30	0.0500	u
Chloroform	5.4860	5.7677	10.00	10.52	nL/L	5	30	0.0500	u
Benzene	0.4306	0.4181	10.00	9.716	nL/L	-3	30	0.0500	u
Trichloroethene	0.5415	0.6067	10.00	11.21	nL/L	12	30	0.0500	u
Toluene	1.6064	1.4583	10.00	9.079	nL/L	-9	30	0.0500	u
Tetrachloroethene	0.5074	0.5257	10.00	10.36	nL/L	4	30	0.0500	u
Ethylbenzene	1.7778	1.7818	10.00	10.02	nL/L	0	30	0.0500	u
m,p-Xylenes	1.9220	1.7598	20.00	18.31	nL/L	-8	30	0.0500	u
o-Xylene	1.7629	1.7113	10.00	9.707	nL/L	-3	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.0168	10.00	10.18	nL/L	2	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.8109	10.00	10.85	nL/L	9	30	0.0500	u
Bromofluorobenzene	0.8490	0.8534	10.00	10.05	nL/L	0	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	317460	-18.44	27.20	27.23	0.03
1,4-Difluorobenzene	2458000	2418000	-1.63	31.88	31.91	0.03
Chlorobenzene-d5	2767000	2612000	-5.60	41.82	41.84	0.03

SJD 03/10/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV.
[general version]

SJD 03/10/10 [Bromoform]: Integrated to match integration of ICAL and CCV.
[general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218411 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC535705 IDF : 1.0
 Seqnum : 1200101747002.1 File : 070_002 Time : 11-MAR-2010 16:47
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S14178, S14127 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	3.1862	10.00	11.43	nL/L	14	30	0.0500	m u
Chloroethane	0.2641	0.2706	10.00	10.25	nL/L	2	30	0.0500	u
1,1-Dichloroethene	3.7651	4.0485	10.00	10.75	nL/L	8	30	0.0500	u
1,1-Dichloroethane	4.5587	4.9585	10.00	10.88	nL/L	9	30	0.0500	u
MTBE	3.0193	3.4648	10.00	11.48	nL/L	15	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.8842	10.00	10.71	nL/L	7	30	0.0500	u
n-Hexane	2.4426	2.6789	10.00	10.97	nL/L	10	30	0.0500	u
Chloroform	5.4860	6.2703	10.00	11.43	nL/L	14	30	0.0500	u
Benzene	0.4306	0.3356	10.00	7.793	nL/L	-22	30	0.0500	u
Trichloroethene	0.5415	0.4733	10.00	8.741	nL/L	-13	30	0.0500	u
Toluene	1.6064	1.5110	10.00	9.409	nL/L	-6	30	0.0500	u
Tetrachloroethene	0.5074	0.5631	10.00	11.11	nL/L	11	30	0.0500	u
Ethylbenzene	1.7778	1.8546	10.00	10.44	nL/L	4	30	0.0500	u
m,p-Xylenes	1.9220	1.9010	20.00	19.78	nL/L	-1	30	0.0500	u
o-Xylene	1.7629	1.7443	10.00	9.898	nL/L	-1	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.1677	10.00	10.94	nL/L	9	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.9538	10.00	11.71	nL/L	17	30	0.0500	u
Bromofluorobenzene	0.8490	0.8323	10.00	9.804	nL/L	-2	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	291216	-25.18	27.20	27.24	0.04
1,4-Difluorobenzene	2458000	3036000	23.52	31.88	31.94	0.06
Chlorobenzene-d5	2767000	2511000	-9.25	41.82	41.86	0.05

BO 03/12/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV.
[general version]

BO 03/12/10 [Bromomethane]: Integrated to match integration of ICAL and CCV.
[general version]

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200093531

Date : 03/05/10
 Sequence : MSAIR01 064

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
003	CCV/BS	QC535078	279144	27.27	2299000	31.95	2342000	41.88
004	BSD	QC535079	270534	27.27	2288000	31.96	2352000	41.89
005	BLANK	QC535077	244757	27.28	2967000	31.99	2273000	41.90
006	SAMPLE	218411-028	271592	27.27	2604000	31.96	2379000	41.89
007	SAMPLE	218411-029	275477	27.27	2278000	31.96	2371000	41.89
008	SAMPLE	218411-030	257866	27.26	2235000	31.96	2298000	41.89
009	SAMPLE	218411-031	260273	27.31	2217000	31.98	2386000	41.90
010	SAMPLE	218411-032	263491	27.30	2223000	31.97	2373000	41.90
011	SAMPLE	218411-037	266494	27.28	2236000	31.96	2255000	41.89
012	SAMPLE	218411-038	249976	27.26	2153000	31.95	2310000	41.89
013	SAMPLE	218329-006	250439	27.28	2878000	31.97	2341000	41.90
014	SAMPLE	218329-007	247247	27.27	2999000	31.99	2147000	41.91
015	SAMPLE	218329-015	255761	27.28	3104000	31.98	1876000	41.90
016	SAMPLE	218329-007	230096 *	27.31	2188000	31.96	2390000	41.90
017	SAMPLE	218411-030	252261	27.30	2243000	31.96	2466000	41.89
018	CANCHECK	NONE	248427	27.31	2233000	32.00	2441000	41.91
019	CANCHECK	NONE	239422	27.31	2963000	32.01	2386000	41.92
020	SAMPLE	218329-007	242765	27.31	2814000	32.00	2488000	41.91

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200095292

Date : 03/07/10
 Sequence : MSAIR01 065

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	IB	NONE	303326	27.31	3065000	32.01	2549000	41.91
004	CCV/BS	QC535096	324382	27.27	2439000	31.94	2728000	41.88
005	BLANK	QC535095	304688	27.29	3253000	31.98	2644000	41.90
006	SAMPLE	218411-025	323650	27.27	3328000	31.98	2880000	41.89
007	SAMPLE	218411-026	320520	27.27	3318000	31.98	2726000	41.90
008	SAMPLE	218411-027	309141	27.27	2369000	31.95	2784000	41.88
009	SAMPLE	218411-027	262594	27.27	2320000	31.96	2632000	41.89
010	BSD	QC535097	311888	27.27	2607000	31.97	2714000	41.89
011	CANCHECK	NONE	269951	27.28	3063000	31.98	2571000	41.90
012	SAMPLE	218432-001	1113000 *	27.31	3187000	32.05	2609000	41.91
013	SAMPLE	218411-024	280382	27.27	2404000	31.95	2621000	41.89
014	SAMPLE	218411-023	310285	27.27	2395000	31.94	2687000	41.88
015	SAMPLE	218411-022	289752	27.27	2745000	31.96	2646000	41.89
016	SAMPLE	218411-021	296421	27.27	2380000	31.95	2568000	41.89
017	SAMPLE	218432-001	306189	27.28	3081000	32.01	2590000	41.91
018	SAMPLE	218411-023	285770	27.28	2392000	31.95	2709000	41.89
019	SAMPLE	218411-020	266632	27.28	3061000	31.99	2650000	41.88
020	SAMPLE	218411-019	273147	27.25	3064000	31.94	2374000	41.87
021	SAMPLE	218411-034	298044	27.25	3119000	31.96	1942000	41.88
022	SAMPLE	218411-035	279752	27.25	3073000	31.98	1937000	41.88
023	SAMPLE	218411-039	278529	27.25	3099000	31.96	1985000	41.87

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200097576

Date : 03/08/10
 Sequence : MSAIR01 067

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	CCV/BS	QC535231	327821	27.25	2877000	31.94	2625000	41.86
003	BSD	QC535232	321130	27.25	2673000	31.94	2671000	41.86
004	BLANK	QC535230	284408	27.26	3145000	31.95	2569000	41.87
005	SAMPLE	218411-034	297353	27.25	3145000	31.95	2478000	41.87
006	SAMPLE	218411-004	282812	27.26	3192000	31.95	2373000	41.87
007	SAMPLE	218411-006	291145	27.23	3156000	31.93	2124000	41.86
008	SAMPLE	218411-001	269249	27.23	3079000	31.93	2150000	41.85
009	SAMPLE	218411-002	262658	27.23	3035000	31.93	2322000	41.85
010	SAMPLE	218411-003	264013	27.24	3048000	31.93	2067000	41.85
011	SAMPLE	218411-005	260323	27.23	3065000	31.93	2087000	41.85
012	SAMPLE	218411-007	280984	27.23	3098000	31.92	2235000	41.85
013	SAMPLE	218411-013	261442	27.23	3094000	31.92	1950000	41.85
014	SAMPLE	218411-008	272916	27.23	3090000	31.93	1991000	41.85
015	SAMPLE	218411-041	266378	27.23	3067000	31.93	1885000	41.86
016	SAMPLE	218411-003	224636 *	27.23	2887000	31.96	2041000	41.86
017	SAMPLE	218411-005	251022	27.23	2948000	31.95	2129000	41.86
018	SAMPLE	218411-017	243880	27.23	3015000	31.92	2410000	41.85
019	SAMPLE	218411-033	247228	27.23	2995000	31.92	2153000	41.85
020	SAMPLE	218411-036	254315	27.23	3004000	31.92	2261000	41.85
021	SAMPLE	218411-003	255788	27.23	3024000	31.94	2181000	41.86

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200099066

Date : 03/09/10
 Sequence : MSAIR01 068

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	IB	NONE	274333	27.23	3071000	31.94	2442000	41.85
003	CCV/BS	QC535422	317460	27.23	2418000	31.91	2612000	41.84
004	BSD	QC535423	311716	27.25	3116000	31.94	2613000	41.87
005	BLANK	QC535421	269225	27.26	3046000	31.97	2457000	41.88
006	SAMPLE	218411-007	288177	27.26	3090000	31.97	2672000	41.88
007	SAMPLE	218411-013	905837 *	27.32	2561000	32.05	2227000	41.90
008	SAMPLE	218411-014	279378	27.26	3120000	31.95	2438000	41.87
009	SAMPLE	218411-018	275475	27.25	3066000	31.94	2358000	41.87
011	SAMPLE	218411-009	271647	27.24	3040000	31.93	2077000	41.86
012	SAMPLE	218411-012	261648	27.24	3013000	31.95	2057000	41.87
013	SAMPLE	218411-016	237913	27.24	2948000	31.95	2189000	41.86
014	SAMPLE	218411-010	245387	27.23	2983000	31.97	1891000	41.88
015	SAMPLE	218411-011	243733	27.26	2963000	31.98	2044000	41.89
016	SAMPLE	218411-015	220678 *	27.25	2922000	31.97	1846000	41.88
017	SAMPLE	218411-013	249347	27.25	2901000	31.94	2318000	41.87
018	SAMPLE	218411-040	224460 *	27.25	2962000	31.95	915738 *	41.86

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200101747

Date : 03/11/10
 Sequence : MSAIR01 070

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	CCV/BS	QC535705	291216	27.24	3036000	31.94	2511000	41.86
003	BSD	QC535706	283623	27.24	3001000	31.92	2438000	41.85
004	CANCHECK	C00240	245022	27.24	2871000	31.92	2343000	41.85
005	SAMPLE	218411-013	255913	27.23	3058000	31.92	2206000	41.85
006	SAMPLE	218411-011	261880	27.23	2916000	31.92	2428000	41.86
007	SAMPLE	218411-012	252813	27.24	2887000	31.96	2260000	41.86
008	SAMPLE	218411-015	254949	27.23	2994000	31.96	1958000	41.86
009	SAMPLE	218411-040	247690	27.23	2879000	31.94	1817000	41.86
010	CANCHECK		225891 *	27.23	2848000	31.94	2367000	41.86
011	SAMPLE	218552-001	270866	27.23	2849000	31.92	2504000	41.85
012	SAMPLE	218552-002	260606	27.23	2234000	31.92	2514000	41.85
013	SAMPLE	218553-001	250399	27.27	2876000	31.96	2357000	41.88
014	SAMPLE	218553-002	257344	27.26	2849000	31.97	2366000	41.88
015	CANCHECK	NONE	237885	27.26	2676000	31.95	2311000	41.87
016	SAMPLE	218552-003	225103 *	27.26	2815000	31.96	2475000	41.87
017	BLANK	QC535707	234817	27.27	2816000	31.98	2228000	41.89
018	CANCHECK	NONE	235918	27.26	2847000	31.97	2276000	41.88

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200061530

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/11/10 16:31

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	042_001	X	BFB			02/11/10 16:31	1.0	1
002	042_002	TUN	BFB			02/11/10 17:30	1.0	1
003	042_003	X	NONE			02/11/10 18:29	1.0	2 1
004	042_004	IB	NONE			02/11/10 19:29	1.0	1
005	042_005	IB	CALIB IB			02/11/10 20:28	1.0	1
006	042_006	ICAL	NONE			02/11/10 21:28	1.0	3 1
007	042_007	ICAL	NONE			02/11/10 22:29	1.0	3 1
008	042_008	ICAL	NONE			02/11/10 23:28	1.0	2 1
009	042_009	ICAL	NONE			02/12/10 00:29	1.0	2 1
010	042_010	ICAL	NONE			02/12/10 01:28	1.0	2 1
011	042_011	ICAL	NONE			02/12/10 02:28	1.0	4 1
012	042_012	ICAL	NONE			02/12/10 03:28	1.0	4 1
013	042_013	ICAL	NONE			02/12/10 04:28	1.0	4 1
014	042_014	ICAL	NONE			02/12/10 05:27	1.0	4 1
015	042_015	IB	NONE			02/12/10 06:26	1.0	1
016	042_016	ICV	NONE			02/12/10 07:26	1.0	5 1

SJD 02/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 16.

Analyst: SJD Date: 02/17/10 Reviewer: BO Date: 02/17/10

Standards used: 1=S13985 2=S13984 3=S13990 4=S13983 5=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200093531

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/05/10 21:52

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	064_001	TUN	BFB			03/05/10 21:52	1.0	1	
002	064_002	TUN	BFB			03/05/10 22:51	1.0	1	
003	064_003	CCV/BS	QC535078	Air	160681	03/05/10 23:51	1.0	2 1	
004	064_004	BSD	QC535079	Air	160681	03/06/10 00:51	1.0	2 1	
005	064_005	BLANK	QC535077	Air	160681	03/06/10 01:51	1.0	1	
006	064_006	SAMPLE	218411-028	Air	160681	03/06/10 02:51	2.22	1	
007	064_007	SAMPLE	218411-029	Air	160681	03/06/10 03:51	2.25	1	
008	064_008	SAMPLE	218411-030	Air	160681	03/06/10 04:50	2.12	1	2:DCA11=150
009	064_009	SAMPLE	218411-031	Air	160681	03/06/10 05:50	2.25	1	
010	064_010	SAMPLE	218411-032	Air	160681	03/06/10 06:50	2.34	1	
011	064_011	SAMPLE	218411-037	Air	160681	03/06/10 07:50	2.200	1	
012	064_012	SAMPLE	218411-038	Air	160681	03/06/10 08:49	2.11	1	1:ISOPROH=110
013	064_013	SAMPLE	218329-006	Air	160681	03/06/10 09:49	80.40	1	
014	064_014	SAMPLE	218329-007	Air	160681	03/06/10 10:49	501.6	1	2:CYHEXANE=120
015	064_015	SAMPLE	218329-015	Air	160681	03/06/10 11:50	128.4	1	1:CYHEXANE=180
016	064_016	SAMPLE	218329-007	Air	160681	03/06/10 12:50	836.0	1	
017	064_017	SAMPLE	218411-030	Air	160681	03/06/10 13:50	4.24	1	
018	064_018	CANCHECK	NONE			03/06/10 14:50	1.0	3	
019	064_019	CANCHECK	NONE			03/06/10 15:50	1.0	3	
020	064_020	SAMPLE	218329-007	Air	160681	03/06/10 16:49	836.0	3	

SJD 03/07/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

SJD 03/07/10 : Changed ISTD canister prior to run 064_018

Analyst: SJD Date: 03/07/10 Reviewer: BO Date: 03/08/10

Standards used: 1=S13985 2=S13981 3=S14127

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200095292

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/07/10 04:12

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	065_001	TUN	BFB			03/07/10 04:12	1.0	1	
002	065_002	IB	NONE			03/07/10 05:11	1.0	1	
003	065_003	X	QC535096	Air	160686	03/07/10 06:11	1.0	2 1	
004	065_004	CCV/BS	QC535096	Air	160686	03/07/10 07:10	1.0	2 1	
005	065_005	BLANK	QC535095	Air	160686	03/07/10 08:10	1.0	1	
006	065_006	SAMPLE	218411-025	Air	160686	03/07/10 09:10	2.25	1	
007	065_007	SAMPLE	218411-026	Air	160686	03/07/10 10:10	2.33	1	
008	065_008	SAMPLE	218411-027	Air	160686	03/07/10 11:10	2.31	1	1:TCE=120
009	065_009	SAMPLE	218411-027	Air	160686	03/07/10 13:10	4.62	1	
010	065_010	BSD	QC535097	Air	160686	03/07/10 14:37	1.0	2 1	
011	065_011	CANCHECK	NONE			03/07/10 16:05	1.0	1	
012	065_012	SAMPLE	218432-001	Air	160686	03/07/10 17:05	1.67	1	
013	065_013	SAMPLE	218411-024	Air	160686	03/07/10 18:05	6.96	1	
014	065_014	SAMPLE	218411-023	Air	160686	03/07/10 19:05	5.82	1	1:PCE=140
015	065_015	SAMPLE	218411-022	Air	160686	03/07/10 20:05	5.88	1	
016	065_016	SAMPLE	218411-021	Air	160686	03/07/10 21:05	6.03	1	
017	065_017	SAMPLE	218432-001	Air	160686	03/07/10 22:05	1.67	1	
018	065_018	SAMPLE	218411-023	Air	160686	03/07/10 23:05	11.64	1	
019	065_019	SAMPLE	218411-020	Air	160686	03/08/10 00:06	23.28	1	
020	065_020	SAMPLE	218411-019	Air	160686	03/08/10 01:07	23.88	1	
021	065_021	SAMPLE	218411-034	Air	160686	03/08/10 02:08	27.48	1	1:CYHEXANE=140
022	065_022	SAMPLE	218411-035	Air	160686	03/08/10 03:09	26.40	1	
023	065_023	SAMPLE	218411-039	Air	160686	03/08/10 04:10	24.0	1	
024	065_024	X	QUICK CONNECT TEST			03/08/10 12:13	1.0	1	

SJD 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 23.

Analyst: BO Date: 03/08/10 Reviewer: SJD Date: 03/11/10

Standards used: 1=S14127 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200097576

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/08/10 18:16

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	067_001	TUN	BFB			03/08/10 18:16	1.0	1
002	067_002	CCV/BS	QC535231	Air	160722	03/08/10 19:16	1.0	2 1
003	067_003	BSD	QC535232	Air	160722	03/08/10 20:16	1.0	2 1
004	067_004	BLANK	QC535230	Air	160722	03/08/10 21:15	1.0	1
005	067_005	SAMPLE	218411-034	Air	160722	03/08/10 22:15	91.60	1
006	067_006	SAMPLE	218411-004	Air	160722	03/08/10 23:16	77.60	1
007	067_007	SAMPLE	218411-006	Air	160722	03/09/10 00:16	190.8	1 1:PCA=20
008	067_008	SAMPLE	218411-001	Air	160722	03/09/10 01:16	250.8	1 1:PCA=17
009	067_009	SAMPLE	218411-002	Air	160722	03/09/10 02:18	246.0	1
010	067_010	SAMPLE	218411-003	Air	160722	03/09/10 03:19	271.2	1
011	067_011	SAMPLE	218411-005	Air	160722	03/09/10 04:20	271.2	1 1:PCA=20
012	067_012	SAMPLE	218411-007	Air	160722	03/09/10 05:22	26.04	1
013	067_013	SAMPLE	218411-013	Air	160722	03/09/10 06:23	25.08	1 2:MMETHACRY=51
014	067_014	SAMPLE	218411-008	Air	160722	03/09/10 07:25	528.0	1 2:CYHEXANE=250
015	067_015	SAMPLE	218411-041	Air	160722	03/09/10 08:26	26.40	1
016	067_016	SAMPLE	218411-003	Air	160722	03/09/10 10:33	542.4	1
017	067_017	SAMPLE	218411-005	Air	160722	03/09/10 11:34	542.4	1
018	067_018	SAMPLE	218411-017	Air	160722	03/09/10 12:35	86.40	1
019	067_019	SAMPLE	218411-033	Air	160722	03/09/10 13:34	149.4	1
020	067_020	SAMPLE	218411-036	Air	160722	03/09/10 14:34	125.4	1
021	067_021	SAMPLE	218411-003	Air	160722	03/09/10 15:34	542.4	1

SJD 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 21.

Analyst: SJD Date: 03/12/10 Reviewer: BO Date: 03/12/10

Standards used: 1=S14127 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200099066

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/09/10 19:06

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	068_001	TUN	BFB			03/09/10 19:06	1.0	1
002	068_002	IB	NONE			03/09/10 20:06	1.0	1
003	068_003	CCV/BS	QC535422	Air	160765	03/09/10 21:06	1.0	2 1
004	068_004	BSD	QC535423	Air	160765	03/09/10 22:06	1.0	2 1
005	068_005	BLANK	QC535421	Air	160765	03/09/10 23:06	1.0	1
006	068_006	SAMPLE	218411-007	Air	160765	03/10/10 00:06	86.80	1
007	068_007	SAMPLE	218411-013	Air	160765	03/10/10 01:06	83.60	1
008	068_008	SAMPLE	218411-014	Air	160765	03/10/10 02:06	1632	1
009	068_009	SAMPLE	218411-018	Air	160765	03/10/10 03:05	1664	1
010	068_010	SAMPLE	218411-009	Air	160765	03/10/10 04:05	242.4	1
011	068_011	SAMPLE	218411-009	Air	160765	03/10/10 10:41	242.4	1
012	068_012	SAMPLE	218411-012	Air	160765	03/10/10 11:42	250.8	1
013	068_013	SAMPLE	218411-016	Air	160765	03/10/10 12:42	254.4	1
014	068_014	SAMPLE	218411-010	Air	160765	03/10/10 13:43	468.0	1
015	068_015	SAMPLE	218411-011	Air	160765	03/10/10 14:43	499.2	1
016	068_016	SAMPLE	218411-015	Air	160765	03/10/10 15:43	482.4	1
017	068_017	SAMPLE	218411-013	Air	160765	03/10/10 16:44	83.60	1
018	068_018	SAMPLE	218411-040	Air	160765	03/10/10 17:55	264.0	1

SJD 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 18.

Analyst: SJD Date: 03/12/10 Reviewer: BO Date: 03/12/10

Standards used: 1=S14127 2=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200101747

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/11/10 15:47

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	070_001	TUN	BFB			03/11/10 15:47	1.0	1	
002	070_002	CCV/BS	QC535705	Air	160838	03/11/10 16:47	1.0	2 1	
003	070_003	BSD	QC535706	Air	160838	03/11/10 17:46	1.0	2 1	
004	070_004	CANCHECK	C00240	Air	160838	03/11/10 18:46	1.0	1	
005	070_005	SAMPLE	218411-013	Air	160838	03/11/10 19:45	41.80	1	
006	070_006	SAMPLE	218411-011	Air	160838	03/11/10 20:45	1664	1	
007	070_007	SAMPLE	218411-012	Air	160838	03/11/10 21:45	501.6	1	
008	070_008	SAMPLE	218411-015	Air	160838	03/11/10 22:45	482.4	1	1:CYHEXANE=150
009	070_009	SAMPLE	218411-040	Air	160838	03/11/10 23:46	264.0	1	
010	070_010	CANCHECK		Air		03/12/10 00:47	1.0	1	
011	070_011	SAMPLE	218552-001	Air	160838	03/12/10 01:46	2.03	1	
012	070_012	SAMPLE	218552-002	Air	160838	03/12/10 02:45	1.96	1	
013	070_013	SAMPLE	218553-001	Air	160838	03/12/10 03:45	2.08	1	
014	070_014	SAMPLE	218553-002	Air	160838	03/12/10 04:45	2.03	1	
015	070_015	CANCHECK	NONE			03/12/10 05:44	1.0	1	
016	070_016	SAMPLE	218552-003	Air	160838	03/12/10 06:44	1480	1	
017	070_017	BLANK	QC535707	Air	160838	03/12/10 10:54	1.0	1	
018	070_018	CANCHECK	NONE			03/12/10 11:58	1.0	1	

SJD 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 18.

Analyst: SJD Date: 03/12/10 Reviewer: BO Date: 03/12/10

Standards used: 1=S14127 2=S14178

PROJECT

AIR SAMPLE PREP LOG

Notebook No. BK2875

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Prepped by / date	Sample ID	Can ID	(PSI) Initial Pres.	(PSI) Final Pres.	Dilution Factor	Comments
ET 2-22-0	218329-001	C00272	11.99	24.87	2.07x	
	-002	C00289	11.63	25.06	2.15x	
	-003	C00277	12.35	25.24	2.04x	
	-004	C00076	12.29	25.50	2.07x	
	-005	C00284	12.28	25.84	2.10x	
	-006	C00286	12.43	25.04	2.01x	
	-007	C00287	11.67	24.46	2.09x	
	-008	C00126	11.68	24.30	2.08x	
	-009	C0043	12.58	24.60	1.95x	
	-010	C00258	11.54	24.53	2.13x	
	-011	C00279	12.86	25.10	1.87x ET → 1.95x	
	-012	C00257	12.03	24.27	2.02x	
	-013	C00278	12.12	26.15	2.16x	
	-014	C00276	12.23	24.30	1.99x	
	-015	C00271	12.13	24.62	2.03x	
	-016	C00268	12.12	26.09	2.15x	
	-017	C00270	12.08	25.03	2.07x	
	-018	C00280	12.38	24.96	2.02x	
	-019	C00273	11.73	25.48	2.17x	
	-020	C00266	11.13	25.38	2.28x	
	-021	C00124	12.84	25.25	1.97x	
	-022	C00167	13.08	24.88	1.90x	
	-023	C00068	12.92	24.98	1.93x	
	-024	C00075	13.09	25.00	1.91x	
	-025	C00098	13.11	25.30	1.93x	
	-026	C00116	13.05	25.62	1.96x	
	-027	C00190	12.48	25.37	2.03x	
	-028	C00066	13.05	24.80	1.90x	
	-029	C00184	13.47	25.12	1.86x	
	-030	C00119	12.40	25.79	2.07x	
	-031	C00141	13.04	25.39	1.95x	
	-032	C00138	10.92	25.10	2.30x	
	-033	C00159	10.76	24.95	2.31x	
	-034	C00282	10.68	24.72	2.31x	
	-035	C00267	10.60	25.17	2.37x	

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Prepped By / date	Sample ID	Can ID	Initial pres. (psi)	Final Pres (psi)	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x 2.42x		
	-043	C00101	10.16	26.50	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00062	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.57		
	-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.83	26.30	2.67x		
	-050	C00088	9.46	26.4	2.79x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
		Blank	C00237 C00230	—	—	1x	
	500 2/22/10	Blank	C00098	—	—	1x	
	Blank	C00281	—	—	1x		
500 ET	218259-002	C00205	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093	
	-003	C00231			39.8x	20x of 1.97x can C00137	
	-004	C00020			38x	20x of 1.90x can C00065	
	-005	C00017			37.6x	20x of 1.88x can C00189	
	-019	C00019			59x	20x of 2.95x can C00145	
	-024	C00095			50.6x	20x of 2.53x can C00096	
	-025	C00230			49.6x 49.6x	20x of 2.48x can C00114	
	-034	C00028			40.4x	20x of 2.02x can C00187	
ET 2-23	218411-001	C00250	11.99	25.12	2.09x		
	-002	C00269	12.34	25.36	2.05x		
	-003	C00100	11.19	25.32	2.26x		
	-004	C00260	12.17	24.88	1.94x		
	-005	C00241	11.24	25.42	2.26x		
	-006	C00249	8.24	26.18	3.18x		

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Prepped by	date	Sample ID	Can ID	(PSIG) Initial Pres.	(PSIG) Final Pres.	Dilution Factor	Comments
ET	2-23	218411-007	C00247	11.62	25.21	2.17x	
		-008	C00251	12.06	26.50	2.59x 2.20x	
		-009	C00166	12.44	25.10	2.02	
		-010	C00057	12.80	25.02	1.95x	
		-011	C00115	12.24	25.47	2.08x	
		-012	C00649	12.50	26.17	2.09x	
		-013	C00255	12.27	25.69	2.09x	
		-014	C00056	12.19	24.93	2.04x	
		-015	C00087	12.44	25.05	2.01x	
		-016	C00180	11.98	25.35	2.12x	
		-017	C00083	12.02	26.00	2.16x	
		-018	C00579	12.06	25.10	2.08x	
		-019	C00150	13.07	25.96	1.99x	
		-020	C0042	12.79	24.85	1.94	
		-021	C00187	12.74	25.58	2.01x	
		-022	C00263	12.91	25.30	1.96x	
		-023	C00156	12.82	24.93	1.94x	
		-024	C00052	11.02	25.62	2.32x	
		-025	C00189	11.45	25.79	2.25x	
		-026	C00077	11.16	25.48		
		-027	C00167	11.62	26.13		ET 2-23
		-028	C00097	11.46	25.48	2.22x	
		-029	C00167	11.62	26.13	2.25x	
		-030	C00127	11.60	24.60	2.12x	
		-031	C00059	11.18	25.14	2.25x	
		-032	C00245	11.42	26.71	2.34x	
		-033					
		-034					ET 2-23
		-035					
		-036	C00274	11.83	24.76	2.09x	
		-037	C00262	12.24	25.98	2.20x	
		-038	C00244	11.77	25.86	2.11x	
		-039					
		-040					ET 2-23
		-041					

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Prepped by / date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution	Factor	Comments
ET 2-23	218411-012						ET 2-23
SOS 2/23/10	BLANK	C00010	—	—	1x		
↓	BLANK	C00038	—	—	1x		
ET 2-25	218477-001	C00062	11.10	25.4	2.26x		
	218477-002	C00070	11.69	25.12	2.15x		
	-003	C00129	11.90	25.30	2.13x		
	-004	ET C00176 C00176	11.53	25.07	2.17x		
	-005	C00140	11.03	25.31	2.29x		
	-006	C00089	11.24	25.82	2.30x		
	-007	C00103	9.07	25.02	2.76x		
	-008	C00161	12.00	25.07	2.09x		
	-009	C00275	12.63	25.71	2.04x		
	-010	C00243	12.05	25.18	2.09x		
	-011	C00248	12.57	25.37	2.02x		
	-012	C00264	11.81	25.57	2.16x		
ET 2-25	Blank	C00240	—	—	1x		
SOS 2/27/10	218259-015	C00007	15 added	30.0 total added	48.8x		20x of 2.44x can C00164
↓	-021	C00217	↓	↓	44.6x		20x of 2.23x can C00050
↓	-006	C	1.5 added	30.0 total added	40.7x		20x of 1.8x can C00188
SOS 2/27/10	218259-006	C00219	15 added	31.82 total added	40.7x		21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x		
↓	-002	C00012	12.34	25.01	2.03x		
↓	Blank	C00240	—	—	1x		ET 3-3
↓	Blank	C00292	—	—	1x		
SOS 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x		20x of 2.10x can C00284
	-006	C00213	↓	↓	40.2x		20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x		20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x		20x of 2.08x can C00126
	-015	C00235	↓	31.63 total added	42.8x		21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x		20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x		20x of 1.93x can C00068
	-026	C00036	↓	↓	39.3x		20x of 1.96x can C00116
SOS 3/5/10	218432-001	C00232	13.56	22.58	1.67x		refill can
↓	218329-007	C00034	1.5 added	30.0 total added	83.6x		20x of 4.18x can C00016

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Prepped by/date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Deletion Factor	Comments
ET 2-12	218259-021	C00050	11.25	25.05	2.23x	
	-022	C00078	10.24	25.26	2.47x	
	-023	C00194	10.57	25.19	2.38x	
	-024	C00096	10.03	25.36	2.53x	
	-025	C00114	10.25	25.39	2.48x	
	-026	C00151	9.78	25.20	2.58x	
	-027	C00172	10.97	25.34	2.3x	
	-028	C00191	11.71	25.38	2.17x	
	-029	C00135	11.58	25.09	2.17x	
	-030	C00192	11.81	25.28	2.14x	
	-031	C00144	12.64	25.33	2.00x	
	-032	C00067	13.32	25.27	2.81x	
	-033	C00061	12.23	25.55	2.07x	
	-034	C00197	12.47	25.20	2.02x	
	-036	C00196	11.78	25.98	2.2x	
	-037	C00121	11.07	25.34	2.29x	
	-038	C00094	11.72	25.43	2.17x	
	ET 2-14-10	218329-018	C00069	9.46	25.89	
	-047	C00117	9.83	26.3		Not used
	-050	C00088	9.83	26.3		ET 2-17-10
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.3	2.67x	
	-050	C00088	9.46	26.4	2.79x	
3/8 2/18/10	218072-004	C00018	1.5 added	30.0 total added	35.6x	20x of 1.78x can C00080
ET 2-18-10	Blank	C00240	—	—	1x	Blank made on 7th
ET 2-22-10	218411-026	C00154	11.10	25.85	2.33x	
	-027	C00170	10.93	25.24	2.31x	
	-033	C00254	9.95	24.80	2.49x	
	-034	C00259	10.64	24.32	2.29x	
	-035	C00290	11.27	24.77	2.20x	
	-039	C00086	12.24	24.48	2.00x	
	-040	C00140	11.40	25.14	2.26x	
	-041	C00123	11.14	24.50	2.20x	
	Blank	C00240	—	—	1x	

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Prepped by	Date	Sample ID	Can ID	(PSIG) Initial Pres.	(PSIG) Final Pres.	Dilution Factor	Comments
ET	2-23	218411-007	C00247	11.62	25.21	2.17x	
		-008	C00251	12.06	26.50	2.59x 2.20x	
		-009	C00166	12.44	25.10	2.02	
		-010	C00057	12.80	25.02	1.95x	
		-011	C00115	12.24	25.47	2.08x	
		-012	C00049	12.50	26.17	2.09x	
		-013	C00255	12.27	25.69	2.09x	
		-014	C00056	12.19	24.93	2.04x	
		-015	C00087	12.44	25.05	2.01x	
		-016	C00180	11.98	25.35	2.12x	
		-017	C00083	12.02	26.00	2.16x	
		-018	C00079	12.06	25.10	2.08x	
		-019	C00150	13.07	25.96	1.99x	
		-020	C00142	12.79	24.85	1.94	
		-021	C00187	12.74	25.58	2.01x	
		-022	C00263	12.91	25.30	1.96x	
		-023	C00156	12.82	24.93	1.94x	
		-024	C00052	11.02	25.62	2.32x	
		-025	C00189	11.45	25.79	2.25x	
		-026	C00097	11.16	25.48		
		-027	C00167	11.62	26.13		ET 2-23
		-028	C00097	11.46	25.48	2.22x	
		-029	C00167	11.62	26.13	2.25x	
		-030	C00127	11.60	24.60	2.12x	
		-031	C00059	11.18	25.14	2.25x	
		-032	C00245	11.42	26.71	2.34x	
		-033					
		-034					ET 2-23
		-035					
		-036	C00274	11.83	24.76	2.09x	
		-037	C00262	12.24	25.98	2.20x	
		-038	C00244	11.77	25.24.86	2.11x	
		-039					
		-040					ET 2-23
		-041					

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Prepped by/date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218411-042					ET 2-23
Sos 2/23/10	BLANK	C00010	—	—	1x	
	BLANK	C00038	—	—	1x	
ET 2-25	218479-001	C00162	11.10	25.4	2.26x	
	218479-002	C00070	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00170 C00170	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00103	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.65	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	-012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
Sos 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x	20x of 2.44x can C00164
	-021	C00217	↓	↓	44.6x	20x of 2.23x can C00150
Sos	-006	C	1.5 added	30.82 total added	40.7x	20x of 1.92x can C00188
Sos 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x	21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x	
	-002	C00012	12.34	25.01	2.03x	
	Blank	C00240	—	—	1x	ET 3-3
	Blank	C00292	—	—	1x	
Sos 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x	20x of 2.10x can C00284
	-006	C00213	↓	↓	40.2x	20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x	20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x	20x of 2.08x can C00286
	-015	C00235	↓	31.63 total added	42.8x	21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x	20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x	20x of 1.93x can C00058
	-026	C00036	↓	↓	39.2x	20x of 1.96x can C00116
Sos 3/5/10	218432-001	C00232	13.56	22.58	1.67x	refill can
	218329-007	C00034	1.5 added	30.0 total added	836x	20x of 41.8x can C00016

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Prepped By / date	Sample ID	Can ID	Initial Pres. (psig)	Final Pres. (psig)	Dilution Factor	Comments
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x	
	-037	C00261	11.53	25.04	2.17x	
	-038	C00252	11.66	25.63	2.20x	
	-039	C00265	11.56	25.89	2.24x	
	-040	C00246	12.17	25.97	2.13x	
	-041	C00242	11.44	25.52	2.23x	
	-042	C00125	10.47	25.39	2.45x 2.42x	
	-043	C00161	10.16	26.50	2.61x	
	-044	C00130	11.83	25.21	2.13x	
	-045	C00062	10.25	25.25	2.46	
	-046	C00120	10.34	25.39	2.45x	
	-047	C00152	9.76	25.28	2.59	
	-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.30	2.67x	
	-050	C00088	9.46	26.4	2.79x	
	-051	C00283	11.27	25.50	2.26x	
	-052	C00281	11.70	26.30	2.25x	
	-053	C00285	11.78	24.92	2.11x	
Blank	C00237 C00230			1x		
500 2/22/10	Blank	C00048			1x	
	Blank	C00281			1x	
500 ET	218259-002	C00205	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093
	-003	C00231			39.8x	20x of 1.99x can C00137
	-004	C00020			38x	20x of 1.90x can C00065
	-005	C00017			37.6x	20x of 1.88x can C00189
	-019	C00019			59x	20x of 2.95x can C00185
	-024	C00045			50.6x	20x of 2.53x can C00096
	-025	C00230			49.6x 49.6x	20x of 2.48x can C00114
	-034	C00028			40.4x	20x of 2.02x can C00187
ET 2-23	218411-001	C00250	11.99	25.12	2.09x	
	-002	C00269	12.34	25.36	2.05x	
	-003	C00160	11.19	25.32	2.26x	
	-004	C00260	12.17	24.88	1.94x	
	-005	C00241	11.24	25.42	2.26x	
	-006	C00249	8.24	26.18	3.18x	

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Prepped by / date	Sample ID	Can ID	(PSIG) Initial Pres.	(PSIG) Final Pres.	Dilution Factor	Comments
ET 2-23	218411-007	C00247	11.62	25.21	2.17x	
	-008	C00251	12.06	26.50	2.59x 2.20x	
	-009	C00166	12.44	25.10	2.02	
	-010	C00057	12.80	25.02	1.95x	
	-011	C00115	12.24	25.47	2.08x	
	-012	C00649	12.50	26.17	2.09x	
	-013	C00255	12.27	25.69	2.09x	
	-014	C00056	12.19	24.93	2.04x	
	-015	C00087	12.44	25.05	2.01x	
	-016	C00180	11.98	25.35	2.12x	
	-017	C00083	12.02	26.00	2.16x	
	-018	C00079	12.06	25.10	2.08x	
	-019	C00150	13.07	25.96	1.99x	
	-020	C0042	12.79	24.85	1.94	
	-021	C00187	12.74	25.58	2.01x	
	-022	C00263	12.91	25.30	1.96x	
	-023	C00156	12.82	24.93	1.94x	
	-024	C00052	11.02	25.62	2.32x	
	-025	C00189	11.45	25.79	2.25x	
	-026	C00097	11.46	25.48		
	-027	C00167	11.62	26.13		ET 2-23
	-028	C00097	11.46	25.48	2.22x	
	-029	C00167	11.62	26.13	2.25x	
	-030	C00127	11.60	24.60	2.12x	
	-031	C00059	11.18	25.14	2.25x	
	-032	C00245	11.42	26.71	2.34x	
	-033					
	-034					ET 2-23
	-035					
	-036	C00274	11.83	24.76	2.09x	
	-037	C00262	12.24	25.98	2.20x	
	-038	C00244	11.77	25.24.86	2.11x	
	-039					
	-040					ET 2-23
	-041					

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Prepped by/date	Sample ID	Can ID	PSIG Critical Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	21844-012					ET 2-23
Srs 2/23/10	BLANK	C00010	—	—	1x	
	BLANK	C00038	—	—	1x	
ET 2-25	218479-001	C00162	11.10	25.4	2.26x	
	218479-002	C00070	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	C00129	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00103	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.05	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	-012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
Srs 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x	20x of 2.44x can C00164
	-021	C00217	↓	↓	44.6x	20x of 2.23x can C00050
	-006	C	1.5 added	30.0 total added	40.7x	20x of 1.92x can C00188
Srs 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x	21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x	
	-002	C00012	12.34	25.01	2.03x	
	Blank	C00240	—	—	1x	ET 3-3
	Blank	C00292	—	—	1x	
Srs 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x	20x of 2.10x can C00284
	-006	C00213	↓	↓	40.2x	20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x	20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x	20x of 2.08x can C00286
	-015	C00235	↓	31.83 total added	42.8x	21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x	20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x	20x of 1.93x can C00068
	-026	C00036	↓	↓	39.2x	20x of 1.96x can C00116
Srs 3/5/10	218432-001	C00232	13.56	22.58	1.67x	refill can
	218329-007	C00034	1.5 added	30.0 total added	836x	20x of 41.8x can C00016

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Prepared by date	SAMPLE ID	CAN ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
ET 3-8	218411-001	C00008	1.5 added	30.0 total added	41.8x	20x of 2.09x can C00250
	-002	C00205			41.0x	20x of 2.05x can C00259
	-003	C00019			45.2x	20x of 2.26x can C00100
	-004	C00217			38.8x	20x of 1.94x can C00260
	-005	C00230			45.2x	20x of 2.26x can C00241
	-006	C00219			63.6x	20x of 3.18x can C00249
	-008	C00017			44.0x	20x of 2.20x can C00251
	-009	C00231			40.4x	20x of 2.02x can C00166
	-010	C00040			39.0x	20x of 1.95x can C00057
	-011	C00028			41.6x	20x of 2.08x can C00115
	-012	C00199			41.2x	20x of 2.09x can C00049
	-014	C00014			40.8x	20x of 2.04x can C00056
	-015	C00031			40.2x	20x of 2.01x can C00057
	-016	C00029			42.4x	20x of 2.12x can C00180
	-018	C00020			41.6x	20x of 2.08x can C00079
	-033	C00209			49.8x	20x of 2.49x can C00254
	-036	C00030			41.8x	20x of 2.09x can C00274
	-040	C00023			44.0x	20x of 2.20x can C00148
	-034	C00203			45.8x	20x of 2.29x can C00259
	-017	C00233			43.2x	20x of 2.16x can C00083
5/24/10	218411-007	C00208	1.5 added	30.0 total added	43.4x	20x of 2.17x can C00247
	-013	C00218			41.8x	20x of 2.09x can C00255
	-014	C00045			81.6x	20x of 40.8x can C00014
	-018	C00010			83.2x	20x of 41.6x can C00020
ET on 3-9	218411-034	C00259	14.75	26.05	4.05	1.77x of 2.29x
	-033	C00254	15.59	25.15	4.01	1.61x of 2.49x
5/27/10	218552-001	C00082	11.71	23.76	2.03x	
	-002	C00085	12.04	23.55	1.96x	
	-003	C00106	12.82	23.76	1.85x	
	BLANK	C00271			1x	
	218411-011	C00118	1.5 added	30.0 total added	83.2x	20x of 41.6x can C00028
5/28/10	218552-003	C00034	1.5 added	30.0 total added	3.7x	20x of 1.85x can C00006
	218552-003	C00036			74.0x	20x of 37x can C00034

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Prepped by/date	Sample ID	Can ID	(psig) Inlet Pressure	(psig) Final Pressure	Dilution Factor	Comments	
ET 2-12	218259-021	C00050	11.25	25.05	2.23x		
	-022	C00078	10.24	25.26	2.47x		
	-023	C00144	10.57	25.19	2.38x		
	-024	C00096	10.03	25.36	2.53x		
	-025	C00114	10.25	25.39	2.48x		
	-026	C00151	9.78	25.20	2.58x		
	-027	C00172	10.97	25.34	2.3x		
	-028	C00191	11.71	25.38	2.17x		
	-029	C00135	11.58	25.09	2.17x		
	-030	C00192	11.81	25.28	2.14x		
	-031	C00144	12.64	25.33	2.00x		
	-032	C00067	13.32	25.27	1.819x		
	-033	C00061	12.23	25.55	2.09x		
	-034	C00197	12.47	25.20	2.02x		
	-036	C00196	11.78	25.98	2.2x		
	-037	C00121	11.07	25.34	2.29x		
	ET 2-17-10	218329-040	C00069	9.46	25.89		
		-047	C00117	9.83	26.3		Not used
	-050	C00088	9.83	26.3		ET 2-17-10	
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.83	26.3	2.67x		
	-050	C00088	9.46	26.4	2.79x		
ET 2/16/10	218072-004	C00018	1.5 added	30.0 ^{total added}	35.6x	20x of 1.78x can C00080	
ET 2-18-10	Blank	C06240			1x	Blank made on 7th	
ET 2-22-10	218411-026	C00154	11.10	25.85	2.33x		
	-027	C00170	10.93	25.24	2.31x		
	-028	C00254	9.95	24.80	2.49x		
	-034	C00259	10.64	24.32	2.29x		
	-035	C00290	11.27	24.77	2.20x		
	-039	C00086	12.24	24.48	2.00x		
	-040	C00140	1.40	25.14	2.20x		
	-041	C00123	11.14	24.50	2.20x		
	Blank	C06240			1x		

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Prepared By / date	Sample ID	Can ID	Initial pres. (psi)	Final Pres (psi)	Dilution Factor	Comments	
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x		
	-037	C00261	11.53	25.04	2.17x		
	-038	C00252	11.66	25.63	2.20x		
	-039	C00265	11.56	25.89	2.24x		
	-040	C00246	12.17	25.97	2.13x		
	-041	C00242	11.44	25.52	2.23x		
	-042	C00125	10.47	25.39	2.45x 2.42x		
	-043	C00161	10.16	26.50	2.61x		
	-044	C00130	11.83	25.21	2.13x		
	-045	C00662	10.25	25.25	2.46		
	-046	C00120	10.34	25.39	2.45x		
	-047	C00152	9.76	25.28	2.57		
	-048	C00664	9.37	25.51	2.72x		
	-049	C00117	9.83	26.30	2.67x		
	-050	C00688	9.46	26.4	2.79x		
	-051	C00283	11.27	25.50	2.26x		
	-052	C00281	11.70	26.30	2.25x		
	-053	C00285	11.78	24.92	2.11x		
	Blank	C00237				1x	
	500 2/22/10	Blank	C00098			1x	
Blank	C00211				1x		
500 ET	218259-002	C00205	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00693	
	-003	C00231			39.8x	20x of 1.99x can C00137	
	-004	C00020			38x	20x of 1.90x can C00665	
	-005	C00017			37.6x	20x of 1.88x can C00189	
	-019	C00019			59x	20x of 2.95x can C00145	
	-024	C00095			50.6x	20x of 2.53x can C00696	
	-025	C00230			47 49.6x	20x of 2.48x can C00114	
	-034	C00028			40.4x	20x of 2.02x can C00197	
ET 2-23	218411-001	C00250	11.99	25.12	2.09x		
	-002	C00269	12.34	25.36	2.05x		
	-003	C00100	11.19	25.32	2.26x		
	-004	C00260	12.17	24.88	1.94x		
	-005	C00241	11.24	25.42	2.26x		
	-006	C00249	8.24	26.18	3.18x		

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Prepped by / date	Sample ID	Can ID	(PSIG) Initial Pres.	(PSIG) Final Pres.	Dilution Factor	Comments
ET 2-23	218411-007	C00247	11.62	25.21	2.17x	
	-008	C00251	12.06	26.50	2.59x 2.20x	
	-009	C00166	12.44	25.10	2.02	
	-010	C00057	12.80	25.02	1.95x	
	-011	C00115	12.24	25.47	2.08x	
	-012	C00649	12.50	26.17	2.09x	
	-013	C00255	12.27	25.69	2.09x	
	-014	C00056	12.19	24.93	2.04x	
	-015	C00087	12.44	25.05	2.01x	
	-016	C00180	11.98	25.35	2.12x	
	-017	C00083	12.02	26.00	2.16x	
	-018	C00579	12.06	25.10	2.08x	
	-019	C00150	13.07	25.96	1.99x	
	-020	C0042	12.79	24.85	1.94	
	-021	C00187	12.74	25.58	2.01x	
	-022	C00263	12.91	25.30	1.96x	
	-023	C00156	12.82	24.93	1.94x	
	-024	C00052	11.02	25.62	2.32x	
	-025	C00189	11.45	25.79	2.25x	
	-026	C00097	11.16	25.48		
	-027	C00167	11.62	26.13		ET 2-23
	-028	C00097	11.46	25.48	2.22x	
	-029	C00167	11.62	26.13	2.25x	
	-030	C00127	11.60	24.60	2.12x	
	-031	C00059	11.18	25.14	2.25x	
	-032	C00245	11.72	26.71	2.34x	
	-033					ET 2-23
	-034					
	-035					
	-036	C00274	11.83	24.76	2.09x	
	-037	C00262	12.24	25.98	2.20x	
	-038	C00244	11.77	25.86	2.11x	
	-039					ET 2-23
	-040					
	-041					Continued on Page

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Prepped by / date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution	Factor	Comments
ET 2-23	218411-012						ET 2-23
SOP 2/23/10	BLANK	C00010	—	—	1x		
	BLANK	C00038	—	—	1x		
ET 2-25	218477-001	C00062	11.10	25.14	2.26x		
	218477-002	C00070	11.69	25.12	2.15x		
	-003	C00129	11.90	25.30	2.13x		
	-004	ET C00176 C00176	11.53	25.07	2.17x		
	-005	C00140	11.03	25.31	2.29x		
	-006	C00089	11.24	25.82	2.30x		
	-007	C00103	9.07	25.02	2.76x		
	-008	C00161	12.00	25.07	2.09x		
	-009	C00275	12.63	25.71	2.04x		
	-010	C00243	12.65	25.18	2.09x		
	-011	C00248	12.57	25.37	2.02x		
	-012	C00264	11.81	25.57	2.16x		
ET 2-25	Blank	C00240	—	—	1x		
SOP 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x		20x of 2.44x can C00169
	-021	C00217	↓	↓	44.6x		20x of 2.23x can C00250
	-006	C	1.5 added	31.82 total added			20x of 1.92x can C00188
SOP 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x		21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x		
	-002	C00012	12.34	25.01	2.03x		
	Blank	C00240	—	—	1x		ET 3-3
	Blank	C00292	—	—	1x		
SOP 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x		20x of 2.19x can C00289
	-006	C00213	↓	↓	40.2x		20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x		20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x		20x of 2.08x can C00286
	-015	C00235	↓	31.63 total added	42.8x		21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x		20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x		20x of 1.93x can C00068
	-026	C00036	↓	↓	39.2x		20x of 1.96x can C00116
SOP 3/5/10	218432-001	C00232	13.56	22.58	1.67x		refill can
	218329-007	C00034	1.5 added	30.0 total added	83.6x		20x of 4.18x can C00016

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Prepped by date	SAMPLE ID	CAN ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
ET	218411-001	C00008	1.5 added	30.0 added	41.8x	20x of 2.09x can ³⁰⁰ C00008 C00250
3-8	-002	C00205			41.0x	20x of 2.05x can C00269
	-003	C00019			45.2x	20x of 2.26x can C00100
	-004	C00217			38.8x	20x of 1.94x can C00260
	-005	C00230			45.2x	20x of 2.26x can C00241
	-006	C00219			63.6x	20x of 3.18x can C00249
	-008	C00017			4.40	20x of 2.20x can C00251
	-009	C00231			40.4x	20x of 2.02x can C00166
	-010	C00010			39.0x	20x of 1.95x can C00057
	-011	C00028			41.6x	20x of 2.08x can C00115
	-012	C00199			41.8x ³⁰⁰	20x of 2.09x can C00049
	-014	C00014			40.3x	20x of 2.04x can C00056
	-015	C00031			40.2x	20x of 2.01x can C00057
	-016	C00029			42.4x	20x of 2.12x can C00180
	-018	C00020			41.8x ^{ET 41.8x}	20x of 2.08x can C00079
	-033	C00209			49.8x	20x of 2.49x can C00254
	-036	C00030			41.8x	20x of 2.09x can C00274
	-040	C00023			44.0x	20x of 2.20x can C00148
	-034	C00203			45.8x	20x of 2.29x can C00259
	-017	C00235			43.2x	20x of 2.16x can C00083
5/29/10	218411-007	C00208	1.5 added	30.0 total added	43.4x	20x of 2.17x can C00247
	-013	C00218			41.8x	20x of 2.09x can C00255
	-014	C00045			81.6x	20x of 40.8x can C00014
	-018	C00010			83.2x	20x of 41.6x can C00020
ET on	218411-034	C00259	14.75	26.05	4.05	1.77x of 2.29x
3-9	-033	C00254	15.59	25.15	4.01	1.61x of 2.49x
5/29/10/10	218552-001	C00082	11.71	23.76	2.03x	
	-002	C00085	12.04	23.55	1.96x	
	-003	C00106	12.82	23.76	1.85x	
	BLANK	C00271			1x	
	218411-011	C00188	1.5 added	30.0 total added	83.2x	20x of 41.6x can C00028
5/29/10/10	218552-003	C00034	1.5 added	30.0 total added	37x	20x of 1.85x can C00006
	218552-003	C00036			740x	20x of 37x can C00034

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Prepped by/date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Dilation Factor	Comments		
ET 2-12	218259-021	C00050	11.25	25.05	2.23x			
	-022	C00078	10.24	25.26	2.47x			
	-023	C00144	10.57	25.19	2.38x			
	-024	C00096	10.03	25.36	2.53x			
	-025	C00114	10.25	25.39	2.48x			
	-026	C00151	9.78	25.20	2.58x			
	-027	C00172	10.97	25.24	2.3x			
	-028	C00191	11.71	25.38	2.17x			
	-029	C00135	11.58	25.09	2.17x			
	-030	C00192	11.81	25.28	2.14x			
	-031	C00144	12.64	25.33	2.00x			
	-032	C00067	13.32	25.27	2.31x			
	-033	C00061	12.23	25.55	2.09x			
	-034	C00197	12.47	25.20	2.02x			
	-036	C00196	11.78	25.98	2.2x			
	-037	C00121	11.07	25.34	2.29x			
	↓	↓	-038	C00094	11.72	25.43	2.17x	
	ET 2-17-10	218329-040	C00069	9.46	25.59			
		-047	C00117	11.83	26.3	Not Used		
		-050	C00088	4.83	26.3	ET 2-17-10		
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x			
↓	↓	-049	C00117	9.83	26.3	2.67x		
↓	↓	-050	C00088	9.46	26.4	2.79x		
5/8 2/16/10	218072-004	C00018	1.5 added	30.0 ^{total added}	35.6x	20x of 1.78x can C00080		
ET 2-18-10	Blank	C00240	—	—	1x	Blank made on 7th		
ET 2-22-10	218411-026	C00154	11.10	25.85	2.23x			
		-027	C00170	10.93	25.24	2.31x		
		-033	C00254	9.95	24.80	2.49x		
		-034	C00259	10.64	24.32	2.29x		
		-035	C00290	11.27	24.77	2.20x		
		-039	C00086	12.24	24.48	2.00x		
		-040	C00148	11.40	25.14	2.20x		
	↓	-041	C00123	11.14	24.50	2.20x		
↓	Blank	C00240	—	—	1x			

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Prepped By / date	Sample ID	Can ID	(Psi) Initial pres.	(Psi) Final Pres	Dilution Factor	Comments
ET 2-22-10	218329-036	C00288	10.62	25.28	2.38x	
	-037	C00261	11.53	25.04	2.17x	
	-038	C00252	11.66	25.63	2.20x	
	-039	C00265	11.56	25.89	2.24x	
	-040	C00246	12.17	25.97	2.13x	
	-041	C00242	11.44	25.52	2.23x	
	-042	C00255	10.47	25.39	2.45x → 2.42x	
	-043	C00161	10.16	26.50	2.61x	
	-044	C00130	11.83	25.21	2.13x	
	-045	C00062	10.25	25.25	2.46	
	-046	C00120	10.34	25.39	2.45x	
	-047	C00152	9.76	25.28	2.59	
	-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.30	2.67x	
	-050	C00088	9.46	26.4	2.79x	
	-051	C00283	11.27	25.50	2.26x	
	-052	C00281	11.70	26.30	2.25x	
	-053	C00285	11.78	24.92	2.11x	
	Blank	C00237	—	—	1x	
500 2/22/10	Blank	C00048	—	—	1x	
500	Blank	C00211	—	—	1x	
ET	218259-002	C00205	1.5 added	30.0 total added	38.4x	20x of 1.92x can C00093
	-003	C00231	—	—	39.8x	20x of 1.99x can C00137
	-004	C00020	—	—	38x	20x of 1.90x can C00065
	-005	C00017	—	—	37.6x	20x of 1.88x can C00199
	-019	C00019	—	—	59x	20x of 2.95x can C00145
	-024	C00045	—	—	50.6x	20x of 2.53x can C00096
	-025	C00230	—	—	49.6x 49.6x	20x of 2.48x can C00114
	-034	C00028	—	—	40.4x	20x of 2.02x can C00197
ET 2-23	218411-001	C00250	11.99	25.12	2.09x	
	-002	C00269	12.34	25.36	2.05x	
	-003	C00160	11.19	25.32	2.26x	
	-004	C00260	12.17	24.88	1.94x	
	-005	C00241	11.24	25.42	2.26x	
	-006	C00249	8.24	26.18	3.18x	

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PROJECT

AIR SAMPLE PREP LOG

Notebook No. BK2875

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Prepped by / date	Sample ID	Can ID	(PSIG) Initial Pres.	(PSIG) Final Pres.	Dilution Factor	Comments
ET 2-23	218411-007	C00247	11.62	25.21	2.17x	
	-008	C00251	12.06	26.50	2.59x 2.20x	
	-009	C00166	12.44	25.10	2.02	
	-010	C00057	12.80	25.02	1.95x	
	-011	C00115	12.24	25.47	2.08x	
	-012	C00649	12.50	26.17	2.09x	
	-013	C00255	12.27	25.69	2.09x	
	-014	C00056	12.19	24.93	2.04x	
	-015	C00087	12.44	25.05	2.01x	
	-016	C00180	11.98	25.35	2.12x	
	-017	C00083	12.02	26.00	2.16x	
	-018	C00679	12.06	25.10	2.08x	
	-019	C00150	13.07	25.96	1.99x	
	-020	C0042	12.79	24.85	1.94	
	-021	C00187	12.74	25.58	2.01x	
	-022	C00263	12.91	25.30	1.96x	
	-023	C00156	12.82	24.93	1.94x	
	-024	C00052	11.02	25.62	2.32x	
	-025	C00189	11.45	25.79	2.25x	
	-026	C00097	11.16	25.48		
	-027	C00167	11.62	26.13		ET 2-23
	-028	C00097	11.46	25.48	2.22x	
	-029	C00167	11.62	26.13	2.25x	
	-030	C00127	11.60	24.60	2.12x	
	-031	C00059	11.18	25.14	2.25x	
	-032	C00245	11.42	26.71	2.34x	
	-033					
	-034					ET 2-23
	-035					
	-036	C00274	11.83	24.76	2.09x	
	-037	C00262	12.24	25.98	2.20x	
	-038	C00244	11.77	25.24.86	2.11x	
	-039					
	-040					ET 2-23
	-041					

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Prepped by/date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218441-012					ET 2-23
Sos 2/23/10	BLANK	C00010	—	—	1x	
	BLANK	C00038	—	—	1x	
ET 2-25	218479-001	C00162	11.10	25.14	2.26x	
	218479-002	C00570	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00176	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00103	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.05	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	-012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
Sos 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x	20x of 2.44x can C00164
	-021	C00217	↓	↓	44.6x	20x of 2.23x can C00050
	-006	C	1.5 added	30.82 total added	↓	20x of 1.92x can C00188
Sos 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x	21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x	
	-002	C00012	12.34	25.01	2.03x	
	Blank	C00240	—	—	1x	ET 3-3
	Blank	C00292	—	—	1x	
Sos 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x	20x of 2.10x can C00284
	-006	C00213	↓	↓	40.2x	20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x	20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x	20x of 2.08x can C00126
	-015	C00235	↓	31.63 total added	42.8x	21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x	20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x	20x of 1.93x can C00068
	-026	C00036	↓	↓	39.2x	20x of 1.96x can C00116
Sos 3/5/10	218432-001	C00232	13.56	22.58	1.67x	refill can
	218329-007	C00034	1.5 added	30.0 total added	836x	20x of 41.8x can C00016

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Prepped by	SAMPLE ID	CAN ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments
ET	218411-001	C00008	1.5 added	30.0 added	41.8x	20x of 2.09x can ⁵⁰⁰ C000 C00250
3-8	-002	C00205			41.0x	20x of 2.05x can C00269
	-003	C00019			45.2x	20x of 2.26x can C00100
	-004	C00217			38.8x	20x of 1.94x can C00260
	-005	C00230			45.2x	20x of 2.26x can C00241
	-006	C00219			63.6x	20x of 3.18x can C00249
	-008	C00017			4.40	20x of 2.20x can C00251
	-009	C00231			40.4x	20x of 2.02x can C00166
	-010	C00040			39.0x	20x of 1.95x can C00057
	-011	C00028			41.6x	20x of 2.08x can C00115
	-012	C00199			41.8x ⁵⁰⁰ 41.8x	20x of 2.09x can C00049
	-014	C00014			40.8x	20x of 2.04x can C00056
	-015	C00031			40.2x	20x of 2.01x can C00067
	-016	C00029			42.4x	20x of 2.12x can C00180
	-018	C00020			^{ET} 41.8x	20x of 2.08x can C00079
	-033	C00209			49.8x	20x of 2.49x can C00254
	-036	C00030			41.8x	20x of 2.09x can C00274
	-040	C00023			44.0x	20x of 2.20x can C00148
	-034	C00203			45.8x	20x of 2.29x can C00259
	-017	C00233			43.2x	20x of 2.16x can C00083
500/9/10	218411-007	C00208	1.5 added	30.0 total added	43.4x	20x of 2.17x can C00247
	-013	C00218			41.8x	20x of 2.09x can C00255
	-014	C00045			81.6x	20x of 40.8x can C00014
	-018	C00010			832x	20x of 41.6x can C00020
ET on	218411-034	C00259	14.75	26.05	4.05	1.77x of 2.29x
3-9	-033	C00254	15.59	25.15	4.01	1.61x of 2.49x
500/10/10	218552-001	C00082	11.71	23.76	2.03x	
	-002	C00085	12.04	23.55	1.96x	
	-003	C00106	12.82	23.76	1.85x	
	BLANK	⁵⁰⁰ C00291			1x	
	218411-011	C00198	1.5 added	30.0 total added	832x	20x of 41.6x can C00028
500/11/10	218552-003	C00034	1.5 added	30.0 total added	37x	20x of 1.85x can C00006
	218552-003	C00036			740x	20x of 37x can C00034

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Prepped by/date	Sample ID	Can ID	(psi g) Inlet Pressure	(psi g) Final Pressure	Dilution Factor	Comments	
ET 2-12	218259-021	C00050	11.25	25.05	2.23x		
	-022	C00078	10.24	25.26	2.47x		
	-023	C00144	10.57	25.19	2.38x		
	-024	C00096	10.03	25.36	2.53x		
	-025	C00114	10.25	25.39	2.48x		
	-026	C00151	9.78	25.20	2.58x		
	-027	C00172	10.97	25.24	2.3x		
	-028	C00191	11.71	25.38	2.17x		
	-029	C00135	11.58	25.09	2.17x		
	-030	C00192	11.81	25.28	2.14x		
	-031	C00144	12.64	25.33	2.00x		
	-032	C00067	13.32	25.27	2.31x		
	-033	C00061	12.23	25.55	2.09x		
	-034	C00197	12.47	25.20	2.02x		
	-036	C00196	11.78	25.98	2.2x		
	-037	C00121	11.07	25.34	2.29x		
	ET 2-17-10	218329-048	C00069	9.46	25.89		
		-049	C00117	9.83	26.3		Not used
	-050	C00088	9.83	26.3		ET 2-17-10	
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x		
	-049	C00117	9.83	26.3	2.67x		
	-050	C00088	9.46	26.4	2.79x		
ET 2/16/10	218072-004	C00018	1.5 added	30.0 ^{total} added	35.6x	20x of 1.78x can C00080	
ET 2-18-10	Blank	C00240	—	—	1x	Blank made on 7th	
ET 2-22-10	218411-026	C00154	11.10	25.85	2.23x		
	-027	C00170	10.93	25.24	2.31x		
	-033	C00254	9.95	24.80	2.49x		
	-034	C00259	10.64	24.32	2.29x		
	-035	C00290	11.27	24.77	2.20x		
	-039	C00086	12.24	24.48	2.00x		
	-040	C00148	11.40	25.14	2.20x		
	-041	C00123	11.14	24.50	2.20x		
	Blank	C00240	—	—	1x		

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Laboratory Job Number 218411

ANALYTICAL REPORT

Volatile Organics in Air GC

Matrix: Air

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Analyte:	Methane-TO3	Units (M):	ug/L
Field ID:	P-32-10Q1	Diln Fac:	2.330
Lab ID:	218411-026	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
Result (M):	2.1	Received:	02/19/10
RL:	0.76	Analyzed:	03/09/10
Units:	ppmv		

Result	RL	ADEQ Flags
3.2	1.2	D1

RL= Reporting Limit

Result M= Result in Mass Units

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Analyte:	Methane-TO3	Units (M):	ug/L
Field ID:	BSVE-SVM-10Q1-011	Diln Fac:	2.310
Lab ID:	218411-027	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
Result (M):	2.1	Received:	02/19/10
RL:	0.76	Analyzed:	03/09/10
Units:	ppmv		

Result	RL	ADEQ Flags
3.2	1.2	D1

RL= Reporting Limit

Result M= Result in Mass Units

Analysis of Reformed Gas

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BV-9N-10Q1	Diln Fac:	2.490
Lab ID:	218411-033	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
RL:	0.25	Received:	02/19/10
Units:	ppmv	Analyzed:	02/23/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	23,000	2,500	2.3	D2
Oxygen	200,000	2,500	20	D2

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BV-9N-10Q1	Diln Fac:	2.490
Lab ID:	218411-033	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
Units:	ppmv	Received:	02/19/10
Units (M):	ug/L	Analyzed:	02/23/10

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	120	1.2	80	0.82	D2
C1-C2 as Ethane	ND	2.5	ND	3.1	D2
C2-C3 as Propane	ND	2.5	ND	4.5	D2
C3-C4 as n-Butane	ND	2.5	ND	5.9	D2
C4-C5 as n-Pentane	ND	2.5	ND	7.3	D2
C5-C6 as n-Hexane	8.1	2.5	29	8.8	D2

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Analysis of Reformed Gas

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BV-13N-10Q1	Diln Fac:	2.290
Lab ID:	218411-034	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
RL:	0.23	Received:	02/19/10
Units:	ppmv	Analyzed:	02/23/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	26,000	2,300	2.6	D1
Oxygen	200,000	2,300	20	D1

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BV-13N-10Q1	Diln Fac:	4.050
Lab ID:	218411-034	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
Units:	ppmv	Received:	02/19/10
Units (M):	ug/L	Analyzed:	03/09/10

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	15	2.0	9.5	1.3	D1
C1-C2 as Ethane	ND	4.1	ND	5.0	D1
C2-C3 as Propane	ND	4.1	ND	7.3	D1
C3-C4 as n-Butane	ND	4.1	ND	9.6	D1
C4-C5 as n-Pentane	ND	4.1	ND	12	D1
C5-C6 as n-Hexane	11	4.1	40	14	D1
C6+ as n-Hexane	27	4.1	95	14	D1

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Analysis of Reformed Gas

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BV-3N-10Q1	Diln Fac:	2.200
Lab ID:	218411-035	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
RL:	0.22	Received:	02/19/10
Units:	ppmv	Analyzed:	02/23/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	21,000	2,200	2.1	D1
Oxygen	250,000	2,200	25	D1

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BV-3N-10Q1	Diln Fac:	2.200
Lab ID:	218411-035	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
Units:	ppmv	Received:	02/19/10
Units (M):	ug/L	Analyzed:	03/09/10

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	70	1.1	46	0.72	D1
C1-C2 as Ethane	ND	2.2	ND	2.7	D1
C2-C3 as Propane	ND	2.2	ND	4.0	D1
C3-C4 as n-Butane	ND	2.2	ND	5.2	D1
C4-C5 as n-Pentane	ND	2.2	ND	6.5	D1
C5-C6 as n-Hexane	4.4	2.2	15	7.8	D1
C6+ as n-Hexane	16	2.2	56	7.8	D1

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Analysis of Reformed Gas

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BV-1N-10Q1	Diln Fac:	2.000
Lab ID:	218411-039	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
RL:	0.20	Received:	02/19/10
Units:	ppmv	Analyzed:	02/24/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	39,000	2,000	3.9	D1
Oxygen	180,000	2,000	18	D1

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BV-1N-10Q1	Diln Fac:	2.000
Lab ID:	218411-039	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
Units:	ppmv	Received:	02/19/10
Units (M):	ug/L	Analyzed:	02/24/10

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	54	1.0	35	0.66	D1
C1-C2 as Ethane	ND	2.0	ND	2.5	D1
C2-C3 as Propane	ND	2.0	ND	3.6	D1
C3-C4 as n-Butane	ND	2.0	ND	4.8	D1
C4-C5 as n-Pentane	ND	2.0	ND	5.9	D1
C5-C6 as n-Hexane	ND	2.0	ND	7.0	D1
C6+ as n-Hexane	2.2	2.0	7.9	7.0	D1

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Analysis of Reformed Gas

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BV-10N-10Q1	Diln Fac:	2.200
Lab ID:	218411-040	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
RL:	0.22	Received:	02/19/10
Units:	ppmv	Analyzed:	02/24/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	92,000	2,200	9.2	D1
Oxygen	94,000	2,200	9.4	D1

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BV-10N-10Q1	Diln Fac:	2.200
Lab ID:	218411-040	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
Units:	ppmv	Received:	02/19/10
Units (M):	ug/L	Analyzed:	02/24/10

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	2,400	1.1	1,500	0.72	D1
C1-C2 as Ethane	ND	2.2	ND	2.7	D1
C2-C3 as Propane	ND	2.2	ND	4.0	D1
C3-C4 as n-Butane	ND	2.2	ND	5.2	D1
C4-C5 as n-Pentane	ND	2.2	ND	6.5	D1
C5-C6 as n-Hexane	17	2.2	62	7.8	D1
C6+ as n-Hexane	150	2.2	520	7.8	D1

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Analysis of Reformed Gas

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BSVE-SVM-10Q1-012	Diln Fac:	2.200
Lab ID:	218411-041	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
RL:	0.22	Received:	02/19/10
Units:	ppmv	Analyzed:	02/24/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	39,000	2,200	3.9	D1
Oxygen	180,000	2,200	18	D1

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air

Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BSVE-SVM-10Q1-012	Diln Fac:	2.290
Lab ID:	218411-041	Batch#:	160295
Matrix:	Air	Sampled:	02/16/10
Units:	ppmv	Received:	02/19/10
Units (M):	ug/L	Analyzed:	03/09/10

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	61	1.1	40	0.75	D1
C1-C2 as Ethane	ND	2.3	ND	2.8	D1
C2-C3 as Propane	ND	2.3	ND	4.1	D1
C3-C4 as n-Butane	ND	2.3	ND	5.4	D1
C4-C5 as n-Pentane	ND	2.3	ND	6.8	D1
C5-C6 as n-Hexane	ND	2.3	ND	8.1	D1
C6+ as n-Hexane	4.1	2.3	14	8.1	D1

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Type:	BLANK	Units:	ppmv
Lab ID:	QC533626	Units (Mol %):	MOL %
Matrix:	Air	Diln Fac:	1.000
Result (Mol %):	ND	Batch#:	160295
RL:	0.10	Analyzed:	02/23/10

Analyte	Result	RL	ADEQ Flags
Carbon Dioxide	ND	1,000	
Oxygen	ND	1,000	

ND= Not Detected

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Type:	BLANK	Units:	ppmv
Lab ID:	QC533627	Units (Mol %):	MOL %
Matrix:	Air	Diln Fac:	1.000
Result (Mol %):	ND	Batch#:	160295
RL:	0.10	Analyzed:	02/23/10

Analyte	Result	RL	ADEQ Flags
Carbon Dioxide	ND	1,000	
Oxygen	ND	1,000	

ND= Not Detected

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Type:	BLANK	Units (M):	ug/L
Lab ID:	QC533627	Diln Fac:	1.000
Matrix:	Air	Batch#:	160295
Result (M):	ND	Analyzed:	02/23/10
Units:	ppmv		

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	0.50	0.33	
C1-C2 as Ethane	ND	1.0	1.2	
C2-C3 as Propane	ND	1.0	1.8	
C3-C4 as n-Butane	ND	1.0	2.4	
C4-C5 as n-Pentane	ND	1.0	3.0	
C5-C6 as n-Hexane	ND	1.0	3.5	
C6+ as n-Hexane	ND	1.0	3.5	

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC533628	Batch#:	160295
Matrix:	Air	Analyzed:	02/23/10
Units:	ppmv		

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Carbon Dioxide	2,000	2,250	113	70-130		
Oxygen	2,000	1,785	89	70-130		

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BV-9N-10Q1	Units (Mol %):	MOL %
Type:	SDUP	Diln Fac:	4.010
MSS Lab ID:	218411-033	Batch#:	160295
Lab ID:	QC533631	Sampled:	02/16/10
Matrix:	Air	Received:	02/19/10
RL:	0.4010	Analyzed:	03/09/10
Units:	ppmv		

Analyte	MSS Result	Result	RL	Result (Mol %)	RPD	Lim	ADEQ	Flags
Carbon Dioxide	23,060	28,440	4,010	2.844	21	30	D1	
Oxygen	204,300	189,000	4,010	18.90	8	30	D1	

RL= Reporting Limit

RPD= Relative Percent Difference

Result Mol %= Result in Mole Percent

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BV-9N-10Q1	Units (M):	ug/L
Type:	SDUP	Diln Fac:	4.010
MSS Lab ID:	218411-033	Batch#:	160295
Lab ID:	QC533631	Sampled:	02/16/10
Matrix:	Air	Received:	02/19/10
Units:	ppmv	Analyzed:	03/09/10

Analyte	MSS Result	Result	RL	Result (M)	RL	RPD	Lim	ADEQ	Flags
Methane-TO3	122.0	145.2	2.005	95.28	1.315	17	30	D1	
C1-C2 as Ethane	<2.490	ND	4.010	ND	4.932	NC	30	D1	
C2-C3 as Propane	<2.490	ND	4.010	ND	7.233	NC	30	D1	
C3-C4 as n-Butane	<2.490	ND	4.010	ND	9.532	NC	30	D1	
C4-C5 as n-Pentane	<2.490	ND	4.010	ND	11.83	NC	30	D1	
C5-C6 as n-Hexane	8.125	9.775	4.010	34.46	14.13	18	30	D1	

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

RPD= Relative Percent Difference

Result M= Result in Mass Units

Batch QC Report

Volatile Organics in Air			
Lab #:	218411	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Type:	BLANK	Units (M):	ug/L
Lab ID:	QC535341	Diln Fac:	1.000
Matrix:	Air	Batch#:	160295
Result (M):	ND	Analyzed:	03/09/10
Units:	ppmv		

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	0.50	0.33	
C1-C2 as Ethane	ND	1.0	1.2	
C2-C3 as Propane	ND	1.0	1.8	
C3-C4 as n-Butane	ND	1.0	2.4	
C4-C5 as n-Pentane	ND	1.0	3.0	
C5-C6 as n-Hexane	ND	1.0	3.5	
C6+ as n-Hexane	ND	1.0	3.5	

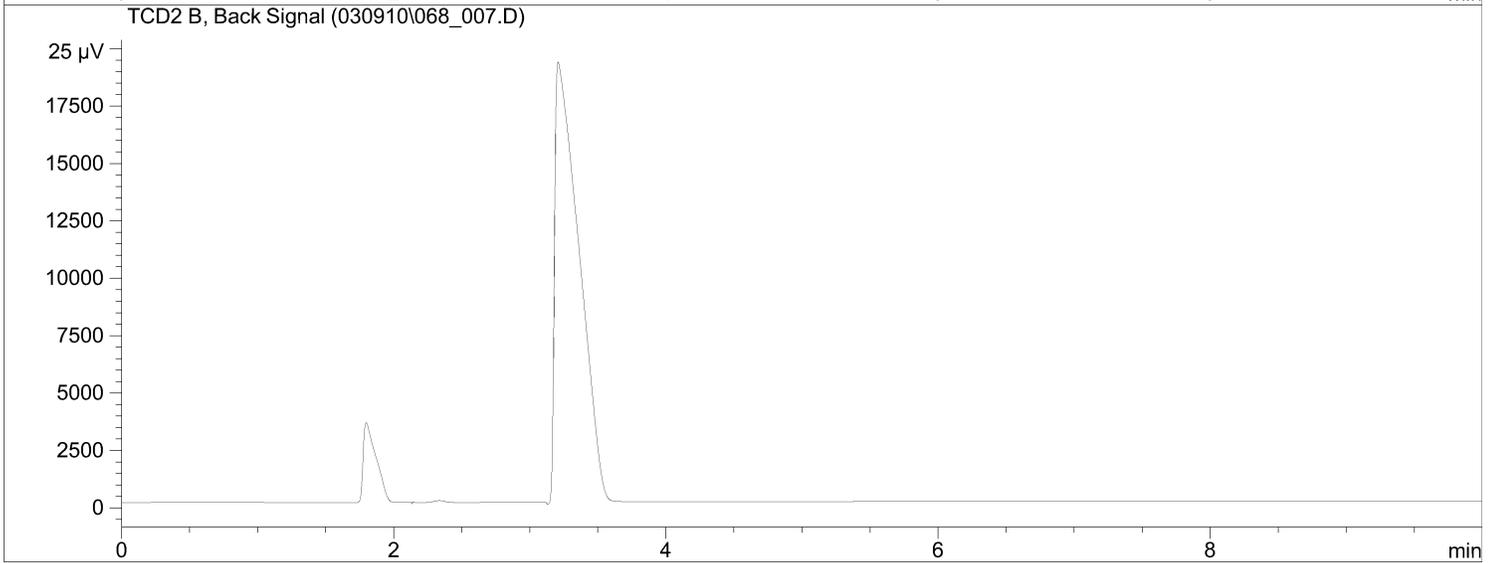
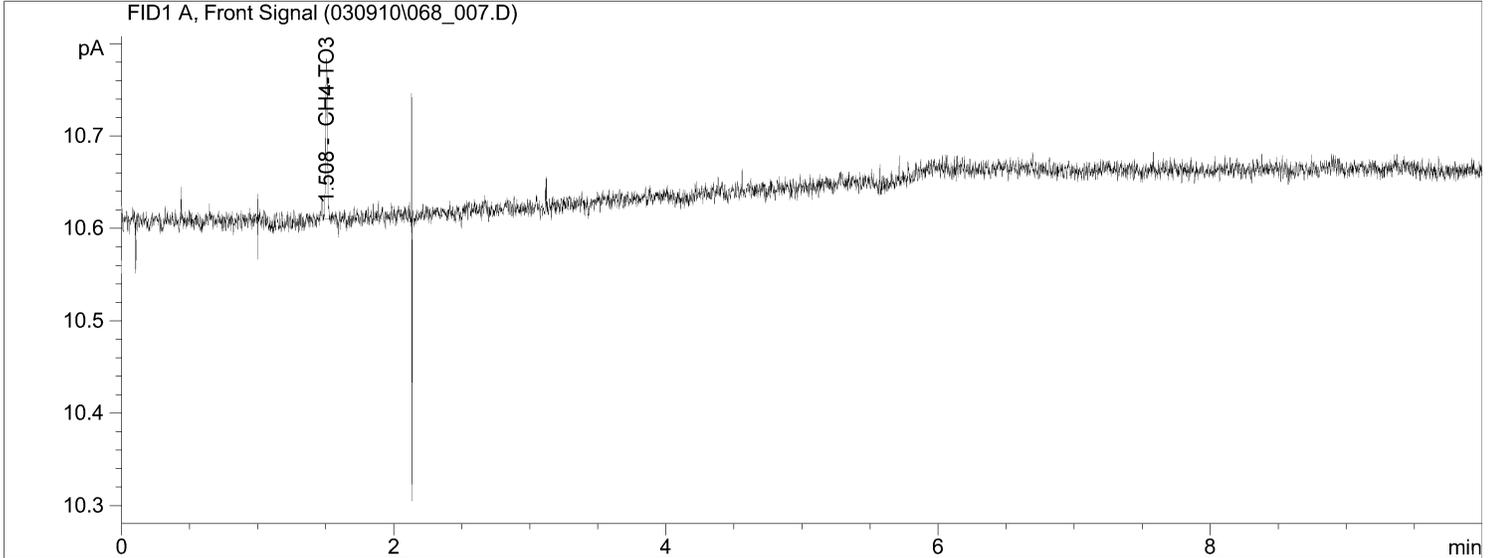
ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Sample Name: 218411-026,160295,2.33

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Acq. Instrument : GC28 Location : Vial 1
Injection Date : 3/9/2010 01:09:19 PM Inj Volume : Manually
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Last changed : 3/9/2010 01:03:58 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



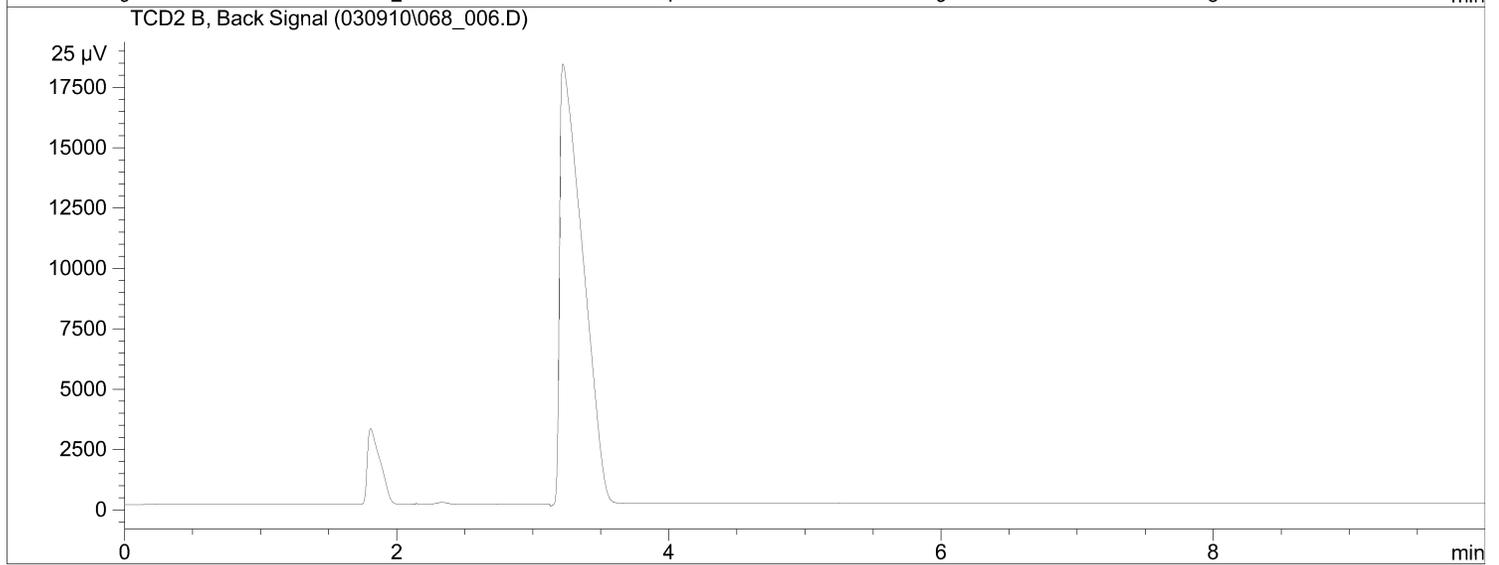
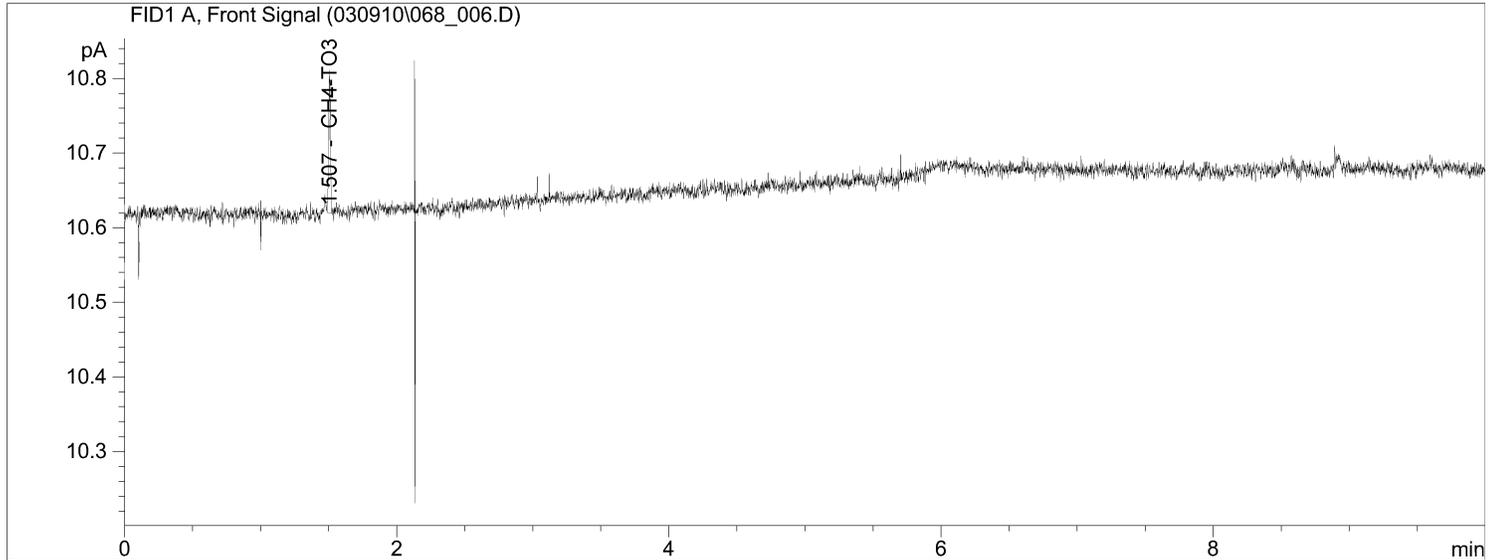
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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Sample Name: 218411-027,160295,2.31

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 3/9/2010 12:48:55 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 3/9/2010 12:44:09 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



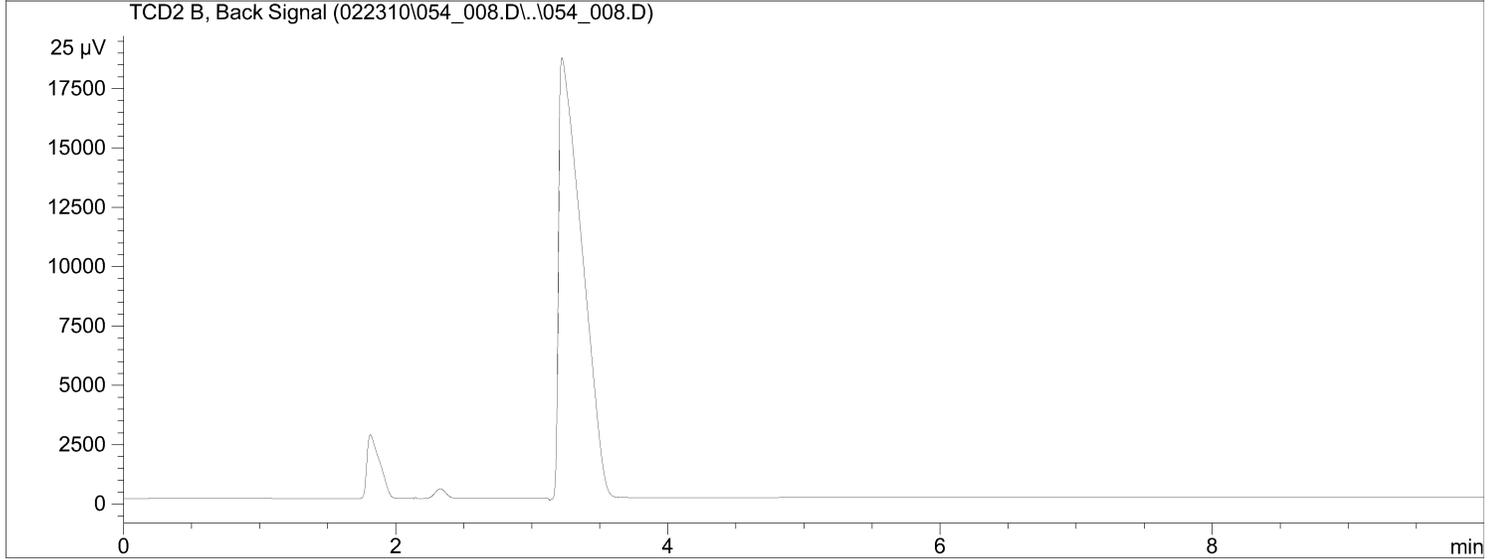
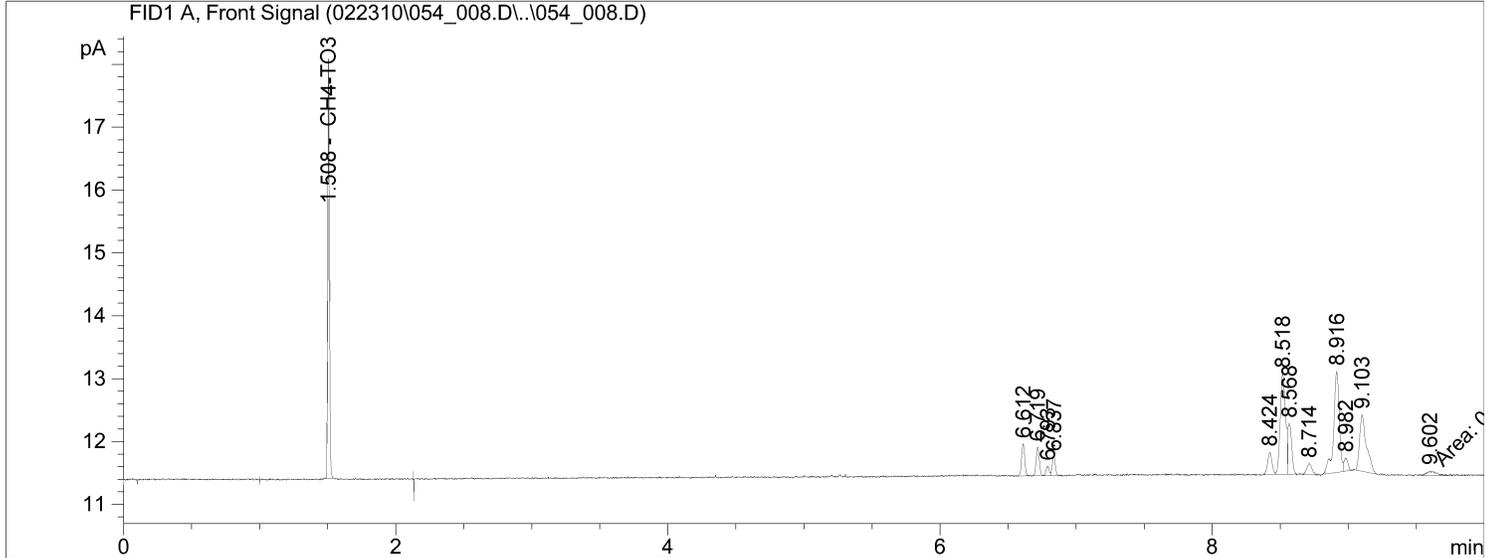
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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Sample Name: mss.218411-033,160295,2.49

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/23/2010 03:13:44 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 2/23/2010 03:03:50 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA
(Results are from a previously saved Batch)



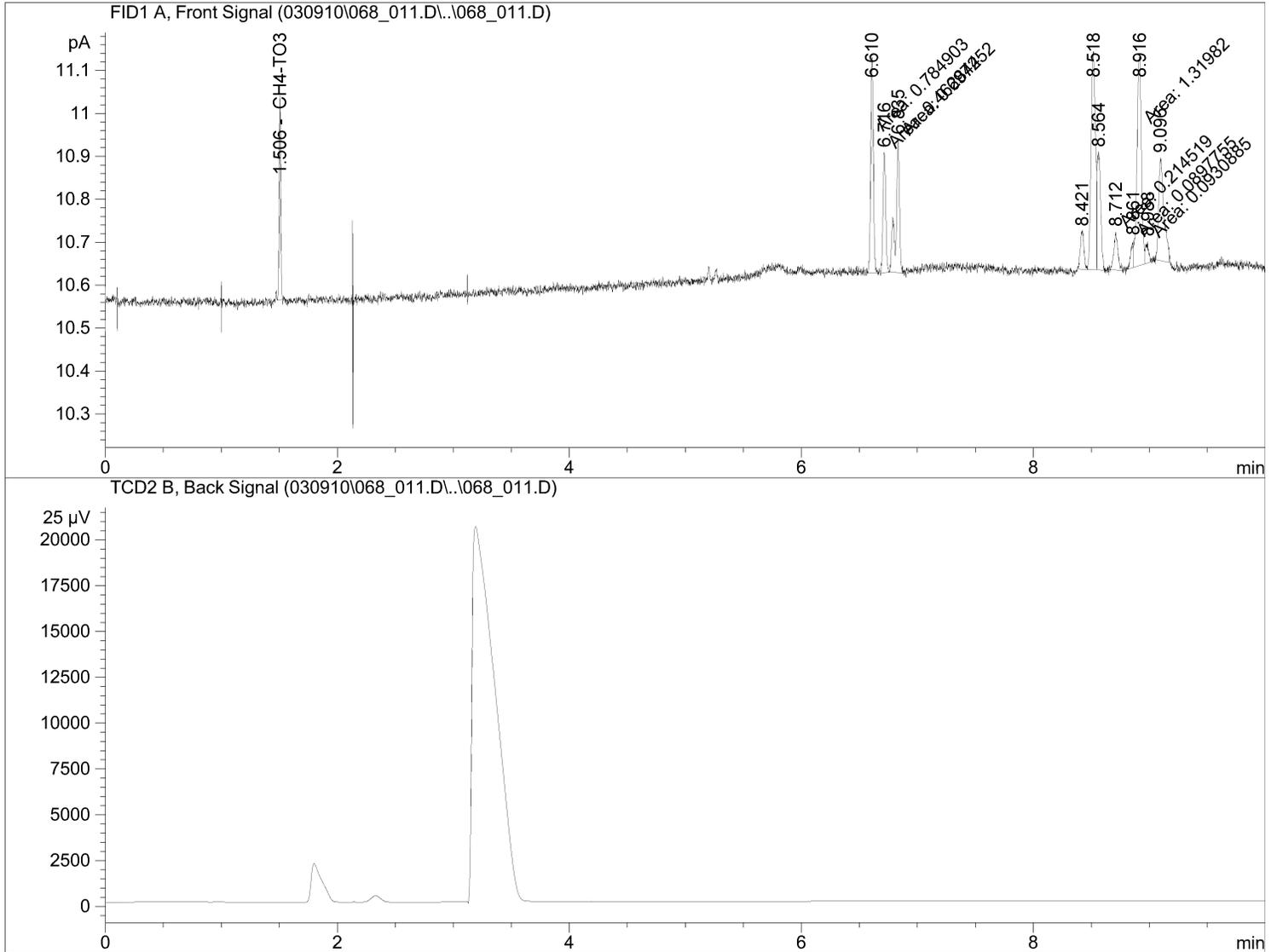
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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Sample Name: 218411-034,160295,4.05

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 3/9/2010 02:31:59 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 3/9/2010 02:31:58 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA
(Results are from a previously saved Batch)

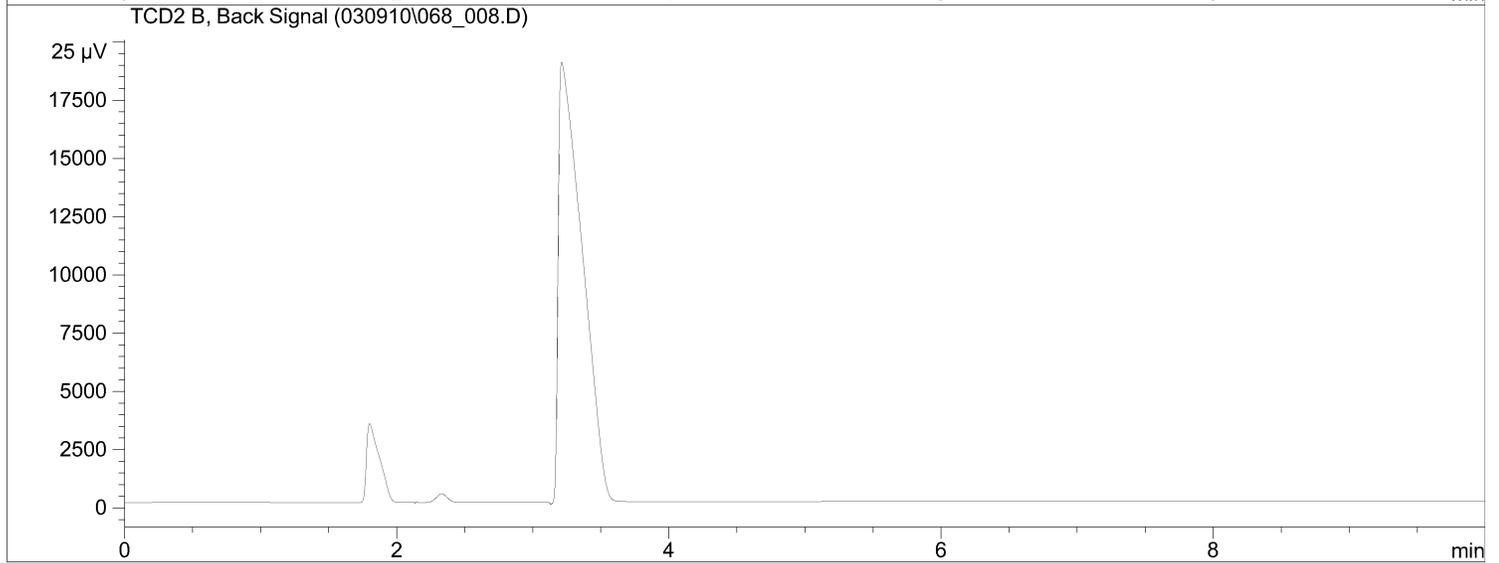
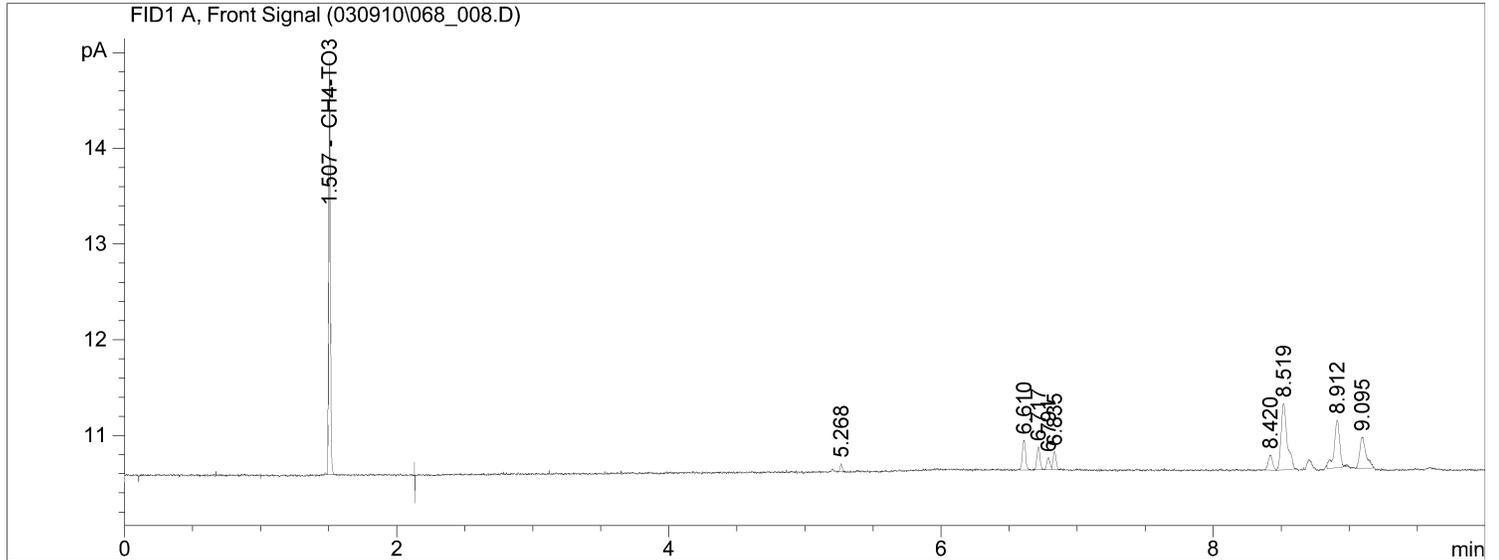


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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Sample Name: 218411-035,160295,2.2

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 3/9/2010 01:29:05 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 3/9/2010 01:29:04 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



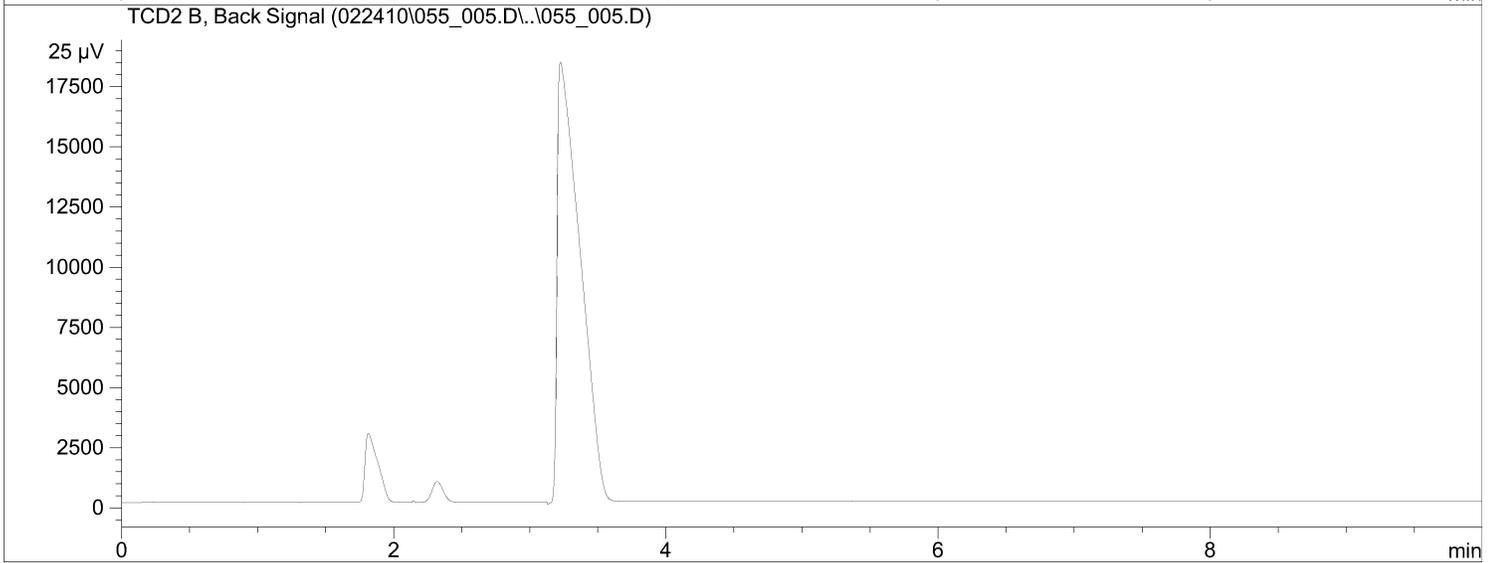
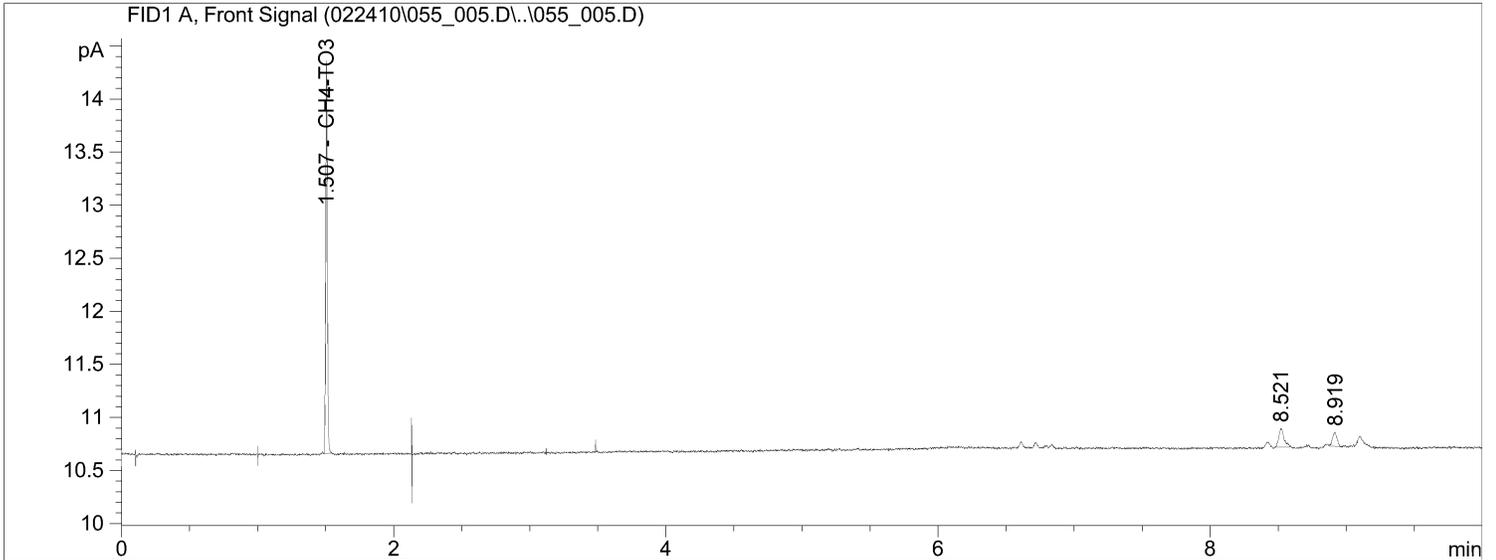
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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Sample Name: 218411-039,160295,2

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/24/2010 02:50:09 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 2/24/2010 02:33:51 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_020910.M
Last changed : 2/9/2010 08:34:33 AM by GC28 RGA
(Results are from a previously saved Batch)



=====
External Standard Report
=====

Sorted By : Signal
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Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

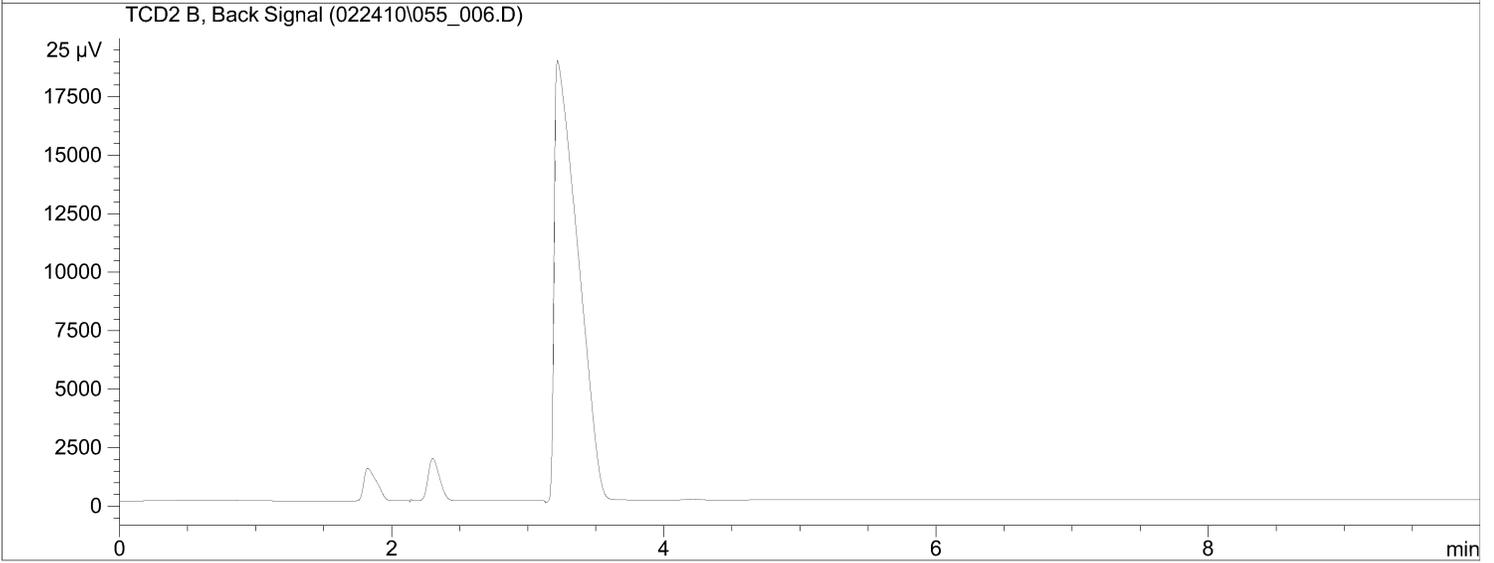
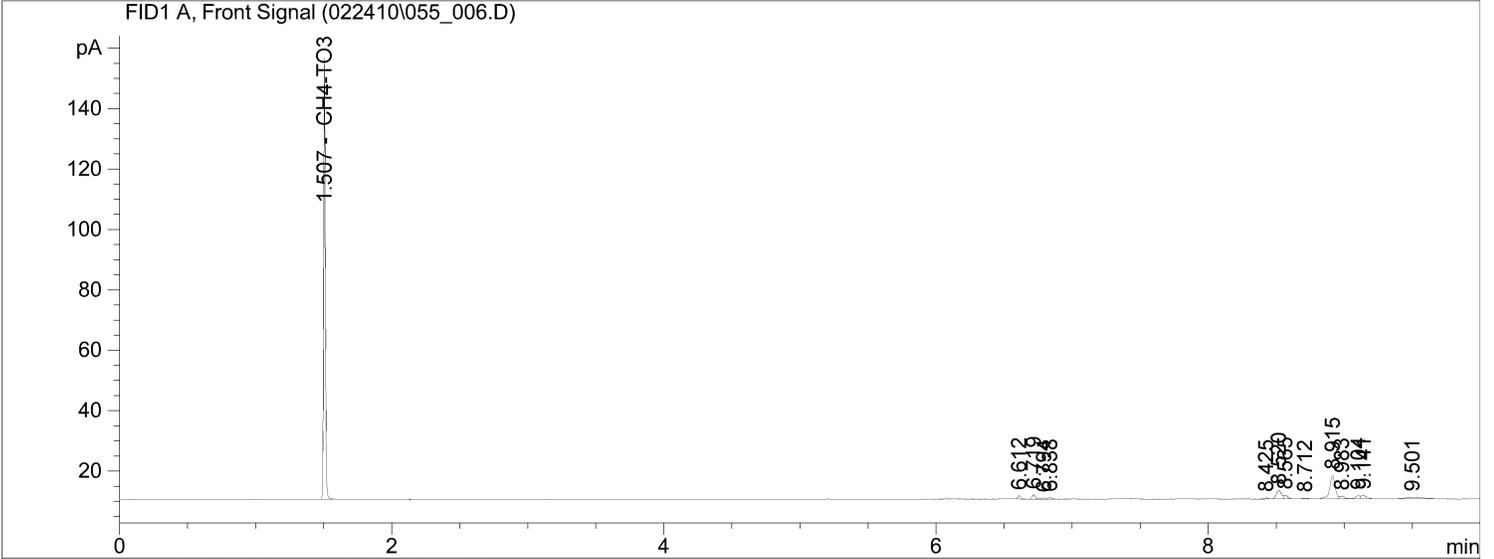
Signal 1: FID1 A, Front Signal

Sample Name: 218411-040,160295,2.2

```

=====
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Acq. Instrument : GC28                      Location : Vial 1
Injection Date  : 2/24/2010 03:19:40 PM
                                           Inj Volume : Manually

Acq. Method     : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed    : 2/24/2010 03:05:10 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed    : 12/11/2009 04:39:29 PM by GC28 RGA
    
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External Standard Report

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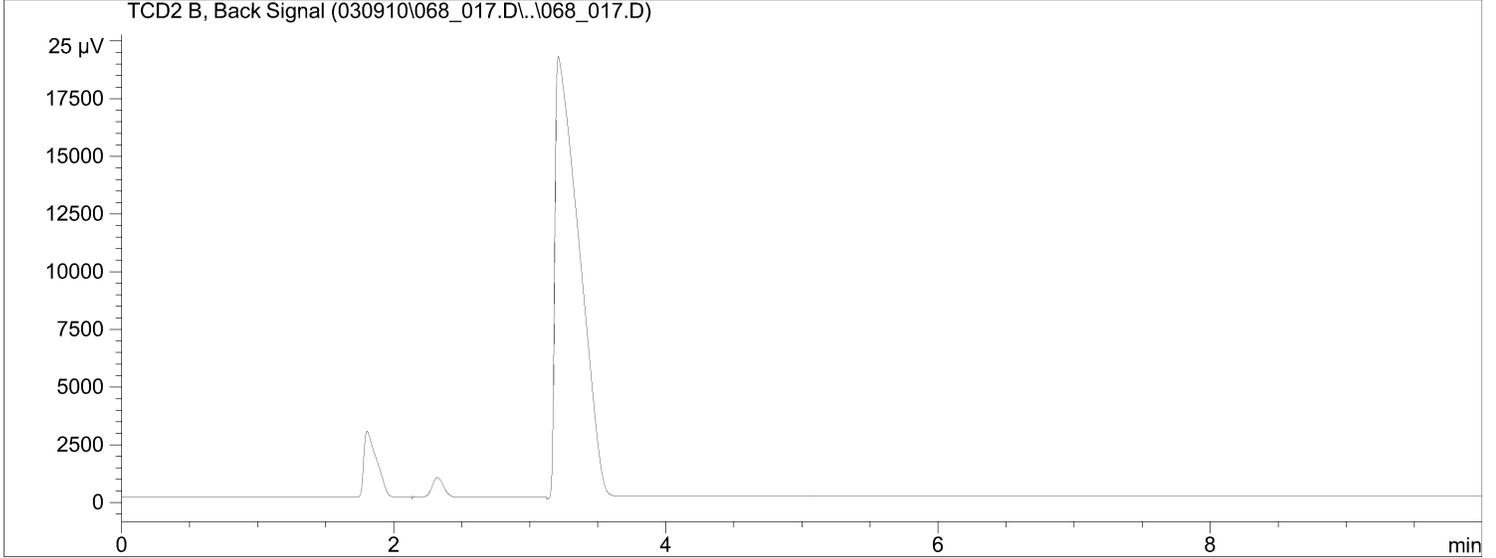
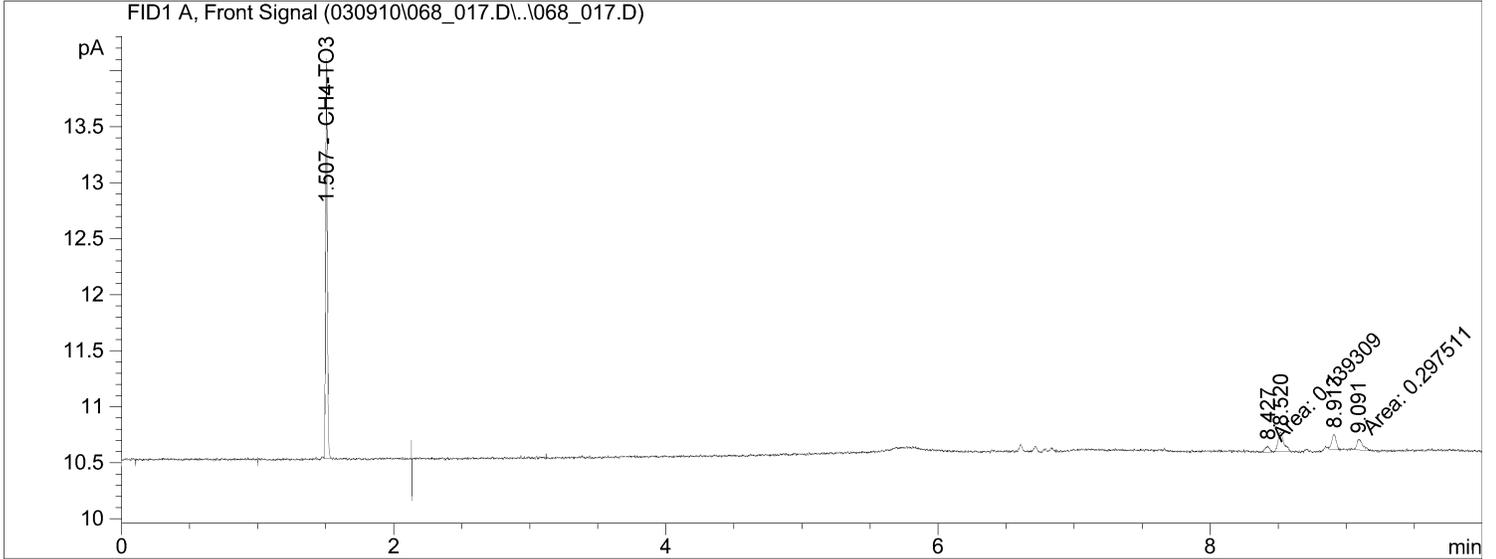
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Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier     : 1.0000
Dilution       : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.507	BB	131.72395	8.13190	1071.16575		CH4-TO3

Sample Name: 218411-041,160295,2.29

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 3/9/2010 04:35:52 PM Inj Volume : Manually
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Last changed : 3/9/2010 04:30:26 PM by GC28 RGA
(modified after loading)
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
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(Results are from a previously saved Batch)

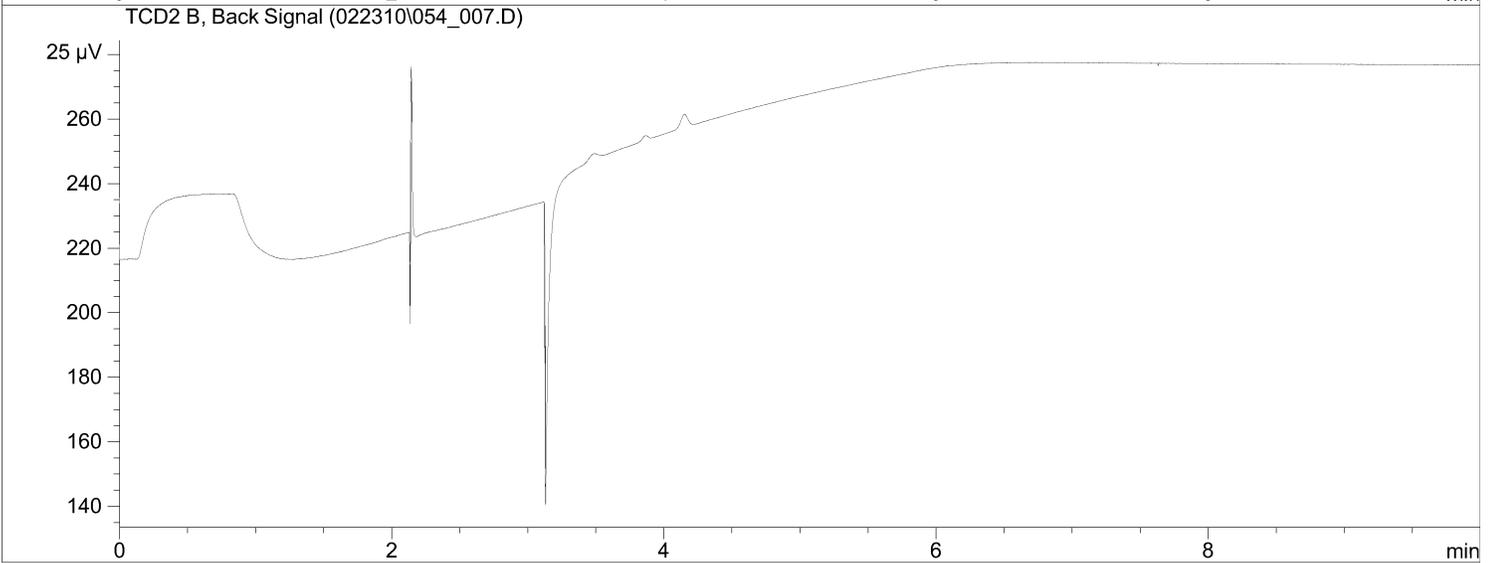
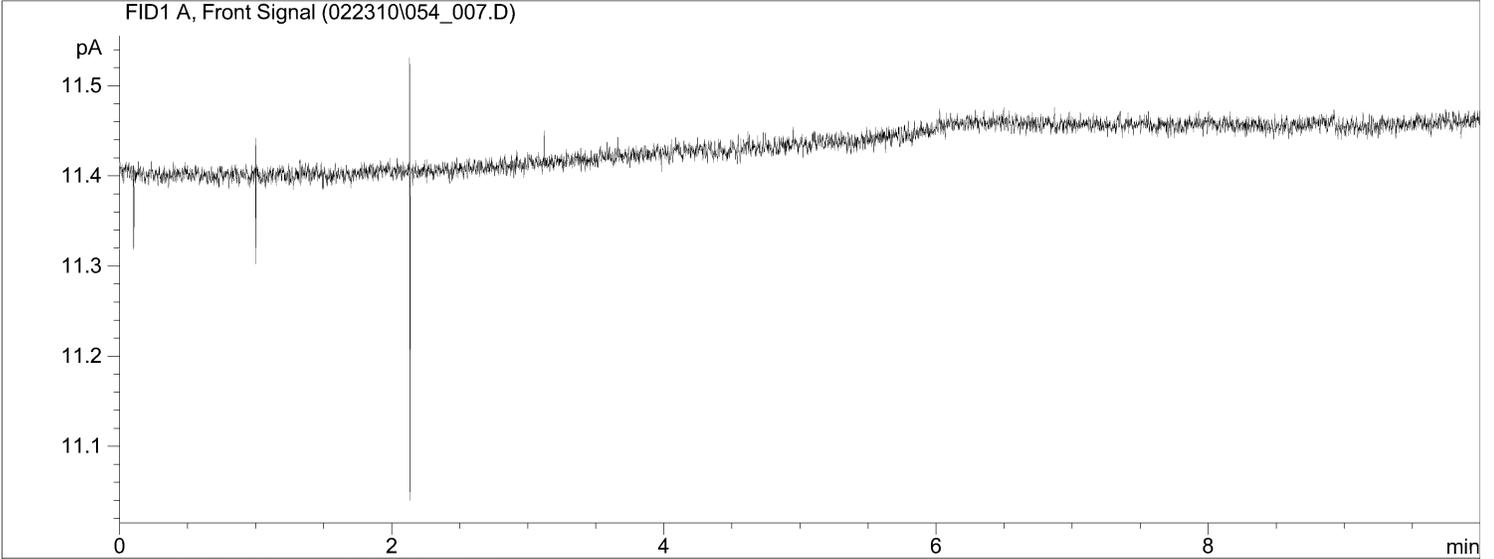


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External Standard Report
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Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Sample Name: blank,qc533627,160295,1

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/23/2010 02:48:50 PM Inj Volume : Manually
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Last changed : 2/23/2010 02:38:22 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



=====
External Standard Report
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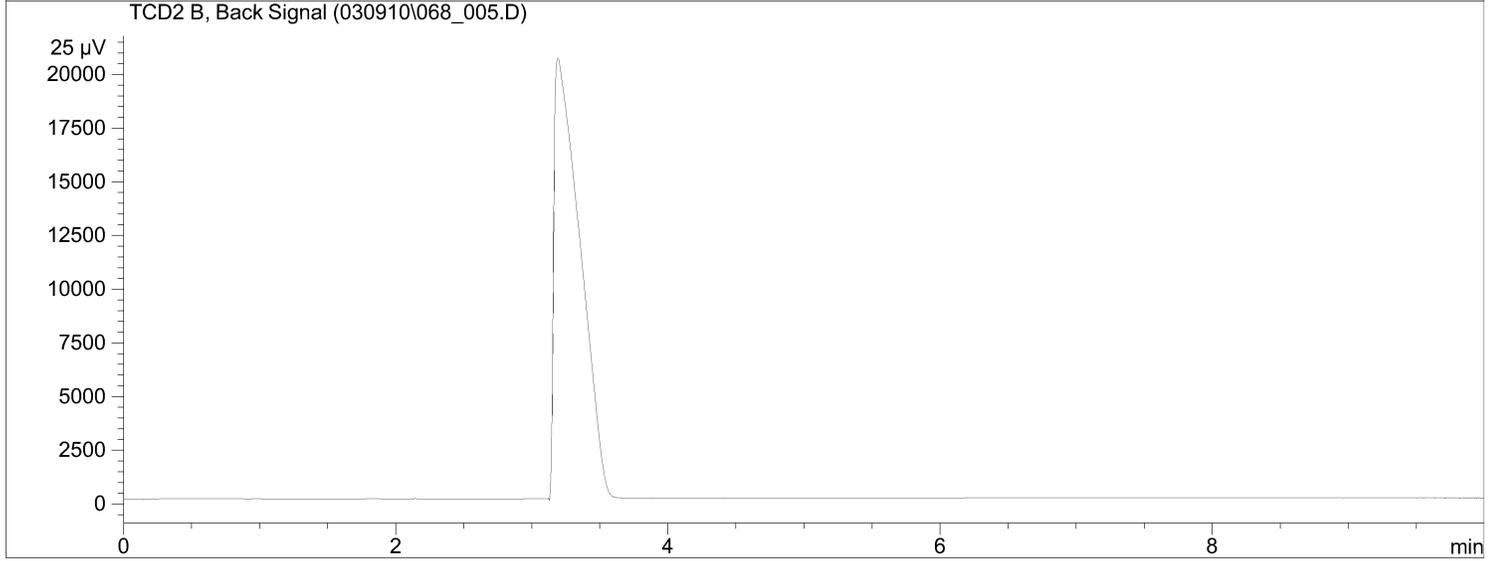
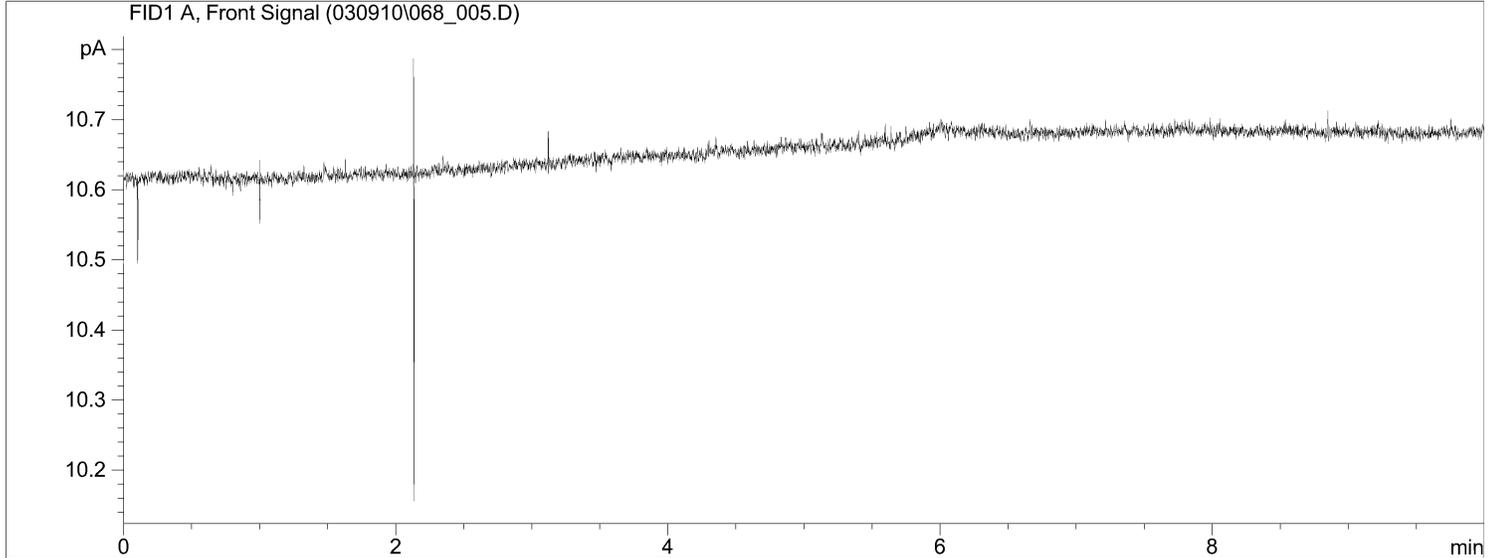
Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.495	-	-	-	-	-	CH4-TO3

Sample Name: blank,qc535341,160295,1

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 3/9/2010 12:29:07 PM Inj Volume : Manually
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Last changed : 12/11/2009 04:39:29 PM by GC28 RGA

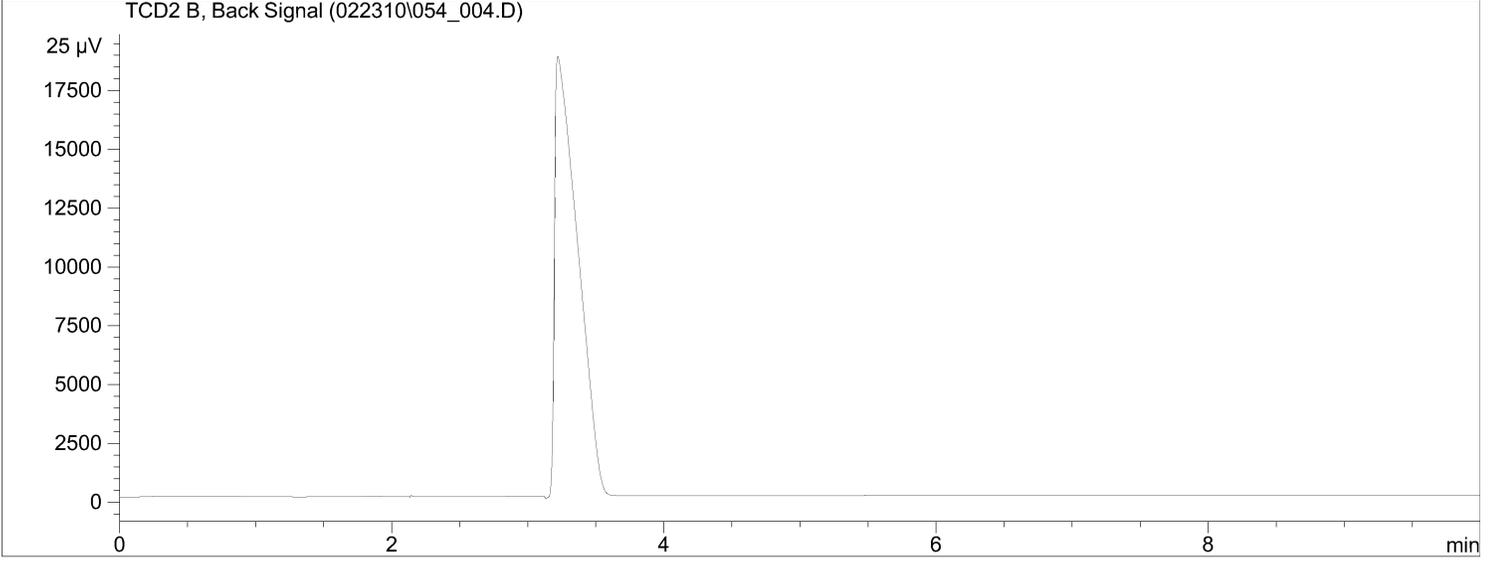
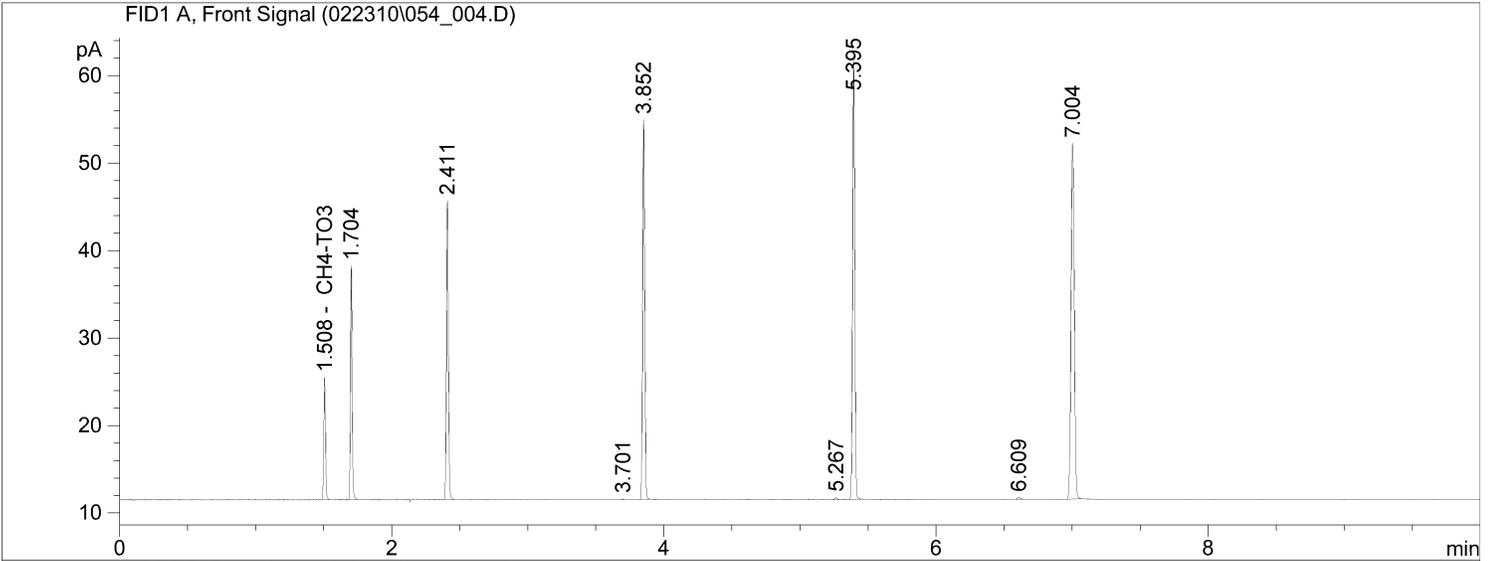


=====
External Standard Report
=====

Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 2/23/2010 01:24:13 PM
Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 2/23/2010 01:18:33 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



=====
External Standard Report
=====

Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.508	BB	12.54958	8.13190	102.05190		CH4-TO3

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218411 GCAIR Air: ASTM D1946

Inst : GC28
 Calnum : 1309434246001
 Units : uL/L

Date : 28-OCT-2009 13:50
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	301_006	1309434246006		28-OCT-2009 13:50	S13246
L2	301_007	1309434246007		28-OCT-2009 14:17	S13247
L3	301_008	1309434246008		28-OCT-2009 14:50	S13248
L4	301_009	1309434246009		28-OCT-2009 15:11	S13249
L5	301_010	1309434246010		28-OCT-2009 15:33	S13250
L6	301_011	1309434246011		28-OCT-2009 16:02	S13251

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	Flg
Oxygen	B		0.2310	0.2147	0.2147	0.2063	0.1979	AVRG		4.69612		0.2129	6	.99	
Carbon Dioxide	B		0.2502	0.2589	0.2542	0.2539	0.2416m	AVRG		3.97217		0.2518	3	.99	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Oxygen	B			500.0	8	2000	1	5000	1	10000	-3	2E+5	-7
Carbon Dioxide	B			500.0	-1	2000	3	5000	1	10000	1	2E+5	-4

m>manual integration

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218411 GCAIR Air: EPA TO-3

Inst : GC28
 Calnum : 1309497539003
 Units : uL/L

Date : 11-DEC-2009 12:37
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	345_002	1309497539002		11-DEC-2009 12:37	S13381
L2	345_003	1309497539003		11-DEC-2009 13:00	S13382
L3	345_004	1309497539004		11-DEC-2009 13:18	S13383
L4	345_005	1309497539005		11-DEC-2009 13:35	S13384
L5	345_006	1309497539006		11-DEC-2009 13:53	S13385
L6	345_007	1309497539007		11-DEC-2009 14:16	S13386
L7	345_008	1309497539008		11-DEC-2009 14:36	S13387
L8	345_009	1309497539009		11-DEC-2009 16:08	S13388

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Methane-TO3	A	0.1314	0.1225	0.1271	0.1208	0.1197	0.1183	0.1197	0.1242	AVRG		8.13190		0.1230	4	.99	30	
C1-C2 as Ethane	A	0.2344	0.2246	0.2351	0.2214	0.2192				AVRG		4.40634		0.2269	3	.99	30	
C2-C3 as Propane	A	0.3733	0.3403	0.3520	0.3349	0.3314				AVRG		2.88691		0.3464	5	.99	30	
C3-C4 as n-Butane	A	0.5160	0.4525	0.4696	0.4450	0.4404				AVRG		2.15194		0.4647	7	.99	30	
C4-C5 as n-Pentane	A	0.6216	0.5643	0.5844	0.5569	0.5515				AVRG		1.73685		0.5758	5	.99	30	
C5-C6 as n-Hexane	A	0.7502	0.6699	0.6955	0.6640	0.6573				AVRG		1.45477		0.6874	6	.99	30	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Methane-TO3	A	0.500	7	10.00	0	100.0	3	501.0	-2	1002	-3	9980	-4	2E+5	-3	5E+5	1
C1-C2 as Ethane	A	0.500	3	10.00	-1	100.0	4	505.5	-2	1011	-3						
C2-C3 as Propane	A	0.500	8	10.00	-2	100.0	2	501.0	-3	1002	-4						
C3-C4 as n-Butane	A	0.500	11	10.00	-3	100.0	1	502.5	-4	1005	-5						
C4-C5 as n-Pentane	A	0.500	8	10.00	-2	100.0	2	500.0	-3	1000	-4						
C5-C6 as n-Hexane	A	0.500	9	10.00	-3	100.0	1	498.5	-3	997.0	-4						

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218411 GCAIR Air
EPA TO-3

Inst : GC28

Calnum : 1309497539003

Cal Date : 11-DEC-2009

ICV 1309497539011 (345_011 11-DEC-2009) stds: S13375

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Methane-TO3	A	1000	1017	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
EPA TO-3

Inst : GC28
 Seqnum : 1300078501014
 Cal : 1309497539003
 Standards: S13824

File : 054_014
 Caldate : 11-DEC-2009

IDF : 1.0
 Time : 23-FEB-2010 17:29

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1230	0.1250	100.0	101.6	uL/L	2	30	
C1-C2 as Ethane	A	0.2269	0.2317	100.0	102.1	uL/L	2	30	
C2-C3 as Propane	A	0.3464	0.3467	100.0	100.1	uL/L	0	30	
C3-C4 as n-Butane	A	0.4647	0.4622	100.0	99.45	uL/L	-1	30	
C4-C5 as n-Pentane	A	0.5758	0.5778	100.0	100.4	uL/L	0	30	
C5-C6 as n-Hexane	A	0.6874	0.6861	100.0	99.82	uL/L	0	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
ASTM D1946

Inst : GC28
 Seqnum : 1300078501015
 Cal : 1309434246001
 Standards: S14001

IDF : 1.0
 Time : 23-FEB-2010 18:22

File : 054_015
 Caldate : 28-OCT-2009

Analyte	Ch	Avg		Spiked	Quant	Units	%D	Max %D	Flags
		RF/CF	RF/CF						
Oxygen	B	0.2129	0.2144	2000	2014	uL/L	1	30	
Carbon Dioxide	B	0.2518	0.2516	2000	1999	uL/L	0	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
ASTM D1946

Inst : GC28
 Seqnum : 1300079994003
 Cal : 1309434246001
 Standards: S14001

IDF : 1.0
 Time : 24-FEB-2010 13:58

File : 055_003
 Caldate : 28-OCT-2009

Analyte	Ch	Avg		Spiked	Quant	Units	%D	Max %D	Flags
		RF/CF	RF/CF						
Oxygen	B	0.2129	0.2636	2000	2476	uL/L	24	30	
Carbon Dioxide	B	0.2518	0.3130	2000	2487	uL/L	24	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
EPA TO-3

Inst : GC28
 Seqnum : 1300079994004
 Cal : 1309497539003
 Standards: S13824

File : 055_004
 Caldate : 11-DEC-2009

IDF : 1.0
 Time : 24-FEB-2010 14:18

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1230	0.1244	100.0	101.2	uL/L	1	30	
C1-C2 as Ethane	A	0.2269	0.2304	100.0	101.5	uL/L	2	30	
C2-C3 as Propane	A	0.3464	0.3450	100.0	99.61	uL/L	0	30	
C3-C4 as n-Butane	A	0.4647	0.4594	100.0	98.86	uL/L	-1	30	
C4-C5 as n-Pentane	A	0.5758	0.5740	100.0	99.70	uL/L	0	30	
C5-C6 as n-Hexane	A	0.6874	0.6812	100.0	99.09	uL/L	-1	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
ASTM D1946

Inst : GC28
 Seqnum : 1300079994011
 Cal : 1309434246001
 Standards: S14001

IDF : 1.0
 Time : 24-FEB-2010 17:07

File : 055_011
 Caldate : 28-OCT-2009

Analyte	Ch	Avg		Spiked	Quant	Units	%D	Max %D	Flags
		RF/CF	RF/CF						
Oxygen	B	0.2129	0.2389	2000	2244	uL/L	12	30	
Carbon Dioxide	B	0.2518	0.2863	2000	2274	uL/L	14	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
EPA TO-3

Inst : GC28
 Seqnum : 1300079994012
 Cal : 1309497539003
 Standards: S13824

File : 055_012
 Caldate : 11-DEC-2009

IDF : 1.0
 Time : 24-FEB-2010 17:27

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1230	0.1239	100.0	100.8	uL/L	1	30	
C1-C2 as Ethane	A	0.2269	0.2289	100.0	100.9	uL/L	1	30	
C2-C3 as Propane	A	0.3464	0.3439	100.0	99.29	uL/L	-1	30	
C3-C4 as n-Butane	A	0.4647	0.4569	100.0	98.33	uL/L	-2	30	
C4-C5 as n-Pentane	A	0.5758	0.5721	100.0	99.36	uL/L	-1	30	
C5-C6 as n-Hexane	A	0.6874	0.6788	100.0	98.76	uL/L	-1	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
ASTM D1946

Inst : GC28
 Seqnum : 1300098563002
 Cal : 1309434246001
 Standards: S14001

IDF : 1.0
 Time : 09-MAR-2010 11:09

File : 068_002
 Caldate : 28-OCT-2009

Analyte	Ch	Avg		Spiked	Quant	Units	%D	Max %D	Flags
		RF/CF	RF/CF						
Oxygen	B	0.2129	0.2250	2000	2113	uL/L	6	30	
Carbon Dioxide	B	0.2518	0.2545	2000	2022	uL/L	1	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
EPA TO-3

Inst : GC28
 Seqnum : 1300098563003
 Cal : 1309497539003
 Standards: S13824

IDF : 1.0
 Time : 09-MAR-2010 11:33

File : 068_003
 Caldate : 11-DEC-2009

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1230	0.1248	100.0	101.4	uL/L	1	30	
C1-C2 as Ethane	A	0.2269	0.2311	100.0	101.8	uL/L	2	30	
C2-C3 as Propane	A	0.3464	0.3463	100.0	99.98	uL/L	0	30	
C3-C4 as n-Butane	A	0.4647	0.4609	100.0	99.18	uL/L	-1	30	
C4-C5 as n-Pentane	A	0.5758	0.5765	100.0	100.1	uL/L	0	30	
C5-C6 as n-Hexane	A	0.6874	0.6838	100.0	99.48	uL/L	-1	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
ASTM D1946

Inst : GC28
 Seqnum : 1300098563020
 Cal : 1309434246001
 Standards: S14001

IDF : 1.0
 Time : 09-MAR-2010 17:38

File : 068_020
 Caldate : 28-OCT-2009

Analyte	Ch	Avg		Spiked	Quant	Units	%D	Max %D	Flags
		RF/CF	RF/CF						
Oxygen	B	0.2129	0.2205	2000	2071	uL/L	4	30	
Carbon Dioxide	B	0.2518	0.2565	2000	2037	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218411 GCAIR Air
EPA TO-3

Inst : GC28
 Seqnum : 1300098563021
 Cal : 1309497539003
 Standards: S13824

File : 068_021
 Caldate : 11-DEC-2009

IDF : 1.0
 Time : 09-MAR-2010 17:59

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1230	0.1247	100.0	101.4	uL/L	1	30	
C1-C2 as Ethane	A	0.2269	0.2308	100.0	101.7	uL/L	2	30	
C2-C3 as Propane	A	0.3464	0.3465	100.0	100.0	uL/L	0	30	
C3-C4 as n-Butane	A	0.4647	0.4609	100.0	99.18	uL/L	-1	30	
C4-C5 as n-Pentane	A	0.5758	0.5766	100.0	100.2	uL/L	0	30	
C5-C6 as n-Hexane	A	0.6874	0.6837	100.0	99.47	uL/L	-1	30	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1300078501

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 02/23/10 12:21

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	054_001	X	IB			02/23/10 12:21	1.0		
002	054_002	CCV/LCS	QC533628	Air	160295	02/23/10 12:41	1.0	1	
003	054_003	CCV/LCS	QC533628	Air	160295	02/23/10 13:03	1.0	1	
004	054_004	CCV/BS	QC533629	Air	160295	02/23/10 13:24	1.0	2	
005	054_005	BSD	QC533630	Air	160295	02/23/10 14:01	1.0	2	
006	054_006	BLANK	QC533626	Air	160295	02/23/10 14:23	1.0		1:N=1100000
007	054_007	BLANK	QC533627	Air	160295	02/23/10 14:48	1.0		
008	054_008	MSS	218411-033	Air	160295	02/23/10 15:13	2.49		
009	054_009	SDUP	QC533631	Air	160295	02/23/10 15:35	2.49		
010	054_010	SAMPLE	218411-034	Air	160295	02/23/10 16:07	2.29		
011	054_011	SAMPLE	218411-035	Air	160295	02/23/10 16:28	2.200		
012	054_012	IB	IB			02/23/10 16:47	1.0		
013	054_013	X				02/23/10 17:08	1.0	1	
014	054_014	CCV				02/23/10 17:29	1.0	2	
015	054_015	CCV				02/23/10 18:22	1.0	1	

ET 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 015.

Analyst: ET Date: 03/09/10 Reviewer: SJD Date: 03/12/10

Standards used: 1=S14001 2=S13824

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1300079994

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 02/24/10 13:14

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	055_001	IB	IB			02/24/10 13:14	1.0		
002	055_002	CCV				02/24/10 13:37	1.0	1	
003	055_003	CCV				02/24/10 13:58	1.0	1	
004	055_004	CCV				02/24/10 14:18	1.0	2	
005	055_005	SAMPLE	218411-039	Air	160295	02/24/10 14:50	2.0		
006	055_006	SAMPLE	218411-040	Air	160295	02/24/10 15:19	2.200		
007	055_007	SAMPLE	218411-041	Air	160295	02/24/10 15:41	2.200		
008	055_008	SAMPLE	218411-026	Air	160295	02/24/10 16:01	2.33		
009	055_009	SAMPLE	218411-027	Air	160295	02/24/10 16:22	2.31		
010	055_010	IB	IB			02/24/10 16:46	1.0		1:N=1100000
011	055_011	CCV				02/24/10 17:07	1.0	1	
012	055_012	CCV				02/24/10 17:27	1.0	2	

ET 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 012.

Analyst: ET Date: 03/09/10 Reviewer: SJD Date: 03/12/10

Standards used: 1=S14001 2=S13824

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1300098563

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 03/09/10 10:43

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	068_001	X	IB			03/09/10 10:43	1.0	
002	068_002	CCV				03/09/10 11:09	1.0	1
003	068_003	CCV				03/09/10 11:33	1.0	2
004	068_004	X	IB	Air		03/09/10 12:13	1.0	
005	068_005	BLANK	QC535341	Air	160295	03/09/10 12:29	1.0	
006	068_006	SAMPLE	218411-027	Air	160295	03/09/10 12:48	2.31	
007	068_007	SAMPLE	218411-026	Air	160295	03/09/10 13:09	2.33	
008	068_008	SAMPLE	218411-035	Air	160295	03/09/10 13:29	2.200	
009	068_009	X	IB			03/09/10 13:49	1.0	
010	068_010	X	IB			03/09/10 14:08	1.0	
011	068_011	SAMPLE	218411-034	Air	160295	03/09/10 14:31	4.05	
012	068_012	X	IB			03/09/10 14:51	1.0	
013	068_013	X	IB			03/09/10 15:12	1.0	
014	068_014	SDUP	QC533631	Air	160295	03/09/10 15:32	4.01	
015	068_015	X	IB			03/09/10 15:53	1.0	
016	068_016	X	IB			03/09/10 16:15	1.0	
017	068_017	SAMPLE	218411-041	Air	160295	03/09/10 16:35	2.29	
018	068_018	X	IB			03/09/10 16:57	1.0	
019	068_019	X	IB			03/09/10 17:17	1.0	
020	068_020	CCV				03/09/10 17:38	1.0	1
021	068_021	CCV				03/09/10 17:59	1.0	2

ET 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 021.

Analyst: ET Date: 03/09/10 Reviewer: SJD Date: 03/12/10

Standards used: 1=S14001 2=S13824

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309434246

Instrument : GC28
 Method : ASTM D1946

Begun : 10/28/09 11:55

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	301_001	IB	IB			10/28/09 11:55	1.0	
002	301_002	IB	IB			10/28/09 12:15	1.0	
003	301_003	IB	IB			10/28/09 12:40	1.0	
004	301_004	IB	HE BLANK			10/28/09 13:05	1.0	
005	301_005	ICAL	CALBLANK			10/28/09 13:26	1.0	
006	301_006	ICAL				10/28/09 13:50	1.0	1
007	301_007	ICAL				10/28/09 14:17	1.0	2
008	301_008	ICAL				10/28/09 14:50	1.0	3
009	301_009	ICAL				10/28/09 15:11	1.0	4
010	301_010	ICAL				10/28/09 15:33	1.0	5
011	301_011	ICAL				10/28/09 16:02	1.0	6

APP 11/12/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 011.

Analyst: APP Date: 11/12/09 Reviewer: SJD Date: 11/12/09

Standards used: 1=S13246 2=S13247 3=S13248 4=S13249 5=S13250 6=S13251

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309497539

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 12/11/09 12:19

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	345_001	IB	IB			12/11/09 12:19	1.0	
002	345_002	ICAL				12/11/09 12:37	1.0	1
003	345_003	ICAL				12/11/09 13:00	1.0	2
004	345_004	ICAL				12/11/09 13:18	1.0	3
005	345_005	ICAL				12/11/09 13:35	1.0	4
006	345_006	ICAL				12/11/09 13:53	1.0	5
007	345_007	ICAL				12/11/09 14:16	1.0	6
008	345_008	ICAL				12/11/09 14:36	1.0	7
009	345_009	ICAL				12/11/09 16:08	1.0	8
010	345_010	IB	IB			12/11/09 16:29	1.0	
011	345_011	ICV				12/11/09 16:47	1.0	9

APP 12/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 011.

Analyst: APP Date: 12/14/09 Reviewer: SJD Date: 01/20/10

Standards used: 1=S13381 2=S13382 3=S13383 4=S13384 5=S13385 6=S13386 7=S13387 8=S13388 9=S13375

Prepped by / date	Sample ID	Can ID	Initial Pressure (psig)	Final Pressure (psig)	Dilation Factor	Comments
ET 2-12	218259-021	C00050	11.25	25.05	2.23x	
	-022	C00078	10.24	25.26	2.47x	
	-023	C00144	10.57	25.19	2.38x	
	-024	C00096	10.03	25.36	2.53x	
	-025	C00114	10.25	25.39	2.48x	
	-026	C00151	9.78	25.20	2.58x	
	-027	C00172	10.97	25.34	2.3x	
	-028	C00191	11.71	25.38	2.17x	
	-029	C00135	11.58	25.09	2.17x	
	-030	C00192	11.81	25.28	2.14x	
	-031	C00144	12.64	25.33	2.00x	
	-032	C00067	13.32	25.27	2.31x	
	-033	C00061	12.23	25.55	2.09x	
	-034	C00197	12.47	25.20	2.02x	
	-036	C00196	11.78	25.98	2.2x	
	-037	C00121	11.07	25.34	2.29x	
	-038	C00094	11.72	25.43	2.17x	
	ET-2-17-10	218329-040	C00069	9.46	25.89	
	-047	C00117	9.83	26.3		Not used
	-052	C00088	9.83	26.3		ET 2-17-10
ET 2-17-10	218329-048	C00064	9.37	25.51	2.72x	
	-049	C00117	9.83	26.3	2.67x	
	-050	C00088	9.46	26.4	2.79x	
5/8 2/18/10	218072-004	C00018	1.5 added	30.0 ^{total added}	75.6x	20x of 1.78x can C00080
ET 2-18-10	Blank	C06240	—	—	1x	Blank made on 7th
ET 2-22-10	218411-026	C00154	11.10	25.85	2.23x	
	-027	C00170	10.93	25.24	2.31x	
	-033	C00254	9.95	24.80	2.49x	
	-034	C00259	10.64	24.32	2.29x	
	-035	C00290	11.27	24.77	2.20x	
	-039	C00086	12.24	24.48	2.00x	
	-040	C00140	1.40	25.14	2.20x	
	-041	C00123	11.14	24.50	2.20x	
	Blank	C06240	—	—	1x	

Continued on Page

Read and Understood By

Signed

Date

Signed

Date

Prepared by	SAMPLE ID	CAN ID	Initial Pressure (psig)	Final Pressure (psig)	Dilution Factor	Comments			
ET	218411-001	C00008	1.5 added	30.0 added	41.8x	20x of 2.09x can	C000 C00250		
3-8	-002	C00205			41.0x	20x of 2.05x can	C00269		
	-003	C00019			45.2x	20x of 2.26x can	C00100		
	-004	C00217			38.0x	20x of 1.94x can	C00260		
	-005	C00230			45.2x	20x of 2.26x can	C00241		
	-006	C00219			63.6x	20x of 3.18x can	C00249		
	-008	C00017			41.4x	20x of 2.20x can	C00251		
	-009	C00231			40.4x	20x of 2.02x can	C00166		
	-010	C00040			39.0x	20x of 1.95x can	C00057		
	-011	C00028			41.6x	20x of 2.08x can	C00115		
	-012	C00199			41.8x 38.0x	20x of 2.09x can	C00049		
	-014	C00014			40.8x	20x of 2.04x can	C00056		
	-015	C00031			40.2x	20x of 2.01x can	C00087		
	-016	C00029			42.4x	20x of 2.12x can	C00180		
	-018	C00020			41.8x 41.6x	20x of 2.08x can	C00079		
	-033	C00209			49.8x	20x of 2.49x can	C00254		
	-036	C00030			41.8x	20x of 2.09x can	C00274		
	-040	C00023			44.0x	20x of 2.20x can	C00148		
	-034	C00203			45.8x	20x of 2.29x can	C00259		
	-017	C00233			43.2x	20x of 2.16x can	C00083		
5/23/10	218411-007	C00208	1.5 added	30.0 total added	43.4x	20x of 2.17x can	C00247		
	-013	C00218			41.8x	20x of 2.09x can	C00255		
	-014	C00045			81.6x	20x of 40.8x can	C00014		
	-018	C00010			83.2x	20x of 41.6x can	C00020		
ET on	218411-034	C00259	14.75	26.05	4.05	1.77x of 2.29x			
3-9	-033	C00254	15.59	25.15	4.01	1.61x of 2.49x			
5/23/10	218552-001	C00082	11.71	23.76	2.03x				
	-002	C00085	12.04	23.55	1.96x				
	-003	C00106	12.82	23.76	1.85x				
	BLANK	C00291			1x				
	218411-011	C00198	1.5 added	30.0 total added	83.2x	20x of 41.6x can	C00028		
5/23/10	218552-003	C00034	1.5 added	30.0 total added	37x	20x of 1.85x can	C00006		
	218552-003	C00036			74.0x	20x of 37x can	C00034		

Continued on Page

Read and Understood By

Signed

Date

Signed

Date



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 218479
ANALYTICAL REPORT

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 371451.SV.99.IS.0109
Location : BSVE QTR SVM
Level : III

Table with 2 columns: Sample ID and Lab ID. Lists 12 sample and lab identifiers.

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

Signature: Senior Program Manager

Date: 03/16/2010

CASE NARRATIVE

Laboratory number: 218479
Client: CH2M Hill
Project: 371451.SV.99.IS.0109
Location: BSVE QTR SVM
Request Date: 02/25/10
Samples Received: 02/25/10

This data package contains sample and QC results for twelve air samples, requested for the above referenced project on 02/25/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

Volatile Organics in Air by MS (EPA TO-15):

BV-19N-10Q1 (lab # 218479-005) was diluted due to problematic matrix.

No other analytical problems were encountered.

Volatile Organics in Air GC (ASTM D1946 and EPA TO-3):

No analytical problems were encountered.

Chain of Custody

21879

Chain Of Custody / Analysis Request

Privileged & Confidential

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

Sample Matrix: Air
Sample Type: SV
Sample Date: 2-19-10
Sample Time: 1117
Sample Purpose: Reg
Sample # of Cont.: 1

Analysis Turnaround Time (TAT): 10
Full Report TAT: 10

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Field Filtered Sample?	Composite/Grab	Preservative	Lab Job #	Authorized User:	Authorized User:
1	55	105	BV-8N-10Q1	2-19-10	1117	SV	AIR	Reg	1	G	N					
2	55.4	180.4	ASE-56A-10Q1	2-19-10	1159	SV	AIR	Reg	1	G	N					
3	-	-	BSVE-SVM-10Q1-014	2-19-10	1201	SV	AIR	Reg	1	G	N					
4	55	105	BV-21N-10Q1	2-19-10	1406	SV	AIR	Reg	1	G	N					
5	55	105	BV-19N-10Q1	2-19-10	1456	SV	AIR	Reg	1	G	N					
6	54.7	79.7	ASE-46A-10Q1	2-19-10	1524	SV	AIR	Reg	1	G	N					
7	NA	NA	BSVE-Inst-10Q1	2-19-10	1559	SV	AIR	Reg	1	G	N					
8																
9																
10																
11																
12																

Relinquished by: [Signature] **Company:** [Blank] **Received by:** [Signature] **Company:** [Blank]

Relinquished by: [Signature] **Date/Time:** 2-25-10 1000 **Received by:** [Signature] **Date/Time:** 2-25-10 1000

Preservatives: (Other, Specify): 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4, pH<2); 8 (HCl, 4 Deg C); 9 (HCl, 4 Deg C); 10 (HNO3, pH<2); 4Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate); sp (special instructions)

21847A

Curtis & Tompkins Laboratories		Honeywell Chain Of Custody / Analysis Request										AESI Ref: 40210.49633							
2323 5th St. Berkeley, CA 94710 510-204-2221		Privileged & Confidential Tuesdai Powers, Critigen Melanie West, Critigen Sky Harbor AZ Phoenix, AZ BSVE QTR SVM CTBERK SKYHARBOR										37380							
Sampling Co.: CH2MHILL Client Contact: (name, co., address) CH2M HILL 2625 South Plaza Drive, Suite 300 Tempe, AZ 85282 Preliminary Data To: Tuesdai Powers, Critigen, Melanie West, Critigen Sample Receipt Acknowledgement To: Tuesdai Powers, Critigen, Melanie West, Critigen Hard Copy To: Tuesdai Powers and Melanie West, Critigen Invoice To: Honeywell/Copy Berney Kidd		EDD To: Tuesdai Powers, Critigen Melanie West, Critigen Sampler: <u>Trail Continus Lopez</u> PO #: 5101516 Analysis Turnaround Time (TAT): 10 Consultant Full Report TAT: 10		Site Name: Sky Harbor AZ Location of Site: Phoenix, AZ Preservative: 0 0 0 0 0 Authorized User: Honeywell		Phase: Sampling Program VOCs (TO-15) Methane (TO-3M) TPH (TO-3M) OZ and CO2 (ASTM 1946)		Lab Proj # (SDG): Lab ID: Site ID: Lab Job #: Authorized User: Honeywell		Text & Excel File Drive Excel & Text File Order		Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.		Text & Excel File Drive Excel & Text File Order					
Sample Identification		Sample Date		Sample Time		Sample Type		Sample Matrix		Sample Purpose		Sample # of Cont.		Units		Sampling Method (code)		Canister Serial No.	
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	Sample # of Cont.	Units	Field Filtered Sample ?	VOCs (TO-15)	Methane (TO-3M)	TPH (TO-3M)	OZ and CO2 (ASTM 1946)	Sampling Method (code)	Canister Serial No.		
1 ASE-53A	53.8	78.8	ASE-53A-1001	021510	0801	SV	AIR	REG	1	G	N	X					161		
2 BU-16N	55	105	BU-16N-1001	021510	0801	SU	AIR	REG	1	G	N	X					275		
3 BU-7N	55	105	BU-7N-1001	021510	1000	SV	AIR	REG	1	G	N	X					243		
4 BU-6N	55	105	BU-6N-1001	021510	1023	SU	AIR	REG	1	G	N	X					248		
5 BU-4N	55	105	BU-4N-1001	021510	1052	SV	AIR	REG	1	G	N	X					264		
6																			
7																			
8																			
9																			
10																			
11																			
12																			
Relinquished by: <u>[Signature]</u>		Company: CH2MHILL		Received by: <u>Felex</u>		Company:		Condition: Cooler Temp.		Custody Seals Intact									
Relinquished by: <u>[Signature]</u>		Date/Time: 021510 1210		Received by: <u>[Signature]</u>		Company:		Condition: Cooler Temp.		Custody Seals Intact									
Relinquished by: <u>[Signature]</u>		Date/Time: 021510 1000		Received by: <u>[Signature]</u>		Company:		Condition: Cooler Temp.		Custody Seals Intact									
Preservatives: (Other, Specify): (none); 1 (4 Deg C); 2 (HCl pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4 (pH<2), 4 Deg C)); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 (pH<2), 4 Deg C); 11 (4C NaOH (pH>12) & Ascorbic Acid); 12 (4C H2SO4 (pH<2) & Na2S2O3); 13 (Zn Acetate), sp (special instructions)																			

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218479 Date Received 2-25-10 Number of coolers 1BX
Client CH2MTAZ Project BSVE QTR SUM

Date Opened 2-25-10 By (print) S. EVANS (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) FENEX # YES NO
Shipping info 8565 256524329470

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many 2 Name SIGNATURE Date 2-24-10

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:

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

Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are samples in the appropriate containers for indicated tests? _____ YES NO

11. Are sample labels present, in good condition and complete? _____ YES NO

12. Do the sample labels agree with custody papers? _____ YES NO

13. Was sufficient amount of sample sent for tests requested? _____ YES NO

14. Are the samples appropriately preserved? _____ YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 218479

ANALYTICAL REPORT

Volatile Organics in Air by MS

Matrix: Air

Volatile Organics in Air

Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-8N-10Q1	Diln Fac:	542.4
Lab ID:	218479-001	Batch#:	160900
Matrix:	Air	Sampled:	02/19/10
Units (V):	ppbv	Received:	02/25/10
Units (M):	ug/m3	Analyzed:	03/13/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	270	ND	690	D2
Chloroethane	ND	270	ND	720	D2
1,1-Dichloroethene	ND	270	ND	1,100	D2
1,1-Dichloroethane	2,400	270	9,600	1,100	D2
MTBE	ND	270	ND	980	D2
cis-1,2-Dichloroethene	ND	270	ND	1,100	D2
n-Hexane	28,000	270	98,000	960	D2
Chloroform	ND	270	ND	1,300	D2
Benzene	420	270	1,300	870	D2
Trichloroethene	ND	270	ND	1,500	D2
Toluene	ND	270	ND	1,000	D2
Tetrachloroethene	ND	270	ND	1,800	D2
Ethylbenzene	ND	270	ND	1,200	D2
m,p-Xylenes	1,400	270	6,100	1,200	D2
o-Xylene	ND	270	ND	1,200	D2
1,3,5-Trimethylbenzene	ND	270	ND	1,300	D2
1,2,4-Trimethylbenzene	4,200	270	21,000	1,300	D2
Xylene (total)	1,400	540	6,100	2,400	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	100	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-56A-10Q1	Diln Fac:	258.0
Lab ID:	218479-002	Batch#:	160900
Matrix:	Air	Sampled:	02/19/10
Units (V):	ppbv	Received:	02/25/10
Units (M):	ug/m3	Analyzed:	03/13/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	130	ND	330	D1
Chloroethane	ND	130	ND	340	D1
1,1-Dichloroethene	ND	130	ND	510	D1
1,1-Dichloroethane	ND	130	ND	520	D1
MTBE	ND	130	ND	470	D1
cis-1,2-Dichloroethene	ND	130	ND	510	D1
n-Hexane	11,000	130	38,000	450	D1
Chloroform	ND	130	ND	630	D1
Benzene	280	130	900	410	D1
Trichloroethene	ND	130	ND	690	D1
Toluene	ND	130	ND	490	D1
Tetrachloroethene	ND	130	ND	870	D1
Ethylbenzene	ND	130	ND	560	D1
m,p-Xylenes	ND	130	ND	560	D1
o-Xylene	ND	130	ND	560	D1
1,3,5-Trimethylbenzene	ND	130	ND	630	D1
1,2,4-Trimethylbenzene	200	130	980	630	D1
Xylene (total)	ND	260	ND	1,100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	117	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-SVM-10Q1-014	Diln Fac:	255.6
Lab ID:	218479-003	Batch#:	160900
Matrix:	Air	Sampled:	02/19/10
Units (V):	ppbv	Received:	02/25/10
Units (M):	ug/m3	Analyzed:	03/13/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	130	ND	330	D1
Chloroethane	ND	130	ND	340	D1
1,1-Dichloroethene	ND	130	ND	510	D1
1,1-Dichloroethane	ND	130	ND	520	D1
MTBE	ND	130	ND	460	D1
cis-1,2-Dichloroethene	ND	130	ND	510	D1
n-Hexane	9,900	130	35,000	450	D1
Chloroform	ND	130	ND	620	D1
Benzene	240	130	770	410	D1
Trichloroethene	ND	130	ND	690	D1
Toluene	ND	130	ND	480	D1
Tetrachloroethene	ND	130	ND	870	D1
Ethylbenzene	ND	130	ND	550	D1
m,p-Xylenes	ND	130	ND	550	D1
o-Xylene	ND	130	ND	550	D1
1,3,5-Trimethylbenzene	ND	130	ND	630	D1
1,2,4-Trimethylbenzene	170	130	830	630	D1
Xylene (total)	ND	260	ND	1,100	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	111	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-21N-10Q1	Units (M):	ug/m3
Lab ID:	218479-004	Sampled:	02/19/10
Matrix:	Air	Received:	02/25/10
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Vinyl Chloride	2,200	260	5,600	670	520.8	160900	03/13/10	D2	
Chloroethane	ND	260	ND	690	520.8	160900	03/13/10	D2	
1,1-Dichloroethene	ND	260	ND	1,000	520.8	160900	03/13/10	D2	
1,1-Dichloroethane	3,300	260	13,000	1,100	520.8	160900	03/13/10	D2	
MTBE	ND	260	ND	940	520.8	160900	03/13/10	D2	
cis-1,2-Dichloroethene	8,600	260	34,000	1,000	520.8	160900	03/13/10	D2	
n-Hexane	120,000	1,300	420,000	4,600	2,604	160909	03/14/10	D1	
Chloroform	ND	260	ND	1,300	520.8	160900	03/13/10	D2	
Benzene	6,600	260	21,000	830	520.8	160900	03/13/10	D2	
Trichloroethene	20,000	260	110,000	1,400	520.8	160900	03/13/10	D2	
Toluene	3,500	260	13,000	980	520.8	160900	03/13/10	D2	
Tetrachloroethene	ND	260	ND	1,800	520.8	160900	03/13/10	D2	
Ethylbenzene	12,000	260	53,000	1,100	520.8	160900	03/13/10	D2	
m,p-Xylenes	41,000	260	180,000	1,100	520.8	160900	03/13/10	D2	
o-Xylene	12,000	260	51,000	1,100	520.8	160900	03/13/10	D2	
1,3,5-Trimethylbenzene	8,400	260	41,000	1,300	520.8	160900	03/13/10	D2	
1,2,4-Trimethylbenzene	22,000	260	110,000	1,300	520.8	160900	03/13/10	D2	
Xylene (total)	53,000	520	230,000	2,300	520.8	160900	03/13/10	D2	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Bromofluorobenzene	95	70-130	520.8	160900	03/13/10		

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-19N-10Q1	Diln Fac:	549.6
Lab ID:	218479-005	Batch#:	160909
Matrix:	Air	Sampled:	02/19/10
Units (V):	ppbv	Received:	02/25/10
Units (M):	ug/m3	Analyzed:	03/15/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	270	ND	700	D1
Chloroethane	ND	270	ND	730	D1
1,1-Dichloroethene	ND	270	ND	1,100	D1
1,1-Dichloroethane	ND	270	ND	1,100	D1
MTBE	ND	270	ND	990	D1
cis-1,2-Dichloroethene	ND	270	ND	1,100	D1
n-Hexane	ND	270	ND	970	D1
Chloroform	ND	270	ND	1,300	D1
Benzene	290	270	910	880	D1
Trichloroethene	ND	270	ND	1,500	D1
Toluene	ND	270	ND	1,000	D1
Tetrachloroethene	ND	270	ND	1,900	D1
Ethylbenzene	ND	270	ND	1,200	D1
m,p-Xylenes	ND	270	ND	1,200	D1
o-Xylene	ND	270	ND	1,200	D1
1,3,5-Trimethylbenzene	ND	270	ND	1,400	D1
1,2,4-Trimethylbenzene	ND	270	ND	1,400	D1
Xylene (total)	ND	550	ND	2,400	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	116	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-46A-10Q1	Diln Fac:	138.0
Lab ID:	218479-006	Batch#:	160909
Matrix:	Air	Sampled:	02/19/10
Units (V):	ppbv	Received:	02/25/10
Units (M):	ug/m3	Analyzed:	03/14/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	69	ND	180	D1
Chloroethane	ND	69	ND	180	D1
1,1-Dichloroethene	ND	69	ND	270	D1
1,1-Dichloroethane	ND	69	ND	280	D1
MTBE	ND	69	ND	250	D1
cis-1,2-Dichloroethene	ND	69	ND	270	D1
n-Hexane	ND	69	ND	240	D1
Chloroform	ND	69	ND	340	D1
Benzene	ND	69	ND	220	D1
Trichloroethene	ND	69	ND	370	D1
Toluene	ND	69	ND	260	D1
Tetrachloroethene	ND	69	ND	470	D1
Ethylbenzene	ND	69	ND	300	D1
m,p-Xylenes	79	69	350	300	D1
o-Xylene	ND	69	ND	300	D1
1,3,5-Trimethylbenzene	140	69	710	340	D1
1,2,4-Trimethylbenzene	160	69	780	340	D1
Xylene (total)	79	69	350	300	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	93	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BSVE-INLET-10Q1	Diln Fac:	331.2
Lab ID:	218479-007	Batch#:	160900
Matrix:	Air	Sampled:	02/19/10
Units (V):	ppbv	Received:	02/25/10
Units (M):	ug/m3	Analyzed:	03/14/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	170	ND	420	D2
Chloroethane	ND	170	ND	440	D2
1,1-Dichloroethene	ND	170	ND	660	D2
1,1-Dichloroethane	440	170	1,800	670	D2
MTBE	370	170	1,300	600	D2
cis-1,2-Dichloroethene	710	170	2,800	660	D2
n-Hexane	17,000	170	62,000	580	D2
Chloroform	ND	170	ND	810	D2
Benzene	1,700	170	5,600	530	D2
Trichloroethene	1,400	170	7,300	890	D2
Toluene	330	170	1,200	620	D2
Tetrachloroethene	ND	170	ND	1,100	D2
Ethylbenzene	2,000	170	8,500	720	D2
m,p-Xylenes	5,300	170	23,000	720	D2
o-Xylene	1,000	170	4,400	720	D2
1,3,5-Trimethylbenzene	1,700	170	8,300	810	D2
1,2,4-Trimethylbenzene	4,800	170	23,000	810	D2
Xylene (total)	6,300	330	28,000	1,400	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	107	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	ASE-53A-10Q1	Units (M):	ug/m3
Lab ID:	218479-008	Sampled:	02/15/10
Matrix:	Air	Received:	02/25/10
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Vinyl Chloride	ND	250	ND	640	501.6	160900	03/14/10	D2	
Chloroethane	ND	250	ND	660	501.6	160900	03/14/10	D2	
1,1-Dichloroethene	ND	250	ND	990	501.6	160900	03/14/10	D2	
1,1-Dichloroethane	ND	250	ND	1,000	501.6	160900	03/14/10	D2	
MTBE	20,000	250	72,000	900	501.6	160900	03/14/10	D2	
cis-1,2-Dichloroethene	ND	250	ND	990	501.6	160900	03/14/10	D2	
n-Hexane	41,000	250	140,000	880	501.6	160900	03/14/10	D2	
Chloroform	ND	250	ND	1,200	501.6	160900	03/14/10	D2	
Benzene	64,000	1,300	200,000	4,100	2,562	160909	03/15/10	D1	
Trichloroethene	ND	250	ND	1,300	501.6	160900	03/14/10	D2	
Toluene	ND	250	ND	950	501.6	160900	03/14/10	D2	
Tetrachloroethene	ND	250	ND	1,700	501.6	160900	03/14/10	D2	
Ethylbenzene	10,000	250	46,000	1,100	501.6	160900	03/14/10	D2	
m,p-Xylenes	ND	250	ND	1,100	501.6	160900	03/14/10	D2	
o-Xylene	ND	250	ND	1,100	501.6	160900	03/14/10	D2	
1,3,5-Trimethylbenzene	ND	250	ND	1,200	501.6	160900	03/14/10	D2	
1,2,4-Trimethylbenzene	ND	250	ND	1,200	501.6	160900	03/14/10	D2	
Xylene (total)	ND	500	ND	2,200	501.6	160900	03/14/10	D2	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Bromofluorobenzene	93	70-130	501.6	160900	03/14/10		

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-16N-10Q1	Diln Fac:	489.6
Lab ID:	218479-009	Batch#:	160900
Matrix:	Air	Sampled:	02/15/10
Units (V):	ppbv	Received:	02/25/10
Units (M):	ug/m3	Analyzed:	03/14/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	240	ND	630	D2
Chloroethane	ND	240	ND	650	D2
1,1-Dichloroethene	ND	240	ND	970	D2
1,1-Dichloroethane	2,000	240	8,000	990	D2
MTBE	540	240	1,900	880	D2
cis-1,2-Dichloroethene	ND	240	ND	970	D2
n-Hexane	26,000	240	93,000	860	D2
Chloroform	ND	240	ND	1,200	D2
Benzene	1,700	240	5,500	780	D2
Trichloroethene	ND	240	ND	1,300	D2
Toluene	ND	240	ND	920	D2
Tetrachloroethene	ND	240	ND	1,700	D2
Ethylbenzene	ND	240	ND	1,100	D2
m,p-Xylenes	260	240	1,100	1,100	D2
o-Xylene	ND	240	ND	1,100	D2
1,3,5-Trimethylbenzene	ND	240	ND	1,200	D2
1,2,4-Trimethylbenzene	460	240	2,300	1,200	D2
Xylene (total)	260	240	1,100	1,100	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	83	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-7N-10Q1	Units (M):	ug/m3
Lab ID:	218479-010	Sampled:	02/15/10
Matrix:	Air	Received:	02/25/10
Units (V):	ppbv		

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Vinyl Chloride	ND	250	ND	640	501.6	160900	03/14/10	D2	
Chloroethane	ND	250	ND	660	501.6	160900	03/14/10	D2	
1,1-Dichloroethene	410	250	1,600	990	501.6	160900	03/14/10	D2	
1,1-Dichloroethane	4,100	250	17,000	1,000	501.6	160900	03/14/10	D2	
MTBE	24,000	250	87,000	900	501.6	160900	03/14/10	D2	
cis-1,2-Dichloroethene	ND	250	ND	990	501.6	160900	03/14/10	D2	
n-Hexane	260,000	2,500	920,000	8,800	5,016	160909	03/15/10	D2	
Chloroform	ND	250	ND	1,200	501.6	160900	03/14/10	D2	
Benzene	51,000	2,500	160,000	8,000	5,016	160909	03/15/10	D2	
Trichloroethene	ND	250	ND	1,300	501.6	160900	03/14/10	D2	
Toluene	13,000	250	50,000	950	501.6	160900	03/14/10	D2	
Tetrachloroethene	ND	250	ND	1,700	501.6	160900	03/14/10	D2	
Ethylbenzene	6,900	250	30,000	1,100	501.6	160900	03/14/10	D2	
m,p-Xylenes	56,000	2,500	240,000	11,000	5,016	160909	03/15/10	D2	
o-Xylene	19,000	250	80,000	1,100	501.6	160900	03/14/10	D2	
1,3,5-Trimethylbenzene	14,000	250	67,000	1,200	501.6	160900	03/14/10	D2	
1,2,4-Trimethylbenzene	33,000	250	160,000	1,200	501.6	160900	03/14/10	D2	
Xylene (total)	75,000	2,800	320,000	12,000	5,016	160909	03/15/10	D2	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Bromofluorobenzene	72	70-130	501.6	160900	03/14/10		

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-6N-10Q1	Diln Fac:	484.8
Lab ID:	218479-011	Batch#:	160900
Matrix:	Air	Sampled:	02/15/10
Units (V):	ppbv	Received:	02/25/10
Units (M):	ug/m3	Analyzed:	03/14/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	240	ND	620	D2
Chloroethane	ND	240	ND	640	D2
1,1-Dichloroethene	ND	240	ND	960	D2
1,1-Dichloroethane	2,500	240	10,000	980	D2
MTBE	ND	240	ND	870	D2
cis-1,2-Dichloroethene	ND	240	ND	960	D2
n-Hexane	37,000	240	130,000	850	D2
Chloroform	ND	240	ND	1,200	D2
Benzene	5,000	240	16,000	770	D2
Trichloroethene	ND	240	ND	1,300	D2
Toluene	940	240	3,500	910	D2
Tetrachloroethene	ND	240	ND	1,600	D2
Ethylbenzene	9,600	240	42,000	1,100	D2
m,p-Xylenes	17,000	240	72,000	1,100	D2
o-Xylene	1,900	240	8,200	1,100	D2
1,3,5-Trimethylbenzene	2,500	240	12,000	1,200	D2
1,2,4-Trimethylbenzene	11,000	240	56,000	1,200	D2
Xylene (total)	19,000	480	81,000	2,100	D2

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	105	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Field ID:	BV-4N-10Q1	Diln Fac:	518.4
Lab ID:	218479-012	Batch#:	160900
Matrix:	Air	Sampled:	02/15/10
Units (V):	ppbv	Received:	02/25/10
Units (M):	ug/m3	Analyzed:	03/14/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	260	ND	660	D1
Chloroethane	ND	260	ND	680	D1
1,1-Dichloroethene	ND	260	ND	1,000	D1
1,1-Dichloroethane	270	260	1,100	1,000	D1
MTBE	ND	260	ND	930	D1
cis-1,2-Dichloroethene	ND	260	ND	1,000	D1
n-Hexane	7,200	260	25,000	910	D1
Chloroform	ND	260	ND	1,300	D1
Benzene	980	260	3,100	830	D1
Trichloroethene	390	260	2,100	1,400	D1
Toluene	ND	260	ND	980	D1
Tetrachloroethene	2,600	260	17,000	1,800	D1
Ethylbenzene	1,800	260	7,600	1,100	D1
m,p-Xylenes	7,000	260	30,000	1,100	D1
o-Xylene	790	260	3,400	1,100	D1
1,3,5-Trimethylbenzene	3,800	260	19,000	1,300	D1
1,2,4-Trimethylbenzene	11,000	260	54,000	1,300	D1
Xylene (total)	7,700	520	34,000	2,300	D1

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	113	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC535974	Diln Fac:	1.000
Matrix:	Air	Batch#:	160900
Units (V):	ppbv	Analyzed:	03/13/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	98	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160900
Units (V):	ppbv	Analyzed:	03/13/10
Diln Fac:	1.000		

Type: BS Lab ID: QC535975

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	11.92	119	70-130		
Chloroethane	10.00	10.80	108	70-130		
1,1-Dichloroethene	10.00	11.27	113	60-145		
1,1-Dichloroethane	10.00	11.14	111	48-145		
MTBE	10.00	11.60	116	70-130		
cis-1,2-Dichloroethene	10.00	10.71	107	70-130		
n-Hexane	10.00	11.17	112	70-130		
Chloroform	10.00	11.61	116	70-130		
Benzene	10.00	7.757	78	70-130		
Trichloroethene	10.00	8.862	89	70-130		
Toluene	10.00	10.13	101	70-130		
Tetrachloroethene	10.00	11.38	114	70-130		
Ethylbenzene	10.00	10.98	110	70-130		
m,p-Xylenes	20.00	20.26	101	70-130		
o-Xylene	10.00	10.13	101	70-130		
1,3,5-Trimethylbenzene	10.00	11.54	115	70-130		
1,2,4-Trimethylbenzene	10.00	12.23	122	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	98	70-130		

Type: BSD Lab ID: QC535976

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	11.92	119	70-130	0	25		
Chloroethane	10.00	10.38	104	70-130	4	25		
1,1-Dichloroethene	10.00	10.98	110	60-145	3	11		
1,1-Dichloroethane	10.00	11.27	113	48-145	1	25		
MTBE	10.00	11.44	114	70-130	1	25		
cis-1,2-Dichloroethene	10.00	10.83	108	70-130	1	25		
n-Hexane	10.00	10.80	108	70-130	3	25		
Chloroform	10.00	11.61	116	70-130	0	25		
Benzene	10.00	8.339	83	70-130	7	25		
Trichloroethene	10.00	9.911	99	70-130	11	25		
Toluene	10.00	10.04	100	70-130	1	25		
Tetrachloroethene	10.00	11.70	117	70-130	3	25		
Ethylbenzene	10.00	11.10	111	70-130	1	25		
m,p-Xylenes	20.00	20.30	101	70-130	0	25		
o-Xylene	10.00	10.21	102	70-130	1	25		
1,3,5-Trimethylbenzene	10.00	11.49	115	70-130	0	25		
1,2,4-Trimethylbenzene	10.00	12.29	123	70-130	0	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	101	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC536009	Diln Fac:	1.000
Matrix:	Air	Batch#:	160909
Units (V):	ppbv	Analyzed:	03/14/10

Analyte	Result (V)	RL	Result (M)	RL	ADEQ Flags
Vinyl Chloride	ND	0.50	ND	1.3	
Chloroethane	ND	0.50	ND	1.3	
1,1-Dichloroethene	ND	0.50	ND	2.0	
1,1-Dichloroethane	ND	0.50	ND	2.0	
MTBE	ND	0.50	ND	1.8	
cis-1,2-Dichloroethene	ND	0.50	ND	2.0	
n-Hexane	ND	0.50	ND	1.8	
Chloroform	ND	0.50	ND	2.4	
Benzene	ND	0.50	ND	1.6	
Trichloroethene	ND	0.50	ND	2.7	
Toluene	ND	0.50	ND	1.9	
Tetrachloroethene	ND	0.50	ND	3.4	
Ethylbenzene	ND	0.50	ND	2.2	
m,p-Xylenes	ND	0.50	ND	2.2	
o-Xylene	ND	0.50	ND	2.2	
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5	
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5	
Xylene (total)	ND	1.0	ND	4.3	

Surrogate	%REC	Limits	ADEQ Flags
Bromofluorobenzene	99	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	160909
Units (V):	ppbv	Analyzed:	03/14/10
Diln Fac:	1.000		

Type: BS Lab ID: QC536010

Analyte	Spiked	Result (V)	%REC	Limits	ADEQ	Flags
Vinyl Chloride	10.00	11.83	118	70-130		
Chloroethane	10.00	10.48	105	70-130		
1,1-Dichloroethene	10.00	11.01	110	60-145		
1,1-Dichloroethane	10.00	11.22	112	48-145		
MTBE	10.00	11.66	117	70-130		
cis-1,2-Dichloroethene	10.00	10.99	110	70-130		
n-Hexane	10.00	10.60	106	70-130		
Chloroform	10.00	11.50	115	70-130		
Benzene	10.00	8.078	81	70-130		
Trichloroethene	10.00	9.260	93	70-130		
Toluene	10.00	9.896	99	70-130		
Tetrachloroethene	10.00	11.69	117	70-130		
Ethylbenzene	10.00	10.88	109	70-130		
m,p-Xylenes	20.00	20.35	102	70-130		
o-Xylene	10.00	10.29	103	70-130		
1,3,5-Trimethylbenzene	10.00	11.44	114	70-130		
1,2,4-Trimethylbenzene	10.00	11.92	119	70-130		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	100	70-130		

Type: BSD Lab ID: QC536011

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim	ADEQ	Flags
Vinyl Chloride	10.00	12.13	121	70-130	3	25		
Chloroethane	10.00	10.91	109	70-130	4	25		
1,1-Dichloroethene	10.00	11.67	117	60-145	6	11		
1,1-Dichloroethane	10.00	11.55	115	48-145	3	25		
MTBE	10.00	11.86	119	70-130	2	25		
cis-1,2-Dichloroethene	10.00	11.35	114	70-130	3	25		
n-Hexane	10.00	11.10	111	70-130	5	25		
Chloroform	10.00	12.03	120	70-130	4	25		
Benzene	10.00	7.579	76	70-130	6	25		
Trichloroethene	10.00	8.787	88	70-130	5	25		
Toluene	10.00	10.19	102	70-130	3	25		
Tetrachloroethene	10.00	11.79	118	70-130	1	25		
Ethylbenzene	10.00	10.95	109	70-130	1	25		
m,p-Xylenes	20.00	20.47	102	70-130	1	25		
o-Xylene	10.00	10.28	103	70-130	0	25		
1,3,5-Trimethylbenzene	10.00	11.52	115	70-130	1	25		
1,2,4-Trimethylbenzene	10.00	12.21	122	70-130	2	25		

Surrogate	%REC	Limits	ADEQ	Flags
Bromofluorobenzene	96	70-130		

RPD= Relative Percent Difference

Result V= Result in volume units

CURTIS & TOMPKINS BFB TUNE FOR 218479 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200061530002 File : 042_002 Time : 11-FEB-2010 17:30

Standards: S13985

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	91839	16.47	
75	30% - 66% of mass 95	237217	42.53	
95		557769	100.00	
96	5% - 9% of mass 95	38075	6.83	
173	< 2% of mass 174	107	0.04	
174	50% - 120% of mass 95	285940	51.26	
175	4% - 9% of mass 174	16963	5.93	
176	93% - 101% of mass 174	277915	97.19	
177	5% - 9% of mass 176	19028	6.85	

CURTIS & TOMPKINS BFB TUNE FOR 218479 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200104493001 File : 072_001 Time : 13-MAR-2010 13:33

Standards: S14127

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	70674	14.00	
75	30% - 66% of mass 95	205105	40.64	
95		504678	100.00	
96	5% - 9% of mass 95	37587	7.45	
173	< 2% of mass 174	812	0.26	
174	50% - 120% of mass 95	318291	63.07	
175	4% - 9% of mass 174	21816	6.85	
176	93% - 101% of mass 174	297997	93.62	
177	5% - 9% of mass 176	20225	6.79	

CURTIS & TOMPKINS BFB TUNE FOR 218479 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : BFB IDF : 1.0
Seqnum : 1200106191002 File : 073_002 Time : 14-MAR-2010 17:51

Standards: S14127

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	8% - 40% of mass 95	77721	14.41	
75	30% - 66% of mass 95	206360	38.25	
95		539486	100.00	
96	5% - 9% of mass 95	33426	6.20	
173	< 2% of mass 174	1553	0.47	
174	50% - 120% of mass 95	331548	61.46	
175	4% - 9% of mass 174	25099	7.57	
176	93% - 101% of mass 174	317192	95.67	
177	5% - 9% of mass 176	22993	7.25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218479 MSAIR Air: EPA TO-15

Inst : MSAIR01
 Calnum : 1200061530001
 Units : nL/L

Date : 11-FEB-2010 21:28
 X Axis : R

Level	File	Seqnum	Sample ID	Sample ID	Analyzed	Stds
L1	042_006	1200061530006	NONE	11-FEB-2010	21:28	S13990 (6X), S13985 (15X)
L2	042_007	1200061530007	NONE	11-FEB-2010	22:29	S13990 (2X), S13985 (15X)
L3	042_008	1200061530008	NONE	11-FEB-2010	23:28	S13984 (6X), S13985 (15X)
L4	042_009	1200061530009	NONE	12-FEB-2010	00:29	S13984 (2X), S13985 (15X)
L5	042_010	1200061530010	NONE	12-FEB-2010	01:28	S13984, S13985 (15X)
L6	042_011	1200061530011	NONE	12-FEB-2010	02:28	S13983 (6X), S13985 (15X)
L7	042_012	1200061530012	NONE	12-FEB-2010	03:28	S13983 (3X), S13985 (15X)
L8	042_013	1200061530013	NONE	12-FEB-2010	04:28	S13983 (2X), S13985 (15X)
L9	042_014	1200061530014	NONE	12-FEB-2010	05:27	S13983, S13985 (15X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Vinyl Chloride	2.7447	2.5879	2.9217	2.5065	2.5743	3.3789	2.9715	2.8173	2.5907	AVRG		0.35866		2.7882	10	0.99	30	
Chloroethane	0.2388m	0.1890	0.2638	0.2793	0.2665	0.3606	0.3065	0.2719	0.2003	AVRG		3.78647		0.2641	20	0.99	30	
1,1-Dichloroethene	3.5636	3.2130	4.4345	3.9541	3.5559	4.7304	3.8663	3.5850	2.9834	AVRG		0.26560		3.7651	15	0.99	30	
1,1-Dichloroethane	4.2593	3.9362	5.1910	4.6086	4.2382	5.5509	4.6873	4.4035	4.1535	AVRG		0.21936		4.5587	11	0.99	30	
MTBE	3.4196	2.9501	3.5831	3.1358	2.8812	3.4512	2.9438	2.6077	2.2012	AVRG		0.33120		3.0193	15	0.99	30	
cis-1,2-Dichloroethene	1.1871	1.2275	2.0814	1.8984	1.6916	2.4676	2.0046	1.7953	1.4762	AVRG		0.56856		1.7588	24	0.99	30	
n-Hexane	2.8621	2.4224	2.7825	2.4749	2.2652	2.7385	2.3187	2.1684	1.9507	AVRG		0.40940		2.4426	12	0.99	30	
Chloroform	6.6228	5.5657	6.5731	5.7667	4.9559	6.3067	5.1919	4.6378	3.7531	AVRG		0.18228		5.4860	17	0.99	30	
Benzene	0.4585	0.5066	0.4557	0.5133	0.3394	0.4144	0.3396	0.4176		AVRG		2.32219		0.4306	15	0.99	30	
Trichloroethene	0.4847	0.6091	0.5522	0.6465	0.4560	0.5780	0.4889	0.6448	0.4138	AVRG		1.84655		0.5415	16	0.99	30	
Toluene	1.4370	1.4217	1.9660	1.6727	1.5811	1.9473	1.6765	1.4781	1.2770	AVRG		0.62252		1.6064	15	0.99	30	
Tetrachloroethene	0.5725	0.5005	0.6127	0.5373	0.5029	0.5876	0.4695	0.4253	0.3582	AVRG		1.97087		0.5074	16	0.99	30	
Ethylbenzene	1.4826	1.4730	2.3223	1.9985	1.8643	2.2411	1.8362	1.5533	1.2288	AVRG		0.56250		1.7778	21	0.99	30	
m,p-Xylenes	1.8006	1.9195	2.5821	2.0957	1.8434	2.1557	1.6379	1.3408		AVRG		0.52030		1.9220	19	0.99	30	
o-Xylene	1.6466	1.7905	2.3923	1.9718	1.7197	1.9027	1.4352	1.2447		AVRG		0.56723		1.7629	20	0.99	30	
1,3,5-Trimethylbenzene	1.6477	1.9921	2.7357	2.2174	2.0018	2.4186	1.9077	1.6155	1.2930	AVRG		0.50478		1.9811	22	0.99	30	
1,2,4-Trimethylbenzene	1.0972	1.3538	2.2884	2.0200	1.8206	2.2234	1.7111	1.4116	1.0903	AVRG		0.59934		1.6685	27	0.99	30	
Bromofluorobenzene	0.8701	0.8586	0.8709	0.8486	0.8434	0.8732	0.8637	0.8124	0.8006	AVRG		1.17779		0.8490	3	0.99	30	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Vinyl Chloride	0.167	-2	0.500	-7	1.667	5	5.000	-10	10.00	-8	16.67	21	33.33	7	50.00	1	100.0	-7
Chloroethane	0.167	-10	0.500	-28	1.667	0	5.000	6	10.00	1	16.67	37	33.33	16	50.00	3	100.0	-24
1,1-Dichloroethene	0.167	-5	0.500	-15	1.667	18	5.000	5	10.00	-6	16.67	26	33.33	3	50.00	-5	100.0	-21
1,1-Dichloroethane	0.167	-7	0.500	-14	1.667	14	5.000	1	10.00	-7	16.67	22	33.33	3	50.00	-3	100.0	-9
MTBE	0.167	13	0.500	-2	1.667	19	5.000	4	10.00	-5	16.67	14	33.33	-2	50.00	-14	100.0	-27
cis-1,2-Dichloroethene	0.167	-33	0.500	-30	1.667	18	5.000	8	10.00	-4	16.67	40	33.33	14	50.00	2	100.0	-16
n-Hexane	0.167	17	0.500	-1	1.667	14	5.000	1	10.00	-7	16.67	12	33.33	-5	50.00	-11	100.0	-20
Chloroform	0.167	21	0.500	1	1.667	20	5.000	5	10.00	-10	16.67	15	33.33	-5	50.00	-15	100.0	-32
Benzene	0.167	6	0.500	18	1.667	6	5.000	19	10.00	-21	16.67	-4	33.33	-21	50.00	-3		
Trichloroethene	0.167	-10	0.500	12	1.667	2	5.000	19	10.00	-16	16.67	7	33.33	-10	50.00	19	100.0	-24
Toluene	0.167	-11	0.500	-11	1.667	22	5.000	4	10.00	-2	16.67	21	33.33	4	50.00	-8	100.0	-21
Tetrachloroethene	0.167	13	0.500	-1	1.667	21	5.000	6	10.00	-1	16.67	16	33.33	-7	50.00	-16	100.0	-29
Ethylbenzene	0.167	-17	0.500	-17	1.667	31	5.000	12	10.00	5	16.67	26	33.33	3	50.00	-13	100.0	-31
m,p-Xylenes	0.333	-6	1.000	0	3.333	34	10.00	9	20.00	-4	33.33	12	66.67	-15	100.0	-30		
o-Xylene	0.167	-7	0.500	2	1.667	36	5.000	12	10.00	-2	16.67	8	33.33	-19	50.00	-29		
1,3,5-Trimethylbenzene	0.167	-17	0.500	1	1.667	38	5.000	12	10.00	1	16.67	22	33.33	-4	50.00	-18	100.0	-35
1,2,4-Trimethylbenzene	0.167	-34	0.500	-19	1.667	37	5.000	21	10.00	9	16.67	33	33.33	3	50.00	-15	100.0	-35
Bromofluorobenzene	10.00	2	10.00	1	10.00	3	10.00	0	10.00	-1	10.00	3	10.00	2	10.00	-4	10.00	-6

SJD 02/17/10 [Bromomethane]: Corrected automatically drawn baseline in NONE (042_006).

SJD 02/17/10 [Chloroethane]: Corrected automatically drawn baseline in NONE (042_006).

SJD 02/17/10 [Ethanol]: Combined split peak in multiple levels.

SJD 02/17/10 [Ethanol]: Corrected automatically drawn baseline in multiple levels.

SJD 02/17/10 [Acetone]: Corrected automatically drawn baseline in multiple levels.

SJD 02/17/10 [trans-1,2-Dichloroethene]: Corrected automatically drawn baseline in NONE (042_006).

m=manual integration

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

Page 2 of 2

1200061530001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218479 MSAIR Air
EPA TO-15

Inst : MSAIR01
Calnum : 1200061530001

Cal Date : 11-FEB-2010

ICV 1200061530016 (042_016 12-FEB-2010) stds: S13981, S13985 (15X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Vinyl Chloride	10.00	8.582	nL/L	-14	30	
Chloroethane	10.00	10.91	nL/L	9	30	
1,1-Dichloroethene	10.00	9.985	nL/L	0	30	
1,1-Dichloroethane	10.00	9.465	nL/L	-5	30	
MTBE	10.00	10.29	nL/L	3	30	
cis-1,2-Dichloroethene	10.00	9.705	nL/L	-3	30	
n-Hexane	10.00	9.448	nL/L	-6	30	
Chloroform	10.00	9.512	nL/L	-5	30	
Benzene	10.00	8.162	nL/L	-18	30	
Trichloroethene	10.00	8.718	nL/L	-13	30	
Toluene	10.00	9.945	nL/L	-1	30	
Tetrachloroethene	10.00	10.15	nL/L	2	30	
Ethylbenzene	10.00	11.15	nL/L	11	30	
m,p-Xylenes	20.00	20.01	nL/L	0	30	
o-Xylene	10.00	10.38	nL/L	4	30	
1,3,5-Trimethylbenzene	10.00	11.07	nL/L	11	30	
1,2,4-Trimethylbenzene	10.00	11.85	nL/L	19	30	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218479 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC535975 IDF : 1.0
 Seqnum : 1200104493002.1 File : 072_002 Time : 13-MAR-2010 14:33
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S14178, S14127 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	3.3215	10.00	11.92	nL/L	19	30	0.0500	m u
Chloroethane	0.2641	0.2851	10.00	10.80	nL/L	8	30	0.0500	u
1,1-Dichloroethene	3.7651	4.2425	10.00	11.27	nL/L	13	30	0.0500	u
1,1-Dichloroethane	4.5587	5.0776	10.00	11.14	nL/L	11	30	0.0500	u
MTBE	3.0193	3.5004	10.00	11.60	nL/L	16	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.8830	10.00	10.71	nL/L	7	30	0.0500	u
n-Hexane	2.4426	2.7282	10.00	11.17	nL/L	12	30	0.0500	u
Chloroform	5.4860	6.3654	10.00	11.61	nL/L	16	30	0.0500	u
Benzene	0.4306	0.3338	10.00	7.757	nL/L	-22	30	0.0500	u
Trichloroethene	0.5415	0.4798	10.00	8.862	nL/L	-11	30	0.0500	m u
Toluene	1.6064	1.6271	10.00	10.13	nL/L	1	30	0.0500	u
Tetrachloroethene	0.5074	0.5768	10.00	11.38	nL/L	14	30	0.0500	u
Ethylbenzene	1.7778	1.9512	10.00	10.98	nL/L	10	30	0.0500	u
m,p-Xylenes	1.9220	1.9459	20.00	20.26	nL/L	1	30	0.0500	u
o-Xylene	1.7629	1.7844	10.00	10.13	nL/L	1	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.2848	10.00	11.54	nL/L	15	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	2.0405	10.00	12.23	nL/L	22	30	0.0500	u
Bromofluorobenzene	0.8490	0.8321	10.00	9.803	nL/L	-2	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	300533	-22.79	27.20	27.23	0.03
1,4-Difluorobenzene	2458000	3241000	31.86	31.88	31.92	0.04
Chlorobenzene-d5	2767000	2644000	-4.45	41.82	41.85	0.04

BO 03/15/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV. [general version]

BO 03/15/10 [Ethanol]: Corrected fronting or tailing peak integration. [general version]

BO 03/15/10 [Trichloroethene]: Corrected automatically drawn baseline. [general version]

SJD 03/15/10 : Fixed Standard ID [general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218479 MSAIR Air
EPA TO-15

Inst : MSAIR01 Run Name : QC536010 IDF : 1.0
 Seqnum : 1200106191003.3 File : 073_003 Time : 14-MAR-2010 18:51
 Cal : 1200061530001 Caldate : 11-FEB-2010
 Standards: S14178, S14127 (15X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Vinyl Chloride	2.7882	3.2980	10.00	11.83	nL/L	18	30	0.0500	m u
Chloroethane	0.2641	0.2766	10.00	10.48	nL/L	5	30	0.0500	u
1,1-Dichloroethene	3.7651	4.1435	10.00	11.01	nL/L	10	30	0.0500	u
1,1-Dichloroethane	4.5587	5.1116	10.00	11.22	nL/L	12	30	0.0500	u
MTBE	3.0193	3.5206	10.00	11.66	nL/L	17	30	0.0500	u
cis-1,2-Dichloroethene	1.7588	1.9327	10.00	10.99	nL/L	10	30	0.0500	u
n-Hexane	2.4426	2.5873	10.00	10.60	nL/L	6	30	0.0500	u
Chloroform	5.4860	6.3088	10.00	11.50	nL/L	15	30	0.0500	u
Benzene	0.4306	0.3478	10.00	8.078	nL/L	-19	30	0.0500	u
Trichloroethene	0.5415	0.5014	10.00	9.260	nL/L	-7	30	0.0500	u
Toluene	1.6064	1.5889	10.00	9.896	nL/L	-1	30	0.0500	u
Tetrachloroethene	0.5074	0.5930	10.00	11.69	nL/L	17	30	0.0500	u
Ethylbenzene	1.7778	1.9336	10.00	10.88	nL/L	9	30	0.0500	u
m,p-Xylenes	1.9220	1.9542	20.00	20.35	nL/L	2	30	0.0500	u
o-Xylene	1.7629	1.8136	10.00	10.29	nL/L	3	30	0.0500	u
1,3,5-Trimethylbenzene	1.9811	2.2663	10.00	11.44	nL/L	14	30	0.0500	u
1,2,4-Trimethylbenzene	1.6685	1.9880	10.00	11.92	nL/L	19	30	0.0500	u
Bromofluorobenzene	0.8490	0.8455	10.00	9.957	nL/L	0	30	0.0500	u

ISTD (ICAL 042_013)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Bromochloromethane	389234	309886	-20.39	27.20	27.22	0.02
1,4-Difluorobenzene	2458000	3203000	30.31	31.88	31.92	0.04
Chlorobenzene-d5	2767000	2666000	-3.65	41.82	41.85	0.04

BO 03/15/10 [Vinyl Chloride]: Integrated to match integration of ICAL and CCV. [general version]

BO 03/15/10 [Bromomethane]: Integrated to match integration of ICAL and CCV. [general version]

BO 03/15/10 [cis-1,3-Dichloropropene]: Corrected automatically drawn baseline. [general version]

BO 03/15/10 [2-Hexanone]: Corrected automatically drawn baseline. [general version]

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200104493

Date : 03/13/10
 Sequence : MSAIR01 072

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
002	CCV/BS	QC535975	300533	27.23	3241000	31.92	2644000	41.85
003	BSD	QC535976	311821	27.23	2972000	31.92	2666000	41.85
005	SAMPLE	218552-003	293661	27.23	3320000	31.92	2258000	41.85
006	SAMPLE	218479-002	272825	27.24	2940000	31.92	2362000	41.86
007	SAMPLE	218479-003	293497	27.24	3374000	31.93	2380000	41.86
008	SAMPLE	218479-001	299890	27.25	3362000	31.95	2177000	41.87
009	BLANK	QC535974	276806	27.24	3239000	31.93	2712000	41.86
010	SAMPLE	218479-004	306956	27.23	3410000	31.96	2150000	41.86
011	SAMPLE	218479-005	264454	27.23	3221000	31.96	2193000	41.87
012	SAMPLE	218479-006	288790	27.24	3399000	31.95	2108000	41.86
013	SAMPLE	218479-007	258239	27.23	3129000	31.93	2149000	41.86
014	SAMPLE	218479-008	285396	27.24	3280000	31.97	2030000	41.87
015	SAMPLE	218479-009	250800	27.24	3098000	31.97	2170000	41.87
016	SAMPLE	218479-010	264443	27.24	3261000	31.97	2068000	41.87
017	SAMPLE	218479-011	251882	27.23	3091000	31.97	1976000	41.87
018	SAMPLE	218479-012	248771	27.24	3170000	31.96	2170000	41.86

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1200106191

Date : 03/14/10
 Sequence : MSAIR01 073

Reference : 042_013
 Analyzed : 02/12/10 04:28

#	Type	Sample ID	BRCLME	RT	14DFB	RT	CLBZD5	RT
		ICAL STD	389234	27.20	2458000	31.88	2767000	41.82
		LOWER LIMIT	233540	26.87	1474800	31.55	1660200	41.49
		UPPER LIMIT	544928	27.53	3441200	32.21	3873800	42.15
003	CCV/BS	QC536010	309886	27.22	3203000	31.92	2666000	41.85
004	BSD	QC536011	302046	27.22	3327000	31.91	2657000	41.85
005	BLANK	QC536009	280745	27.24	3335000	31.93	2720000	41.86
006	SAMPLE	218479-005	311587	27.24	3447000 *	31.97	2444000	41.87
007	SAMPLE	218479-004	275192	27.23	3285000	31.94	2584000	41.86
008	SAMPLE	218479-006	272776	27.24	3310000	31.94	2759000	41.86
009	SAMPLE	218479-008	285587	27.23	3333000	31.94	2469000	41.86
010	SAMPLE	218479-010	278846	27.24	3280000	31.94	2665000	41.86
011	SAMPLE	218479-005	253728	27.24	3245000	31.97	2264000	41.87

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200061530

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 02/11/10 16:31

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	042_001	X	BFB			02/11/10 16:31	1.0	1
002	042_002	TUN	BFB			02/11/10 17:30	1.0	1
003	042_003	X	NONE			02/11/10 18:29	1.0	2 1
004	042_004	IB	NONE			02/11/10 19:29	1.0	1
005	042_005	IB	CALIB IB			02/11/10 20:28	1.0	1
006	042_006	ICAL	NONE			02/11/10 21:28	1.0	3 1
007	042_007	ICAL	NONE			02/11/10 22:29	1.0	3 1
008	042_008	ICAL	NONE			02/11/10 23:28	1.0	2 1
009	042_009	ICAL	NONE			02/12/10 00:29	1.0	2 1
010	042_010	ICAL	NONE			02/12/10 01:28	1.0	2 1
011	042_011	ICAL	NONE			02/12/10 02:28	1.0	4 1
012	042_012	ICAL	NONE			02/12/10 03:28	1.0	4 1
013	042_013	ICAL	NONE			02/12/10 04:28	1.0	4 1
014	042_014	ICAL	NONE			02/12/10 05:27	1.0	4 1
015	042_015	IB	NONE			02/12/10 06:26	1.0	1
016	042_016	ICV	NONE			02/12/10 07:26	1.0	5 1

SJD 02/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 16.

Analyst: SJD Date: 02/17/10 Reviewer: BO Date: 02/17/10

Standards used: 1=S13985 2=S13984 3=S13990 4=S13983 5=S13981

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200104493

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/13/10 13:33

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	072_001	TUN	BFB			03/13/10 13:33	1.0	1
002	072_002	CCV/BS	QC535975	Air	160900	03/13/10 14:33	1.0	2 1
003	072_003	BSD	QC535976	Air	160900	03/13/10 15:32	1.0	2 1
004	072_004	X	ROOM AIR			03/13/10 16:32	1.0	1
005	072_005	SAMPLE	218552-003	Air	160900	03/13/10 17:31	222.0	1
006	072_006	SAMPLE	218479-002	Air	160900	03/13/10 18:32	258.0	1
007	072_007	SAMPLE	218479-003	Air	160900	03/13/10 19:33	255.6	1
008	072_008	SAMPLE	218479-001	Air	160900	03/13/10 20:34	542.4	1
009	072_009	BLANK	QC535974	Air	160900	03/13/10 21:35	1.0	1
010	072_010	SAMPLE	218479-004	Air	160900	03/13/10 22:34	520.8	1
011	072_011	SAMPLE	218479-005	Air	160900	03/13/10 23:35	549.6	1
012	072_012	SAMPLE	218479-006	Air	160900	03/14/10 00:35	27.60	1
013	072_013	SAMPLE	218479-007	Air	160900	03/14/10 01:36	331.2	1
014	072_014	SAMPLE	218479-008	Air	160900	03/14/10 03:37	501.6	1
015	072_015	SAMPLE	218479-009	Air	160900	03/14/10 04:37	489.6	1
016	072_016	SAMPLE	218479-010	Air	160900	03/14/10 05:38	501.6	1
017	072_017	SAMPLE	218479-011	Air	160900	03/14/10 06:39	484.8	1
018	072_018	SAMPLE	218479-012	Air	160900	03/14/10 07:39	518.4	1

BO 03/15/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 18.

Analyst: BO Date: 03/15/10 Reviewer: SJD Date: 03/15/10

Standards used: 1=S14127 2=S14178

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1200106191

Instrument : MSAIR01
 Method : EPA TO-15

Begun : 03/14/10 16:52

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	073_001	TUN	BFB			03/14/10 16:52	1.0	1	
002	073_002	TUN	BFB			03/14/10 17:51	1.0	1	
003	073_003	CCV/BS	QC536010	Air	160909	03/14/10 18:51	1.0	2 1	
004	073_004	BSD	QC536011	Air	160909	03/14/10 19:50	1.0	2 1	
005	073_005	BLANK	QC536009	Air	160909	03/14/10 20:49	1.0	1	
006	073_006	SAMPLE	218479-005	Air	160909	03/14/10 21:49	549.6	1	
007	073_007	SAMPLE	218479-004	Air	160909	03/14/10 22:50	2604	1	
008	073_008	SAMPLE	218479-006	Air	160909	03/14/10 23:49	138.0	1	
009	073_009	SAMPLE	218479-008	Air	160909	03/15/10 00:49	2562	1	1:CYHEXANE=160
010	073_010	SAMPLE	218479-010	Air	160909	03/15/10 01:48	5016	1	
011	073_011	SAMPLE	218479-005	Air	160909	03/15/10 13:09	549.6	1	

BO 03/15/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 11.

Analyst: BO Date: 03/15/10 Reviewer: SJD Date: 03/15/10

Standards used: 1=S14127 2=S14178

Prepped by / date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218411-042					ET 2-23
SOP 2/23/10	BLANK	C00010	—	—	1x	
↓	BLANK	C00038	—	—	1x	
ET 2-25	218479-001	C00162	11.10	25.14	2.26x	
	218479-002	C00070	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00178 C00129	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00105	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.05	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	-012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
SOP 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x	20x of 2.44x can C00164
↓	-021	C00217	↓	↓	44.6x	20x of 2.23x can C00050
↓	-006	C	1.5 added	30.82 total added	—	20x of 1.94x can C00188
SOP 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x	21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x	
↓	-002	C00012	12.34	25.01	2.03x	
↓	Blank	C00240	—	—	1x	ET 3-3
↓	Blank	C00292	—	—	1x	
SOP 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x	20x of 2.10x can C00284
	-006	C00213	↓	↓	40.2x	20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x	20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x	20x of 2.08x can C00285
	-015	C00235	↓	31.63 total added	42.8x	21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x	20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x	20x of 1.93x can C00068
	-026	C00036	↓	↓	39.2x	20x of 1.96x can C00116
SOP 3/5/10	218432-001	C00232	13.56	22.58	1.67x	refill can
↓	218329-007	C00034	1.5 added	30.0 total added	83.6x	20x of 4.18x can C00016

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Read and Understood By

Signed _____ Date _____ Signed _____ Date _____

Prepared by of the	SAMPLE ID	CAN ID	Initial (psig) Pressure	Final Pressure (psig)	Dilution Factor	Comments
ET	218411-001	C00008	1.5 added	30.0 added	41.8x	20x of 2.09x can ³⁰⁰ C000 C00250
3-8	-002	C00205			41.0x	20x of 2.05x can C00269
	-003	C00019			45.2x	20x of 2.26x can C00100
	-004	C00217			38.8x	20x of 1.94x can C00260
	-005	C00230			45.2x	20x of 2.26x can C00241
	-006	C00219			63.6x	20x of 3.18x can C00249
	-008	C00017			44.0x	20x of 2.20x can C00251
	-009	C00231			40.4x	20x of 2.02x can C00166
	-010	C00010			39.0x	20x of 1.95x can C00057
	-011	C00028			41.6x	20x of 2.08x can C00115
	-012	C00199			41.8x ^{38.8x}	20x of 2.09x can C00049
	-014	C00014			40.8x	20x of 2.04x can C00056
	-015	C00031			40.2x	20x of 2.01x can C00057
	-016	C00029			42.4x	20x of 2.12x can C00180
	-018	C00020			41.6x ^{ET 41.6x}	20x of 2.08x can C00079
	-033	C00209			49.8x	20x of 2.49x can C00254
	-036	C00030			41.8x	20x of 2.09x can C00274
	-040	C00023			44.0x	20x of 2.20x can C00148
	-034	C00203			45.8x	20x of 2.29x can C00259
	-017	C00235			43.2x	20x of 2.16x can C00083
500/9/10	218411-007	C00208	1.5 added	30.0 total added	43.4x	20x of 2.17x can C00247
	-013	C00218			41.8x	20x of 2.09x can C00255
	-014	C00045			81.6x	20x of 4.08x can C00014
	-018	C00010			83.2x	20x of 4.16x can C00020
ET on	218411-034	C00259	14.75	26.05	4.05	1.77x of 2.29x
3-9	-033	C00254	15.59	25.15	4.01	1.61x of 2.49x
500/10/10	218552-001	C00082	11.71	23.76	2.03x	
	-002	C00085	12.04	23.55	1.96x	
	-003	C00106	12.82	23.76	1.85x	
	BLANK	C00291			1x	
	218411-011	C00198	1.5 added	30.0 total added	83.2x	20x of 4.16x can C00028
500/11/10	218552-003	C00034	1.5 added	30.0 total added	37x	20x of 1.85x can C00106
	218552-003	C00036			74.0x	20x of 3.7x can C00034

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Read and Understood By

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Date

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Date

App'd by Date	SAMPLE ID	CAN ID	Initial Pressure (psis)	Final Pressure (psis)	Dilution Factor	Comments
5003/13/10	218479-001	C00200	1.5 added	30.0 total added	45.2x	20x of 2.26x can C00162
	-002	C00002			43x	20x of 2.15x can C00070
	-003	C00236			42.6x	20x of 2.13x can C00129
	-004	C00219			43.4x	20x of 2.17x can C00126
	-005	C00203			45.8x	20x of 2.29x can C00140
	-006	C00213			55.2x	20x of 2.76x can C00103
	-008	C00016			41.8x	20x of 2.09x can C00161
	-009	C0017			40.8x	20x of 2.04x can C00215
	-010	C00003			41.8x	20x of 2.09x can C00243
	-011	C00235			40.4x	20x of 2.02x can C00248
	-012	C00019			43.2x	20x of 2.16x can C00264
	5003/14/10	218479-004	C00205	1.5 added	30.0 total added	868x
-006		C00233			46x	20x of 2.30x can C00089
-008		C00230		30.65 total added	854x	20.43x of 41.8x can C00016
-010		C00217		30.0 total added	836x	20x of 41.8x can C00003

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Date

Prepped by/date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218411-012					ET 2-23
Sos 2/23/10	BLANK	C00010	—	—	1x	
	BLANK	C00038	—	—	1x	
ET 2-25	218477-001	C00062	11.10	25.14	2.26x	
	218477-002	C00070	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00129 C00129	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00105	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.05	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	-012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
Sos 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x	20x of 2.44x can C00164
	-021	C00217	↓	↓	44.6x	20x of 2.23x can C00180
	-006	C	1.5 added	30.0 total added	40.7x	20x of 1.92x can C00188
Sos 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x	21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x	
	-002	C00012	12.34	25.01	2.03x	
	Blank	C00240	—	—	1x	ET 3-3
	Blank	C00292	—	—	1x	
Sos 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x	20x of 2.10x can C00284
	-006	C00213	↓	↓	40.2x	20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x	20x of 2.09x can C00287
	-008	C00220	↓	↓	41.6x	20x of 2.08x can C00286
	-015	C00235	↓	31.63 total added	42.8x	21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x	20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x	20x of 1.93x can C00068
	-026	C00036	↓	↓	39.2x	20x of 1.96x can C00116
Sos 3/5/10	218432-001	C00232	13.56	22.58	1.67x	refill can
	218329-007	C00034	1.5 added	30.0 total added	83.6x	20x of 4.18x can C00016

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Read and Understood By

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Date

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Date

Prepped by Date	SAMPLE ID	CAN ID	Initial Pressure (psis)	Final Pressure (psis)	Dilution Factor	Comments
5003/13/10	218479-001	C00200	1.5 added	30.0 total added	45.2x	20x of 2.26x can C00162
	-002	C00002			43x	20x of 2.15x can C00070
	-003	C00236			42.6x	20x of 2.13x can C00129
	-004	C00219			43.4x	20x of 2.17x can C00126
	-005	C00203			45.8x	20x of 2.29x can C00140
	-006	C00213			55.2x	20x of 2.76x can C00193
	-008	C00016			41.8x	20x of 2.09x can C00161
	-009	C0017			40.8x	20x of 2.04x can C00225
	-010	C00003			41.8x	20x of 2.09x can C00243
	-011	C00235			40.4x	20x of 2.02x can C00248
	-012	C00019			43.2x	20x of 2.16x can C00264
	5003/14/10	218479-004	C00205	1.5 added	30.0 total added	868x
-006		C00233			46x	20x of 2.30x can C00089
-008		C00230		30.65 total added	854x	20.43x of 41.8x can C00016
-010		C00217		30.0 total added	836x	20x of 41.8x can C00003

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Read and Understood By

Signed

Date

Signed

Date

Laboratory Job Number 218479

ANALYTICAL REPORT

Volatile Organics in Air GC

Matrix: Air

Analysis of Reformed Gas

Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BV-19N-10Q1	Diln Fac:	2.290
Lab ID:	218479-005	Batch#:	160482
Matrix:	Air	Sampled:	02/19/10
RL:	0.23	Received:	02/25/10
Units:	ppmv	Analyzed:	03/01/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	65,000	2,300	6.5	D2
Oxygen	140,000	2,300	14	D2

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BV-19N-10Q1	Diln Fac:	2.290
Lab ID:	218479-005	Batch#:	160482
Matrix:	Air	Sampled:	02/19/10
Units:	ppmv	Received:	02/25/10
Units (M):	ug/L	Analyzed:	03/01/10

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	14,000	1.1	9,300	0.75	D2
C1-C2 as Ethane	ND	2.3	ND	2.8	D2
C2-C3 as Propane	ND	2.3	ND	4.1	D2
C3-C4 as n-Butane	ND	2.3	ND	5.4	D2
C4-C5 as n-Pentane	8.4	2.3	25	6.8	D2
C5-C6 as n-Hexane	57	2.3	200	8.1	D2
C6+ as n-Hexane	180	2.3	650	8.1	D2

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Analysis of Reformed Gas

Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	ASE-46A-10Q1	Diln Fac:	2.300
Lab ID:	218479-006	Batch#:	160482
Matrix:	Air	Sampled:	02/19/10
RL:	0.23	Received:	02/25/10
Units:	ppmv	Analyzed:	03/01/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	14,000	2,300	1.4	D1
Oxygen	240,000	2,300	24	D1

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	ASE-46A-10Q1	Diln Fac:	2.300
Lab ID:	218479-006	Batch#:	160482
Matrix:	Air	Sampled:	02/19/10
Units:	ppmv	Received:	02/25/10
Units (M):	ug/L	Analyzed:	03/01/10

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	58	1.2	38	0.75	D1
C1-C2 as Ethane	ND	2.3	ND	2.8	D1
C2-C3 as Propane	ND	2.3	ND	4.1	D1
C3-C4 as n-Butane	ND	2.3	ND	5.5	D1
C4-C5 as n-Pentane	ND	2.3	ND	6.8	D1
C5-C6 as n-Hexane	ND	2.3	ND	8.1	D1
C6+ as n-Hexane	10	2.3	36	8.1	D1

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Analysis of Reformed Gas

Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BSVE-INLET-10Q1	Diln Fac:	2.760
Lab ID:	218479-007	Batch#:	160482
Matrix:	Air	Sampled:	02/19/10
RL:	0.28	Received:	02/25/10
Units:	ppmv	Analyzed:	03/01/10
Units (Mol %):	MOL %		

Analyte	Result	RL	Result (Mol %)	ADEQ Flags
Carbon Dioxide	50,000	2,800	5.0	D1
Oxygen	260,000	2,800	26	D1

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BSVE-INLET-10Q1	Diln Fac:	2.760
Lab ID:	218479-007	Batch#:	160482
Matrix:	Air	Sampled:	02/19/10
Units:	ppmv	Received:	02/25/10
Units (M):	ug/L	Analyzed:	03/01/10

Analyte	Result	RL	Result (M)	RL	ADEQ Flags
Methane-TO3	1,600	1.4	1,000	0.91	D1
C1-C2 as Ethane	ND	2.8	ND	3.4	D1
C2-C3 as Propane	ND	2.8	ND	5.0	D1
C3-C4 as n-Butane	ND	2.8	ND	6.6	D1
C4-C5 as n-Pentane	19	2.8	55	8.1	D1
C5-C6 as n-Hexane	140	2.8	500	9.7	D1
C6+ as n-Hexane	340	2.8	1,200	9.7	D1

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Type:	BLANK	Units:	ppmv
Lab ID:	QC534323	Units (Mol %):	MOL %
Matrix:	Air	Diln Fac:	1.000
Result (Mol %):	ND	Batch#:	160482
RL:	0.10	Analyzed:	03/01/10

Analyte	Result	RL	ADEQ Flags
Carbon Dioxide	ND	1,000	
Oxygen	ND	1,000	

ND= Not Detected

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Batch QC Report

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Type:	BLANK	Units (M):	ug/L
Lab ID:	QC534323	Diln Fac:	1.000
Matrix:	Air	Batch#:	160482
Result (M):	ND	Analyzed:	03/01/10
Units:	ppmv		

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	0.50	0.33	
C1-C2 as Ethane	ND	1.0	1.2	
C2-C3 as Propane	ND	1.0	1.8	
C3-C4 as n-Butane	ND	1.0	2.4	
C4-C5 as n-Pentane	ND	1.0	3.0	
C5-C6 as n-Hexane	ND	1.0	3.5	
C6+ as n-Hexane	ND	1.0	3.5	

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Type:	BLANK	Units:	ppmv
Lab ID:	QC534324	Units (Mol %):	MOL %
Matrix:	Air	Diln Fac:	1.000
Result (Mol %):	ND	Batch#:	160482
RL:	0.10	Analyzed:	03/01/10

Analyte	Result	RL	ADEQ Flags
Carbon Dioxide	ND	1,000	
Oxygen	ND	1,000	

ND= Not Detected

RL= Reporting Limit

Result Mol %= Result in Mole Percent

Batch QC Report

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Type:	BLANK	Units (M):	ug/L
Lab ID:	QC534324	Diln Fac:	1.000
Matrix:	Air	Batch#:	160482
Result (M):	ND	Analyzed:	03/01/10
Units:	ppmv		

Analyte	Result	RL	RL	ADEQ Flags
Methane-TO3	ND	0.50	0.33	
C1-C2 as Ethane	ND	1.0	1.2	
C2-C3 as Propane	ND	1.0	1.8	
C3-C4 as n-Butane	ND	1.0	2.4	
C4-C5 as n-Pentane	ND	1.0	3.0	
C5-C6 as n-Hexane	ND	1.0	3.5	
C6+ as n-Hexane	ND	1.0	3.5	

ND= Not Detected

RL= Reporting Limit

Result M= Result in Mass Units

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC534325	Batch#:	160482
Matrix:	Air	Analyzed:	03/01/10
Units:	ppmv		

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Carbon Dioxide	2,000	2,443	122	70-130		
Oxygen	2,000	2,508	125	70-130		

Batch QC Report

Analysis of Reformed Gas			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	ASTM D1946
Field ID:	BV-19N-10Q1	Units (Mol %):	MOL %
Type:	SDUP	Diln Fac:	2.290
MSS Lab ID:	218479-005	Batch#:	160482
Lab ID:	QC534328	Sampled:	02/19/10
Matrix:	Air	Received:	02/25/10
RL:	0.2290	Analyzed:	03/01/10
Units:	ppmv		

Analyte	MSS Result	Result	RL	Result (Mol %)	RPD	Lim	ADEQ	Flags
Carbon Dioxide	64,690	69,800	2,290	6.980	8	30	D1	
Oxygen	144,300	154,900	2,290	15.49	7	30	D1	

RL= Reporting Limit

RPD= Relative Percent Difference

Result Mol %= Result in Mole Percent

Batch QC Report

Volatile Organics in Air			
Lab #:	218479	Location:	BSVE QTR SVM
Client:	CH2M Hill	Prep:	METHOD
Project#:	371451.SV.99.IS.0109	Analysis:	EPA TO-3
Field ID:	BV-19N-10Q1	Units (M):	ug/L
Type:	SDUP	Diln Fac:	2.290
MSS Lab ID:	218479-005	Batch#:	160482
Lab ID:	QC534328	Sampled:	02/19/10
Matrix:	Air	Received:	02/25/10
Units:	ppmv	Analyzed:	03/01/10

Analyte	MSS Result	Result	RL	Result (M)	RL	RPD	Lim	ADEQ	Flags
Methane-TO3	14,220	15,070	1.145	9,886	0.7512	6	30	D1	
C1-C2 as Ethane	<2.290	ND	2.290	ND	2.816	NC	30	D1	
C2-C3 as Propane	<2.290	ND	2.290	ND	4.130	NC	30	D1	
C3-C4 as n-Butane	<2.290	ND	2.290	ND	5.444	NC	30	D1	
C4-C5 as n-Pentane	8.382	8.914	2.290	26.30	6.758	6	30	D1	
C5-C6 as n-Hexane	57.27	60.52	2.290	213.3	8.072	6	30	D1	
C6+ as n-Hexane	183.2	194.0	2.290	683.8	8.072	6	30	D1	

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

RPD= Relative Percent Difference

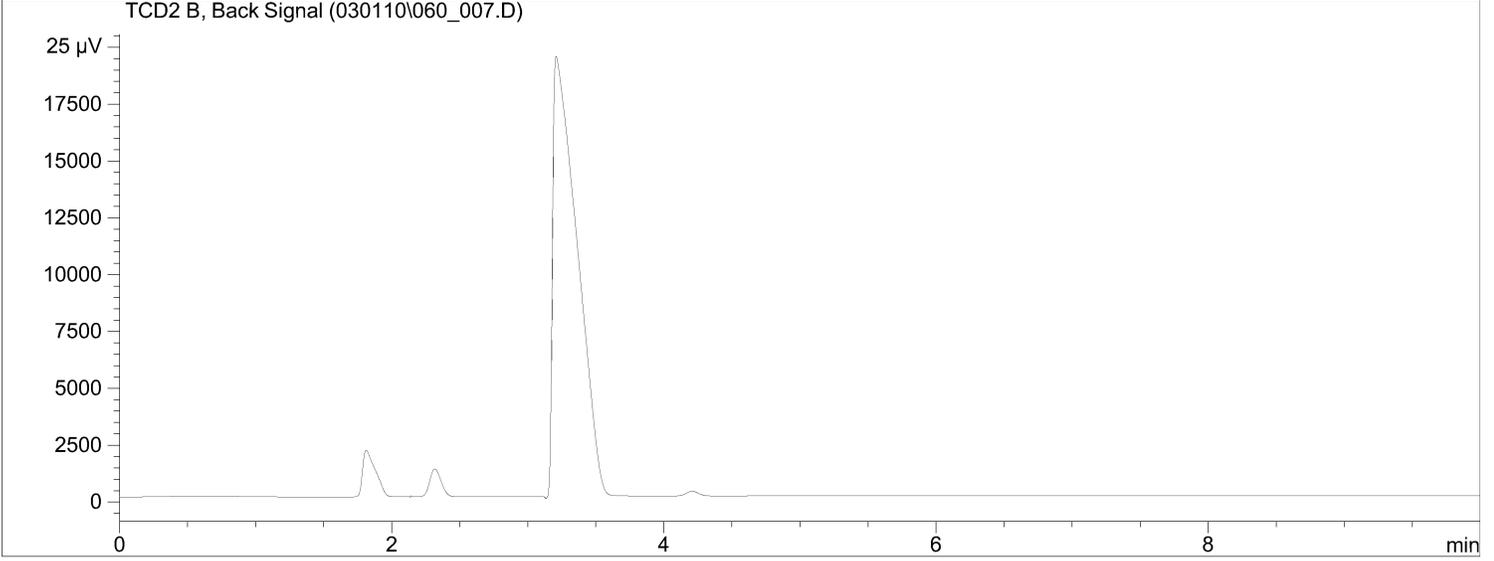
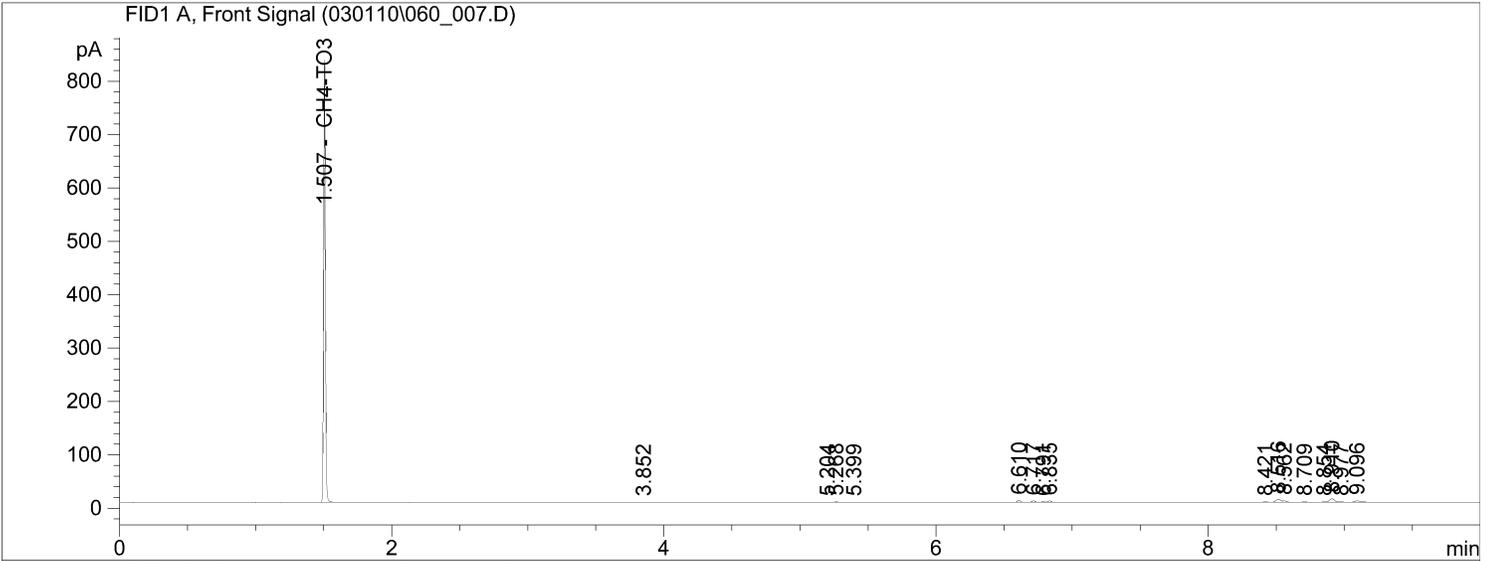
Result M= Result in Mass Units

Sample Name: mss.218479-005,160482,2.29

```

=====
Acq. Operator   : GC28 RGA
Acq. Instrument : GC28                      Location : Vial 1
Injection Date  : 3/1/2010 12:52:25 PM
                                           Inj Volume : Manually

Acq. Method     : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed    : 3/1/2010 12:46:46 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed    : 12/11/2009 04:39:29 PM by GC28 RGA
    
```



External Standard Report

```

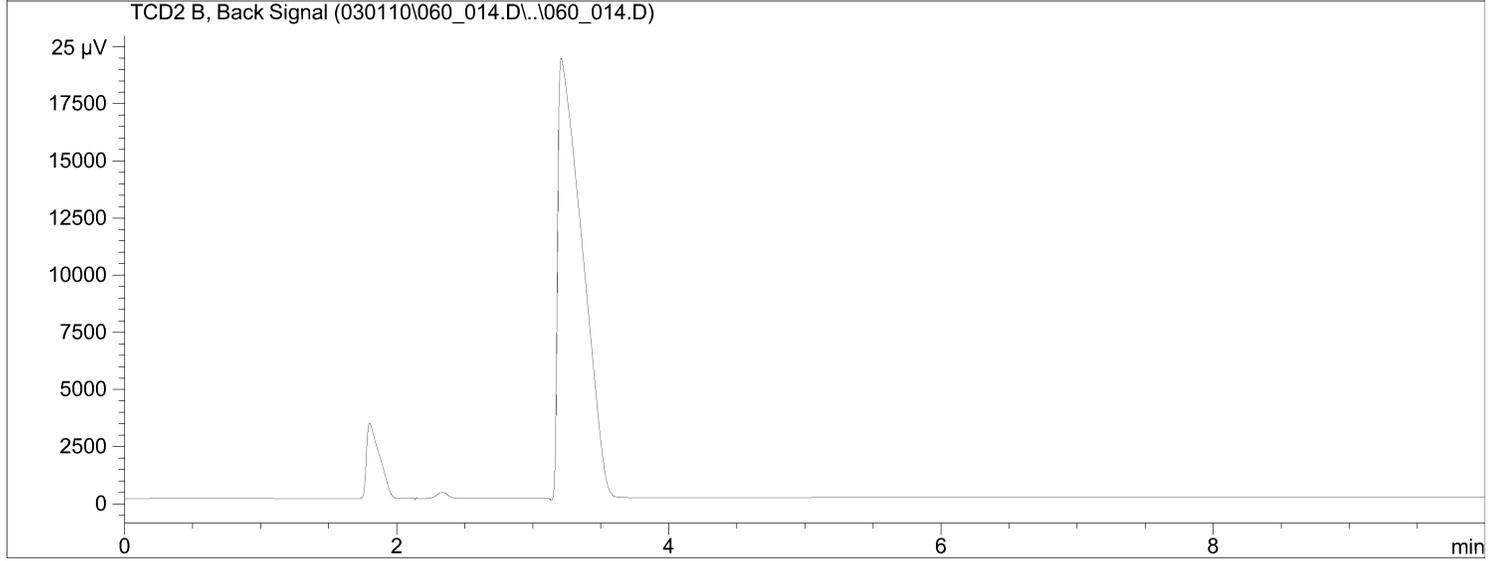
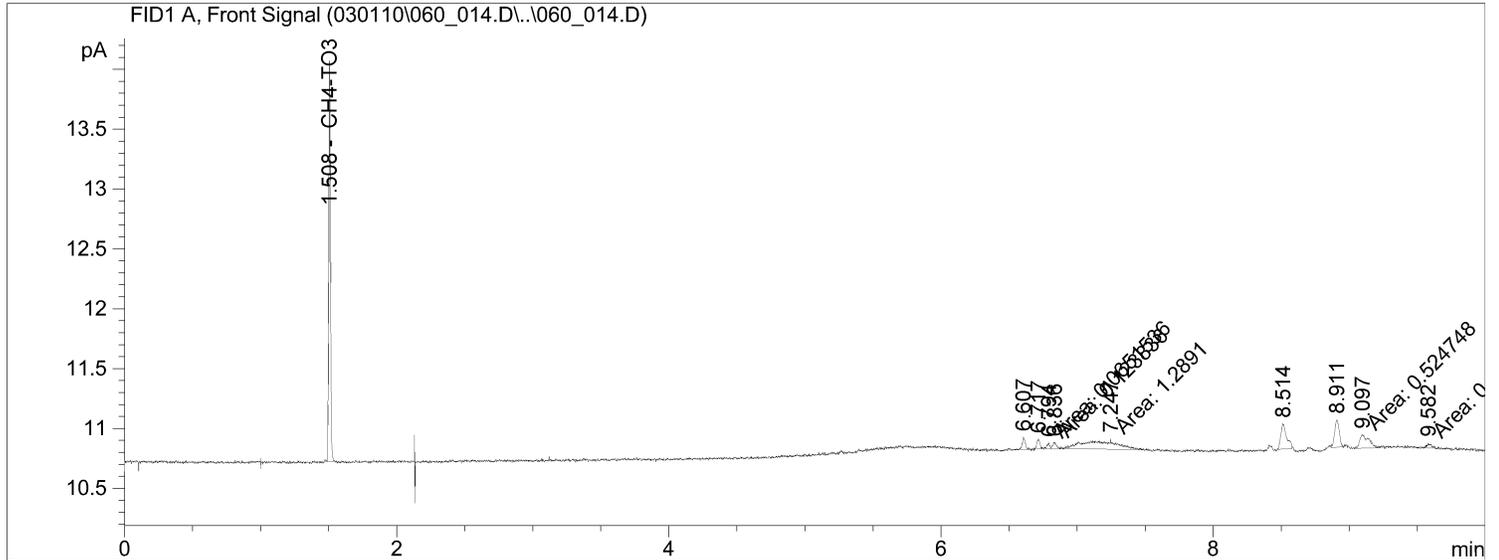
Sorted By      : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier     : 1.0000
Dilution       : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.507	BB	763.38708	8.13190	6207.78590		CH4-TO3

Sample Name: 218479-006,160482,2.3

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 3/1/2010 04:08:58 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 3/1/2010 04:03:42 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA
(Results are from a previously saved Batch)



=====
External Standard Report
=====

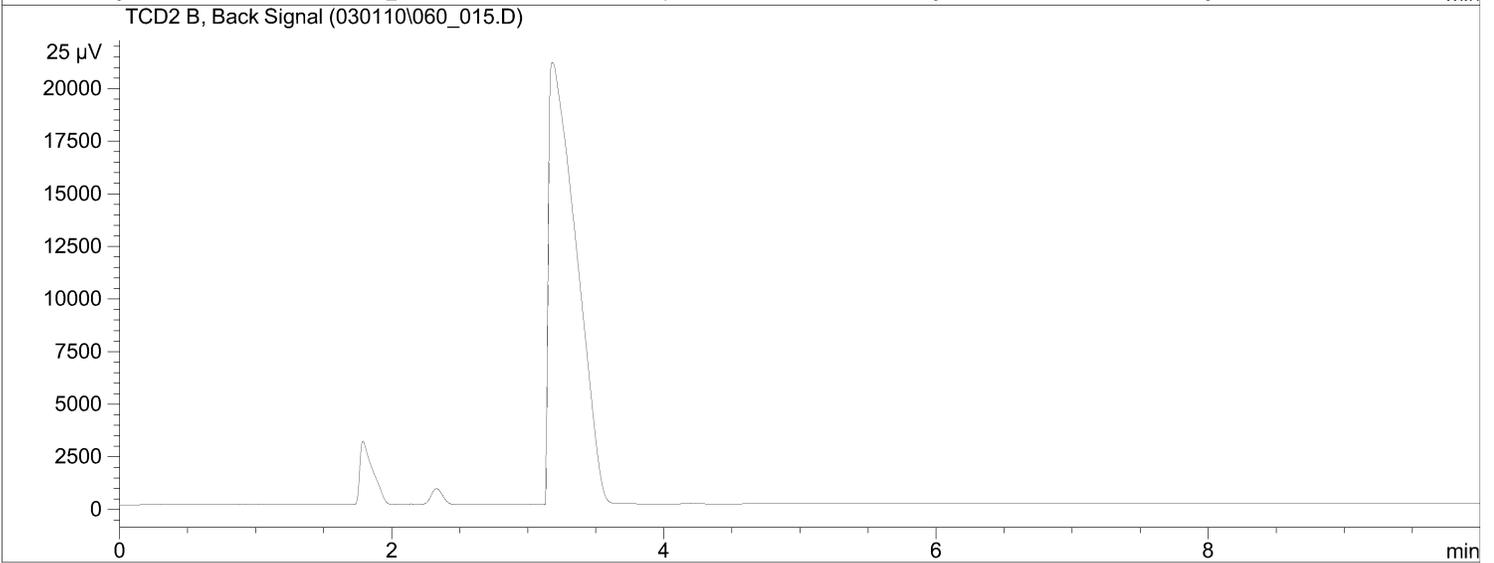
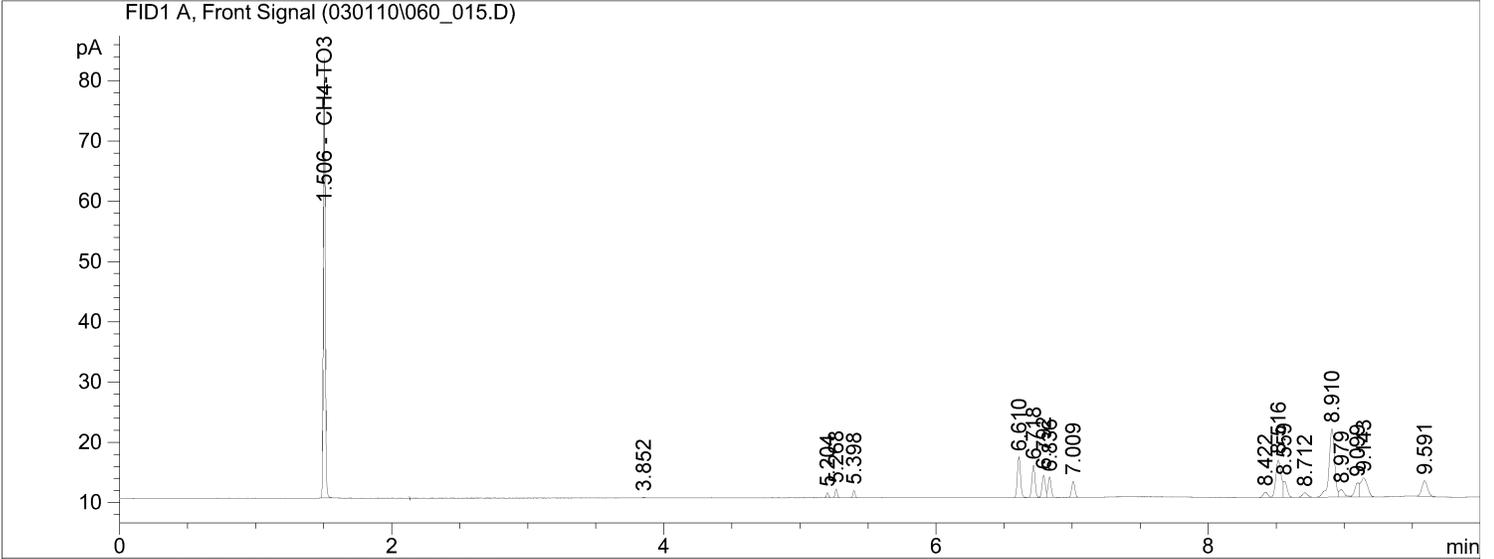
Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A, Front Signal

Sample Name: 218479-007,160482,2.76

```

=====
Acq. Operator   : GC28 RGA
Acq. Instrument : GC28                      Location : Vial 1
Injection Date  : 3/1/2010 04:31:17 PM
                                           Inj Volume : Manually
Acq. Method     : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed    : 3/1/2010 04:23:59 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_020910.M
Last changed    : 2/9/2010 08:34:33 AM by GC28 RGA
    
```



External Standard Report

```

Sorted By      : Signal
Calib. Data Modified : 2/9/2010 08:33:15 AM
Multiplier     : 1.0000
Dilution       : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs
    
```

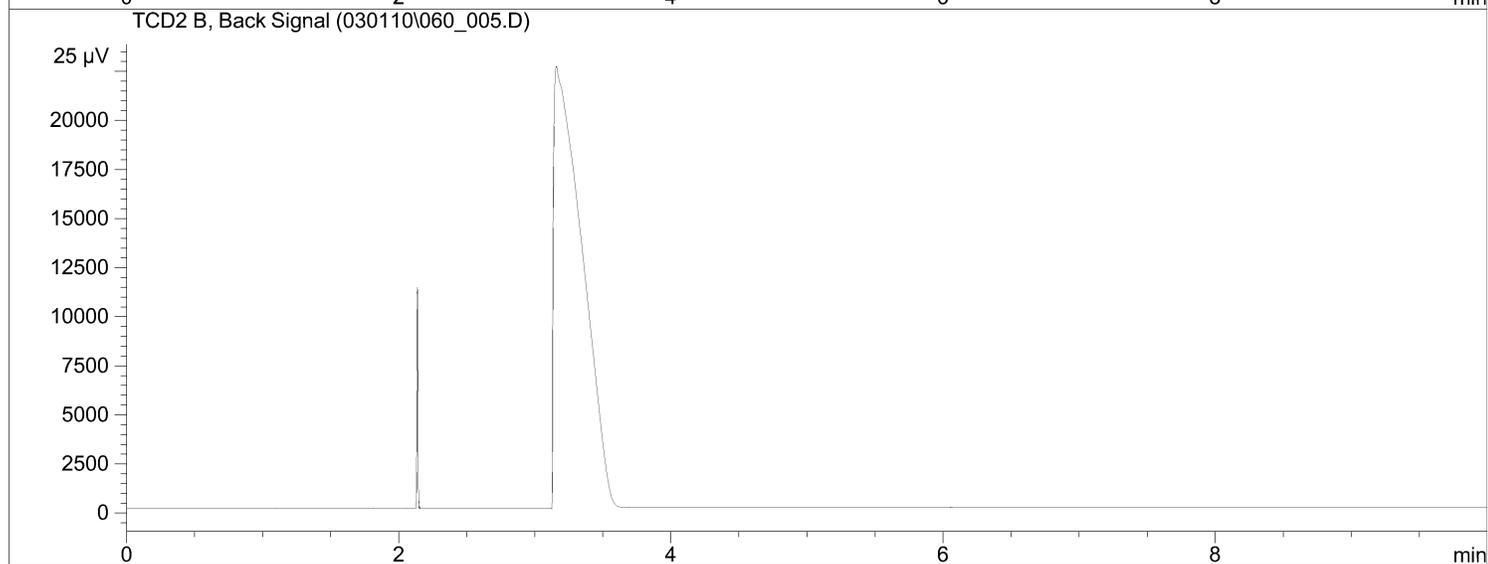
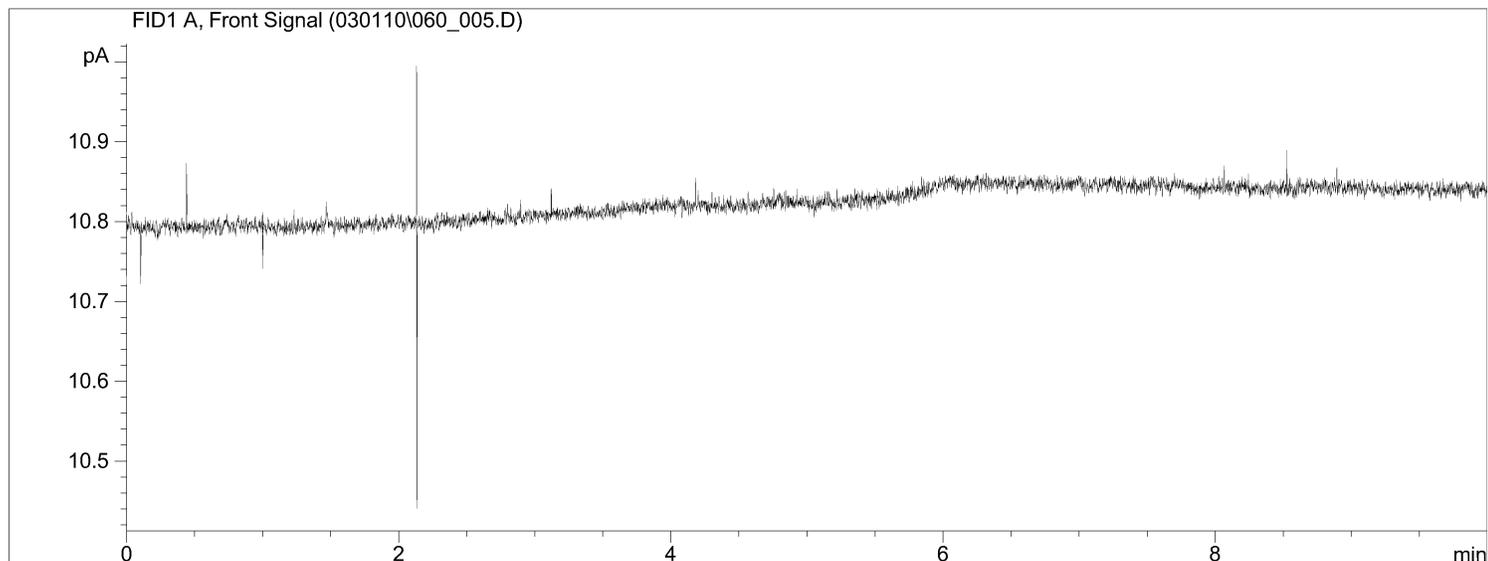
Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.506	BB	71.28828	8.13190	579.70899		CH4+TO3

Sample Name: blank,qc534323,160482,1

```

=====
Acq. Operator   : GC28 RGA
Acq. Instrument : GC28                      Location : Vial 1
Injection Date  : 3/1/2010 12:10:14 PM
                                           Inj Volume : Manually
Acq. Method     : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed    : 3/1/2010 12:04:35 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed    : 12/11/2009 04:39:29 PM by GC28 RGA
    
```



External Standard Report

```

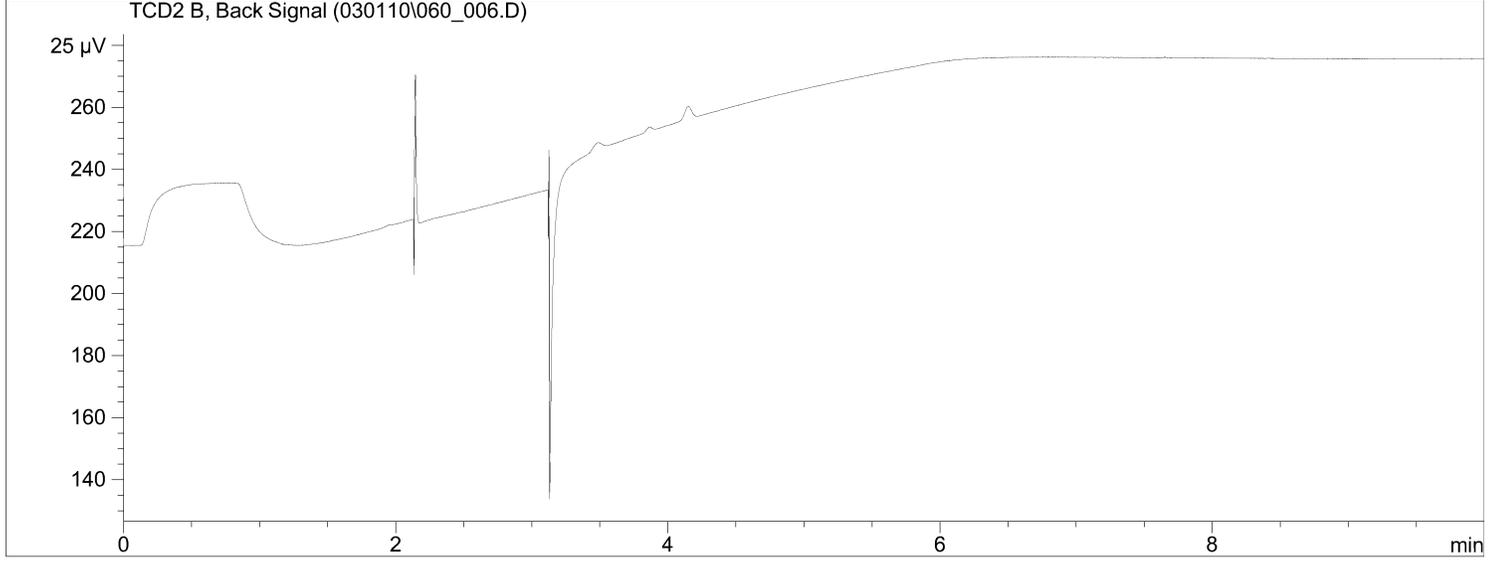
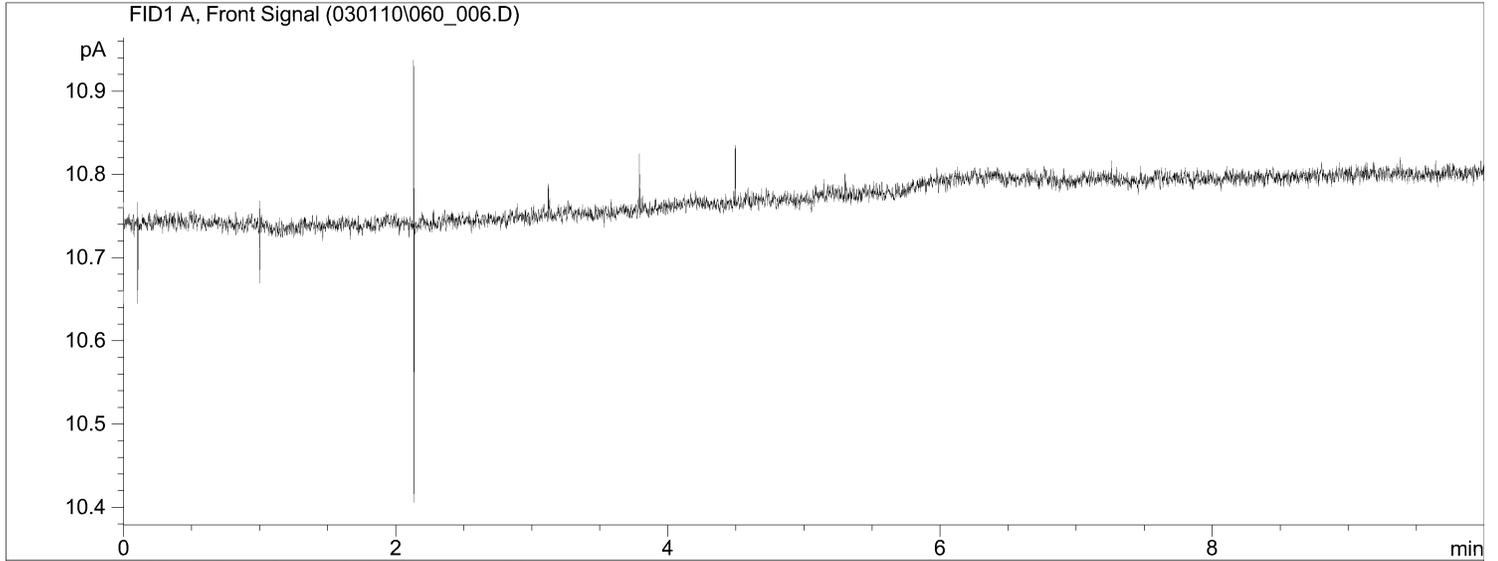
Sorted By      : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier     : 1.0000
Dilution       : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs
    
```

Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.495	-	-	-	-	-	CH4-TO3

Sample Name: blank,qc534324,160482,1

=====
Acq. Operator : GC28 RGA
Acq. Instrument : GC28 Location : Vial 1
Injection Date : 3/1/2010 12:31:45 PM Inj Volume : Manually
Acq. Method : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed : 3/1/2010 12:25:15 PM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed : 12/11/2009 04:39:29 PM by GC28 RGA



=====
External Standard Report
=====

Sorted By : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier : 1.0000
Dilution : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs

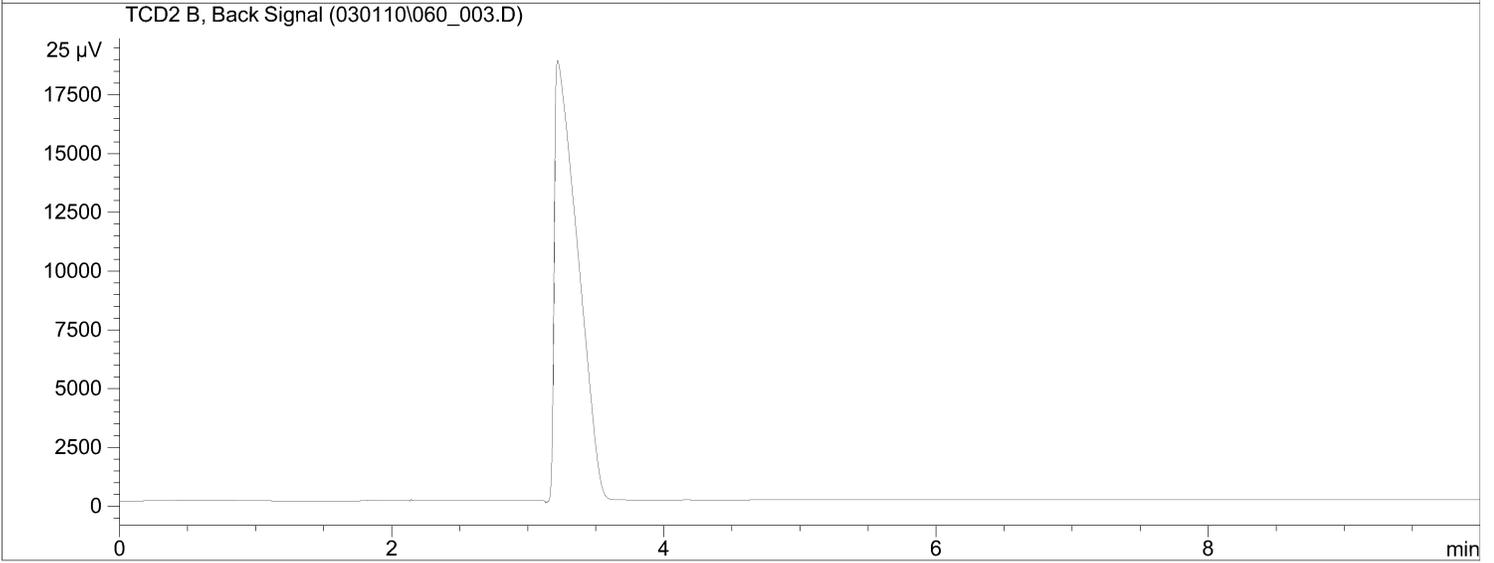
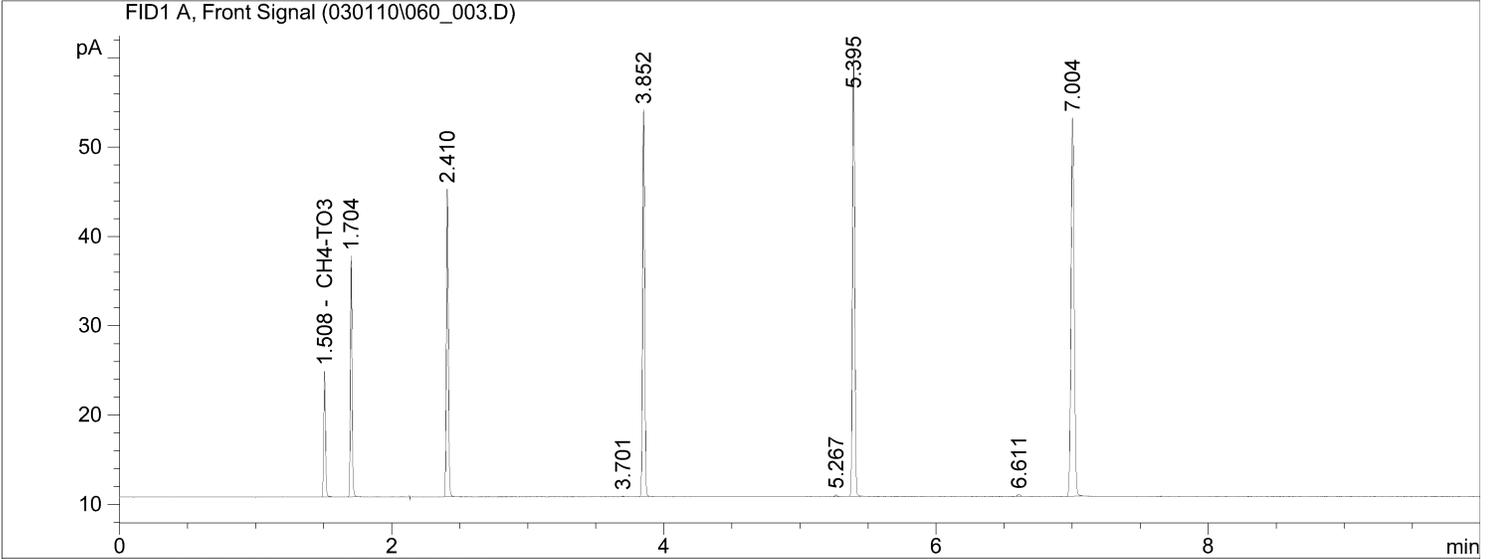
Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.495	-	-	-	-	-	CH4-TO3

```

=====
Acq. Operator   : GC28 RGA
Acq. Instrument : GC28                      Location : Vial 1
Injection Date  : 3/1/2010 11:28:08 AM
                                           Inj Volume : Manually

Acq. Method     : C:\CHEM32\1\METHODS\D1946_021710.M
Last changed    : 3/1/2010 11:22:51 AM by GC28 RGA
Analysis Method : C:\CHEM32\1\METHODS\TIMEDGRPS_121109.M
Last changed    : 12/11/2009 04:39:29 PM by GC28 RGA
  
```



External Standard Report

```

Sorted By      : Signal
Calib. Data Modified : 12/11/2009 04:39:25 PM
Multiplier     : 1.0000
Dilution       : 1.0000
Do not use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: FID1 A, Front Signal

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [uL/L]	Grp	Name
1.508	BB	12.67145	8.13190	103.04297		CH4-TO3

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218479 GCAIR Air: ASTM D1946

Inst : GC28
 Calnum : 1309434246001
 Units : uL/L

Date : 28-OCT-2009 13:50
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	301_006	1309434246006		28-OCT-2009 13:50	S13246
L2	301_007	1309434246007		28-OCT-2009 14:17	S13247
L3	301_008	1309434246008		28-OCT-2009 14:50	S13248
L4	301_009	1309434246009		28-OCT-2009 15:11	S13249
L5	301_010	1309434246010		28-OCT-2009 15:33	S13250
L6	301_011	1309434246011		28-OCT-2009 16:02	S13251

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	Flg
Oxygen	B		0.2310	0.2147	0.2147	0.2063	0.1979	AVRG		4.69612		0.2129	6	.99	
Carbon Dioxide	B		0.2502	0.2589	0.2542	0.2539	0.2416m	AVRG		3.97217		0.2518	3	.99	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Oxygen	B			500.0	8	2000	1	5000	1	10000	-3	2E+5	-7
Carbon Dioxide	B			500.0	-1	2000	3	5000	1	10000	1	2E+5	-4

m=manual integration

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218479 GCAIR Air: EPA TO-3

Inst : GC28
 Calnum : 1309497539003
 Units : uL/L

Date : 11-DEC-2009 12:37
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	345_002	1309497539002		11-DEC-2009 12:37	S13381
L2	345_003	1309497539003		11-DEC-2009 13:00	S13382
L3	345_004	1309497539004		11-DEC-2009 13:18	S13383
L4	345_005	1309497539005		11-DEC-2009 13:35	S13384
L5	345_006	1309497539006		11-DEC-2009 13:53	S13385
L6	345_007	1309497539007		11-DEC-2009 14:16	S13386
L7	345_008	1309497539008		11-DEC-2009 14:36	S13387
L8	345_009	1309497539009		11-DEC-2009 16:08	S13388

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Methane-TO3	A	0.1314	0.1225	0.1271	0.1208	0.1197	0.1183	0.1197	0.1242	AVRG		8.13190		0.1230	4	.99	30	
C1-C2 as Ethane	A	0.2344	0.2246	0.2351	0.2214	0.2192				AVRG		4.40634		0.2269	3	.99	30	
C2-C3 as Propane	A	0.3733	0.3403	0.3520	0.3349	0.3314				AVRG		2.88691		0.3464	5	.99	30	
C3-C4 as n-Butane	A	0.5160	0.4525	0.4696	0.4450	0.4404				AVRG		2.15194		0.4647	7	.99	30	
C4-C5 as n-Pentane	A	0.6216	0.5643	0.5844	0.5569	0.5515				AVRG		1.73685		0.5758	5	.99	30	
C5-C6 as n-Hexane	A	0.7502	0.6699	0.6955	0.6640	0.6573				AVRG		1.45477		0.6874	6	.99	30	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D
Methane-TO3	A	0.500	7	10.00	0	100.0	3	501.0	-2	1002	-3	9980	-4	2E+5	-3	5E+5	1
C1-C2 as Ethane	A	0.500	3	10.00	-1	100.0	4	505.5	-2	1011	-3						
C2-C3 as Propane	A	0.500	8	10.00	-2	100.0	2	501.0	-3	1002	-4						
C3-C4 as n-Butane	A	0.500	11	10.00	-3	100.0	1	502.5	-4	1005	-5						
C4-C5 as n-Pentane	A	0.500	8	10.00	-2	100.0	2	500.0	-3	1000	-4						
C5-C6 as n-Hexane	A	0.500	9	10.00	-3	100.0	1	498.5	-3	997.0	-4						

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218479 GCAIR Air
EPA TO-3

Inst : GC28

Calnum : 1309497539003

Cal Date : 11-DEC-2009

ICV 1309497539011 (345_011 11-DEC-2009) stds: S13375

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Methane-TO3	A	1000	1017	uL/L	2	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218479 GCAIR Air
ASTM D1946

Inst : GC28
 Seqnum : 1300087016012
 Cal : 1309434246001
 Standards: S14001

IDF : 1.0
 Time : 01-MAR-2010 15:28

File : 060_012
 Caldate : 28-OCT-2009

Analyte	Ch	Avg		Spiked	Quant	Units	%D	Max %D	Flags
		RF/CF	RF/CF						
Oxygen	B	0.2129	0.2715	2000	2550	uL/L	27	30	
Carbon Dioxide	B	0.2518	0.3227	2000	2564	uL/L	28	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218479 GCAIR Air
EPA TO-3

Inst : GC28
 Seqnum : 1300087016013
 Cal : 1309497539003
 Standards: S13824

IDF : 1.0
 Time : 01-MAR-2010 15:48

File : 060_013
 Caldate : 11-DEC-2009

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1230	0.1330	100.0	108.1	uL/L	8	30	
C1-C2 as Ethane	A	0.2269	0.2466	100.0	108.7	uL/L	9	30	
C2-C3 as Propane	A	0.3464	0.3693	100.0	106.6	uL/L	7	30	
C3-C4 as n-Butane	A	0.4647	0.4924	100.0	106.0	uL/L	6	30	
C4-C5 as n-Pentane	A	0.5758	0.6155	100.0	106.9	uL/L	7	30	
C5-C6 as n-Hexane	A	0.6874	0.7299	100.0	106.2	uL/L	6	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218479 GCAIR Air
ASTM D1946

Inst : GC28
 Seqnum : 1300087016017
 Cal : 1309434246001
 Standards: S14001

IDF : 1.0
 Time : 01-MAR-2010 17:13

File : 060_017
 Caldate : 28-OCT-2009

Analyte	Ch	Avg		Spiked	Quant	Units	%D	Max %D	Flags
		RF/CF	RF/CF						
Oxygen	B	0.2129	0.2566	2000	2410	uL/L	21	30	
Carbon Dioxide	B	0.2518	0.3064	2000	2434	uL/L	22	30	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218479 GCAIR Air
EPA TO-3

Inst : GC28
 Seqnum : 1300087016018
 Cal : 1309497539003
 Standards: S13824

File : 060_018
 Caldate : 11-DEC-2009

IDF : 1.0
 Time : 01-MAR-2010 17:33

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Methane-TO3	A	0.1230	0.1308	100.0	106.3	uL/L	6	30	
C1-C2 as Ethane	A	0.2269	0.2421	100.0	106.7	uL/L	7	30	
C2-C3 as Propane	A	0.3464	0.3628	100.0	104.7	uL/L	5	30	
C3-C4 as n-Butane	A	0.4647	0.4835	100.0	104.1	uL/L	4	30	
C4-C5 as n-Pentane	A	0.5758	0.6044	100.0	105.0	uL/L	5	30	
C5-C6 as n-Hexane	A	0.6874	0.7175	100.0	104.4	uL/L	4	30	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1300087016

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 03/01/10 10:16

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	060_001	IB	IB			03/01/10 10:16	1.0		1:N=1000000
002	060_002	CCV/LCS	QC534325	Air	160482	03/01/10 11:07	1.0	1	
003	060_003	CCV/BS	QC534326	Air	160482	03/01/10 11:28	1.0	2	
004	060_004	BSD	QC534327	Air	160482	03/01/10 11:49	1.0	2	
005	060_005	BLANK	QC534323	Air	160482	03/01/10 12:10	1.0		1:N=1100000
006	060_006	BLANK	QC534324	Air	160482	03/01/10 12:31	1.0		
007	060_007	MSS	218479-005	Air	160482	03/01/10 12:52	2.29		
008	060_008	IB	IB			03/01/10 13:12	1.0		1:N=1000000
009	060_009	IB	IB			03/01/10 13:33	1.0		1:N=1100000
010	060_010	SDUP	QC534328	Air	160482	03/01/10 14:12	2.29		
011	060_011	IB	IB			03/01/10 15:07	1.0		1:N=1000000
012	060_012	CCV				03/01/10 15:28	1.0	1	
013	060_013	CCV				03/01/10 15:48	1.0	2	
014	060_014	SAMPLE	218479-006	Air	160482	03/01/10 16:08	2.300		
015	060_015	SAMPLE	218479-007	Air	160482	03/01/10 16:31	2.76		
016	060_016	IB	IB			03/01/10 16:51	1.0		
017	060_017	CCV				03/01/10 17:13	1.0	1	
018	060_018	CCV				03/01/10 17:33	1.0	2	

ET 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 018.

Analyst: ET Date: 03/12/10 Reviewer: SJD Date: 03/12/10

Standards used: 1=S14001 2=S13824

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309434246

Instrument : GC28
 Method : ASTM D1946

Begun : 10/28/09 11:55

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	301_001	IB	IB			10/28/09 11:55	1.0	
002	301_002	IB	IB			10/28/09 12:15	1.0	
003	301_003	IB	IB			10/28/09 12:40	1.0	
004	301_004	IB	HE BLANK			10/28/09 13:05	1.0	
005	301_005	ICAL	CALBLANK			10/28/09 13:26	1.0	
006	301_006	ICAL				10/28/09 13:50	1.0	1
007	301_007	ICAL				10/28/09 14:17	1.0	2
008	301_008	ICAL				10/28/09 14:50	1.0	3
009	301_009	ICAL				10/28/09 15:11	1.0	4
010	301_010	ICAL				10/28/09 15:33	1.0	5
011	301_011	ICAL				10/28/09 16:02	1.0	6

APP 11/12/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 011.

Analyst: APP Date: 11/12/09 Reviewer: SJD Date: 11/12/09

Standards used: 1=S13246 2=S13247 3=S13248 4=S13249 5=S13250 6=S13251

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1309497539

Instrument : GC28
 Method : ASTM D1946, EPA TO-3

Begun : 12/11/09 12:19

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	345_001	IB	IB			12/11/09 12:19	1.0	
002	345_002	ICAL				12/11/09 12:37	1.0	1
003	345_003	ICAL				12/11/09 13:00	1.0	2
004	345_004	ICAL				12/11/09 13:18	1.0	3
005	345_005	ICAL				12/11/09 13:35	1.0	4
006	345_006	ICAL				12/11/09 13:53	1.0	5
007	345_007	ICAL				12/11/09 14:16	1.0	6
008	345_008	ICAL				12/11/09 14:36	1.0	7
009	345_009	ICAL				12/11/09 16:08	1.0	8
010	345_010	IB	IB			12/11/09 16:29	1.0	
011	345_011	ICV				12/11/09 16:47	1.0	9

APP 12/14/09 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 011.

Analyst: APP Date: 12/14/09 Reviewer: SJD Date: 01/20/10

Standards used: 1=S13381 2=S13382 3=S13383 4=S13384 5=S13385 6=S13386 7=S13387 8=S13388 9=S13375

Prepped by/date	Sample ID	Can ID	PSIG Initial Pres.	PSIG Final Pres.	Dilution Factor	Comments
ET 2-23	218411-042					ET 2-23
Sos 2/28/10	BLANK	C00010	—	—	1x	
	BLANK	C00038	—	—	1x	
ET 2-25	218479-001	C00162	11.10	25.14	2.26x	
	218479-002	C00570	11.69	25.12	2.15x	
	-003	C00129	11.90	25.30	2.13x	
	-004	ET C00176	11.53	25.07	2.17x	
	-005	C00140	11.03	25.31	2.29x	
	-006	C00089	11.24	25.82	2.30x	
	-007	C00103	9.07	25.02	2.76x	
	-008	C00161	12.00	25.07	2.09x	
	-009	C00275	12.63	25.71	2.04x	
	-010	C00243	12.05	25.18	2.09x	
	-011	C00248	12.57	25.37	2.02x	
	-012	C00264	11.81	25.57	2.16x	
ET 2-25	Blank	C00240	—	—	1x	
Sos 2/27/10	218259-015	C00007	1.5 added	30.0 total added	48.8x	20x of 2.44x can C00164
	-021	C00217	↓	↓	44.6x	20x of 2.23x can C00050
	-006	C	1.5 added	30.0 total added	40.7x	20x of 1.92x can C00188
Sos 2/27/10	218259-006	C00219	1.5 added	31.82 total added	40.7x	21.2x of 1.92x can C00188
ET 3-3	218553-001	C00211	11.96	24.83	2.08x	
	-002	C00012	12.34	25.01	2.03x	
	Blank	C00240	—	—	1x	ET 3-3
	Blank	C00292	—	—	1x	
Sos 3/3/10	218329-005	C00200	1.5 added	30.0 total added	42x	20x of 2.10x can C00284
	-006	C00213	↓	↓	40.2x	20x of 2.01x can C00286
	-007	C00016	↓	↓	41.8x	20x of 2.07x can C00287
	-008	C00220	↓	↓	41.6x	20x of 2.08x can C00286
	-015	C00235	↓	31.63 total added	42.8x	21.1x of 2.03x can C00271
	-019	C00236	↓	30.0 total added	43.4x	20x of 2.17x can C00273
	-023	C00002	↓	↓	38.6x	20x of 1.93x can C00068
	-026	C00036	↓	↓	39.2x	20x of 1.96x can C00116
Sos 3/5/10	218432-001	C00232	13.56	22.58	1.67x	refill can
	218329-007	C00034	1.5 added	30.0 total added	83.6x	20x of 4.18x can C00016

Continued on Page

Read and Understood By

Signed

Date

Signed

Date

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: BSVE Air Permit

Sampled: 02/09/10-02/10/10
Received: 02/10/10
Issued: 02/17/10 16:40

NELAP #01109CA Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID

PTB0615-01
PTB0615-02
PTB0615-03
PTB0615-04
PTB0615-05
PTB0615-06
PTB0615-07

CLIENT ID

BV-29N-10Q1
BV-28N-10Q1
BV-27N-10Q1
BV-26N-10Q1
BSVE-SVM-10Q1-016
ASE-97A-10Q1
BC-8B-10Q1

MATRIX

Air
Air
Air
Air
Air
Air
Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0615

Sampled: 02/09/10-02/10/10
Received: 02/10/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB0615-01 (BV-29N-10Q1 - Air)				Sampled: 02/09/10				T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0389	49	ND	1	2/10/2010	2/10/2010	
Sample ID: PTB0615-02 (BV-28N-10Q1 - Air)				Sampled: 02/10/10				T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0389	49	65	1	2/10/2010	2/10/2010	
Sample ID: PTB0615-03 (BV-27N-10Q1 - Air)				Sampled: 02/10/10				T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0389	98	880	2	2/10/2010	2/10/2010	
Sample ID: PTB0615-04 (BV-26N-10Q1 - Air)				Sampled: 02/10/10				T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0389	49	ND	1	2/10/2010	2/10/2010	
Sample ID: PTB0615-05 (BSVE-SVM-10Q1-016 - Air)				Sampled: 02/10/10				T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0389	49	ND	1	2/10/2010	2/10/2010	
Sample ID: PTB0615-06 (ASE-97A-10Q1 - Air)				Sampled: 02/10/10				T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0389	49	310	1	2/10/2010	2/10/2010	
Sample ID: PTB0615-07 (BC-8B-10Q1 - Air)				Sampled: 02/10/10				T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0389	49	ND	1	2/10/2010	2/10/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PTB0615 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0615

Sampled: 02/09/10-02/10/10
Received: 02/10/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: BV-29N-10Q1 (PTB0615-01) - Air EPA 8015D MOD.	3	02/09/2010 23:39	02/10/2010 08:00	02/10/2010 16:00	02/10/2010 16:29
Sample ID: BV-28N-10Q1 (PTB0615-02) - Air EPA 8015D MOD.	3	02/10/2010 00:22	02/10/2010 08:00	02/10/2010 16:00	02/10/2010 16:52
Sample ID: BV-27N-10Q1 (PTB0615-03) - Air EPA 8015D MOD.	3	02/10/2010 01:13	02/10/2010 08:00	02/10/2010 17:45	02/10/2010 21:58
Sample ID: BV-26N-10Q1 (PTB0615-04) - Air EPA 8015D MOD.	3	02/10/2010 01:54	02/10/2010 08:00	02/10/2010 16:15	02/10/2010 17:39
Sample ID: BSVE-SVM-10Q1-016 (PTB0615-05) - Air EPA 8015D MOD.	3	02/10/2010 01:00	02/10/2010 08:00	02/10/2010 17:20	02/10/2010 20:47
Sample ID: ASE-97A-10Q1 (PTB0615-06) - Air EPA 8015D MOD.	3	02/10/2010 02:36	02/10/2010 08:00	02/10/2010 17:20	02/10/2010 21:11
Sample ID: BC-8B-10Q1 (PTB0615-07) - Air EPA 8015D MOD.	3	02/10/2010 04:47	02/10/2010 08:00	02/10/2010 17:20	02/10/2010 21:34

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0615 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit
Report Number: PTB0615

Sampled: 02/09/10-02/10/10
Received: 02/10/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0389 Extracted: 02/10/10										
Blank Analyzed: 02/10/2010 (10B0389-BLK1)										
Volatiles Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/10/2010 (10B0389-BS2)										
Volatiles Fuel Hydrocarbons	119	49	ppmv	122		97	80-115			T3
LCS Dup Analyzed: 02/10/2010 (10B0389-BSD2)										
Volatiles Fuel Hydrocarbons	122	49	ppmv	122		100	80-115	3	20	T3
Duplicate Analyzed: 02/10/2010 (10B0389-DUP1)										
Volatiles Fuel Hydrocarbons	273	98	ppmv		880			105	20	R9, T3

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0615 <Page 4 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0615

Sampled: 02/09/10-02/10/10
Received: 02/10/10

DATA QUALIFIERS AND DEFINITIONS

- R9** Sample RPD exceeded the laboratory acceptance limit
- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0615 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0615

Sampled: 02/09/10-02/10/10
Received: 02/10/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0615

Test America Phoenix

4645 E. Cotton Center Blvd
Phoenix, AZ 85040
602 437-3340

Honeywell

Chain Of Custody / Analysis Request

AEISI Ref: 40214.75067
COC#: 37380

Privileged & Confidential
 EDD To: Tuesdal Powers, Critigen
 Melanie West, Critigen
 Site Name: Sky Harbor AZ
 Location of Site: Phoenix, AZ
 Phase: Sampling Program
 Lab Proj # (SDG): TAMIP
 Lab ID: SKYHARBOR
 Lab Job #: SKYHARBOR
 Authorized User: Honeywell

Client Contact: (name, co., address)
 CH2M HILL
 2625 South Plaza Drive, Suite 300
 Tempe, AZ 85282
 Sampler: LAIS Peter Sora
 PO #: 2959460
 Analysis Turnaround Time (TAT): Consultant
 Preliminary Data To: Tuesdal Powers, Critigen, Melanie West, Critigen
 Sample Receipt: Tuesdal Powers, Critigen, Melanie West, Critigen
 Acknowledgement To: Tuesdal Powers, Critigen, Melanie West, Critigen
 Hard Copy To: Tuesdal Powers and Melanie West, Critigen
 Invoice To: Honeywell/Copy Berney Kidd

Full Report TAT: 7
 Composite/Grab: SW8015M (TPH - GRO - C6-C10)
 Field Filtered Sample ?
 Units: X
 Copyright AESI: Version 8.0 Unauthorized use strictly prohibited.
 Text & Excel File Drive: Excel & Text File Order

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Preservative	Field Filtered Sample ?	Units	
01	BV-29N	51.5	71.59	BV-29N-1001	2/9/10	2339	SV	AIR	REG	1	G	N	X
02	BV-28N	50.0	73.01	BV-28N-1001	2/10/10	0022	SV	AIR	REG	1	G	N	X
03	BV-27N	50.0	72.36	BV-27N-1001	2/10/10	0113	SV	AIR	REG	1	G	N	X
04	BV-26N	51.0	78.56	BV-26N-1002	2/10/10	0154	SV	AIR	REG	1	G	N	X
05				BSVE-SVM-1001-016	2/10/10	0100	SV	AIR	REG	1	G	N	X
06	ASE-97A	51.0	78.21	ASE-97A-1001	2/10/10	0236	SV	AIR	REG	1	G	N	X
07	BC-8B	51.0	71.40	BC-8B-1001	2/10/10	0447	SV	AIR	REG	1	G	N	X
8													
9													
10													
11													
12													

Relinquished by: *LAIS Peter Sora* Company: CH2M HILL
 Date/Time: 2/10/10 0800
 Received by: *LAIS Peter Sora* Company: TA
 Date/Time: 2/10/10 8:00
 Condition: 20.0c / Amb
 Relinquished by: *LAIS Peter Sora* Company: CH2M HILL
 Date/Time: 2/10/10 0800
 Received by: *LAIS Peter Sora* Company: TA
 Date/Time: 2/10/10 8:00
 Condition: 20.0c / Amb
 Relinquished by: *LAIS Peter Sora* Company: CH2M HILL
 Date/Time: 2/10/10 0800
 Received by: *LAIS Peter Sora* Company: TA
 Date/Time: 2/10/10 8:00
 Condition: 20.0c / Amb

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

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: BSVE Air Permit

Sampled: 02/11/10
Received: 02/11/10
Issued: 02/18/10 16:33

NELAP #01109CA Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID

PTB0790-01
PTB0790-02

CLIENT ID

ASE-59A-10Q1
BV-2N-10Q1

MATRIX

Air
Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0790

Sampled: 02/11/10

Received: 02/11/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB0790-01 (ASE-59A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0434	49	340	1	2/12/2010	2/12/2010	
Sample ID: PTB0790-02 (BV-2N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0538	98	1000	2	2/13/2010	2/13/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0790 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0790

Sampled: 02/11/10

Received: 02/11/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: ASE-59A-10Q1 (PTB0790-01) - Air EPA 8015D MOD.	3	02/11/2010 11:34	02/11/2010 16:40	02/12/2010 19:30	02/12/2010 20:02
Sample ID: BV-2N-10Q1 (PTB0790-02) - Air EPA 8015D MOD.	3	02/11/2010 13:06	02/11/2010 16:40	02/13/2010 15:45	02/13/2010 17:53

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0790 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit
Report Number: PTB0790

Sampled: 02/11/10
Received: 02/11/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0434 Extracted: 02/12/10										
Blank Analyzed: 02/12/2010 (10B0434-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/12/2010 (10B0434-BS2)										
Volatile Fuel Hydrocarbons	116	49	ppmv	122		95	80-115			T3
LCS Dup Analyzed: 02/12/2010 (10B0434-BSD2)										
Volatile Fuel Hydrocarbons	112	49	ppmv	122		92	80-115	4	20	T3
Duplicate Analyzed: 02/12/2010 (10B0434-DUP1)										
Volatile Fuel Hydrocarbons	986	98	ppmv		Source: PTB0648-02 784			23	20	T3 R9
Duplicate Analyzed: 02/12/2010 (10B0434-DUP2)										
Volatile Fuel Hydrocarbons	249	49	ppmv		Source: PTB0737-02 235			6	20	T3
Batch: 10B0538 Extracted: 02/13/10										
Blank Analyzed: 02/13/2010 (10B0538-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/13/2010 (10B0538-BS2)										
Volatile Fuel Hydrocarbons	119	49	ppmv	122		98	80-115			T3
LCS Dup Analyzed: 02/13/2010 (10B0538-BSD2)										
Volatile Fuel Hydrocarbons	118	49	ppmv	122		96	80-115	2	20	T3
Duplicate Analyzed: 02/13/2010 (10B0538-DUP1)										
Volatile Fuel Hydrocarbons	367	49	ppmv		Source: PTB0886-02 477			26	20	R9, T3

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0790

Sampled: 02/11/10

Received: 02/11/10

DATA QUALIFIERS AND DEFINITIONS

- R9** Sample RPD exceeded the laboratory acceptance limit
- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0790 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0790

Sampled: 02/11/10

Received: 02/11/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0790 <Page 6 of 6>

Test America Phoenix

4645 E. Cotton Center Blvd
Phoenix, AZ 85040
602 437-3340

Honeywell

Chain Of Custody / Analysis Request

ATB 0790

AESE Ref: 40214.75067
COC#: 37380

Lab Proj # (SDG):
Lab ID: TAMIP

Site ID: SKYHARBOR
Lab Job #:
Authorized User: Honeywell

Text & Excel File Drive
Excel & Text File Order

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Privileged & Confidential
EOD To: Tuesday Powers, Critigen
Melanie West, Critigen
Client Contact (Name, Co., address)
CH2M HILL
2825 South Plaza Drive, Suite 300
Tempe, AZ 85282
Preliminary Data To: Tuesday Powers, Critigen, Melanie West, Critigen
Sample Receipt: Tuesday Powers, Critigen, Melanie West, Critigen
Acknowledgement To: Tuesday Powers and Melanie West, Critigen
Hard Copy To: Honeywell/Copy Berman Kidd
Invoice To: Full Report TAT: 7

Sampler: Iqbal Cortez Lopez
PO #: 2959480
Analysis Turnaround Time (TAT): Consultant
Sample Date: 11/30/10
Sample Time: 1306
Sample Type: SV
Sample Matrix: AIR
Sample Purpose: BETA
of Cont.: 1
Composite/Grab: G N X
Field Filtered Sample?: SW8015M (TPH - GRO - C6-C10)

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units
1 ASE-S9A	01	01	ASE-S9A-1001	02/11/10	1134	SV	AIR	BETA	1	G N X
2 BU-2N	05	105	BU-2N-1001	02/11/10	1306	SV	AIR	BETA	1	G N X
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

Relinquished by: [Signature]
Company: CH2M HILL
Date/Time: 02/11/10 1555
Received by: Baine Foehl
Date/Time: 02/11/10 1613
Condition: Cooler Temp.
Custody Seals Intact

Relinquished by: [Signature]
Company: CH2M HILL
Date/Time: 02/11/10 1613
Received by: [Signature]
Date/Time: 02/11/10 1613
Condition: Cooler Temp.
Custody Seals Intact

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

Relinquished by: [Signature]
Company: CH2M HILL
Date/Time: 02/11/10 1613
Received by: [Signature]
Date/Time: 02/11/10 1613
Condition: Cooler Temp.
Custody Seals Intact

Relinquished by: [Signature] Date: 2/11/10 1613 Received by: [Signature] Date: 2/11/10 1640 20.00°C / Amb

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: BSVE Air Permit

Sampled: 02/11/10
Received: 02/11/10
Issued: 02/18/10 16:28

NELAP #01109CA Arizona DHS#AZ0728

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.
This entire report was reviewed and approved for release.*

CASE NARRATIVE

LABORATORY ID

PTB0791-02
PTB0791-03
PTB0791-04

CLIENT ID

BV-30N-10Q1
BV-33N-10Q1
BV-32N-10Q1

MATRIX

Air
Air
Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0791

Sampled: 02/11/10

Received: 02/11/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB0791-02 (BV-30N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatiles Fuel Hydrocarbons	EPA 8015D MOD.	10B0434	49	ND	1	2/12/2010	2/12/2010	
Sample ID: PTB0791-03 (BV-33N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatiles Fuel Hydrocarbons	EPA 8015D MOD.	10B0434	49	710	1	2/12/2010	2/12/2010	
Sample ID: PTB0791-04 (BV-32N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatiles Fuel Hydrocarbons	EPA 8015D MOD.	10B0434	49	ND	1	2/12/2010	2/12/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0791 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0791

Sampled: 02/11/10

Received: 02/11/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: BV-30N-10Q1 (PTB0791-02) - Air EPA 8015D MOD.	3	02/11/2010 09:34	02/11/2010 16:40	02/12/2010 13:20	02/12/2010 13:42
Sample ID: BV-33N-10Q1 (PTB0791-03) - Air EPA 8015D MOD.	3	02/11/2010 10:08	02/11/2010 16:40	02/12/2010 16:30	02/12/2010 17:27
Sample ID: BV-32N-10Q1 (PTB0791-04) - Air EPA 8015D MOD.	3	02/11/2010 10:48	02/11/2010 16:40	02/12/2010 19:30	02/12/2010 19:38

TestAmerica Phoenix

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Project Manager

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PTB0791 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit
Report Number: PTB0791

Sampled: 02/11/10
Received: 02/11/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 10B0434 Extracted: 02/12/10										
Blank Analyzed: 02/12/2010 (10B0434-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/12/2010 (10B0434-BS2)										
Volatile Fuel Hydrocarbons	116	49	ppmv	122		95	80-115			T3
LCS Dup Analyzed: 02/12/2010 (10B0434-BSD2)										
Volatile Fuel Hydrocarbons	112	49	ppmv	122		92	80-115	4	20	T3
Duplicate Analyzed: 02/12/2010 (10B0434-DUP1)										
Volatile Fuel Hydrocarbons	986	98	ppmv		Source: PTB0648-02 784			23	20	T3 R9
Duplicate Analyzed: 02/12/2010 (10B0434-DUP2)										
Volatile Fuel Hydrocarbons	249	49	ppmv		Source: PTB0737-02 235			6	20	T3

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PTB0791 <Page 4 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0791

Sampled: 02/11/10

Received: 02/11/10

DATA QUALIFIERS AND DEFINITIONS

- R9** Sample RPD exceeded the laboratory acceptance limit
- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0791 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: BSVE Air Permit

Report Number: PTB0791

Sampled: 02/11/10

Received: 02/11/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0791 <Page 6 of 6>

Approved 2/16/10

PTB0791

37580-100211

Test America Phoenix
 4545 E. Cotton Center Blvd
 Phoenix, AZ 85040
 602-437-3340

Honeywell Chain Of Custody / Analysis Request

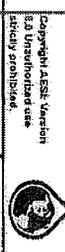
Lab Proj # (SDG):
 Lab ID: TAMM
 COD#: 37580
 AESI Ref: 40211, 15067

Sampling Co.: CH2M HILL
 Client Contact: (name, co., address)
 CH2M HILL
 2825 South Plaza Drive, Suite 300
 Tempe, AZ 85282
 Preliminary Data To: Tussdal Powers, Crittgen, Melanie West, Crittgen
 Sample Receipt: Tussdal Powers, Crittgen, Melanie West, Crittgen
 Acknowledgement To: Tussdal Powers and Melanie West, Crittgen
 Hard Copy To: Honeywell/Copy Barney Kidd
 Invoice To: Honeywell/Copy Barney Kidd

Privileged & Confidential
 EDD To: Tussdal Powers, Crittgen, Melanie West, Crittgen
 Samples: *Leery Petersen*
 PO #: 2959460
 Analysis Turnaround Time (TAT): 7
 Consultant:
 Full Report TAT: 7
 Site Name: Sky Harbor AZ
 Location of Site: Phoenix, AZ
 Phase: Sampling Program
 BSVL Air Permit
 Site ID: SKYHARBOR
 Lab Job #: Honeywell
 Authorized User: Honeywell
 Text & Excel File Drive: Excel & Text File Order

Location ID	Sample Identification		Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	Units
	Start Depth (ft)	End Depth (ft)										
1	52.0	70.0	SV-33N-1001	2/11/10	0934	SV	AIR	REG	1	G	N	X
2	52.0	70.94	SV-33N-1001	2/11/10	0934	SV	AIR	REG	1	G	N	X
3	52.0	71.02	SV-33N-1001	2/11/10	1008	SV	AIR	REG	1	G	N	X
4	52.0	75.07	SV-33N-1001	2/11/10	1048	SV	AIR	REG	1	G	N	X
5	20.0	25.0	PHWT-1 (15)									
6												
7												
8												
9												
10												
11												
12												

Relinquished by: *Leery Petersen* Date/Time: 2/11/10 1640 Company: CH2M HILL
 Received by: *[Signature]* Date/Time: 2/11/10 1640 Company: CH2M HILL
 Condition: Cooler Temp. 20°C
 Custody Seals Intact
 Preservatives: (Other, Specify):
 0 (none); 1 (4 Deg C); 2 (10 Deg C); 3 (PH103 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH<12); 6 (NaOH, Zn Acetate); 7 (H2SO4 pH<2); 8 (4 Deg C); 9 (PH103 pH<2); 10 (HNO3 pH<2); 11 (4 Deg C); 12 (H2SO4 pH<2); 13 (Zn Acetate); 14 (Special instructions)



Approved 2/16/10

PTB0791

37580-100211

Test America Phoenix
 4545 E. Cotton Center Blvd
 Phoenix, AZ 85040
 602-437-3340

Honeywell Chain Of Custody / Analysis Request

Lab Proj # (SDG): 40211, 15067
 COD#: 37580

Sampling Co.: CH2M HILL
 Client Contact: (name, co., address)
 CH2M HILL
 2825 South Plaza Drive, Suite 300
 Tempe, AZ 85282
 Preliminary Data To: Tussdal Powers, Crittgen, Melanie West, Crittgen
 Sample Receipt: Tussdal Powers, Crittgen, Melanie West, Crittgen
 Acknowledgement To: Tussdal Powers and Melanie West, Crittgen
 Hard Copy To: Honeywell/Copy Barney Kidd
 Invoice To: Honeywell/Copy Barney Kidd

Privileged & Confidential
 EDD To: Tussdal Powers, Crittgen, Melanie West, Crittgen
 Samples: *Leery Peters*
 PO #: 2959460
 Analysis Turnaround Time (TAT): 7
 Consultant:
 Full Report TAT: 7
 Site Name: Sky Harbor AZ
 Location of Site: Phoenix, AZ
 Phase: Sampling Program
 BSVL Air Permit
 Lab ID: SKYHARBOR
 Lab Job #: Honeywell
 Authorized User: Honeywell
 Text & Excel File Drive: Excel & Text File Order

Location ID	Sample Identification		Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	Units	Sampling Method (code)	Canister Serial No.
	Start Depth (ft)	End Depth (ft)												
1	52.0	70.0	BY-33N-1001	2/11/10	0934	SV	AIR	REG	1	G	N	X		
2	52.0	70.94	BY-33N-1001	2/11/10	0934	SV	AIR	REG	1	G	N	X		
3	52.0	71.02	BY-33N-1001	2/11/10	1008	SV	AIR	REG	1	G	N	X		
4	BY-33N	48.5	BY-33N-1001	2/11/10	1048	SV	AIR	REG	1	G	N	X		
5	20.0	25.0	PHWT-1 (15)											
6														
7														
8														
9														
10														
11														
12														

Relinquished by: *Leery Peters* Date/Time: 2/11/10 1640 Company: CH2M HILL
 Received by: *[Signature]* Date/Time: 2/11/10 1640 Company: CH2M HILL
 Condition: Cooler Temp. 20°C
 Custody Seals Intact
 0 (metal), 1 (4 Deg C), 2 (100 pH<2), 3 (PH103 pH<2), 4 (H2SO4 pH<2), 5 (NaOH pH<12), 6 (NaOH, Zn Acetate), 7 (H2SO4 pH<2), 8 (Deg C), 9 (PH14 pH<2), 10 (HNO3 pH<2), 11 (Deg C), 12 (H2SO4 pH<2) & Ascorbic Acid), 13 (Zn Acetate), sp (Special instructions)



Test America Phoenix

4645 E. Cotton Center Blvd
Phoenix, AZ 85040
602 437-3340

Honeywell

Chain Of Custody / Analysis Request

AESI Ref: 40211.75067
COC#: 37380

Sampling Co.: CH2MHILL

Privileged & Confidential
EDD To: Tuesdal Powers, Critigen
Melanie West, Critigen

Site Name: Sky Harbor AZ
Location of Site: Phoenix, AZ

Phase: Sampling Program
BSVE AIR Permit

Lab Proj # (SDG): TAMM
Lab ID SKYHARBOR

Client Contact: (name, co., address)
CH2M HILL
2825 South Plaza Drive, Suite 300
Tempe, AZ 85282

Sampler: Lars Petersen
PO #: 2959460
Analysis Turnaround Time (TAT): Consultant

Preservative: 0

Site ID SKYHARBOR

Lab Job #
Authorized User: Honeywell

Preliminary Data To Tuesdal Powers, Critigen, Melanie West, Critigen
Tempe, AZ 85282

Sample Receipt Tuesdal Powers, Critigen, Melanie West, Critigen
Acknowledgement To Tuesdal Powers and Melanie West, Critigen

Field Filtered Sample ? SW8015M (TPH -GRO - C6-C10)

Authorized User: Honeywell

Text & Excel File Drive Excel & Text File Order

Hard Copy To Tuesdal Powers and Melanie West, Critigen

Full Report TAT: 7

Composite/Grab

Sampling Method (code) -01

Canister Serial No.

Invoice To: Honeywell/Copy Berny Kidd

Sample Identification

Field Filtered Sample ? SW8015M (TPH -GRO - C6-C10)

Sampling Method (code) -02

Canister Serial No.

Location ID

Sample Date

Sample Time

Sample Type

Sample Matrix

Start Depth (ft)

End Depth (ft)

Field Sample ID

Sample Purpose

of Cont.

1 BV-31N 50.0 70.68 BV-31N-10Q1 2/11/10 0839 SV AIR REG 1 G N X

2 BV-30N 50.0 70.94 BV-30N-10Q1 2/11/10 0934 SV AIR REG 1 G N X

3 BV-33N 50.0 71.02 BV-33N-10Q1 2/11/10 1008 SV AIR REG 1 G N X

4 BV-32N 48.5 78.07 BV-32N-10Q1 2/11/10 1048 SV AIR REG 1 G N X

5 ~~Paper-14~~ 20.0 25.0 ~~Paper-14~~ (15)

6

7

8

9

10

11

12

Units

Condition

Custody Seals Intact

Relinquished by Lars Petersen

Company CH2M HILL

Received by

Company CH2M HILL

Condition

Relinquished by

Company

Received by

Company

Condition

Preservatives: (Other, Specify):

Date/Time 2/11/10 1640

Date/Time 2/11/10 1440

Condition

Custody Seals Intact

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

PTB 0791

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: Sky Harbor AZ

Sampled: 02/12/10
Received: 02/13/10
Issued: 02/22/10 13:41

NELAP #01109CA Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID	CLIENT ID	MATRIX
PTB0886-01	BV-23N-10Q1	Air
PTB0886-02	BV-24N-10Q1	Air
PTB0886-03	BV-25N-10Q1	Air
PTB0886-04	ASE-41A-10Q1	Air
PTB0886-05	BV-18N-10Q1	Air
PTB0886-06	BV-22N-10Q1	Air
PTB0886-07	PL-101A-10Q1	Air
PTB0886-08	ASE-39A-10Q1	Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0886

Sampled: 02/12/10
Received: 02/13/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB0886-01 (BV-23N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0538	49	900	1	2/13/2010	2/13/2010	
Sample ID: PTB0886-02 (BV-24N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0538	49	480	1	2/13/2010	2/13/2010	
Sample ID: PTB0886-03 (BV-25N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0538	49	850	1	2/13/2010	2/13/2010	
Sample ID: PTB0886-04 (ASE-41A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0538	49	200	1	2/13/2010	2/13/2010	
Sample ID: PTB0886-05 (BV-18N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0538	98	620	2	2/13/2010	2/13/2010	
Sample ID: PTB0886-06 (BV-22N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0538	49	510	1	2/13/2010	2/13/2010	
Sample ID: PTB0886-07 (PL-101A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0538	49	52	1	2/13/2010	2/13/2010	
Sample ID: PTB0886-08 (ASE-39A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0546	98	1600	2	2/15/2010	2/15/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0886 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0886

Sampled: 02/12/10

Received: 02/13/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: BV-23N-10Q1 (PTB0886-01) - Air EPA 8015D MOD.	3	02/12/2010 09:09	02/13/2010 08:50	02/13/2010 12:15	02/13/2010 12:36
Sample ID: BV-24N-10Q1 (PTB0886-02) - Air EPA 8015D MOD.	3	02/12/2010 09:57	02/13/2010 08:50	02/13/2010 12:15	02/13/2010 13:00
Sample ID: BV-25N-10Q1 (PTB0886-03) - Air EPA 8015D MOD.	3	02/12/2010 10:35	02/13/2010 08:50	02/13/2010 12:15	02/13/2010 13:23
Sample ID: ASE-41A-10Q1 (PTB0886-04) - Air EPA 8015D MOD.	3	02/12/2010 10:59	02/13/2010 08:50	02/13/2010 12:15	02/13/2010 13:58
Sample ID: BV-18N-10Q1 (PTB0886-05) - Air EPA 8015D MOD.	3	02/12/2010 11:24	02/13/2010 08:50	02/13/2010 15:55	02/13/2010 18:39
Sample ID: BV-22N-10Q1 (PTB0886-06) - Air EPA 8015D MOD.	3	02/12/2010 11:50	02/13/2010 08:50	02/13/2010 15:45	02/13/2010 15:55
Sample ID: PL-101A-10Q1 (PTB0886-07) - Air EPA 8015D MOD.	3	02/12/2010 14:30	02/13/2010 08:50	02/13/2010 15:30	02/13/2010 16:19
Sample ID: ASE-39A-10Q1 (PTB0886-08) - Air EPA 8015D MOD.	3	02/12/2010 15:05	02/13/2010 08:50	02/15/2010 11:20	02/15/2010 12:00

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0886 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ
Report Number: PTB0886

Sampled: 02/12/10
Received: 02/13/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0538 Extracted: 02/13/10										
Blank Analyzed: 02/13/2010 (10B0538-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/13/2010 (10B0538-BS2)										
Volatile Fuel Hydrocarbons	119	49	ppmv	122		98	80-115			T3
LCS Dup Analyzed: 02/13/2010 (10B0538-BSD2)										
Volatile Fuel Hydrocarbons	118	49	ppmv	122		96	80-115	2	20	T3
Duplicate Analyzed: 02/13/2010 (10B0538-DUP1)										
Volatile Fuel Hydrocarbons	367	49	ppmv		Source: PTB0886-02 477			26	20	R9, T3
Batch: 10B0546 Extracted: 02/15/10										
Blank Analyzed: 02/15/2010 (10B0546-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/15/2010 (10B0546-BS2)										
Volatile Fuel Hydrocarbons	117	49	ppmv	122		96	80-115			T3
LCS Dup Analyzed: 02/15/2010 (10B0546-BSD2)										
Volatile Fuel Hydrocarbons	116	49	ppmv	122		95	80-115	0.8	20	T3
Duplicate Analyzed: 02/15/2010 (10B0546-DUP1)										
Volatile Fuel Hydrocarbons	1450	98	ppmv		Source: PTB0886-08 1620			11	20	T3

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0886

Sampled: 02/12/10

Received: 02/13/10

DATA QUALIFIERS AND DEFINITIONS

- R9** Sample RPD exceeded the laboratory acceptance limit
- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0886 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0886

Sampled: 02/12/10

Received: 02/13/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

Test America Phoenix
 4645 E. Cotton Center Blvd
 Phoenix, AZ 85040
 602 437-3340

Honeywell

Chain Of Custody / Analysis Request

Privileged & Confidential

EDD To: Tuesdal Powers, Critigen
 Melanie West, Critigen

Sampler: *Traci Catmans Leppe*

PO #: 2999460

Analysis Turnaround Time (TAT): Consultant

Full Report TAT: 7

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

Sample Receipt
 Acknowledgement To: Tuesdal Powers, Critigen, Melanie West, Critigen
 Hard Copy To: Tuesdal Powers and Melanie West, Critigen
 Invoice To: Honeywell/Copy Berney Kid

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	Units
1	SS	105	BV-23N-10Q1	02/12/08	09:09	SV	AIR	DEG	1	G	N	X
2	SS	105	BV-24N-10Q1	02/12/08	09:57	SV	AIR	DEG	1	G	N	X
3	SS	105	BV-25N-10Q1	02/12/08	10:35	SV	AIR	DEG	1	G	N	X
4	SS	90	ASF-41A-10Q1	02/12/08	10:58	SV	AIR	DEG	1	G	N	X
5	SS	105	BV-18N-10Q1	02/12/08	11:24	SV	AIR	DEG	1	G	N	X
6	SS	105	BV-22N-10Q1	02/12/08	11:50	SV	AIR	DEG	1	G	N	X
7	SS	75	PL-101A-10Q1	02/12/08	14:30	SV	AIR	DEG	1	G	N	X
8	SS	105	ASF-31A-10Q1	02/12/08	15:05	SV	AIR	DEG	1	G	N	X
9												
10												
11												
12												

Relinquished by: *[Signature]* **Company:** CH2M HILL **Received by:** *[Signature]* **Company:** CH2M HILL

Date/Time: 02-13-2010 **Company:** BSO **Date/Time:** 2/13/10 **Company:** BSO

Relinquished by: *[Signature]* **Date/Time:** **Company:** **Received by:** *[Signature]* **Date/Time:** **Company:**

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

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Text & Excel File Drive
 Order

Authorized User: Honeywell

Lab ID: SKYHARBOR

Lab ID: TAMIP

Lab Proj # (SDG): 40211.75067

COC#: 37380

PTB0886

200c/Ans

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: Sky Harbor AZ

Sampled: 02/15/10
Received: 02/15/10
Issued: 02/22/10 13:36

NELAP #01109CA Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID

PTB0910-01
PTB0910-02
PTB0910-03
PTB0910-04
PTB0910-05

CLIENT ID

ASE-53A-10Q1
BV-16N-10Q1
BV-7N-10Q1
BV-6N-10Q1
BV-4N-10Q1

MATRIX

Air
Air
Air
Air
Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0910

Sampled: 02/15/10

Received: 02/15/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB0910-01 (ASE-53A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0604	240	3100	5	2/16/2010	2/16/2010	
Sample ID: PTB0910-02 (BV-16N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0604	49	830	1	2/16/2010	2/16/2010	
Sample ID: PTB0910-03 (BV-7N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0604	240	2400	5	2/16/2010	2/16/2010	
Sample ID: PTB0910-04 (BV-6N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0604	240	1400	5	2/16/2010	2/16/2010	
Sample ID: PTB0910-05 (BV-4N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0604	98	1000	2	2/16/2010	2/16/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PTB0910 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0910

Sampled: 02/15/10

Received: 02/15/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: ASE-53A-10Q1 (PTB0910-01) - Air EPA 8015D MOD.	3	02/15/2010 08:01	02/15/2010 12:35	02/16/2010 17:10	02/16/2010 20:24
Sample ID: BV-16N-10Q1 (PTB0910-02) - Air EPA 8015D MOD.	3	02/15/2010 09:26	02/15/2010 12:35	02/16/2010 12:15	02/16/2010 12:49
Sample ID: BV-7N-10Q1 (PTB0910-03) - Air EPA 8015D MOD.	3	02/15/2010 10:00	02/15/2010 12:35	02/16/2010 14:30	02/16/2010 15:19
Sample ID: BV-6N-10Q1 (PTB0910-04) - Air EPA 8015D MOD.	3	02/15/2010 10:23	02/15/2010 12:35	02/16/2010 17:10	02/16/2010 20:48
Sample ID: BV-4N-10Q1 (PTB0910-05) - Air EPA 8015D MOD.	3	02/15/2010 10:52	02/15/2010 12:35	02/16/2010 17:10	02/16/2010 21:57

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0910 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ
Report Number: PTB0910

Sampled: 02/15/10
Received: 02/15/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0604 Extracted: 02/16/10										
Blank Analyzed: 02/16/2010 (10B0604-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/16/2010 (10B0604-BS2)										
Volatile Fuel Hydrocarbons	117	49	ppmv	122		95	80-115			T3
LCS Dup Analyzed: 02/16/2010 (10B0604-BSD2)										
Volatile Fuel Hydrocarbons	115	49	ppmv	122		94	80-115	1	20	T3
Duplicate Analyzed: 02/16/2010 (10B0604-DUP1)										
Volatile Fuel Hydrocarbons	816	49	ppmv		Source: PTB0910-02	825		1	20	T3

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0910 <Page 4 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0910

Sampled: 02/15/10

Received: 02/15/10

DATA QUALIFIERS AND DEFINITIONS

- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0910 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0910

Sampled: 02/15/10

Received: 02/15/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PTB0910

Test America Phoenix

4645 E. Cotton Center Blvd
Phoenix, AZ 85040
602 437-3340

Honeywell

Chain Of Custody / Analysis Request

Privileged & Confidential

EDD To: Tuesday Powers, Critigen
Melanie West, Critigen

Site Name: Sky Harbor AZ
Location of Site: Phoenix, AZ

Phase: Sampling Program
BSVE AIR Permit

AEISI Ref: 40214.75067
COC#: 37380
Lab Proj # (SDG):
Lab ID: TAMP
Site ID: SKYHARBOR

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

Sampler: Frank Cochran's papers
PO #: 2959460
Analysis Turnaround Time (TAT): Consultant

Preservative: 0

Lab Job #: Honeywell
Authorized User: Honeywell

Preliminary Data To: Tuesday Powers, Critigen, Melanie West, Critigen

Sample Receipt Acknowledgement To: Tuesday Powers, Critigen, Melanie West, Critigen

Text & Excel File Drive: Excel & Text File Order

Hard Copy To: Tuesday Powers and Melanie West, Critigen
Invoice To: Honeywell/Copy Berny Kidd

Full Report TAT: 7

Composite/Grab: SW8015M (TPH - GRO - C6-C10)

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Order



Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Field Filtered Sample ?	Sampling Method (code)	Canister Serial No.
1 ASE-53A	53.8	78.8	ASE-53A-1001	021510	0801	SV	AIR	REF	1	G	N		
2 BU-16N	SS	105	BU-16N-1001	021510	0926	SV	A12	REF	1	G	N		
3 BU-7N	SE	105	BU-7N-1001	021510	1000	SV	A12	REF	1	G	N		
4 BU-6N	SE	105	BU-6N-1001	021510	1023	SV	A12	REF	1	G	N		
5 BU-4N	SE	105	BU-4N-1001	021510	1052	SV	A12	REF	1	G	N		
6													
7													
8													
9													
10													
11													
12													

Relinquished by: [Signature]
Date/Time: 02/15/10
Company: CH2M HILL

Received by: [Signature]
Date/Time: 02-15-10
Company: CH2M HILL

Condition: Cooler Temp.
Custody Seals Intact

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

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: Sky Harbor AZ

Sampled: 02/16/10
Received: 02/16/10
Issued: 02/22/10 14:14

NELAP #01109CA Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID

PTB0990-01

CLIENT ID

BV-20N-10Q1

MATRIX

Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0990

Sampled: 02/16/10

Received: 02/16/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB0990-01 (BV-20N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0604	49	730	1	2/16/2010	2/16/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PTB0990 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0990

Sampled: 02/16/10

Received: 02/16/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: BV-20N-10Q1 (PTB0990-01) - Air EPA 8015D MOD.	3	02/16/2010 13:17	02/16/2010 16:05	02/16/2010 17:30	02/16/2010 22:45

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0990 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ
Report Number: PTB0990

Sampled: 02/16/10
Received: 02/16/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0604 Extracted: 02/16/10										
Blank Analyzed: 02/16/2010 (10B0604-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/16/2010 (10B0604-BS2)										
Volatile Fuel Hydrocarbons	117	49	ppmv	122		95	80-115			T3
LCS Dup Analyzed: 02/16/2010 (10B0604-BSD2)										
Volatile Fuel Hydrocarbons	115	49	ppmv	122		94	80-115	1	20	T3
Duplicate Analyzed: 02/16/2010 (10B0604-DUP1)										
Volatile Fuel Hydrocarbons	816	49	ppmv		Source: PTB0910-02	825		1	20	T3

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PTB0990 <Page 4 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0990

Sampled: 02/16/10

Received: 02/16/10

DATA QUALIFIERS AND DEFINITIONS

- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

*The results pertain only to the samples tested in the laboratory. This report shall not be reproduced,
except in full, without written permission from TestAmerica.*

PTB0990 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0990

Sampled: 02/16/10

Received: 02/16/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PTB0990 <Page 6 of 6>

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: Sky Harbor AZ

Sampled: 02/16/10
Received: 02/16/10
Issued: 02/22/10 14:16

NELAP #01109CA Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID	CLIENT ID	MATRIX
PTB0991-01	BV-9N-10Q1	Air
PTB0991-02	BV-13N-10Q1	Air
PTB0991-03	BV-3N-10Q1	Air
PTB0991-04	BV-12N-10Q1	Air
PTB0991-05	BV-15N-10Q1	Air
PTB0991-06	BV-11N-10Q1	Air
PTB0991-07	BV-1N-10Q1	Air
PTB0991-08	BV-10N-10Q1	Air
PTB0991-09	BSVE-SVM-10Q1-012	Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0991

Sampled: 02/16/10

Received: 02/16/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB0991-01 (BV-9N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0660	49	430	1	2/17/2010	2/17/2010	
Sample ID: PTB0991-02 (BV-13N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0660	49	170	1	2/17/2010	2/17/2010	
Sample ID: PTB0991-03 (BV-3N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0660	49	130	1	2/17/2010	2/17/2010	
Sample ID: PTB0991-04 (BV-12N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0660	49	360	1	2/17/2010	2/17/2010	
Sample ID: PTB0991-05 (BV-15N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0660	49	50	1	2/17/2010	2/17/2010	
Sample ID: PTB0991-06 (BV-11N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0660	49	ND	1	2/17/2010	2/17/2010	
Sample ID: PTB0991-07 (BV-1N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0660	49	110	1	2/17/2010	2/17/2010	
Sample ID: PTB0991-08 (BV-10N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0660	49	770	1	2/17/2010	2/17/2010	
Sample ID: PTB0991-09 (BSVE-SVM-10Q1-012 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0660	49	100	1	2/17/2010	2/17/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0991 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0991

Sampled: 02/16/10

Received: 02/16/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: BV-9N-10Q1 (PTB0991-01) - Air EPA 8015D MOD.	3	02/16/2010 08:21	02/16/2010 16:05	02/17/2010 12:20	02/17/2010 12:53
Sample ID: BV-13N-10Q1 (PTB0991-02) - Air EPA 8015D MOD.	3	02/16/2010 09:10	02/16/2010 16:05	02/17/2010 12:20	02/17/2010 13:16
Sample ID: BV-3N-10Q1 (PTB0991-03) - Air EPA 8015D MOD.	3	02/16/2010 09:53	02/16/2010 16:05	02/17/2010 12:20	02/17/2010 13:40
Sample ID: BV-12N-10Q1 (PTB0991-04) - Air EPA 8015D MOD.	3	02/16/2010 10:37	02/16/2010 16:05	02/17/2010 14:15	02/17/2010 14:56
Sample ID: BV-15N-10Q1 (PTB0991-05) - Air EPA 8015D MOD.	3	02/16/2010 11:13	02/16/2010 16:05	02/17/2010 14:15	02/17/2010 15:19
Sample ID: BV-11N-10Q1 (PTB0991-06) - Air EPA 8015D MOD.	3	02/16/2010 11:46	02/16/2010 16:05	02/17/2010 17:20	02/17/2010 17:29
Sample ID: BV-1N-10Q1 (PTB0991-07) - Air EPA 8015D MOD.	3	02/16/2010 13:15	02/16/2010 16:05	02/17/2010 17:20	02/17/2010 17:52
Sample ID: BV-10N-10Q1 (PTB0991-08) - Air EPA 8015D MOD.	3	02/16/2010 13:58	02/16/2010 16:05	02/17/2010 17:20	02/17/2010 18:16
Sample ID: BSVE-SVM-10Q1-012 (PTB0991-09) - Air EPA 8015D MOD.	3	02/16/2010 08:00	02/16/2010 16:05	02/17/2010 17:20	02/17/2010 19:05

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Project Manager

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PTB0991 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ
Report Number: PTB0991

Sampled: 02/16/10
Received: 02/16/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0660 Extracted: 02/17/10										
Blank Analyzed: 02/17/2010 (10B0660-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/17/2010 (10B0660-BS2)										
Volatile Fuel Hydrocarbons	120	49	ppmv	122		99	80-115			T3
LCS Dup Analyzed: 02/17/2010 (10B0660-BSD2)										
Volatile Fuel Hydrocarbons	112	49	ppmv	122		91	80-115	7	20	T3
Duplicate Analyzed: 02/17/2010 (10B0660-DUP1)										
Volatile Fuel Hydrocarbons	2430	240	ppmv		Source: PTB0923-03					T3
					2220			9	20	
Duplicate Analyzed: 02/17/2010 (10B0660-DUP2)										
Volatile Fuel Hydrocarbons	5960	980	ppmv		Source: PTB0923-04					T3
					3950			40	20	R9

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Project Manager

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PTB0991 <Page 4 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0991

Sampled: 02/16/10

Received: 02/16/10

DATA QUALIFIERS AND DEFINITIONS

- R9** Sample RPD exceeded the laboratory acceptance limit
- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0991 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB0991

Sampled: 02/16/10

Received: 02/16/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB0991 <Page 6 of 6>

Test America Phoenix
 4645 E. Cotton Center Blvd
 Phoenix, AZ 85040
 602 437-3340

Honeywell Chain Of Custody / Analysis Request

PTB0991

AEISI Ref: 40211-75067
 COC#: 37380

Privileged & Confidential
 EDD To: Tuesdal Powers, Critigen
 Maelanie West, Critigen
 Site Name: Sky Harbor AZ
 Location of Site: Phoenix, AZ
 Phase: Sampling Program
 BSVL AIR Permit

Client Contact: (name, co., address)
 CH2MHILL
 2625 South Plaza Drive, Suite 300
 Tempe, AZ 85282
 Preliminary Data To: Tuesdal Powers, Critigen, Maelanie West, Critigen
 Sample Receipt: Tuesdal Powers, Critigen, Maelanie West, Critigen
 Acknowledgement To: Tuesdal Powers, Critigen, Maelanie West, Critigen

Hard Copy To: Tuesdal Powers and Maelanie West, Critigen
 Invoice To: Honeywell/Copy Berny Kidd
 Full Report TAT: 7

Sampler: TAMI COX
 PO #: 2959460
 Analysis Turnaround Time (TAT): Consultant

SW8015M (TPH - GRO - C6-C10)
 Composite/Grab
 Field Filtered Sample ?
 Units

Copyright AESIS, Version 6.0. Unauthorized use strictly prohibited.
 Sampling Method (code)
 Canister Serial No.

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Field Filtered Sample ?	Units
1 BV-9N	55	105	BV-9N-10Q1	021610	0821	SV	AIR	REG	1	X	N
2 BV-13N	55	95	BV-13N-10Q1	021610	0910	SV	AIR	REG	1	X	N
3 BV-3N	55	105	BV-3N-10Q1	021610	0953	SV	AIR	REG	1	X	N
4 BV-12N	55	105	BV-12N-10Q1	021610	1037	SV	AIR	REG	1	X	N
5 BV-15N	55	85	BV-15N-10Q1	021610	1113	SV	AIR	REG	1	X	N
6 BV-11N	55	95	BV-11N-10Q1	021610	1146	SV	AIR	REG	1	X	N
7 BV-1N	55	105	BV-1N-10Q1	021610	1315	SV	AIR	REG	1	X	N
8 BV-10N	55	95	BV-10N-10Q1	021610	1358	SV	AIR	REG	1	X	N
9	-	-	BSUE-SUM-10Q1-012	021610	-	SV	AIR	REG	1	X	N
10											
11											
12											

Relinquished by: [Signature]
 Date/Time: 02/16/2010 15:50
 Company: CH2M HILL
 Received by: [Signature]
 Date/Time: 2/16/10 15:50
 Company: CH2M HILL
 Condition: N/A
 Custody Seals Intact: N/A

Relinquished by: [Signature]
 Date/Time: 2/16/10 16:05
 Company: CH2M HILL
 Received by: [Signature]
 Date/Time: 2/16/10 16:05
 Company: CH2M HILL
 Condition: N/A
 Custody Seals Intact: N/A

Preservatives: (Other, Specify):
 0 (none); 1 (4 Deg C); 2 (40C pH<2); 3 (HNO3 pH<2); 4 (H2SO4 pH<2); 5 (NaOH pH<12); 6 (NaOH, Zn Acetate); 7 (H2SO4 pH<2); 4 Deg C); 8 (HCl pH<2); 9 (HCl 4 Deg C); 10 (HNO3 pH<2); 4Deg C); 11 (4C NaOH pH<12 & Ascorbic Acid); 12 (4C H2SO4 pH<2 & Na2S2O3); 13 (Zn Acetate); sp (Special Instructions)

20.0 °C / Amt

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: Sky Harbor AZ

Sampled: 02/18/10
Received: 02/18/10
Issued: 02/25/10 06:23

NELAP #01109CA Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID	CLIENT ID	MATRIX
PTB1154-01	ASE-51A-10Q1	Air
PTB1154-02	BV-14N-10Q1	Air
PTB1154-03	ASE-66A-10Q1	Air
PTB1154-04	ASE-20A-10Q1	Air
PTB1154-05	BV-17N-10Q1	Air
PTB1154-06	ASE-57A-10Q1	Air
PTB1154-07	BV-5-10Q1	Air
PTB1154-08	BSVE-SVM-10Q1-013	Air
PTB1154-09	BSVE-SVM-10Q1-015	Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1154

Sampled: 02/18/10

Received: 02/18/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB1154-01 (ASE-51A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0765	240	1100	5	2/19/2010	2/19/2010	
Sample ID: PTB1154-02 (BV-14N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0765	98	720	2	2/19/2010	2/19/2010	
Sample ID: PTB1154-03 (ASE-66A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0765	49	530	1	2/19/2010	2/19/2010	
Sample ID: PTB1154-04 (ASE-20A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0765	240	2700	5	2/19/2010	2/19/2010	
Sample ID: PTB1154-05 (BV-17N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0765	49	160	1	2/19/2010	2/19/2010	
Sample ID: PTB1154-06 (ASE-57A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0765	98	440	2	2/19/2010	2/19/2010	
Sample ID: PTB1154-07 (BV-5-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0765	49	490	1	2/19/2010	2/19/2010	
Sample ID: PTB1154-08 (BSVE-SVM-10Q1-013 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0804	240	1900	5	2/20/2010	2/20/2010	
Sample ID: PTB1154-09 (BSVE-SVM-10Q1-015 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0765	49	210	1	2/19/2010	2/19/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1154 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1154

Sampled: 02/18/10

Received: 02/18/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: ASE-51A-10Q1 (PTB1154-01) - Air EPA 8015D MOD.	3	02/18/2010 08:19	02/18/2010 17:23	02/19/2010 13:45	02/19/2010 13:58
Sample ID: BV-14N-10Q1 (PTB1154-02) - Air EPA 8015D MOD.	3	02/18/2010 08:52	02/18/2010 17:23	02/19/2010 13:45	02/19/2010 14:21
Sample ID: ASE-66A-10Q1 (PTB1154-03) - Air EPA 8015D MOD.	3	02/18/2010 09:34	02/18/2010 17:23	02/19/2010 11:40	02/19/2010 12:42
Sample ID: ASE-20A-10Q1 (PTB1154-04) - Air EPA 8015D MOD.	3	02/18/2010 10:05	02/18/2010 17:23	02/19/2010 17:20	02/19/2010 18:17
Sample ID: BV-17N-10Q1 (PTB1154-05) - Air EPA 8015D MOD.	3	02/18/2010 11:21	02/18/2010 17:23	02/19/2010 11:50	02/19/2010 13:29
Sample ID: ASE-57A-10Q1 (PTB1154-06) - Air EPA 8015D MOD.	3	02/18/2010 12:01	02/18/2010 17:23	02/19/2010 15:30	02/19/2010 16:42
Sample ID: BV-5-10Q1 (PTB1154-07) - Air EPA 8015D MOD.	3	02/18/2010 13:52	02/18/2010 17:23	02/19/2010 15:40	02/19/2010 17:06
Sample ID: BSVE-SVM-10Q1-013 (PTB1154-08) - Air EPA 8015D MOD.	3	02/18/2010 08:00	02/18/2010 17:23	02/20/2010 11:30	02/20/2010 12:27
Sample ID: BSVE-SVM-10Q1-015 (PTB1154-09) - Air EPA 8015D MOD.	3	02/18/2010 08:00	02/18/2010 17:23	02/19/2010 17:20	02/19/2010 17:53

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Project Manager

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PTB1154 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ
Report Number: PTB1154

Sampled: 02/18/10
Received: 02/18/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0765 Extracted: 02/19/10										
Blank Analyzed: 02/19/2010 (10B0765-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/19/2010 (10B0765-BS2)										
Volatile Fuel Hydrocarbons	114	49	ppmv	122		93	80-115			T3
LCS Dup Analyzed: 02/19/2010 (10B0765-BSD2)										
Volatile Fuel Hydrocarbons	118	49	ppmv	122		96	80-115	3	20	T3
Duplicate Analyzed: 02/19/2010 (10B0765-DUP1)										
Volatile Fuel Hydrocarbons	649	49	ppmv		529			20	20	T3
					Source: PTB1154-03					
Batch: 10B0804 Extracted: 02/20/10										
Blank Analyzed: 02/20/2010 (10B0804-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/20/2010 (10B0804-BS2)										
Volatile Fuel Hydrocarbons	115	49	ppmv	122		94	80-115			T3
LCS Dup Analyzed: 02/20/2010 (10B0804-BSD2)										
Volatile Fuel Hydrocarbons	113	49	ppmv	122		92	80-115	2	20	T3
Duplicate Analyzed: 02/20/2010 (10B0804-DUP1)										
Volatile Fuel Hydrocarbons	645	49	ppmv		699			8	20	T3
					Source: PTB1209-02					

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1154 <Page 4 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1154

Sampled: 02/18/10

Received: 02/18/10

DATA QUALIFIERS AND DEFINITIONS

- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1154 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1154

Sampled: 02/18/10

Received: 02/18/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1154 <Page 6 of 6>

Test America Phoenix
 4645 E. Cotton Center Blvd
 Phoenix, AZ 85040
 602 437-3340

Honeywell

Chain Of Custody / Analysis Request

ASI Ref: 40211.75067
 COC#: 37380

PTB 1574

Privileged & Confidential

Site Name: Sky Harbor AZ

Location of Site: Phoenix, AZ

Phase: Sampling Program

Lab ID: TAMP

Lab Proj # (SDG):

Lab Job #: SKYHARBOR

Authorized User: Honeywell

Text & Excel File Drive: Excel & Text File Order

Sample Receipt: Tuesday Powers, Critigen, Melanie West, Critigen

Acknowledgement To: Tuesday Powers, Critigen, Melanie West, Critigen

Hard Copy To: Tuesday Powers and Melanie West, Critigen

Invoice To: Honeywell/Copy Berney Kidd

Full Report TAT: 7

Location ID	Sample Identification		Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab		Units
	Start Depth (ft)	End Depth (ft)							Field Sample ID	Field Filtered Sample ?	
1 ASE-S1A	SS.6	BS.6 ASE-S1A-1001 ¹²	02.18.10	0819	SV	AIR	DEG	1	G	N	X
2 BV-14N	SS	BV-14N-1001	0.18.10	0852	SV	AIR	DEG	1	G	N	X
3 ASE-66A	60.5	ASE-66A-1001	0.18.10	0934	SV	AIR	DEG	1	G	N	X
4 ASE-20A	61	ASE-20A-1001	0.18.10	1005	SV	AIR	DEG	1	G	N	X
5 AV-17N	SS	BV-17N-1001	0.18.10	1121	SV	AIR	DEG	1	G	N	X
6 ASE-S7A	SS.1	ASE-S7A-1001	0.18.10	1201	SV	AIR	DEG	1	G	N	X
7 BV-S	46	BV-S-1001	0.18.10	1352	SV	AIR	DEG	1	G	N	X
8	-	BSVE-SVM-1001-03	0.18.10	-	SV	AIR	DEG	1	G	N	X
9	-	BSVE-SM-1001-015	0.18.10	-	SV	AIR	DEG	1	G	N	X
10											
11											
12											

Relinquished by: [Signature]

Company: CH2M HILL

Date/Time: 01-18-10 1400

Received by: [Signature]

Company: CH2M HILL

Date/Time: 01-18-10 1723

Condition: Cooler Temp.

Custody Seals Intact

Relinquished by: [Signature]

Company: CH2M HILL

Date/Time: 01-18-10 1723

Received by: [Signature]

Company: CH2M HILL

Date/Time: 01-18-10 1723

Condition: Cooler Temp.

Custody Seals Intact

Preservatives: (Other: Specify):

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

20.0[±] / min

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: Sky Harbor AZ

Sampled: 02/19/10
Received: 02/19/10
Issued: 02/23/10 06:57

NELAP #01109CA Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID

PTB1209-01
PTB1209-02
PTB1209-03
PTB1209-04
PTB1209-05
PTB1209-06

CLIENT ID

BV-8N-10Q1
ASE-56A-10Q1
BSVE-SVM-10Q1-014
BV-21N-10Q1
BV-19N-10Q1
ASE-46A-10Q1

MATRIX

Air
Air
Air
Air
Air
Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1209

Sampled: 02/19/10

Received: 02/19/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB1209-01 (BV-8N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0804	240	510	5	2/20/2010	2/20/2010	
Sample ID: PTB1209-02 (ASE-56A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0804	49	700	1	2/20/2010	2/20/2010	
Sample ID: PTB1209-03 (BSVE-SVM-10Q1-014 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0804	49	720	1	2/20/2010	2/20/2010	
Sample ID: PTB1209-04 (BV-21N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0804	240	1500	5	2/20/2010	2/20/2010	
Sample ID: PTB1209-05 (BV-19N-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0804	49	870	1	2/20/2010	2/20/2010	
Sample ID: PTB1209-06 (ASE-46A-10Q1 - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0804	49	180	1	2/20/2010	2/20/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1209 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1209

Sampled: 02/19/10

Received: 02/19/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: BV-8N-10Q1 (PTB1209-01) - Air EPA 8015D MOD.	3	02/19/2010 11:17	02/19/2010 17:03	02/20/2010 13:40	02/20/2010 15:35
Sample ID: ASE-56A-10Q1 (PTB1209-02) - Air EPA 8015D MOD.	3	02/19/2010 11:59	02/19/2010 17:03	02/20/2010 11:55	02/20/2010 13:14
Sample ID: BSVE-SVM-10Q1-014 (PTB1209-03) - Air EPA 8015D MOD.	3	02/19/2010 12:01	02/19/2010 17:03	02/20/2010 11:55	02/20/2010 13:37
Sample ID: BV-21N-10Q1 (PTB1209-04) - Air EPA 8015D MOD.	3	02/19/2010 14:06	02/19/2010 17:03	02/20/2010 14:30	02/20/2010 15:59
Sample ID: BV-19N-10Q1 (PTB1209-05) - Air EPA 8015D MOD.	3	02/19/2010 14:56	02/19/2010 17:03	02/20/2010 13:10	02/20/2010 14:48
Sample ID: ASE-46A-10Q1 (PTB1209-06) - Air EPA 8015D MOD.	3	02/19/2010 15:24	02/19/2010 17:03	02/20/2010 13:10	02/20/2010 15:12

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Carlene McCutcheon
Project Manager

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PTB1209 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ
Report Number: PTB1209

Sampled: 02/19/10
Received: 02/19/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0804 Extracted: 02/20/10										
Blank Analyzed: 02/20/2010 (10B0804-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/20/2010 (10B0804-BS2)										
Volatile Fuel Hydrocarbons	115	49	ppmv	122		94	80-115			T3
LCS Dup Analyzed: 02/20/2010 (10B0804-BSD2)										
Volatile Fuel Hydrocarbons	113	49	ppmv	122		92	80-115	2	20	T3
Duplicate Analyzed: 02/20/2010 (10B0804-DUP1)										
Volatile Fuel Hydrocarbons	645	49	ppmv		699			8	20	T3

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1209 <Page 4 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1209

Sampled: 02/19/10

Received: 02/19/10

DATA QUALIFIERS AND DEFINITIONS

- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1209 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1209

Sampled: 02/19/10

Received: 02/19/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PTB 1209

Test America Phoenix

4645 E. Cotten Center Blvd
Phoenix, AZ 85040
602 437-3340

Honeywell

Chain Of Custody / Analysis Request

AEISI Ref: 40211.75067
COCH#: 37380

Privileged & Confidential

Site Name: Sky Harbor AZ

Location of Site: Phoenix, AZ

Phase: Sampling Program

Lab Proj # (SDG): TAMP

Lab ID: SKYHARBOR

Lab Job #: Honeywell

Authorized User: Honeywell

Client Contact (name, co., address): CH2M HILL

2625 South Plaza Drive, Suite 300
Tempe, AZ 85282

Sample Receipt Acknowledgement To: Tuesday Powers, Critigan, Melanie West, Critigan

Hard Copy To: Tuesday Powers and Melanie West, Critigan

Invoice To: Honeywell/Copy Barney Kidd

Sample Identification

Location ID: 1 BV-8N

Start Depth (ft): 55

End Depth (ft): 105

Field Sample ID: BV-8N-1001

Sample Date: 2-19-10

Sample Time: 11:17

Sample Type: SV

Sample Matrix: AIR

Sample Purpose: reg

of Cont: 1

Units: N

Sample Identification

Location ID: 2 ASE-5CA

Start Depth (ft): 55.4

End Depth (ft): 80.4

Field Sample ID: ASE-5CA-1001

Sample Date: 2-19-10

Sample Time: 11:59

Sample Type: SV

Sample Matrix: Air

Sample Purpose: reg

of Cont: 1

Units: N

Sample Identification

Location ID: 3 -

Start Depth (ft): -

End Depth (ft): -

Field Sample ID: BSV-SVM-1001-014

Sample Date: 2-19-10

Sample Time: 12:01

Sample Type: SV

Sample Matrix: Air

Sample Purpose: reg

of Cont: 1

Units: W

Sample Identification

Location ID: 4 BV-21N

Start Depth (ft): 55

End Depth (ft): 105

Field Sample ID: BV-21N-1001

Sample Date: 2-19-10

Sample Time: 14:06

Sample Type: SV

Sample Matrix: Air

Sample Purpose: reg

of Cont: 1

Units: W

Sample Identification

Location ID: 5 BV-19N

Start Depth (ft): 55

End Depth (ft): 105

Field Sample ID: BV-19N-1001

Sample Date: 2-19-10

Sample Time: 14:56

Sample Type: SV

Sample Matrix: Air

Sample Purpose: reg

of Cont: 1

Units: N

Sample Identification

Location ID: 6 ASE-46A

Start Depth (ft): 54.7

End Depth (ft): 79.7

Field Sample ID: ASE-46A-1001

Sample Date: 2-19-10

Sample Time: 15:24

Sample Type: SV

Sample Matrix: Air

Sample Purpose: reg

of Cont: 1

Units: N

Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units
1 BV-8N	55	105	BV-8N-1001	2-19-10	11:17	SV	AIR	reg	1	N
2 ASE-5CA	55.4	80.4	ASE-5CA-1001	2-19-10	11:59	SV	Air	reg	1	N
3 -	-	-	BSV-SVM-1001-014	2-19-10	12:01	SV	Air	reg	1	W
4 BV-21N	55	105	BV-21N-1001	2-19-10	14:06	SV	Air	reg	1	W
5 BV-19N	55	105	BV-19N-1001	2-19-10	14:56	SV	Air	reg	1	N
6 ASE-46A	54.7	79.7	ASE-46A-1001	2-19-10	15:24	SV	Air	reg	1	N
7										
8										
9										
10										
11										
12										

Relinquished by: [Signature]

Company: CH2M HILL

Date/Time: 2-19-10 17:03

Received by: [Signature]

Company: CH2M HILL

Date/Time: 2-19-10 17:03

Condition: Cooler Temp. 28.9 °C / 84 °F

Custody Seal: Intact

Relinquished by: [Signature]

Company: CH2M HILL

Date/Time: 2-19-10 17:03

Received by: [Signature]

Company: CH2M HILL

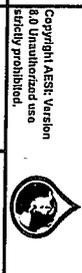
Date/Time: 2-19-10 17:03

Condition: Cooler Temp. 28.9 °C / 84 °F

Custody Seal: Intact

Preservatives: (Other: Specify):

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



Text & Excel File Drive
Excel & Text File Order

LABORATORY REPORT

Prepared For: CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project: Sky Harbor AZ

Sampled: 02/19/10
Received: 02/19/10
Issued: 02/25/10 06:33

NELAP #01109CA Arizona DHS#AZ0728

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID

PTB1210-01

CLIENT ID

BV-31N-10Q1B

MATRIX

Air

SAMPLE RECEIPT: Samples were received intact, at 20°C and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica Phoenix

Carlene McCutcheon
Project Manager

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1210

Sampled: 02/19/10

Received: 02/19/10

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PTB1210-01 (BV-31N-10Q1B - Air)								T3
Reporting Units: ppmv								
Volatile Fuel Hydrocarbons	EPA 8015D MOD.	10B0765	49	75	1	2/19/2010	2/19/2010	

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1210 <Page 2 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1210

Sampled: 02/19/10

Received: 02/19/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: BV-31N-10Q1B (PTB1210-01) - Air EPA 8015D MOD.	3	02/19/2010 09:02	02/19/2010 17:03	02/19/2010 17:30	02/19/2010 19:50

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1210 <Page 3 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ
Report Number: PTB1210

Sampled: 02/19/10
Received: 02/19/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (MOD. 8015D)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0765 Extracted: 02/19/10										
Blank Analyzed: 02/19/2010 (10B0765-BLK1)										
Volatile Fuel Hydrocarbons	ND	49	ppmv							T3
LCS Analyzed: 02/19/2010 (10B0765-BS2)										
Volatile Fuel Hydrocarbons	114	49	ppmv	122		93	80-115			T3
LCS Dup Analyzed: 02/19/2010 (10B0765-BSD2)										
Volatile Fuel Hydrocarbons	118	49	ppmv	122		96	80-115	3	20	T3
Duplicate Analyzed: 02/19/2010 (10B0765-DUP1)										
Volatile Fuel Hydrocarbons	649	49	ppmv		529			20	20	T3

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1210 <Page 4 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1210

Sampled: 02/19/10

Received: 02/19/10

DATA QUALIFIERS AND DEFINITIONS

- T3** Method not promulgated either by EPA or ADHS.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

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PTB1210 <Page 5 of 6>

CH2M Hill - Tempe
2625 S. Plaza Drive, Ste. 300
Tempe, AZ 85282
Attention: Tuesdai Powers

Project ID: Sky Harbor AZ

Report Number: PTB1210

Sampled: 02/19/10

Received: 02/19/10

Certification Summary

TestAmerica Phoenix

Method	Matrix	Nelac	Arizona
EPA 8015D MOD.	Air		X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica Phoenix

Carlene McCutcheon
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

Test America Phoenix
 4645 E. Cotton Center Blvd
 Phoenix, AZ 85040
 602.437.3340

Honeywell

Chain Of Custody / Analysis Request

PTB1215

Privileged & Confidential
 EDD To: Tuesday Powers, Critigen
 Melanie West, Critigen
 Sampler: **LAYS PETERSON**
 PO # 2969460
 Analysis Turnaround Time (TAT):
 Consultant

Site Name: Sky Harbor AZ
 Location of Site: Phoenix, AZ
 Phase: Sampling Program
 BSYE AIR Permit

Lab Proj # (SDG):
 Lab ID: TAMF
 Site ID: SKYHARBOR

Lab Job #:
 Authorized User: Honeywell

Text & Excel File Drive
 Excel & Text File Order

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Sample Receipt Acknowledgment To: Tuesday Powers, Critigen, Melanie West, Critigen
 Hard Copy To: Tuesday Powers and Melanie West, Critigen
 Invoice To: Honeywell/Copy Berny Kidd
 Full Report TAT: 7

Location ID	Sample Identification		Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Composite/Grab	Field Filtered Sample ?	SW8015M (TPH - GRO - C6-C10)	Units
	Start Depth (ft)	End Depth (ft)											
1	BV-31N	50.0	70.28	BV-31N-10691B	2/19/10	0902	SV	AIR	REG 1	GIN	X	-01	
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

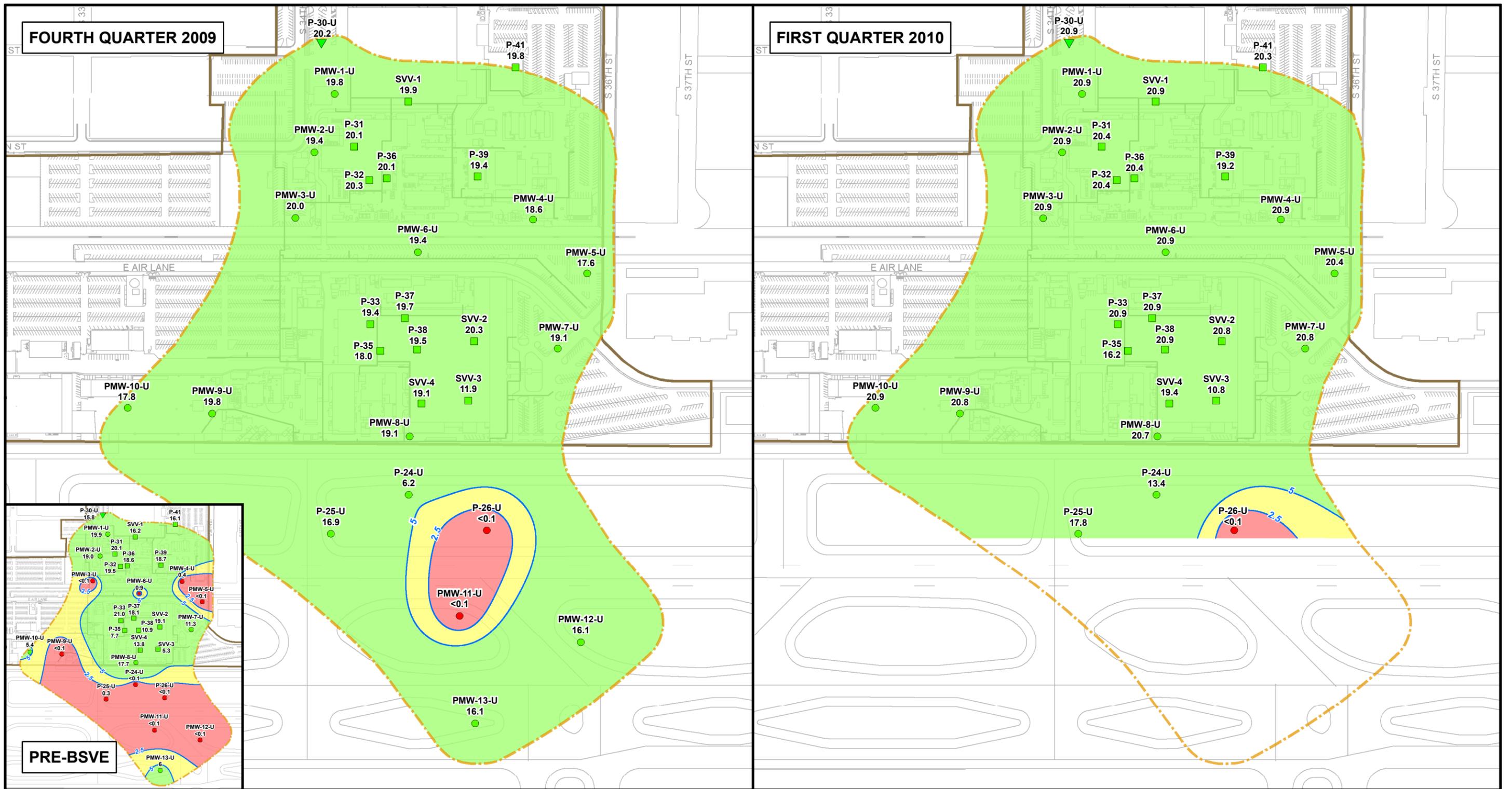
Relinquished by: **LAYS PETERSON**
 Date/Time: 2/19/10 1045
 Company: CH2MHILL

Received by: **[Signature]**
 Date/Time: 2/19/10 1303
 Company: CH2MHILL

Condition: Cooler Temp. 30.0
 Cooler Temp. 30.0
 Custody Seals Intact

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

Appendix E
Oxygen, Methane, and Total Petroleum
Hydrocarbons Distribution Figures,
Soil Vapor Field Parameters



FOURTH QUARTER 2009

FIRST QUARTER 2010

PRE-BSVE

Legend

- | | |
|-------------------------------------|---|
| Process Monitoring Well | Honeywell Monitoring Well |
| ● O ₂ ≥ 5% | ▼ O ₂ ≥ 5% |
| ● O ₂ < 5% and > 2.5% | ▼ O ₂ < 5% and > 2.5% |
| ● O ₂ ≤ 2.5% | ▼ O ₂ ≤ 2.5% |
| Sub-slab Monitoring Location | — Oxygen Isocontour (% O ₂) |
| ■ O ₂ ≥ 5% | — BSVE Pipeline System |
| ■ O ₂ < 5% and > 2.5% | Target Treatment Area |
| ■ O ₂ ≤ 2.5% | Honeywell Facility |

Notes:
 1. BSVE = Biologically-enhanced Soil-vapor Extraction
 2. First Quarter 2010 measurements were collected between February 5, 2010 and February 17, 2010.
 3. Fourth Quarter 2009 measurements were collected between November 6, 2009 and December 2, 2009.
 4. Pre-BSVE measurements were collected between September 20, 2006 and May 22, 2009.
 5. Contours were produced using computing software and the kriging gridding method.

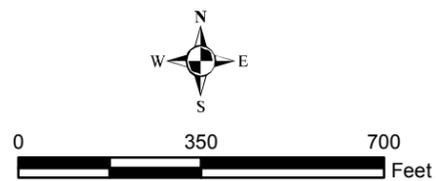
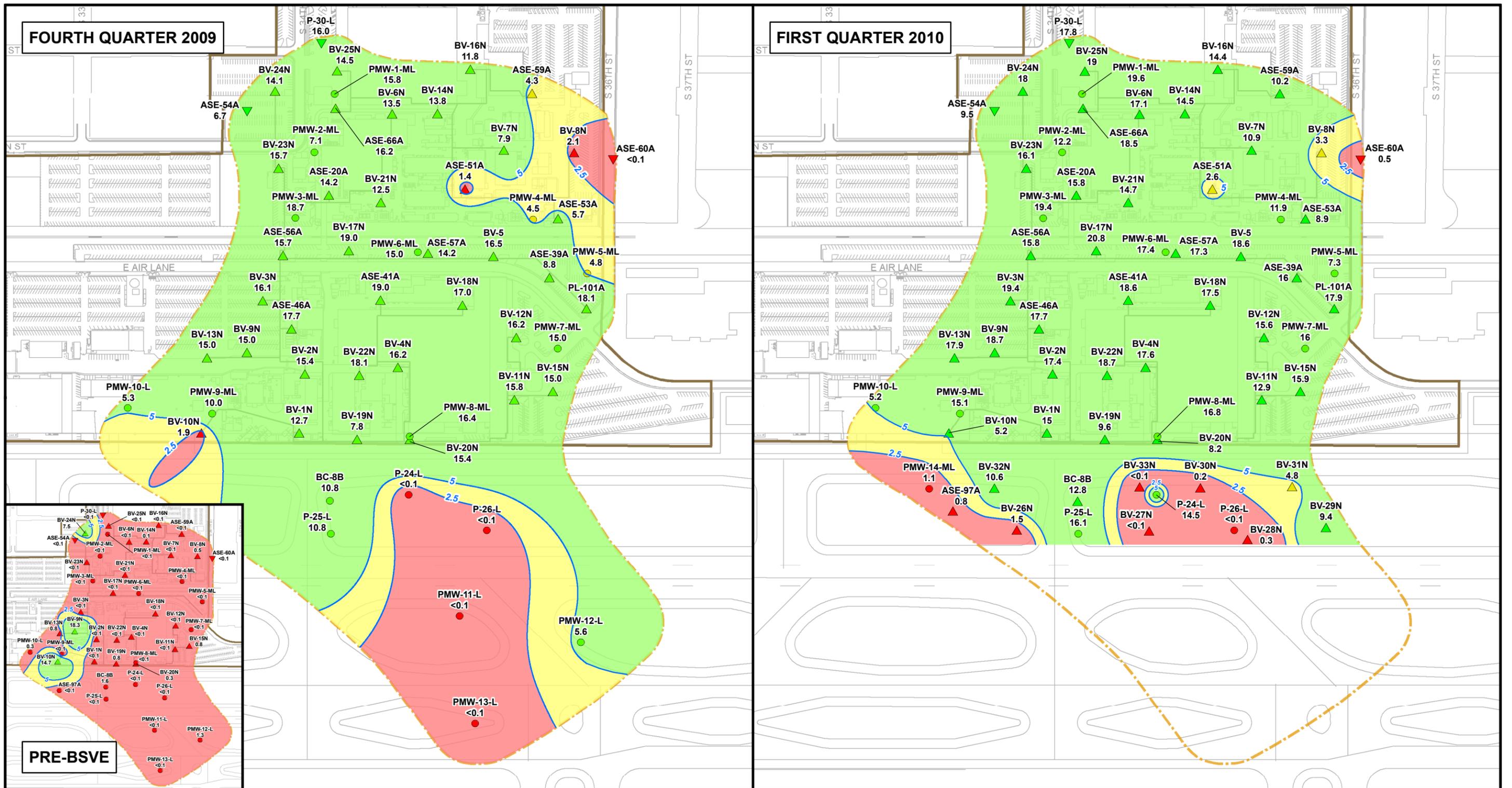


FIGURE E-1
SHALLOW SUBSURFACE
OXYGEN DISTRIBUTION
SOIL-VAPOR FIELD PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona



Legend

- | | |
|---------------------------------------|---|
| Process Monitoring Well | Honeywell Monitoring Well |
| ● O ₂ ≥ 5% | ▼ O ₂ ≥ 5% |
| ● O ₂ < 5% and > 2.5% | ▼ O ₂ < 5% and > 2.5% |
| ● O ₂ ≤ 2.5% | ▼ O ₂ ≤ 2.5% |
| BSVE Injection/Extraction Well | — Oxygen Isocontour (% O ₂) |
| ▲ O ₂ ≥ 5% | — BSVE Pipeline System |
| ▲ O ₂ < 5% and > 2.5% | Target Treatment Area |
| ▲ O ₂ ≤ 2.5% | Honeywell Facility |

- Notes:**
1. BSVE = Biologically-enhanced Soil-vapor Extraction
 2. First Quarter 2010 measurements were collected between February 8, 2010 and March 23, 2010.
 3. Fourth Quarter 2009 measurements were collected between November 5, 2009 and December 2, 2009.
 4. Pre-BSVE measurements were collected between May 2, 2006 and May 22, 2009.
 5. Phase C Injection/Extraction Wells not connected to the BSVE system during First Quarter 2010.
 6. Contours were produced using computing software and the kriging gridding method.

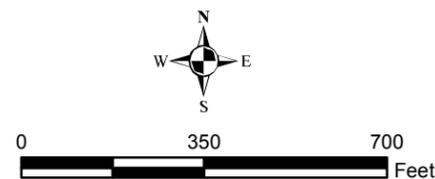
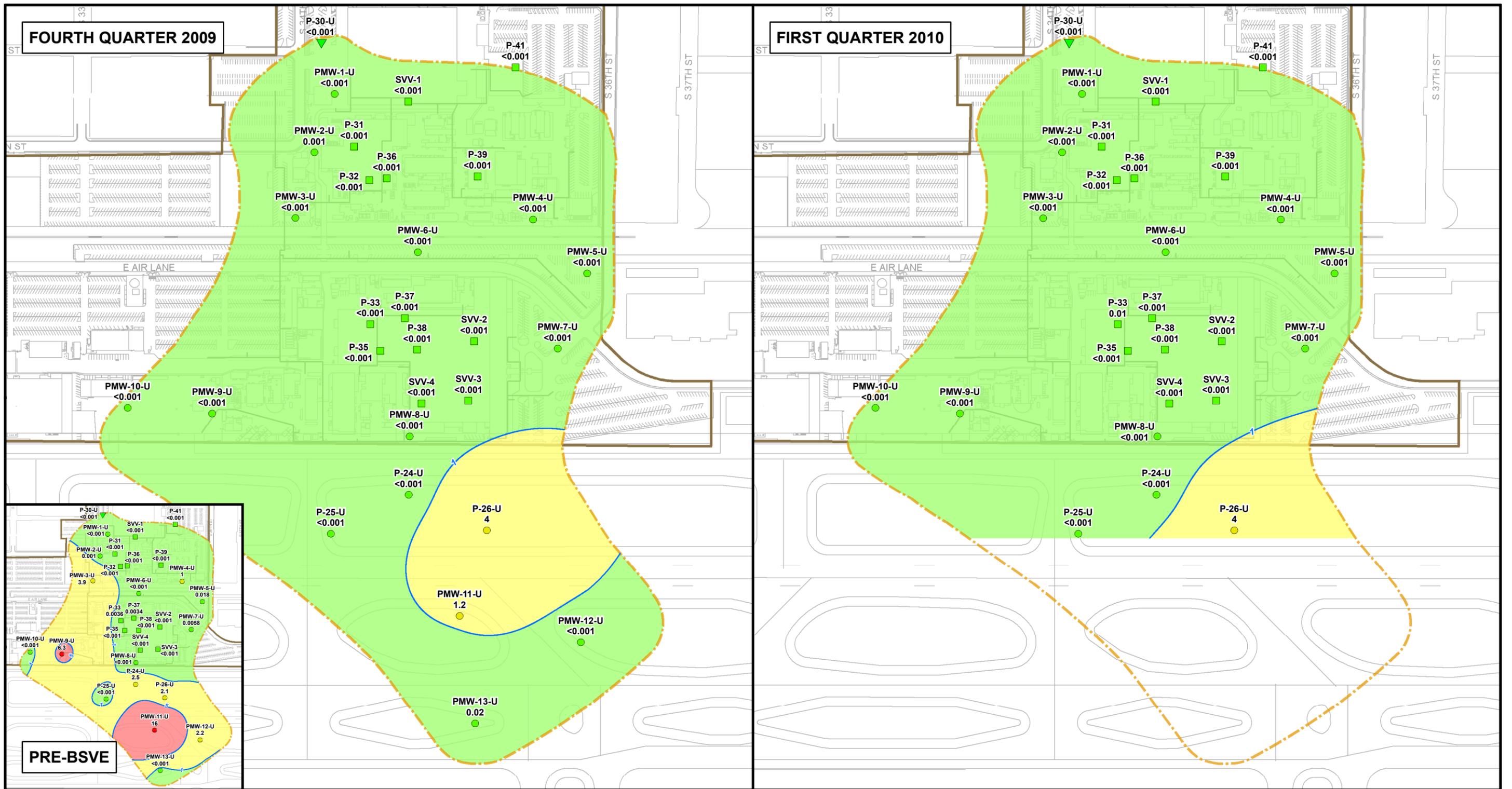


FIGURE E-2
DEEP SUBSURFACE
OXYGEN DISTRIBUTION
SOIL-VAPOR FIELD PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona



FOURTH QUARTER 2009

FIRST QUARTER 2010

PRE-BSVE

- Legend**
- Process Monitoring Well**
 - Methane < 1%
 - Methane ≥ 1% and ≤ 5%
 - Methane > 5%
 - Sub-slab Monitoring Location**
 - Methane < 1%
 - Methane ≥ 1% and ≤ 5%
 - Methane > 5%
 - Honeywell Monitoring Well**
 - ▼ Methane < 1%
 - ▼ Methane ≥ 1% and ≤ 5%
 - ▼ Methane > 5%
 - Methane Isocontour (%)
 - BSVE Pipeline System
 - Target Treatment Area
 - Honeywell Facility

- Notes:**
- BSVE = Biologically-enhanced Soil-vapor Extraction
 - First Quarter 2010 measurements were collected between February 5, 2010 and February 17, 2010.
 - Fourth Quarter 2009 measurements were collected between November 6, 2009 and December 2, 2009.
 - Pre-BSVE measurements were collected between September 20, 2006 and May 22, 2009.
 - First Quarter 2010 methane data were collected with an RKI Eagle (detection limit of 0.001%). The Pre-BSVE and Fourth Quarter 2009 methane data were collected using a flame ionization detector (FID). For the purposes of this figure, FID detections below 0.001% are presented as <0.001%.
 - Contours were produced using computing software and the kriging gridding method.

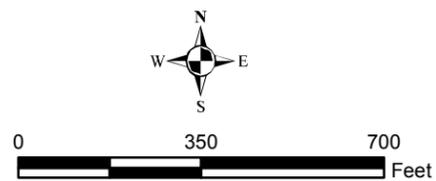
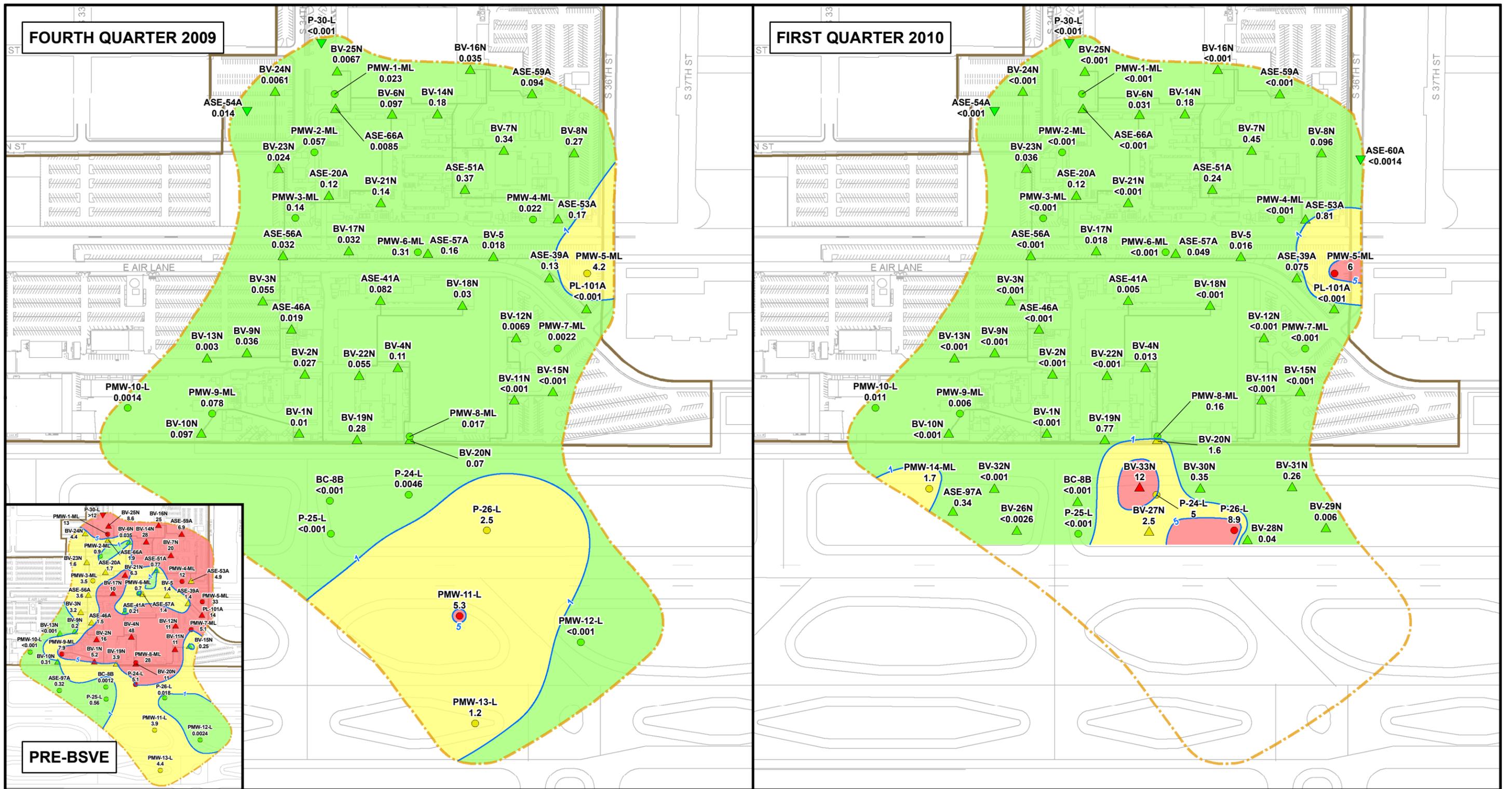


FIGURE E-3
SHALLOW SUBSURFACE
METHANE DISTRIBUTION
SOIL-VAPOR FIELD PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona





Legend

- | | |
|---------------------------------------|----------------------------------|
| Process Monitoring Well | Honeywell Monitoring Well |
| ● Methane < 1% | ▼ Methane < 1% |
| ● Methane ≥ 1% and ≤ 5% | ▼ Methane ≥ 1% and ≤ 5% |
| ● Methane > 5% | ▼ Methane > 5% |
| BSVE Injection/Extraction Well | — Methane Isocontour (%) |
| ▲ Methane < 1% | — BSVE Pipeline System |
| ▲ Methane ≥ 1% and ≤ 5% | Target Treatment Area |
| ▲ Methane > 5% | Honeywell Facility |

Notes:

- BSVE = Biologically-enhanced Soil-vapor Extraction.
- First Quarter 2010 measurements were collected between February 4, 2010 and February 19, 2010.
- Fourth Quarter 2009 measurements were collected between November 5, 2009 and December 2, 2009.
- Pre-BSVE measurements were collected between July 8, 2005 and May 22, 2009.
- First Quarter 2010 methane data were collected with an RKI Eagle (detection limit of 0.001%). The Pre-BSVE and Fourth Quarter 2009 methane data were collected using a flame ionization detector (FID). For the purposes of this figure, FID detections below 0.001% are presented as <0.001%.
- Phase C Injection/Extraction Wells not connected to the BSVE system during First Quarter 2010.
- Contours were produced using computing software and the kriging gridding method.

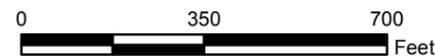
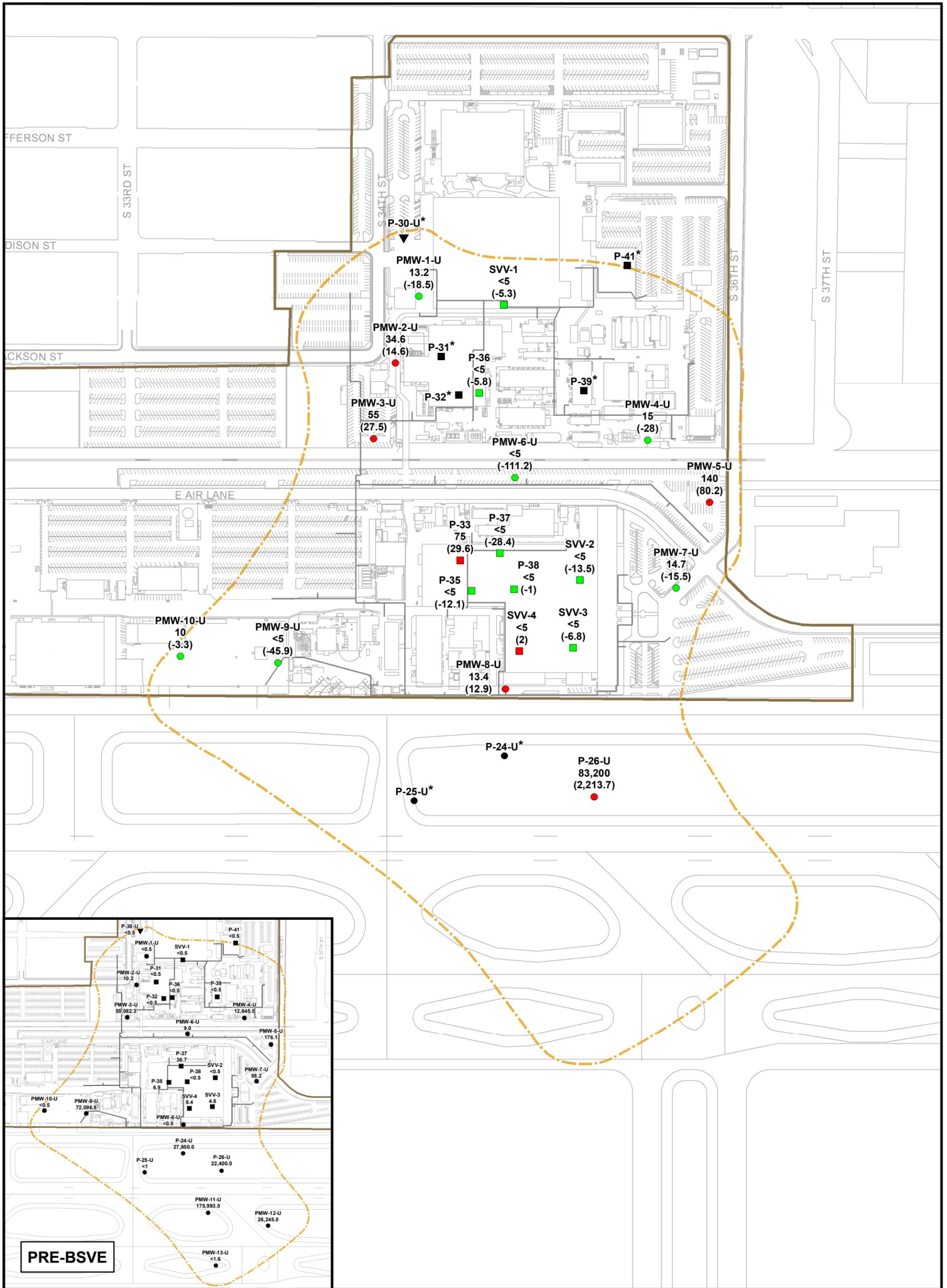


FIGURE E-4
DEEP SUBSURFACE
METHANE DISTRIBUTION
SOIL-VAPOR FIELD PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona



Legend

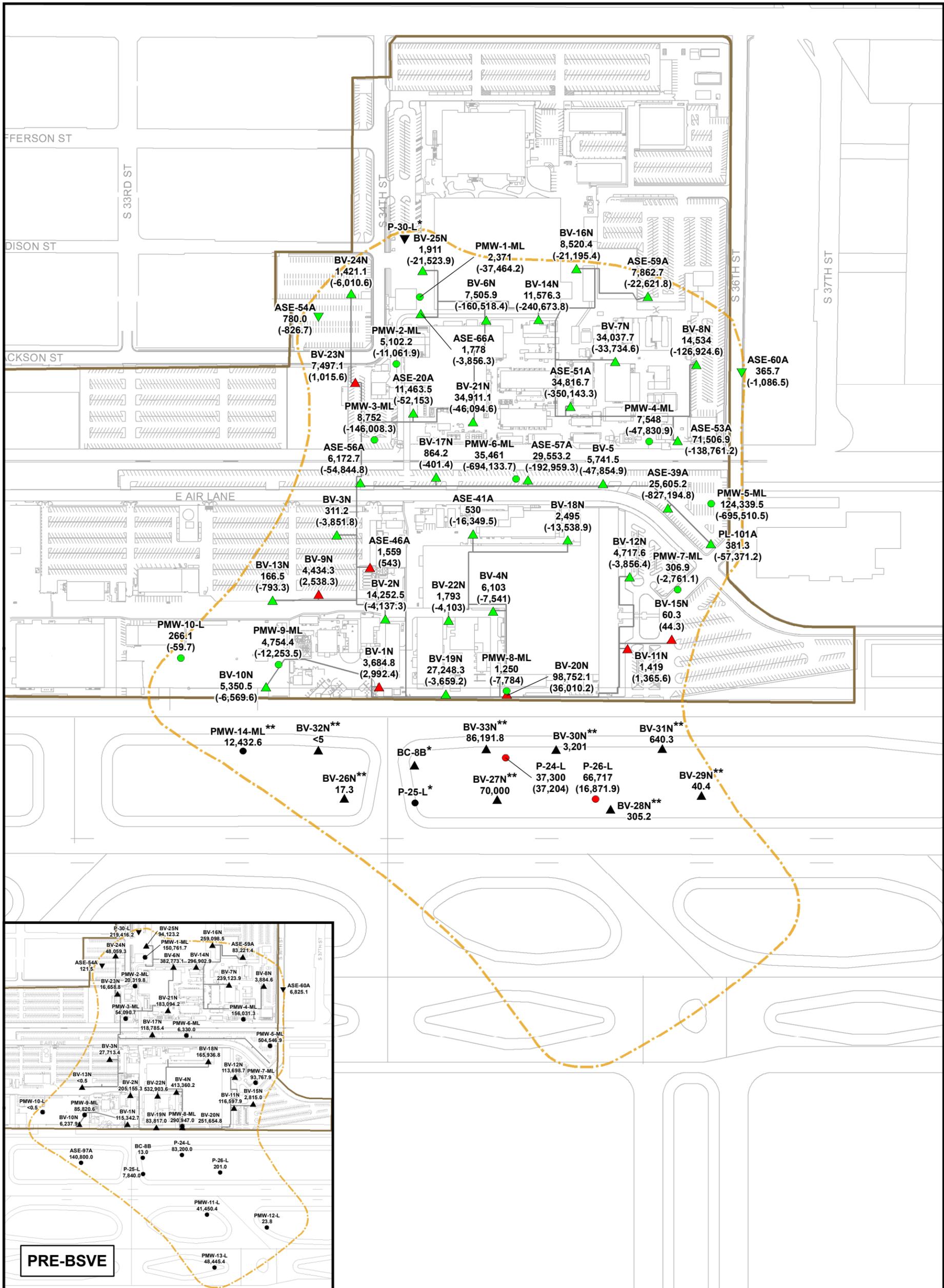
- P-26-U Well Identifier
- 83,200 Current TPH Concentration
- (2,213.7) Change Since Previous Quarter
- Process Monitoring Well, Decreasing TPH
- Process Monitoring Well, Increasing TPH
- Sub-slab, Decreasing TPH
- Sub-slab, Increasing TPH
- ▼ Honeywell Monitoring Well
- BSVE Pipeline System

- Target Treatment Area
- Honeywell Facility

Notes:
 1. BSVE = Biologically-enhanced Soil-vapor Extraction
 2. TPH = Total Petroleum Hydrocarbons
 3. TPH concentrations in parts per million
 4. Pre-BSVE measurements were collected between July 28, 2005 and May 22, 2009.
 5. * Indicates no change (non-detect in both sample periods).
 6. The maximum First Quarter 2010 TPH concentration is presented and was used to calculate change from previous quarter by comparison to the maximum Fourth Quarter 2009 TPH concentration. Changes in TPH for cases when TPH was detectable in only one quarter were calculated using the reporting limit for non-detect values.



FIGURE E-5
CHANGES IN SHALLOW SUBSURFACE
TOTAL PETROLEUM HYDROCARBONS
FOURTH QUARTER 2009 TO
FIRST QUARTER 2010
Honeywell 34th Street Facility
Phoenix, Arizona



Legend

- BV-1N Well Identifier
- 3,684.8 Current TPH Concentration
- (2,992.4) Change Since Previous Quarter
- Process Monitoring Well, Decreasing TPH
- Process Monitoring Well, Increasing TPH
- ▲ BSVE Injection/Extraction Well, Decreasing TPH
- ▲ BSVE Injection/Extraction Well, Increasing TPH
- ▼ Honeywell Monitoring Well, Decreasing TPH
- ▼ Honeywell Monitoring Well, Increasing TPH
- BSVE Pipeline System

- Target Treatment Area
- Honeywell Facility

Notes:

1. BSVE = Biologically-enhanced Soil-vapor Extraction
2. TPH = Total Petroleum Hydrocarbons
3. TPH concentrations in parts per million
4. Pre-BSVE measurements were collected between July 28, 2005 and May 22, 2009.
5. * Indicates no change (non-detect in both sample periods).
6. ** Indicates first time well monitored; therefore no change in TPH concentration was evaluated.
7. The maximum First Quarter 2010 TPH concentration is presented and was used to calculate change from previous quarter by comparison to the maximum Fourth Quarter 2009 TPH concentration.
8. Phase C Injection/Extraction Wells not connected to the BSVE system during First Quarter 2010.

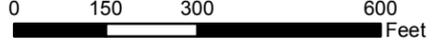
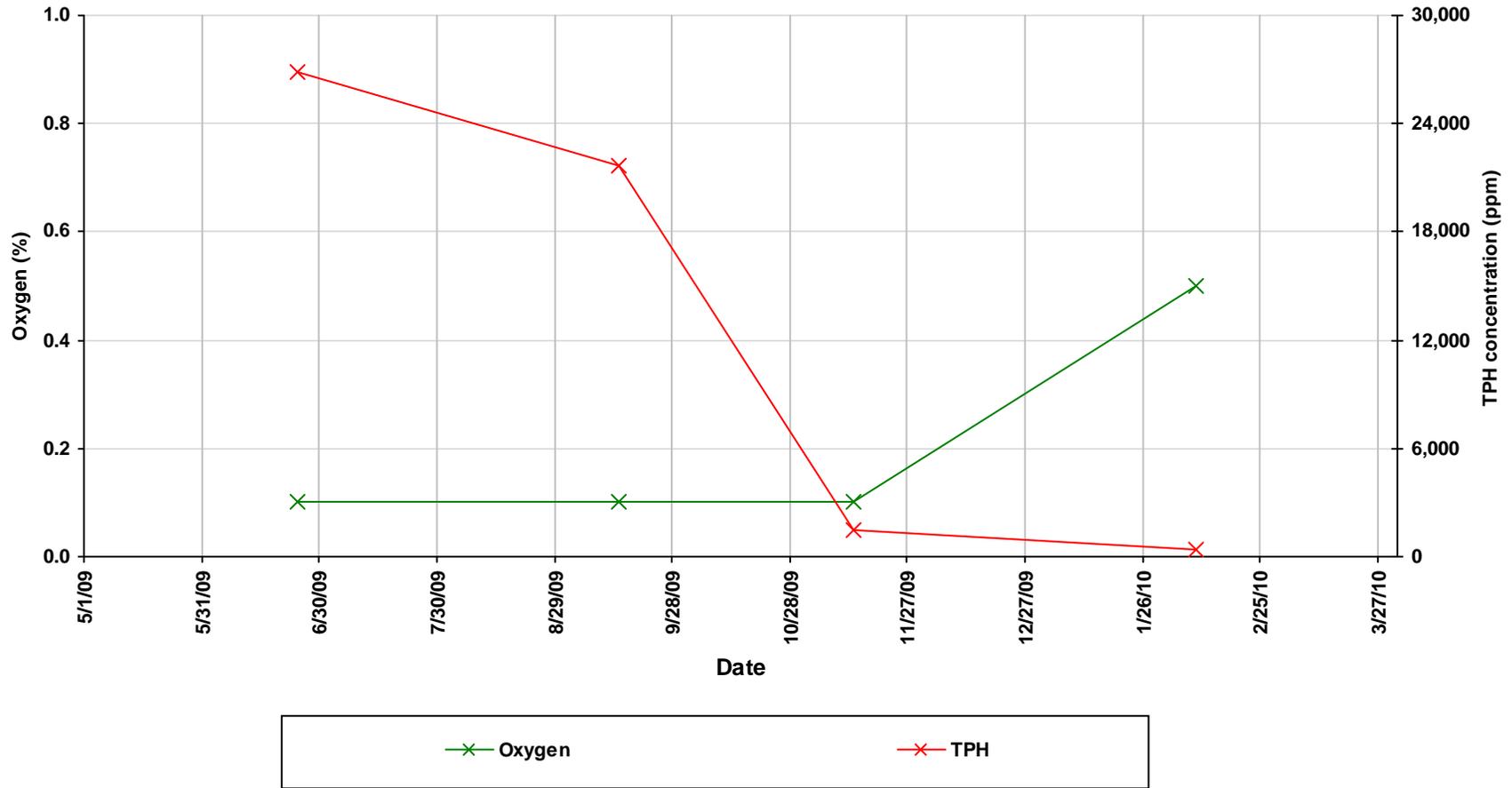


FIGURE E-6
CHANGES IN DEEP SUBSURFACE
TOTAL PETROLEUM HYDROCARBONS
FOURTH QUARTER 2009 TO
FIRST QUARTER 2010
Honeywell 34th Street Facility
Phoenix, Arizona

Appendix F
Total Petroleum Hydrocarbons and Oxygen
Concentrations for Soil Vapor Monitoring Wells

ASE-60A



Notes:

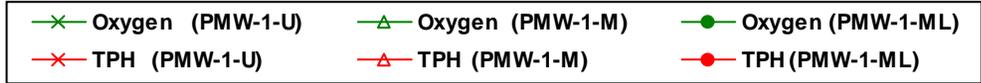
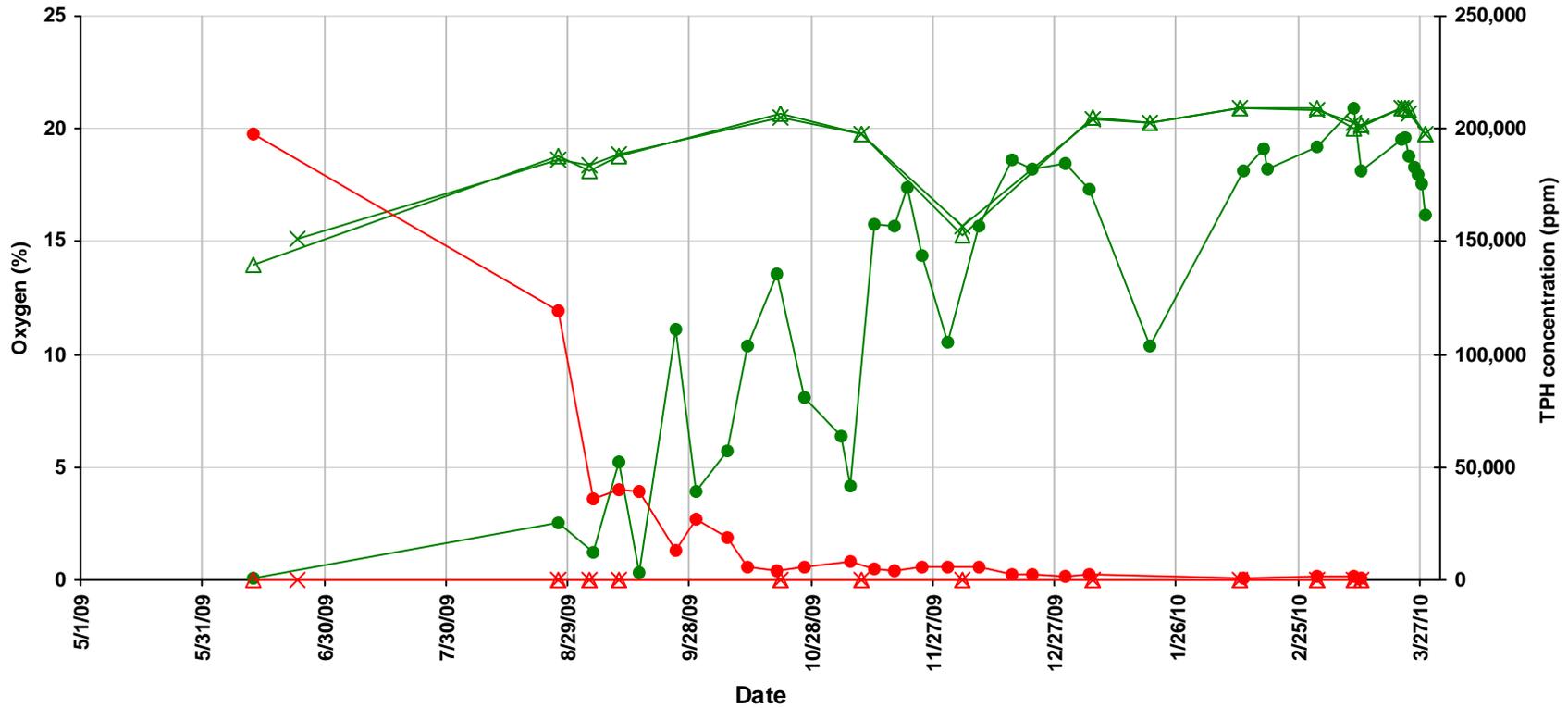
- 1. % = percent
- 2. ppm = parts per million
- 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-1
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-1



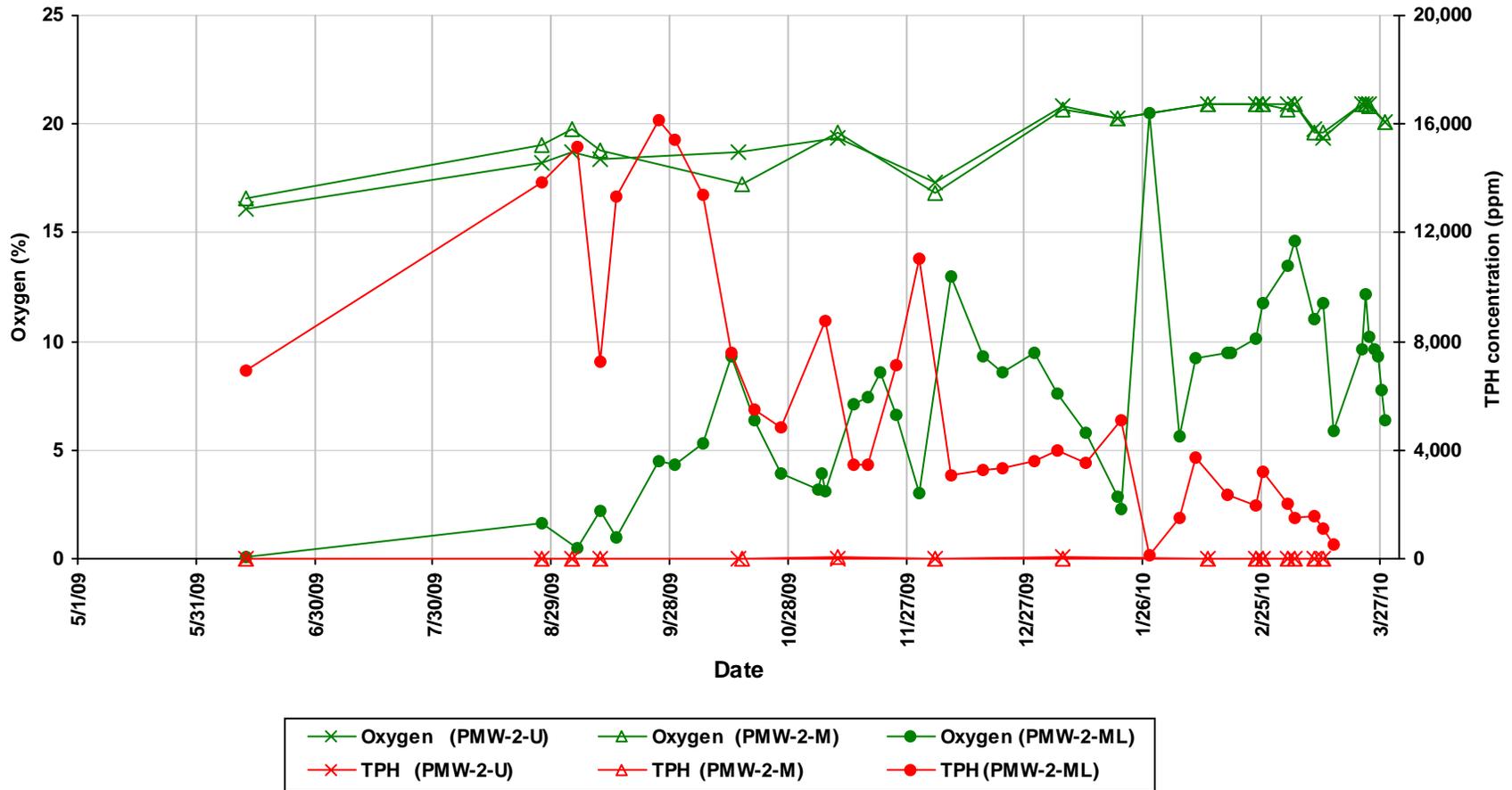
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-2
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-2



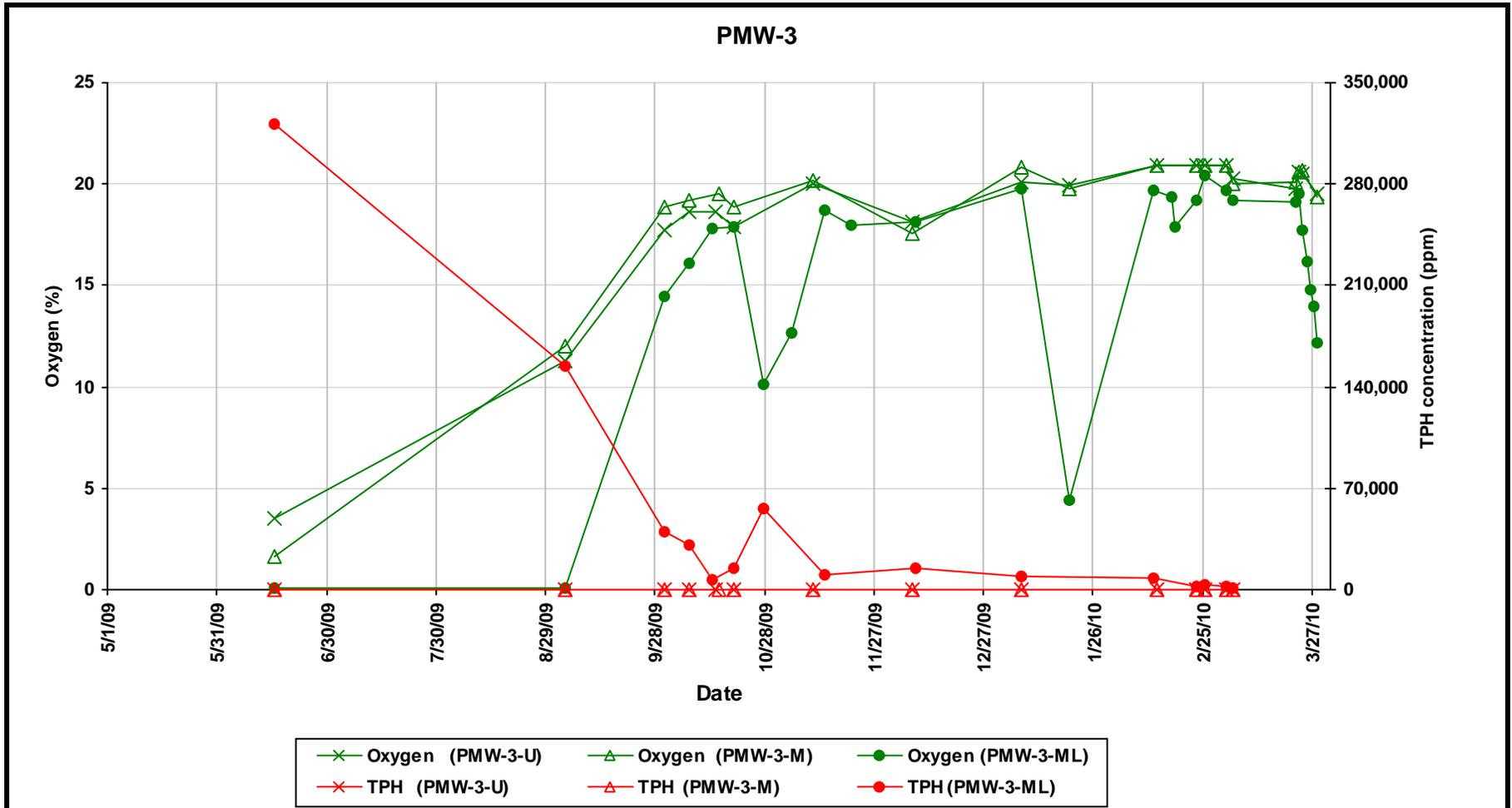
Notes:

1. % = percent
2. ppm = parts per million
3. TPH = Total Petroleum Hydrocarbons

FIGURE F-3
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



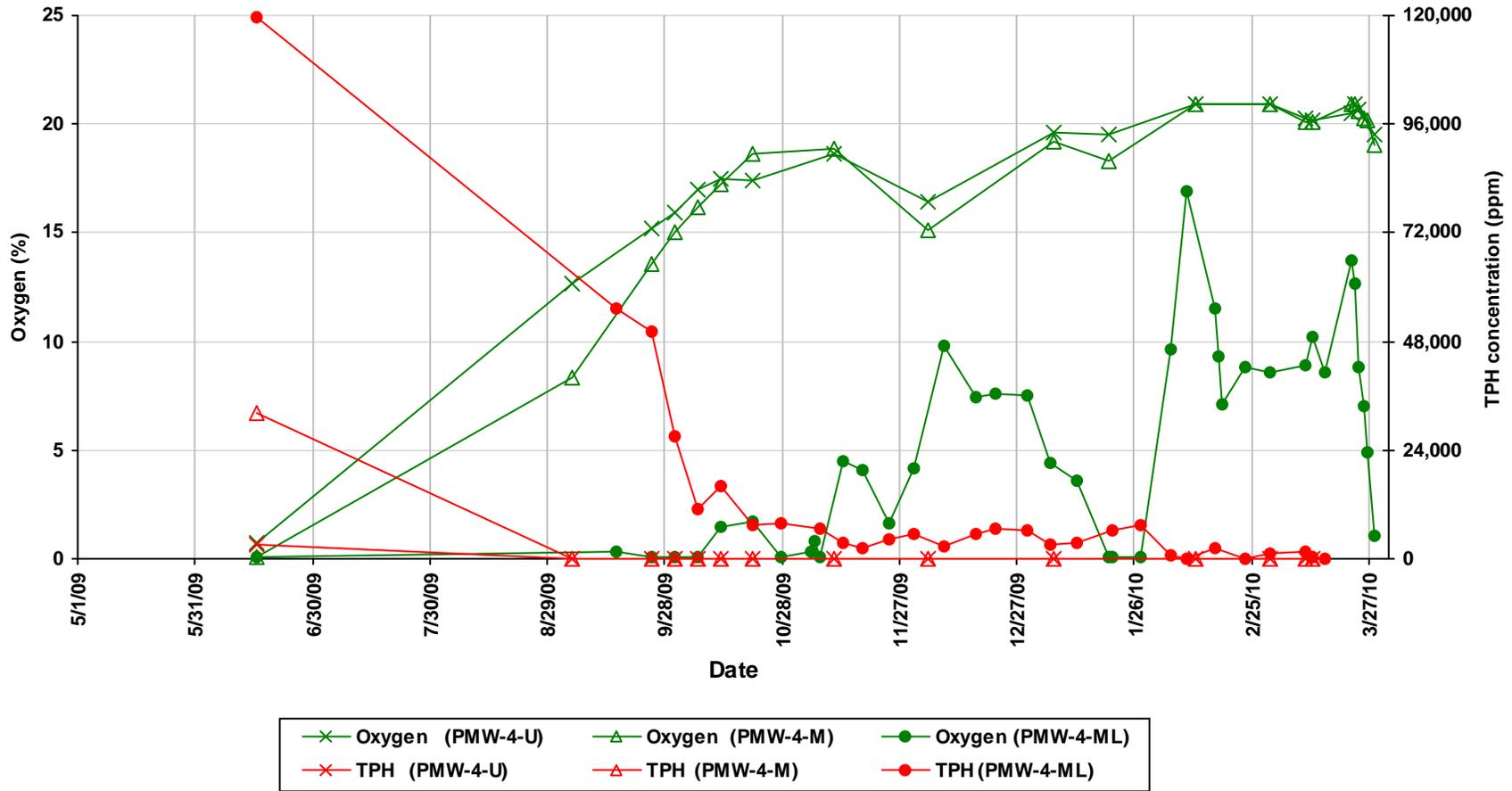


- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-4
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



PMW-4



Notes:

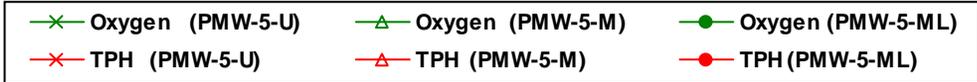
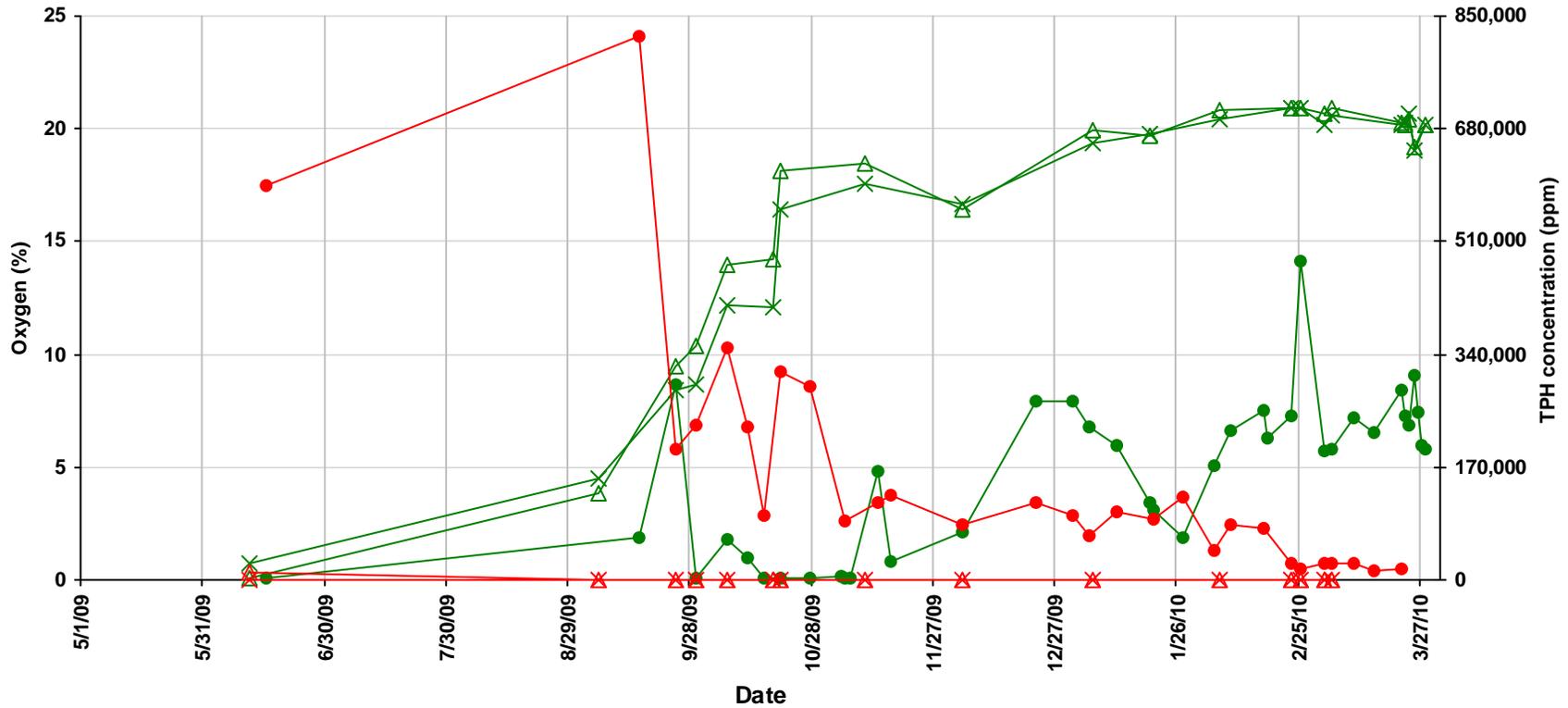
1. % = percent
2. ppm = parts per million
3. TPH = Total Petroleum Hydrocarbons

FIGURE F-5
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-5



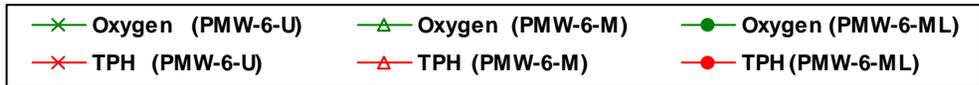
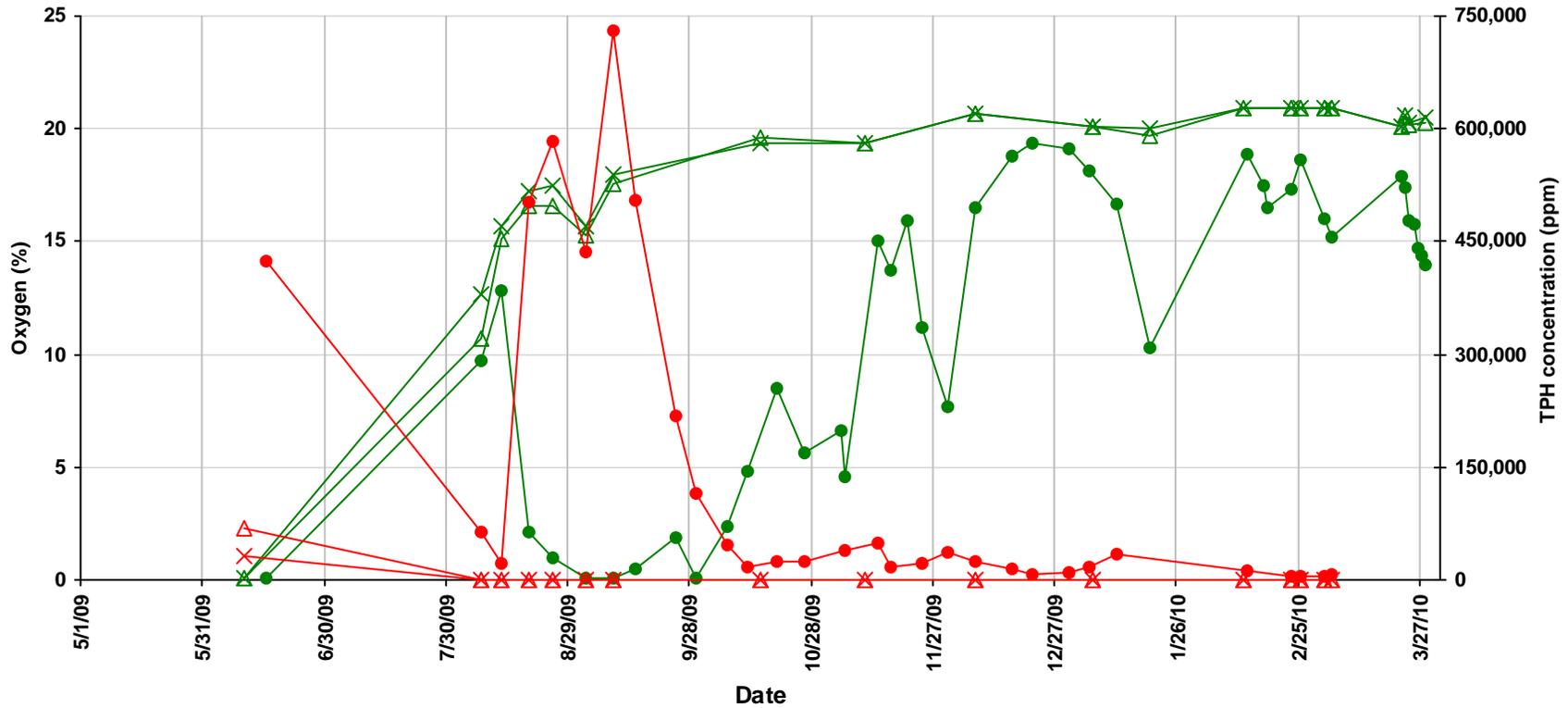
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-6
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-6

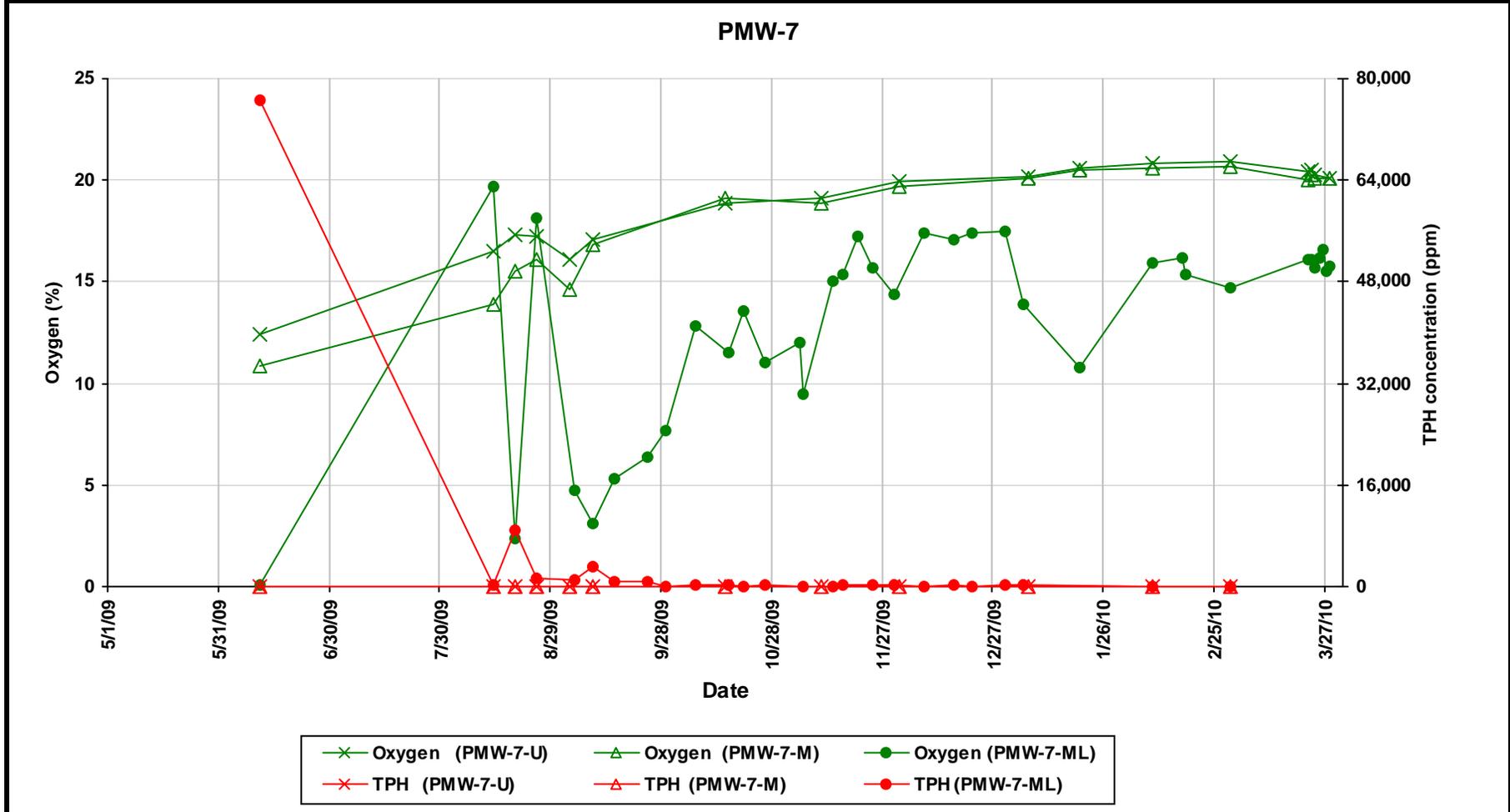


- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-7
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona





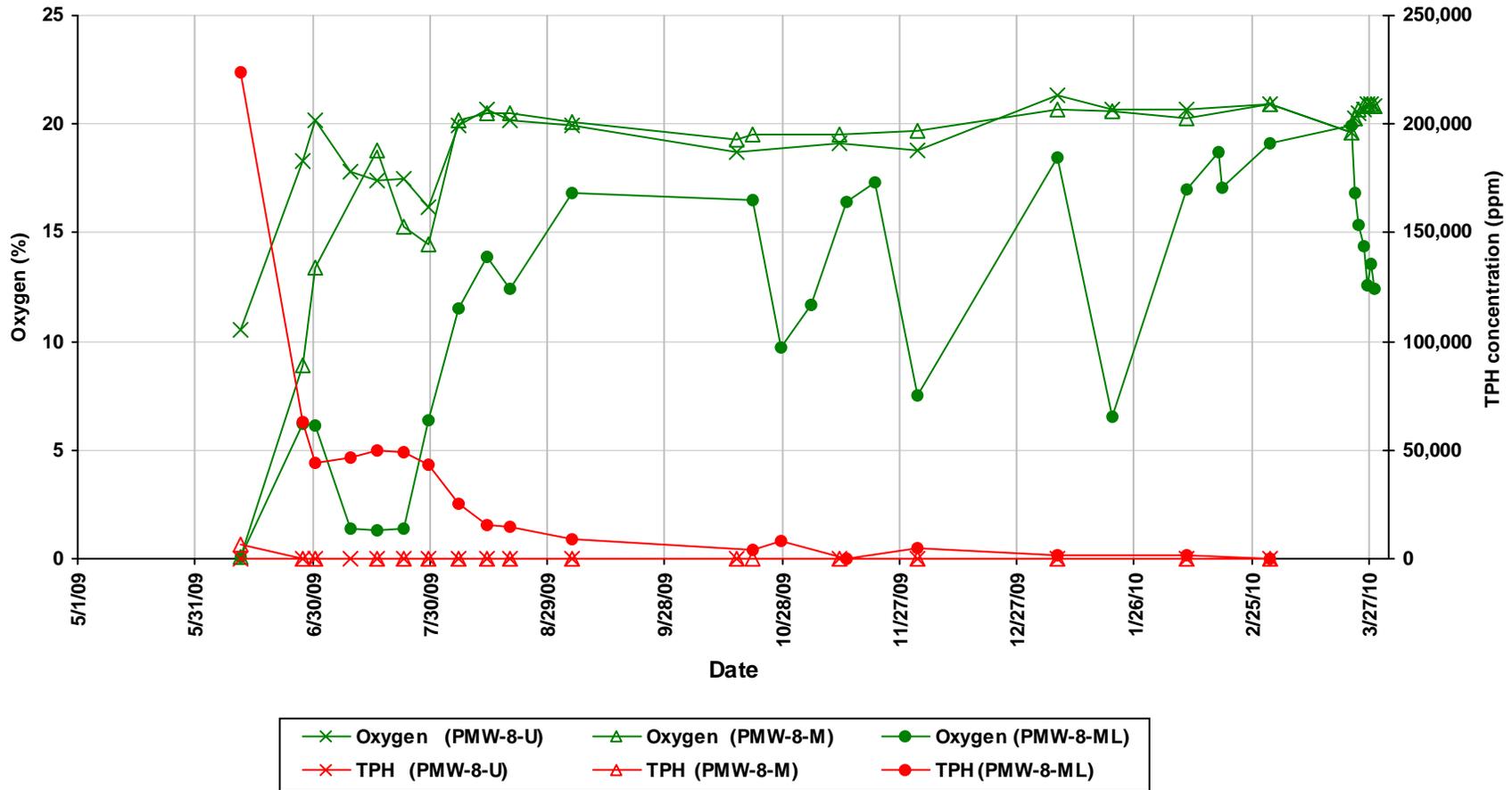
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-8
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-8



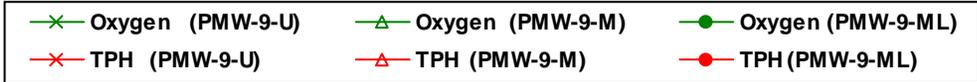
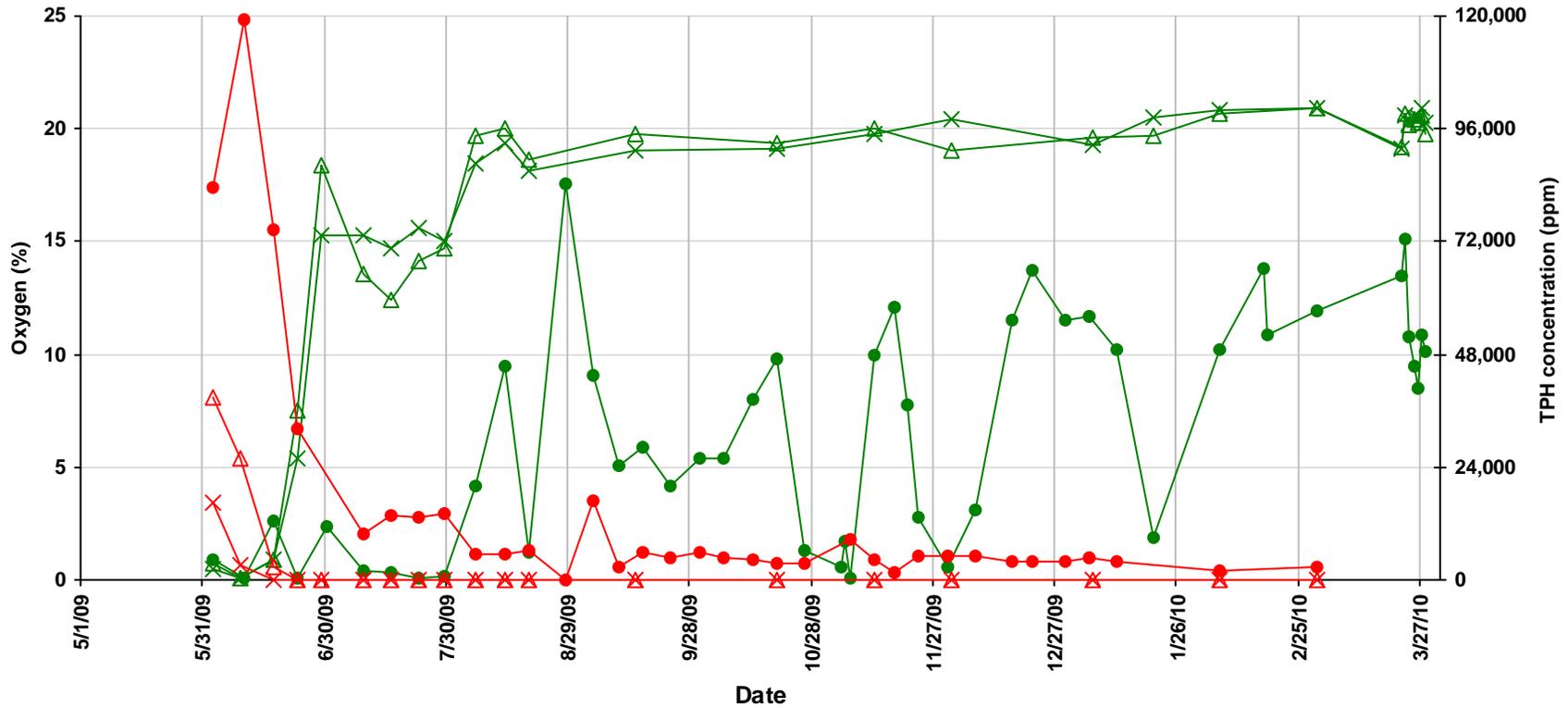
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-9
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-9



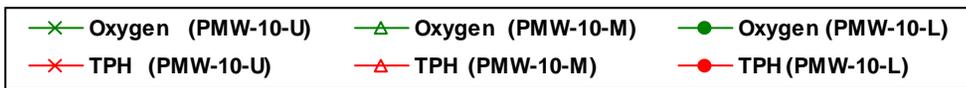
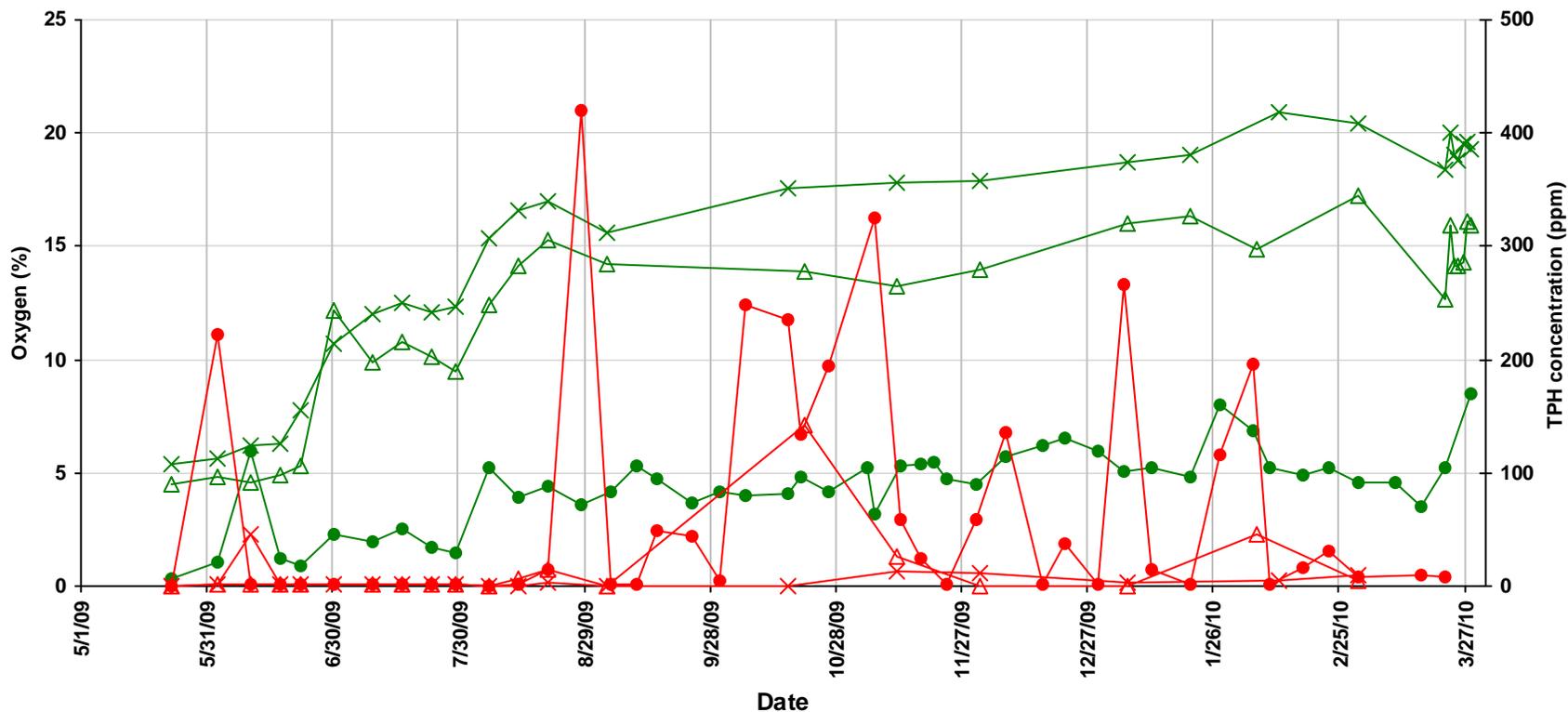
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-10
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-10



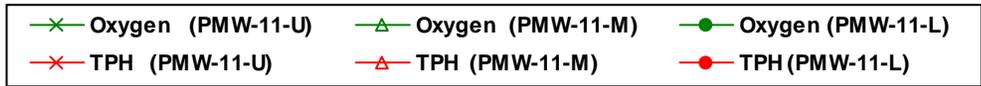
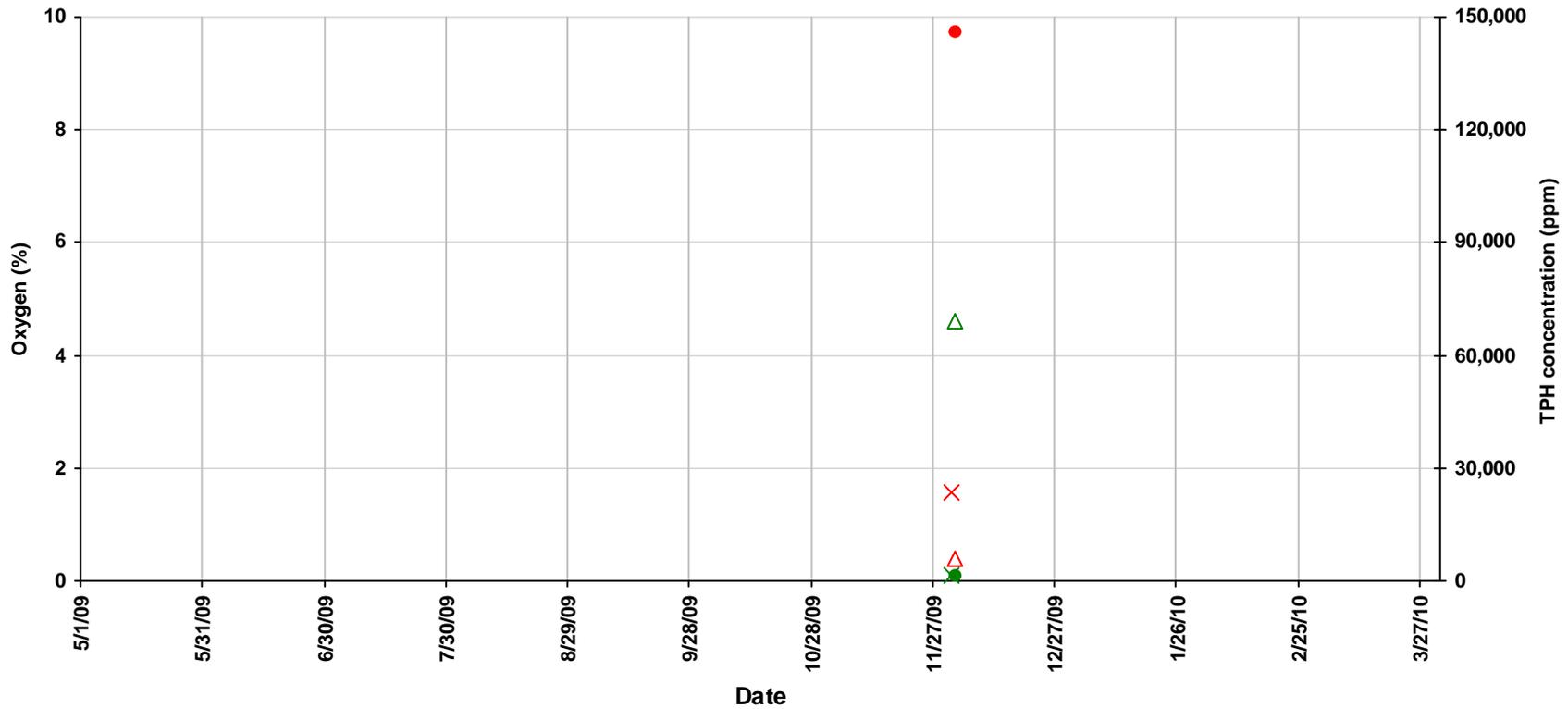
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-11
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-11



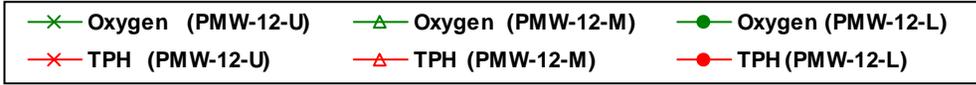
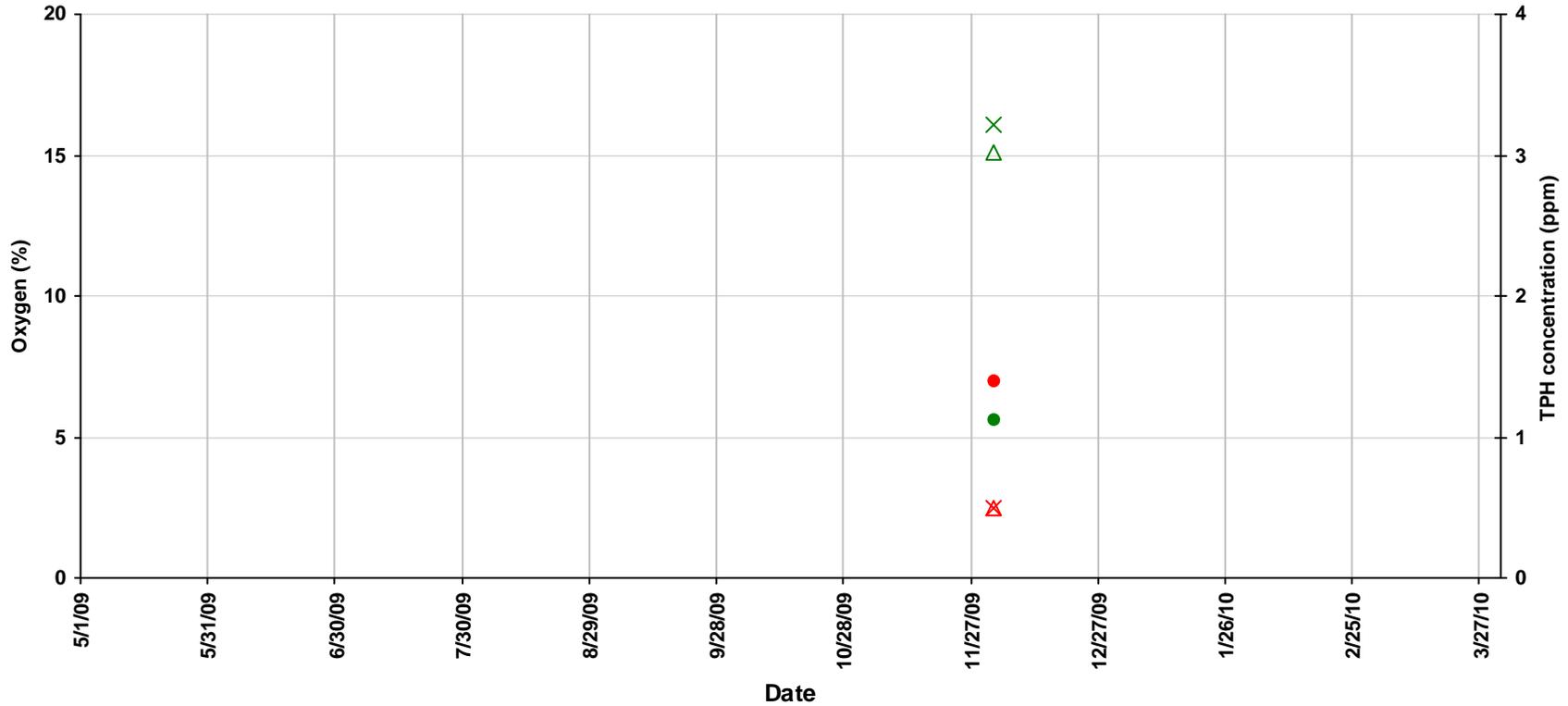
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-12
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-12

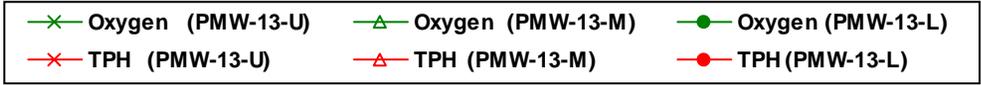
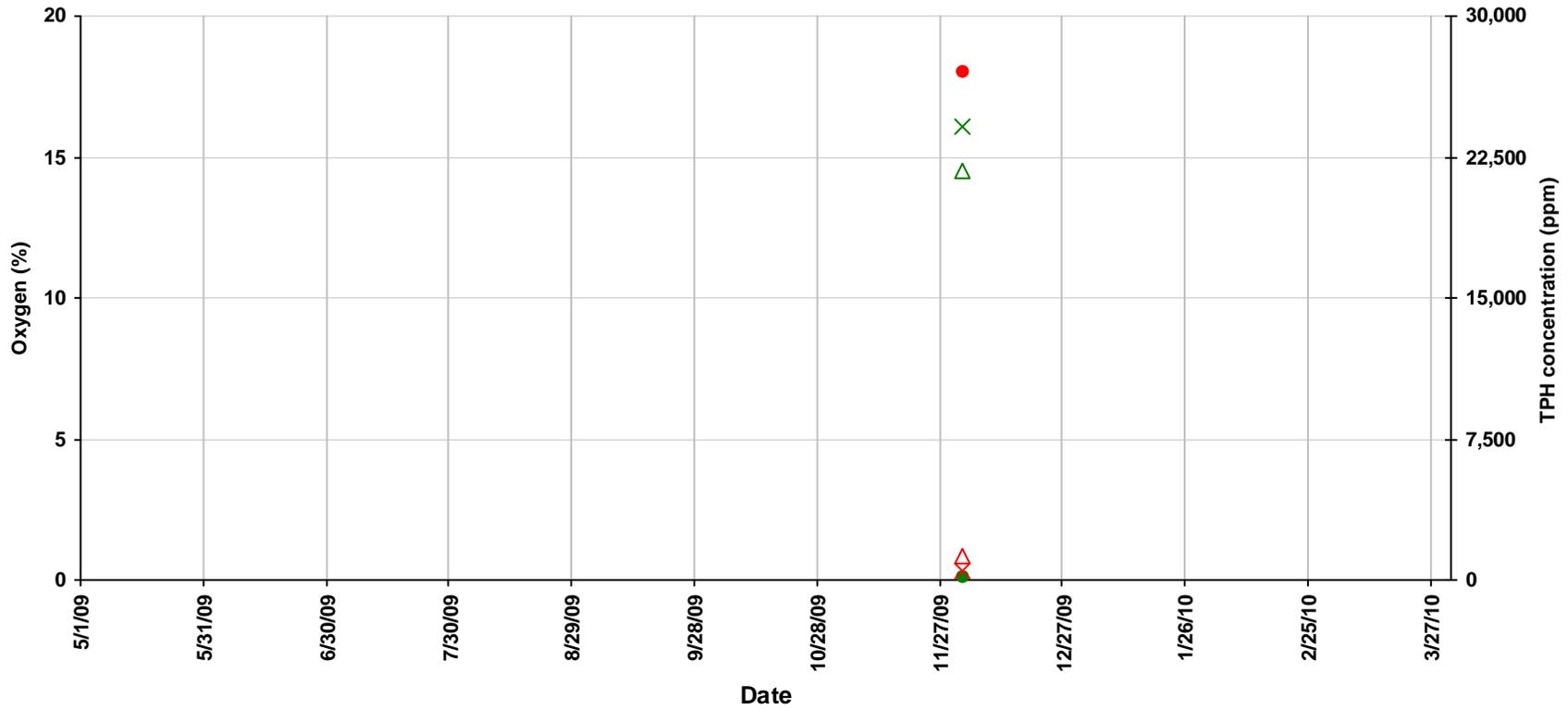


- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-13
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



PMW-13



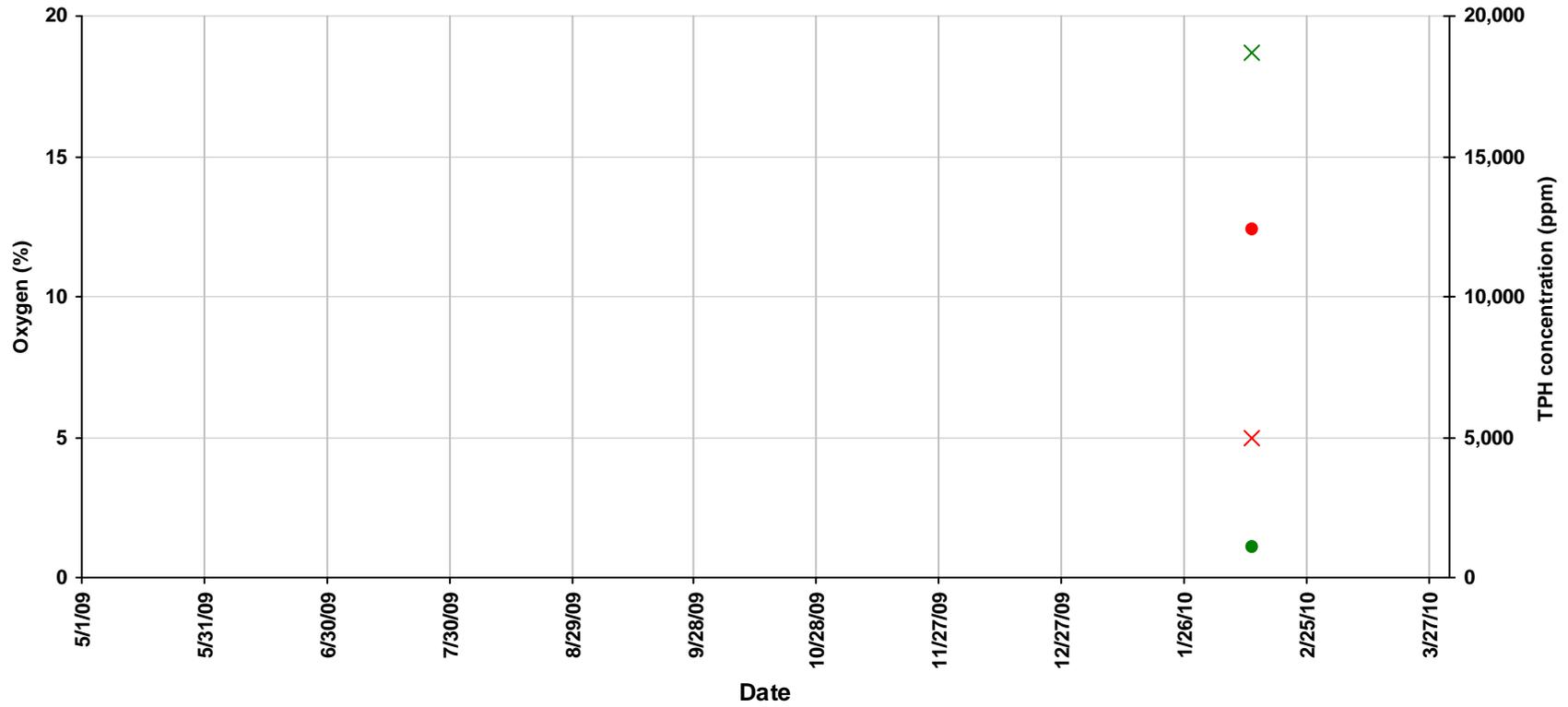
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-14
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



PMW-14

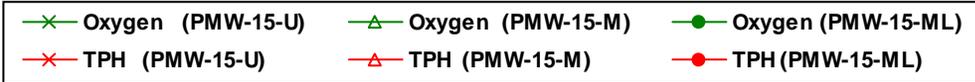
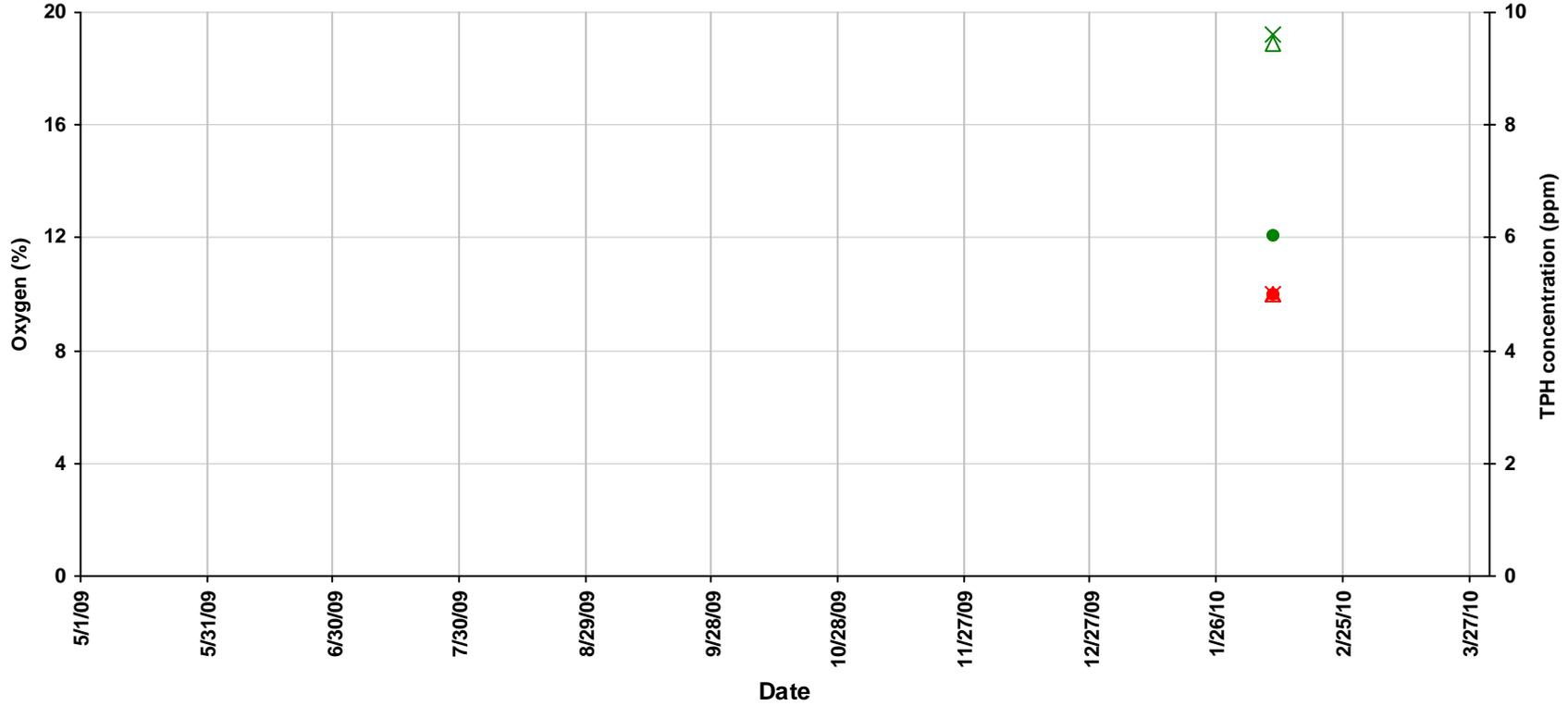


- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-15
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS
Honeywell 34th Street Facility
Phoenix, Arizona



PMW-15



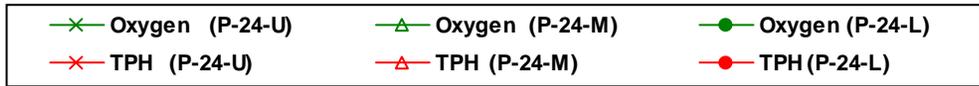
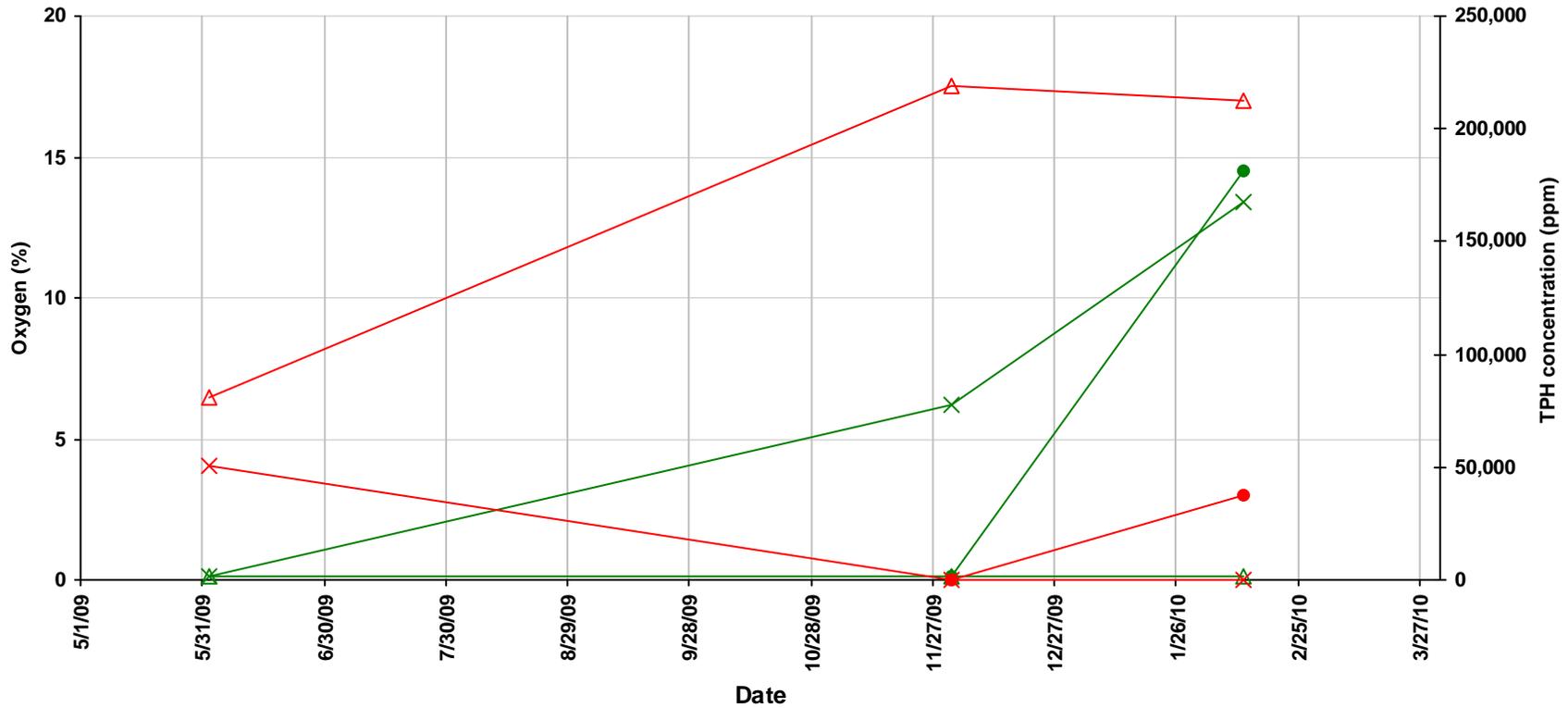
- Notes:
- 1. % = percent
 - 2. ppm = parts per million
 - 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-16
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



P-24



Notes:

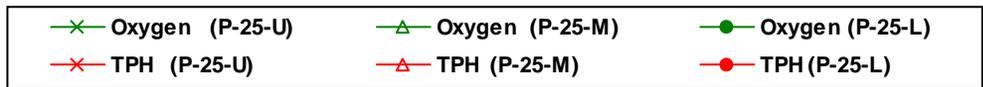
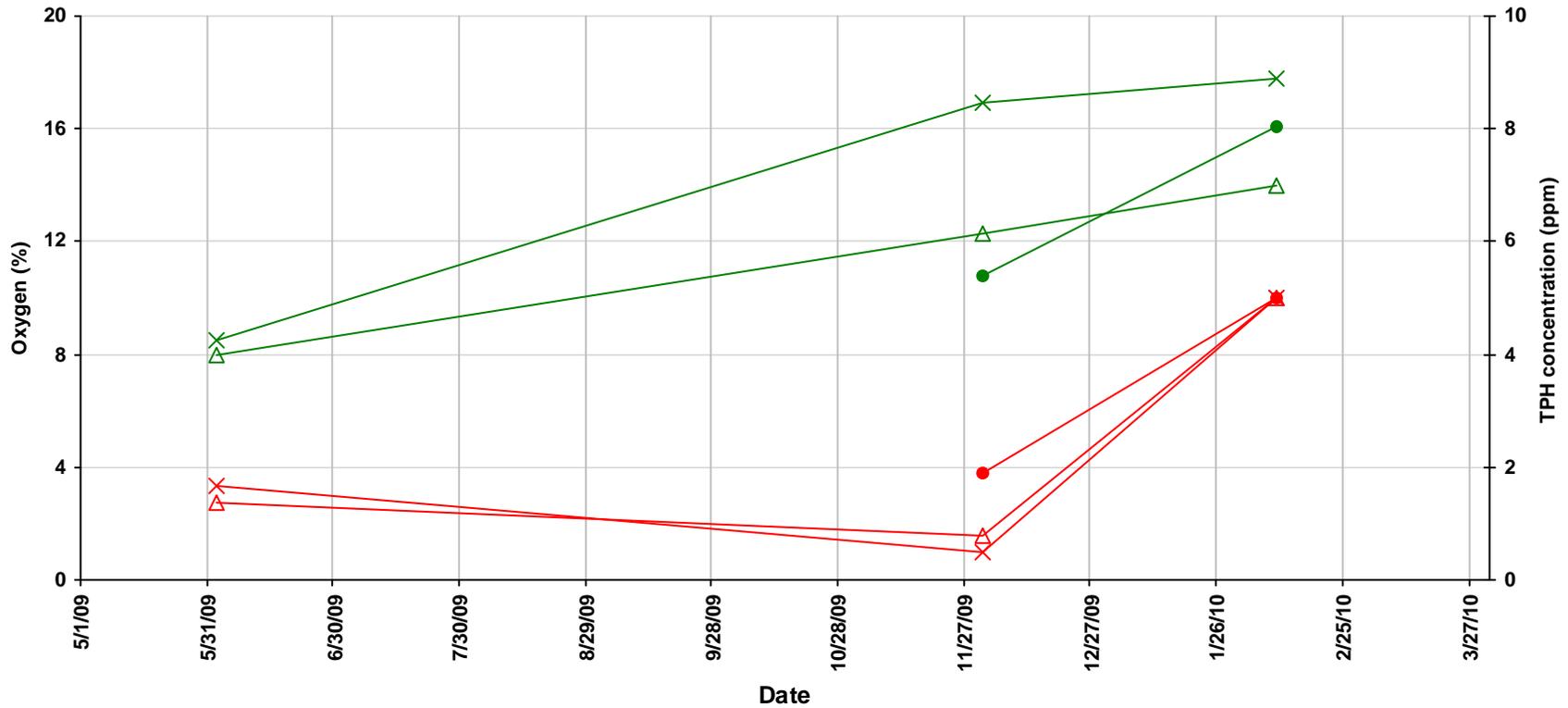
1. % = percent
2. ppm = parts per million
3. TPH = Total Petroleum Hydrocarbons

FIGURE F-17
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona

CH2MHILL

P-25



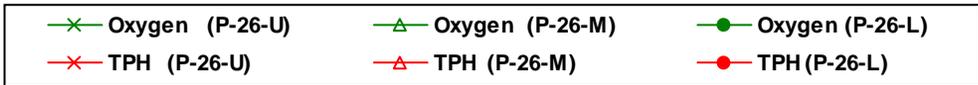
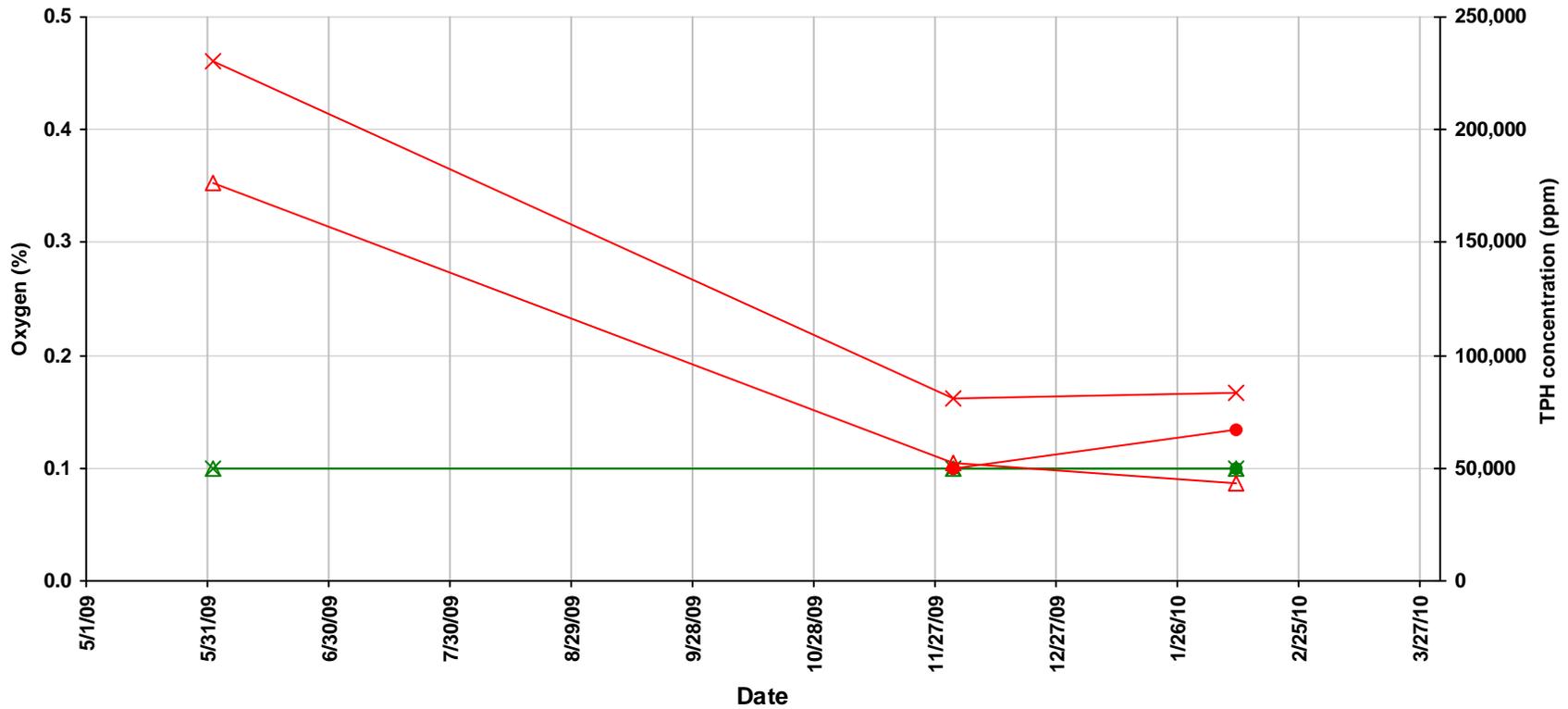
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-18
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



P-26



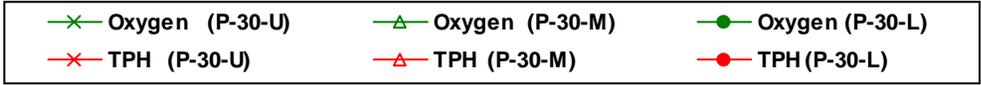
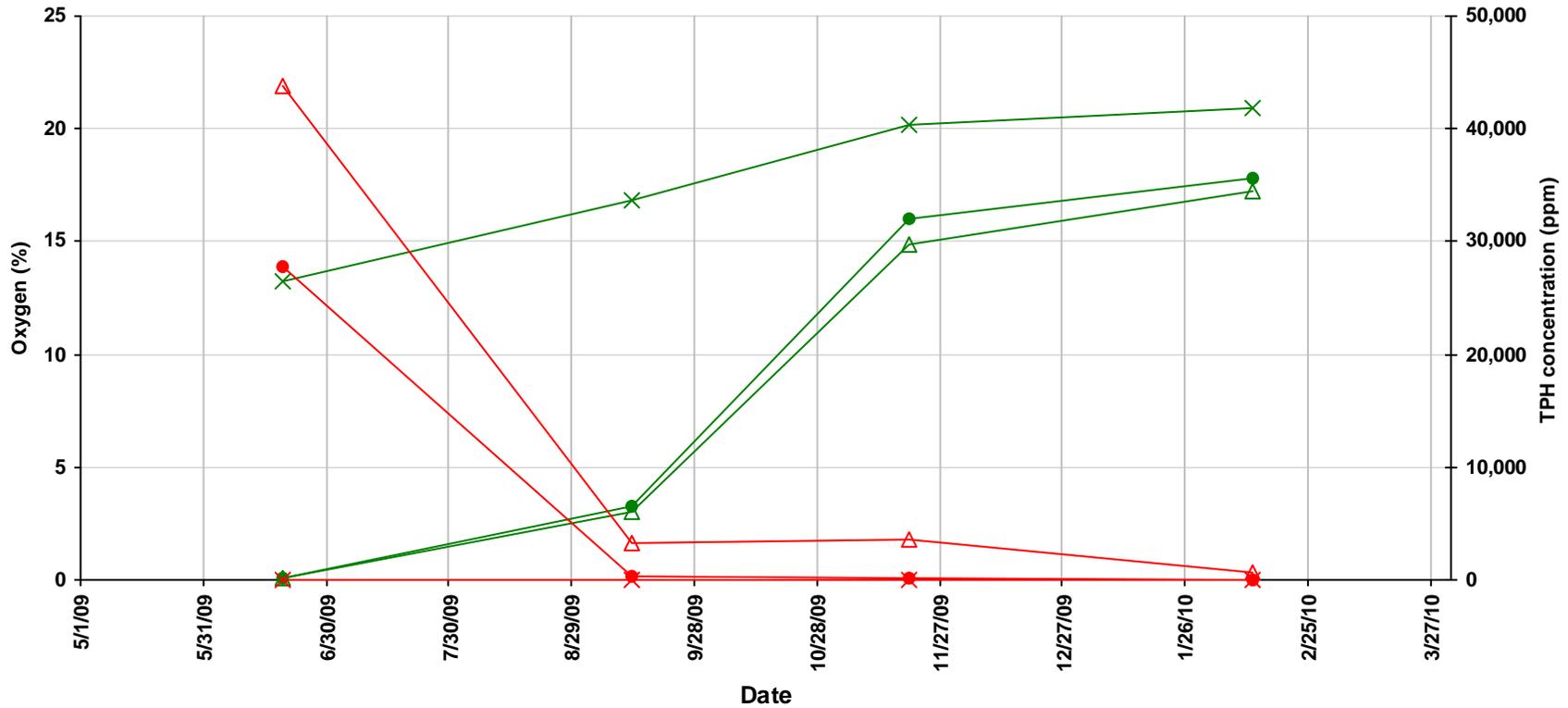
- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-19
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



P-30



- Notes:
1. % = percent
 2. ppm = parts per million
 3. TPH = Total Petroleum Hydrocarbons

FIGURE F-20
TOTAL PETROLEUM HYDROCARBONS AND OXYGEN
CONCENTRATIONS FOR SOIL VAPOR MONITORING WELLS

Honeywell 34th Street Facility
Phoenix, Arizona



TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
ASE-60A	06/24/09	26,857.5	<0.1
	09/14/09	21,686.9	<0.1
	11/13/09	1,452.2	<0.1
	02/08/10	365.7	0.5
PMW-1-U	06/23/09	<0.5	15.1
	08/26/09	3.6	18.6
	09/03/09	<0.5	18.4
	09/10/09	11.8	18.9
	10/20/09	31.7	20.5
	11/09/09	20.3	19.8
	12/04/09	<0.5	15.7
	01/05/10	13.2	20.4
	01/19/10	NM	20.3
	02/10/10	<5.0	20.9
	03/01/10	<5.0	20.8
	03/10/10	<5.0	20.3
	03/12/10	<5.0	20.1
	03/22/10	NM	20.9
	03/23/10	NM	20.9
	03/24/10	NM	20.7
03/28/10	NM	19.8	
PMW-1-M	06/12/09	16.6	14.0
	08/26/09	5.6	18.8
	09/03/09	<0.5	18.1
	09/10/09	<0.5	18.8
	10/20/09	23.5	20.7
	11/09/09	71.8	19.8
	12/04/09	6.2	15.3
	01/05/10	7.8	20.5
	01/19/10	NM	20.3
	02/10/10	<5.0	20.9
	03/01/10	<5.0	20.9
	03/10/10	<5.0	20.0
	03/12/10	<5.0	20.2
	03/22/10	NM	20.9
	03/23/10	NM	20.9
	03/24/10	NM	20.8
03/28/10	NM	19.8	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-1-ML	06/12/09	197,928.2	<0.1
	08/26/09	119,623.9	2.5
	09/04/09	35,713.9	1.2
	09/10/09	39,835.2	5.2
	09/15/09	39,542.6	0.3
	09/24/09	12,958.4	11.1
	09/29/09	27,153.1	3.9
	10/07/09	18,717.7	5.7
	10/12/09	5,559.4	10.4
	10/19/09	4,261.2	13.6
	10/26/09	5,314.2	8.1
	11/04/09	NM	6.4
	11/06/09	8,024.9	4.2
	11/12/09	4,982.0	15.8
	11/17/09	4,232.0	15.7
	11/20/09	NM	17.4
	11/24/09	5,679.7	14.4
	11/30/09	5,325.5	10.5
	12/08/09	5,434.0	15.7
	12/16/09	2,045.0	18.6
	12/21/09	2,198.0	18.2
	12/29/09	1,891.0	18.5
	01/04/10	2,371.0	17.3
	01/19/10	NM	10.4
	02/11/10	780.0	18.1
	02/16/10	NM	19.1
	02/17/10	NM	18.2
	03/01/10	1,500.0	19.2
	03/10/10	1,500.0	20.9
	03/12/10	980.0	18.1
	03/22/10	NM	19.5
	03/23/10	NM	19.6
	03/24/10	NM	18.8
03/25/10	NM	18.3	
03/26/10	NM	18.0	
03/27/10	NM	17.6	
03/28/10	NM	16.2	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-2-U	06/12/09	<0.5	16.1
	08/26/09	<0.5	18.2
	09/03/09	0.9	18.7
	09/10/09	<0.5	18.4
	10/15/09	<0.5	18.7
	11/09/09	20.0	19.4
	12/04/09	<0.5	17.3
	01/05/10	34.6	20.8
	01/19/10	NM	20.3
	02/11/10	<5.0	20.9
	02/23/10	<5.0	20.9
	02/25/10	<5.0	20.9
	03/03/10	<5.0	20.9
	03/05/10	<5.0	20.9
	03/10/10	<5.0	19.8
	03/12/10	<5.0	19.4
	03/22/10	NM	20.9
	03/23/10	NM	20.9
03/24/10	NM	20.9	
03/28/10	NM	20.1	
PMW-2-M	06/12/09	<0.5	16.6
	08/26/09	<0.5	19.0
	09/03/09	3.3	19.8
	09/10/09	<0.5	18.8
	10/16/09	17.2	17.2
	11/09/09	43.7	19.6
	12/04/09	3.6	16.8
	01/05/10	22.7	20.7
	01/19/10	NM	20.3
	02/11/10	<5.0	20.9
	02/23/10	<5.0	20.9
	02/25/10	<5.0	20.9
	03/03/10	<5.0	20.7
	03/05/10	<5.0	20.9
	03/10/10	<5.0	19.6
	03/12/10	<5.0	19.6
	03/22/10	NM	20.9
	03/23/10	NM	20.9
03/24/10	NM	20.8	
03/28/10	NM	20.1	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-2-ML	06/12/09	6,902.6	<0.1
	08/26/09	13,860.3	1.6
	09/04/09	15,184.0	0.5
	09/10/09	7,242.0	2.2
	09/14/09	13,318.8	1.0
	09/25/09	16,164.1	4.5
	09/29/09	15,416.1	4.3
	10/06/09	13,397.5	5.3
	10/13/09	7,590.9	9.3
	10/19/09	5,495.0	6.4
	10/26/09	4,820.7	3.9
	11/04/09	NM	3.2
	11/05/09	NM	3.9
	11/06/09	8,737.7	3.1
	11/13/09	3,457.5	7.1
	11/17/09	3,435.3	7.4
	11/20/09	NM	8.6
	11/24/09	7,147.5	6.6
	11/30/09	11,045.5	3.0
	12/08/09	3,052.4	13.0
	12/16/09	3,266.9	9.3
	12/21/09	3,338.3	8.6
	12/29/09	3,622.4	9.5
	01/04/10	3,967.0	7.6
	01/11/10	3,545.6	5.8
	01/19/10	NM	2.9
	01/20/10	5,102.2	2.3
	01/27/10	153.0	20.5
	02/04/10	1,482.2	5.6
	02/08/10	3,752.5	9.2
	02/16/10	2,381.2	9.5
	02/17/10	NM	9.5
	02/23/10	1,950.0	10.1
	02/25/10	3,200.0	11.8
	03/03/10	2,050.0	13.5
	03/05/10	1,500.0	14.6
	03/10/10	1,550.0	11.0
	03/12/10	1,100.0	11.8
	03/15/10	519.2	5.9
	03/22/10	NM	9.6
03/23/10	NM	12.2	
03/24/10	NM	10.2	
03/25/10	NM	9.6	
03/26/10	NM	9.3	
03/27/10	NM	7.8	
03/28/10	NM	6.4	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
 Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-3-U	06/15/09	<1.9	3.5
	09/03/09	0.9	11.3
	09/30/09	10.8	17.7
	10/07/09	2.2	18.6
	10/14/09	11.7	18.6
	10/19/09	27.5	17.9
	11/10/09	9.5	20.0
	12/07/09	<0.5	18.1
	01/06/10	21.5	20.1
	01/19/10	NM	19.9
	02/12/10	<5.0	20.9
	02/23/10	35.0	20.9
	02/25/10	<5.0	20.9
	03/03/10	55.0	20.9
	03/05/10	<5.0	20.3
	03/22/10	NM	19.8
	03/23/10	NM	20.6
03/24/10	NM	20.5	
03/28/10	NM	19.5	
PMW-3-M	06/15/09	<1.7	1.6
	09/03/09	<0.9	12.0
	09/30/09	16.2	18.9
	10/07/09	<0.5	19.2
	10/15/09	<0.5	19.5
	10/19/09	25.4	18.9
	11/10/09	7.9	20.2
	12/07/09	<0.5	17.6
	01/06/10	5.8	20.8
	01/19/10	NM	19.8
	02/12/10	<5.0	20.9
	02/23/10	<5.0	20.9
	02/25/10	<5.0	20.9
	03/03/10	35.0	20.9
	03/05/10	<5.0	20.0
	03/22/10	NM	20.1
	03/23/10	NM	20.6
03/24/10	NM	20.7	
03/28/10	NM	19.4	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-3-ML	06/15/09	320,851.6	<0.1
	09/03/09	154,760.3	<0.1
	09/30/09	39,665.8	14.5
	10/07/09	30,715.0	16.1
	10/13/09	6,644.0	17.8
	10/19/09	14,353.0	17.9
	10/27/09	55,869.9	10.1
	11/04/09	NM	12.7
	11/13/09	9,859.0	18.7
	11/20/09	NM	18.0
	12/08/09	15,384.0	18.1
	01/06/10	8,752.0	19.8
	01/19/10	NM	4.4
	02/11/10	7,450.0	19.7
	02/16/10	NM	19.4
	02/17/10	NM	17.9
	02/23/10	2,800.0	19.2
	02/25/10	2,950.0	20.4
	03/03/10	1,750.0	19.7
	03/05/10	1,650.0	19.2
	03/22/10	NM	19.1
	03/23/10	NM	19.5
	03/24/10	NM	17.7
	03/25/10	NM	16.2
	03/26/10	NM	14.8
	03/27/10	NM	14.0
	03/28/10	NM	12.2
	PMW-4-U	06/15/09	3,235.4
09/04/09		<0.9	12.7
09/24/09		17.5	15.2
09/30/09		<0.5	15.9
10/06/09		<0.5	17.0
10/12/09		<0.5	17.5
10/20/09		6.3	17.4
11/10/09		13.8	18.6
12/04/09		43.0	16.4
01/05/10		7.9	19.6
01/19/10		NM	19.5
02/10/10		<5.0	20.9
03/01/10		15.0	20.9
03/10/10		<5.0	20.3
03/12/10		<5.0	20.2
03/22/10		NM	20.5
03/23/10		NM	20.9
03/24/10	NM	20.7	
03/28/10	NM	19.5	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-4-M	06/15/09	32,285.4	<0.1
	09/04/09	<1.1	8.3
	09/24/09	16.9	13.6
	09/30/09	<0.5	15.0
	10/06/09	<0.5	16.2
	10/12/09	<0.5	17.2
	10/20/09	<0.5	18.6
	11/10/09	<0.5	18.9
	12/04/09	75.7	15.1
	01/05/10	<0.5	19.2
	01/19/10	NM	18.3
	02/10/10	<5.0	20.9
	03/01/10	50.0	20.9
	03/10/10	<5.0	20.1
	03/12/10	<5.0	20.1
	03/22/10	NM	20.9
	03/23/10	NM	20.9
	03/24/10	NM	20.6
	03/25/10	NM	20.3
	03/26/10	NM	20.2
03/28/10	NM	19.0	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-4-ML	06/15/09	119,422.8	<0.1
	09/15/09	55,378.9	0.3
	09/24/09	50,320.9	<0.1
	09/30/09	26,932.3	<0.1
	10/06/09	11,073.9	<0.1
	10/12/09	16,242.7	1.5
	10/20/09	7,569.8	1.7
	10/27/09	7,945.6	<0.1
	11/04/09	NM	0.3
	11/05/09	NM	0.8
	11/06/09	6,791.0	<0.1
	11/12/09	3,441.1	4.5
	11/17/09	2,403.6	4.1
	11/24/09	4,397.0	1.6
	11/30/09	5,511.0	4.2
	12/08/09	2,933.6	9.8
	12/16/09	5,319.0	7.4
	12/21/09	6,810.1	7.6
	12/29/09	6,323.5	7.5
	01/04/10	3,187.5	4.4
	01/11/10	3,659.6	3.6
	01/19/10	NM	<0.1
	01/20/10	6,115.2	<0.1
	01/27/10	7,548.0	<0.1
	02/04/10	616.4	9.6
	02/08/10	4.3	16.9
	02/15/10	2,254.3	11.5
	02/16/10	NM	9.3
	02/17/10	NM	7.1
	02/23/10	<5.0	8.8
	03/01/10	1,281.3	8.6
	03/10/10	1,620.0	8.9
	03/12/10	500.0	10.2
	03/15/10	<6.1	8.6
	03/22/10	NM	13.7
	03/23/10	NM	12.7
03/24/10	NM	8.8	
03/25/10	NM	7.0	
03/26/10	NM	4.9	
03/28/10	NM	1.1	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-5-U	06/11/09	<2.2	0.7
	09/05/09	1.4	4.5
	09/24/09	11.9	8.4
	09/29/09	<1.1	8.7
	10/07/09	<0.8	12.2
	10/18/09	<0.5	12.1
	10/20/09	59.8	16.4
	11/10/09	<0.5	17.6
	12/04/09	<0.5	16.7
	01/05/10	<0.5	19.4
	01/19/10	NM	19.8
	02/05/10	<5.0	20.4
	02/23/10	140.0	20.9
	02/25/10	<5.0	20.9
	03/03/10	<5.0	20.2
	03/05/10	<5.0	20.6
	03/22/10	NM	20.2
	03/23/10	NM	20.3
	03/24/10	NM	20.7
	03/25/10	NM	19.0
03/28/10	NM	20.2	
PMW-5-M	06/11/09	10,343.7	<0.1
	09/05/09	<1.6	3.8
	09/24/09	17.4	9.5
	09/29/09	<0.9	10.4
	10/07/09	<0.7	14.0
	10/18/09	<0.5	14.2
	10/20/09	37.6	18.1
	11/10/09	<0.5	18.5
	12/04/09	12.0	16.4
	01/05/10	<0.5	19.9
	01/19/10	NM	19.7
	02/05/10	30.0	20.8
	02/23/10	70.0	20.9
	02/25/10	<5.0	20.9
	03/03/10	<5.0	20.7
	03/05/10	<5.0	20.9
	03/22/10	NM	20.3
	03/23/10	NM	20.2
	03/24/10	NM	20.4
	03/25/10	NM	19.2
03/28/10	NM	20.2	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-5-ML	06/15/09	594,134.7	<0.1
	09/15/09	819,850.0	1.9
	09/24/09	197,172.3	8.7
	09/29/09	232,813.2	<0.1
	10/07/09	348,802.4	1.8
	10/12/09	>231,395.3	1.0
	10/16/09	96,671.3	<0.1
	10/20/09	314,329.6	<0.1
	10/27/09	292,350.9	<0.1
	11/04/09	NM	0.2
	11/05/09	88,469.3	<0.1
	11/06/09	NM	<0.1
	11/13/09	116,642.1	4.8
	11/16/09	128,049.1	0.8
	12/04/09	83,291.1	2.1
	12/22/09	116,626.8	7.9
	12/31/09	96,031.8	7.9
	01/04/10	65,565.0	6.8
	01/11/10	103,991.2	6.0
	01/19/10	NM	3.4
	01/20/10	92,732.9	3.1
	01/27/10	124,339.5	1.9
	02/04/10	45,402.3	5.1
	02/08/10	82,578.5	6.6
	02/16/10	78,256.0	7.5
	02/17/10	NM	6.3
	02/23/10	24,500.0	7.3
	02/25/10	17,000.0	14.1
	03/03/10	26,328.6	5.7
	03/05/10	26,290.2	5.8
	03/10/10	25,819.2	7.2
	03/15/10	15,176.5	6.5
	03/22/10	16,453.6	8.4
	03/23/10	NM	7.3
	03/24/10	NM	6.9
	03/25/10	NM	9.1
03/26/10	NM	7.4	
03/27/10	NM	6.0	
03/28/10	NM	5.8	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-6-U	06/10/09	31,514.4	<0.1
	08/07/09	28.5	12.7
	08/12/09	11.3	15.7
	08/19/09	<0.5	17.2
	08/25/09	<0.5	17.5
	09/02/09	4.3	15.7
	09/09/09	<0.5	18.0
	10/15/09	<0.5	19.4
	11/10/09	6.7	19.4
	12/07/09	116.2	20.7
	01/05/10	<0.5	20.1
	01/19/10	NM	20.0
	02/11/10	<5.0	20.9
	02/23/10	<5.0	20.9
	02/25/10	<5.0	20.9
	03/03/10	<5.0	20.9
	03/05/10	<5.0	20.9
	03/22/10	NM	20.1
	03/23/10	NM	20.6
	03/24/10	NM	20.3
03/28/10	NM	20.5	
PMW-6-M	06/10/09	69,194.7	<0.1
	08/07/09	36.0	10.7
	08/12/09	7.6	15.1
	08/19/09	<0.5	16.6
	08/25/09	<0.5	16.6
	09/02/09	8.4	15.3
	09/09/09	<0.5	17.6
	10/15/09	<0.5	19.6
	11/10/09	7.2	19.4
	12/07/09	43.6	20.7
	01/05/10	<0.5	20.1
	01/19/10	NM	19.7
	02/11/10	<5.0	20.9
	02/23/10	<5.0	20.9
	02/25/10	<5.0	20.9
	03/03/10	<5.0	20.9
	03/05/10	<5.0	20.9
	03/22/10	NM	20.1
	03/23/10	NM	20.6
	03/24/10	NM	20.2
03/28/10	NM	20.3	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-6-ML	06/15/09	424,569.6	<0.1
	08/07/09	63,831.8	9.7
	08/12/09	21,617.7	12.8
	08/19/09	503,041.0	2.1
	08/25/09	583,434.8	1.0
	09/02/09	436,529.6	<0.1
	09/09/09	729,594.7	<0.1
	09/14/09	505,337.1	0.5
	09/24/09	218,907.1	1.9
	09/29/09	116,292.1	<0.1
	10/07/09	46,880.4	2.4
	10/12/09	18,000.6	4.8
	10/19/09	24,317.5	8.5
	10/26/09	23,656.2	5.6
	11/04/09	NM	6.6
	11/05/09	38,665.3	4.6
	11/13/09	49,002.0	15.0
	11/16/09	17,782.5	13.7
	11/20/09	NM	15.9
	11/24/09	23,283.1	11.2
	11/30/09	36,635.5	7.7
	12/07/09	23,301.0	16.5
	12/16/09	13,643.0	18.8
	12/21/09	8,466.0	19.4
	12/30/09	9,423.0	19.1
	01/04/10	18,069.0	18.1
	01/11/10	35,461.0	16.7
	01/19/10	NM	10.3
	02/12/10	11,250.0	18.9
	02/16/10	NM	17.5
	02/17/10	NM	16.5
	02/23/10	5,600.0	17.3
	02/25/10	4,750.0	18.6
	03/03/10	5,450.0	16.0
	03/05/10	6,200.0	15.2
03/22/10	NM	17.9	
03/23/10	NM	17.4	
03/24/10	NM	15.9	
03/25/10	NM	15.8	
03/26/10	NM	14.7	
03/27/10	NM	14.4	
03/28/10	NM	14.0	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-7-U	06/11/09	<1.0	12.4
	08/13/09	<0.5	16.5
	08/19/09	<0.5	17.3
	08/25/09	<0.5	17.2
	09/03/09	<0.5	16.1
	09/09/09	<0.5	17.1
	10/15/09	<0.5	18.9
	11/10/09	9.5	19.1
	12/01/09	30.2	19.9
	01/05/10	14.7	20.2
	01/19/10	NM	20.6
	02/08/10	<5.0	20.8
	03/01/10	<5.0	20.9
	03/22/10	NM	20.4
	03/23/10	NM	20.5
	03/24/10	NM	20.3
03/28/10	NM	20.1	
PMW-7-M	06/11/09	<0.9	10.9
	08/13/09	<0.7	13.9
	08/19/09	10.3	15.5
	08/25/09	<0.5	16.1
	09/03/09	<0.5	14.6
	09/09/09	<0.5	16.8
	10/15/09	<0.5	19.1
	11/10/09	6.5	18.9
	12/01/09	25.7	19.7
	01/05/10	17.9	20.1
	01/19/10	NM	20.5
	02/08/10	<5.0	20.6
	03/01/10	<5.0	20.7
	03/22/10	NM	20.0
	03/23/10	NM	20.3
	03/24/10	NM	20.1
03/28/10	NM	20.1	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
 Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-7-ML	06/11/09	76,553.7	<0.1
	08/13/09	275.2	19.7
	08/19/09	8,806.6	2.4
	08/25/09	1,259.0	18.1
	09/04/09	996.8	4.7
	09/09/09	3,068.0	3.1
	09/15/09	780.0	5.3
	09/24/09	804.4	6.4
	09/29/09	80.6	7.7
	10/07/09	165.8	12.8
	10/16/09	171.5	11.5
	10/20/09	122.4	13.6
	10/26/09	249.3	11.0
	11/04/09	NM	12.0
	11/05/09	42.4	9.5
	11/13/09	60.4	15.0
	11/16/09	167.6	15.4
	11/20/09	NM	17.2
	11/24/09	216.9	15.7
	11/30/09	275.2	14.4
	12/08/09	84.7	17.4
	12/16/09	260.3	17.1
	12/21/09	112.3	17.4
	12/30/09	311.1	17.5
	01/04/10	306.9	13.9
	01/19/10	NM	10.8
	02/08/10	<5.0	15.9
	02/16/10	NM	16.2
	02/17/10	NM	15.4
	03/01/10	<5.0	14.7
	03/22/10	NM	16.1
	03/23/10	NM	16.1
	03/24/10	NM	15.7
03/25/10	NM	16.2	
03/26/10	NM	16.6	
03/27/10	NM	15.5	
03/28/10	NM	15.8	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-8-U	06/11/09	<0.9	10.5
	06/27/09	<0.5	18.3
	06/30/09	<0.5	20.2
	07/09/09	<0.5	17.8
	07/16/09	<0.5	17.4
	07/23/09	<0.5	17.5
	07/29/09	<0.5	16.2
	08/06/09	<0.5	19.9
	08/13/09	<0.5	20.7
	08/19/09	<0.5	20.2
	09/04/09	<0.5	19.9
	10/16/09	<0.5	18.7
	11/11/09	<0.5	19.1
	12/01/09	<0.5	18.8
	01/06/10	13.4	21.3
	01/20/10	NM	20.7
	02/08/10	<5.0	20.7
	03/01/10	<5.0	20.9
	03/22/10	NM	19.6
	03/23/10	NM	20.3
	03/24/10	NM	20.5
	03/25/10	NM	20.7
	03/26/10	NM	20.9
	03/27/10	NM	20.9
	03/28/10	NM	20.8

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-8-M	06/11/09	6,773.0	<0.1
	06/27/09	<1.1	8.9
	06/30/09	<0.7	13.4
	07/09/09	NM	NM
	07/16/09	<0.5	18.8
	07/23/09	<0.5	15.3
	07/29/09	<0.6	14.5
	08/06/09	<0.5	20.2
	08/13/09	<0.5	20.5
	08/19/09	1.7	20.5
	09/04/09	<0.5	20.1
	10/16/09	<0.5	19.3
	10/20/09	15.3	19.5
	11/11/09	12.3	19.5
	12/01/09	11.2	19.7
	01/06/10	7.9	20.7
	01/20/10	NM	20.6
	02/08/10	<5.0	20.3
	03/01/10	<5.0	20.9
	03/22/10	NM	19.6
	03/23/10	NM	20.3
	03/24/10	NM	20.7
	03/25/10	NM	20.8
	03/26/10	NM	20.9
	03/27/10	NM	20.9
	03/28/10	NM	20.8

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
 Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-8-ML	06/11/09	224,079.3	<0.1
	06/27/09	63,316.9	6.2
	06/30/09	44,293.1	6.1
	07/09/09	46,170.0	1.4
	07/16/09	49,799.9	1.3
	07/23/09	49,087.7	1.4
	07/29/09	43,007.5	6.4
	08/06/09	25,189.8	11.5
	08/13/09	15,802.5	13.9
	08/19/09	15,032.2	12.4
	09/04/09	9,034.0	16.8
	10/20/09	4,488.0	16.5
	10/27/09	8,235.9	9.7
	11/04/09	NM	11.7
	11/13/09	157.8	16.4
	11/20/09	NM	17.3
	12/01/09	4,635.9	7.5
	01/06/10	1,248.0	18.5
	01/20/10	NM	6.5
	02/08/10	1,250.0	17.0
	02/16/10	NM	18.7
	02/17/10	NM	17.1
	03/01/10	110.0	19.1
	03/22/10	NM	19.9
	03/23/10	NM	16.8
	03/24/10	NM	15.4
	03/25/10	NM	14.4
	03/26/10	NM	12.6
	03/27/10	NM	13.6
	03/28/10	NM	12.4

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
 Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-9-U	06/02/09	16,583.5	0.5
	06/09/09	3,202.5	<0.1
	06/17/09	<1.9	0.9
	06/23/09	<1.4	5.4
	06/29/09	<0.7	15.3
	07/09/09	<0.5	15.3
	07/16/09	<0.7	14.7
	07/23/09	<0.5	15.6
	07/29/09	<0.5	15.0
	08/06/09	<0.5	18.5
	08/13/09	3.9	19.4
	08/19/09	<0.5	18.1
	09/14/09	<0.5	19.0
	10/19/09	50.9	19.1
	11/12/09	1.0	19.8
	12/01/09	2.2	20.4
	01/05/10	<0.5	19.3
	01/20/10	NM	20.5
	02/05/10	<5.0	20.8
	03/01/10	<5.0	20.9
	03/22/10	NM	19.1
	03/23/10	NM	20.6
	03/24/10	NM	20.3
	03/25/10	NM	20.5
	03/26/10	NM	20.5
	03/27/10	NM	20.9
	03/28/10	NM	20.3

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-9-M	06/02/09	38,809.3	0.7
	06/09/09	25,977.3	<0.1
	06/17/09	2,760.5	0.9
	06/23/09	<1.3	7.5
	06/29/09	18.2	18.4
	07/09/09	<0.7	13.6
	07/16/09	<0.8	12.4
	07/23/09	<0.7	14.1
	07/29/09	<0.6	14.7
	08/06/09	<0.5	19.7
	08/13/09	4.1	20.0
	08/19/09	<0.5	18.6
	09/14/09	<0.5	19.8
	10/19/09	54.7	19.4
	11/12/09	<0.5	20.0
	12/01/09	5.2	19.0
	01/05/10	<0.5	19.6
	01/20/10	NM	19.7
	02/05/10	<5.0	20.7
	03/01/10	<5.0	20.9
	03/22/10	NM	19.2
	03/23/10	NM	20.7
	03/24/10	NM	20.2
	03/25/10	NM	20.4
	03/26/10	NM	20.3
	03/27/10	NM	20.6
	03/28/10	NM	19.8

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-9-ML	06/02/09	83,643.6	0.9
	06/10/09	119,072.0	<0.1
	06/17/09	74,624.1	2.6
	06/23/09	32,154.4	<0.1
	06/30/09	NM	2.4
	07/09/09	9,965.3	0.4
	07/16/09	13,919.7	0.3
	07/23/09	13,472.0	0.1
	07/29/09	13,980.9	0.2
	08/06/09	5,337.6	4.2
	08/13/09	5,553.2	9.5
	08/19/09	6,181.7	1.2
	08/28/09	<0.5	17.6
	09/04/09	17,007.9	9.1
	09/10/09	2,596.5	5.1
	09/16/09	6,032.7	5.9
	09/23/09	4,660.8	4.2
	09/30/09	5,735.0	5.4
	10/06/09	4,671.0	5.4
	10/13/09	4,277.4	8.0
	10/19/09	3,604.6	9.8
	10/26/09	3,565.4	1.3
	11/04/09	NM	0.6
	11/05/09	NM	1.7
	11/06/09	8,743.3	<0.1
	11/12/09	4,311.6	10.0
	11/17/09	1,494.3	12.1
	11/20/09	NM	7.8
	11/23/09	5,068.0	2.8
	11/30/09	5,117.9	0.6
	12/07/09	5,101.7	3.1
	12/16/09	3,863.8	11.5
	12/21/09	4,085.4	13.7
	12/29/09	4,030.5	11.5
	01/04/10	4,754.4	11.7
	01/11/10	3,824.8	10.2
	01/20/10	NM	1.9
	02/05/10	1,800.0	10.2
	02/16/10	NM	13.8
	02/17/10	NM	10.9
	03/01/10	2,600.0	11.9
	03/22/10	NM	13.5
03/23/10	NM	15.1	
03/24/10	NM	10.8	
03/25/10	NM	9.5	
03/26/10	NM	8.5	
03/27/10	NM	10.9	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
 Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-9-ML	03/28/10	NM	10.1
PMW-10-U	05/22/09	<0.5	5.4
	06/02/09	1.4	5.6
	06/10/09	46.0	6.2
	06/17/09	<1.4	6.3
	06/22/09	<1.3	7.8
	06/30/09	<1.2	10.7
	07/09/09	<0.9	12.0
	07/16/09	<0.9	12.5
	07/23/09	<1.0	12.1
	07/29/09	<1.0	12.3
	08/06/09	<0.5	15.4
	08/13/09	<0.5	16.6
	08/20/09	3.6	17.0
	09/03/09	<0.5	15.6
	10/16/09	<0.5	17.6
	11/11/09	13.3	17.8
	12/01/09	10.7	17.9
	01/05/10	2.5	18.7
	01/20/10	NM	19.0
	02/10/10	<5.0	20.9
	03/01/10	10.0	20.4
	03/22/10	NM	18.4
	03/23/10	NM	20.0
	03/24/10	NM	19.0
	03/25/10	NM	18.8
	03/26/10	NM	19.5
	03/27/10	NM	19.6
	03/28/10	NM	19.3

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
 Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-10-M	05/22/09	<0.5	4.5
	06/02/09	1.5	4.8
	06/10/09	<2.3	4.6
	06/17/09	<1.6	4.9
	06/22/09	<1.7	5.3
	06/30/09	NM	12.2
	07/09/09	<1.0	9.9
	07/16/09	<1.0	10.8
	07/23/09	<1.0	10.1
	07/29/09	<1.2	9.5
	08/06/09	<0.5	12.4
	08/13/09	7.3	14.1
	08/20/09	13.9	15.3
	09/03/09	0.7	14.2
	10/20/09	141.9	13.9
	11/11/09	26.3	13.2
	12/01/09	<0.7	14.0
	01/05/10	<0.5	16.0
	01/20/10	NM	16.3
	02/05/10	45.0	14.9
	03/01/10	<5.0	17.2
	03/22/10	NM	12.7
	03/23/10	NM	15.9
	03/24/10	NM	14.1
	03/25/10	NM	14.1
	03/26/10	NM	14.3
	03/27/10	NM	16.1
	03/28/10	NM	15.9

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-10-L	05/22/09	<0.5	0.3
	06/02/09	222.6	1.1
	06/10/09	<2.3	6.0
	06/17/09	<1.8	1.2
	06/22/09	<1.8	0.9
	06/30/09	<2.1	2.3
	07/09/09	<1.9	2.0
	07/16/09	<1.9	2.5
	07/23/09	<2.2	1.7
	07/29/09	<2.3	1.5
	08/06/09	<0.5	5.2
	08/13/09	<1.5	3.9
	08/20/09	15.4	4.4
	08/28/09	419.3	3.6
	09/04/09	<1.5	4.2
	09/10/09	<1.4	5.3
	09/15/09	49.5	4.7
	09/23/09	43.8	3.7
	09/30/09	4.3	4.2
	10/06/09	248.1	4.0
	10/16/09	236.1	4.1
	10/19/09	133.8	4.8
	10/26/09	195.0	4.2
	11/04/09	NM	5.2
	11/06/09	325.8	3.2
	11/12/09	58.2	5.3
	11/17/09	25.0	5.4
	11/20/09	NM	5.5
	11/23/09	<1.4	4.7
	11/30/09	58.9	4.5
	12/07/09	135.7	5.7
	12/16/09	<1.3	6.2
	12/21/09	37.4	6.5
	12/29/09	<1.3	6.0
	01/04/10	266.1	5.1
	01/11/10	15.1	5.2
01/20/10	<1.5	4.8	
01/27/10	115.2	8.0	
02/04/10	195.3	6.9	
02/08/10	<1.4	5.2	
02/16/10	16.7	4.9	
02/22/10	31.4	5.2	
03/01/10	<7.9	4.6	
03/10/10	NM	4.6	
03/16/10	<9.5	3.5	
03/22/10	<7.6	5.2	
03/28/10	NM	8.5	

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
PMW-11-U	12/01/09	23,741.0	<0.1
PMW-11-M	12/02/09	5,902.0	4.6
PMW-11-L	12/02/09	146,041.2	<0.1
PMW-12-U	12/02/09	<0.5	16.1
PMW-12-M	12/02/09	<0.5	15.1
PMW-12-L	12/02/09	<1.4	5.6
PMW-13-U	12/02/09	445.5	16.1
PMW-13-M	12/02/09	1,310.8	14.5
PMW-13-L	12/02/09	27,040.0	<0.1
PMW-14-M	02/11/10	<5.0	18.7
PMW-14-ML	02/11/10	12,432.6	1.1
PMW-15-U	02/08/10	<5.0	19.2
PMW-15-M	02/08/10	<5.0	18.9
PMW-15-ML	02/08/10	<5.0	12.1
P-24-U	06/01/09	51,048.3	<0.1
	12/01/09	<1.5	6.2
	02/11/10	<5.0	13.4
P-24-M	06/01/09	80,903.2	<0.1
	12/01/09	218,616.0	<0.1
	02/11/10	212,727.3	<0.1
P-24-L	06/01/09	NM	NM
	12/01/09	96.0	<0.1
	02/11/10	37,300.0	14.5
P-25-U	06/02/09	<1.7	8.5
	12/01/09	<0.5	16.9
	02/09/10	<5.0	17.8
P-25-M	06/02/09	<1.4	8.0
	12/01/09	<0.8	12.3
	02/09/10	<5.0	14.0
P-25-L	06/02/09	NM	NM
	12/01/09	<1.9	10.8
	02/09/10	<5.0	16.1
P-26-U	06/01/09	230,620.7	<0.1
	12/01/09	80,986.3	<0.1
	02/09/10	83,200.0	<0.1
P-26-M	06/01/09	176,080.4	<0.1
	12/01/09	52,435.5	<0.1
	02/09/10	43,034.5	<0.1
P-26-L	06/01/09	NM	NM
	12/01/09	49,845.1	<0.1
	02/09/10	66,717.0	<0.1
P-30-U	06/19/09	<0.7	13.2
	09/12/09	<0.5	16.8
	11/19/09	11.1	20.2
	02/11/10	<5.0	20.9

TABLE F-1

Total Petroleum Hydrocarbons and Oxygen Concentrations for Soil Vapor Monitoring Wells
Honeywell 34th Street Facility, Phoenix, Arizona

Location ID	Date	TPH Concentration (ppm)	Oxygen Concentration (%)
P-30-M	06/19/09	43,820.1	<0.1
	09/12/09	3,222.0	3.0
	11/19/09	3,585.8	14.9
	02/11/10	720.0	17.2
P-30-L	06/19/09	27,798.8	<0.1
	09/12/09	287.4	3.3
	11/19/09	82.3	16.0
	02/11/10	<5.0	17.8

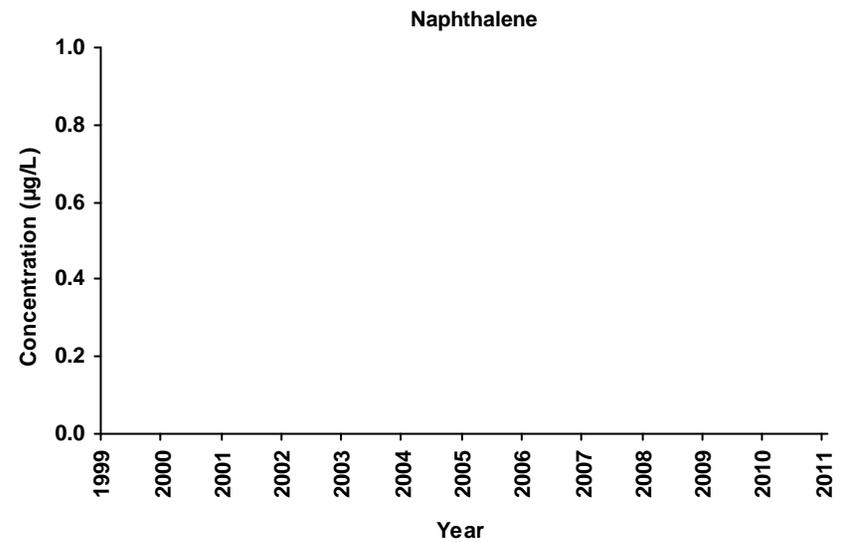
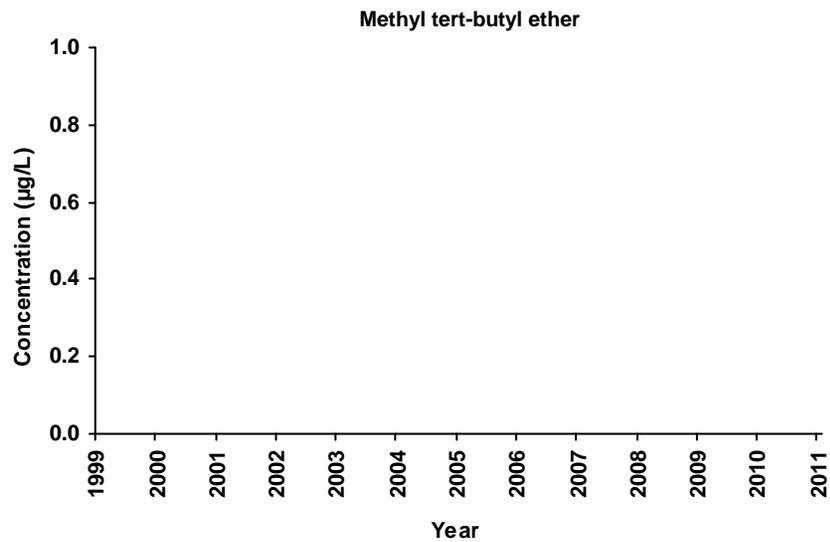
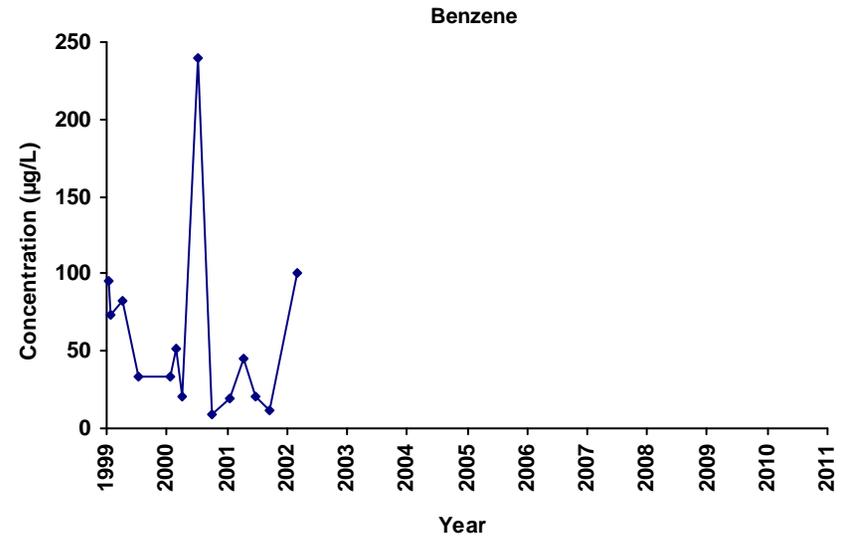
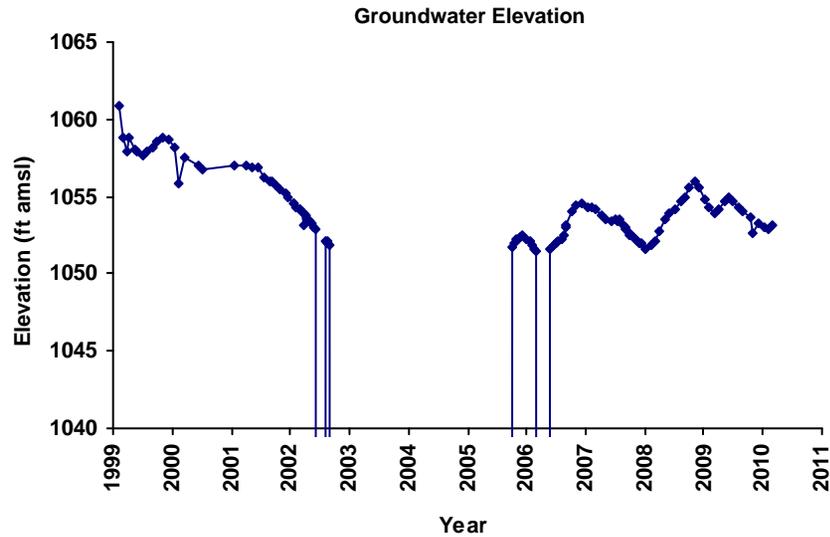
% = percent

TPH = Total Petroleum Hydrocarbon

ppm = parts per million

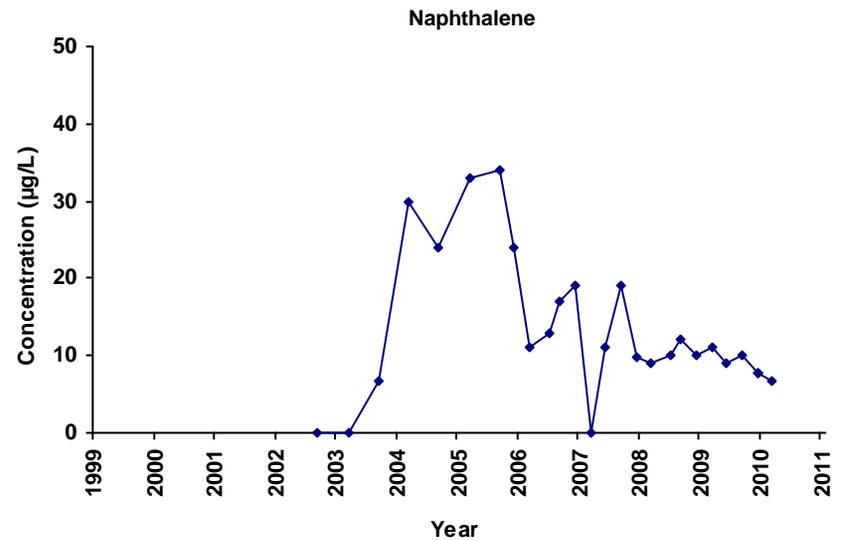
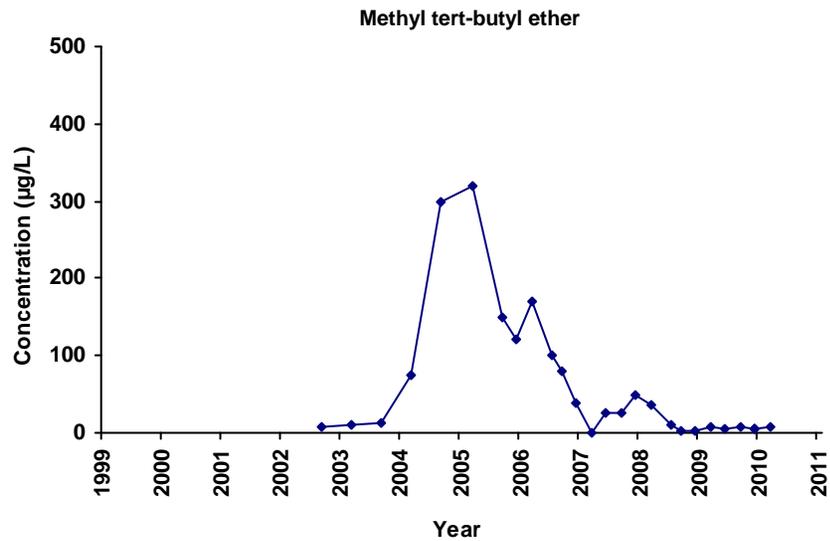
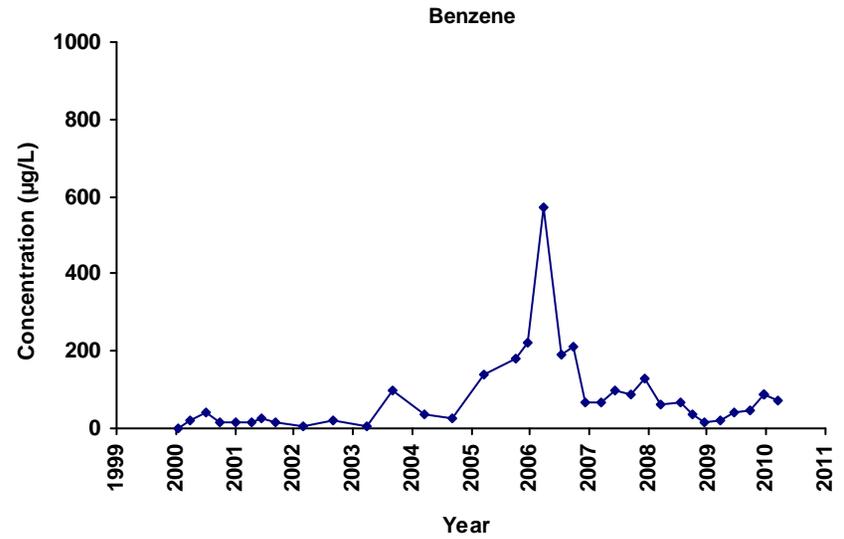
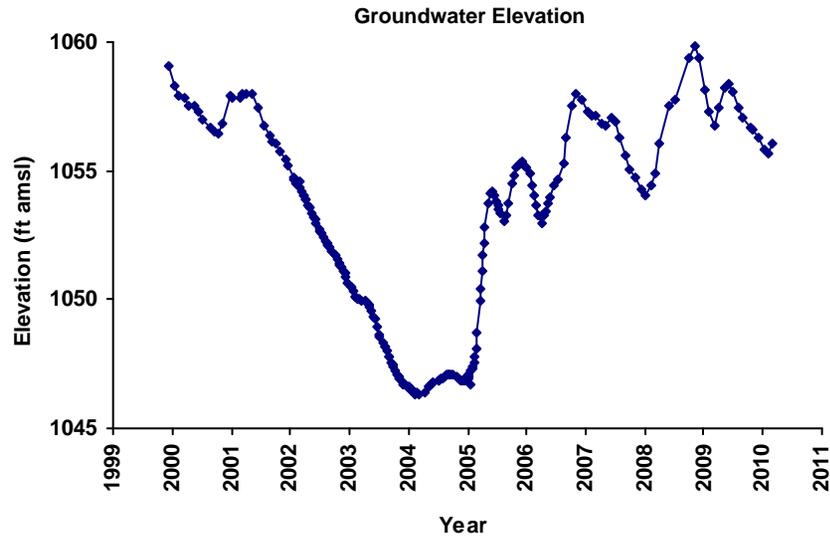
NM = not measured

Appendix G
Water Level and Water Quality Hydrographs



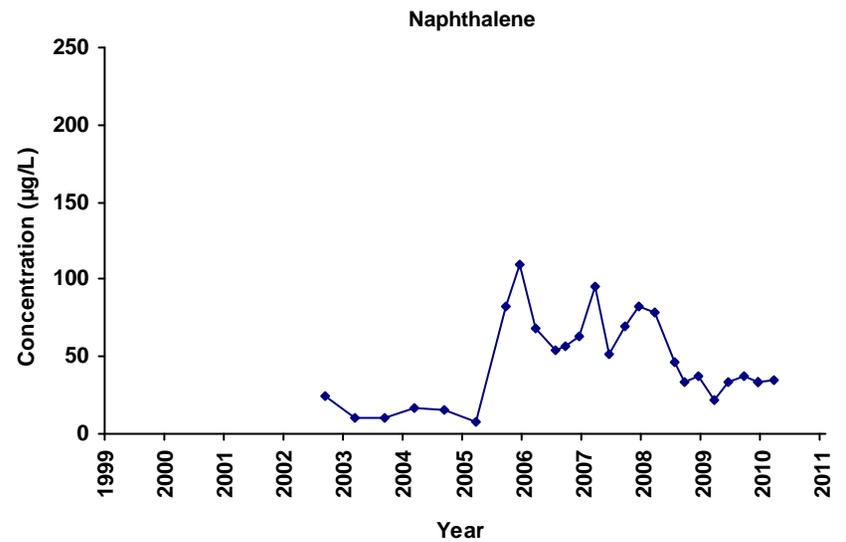
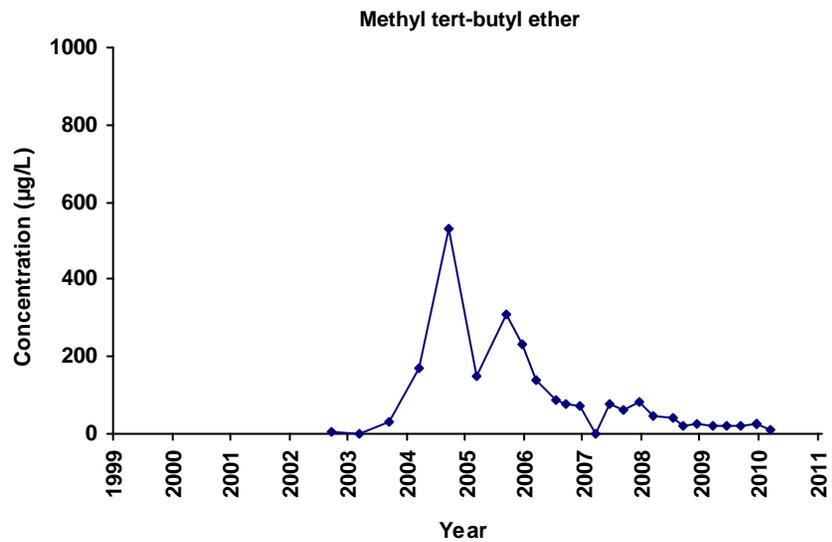
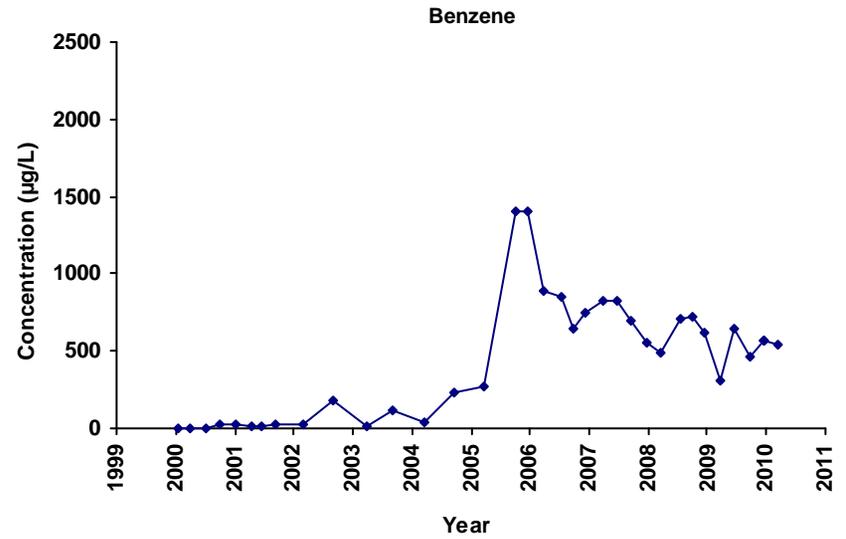
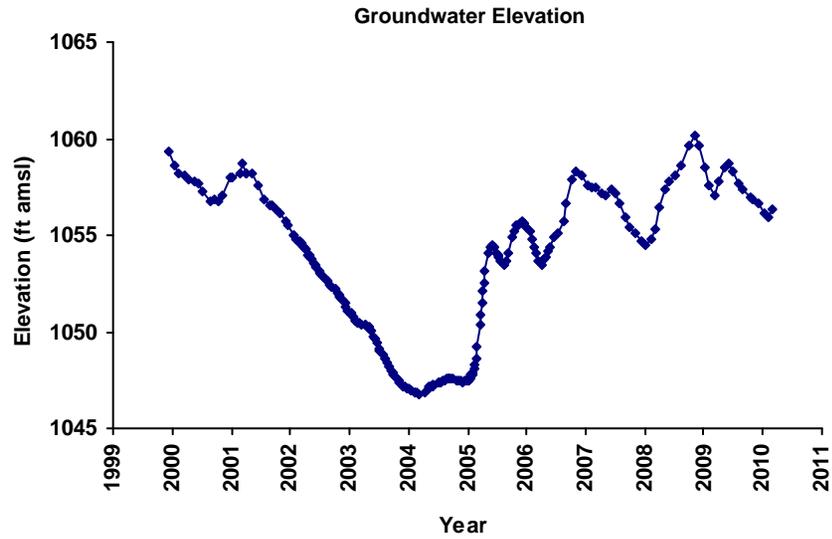
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-1
 ASE-19A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



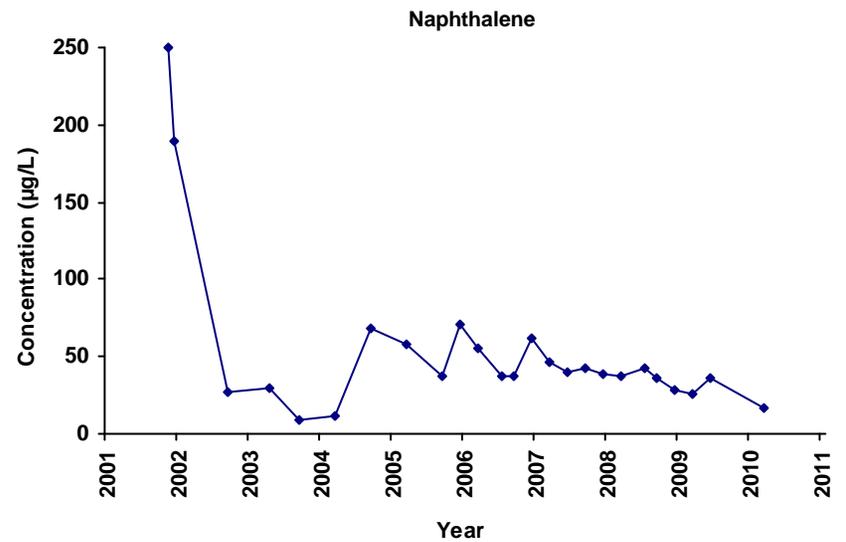
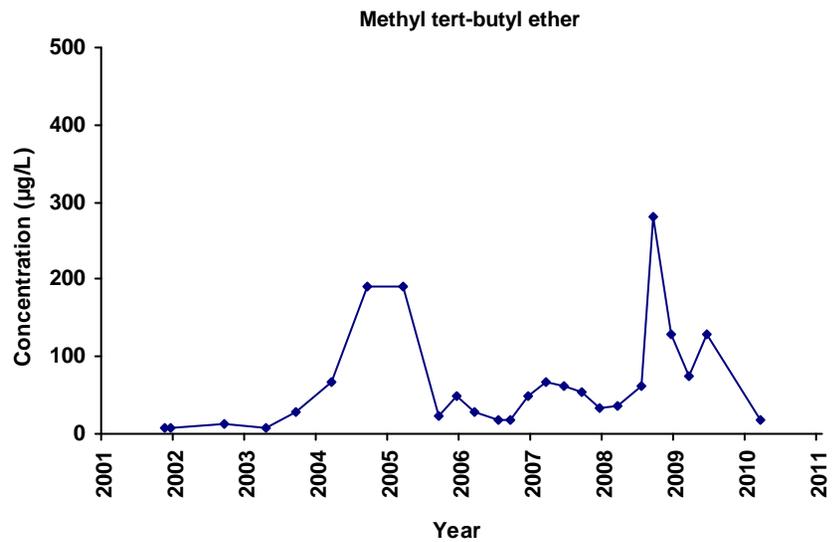
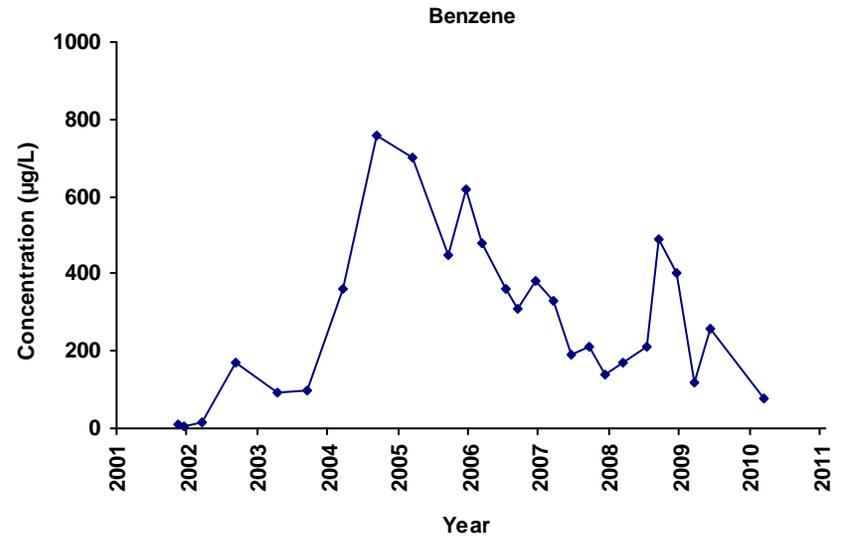
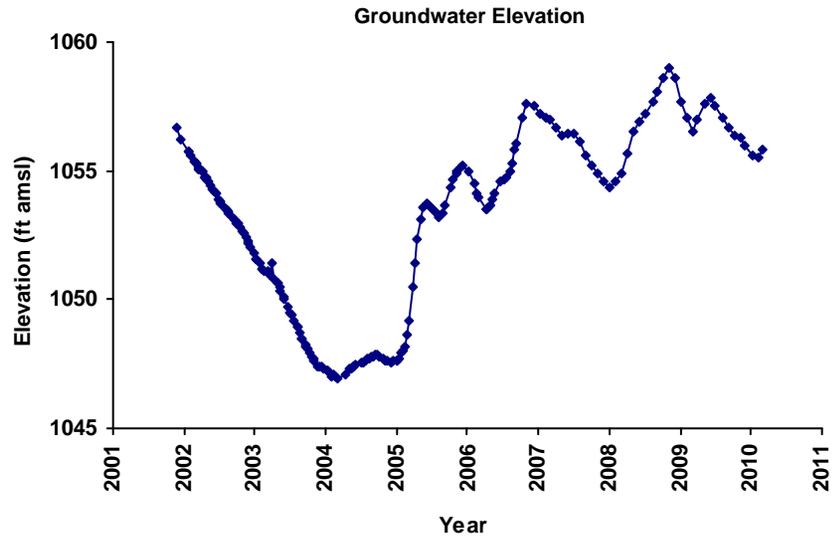
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-2
 ASE-37A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



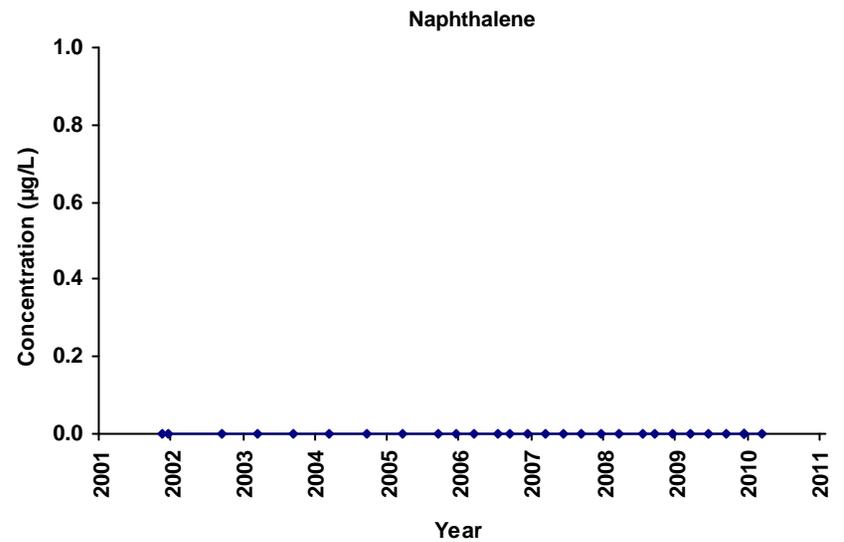
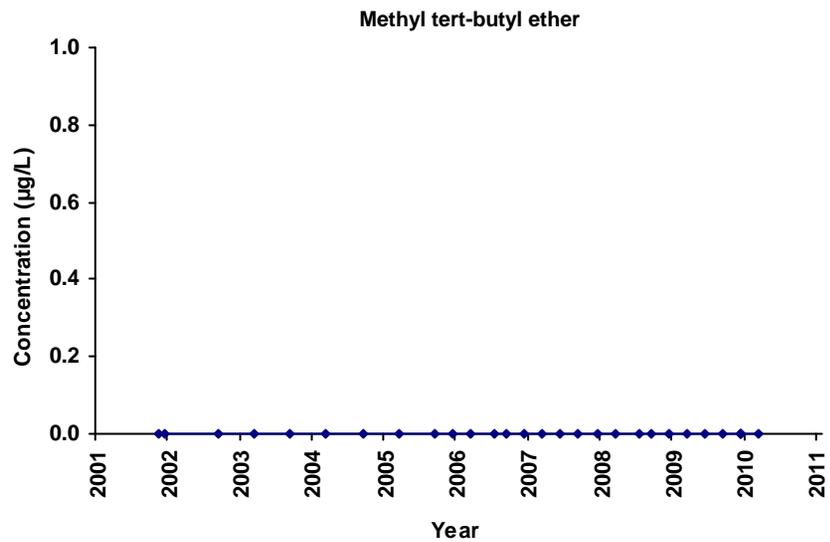
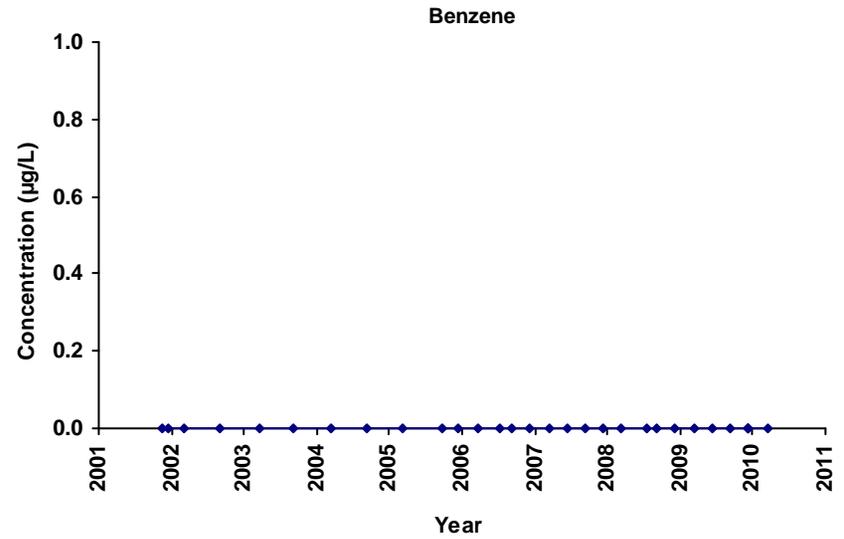
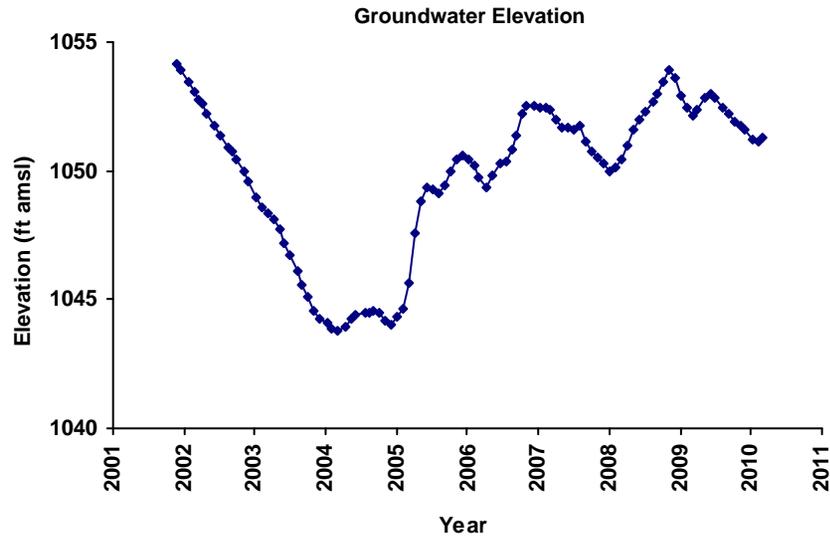
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-3
 ASE-38A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



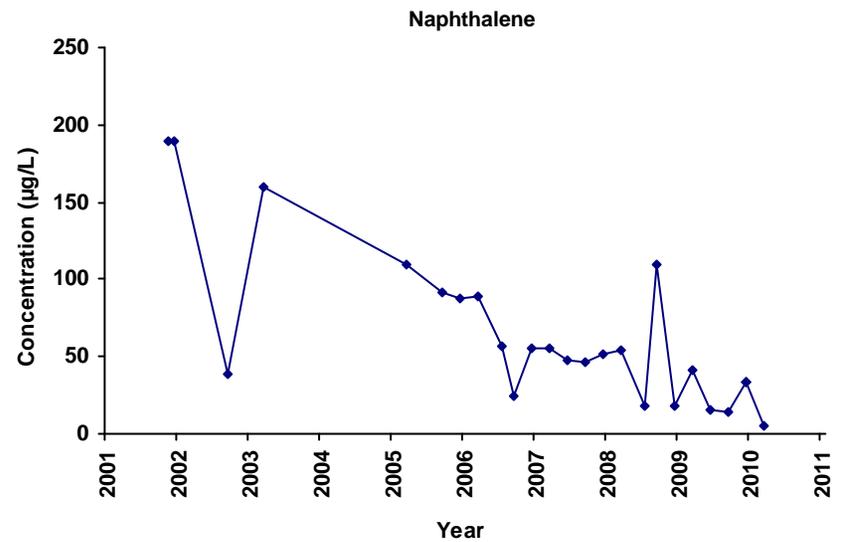
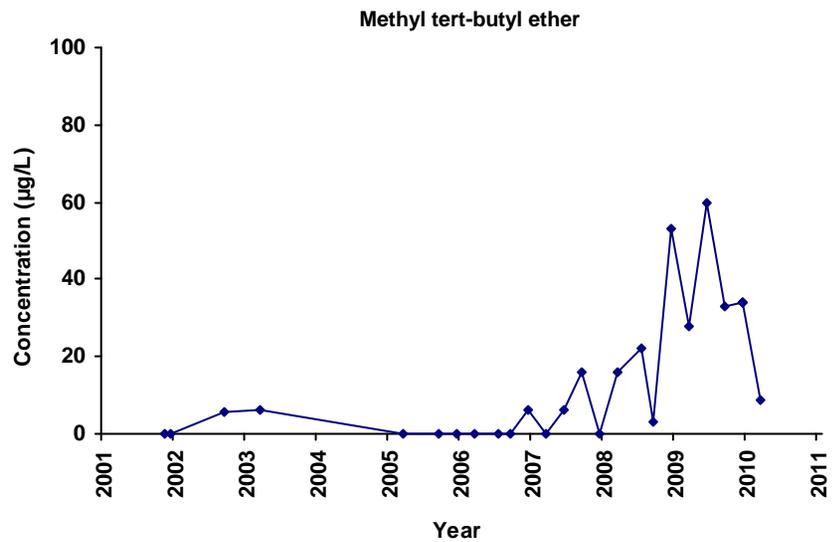
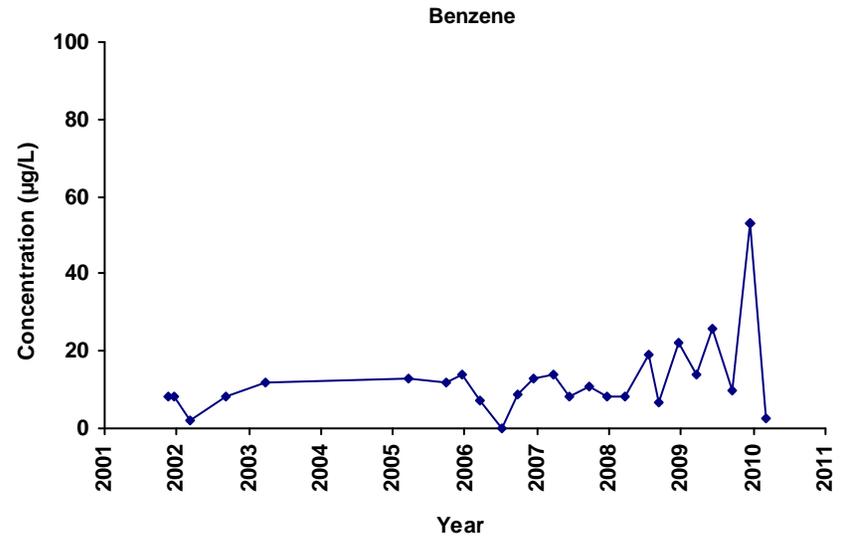
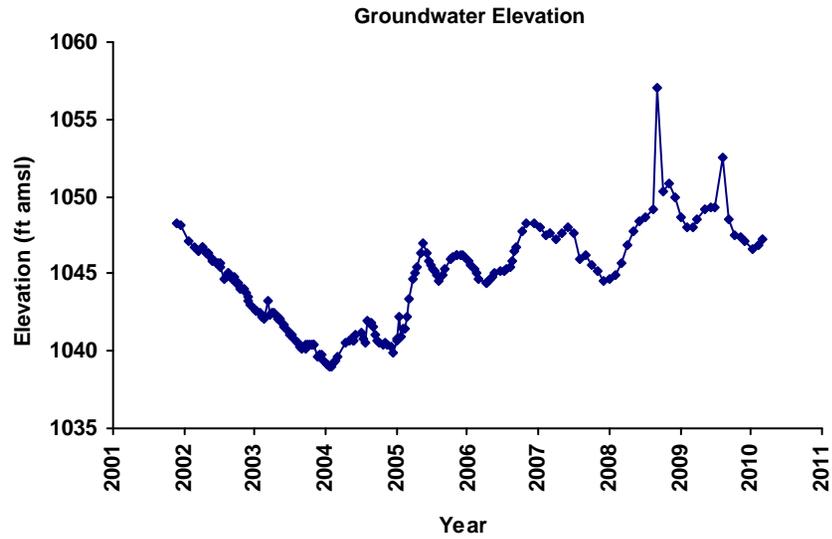
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-4
 ASE-52A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



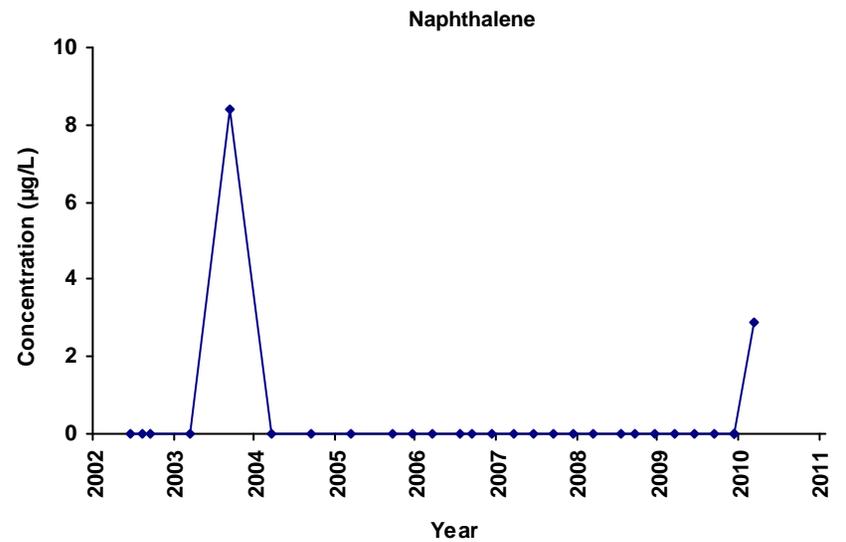
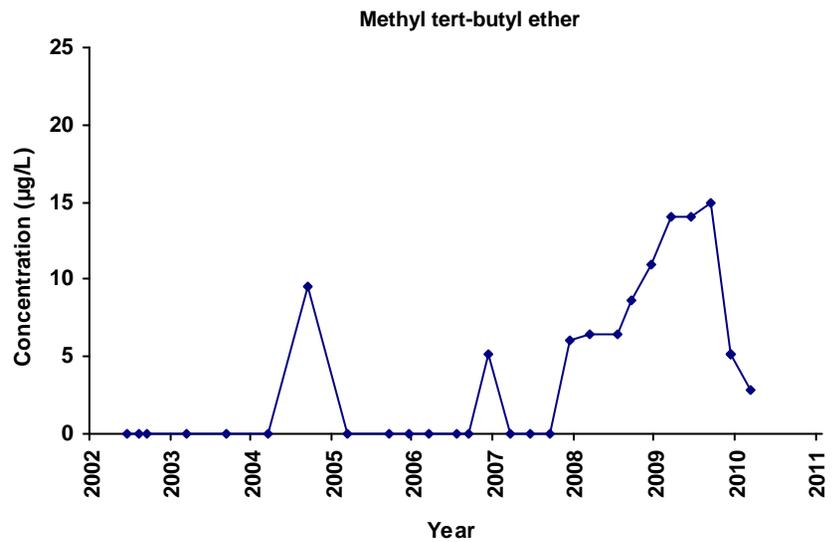
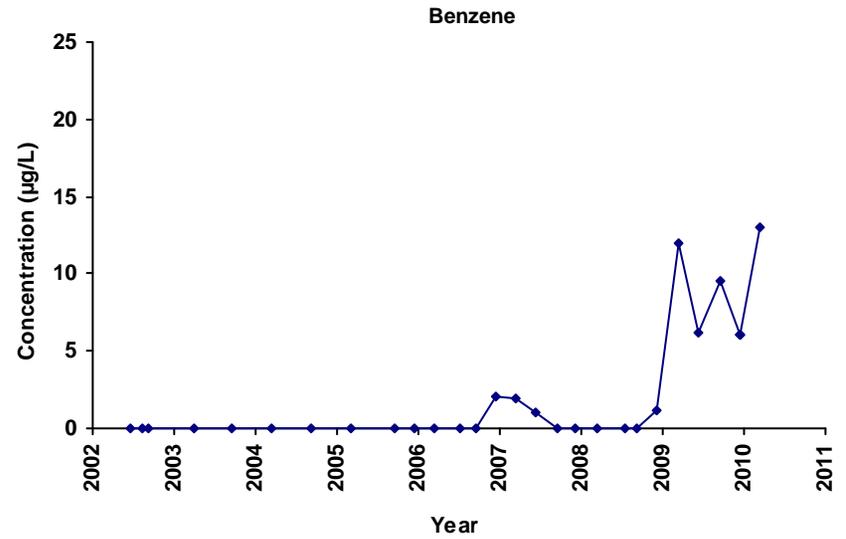
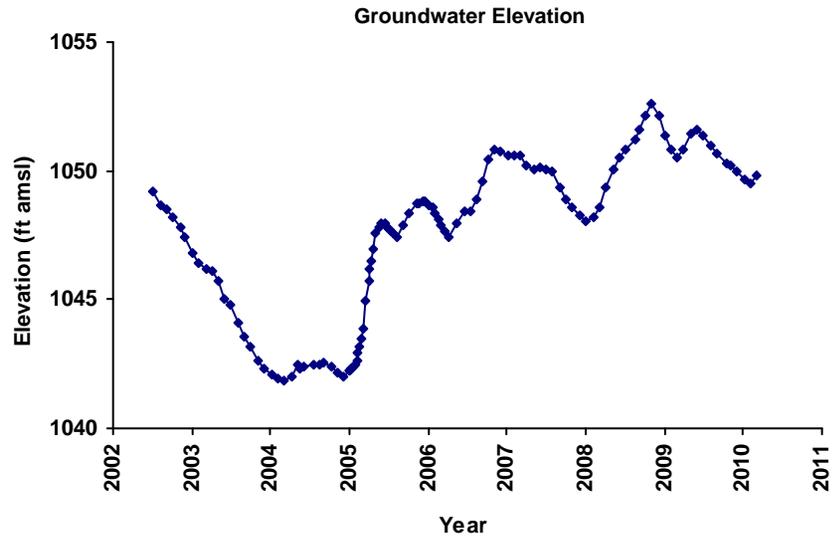
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-5
 ASE-54A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



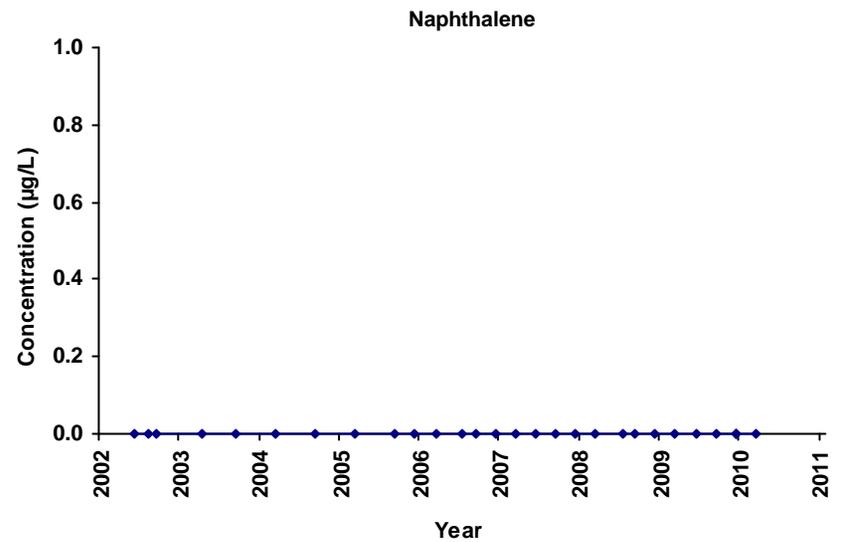
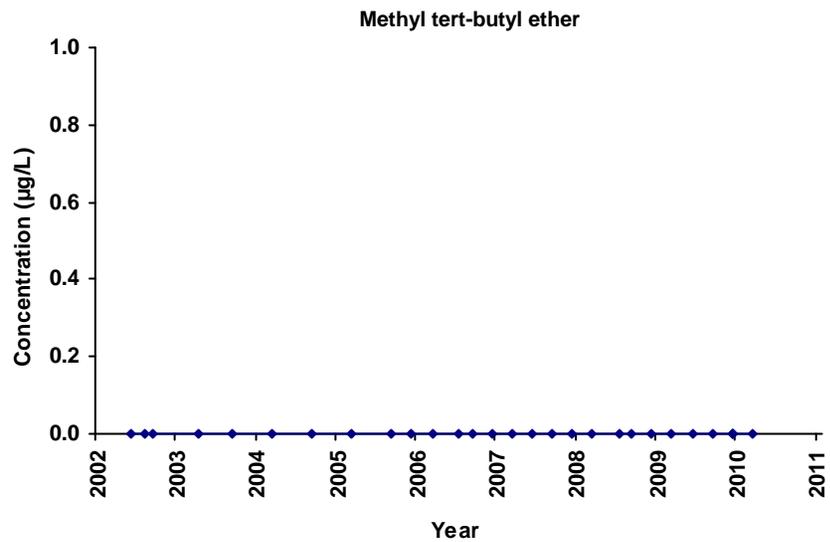
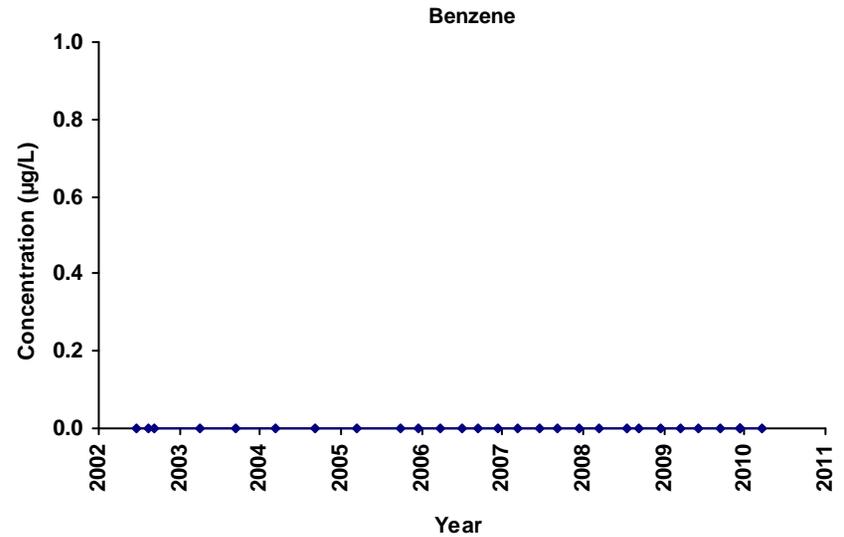
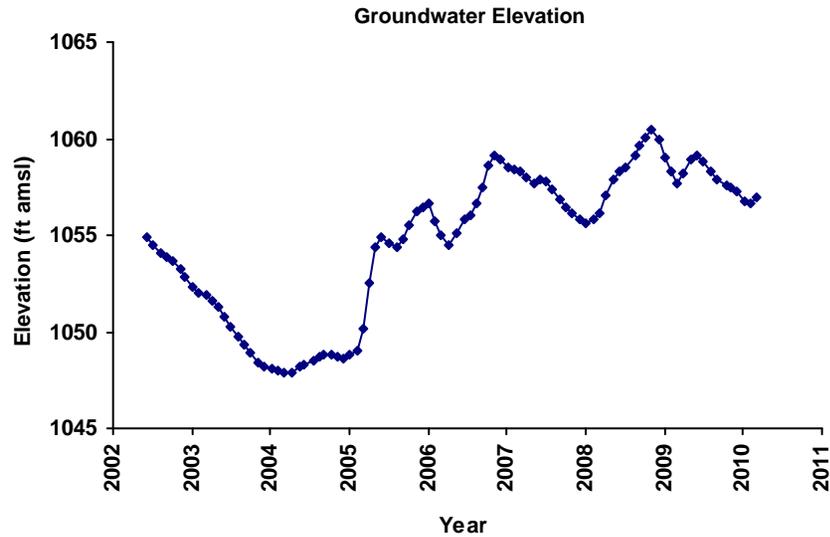
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-6
 ASE-55A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



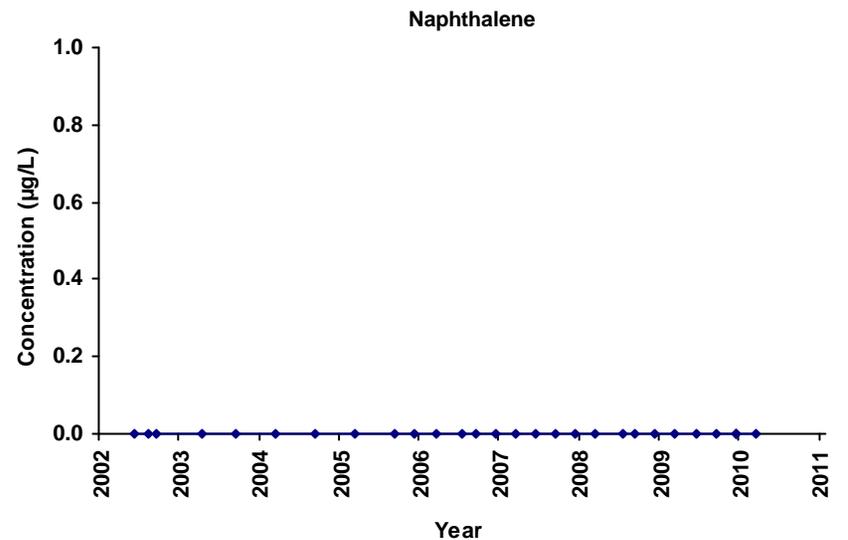
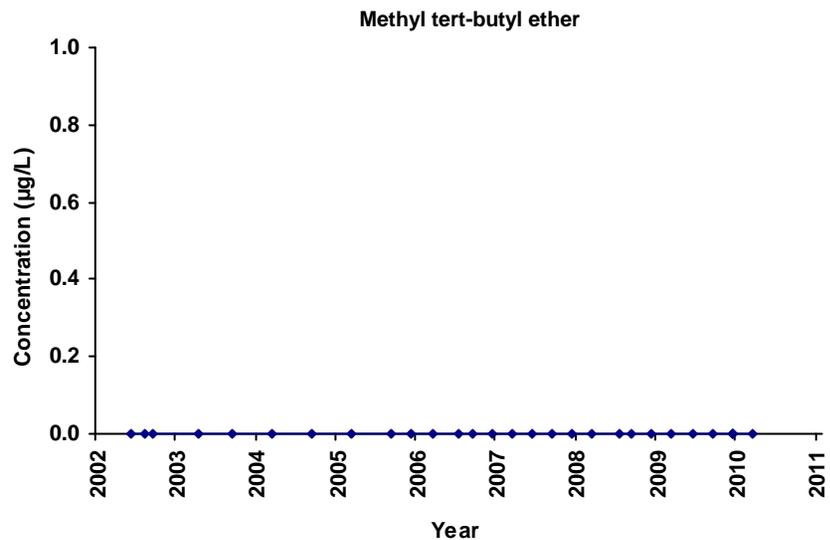
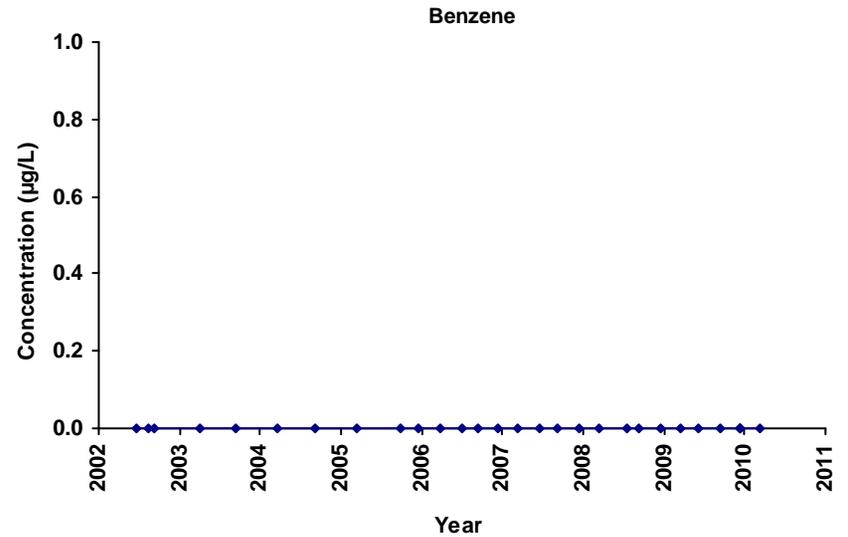
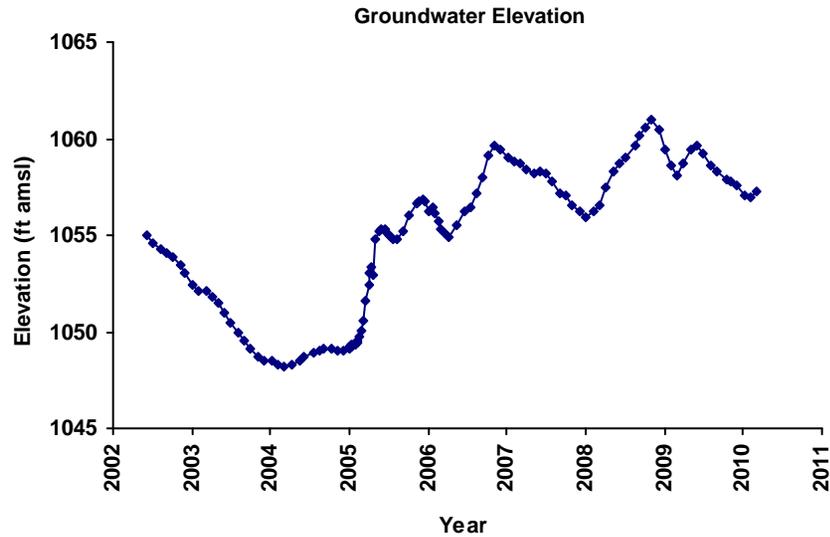
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-7
 ASE-58A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



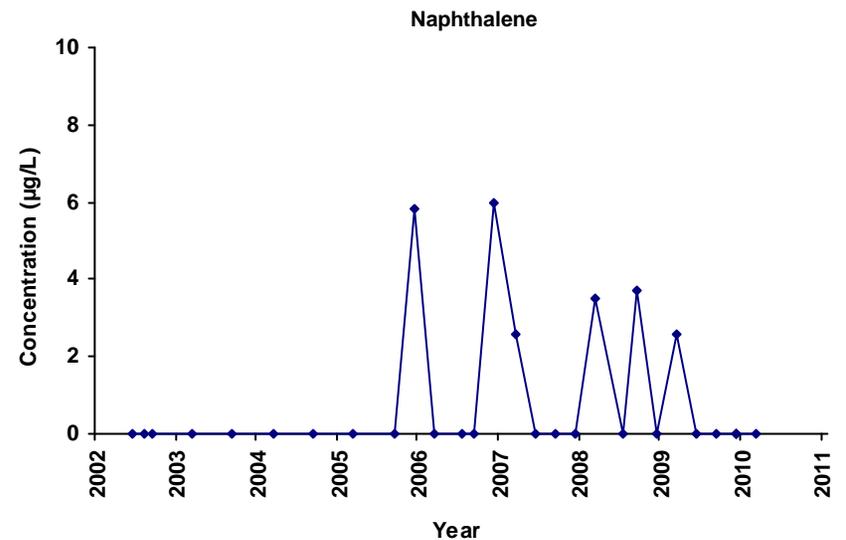
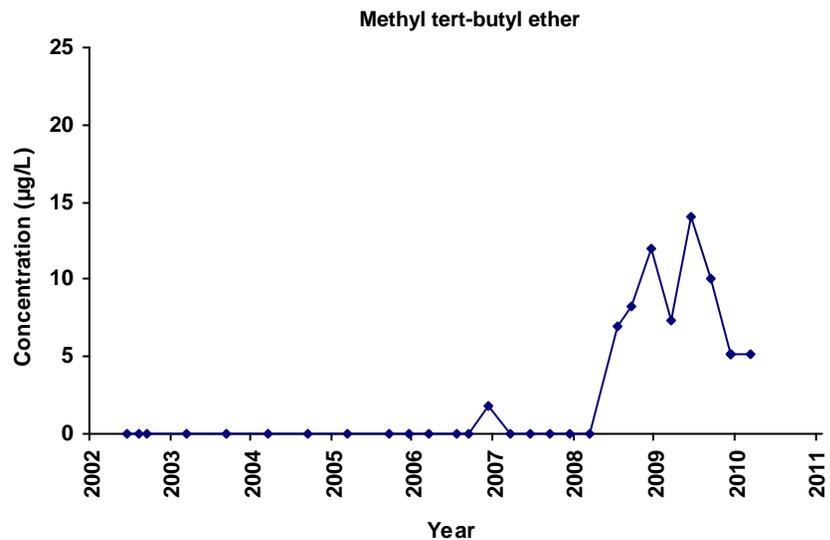
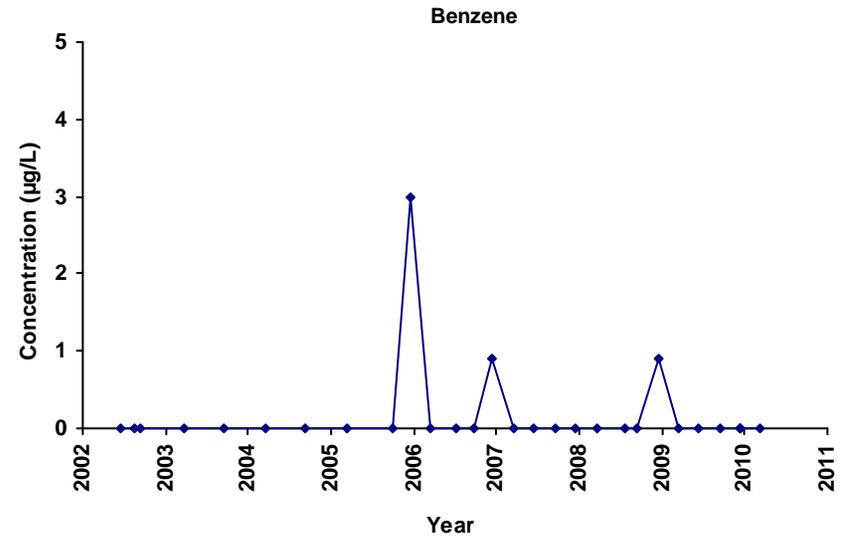
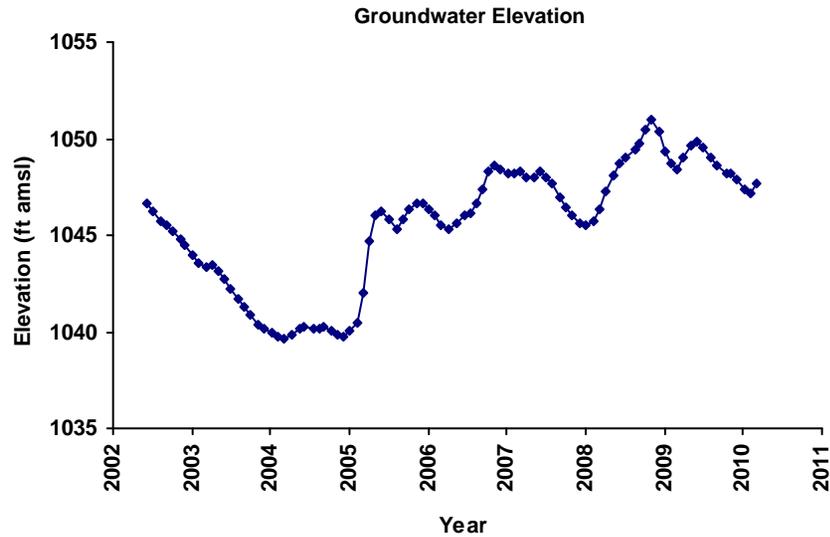
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-8
 ASE-60A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



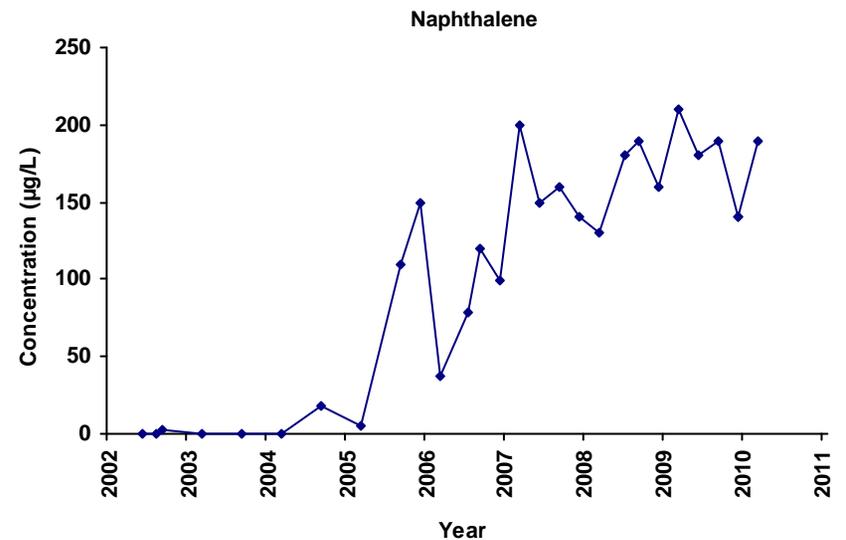
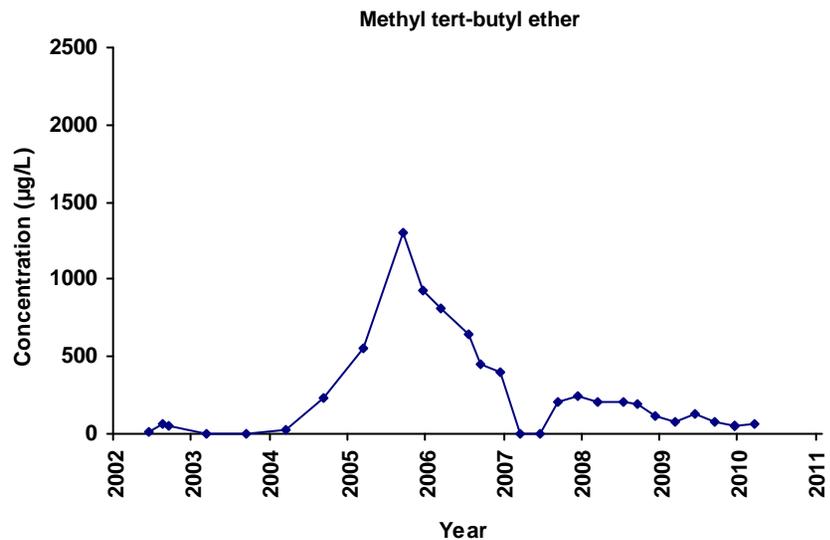
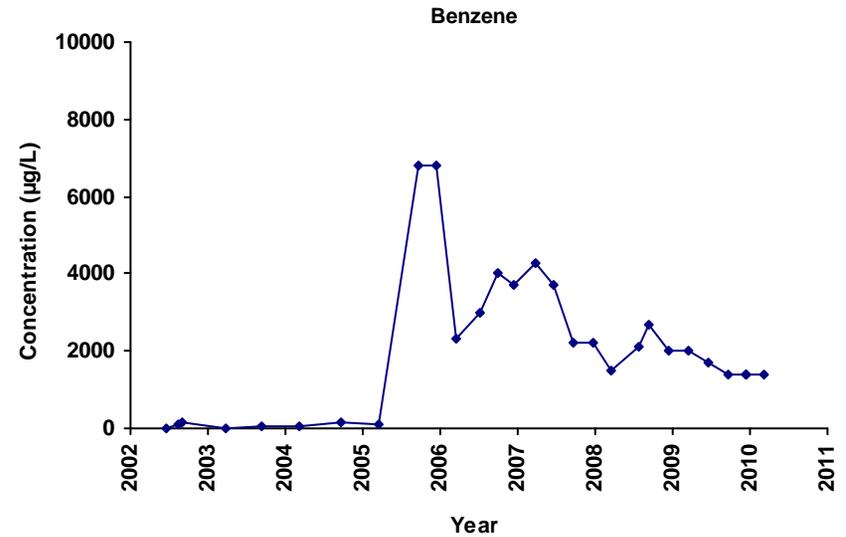
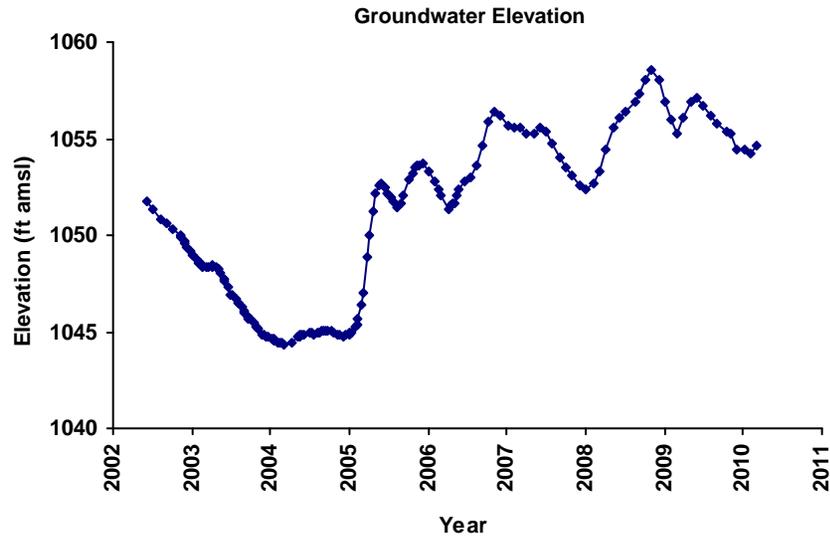
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-9
 ASE-61A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



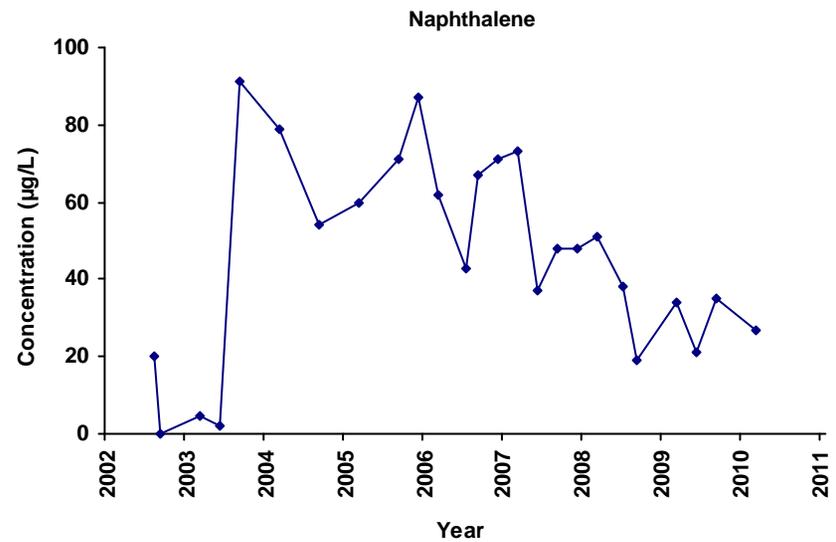
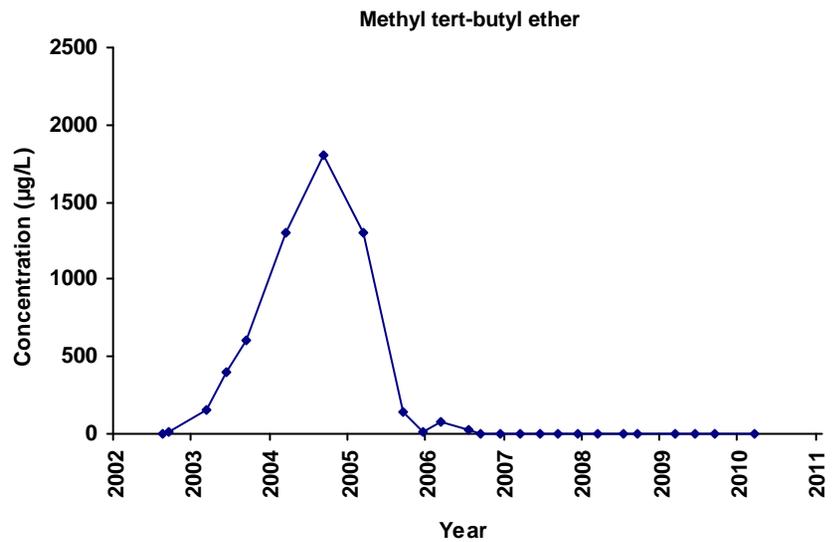
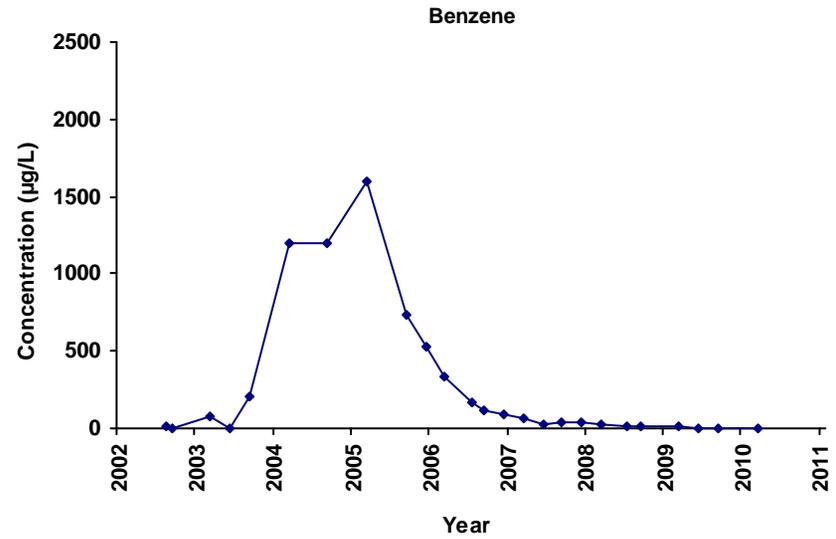
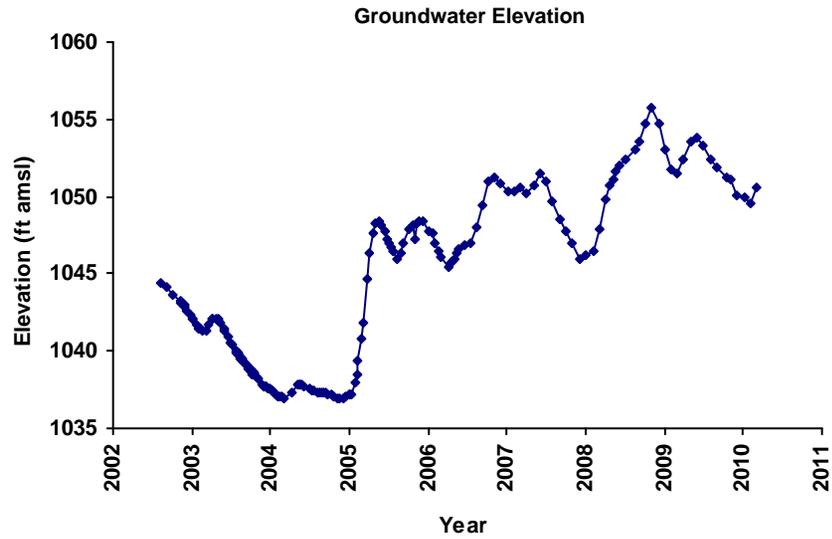
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-10
 ASE-62A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



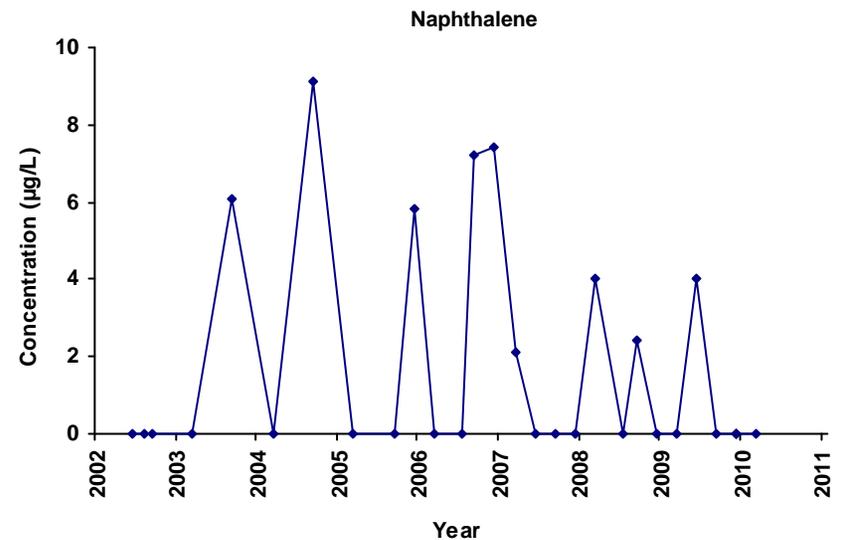
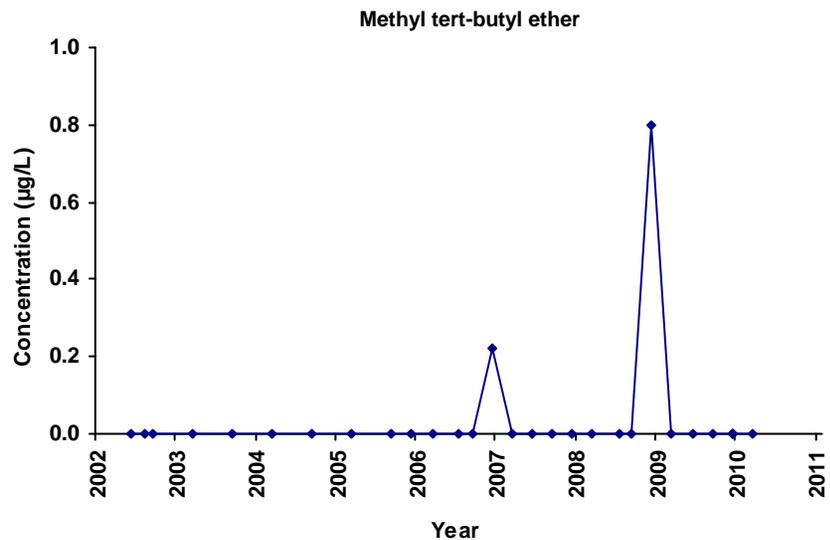
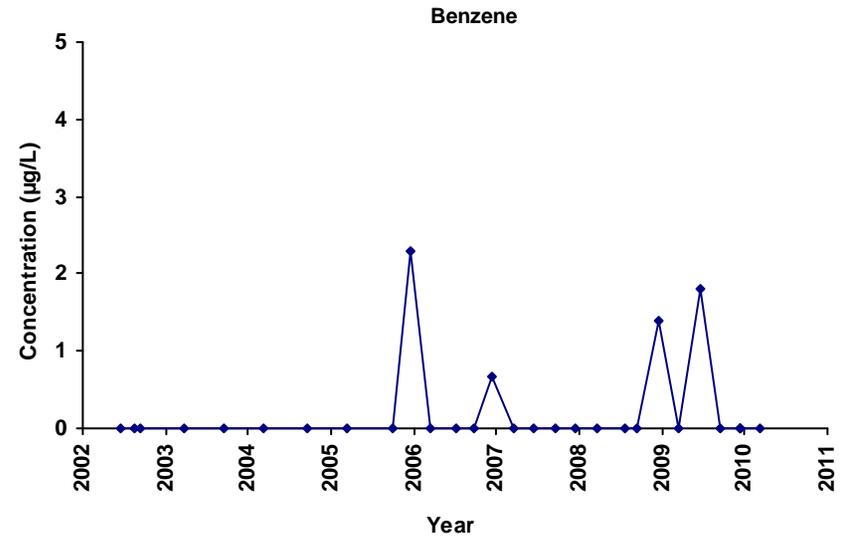
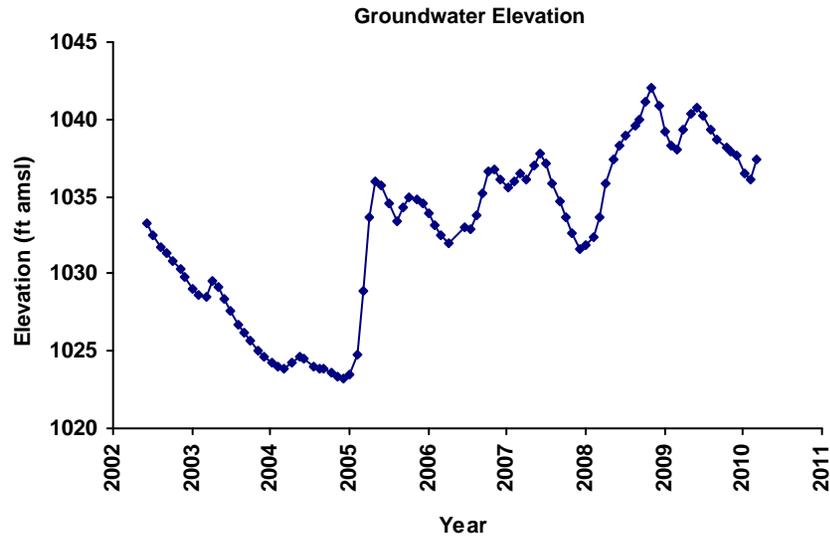
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-11
 ASE-63A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



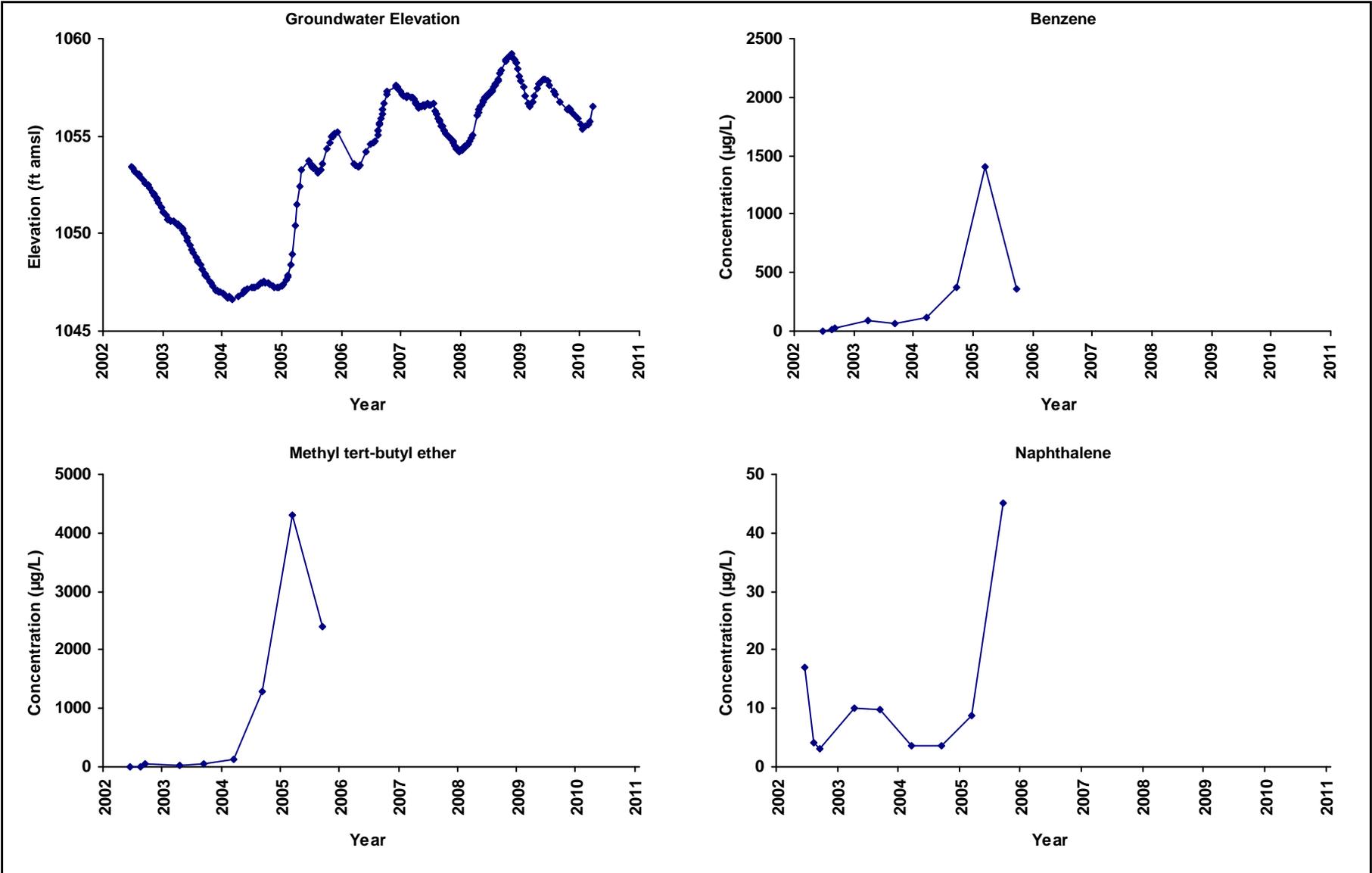
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-12
 ASE-64A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



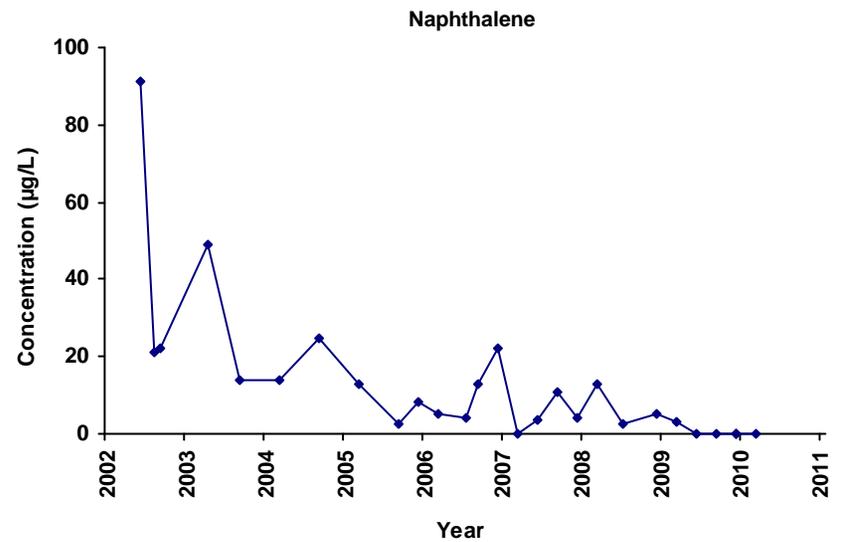
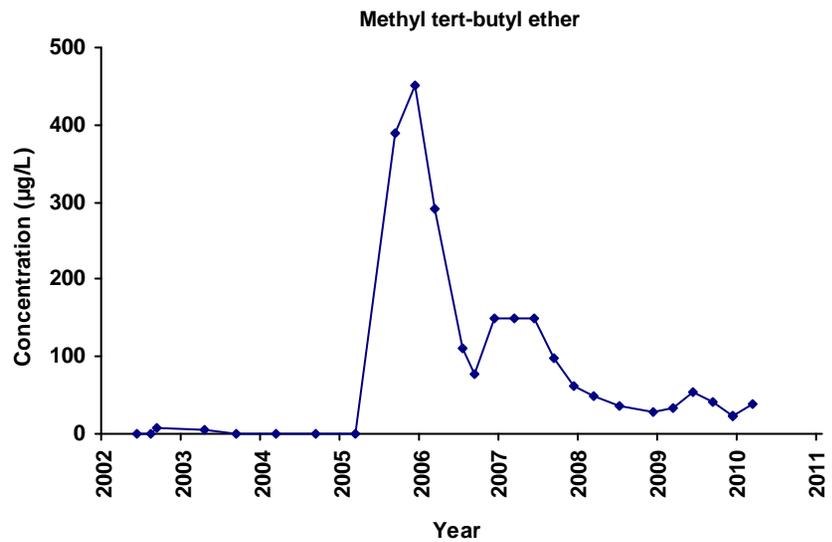
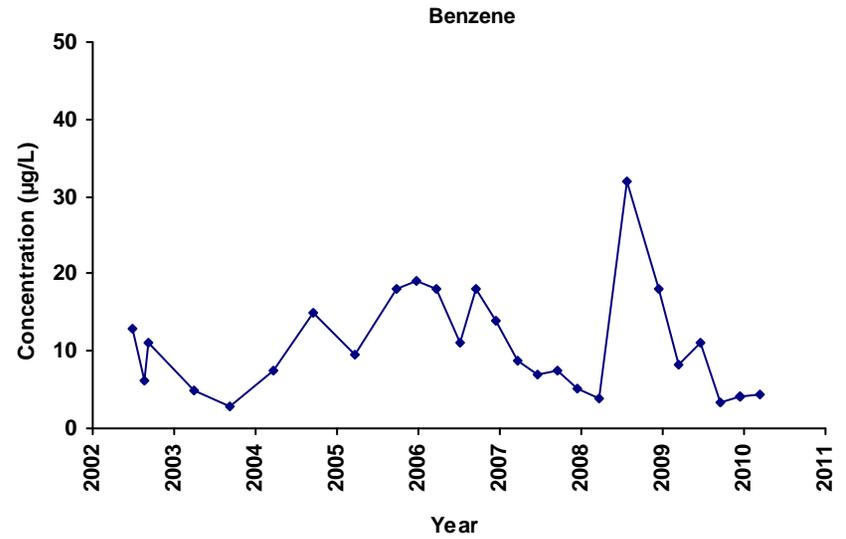
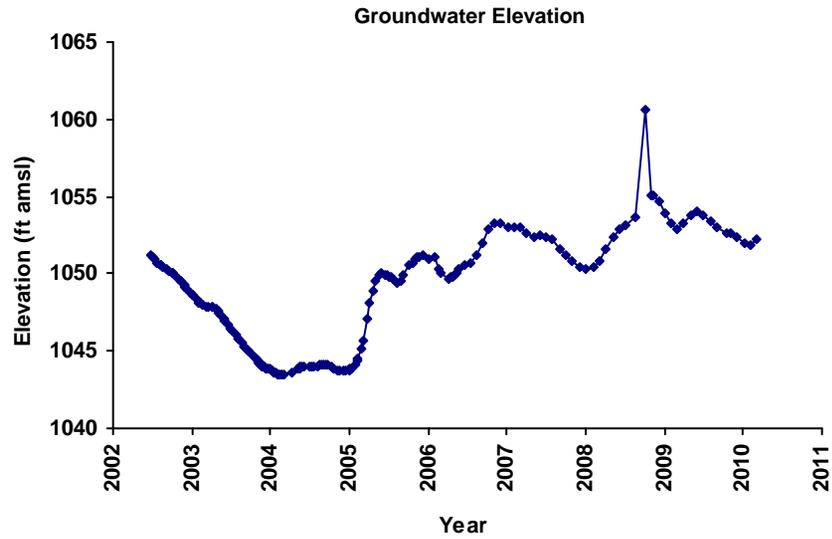
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-13
 ASE-65A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



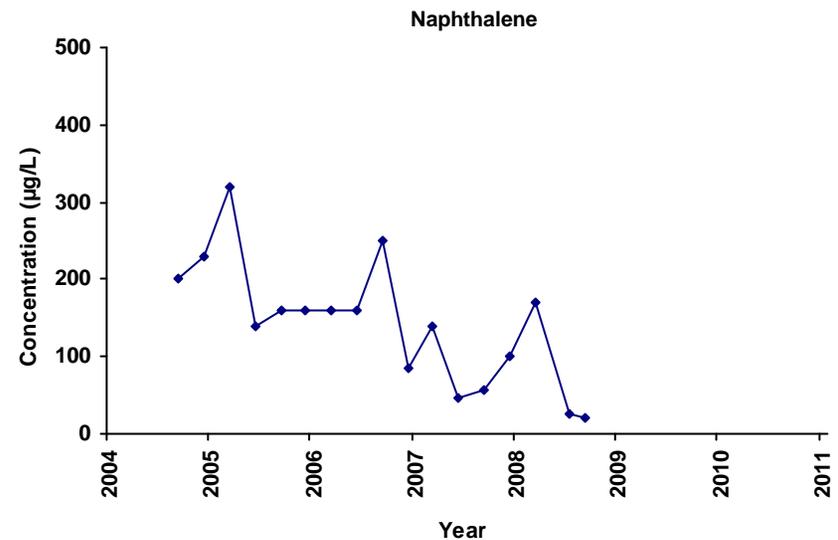
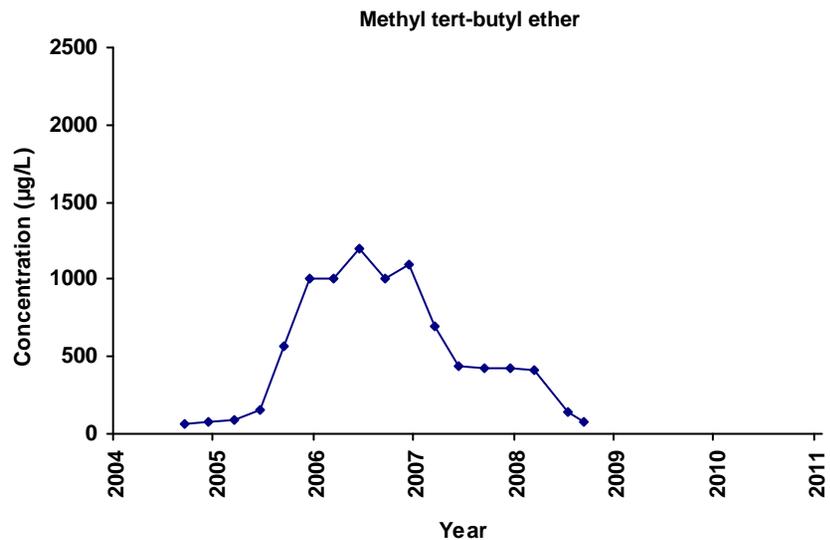
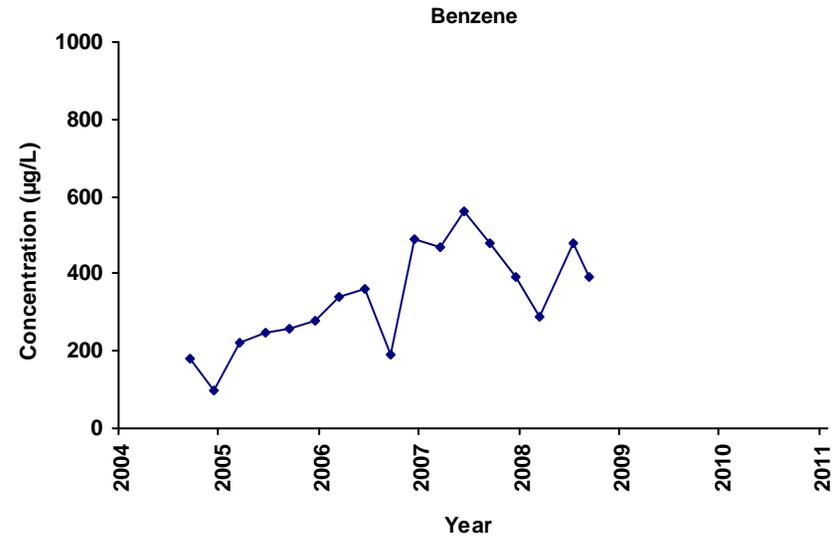
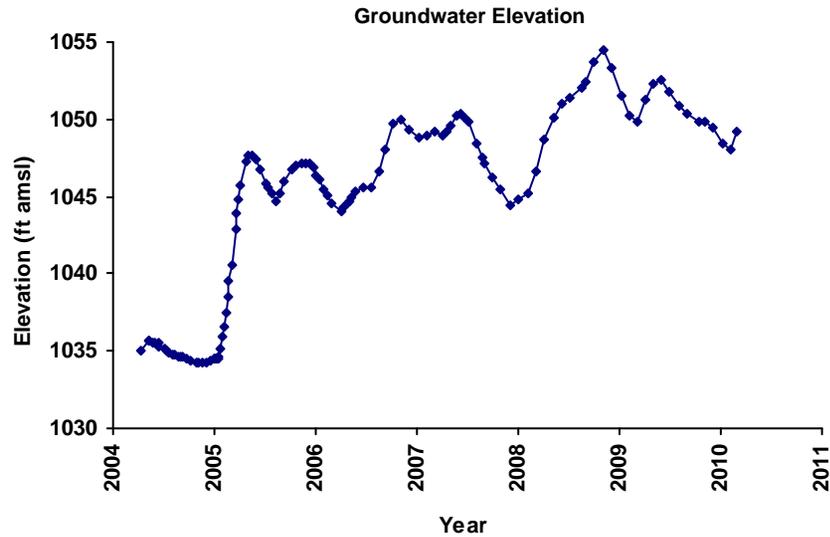
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-14
 ASE-67A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



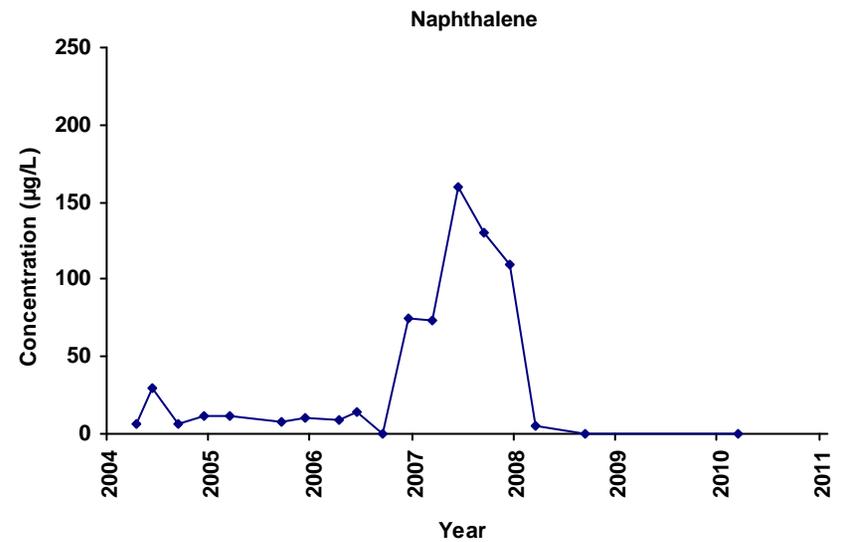
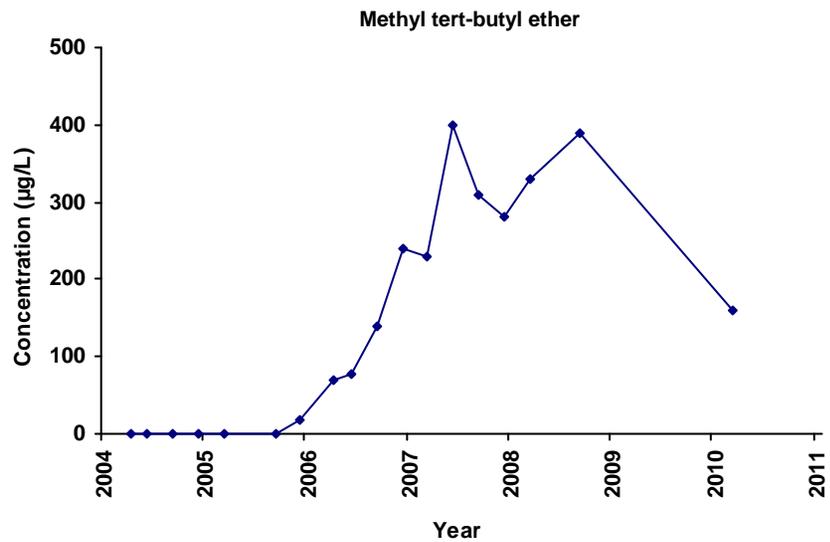
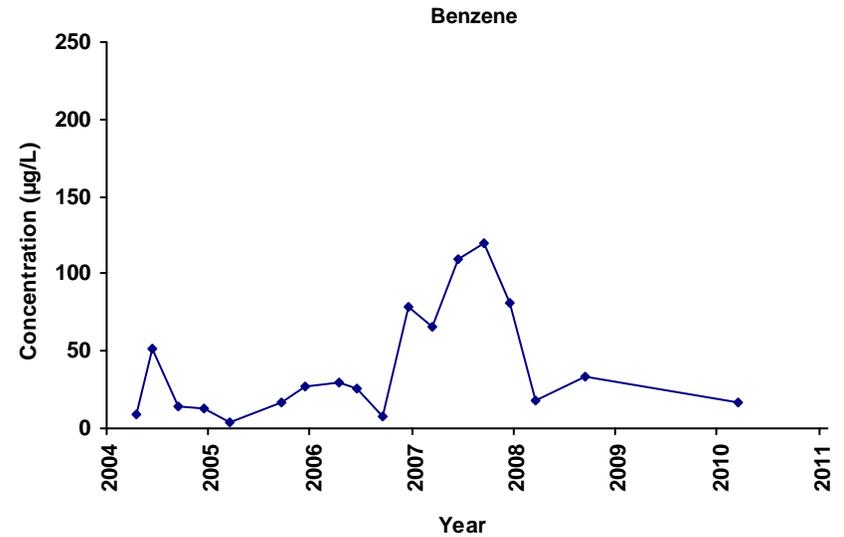
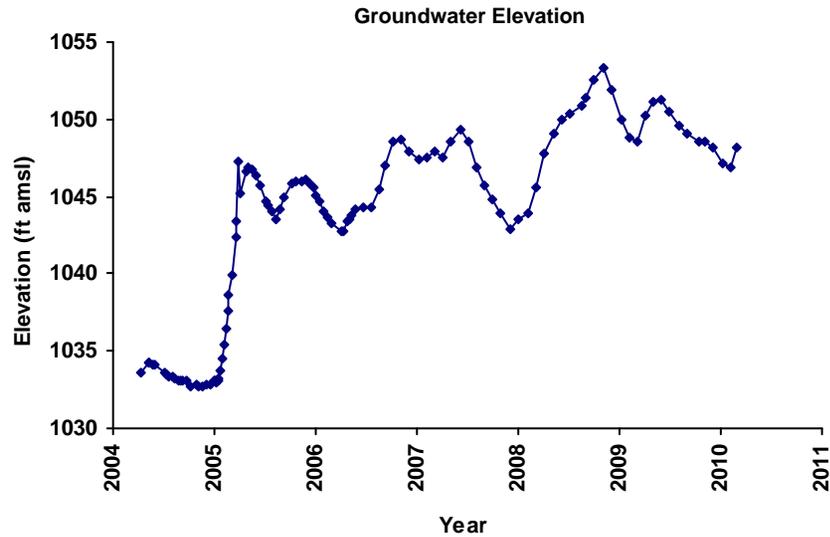
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-15
 ASE-68A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



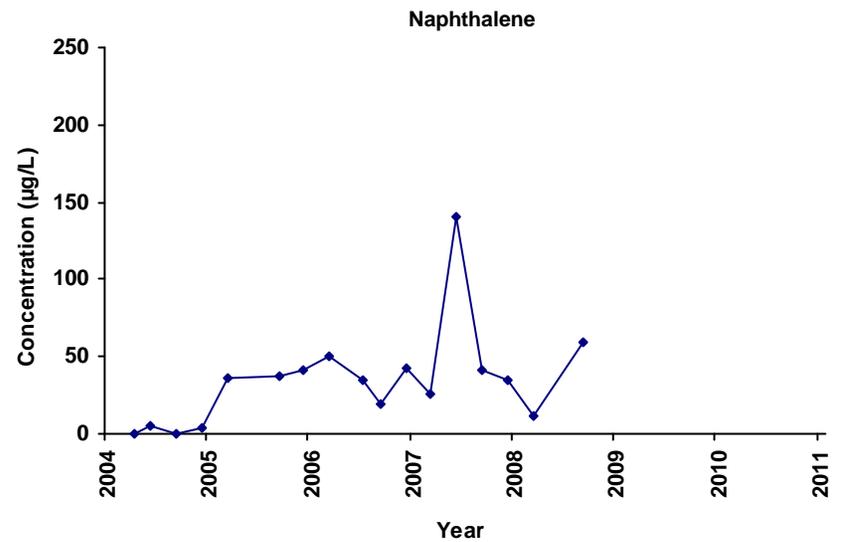
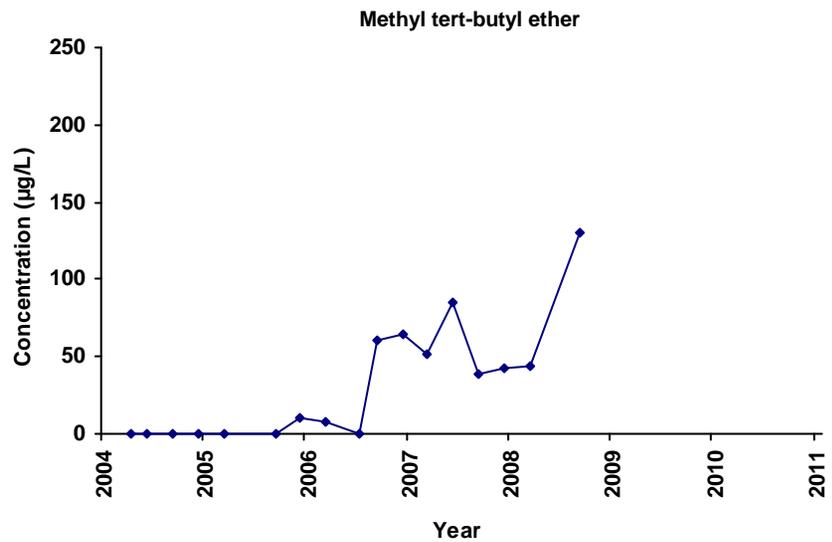
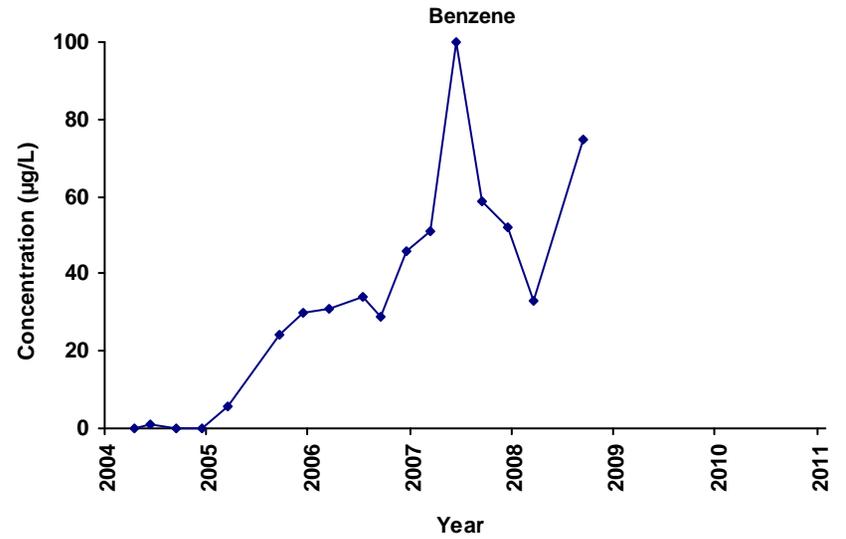
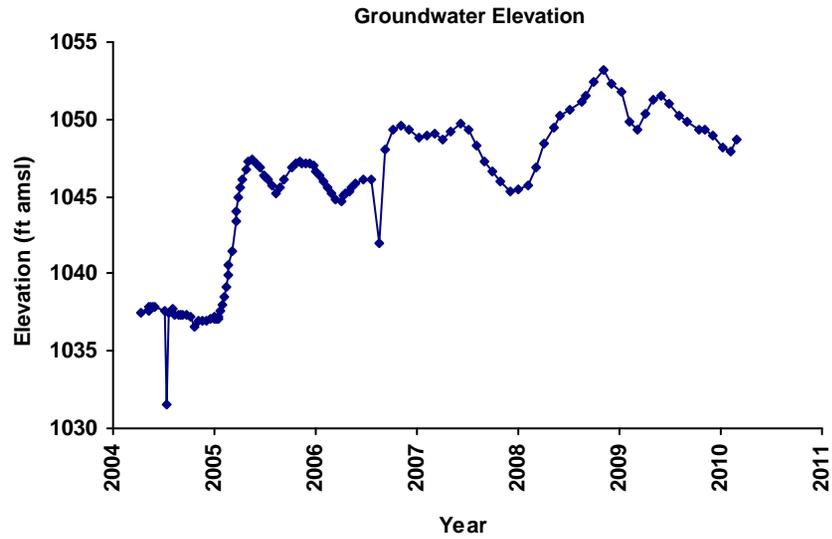
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-16
 ASE-89A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



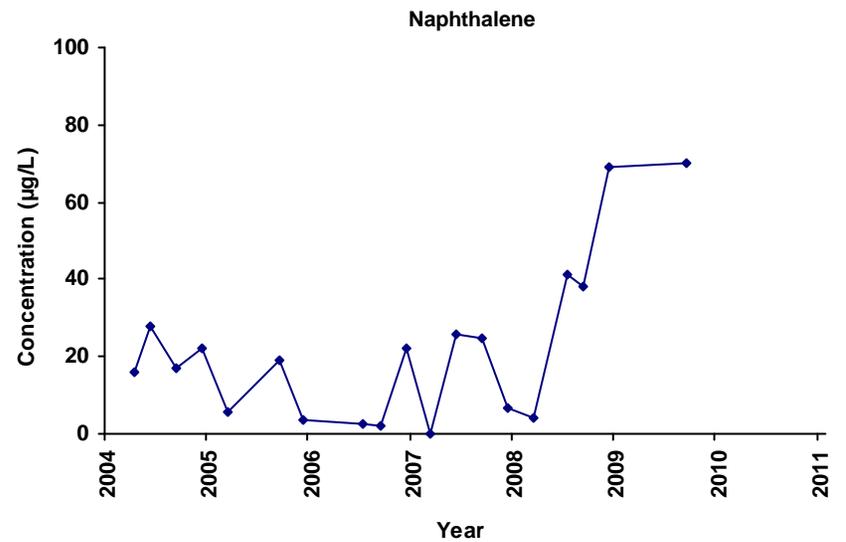
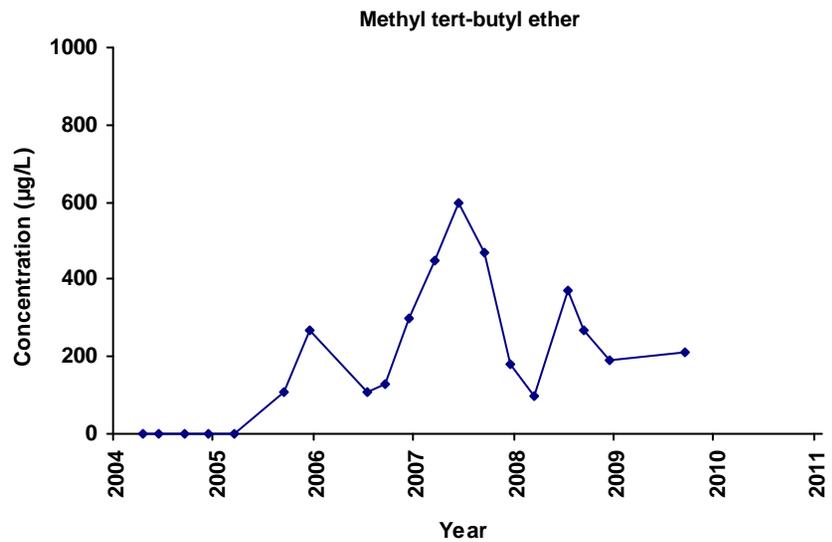
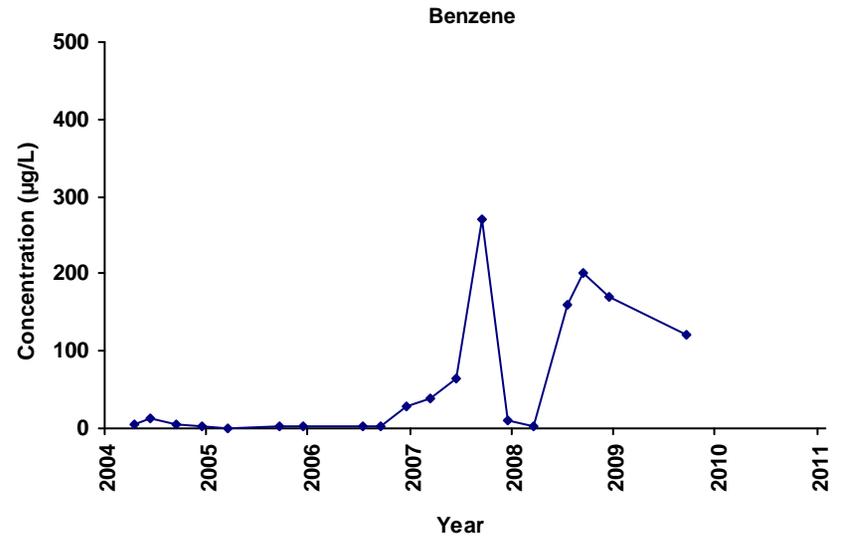
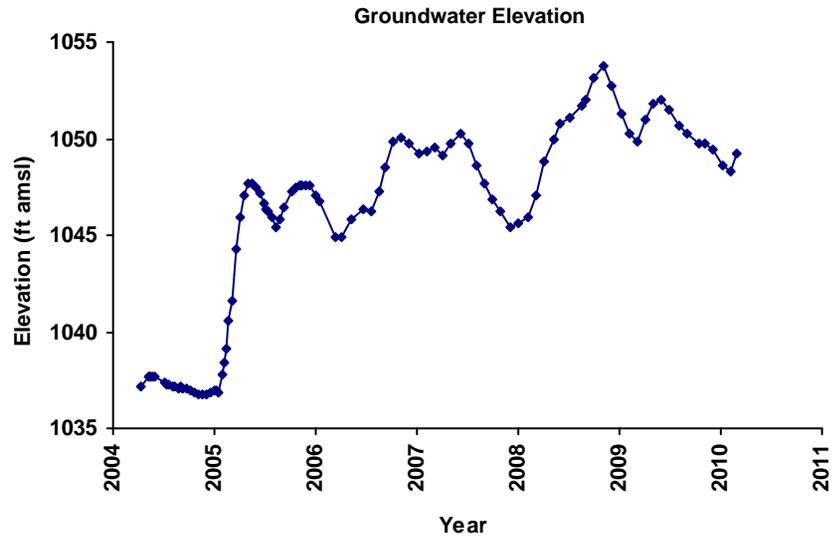
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-17
 ASE-90A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



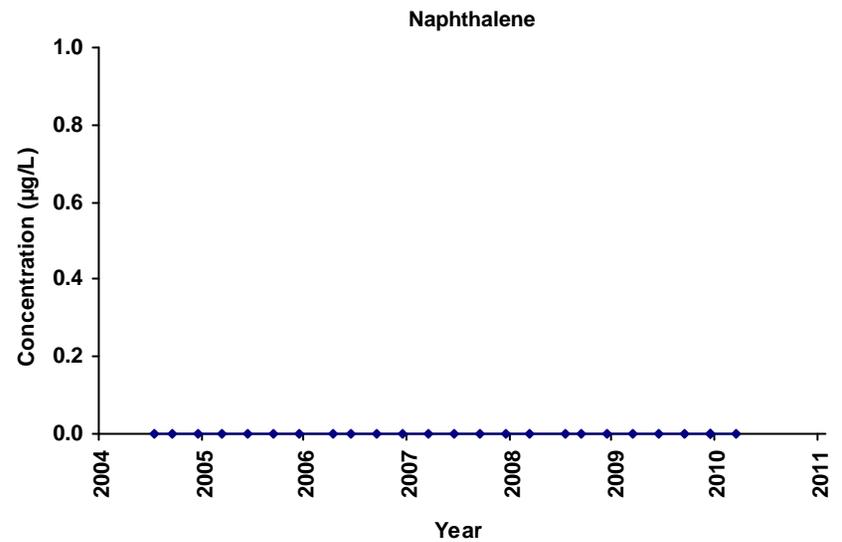
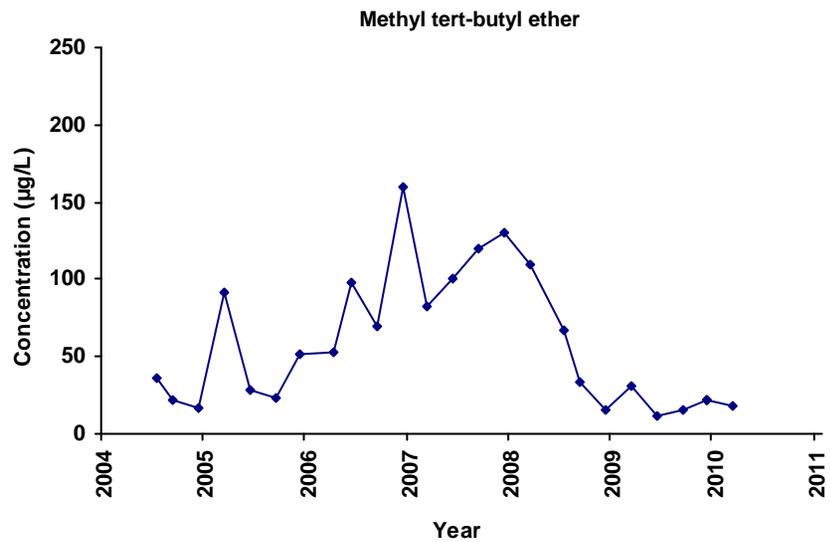
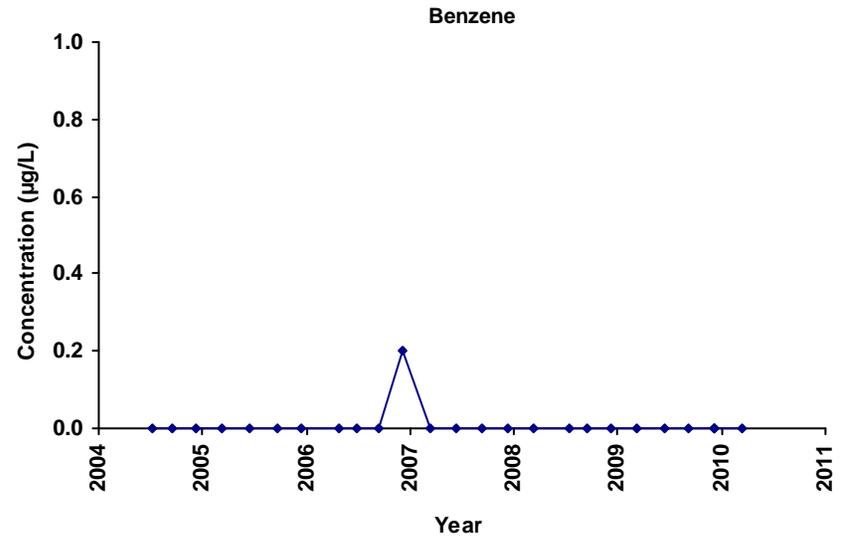
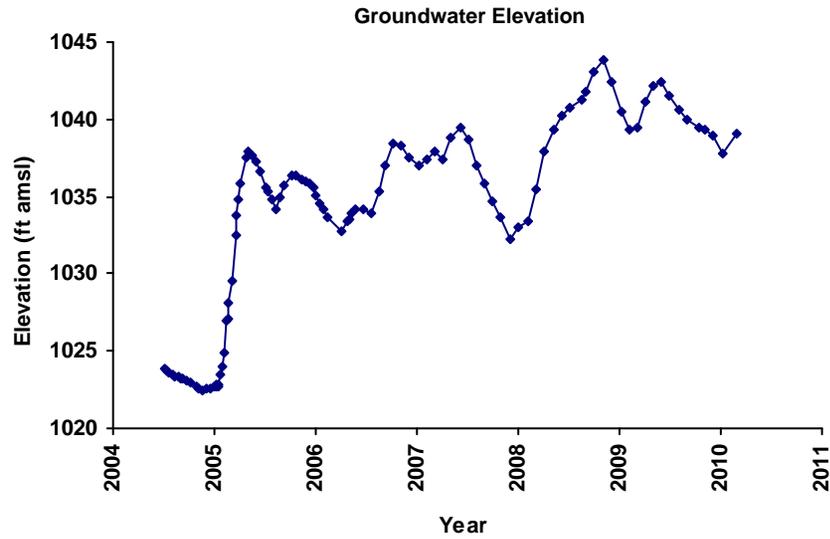
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-18
 ASE-91A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



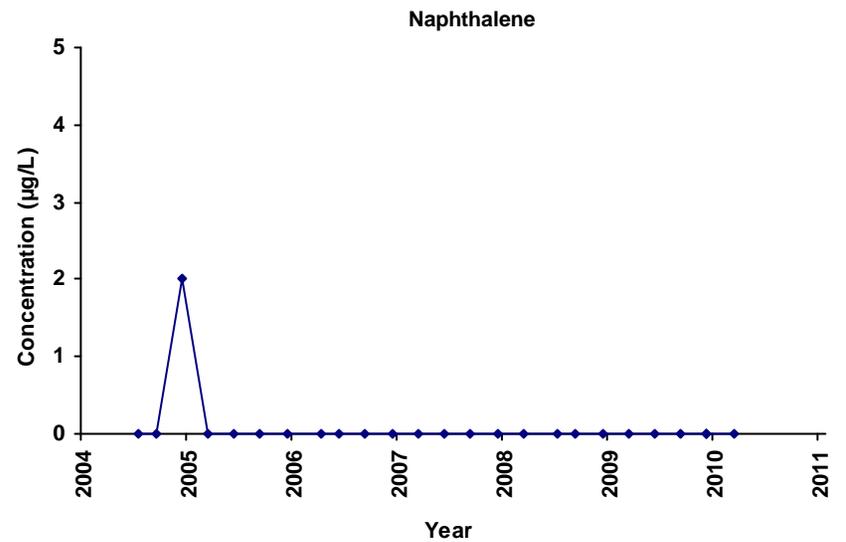
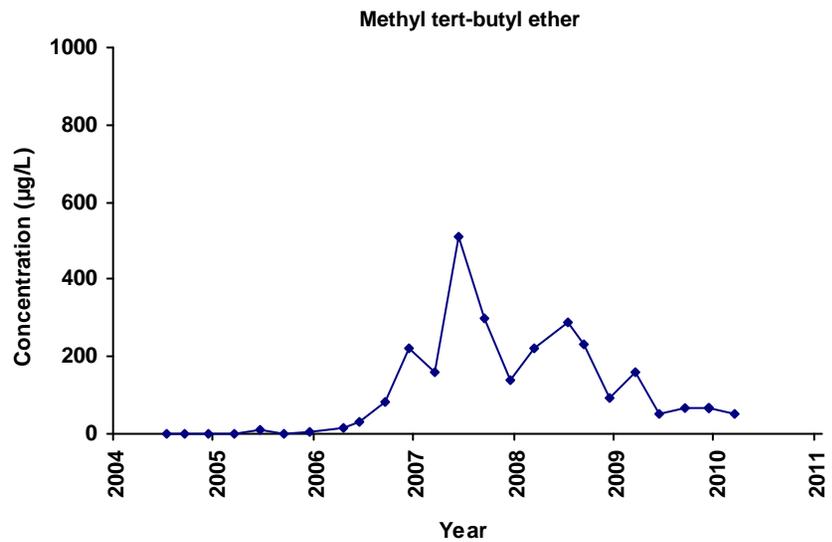
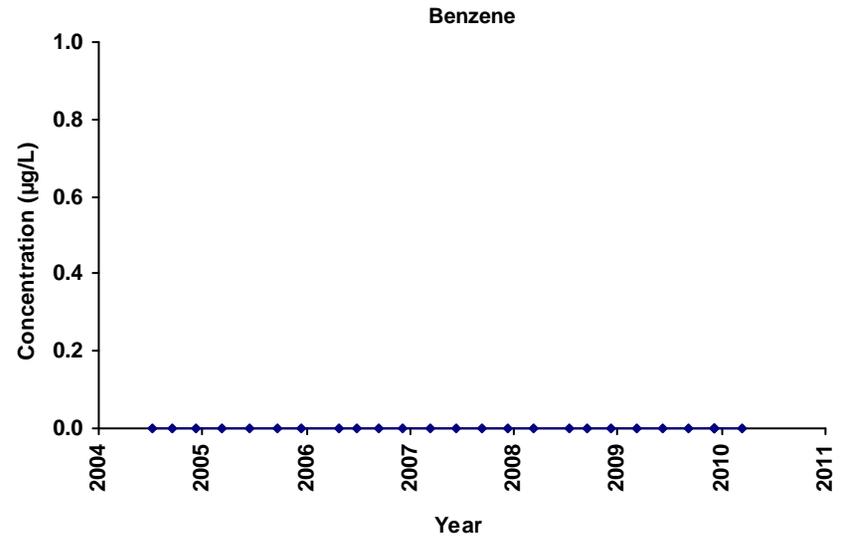
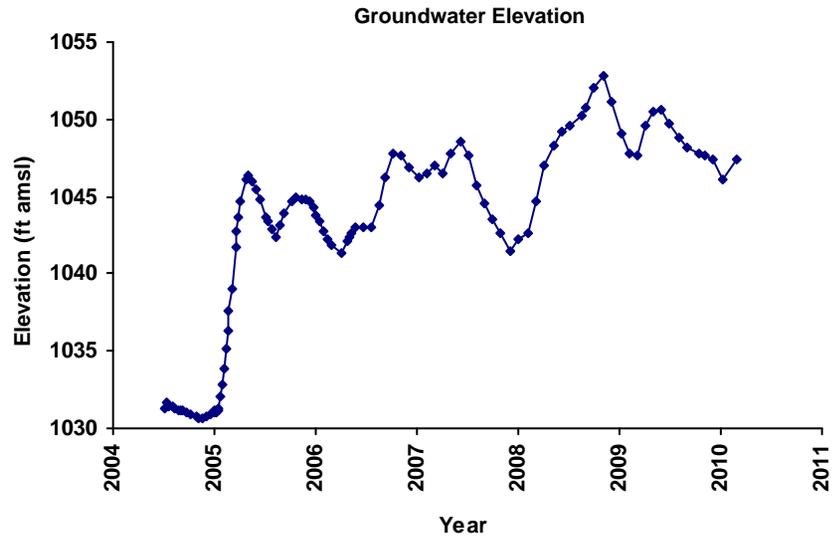
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-19
 ASE-92A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



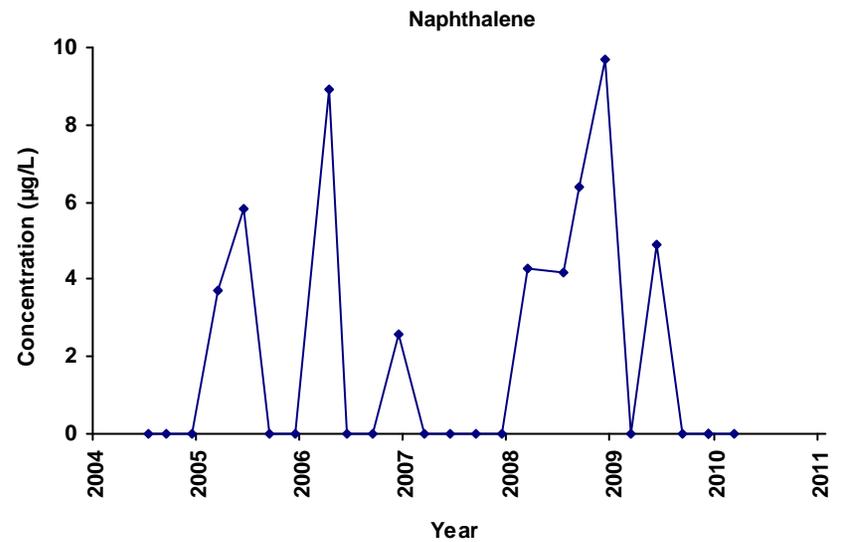
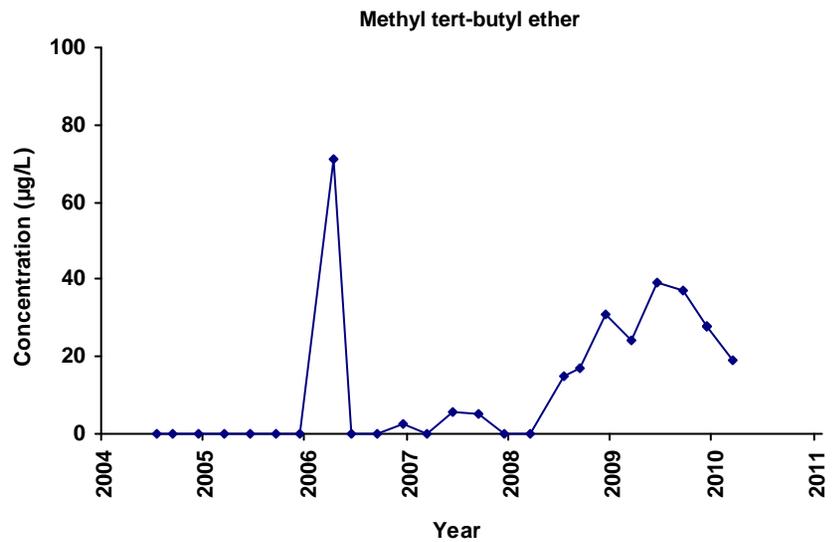
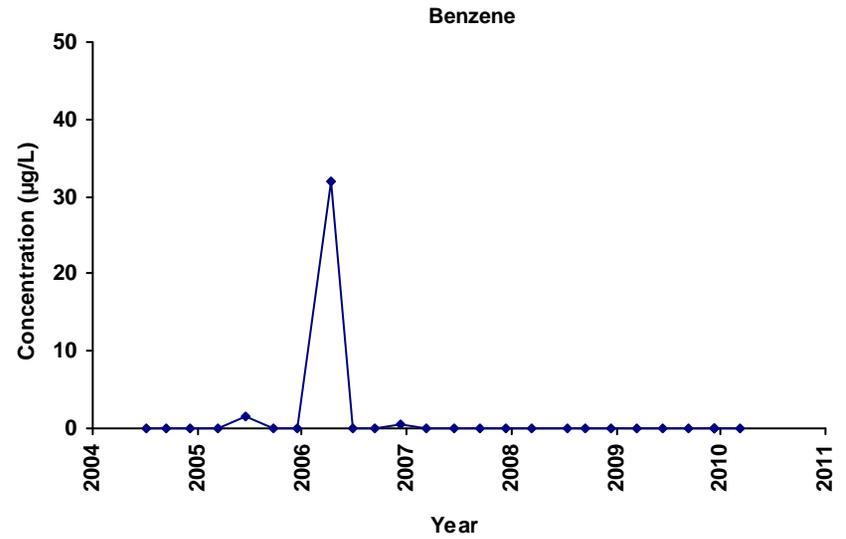
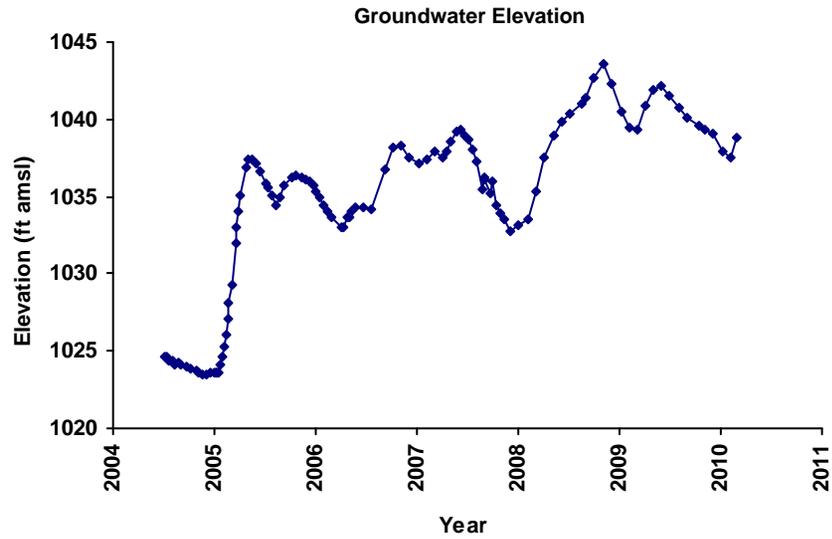
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-20
 ASE-95A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



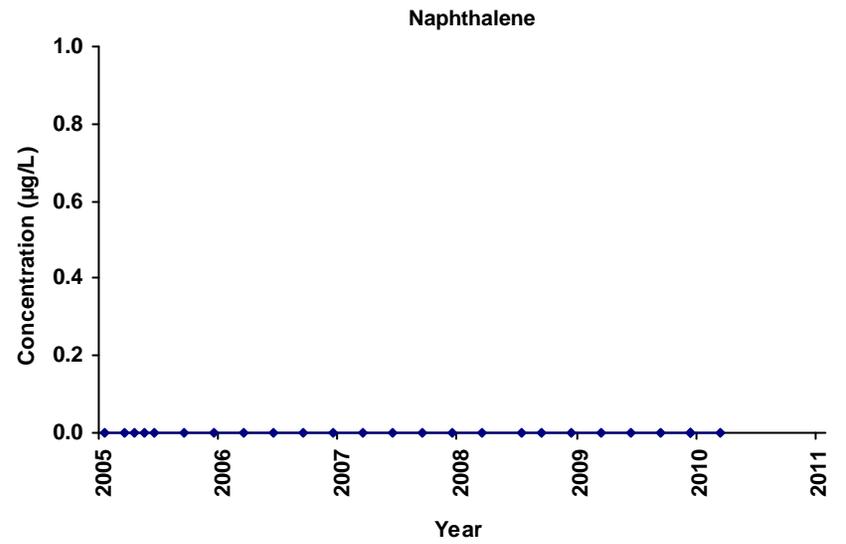
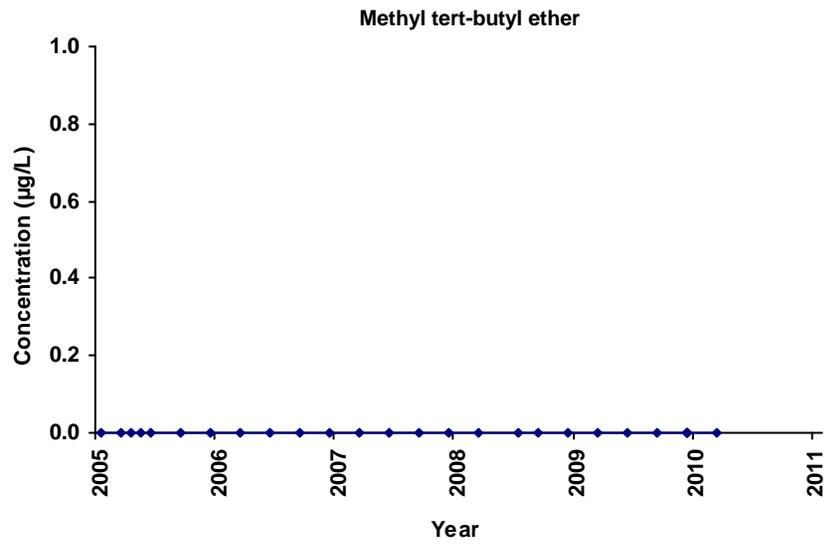
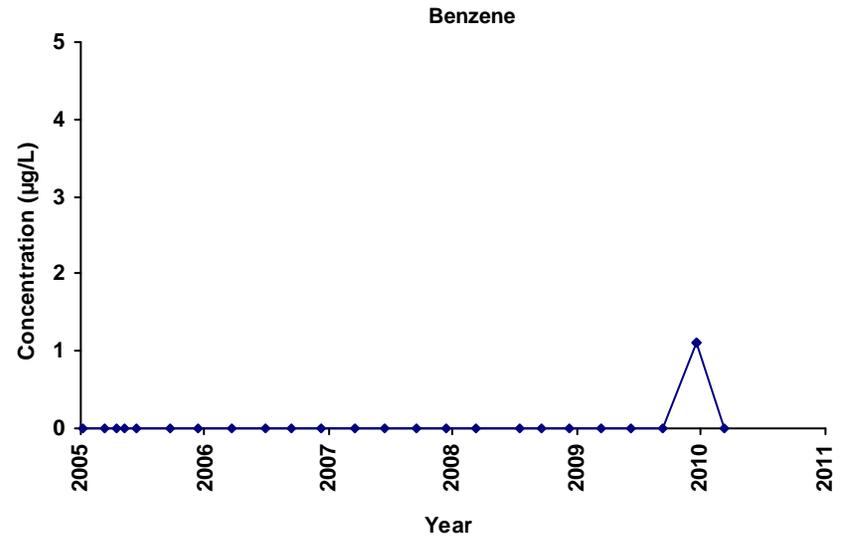
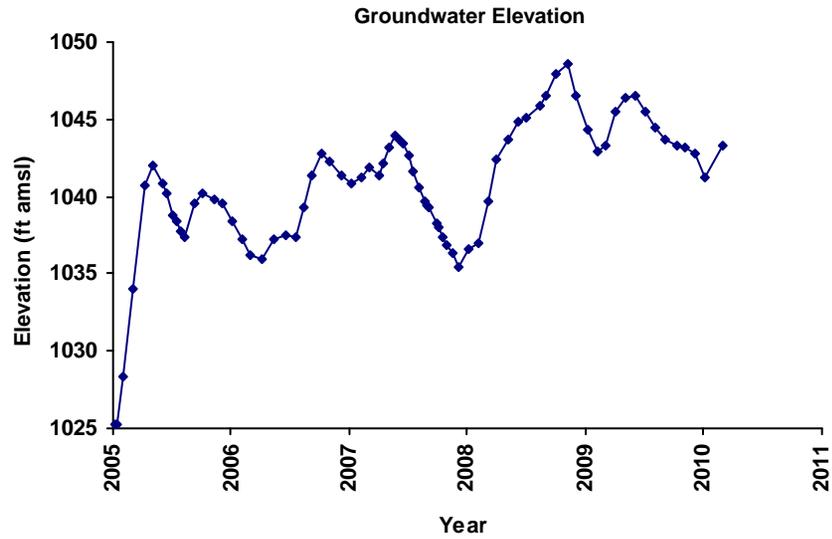
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-21
 ASE-96A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



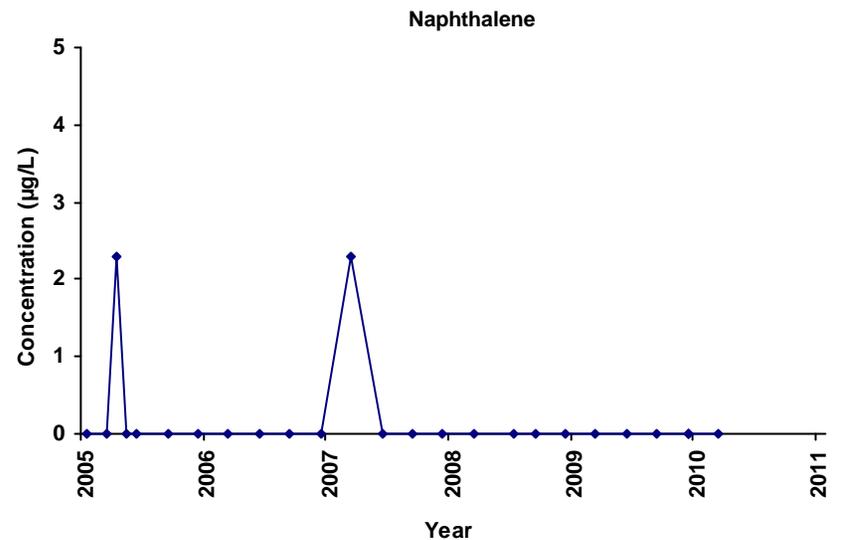
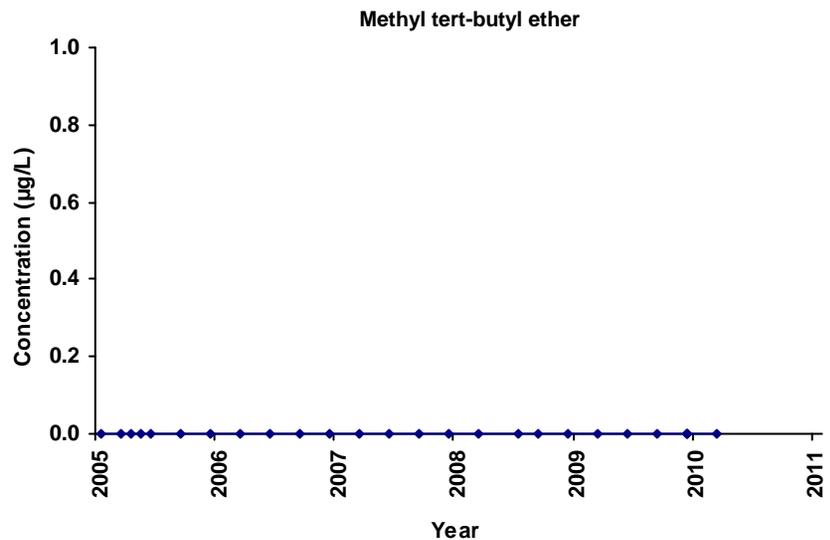
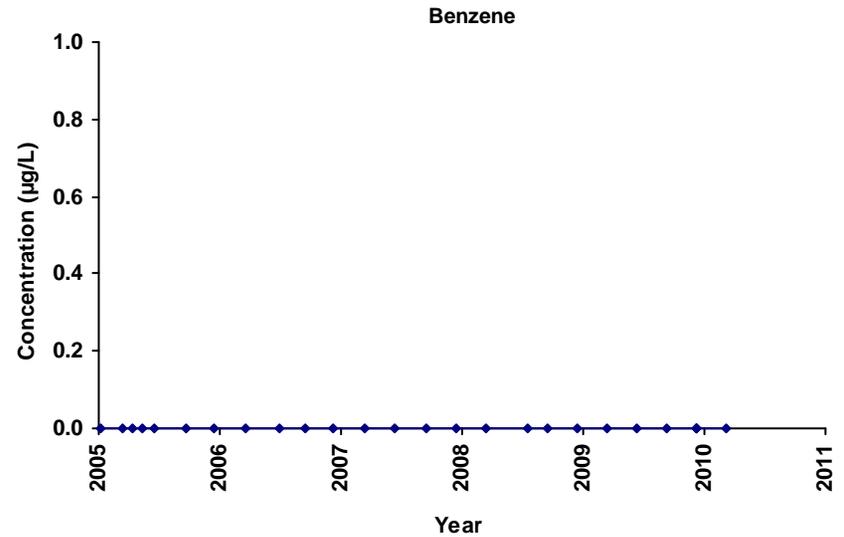
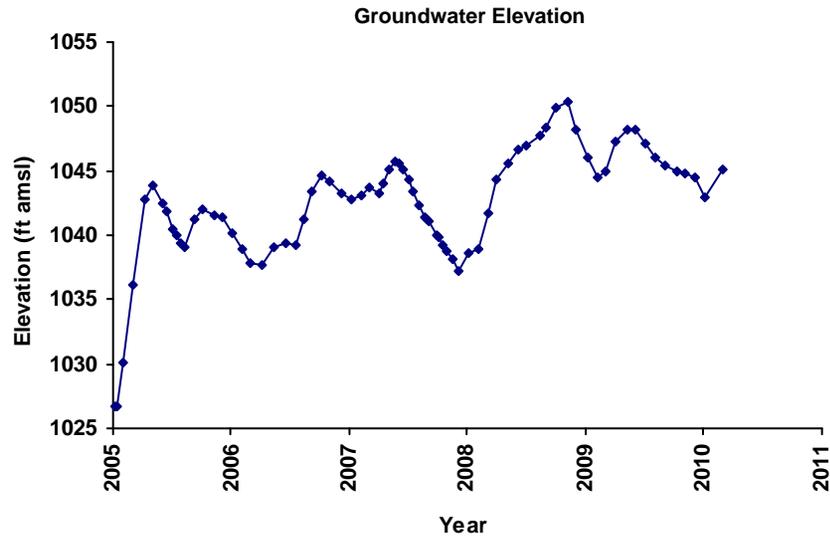
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-22
 ASE-97A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



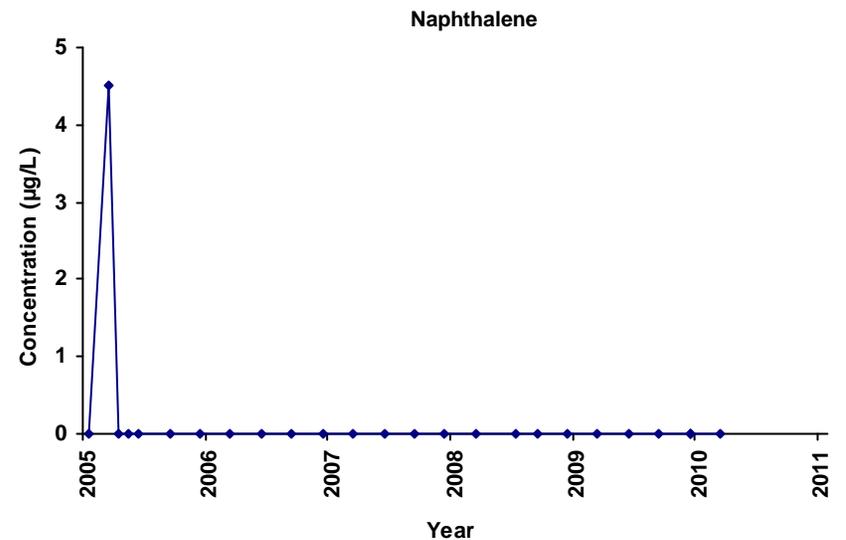
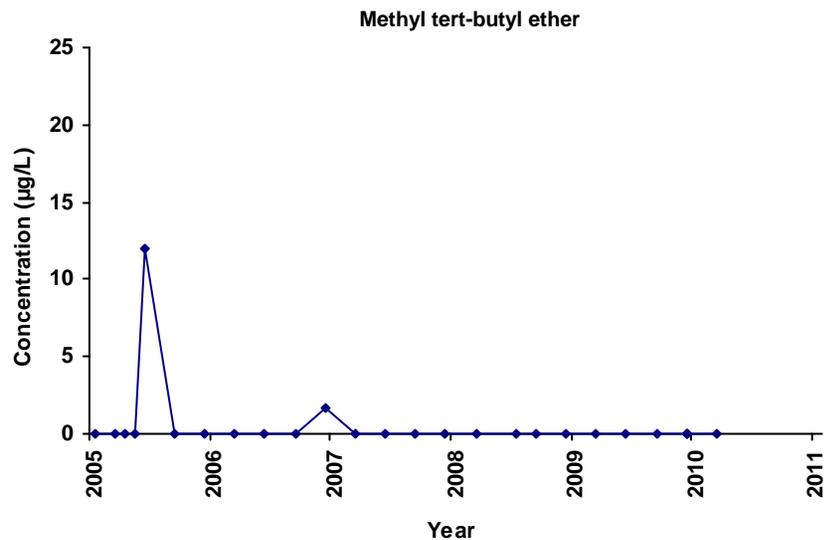
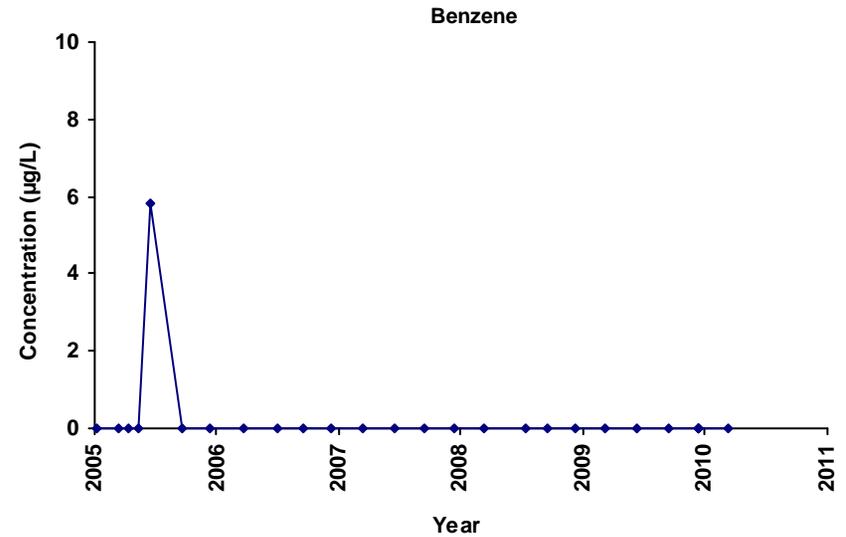
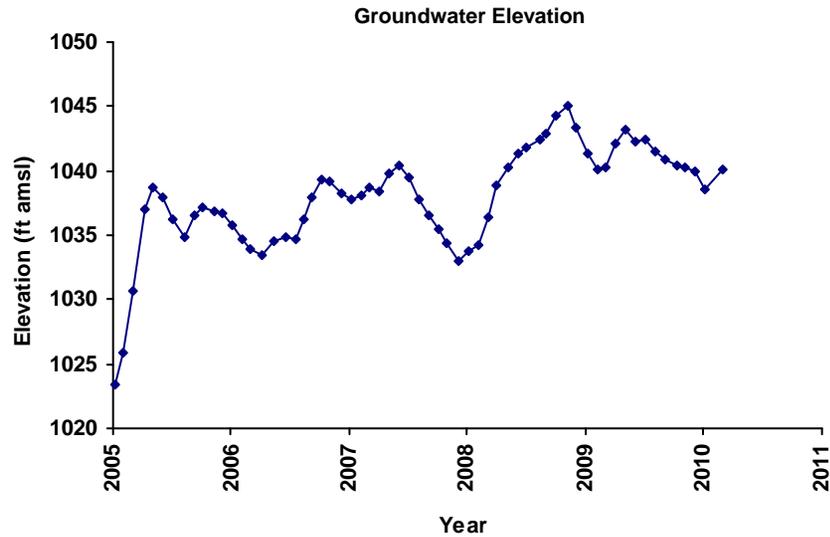
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-23
 ASE-98A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



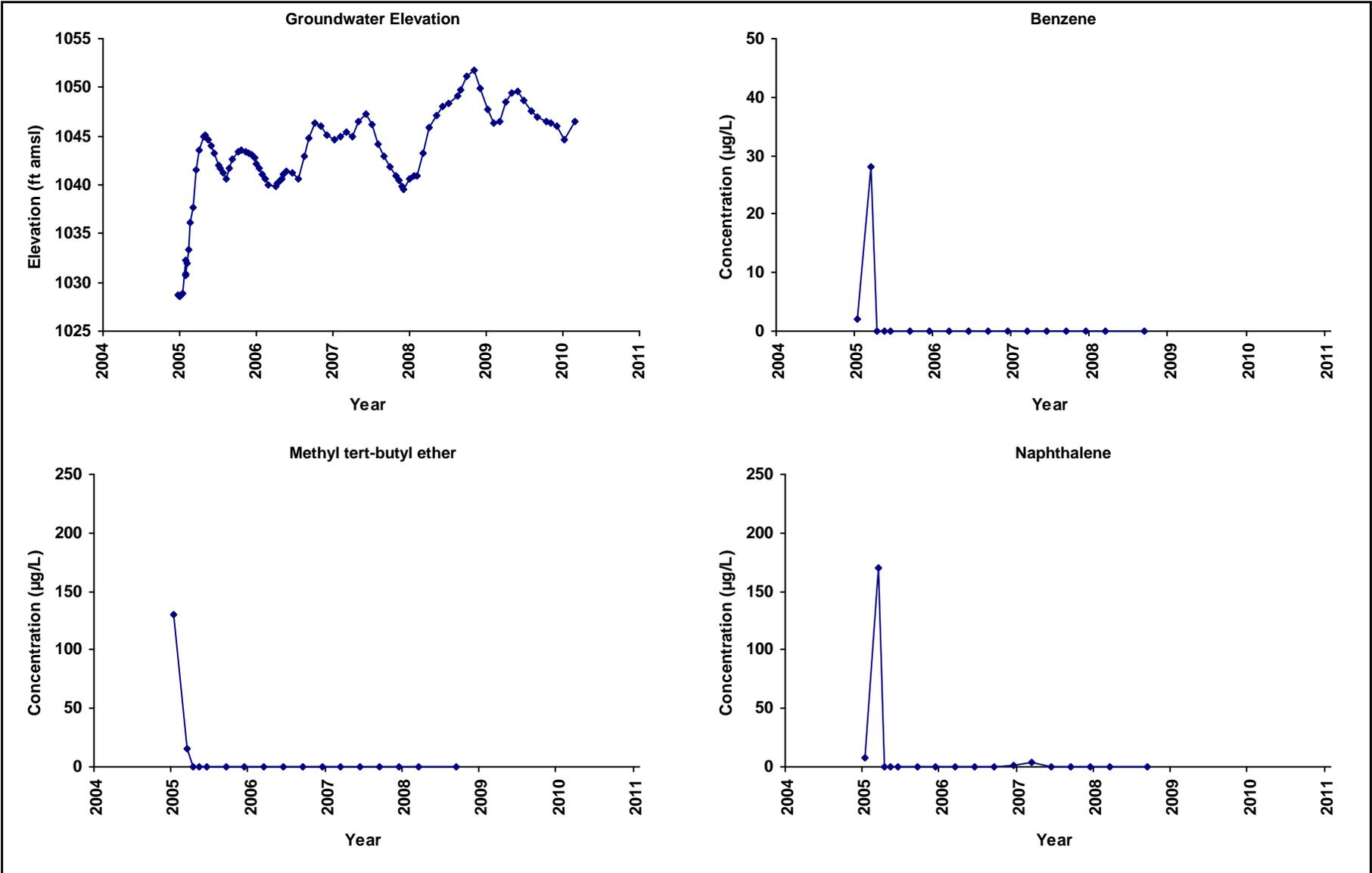
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-24
 ASE-99A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



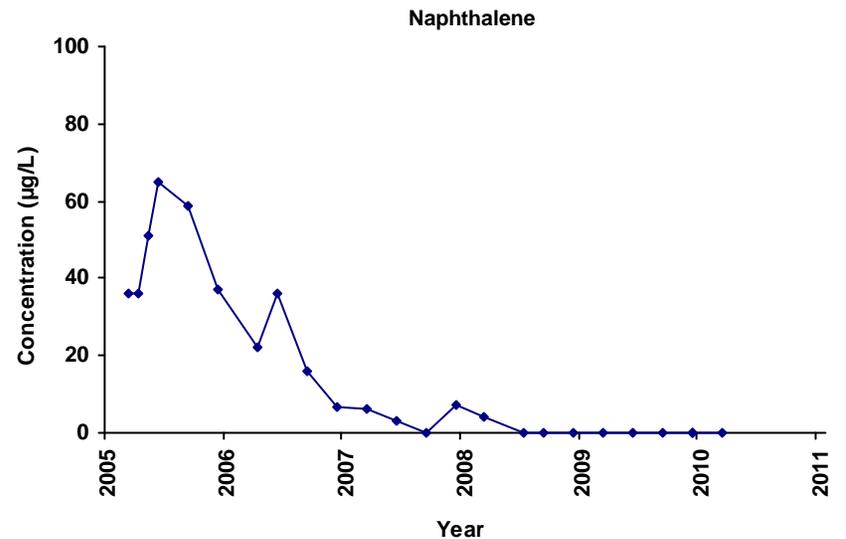
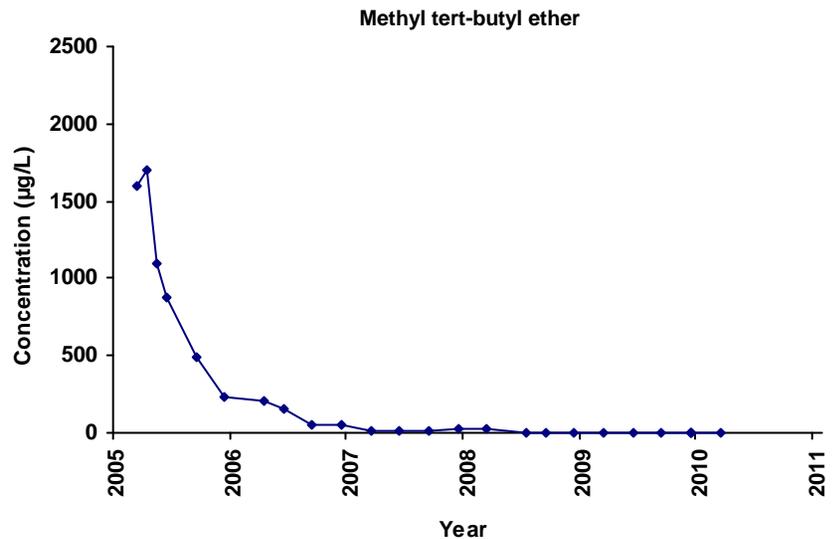
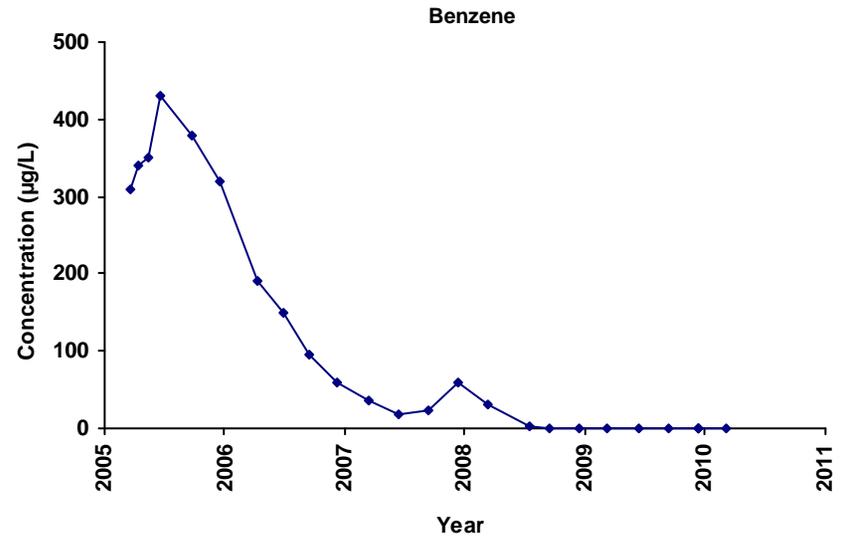
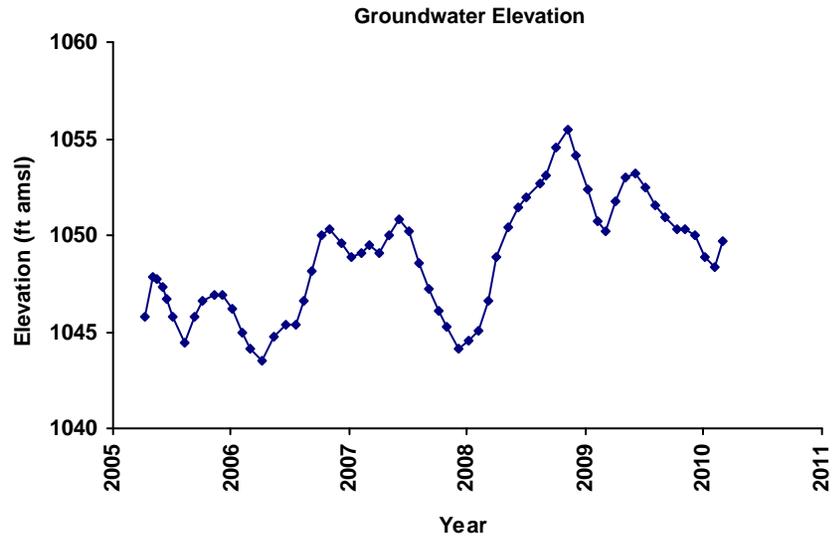
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-25
 ASE-100A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



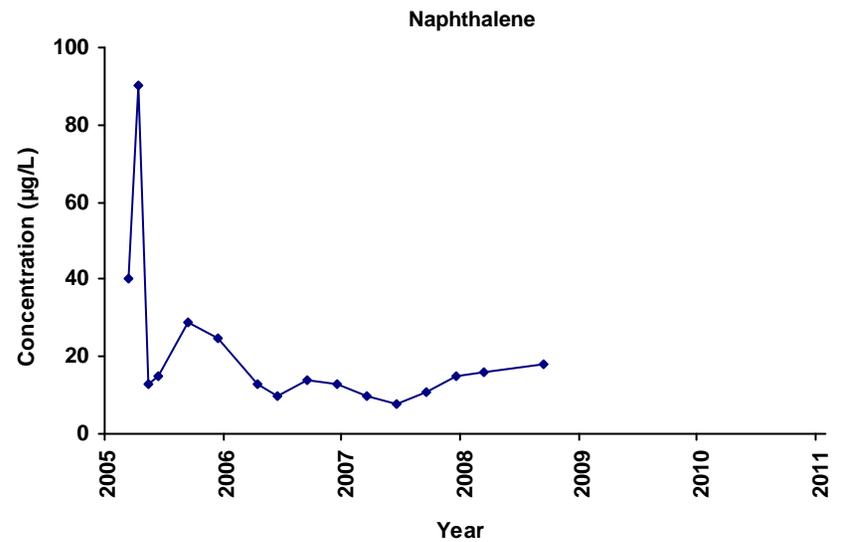
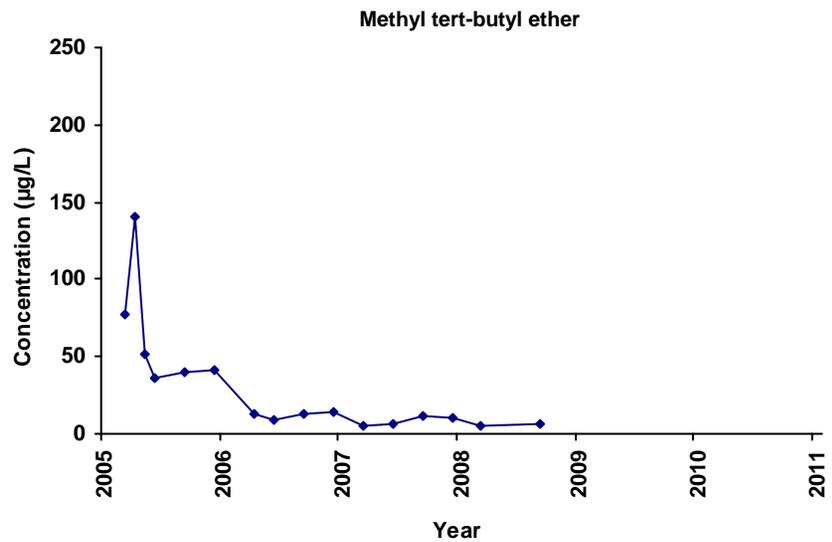
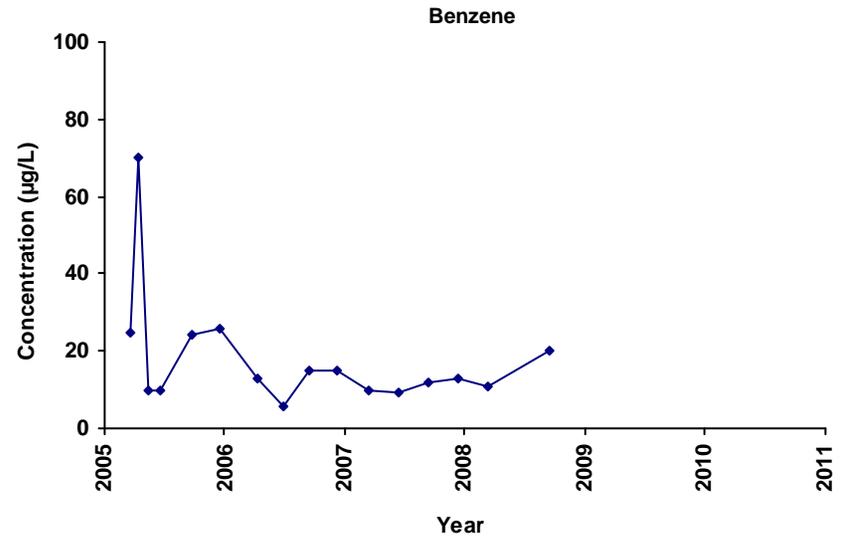
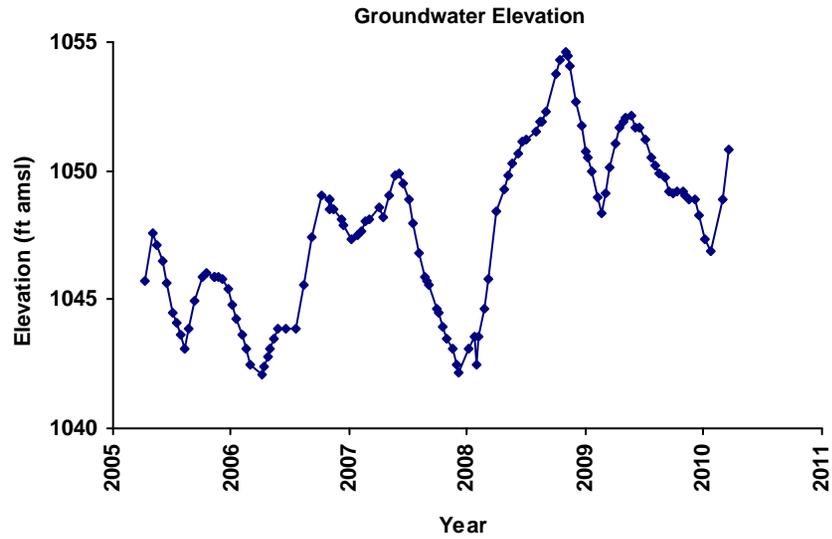
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-27
 ASE-102A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



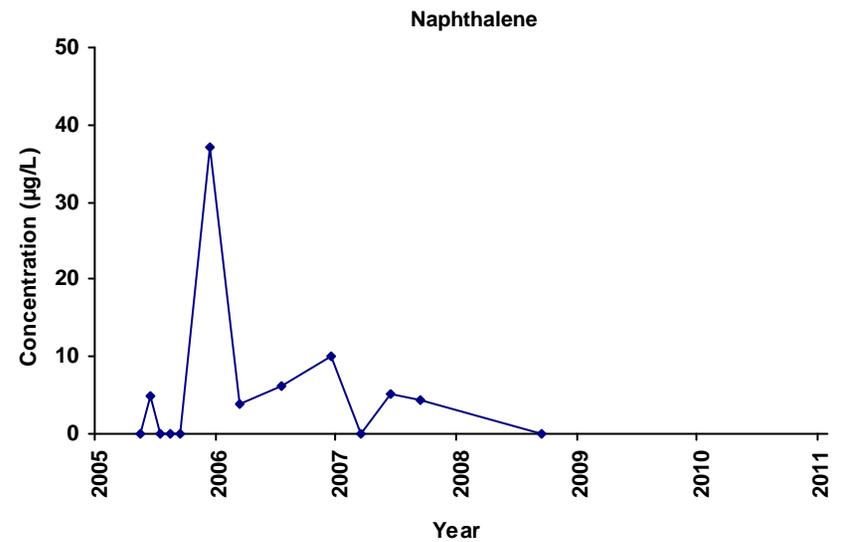
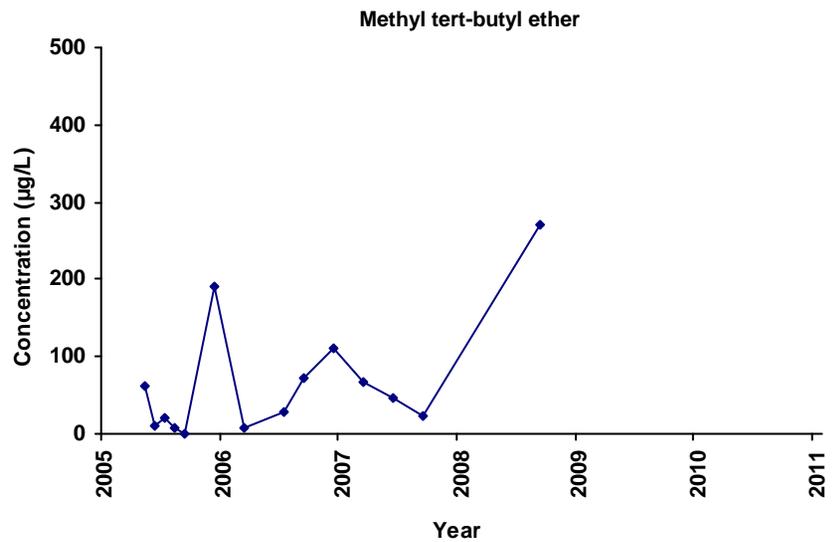
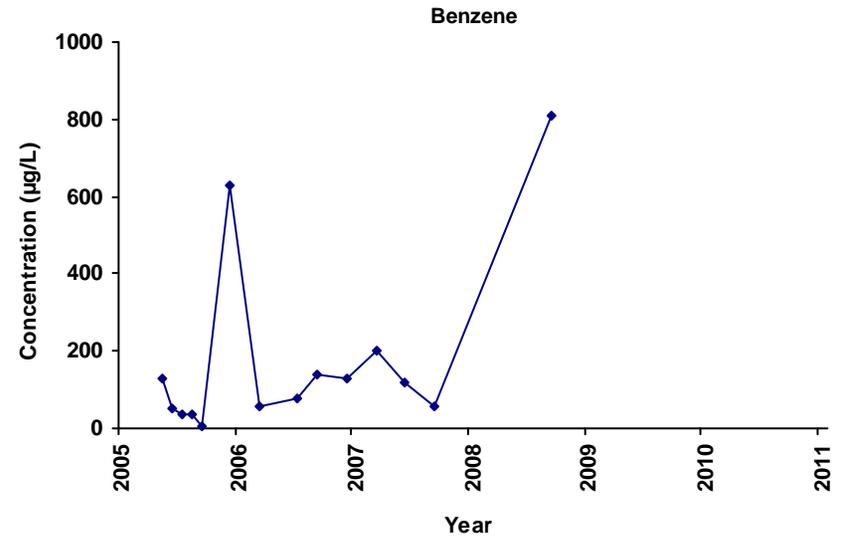
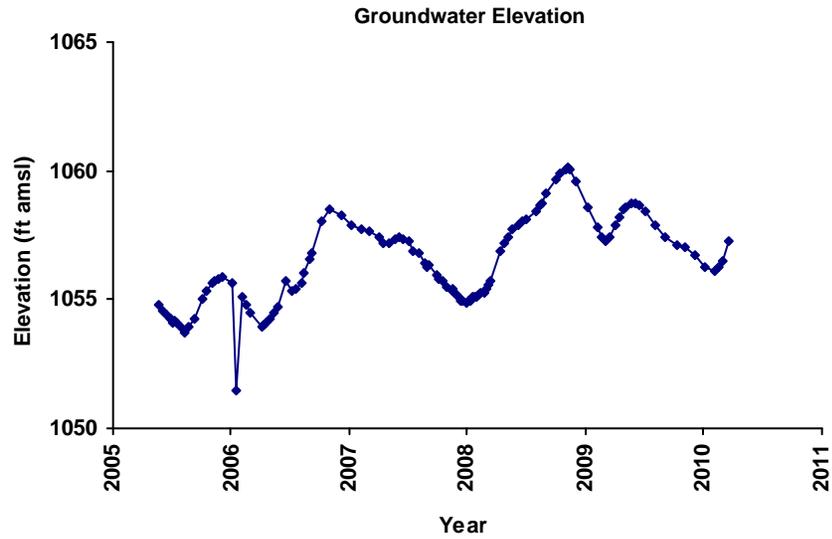
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-29
 ASE-105A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



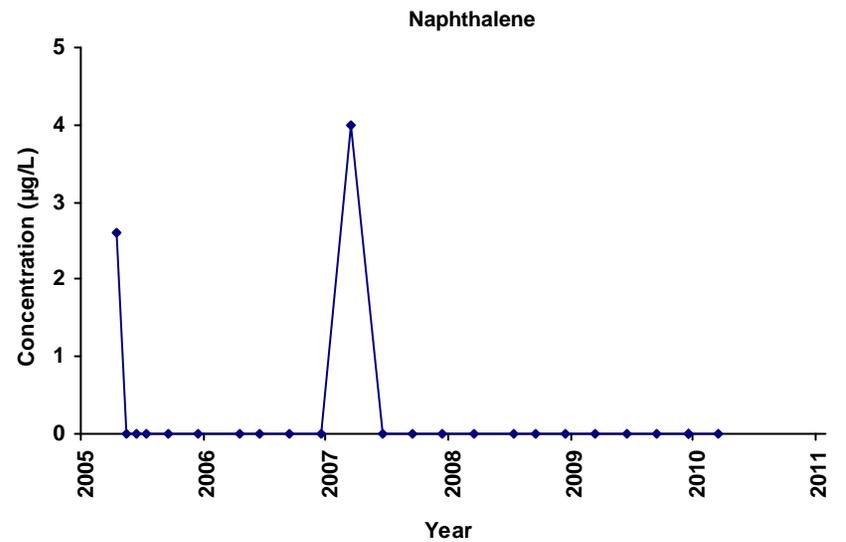
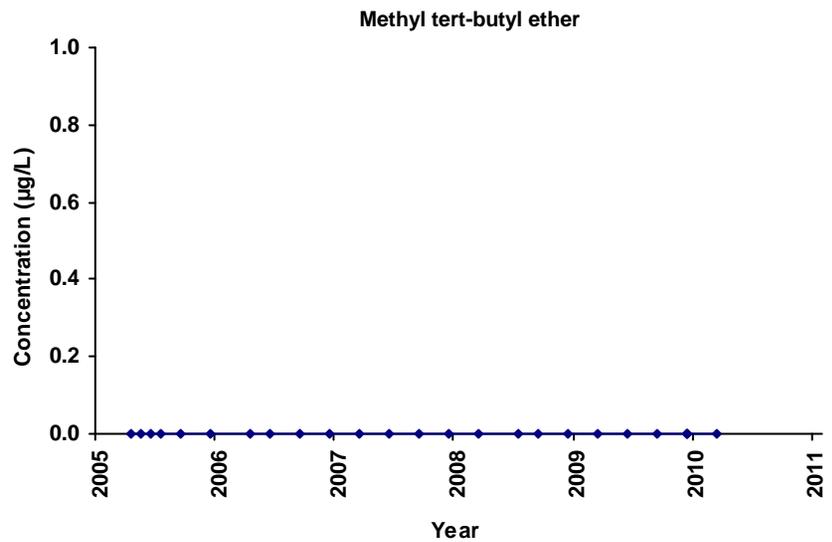
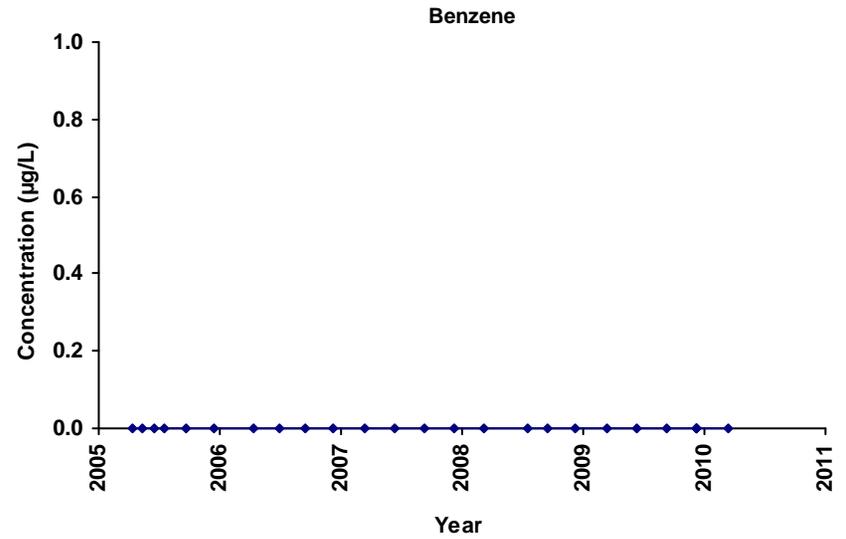
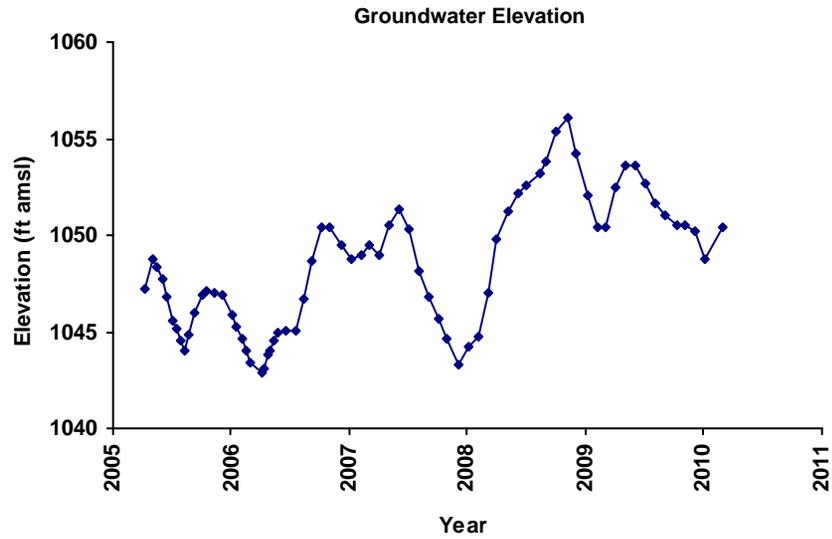
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-31
 ASE-107A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



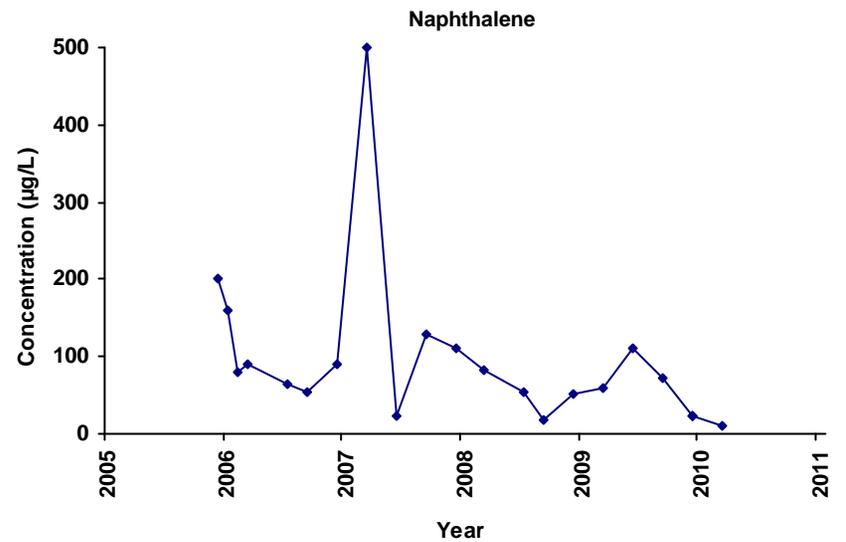
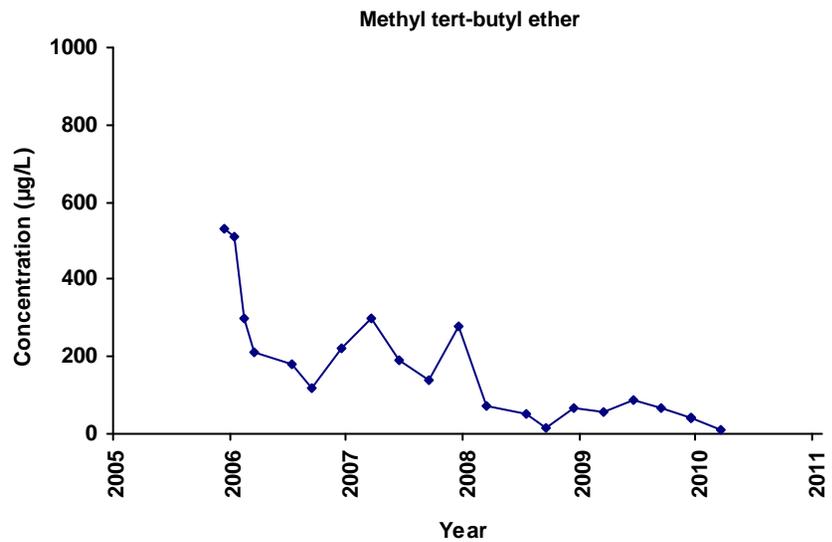
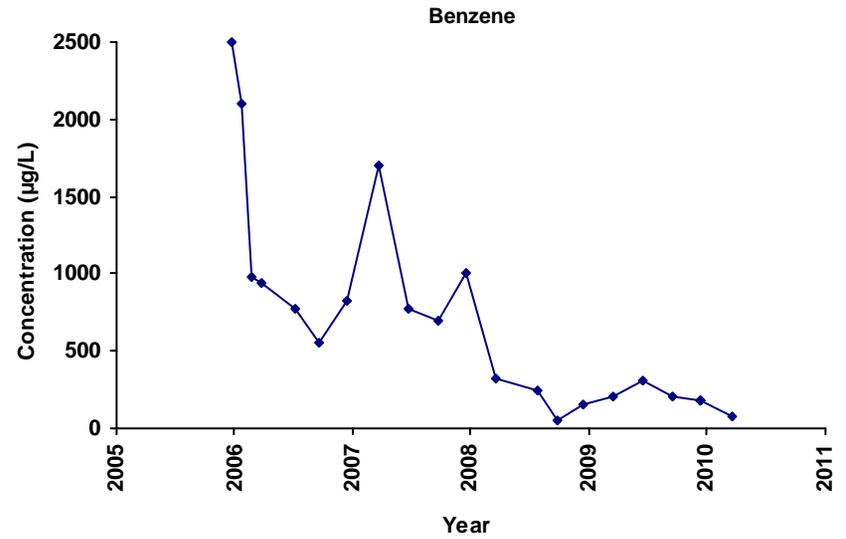
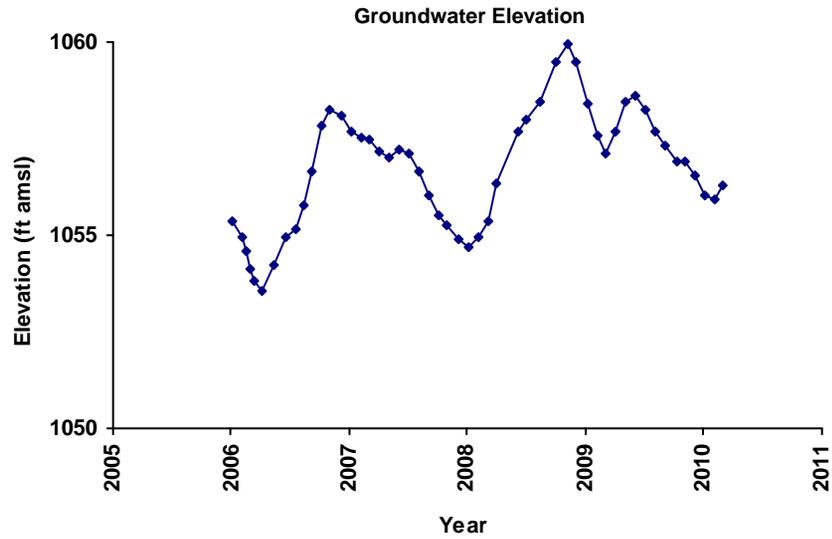
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-35
 ASE-111A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



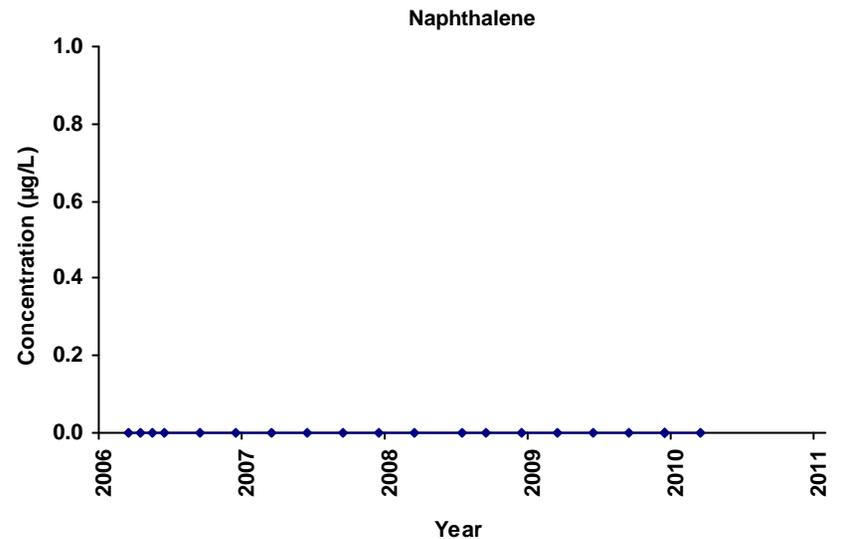
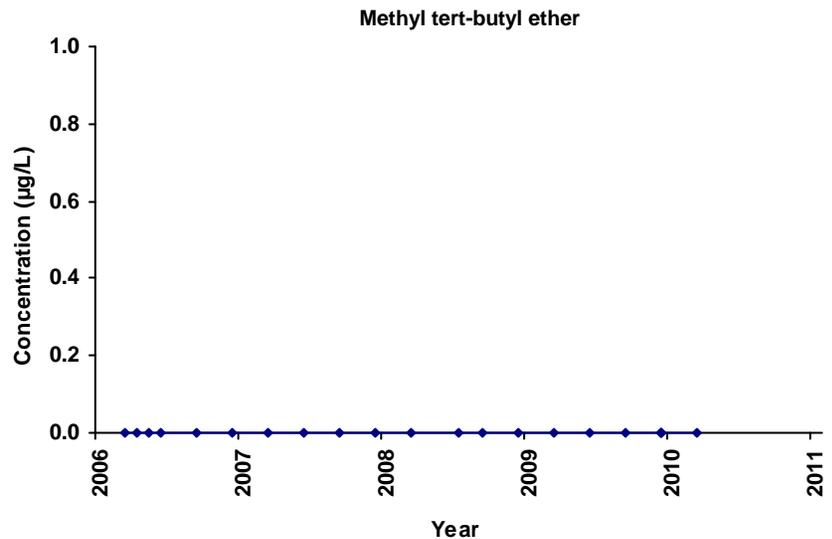
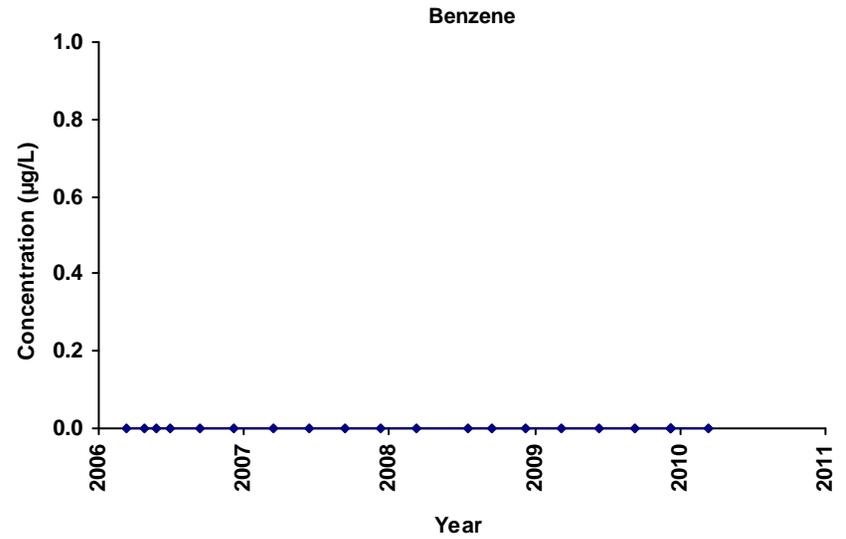
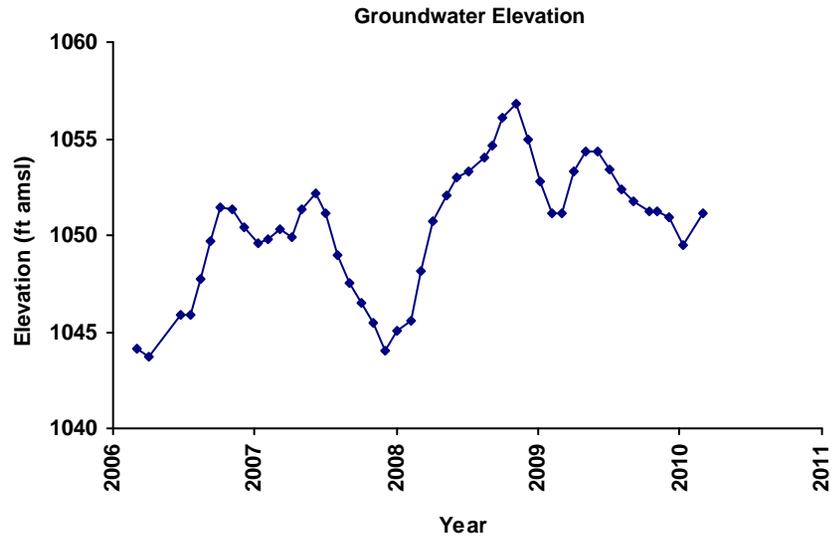
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-37
 ASE-113A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



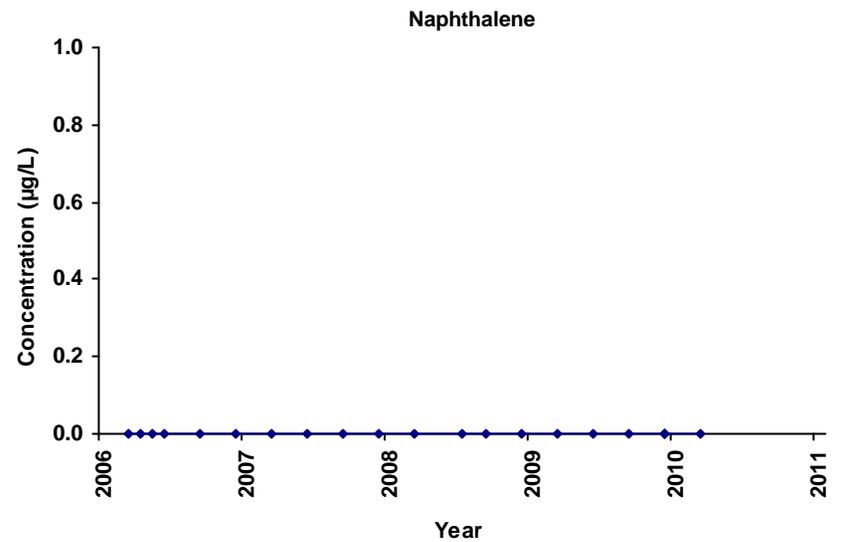
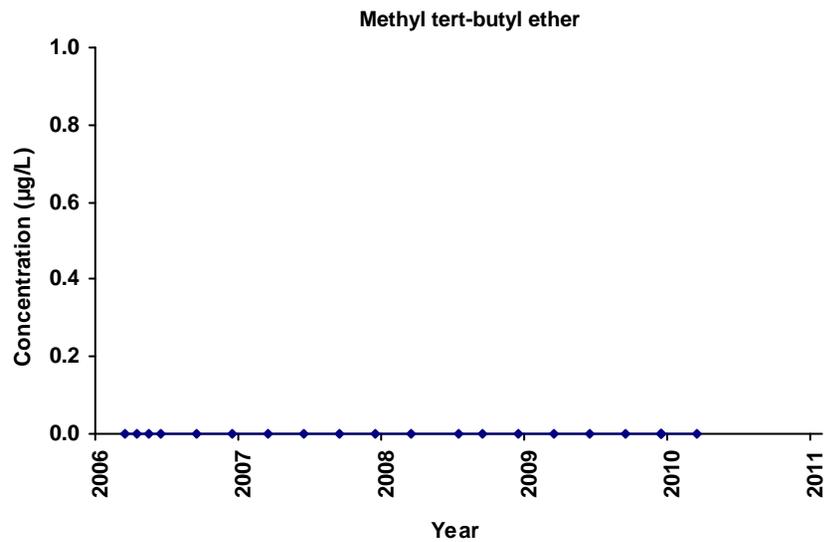
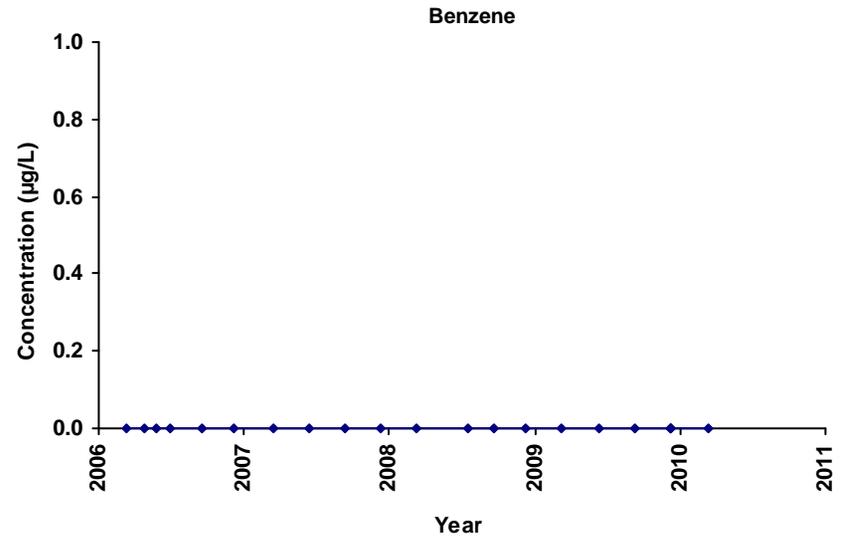
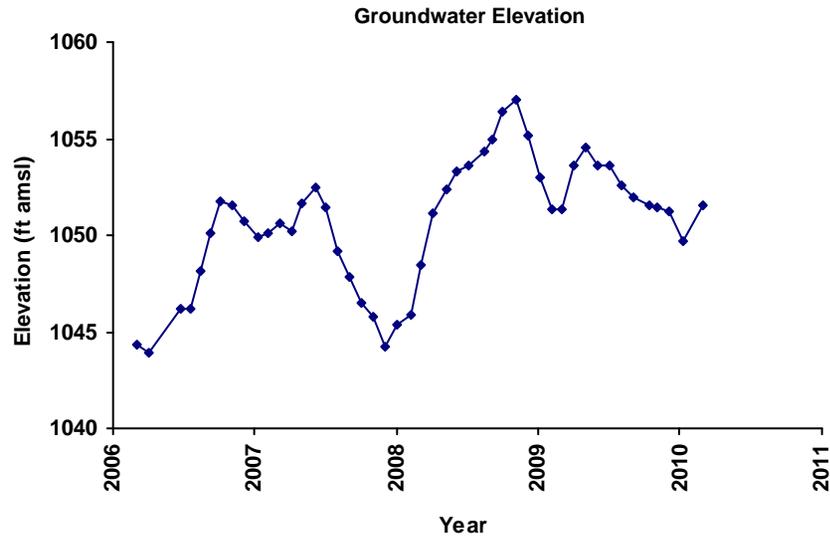
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-40
 ASE-116A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



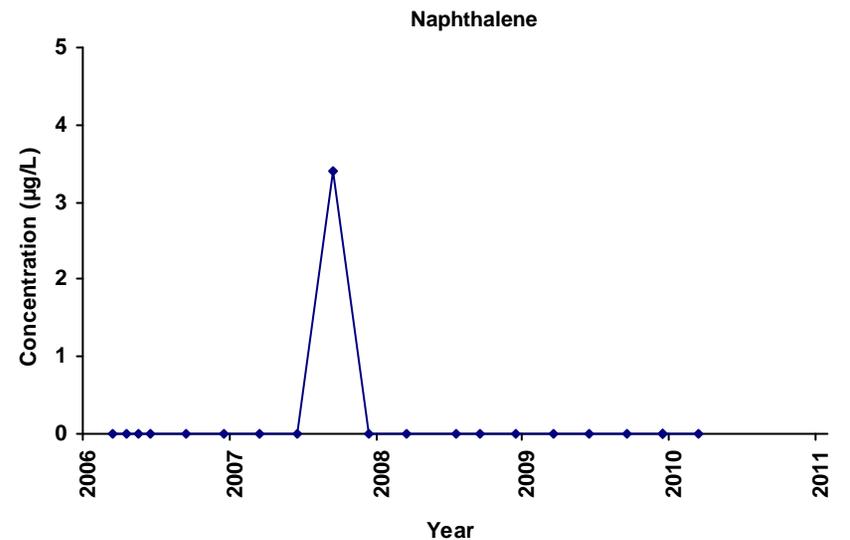
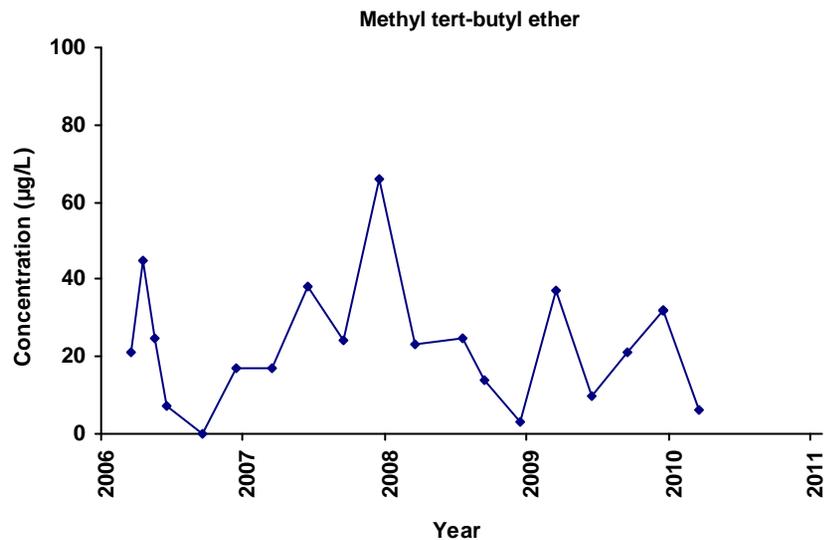
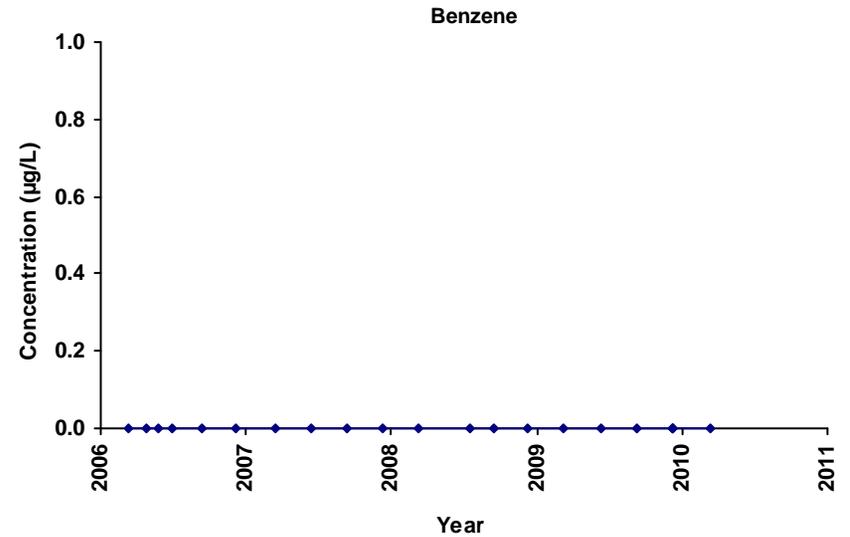
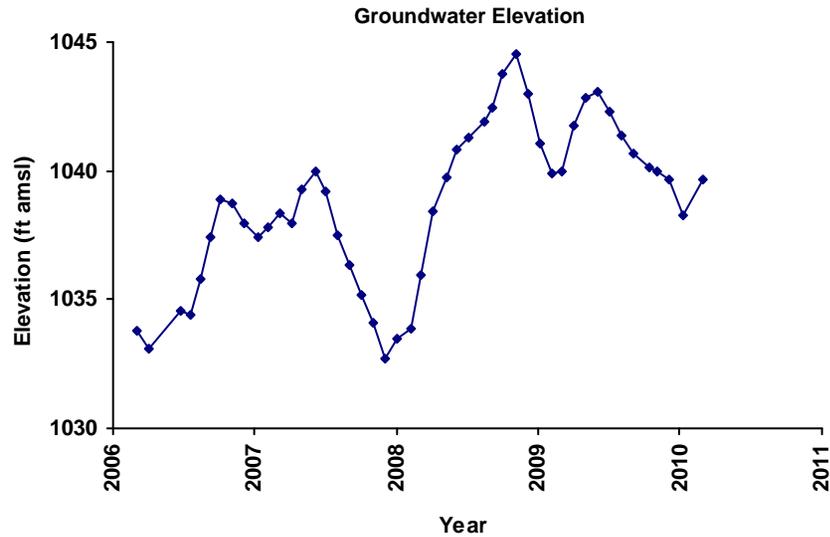
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-41
 ASE-122A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



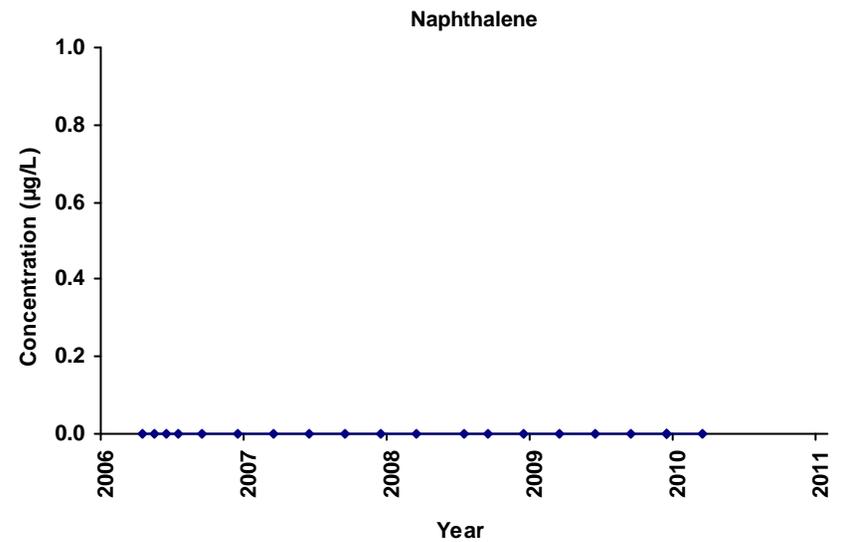
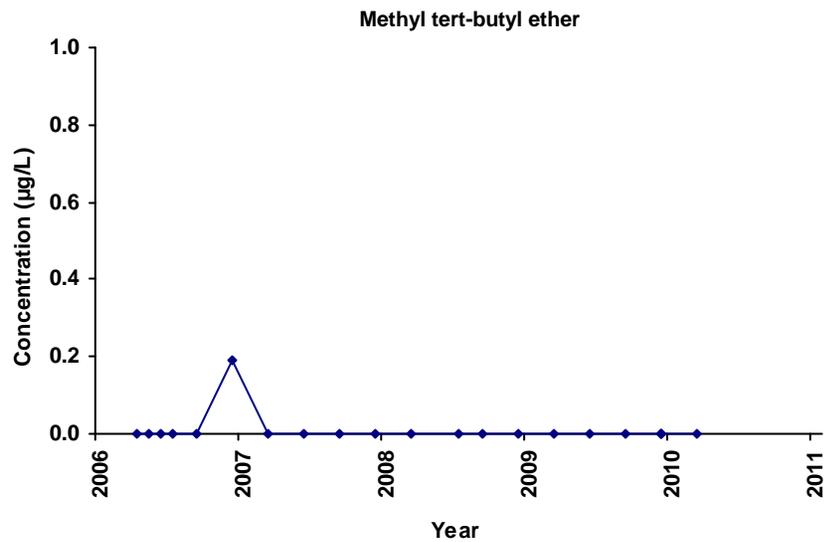
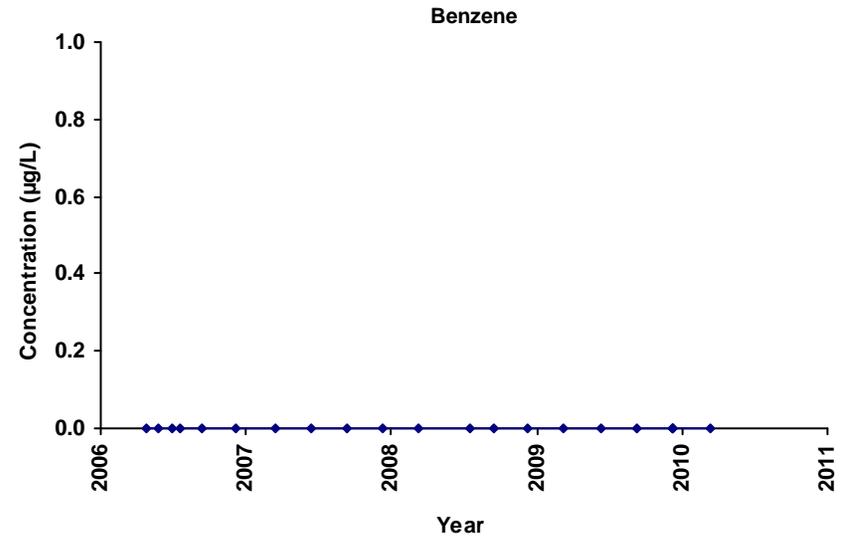
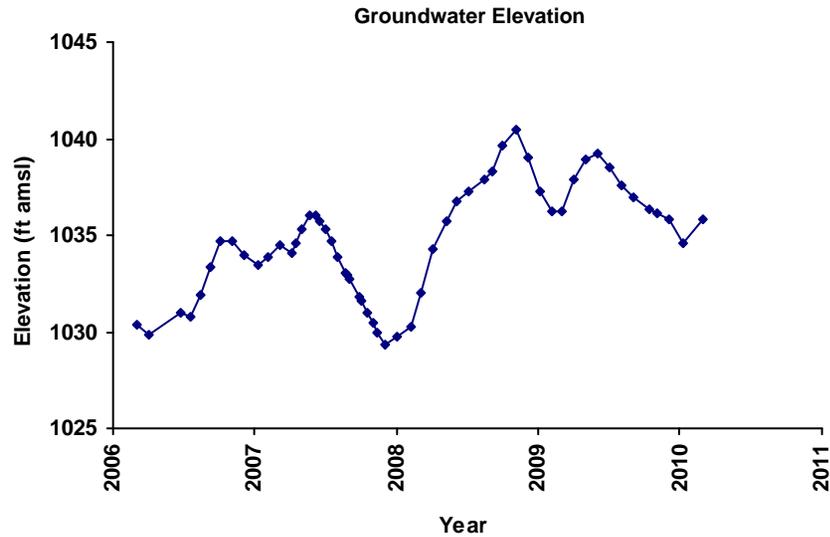
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-42
 ASE-123A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



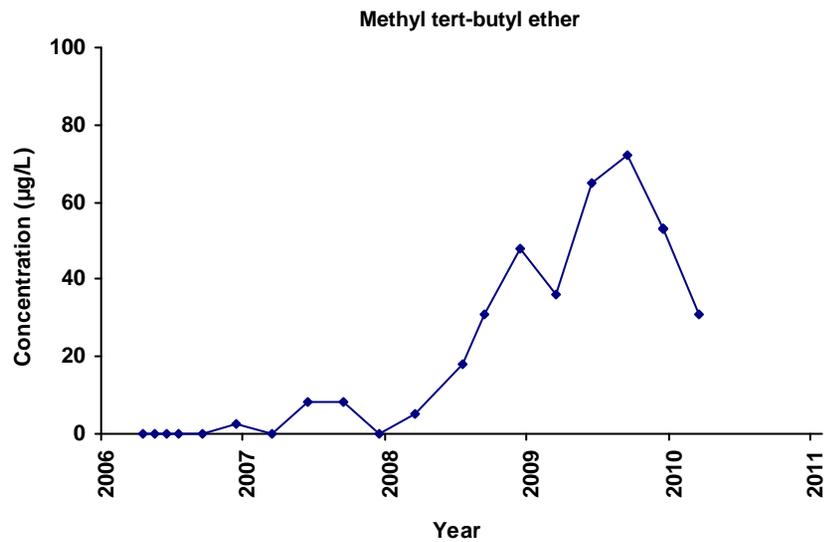
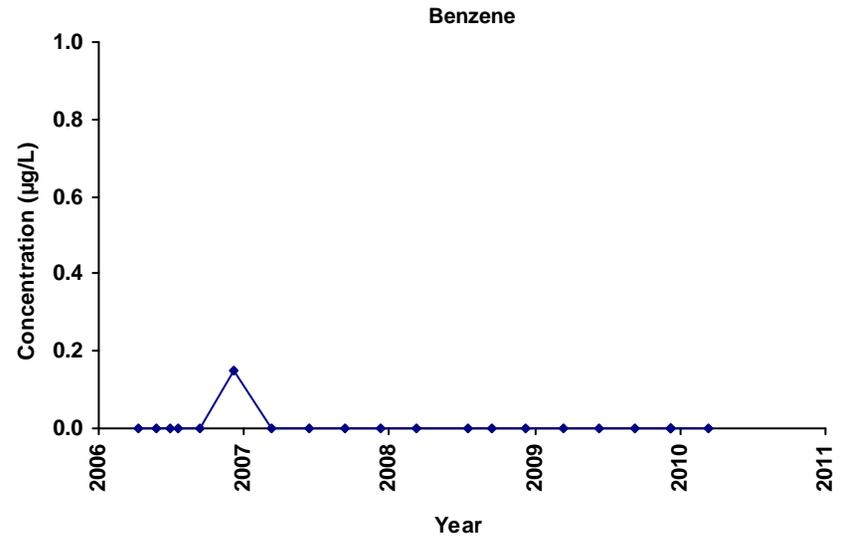
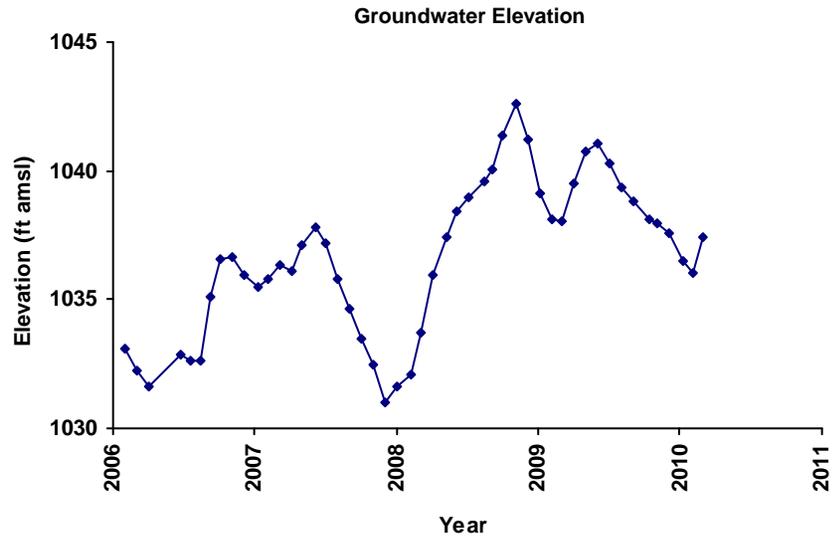
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

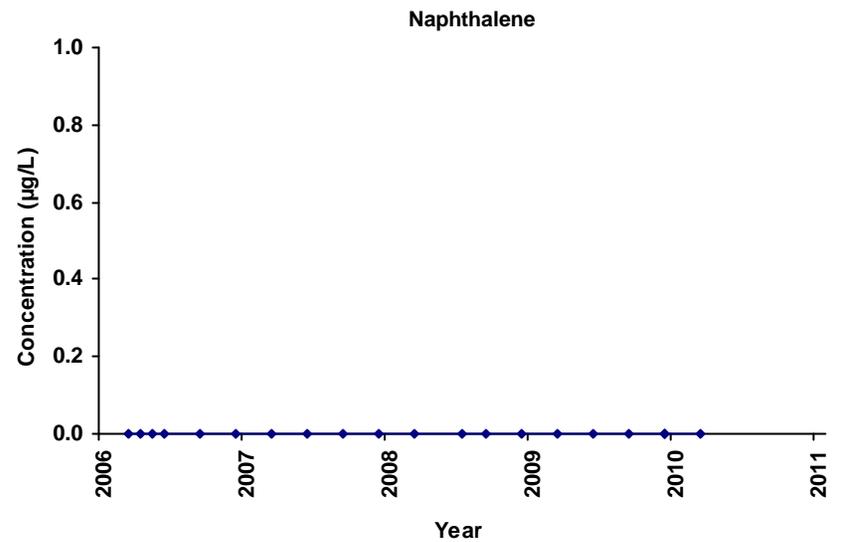
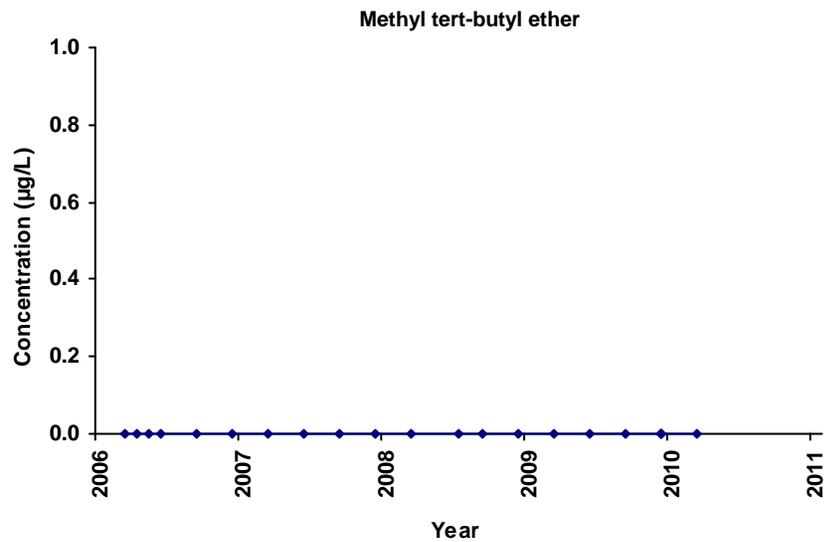
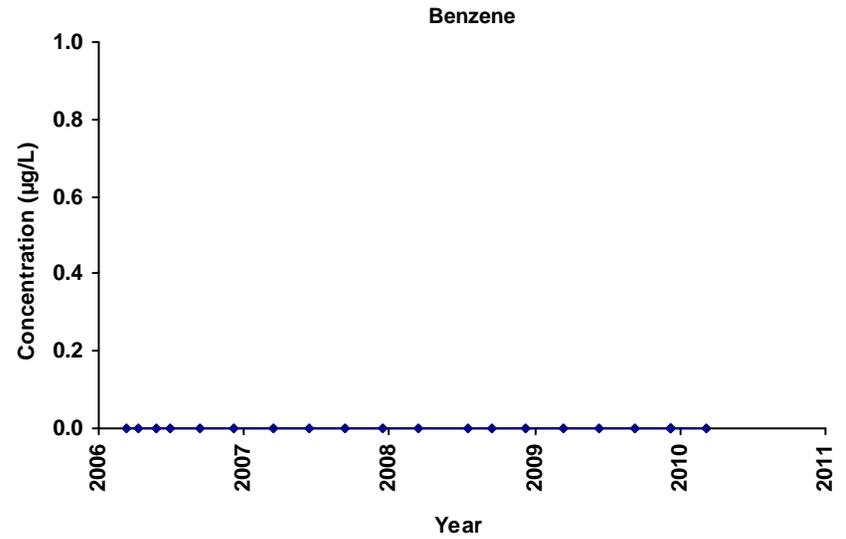
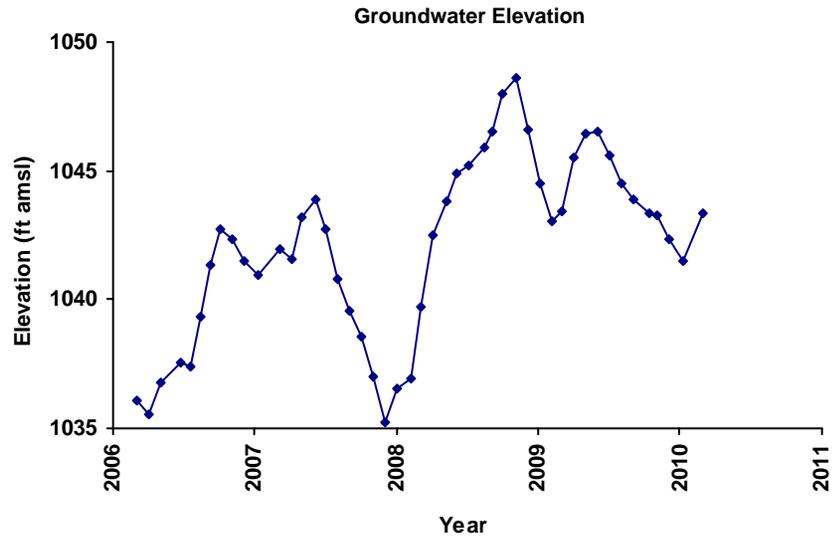
FIGURE G-43
 ASE-124A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

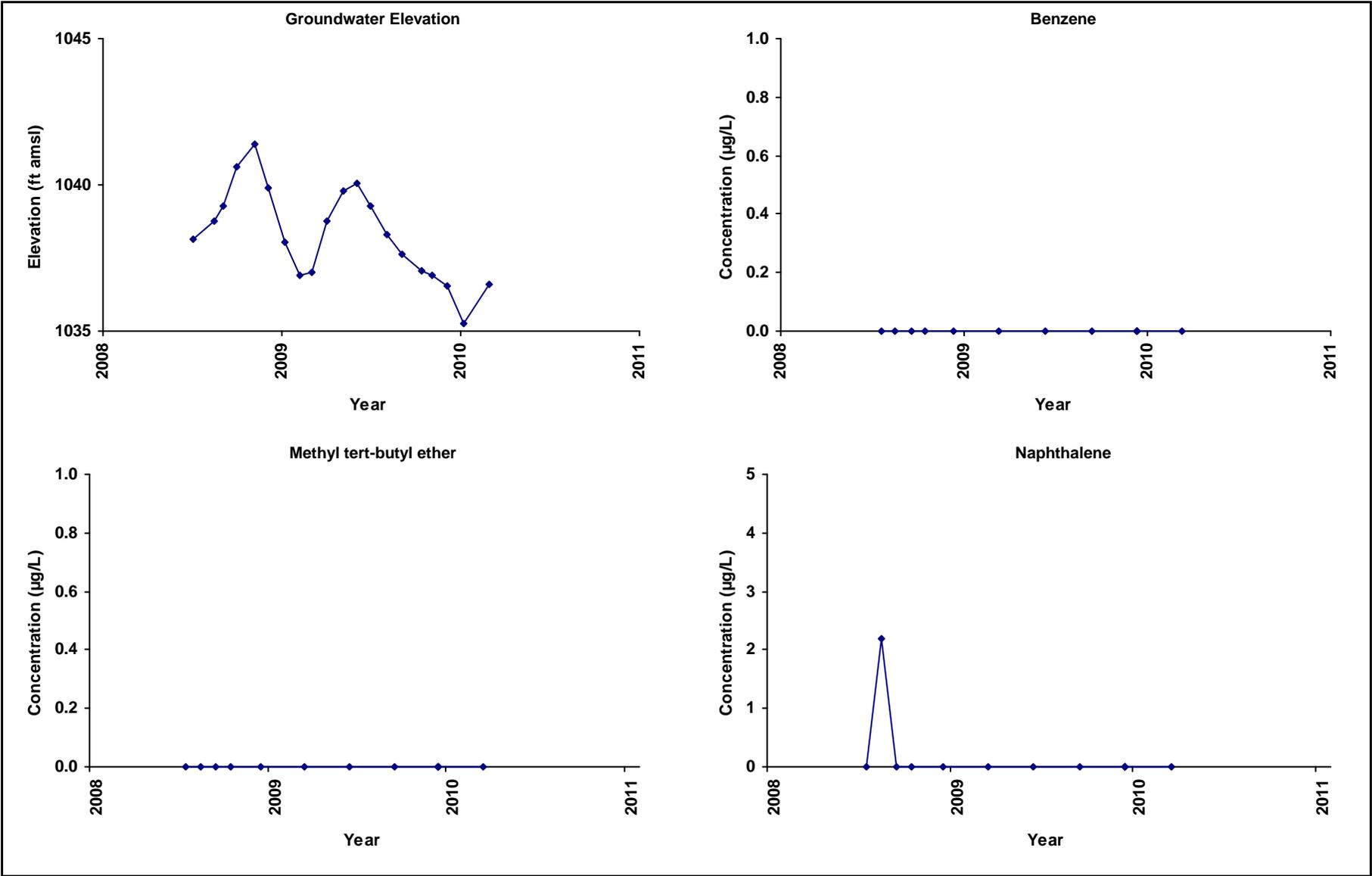
FIGURE G-44
 ASE-125A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona





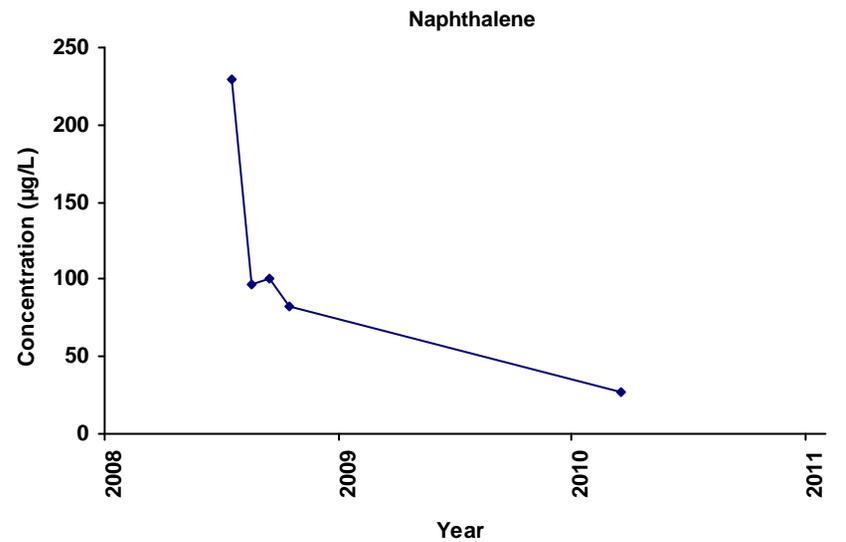
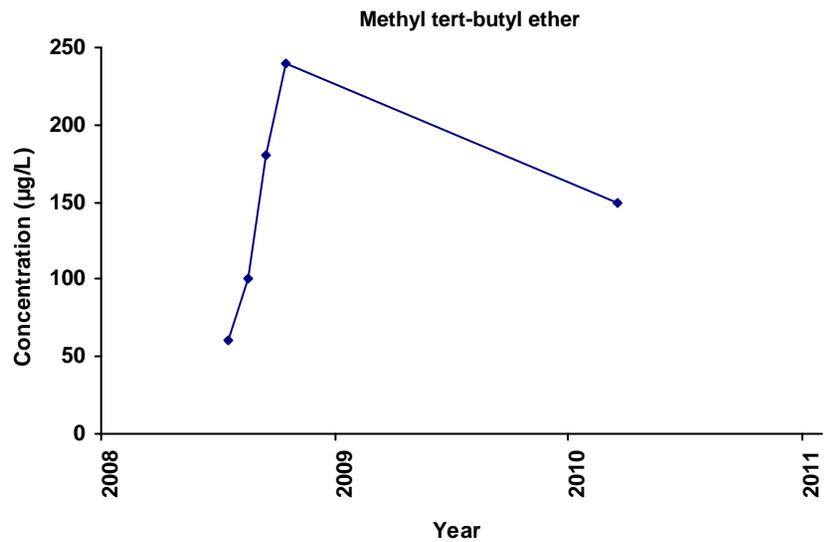
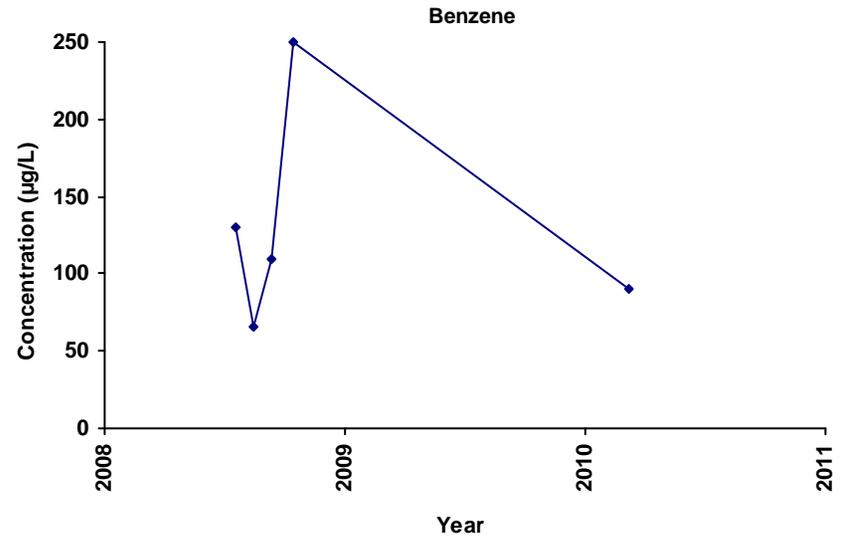
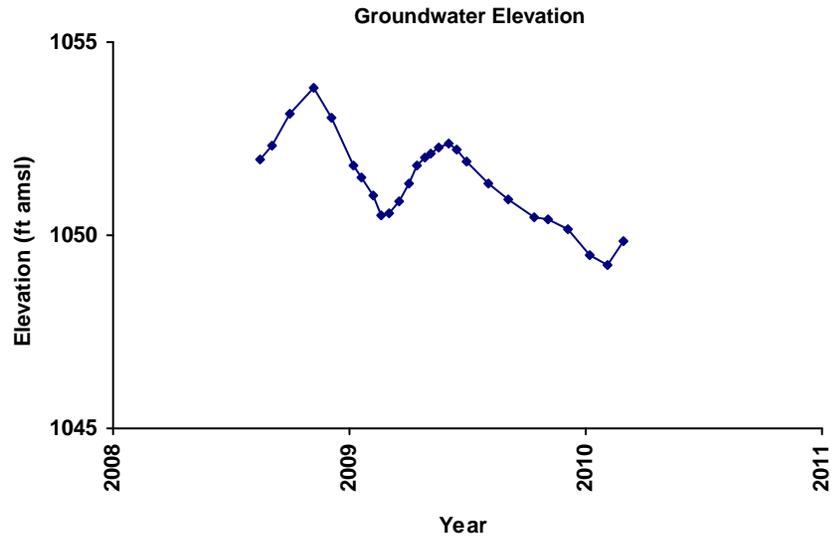
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-47
 ASE-128A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



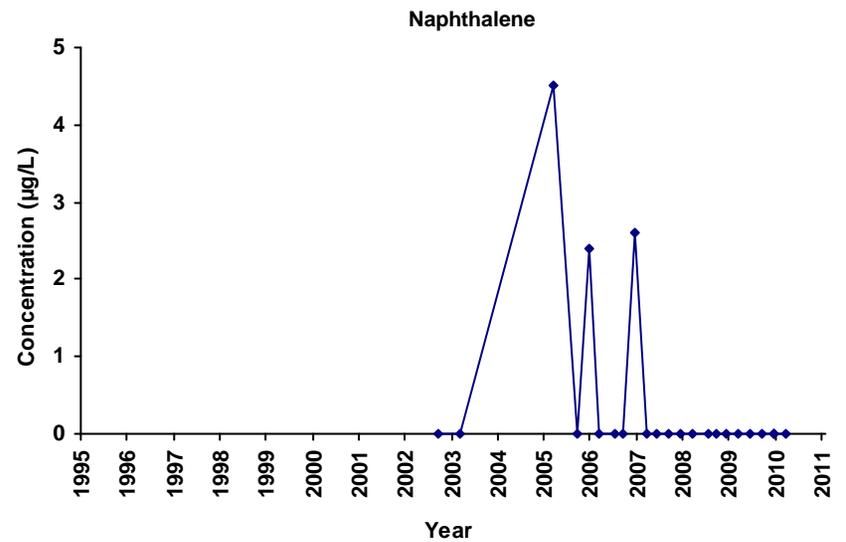
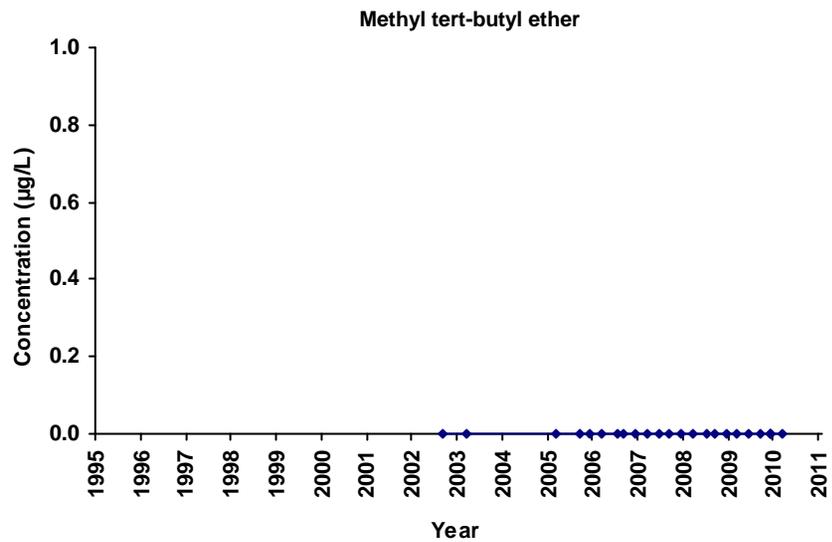
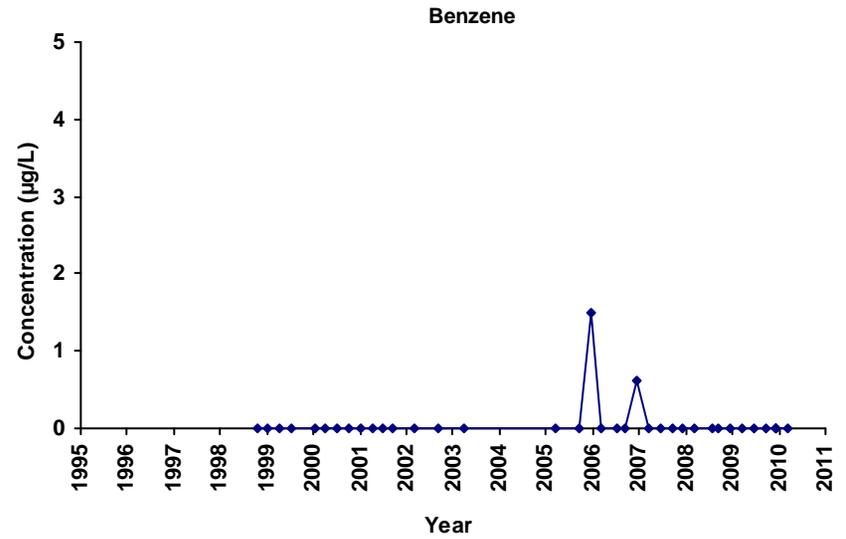
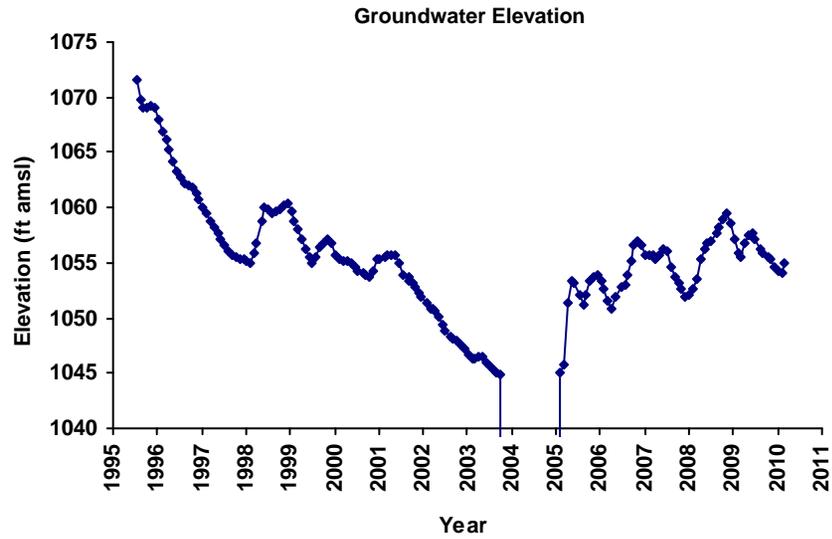
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-48
 ASE-129A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



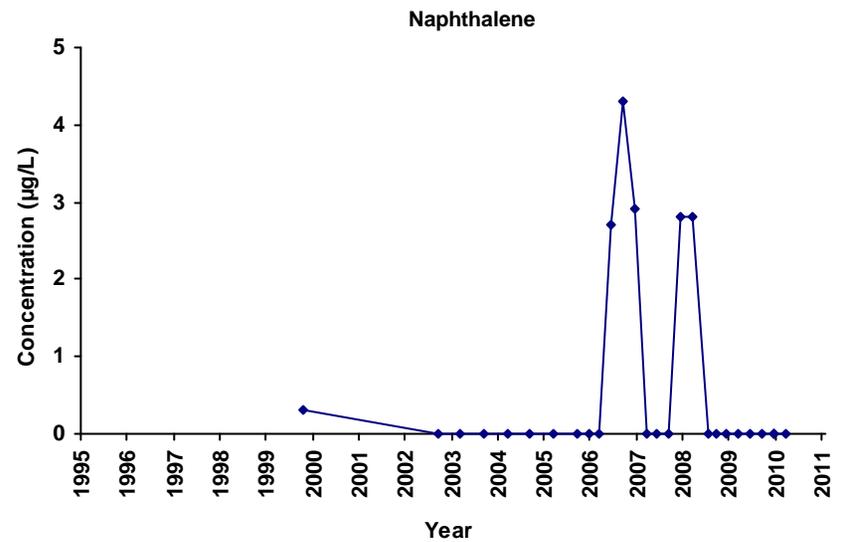
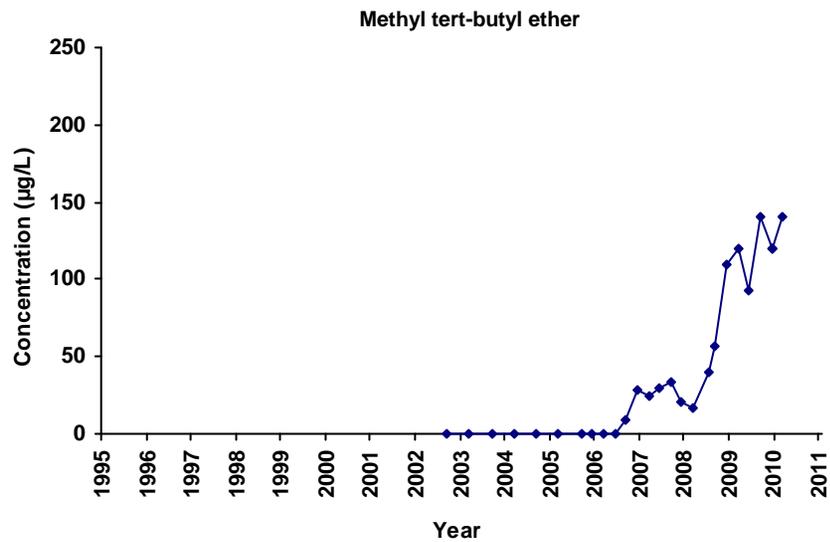
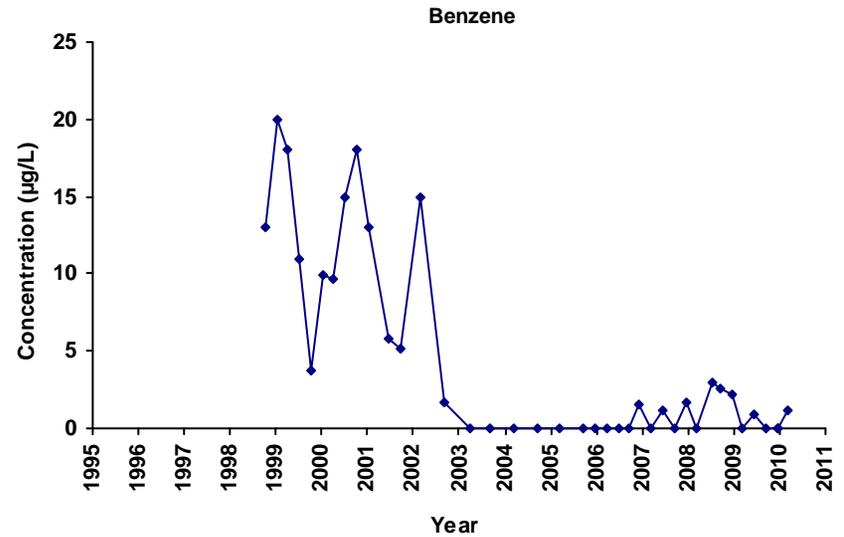
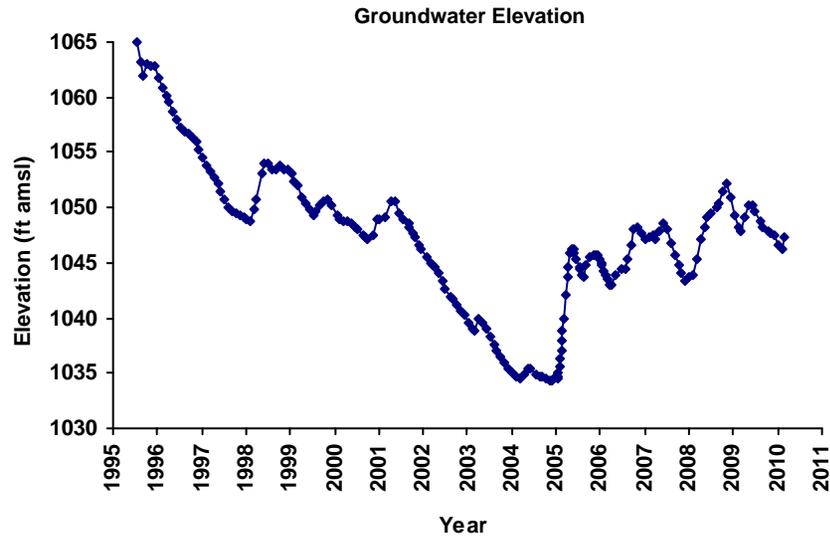
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-49
 ASE-130A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



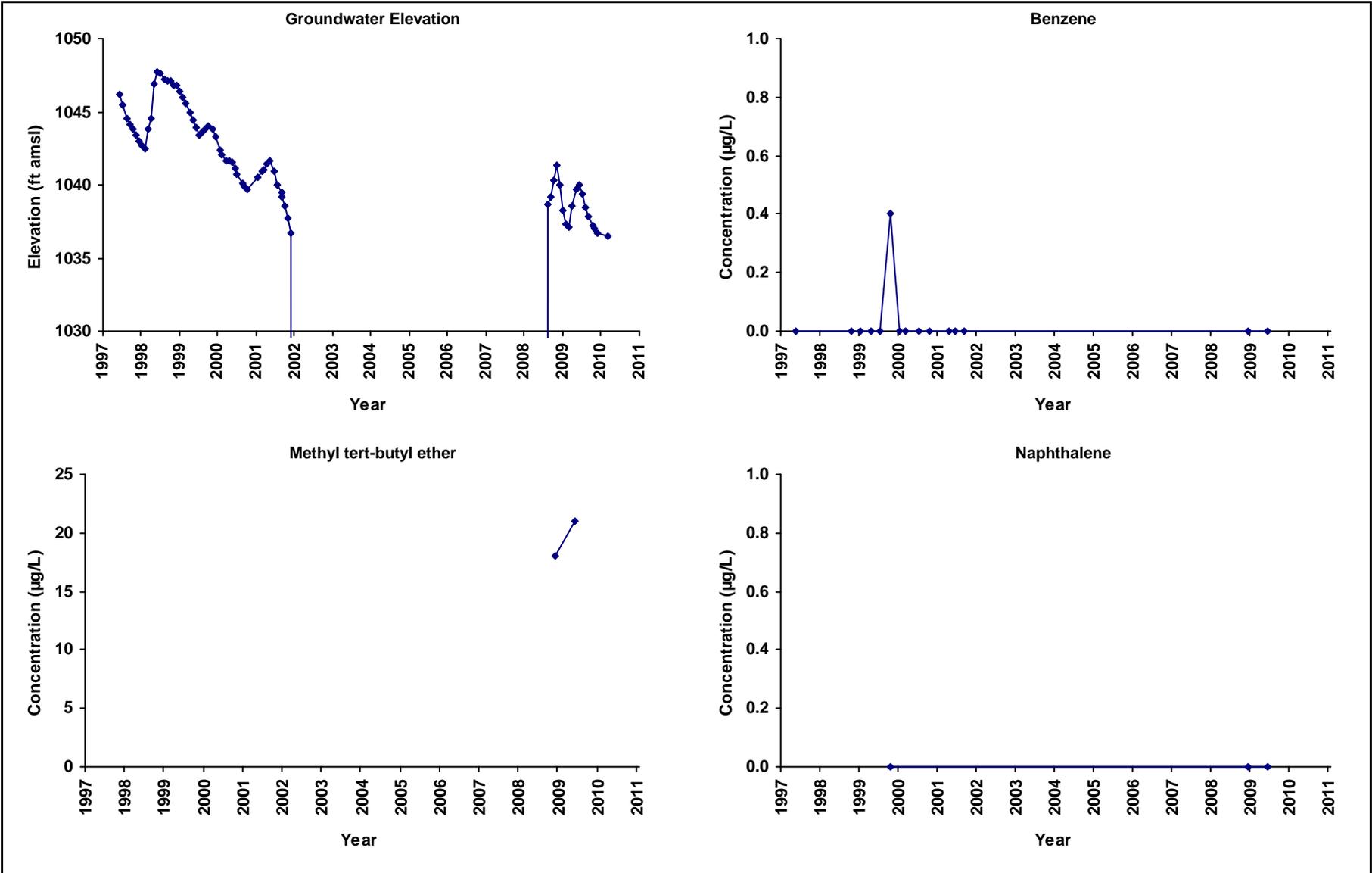
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-50
 BC-7A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



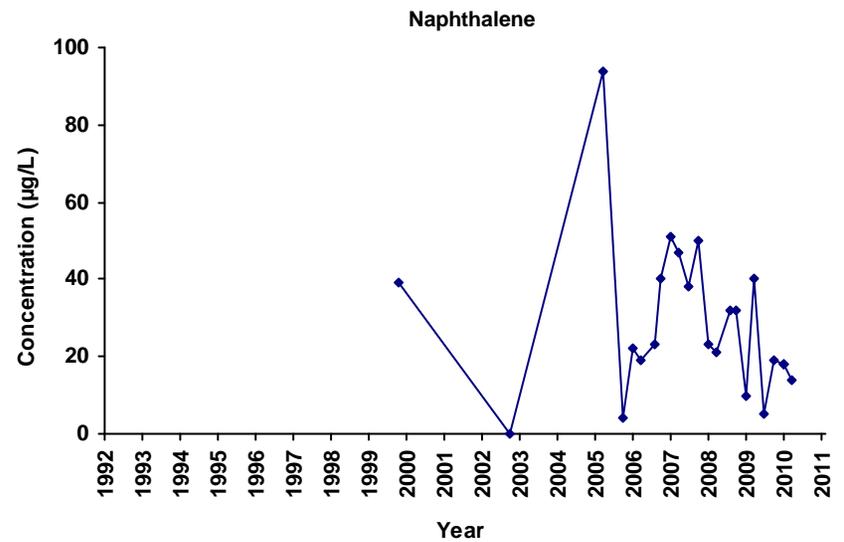
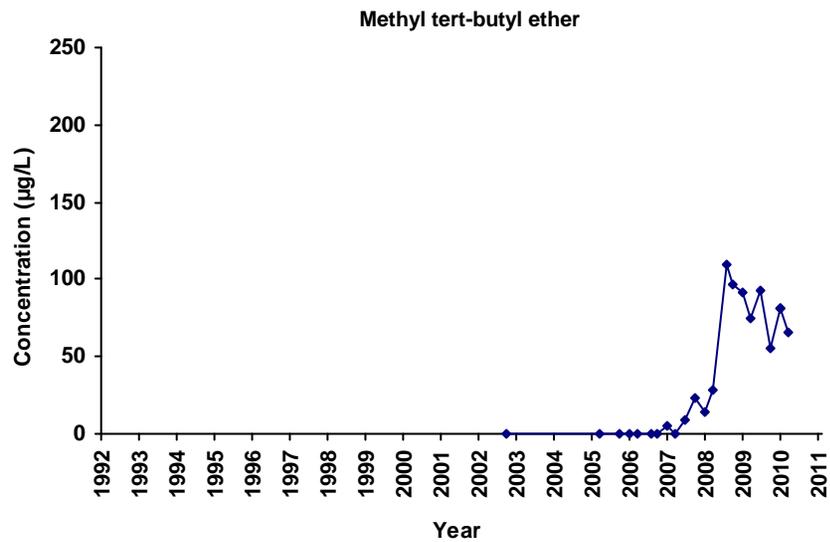
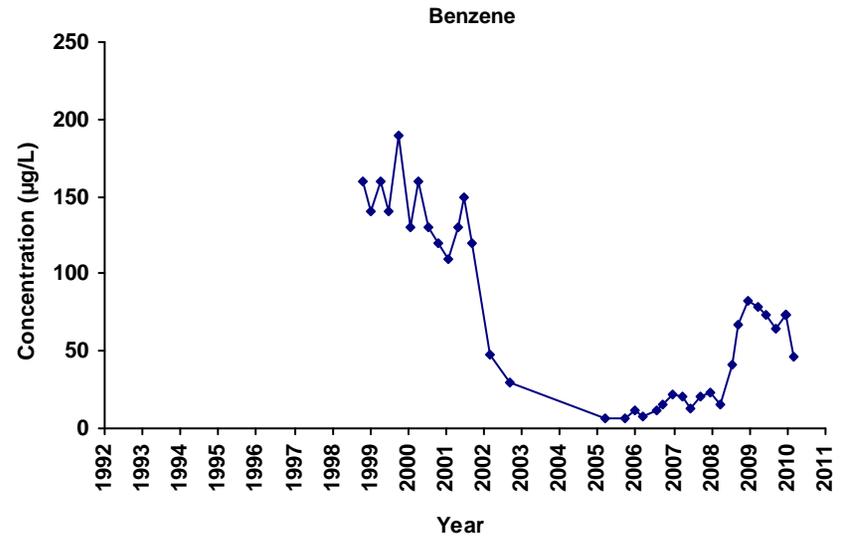
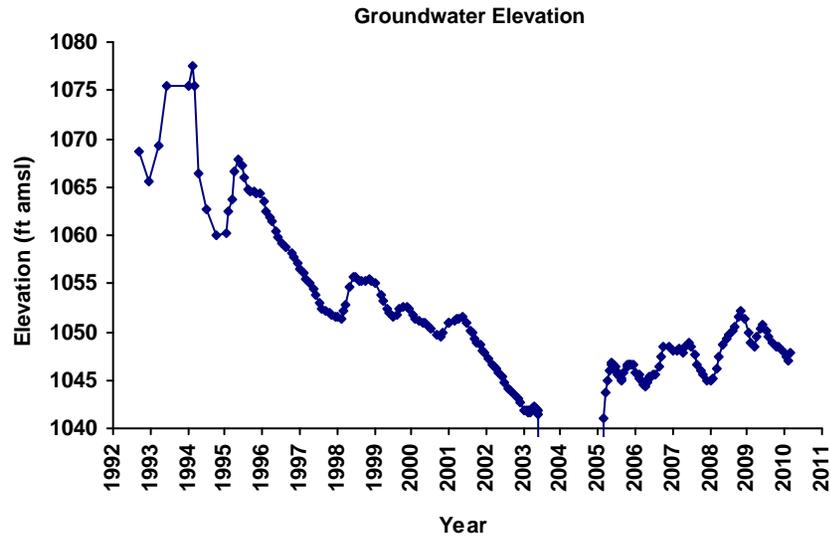
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-51
 BC-8B
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



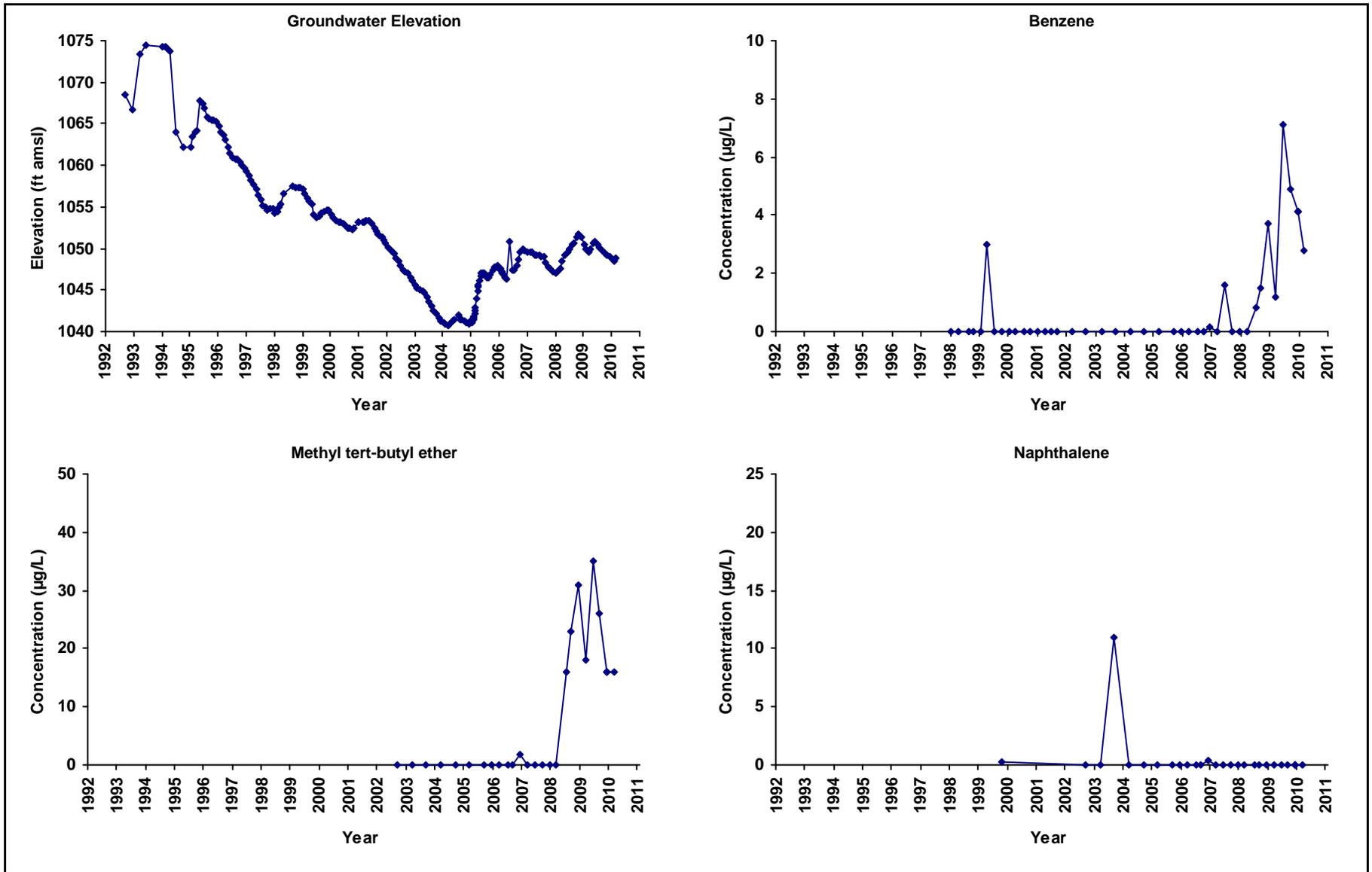
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-52
 BC-18
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



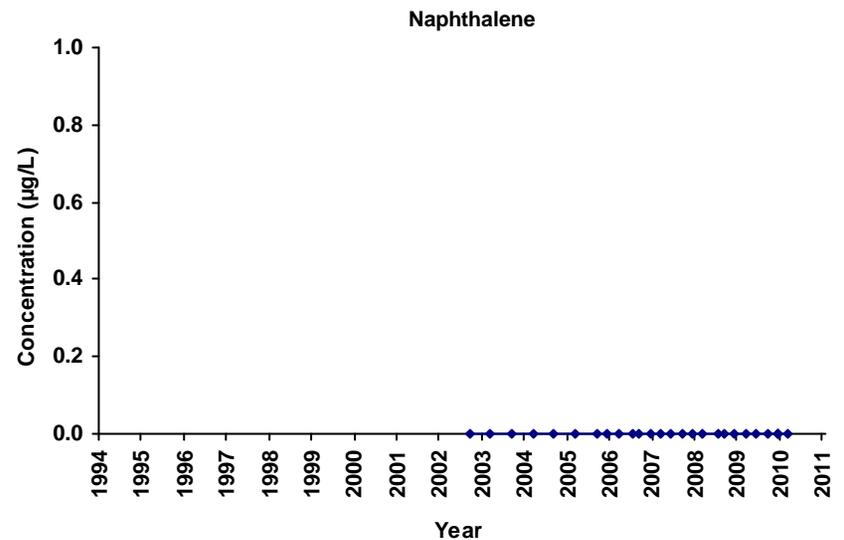
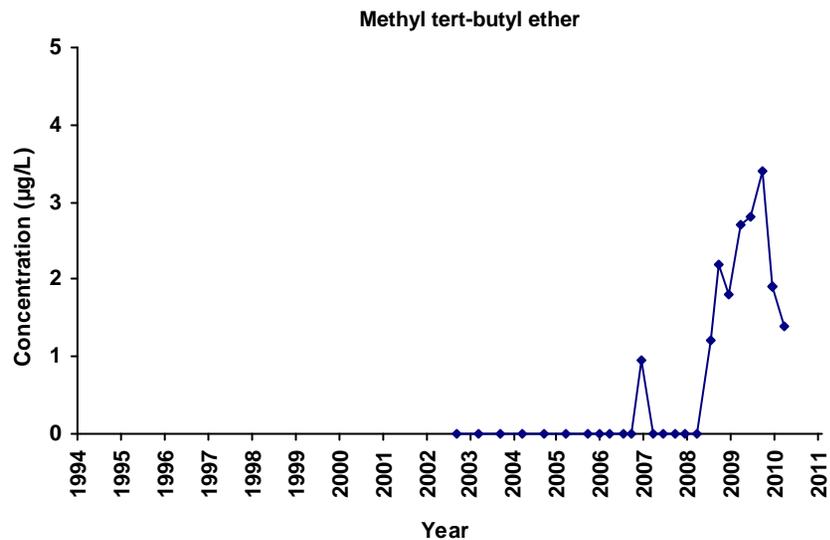
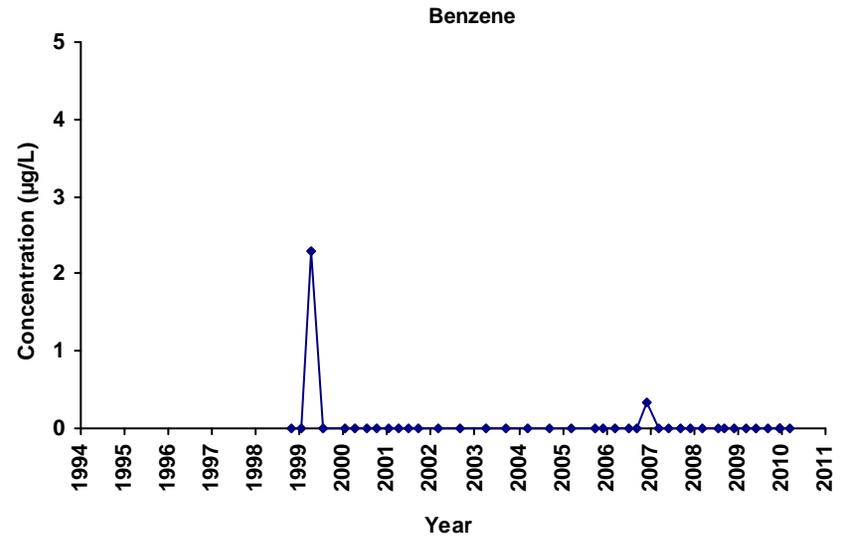
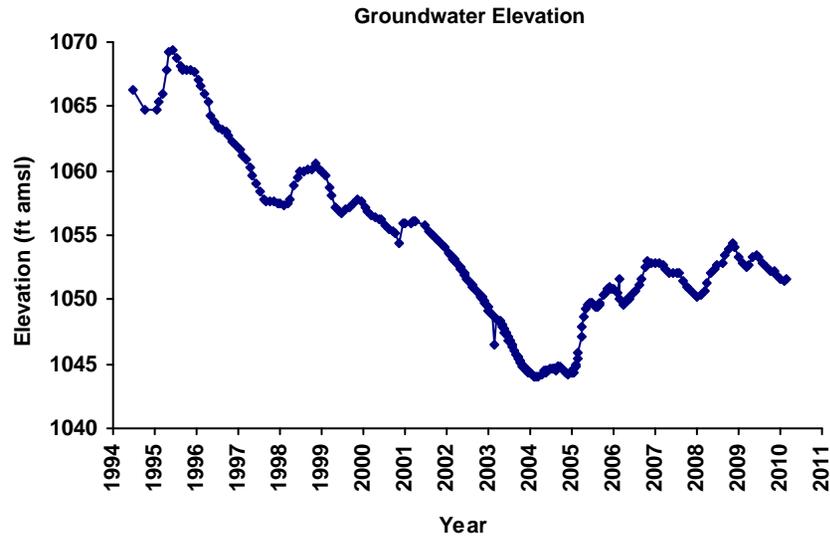
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-53
 PL-105A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



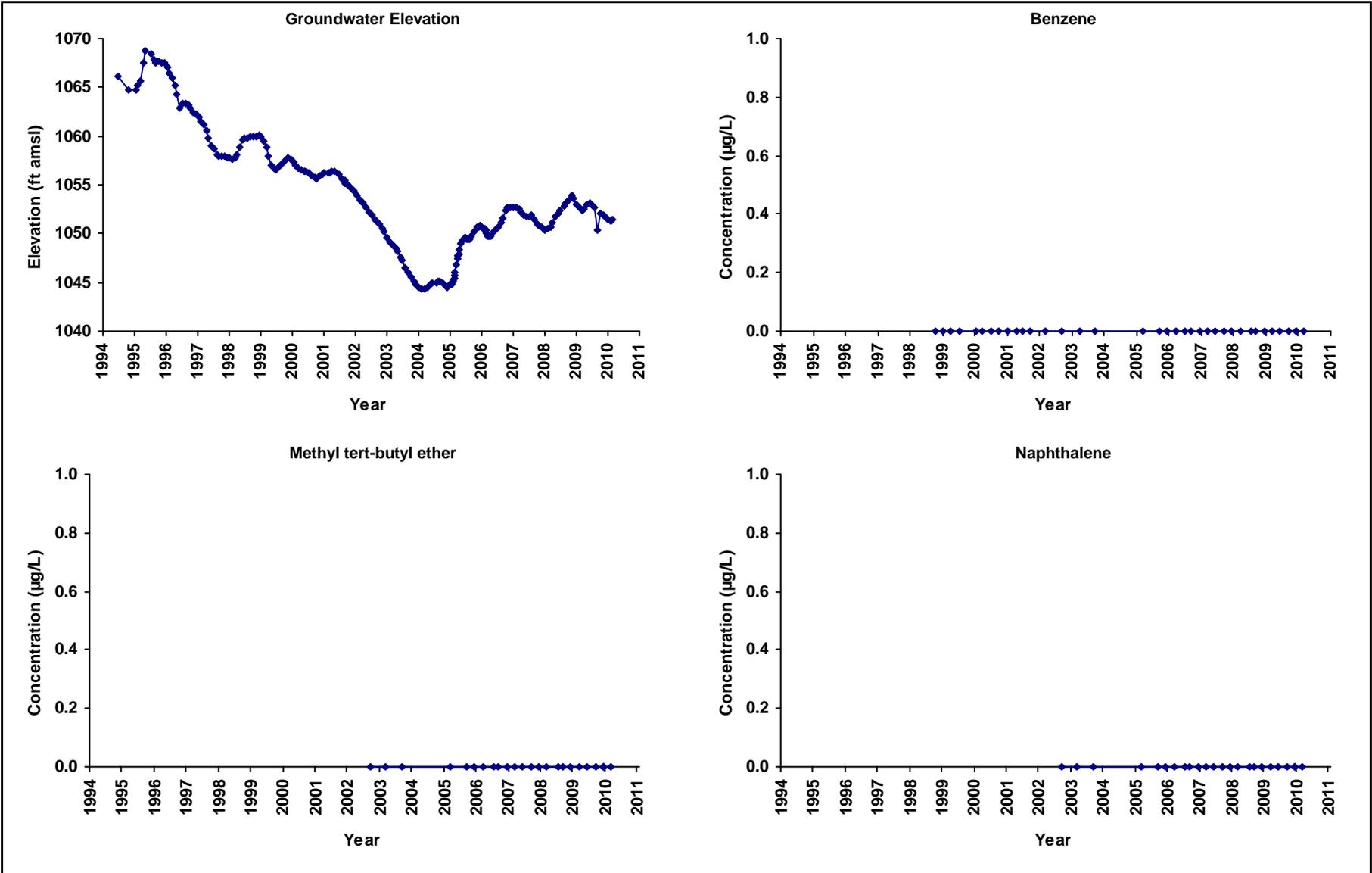
Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-54
 PL-201A
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-55
 PL-2101
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona



Notes:
 Concentrations reported as non-detect are plotted as zero.
 ft amsl = feet above mean sea level
 µg/L = micrograms per liter

FIGURE G-56
 PL-2102
 Water Level and Water Quality Hydrographs
 Honeywell 34th Street Facility, Phoenix, Arizona

Appendix H
Data Quality Evaluation and
Laboratory Analytical Reports - Groundwater

Data Quality Evaluation Report – First Quarter 2010 Underground Storage Tank Groundwater Monitoring

Introduction

The objective of this data quality evaluation (DQE) report is to assess the data quality of analytical results for water samples collected for the First Quarter 2010 monitoring period at the Honeywell International Inc. (Honeywell) 34th Street Aerospace Engines Product Center (Honeywell facility or facility). Samples were collected and analyzed in an effort to continue providing a framework for long-term monitoring of the Honeywell facility. The data may also be used to support future activities such as feasibility studies, risk assessments, fate and transport modeling, and remedial actions. The basis for this assessment includes: individual method requirements, guidelines from the United States Environmental Protection Agency (USEPA) *Contract Laboratory National Functional Guidelines for Organic Data Review* (USEPA, 1999), and the *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona* (QAPP) (CH2M HILL, 2007). This DQE report is intended as a general data quality assessment designed to summarize data issues.

The First Quarter 2010 groundwater sampling event was conducted in compliance with the updated QAPP entitled *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2007), approved by the Arizona Department of Environmental Quality on December 1, 2009.

Analytical Data

This DQE report covers 50 normal samples, seven field duplicates, eight equipment blanks, and eight trip blanks. A list of samples and collection dates is included in Attachment H-2 at the end of this DQE report. Samples were collected between March 7 and March 17, 2010. These sample results were reported as eight sample delivery groups (SDG) listed in Table H-1. The analyses were performed by Curtis & Tompkins Laboratory in Berkeley, California (CTBERK).

TABLE H-1
Sample Delivery Groups (SDGs)

218669
218702
218730
218768
218801
218834
218866
218881

Two methods were used to analyze the environmental samples. Samples were collected and shipped by overnight carrier to the laboratory for analysis. Selected samples were analyzed for one or more of the analytes/methods shown in Table H-2.

TABLE H-2
 Analytical Parameters by Laboratory

Parameter	Method
Volatile Organic Compounds	SW8260B
Total Petroleum Hydrocarbons (diesel and oil range organics)	SW8015B

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

The assessment of data included a review of: (1) the chain-of-custody documentation; (2) holding-time compliance; (3) the required field and laboratory quality control samples; (4) flagging for method blanks; (5) laboratory control sample (LCS) recoveries; (6) surrogate spike recoveries; (7) matrix spike/matrix spike duplicate (MS/MSD) samples; (8) internal standard responses; and (9) initial and continuing calibrations.

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

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

The data flags are defined below:

- J = Analyte was present but reported value may not be accurate or precise.
- R = The result was rejected.
- U = Analyte was analyzed for but not detected at the specified detection limit.
- UJ = Analyte was not detected above the detection limit objective. However, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Findings

The overall summaries of the data validation findings are contained in the following sections below and summarized in Attachment H-2 at the end of this DQE report. Both the text section and Attachment H-2 contain only the instances where criteria exceedances impact data qualification (resulting in a validation flag being added to the data).

Holding Times

All holding-time criteria were met.

Sample Quantitation

All methods were reported to the reporting limit (RL). For methods included in the QAPP, all QAPP objectives were met for undiluted analyses with the exceptions listed in Table H-3.

TABLE H-3
Samples for Which QAPP Reporting Limit Objectives Were Not Met

Method	Analyte	QAPP ¹ RL (µg/L)	Report ² RL (µg/L)	Comments
SW8260B	Methylene Chloride	5	10	Laboratory RL submitted as a variance to the Honeywell QAPP. Variance was accepted by the CH2M HILL chemist.
SW8015B	Total Petroleum Hydrocarbons - Diesel Range Organics (C ₁₀ -C ₂₂)	50	1,000	Laboratory RL raised per client request
SW8015B	Total Petroleum Hydrocarbons - Oil Range Organics (C ₂₂ -C ₃₂)	50	1,000	Laboratory RL raised per client request

Notes:

¹ Reporting Limits from the *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2007).

² *First Quarter 2010 Remediation Status Report*

Sample Dilutions

Several samples required dilution due to high analyte concentrations and/or matrix interference. The RLs for non-detected analytes in the diluted samples were raised accordingly. Table H-4 lists the methods and samples analyzed at a dilution.

TABLE H-4
Samples Analyzed Diluted

Method	Sample ID	Dilution Factor(s)
SW8015B	ASE-55A-UST-10Q1	2
SW8260B	ASE-130A-UST-10Q1	2
SW8260B	ASE-38A-UST-10Q1	7.14
SW8260B	ASE-63A-UST-10Q1	20
SW8260B	ASE-90A-UST-10Q1	2, 5
SW8260B	BC-8B-UST-10Q1	2
SW8260B	UST-10Q1-001	2
SW8260B	UST-10Q1-003	20

Calibration

The recovery of iodomethane was below criteria in the initial calibration verifications for Method SW8260B, indicating associated sample results are possibly biased low. Fourteen associated non-detected results were qualified as estimated and flagged “UJ.”

The recoveries of seven analytes were below criteria in the continuing calibration verifications for Method SW8260B, indicating associated sample results are possibly biased low. Twenty associated non-detected results were qualified as estimated and flagged “UJ.”

Method Blanks

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

Field Blanks

Equipment blanks and trip blanks were collected as required and were generally free of contamination.

Toluene was detected above the reporting limit in several equipment blanks for Method SW8260B. Associated samples were not qualified because they did not contain reportable levels of toluene.

Field Duplicates

Seven field duplicate sets were collected and analyzed with this event. A list of field duplicates and associated parent sample identifications (ID) is included in Table H-5.

TABLE H-5
 List of Field Duplicates

Field Duplicate Sample ID	Associated Parent Sample ID
UST-10Q1-001	BC-8B-UST-10Q1
UST-10Q1-002	PL-105A-UST-10Q1
UST-10Q1-003	ASE-63A-UST-10Q1
UST-10Q1-004	ASE-98A-UST-10Q1
UST-10Q1-005	ASE-96A-UST-10Q1
UST-10Q1-006	PL-2101-UST-10Q1
UST-10Q1-007	ASE-116A-UST-10Q1

All relative percent difference (RPD) criteria were met.

Surrogates

All surrogates recovery criteria were met.

Laboratory Control Samples

LCSs were analyzed for all methods as required. All acceptance criteria were met with the following exception:

Iodomethane was recovered below the lower control limit in one LCS for Method SW8260B, indicating associated sample results are possibly biased low. One associated non-detected result was qualified as estimated and flagged “UJ.”

Matrix Spikes

The results of MS/MSD analyses provide information about the possible influence of the matrix on either accuracy or precision of the measurements. MS/MSD recoveries and the associated RPD met criteria.

Internal Standards

All internal standard criteria were met.

Tentatively Identified Compounds

Tentatively identified compounds were not reported by the laboratory.

Chain of Custody

Each sample was documented in a completed chain-of-custody and received at the laboratory within temperature criteria. Instances where discrepancies in sample integrity were noted are described below.

There were several instances where trip blanks were received with air bubbles that exceeded the USEPA recommended size criterion. These trip blanks did not contain contamination, and therefore it could not be determined if associated data were affected. No data were qualified.

Overall Assessment

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

1. No data were rejected and completeness was 100 percent for all method/analyte combinations.
2. No data were qualified due to low-level blank contamination.
3. Samples were analyzed diluted for Methods SW8260B and SW8015B, resulting in raised RLs for non-detected analytes.
4. Initial and continuing calibration exceedances were observed for Method SW8260B; 32 results were qualified as estimated.

5. An LCS recovery exceedance was observed for Method SW8260B; one result was qualified as estimated.
6. Overall, the precision and accuracy of the data, as measured by field and laboratory quality control indicators, indicates that the data are usable for project objectives

References

CH2M HILL. 2007. *Master Quality Assurance Project Plan, Honeywell International, Inc., 34th Street Facility, Phoenix, Arizona*. September 20.

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

ATTACHMENT H-1

Samples Associated with DQE

 SAMPLES ASSOCIATED WITH DQE

Field Sample ID	Sample Date	Sample Type
EB-001-UST-10Q1	03/07/2010	EB
EB-002-UST-10Q1	03/09/2010	EB
EB-003-UST-10Q1	03/10/2010	EB
EB-004-UST-10Q1	03/11/2010	EB
EB-005-UST-10Q1	03/12/2010	EB
EB-006-UST-10Q1	03/15/2010	EB
EB-007-UST-10Q1	03/16/2010	EB
EB-008-UST-10Q1	03/17/2010	EB
UST-10Q1-004	03/08/2010	FD
UST-10Q1-002	03/09/2010	FD
UST-10Q1-003	03/10/2010	FD
UST-10Q1-001	03/11/2010	FD
UST-10Q1-005	03/15/2010	FD
UST-10Q1-006	03/16/2010	FD
UST-10Q1-007	03/17/2010	FD
ASE-90A-UST-10Q1	03/08/2010	REG
ASE-98A-UST-10Q1	03/08/2010	REG
ASE-99A-UST-10Q1	03/08/2010	REG
ASE-112A-UST-10Q1	03/08/2010	REG
ASE-128A-UST-10Q1	03/08/2010	REG
ASE-105A-UST-10Q1	03/08/2010	REG
ASE-65A-UST-10Q1	03/09/2010	REG
ASE-108A-UST-10Q1	03/09/2010	REG
ASE-118A-UST-10Q1	03/09/2010	REG
PL-201A-UST-10Q1	03/09/2010	REG
ASE-130A-UST-10Q1	03/09/2010	REG
ASE-62A-UST-10Q1	03/09/2010	REG
ASE-22AR-UST-10Q1	03/09/2010	REG
PL-105A-UST-10Q1	03/09/2010	REG
ASE-58A-UST-10Q1	03/09/2010	REG
ASE-63A-UST-10Q1	03/10/2010	REG
ASE-61A-UST-10Q1	03/10/2010	REG
ASE-55A-UST-10Q1	03/10/2010	REG
BC-7A-UST-10Q1	03/10/2010	REG
PL-2102-UST-10Q1	03/10/2010	REG
ASE-64A-UST-10Q1	03/10/2010	REG
ASE-127A-UST-10Q1	03/10/2010	REG

SAMPLES ASSOCIATED WITH DQE

Field Sample ID	Sample Date	Sample Type
ASE-126A-UST-10Q1	03/11/2010	REG
ASE-125A-UST-10Q1	03/11/2010	REG
ASE-84A-UST-10Q1	03/11/2010	REG
ASE-95A-UST-10Q1	03/11/2010	REG
ASE-97A-UST-10Q1	03/11/2010	REG
BC-8B-UST-10Q1	03/11/2010	REG
ASE-123A-UST-10Q1	03/12/2010	REG
ASE-101A-UST-10Q1	03/12/2010	REG
ASE-103A-UST-10Q1	03/12/2010	REG
ASE-109A-UST-10Q1	03/12/2010	REG
ASE-110A-UST-10Q1	03/12/2010	REG
ASE-100A-UST-10Q1	03/12/2010	REG
ASE-129A-UST-10Q1	03/12/2010	REG
ASE-124A-UST-10Q1	03/14/2010	REG
ASE-114A-UST-10Q1	03/15/2010	REG
ASE-96A-UST-10Q1	03/15/2010	REG
ASE-106A-UST-10Q1	03/15/2010	REG
ASE-113A-UST-10Q1	03/15/2010	REG
ASE-122A-UST-10Q1	03/15/2010	REG
ASE-52A-UST-10Q1	03/16/2010	REG
ASE-68A-UST-10Q1	03/16/2010	REG
ASE-60A-UST-10Q1	03/16/2010	REG
PL-2101-UST-10Q1	03/16/2010	REG
ASE-54A-UST-10Q1	03/16/2010	REG
ASE-37A-UST-10Q1	03/17/2010	REG
ASE-120-UST-10Q1	03/17/2010	REG
ASE-38A-UST-10Q1	03/17/2010	REG
ASE-116A-UST-10Q1	03/17/2010	REG
TB-001-UST-10Q1	03/07/2010	TB
TB-002-UST-10Q1	03/09/2010	TB
TB-003-UST-10Q1	03/10/2010	TB
TB-004-UST-10Q1	03/11/2010	TB
TB-005-UST-10Q1	03/12/2010	TB
TB-006-UST-10Q1	03/14/2010	TB
TB-007-UST-10Q1	03/16/2010	TB
TB-008-UST-10Q1	03/17/2010	TB

Notes:

EB = Equipment blank
 FD = Field duplicate
 REG = Regular sample
 TB = Trip blank

ATTACHMENT H-2

Validation Findings

 VALIDATION FINDINGS

Method	Native ID	Analyte	Final Result	Units	Final Flag	Validation Reason
SW8260B	ASE-105A-UST-10Q1	VINYL ACETATE	10	µg/L	UJ	CCVL
SW8260B	ASE-108A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	ASE-112A-UST-10Q1	VINYL ACETATE	10	µg/L	UJ	CCVL
SW8260B	ASE-116A-UST-10Q1	ACETONE	10	µg/L	UJ	CCVL
SW8260B	ASE-116A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL CCVL
SW8260B	ASE-118A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	ASE-127A-UST-10Q1	BROMOMETHANE	1.0	µg/L	UJ	CCVL
SW8260B	ASE-128A-UST-10Q1	VINYL ACETATE	10	µg/L	UJ	CCVL
SW8260B	ASE-130A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	ASE-22AR-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	ASE-52A-UST-10Q1	ACETONE	10	µg/L	UJ	CCVL
SW8260B	ASE-52A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	ASE-55A-UST-10Q1	BROMOMETHANE	1.0	µg/L	UJ	CCVL
SW8260B	ASE-58A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	ASE-60A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	LCSL CCVL
SW8260B	ASE-61A-UST-10Q1	BROMOMETHANE	1.0	µg/L	UJ	CCVL
SW8260B	ASE-62A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	ASE-63A-UST-10Q1	BROMOMETHANE	20	µg/L	UJ	CCVL
SW8260B	ASE-64A-UST-10Q1	BROMOMETHANE	1.0	µg/L	UJ	CCVL
SW8260B	ASE-65A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	ASE-90A-UST-10Q1	CHLOROETHANE	2.5	µg/L	UJ	CCVL
SW8260B	ASE-90A-UST-10Q1	CHLOROMETHANE	2.5	µg/L	UJ	CCVL
SW8260B	ASE-98A-UST-10Q1	VINYL ACETATE	10	µg/L	UJ	CCVL
SW8260B	ASE-99A-UST-10Q1	DICHLORODIFLUOROMETHANE	1.0	µg/L	UJ	CCVL
SW8260B	ASE-99A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	BC-7A-UST-10Q1	BROMOMETHANE	1.0	µg/L	UJ	CCVL
SW8260B	PL-105A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	PL-201A-UST-10Q1	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	PL-2102-UST-10Q1	BROMOMETHANE	1.0	µg/L	UJ	CCVL
SW8260B	UST-10Q1-002	IODOMETHANE	10	µg/L	UJ	ICVSL
SW8260B	UST-10Q1-003	IODOMETHANE	200	µg/L	UJ	ICVSL CCVL
SW8260B	UST-10Q1-004	VINYL ACETATE	10	µg/L	UJ	CCVL

VALIDATION FINDINGS

Method	Native ID	Analyte	Final Result	Units	Final Flag	Validation Reason
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Notes:

CCVL = Continuing calibration verification recovery greater than the upper control limit

ICVSL = Initial calibration verification recovery less than the lower control limit

LCSL = Laboratory control sample recovery less than the lower control limit

µg/L = Micrograms per liter



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

Laboratory Job Number 218669
ANALYTICAL REPORT

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 383868.US.60.61.QS
Location : Quarterly UST
Level : III

Table with 2 columns: Sample ID and Lab ID. Rows include TB-001-UST-10Q1, EB-001-UST-10Q1, ASE-112A-UST-10Q1, ASE-105A-UST-10Q1, ASE-90A-UST-10Q1, ASE-128A-UST-10Q1, ASE-98A-UST-10Q1, UST-10Q1-004, ASE-99A-UST-10Q1.

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

Signature: Senior Program Manager

Date: 03/23/2010

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 218669
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/09/10
Samples Received: 03/09/10

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 03/09/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for iodomethane in the ICV analyzed 01/28/10 01:45; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for vinyl acetate in the CCV analyzed 03/19/10 15:48; this analyte met minimum response criteria.

Low responses were observed for chloroethane and chloromethane in the CCV analyzed 03/21/10 17:36; these analytes met minimum response criteria.

Low response was observed for Freon 12 in the CCV analyzed 03/19/10 15:38; this analyte met minimum response criteria, and affected data was qualified with "b". High response was observed for vinyl acetate; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High responses were observed for a number of analytes in the CCV analyzed 03/19/10 08:44; affected data was qualified with "b".

High responses were observed for carbon tetrachloride and hexachlorobutadiene in the CCV analyzed 03/21/10 12:24; affected data was qualified with "b".

High recoveries were observed for carbon tetrachloride and hexachlorobutadiene in the BS/BSD for batch 161072; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.

High recoveries were observed for vinyl acetate in the BS/BSD for batch 161080; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample.

CASE NARRATIVE

Laboratory number: 218669
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/09/10
Samples Received: 03/09/10

Volatile Organics by GC/MS (EPA 8260B):

High recoveries were observed for hexachlorobutadiene in the BS/BSD for batch 161119; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample.

ASE-98A-UST-10Q1 (lab # 218669-007) had multiple vials combined due to sediment.

No other analytical problems were encountered.

Chain of Custody

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218669 Date Received 3-9-10 Number of coolers 2
Client CHUM AZ / HONEXWELL Project QUARTERLY VST

Date Opened 3-9-10 By (print) S. EVANS (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX # YES NO
Shipping info 8720 5038 8962

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many 1 EA Name SIGNATURE Date 3-8-10

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:
Type of ice used: Wet Blue/Gel None Temp(°C) 1.4, 1.0

- Samples Received on ice & cold without a temperature blank
- Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are samples in the appropriate containers for indicated tests? _____ YES NO

11. Are sample labels present, in good condition and complete? _____ YES NO

12. Do the sample labels agree with custody papers? _____ YES NO

13. Was sufficient amount of sample sent for tests requested? _____ YES NO

14. Are the samples appropriately preserved? _____ YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 218669

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	160802
Units:	ug/L	Received:	03/09/10
Diln Fac:	1.000	Prepared:	03/10/10

Field ID: EB-001-UST-10Q1 Sampled: 03/07/10
 Type: SAMPLE Analyzed: 03/11/10
 Lab ID: 218669-002

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

Field ID: ASE-112A-UST-10Q1 Sampled: 03/08/10
 Type: SAMPLE Analyzed: 03/11/10
 Lab ID: 218669-003

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Field ID: ASE-105A-UST-10Q1 Sampled: 03/08/10
 Type: SAMPLE Analyzed: 03/12/10
 Lab ID: 218669-004

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	160802
Units:	ug/L	Received:	03/09/10
Diln Fac:	1.000	Prepared:	03/10/10

Field ID: ASE-90A-UST-10Q1 Sampled: 03/08/10
 Type: SAMPLE Analyzed: 03/12/10
 Lab ID: 218669-005

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	1,800 Y	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Field ID: ASE-128A-UST-10Q1 Sampled: 03/08/10
 Type: SAMPLE Analyzed: 03/12/10
 Lab ID: 218669-006

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Field ID: ASE-98A-UST-10Q1 Sampled: 03/08/10
 Type: SAMPLE Analyzed: 03/12/10
 Lab ID: 218669-007

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	160802
Units:	ug/L	Received:	03/09/10
Diln Fac:	1.000	Prepared:	03/10/10

Field ID: UST-10Q1-004 Sampled: 03/08/10
 Type: SAMPLE Analyzed: 03/12/10
 Lab ID: 218669-008

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	110	50-120	

Field ID: ASE-99A-UST-10Q1 Sampled: 03/08/10
 Type: SAMPLE Analyzed: 03/12/10
 Lab ID: 218669-009

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	102	50-120	

Type: BLANK Analyzed: 03/11/10
 Lab ID: QC535564

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	119	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	160802
Units:	ug/L	Prepared:	03/10/10
Diln Fac:	1.000	Analyzed:	03/11/10

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC535565

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,104	84	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	95	50-120	

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC535566

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,294	92	54-120	9	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	103	50-120	

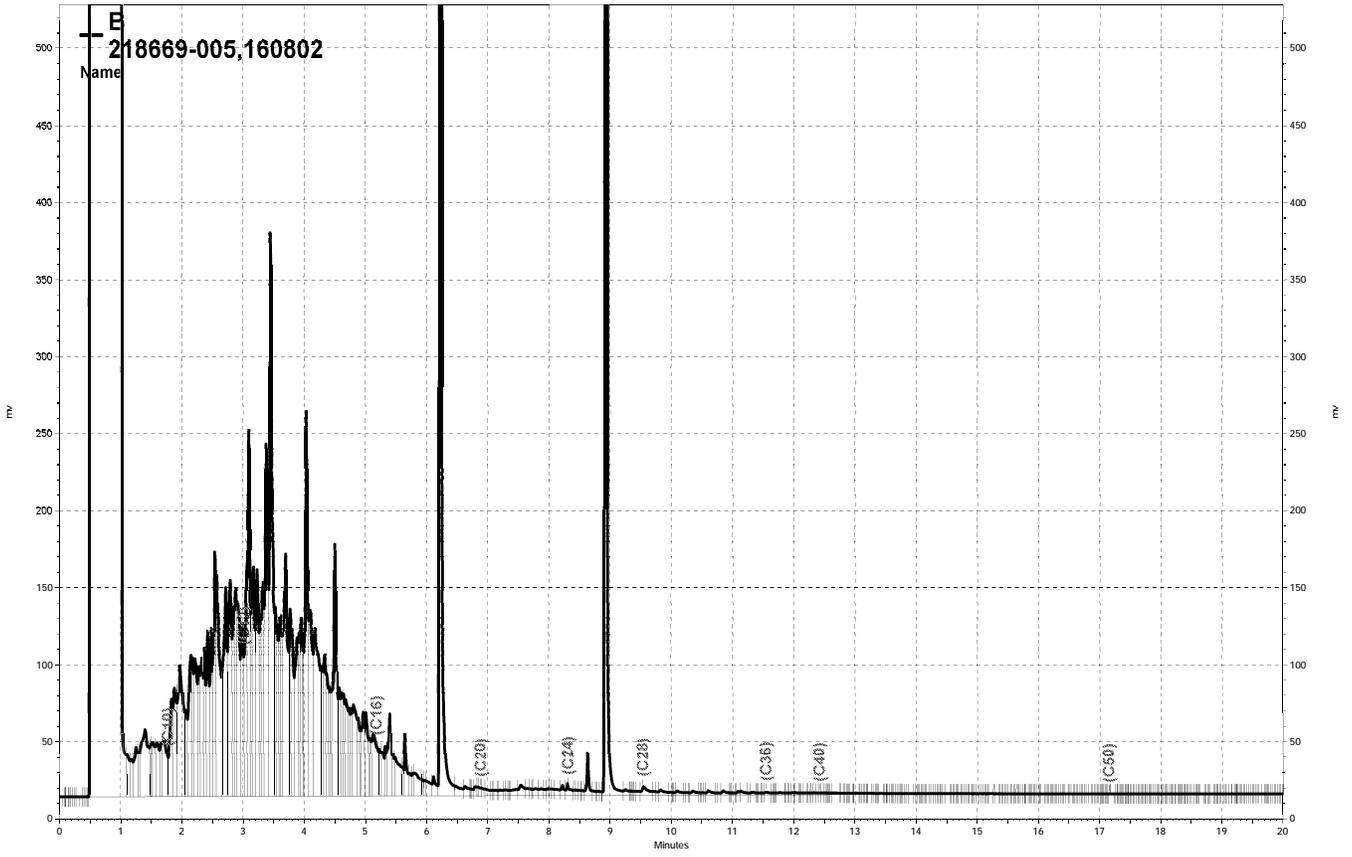
RPD= Relative Percent Difference

Batch QC Report

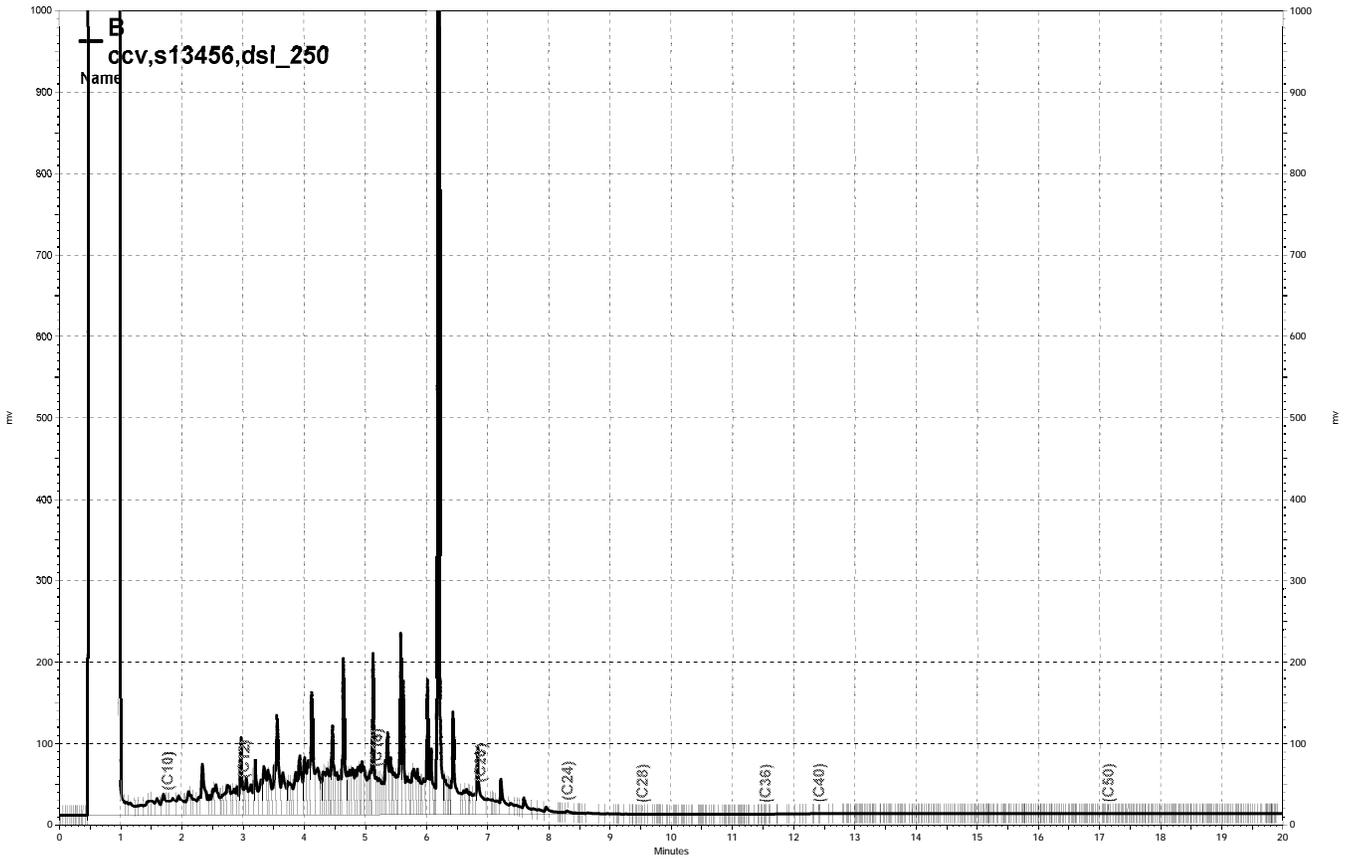
Total Extractable Hydrocarbons			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC535567	Batch#:	160802
Matrix:	Water	Prepared:	03/10/10
Units:	ug/L	Analyzed:	03/11/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,484	99	61-139	

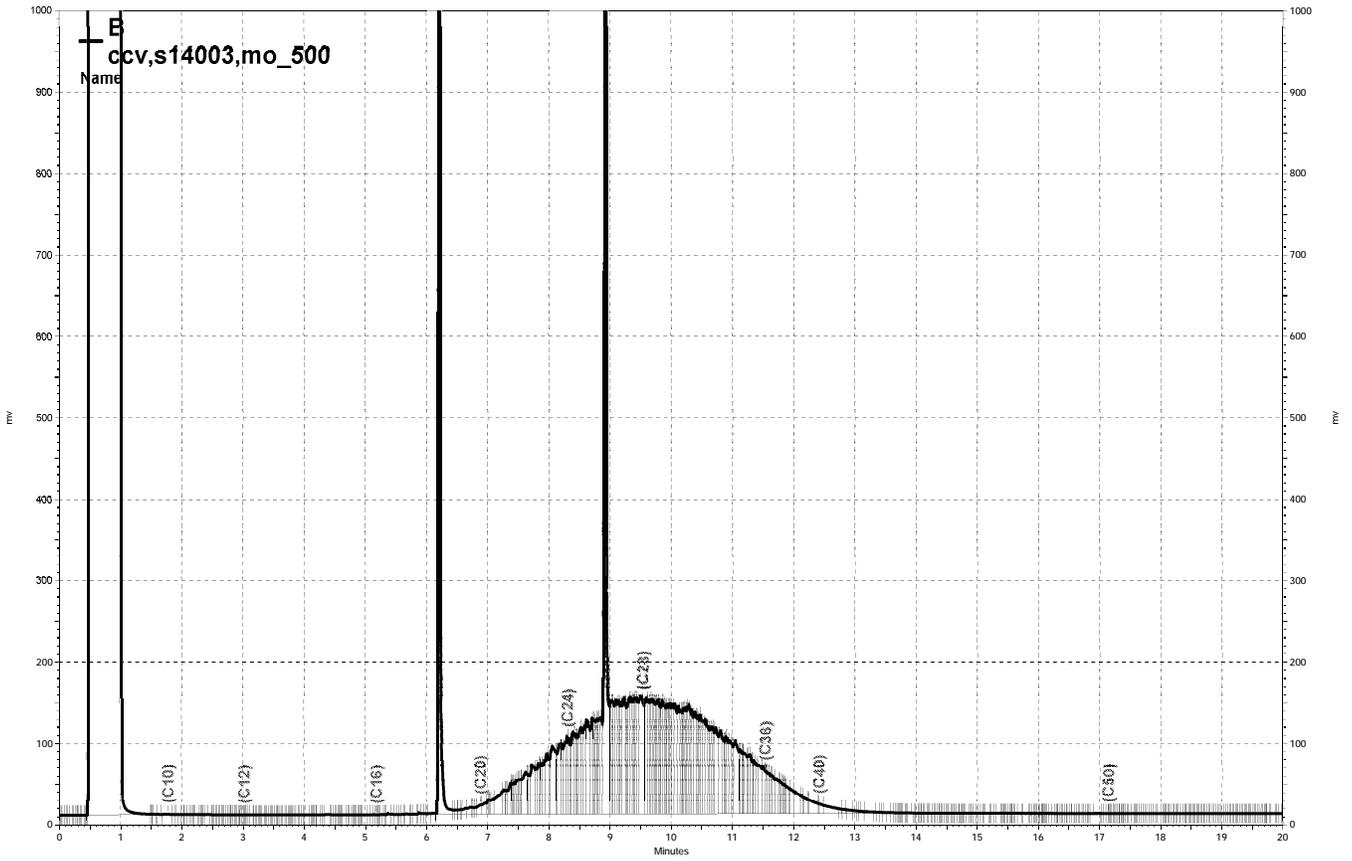
Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	103	50-120	



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\071b008, B



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\070b005, B



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\070b004, B

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220019637002
 Units : mg/L

Name : DSL_013
 Date : 14-JAN-2010 01:32
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	013_020	220019637020	DSL_10	14-JAN-2010 01:32	S13230
L2	013_021	220019637021	DSL_100	14-JAN-2010 02:00	S13231
L3	013_022	220019637022	DSL_500	14-JAN-2010 02:28	S13232
L4	013_023	220019637023	DSL_1000	14-JAN-2010 02:55	S13233
L5	013_024	220019637024	DSL_5000	14-JAN-2010 03:23	S13229
L6	013_025	220019637025	DSL_7500	14-JAN-2010 03:50	S13234

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	30857	41804	48676	43245	43072	44897	AVRG		2.38E-5		42092	14	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	-27	100.0	-1	500.0	16	1000	3	5000	2	7500	7

TFB 01/14/10 : Levels 1-3 and ICV: corrected automatically drawn baseline.

TFB 01/14/10 : Carbon Marker scanned in after EZChrom calibrations.

Analyst: TFB Date: 01/14/10 Reviewer: EAH Date: 01/15/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218669 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 220019637002

Name : DSL_013
Cal Date : 14-JAN-2010

ICV 220019637027 (013_027 14-JAN-2010) stds: S13457

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	501.4	mg/L	0	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220027250001
 Units : mg/L

Name : HEXOTP_018
 Date : 18-JAN-2010 16:02
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_004	220027250004	HEXOTP_5	18-JAN-2010 16:02	S13690
L2	018_005	220027250005	HEXOTP_10	18-JAN-2010 16:30	S13691
L3	018_006	220027250006	HEXOTP_25	18-JAN-2010 16:58	S13692
L4	018_007	220027250007	HEXOTP_50	18-JAN-2010 17:27	S13693
L5	018_008	220027250008	HEXOTP_100	18-JAN-2010 17:55	S13694

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	B	51987	51113	52393	50111	49558	AVRG		1.96E-5		51032	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	B	5.000	2	10.00	0	25.00	3	50.00	-2	100.0	-3

TFB 01/18/10 : Levels 2,4,5: corrected automatically drawn baseline.

TFB 01/19/10 : Level 6 dropped due to high %D in hexacosane. Dropped from OTP for consistency.

Analyst: TFB

Date: 01/18/10

Reviewer: EAH

Date: 01/19/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122008
 Units : mg/L

Name : HEXOTP_010
 Date : 10-JAN-2010 13:26
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b004	160015122004	HEXOTP_5	10-JAN-2010 13:26	S13690
L2	010b005	160015122005	HEXOTP_10	10-JAN-2010 13:54	S13691
L3	010b006	160015122006	HEXOTP_25	10-JAN-2010 14:21	S13692
L4	010b007	160015122007	HEXOTP_50	10-JAN-2010 14:49	S13693
L5	010b008	160015122008	HEXOTP_100	10-JAN-2010 15:17	S13694
L6	010b009	160015122009	HEXOTP_200	10-JAN-2010 15:45	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	64413	65438	65659	68934	63215	71786	AVRG		1.50E-5		66574	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-3	10.00	-2	25.00	-1	50.00	4	100.0	-5	200.0	8

CP 01/12/10 : JDG: Corrected automatically drawn baseline for all ICALS, except for HEXOTP_50.

Analyst: PRW

Date: 01/12/10

Reviewer: CP

Date: 01/12/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122002
 Units : mg/L

Name : DSL_010
 Date : 10-JAN-2010 16:41
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b011	160015122011	DSL_10	10-JAN-2010 16:41	S13230
L2	010b012	160015122012	DSL_100	10-JAN-2010 17:09	S13231
L3	010b013	160015122013	DSL_500	10-JAN-2010 17:37	S13232
L4	010b014	160015122014	DSL_1000	10-JAN-2010 18:05	S13233
L5	010b015	160015122015	DSL_5000	10-JAN-2010 18:33	S13229
L6	010b016	160015122016	DSL_7500	10-JAN-2010 19:01	S13234

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	46290	57423	63137	60591	59298	62684	AVRG		1.72E-5		58237	11	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-21	100.0	-1	500.0	8	1000	4	5000	2	7500	8

JDG 01/11/10 : Corrected automatically drawn baseline in DSL_10 (010b011).

Analyst: JDG

Date: 01/11/10

Reviewer: EAH

Date: 01/12/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 160015122002

Name : DSL_010
Cal Date : 10-JAN-2010

ICV 160015122018 (010b018 10-JAN-2010) stds: S13457

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	514.5	mg/L	3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122003
 Units : mg/L

Name : MO_010
 Date : 10-JAN-2010 21:20
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b021	160015122021	MO_50	10-JAN-2010 21:20	S12675
L2	010b022	160015122022	MO_250	10-JAN-2010 21:47	S12676
L3	010b023	160015122023	MO_500	10-JAN-2010 22:15	S12677
L4	010b024	160015122024	MO_1000	10-JAN-2010 22:43	S12678
L5	010b025	160015122025	MO_5000	10-JAN-2010 23:10	S12679
L6	010b026	160015122026	MO_7500	10-JAN-2010 23:38	S12680

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	45439	44674	45779	46295	36737	34758	AVRG		2.37E-5		42280	12	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	6	500.0	8	1000	9	5000	-13	7500	-18

JDG 01/11/10 : Manually integrated fuel hump: MO_50,1000, & 7500.

Analyst: JDG

Date: 01/11/10

Reviewer: EAH

Date: 01/12/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170098370001
 Units : mg/L

Name : hexotp_068
 Date : 09-MAR-2010 20:48
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	068a020	170098370020	HEXOTP_5	09-MAR-2010 20:48	S13690
L2	068a021	170098370021	HEXOTP_10	09-MAR-2010 21:15	S13691
L3	068a022	170098370022	HEXOTP_25	09-MAR-2010 21:43	S13692
L4	068a023	170098370023	HEXOTP_50	09-MAR-2010 22:10	S13693
L5	068a024	170098370024	HEXOTP_100	09-MAR-2010 22:37	S13694
L6	068a025	170098370025	HEXOTP_200	09-MAR-2010 23:05	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	61062	65448	69348	66907	59438	61064	AVRG		1.57E-5		63878	6	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-4	10.00	2	25.00	9	50.00	5	100.0	-7	200.0	-4

JDG 03/10/10 : Corrected automatically drawn baseline in HEXOTP_200 (068a025).

Analyst: JDG

Date: 03/10/10

Reviewer: EAH

Date: 03/10/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399001
 Units : mg/L

Name : DSL_069
 Date : 10-MAR-2010 09:30
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a004	170100399004	DSL_10	10-MAR-2010 09:30	S14114
L2	069a005	170100399005	DSL_100	10-MAR-2010 09:58	S14115
L3	069a006	170100399006	DSL_500	10-MAR-2010 10:25	S14116
L4	069a007	170100399007	DSL_1000	10-MAR-2010 10:52	S14117
L5	069a008	170100399008	DSL_5000	10-MAR-2010 11:20	S14113
L6	069a009	170100399009	DSL_7500	10-MAR-2010 11:48	S14118

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	38992	57098	61023	62848	63686	64949	AVRG		1.72E-5		58099	17	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-33	100.0	-2	500.0	5	1000	8	5000	10	7500	12

JDG 03/11/10 : Corrected automatically baseline for: Levels 1-5.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218669 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 170100399001

Name : DSL_069
Cal Date : 10-MAR-2010

ICV 170100399011 (069a011 10-MAR-2010) stds: S14077

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	542.9	mg/L	9	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399002
 Units : mg/L

Name : MO_069
 Date : 10-MAR-2010 14:05
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a014	170100399014	MO_50	10-MAR-2010 14:05	S13804
L2	069a015	170100399015	MO_250	10-MAR-2010 14:32	S13805
L3	069a016	170100399016	MO_500	10-MAR-2010 15:00	S13806
L4	069a017	170100399017	MO_1000	10-MAR-2010 15:27	S13807
L5	069a018	170100399018	MO_5000	10-MAR-2010 15:55	S13808
L6	069a019	170100399019	MO_7500	10-MAR-2010 16:23	S13809

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	44768	46378	45947	46506	45328	45626	AVRG		2.19E-5		45759	1	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	-2	250.0	1	500.0	0	1000	2	5000	-1	7500	0

JDG 03/11/10 : Corrected automatically drawn baseline for levels 2-6.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
 Seqnum : 220101281022 File : 070_022 Time : 11-MAR-2010 19:23
 Standards: S14077

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	41223	500.0	489.7	mg/L	-2	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	48965	50.00	47.97	mg/L	-4	15	

Analyst: JDG Date: 03/12/10 Reviewer: PRW Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
 Seqnum : 220101281034 File : 070_034 Time : 12-MAR-2010 10:42
 Standards: S13458

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	41432	1000	984.3	mg/L	-2	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	53320	50.00	52.24	mg/L	4	15	

Analyst: JDG Date: 03/12/10 Reviewer: PRW Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
 Seqnum : 160101608004 File : 070b004 Time : 11-MAR-2010 14:53
 Standards: S14003

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	39918	500.0	472.1	mg/L	-6	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	61094	50.00	45.88	mg/L	-8	15	

JDG 03/12/10 : Manually integrated fuel hump.

Analyst: JDG Date: 03/12/10 Reviewer: PRW Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
 Seqnum : 160101608019 File : 070b019 Time : 11-MAR-2010 21:59
 Standards: S13458

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	57569	1000	988.5	mg/L	-1	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	71552	50.00	53.74	mg/L	7	15	

JDG 03/12/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/12/10 Reviewer: PRW Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
 Seqnum : 160101608020 File : 070b020 Time : 11-MAR-2010 22:27
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	41661	500.0	492.7	mg/L	-1	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	63510	50.00	47.70	mg/L	-5	15	

JDG 03/12/10 : Manually integrated fuel hump.

Analyst: JDG Date: 03/12/10 Reviewer: PRW Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
 Seqnum : 160101608032 File : 070b032 Time : 12-MAR-2010 04:03
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	42116	500.0	498.1	mg/L	0	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	64934	50.00	48.77	mg/L	-2	15	

JDG 03/12/10 : Manually integrated fuel hump.

Analyst: JDG Date: 03/12/10 Reviewer: EAH Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
 Seqnum : 160101608033 File : 070b033 Time : 12-MAR-2010 04:31
 Standards: S14077

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	57258	500.0	491.6	mg/L	-2	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	68730	50.00	51.62	mg/L	3	15	

JDG 03/12/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/12/10 Reviewer: EAH Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
 Seqnum : 160102711004 File : 071b004 Time : 12-MAR-2010 09:15
 Standards: S14003

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	37673	500.0	445.5	mg/L	-11	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	57465	50.00	43.16	mg/L	-14	15	

Analyst: JDG Date: 03/12/10 Reviewer: EAH Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
 Seqnum : 160102711005 File : 071b005 Time : 12-MAR-2010 09:43
 Standards: S13456

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	58742	250.0	252.2	mg/L	1	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	70354	50.00	52.84	mg/L	6	15	

JDG 03/12/10 [o-Terphenyl B]: Separated from coeluting peak.

Analyst: JDG Date: 03/12/10 Reviewer: EAH Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
Seqnum : 160102711011 File : 071b011 Time : 12-MAR-2010 13:40
Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	43632	500.0	516.0	mg/L	3	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	67023	50.00	50.34	mg/L	1	15	

JDG 03/12/10 : Manually integrated fuel hump.

Analyst: JDG Date: 03/12/10 Reviewer: EAH Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
 Seqnum : 160102711012 File : 071b012 Time : 12-MAR-2010 14:08
 Standards: S13458

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	56385	1000	968.2	mg/L	-3	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	69883	50.00	52.49	mg/L	5	15	

JDG 03/12/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/12/10 Reviewer: EAH Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC17A Run Name : JET_250 IDF : 1.0
 Seqnum : 170101249006 File : 070a006 Time : 11-MAR-2010 09:46
 Cal : 170098370001 Caldate : 09-MAR-2010
 Standards: S13073

Analyte	Avg		Spiked	Quant	Units	%D	Max	%D	Flags
	RF/CF	RF/CF							
o-Terphenyl	63878	68843	50.00	53.89	mg/L	8	15		

JDG 03/11/10 [o-Terphenyl A]: Corrected automatically drawn baseline.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170101249007 File : 070a007 Time : 11-MAR-2010 11:01
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	46821	500.0	511.6	mg/L	2	15	
o-Terphenyl	170098370001	09-MAR-2010	63878	72435	50.00	56.70	mg/L	13	15	

JDG 03/11/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/11/10 Reviewer: EAH Date: 03/11/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
 Seqnum : 170101249008 File : 070a008 Time : 11-MAR-2010 11:28
 Standards: S13456

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	170100399001	10-MAR-2010	58099	64183	250.0	276.2	mg/L	10	15	
o-Terphenyl	170098370001	09-MAR-2010	63878	76678	50.00	60.02	mg/L	20	15	c+

JDG 03/11/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/11/10 Reviewer: EAH Date: 03/11/10

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170101249020 File : 070a020 Time : 11-MAR-2010 17:39
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	44106	500.0	481.9	mg/L	-4	15	
o-Terphenyl	170098370001	09-MAR-2010	63878	68304	50.00	53.46	mg/L	7	15	

JDG 03/12/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/12/10 Reviewer: PRW Date: 03/12/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_1000 IDF : 1.0
 Seqnum : 170101249021 File : 070a021 Time : 11-MAR-2010 18:07
 Standards: S13458

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	170100399001	10-MAR-2010	58099	63233	1000	1088	mg/L	9	15	
o-Terphenyl	170098370001	09-MAR-2010	63878	79991	50.00	62.61	mg/L	25	15	c+

JDG 03/12/10 [o-Terphenyl A]: Separated from coeluting peak.

Analyst: JDG Date: 03/12/10 Reviewer: PRW Date: 03/12/10

+=high bias c=CCV

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 160015122

Instrument : GC15B
 Method : EPA 8015B

Begun : 01/10/10 12:02
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	010b001	X	PRIMER			01/10/10 12:02	1.0	
002	010b002	X	IB			01/10/10 12:30	1.0	
003	010b003	X	IB			01/10/10 12:58	1.0	
004	010b004	ICAL	HEXOTP_5			01/10/10 13:26	1.0	1
005	010b005	ICAL	HEXOTP_10			01/10/10 13:54	1.0	2
006	010b006	ICAL	HEXOTP_25			01/10/10 14:21	1.0	3
007	010b007	ICAL	HEXOTP_50			01/10/10 14:49	1.0	4
008	010b008	ICAL	HEXOTP_100			01/10/10 15:17	1.0	5
009	010b009	ICAL	HEXOTP_200			01/10/10 15:45	1.0	6
010	010b010	IB	CALIB			01/10/10 16:13	1.0	
011	010b011	ICAL	DSL_10			01/10/10 16:41	1.0	7
012	010b012	ICAL	DSL_100			01/10/10 17:09	1.0	8
013	010b013	ICAL	DSL_500			01/10/10 17:37	1.0	9
014	010b014	ICAL	DSL_1000			01/10/10 18:05	1.0	10
015	010b015	ICAL	DSL_5000			01/10/10 18:33	1.0	11
016	010b016	ICAL	DSL_7500			01/10/10 19:01	1.0	12
017	010b017	IB	CALIB			01/10/10 19:29	1.0	
018	010b018	ICV	DSL_500			01/10/10 19:57	1.0	13
019	010b019	X	ICV			01/10/10 20:24	1.0	13
020	010b020	IB	CALIB			01/10/10 20:52	1.0	
021	010b021	ICAL	MO_50			01/10/10 21:20	1.0	14
022	010b022	ICAL	MO_250			01/10/10 21:47	1.0	15
023	010b023	ICAL	MO_500			01/10/10 22:15	1.0	16
024	010b024	ICAL	MO_1000			01/10/10 22:43	1.0	17
025	010b025	ICAL	MO_5000			01/10/10 23:10	1.0	18
026	010b026	ICAL	MO_7500			01/10/10 23:38	1.0	19
027	010b027	IB	CALIB			01/11/10 00:06	1.0	
028	010b028	ICAL	JET_10			01/11/10 00:33	1.0	20
029	010b029	ICAL	JET_100			01/11/10 01:01	1.0	21
030	010b030	ICAL	JET_500			01/11/10 01:28	1.0	22
031	010b031	ICAL	JET_1000			01/11/10 01:56	1.0	23
032	010b032	ICAL	JET_2000			01/11/10 02:24	1.0	24
033	010b033	ICAL	JET_3000			01/11/10 02:51	1.0	25
034	010b034	IB	CALIB			01/11/10 03:19	1.0	
035	010b035	ICAL	JP5_10			01/11/10 03:46	1.0	26
036	010b036	ICAL	JP5_100			01/11/10 04:14	1.0	27
037	010b037	ICAL	JP5_500			01/11/10 04:42	1.0	28
038	010b038	ICAL	JP5_1500			01/11/10 05:09	1.0	29
039	010b039	ICAL	JP5_2500			01/11/10 05:37	1.0	30
040	010b040	ICAL	JP5_5000			01/11/10 06:05	1.0	31
041	010b041	IB	CALIB			01/11/10 06:33	1.0	
042	010b042	ICAL	BUNK_50			01/11/10 07:01	1.0	32
043	010b043	ICAL	BUNK_250			01/11/10 07:28	1.0	33
044	010b044	ICAL	BUNK_500			01/11/10 07:56	1.0	34
045	010b045	ICAL	BUNK_1250			01/11/10 08:24	1.0	35
046	010b046	ICAL	BUNK_2500			01/11/10 08:52	1.0	36
047	010b047	ICAL	BUNK_5000			01/11/10 09:20	1.0	37
048	010b048	IB	CALIB			01/11/10 09:48	1.0	
049	010b049	CMARKER	C8_C50			01/11/10 10:16	1.0	38
050	010b050	IB	CALIB			01/11/10 10:44	1.0	

JDG 01/11/10 : I verified that the vials loaded on the instrument matched the

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 160101608

Instrument : GC15B
 Method : EPA 8015B

Begun : 03/11/10 13:28
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	070b001	X	PRIMER				03/11/10 13:28	1.0		
002	070b002	X	IB				03/11/10 13:56	1.0		
003	070b003	X	CMARKER				03/11/10 14:25	1.0	1	
004	070b004	CCV	MO_500				03/11/10 14:53	1.0	2	
005	070b005	CCV	DSL_250				03/11/10 15:22	1.0	3	
006	070b006	MSS	218686-001		Soil	160766	03/11/10 15:50	5.0		
007	070b007	MS	QC535426		Soil	160766	03/11/10 16:19	5.0		
008	070b008	MSD	QC535427		Soil	160766	03/11/10 16:47	5.0		2:BUNKC:12-50=6500
009	070b009	X	IB				03/11/10 17:15	1.0		
010	070b010	LCS	QC535567		Water	160802	03/11/10 17:44	1.0		
011	070b011	SAMPLE	218688-001		Water	160802	03/11/10 18:12	1.0		
012	070b012	SAMPLE	218688-002		Water	160802	03/11/10 18:41	1.0		
013	070b013	SAMPLE	218688-003		Water	160802	03/11/10 19:09	1.0		
014	070b014	SAMPLE	218688-004		Water	160802	03/11/10 19:37	1.0		
015	070b015	SAMPLE	218669-002		Water	160802	03/11/10 20:06	1.0		
016	070b016	SAMPLE	218669-003		Water	160802	03/11/10 20:34	1.0		
017	070b017	X	CMARKER				03/11/10 21:02	1.0	1	
018	070b018	X	MO_500				03/11/10 21:30	1.0	2	
019	070b019	CCV	DSL_1000				03/11/10 21:59	1.0	4	
020	070b020	CCV	MO_500				03/11/10 22:27	1.0	2	
021	070b021	X	CCV				03/11/10 22:55	1.0	4	
022	070b022	X	DSL5000 S&S SPIKE TE				03/11/10 23:23	1.0	5	
023	070b023	SAMPLE	218732-001		Soil	160799	03/11/10 23:51	1.0		
024	070b024	SAMPLE	218732-002		Soil	160799	03/12/10 00:19	5.0		
025	070b025	SAMPLE	218708-001		Miscell.	160799	03/12/10 00:47	10.0		
026	070b026	X	IB				03/12/10 01:15	1.0		
027	070b027	SAMPLE	218673-003	S	Soil	160799	03/12/10 01:43	1.0		
028	070b028	SAMPLE	218722-005	S	Soil	160799	03/12/10 02:11	1.0		
029	070b029	SAMPLE	218669-008		Water	160802	03/12/10 02:39	1.0		
030	070b030	SAMPLE	218669-009		Water	160802	03/12/10 03:07	1.0		
031	070b031	X	CMARKER				03/12/10 03:35	1.0	1	
032	070b032	CCV	MO_500				03/12/10 04:03	1.0	2	
033	070b033	CCV	DSL_500				03/12/10 04:31	1.0	6	
034	070b034	X	CCV				03/12/10 04:59	1.0	2	
035	070b035	X	CCV				03/12/10 05:27	1.0	6	

JDG 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 35.

Standards used: 1=S13646 2=S14003 3=S13456 4=S13458 5=S14185 6=S14077

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 160102711

Instrument : GC15B Begun : 03/12/10 07:51
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	071b001	X	PRIMER				03/12/10 07:51	1.0	
002	071b002	X	IB				03/12/10 08:19	1.0	
003	071b003	X	CMARKER				03/12/10 08:47	1.0	1
004	071b004	CCV	MO_500				03/12/10 09:15	1.0	2
005	071b005	CCV	DSL_250				03/12/10 09:43	1.0	3
006	071b006	SAMPLE	218706-003	S	Water	160802	03/12/10 11:10	1.0	
007	071b007	SAMPLE	218669-004		Water	160802	03/12/10 11:48	1.0	
008	071b008	SAMPLE	218669-005		Water	160802	03/12/10 12:16	1.0	
009	071b009	SAMPLE	218669-006		Water	160802	03/12/10 12:44	1.0	
010	071b010	SAMPLE	218669-007		Water	160802	03/12/10 13:12	1.0	
011	071b011	CCV	MO_500				03/12/10 13:40	1.0	2
012	071b012	CCV	DSL_250				03/12/10 14:08	1.0	4
013	071b013	X	QC535896		Soil	160879	03/12/10 15:04	1.0	
014	071b014	LCS	QC535897		Soil	160879	03/12/10 15:32	1.0	
015	071b015	CCV	MO_500				03/12/10 16:17	1.0	2
016	071b016	CCV	DSL_1000				03/12/10 16:45	1.0	4

TFB 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 16.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170100399

Instrument : GC17A Begun : 03/10/10 08:00
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	069a001	X	PRIMER			03/10/10 08:00	1.0	
002	069a002	X	IB			03/10/10 08:28	1.0	
003	069a003	IB	CALIB			03/10/10 08:55	1.0	
004	069a004	ICAL	DSL_10			03/10/10 09:30	1.0	1
005	069a005	ICAL	DSL_100			03/10/10 09:58	1.0	2
006	069a006	ICAL	DSL_500			03/10/10 10:25	1.0	3
007	069a007	ICAL	DSL_1000			03/10/10 10:52	1.0	4
008	069a008	ICAL	DSL_5000			03/10/10 11:20	1.0	5
009	069a009	ICAL	DSL_7500			03/10/10 11:48	1.0	6
010	069a010	IB	CALIB			03/10/10 12:15	1.0	
011	069a011	ICV	DSL_500			03/10/10 12:42	1.0	7
012	069a012	X	ICV			03/10/10 13:09	1.0	7
013	069a013	IB	CALIB			03/10/10 13:37	1.0	
014	069a014	ICAL	MO_50			03/10/10 14:05	1.0	8
015	069a015	ICAL	MO_250			03/10/10 14:32	1.0	9
016	069a016	ICAL	MO_500			03/10/10 15:00	1.0	10
017	069a017	ICAL	MO_1000			03/10/10 15:27	1.0	11
018	069a018	ICAL	MO_5000			03/10/10 15:55	1.0	12
019	069a019	ICAL	MO_7500			03/10/10 16:23	1.0	13
020	069a020	IB	CALIB			03/10/10 16:51	1.0	
021	069a021	CMARKER	C8-C50			03/10/10 17:19	1.0	14
022	069a022	IB	CALIB			03/10/10 17:46	1.0	

JDG 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

Standards used: 1=S14114 2=S14115 3=S14116 4=S14117 5=S14113 6=S14118 7=S14077 8=S13804 9=S13805 10=S13806 11=S13807
 12=S13808 13=S13809 14=S13646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170101249

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/11/10 07:29
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	070a001	X	PRIMER				03/11/10 07:29	1.0	
002	070a002	X	IB				03/11/10 07:56	1.0	
003	070a003	X	CMARKER				03/11/10 08:24	1.0	1
004	070a004	X	MO_500				03/11/10 08:51	1.0	2
005	070a005	X	DSL_250				03/11/10 09:19	1.0	3
006	070a006	CCV	JET_250				03/11/10 09:46	1.0	4
007	070a007	CCV	MO_500				03/11/10 11:01	1.0	2
008	070a008	CCV	DSL_250				03/11/10 11:28	1.0	3
009	070a009	CCV	JP5_250				03/11/10 11:59	1.0	5
010	070a010	BLANK	QC535564		Water	160802	03/11/10 12:34	1.0	
011	070a011	BS	QC535565		Water	160802	03/11/10 13:02	1.0	
012	070a012	BSD	QC535566		Water	160802	03/11/10 13:30	1.0	
013	070a013	SAMPLE	218709-002		Water	160802	03/11/10 13:57	1.0	
014	070a014	BLANK	QC535407		Water	160762	03/11/10 14:52	1.0	
015	070a015	BLANK	QC535552	S	Soil	160799	03/11/10 15:20	1.0	
016	070a016	SAMPLE	218661-001		Water	160762	03/11/10 15:48	1.0	
017	070a017	SAMPLE	218661-002		Water	160762	03/11/10 16:16	1.0	
018	070a018	MSS	218690-003	S	Soil	160799	03/11/10 16:43	1.0	
019	070a019	SAMPLE	218690-004	S	Soil	160799	03/11/10 17:11	1.0	
020	070a020	CCV	MO_500				03/11/10 17:39	1.0	2
021	070a021	CCV	DSL_1000				03/11/10 18:07	1.0	6
022	070a022	X	JET_250				03/11/10 18:35	1.0	4
023	070a023	CCV	JP5_250				03/11/10 19:02	1.0	5
024	070a024	X	CCV				03/11/10 19:30	1.0	2
025	070a025	X	CCV				03/11/10 19:58	1.0	6
026	070a026	CCV	JET_250				03/11/10 20:25	1.0	4
027	070a027	X	CCV				03/11/10 20:53	1.0	5
028	070a028	BLANK	QC535424	S	Soil	160766	03/11/10 21:20	1.0	
029	070a029	SAMPLE	218668-001	S	Soil	160766	03/11/10 21:48	1.0	
030	070a030	SAMPLE	218668-002	S	Soil	160766	03/11/10 22:15	1.0	
031	070a031	SAMPLE	218668-003	S	Soil	160766	03/11/10 22:43	1.0	
032	070a032	SAMPLE	218668-004	S	Soil	160766	03/11/10 23:11	1.0	
033	070a033	X	IB				03/11/10 23:38	1.0	
034	070a034	SAMPLE	218668-005	S	Soil	160766	03/12/10 00:05	1.0	
035	070a035	SAMPLE	218690-001	S	Soil	160799	03/12/10 00:33	1.0	
036	070a036	SAMPLE	218690-002	S	Soil	160799	03/12/10 01:00	1.0	
037	070a037	SAMPLE	218690-005	S	Soil	160799	03/12/10 01:28	1.0	
038	070a038	SAMPLE	218690-006	S	Soil	160799	03/12/10 01:55	1.0	
039	070a039	X	CMARKER				03/12/10 02:23	1.0	1
040	070a040	X	MO_500				03/12/10 02:50	1.0	2
041	070a041	X	DSL_250				03/12/10 03:18	1.0	3
042	070a042	CCV	JP5_250				03/12/10 03:45	1.0	5
043	070a043	CCV	MO_500				03/12/10 04:12	1.0	2
044	070a044	CCV	DSL_250				03/12/10 04:40	1.0	3
045	070a045	X	CCV				03/12/10 05:07	1.0	5
046	070a046	SAMPLE	218690-007	S	Soil	160799	03/12/10 05:35	1.0	
047	070a047	SAMPLE	218690-008	S	Soil	160799	03/12/10 06:02	1.0	
048	070a048	X	MO_500				03/12/10 06:29	1.0	2
049	070a049	X	DSL_500				03/12/10 06:57	1.0	7
050	070a050	CCV	JP5_250				03/12/10 07:24	1.0	5
051	070a051	CCV	MO_500				03/12/10 08:00	1.0	2
052	070a052	CCV	DSL_500				03/12/10 08:27	1.0	7

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220019637

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/13/10 15:17
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	013_001	X	PRIMER			01/13/10 15:17	1.0	
002	013_002	X	IB			01/13/10 15:46	1.0	
003	013_003	X	CMARKER			01/13/10 16:14	1.0	1
004	013_004	X	DSL_500			01/13/10 16:43	1.0	2
005	013_005	X	MO_500			01/13/10 17:12	1.0	3
006	013_006	X	IB			01/13/10 17:48	1.0	
007	013_007	X	CMARKER			01/13/10 18:17	1.0	1
008	013_008	X	DSL_500			01/13/10 18:46	1.0	2
009	013_009	X	MO_500			01/13/10 19:15	1.0	3
010	013_010	X	IB			01/13/10 20:54	1.0	
011	013_011	X	IB			01/13/10 21:22	1.0	
012	013_012	IB	CALIB			01/13/10 21:50	1.0	
013	013_013	ICAL	HEXOTP_5			01/13/10 22:18	1.0	4
014	013_014	ICAL	HEXOTP_10			01/13/10 22:46	1.0	5
015	013_015	ICAL	HEXOTP_25			01/13/10 23:14	1.0	6
016	013_016	ICAL	HEXOTP_50			01/13/10 23:42	1.0	7
017	013_017	ICAL	HEXOTP_100			01/14/10 00:09	1.0	8
018	013_018	ICAL	HEXOTP_200			01/14/10 00:37	1.0	9
019	013_019	IB	CALIB			01/14/10 01:04	1.0	
020	013_020	ICAL	DSL_10			01/14/10 01:32	1.0	10
021	013_021	ICAL	DSL_100			01/14/10 02:00	1.0	11
022	013_022	ICAL	DSL_500			01/14/10 02:28	1.0	12
023	013_023	ICAL	DSL_1000			01/14/10 02:55	1.0	13
024	013_024	ICAL	DSL_5000			01/14/10 03:23	1.0	14
025	013_025	ICAL	DSL_7500			01/14/10 03:50	1.0	15
026	013_026	IB	CALIB			01/14/10 04:18	1.0	
027	013_027	ICV	DSL_500			01/14/10 04:46	1.0	2
028	013_028	X	ICV			01/14/10 05:14	1.0	2
029	013_029	IB	CALIB			01/14/10 05:43	1.0	
030	013_030	ICAL	MO_50			01/14/10 06:11	1.0	16
031	013_031	ICAL	MO_250			01/14/10 06:39	1.0	17
032	013_032	ICAL	MO_500			01/14/10 07:07	1.0	18
033	013_033	ICAL	MO_1000			01/14/10 07:34	1.0	19
034	013_034	ICAL	MO_5000			01/14/10 08:02	1.0	20
035	013_035	ICAL	MO_7500			01/14/10 08:30	1.0	21
036	013_036	IB	CALIB			01/14/10 08:58	1.0	
037	013_037	CMARKER	C8-C50			01/14/10 09:26	1.0	1
038	013_038	IB	CALIB			01/14/10 09:54	1.0	

TFB 01/14/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

Standards used: 1=S12636 2=S13457 3=S13471 4=S13690 5=S13691 6=S13692 7=S13693 8=S13694 9=S13695 10=S13230 11=S13231
 12=S13232 13=S13233 14=S13229 15=S13234 16=S12675 17=S12676 18=S12677 19=S12678 20=S12679 21=S12680

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220027250

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/18/10 14:37
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	018_001	X	PRIMER			01/18/10 14:37	1.0	
002	018_002	X	IB			01/18/10 15:05	1.0	
003	018_003	IB	CALIB			01/18/10 15:33	1.0	
004	018_004	ICAL	HEXOTP_5			01/18/10 16:02	1.0	1
005	018_005	ICAL	HEXOTP_10			01/18/10 16:30	1.0	2
006	018_006	ICAL	HEXOTP_25			01/18/10 16:58	1.0	3
007	018_007	ICAL	HEXOTP_50			01/18/10 17:27	1.0	4
008	018_008	ICAL	HEXOTP_100			01/18/10 17:55	1.0	5
009	018_009	X	HEXOTP_200			01/18/10 18:24	1.0	6
010	018_010	IB	CALIB			01/18/10 18:53	1.0	
011	018_011	ICAL	MO_50			01/18/10 19:21	1.0	7
012	018_012	ICAL	MO_250			01/18/10 19:49	1.0	8
013	018_013	ICAL	MO_500			01/18/10 20:18	1.0	9
014	018_014	ICAL	MO_1000			01/18/10 20:46	1.0	10
015	018_015	ICAL	MO_5000			01/18/10 21:14	1.0	11
016	018_016	ICAL	MO_7500			01/18/10 21:42	1.0	12
017	018_017	CMARKER	C8-C50			01/18/10 22:10	1.0	13
018	018_018	CCV	DSL_500			01/18/10 22:38	1.0	14
019	018_019	CCV	MO_500			01/18/10 23:06	1.0	15
020	018_020	BLANK	QC489059	Soil	149293	01/18/10 23:35	1.0	
021	018_021	MDL	207486-001	Soil	149293	01/19/10 00:03	1.0	
022	018_022	MDL	207486-002	Soil	149293	01/19/10 00:31	1.0	
023	018_023	MDL	207486-003	Soil	149293	01/19/10 00:59	1.0	
024	018_024	MDL	207486-004	Soil	149293	01/19/10 01:27	1.0	
025	018_025	MDL	207486-005	Soil	149293	01/19/10 01:55	1.0	
026	018_026	MDL	207486-006	Soil	149293	01/19/10 02:23	1.0	
027	018_027	MDL	207486-007	Soil	149293	01/19/10 02:50	1.0	
028	018_028	MDL	207486-008	Soil	149293	01/19/10 03:18	1.0	
029	018_029	LOD	212266-010	Water	159144	01/19/10 03:46	1.0	
030	018_030	CCV	DSL_250			01/19/10 04:15	1.0	16
031	018_031	CCV	MO_500			01/19/10 04:43	1.0	15
032	018_032	X	CCV			01/19/10 05:11	1.0	16
033	018_033	X	CCV			01/19/10 05:39	1.0	15

TFB 01/18/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S13690 2=S13691 3=S13692 4=S13693 5=S13694 6=S13695 7=S12675 8=S12676 9=S12677 10=S12678 11=S12679
 12=S12680 13=S12636 14=S13457 15=S13744 16=S13456

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220101281

Instrument : GC14B
 Method : EPA 8015B

Begun : 03/11/10 08:01
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	070_001	X	PRIMER				03/11/10 08:01	1.0	
002	070_002	X	IB				03/11/10 08:29	1.0	
003	070_003	X	IB				03/11/10 08:57	1.0	
004	070_004	X	CMARKER				03/11/10 09:25	1.0	1
005	070_005	CCV	DSL_250				03/11/10 09:54	1.0	2
006	070_006	CCV	MO_500				03/11/10 10:22	1.0	3
007	070_007	CCV	JETA_250				03/11/10 10:59	1.0	4
008	070_008	X	JP5_250				03/11/10 12:22	1.0	5
009	070_009	SAMPLE	218705-001		Water	160802	03/11/10 12:50	1.0	
010	070_010	SAMPLE	218705-002		Water	160802	03/11/10 13:18	1.0	
011	070_011	SAMPLE	218705-003		Water	160802	03/11/10 13:47	1.0	
012	070_012	SAMPLE	218705-004		Water	160802	03/11/10 14:16	1.0	
013	070_013	X	IB				03/11/10 15:05	1.0	
014	070_014	MS	QC535554	S	Soil	160799	03/11/10 15:34	1.0	
015	070_015	MSD	QC535555	S	Soil	160799	03/11/10 16:02	1.0	
016	070_016	X	IB				03/11/10 16:31	1.0	
017	070_017	SAMPLE	218693-001	S	Soil	160799	03/11/10 17:00	3.0	
018	070_018	X	IB				03/11/10 17:29	1.0	
019	070_019	SAMPLE	218703-001	S	Soil	160799	03/11/10 17:57	1.0	
020	070_020	SAMPLE	218703-002	S	Soil	160799	03/11/10 18:26	1.0	
021	070_021	SAMPLE	218703-003	S	Soil	160799	03/11/10 18:54	1.0	
022	070_022	CCV	DSL_500				03/11/10 19:23	1.0	6
023	070_023	CCV	MO_500				03/11/10 19:52	1.0	3
024	070_024	CCV	JETA_250				03/11/10 20:20	1.0	4
025	070_025	X	CCV				03/11/10 20:49	1.0	6
026	070_026	X	CCV				03/11/10 21:17	1.0	3
027	070_027	X	CCV				03/11/10 21:45	1.0	4
028	070_028	BLANK	QC535564	S	Water	160802	03/11/10 22:13	1.0	
029	070_029	BS	QC535565	S	Water	160802	03/11/10 22:42	1.0	
030	070_030	BSD	QC535566	S	Water	160802	03/11/10 23:10	1.0	
031	070_031	SAMPLE	218706-001	S	Water	160802	03/11/10 23:38	1.0	
032	070_032	SAMPLE	218706-002	S	Water	160802	03/12/10 00:06	1.0	
033	070_033	X	CMARKER				03/12/10 10:14	1.0	1
034	070_034	CCV	DSL_1000				03/12/10 10:42	1.0	7
035	070_035	CCV	MO_500				03/12/10 11:10	1.0	3
036	070_036	CCV	JETA_250				03/12/10 11:38	1.0	4

SFL 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

JDG 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 27.

JDG 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 28 through 36.

Standards used: 1=S13646 2=S13456 3=S14003 4=S13073 5=S12969 6=S14077 7=S13458

SAMPLE PREPARATION SUMMARY

Batch # : 160802
 Started By : DJT
 Method : 3520C
 Spike #1 ID : S13777

Prep Date : 10-MAR-2010 16:40
 SOP Version : TEH_3520_rv12
 Spike #2 ID : S14101

Analysis : TEH
 Finished By : MB2
 Units : mL
 Spike #3 ID : S13010

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
218669-002		Water	500	2.5	1	0.005	5	.5				TEHM	
218669-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218669-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218669-005		Water	500	2.5	1	0.005	7	.5				TEHM	
218669-006		Water	500	2.5	1	0.005	7	.5				TEHM	
218669-007		Water	500	2.5	1	0.005	7	.5				TEHM	
218669-008		Water	500	2.5	1	0.005	7	.5				TEHM	
218669-009		Water	500	2.5	1	0.005	7	.5				TEHM	
218688-001		Water	500	2.5	1	0.005	7	.5				TEHM	
218688-002		Water	500	2.5	1	0.005	7	.5				TEHM	
218688-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218688-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218705-001		Water	500	2.5	1	0.005	7	.5				TEH	
218705-002		Water	500	2.5	1	0.005	7	.5				TEH	
218705-003		Water	500	2.5	1	0.005	7	.5				TEH	
218705-004		Water	500	2.5	1	0.005	7	.5				TEH	
218706-001		Water	500	2.5	1	0.005	2	.5			3630C	TEH	hcl preserved
218706-002		Water	500	2.5	1	0.005	2	.5			3630C	TEH	hcl preserved
218706-003		Water	500	2.5	1	0.005	5	.5			3630C	TEH	
218709-002		Water	500	2.5	1	0.005	7	.5				TEHM	
QC535564	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC535565	BS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC535566	BSD	Water	500	2.5	1	0.005		.5	.5		3630C		
QC535567	LCS	Water	500	2.5	1	0.005		.5		.5			

JDG 03/12/10 : Matrix spikes were not performed for this analysis in batch 160802 due to insufficient sample amount.

Analyst: JDG Date: 03/12/10 Reviewer: PRW Date: 03/12/10

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 160802
 LIMS Analysis: TEH/M
 Date Extracted: 3/10/10

Extraction Method:
 mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

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Cleanup Method (if needed):
 EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
218669-002	D	500	5	2.5		
	003		7			
	004					
	005					
	006					
	007					
	008					
	009					
218688-001	E					
	002					
	003					
	004					
218705-001	D					
	002					
	003					
	004					
218706-001	F		2		X	HCL PRESERVED
	002					
	003		5			
218709-002	E		7			
MB QC 535564	NA		NA		X	
BS	5					
BSD	6					
*LCS	7					

Handwritten: KRL 3/12/10

0.5 mL of TEH_SURR was added to all samples
 0.5 mL of TEH_SP was added to all spikes
 pH of all samples adjusted to pH ≤ 2 with H₂SO₄

3520c: Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time: 1640

Extraction End Time: 1040

3510c: Samples were extracted 3 times with 60 mL of CH₂Cl₂
 Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄
 Concentrated to final volume at temperature (degrees C)

Relinquished to TEH Department

Mfg & Lot# / LIMS # / Time	Date/Initials
S137770	DJK 3/10/10
S14101C/S13010C*	
FS044395	
EM49338	
1640	
1040	MBZ 3/11/10
NA	
EM49247942	
100	

Signature
 Extraction Chemist 3/10/10
 Date

Continued from Page 1
 Continued on Page 1

Signature 3/12/10
 Reviewed by Date

Laboratory Job Number 218669

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-001-UST-10Q1	Batch#:	161072
Lab ID:	218669-001	Sampled:	03/07/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-001-UST-10Q1	Batch#:	161072
Lab ID:	218669-001	Sampled:	03/07/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	117	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	98	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-001-UST-10Q1	Batch#:	161072
Lab ID:	218669-002	Sampled:	03/07/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	0.7	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-001-UST-10Q1	Batch#:	161072
Lab ID:	218669-002	Sampled:	03/07/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	117	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-112A-UST-10Q1	Batch#:	161072
Lab ID:	218669-003	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	0.9	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.8	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-112A-UST-10Q1	Batch#:	161072
Lab ID:	218669-003	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	2.5	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	0.7	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	1.7	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	116	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-105A-UST-10Q1	Batch#:	161072
Lab ID:	218669-004	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-105A-UST-10Q1	Batch#:	161072
Lab ID:	218669-004	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	1.6	0.5	
m,p-Xylenes	0.7	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	0.8	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	0.6	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	0.5	0.5	
sec-Butylbenzene	0.5	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	0.7	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	117	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-90A-UST-10Q1	Units:	ug/L
Lab ID:	218669-005	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ	Flags
Freon 12	ND	2.5	2.500	161119	03/22/10	D2	
Chloromethane	ND	2.5	2.500	161119	03/22/10	D2	V9
Vinyl Chloride	ND	1.3	2.500	161119	03/22/10	D2	
Bromomethane	ND	2.5	2.500	161119	03/22/10	D2	
Chloroethane	ND	2.5	2.500	161119	03/22/10	D2	V9
Trichlorofluoromethane	ND	2.5	2.500	161119	03/22/10	D2	
Iodomethane	ND	25	2.500	161119	03/22/10	D2	
Acetone	ND	25	2.500	161119	03/22/10	D2	
1,1-Dichloroethene	ND	1.3	2.500	161119	03/22/10	D2	
Methylene Chloride	ND	25	2.500	161119	03/22/10	D2	
Carbon Disulfide	ND	1.3	2.500	161119	03/22/10	D2	
MTBE	160	1.3	2.500	161119	03/22/10	D2	
trans-1,2-Dichloroethene	ND	1.3	2.500	161119	03/22/10	D2	
Vinyl Acetate	ND	25	2.500	161119	03/22/10	D2	
1,1-Dichloroethane	ND	1.3	2.500	161119	03/22/10	D2	
2-Butanone	ND	25	2.500	161119	03/22/10	D2	
cis-1,2-Dichloroethene	ND	2.5	5.000	161072	03/20/10	D1	
2,2-Dichloropropane	ND	1.3	2.500	161119	03/22/10	D2	
Chloroform	ND	1.3	2.500	161119	03/22/10	D2	
Bromochloromethane	ND	1.3	2.500	161119	03/22/10	D2	
1,1,1-Trichloroethane	ND	1.3	2.500	161119	03/22/10	D2	
1,1-Dichloropropene	ND	1.3	2.500	161119	03/22/10	D2	
Carbon Tetrachloride	ND	1.3	2.500	161119	03/22/10	D2	
1,2-Dichloroethane	ND	1.3	2.500	161119	03/22/10	D2	
Benzene	17	1.3	2.500	161119	03/22/10	D2	
Trichloroethene	ND	1.3	2.500	161119	03/22/10	D2	
1,2-Dichloropropane	ND	1.3	2.500	161119	03/22/10	D2	
Bromodichloromethane	ND	1.3	2.500	161119	03/22/10	D2	
Dibromomethane	ND	1.3	2.500	161119	03/22/10	D2	
4-Methyl-2-Pentanone	ND	25	2.500	161119	03/22/10	D2	
cis-1,3-Dichloropropene	ND	1.3	2.500	161119	03/22/10	D2	
Toluene	ND	1.3	2.500	161119	03/22/10	D2	
trans-1,3-Dichloropropene	ND	1.3	2.500	161119	03/22/10	D2	
1,1,2-Trichloroethane	ND	1.3	2.500	161119	03/22/10	D2	
2-Hexanone	ND	25	2.500	161119	03/22/10	D2	
1,3-Dichloropropane	ND	1.3	2.500	161119	03/22/10	D2	
Tetrachloroethene	ND	1.3	2.500	161119	03/22/10	D2	
Dibromochloromethane	ND	1.3	2.500	161119	03/22/10	D2	
1,2-Dibromoethane	ND	1.3	2.500	161119	03/22/10	D2	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-90A-UST-10Q1	Units:	ug/L
Lab ID:	218669-005	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Chlorobenzene	ND	1.3	2.500	161119	03/22/10	D2
1,1,1,2-Tetrachloroethane	ND	1.3	2.500	161119	03/22/10	D2
Ethylbenzene	ND	1.3	2.500	161119	03/22/10	D2
m,p-Xylenes	ND	1.3	2.500	161119	03/22/10	D2
o-Xylene	ND	1.3	2.500	161119	03/22/10	D2
Styrene	ND	1.3	2.500	161119	03/22/10	D2
Bromoform	ND	2.5	2.500	161119	03/22/10	D2
Isopropylbenzene	4.2	1.3	2.500	161119	03/22/10	D2
1,1,2,2-Tetrachloroethane	ND	1.3	2.500	161119	03/22/10	D2
1,2,3-Trichloropropane	ND	1.3	2.500	161119	03/22/10	D2
Propylbenzene	4.3	1.3	2.500	161119	03/22/10	D2
Bromobenzene	ND	1.3	2.500	161119	03/22/10	D2
1,3,5-Trimethylbenzene	ND	1.3	2.500	161119	03/22/10	D2
2-Chlorotoluene	ND	1.3	2.500	161119	03/22/10	D2
4-Chlorotoluene	ND	1.3	2.500	161119	03/22/10	D2
tert-Butylbenzene	ND	1.3	2.500	161119	03/22/10	D2
1,2,4-Trimethylbenzene	ND	1.3	2.500	161119	03/22/10	D2
sec-Butylbenzene	1.5	1.3	2.500	161119	03/22/10	D2
para-Isopropyl Toluene	ND	1.3	2.500	161119	03/22/10	D2
1,3-Dichlorobenzene	ND	1.3	2.500	161119	03/22/10	D2
1,4-Dichlorobenzene	ND	1.3	2.500	161119	03/22/10	D2
n-Butylbenzene	1.6	1.3	2.500	161119	03/22/10	D2
1,2-Dichlorobenzene	ND	1.3	2.500	161119	03/22/10	D2
1,2-Dibromo-3-Chloropropane	ND	5.0	2.500	161119	03/22/10	D2
1,2,4-Trichlorobenzene	ND	1.3	2.500	161119	03/22/10	D2
Hexachlorobutadiene	ND	5.0	2.500	161119	03/22/10	D2 L1
Naphthalene	ND	5.0	2.500	161119	03/22/10	D2
1,2,3-Trichlorobenzene	ND	1.3	2.500	161119	03/22/10	D2
Xylene (total)	ND	1.3	2.500	161119	03/22/10	D2

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	99	77-120	5.000	161072	03/20/10	
Dibromofluoromethane	99	77-120	2.500	161119	03/22/10	
1,2-Dichloroethane-d4	115	70-127	5.000	161072	03/20/10	
1,2-Dichloroethane-d4	115	70-127	2.500	161119	03/22/10	
Toluene-d8	101	83-125	5.000	161072	03/20/10	
Toluene-d8	99	83-125	2.500	161119	03/22/10	
Bromofluorobenzene	100	78-120	5.000	161072	03/20/10	
Bromofluorobenzene	100	78-120	2.500	161119	03/22/10	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-128A-UST-10Q1	Batch#:	161072
Lab ID:	218669-006	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/20/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-128A-UST-10Q1	Batch#:	161072
Lab ID:	218669-006	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/20/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	116	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-98A-UST-10Q1	Batch#:	161072
Lab ID:	218669-007	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-98A-UST-10Q1	Batch#:	161072
Lab ID:	218669-007	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	116	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	98	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-004	Batch#:	161072
Lab ID:	218669-008	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-004	Batch#:	161072
Lab ID:	218669-008	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	118	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	98	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-UST-10Q1	Batch#:	161080
Lab ID:	218669-009	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V9
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-99A-UST-10Q1	Batch#:	161080
Lab ID:	218669-009	Sampled:	03/08/10
Matrix:	Water	Received:	03/09/10
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161072
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Type: BS Lab ID: QC536655

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	25.00	22.88	b 92	56-140	V3	
Chloromethane	25.00	19.50	78	46-142		
Vinyl Chloride	25.00	21.12	84	49-136		
Bromomethane	25.00	25.12	100	42-154		
Chloroethane	25.00	22.14	89	51-133		
Trichlorofluoromethane	25.00	26.26	105	63-135		
Iodomethane	25.00	28.74	115	70-130		
Acetone	25.00	24.96	b 100	48-130	V3	
1,1-Dichloroethene	25.00	24.56	98	68-133		
Methylene Chloride	25.00	22.84	91	71-120		
Carbon Disulfide	25.00	21.64	87	56-120		
MTBE	25.00	22.40	90	58-120		
trans-1,2-Dichloroethene	25.00	23.68	95	80-120		
Vinyl Acetate	25.00	25.12	100	63-124		
1,1-Dichloroethane	25.00	23.84	95	77-120		
2-Butanone	25.00	23.74	95	57-120		
cis-1,2-Dichloroethene	25.00	23.62	94	75-120		
2,2-Dichloropropane	25.00	28.86	b 115	72-128	V3	
Chloroform	25.00	25.17	101	78-120		
Bromochloromethane	25.00	24.11	96	78-120		
1,1,1-Trichloroethane	25.00	27.87	111	78-120		
1,1-Dichloropropene	25.00	28.25	113	75-120		
Carbon Tetrachloride	25.00	31.41	b 126 *	80-120	L1 V3	
1,2-Dichloroethane	25.00	28.58	114	74-120		
Benzene	25.00	25.34	101	77-120		
Trichloroethene	25.00	27.00	108	78-122		
1,2-Dichloropropane	25.00	24.19	97	76-120		
Bromodichloromethane	25.00	26.24	105	78-120		
Dibromomethane	25.00	25.07	100	77-120		
4-Methyl-2-Pentanone	25.00	24.47	98	65-120		
cis-1,3-Dichloropropene	25.00	25.24	101	76-120		
Toluene	25.00	25.12	100	73-120		
trans-1,3-Dichloropropene	25.00	23.38	94	72-120		
1,1,2-Trichloroethane	25.00	25.16	101	76-120		
2-Hexanone	25.00	25.70	103	57-121		
1,3-Dichloropropane	25.00	25.59	102	75-120		
Tetrachloroethene	25.00	27.85	111	77-120		
Dibromochloromethane	25.00	25.46	102	76-120		
1,2-Dibromoethane	25.00	26.65	107	77-120		
Chlorobenzene	25.00	24.29	97	78-120		
1,1,1,2-Tetrachloroethane	25.00	26.12	104	77-120		
Ethylbenzene	25.00	25.90	104	78-120		
m,p-Xylenes	50.00	51.12	102	77-120		
o-Xylene	25.00	25.08	100	77-120		
Styrene	25.00	24.95	100	77-120		
Bromoform	25.00	25.74	103	74-121		
Isopropylbenzene	25.00	22.41	90	71-120		
1,1,2,2-Tetrachloroethane	25.00	23.05	92	73-120		
1,2,3-Trichloropropane	25.00	24.87	99	72-120		
Propylbenzene	25.00	26.07	104	76-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161072
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	25.00	25.20	101	75-120	
1,3,5-Trimethylbenzene	25.00	26.09	104	77-120	
2-Chlorotoluene	25.00	25.85	103	76-120	
4-Chlorotoluene	25.00	25.11	100	78-120	
tert-Butylbenzene	25.00	27.01	108	76-120	
1,2,4-Trimethylbenzene	25.00	25.11	100	77-120	
sec-Butylbenzene	25.00	27.51	110	80-120	
para-Isopropyl Toluene	25.00	25.95	104	76-120	
1,3-Dichlorobenzene	25.00	24.61	98	75-120	
1,4-Dichlorobenzene	25.00	24.92	100	77-120	
n-Butylbenzene	25.00	27.14	109	76-120	
1,2-Dichlorobenzene	25.00	24.82	99	76-120	
1,2-Dibromo-3-Chloropropane	25.00	26.83	107	65-120	
1,2,4-Trichlorobenzene	25.00	25.72	103	73-121	
Hexachlorobutadiene	25.00	31.96 b	128 *	73-123	L1 V3
Naphthalene	25.00	22.01	88	62-121	
1,2,3-Trichlorobenzene	25.00	26.56	106	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	114	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	97	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161072
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Type: BSD Lab ID: QC536656

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	23.14 b	93	56-140	1	24	V3	
Chloromethane	25.00	19.75	79	46-142	1	24		
Vinyl Chloride	25.00	21.27	85	49-136	1	24		
Bromomethane	25.00	25.53	102	42-154	2	24		
Chloroethane	25.00	21.99	88	51-133	1	25		
Trichlorofluoromethane	25.00	26.12	104	63-135	1	20		
Iodomethane	25.00	29.40	118	70-130	2	20		
Acetone	25.00	24.62 b	98	48-130	1	41	V3	
1,1-Dichloroethene	25.00	25.01	100	68-133	2	20		
Methylene Chloride	25.00	23.21	93	71-120	2	20		
Carbon Disulfide	25.00	22.35	89	56-120	3	20		
MTBE	25.00	22.57	90	58-120	1	21		
trans-1,2-Dichloroethene	25.00	24.19	97	80-120	2	24		
Vinyl Acetate	25.00	25.41	102	63-124	1	24		
1,1-Dichloroethane	25.00	24.14	97	77-120	1	20		
2-Butanone	25.00	24.03	96	57-120	1	32		
cis-1,2-Dichloroethene	25.00	23.92	96	75-120	1	20		
2,2-Dichloropropane	25.00	29.26 b	117	72-128	1	24	V3	
Chloroform	25.00	25.36	101	78-120	1	20		
Bromochloromethane	25.00	24.61	98	78-120	2	20		
1,1,1-Trichloroethane	25.00	29.05	116	78-120	4	20		
1,1-Dichloropropene	25.00	28.77	115	75-120	2	21		
Carbon Tetrachloride	25.00	31.65 b	127 *	80-120	1	21	L1 V3	
1,2-Dichloroethane	25.00	28.64	115	74-120	0	20		
Benzene	25.00	26.31	105	77-120	4	20		
Trichloroethene	25.00	27.84	111	78-122	3	20		
1,2-Dichloropropane	25.00	24.57	98	76-120	2	20		
Bromodichloromethane	25.00	26.81	107	78-120	2	20		
Dibromomethane	25.00	25.51	102	77-120	2	20		
4-Methyl-2-Pentanone	25.00	25.69	103	65-120	5	22		
cis-1,3-Dichloropropene	25.00	26.07	104	76-120	3	20		
Toluene	25.00	25.68	103	73-120	2	20		
trans-1,3-Dichloropropene	25.00	24.09	96	72-120	3	20		
1,1,2-Trichloroethane	25.00	25.91	104	76-120	3	20		
2-Hexanone	25.00	26.32	105	57-121	2	25		
1,3-Dichloropropane	25.00	25.95	104	75-120	1	20		
Tetrachloroethene	25.00	28.98	116	77-120	4	20		
Dibromochloromethane	25.00	26.70	107	76-120	5	20		
1,2-Dibromoethane	25.00	26.93	108	77-120	1	20		
Chlorobenzene	25.00	25.30	101	78-120	4	20		
1,1,1,2-Tetrachloroethane	25.00	27.07	108	77-120	4	20		
Ethylbenzene	25.00	26.42	106	78-120	2	26		
m,p-Xylenes	50.00	51.18	102	77-120	0	20		
o-Xylene	25.00	25.04	100	77-120	0	20		
Styrene	25.00	25.12	100	77-120	1	20		
Bromoform	25.00	26.44	106	74-121	3	21		
Isopropylbenzene	25.00	23.05	92	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	24.54	98	73-120	6	20		
1,2,3-Trichloropropane	25.00	26.47	106	72-120	6	20		
Propylbenzene	25.00	26.58	106	76-120	2	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161072
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Bromobenzene	25.00	26.64	107	75-120	6	20		
1,3,5-Trimethylbenzene	25.00	26.84	107	77-120	3	20		
2-Chlorotoluene	25.00	26.37	105	76-120	2	20		
4-Chlorotoluene	25.00	25.54	102	78-120	2	20		
tert-Butylbenzene	25.00	27.66	111	76-120	2	21		
1,2,4-Trimethylbenzene	25.00	25.86	103	77-120	3	20		
sec-Butylbenzene	25.00	28.02	112	80-120	2	21		
para-Isopropyl Toluene	25.00	26.51	106	76-120	2	20		
1,3-Dichlorobenzene	25.00	25.22	101	75-120	2	20		
1,4-Dichlorobenzene	25.00	25.45	102	77-120	2	23		
n-Butylbenzene	25.00	27.29	109	76-120	1	21		
1,2-Dichlorobenzene	25.00	25.89	104	76-120	4	20		
1,2-Dibromo-3-Chloropropane	25.00	27.60	110	65-120	3	22		
1,2,4-Trichlorobenzene	25.00	26.76	107	73-121	4	20		
Hexachlorobutadiene	25.00	32.44 b	130 *	73-123	2	25	L1	V3
Naphthalene	25.00	22.77	91	62-121	3	32		
1,2,3-Trichlorobenzene	25.00	27.80	111	66-123	5	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	102	77-120		
1,2-Dichloroethane-d4	115	70-127		
Toluene-d8	102	83-125		
Bromofluorobenzene	98	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536659	Batch#:	161072
Matrix:	Water	Analyzed:	03/19/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	V1
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536659	Batch#:	161072
Matrix:	Water	Analyzed:	03/19/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	116	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	97	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161080
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Type: BS Lab ID: QC536691

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	31.25	24.19 b	77	56-140	V9	
Chloromethane	31.25	25.36	81	46-142		
Vinyl Chloride	31.25	27.21	87	49-136		
Bromomethane	31.25	32.94	105	42-154		
Chloroethane	31.25	30.40	97	51-133		
Trichlorofluoromethane	31.25	30.57	98	63-135		
Iodomethane	31.25	32.49 b	104	70-130		
Acetone	31.25	28.46	91	48-130		
1,1-Dichloroethene	31.25	37.39	120	68-133		
Methylene Chloride	31.25	31.88	102	71-120		
Carbon Disulfide	31.25	32.10	103	56-120		
MTBE	31.25	29.41	94	58-120		
trans-1,2-Dichloroethene	31.25	34.25	110	80-120		
Vinyl Acetate	31.25	40.04 b	128 *	63-124	L1 V3	
1,1-Dichloroethane	31.25	30.86	99	77-120		
2-Butanone	31.25	29.64	95	57-120		
cis-1,2-Dichloroethene	31.25	32.95	105	75-120		
2,2-Dichloropropane	31.25	35.30	113	72-128		
Chloroform	31.25	30.36	97	78-120		
Bromochloromethane	31.25	34.02	109	78-120		
1,1,1-Trichloroethane	31.25	31.28	100	78-120		
1,1-Dichloropropene	31.25	33.11	106	75-120		
Carbon Tetrachloride	31.25	31.29	100	80-120		
1,2-Dichloroethane	31.25	28.46	91	74-120		
Benzene	31.25	32.06	103	77-120		
Trichloroethene	31.25	31.24	100	78-122		
1,2-Dichloropropane	31.25	29.12	93	76-120		
Bromodichloromethane	31.25	30.04	96	78-120		
Dibromomethane	31.25	30.46	97	77-120		
4-Methyl-2-Pentanone	31.25	30.08	96	65-120		
cis-1,3-Dichloropropene	31.25	30.58	98	76-120		
Toluene	31.25	32.22	103	73-120		
trans-1,3-Dichloropropene	31.25	27.46	88	72-120		
1,1,2-Trichloroethane	31.25	32.81	105	76-120		
2-Hexanone	31.25	31.08	99	57-121		
1,3-Dichloropropane	31.25	33.27	106	75-120		
Tetrachloroethene	31.25	33.96	109	77-120		
Dibromochloromethane	31.25	31.23	100	76-120		
1,2-Dibromoethane	31.25	33.00	106	77-120		
Chlorobenzene	31.25	32.76	105	78-120		
1,1,1,2-Tetrachloroethane	31.25	31.78	102	77-120		
Ethylbenzene	31.25	33.05	106	78-120		
m,p-Xylenes	62.50	68.94	110	77-120		
o-Xylene	31.25	33.43	107	77-120		
Styrene	31.25	33.86	108	77-120		
Bromoform	31.25	33.36	107	74-121		
Isopropylbenzene	31.25	29.82	95	71-120		
1,1,2,2-Tetrachloroethane	31.25	34.62	111	73-120		
1,2,3-Trichloropropane	31.25	31.89	102	72-120		
Propylbenzene	31.25	34.22	109	76-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161080
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	31.25	34.64	111	75-120	
1,3,5-Trimethylbenzene	31.25	33.06	106	77-120	
2-Chlorotoluene	31.25	32.34	104	76-120	
4-Chlorotoluene	31.25	32.34	103	78-120	
tert-Butylbenzene	31.25	33.26	106	76-120	
1,2,4-Trimethylbenzene	31.25	33.12	106	77-120	
sec-Butylbenzene	31.25	34.95	112	80-120	
para-Isopropyl Toluene	31.25	33.54	107	76-120	
1,3-Dichlorobenzene	31.25	32.43	104	75-120	
1,4-Dichlorobenzene	31.25	32.29	103	77-120	
n-Butylbenzene	31.25	34.78	111	76-120	
1,2-Dichlorobenzene	31.25	33.02	106	76-120	
1,2-Dibromo-3-Chloropropane	31.25	29.71	95	65-120	
1,2,4-Trichlorobenzene	31.25	33.04	106	73-121	
Hexachlorobutadiene	31.25	34.54	111	73-123	
Naphthalene	31.25	33.16	106	62-121	
1,2,3-Trichlorobenzene	31.25	34.13	109	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	88	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161080
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Type: BSD Lab ID: QC536692

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	31.25	23.56 b	75	56-140	3	24	V9	
Chloromethane	31.25	26.38	84	46-142	4	24		
Vinyl Chloride	31.25	26.58	85	49-136	2	24		
Bromomethane	31.25	32.59	104	42-154	1	24		
Chloroethane	31.25	30.97	99	51-133	2	25		
Trichlorofluoromethane	31.25	29.38	94	63-135	4	20		
Iodomethane	31.25	32.30 b	103	70-130	1	20		
Acetone	31.25	28.72	92	48-130	1	41		
1,1-Dichloroethene	31.25	37.14	119	68-133	1	20		
Methylene Chloride	31.25	31.61	101	71-120	1	20		
Carbon Disulfide	31.25	32.35	104	56-120	1	20		
MTBE	31.25	29.10	93	58-120	1	21		
trans-1,2-Dichloroethene	31.25	35.27	113	80-120	3	24		
Vinyl Acetate	31.25	39.22 b	126 *	63-124	2	24	L1 V3	
1,1-Dichloroethane	31.25	31.42	101	77-120	2	20		
2-Butanone	31.25	29.89	96	57-120	1	32		
cis-1,2-Dichloroethene	31.25	33.29	107	75-120	1	20		
2,2-Dichloropropane	31.25	35.64	114	72-128	1	24		
Chloroform	31.25	31.09	99	78-120	2	20		
Bromochloromethane	31.25	33.46	107	78-120	2	20		
1,1,1-Trichloroethane	31.25	31.33	100	78-120	0	20		
1,1-Dichloropropene	31.25	34.12	109	75-120	3	21		
Carbon Tetrachloride	31.25	31.10	100	80-120	1	21		
1,2-Dichloroethane	31.25	29.18	93	74-120	3	20		
Benzene	31.25	32.14	103	77-120	0	20		
Trichloroethene	31.25	32.46	104	78-122	4	20		
1,2-Dichloropropane	31.25	30.44	97	76-120	4	20		
Bromodichloromethane	31.25	30.40	97	78-120	1	20		
Dibromomethane	31.25	31.51	101	77-120	3	20		
4-Methyl-2-Pentanone	31.25	29.25	94	65-120	3	22		
cis-1,3-Dichloropropene	31.25	31.24	100	76-120	2	20		
Toluene	31.25	32.14	103	73-120	0	20		
trans-1,3-Dichloropropene	31.25	27.71	89	72-120	1	20		
1,1,2-Trichloroethane	31.25	33.53	107	76-120	2	20		
2-Hexanone	31.25	29.92	96	57-121	4	25		
1,3-Dichloropropane	31.25	32.81	105	75-120	1	20		
Tetrachloroethene	31.25	33.75	108	77-120	1	20		
Dibromochloromethane	31.25	31.59	101	76-120	1	20		
1,2-Dibromoethane	31.25	32.64	104	77-120	1	20		
Chlorobenzene	31.25	31.59	101	78-120	4	20		
1,1,1,2-Tetrachloroethane	31.25	33.11	106	77-120	4	20		
Ethylbenzene	31.25	32.99	106	78-120	0	26		
m,p-Xylenes	62.50	69.02	110	77-120	0	20		
o-Xylene	31.25	33.17	106	77-120	1	20		
Styrene	31.25	33.34	107	77-120	2	20		
Bromoform	31.25	32.96	105	74-121	1	21		
Isopropylbenzene	31.25	30.24	97	71-120	1	20		
1,1,2,2-Tetrachloroethane	31.25	34.29	110	73-120	1	20		
1,2,3-Trichloropropane	31.25	33.46	107	72-120	5	20		
Propylbenzene	31.25	32.86	105	76-120	4	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161080
Units:	ug/L	Analyzed:	03/19/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Bromobenzene	31.25	33.89	108	75-120	2	20		
1,3,5-Trimethylbenzene	31.25	33.73	108	77-120	2	20		
2-Chlorotoluene	31.25	32.94	105	76-120	2	20		
4-Chlorotoluene	31.25	31.77	102	78-120	2	20		
tert-Butylbenzene	31.25	34.46	110	76-120	4	21		
1,2,4-Trimethylbenzene	31.25	32.61	104	77-120	2	20		
sec-Butylbenzene	31.25	34.74	111	80-120	1	21		
para-Isopropyl Toluene	31.25	32.33	103	76-120	4	20		
1,3-Dichlorobenzene	31.25	32.06	103	75-120	1	20		
1,4-Dichlorobenzene	31.25	31.68	101	77-120	2	23		
n-Butylbenzene	31.25	33.52	107	76-120	4	21		
1,2-Dichlorobenzene	31.25	32.49	104	76-120	2	20		
1,2-Dibromo-3-Chloropropane	31.25	28.83	92	65-120	3	22		
1,2,4-Trichlorobenzene	31.25	31.72	102	73-121	4	20		
Hexachlorobutadiene	31.25	33.47	107	73-123	3	25		
Naphthalene	31.25	33.32	107	62-121	0	32		
1,2,3-Trichlorobenzene	31.25	33.55	107	66-123	2	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	97	77-120		
1,2-Dichloroethane-d4	88	70-127		
Toluene-d8	99	83-125		
Bromofluorobenzene	101	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536695	Batch#:	161080
Matrix:	Water	Analyzed:	03/19/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V9
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1 V1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536695	Batch#:	161080
Matrix:	Water	Analyzed:	03/19/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	98	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536709	Batch#:	161072
Matrix:	Water	Analyzed:	03/19/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	V9
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536709	Batch#:	161072
Matrix:	Water	Analyzed:	03/19/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	116	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536848	Batch#:	161119
Matrix:	Water	Analyzed:	03/21/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536848	Batch#:	161119
Matrix:	Water	Analyzed:	03/21/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	95	77-120	
1,2-Dichloroethane-d4	117	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	98	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536849	Batch#:	161119
Matrix:	Water	Analyzed:	03/21/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	V9
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	V9
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536849	Batch#:	161119
Matrix:	Water	Analyzed:	03/21/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	96	77-120	
1,2-Dichloroethane-d4	115	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	97	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161119
Units:	ug/L	Analyzed:	03/21/10
Diln Fac:	1.000		

Type: BS Lab ID: QC536850

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	20.00	22.88	114	56-140		
Chloromethane	20.00	17.43	87	46-142		
Vinyl Chloride	20.00	16.91	85	49-136		
Bromomethane	20.00	19.71	99	42-154		
Chloroethane	20.00	17.49	87	51-133		
Trichlorofluoromethane	20.00	20.32	102	63-135		
Iodomethane	20.00	21.78	109	70-130		
Acetone	20.00	18.66	93	48-130		
1,1-Dichloroethene	20.00	18.53	93	68-133		
Methylene Chloride	20.00	17.26	86	71-120		
Carbon Disulfide	20.00	16.31	82	56-120		
MTBE	20.00	16.45	82	58-120		
trans-1,2-Dichloroethene	20.00	18.15	91	80-120		
Vinyl Acetate	20.00	19.08	95	63-124		
1,1-Dichloroethane	20.00	18.06	90	77-120		
2-Butanone	20.00	18.31	92	57-120		
cis-1,2-Dichloroethene	20.00	17.85	89	75-120		
2,2-Dichloropropane	20.00	21.95	110	72-128		
Chloroform	20.00	19.05	95	78-120		
Bromochloromethane	20.00	18.54	93	78-120		
1,1,1-Trichloroethane	20.00	21.21	106	78-120		
1,1-Dichloropropene	20.00	21.62	108	75-120		
Carbon Tetrachloride	20.00	24.00	b	80-120	V3	
1,2-Dichloroethane	20.00	21.37	107	74-120		
Benzene	20.00	19.77	99	77-120		
Trichloroethene	20.00	20.85	104	78-122		
1,2-Dichloropropane	20.00	18.51	93	76-120		
Bromodichloromethane	20.00	20.35	102	78-120		
Dibromomethane	20.00	19.83	99	77-120		
4-Methyl-2-Pentanone	20.00	19.19	96	65-120		
cis-1,3-Dichloropropene	20.00	20.01	100	76-120		
Toluene	20.00	19.60	98	73-120		
trans-1,3-Dichloropropene	20.00	18.10	90	72-120		
1,1,2-Trichloroethane	20.00	19.29	96	76-120		
2-Hexanone	20.00	19.70	99	57-121		
1,3-Dichloropropane	20.00	19.35	97	75-120		
Tetrachloroethene	20.00	21.88	109	77-120		
Dibromochloromethane	20.00	20.17	101	76-120		
1,2-Dibromoethane	20.00	20.09	100	77-120		
Chlorobenzene	20.00	19.12	96	78-120		
1,1,1,2-Tetrachloroethane	20.00	21.00	105	77-120		
Ethylbenzene	20.00	20.54	103	78-120		
m,p-Xylenes	40.00	40.06	100	77-120		
o-Xylene	20.00	19.82	99	77-120		
Styrene	20.00	19.47	97	77-120		
Bromoform	20.00	21.10	106	74-121		
Isopropylbenzene	20.00	17.93	90	71-120		
1,1,2,2-Tetrachloroethane	20.00	17.99	90	73-120		
1,2,3-Trichloropropane	20.00	19.60	98	72-120		
Propylbenzene	20.00	20.54	103	76-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161119
Units:	ug/L	Analyzed:	03/21/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	20.00	20.10	100	75-120	
1,3,5-Trimethylbenzene	20.00	20.70	104	77-120	
2-Chlorotoluene	20.00	20.39	102	76-120	
4-Chlorotoluene	20.00	19.49	97	78-120	
tert-Butylbenzene	20.00	21.34	107	76-120	
1,2,4-Trimethylbenzene	20.00	19.94	100	77-120	
sec-Butylbenzene	20.00	21.70	109	80-120	
para-Isopropyl Toluene	20.00	20.79	104	76-120	
1,3-Dichlorobenzene	20.00	19.51	98	75-120	
1,4-Dichlorobenzene	20.00	19.75	99	77-120	
n-Butylbenzene	20.00	21.29	106	76-120	
1,2-Dichlorobenzene	20.00	19.90	99	76-120	
1,2-Dibromo-3-Chloropropane	20.00	20.49	102	65-120	
1,2,4-Trichlorobenzene	20.00	20.66	103	73-121	
Hexachlorobutadiene	20.00	26.03 b	130 *	73-123	L1 V3
Naphthalene	20.00	17.54	88	62-121	
1,2,3-Trichlorobenzene	20.00	21.07	105	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	97	77-120	
1,2-Dichloroethane-d4	110	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161119
Units:	ug/L	Analyzed:	03/21/10
Diln Fac:	1.000		

Type: BSD Lab ID: QC536851

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	20.00	21.48	107	56-140	6	24		
Chloromethane	20.00	16.72	84	46-142	4	24		
Vinyl Chloride	20.00	16.46	82	49-136	3	24		
Bromomethane	20.00	18.69	93	42-154	5	24		
Chloroethane	20.00	16.52	83	51-133	6	25		
Trichlorofluoromethane	20.00	19.18	96	63-135	6	20		
Iodomethane	20.00	20.86	104	70-130	4	20		
Acetone	20.00	18.80	94	48-130	1	41		
1,1-Dichloroethene	20.00	17.89	89	68-133	4	20		
Methylene Chloride	20.00	17.58	88	71-120	2	20		
Carbon Disulfide	20.00	15.65	78	56-120	4	20		
MTBE	20.00	16.56	83	58-120	1	21		
trans-1,2-Dichloroethene	20.00	17.42	87	80-120	4	24		
Vinyl Acetate	20.00	18.96	95	63-124	1	24		
1,1-Dichloroethane	20.00	17.81	89	77-120	1	20		
2-Butanone	20.00	18.12	91	57-120	1	32		
cis-1,2-Dichloroethene	20.00	17.74	89	75-120	1	20		
2,2-Dichloropropane	20.00	20.79	104	72-128	5	24		
Chloroform	20.00	18.84	94	78-120	1	20		
Bromochloromethane	20.00	18.71	94	78-120	1	20		
1,1,1-Trichloroethane	20.00	20.71	104	78-120	2	20		
1,1-Dichloropropene	20.00	20.86	104	75-120	4	21		
Carbon Tetrachloride	20.00	23.32	b	80-120	3	21	V3	
1,2-Dichloroethane	20.00	21.43	107	74-120	0	20		
Benzene	20.00	19.50	97	77-120	1	20		
Trichloroethene	20.00	20.60	103	78-122	1	20		
1,2-Dichloropropane	20.00	18.58	93	76-120	0	20		
Bromodichloromethane	20.00	20.17	101	78-120	1	20		
Dibromomethane	20.00	19.84	99	77-120	0	20		
4-Methyl-2-Pentanone	20.00	19.23	96	65-120	0	22		
cis-1,3-Dichloropropene	20.00	19.72	99	76-120	1	20		
Toluene	20.00	19.91	100	73-120	2	20		
trans-1,3-Dichloropropene	20.00	18.38	92	72-120	2	20		
1,1,2-Trichloroethane	20.00	19.56	98	76-120	1	20		
2-Hexanone	20.00	19.45	97	57-121	1	25		
1,3-Dichloropropane	20.00	19.79	99	75-120	2	20		
Tetrachloroethene	20.00	21.06	105	77-120	4	20		
Dibromochloromethane	20.00	20.33	102	76-120	1	20		
1,2-Dibromoethane	20.00	21.07	105	77-120	5	20		
Chlorobenzene	20.00	19.23	96	78-120	1	20		
1,1,1,2-Tetrachloroethane	20.00	20.87	104	77-120	1	20		
Ethylbenzene	20.00	20.37	102	78-120	1	26		
m,p-Xylenes	40.00	40.10	100	77-120	0	20		
o-Xylene	20.00	19.58	98	77-120	1	20		
Styrene	20.00	19.41	97	77-120	0	20		
Bromoform	20.00	21.57	108	74-121	2	21		
Isopropylbenzene	20.00	17.58	88	71-120	2	20		
1,1,2,2-Tetrachloroethane	20.00	18.15	91	73-120	1	20		
1,2,3-Trichloropropane	20.00	19.30	97	72-120	2	20		
Propylbenzene	20.00	19.83	99	76-120	4	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218669	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161119
Units:	ug/L	Analyzed:	03/21/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Bromobenzene	20.00	20.11	101	75-120	0	20		
1,3,5-Trimethylbenzene	20.00	20.21	101	77-120	2	20		
2-Chlorotoluene	20.00	19.78	99	76-120	3	20		
4-Chlorotoluene	20.00	19.05	95	78-120	2	20		
tert-Butylbenzene	20.00	20.64	103	76-120	3	21		
1,2,4-Trimethylbenzene	20.00	19.43	97	77-120	3	20		
sec-Butylbenzene	20.00	20.73	104	80-120	5	21		
para-Isopropyl Toluene	20.00	20.03	100	76-120	4	20		
1,3-Dichlorobenzene	20.00	19.42	97	75-120	0	20		
1,4-Dichlorobenzene	20.00	18.95	95	77-120	4	23		
n-Butylbenzene	20.00	20.51	103	76-120	4	21		
1,2-Dichlorobenzene	20.00	19.61	98	76-120	1	20		
1,2-Dibromo-3-Chloropropane	20.00	21.17	106	65-120	3	22		
1,2,4-Trichlorobenzene	20.00	20.36	102	73-121	1	20		
Hexachlorobutadiene	20.00	24.78 b	124 *	73-123	5	25	L1	V3
Naphthalene	20.00	17.60	88	62-121	0	32		
1,2,3-Trichlorobenzene	20.00	21.49	107	66-123	2	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	96	77-120		
1,2-Dichloroethane-d4	108	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	97	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480039377003 File : iar03 Time : 27-JAN-2010 17:11

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	119490	17.70	
75	30% - 60% of mass 95	276672	40.99	
95		675029	100.00	
96	5% - 9% of mass 95	46176	6.84	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	508352	75.31	
175	5% - 9% of mass 174	37824	7.44	
176	> 95% and < 101% of mass 174	488896	96.17	
177	5% - 9% of mass 176	33058	6.76	

Analyst: BO Date: 01/28/10 Reviewer: LW Date: 01/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480112900008 File : icj08 Time : 19-MAR-2010 14:30

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	16106	16.47	
75	30% - 60% of mass 95	39122	40.01	
95		97784	100.00	
96	5% - 9% of mass 95	6392	6.54	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	78490	80.27	
175	5% - 9% of mass 174	5401	6.88	
176	> 95% and < 101% of mass 174	75522	96.22	
177	5% - 9% of mass 176	5062	6.70	

TDL 03/22/10 : Adjusted tune

Analyst: TDL Date: 03/22/10 Reviewer: BO Date: 03/22/10

CURTIS & TOMPKINS BFB TUNE FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490027869008 File : jaj08 Time : 19-JAN-2010 15:39

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	37570	17.43	
75	30% - 60% of mass 95	88520	41.07	
95		215530	100.00	
96	5% - 9% of mass 95	14801	6.87	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	166912	77.44	
175	5% - 9% of mass 174	12330	7.39	
176	> 95% and < 101% of mass 174	162773	97.52	
177	5% - 9% of mass 176	10436	6.41	

Analyst: BO Date: 01/20/10 Reviewer: LW Date: 01/22/10

CURTIS & TOMPKINS BFB TUNE FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490112790002 File : jcyj02 Time : 19-MAR-2010 08:18

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	27037	20.64	
75	30% - 60% of mass 95	61304	46.80	
95		131005	100.00	
96	5% - 9% of mass 95	8561	6.53	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	100296	76.56	
175	5% - 9% of mass 174	7758	7.74	
176	> 95% and < 101% of mass 174	100058	99.76	
177	5% - 9% of mass 176	6615	6.61	

Analyst: PDM Date: 03/19/10 Reviewer: BO Date: 03/22/10

CURTIS & TOMPKINS BFB TUNE FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490112790014 File : jcyj14 Time : 19-MAR-2010 15:22

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	26336	19.63	
75	30% - 60% of mass 95	60008	44.73	
95		134144	100.00	
96	5% - 9% of mass 95	8643	6.44	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	103448	77.12	
175	5% - 9% of mass 174	7935	7.67	
176	> 95% and < 101% of mass 174	100488	97.14	
177	5% - 9% of mass 176	6717	6.68	

Analyst: PDM Date: 03/22/10 Reviewer: BO Date: 03/22/10

CURTIS & TOMPKINS BFB TUNE FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490115885002 File : jcl02 Time : 21-MAR-2010 11:58

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	26650	20.89	
75	30% - 60% of mass 95	57738	45.26	
95		127560	100.00	
96	5% - 9% of mass 95	8694	6.82	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	95170	74.61	
175	5% - 9% of mass 174	7559	7.94	
176	> 95% and < 101% of mass 174	94229	99.01	
177	5% - 9% of mass 176	6422	6.82	

Analyst: PDM Date: 03/22/10 Reviewer: BO Date: 03/22/10

CURTIS & TOMPKINS BFB TUNE FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490115885011 File : jcl11 Time : 21-MAR-2010 17:09

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	24125	18.40	
75	30% - 60% of mass 95	57336	43.74	
95		131090	100.00	
96	5% - 9% of mass 95	8707	6.64	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	106960	81.59	
175	5% - 9% of mass 174	8246	7.71	
176	> 95% and < 101% of mass 174	104650	97.84	
177	5% - 9% of mass 176	7181	6.86	

Analyst: PDM Date: 03/22/10 Reviewer: BO Date: 03/22/10

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 MSVOA Water: EPA 8260B

Inst : MSVOA09
 Calnum : 480039377001
 Units : ug/L

Name : 826GOX9W
 Date : 27-JAN-2010 20:15
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	iar07	480039377007	.25/.5PPB	27-JAN-2010 20:15	S13745 (20000X), S13845 (20000X), S13747 (20000X), S13846 (100000X), S13687 (5000X)
L2	iar08	480039377008	0.5/1PPB	27-JAN-2010 20:49	S13745 (100000X), S13845 (100000X), S13747 (100000X), S13846 (50000X), S13687 (5000X)
L3	iar09	480039377009	2PPB	27-JAN-2010 21:22	S13745 (25000X), S13845 (25000X), S13747 (50000X), S13846 (25000X), S13687 (5000X)
L4	iar10	480039377010	5PPB	27-JAN-2010 21:55	S13745 (10000X), S13845 (10000X), S13747 (20000X), S13846 (10000X), S13687 (5000X)
L5	iar11	480039377011	10PPB	27-JAN-2010 22:28	S13745 (5000X), S13845 (5000X), S13747 (10000X), S13846 (5000X), S13687 (5000X)
L6	iar12	480039377012	20PPB	27-JAN-2010 23:01	S13680 (25000X), S13796 (25000X), S13625 (50000X), S13503 (25000X), S13687 (5000X)
L7	iar13	480039377013	50PPB	27-JAN-2010 23:34	S13680 (10000X), S13796 (10000X), S13625 (20000X), S13503 (10000X), S13687 (5000X)
L8	iar14	480039377014	75PPB	28-JAN-2010 00:07	S13680 (6667X), S13796 (6667X), S13625 (13330X), S13503 (6667X), S13687 (5000X)
L9	iar15	480039377015	100PPB	28-JAN-2010 00:39	S13680 (5000X), S13796 (5000X), S13625 (10000X), S13503 (5000X), S13687 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Freon 12		0.4272	0.6076	0.5551	0.6189	0.6131	0.6391	0.5765	0.5958	AVRG		1.72662		0.5792	12	15	0.05	0.99	
Chloromethane		0.8240	0.9930	0.9112	0.9272	0.9023	0.8693	0.8104	0.7946	AVRG		1.13767		0.8790	8	15	0.10	0.99	
Vinyl Chloride	0.5181	0.5422	0.7028	0.6832	0.6817	0.6816	0.6563	0.6083	0.5695	AVRG		1.59470		0.6271	11	15	0.05	0.99	
Bromomethane		0.3327	0.3778	0.3470	0.3376	0.3814	0.3741	0.3742	0.3632	AVRG		2.77001		0.3610	5	15	0.05	0.99	
Chloroethane		0.3935	0.4827	0.4630	0.4416	0.4633	0.4477	0.4193	0.4174	AVRG		2.26725		0.4411	7	15	0.05	0.99	
Trichlorofluoromethane		0.5190	0.6690	0.6150	0.6630	0.6423	0.6798	0.6145	0.6119	AVRG		1.59535		0.6268	8	15	0.05	0.99	
Acetone				0.1172	0.1133	0.1131	0.1053	0.0922	0.0927	AVRG		9.46550		0.1056	10	15	0.05	0.99	
1,1-Dichloroethene		0.3192	0.4324	0.3853	0.3906	0.3699	0.3637	0.3930	0.3876	AVRG		2.63014		0.3802	8	15	0.05	0.99	
Iodomethane				0.5282	0.5552	0.5997	0.6044	0.5951	0.6206	AVRG		1.71268		0.5839	6	15	0.05	0.99	
Methylene Chloride		0.5858	0.6009	0.5287	0.5011	0.5232	0.5143	0.5033	0.4935	AVRG		1.88203		0.5313	8	15	0.05	0.99	
Carbon Disulfide		1.5171	1.9736	1.7265	1.7529	1.6610	1.5889	1.6476	1.5771	AVRG		0.59503		1.6806	8	15	0.05	0.99	
MTBE		0.9320	1.0138	0.9931	0.9929	1.0189	0.9926	0.9195	0.8743	AVRG		1.03396		0.9672	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4406	0.5305	0.4618	0.4602	0.4757	0.4552	0.4688	0.4558	AVRG		2.13408		0.4686	6	15	0.05	0.99	
Vinyl Acetate			0.6282	0.6668	0.6830	0.7536	0.7417	0.8563	0.7420	AVRG		1.38026		0.7245	10	15	0.05	0.99	
1,1-Dichloroethane		0.8516	1.0446	0.9546	0.9019	0.9393	0.9119	0.8841	0.8458	AVRG		1.09085		0.9167	7	15	0.10	0.99	
2-Butanone			0.2069m	0.1893	0.1836	0.1851	0.1785	0.1526	0.1452	AVRG		5.63991		0.1773	12	15	0.05	0.99	
2,2-Dichloropropane		0.4892	0.6320	0.5236	0.5438	0.5313	0.4881	0.4891	0.4602	AVRG		1.92434		0.5197	10	15	0.05	0.99	
cis-1,2-Dichloroethene		0.4938	0.5578	0.4996	0.4958	0.5086	0.5035	0.5009	0.4937	AVRG		1.97351		0.5067	4	15	0.05	0.99	
Chloroform		0.7593	0.8988	0.8262	0.8030	0.8348	0.7985	0.7757	0.7543	AVRG		1.24021		0.8063	6	15	0.05	0.99	
Bromochloromethane		0.1840	0.2315	0.2099	0.2160	0.2219	0.2274	0.2192	0.2171	AVRG		4.63209		0.2159	7	15	0.05	0.99	
1,1,1-Trichloroethane		0.4684	0.6327	0.5630	0.5644	0.5706	0.5140	0.5506	0.5210	AVRG		1.82451		0.5481	9	15	0.05	0.99	
1,1-Dichloropropene		0.3158	0.4343	0.3542	0.3790	0.3680	0.3394	0.3705	0.3601	AVRG		2.73852		0.3652	9	15	0.05	0.99	
Carbon Tetrachloride		0.2519	0.3316	0.2884	0.2907	0.2825	0.2633	0.2915	0.2847	AVRG		3.50159		0.2856	8	15	0.05	0.99	
1,2-Dichloroethane		0.2690	0.3044	0.2819	0.2808	0.2982	0.2878	0.2677	0.2636	AVRG		3.55022		0.2817	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Benzene		1.0292	1.2652	1.0714	1.0609	1.1235	1.0294	1.0188	0.9650	AVRG		0.93423		1.0704	9	15	0.05	0.99	
Trichloroethene		0.2697	0.3259	0.2720	0.2774	0.2985	0.2818	0.2818	0.2765	AVRG		3.50319		0.2855	6	15	0.05	0.99	
1,2-Dichloropropane		0.3482	0.3804	0.3531	0.3345	0.3598	0.3425	0.3400	0.3296	AVRG		2.86920		0.3485	5	15	0.05	0.99	
Bromodichloromethane		0.3451	0.3918	0.3578	0.3454	0.3759	0.3633	0.3588	0.3558	AVRG		2.76456		0.3617	4	15	0.05	0.99	
Dibromomethane		0.1452	0.1603	0.1563	0.1543	0.1669	0.1664	0.1592	0.1572	AVRG		6.32076		0.1582	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.2356	0.2296	0.2350	0.2480	0.2457	0.2205	0.2116	AVRG		4.30507		0.2323	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4479	0.4924	0.4528	0.4573	0.4598	0.4598	0.4404	0.4315	AVRG		2.19668		0.4552	4	15	0.05	0.99	
Toluene		0.7703	0.9216	0.7566	0.7233	0.7824	0.7735	0.7985	0.7408	AVRG		1.27653		0.7834	8	15	0.05	0.99	
trans-1,3-Dichloropropene		0.4314	0.5131	0.4670	0.4468	0.4973	0.4610	0.4573	0.4396	AVRG		2.15431		0.4642	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.1337	0.1518	0.1406	0.1382	0.1505	0.1472	0.1433	0.1436	AVRG		6.96298		0.1436	4	15	0.05	0.99	
2-Hexanone			0.2239	0.2090	0.2014	0.2118	0.2130	0.1906	0.1791	AVRG		4.89948		0.2041	7	15	0.05	0.99	
1,3-Dichloropropane		0.4004	0.4631	0.4225	0.4249	0.4545	0.4640	0.4442	0.4221	AVRG		2.28843		0.4370	5	15	0.05	0.99	
Tetrachloroethene		0.2481	0.3488	0.2870	0.2869	0.3017	0.2822	0.3138	0.3106	AVRG		3.36270		0.2974	10	15	0.05	0.99	
Dibromochloromethane		0.2907	0.3097	0.2913	0.2895	0.3125	0.3115	0.3151	0.3032	AVRG		3.30100		0.3029	4	15	0.05	0.99	
1,2-Dibromoethane		0.2312	0.2553	0.2455	0.2401	0.2619	0.2651	0.2633	0.2596	AVRG		3.95653		0.2527	5	15	0.05	0.99	
Chlorobenzene		0.7993	0.9853	0.8244	0.8088	0.8858	0.8623	0.8392	0.8012	AVRG		1.17537		0.8508	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2826	0.3303	0.2747	0.2760	0.2980	0.3067	0.3047	0.2944	AVRG		3.37928		0.2959	6	15	0.05	0.99	
Ethylbenzene		1.3640	1.7214	1.3993	1.3607	1.4898	1.3585	1.3068	1.2120	AVRG		0.71350		1.4015	11	15	0.05	0.99	
m,p-Xylenes	0.5036	0.4527	0.6147	0.5056	0.4893	0.5384	0.5088	0.4958	0.4418	AVRG		1.97774		0.5056	10	15	0.05	0.99	
o-Xylene		0.4874	0.6016	0.5082	0.4965	0.5489	0.5334	0.5259	0.5097	AVRG		1.89951		0.5265	7	15	0.05	0.99	
Styrene		0.8609	1.0026	0.8795	0.8674	0.9605	0.9470	0.8954	0.8576	AVRG		1.10028		0.9089	6	15	0.05	0.99	
Bromoform		0.1512	0.1751	0.1615	0.1650	0.1814	0.1861	0.1861	0.1830	AVRG		5.75787		0.1737	7	15	0.10	0.99	
Isopropylbenzene		2.3217	3.1596	2.5691	2.5469	2.7063	2.4453	2.6712	2.4395	AVRG		0.38352		2.6074	10	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6030	0.5937	0.5909	0.5928	0.6153	0.6111	0.6410	0.6031	AVRG		1.64915		0.6064	3	15	0.30	0.99	
1,2,3-Trichloropropane		0.1447	0.1409	0.1299	0.1309	0.1378	0.1430	0.1410	0.1265	AVRG		7.30736		0.1368	5	15	0.05	0.99	
Propylbenzene		3.0497	3.9560	3.2048	3.2461	3.3629	3.0327	3.0560	2.6950	AVRG		0.31246		3.2004	11	15	0.05	0.99	
Bromobenzene		0.6665	0.7228	0.6435	0.6492	0.7032	0.7201	0.7249	0.6703	AVRG		1.45444		0.6876	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.9922	2.4458	2.0368	2.0219	2.1529	1.9990	1.9836	1.7635	AVRG		0.48793		2.0495	9	15	0.05	0.99	
2-Chlorotoluene		2.2554	2.5642	2.1161	2.1087	2.2652	2.0862	1.9834	1.7493	AVRG		0.46706		2.1411	11	15	0.05	0.99	
4-Chlorotoluene		2.1887	2.3464	1.9752	2.0153	2.0709	2.0599	2.0773	1.9065	AVRG		0.48076		2.0800	7	15	0.05	0.99	
tert-Butylbenzene		1.5755	2.0121	1.6313	1.6883	1.7810	1.6549	1.7601	1.6963	AVRG		0.57973		1.7249	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.1523	2.5130	2.0569	2.0414	2.2207	2.0902	2.1625	2.0170	AVRG		0.46366		2.1567	7	15	0.05	0.99	
sec-Butylbenzene		2.3579	3.0923	2.6227	2.6213	2.7538	2.5038	2.7910	2.5827	AVRG		0.37514		2.6657	8	15	0.05	0.99	
para-Isopropyl Toluene		1.8819	2.2981	1.9427	2.0129	2.1003	1.8867	2.1308	2.0144	AVRG		0.49177		2.0335	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.2368	1.4206	1.2144	1.2052	1.3068	1.2860	1.3439	1.2935	AVRG		0.77618		1.2884	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.3246	1.4816	1.2289	1.2471	1.3353	1.3172	1.3326	1.2740	AVRG		0.75892		1.3177	6	15	0.05	0.99	
n-Butylbenzene		1.9278	2.4190	1.9466	2.0219	2.1231	1.9181	2.1344	2.0210	AVRG		0.48450		2.0640	8	15	0.05	0.99	
1,2-Dichlorobenzene		1.1836	1.2168	1.1290	1.1069	1.1904	1.1946	1.2267	1.1710	AVRG		0.84933		1.1774	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.0812	0.1026	0.0896	0.0907	0.0912	0.0934	0.0870	0.0842	AVRG		11.1139		0.0900	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.6413	0.6999	0.6384	0.6552	0.6932	0.7048	0.7109	0.7232	AVRG		1.46338		0.6833	5	15	0.05	0.99	
Hexachlorobutadiene		0.2542	0.3630	0.3000	0.3125	0.3339	0.3017	0.3594	0.3585	AVRG		3.09685		0.3229	12	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Naphthalene		1.2171	1.2766	1.2470	1.2729	1.3320	1.3830	1.3625	1.3472	AVRG		0.76642		1.3048	5	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.5473	0.5994	0.5662	0.5762	0.6237	0.6325	0.6475	0.6396	AVRG		1.65553		0.6040	6	15	0.05	0.99	
Dibromofluoromethane	0.5626	0.5685	0.5730	0.5794	0.5894	0.5803	0.5742	0.5559	0.5424	AVRG		1.75583		0.5695	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.2776	0.2836	0.2948	0.2950	0.2948	0.2923	0.2665	0.2472	0.2356	AVRG		3.61858		0.2764	8	15	0.05	0.99	
Toluene-d8	1.3332	1.3494	1.4060	1.3911	1.4075	1.3829	1.3735	1.3651	1.3835	AVRG		0.72626		1.3769	2	15	0.05	0.99	
Bromofluorobenzene	1.0186	1.0587	1.0239	1.0392	1.0317	0.9937	1.0272	1.0417	1.0060	AVRG		0.97396		1.0267	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-26	2.000	5	5.000	-4	10.00	7	20.00	6	50.00	10	75.00	0	100.0	3
Chloromethane			1.000	-6	2.000	13	5.000	4	10.00	5	20.00	3	50.00	-1	75.00	-8	100.0	-10
Vinyl Chloride	0.500	-17	1.000	-14	2.000	12	5.000	9	10.00	9	20.00	9	50.00	5	75.00	-3	100.0	-9
Bromomethane			1.000	-8	2.000	5	5.000	-4	10.00	-6	20.00	6	50.00	4	75.00	4	100.0	1
Chloroethane			1.000	-11	2.000	9	5.000	5	10.00	0	20.00	5	50.00	2	75.00	-5	100.0	-5
Trichlorofluoromethane			1.000	-17	2.000	7	5.000	-2	10.00	6	20.00	2	50.00	8	75.00	-2	100.0	-2
Acetone							5.000	11	10.00	7	20.00	7	50.00	0	75.00	-13	100.0	-12
1,1-Dichloroethene			0.500	-16	2.000	14	5.000	1	10.00	3	20.00	-3	50.00	-4	75.00	3	100.0	2
Iodomethane							5.000	-10	10.00	-5	20.00	3	50.00	4	75.00	2	100.0	6
Methylene Chloride			0.500	10	2.000	13	5.000	-1	10.00	-6	20.00	-2	50.00	-3	75.00	-5	100.0	-7
Carbon Disulfide			0.500	-10	2.000	17	5.000	3	10.00	4	20.00	-1	50.00	-5	75.00	-2	100.0	-6
MTBE			0.500	-4	2.000	5	5.000	3	10.00	3	20.00	5	50.00	3	75.00	-5	100.0	-10
trans-1,2-Dichloroethene			0.500	-6	2.000	13	5.000	-1	10.00	-2	20.00	2	50.00	-3	75.00	0	100.0	-3
Vinyl Acetate					2.000	-13	5.000	-8	10.00	-6	20.00	4	50.00	2	75.00	18	100.0	2
1,1-Dichloroethane			0.500	-7	2.000	14	5.000	4	10.00	-2	20.00	2	50.00	-1	75.00	-4	100.0	-8
2-Butanone					2.000	17	5.000	7	10.00	4	20.00	4	50.00	1	75.00	-14	100.0	-18
2,2-Dichloropropane			0.500	-6	2.000	22	5.000	1	10.00	5	20.00	2	50.00	-6	75.00	-6	100.0	-11
cis-1,2-Dichloroethene			0.500	-3	2.000	10	5.000	-1	10.00	-2	20.00	0	50.00	-1	75.00	-1	100.0	-3
Chloroform			0.500	-6	2.000	11	5.000	2	10.00	0	20.00	4	50.00	-1	75.00	-4	100.0	-6
Bromochloromethane			0.500	-15	2.000	7	5.000	-3	10.00	0	20.00	3	50.00	5	75.00	2	100.0	1
1,1,1-Trichloroethane			0.500	-15	2.000	15	5.000	3	10.00	3	20.00	4	50.00	-6	75.00	0	100.0	-5
1,1-Dichloropropene			0.500	-14	2.000	19	5.000	-3	10.00	4	20.00	1	50.00	-7	75.00	1	100.0	-1
Carbon Tetrachloride			0.500	-12	2.000	16	5.000	1	10.00	2	20.00	-1	50.00	-8	75.00	2	100.0	0
1,2-Dichloroethane			0.500	-5	2.000	8	5.000	0	10.00	0	20.00	6	50.00	2	75.00	-5	100.0	-6
Benzene			0.500	-4	2.000	18	5.000	0	10.00	-1	20.00	5	50.00	-4	75.00	-5	100.0	-10
Trichloroethene			0.500	-6	2.000	14	5.000	-5	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-3
1,2-Dichloropropane			0.500	0	2.000	9	5.000	1	10.00	-4	20.00	3	50.00	-2	75.00	-2	100.0	-5
Bromodichloromethane			0.500	-5	2.000	8	5.000	-1	10.00	-5	20.00	4	50.00	0	75.00	-1	100.0	-2
Dibromomethane			0.500	-8	2.000	1	5.000	-1	10.00	-2	20.00	5	50.00	5	75.00	1	100.0	-1
4-Methyl-2-Pentanone					2.000	1	5.000	-1	10.00	1	20.00	7	50.00	6	75.00	-5	100.0	-9
cis-1,3-Dichloropropene			0.500	-2	2.000	8	5.000	-1	10.00	0	20.00	1	50.00	1	75.00	-3	100.0	-5
Toluene			0.500	-2	2.000	18	5.000	-3	10.00	-8	20.00	0	50.00	-1	75.00	2	100.0	-5
trans-1,3-Dichloropropene			0.500	-7	2.000	11	5.000	1	10.00	-4	20.00	7	50.00	-1	75.00	-1	100.0	-5
1,1,2-Trichloroethane			0.500	-7	2.000	6	5.000	-2	10.00	-4	20.00	5	50.00	3	75.00	0	100.0	0
2-Hexanone					2.000	10	5.000	2	10.00	-1	20.00	4	50.00	4	75.00	-7	100.0	-12
1,3-Dichloropropane			0.500	-8	2.000	6	5.000	-3	10.00	-3	20.00	4	50.00	6	75.00	2	100.0	-3
Tetrachloroethene			0.500	-17	2.000	17	5.000	-3	10.00	-4	20.00	1	50.00	-5	75.00	6	100.0	4
Dibromochloromethane			0.500	-4	2.000	2	5.000	-4	10.00	-4	20.00	3	50.00	3	75.00	4	100.0	0
1,2-Dibromoethane			0.500	-9	2.000	1	5.000	-3	10.00	-5	20.00	4	50.00	5	75.00	4	100.0	3
Chlorobenzene			0.500	-6	2.000	16	5.000	-3	10.00	-5	20.00	4	50.00	1	75.00	-1	100.0	-6
1,1,1,2-Tetrachloroethane			0.500	-4	2.000	12	5.000	-7	10.00	-7	20.00	1	50.00	4	75.00	3	100.0	-1
Ethylbenzene			0.500	-3	2.000	23	5.000	0	10.00	-3	20.00	6	50.00	-3	75.00	-7	100.0	-14

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	0	1.000	-10	4.000	22	10.00	0	20.00	-3	40.00	6	100.0	1	150.0	-2	200.0	-13
o-Xylene			0.500	-7	2.000	14	5.000	-3	10.00	-6	20.00	4	50.00	1	75.00	0	100.0	-3
Styrene			0.500	-5	2.000	10	5.000	-3	10.00	-5	20.00	6	50.00	4	75.00	-1	100.0	-6
Bromoform			0.500	-13	2.000	1	5.000	-7	10.00	-5	20.00	4	50.00	7	75.00	7	100.0	5
Isopropylbenzene			0.500	-11	2.000	21	5.000	-1	10.00	-2	20.00	4	50.00	-6	75.00	2	100.0	-6
1,1,2,2-Tetrachloroethane			0.500	-1	2.000	-2	5.000	-3	10.00	-2	20.00	1	50.00	1	75.00	6	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	3	5.000	-5	10.00	-4	20.00	1	50.00	5	75.00	3	100.0	-8
Propylbenzene			0.500	-5	2.000	24	5.000	0	10.00	1	20.00	5	50.00	-5	75.00	-5	100.0	-16
Bromobenzene			0.500	-3	2.000	5	5.000	-6	10.00	-6	20.00	2	50.00	5	75.00	5	100.0	-3
1,3,5-Trimethylbenzene			0.500	-3	2.000	19	5.000	-1	10.00	-1	20.00	5	50.00	-2	75.00	-3	100.0	-14
2-Chlorotoluene			0.500	5	2.000	20	5.000	-1	10.00	-2	20.00	6	50.00	-3	75.00	-7	100.0	-18
4-Chlorotoluene			0.500	5	2.000	13	5.000	-5	10.00	-3	20.00	0	50.00	-1	75.00	0	100.0	-8
tert-Butylbenzene			0.500	-9	2.000	17	5.000	-5	10.00	-2	20.00	3	50.00	-4	75.00	2	100.0	-2
1,2,4-Trimethylbenzene			0.500	0	2.000	17	5.000	-5	10.00	-5	20.00	3	50.00	-3	75.00	0	100.0	-6
sec-Butylbenzene			0.500	-12	2.000	16	5.000	-2	10.00	-2	20.00	3	50.00	-6	75.00	5	100.0	-3
para-Isopropyl Toluene			0.500	-7	2.000	13	5.000	-4	10.00	-1	20.00	3	50.00	-7	75.00	5	100.0	-1
1,3-Dichlorobenzene			0.500	-4	2.000	10	5.000	-6	10.00	-6	20.00	1	50.00	0	75.00	4	100.0	0
1,4-Dichlorobenzene			0.500	1	2.000	12	5.000	-7	10.00	-5	20.00	1	50.00	0	75.00	1	100.0	-3
n-Butylbenzene			0.500	-7	2.000	17	5.000	-6	10.00	-2	20.00	3	50.00	-7	75.00	3	100.0	-2
1,2-Dichlorobenzene			0.500	1	2.000	3	5.000	-4	10.00	-6	20.00	1	50.00	1	75.00	4	100.0	-1
1,2-Dibromo-3-Chloropropane			0.500	-10	2.000	14	5.000	0	10.00	1	20.00	1	50.00	4	75.00	-3	100.0	-6
1,2,4-Trichlorobenzene			0.500	-6	2.000	2	5.000	-7	10.00	-4	20.00	1	50.00	3	75.00	4	100.0	6
Hexachlorobutadiene			0.500	-21	2.000	12	5.000	-7	10.00	-3	20.00	3	50.00	-7	75.00	11	100.0	11
Naphthalene			0.500	-7	2.000	-2	5.000	-4	10.00	-2	20.00	2	50.00	6	75.00	4	100.0	3
1,2,3-Trichlorobenzene			0.500	-9	2.000	-1	5.000	-6	10.00	-5	20.00	3	50.00	5	75.00	7	100.0	6
Dibromofluoromethane	50.00	-1	50.00	0	50.00	1	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-2	50.00	-5
1,2-Dichloroethane-d4	50.00	0	50.00	3	50.00	7	50.00	7	50.00	7	50.00	6	50.00	-4	50.00	-11	50.00	-15
Toluene-d8	50.00	-3	50.00	-2	50.00	2	50.00	1	50.00	2	50.00	0	50.00	0	50.00	-1	50.00	0
Bromofluorobenzene	50.00	-1	50.00	3	50.00	0	50.00	1	50.00	0	50.00	-3	50.00	0	50.00	1	50.00	-2

BO 01/29/10 [Iodomethane]: cannot report 8260c

BO 01/29/10 [Cyclohexanone]: cannot report 8260c

BO 01/29/10 [2-Chloroethylvinylether]: cannot report 8260c

BO 01/29/10 [2-Butanone]: Corrected baseline noise or negative peak in 2PPB (iar09).

Analyst: BO

Date: 01/29/10

Reviewer: LW

Date: 01/29/10

m=manual integration

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

Page 5 of 5

480039377001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA09
Calnum : 480039377001

Name : 826GOX9W
Cal Date : 27-JAN-2010

Type : WATER

ICV 480039377016 (iar16 28-JAN-2010) stds: S13817 (10000X), S13687 (5000X)
ICV 480039377017 (iar17 28-JAN-2010) stds: S13654 (10000X), S13639 (10000X),
S13492 (10000X), S13687 (5000X)

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
Freon 12	480039377016	25.00	20.09	ug/L	-20	25	
Chloromethane	480039377016	25.00	20.89	ug/L	-16	25	
Vinyl Chloride	480039377016	25.00	20.03	ug/L	-20	25	
Bromomethane	480039377016	25.00	22.30	ug/L	-11	25	
Chloroethane	480039377016	25.00	24.23	ug/L	-3	25	
Trichlorofluoromethane	480039377016	25.00	22.44	ug/L	-10	25	
Acetone	480039377017	25.00	21.54	ug/L	-14	25	
1,1-Dichloroethene	480039377017	25.00	26.91	ug/L	8	25	
Iodomethane	480039377017	25.00	18.32	ug/L	-27	25	v-
Methylene Chloride	480039377017	25.00	25.37	ug/L	1	25	
Carbon Disulfide	480039377017	25.00	23.28	ug/L	-7	25	
MTBE	480039377017	25.00	21.43	ug/L	-14	25	
trans-1,2-Dichloroethene	480039377017	25.00	26.20	ug/L	5	25	
Vinyl Acetate	480039377017	25.00	30.70	ug/L	23	25	
1,1-Dichloroethane	480039377017	25.00	24.42	ug/L	-2	25	
2-Butanone	480039377017	25.00	21.82	ug/L	-13	25	
2,2-Dichloropropane	480039377017	25.00	23.05	ug/L	-8	25	
cis-1,2-Dichloroethene	480039377017	25.00	26.25	ug/L	5	25	
Chloroform	480039377017	25.00	24.59	ug/L	-2	25	
Bromochloromethane	480039377017	25.00	27.00	ug/L	8	25	
1,1,1-Trichloroethane	480039377017	25.00	24.17	ug/L	-3	25	
1,1-Dichloropropene	480039377017	25.00	25.99	ug/L	4	25	
Carbon Tetrachloride	480039377017	25.00	25.34	ug/L	1	25	
1,2-Dichloroethane	480039377017	25.00	24.60	ug/L	-2	25	
Benzene	480039377017	25.00	27.05	ug/L	8	25	
Trichloroethene	480039377017	25.00	25.70	ug/L	3	25	
1,2-Dichloropropane	480039377017	25.00	24.27	ug/L	-3	25	
Bromodichloromethane	480039377017	25.00	25.33	ug/L	1	25	
Dibromomethane	480039377017	25.00	26.37	ug/L	5	25	
4-Methyl-2-Pentanone	480039377017	25.00	24.05	ug/L	-4	25	
cis-1,3-Dichloropropene	480039377017	25.00	26.24	ug/L	5	25	
Toluene	480039377017	25.00	27.48	ug/L	10	25	
trans-1,3-Dichloropropene	480039377017	25.00	23.44	ug/L	-6	25	
1,1,2-Trichloroethane	480039377017	25.00	27.04	ug/L	8	25	
2-Hexanone	480039377017	25.00	23.20	ug/L	-7	25	
1,3-Dichloropropane	480039377017	25.00	27.15	ug/L	9	25	
Tetrachloroethene	480039377017	25.00	26.80	ug/L	7	25	
Dibromochloromethane	480039377017	25.00	26.70	ug/L	7	25	
1,2-Dibromoethane	480039377017	25.00	28.03	ug/L	12	25	
Chlorobenzene	480039377017	25.00	26.33	ug/L	5	25	
1,1,1,2-Tetrachloroethane	480039377017	25.00	27.46	ug/L	10	25	
Ethylbenzene	480039377017	25.00	27.03	ug/L	8	25	
m,p-Xylenes	480039377017	50.00	57.68	ug/L	15	25	
o-Xylene	480039377017	25.00	27.64	ug/L	11	25	
Styrene	480039377017	25.00	27.93	ug/L	12	25	
Bromoform	480039377017	25.00	27.39	ug/L	10	25	
Isopropylbenzene	480039377017	25.00	24.25	ug/L	-3	25	

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	480039377017	25.00	27.95	ug/L	12	25	
1,2,3-Trichloropropane	480039377017	25.00	27.52	ug/L	10	25	
Propylbenzene	480039377017	25.00	27.56	ug/L	10	25	
Bromobenzene	480039377017	25.00	28.48	ug/L	14	25	
1,3,5-Trimethylbenzene	480039377017	25.00	27.77	ug/L	11	25	
2-Chlorotoluene	480039377017	25.00	27.96	ug/L	12	25	
4-Chlorotoluene	480039377017	25.00	26.81	ug/L	7	25	
tert-Butylbenzene	480039377017	25.00	27.81	ug/L	11	25	
1,2,4-Trimethylbenzene	480039377017	25.00	26.73	ug/L	7	25	
sec-Butylbenzene	480039377017	25.00	29.07	ug/L	16	25	
para-Isopropyl Toluene	480039377017	25.00	26.98	ug/L	8	25	
1,3-Dichlorobenzene	480039377017	25.00	26.38	ug/L	6	25	
1,4-Dichlorobenzene	480039377017	25.00	26.14	ug/L	5	25	
n-Butylbenzene	480039377017	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	480039377017	25.00	27.01	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	480039377017	25.00	26.21	ug/L	5	25	
1,2,4-Trichlorobenzene	480039377017	25.00	26.47	ug/L	6	25	
Hexachlorobutadiene	480039377017	25.00	27.55	ug/L	10	25	
Naphthalene	480039377017	25.00	27.87	ug/L	11	25	
1,2,3-Trichlorobenzene	480039377017	25.00	28.65	ug/L	15	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218669 MSVOA Water: EPA 8260B

Inst : MSVOA10
 Calnum : 490027869001
 Units : ug/L

Name : 826GOX10
 Date : 19-JAN-2010 18:58
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	jaj12	490027869012	.25/.5PPB	19-JAN-2010 18:58	S13745 (20000X), S13746 (20000X), S13747 (20000X), S13748 (10000X), S13615 (2500X)
L2	jaj13	490027869013	0.5/1PPB	19-JAN-2010 19:32	S13745 (10000X), S13746 (10000X), S13747 (10000X), S13748 (50000X), S13615 (2500X)
L3	jaj14	490027869014	2PPB	19-JAN-2010 20:07	S13745 (25000X), S13746 (25000X), S13747 (50000X), S13748 (25000X), S13615 (2500X)
L4	jaj15	490027869015	5PPB	19-JAN-2010 20:42	S13745 (10000X), S13746 (10000X), S13747 (20000X), S13748 (10000X), S13615 (2500X)
L5	jaj16	490027869016	10PPB	19-JAN-2010 21:17	S13745 (5000X), S13746 (5000X), S13747 (10000X), S13748 (5000X), S13615 (2500X)
L6	jaj17	490027869017	20PPB	19-JAN-2010 21:51	S13680 (25000X), S13586 (25000X), S13625 (50000X), S13503 (25000X), S13615 (2500X)
L7	jaj18	490027869018	50PPB	19-JAN-2010 22:26	S13680 (10000X), S13586 (10000X), S13625 (20000X), S13503 (10000X), S13615 (2500X)
L8	jaj19	490027869019	75PPB	19-JAN-2010 23:01	S13680 (6667X), S13586 (6667X), S13625 (13330X), S13503 (6667X), S13615 (2500X)
L9	jaj20	490027869020	100PPB	19-JAN-2010 23:35	S13680 (5000X), S13586 (5000X), S13625 (10000X), S13503 (5000X), S13615 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.3918	0.6916	0.6069m	0.6327	0.6573	0.7062			QUAD	0.18210	1.56885	-0.00448	0.6144	1.000	15	0.05	0.99	
Chloromethane		0.9525	1.0916m	1.0509	1.0071	0.9526	0.9903	0.9559	0.9085	AVRG		1.01145		0.9887	6	15	0.10	0.99	
Vinyl Chloride	0.7254	0.6064	0.8278	0.8382	0.7852	0.8017	0.8279	0.7825	0.7655	AVRG		1.29299		0.7734	9	15	0.05	0.99	
Bromomethane		0.4138	0.4729m	0.4748	0.4397	0.4360	0.4925	0.4880	0.4634	AVRG		2.17319		0.4602	6	15	0.05	0.99	
Chloroethane		0.4443m	0.4834m	0.4592m	0.4676	0.4510	0.4609	0.4413	0.4233	AVRG		2.20328		0.4539	4	15	0.05	0.99	
Trichlorofluoromethane		0.3817	0.6879	0.6368	0.6590	0.6730	0.6968			QUAD	0.22115	1.49397	-0.00187	0.6225	1.000	15	0.05	0.99	
Acetone				0.1936	0.1630	0.1407	0.1841	0.1655	0.1600	AVRG		5.95858		0.1678	11	15	0.05	0.99	
1,1-Dichloroethene		0.4959m	0.5767	0.6106	0.5879	0.5852	0.5594	0.5802	0.5611	AVRG		1.75556		0.5696	6	15	0.05	0.99	
Iodomethane			0.5906	0.7037	0.7318	0.5257	0.5613	0.5475	0.5298	AVRG		1.67051		0.5986	14	15	0.05	0.99	
Methylene Chloride		0.8469	0.7815	0.7512	0.7187	0.7252	0.7686	0.7365	0.7067	AVRG		1.32554		0.7544	6	15	0.05	0.99	
Carbon Disulfide		1.9085	2.4192	2.5698	2.4448	2.4480	2.4513	2.4485	2.3702	AVRG		0.41972		2.3825	8	15	0.05	0.99	
MTBE		1.5356	1.6609	1.6438	1.6234	1.5890	1.7290	1.6509	1.5851	AVRG		0.61454		1.6272	4	15	0.05	0.99	
trans-1,2-Dichloroethene		0.6320	0.6779	0.6780	0.6807	0.6724	0.6798	0.6753	0.6531	AVRG		1.49555		0.6687	3	15	0.05	0.99	
Vinyl Acetate			1.4467	1.3662	1.3674	1.4708	1.6053	1.5563	1.4683	AVRG		0.68087		1.4687	6	15	0.05	0.99	
1,1-Dichloroethane		1.0643	1.1998	1.2389	1.2046	1.2031	1.2289	1.2004	1.1576	AVRG		0.84233		1.1872	5	15	0.10	0.99	
2-Butanone			0.2978	0.2763	0.2694	0.2323	0.2836	0.2590	0.2566	AVRG		3.73358		0.2678	8	15	0.05	0.99	
2,2-Dichloropropane		0.6757	0.7276	0.7403	0.6863	0.6873	0.6681	0.6749	0.6415	AVRG		1.45412		0.6877	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.7204	0.7106	0.6859	0.6917	0.6975	0.7284	0.7094	0.6857	AVRG		1.42107		0.7037	2	15	0.05	0.99	
Chloroform		0.9388	1.0291	1.0289	1.0217	1.0228	1.0628	1.0350	0.9708	AVRG		0.98644		1.0137	4	15	0.05	0.99	
Bromochloromethane		0.3080	0.3276	0.3319	0.3366	0.3337	0.3581	0.3440	0.3303	AVRG		2.99603		0.3338	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.5394	0.6557	0.6833	0.6635	0.6956	0.6706	0.6901	0.6779	AVRG		1.51627		0.6595	8	15	0.05	0.99	
1,1-Dichloropropene		0.3343	0.4453	0.4718	0.4471	0.4583	0.4447	0.4569	0.4372	AVRG		2.28864		0.4369	10	15	0.05	0.99	
Carbon Tetrachloride		0.2165	0.2877	0.3180	0.3109	0.3127	0.2982	0.3095	0.3047	AVRG		3.39243		0.2948	11	15	0.05	0.99	
1,2-Dichloroethane		0.3478	0.3616	0.3803	0.3806	0.3856	0.4024	0.3796	0.3628	AVRG		2.66595		0.3751	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.2680	1.3599	1.4254	1.3984	1.3877	1.4206	1.3726	1.2892	AVRG		0.73248		1.3652	4	15	0.05	0.99	
Trichloroethene		0.2922	0.3180	0.3575	0.3518	0.3551	0.3569	0.3523	0.3438	AVRG		2.93293		0.3410	7	15	0.05	0.99	
1,2-Dichloropropane		0.4079	0.4008	0.4191	0.4248	0.4061	0.4466	0.4236	0.4076	AVRG		2.39776		0.4171	4	15	0.05	0.99	
Bromodichloromethane		0.4122	0.4221	0.4427	0.4372	0.4384	0.4684	0.4476	0.4261	AVRG		2.28903		0.4369	4	15	0.05	0.99	
Dibromomethane		0.2186	0.2282	0.2333	0.2258	0.2293	0.2476	0.2369	0.2248	AVRG		4.33774		0.2305	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3340	0.3217	0.3214	0.2921	0.3566	0.3350	0.3224	AVRG		3.06596		0.3262	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.5750	0.5610	0.5820	0.5819	0.5732	0.6180	0.5885	0.5523	AVRG		1.72722		0.5790	3	15	0.05	0.99	
Toluene		0.9530	0.9690	0.9911	0.9610	0.9673	0.9894	0.9666	0.9247	AVRG		1.03598		0.9653	2	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5178	0.5628	0.5849	0.5685	0.5694	0.6272	0.5955	0.5659	AVRG		1.74212		0.5740	5	15	0.05	0.99	
1,1,2-Trichloroethane		0.1892	0.1941	0.2061	0.1972	0.1971	0.2197	0.2037	0.1969	AVRG		4.98735		0.2005	5	15	0.05	0.99	
2-Hexanone			0.2843	0.2413	0.2451	0.2371	0.2836	0.2591	0.2540	AVRG		3.87915		0.2578	7	15	0.05	0.99	
1,3-Dichloropropane		0.5398	0.5934	0.5905	0.6052	0.5852	0.6412	0.6115	0.5872	AVRG		1.68276		0.5943	5	15	0.05	0.99	
Tetrachloroethene		0.3033	0.3598	0.3944	0.3774	0.3880	0.3800	0.3860	0.3774	AVRG		2.69689		0.3708	8	15	0.05	0.99	
Dibromochloromethane		0.3437	0.3530	0.3738	0.3709	0.3728	0.4166	0.3927	0.3774	AVRG		2.66591		0.3751	6	15	0.05	0.99	
1,2-Dibromoethane		0.3057	0.3362	0.3526	0.3513	0.3501	0.3915	0.3716	0.3532	AVRG		2.84479		0.3515	7	15	0.05	0.99	
Chlorobenzene		1.0531	1.0536	1.1044	1.0812	1.0923	1.1462	1.0966	1.0330	AVRG		0.92374		1.0826	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3096	0.3309	0.3385	0.3290	0.3369	0.3576	0.3471	0.3239	AVRG		2.99234		0.3342	4	15	0.05	0.99	
Ethylbenzene		1.6500	1.7827	1.8447	1.8008	1.8122	1.8127	1.7761	1.6781	AVRG		0.56508		1.7697	4	15	0.05	0.99	
m,p-Xylenes	0.7326	0.6241	0.6797	0.6930	0.6793	0.6793	0.6821	0.6607	0.6269	AVRG		1.48570		0.6731	5	15	0.05	0.99	
o-Xylene		0.6283	0.6409	0.6946	0.6643	0.6770	0.6972	0.6705	0.6373	AVRG		1.50652		0.6638	4	15	0.05	0.99	
Styrene		1.0406	1.1627	1.2311	1.2098	1.2251	1.2781	1.2105	1.1436	AVRG		0.84197		1.1877	6	15	0.05	0.99	
Bromoform		0.1964	0.2203	0.2317	0.2267	0.2276	0.2591	0.2451	0.2364	AVRG		4.33951		0.2304	8	15	0.10	0.99	
Isopropylbenzene		2.9948	3.3679	3.5241	3.4842	3.4035	3.3814	3.3183	3.1713	AVRG		0.30024		3.3307	5	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.8634	0.9388	0.9230	0.9478	0.9028	1.0130	0.9497	0.9175	AVRG		1.07298		0.9320	5	15	0.30	0.99	
1,2,3-Trichloropropane		0.8131	0.7442	0.7575	0.7291	0.7036	0.7780	0.7350	0.7021	AVRG		1.34168		0.7453	5	15	0.05	0.99	
Propylbenzene		3.8415	4.2083	4.4710	4.4582	4.3750	4.2436	4.1775	3.9757	AVRG		0.23703		4.2189	5	15	0.05	0.99	
Bromobenzene		0.9139	0.8760	0.8746	0.8897	0.8916	0.9348	0.8925	0.8432	AVRG		1.12420		0.8895	3	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.5580	2.7063	2.8266	2.7814	2.8072	2.7882	2.7232	2.5554	AVRG		0.36788		2.7183	4	15	0.05	0.99	
2-Chlorotoluene		2.7142	2.7171	2.8270	2.7395	2.7646	2.7823	2.6919	2.5142	AVRG		0.36780		2.7188	3	15	0.05	0.99	
4-Chlorotoluene		2.5567	2.4605	2.6264	2.6572	2.6019	2.7049	2.5911	2.4565	AVRG		0.38731		2.5819	3	15	0.05	0.99	
tert-Butylbenzene		1.9102	2.2307	2.3379	2.3503	2.3537	2.2889	2.2921	2.2090	AVRG		0.44512		2.2466	7	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.7826	2.7787	2.8993	2.9118	2.8776	2.9550	2.8359	2.7052	AVRG		0.35171		2.8433	3	15	0.05	0.99	
sec-Butylbenzene		2.9770	3.6151	3.7665	3.7770	3.6964	3.5787	3.6421	3.4951	AVRG		0.28023		3.5685	7	15	0.05	0.99	
para-Isopropyl Toluene		2.3366	2.7451	2.8866	2.9148	2.9033	2.8430	2.8287	2.7468	AVRG		0.36028		2.7756	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.6381	1.6631	1.7085	1.7222	1.7035	1.7980	1.7299	1.6200	AVRG		0.58896		1.6979	3	15	0.05	0.99	
1,4-Dichlorobenzene		1.6778	1.7282	1.7702	1.7656	1.7528	1.8472	1.7667	1.6569	AVRG		0.57285		1.7457	3	15	0.05	0.99	
n-Butylbenzene		2.4792	2.7039	2.9085	2.8499	2.8497	2.7808	2.7966	2.7111	AVRG		0.36232		2.7600	5	15	0.05	0.99	
1,2-Dichlorobenzene		1.4027	1.5685	1.5678	1.5997	1.5870	1.7042	1.6245	1.5228	AVRG		0.63607		1.5721	6	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.0991	0.1225	0.1188	0.1064	0.1262	0.1187	0.1144	AVRG		8.68367		0.1152	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.8558	0.9018	0.9209	0.9250	0.9263	0.9824	0.9485	0.9113	AVRG		1.08517		0.9215	4	15	0.05	0.99	
Hexachlorobutadiene		0.1934	0.2667	0.2972	0.2876	0.3049	0.2844	0.3056	0.3025	AVRG		3.56770		0.2803	13	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.7939	1.9260	1.9940	1.9976	1.9369	2.1935	2.0997	2.0470	AVRG		0.50036		1.9986	6	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7439	0.7428	0.7816	0.7984	0.7980	0.8729	0.8407	0.7902	AVRG		1.25619		0.7961	6	15	0.05	0.99	
Dibromofluoromethane	0.5743	0.5645	0.5823	0.5690	0.5749	0.5655	0.5729	0.5738	0.5767	AVRG		1.74622		0.5727	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.2823	0.2827	0.2826	0.2829	0.2793	0.2721	0.2732	0.2671	0.2658	AVRG		3.61733		0.2764	3	15	0.05	0.99	
Toluene-d8	1.3510	1.3456	1.3389	1.3520	1.3395	1.3495	1.3651	1.3481	1.3459	AVRG		0.74162		1.3484	1	15	0.05	0.99	
Bromofluorobenzene	0.9927	1.0105	0.9774	0.9906	1.0040	0.9879	0.9870	0.9890	0.9773	AVRG		1.00937		0.9907	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-20	2.000	17	5.000	-2	10.00	-1	20.00	0	50.00	0				
Chloromethane			1.000	-4	2.000	10	5.000	6	10.00	2	20.00	-4	50.00	0	75.00	-3	100.0	-8
Vinyl Chloride	0.500	-6	1.000	-22	2.000	7	5.000	8	10.00	2	20.00	4	50.00	7	75.00	1	100.0	-1
Bromomethane			1.000	-10	2.000	3	5.000	3	10.00	-4	20.00	-5	50.00	7	75.00	6	100.0	1
Chloroethane			1.000	-2	2.000	7	5.000	1	10.00	3	20.00	-1	50.00	2	75.00	-3	100.0	-7
Trichlorofluoromethane			1.000	-21	2.000	14	5.000	-1	10.00	0	20.00	0	50.00	0				
Acetone							5.000	15	10.00	-3	20.00	-16	50.00	10	75.00	-1	100.0	-5
1,1-Dichloroethene			0.500	-13	2.000	1	5.000	7	10.00	3	20.00	3	50.00	-2	75.00	2	100.0	-2
Iodomethane					2.000	-1	5.000	18	10.00	22	20.00	-12	50.00	-6	75.00	-9	100.0	-12
Methylene Chloride			0.500	12	2.000	4	5.000	0	10.00	-5	20.00	-4	50.00	2	75.00	-2	100.0	-6
Carbon Disulfide			0.500	-20	2.000	2	5.000	8	10.00	3	20.00	3	50.00	3	75.00	3	100.0	-1
MTBE			0.500	-6	2.000	2	5.000	1	10.00	0	20.00	-2	50.00	6	75.00	1	100.0	-3
trans-1,2-Dichloroethene			0.500	-5	2.000	1	5.000	1	10.00	2	20.00	1	50.00	2	75.00	1	100.0	-2
Vinyl Acetate					2.000	-1	5.000	-7	10.00	-7	20.00	0	50.00	9	75.00	6	100.0	0
1,1-Dichloroethane			0.500	-10	2.000	1	5.000	4	10.00	1	20.00	1	50.00	4	75.00	1	100.0	-2
2-Butanone					2.000	11	5.000	3	10.00	1	20.00	-13	50.00	6	75.00	-3	100.0	-4
2,2-Dichloropropane			0.500	-2	2.000	6	5.000	8	10.00	0	20.00	0	50.00	-3	75.00	-2	100.0	-7
cis-1,2-Dichloroethene			0.500	2	2.000	1	5.000	-3	10.00	-2	20.00	-1	50.00	4	75.00	1	100.0	-3
Chloroform			0.500	-7	2.000	2	5.000	1	10.00	1	20.00	1	50.00	5	75.00	2	100.0	-4
Bromochloromethane			0.500	-8	2.000	-2	5.000	-1	10.00	1	20.00	0	50.00	7	75.00	3	100.0	-1
1,1,1-Trichloroethane			0.500	-18	2.000	-1	5.000	4	10.00	1	20.00	5	50.00	2	75.00	5	100.0	3
1,1-Dichloropropene			0.500	-23	2.000	2	5.000	8	10.00	2	20.00	5	50.00	2	75.00	5	100.0	0
Carbon Tetrachloride			0.500	-27	2.000	-2	5.000	8	10.00	5	20.00	6	50.00	1	75.00	5	100.0	3
1,2-Dichloroethane			0.500	-7	2.000	-4	5.000	1	10.00	1	20.00	3	50.00	7	75.00	1	100.0	-3
Benzene			0.500	-7	2.000	0	5.000	4	10.00	2	20.00	2	50.00	4	75.00	1	100.0	-6
Trichloroethene			0.500	-14	2.000	-7	5.000	5	10.00	3	20.00	4	50.00	5	75.00	3	100.0	1
1,2-Dichloropropane			0.500	-2	2.000	-4	5.000	0	10.00	2	20.00	-3	50.00	7	75.00	2	100.0	-2
Bromodichloromethane			0.500	-6	2.000	-3	5.000	1	10.00	0	20.00	0	50.00	7	75.00	2	100.0	-2
Dibromomethane			0.500	-5	2.000	-1	5.000	1	10.00	-2	20.00	-1	50.00	7	75.00	3	100.0	-3
4-Methyl-2-Pentanone					2.000	2	5.000	-1	10.00	-1	20.00	-10	50.00	9	75.00	3	100.0	-1
cis-1,3-Dichloropropene			0.500	-1	2.000	-3	5.000	1	10.00	1	20.00	-1	50.00	7	75.00	2	100.0	-5
Toluene			0.500	-1	2.000	0	5.000	3	10.00	0	20.00	0	50.00	3	75.00	0	100.0	-4
trans-1,3-Dichloropropene			0.500	-10	2.000	-2	5.000	2	10.00	-1	20.00	-1	50.00	9	75.00	4	100.0	-1
1,1,2-Trichloroethane			0.500	-6	2.000	-3	5.000	3	10.00	-2	20.00	-2	50.00	10	75.00	2	100.0	-2
2-Hexanone					2.000	10	5.000	-6	10.00	-5	20.00	-8	50.00	10	75.00	1	100.0	-1
1,3-Dichloropropane			0.500	-9	2.000	0	5.000	-1	10.00	2	20.00	-2	50.00	8	75.00	3	100.0	-1
Tetrachloroethene			0.500	-18	2.000	-3	5.000	6	10.00	2	20.00	5	50.00	2	75.00	4	100.0	2
Dibromochloromethane			0.500	-8	2.000	-6	5.000	0	10.00	-1	20.00	-1	50.00	11	75.00	5	100.0	1
1,2-Dibromoethane			0.500	-13	2.000	-4	5.000	0	10.00	0	20.00	0	50.00	11	75.00	6	100.0	0
Chlorobenzene			0.500	-3	2.000	-3	5.000	2	10.00	0	20.00	1	50.00	6	75.00	1	100.0	-5
1,1,1,2-Tetrachloroethane			0.500	-7	2.000	-1	5.000	1	10.00	-2	20.00	1	50.00	7	75.00	4	100.0	-3
Ethylbenzene			0.500	-7	2.000	1	5.000	4	10.00	2	20.00	2	50.00	2	75.00	0	100.0	-5

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	9	1.000	-7	4.000	1	10.00	3	20.00	1	40.00	1	100.0	1	150.0	-2	200.0	-7
o-Xylene			0.500	-5	2.000	-3	5.000	5	10.00	0	20.00	2	50.00	5	75.00	1	100.0	-4
Styrene			0.500	-12	2.000	-2	5.000	4	10.00	2	20.00	3	50.00	8	75.00	2	100.0	-4
Bromoform			0.500	-15	2.000	-4	5.000	1	10.00	-2	20.00	-1	50.00	12	75.00	6	100.0	3
Isopropylbenzene			0.500	-10	2.000	1	5.000	6	10.00	5	20.00	2	50.00	2	75.00	0	100.0	-5
1,1,2,2-Tetrachloroethane			0.500	-7	2.000	1	5.000	-1	10.00	2	20.00	-3	50.00	9	75.00	2	100.0	-2
1,2,3-Trichloropropane			0.500	9	2.000	0	5.000	2	10.00	-2	20.00	-6	50.00	4	75.00	-1	100.0	-6
Propylbenzene			0.500	-9	2.000	0	5.000	6	10.00	6	20.00	4	50.00	1	75.00	-1	100.0	-6
Bromobenzene			0.500	3	2.000	-2	5.000	-2	10.00	0	20.00	0	50.00	5	75.00	0	100.0	-5
1,3,5-Trimethylbenzene			0.500	-6	2.000	0	5.000	4	10.00	2	20.00	3	50.00	3	75.00	0	100.0	-6
2-Chlorotoluene			0.500	0	2.000	0	5.000	4	10.00	1	20.00	2	50.00	2	75.00	-1	100.0	-8
4-Chlorotoluene			0.500	-1	2.000	-5	5.000	2	10.00	3	20.00	1	50.00	5	75.00	0	100.0	-5
tert-Butylbenzene			0.500	-15	2.000	-1	5.000	4	10.00	5	20.00	5	50.00	2	75.00	2	100.0	-2
1,2,4-Trimethylbenzene			0.500	-2	2.000	-2	5.000	2	10.00	2	20.00	1	50.00	4	75.00	0	100.0	-5
sec-Butylbenzene			0.500	-17	2.000	1	5.000	6	10.00	6	20.00	4	50.00	0	75.00	2	100.0	-2
para-Isopropyl Toluene			0.500	-16	2.000	-1	5.000	4	10.00	5	20.00	5	50.00	2	75.00	2	100.0	-1
1,3-Dichlorobenzene			0.500	-4	2.000	-2	5.000	1	10.00	1	20.00	0	50.00	6	75.00	2	100.0	-5
1,4-Dichlorobenzene			0.500	-4	2.000	-1	5.000	1	10.00	1	20.00	0	50.00	6	75.00	1	100.0	-5
n-Butylbenzene			0.500	-10	2.000	-2	5.000	5	10.00	3	20.00	3	50.00	1	75.00	1	100.0	-2
1,2-Dichlorobenzene			0.500	-11	2.000	0	5.000	0	10.00	2	20.00	1	50.00	8	75.00	3	100.0	-3
1,2-Dibromo-3-Chloropropane					2.000	-14	5.000	6	10.00	3	20.00	-8	50.00	10	75.00	3	100.0	-1
1,2,4-Trichlorobenzene			0.500	-7	2.000	-2	5.000	0	10.00	0	20.00	1	50.00	7	75.00	3	100.0	-1
Hexachlorobutadiene			0.500	-31	2.000	-5	5.000	6	10.00	3	20.00	9	50.00	1	75.00	9	100.0	8
Naphthalene			0.500	-10	2.000	-4	5.000	0	10.00	0	20.00	-3	50.00	10	75.00	5	100.0	2
1,2,3-Trichlorobenzene			0.500	-7	2.000	-7	5.000	-2	10.00	0	20.00	0	50.00	10	75.00	6	100.0	-1
Dibromofluoromethane	50.00	0	50.00	-1	50.00	2	50.00	-1	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	1
1,2-Dichloroethane-d4	50.00	2	50.00	2	50.00	2	50.00	2	50.00	1	50.00	-2	50.00	-1	50.00	-3	50.00	-4
Toluene-d8	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	-1	50.00	0	50.00	1	50.00	0	50.00	0
Bromofluorobenzene	50.00	0	50.00	2	50.00	-1	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1

BO 01/20/10 [Chloromethane]: Corrected fronting or tailing peak integration in 2PPB (jaj14).

BO 01/20/10 [Chloroethane]: Corrected baseline noise or negative peak in multiple levels.

BO 01/20/10 [1,1-Dichloroethene]: Corrected fronting or tailing peak integration1PPB (jaj13).

BO 01/20/10 [Isopropyl Ether (DIPE)]: Corrected fronting or tailing peak integration1PPB (jaj13).

BO 01/22/10 [n-Hexane]: DO NOT USE

Analyst: BO

Date: 01/22/10

Reviewer: LW

Date: 01/22/10

m=manual integration

Instrument amount = $a_0 + \text{response} * a_1 + \text{response}^2 * a_2$; AVRG=Average response factor; QUAD=Quadratic regression

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490027869001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10
Calnum : 490027869001

Name : 826GOX10
Cal Date : 19-JAN-2010

Type : WATER

ICV 490027869021 (jaj21 20-JAN-2010) stds: S13817 (10000X), S13615 (2500X)
ICV 490027869022 (jaj22 20-JAN-2010) stds: S13559 (10000X), S13639 (10000X),
S13492 (10000X), S13615 (2500X)

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
Freon 12	490027869021	25.00	27.46	ug/L	10	25	
Chloromethane	490027869021	25.00	25.14	ug/L	1	25	
Vinyl Chloride	490027869021	25.00	24.91	ug/L	0	25	
Bromomethane	490027869021	25.00	25.54	ug/L	2	25	
Chloroethane	490027869021	25.00	26.12	ug/L	4	25	
Trichlorofluoromethane	490027869021	25.00	24.17	ug/L	-3	25	
Acetone	490027869022	25.00	25.77	ug/L	3	25	
1,1-Dichloroethene	490027869022	25.00	26.60	ug/L	6	25	
Iodomethane	490027869022	25.00	21.78	ug/L	-13	25	
Methylene Chloride	490027869022	25.00	25.48	ug/L	2	25	
Carbon Disulfide	490027869022	25.00	22.36	ug/L	-11	25	
MTBE	490027869022	25.00	23.83	ug/L	-5	25	
trans-1,2-Dichloroethene	490027869022	25.00	26.75	ug/L	7	25	
Vinyl Acetate	490027869022	25.00	25.72	ug/L	3	25	
1,1-Dichloroethane	490027869022	25.00	26.55	ug/L	6	25	
2-Butanone	490027869022	25.00	24.40	ug/L	-2	25	
2,2-Dichloropropane	490027869022	25.00	25.34	ug/L	1	25	
cis-1,2-Dichloroethene	490027869022	25.00	26.87	ug/L	7	25	
Chloroform	490027869022	25.00	26.37	ug/L	5	25	
Bromochloromethane	490027869022	25.00	26.60	ug/L	6	25	
1,1,1-Trichloroethane	490027869022	25.00	27.92	ug/L	12	25	
1,1-Dichloropropene	490027869022	25.00	28.30	ug/L	13	25	
Carbon Tetrachloride	490027869022	25.00	28.51	ug/L	14	25	
1,2-Dichloroethane	490027869022	25.00	25.99	ug/L	4	25	
Benzene	490027869022	25.00	27.78	ug/L	11	25	
Trichloroethene	490027869022	25.00	28.04	ug/L	12	25	
1,2-Dichloropropane	490027869022	25.00	26.34	ug/L	5	25	
Bromodichloromethane	490027869022	25.00	26.54	ug/L	6	25	
Dibromomethane	490027869022	25.00	26.27	ug/L	5	25	
4-Methyl-2-Pentanone	490027869022	25.00	24.92	ug/L	0	25	
cis-1,3-Dichloropropene	490027869022	25.00	26.68	ug/L	7	25	
Toluene	490027869022	25.00	27.42	ug/L	10	25	
trans-1,3-Dichloropropene	490027869022	25.00	24.15	ug/L	-3	25	
1,1,2-Trichloroethane	490027869022	25.00	26.11	ug/L	4	25	
2-Hexanone	490027869022	25.00	25.89	ug/L	4	25	
1,3-Dichloropropane	490027869022	25.00	26.99	ug/L	8	25	
Tetrachloroethene	490027869022	25.00	27.37	ug/L	9	25	
Dibromochloromethane	490027869022	25.00	26.43	ug/L	6	25	
1,2-Dibromoethane	490027869022	25.00	27.39	ug/L	10	25	
Chlorobenzene	490027869022	25.00	26.86	ug/L	7	25	
1,1,1,2-Tetrachloroethane	490027869022	25.00	27.37	ug/L	9	25	
Ethylbenzene	490027869022	25.00	27.80	ug/L	11	25	
m,p-Xylenes	490027869022	50.00	55.23	ug/L	10	25	
o-Xylene	490027869022	25.00	27.24	ug/L	9	25	
Styrene	490027869022	25.00	28.01	ug/L	12	25	
Bromoform	490027869022	25.00	26.32	ug/L	5	25	
Isopropylbenzene	490027869022	25.00	24.49	ug/L	-2	25	

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	490027869022	25.00	25.59	ug/L	2	25	
1,2,3-Trichloropropane	490027869022	25.00	26.29	ug/L	5	25	
Propylbenzene	490027869022	25.00	27.54	ug/L	10	25	
Bromobenzene	490027869022	25.00	26.97	ug/L	8	25	
1,3,5-Trimethylbenzene	490027869022	25.00	27.50	ug/L	10	25	
2-Chlorotoluene	490027869022	25.00	27.75	ug/L	11	25	
4-Chlorotoluene	490027869022	25.00	26.75	ug/L	7	25	
tert-Butylbenzene	490027869022	25.00	27.62	ug/L	10	25	
1,2,4-Trimethylbenzene	490027869022	25.00	26.71	ug/L	7	25	
sec-Butylbenzene	490027869022	25.00	27.97	ug/L	12	25	
para-Isopropyl Toluene	490027869022	25.00	27.08	ug/L	8	25	
1,3-Dichlorobenzene	490027869022	25.00	26.62	ug/L	6	25	
1,4-Dichlorobenzene	490027869022	25.00	26.46	ug/L	6	25	
n-Butylbenzene	490027869022	25.00	27.91	ug/L	12	25	
1,2-Dichlorobenzene	490027869022	25.00	27.02	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	490027869022	25.00	27.27	ug/L	9	25	
1,2,4-Trichlorobenzene	490027869022	25.00	26.94	ug/L	8	25	
Hexachlorobutadiene	490027869022	25.00	27.97	ug/L	12	25	
Naphthalene	490027869022	25.00	27.76	ug/L	11	25	
1,2,3-Trichlorobenzene	490027869022	25.00	27.97	ug/L	12	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : QC536691 IDF : 1.0
 Seqnum : 480112900010.3 File : icj10 Time : 19-MAR-2010 15:38
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14092 (8000X), S14067 (8000X), S14144 (8000X), S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.4483	31.25	24.19	ug/L	-23	20	0.0500	c- u ***
Chloromethane	0.8790	0.7134	31.25	25.36	ug/L	-19	20	0.1000	u
Vinyl Chloride	0.6271	0.5461	31.25	27.21	ug/L	-13	20	0.0500	u
Bromomethane	0.3610	0.3806	31.25	32.94	ug/L	5	20	0.0500	u
Chloroethane	0.4411	0.4291	31.25	30.40	ug/L	-3	20	0.0500	u
Trichlorofluoromethane	0.6268	0.6132	31.25	30.57	ug/L	-2	20	0.0500	u
Iodomethane	0.5839	0.6071	31.25	32.49	ug/L	4	20	0.0500	u v- ***
Acetone	0.1056	0.0962	31.25	28.46	ug/L	-9	20	0.0500	u
1,1-Dichloroethene	0.3802	0.4549	31.25	37.39	ug/L	20	20	0.0500	u
Methylene Chloride	0.5313	0.5421	31.25	31.88	ug/L	2	20	0.0500	u
Carbon Disulfide	1.6806	1.7263	31.25	32.10	ug/L	3	20	0.0500	u
MTBE	0.9672	0.9102	31.25	29.41	ug/L	-6	20	0.0500	u
trans-1,2-Dichloroethene	0.4686	0.5136	31.25	34.25	ug/L	10	20	0.0500	u
Vinyl Acetate	0.7245	0.9284	31.25	40.04	ug/L	28	20	0.0500	c+ u ***
1,1-Dichloroethane	0.9167	0.9053	31.25	30.86	ug/L	-1	20	0.1000	u
2-Butanone	0.1773	0.1682	31.25	29.64	ug/L	-5	20	0.0500	u
cis-1,2-Dichloroethene	0.5067	0.5342	31.25	32.95	ug/L	5	20	0.0500	u
2,2-Dichloropropane	0.5197	0.5871	31.25	35.30	ug/L	13	20	0.0500	u
Chloroform	0.8063	0.7834	31.25	30.36	ug/L	-3	20	0.0500	u
Bromochloromethane	0.2159	0.2350	31.25	34.02	ug/L	9	20	0.0500	u
1,1,1-Trichloroethane	0.5481	0.5486	31.25	31.28	ug/L	0	20	0.0500	u
1,1-Dichloropropene	0.3652	0.3869	31.25	33.11	ug/L	6	20	0.0500	u
Carbon Tetrachloride	0.2856	0.2860	31.25	31.29	ug/L	0	20	0.0500	u
1,2-Dichloroethane	0.2817	0.2565	31.25	28.46	ug/L	-9	20	0.0500	u
Benzene	1.0704	1.0980	31.25	32.06	ug/L	3	20	0.0500	u
Trichloroethene	0.2855	0.2854	31.25	31.24	ug/L	0	20	0.0500	u
1,2-Dichloropropane	0.3485	0.3248	31.25	29.12	ug/L	-7	20	0.0500	u
Bromodichloromethane	0.3617	0.3477	31.25	30.04	ug/L	-4	20	0.0500	u
Dibromomethane	0.1582	0.1542	31.25	30.46	ug/L	-3	20	0.0500	u
4-Methyl-2-Pentanone	0.2323	0.2236	31.25	30.08	ug/L	-4	20	0.0500	u
cis-1,3-Dichloropropene	0.4552	0.4455	31.25	30.58	ug/L	-2	20	0.0500	u
Toluene	0.7834	0.8076	31.25	32.22	ug/L	3	20	0.0500	u
trans-1,3-Dichloropropene	0.4642	0.4079	31.25	27.46	ug/L	-12	20	0.0500	u
1,1,2-Trichloroethane	0.1436	0.1508	31.25	32.81	ug/L	5	20	0.0500	u
2-Hexanone	0.2041	0.2030	31.25	31.08	ug/L	-1	20	0.0500	u
1,3-Dichloropropane	0.4370	0.4652	31.25	33.27	ug/L	6	20	0.0500	u
Tetrachloroethene	0.2974	0.3232	31.25	33.96	ug/L	9	20	0.0500	u
Dibromochloromethane	0.3029	0.3028	31.25	31.23	ug/L	0	20	0.0500	u
1,2-Dibromoethane	0.2527	0.2669	31.25	33.00	ug/L	6	20	0.0500	u
Chlorobenzene	0.8508	0.8918	31.25	32.76	ug/L	5	20	0.3000	u
1,1,1,2-Tetrachloroethane	0.2959	0.3009	31.25	31.78	ug/L	2	20	0.0500	u
Ethylbenzene	1.4015	1.4825	31.25	33.05	ug/L	6	20	0.0500	u
m,p-Xylenes	0.5056	0.5577	62.50	68.94	ug/L	10	20	0.0500	u
o-Xylene	0.5265	0.5632	31.25	33.43	ug/L	7	20	0.0500	u
Styrene	0.9089	0.9849	31.25	33.86	ug/L	8	20	0.0500	u
Bromoform	0.1737	0.1854	31.25	33.36	ug/L	7	20	0.1000	u
Isopropylbenzene	2.6074	2.4884	31.25	29.82	ug/L	-5	20	0.0500	u
1,1,2,2-Tetrachloroethane	0.6064	0.6717	31.25	34.62	ug/L	11	20	0.3000	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,2,3-Trichloropropane	0.1368	0.1397	31.25	31.89	ug/L	2	20	0.0500	u
Propylbenzene	3.2004	3.5044	31.25	34.22	ug/L	9	20	0.0500	u
Bromobenzene	0.6876	0.7621	31.25	34.64	ug/L	11	20	0.0500	u
1,3,5-Trimethylbenzene	2.0495	2.1685	31.25	33.06	ug/L	6	20	0.0500	u
2-Chlorotoluene	2.1411	2.2160	31.25	32.34	ug/L	4	20	0.0500	u
4-Chlorotoluene	2.0800	2.1524	31.25	32.34	ug/L	3	20	0.0500	u
tert-Butylbenzene	1.7249	1.8358	31.25	33.26	ug/L	6	20	0.0500	u
1,2,4-Trimethylbenzene	2.1567	2.2860	31.25	33.12	ug/L	6	20	0.0500	u
sec-Butylbenzene	2.6657	2.9812	31.25	34.95	ug/L	12	20	0.0500	u
para-Isopropyl Toluene	2.0335	2.1827	31.25	33.54	ug/L	7	20	0.0500	u
1,3-Dichlorobenzene	1.2884	1.3369	31.25	32.43	ug/L	4	20	0.0500	u
1,4-Dichlorobenzene	1.3177	1.3613	31.25	32.29	ug/L	3	20	0.0500	u
n-Butylbenzene	2.0640	2.2972	31.25	34.78	ug/L	11	20	0.0500	u
1,2-Dichlorobenzene	1.1774	1.2441	31.25	33.02	ug/L	6	20	0.0500	u
1,2-Dibromo-3-Chloropropane	0.0900	0.0855	31.25	29.71	ug/L	-5	20	0.0500	u
1,2,4-Trichlorobenzene	0.6833	0.7225	31.25	33.04	ug/L	6	20	0.0500	u
Hexachlorobutadiene	0.3229	0.3569	31.25	34.54	ug/L	11	20	0.0500	u
Naphthalene	1.3048	1.3847	31.25	33.16	ug/L	6	20	0.0500	u
1,2,3-Trichlorobenzene	0.6040	0.6596	31.25	34.13	ug/L	9	20	0.0500	u
Dibromofluoromethane	0.5695	0.5572	50.00	48.92	ug/L	-2	20	0.0500	u
1,2-Dichloroethane-d4	0.2764	0.2441	50.00	44.16	ug/L	-12	20	0.0500	u
Toluene-d8	1.3769	1.3678	50.00	49.67	ug/L	-1	20	0.0500	u
Bromofluorobenzene	1.0267	1.0261	50.00	49.97	ug/L	0	20	0.0500	u

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	1954820	-6.91	12.37	12.35	-0.02
1,4-Difluorobenzene	3438431	3310423	-3.72	13.66	13.65	-0.01
Chlorobenzene-d5	2768728	2640863	-4.62	17.68	17.67	-0.01
1,4-Dichlorobenzene-d4	1353103	1279145	-5.47	20.18	20.18	0.00

TDL 03/22/10 : Sample ID fixed in LIMS [general version]

Analyst: TDL Date: 03/22/10 Reviewer: LW Date: 03/23/10

+ = high bias - = low bias c = CCV u = use v = ICV

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : QC536693 IDF : 1.0
 Seqnum : 480112900012.3 File : icj12 Time : 19-MAR-2010 17:11
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S13447 (13330X), S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Dibromofluoromethane	0.5695	0.5554	50.00	48.76	ug/L	-2	20	0.0500	u
1,2-Dichloroethane-d4	0.2764	0.2521	50.00	45.61	ug/L	-9	20	0.0500	u
Toluene-d8	1.3769	1.3514	50.00	49.07	ug/L	-2	20	0.0500	u
Bromofluorobenzene	1.0267	0.9737	50.00	47.42	ug/L	-5	20	0.0500	u

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	1991560	-5.16	12.37	12.36	-0.01
1,4-Difluorobenzene	3438431	3244649	-5.64	13.66	13.66	0.00
Chlorobenzene-d5	2768728	2638549	-4.70	17.68	17.67	-0.01
1,4-Dichlorobenzene-d4	1353103	1277192	-5.61	20.18	20.17	-0.01

ISTD (ICAL ibm08)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Chlorobenzene-d5 TIC	6292999	7742517	23.03	17.66	17.67	0.01

TDL 03/22/10 : Sample info fixed in LIMS [general version]

TDL 03/22/10 [Gasoline C5-C12]: Separated from coeluting peak. [general version]

TDL 03/22/10 [Gasoline C6-C10]: Separated from coeluting peak. [general version]

TDL 03/22/10 [Gasoline C7-C12]: Separated from coeluting peak. [general version]

Analyst: TDL Date: 03/23/10 Reviewer: LW Date: 03/23/10

u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 30PPB IDF : 1.0
 Seqnum : 490112790003.1 File : jcyj03 Time : 19-MAR-2010 08:44
 Cal : 490027869001 Caldate : 19-JAN-2010 Caltype : WATER
 Standards: S13952 (16670X), S13719 (16670X), S14108 (16670X), S13625 (33330X),
 S14145 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6144	0.8340	30.00	36.63	ug/L	22	20	0.0500	c+ ***
Chloromethane	0.9887	0.9511	30.00	28.86	ug/L	-4	20	0.1000	
Vinyl Chloride	0.7734	0.8336	30.00	32.33	ug/L	8	20	0.0500	
Bromomethane	0.4602	0.4436	30.00	28.92	ug/L	-4	20	0.0500	
Chloroethane	0.4539	0.4428	30.00	29.27	ug/L	-2	20	0.0500	
Trichlorofluoromethane	0.6225	0.7883	30.00	34.51	ug/L	15	20	0.0500	
Acetone	0.1678	0.2110	30.00	37.71	ug/L	26	20	0.0500	c+ ***
1,1-Dichloroethene	0.5696	0.5700	30.00	30.02	ug/L	0	20	0.0500	
Iodomethane	0.5986	0.6163	30.00	30.89	ug/L	3	20	0.0500	
Methylene Chloride	0.7544	0.6996	30.00	27.82	ug/L	-7	20	0.0500	
Carbon Disulfide	2.3825	2.4687	30.00	31.09	ug/L	4	20	0.0500	
MTBE	1.6272	1.5652	30.00	28.86	ug/L	-4	20	0.0500	
trans-1,2-Dichloroethene	0.6687	0.6387	30.00	28.66	ug/L	-4	20	0.0500	
Vinyl Acetate	1.4687	1.4316	30.00	29.24	ug/L	-3	20	0.0500	
1,1-Dichloroethane	1.1872	1.1909	30.00	30.09	ug/L	0	20	0.1000	
2-Butanone	0.2678	0.2782	30.00	31.16	ug/L	4	20	0.0500	
2,2-Dichloropropane	0.6877	0.8680	30.00	37.87	ug/L	26	20	0.0500	c+ ***
cis-1,2-Dichloroethene	0.7037	0.7000	30.00	29.84	ug/L	-1	20	0.0500	
Chloroform	1.0137	1.0737	30.00	31.78	ug/L	6	20	0.0500	
Bromochloromethane	0.3338	0.3242	30.00	29.14	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.6595	0.7669	30.00	34.88	ug/L	16	20	0.0500	
1,1-Dichloropropene	0.4369	0.5094	30.00	34.98	ug/L	17	20	0.0500	
Carbon Tetrachloride	0.2948	0.3759	30.00	38.25	ug/L	28	20	0.0500	c+ ***
1,2-Dichloroethane	0.3751	0.4346	30.00	34.76	ug/L	16	20	0.0500	
Benzene	1.3652	1.4224	30.00	31.26	ug/L	4	20	0.0500	
Trichloroethene	0.3410	0.3703	30.00	32.58	ug/L	9	20	0.0500	
1,2-Dichloropropane	0.4171	0.3957	30.00	28.47	ug/L	-5	20	0.0500	
Bromodichloromethane	0.4369	0.4642	30.00	31.88	ug/L	6	20	0.0500	
Dibromomethane	0.2305	0.2368	30.00	30.82	ug/L	3	20	0.0500	
4-Methyl-2-Pentanone	0.3262	0.3290	30.00	30.26	ug/L	1	20	0.0500	
cis-1,3-Dichloropropene	0.5790	0.5921	30.00	30.68	ug/L	2	20	0.0500	
Toluene	0.9653	0.9679	30.00	30.08	ug/L	0	20	0.0500	
trans-1,3-Dichloropropene	0.5740	0.5896	30.00	30.81	ug/L	3	20	0.0500	
1,1,2-Trichloroethane	0.2005	0.1998	30.00	29.90	ug/L	0	20	0.0500	
2-Hexanone	0.2578	0.2748	30.00	31.98	ug/L	7	20	0.0500	
1,3-Dichloropropane	0.5943	0.6082	30.00	30.71	ug/L	2	20	0.0500	
Tetrachloroethene	0.3708	0.4116	30.00	33.30	ug/L	11	20	0.0500	
Dibromochloromethane	0.3751	0.3775	30.00	30.19	ug/L	1	20	0.0500	
1,2-Dibromoethane	0.3515	0.3704	30.00	31.61	ug/L	5	20	0.0500	
Chlorobenzene	1.0826	1.0728	30.00	29.73	ug/L	-1	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3342	0.3565	30.00	32.00	ug/L	7	20	0.0500	
Ethylbenzene	1.7697	1.8754	30.00	31.79	ug/L	6	20	0.0500	
m,p-Xylenes	0.6731	0.6932	60.00	61.80	ug/L	3	20	0.0500	
o-Xylene	0.6638	0.6783	30.00	30.66	ug/L	2	20	0.0500	
Styrene	1.1877	1.1974	30.00	30.24	ug/L	1	20	0.0500	
Bromoform	0.2304	0.2336	30.00	30.41	ug/L	1	20	0.1000	
Isopropylbenzene	3.3307	3.5124	30.00	31.64	ug/L	5	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9320	0.8519	30.00	27.42	ug/L	-9	20	0.3000	
1,2,3-Trichloropropane	0.7453	0.7432	30.00	29.91	ug/L	0	20	0.0500	
Propylbenzene	4.2189	4.4864	30.00	31.90	ug/L	6	20	0.0500	
Bromobenzene	0.8895	0.9089	30.00	30.65	ug/L	2	20	0.0500	
1,3,5-Trimethylbenzene	2.7183	2.8611	30.00	31.58	ug/L	5	20	0.0500	
2-Chlorotoluene	2.7188	2.8338	30.00	31.27	ug/L	4	20	0.0500	
4-Chlorotoluene	2.5819	2.6257	30.00	30.51	ug/L	2	20	0.0500	
tert-Butylbenzene	2.2466	2.4017	30.00	32.07	ug/L	7	20	0.0500	
1,2,4-Trimethylbenzene	2.8433	2.8536	30.00	30.11	ug/L	0	20	0.0500	
sec-Butylbenzene	3.5685	3.8403	30.00	32.29	ug/L	8	20	0.0500	
para-Isopropyl Toluene	2.7756	3.0055	30.00	32.49	ug/L	8	20	0.0500	
1,3-Dichlorobenzene	1.6979	1.6880	30.00	29.83	ug/L	-1	20	0.0500	
1,4-Dichlorobenzene	1.7457	1.7271	30.00	29.68	ug/L	-1	20	0.0500	
n-Butylbenzene	2.7600	2.9383	30.00	31.94	ug/L	6	20	0.0500	
1,2-Dichlorobenzene	1.5721	1.5684	30.00	29.93	ug/L	0	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1152	0.1265	30.00	32.96	ug/L	10	20	0.0500	
1,2,4-Trichlorobenzene	0.9215	0.9253	30.00	30.12	ug/L	0	20	0.0500	
Hexachlorobutadiene	0.2803	0.3779	30.00	40.44	ug/L	35	20	0.0500	c+ ***
Naphthalene	1.9986	1.6066	30.00	24.12	ug/L	-20	20	0.0500	
1,2,3-Trichlorobenzene	0.7961	0.7906	30.00	29.79	ug/L	-1	20	0.0500	
Dibromofluoromethane	0.5727	0.5766	50.00	50.34	ug/L	1	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.3189	50.00	57.68	ug/L	15	20	0.0500	
Toluene-d8	1.3484	1.3472	50.00	49.96	ug/L	0	20	0.0500	
Bromofluorobenzene	0.9907	0.9707	50.00	48.99	ug/L	-2	20	0.0500	

ISTD (ICAL jaj18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	704216	669931	-4.87	10.97	10.93	-0.04
1,4-Difluorobenzene	1214372	1126344	-7.25	12.14	12.10	-0.04
Chlorobenzene-d5	1037725	963620	-7.14	16.07	16.03	-0.04
1,4-Dichlorobenzene-d4	517916	488249	-5.73	18.78	18.74	-0.04

Analyst: TDL

Date: 03/22/10

Reviewer: LW

Date: 03/23/10

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 30PPB IDF : 1.0
 Seqnum : 490112790015.1 File : jcyj15 Time : 19-MAR-2010 15:48
 Cal : 490027869001 Caldate : 19-JAN-2010 Caltype : WATER
 Standards: S13952 (16670X), S13719 (16670X), S14108 (16670X), S13625 (33330X),
 S14145 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6144	0.7388	30.00	32.76	ug/L	9	20	0.0500	
Chloromethane	0.9887	0.8140	30.00	24.70	ug/L	-18	20	0.1000	
Vinyl Chloride	0.7734	0.7023	30.00	27.24	ug/L	-9	20	0.0500	
Bromomethane	0.4602	0.3922	30.00	25.57	ug/L	-15	20	0.0500	
Chloroethane	0.4539	0.3666	30.00	24.23	ug/L	-19	20	0.0500	
Trichlorofluoromethane	0.6225	0.6674	30.00	29.38	ug/L	-2	20	0.0500	
Acetone	0.1678	0.1851	30.00	33.08	ug/L	10	20	0.0500	
1,1-Dichloroethene	0.5696	0.5203	30.00	27.40	ug/L	-9	20	0.0500	
Iodomethane	0.5986	0.5617	30.00	28.15	ug/L	-6	20	0.0500	
Methylene Chloride	0.7544	0.6735	30.00	26.78	ug/L	-11	20	0.0500	
Carbon Disulfide	2.3825	2.2500	30.00	28.33	ug/L	-6	20	0.0500	
MTBE	1.6272	1.5656	30.00	28.86	ug/L	-4	20	0.0500	
trans-1,2-Dichloroethene	0.6687	0.5880	30.00	26.38	ug/L	-12	20	0.0500	
Vinyl Acetate	1.4687	0.9817	30.00	20.05	ug/L	-33	20	0.0500	c- ***
1,1-Dichloroethane	1.1872	1.0761	30.00	27.19	ug/L	-9	20	0.1000	
2-Butanone	0.2678	0.2739	30.00	30.68	ug/L	2	20	0.0500	
2,2-Dichloropropane	0.6877	0.6537	30.00	28.52	ug/L	-5	20	0.0500	
cis-1,2-Dichloroethene	0.7037	0.6452	30.00	27.51	ug/L	-8	20	0.0500	
Chloroform	1.0137	0.9981	30.00	29.54	ug/L	-2	20	0.0500	
Bromochloromethane	0.3338	0.3250	30.00	29.21	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.6595	0.7070	30.00	32.16	ug/L	7	20	0.0500	
1,1-Dichloropropene	0.4369	0.4668	30.00	32.05	ug/L	7	20	0.0500	
Carbon Tetrachloride	0.2948	0.3506	30.00	35.69	ug/L	19	20	0.0500	
1,2-Dichloroethane	0.3751	0.4168	30.00	33.34	ug/L	11	20	0.0500	
Benzene	1.3652	1.3354	30.00	29.34	ug/L	-2	20	0.0500	
Trichloroethene	0.3410	0.3724	30.00	32.77	ug/L	9	20	0.0500	
1,2-Dichloropropane	0.4171	0.3884	30.00	27.94	ug/L	-7	20	0.0500	
Bromodichloromethane	0.4369	0.4300	30.00	29.53	ug/L	-2	20	0.0500	
Dibromomethane	0.2305	0.2367	30.00	30.80	ug/L	3	20	0.0500	
4-Methyl-2-Pentanone	0.3262	0.3598	30.00	33.09	ug/L	10	20	0.0500	
cis-1,3-Dichloropropene	0.5790	0.5425	30.00	28.11	ug/L	-6	20	0.0500	
Toluene	0.9653	0.9388	30.00	29.18	ug/L	-3	20	0.0500	
trans-1,3-Dichloropropene	0.5740	0.5563	30.00	29.07	ug/L	-3	20	0.0500	
1,1,2-Trichloroethane	0.2005	0.2006	30.00	30.01	ug/L	0	20	0.0500	
2-Hexanone	0.2578	0.2921	30.00	34.00	ug/L	13	20	0.0500	
1,3-Dichloropropane	0.5943	0.5972	30.00	30.15	ug/L	0	20	0.0500	
Tetrachloroethene	0.3708	0.4018	30.00	32.51	ug/L	8	20	0.0500	
Dibromochloromethane	0.3751	0.3811	30.00	30.48	ug/L	2	20	0.0500	
1,2-Dibromoethane	0.3515	0.3757	30.00	32.06	ug/L	7	20	0.0500	
Chlorobenzene	1.0826	1.0361	30.00	28.71	ug/L	-4	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3342	0.3496	30.00	31.38	ug/L	5	20	0.0500	
Ethylbenzene	1.7697	1.7615	30.00	29.86	ug/L	0	20	0.0500	
m,p-Xylenes	0.6731	0.6560	60.00	58.47	ug/L	-3	20	0.0500	
o-Xylene	0.6638	0.6485	30.00	29.31	ug/L	-2	20	0.0500	
Styrene	1.1877	1.1584	30.00	29.26	ug/L	-2	20	0.0500	
Bromoform	0.2304	0.2502	30.00	32.57	ug/L	9	20	0.1000	
Isopropylbenzene	3.3307	3.3723	30.00	30.37	ug/L	1	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9320	0.8514	30.00	27.41	ug/L	-9	20	0.3000	
1,2,3-Trichloropropane	0.7453	0.7722	30.00	31.08	ug/L	4	20	0.0500	
Propylbenzene	4.2189	4.2255	30.00	30.05	ug/L	0	20	0.0500	
Bromobenzene	0.8895	0.8988	30.00	30.31	ug/L	1	20	0.0500	
1,3,5-Trimethylbenzene	2.7183	2.7279	30.00	30.11	ug/L	0	20	0.0500	
2-Chlorotoluene	2.7188	2.6713	30.00	29.48	ug/L	-2	20	0.0500	
4-Chlorotoluene	2.5819	2.4817	30.00	28.84	ug/L	-4	20	0.0500	
tert-Butylbenzene	2.2466	2.3254	30.00	31.05	ug/L	4	20	0.0500	
1,2,4-Trimethylbenzene	2.8433	2.7155	30.00	28.65	ug/L	-4	20	0.0500	
sec-Butylbenzene	3.5685	3.6790	30.00	30.93	ug/L	3	20	0.0500	
para-Isopropyl Toluene	2.7756	2.8474	30.00	30.78	ug/L	3	20	0.0500	
1,3-Dichlorobenzene	1.6979	1.6124	30.00	28.49	ug/L	-5	20	0.0500	
1,4-Dichlorobenzene	1.7457	1.6681	30.00	28.67	ug/L	-4	20	0.0500	
n-Butylbenzene	2.7600	2.7173	30.00	29.54	ug/L	-2	20	0.0500	
1,2-Dichlorobenzene	1.5721	1.5671	30.00	29.90	ug/L	0	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1152	0.1358	30.00	35.39	ug/L	18	20	0.0500	
1,2,4-Trichlorobenzene	0.9215	0.9430	30.00	30.70	ug/L	2	20	0.0500	
Hexachlorobutadiene	0.2803	0.3350	30.00	35.85	ug/L	20	20	0.0500	
Naphthalene	1.9986	1.8463	30.00	27.71	ug/L	-8	20	0.0500	
1,2,3-Trichlorobenzene	0.7961	0.8498	30.00	32.03	ug/L	7	20	0.0500	
Dibromofluoromethane	0.5727	0.5664	50.00	49.46	ug/L	-1	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.3129	50.00	56.59	ug/L	13	20	0.0500	
Toluene-d8	1.3484	1.3561	50.00	50.29	ug/L	1	20	0.0500	
Bromofluorobenzene	0.9907	0.9586	50.00	48.38	ug/L	-3	20	0.0500	

ISTD (ICAL jaj18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	704216	662437	-5.93	10.97	10.92	-0.05
1,4-Difluorobenzene	1214372	1099997	-9.42	12.14	12.09	-0.05
Chlorobenzene-d5	1037725	936313	-9.77	16.07	16.03	-0.04
1,4-Dichlorobenzene-d4	517916	475894	-8.11	18.78	18.74	-0.04

Analyst: TDL Date: 03/22/10 Reviewer: LW Date: 03/23/10

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : TVH750PPB IDF : 1.0
 Seqnum : 490112790016.1 File : jcj16 Time : 19-MAR-2010 16:24
 Cal : 490027869001 Caldate : 19-JAN-2010 Caltype : WATER
 Standards: S13446 (13330X), S14145 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Dibromofluoromethane	0.5727	0.5684	50.00	49.63	ug/L	-1	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.3246	50.00	58.71	ug/L	17	20	0.0500	
Toluene-d8	1.3484	1.3498	50.00	50.05	ug/L	0	20	0.0500	
Bromofluorobenzene	0.9907	0.9727	50.00	49.09	ug/L	-2	20	0.0500	

ISTD (ICAL jaj18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	704216	658445	-6.50	10.97	10.92	-0.05
1,4-Difluorobenzene	1214372	1080338	-11.04	12.14	12.09	-0.05
Chlorobenzene-d5	1037725	931438	-10.24	16.07	16.03	-0.04
1,4-Dichlorobenzene-d4	517916	475427	-8.20	18.78	18.74	-0.04

ISTD (ICAL jba15)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Chlorobenzene-d5 TIC	2875680	2814131	-2.14	16.03	16.03	0.00

PDM 03/22/10 [Gasoline C5-C12]: Separated from coeluting peak. [general version]
 PDM 03/22/10 [Gasoline C6-C10]: Separated from coeluting peak. [general version]
 PDM 03/22/10 [Gasoline C7-C12]: Separated from coeluting peak. [general version]

Analyst: TDL Date: 03/23/10 Reviewer: LW Date: 03/23/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 35PPB IDF : 1.0
 Seqnum : 490115885003.1 File : jcl03 Time : 21-MAR-2010 12:24
 Cal : 490027869001 Caldate : 19-JAN-2010 Caltype : WATER
 Standards: S13952 (14290X), S13719 (14290X), S14108 (14290X), S13625 (28570X),
 S14145 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6144	0.7455	35.00	38.07	ug/L	9	20	0.0500	
Chloromethane	0.9887	0.8397	35.00	29.72	ug/L	-15	20	0.1000	
Vinyl Chloride	0.7734	0.7719	35.00	34.93	ug/L	0	20	0.0500	
Bromomethane	0.4602	0.4386	35.00	33.36	ug/L	-5	20	0.0500	
Chloroethane	0.4539	0.4084	35.00	31.50	ug/L	-10	20	0.0500	
Trichlorofluoromethane	0.6225	0.7455	35.00	37.93	ug/L	8	20	0.0500	
Acetone	0.1678	0.1870	35.00	38.99	ug/L	11	20	0.0500	
1,1-Dichloroethene	0.5696	0.5525	35.00	33.95	ug/L	-3	20	0.0500	
Iodomethane	0.5986	0.6261	35.00	36.61	ug/L	5	20	0.0500	
Methylene Chloride	0.7544	0.6848	35.00	31.77	ug/L	-9	20	0.0500	
Carbon Disulfide	2.3825	2.3158	35.00	34.02	ug/L	-3	20	0.0500	
MTBE	1.6272	1.5405	35.00	33.14	ug/L	-5	20	0.0500	
trans-1,2-Dichloroethene	0.6687	0.6106	35.00	31.96	ug/L	-9	20	0.0500	
Vinyl Acetate	1.4687	1.4227	35.00	33.90	ug/L	-3	20	0.0500	
1,1-Dichloroethane	1.1872	1.1063	35.00	32.62	ug/L	-7	20	0.1000	
2-Butanone	0.2678	0.2535	35.00	33.12	ug/L	-5	20	0.0500	
2,2-Dichloropropane	0.6877	0.8241	35.00	41.94	ug/L	20	20	0.0500	
cis-1,2-Dichloroethene	0.7037	0.6749	35.00	33.57	ug/L	-4	20	0.0500	
Chloroform	1.0137	1.0409	35.00	35.94	ug/L	3	20	0.0500	
Bromochloromethane	0.3338	0.3244	35.00	34.02	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.6595	0.7298	35.00	38.73	ug/L	11	20	0.0500	
1,1-Dichloropropene	0.4369	0.4962	35.00	39.75	ug/L	14	20	0.0500	
Carbon Tetrachloride	0.2948	0.3729	35.00	44.28	ug/L	27	20	0.0500	c+ ***
1,2-Dichloroethane	0.3751	0.4272	35.00	39.86	ug/L	14	20	0.0500	
Benzene	1.3652	1.4124	35.00	36.21	ug/L	3	20	0.0500	
Trichloroethene	0.3410	0.3702	35.00	38.00	ug/L	9	20	0.0500	
1,2-Dichloropropane	0.4171	0.4031	35.00	33.83	ug/L	-3	20	0.0500	
Bromodichloromethane	0.4369	0.4590	35.00	36.78	ug/L	5	20	0.0500	
Dibromomethane	0.2305	0.2307	35.00	35.02	ug/L	0	20	0.0500	
4-Methyl-2-Pentanone	0.3262	0.3275	35.00	35.14	ug/L	0	20	0.0500	
cis-1,3-Dichloropropene	0.5790	0.5891	35.00	35.61	ug/L	2	20	0.0500	
Toluene	0.9653	0.9793	35.00	35.51	ug/L	1	20	0.0500	
trans-1,3-Dichloropropene	0.5740	0.6030	35.00	36.77	ug/L	5	20	0.0500	
1,1,2-Trichloroethane	0.2005	0.2004	35.00	34.98	ug/L	0	20	0.0500	
2-Hexanone	0.2578	0.2672	35.00	36.28	ug/L	4	20	0.0500	
1,3-Dichloropropane	0.5943	0.6027	35.00	35.50	ug/L	1	20	0.0500	
Tetrachloroethene	0.3708	0.4160	35.00	39.27	ug/L	12	20	0.0500	
Dibromochloromethane	0.3751	0.3927	35.00	36.64	ug/L	5	20	0.0500	
1,2-Dibromoethane	0.3515	0.3685	35.00	36.69	ug/L	5	20	0.0500	
Chlorobenzene	1.0826	1.0745	35.00	34.74	ug/L	-1	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3342	0.3586	35.00	37.55	ug/L	7	20	0.0500	
Ethylbenzene	1.7697	1.8280	35.00	36.15	ug/L	3	20	0.0500	
m,p-Xylenes	0.6731	0.6880	70.00	71.55	ug/L	2	20	0.0500	
o-Xylene	0.6638	0.6711	35.00	35.39	ug/L	1	20	0.0500	
Styrene	1.1877	1.1997	35.00	35.36	ug/L	1	20	0.0500	
Bromoform	0.2304	0.2549	35.00	38.71	ug/L	11	20	0.1000	
Isopropylbenzene	3.3307	3.3879	35.00	35.60	ug/L	2	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9320	0.8484	35.00	31.86	ug/L	-9	20	0.3000	
1,2,3-Trichloropropane	0.7453	0.7342	35.00	34.48	ug/L	-1	20	0.0500	
Propylbenzene	4.2189	4.3400	35.00	36.01	ug/L	3	20	0.0500	
Bromobenzene	0.8895	0.9058	35.00	35.64	ug/L	2	20	0.0500	
1,3,5-Trimethylbenzene	2.7183	2.7322	35.00	35.18	ug/L	1	20	0.0500	
2-Chlorotoluene	2.7188	2.7181	35.00	34.99	ug/L	0	20	0.0500	
4-Chlorotoluene	2.5819	2.5674	35.00	34.80	ug/L	-1	20	0.0500	
tert-Butylbenzene	2.2466	2.3435	35.00	36.51	ug/L	4	20	0.0500	
1,2,4-Trimethylbenzene	2.8433	2.7965	35.00	34.42	ug/L	-2	20	0.0500	
sec-Butylbenzene	3.5685	3.7308	35.00	36.59	ug/L	5	20	0.0500	
para-Isopropyl Toluene	2.7756	2.9114	35.00	36.71	ug/L	5	20	0.0500	
1,3-Dichlorobenzene	1.6979	1.6512	35.00	34.04	ug/L	-3	20	0.0500	
1,4-Dichlorobenzene	1.7457	1.6968	35.00	34.02	ug/L	-3	20	0.0500	
n-Butylbenzene	2.7600	2.7826	35.00	35.29	ug/L	1	20	0.0500	
1,2-Dichlorobenzene	1.5721	1.5494	35.00	34.49	ug/L	-1	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1152	0.1283	35.00	38.98	ug/L	11	20	0.0500	
1,2,4-Trichlorobenzene	0.9215	0.9421	35.00	35.78	ug/L	2	20	0.0500	
Hexachlorobutadiene	0.2803	0.3482	35.00	43.47	ug/L	24	20	0.0500	c+ ***
Naphthalene	1.9986	1.6965	35.00	29.71	ug/L	-15	20	0.0500	
1,2,3-Trichlorobenzene	0.7961	0.8098	35.00	35.60	ug/L	2	20	0.0500	
Dibromofluoromethane	0.5727	0.5676	50.00	49.56	ug/L	-1	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.3110	50.00	56.26	ug/L	13	20	0.0500	
Toluene-d8	1.3484	1.3662	50.00	50.66	ug/L	1	20	0.0500	
Bromofluorobenzene	0.9907	0.9712	50.00	49.02	ug/L	-2	20	0.0500	

ISTD (ICAL jaj18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	704216	695057	-1.30	10.97	10.91	-0.06
1,4-Difluorobenzene	1214372	1141946	-5.96	12.14	12.08	-0.06
Chlorobenzene-d5	1037725	975483	-6.00	16.07	16.02	-0.05
1,4-Dichlorobenzene-d4	517916	502022	-3.07	18.78	18.73	-0.05

Analyst: TDL

Date: 03/22/10

Reviewer: LW

Date: 03/23/10

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218669 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 35PPB IDF : 1.0
 Seqnum : 490115885012.1 File : jcl12 Time : 21-MAR-2010 17:36
 Cal : 490027869001 Caldate : 19-JAN-2010 Caltype : WATER
 Standards: S13952 (14290X), S13719 (14290X), S14108 (14290X), S13625 (28570X),
 S14145 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6144	0.6543	35.00	33.76	ug/L	-4	20	0.0500	
Chloromethane	0.9887	0.7645	35.00	27.06	ug/L	-23	20	0.1000	c- ***
Vinyl Chloride	0.7734	0.6559	35.00	29.68	ug/L	-15	20	0.0500	
Bromomethane	0.4602	0.3740	35.00	28.45	ug/L	-19	20	0.0500	
Chloroethane	0.4539	0.3473	35.00	26.78	ug/L	-23	20	0.0500	c- ***
Trichlorofluoromethane	0.6225	0.6383	35.00	32.66	ug/L	-7	20	0.0500	
Acetone	0.1678	0.1515	35.00	31.60	ug/L	-10	20	0.0500	
1,1-Dichloroethene	0.5696	0.5071	35.00	31.16	ug/L	-11	20	0.0500	
Iodomethane	0.5986	0.5754	35.00	33.64	ug/L	-4	20	0.0500	
Methylene Chloride	0.7544	0.6282	35.00	29.15	ug/L	-17	20	0.0500	
Carbon Disulfide	2.3825	2.1821	35.00	32.05	ug/L	-8	20	0.0500	
MTBE	1.6272	1.4585	35.00	31.37	ug/L	-10	20	0.0500	
trans-1,2-Dichloroethene	0.6687	0.5623	35.00	29.43	ug/L	-16	20	0.0500	
Vinyl Acetate	1.4687	1.2904	35.00	30.75	ug/L	-12	20	0.0500	
1,1-Dichloroethane	1.1872	1.0322	35.00	30.43	ug/L	-13	20	0.1000	
2-Butanone	0.2678	0.2376	35.00	31.05	ug/L	-11	20	0.0500	
2,2-Dichloropropane	0.6877	0.6457	35.00	32.86	ug/L	-6	20	0.0500	
cis-1,2-Dichloroethene	0.7037	0.6185	35.00	30.77	ug/L	-12	20	0.0500	
Chloroform	1.0137	0.9561	35.00	33.01	ug/L	-6	20	0.0500	
Bromochloromethane	0.3338	0.3090	35.00	32.40	ug/L	-7	20	0.0500	
1,1,1-Trichloroethane	0.6595	0.6717	35.00	35.65	ug/L	2	20	0.0500	
1,1-Dichloropropene	0.4369	0.4560	35.00	36.53	ug/L	4	20	0.0500	
Carbon Tetrachloride	0.2948	0.3513	35.00	41.72	ug/L	19	20	0.0500	
1,2-Dichloroethane	0.3751	0.3922	35.00	36.59	ug/L	5	20	0.0500	
Benzene	1.3652	1.3015	35.00	33.37	ug/L	-5	20	0.0500	
Trichloroethene	0.3410	0.3459	35.00	35.51	ug/L	1	20	0.0500	
1,2-Dichloropropane	0.4171	0.3685	35.00	30.92	ug/L	-12	20	0.0500	
Bromodichloromethane	0.4369	0.4270	35.00	34.21	ug/L	-2	20	0.0500	
Dibromomethane	0.2305	0.2291	35.00	34.78	ug/L	-1	20	0.0500	
4-Methyl-2-Pentanone	0.3262	0.3221	35.00	34.56	ug/L	-1	20	0.0500	
cis-1,3-Dichloropropene	0.5790	0.5433	35.00	32.84	ug/L	-6	20	0.0500	
Toluene	0.9653	0.9294	35.00	33.70	ug/L	-4	20	0.0500	
trans-1,3-Dichloropropene	0.5740	0.5507	35.00	33.58	ug/L	-4	20	0.0500	
1,1,2-Trichloroethane	0.2005	0.1946	35.00	33.97	ug/L	-3	20	0.0500	
2-Hexanone	0.2578	0.2619	35.00	35.56	ug/L	2	20	0.0500	
1,3-Dichloropropane	0.5943	0.5702	35.00	33.58	ug/L	-4	20	0.0500	
Tetrachloroethene	0.3708	0.4004	35.00	37.80	ug/L	8	20	0.0500	
Dibromochloromethane	0.3751	0.3788	35.00	35.35	ug/L	1	20	0.0500	
1,2-Dibromoethane	0.3515	0.3601	35.00	35.85	ug/L	2	20	0.0500	
Chlorobenzene	1.0826	1.0266	35.00	33.19	ug/L	-5	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3342	0.3442	35.00	36.05	ug/L	3	20	0.0500	
Ethylbenzene	1.7697	1.7432	35.00	34.48	ug/L	-1	20	0.0500	
m,p-Xylenes	0.6731	0.6511	70.00	67.71	ug/L	-3	20	0.0500	
o-Xylene	0.6638	0.6460	35.00	34.06	ug/L	-3	20	0.0500	
Styrene	1.1877	1.1248	35.00	33.15	ug/L	-5	20	0.0500	
Bromoform	0.2304	0.2506	35.00	38.06	ug/L	9	20	0.1000	
Isopropylbenzene	3.3307	3.3007	35.00	34.69	ug/L	-1	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9320	0.8219	35.00	30.87	ug/L	-12	20	0.3000	
1,2,3-Trichloropropane	0.7453	0.7093	35.00	33.31	ug/L	-5	20	0.0500	
Propylbenzene	4.2189	4.0778	35.00	33.83	ug/L	-3	20	0.0500	
Bromobenzene	0.8895	0.8660	35.00	34.07	ug/L	-3	20	0.0500	
1,3,5-Trimethylbenzene	2.7183	2.6669	35.00	34.34	ug/L	-2	20	0.0500	
2-Chlorotoluene	2.7188	2.5713	35.00	33.10	ug/L	-5	20	0.0500	
4-Chlorotoluene	2.5819	2.4122	35.00	32.70	ug/L	-7	20	0.0500	
tert-Butylbenzene	2.2466	2.2704	35.00	35.37	ug/L	1	20	0.0500	
1,2,4-Trimethylbenzene	2.8433	2.6672	35.00	32.83	ug/L	-6	20	0.0500	
sec-Butylbenzene	3.5685	3.6176	35.00	35.48	ug/L	1	20	0.0500	
para-Isopropyl Toluene	2.7756	2.8138	35.00	35.48	ug/L	1	20	0.0500	
1,3-Dichlorobenzene	1.6979	1.5917	35.00	32.81	ug/L	-6	20	0.0500	
1,4-Dichlorobenzene	1.7457	1.6310	35.00	32.70	ug/L	-7	20	0.0500	
n-Butylbenzene	2.7600	2.6811	35.00	34.00	ug/L	-3	20	0.0500	
1,2-Dichlorobenzene	1.5721	1.4946	35.00	33.27	ug/L	-5	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1152	0.1218	35.00	37.03	ug/L	6	20	0.0500	
1,2,4-Trichlorobenzene	0.9215	0.9286	35.00	35.27	ug/L	1	20	0.0500	
Hexachlorobutadiene	0.2803	0.3316	35.00	41.40	ug/L	18	20	0.0500	
Naphthalene	1.9986	1.7131	35.00	30.00	ug/L	-14	20	0.0500	
1,2,3-Trichlorobenzene	0.7961	0.8159	35.00	35.87	ug/L	2	20	0.0500	
Dibromofluoromethane	0.5727	0.5551	50.00	48.47	ug/L	-3	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.3056	50.00	55.27	ug/L	11	20	0.0500	
Toluene-d8	1.3484	1.3657	50.00	50.64	ug/L	1	20	0.0500	
Bromofluorobenzene	0.9907	0.9535	50.00	48.12	ug/L	-4	20	0.0500	

ISTD (ICAL jaj18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	704216	706504	0.32	10.97	10.92	-0.05
1,4-Difluorobenzene	1214372	1147386	-5.52	12.14	12.09	-0.05
Chlorobenzene-d5	1037725	972640	-6.27	16.07	16.03	-0.04
1,4-Dichlorobenzene-d4	517916	505037	-2.49	18.78	18.73	-0.05

Analyst: TDL

Date: 03/22/10

Reviewer: LW

Date: 03/23/10

--low bias c=CCV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 480112900

Date : 03/19/10
 Sequence : MSVOA09 icj

Reference : iar13
 Analyzed : 01/27/10 23:34

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2099875	12.37	3438431	13.66	2768728	17.68	1353103	20.18
		LOWER LIMIT	1049938	11.87	1719216	13.16	1384364	17.18	676552	19.68
		UPPER LIMIT	4199750	12.87	6876862	14.16	5537456	18.18	2706206	20.68
003	CCV	30PPB	1071731	12.36	1814093	13.65	1577696	17.67	816582	20.17
004	CCV/BS	QC536691	1260091	12.36	2073667	13.65	1685180	17.67	802966	20.17
006	CCV/BS	QC536691	1620266	12.36	2726396	13.65	2218970	17.67	1074426	20.18
007	CCV/BS	QC536691	1603621	12.36	2688603	13.65	2164690	17.67	1022636	20.17
009	CCV/BS	QC536691	1978891	12.36	3248033	13.65	2677544	17.67	1313444	20.17
010	CCV/BS	QC536691	1954820	12.35	3310423	13.65	2640863	17.67	1279145	20.18
011	BSD	QC536692	1934663	12.36	3179478	13.65	2616352	17.67	1260706	20.18
012	CCV/BS	QC536693	1991560	12.36	3244649	13.66	2638549	17.67	1277192	20.17
013	BSD	QC536694	1946802	12.36	3227008	13.65	2592003	17.67	1249262	20.17
014	IB	IB	1963439	12.36	3174696	13.65	2667733	17.66	1373276	20.18
015	BLANK	QC536695	1939212	12.35	3218490	13.65	2573878	17.67	1227915	20.17
016	SAMPLE	218683-002	1958167	12.36	3195968	13.65	2592443	17.66	1226036	20.18
017	SAMPLE	218683-004	1912482	12.36	3094609	13.65	2543985	17.66	1169629	20.18
018	SAMPLE	218683-005	1848049	12.36	2986405	13.65	2391629	17.67	1128818	20.17
019	SAMPLE	218669-009	1865078	12.36	3000651	13.64	2481401	17.67	1098219	20.18
020	SAMPLE	218802-007	1688545	12.36	2781015	13.65	2226932	17.66	1035901	20.18
021	SAMPLE	218802-008	1663973	12.36	2760614	13.64	2232822	17.67	1016111	20.17
022	SAMPLE	218802-009	1630112	12.36	2690252	13.65	2177793	17.66	980636	20.17
023	SAMPLE	218802-010	1582900	12.36	2626108	13.65	2120668	17.66	975046	20.18
024	SAMPLE	218802-011	1622026	12.36	2665118	13.64	2143826	17.66	997794	20.18
025	SAMPLE	218787-006	1587702	12.36	2588218	13.65	2102198	17.67	1112353	20.17
026	SAMPLE	218787-004	1982559	12.36	3279550	13.65	2651655	17.66	1243099	20.18
027	SAMPLE	218787-005	2013787	12.36	3305510	13.65	2597211	17.66	1265362	20.18
028	CCV	30PPB	1955506	12.36	3236162	13.65	2553240	17.66	1226758	20.18
029	IB	IB	2031034	12.35	3265089	13.65	2603674	17.66	1265988	20.17
030	IB	IB	2080452	12.36	3308392	13.65	2677930	17.67	1259964	20.17
031	IB	IB	1984572	12.36	3305534	13.64	2631534	17.67	1237211	20.17
032	IB	IB	1959370	12.36	3300914	13.65	2611319	17.67	1237870	20.18
033	IB	IB	1935219	12.36	3072316	13.64	2553475	17.67	1170811	20.17

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 480112900

Date : 03/19/10
 Sequence : MSVOA09 icj

Reference : ibm08
 Analyzed : 02/22/10 16:23

#	Type	Sample ID	CLBZD5-TIC	RT
		ICAL STD	6292999	17.66
		LOWER LIMIT	3146500	17.16
		UPPER LIMIT	12585998	18.16
012	CCV/BS	QC536693	7742517	17.67
020	SAMPLE	218802-007	7059650	17.66
021	SAMPLE	218802-008	6982212	17.66
022	SAMPLE	218802-009	6933298	17.66
023	SAMPLE	218802-010	6637911	17.66
024	SAMPLE	218802-011	6743498	17.67
025	SAMPLE	218787-006	6697074	17.67
026	SAMPLE	218787-004	7852991	17.67
027	SAMPLE	218787-005	7612311	17.66

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 490112790

Date : 03/19/10
 Sequence : MSVOA10 jcj

Reference : jaj18
 Analyzed : 01/19/10 22:26

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	704216	10.97	1214372	12.14	1037725	16.07	517916	18.78
		LOWER LIMIT	352108	10.47	607186	11.64	518863	15.57	258958	18.28
		UPPER LIMIT	1408432	11.47	2428744	12.64	2075450	16.57	1035832	19.28
003	CCV	30PPB	669931	10.93	1126344	12.10	963620	16.03	488249	18.74
004	BS	QC536655	671748	10.93	1120302	12.10	956581	16.04	483405	18.74
005	BSD	QC536656	674250	10.93	1120597	12.10	953100	16.04	468910	18.74
006	CCV/BS	QC536657	677614	10.93	1120997	12.10	954315	16.04	484080	18.74
007	BSD	QC536658	682210	10.92	1126292	12.09	966956	16.03	483685	18.74
009	BLANK	QC536659	683846	10.92	1116466	12.09	959117	16.03	486413	18.74
010	SAMPLE	218789-007	676035	10.92	1097513	12.09	971912	16.03	481572	18.74
011	SAMPLE	218789-017	677832	10.92	1099818	12.09	935789	16.03	472958	18.74
012	SAMPLE	218793-002	665531	10.93	1094967	12.10	947375	16.04	468806	18.74
013	SAMPLE	218793-003	669931	10.93	1091768	12.10	945811	16.04	476507	18.74
015	CCV	30PPB	662437	10.92	1099997	12.09	936313	16.03	475894	18.74
016	CCV	TVH750PPB	658445	10.92	1080338	12.09	931438	16.03	475427	18.74
018	BLANK	QC536709	667387	10.92	1090518	12.09	940547	16.03	472528	18.74
019	SAMPLE	218669-001	657690	10.92	1083063	12.09	927886	16.03	467265	18.74
020	SAMPLE	218669-002	672424	10.93	1101300	12.10	953468	16.04	473943	18.74
021	SAMPLE	218669-003	652859	10.92	1084171	12.09	932394	16.03	467687	18.74
022	SAMPLE	218669-004	664710	10.92	1084984	12.09	937125	16.03	469653	18.74
023	SAMPLE	218669-007	672268	10.93	1126153	12.10	953246	16.04	480148	18.74
024	SAMPLE	218669-008	663541	10.93	1083955	12.10	943719	16.04	482458	18.74
025	SAMPLE	218789-013	685932	10.92	1124345	12.09	950329	16.03	477950	18.74
026	SAMPLE	218789-016	668712	10.92	1105426	12.09	950071	16.03	477891	18.74
027	SAMPLE	218789-011	666169	10.92	1095867	12.09	936509	16.03	473784	18.74
028	SAMPLE	218789-012	695229	10.93	1144116	12.10	974252	16.04	481698	18.74
029	SAMPLE	218789-014	682193	10.92	1112562	12.10	958086	16.03	481804	18.74
030	SAMPLE	218669-006	701592	10.93	1162813	12.10	989135	16.04	481187	18.74
031	SAMPLE	218789-008	678214	10.92	1114985	12.09	956863	16.03	474143	18.74
032	SAMPLE	218789-009	686670	10.92	1129445	12.09	960436	16.03	466367	18.74
033	SAMPLE	218789-015	684584	10.92	1128713	12.09	976975	16.03	483517	18.74
034	SAMPLE	218669-005	685761	10.93	1136047	12.10	975404	16.04	485580	18.73

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 490112790

Date : 03/19/10
 Sequence : MSVOA10 jcj

Reference : jba15
 Analyzed : 02/10/10 16:44

#	Type	Sample ID	CLBZD5-TIC	RT
		ICAL STD	2875680	16.03
		LOWER LIMIT	1437840	15.53
		UPPER LIMIT	5751360	16.53
006	CCV/BS	QC536657	2928900	16.04
010	SAMPLE	218789-007	2903481	16.03
011	SAMPLE	218789-017	2801334	16.03
016	CCV	TVH750PPB	2814131	16.03
025	SAMPLE	218789-013	2847024	16.03
026	SAMPLE	218789-016	2870802	16.03
027	SAMPLE	218789-011	2817052	16.03
028	SAMPLE	218789-012	2908629	16.04
029	SAMPLE	218789-014	2887154	16.03
031	SAMPLE	218789-008	2906338	16.03
032	SAMPLE	218789-009	2888199	16.03
033	SAMPLE	218789-015	2979766	16.03

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 490115885

Date : 03/21/10
 Sequence : MSVOA10 jcl

Reference : jaj18
 Analyzed : 01/19/10 22:26

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	704216	10.97	1214372	12.14	1037725	16.07	517916	18.78
		LOWER LIMIT	352108	10.47	607186	11.64	518863	15.57	258958	18.28
		UPPER LIMIT	1408432	11.47	2428744	12.64	2075450	16.57	1035832	19.28
003	CCV	35PPB	695057	10.91	1141946	12.08	975483	16.02	502022	18.73
004	BS	QC536850	730184	10.92	1193933	12.09	1019995	16.03	512650	18.73
005	BSD	QC536851	715106	10.91	1164181	12.08	993137	16.02	506335	18.73
006	CCV/BS	QC536852	693851	10.91	1136681	12.08	965426	16.02	495076	18.73
007	BSD	QC536853	700821	10.91	1119366	12.08	960674	16.03	488840	18.73
009	BLANK	QC536848	708880	10.92	1151150	12.09	984521	16.03	499543	18.73
010	SAMPLE	218789-015	700147	10.91	1129798	12.08	970932	16.02	492640	18.73
012	CCV	35PPB	706504	10.92	1147386	12.09	972640	16.03	505037	18.73
014	BLANK	QC536849	687242	10.92	1105042	12.09	961590	16.03	481172	18.73
015	SAMPLE	218720-001	694342	10.91	1132564	12.08	978520	16.03	493298	18.74
016	SAMPLE	218720-004	692413	10.92	1118355	12.09	961483	16.03	485645	18.73
017	SAMPLE	218720-005	699855	10.91	1143684	12.09	988609	16.03	489946	18.74
018	SAMPLE	218720-008	677900	10.92	1106651	12.09	952111	16.03	478965	18.74
019	SAMPLE	218720-009	690335	10.91	1111318	12.08	963926	16.03	494049	18.74
020	SAMPLE	218720-011	686147	10.91	1121973	12.08	973869	16.02	489797	18.73
021	SAMPLE	218720-014	697321	10.91	1131556	12.09	971199	16.03	492394	18.74
022	SAMPLE	218720-016	710159	10.92	1150335	12.09	996065	16.03	488830	18.73
023	SAMPLE	218720-007	704315	10.92	1146959	12.09	993533	16.03	494575	18.73
024	SAMPLE	218720-013	678715	10.91	1127117	12.08	972222	16.02	483680	18.73
025	SAMPLE	218720-015	678593	10.91	1103232	12.09	958362	16.02	476987	18.73
026	SAMPLE	218669-005	710914	10.91	1148002	12.08	1003979	16.02	501947	18.73
027	SAMPLE	218720-002	698550	10.91	1146332	12.08	995559	16.02	509475	18.73
028	SAMPLE	218720-003	690049	10.91	1119258	12.08	974295	16.03	485817	18.73
029	SAMPLE	218720-012	685775	10.91	1124603	12.09	972220	16.03	489557	18.74
030	SAMPLE	218720-010	699470	10.92	1148293	12.09	984059	16.03	491805	18.74
031	SAMPLE	218720-006	692153	10.91	1142214	12.10	981428	16.03	491948	18.74

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 480112900

Instrument : MSVOA09 Begun : 03/19/10 09:40
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	icj01	X	IB			03/19/10 09:40	1.0	1
002	icj02	TUN	BFB			03/19/10 10:20	1.0	2
003	icj03	CCV	30PPB			03/19/10 11:17	1.0	3 4 5 6 1
004	icj04	CCV/BS	QC536691	Water	161080	03/19/10 11:50	1.0	7 8 9 10 1
005	icj05	TUN	BFB			03/19/10 12:52	1.0	2
006	icj06	CCV/BS	QC536691	Water	161080	03/19/10 13:19	1.0	7 8 9 10 1
007	icj07	CCV/BS	QC536691	Water	161080	03/19/10 13:53	1.0	7 8 9 10 1
008	icj08	TUN	BFB			03/19/10 14:30	1.0	2
009	icj09	CCV/BS	QC536691	Water	161080	03/19/10 15:03	1.0	7 8 9 10 1
010	icj10	CCV/BS	QC536691	Water	161080	03/19/10 15:38	1.0	7 8 9 1
011	icj11	BSD	QC536692	Water	161080	03/19/10 16:28	1.0	7 8 9 1
012	icj12	CCV/BS	QC536693	Water	161080	03/19/10 17:11	1.0	11 1
013	icj13	BSD	QC536694	Water	161080	03/19/10 17:46	1.0	11 1
014	icj14	IB	IB			03/19/10 18:21	1.0	1
015	icj15	BLANK	QC536695	Water	161080	03/19/10 18:56	1.0	1
016	icj16	SAMPLE	218683-002	Water	161080	03/19/10 19:31	1.0	1
017	icj17	SAMPLE	218683-004	Water	161080	03/19/10 20:05	1.0	1
018	icj18	SAMPLE	218683-005	Water	161080	03/19/10 20:44	1.0	1
019	icj19	SAMPLE	218669-009	Water	161080	03/19/10 21:18	1.0	1
020	icj20	SAMPLE	218802-007	Water	161080	03/19/10 21:54	1.0	1
021	icj21	SAMPLE	218802-008	Water	161080	03/19/10 22:32	1.0	1
022	icj22	SAMPLE	218802-009	Water	161080	03/19/10 23:10	1.0	1
023	icj23	SAMPLE	218802-010	Water	161080	03/19/10 23:46	1.0	1
024	icj24	SAMPLE	218802-011	Water	161080	03/20/10 00:21	1.0	1
025	icj25	SAMPLE	218787-006	Water	161080	03/20/10 00:56	1.429	1
026	icj26	SAMPLE	218787-004	Water	161080	03/20/10 01:30	7.143	1
027	icj27	SAMPLE	218787-005	Water	161080	03/20/10 02:07	7.143	1
028	icj28	CCV	30PPB			03/20/10 02:43	1.0	3 4 5 6 1
029	icj29	IB	IB			03/20/10 03:18	1.0	1
030	icj30	IB	IB			03/20/10 03:52	1.0	1
031	icj31	IB	IB			03/20/10 04:28	1.0	1
032	icj32	IB	IB			03/20/10 05:02	1.0	1
033	icj33	IB	IB			03/20/10 05:37	1.0	1

TDL 03/22/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

TDL 03/22/10 : Matrix spikes were not performed for this analysis in batch 161080 due to insufficient sample amount.

TDL 03/22/10 : Adjusted tune for files icj05, icj08

Analyst: TDL Date: 03/22/10 Reviewer: BO Date: 03/22/10

Standards used: 1=S14026 2=S13652 3=S14216 4=S14108 5=S13625 6=S13719 7=S14092 8=S14067 9=S14144 10=S13925 11=S13447

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 490027869

Instrument : MSVOA10 Begun : 01/19/10 08:29
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	jaj01	X	IB			01/19/10 08:29	1.0	1
002	jaj02	X	LOW PT			01/19/10 09:26	1.0	1
003	jaj03	X	LOW PT			01/19/10 10:09	1.0	1
004	jaj04	X	LOW PT			01/19/10 10:43	1.0	1
005	jaj05	X	LOW PT			01/19/10 11:49	1.0	1
006	jaj06	X	LOW PT			01/19/10 14:28	1.0	1
007	jaj07	X	LOW PT			01/19/10 15:02	1.0	1
008	jaj08	TUN	BFB			01/19/10 15:39	1.0	2
009	jaj09	X	IB			01/19/10 17:14	1.0	1
010	jaj10	X	IB			01/19/10 17:49	1.0	1
011	jaj11	IB	CALIB IB			01/19/10 18:23	1.0	1
012	jaj12	ICAL	.25/.5PPB			01/19/10 18:58	1.0	3 4 5 6 1
013	jaj13	ICAL	0.5/1PPB			01/19/10 19:32	1.0	3 4 5 6 1
014	jaj14	ICAL	2PPB			01/19/10 20:07	1.0	3 4 5 6 1
015	jaj15	ICAL	5PPB			01/19/10 20:42	1.0	3 4 5 6 1
016	jaj16	ICAL	10PPB			01/19/10 21:17	1.0	3 4 5 6 1
017	jaj17	ICAL	20PPB			01/19/10 21:51	1.0	7 8 9 10 1
018	jaj18	ICAL	50PPB			01/19/10 22:26	1.0	7 8 9 10 1
019	jaj19	ICAL	75PPB			01/19/10 23:01	1.0	7 8 9 10 1
020	jaj20	ICAL	100PPB			01/19/10 23:35	1.0	7 8 9 10 1
021	jaj21	ICV	25PPB			01/20/10 00:10	1.0	11 1
022	jaj22	ICV	25PPB			01/20/10 00:44	1.0	12 13 14 1
023	jaj23	X	IB			01/20/10 01:19	1.0	1
024	jaj24	X	IB			01/20/10 01:54	1.0	1
025	jaj25	X	IB			01/20/10 02:28	1.0	1

BO 01/20/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 25.

Analyst: BO Date: 01/20/10 Reviewer: LW Date: 01/22/10
 Standards used: 1=S13615 2=S13652 3=S13745 4=S13746 5=S13747 6=S13748 7=S13680 8=S13586 9=S13625 10=S13503 11=S13817
 12=S13559 13=S13639 14=S13492

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 490112790

Instrument : MSVOA10
 Method : EPA 8260B

Begun : 03/19/10 07:50
 SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jcj01	X	IB			03/19/10 07:50	1.0	1	
002	jcj02	TUN	BFB			03/19/10 08:18	1.0	2	
003	jcj03	CCV	30PPB			03/19/10 08:44	1.0	3 4 5 6 1	
004	jcj04	BS	QC536655	Water	161072	03/19/10 09:30	1.0	7 8 9 10 1	
005	jcj05	BSD	QC536656	Water	161072	03/19/10 10:05	1.0	7 8 9 10 1	
006	jcj06	CCV/BS	QC536657	Water	161072	03/19/10 10:39	1.0	11 1	
007	jcj07	BSD	QC536658	Water	161072	03/19/10 11:23	1.0	11 1	
008	jcj08	X	IB			03/19/10 11:58	1.0	1	
009	jcj09	BLANK	QC536659	Water	161072	03/19/10 12:33	1.0	1	
010	jcj10	SAMPLE	218789-007	Water	161072	03/19/10 13:08	1.0	1	
011	jcj11	SAMPLE	218789-017	Water	161072	03/19/10 13:44	1.0	1	
012	jcj12	SAMPLE	218793-002	Water	161072	03/19/10 14:19	1.0	1	
013	jcj13	SAMPLE	218793-003	Water	161072	03/19/10 14:55	1.0	1	
014	jcj14	TUN	BFB			03/19/10 15:22	1.0	2	
015	jcj15	CCV	30PPB			03/19/10 15:48	1.0	3 4 5 6 1	
016	jcj16	CCV	TVH750PPB			03/19/10 16:24	1.0	12 1	
017	jcj17	X	IB			03/19/10 16:59	1.0	1	
018	jcj18	BLANK	QC536709	Water	161072	03/19/10 17:34	1.0	1	
019	jcj19	SAMPLE	218669-001	Water	161072	03/19/10 18:10	1.0	1	
020	jcj20	SAMPLE	218669-002	Water	161072	03/19/10 18:46	1.0	1	
021	jcj21	SAMPLE	218669-003	Water	161072	03/19/10 19:22	1.0	1	
022	jcj22	SAMPLE	218669-004	Water	161072	03/19/10 19:58	1.0	1	
023	jcj23	SAMPLE	218669-007	Water	161072	03/19/10 20:33	1.0	1	combined (sediment)
024	jcj24	SAMPLE	218669-008	Water	161072	03/19/10 21:09	1.0	1	
025	jcj25	SAMPLE	218789-013	Water	161072	03/19/10 21:44	1.0	1	combined (sediment)
026	jcj26	SAMPLE	218789-016	Water	161072	03/19/10 22:20	1.0	1	combined (sediment)
027	jcj27	SAMPLE	218789-011	Water	161072	03/19/10 22:55	1.0	1	
028	jcj28	SAMPLE	218789-012	Water	161072	03/19/10 23:31	1.0	1	
029	jcj29	SAMPLE	218789-014	Water	161072	03/20/10 00:06	1.0	1	
030	jcj30	SAMPLE	218669-006	Water	161072	03/20/10 00:41	1.0	1	
031	jcj31	SAMPLE	218789-008	Water	161072	03/20/10 01:16	1.0	1	
032	jcj32	SAMPLE	218789-009	Water	161072	03/20/10 01:50	1.0	1	
033	jcj33	SAMPLE	218789-015	Water	161072	03/20/10 02:25	3.333	1	
034	jcj34	SAMPLE	218669-005	Water	161072	03/20/10 03:00	5.0	1	
035	jcj35	X	IB			03/20/10 03:35	1.0	1	
036	jcj36	X	IB			03/20/10 04:10	1.0	1	
037	jcj37	X	IB			03/20/10 04:44	1.0	1	
038	jcj38	X	IB			03/20/10 05:19	1.0	1	
039	jcj39	X	IB			03/20/10 05:53	1.0	1	

PDM 03/22/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 039.

PDM 03/22/10 : Matrix spikes were not performed for this analysis in batch 161072 due to insufficient sample amount.

Analyst: PDM Date: 03/22/10 Reviewer: BO Date: 03/22/10

Standards used: 1=S14145 2=S13652 3=S13952 4=S13719 5=S14108 6=S13625 7=S14092 8=S14144 9=S13925 10=S14067 11=S13447
 12=S13446

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 490115885

Instrument : MSVOA10
 Method : EPA 8260B

Begun : 03/21/10 11:25
 SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	jcl01	X	IB			03/21/10 11:25	1.0	1	
002	jcl02	TUN	BFB			03/21/10 11:58	1.0	2	
003	jcl03	CCV	35PPB			03/21/10 12:24	1.0	3 4 5 6 1	
004	jcl04	BS	QC536850	Water	161119	03/21/10 12:59	1.0	7 8 9 10 1	
005	jcl05	BSD	QC536851	Water	161119	03/21/10 13:34	1.0	7 8 9 10 1	
006	jcl06	CCV/BS	QC536852	Water	161119	03/21/10 14:09	1.0	11 1	
007	jcl07	BSD	QC536853	Water	161119	03/21/10 14:44	1.0	11 1	
008	jcl08	X	IB			03/21/10 15:31	1.0	1	
009	jcl09	BLANK	QC536848	Water	161119	03/21/10 16:07	1.0	1	
010	jcl10	SAMPLE	218789-015	Water	161119	03/21/10 16:42	1.0	1	
011	jcl11	TUN	BFB			03/21/10 17:09	1.0	2	
012	jcl12	CCV	35PPB			03/21/10 17:36	1.0	3 4 5 6 1	
013	jcl13	X	IB			03/21/10 18:12	1.0	1	
014	jcl14	BLANK	QC536849	Water	161119	03/21/10 18:47	1.0	1	
015	jcl15	SAMPLE	218720-001	Water	161119	03/21/10 19:22	1.0	1	
016	jcl16	SAMPLE	218720-004	Water	161119	03/21/10 19:58	1.0	1	
017	jcl17	SAMPLE	218720-005	Water	161119	03/21/10 20:33	1.0	1	
018	jcl18	SAMPLE	218720-008	Water	161119	03/21/10 21:08	1.0	1	1:DCE12C=120
019	jcl19	SAMPLE	218720-009	Water	161119	03/21/10 21:43	1.0	1	
020	jcl20	SAMPLE	218720-011	Water	161119	03/21/10 22:18	1.0	1	
021	jcl21	SAMPLE	218720-014	Water	161119	03/21/10 22:54	1.0	1	
022	jcl22	SAMPLE	218720-016	Water	161119	03/21/10 23:29	1.0	1	
023	jcl23	SAMPLE	218720-007	Water	161119	03/22/10 00:03	5.0	1	1:TCE=510
024	jcl24	SAMPLE	218720-013	Water	161119	03/22/10 00:38	5.0	1	
025	jcl25	SAMPLE	218720-015	Water	161119	03/22/10 01:13	5.0	1	2:DCE12C=890
026	jcl26	SAMPLE	218669-005	Water	161119	03/22/10 01:48	2.500	1	
027	jcl27	SAMPLE	218720-002	Water	161119	03/22/10 02:22	7.143	1	
028	jcl28	SAMPLE	218720-003	Water	161119	03/22/10 02:57	16.67	1	1:DCE12C=100
029	jcl29	SAMPLE	218720-012	Water	161119	03/22/10 03:32	20.0	1	
030	jcl30	SAMPLE	218720-010	Water	161119	03/22/10 04:06	50.0	1	
031	jcl31	SAMPLE	218720-006	Water	161119	03/22/10 04:41	83.33	1	
032	jcl32	X	IB			03/22/10 05:15	1.0	1	
033	jcl33	X	IB			03/22/10 05:50	1.0	1	
034	jcl34	X	IB			03/22/10 06:24	1.0	1	

PDM 03/22/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 034.

PDM 03/22/10 : Matrix spikes were not performed for this analysis in batch 161119 due to insufficient sample amount.

Analyst: PDM Date: 03/22/10 Reviewer: BO Date: 03/22/10

Standards used: 1=S14145 2=S13652 3=S13952 4=S13719 5=S14108 6=S13625 7=S14092 8=S14144 9=S13925 10=S14068 11=S13447

GC/MS VOLATILE ORGANICS

Batch #: 140172

Water Sample Prep Sheet

Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
218789-008	C	<2				10	PP @ 1x OD; Lead last - possible SO ₂	TDL 3/18/10
-009	I						I	
-007	C,D						I	
-011	C						1x	
-012	B						silty	
-013	AB						I	
-014	B	↓					3.3x	
-015	B	<2			10		1x silty	
-016	CF	<2					I	
-017	B						PP @ 1x; OD	
218793-002	C						I	
-003	I						I	
218669-1	A						1x	
-2	↓						1x	
-3	B	↓					1x	
-4	B	↓					↓	
-5	B	<2			7		5x	
-6	B	<2					1x Lead last	
-7	I	↓					↓	
-8	↓	↓					↓	

8260

GC/MS VOLATILE ORGANICS

Water Sample Prep Sheet

Batch #: 161119

Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	2180689-5	<2	LV	20	3	10	Re 2.5x OD	TEW 3-21-10
2	218789-15	↓		20		1	↓ 1x	
3	218720-1	A		21			TB	
4	-2	B			4		7.14x	
5	-3	↓			5		16.7x	
6	-4	<2					1x	
7	-5	↓					↓	
8	-6	<2			6		83.3x	
9	-7	↓			7		5x 50x	
10	-8	<2					1x	
11	-9	↓					↓	
12	-10	<2			8		50x	
13	-11	↓					1x	
14	-12	<2			9		20x	
15	-13	↓			10		5x 50x	
16	-14	<2					1x	
17	-15	<2					5x 50x	
18	-16	↓				↓	1x	
19								
20								
21								
22								
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35								



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 218702
ANALYTICAL REPORT

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 383868.US.60.61.QS
Location : Quarterly UST
Level : III

Table with 2 columns: Sample ID and Lab ID. Lists various sample identifiers and their corresponding lab IDs.

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

Signature: Senior Program Manager

Date: 03/25/2010

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 218702
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/10/10
Samples Received: 03/10/10

This data package contains sample and QC results for twelve water samples, requested for the above referenced project on 03/10/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for iodomethane in the ICV analyzed 01/28/10 01:45; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for iodomethane in the CCV analyzed 03/23/10 10:03 and the CCV analyzed 03/23/10 14:37; this analyte met minimum response criteria, and affected data was qualified with "b".

High recovery was observed for vinyl acetate in the BSD for batch 161182; the associated RPD was within limits, and the high recovery was not associated with any reported results.

High RPD was observed for bromomethane in the MS/MSD of ASE-118A-UST-10Q1 (lab # 218702-002); this analyte was not detected at or above the RL in the associated samples.

No other analytical problems were encountered.

Chain of Custody

218702

38370-100309

Curtis & Tompkins Laboratories 2323 5th St. Berkeley, CA 94710 510-204-2221		Honeywell Chain Of Custody / Analysis Request		AESI Ref: 40242.58627 COC#: 37380	
Privileged & Confidential EDD To: Tuesday Powers@Critigen.com Melanie.West@Critigen.com		Sky Harbor AZ PHOENIX, AZ		Lab Proj # (SDG): Lab ID: CTBERK Site ID: SKYHARBOR Lab Job #: Authorized User: Honeywell	
Sampler: Devick Feelm PO #: PO-5101516/PN-397664/CC-6400 Analysis Turnaround Time (TAT): 7		Location of Site: Preservative: 8 1 Total VOCs (SW8260B) TRPH DRG C10-C22 - ORO C22-C32 (SW8015B)		Phase: Sampling Program Quaterly UST	
Preliminary Data To:		Composite/Grab Field Filtered Sample ?		Text & Excel File Drive Excel & Text File Quaterly	
Sample Receipt Acknowledgement To:		Laboratory Contact Report Tier Level Full Report TAT: 7		Copyright AESK Version 10.0 (11-23-99) Unauthorized use strictly prohibited.	
Hard Copy To: Tuesday Powers and Melanie West, Critigen Invoice To: Honeywell/Copy Berney Kidd, CH2M HILL/Copy Melanie West, Critigen		Sample Identification Start Depth (ft) End Depth (ft) Field Sample ID		Sampling Method (code) Lab Sample Numbers	
1	---	---	---	---	---
2	ASE-118A	---	---	TB-002-UST-1001	---
3	ASE-22AR	---	---	ASE-18A-UST-1001	---
4	ASE-58A	---	---	ASE-22AR-UST-1001	---
5	PL-201A	---	---	ASE-58A-UST-1001	---
6	ASE-130A	---	---	PL-201A-UST-1001	---
7	PL-105A	---	---	ASE-130A-UST-1001	---
8	1001-00Z	---	---	PL-105A-UST-1001	---
9	ASE-108A	---	---	UST-1001-00Z	---
10	ASE-108A	---	---	ASE-108A-UST-1001	---
11	ASE-62A	---	---	ER-002-UST-1001	---
12	ASE-65A	---	---	ASE-62A-UST-1001	---
Relinquished by: <i>[Signature]</i>		Company: CH2MHILL		Condition:	
Date/Time: 03/09/10		Date/Time: 3-10-10		Cooler Temp.	
Relinquished by: <i>[Signature]</i>		Company:		Condition:	
Date/Time:		Date/Time:		Cooler Temp.	
Preservatives: (Other, Specify):					

FED EX #

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218702 Date Received 3-10-10 Number of coolers 3
Client CH2M/HONEYWELL Project QUARTERS/UST

Date Opened 3-10-10 By (print) S. EVANS (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX MASTER (YES) NO
Shipping info 8720 503B 8973

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many 1 EA Name SIGNATURE Date 3-9-10

2B. Were custody seals intact upon arrival? (YES) NO N/A

3. Were custody papers dry and intact when received? (YES) NO

4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO

5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:

Type of ice used: Wet Blue/Gel None Temp(°C) 1.7, 1.9, 1.3

Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? _____ YES (NO)
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? (YES) NO

10. Are samples in the appropriate containers for indicated tests? (YES) NO

11. Are sample labels present, in good condition and complete? (YES) NO

12. Do the sample labels agree with custody papers? (YES) NO

13. Was sufficient amount of sample sent for tests requested? (YES) NO

14. Are the samples appropriately preserved? (YES) NO N/A

15. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 218702

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/09/10
Units:	ug/L	Received:	03/10/10
Diln Fac:	1.000	Prepared:	03/12/10
Batch#:	160891		

Field ID: ASE-58A-UST-10Q1 Lab ID: 218702-004
 Type: SAMPLE Analyzed: 03/15/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	97	50-120	

Field ID: PL-201A-UST-10Q1 Lab ID: 218702-005
 Type: SAMPLE Analyzed: 03/16/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	94	50-120	

Field ID: ASE-130A-UST-10Q1 Lab ID: 218702-006
 Type: SAMPLE Analyzed: 03/16/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	1,600	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Field ID: PL-105A-UST-10Q1 Lab ID: 218702-007
 Type: SAMPLE Analyzed: 03/16/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	13,000	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Total Extractable Hydrocarbons			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/09/10
Units:	ug/L	Received:	03/10/10
Diln Fac:	1.000	Prepared:	03/12/10
Batch#:	160891		

Field ID: UST-10Q1-002 Lab ID: 218702-008
 Type: SAMPLE Analyzed: 03/16/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	14,000	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	103	50-120	

Field ID: ASE-108A-UST-10Q1 Lab ID: 218702-009
 Type: SAMPLE Analyzed: 03/16/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	1,000	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	91	50-120	

Field ID: EB-002-UST-10Q1 Lab ID: 218702-010
 Type: SAMPLE Analyzed: 03/16/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	95	50-120	

Field ID: ASE-62A-UST-10Q1 Lab ID: 218702-011
 Type: SAMPLE Analyzed: 03/16/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	94	50-120	

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/09/10
Units:	ug/L	Received:	03/10/10
Diln Fac:	1.000	Prepared:	03/12/10
Batch#:	160891		

Field ID: ASE-65A-UST-10Q1 Lab ID: 218702-012
 Type: SAMPLE Analyzed: 03/16/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	97	50-120	

Type: BLANK Analyzed: 03/16/10
 Lab ID: QC535926

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	115	50-120	

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	160891
Units:	ug/L	Prepared:	03/12/10
Diln Fac:	1.000	Analyzed:	03/15/10

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC535927

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,169	87	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	97	50-120	

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC535928

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ Flags
Diesel C10-C22	2,500	2,350	94	54-120	8	31	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

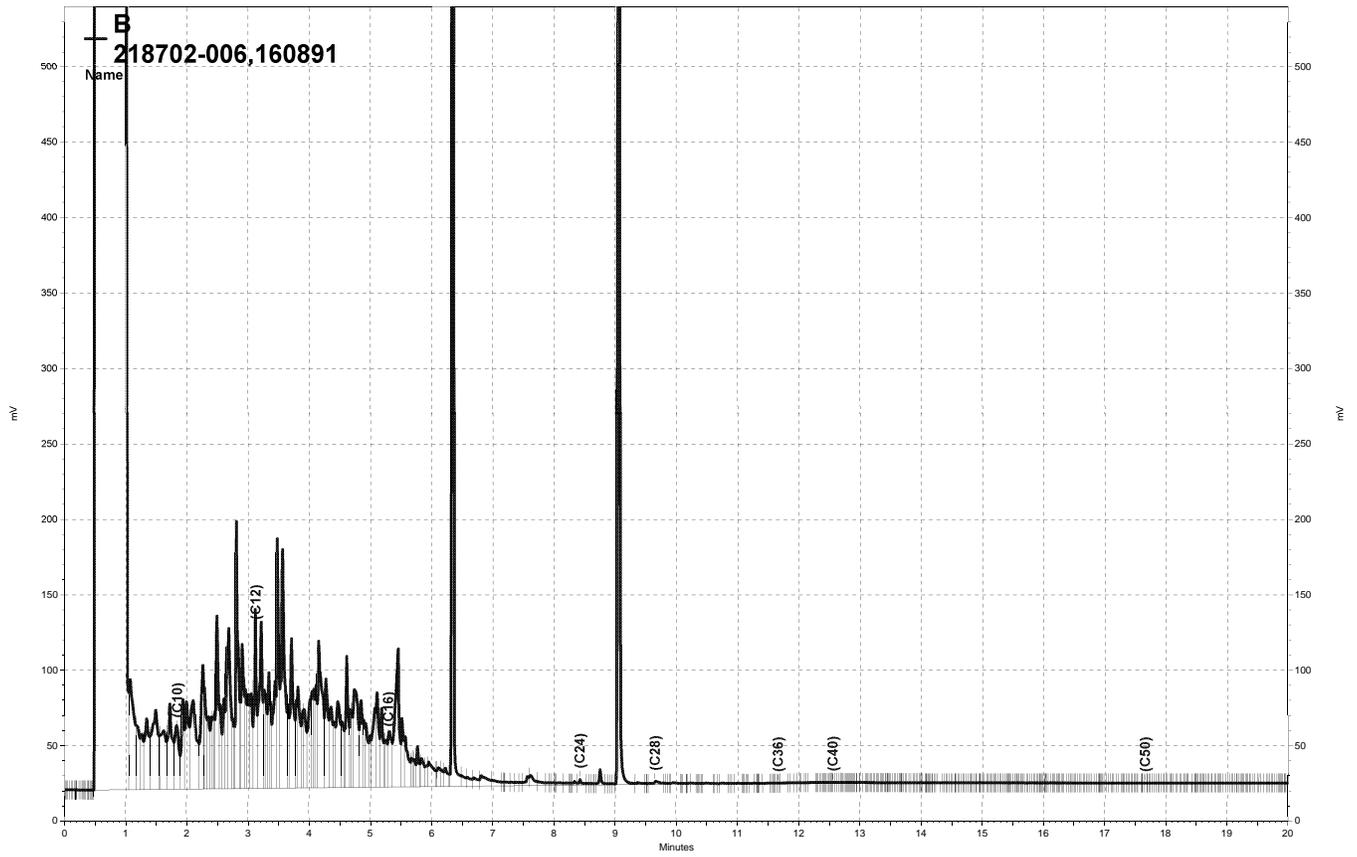
RPD= Relative Percent Difference

Batch QC Report

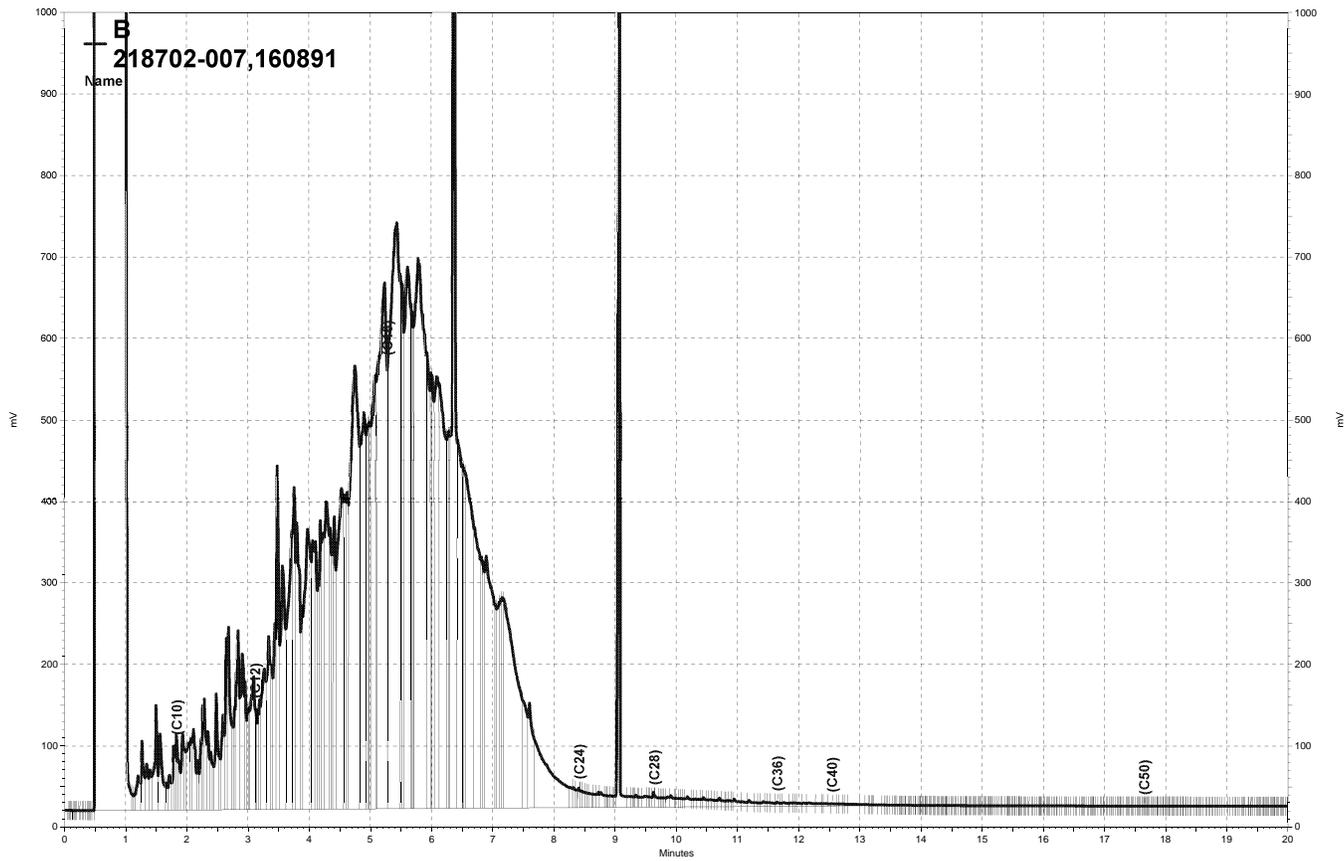
Total Extractable Hydrocarbons			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC535929	Batch#:	160891
Matrix:	Water	Prepared:	03/12/10
Units:	ug/L	Analyzed:	03/15/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,583	103	61-139	

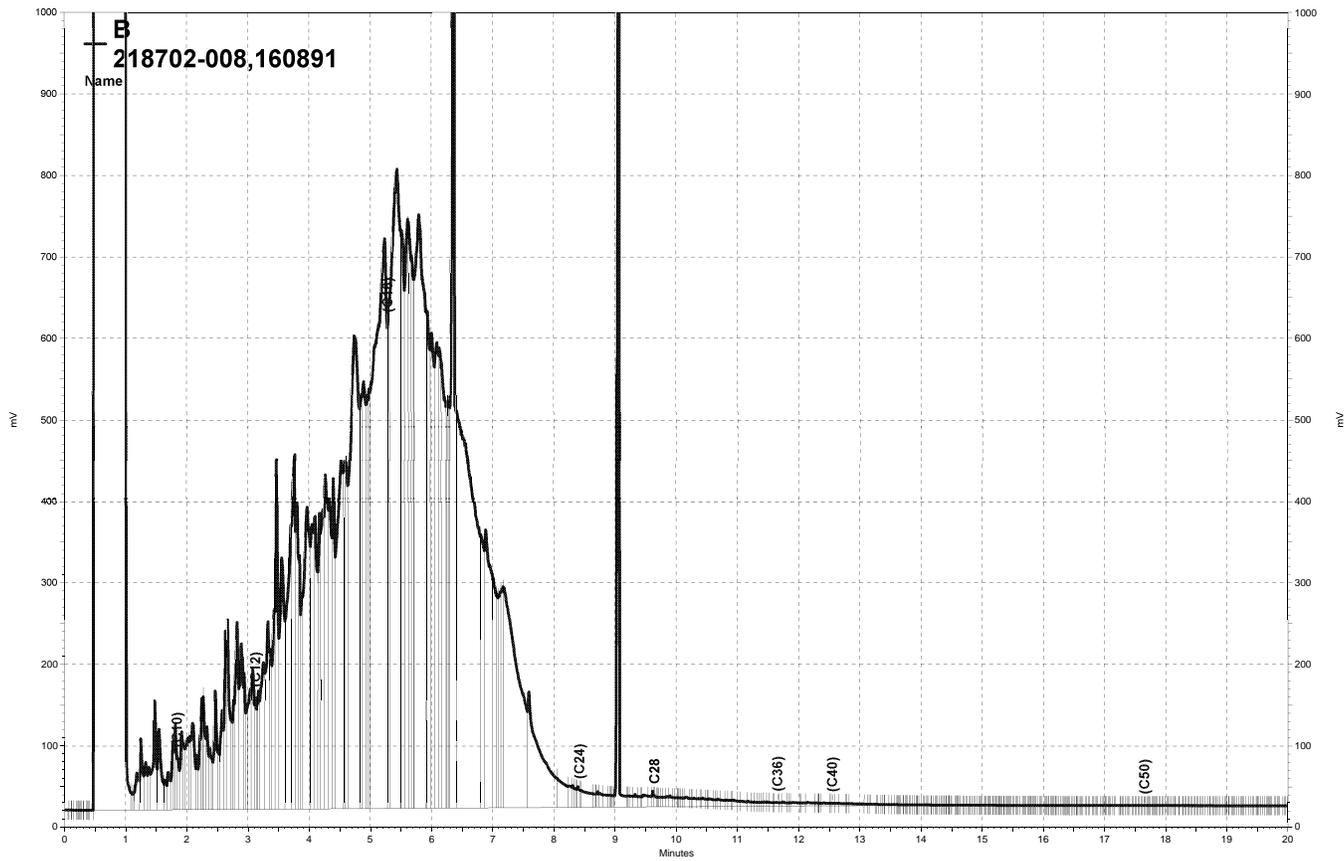
Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	93	50-120	



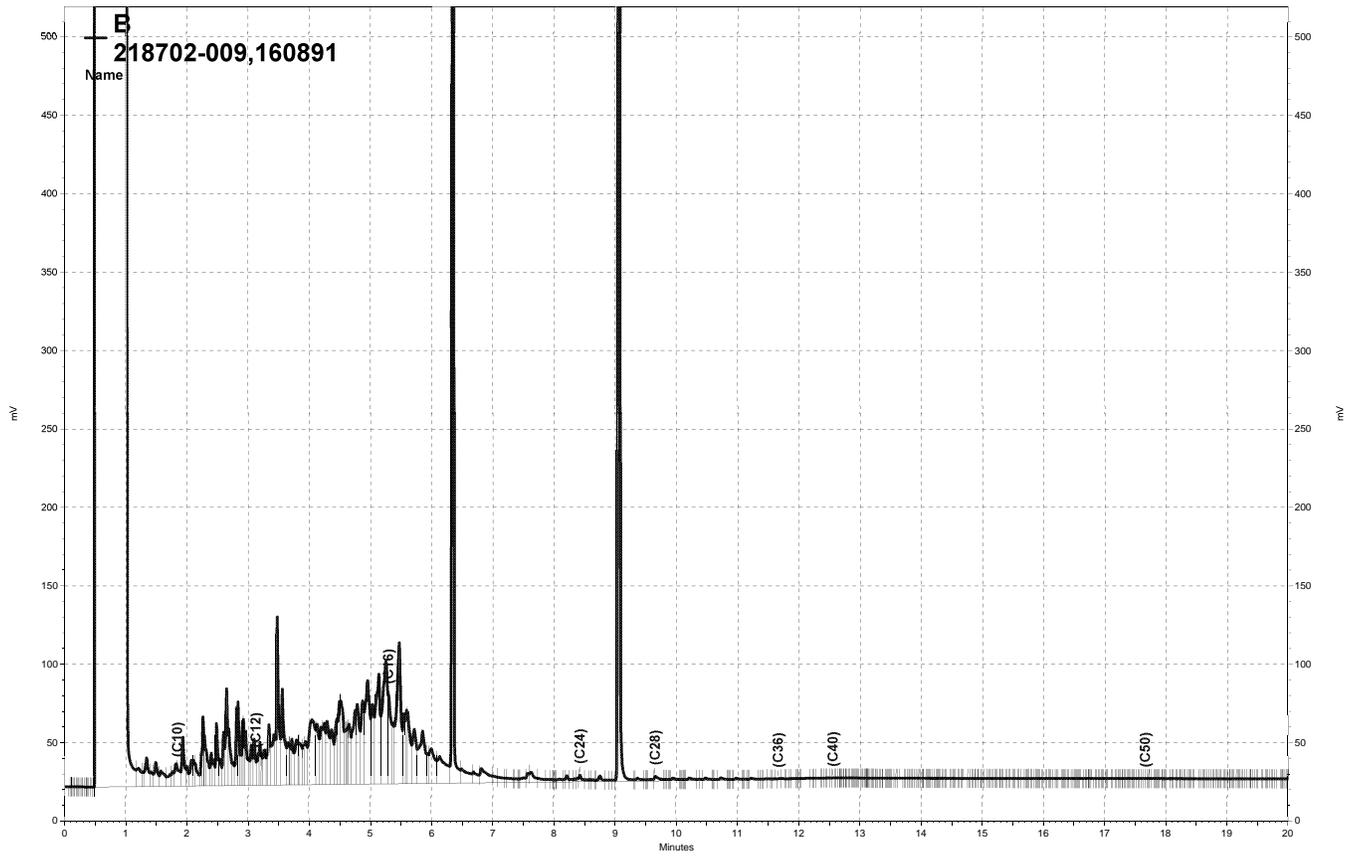
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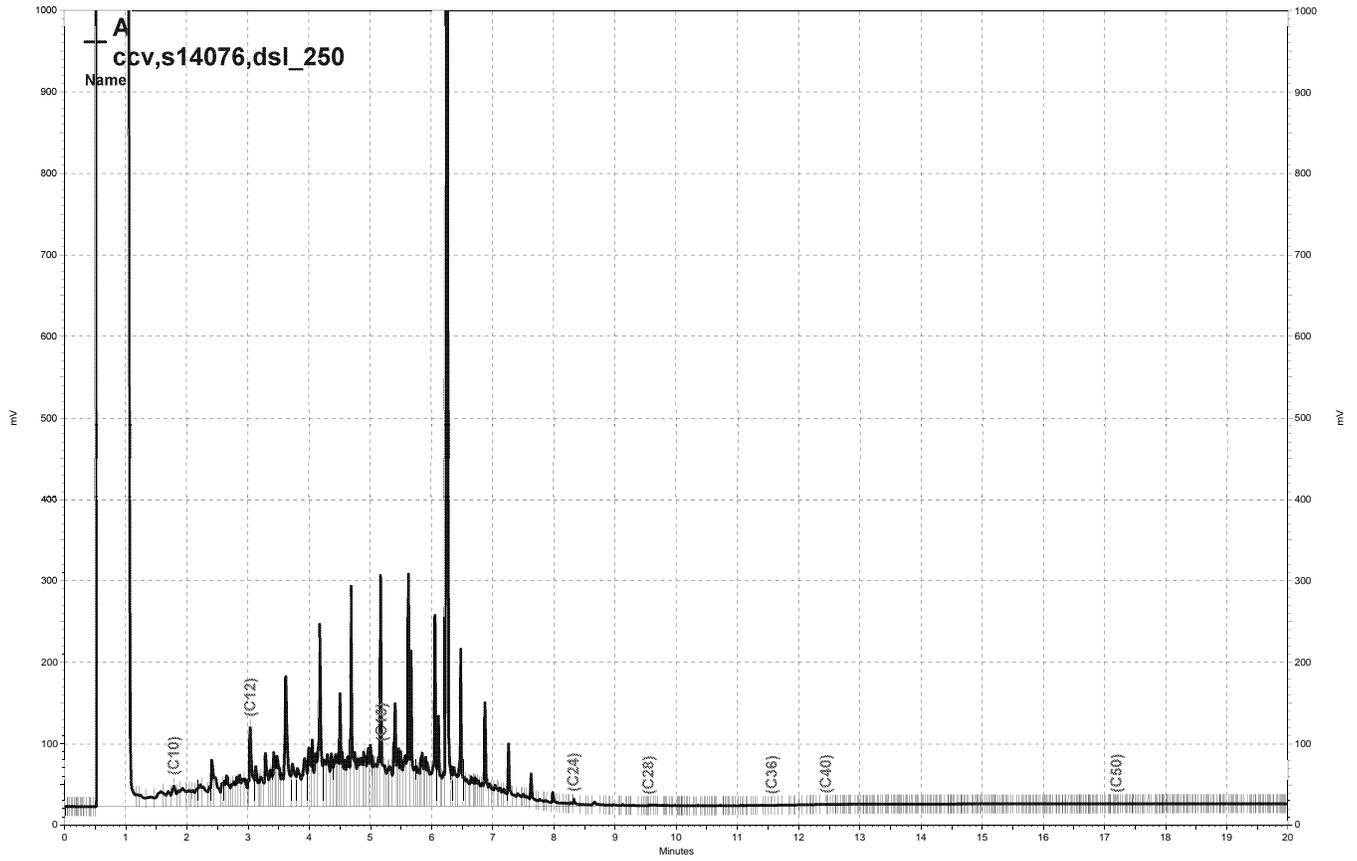
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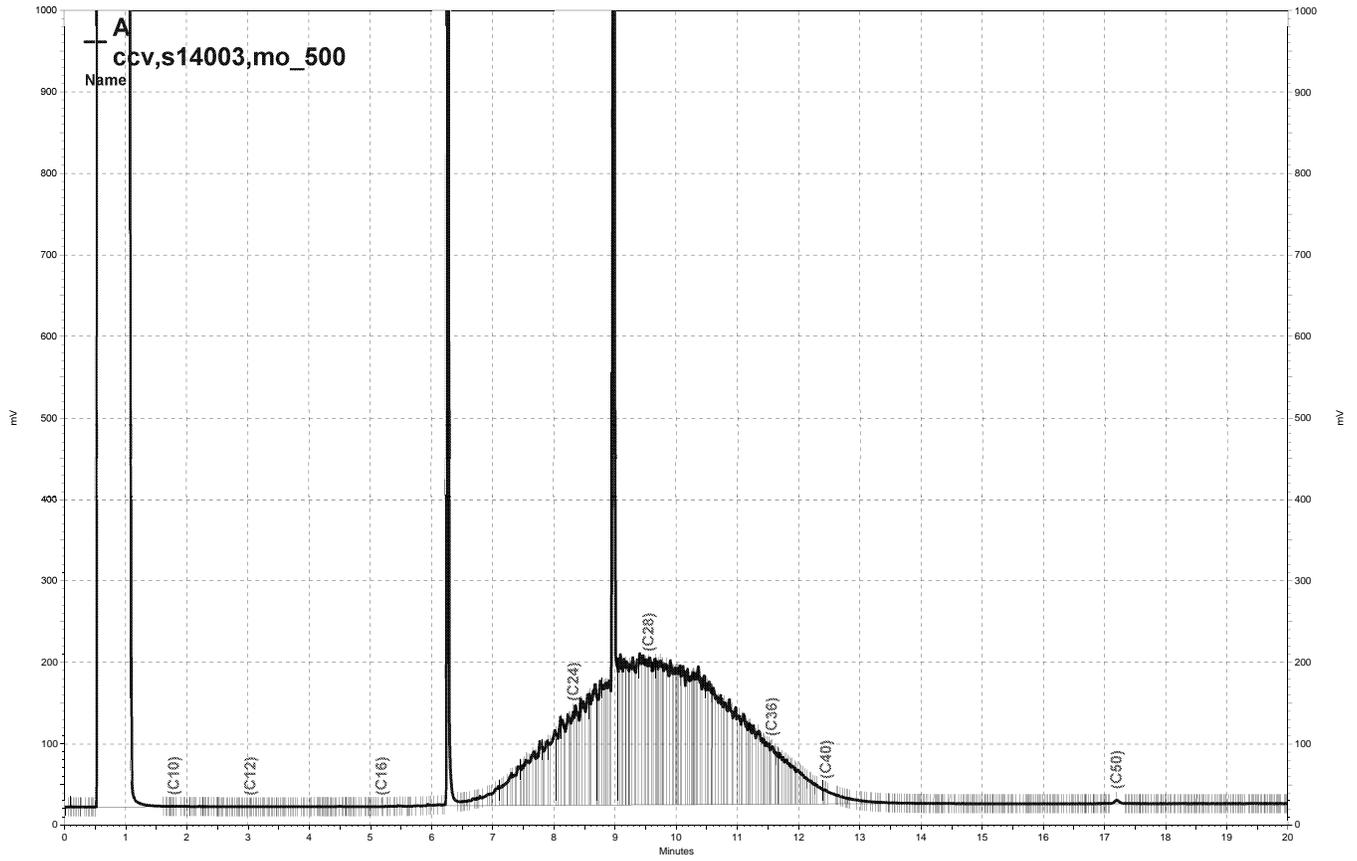
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— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\075a021, A



— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\075a020, A

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218702 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220019637002
 Units : mg/L

Name : DSL_013
 Date : 14-JAN-2010 01:32
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	013_020	220019637020	DSL_10	14-JAN-2010 01:32	S13230
L2	013_021	220019637021	DSL_100	14-JAN-2010 02:00	S13231
L3	013_022	220019637022	DSL_500	14-JAN-2010 02:28	S13232
L4	013_023	220019637023	DSL_1000	14-JAN-2010 02:55	S13233
L5	013_024	220019637024	DSL_5000	14-JAN-2010 03:23	S13229
L6	013_025	220019637025	DSL_7500	14-JAN-2010 03:50	S13234

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	30857	41804	48676	43245	43072	44897	AVRG		2.38E-5		42092	14	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	-27	100.0	-1	500.0	16	1000	3	5000	2	7500	7

TFB 01/14/10 : Levels 1-3 and ICV: corrected automatically drawn baseline.

TFB 01/14/10 : Carbon Marker scanned in after EZChrom calibrations.

Analyst: TFB Date: 01/14/10 Reviewer: EAH Date: 01/15/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218702 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 220019637002

Name : DSL_013
Cal Date : 14-JAN-2010

ICV 220019637027 (013_027 14-JAN-2010) stds: S13457

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	501.4	mg/L	0	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218702 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220027250001
 Units : mg/L

Name : HEXOTP_018
 Date : 18-JAN-2010 16:02
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_004	220027250004	HEXOTP_5	18-JAN-2010 16:02	S13690
L2	018_005	220027250005	HEXOTP_10	18-JAN-2010 16:30	S13691
L3	018_006	220027250006	HEXOTP_25	18-JAN-2010 16:58	S13692
L4	018_007	220027250007	HEXOTP_50	18-JAN-2010 17:27	S13693
L5	018_008	220027250008	HEXOTP_100	18-JAN-2010 17:55	S13694

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	51987	51113	52393	50111	49558	AVRG		1.96E-5		51032	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	B	5.000	2	10.00	0	25.00	3	50.00	-2	100.0	-3

TFB 01/18/10 : Levels 2,4,5: corrected automatically drawn baseline.

TFB 01/19/10 : Level 6 dropped due to high %D in hexacosane. Dropped from OTP for consistency.

Analyst: TFB

Date: 01/18/10

Reviewer: EAH

Date: 01/19/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218702 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220091179001
 Units : mg/L

Name : MO_063
 Date : 04-MAR-2010 16:24
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	063_016	220091179016	MO_50	04-MAR-2010 16:24	S13804
L2	063_017	220091179017	MO_250	04-MAR-2010 16:52	S13805
L3	063_018	220091179018	MO_500	04-MAR-2010 17:21	S13806
L4	063_019	220091179019	MO_1000	04-MAR-2010 17:50	S13807
L5	063_020	220091179020	MO_5000	04-MAR-2010 18:18	S13808
L6	063_021	220091179021	MO_7500	04-MAR-2010 18:47	S13809

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	B	31871	31503	30804	30203	28364	26768	AVRG		3.34E-5		29919	7	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	B	50.00	7	250.0	5	500.0	3	1000	1	5000	-5	7500	-11

JDG 03/05/10 : GC14b 063_019: MO_1000

JDG 03/05/10 : GC14b 063_020: MO_5000

Analyst: JDG

Date: 03/05/10

Reviewer: EAH

Date: 03/05/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218702 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399001
 Units : mg/L

Name : DSL_069
 Date : 10-MAR-2010 09:30
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a004	170100399004	DSL_10	10-MAR-2010 09:30	S14114
L2	069a005	170100399005	DSL_100	10-MAR-2010 09:58	S14115
L3	069a006	170100399006	DSL_500	10-MAR-2010 10:25	S14116
L4	069a007	170100399007	DSL_1000	10-MAR-2010 10:52	S14117
L5	069a008	170100399008	DSL_5000	10-MAR-2010 11:20	S14113
L6	069a009	170100399009	DSL_7500	10-MAR-2010 11:48	S14118

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Diesel C10-C22	38992	57098	61023	62848	63686	64949	AVRG		1.72E-5		58099	17	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-33	100.0	-2	500.0	5	1000	8	5000	10	7500	12

JDG 03/11/10 : Corrected automatically baseline for: Levels 1-5.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218702 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 170100399001

Name : DSL_069
Cal Date : 10-MAR-2010

ICV 170100399011 (069a011 10-MAR-2010) stds: S14077

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	542.9	mg/L	9	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218702 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399002
 Units : mg/L

Name : MO_069
 Date : 10-MAR-2010 14:05
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a014	170100399014	MO_50	10-MAR-2010 14:05	S13804
L2	069a015	170100399015	MO_250	10-MAR-2010 14:32	S13805
L3	069a016	170100399016	MO_500	10-MAR-2010 15:00	S13806
L4	069a017	170100399017	MO_1000	10-MAR-2010 15:27	S13807
L5	069a018	170100399018	MO_5000	10-MAR-2010 15:55	S13808
L6	069a019	170100399019	MO_7500	10-MAR-2010 16:23	S13809

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	44768	46378	45947	46506	45328	45626	AVRG		2.19E-5		45759	1	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	-2	250.0	1	500.0	0	1000	2	5000	-1	7500	0

JDG 03/11/10 : Corrected automatically drawn baseline for levels 2-6.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218702 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170108447001
 Units : mg/L

Name : HEXOTP_075
 Date : 16-MAR-2010 15:35
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	075a012	170108447012	HEXOTP_5	16-MAR-2010 15:35	S13690
L2	075a013	170108447013	HEXOTP_10	16-MAR-2010 16:03	S13691
L3	075a014	170108447014	HEXOTP_25	16-MAR-2010 16:30	S13692
L4	075a015	170108447015	HEXOTP_50	16-MAR-2010 16:58	S13693
L5	075a016	170108447016	HEXOTP_100	16-MAR-2010 17:25	S13694
L6	075a017	170108447017	HEXOTP_200	16-MAR-2010 17:53	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	73067	76327	75701	75675	73539	74396	AVRG		1.34E-5		74784	2	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-2	10.00	2	25.00	1	50.00	1	100.0	-2	200.0	-1

JDG 03/17/10 : Corrected automatically drawn baseline for L1 & L2.

Analyst: JDG

Date: 03/17/10

Reviewer: EAH

Date: 03/17/10

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

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
 Seqnum : 220107051004 File : 074_004 Time : 15-MAR-2010 11:38
 Standards: S14076

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	40700	250.0	241.7	mg/L	-3	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	47937	50.00	46.97	mg/L	-6	15	

Analyst: SFL Date: 03/16/10 Reviewer: PRW Date: 03/16/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220107051005 File : 074_005 Time : 15-MAR-2010 12:06
 Standards: S14003

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	30763	500.0	514.1	mg/L	3	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	47709	50.00	46.74	mg/L	-7	15	

Analyst: SFL Date: 03/16/10 Reviewer: PRW Date: 03/16/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
 Seqnum : 220107051031 File : 074_031 Time : 16-MAR-2010 05:03
 Standards: S14078

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	42435	1000	1008	mg/L	1	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	53597	50.00	52.51	mg/L	5	15	

SFL 03/16/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/16/10 Reviewer: JDG Date: 03/16/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170108447020 File : 075a020 Time : 16-MAR-2010 19:15
 Standards: S14003

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	49923	500.0	545.5	mg/L	9	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	75792	50.00	50.67	mg/L	1	15	

JDG 03/17/10 : Manually integrated fuel hump.

Analyst: JDG Date: 03/17/10 Reviewer: SFL Date: 03/17/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
 Seqnum : 170108447021 File : 075a021 Time : 16-MAR-2010 19:42
 Standards: S14076

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	170100399001	10-MAR-2010	58099	61827	250.0	266.0	mg/L	6	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	75040	50.00	50.17	mg/L	0	15	

JDG 03/17/10 : DSL_250: S14076

JDG 03/17/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/17/10 Reviewer: SFL Date: 03/17/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170108447034 File : 075a034 Time : 17-MAR-2010 01:39
 Standards: S14003

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	51964	500.0	567.8	mg/L	14	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	77882	50.00	52.07	mg/L	4	15	

Analyst: JDG Date: 03/17/10 Reviewer: SFL Date: 03/17/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_1000 IDF : 1.0
 Seqnum : 170108447035 File : 075a035 Time : 17-MAR-2010 02:07
 Standards: S14078

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	170100399001	10-MAR-2010	58099	64604	1000	1112	mg/L	11	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	80306	50.00	53.69	mg/L	7	15	

JDG 03/17/10 [o-Terphenyl A]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/17/10 Reviewer: SFL Date: 03/17/10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170100399

Instrument : GC17A Begun : 03/10/10 08:00
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	069a001	X	PRIMER			03/10/10 08:00	1.0	
002	069a002	X	IB			03/10/10 08:28	1.0	
003	069a003	IB	CALIB			03/10/10 08:55	1.0	
004	069a004	ICAL	DSL_10			03/10/10 09:30	1.0	1
005	069a005	ICAL	DSL_100			03/10/10 09:58	1.0	2
006	069a006	ICAL	DSL_500			03/10/10 10:25	1.0	3
007	069a007	ICAL	DSL_1000			03/10/10 10:52	1.0	4
008	069a008	ICAL	DSL_5000			03/10/10 11:20	1.0	5
009	069a009	ICAL	DSL_7500			03/10/10 11:48	1.0	6
010	069a010	IB	CALIB			03/10/10 12:15	1.0	
011	069a011	ICV	DSL_500			03/10/10 12:42	1.0	7
012	069a012	X	ICV			03/10/10 13:09	1.0	7
013	069a013	IB	CALIB			03/10/10 13:37	1.0	
014	069a014	ICAL	MO_50			03/10/10 14:05	1.0	8
015	069a015	ICAL	MO_250			03/10/10 14:32	1.0	9
016	069a016	ICAL	MO_500			03/10/10 15:00	1.0	10
017	069a017	ICAL	MO_1000			03/10/10 15:27	1.0	11
018	069a018	ICAL	MO_5000			03/10/10 15:55	1.0	12
019	069a019	ICAL	MO_7500			03/10/10 16:23	1.0	13
020	069a020	IB	CALIB			03/10/10 16:51	1.0	
021	069a021	CMARKER	C8-C50			03/10/10 17:19	1.0	14
022	069a022	IB	CALIB			03/10/10 17:46	1.0	

JDG 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

Standards used: 1=S14114 2=S14115 3=S14116 4=S14117 5=S14113 6=S14118 7=S14077 8=S13804 9=S13805 10=S13806 11=S13807
 12=S13808 13=S13809 14=S13646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170108447

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/16/10 07:27
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	075a001	X	PRIMER				03/16/10 07:27	1.0	
002	075a002	X	IB				03/16/10 07:55	1.0	
003	075a003	X	CMARKER				03/16/10 08:24	1.0	1
004	075a004	X	MO_500				03/16/10 08:52	1.0	2
005	075a005	X	DSL_500				03/16/10 09:19	1.0	3
006	075a006	X	JP5_250				03/16/10 09:47	1.0	4
007	075a007	X	IB				03/16/10 12:53	1.0	
008	075a008	X	CMARKER				03/16/10 13:21	1.0	1
009	075a009	X	MO_500				03/16/10 13:48	1.0	2
010	075a010	X	IB				03/16/10 14:40	1.0	
011	075a011	IB	CALIB				03/16/10 15:07	1.0	
012	075a012	ICAL	HEXOTP_5				03/16/10 15:35	1.0	5
013	075a013	ICAL	HEXOTP_10				03/16/10 16:03	1.0	6
014	075a014	ICAL	HEXOTP_25				03/16/10 16:30	1.0	7
015	075a015	ICAL	HEXOTP_50				03/16/10 16:58	1.0	8
016	075a016	ICAL	HEXOTP_100				03/16/10 17:25	1.0	9
017	075a017	ICAL	HEXOTP_200				03/16/10 17:53	1.0	10
018	075a018	IB	CALIB				03/16/10 18:20	1.0	
019	075a019	CMARKER	C8-C50				03/16/10 18:48	1.0	1
020	075a020	CCV	MO_500				03/16/10 19:15	1.0	2
021	075a021	CCV	DSL_250				03/16/10 19:42	1.0	11
022	075a022	X	CCV				03/16/10 20:10	1.0	2
023	075a023	X	CCV				03/16/10 20:37	1.0	11
024	075a024	BLANK	QC535926		Water	160891	03/16/10 21:05	1.0	
025	075a025	SAMPLE	218714-001	S	Water	160843	03/16/10 21:32	1.0	
026	075a026	BLANK	QC536089	S	Water	160933	03/16/10 22:00	1.0	
027	075a027	BLANK	QC536089		Water	160933	03/16/10 22:27	1.0	
028	075a028	BS	QC536090	S	Water	160933	03/16/10 22:54	1.0	
029	075a029	BSD	QC536091	S	Water	160933	03/16/10 23:22	1.0	
030	075a030	SAMPLE	218778-001		Water	160933	03/16/10 23:49	1.0	
031	075a031	SAMPLE	218778-002		Water	160933	03/17/10 00:17	1.0	
032	075a032	SAMPLE	218778-003		Water	160933	03/17/10 00:45	1.0	
033	075a033	SAMPLE	218778-004		Water	160933	03/17/10 01:12	1.0	
034	075a034	CCV	MO_500				03/17/10 01:39	1.0	2
035	075a035	CCV	DSL_1000				03/17/10 02:07	1.0	12
036	075a036	X	CCV				03/17/10 02:34	1.0	2
037	075a037	X	CCV				03/17/10 03:02	1.0	12
038	075a038	SAMPLE	218787-006	S	Water	160933	03/17/10 03:29	1.0	
039	075a039	SAMPLE	218787-007	S	Water	160933	03/17/10 03:56	1.0	
040	075a040	SAMPLE	218789-001	S	Water	160933	03/17/10 04:24	1.0	
041	075a041	SAMPLE	218789-002	S	Water	160933	03/17/10 04:52	1.0	
042	075a042	SAMPLE	218789-003	S	Water	160933	03/17/10 05:19	1.0	
043	075a043	X	CMARKER				03/17/10 05:47	1.0	1
044	075a044	X	MO_500				03/17/10 06:14	1.0	2
045	075a045	CCV	DSL_500				03/17/10 06:41	1.0	3
046	075a046	CCV	MO_500				03/17/10 07:09	1.0	2
047	075a047	X	CCV				03/17/10 07:36	1.0	3

JDG 03/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220019637

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/13/10 15:17
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	013_001	X	PRIMER			01/13/10 15:17	1.0	
002	013_002	X	IB			01/13/10 15:46	1.0	
003	013_003	X	CMARKER			01/13/10 16:14	1.0	1
004	013_004	X	DSL_500			01/13/10 16:43	1.0	2
005	013_005	X	MO_500			01/13/10 17:12	1.0	3
006	013_006	X	IB			01/13/10 17:48	1.0	
007	013_007	X	CMARKER			01/13/10 18:17	1.0	1
008	013_008	X	DSL_500			01/13/10 18:46	1.0	2
009	013_009	X	MO_500			01/13/10 19:15	1.0	3
010	013_010	X	IB			01/13/10 20:54	1.0	
011	013_011	X	IB			01/13/10 21:22	1.0	
012	013_012	IB	CALIB			01/13/10 21:50	1.0	
013	013_013	ICAL	HEXOTP_5			01/13/10 22:18	1.0	4
014	013_014	ICAL	HEXOTP_10			01/13/10 22:46	1.0	5
015	013_015	ICAL	HEXOTP_25			01/13/10 23:14	1.0	6
016	013_016	ICAL	HEXOTP_50			01/13/10 23:42	1.0	7
017	013_017	ICAL	HEXOTP_100			01/14/10 00:09	1.0	8
018	013_018	ICAL	HEXOTP_200			01/14/10 00:37	1.0	9
019	013_019	IB	CALIB			01/14/10 01:04	1.0	
020	013_020	ICAL	DSL_10			01/14/10 01:32	1.0	10
021	013_021	ICAL	DSL_100			01/14/10 02:00	1.0	11
022	013_022	ICAL	DSL_500			01/14/10 02:28	1.0	12
023	013_023	ICAL	DSL_1000			01/14/10 02:55	1.0	13
024	013_024	ICAL	DSL_5000			01/14/10 03:23	1.0	14
025	013_025	ICAL	DSL_7500			01/14/10 03:50	1.0	15
026	013_026	IB	CALIB			01/14/10 04:18	1.0	
027	013_027	ICV	DSL_500			01/14/10 04:46	1.0	2
028	013_028	X	ICV			01/14/10 05:14	1.0	2
029	013_029	IB	CALIB			01/14/10 05:43	1.0	
030	013_030	ICAL	MO_50			01/14/10 06:11	1.0	16
031	013_031	ICAL	MO_250			01/14/10 06:39	1.0	17
032	013_032	ICAL	MO_500			01/14/10 07:07	1.0	18
033	013_033	ICAL	MO_1000			01/14/10 07:34	1.0	19
034	013_034	ICAL	MO_5000			01/14/10 08:02	1.0	20
035	013_035	ICAL	MO_7500			01/14/10 08:30	1.0	21
036	013_036	IB	CALIB			01/14/10 08:58	1.0	
037	013_037	CMARKER	C8-C50			01/14/10 09:26	1.0	1
038	013_038	IB	CALIB			01/14/10 09:54	1.0	

TFB 01/14/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

Standards used: 1=S12636 2=S13457 3=S13471 4=S13690 5=S13691 6=S13692 7=S13693 8=S13694 9=S13695 10=S13230 11=S13231
 12=S13232 13=S13233 14=S13229 15=S13234 16=S12675 17=S12676 18=S12677 19=S12678 20=S12679 21=S12680

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220027250

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/18/10 14:37
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	018_001	X	PRIMER			01/18/10 14:37	1.0	
002	018_002	X	IB			01/18/10 15:05	1.0	
003	018_003	IB	CALIB			01/18/10 15:33	1.0	
004	018_004	ICAL	HEXOTP_5			01/18/10 16:02	1.0	1
005	018_005	ICAL	HEXOTP_10			01/18/10 16:30	1.0	2
006	018_006	ICAL	HEXOTP_25			01/18/10 16:58	1.0	3
007	018_007	ICAL	HEXOTP_50			01/18/10 17:27	1.0	4
008	018_008	ICAL	HEXOTP_100			01/18/10 17:55	1.0	5
009	018_009	X	HEXOTP_200			01/18/10 18:24	1.0	6
010	018_010	IB	CALIB			01/18/10 18:53	1.0	
011	018_011	ICAL	MO_50			01/18/10 19:21	1.0	7
012	018_012	ICAL	MO_250			01/18/10 19:49	1.0	8
013	018_013	ICAL	MO_500			01/18/10 20:18	1.0	9
014	018_014	ICAL	MO_1000			01/18/10 20:46	1.0	10
015	018_015	ICAL	MO_5000			01/18/10 21:14	1.0	11
016	018_016	ICAL	MO_7500			01/18/10 21:42	1.0	12
017	018_017	CMARKER	C8-C50			01/18/10 22:10	1.0	13
018	018_018	CCV	DSL_500			01/18/10 22:38	1.0	14
019	018_019	CCV	MO_500			01/18/10 23:06	1.0	15
020	018_020	BLANK	QC489059	Soil	149293	01/18/10 23:35	1.0	
021	018_021	MDL	207486-001	Soil	149293	01/19/10 00:03	1.0	
022	018_022	MDL	207486-002	Soil	149293	01/19/10 00:31	1.0	
023	018_023	MDL	207486-003	Soil	149293	01/19/10 00:59	1.0	
024	018_024	MDL	207486-004	Soil	149293	01/19/10 01:27	1.0	
025	018_025	MDL	207486-005	Soil	149293	01/19/10 01:55	1.0	
026	018_026	MDL	207486-006	Soil	149293	01/19/10 02:23	1.0	
027	018_027	MDL	207486-007	Soil	149293	01/19/10 02:50	1.0	
028	018_028	MDL	207486-008	Soil	149293	01/19/10 03:18	1.0	
029	018_029	LOD	212266-010	Water	159144	01/19/10 03:46	1.0	
030	018_030	CCV	DSL_250			01/19/10 04:15	1.0	16
031	018_031	CCV	MO_500			01/19/10 04:43	1.0	15
032	018_032	X	CCV			01/19/10 05:11	1.0	16
033	018_033	X	CCV			01/19/10 05:39	1.0	15

TFB 01/18/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S13690 2=S13691 3=S13692 4=S13693 5=S13694 6=S13695 7=S12675 8=S12676 9=S12677 10=S12678 11=S12679
 12=S12680 13=S12636 14=S13457 15=S13744 16=S13456

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220107051

Instrument : GC14B
 Method : EPA 8015B

Begun : 03/15/10 08:11
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	074_001	X	PRIMER				03/15/10 08:11	1.0		
002	074_002	X	IB				03/15/10 08:39	1.0		
003	074_003	X	CMARKER				03/15/10 09:08	1.0	1	
004	074_004	CCV	DSL_250				03/15/10 11:38	1.0	2	
005	074_005	CCV	MO_500				03/15/10 12:06	1.0	3	
006	074_006	BLANK	QC535926	S	Water	160891	03/15/10 17:20	1.0		
007	074_007	BLANK	QC535926		Water	160891	03/15/10 17:48	1.0		
008	074_008	BS	QC535927	S	Water	160891	03/15/10 18:17	1.0		
009	074_009	BSD	QC535928	S	Water	160891	03/15/10 18:45	1.0		
010	074_010	LCS	QC535929		Water	160891	03/15/10 19:13	1.0		
011	074_011	SAMPLE	218741-071	S	Water	160891	03/15/10 19:40	1.0		
012	074_012	SAMPLE	218741-072	S	Water	160891	03/15/10 20:08	1.0		
013	074_013	SAMPLE	218756-001	S	Water	160891	03/15/10 20:36	1.0		
014	074_014	SAMPLE	218756-002	S	Water	160891	03/15/10 21:04	1.0		
015	074_015	SAMPLE	218722-002	S	Water	160837	03/15/10 21:32	1.0		
016	074_016	CCV	DSL_500				03/15/10 22:00	1.0	4	
017	074_017	CCV	MO_500				03/15/10 22:28	1.0	3	
018	074_018	X	CCV				03/15/10 22:57	1.0	4	
019	074_019	X	CCV				03/15/10 23:25	1.0	3	
020	074_020	SAMPLE	218702-004		Water	160891	03/15/10 23:53	1.0		
021	074_021	SAMPLE	218702-005		Water	160891	03/16/10 00:22	1.0		
022	074_022	SAMPLE	218702-006		Water	160891	03/16/10 00:50	1.0		
023	074_023	SAMPLE	218702-007		Water	160891	03/16/10 01:18	1.0		2:BUNKC:12-40=12000
024	074_024	SAMPLE	218702-008		Water	160891	03/16/10 01:46	1.0		2:BUNKC:12-40=14000
025	074_025	SAMPLE	218702-009		Water	160891	03/16/10 02:14	1.0		
026	074_026	SAMPLE	218702-010		Water	160891	03/16/10 02:42	1.0		
027	074_027	SAMPLE	218702-011		Water	160891	03/16/10 03:11	1.0		
028	074_028	SAMPLE	218702-012		Water	160891	03/16/10 03:39	1.0		
029	074_029	SAMPLE	218741-052	S	Soil	160903	03/16/10 04:07	5.0		2:BUNKC:12-40=10000
030	074_030	X	CMARKER				03/16/10 04:35	1.0	1	
031	074_031	CCV	DSL_1000				03/16/10 05:03	1.0	5	
032	074_032	CCV	MO_500				03/16/10 05:32	1.0	3	
033	074_033	X	CCV				03/16/10 06:00	1.0	5	
034	074_034	X	CCV				03/16/10 06:28	1.0	3	
035	074_035	IB	CALIB				03/16/10 06:56	1.0		
036	074_036	ICAL	JP5_10				03/16/10 07:24	1.0	6	
037	074_037	ICAL	JP5_100				03/16/10 08:00	1.0	7	
038	074_038	ICAL	JP5_500				03/16/10 08:28	1.0	8	
039	074_039	ICAL	JP5_1500				03/16/10 08:56	1.0	9	
040	074_040	ICAL	JP5_2500				03/16/10 09:25	1.0	10	
041	074_041	ICAL	JP5_5000				03/16/10 09:53	1.0	11	
042	074_042	IB	CALIB				03/16/10 10:22	1.0		
043	074_043	CMARKER	C8-C50				03/16/10 10:50	1.0	12	
044	074_044	IB	CALIB				03/16/10 11:18	1.0		

SFL 03/16/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 34.

SFL 03/16/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 35 through 44.

SAMPLE PREPARATION SUMMARY

Batch # : 160891		Analysis : TEH
Started By : CRD	Prep Date : 12-MAR-2010 16:15	Finished By : MB2
Method : 3520C	SOP Version : TEH_3520_rv12	Units : mL
Spike #1 ID : S14152	Spike #2 ID : S14101	Spike #3 ID : S13010

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
218702-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218702-005		Water	500	2.5	1	0.005	7	.5				TEHM	
218702-006		Water	500	2.5	1	0.005	7	.5				TEHM	
218702-007		Water	500	2.5	1	0.005	7	.5				TEHM	
218702-008		Water	500	2.5	1	0.005	7	.5				TEHM	
218702-009		Water	500	2.5	1	0.005	7	.5				TEHM	
218702-010		Water	500	2.5	1	0.005	5	.5				TEHM	
218702-011		Water	500	2.5	1	0.005	7	.5				TEHM	
218702-012		Water	500	2.5	1	0.005	7	.5				TEHM	
218734-001		Water	500	2.5	1	0.005	7	.5				TEH	
218734-002		Water	500	2.5	1	0.005	7	.5				TEH	
218734-003		Water	500	2.5	1	0.005	7	.5				TEH	
218734-004		Water	500	2.5	1	0.005	7	.5				TEH	
218734-005		Water	500	2.5	1	0.005	7	.5				TEH	
218734-006		Water	500	2.5	1	0.005	7	.5				TEH	
218741-071		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
218741-072		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
218756-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	sediment
218756-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC535926	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC535927	BS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC535928	BSD	Water	500	2.5	1	0.005		.5	.5		3630C		
QC535929	LCS	Water	500	2.5	1	0.005		.5		.5			

JDG 03/17/10 : Matrix spikes were not performed for this analysis in batch 160891 due to insufficient sample amount.

Analyst: SFL Date: 03/17/10 Reviewer: JDG Date: 03/17/10

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

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BK 2968

LIMS Batch No: 160891
 LIMS Analysis: TEH/M
 Date Extracted: 3/12/10

Extraction Method:
 mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
 EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
218702-004	E	500	7	2.5		
	05					
	06					
	07					
	08					
	09					
	10		5			
	11		7			
	12					
218734-001	I					
	2					
	3					
	4					
	5					
	6					
218741-071	J		5		X	
	72					
218756-001	G		7			sediment
	2					
MB QC535926	NA		NA			
BS	7					
BSD	8					
* MOLLCS	9					

Mfg & Lot# / LIMS # / Time Date/ Initials

0.5 mL of TEH_SURR was added to all samples	514152A	CRD 3/2/10
0.5 mL of TEH_SP was added to all spikes	514101A / 513010C	
pH of all samples adjusted to pH ≤ 2 with H ₂ SO ₄	ES094395	
<input checked="" type="checkbox"/> 3520c: Samples were continually extracted about 450 mL of CH ₂ Cl ₂	EM49338	
Extraction Start Time:	1415	
Extraction End Time:	1425	CRD 3/13/10
<input type="checkbox"/> 3510c: Samples were extracted 3 times with 60 mL of CH ₂ Cl ₂	NA	MBSZ 3/15/10
Extracts filtered through baked, CH ₂ Cl ₂ -rinsed granular Na ₂ SO ₄	EM49247942	
Concentrated to final volume at temperature (degrees C)	100	
Relinquished to TEH Department	✓	

[Signature] 3/12/10
 Extraction Chemist Date

Continued from Page
 Continued on Page

[Signature] 3/16/10
 Reviewed by Date

Prep Chemist: MBZ
 Cleanup Date: 3/15/10

Benchbook # **BK 2983**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
218741-071 ↓ 072	160891	1.0	1.0	
218756-001 ↓ 002	↓	↓	↓	
5 MB QL 535926	↓	↓	↓	
BS ↓ 7	↓	↓	↓	
BSD ↓ 8	↓	↓	↓	
KRM 3/16/10				

Extracts were cleaned up using C&T assembled _____ g columns

Extracts were cleaned up using 1.0 g cartridges

Extracts were eluted with 4.0 mL CH₂Cl₂

Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
NA	MBZ 3/15/10
SP1476801	↓
EM49338	↓

[Signature] 3/15/10
 Extraction Chemist / Date

Continued from page /
 Continued on page /

[Signature] 3/16/10
 Reviewed by / Date

Laboratory Job Number 218702

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-002-UST-10Q1	Batch#:	161142
Lab ID:	218702-001	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-002-UST-10Q1	Batch#:	161142
Lab ID:	218702-001	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-118A-UST-10Q1	Batch#:	161142
Lab ID:	218702-002	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	R5
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	4.5	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	7.1	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	2.7	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.8	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	2.0	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	12	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.2	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-118A-UST-10Q1	Batch#:	161142
Lab ID:	218702-002	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	113	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-22AR-UST-10Q1	Batch#:	161142
Lab ID:	218702-003	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	6.4	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	5.5	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	4.4	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.7	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	37	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.0	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-22AR-UST-10Q1	Batch#:	161142
Lab ID:	218702-003	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	94	77-120	
1,2-Dichloroethane-d4	93	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	97	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-58A-UST-10Q1	Batch#:	161142
Lab ID:	218702-004	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	0.5	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	2.8	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	5.1	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	13	0.5	
Trichloroethene	1.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-58A-UST-10Q1	Batch#:	161142
Lab ID:	218702-004	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	3.3	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	1.1	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	1.6	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	1.0	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	2.9	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	94	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	97	83-125	
Bromofluorobenzene	98	78-120	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-201A-UST-10Q1	Batch#:	161142
Lab ID:	218702-005	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	1.7	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	16	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	18	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.8	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	2.8	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-201A-UST-10Q1	Batch#:	161142
Lab ID:	218702-005	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	94	77-120	
1,2-Dichloroethane-d4	89	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	98	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-130A-UST-10Q1	Units:	ug/L
Lab ID:	218702-006	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	1.000	161142	03/22/10	
Chloromethane	ND	1.0	1.000	161142	03/22/10	
Vinyl Chloride	ND	0.5	1.000	161142	03/22/10	
Bromomethane	ND	1.0	1.000	161142	03/22/10	
Chloroethane	1.9	1.0	1.000	161142	03/22/10	
Trichlorofluoromethane	ND	1.0	1.000	161142	03/22/10	
Iodomethane	ND	10	1.000	161142	03/22/10	
Acetone	ND	10	1.000	161142	03/22/10	
1,1-Dichloroethene	ND	0.5	1.000	161142	03/22/10	
Methylene Chloride	ND	10	1.000	161142	03/22/10	
Carbon Disulfide	ND	0.5	1.000	161142	03/22/10	
MTBE	150	1.0	2.000	161182	03/23/10	D2
trans-1,2-Dichloroethene	ND	0.5	1.000	161142	03/22/10	
Vinyl Acetate	ND	10	1.000	161142	03/22/10	
1,1-Dichloroethane	1.6	0.5	1.000	161142	03/22/10	
2-Butanone	ND	10	1.000	161142	03/22/10	
cis-1,2-Dichloroethene	ND	0.5	1.000	161142	03/22/10	
2,2-Dichloropropane	ND	0.5	1.000	161142	03/22/10	
Chloroform	ND	0.5	1.000	161142	03/22/10	
Bromochloromethane	ND	0.5	1.000	161142	03/22/10	
1,1,1-Trichloroethane	ND	0.5	1.000	161142	03/22/10	
1,1-Dichloropropene	ND	0.5	1.000	161142	03/22/10	
Carbon Tetrachloride	ND	0.5	1.000	161142	03/22/10	
1,2-Dichloroethane	ND	0.5	1.000	161142	03/22/10	
Benzene	90	0.5	1.000	161142	03/22/10	
Trichloroethene	ND	0.5	1.000	161142	03/22/10	
1,2-Dichloropropane	ND	0.5	1.000	161142	03/22/10	
Bromodichloromethane	ND	0.5	1.000	161142	03/22/10	
Dibromomethane	ND	0.5	1.000	161142	03/22/10	
4-Methyl-2-Pentanone	ND	10	1.000	161142	03/22/10	
cis-1,3-Dichloropropene	ND	0.5	1.000	161142	03/22/10	
Toluene	ND	0.5	1.000	161142	03/22/10	
trans-1,3-Dichloropropene	ND	0.5	1.000	161142	03/22/10	
1,1,2-Trichloroethane	ND	0.5	1.000	161142	03/22/10	
2-Hexanone	ND	10	1.000	161142	03/22/10	
1,3-Dichloropropane	ND	0.5	1.000	161142	03/22/10	
Tetrachloroethene	ND	0.5	1.000	161142	03/22/10	
Dibromochloromethane	ND	0.5	1.000	161142	03/22/10	
1,2-Dibromoethane	ND	0.5	1.000	161142	03/22/10	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-130A-UST-10Q1	Units:	ug/L
Lab ID:	218702-006	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10

Analyte	Result	RL	Diln Fac	Batch#	Analyzed	ADEQ Flags
Chlorobenzene	ND	0.5	1.000	161142	03/22/10	
1,1,1,2-Tetrachloroethane	ND	0.5	1.000	161142	03/22/10	
Ethylbenzene	17	0.5	1.000	161142	03/22/10	
m,p-Xylenes	5.7	0.5	1.000	161142	03/22/10	
o-Xylene	ND	0.5	1.000	161142	03/22/10	
Styrene	ND	0.5	1.000	161142	03/22/10	
Bromoform	ND	1.0	1.000	161142	03/22/10	
Isopropylbenzene	11	0.5	1.000	161142	03/22/10	
1,1,2,2-Tetrachloroethane	ND	0.5	1.000	161142	03/22/10	
1,2,3-Trichloropropane	ND	0.5	1.000	161142	03/22/10	
Propylbenzene	9.6	0.5	1.000	161142	03/22/10	
Bromobenzene	ND	0.5	1.000	161142	03/22/10	
1,3,5-Trimethylbenzene	1.3	0.5	1.000	161142	03/22/10	
2-Chlorotoluene	ND	0.5	1.000	161142	03/22/10	
4-Chlorotoluene	ND	0.5	1.000	161142	03/22/10	
tert-Butylbenzene	0.9	0.5	1.000	161142	03/22/10	
1,2,4-Trimethylbenzene	11	0.5	1.000	161142	03/22/10	
sec-Butylbenzene	3.2	0.5	1.000	161142	03/22/10	
para-Isopropyl Toluene	1.5	0.5	1.000	161142	03/22/10	
1,3-Dichlorobenzene	ND	0.5	1.000	161142	03/22/10	
1,4-Dichlorobenzene	ND	0.5	1.000	161142	03/22/10	
n-Butylbenzene	3.7	0.5	1.000	161142	03/22/10	
1,2-Dichlorobenzene	ND	0.5	1.000	161142	03/22/10	
1,2-Dibromo-3-Chloropropane	ND	2.0	1.000	161142	03/22/10	
1,2,4-Trichlorobenzene	ND	0.5	1.000	161142	03/22/10	
Hexachlorobutadiene	ND	2.0	1.000	161142	03/22/10	
Naphthalene	27	2.0	1.000	161142	03/22/10	
1,2,3-Trichlorobenzene	ND	0.5	1.000	161142	03/22/10	
Xylene (total)	5.7	0.5	1.000	161142	03/22/10	

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	94	77-120	1.000	161142	03/22/10	
Dibromofluoromethane	105	77-120	2.000	161182	03/23/10	
1,2-Dichloroethane-d4	83	70-127	1.000	161142	03/22/10	
1,2-Dichloroethane-d4	109	70-127	2.000	161182	03/23/10	
Toluene-d8	100	83-125	1.000	161142	03/22/10	
Toluene-d8	107	83-125	2.000	161182	03/23/10	
Bromofluorobenzene	103	78-120	1.000	161142	03/22/10	
Bromofluorobenzene	102	78-120	2.000	161182	03/23/10	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-105A-UST-10Q1	Batch#:	161142
Lab ID:	218702-007	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	1.3	0.5	
Bromomethane	ND	1.0	
Chloroethane	2.6	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	59	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	13	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.9	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	41	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-105A-UST-10Q1	Batch#:	161142
Lab ID:	218702-007	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	0.9	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	0.7	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	17	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	15	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	0.7	0.5	
1,2,4-Trimethylbenzene	0.9	0.5	
sec-Butylbenzene	4.8	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	6.5	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	12	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	0.7	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	94	77-120	
1,2-Dichloroethane-d4	88	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-002	Batch#:	161142
Lab ID:	218702-008	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	1.8	0.5	
Bromomethane	ND	1.0	
Chloroethane	2.8	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	66	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	15	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.8	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	46	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-002	Batch#:	161142
Lab ID:	218702-008	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	0.9	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	0.6	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	16	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	16	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	0.7	0.5	
1,2,4-Trimethylbenzene	0.8	0.5	
sec-Butylbenzene	4.7	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	7.4	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	14	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	0.6	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	110	70-127	
Toluene-d8	107	83-125	
Bromofluorobenzene	97	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-UST-10Q1	Batch#:	161142
Lab ID:	218702-009	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	1.6	0.5	
Bromomethane	ND	1.0	
Chloroethane	1.8	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	11	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	33	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	15	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.2	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	8.7	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	25	0.5	
Trichloroethene	4.1	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-108A-UST-10Q1	Batch#:	161142
Lab ID:	218702-009	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	6.5	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	5.4	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	2.6	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	3.2	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	8.1	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	92	70-127	
Toluene-d8	97	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-002-UST-10Q1	Batch#:	161142
Lab ID:	218702-010	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	0.6	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-002-UST-10Q1	Batch#:	161142
Lab ID:	218702-010	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-62A-UST-10Q1	Batch#:	161142
Lab ID:	218702-011	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	0.5	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	5.1	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	7.3	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-62A-UST-10Q1	Batch#:	161142
Lab ID:	218702-011	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	0.6	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	95	77-120	
1,2-Dichloroethane-d4	91	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	97	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-65A-UST-10Q1	Batch#:	161142
Lab ID:	218702-012	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	0.8	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.5	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.7	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.7	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-65A-UST-10Q1	Batch#:	161142
Lab ID:	218702-012	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	96	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	98	78-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536949	Batch#:	161142
Matrix:	Water	Analyzed:	03/22/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	17.04	68	56-140	
Chloromethane	25.00	20.18	81	46-142	
Vinyl Chloride	25.00	21.46	86	49-136	
Bromomethane	25.00	27.83	111	42-154	
Chloroethane	25.00	24.39	98	51-133	
Trichlorofluoromethane	25.00	23.66	95	63-135	
Iodomethane	25.00	25.07 b	100	70-130	
Acetone	25.00	24.44	98	48-130	
1,1-Dichloroethene	25.00	30.20	121	68-133	
Methylene Chloride	25.00	25.30	101	71-120	
Carbon Disulfide	25.00	26.43	106	56-120	
MTBE	25.00	21.49	86	58-120	
trans-1,2-Dichloroethene	25.00	26.96	108	80-120	
Vinyl Acetate	25.00	30.73	123	63-124	
1,1-Dichloroethane	25.00	26.27	105	77-120	
2-Butanone	25.00	23.31	93	57-120	
cis-1,2-Dichloroethene	25.00	27.23	109	75-120	
2,2-Dichloropropane	25.00	29.74	119	72-128	
Chloroform	25.00	25.50	102	78-120	
Bromochloromethane	25.00	26.30	105	78-120	
1,1,1-Trichloroethane	25.00	25.52	102	78-120	
1,1-Dichloropropene	25.00	27.56	110	75-120	
Carbon Tetrachloride	25.00	24.83	99	80-120	
1,2-Dichloroethane	25.00	22.58	90	74-120	
Benzene	25.00	27.41	110	77-120	
Trichloroethene	25.00	26.23	105	78-122	
1,2-Dichloropropane	25.00	24.64	99	76-120	
Bromodichloromethane	25.00	24.16	97	78-120	
Dibromomethane	25.00	23.95	96	77-120	
4-Methyl-2-Pentanone	25.00	21.66	87	65-120	
cis-1,3-Dichloropropene	25.00	25.39	102	76-120	
Toluene	25.00	28.07	112	73-120	
trans-1,3-Dichloropropene	25.00	23.15	93	72-120	
1,1,2-Trichloroethane	25.00	25.77	103	76-120	
2-Hexanone	25.00	23.79	95	57-121	
1,3-Dichloropropane	25.00	26.14	105	75-120	
Tetrachloroethene	25.00	28.61	114	77-120	
Dibromochloromethane	25.00	24.57	98	76-120	

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536949	Batch#:	161142
Matrix:	Water	Analyzed:	03/22/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	26.14	105	77-120	
Chlorobenzene	25.00	26.52	106	78-120	
1,1,1,2-Tetrachloroethane	25.00	27.08	108	77-120	
Ethylbenzene	25.00	28.86	115	78-120	
m,p-Xylenes	50.00	58.80	118	77-120	
o-Xylene	25.00	27.89	112	77-120	
Styrene	25.00	27.83	111	77-120	
Bromoform	25.00	24.60	98	74-121	
Isopropylbenzene	25.00	24.79	99	71-120	
1,1,2,2-Tetrachloroethane	25.00	25.97	104	73-120	
1,2,3-Trichloropropane	25.00	24.37	97	72-120	
Propylbenzene	25.00	28.42	114	76-120	
Bromobenzene	25.00	27.99	112	75-120	
1,3,5-Trimethylbenzene	25.00	29.07	116	77-120	
2-Chlorotoluene	25.00	28.28	113	76-120	
4-Chlorotoluene	25.00	27.29	109	78-120	
tert-Butylbenzene	25.00	28.63	115	76-120	
1,2,4-Trimethylbenzene	25.00	26.90	108	77-120	
sec-Butylbenzene	25.00	29.27	117	80-120	
para-Isopropyl Toluene	25.00	27.72	111	76-120	
1,3-Dichlorobenzene	25.00	26.37	105	75-120	
1,4-Dichlorobenzene	25.00	26.55	106	77-120	
n-Butylbenzene	25.00	28.60	114	76-120	
1,2-Dichlorobenzene	25.00	25.97	104	76-120	
1,2-Dibromo-3-Chloropropane	25.00	21.95	88	65-120	
1,2,4-Trichlorobenzene	25.00	26.09	104	73-121	
Hexachlorobutadiene	25.00	27.52	110	73-123	
Naphthalene	25.00	25.41	102	62-121	
1,2,3-Trichlorobenzene	25.00	26.45	106	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	93	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	99	78-120	

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536950	Batch#:	161142
Matrix:	Water	Analyzed:	03/22/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536950	Batch#:	161142
Matrix:	Water	Analyzed:	03/22/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-118A-UST-10Q1	Batch#:	161142
MSS Lab ID:	218702-002	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Type: MS Lab ID: QC536951

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	<0.1733	25.00	16.38	66	56-140		
Chloromethane	<0.2133	25.00	16.01	64	46-142		
Vinyl Chloride	<0.1202	25.00	18.58	74	49-136		
Bromomethane	<0.1692	25.00	14.54	58	42-154		
Chloroethane	<0.1670	25.00	22.25	89	51-133		
Trichlorofluoromethane	<0.1840	25.00	22.35	89	63-135		
Iodomethane	<0.1570	25.00	23.84	b 95	60-140		
Acetone	<0.4783	25.00	18.96	76	48-130		
1,1-Dichloroethene	4.516	25.00	32.84	113	68-133		
Methylene Chloride	<0.1458	25.00	24.09	96	71-120		
Carbon Disulfide	<0.1000	25.00	24.75	99	56-120		
MTBE	<0.1000	25.00	20.71	83	58-120		
trans-1,2-Dichloroethene	<0.1000	25.00	26.53	106	80-120		
Vinyl Acetate	<0.5118	25.00	21.72	87	63-124		
1,1-Dichloroethane	7.104	25.00	30.12	92	77-120		
2-Butanone	<0.2956	25.00	19.72	79	57-120		
cis-1,2-Dichloroethene	2.729	25.00	28.68	104	75-120		
2,2-Dichloropropane	<0.1000	25.00	23.42	94	72-128		
Chloroform	0.7523	25.00	23.78	92	78-120		
Bromochloromethane	<0.1508	25.00	24.70	99	78-120		
1,1,1-Trichloroethane	2.036	25.00	25.38	93	78-120		
1,1-Dichloropropene	<0.1000	25.00	26.38	106	75-120		
Carbon Tetrachloride	<0.1000	25.00	24.00	96	80-120		
1,2-Dichloroethane	<0.1000	25.00	21.42	86	74-120		
Benzene	<0.1000	25.00	26.09	104	77-120		
Trichloroethene	11.71	25.00	35.71	96	78-122		
1,2-Dichloropropane	<0.1501	25.00	22.82	91	76-120		
Bromodichloromethane	<0.1000	25.00	23.34	93	78-120		
Dibromomethane	<0.1000	25.00	24.08	96	77-120		
4-Methyl-2-Pentanone	<0.1884	25.00	22.24	89	65-120		
cis-1,3-Dichloropropene	<0.1000	25.00	21.60	86	76-120		
Toluene	0.1919	25.00	26.89	107	73-120		
trans-1,3-Dichloropropene	<0.1000	25.00	18.77	75	72-120		
1,1,2-Trichloroethane	<0.1596	25.00	25.77	103	76-120		
2-Hexanone	<0.1592	25.00	21.66	87	57-121		
1,3-Dichloropropane	<0.1000	25.00	25.59	102	75-120		
Tetrachloroethene	1.150	25.00	29.37	113	77-120		
Dibromochloromethane	<0.1000	25.00	24.04	96	76-120		
1,2-Dibromoethane	<0.1000	25.00	25.53	102	77-120		
Chlorobenzene	<0.1136	25.00	25.78	103	78-120		
1,1,1,2-Tetrachloroethane	<0.1000	25.00	26.36	105	77-120		
Ethylbenzene	<0.1561	25.00	27.50	110	78-120		
m,p-Xylenes	<0.1000	50.00	56.65	113	77-120		
o-Xylene	<0.09974	25.00	26.75	107	77-120		
Styrene	<0.1000	25.00	23.09	92	77-120		
Bromoform	<0.1000	25.00	25.36	101	74-121		
Isopropylbenzene	0.1507	25.00	24.95	99	71-120		
1,1,2,2-Tetrachloroethane	<0.1000	25.00	26.75	107	73-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-118A-UST-10Q1	Batch#:	161142
MSS Lab ID:	218702-002	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1388	25.00	25.93	104	72-120	
Propylbenzene	0.1401	25.00	27.98	111	76-120	
Bromobenzene	<0.1000	25.00	27.75	111	75-120	
1,3,5-Trimethylbenzene	<0.1017	25.00	27.42	110	77-120	
2-Chlorotoluene	<0.1027	25.00	26.71	107	76-120	
4-Chlorotoluene	<0.1554	25.00	25.92	104	78-120	
tert-Butylbenzene	<0.1000	25.00	27.88	112	76-120	
1,2,4-Trimethylbenzene	<0.1598	25.00	26.45	106	77-120	
sec-Butylbenzene	<0.1102	25.00	28.83	115	80-120	
para-Isopropyl Toluene	<0.1014	25.00	27.26	109	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.54	102	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	25.89	104	77-120	
n-Butylbenzene	<0.1011	25.00	27.21	109	76-120	
1,2-Dichlorobenzene	<0.1000	25.00	27.34	109	76-120	
1,2-Dibromo-3-Chloropropane	<0.1880	25.00	22.39	90	65-120	
1,2,4-Trichlorobenzene	<0.1138	25.00	24.58	98	73-121	
Hexachlorobutadiene	<0.1492	25.00	26.62	106	73-123	
Naphthalene	0.1554	25.00	25.21	100	62-121	
1,2,3-Trichlorobenzene	<0.1000	25.00	26.39	106	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	95	77-120	
1,2-Dichloroethane-d4	88	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	97	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-118A-UST-10Q1	Batch#:	161142
MSS Lab ID:	218702-002	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Type: MSD Lab ID: QC536952

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	15.25	61	56-140	7	24		
Chloromethane	25.00	15.41	62	46-142	4	24		
Vinyl Chloride	25.00	17.43	70	49-136	6	24		
Bromomethane	25.00	19.05	76	42-154	27 *	24	R5	
Chloroethane	25.00	21.36	85	51-133	4	25		
Trichlorofluoromethane	25.00	21.33	85	63-135	5	20		
Iodomethane	25.00	25.91 b	104	60-140	8	30		
Acetone	25.00	18.72	75	48-130	1	41		
1,1-Dichloroethene	25.00	31.39	108	68-133	5	20		
Methylene Chloride	25.00	23.88	96	71-120	1	20		
Carbon Disulfide	25.00	23.02	92	56-120	7	20		
MTBE	25.00	20.50	82	58-120	1	21		
trans-1,2-Dichloroethene	25.00	25.80	103	80-120	3	24		
Vinyl Acetate	25.00	20.14	81	63-124	8	24		
1,1-Dichloroethane	25.00	28.65	86	77-120	5	20		
2-Butanone	25.00	18.96	76	57-120	4	32		
cis-1,2-Dichloroethene	25.00	26.67	96	75-120	7	20		
2,2-Dichloropropane	25.00	22.11	88	72-128	6	24		
Chloroform	25.00	22.80	88	78-120	4	20		
Bromochloromethane	25.00	24.31	97	78-120	2	20		
1,1,1-Trichloroethane	25.00	24.61	90	78-120	3	20		
1,1-Dichloropropene	25.00	24.65	99	75-120	7	21		
Carbon Tetrachloride	25.00	23.68	95	80-120	1	21		
1,2-Dichloroethane	25.00	20.69	83	74-120	3	20		
Benzene	25.00	24.47	98	77-120	6	20		
Trichloroethene	25.00	33.81	88	78-122	5	20		
1,2-Dichloropropane	25.00	22.10	88	76-120	3	20		
Bromodichloromethane	25.00	22.32	89	78-120	4	20		
Dibromomethane	25.00	23.10	92	77-120	4	20		
4-Methyl-2-Pentanone	25.00	21.24	85	65-120	5	22		
cis-1,3-Dichloropropene	25.00	20.74	83	76-120	4	20		
Toluene	25.00	25.42	101	73-120	6	20		
trans-1,3-Dichloropropene	25.00	18.83	75	72-120	0	20		
1,1,2-Trichloroethane	25.00	25.27	101	76-120	2	20		
2-Hexanone	25.00	21.53	86	57-121	1	25		
1,3-Dichloropropane	25.00	25.20	101	75-120	2	20		
Tetrachloroethene	25.00	27.84	107	77-120	5	20		
Dibromochloromethane	25.00	24.13	97	76-120	0	20		
1,2-Dibromoethane	25.00	25.82	103	77-120	1	20		
Chlorobenzene	25.00	26.08	104	78-120	1	20		
1,1,1,2-Tetrachloroethane	25.00	26.04	104	77-120	1	20		
Ethylbenzene	25.00	26.83	107	78-120	2	26		
m,p-Xylenes	50.00	55.26	111	77-120	2	20		
o-Xylene	25.00	26.63	107	77-120	0	20		
Styrene	25.00	21.93	88	77-120	5	20		
Bromoform	25.00	25.47	102	74-121	0	21		
Isopropylbenzene	25.00	23.90	95	71-120	4	20		
1,1,2,2-Tetrachloroethane	25.00	26.37	105	73-120	1	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-118A-UST-10Q1	Batch#:	161142
MSS Lab ID:	218702-002	Sampled:	03/09/10
Matrix:	Water	Received:	03/10/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,2,3-Trichloropropane	25.00	25.50	102	72-120	2	20		
Propylbenzene	25.00	27.21	108	76-120	3	20		
Bromobenzene	25.00	27.11	108	75-120	2	20		
1,3,5-Trimethylbenzene	25.00	27.40	110	77-120	0	20		
2-Chlorotoluene	25.00	26.57	106	76-120	1	20		
4-Chlorotoluene	25.00	25.57	102	78-120	1	20		
tert-Butylbenzene	25.00	27.42	110	76-120	2	21		
1,2,4-Trimethylbenzene	25.00	26.33	105	77-120	0	20		
sec-Butylbenzene	25.00	28.04	112	80-120	3	21		
para-Isopropyl Toluene	25.00	26.46	106	76-120	3	20		
1,3-Dichlorobenzene	25.00	25.17	101	75-120	1	20		
1,4-Dichlorobenzene	25.00	24.89	100	77-120	4	23		
n-Butylbenzene	25.00	25.62	102	76-120	6	21		
1,2-Dichlorobenzene	25.00	25.44	102	76-120	7	20		
1,2-Dibromo-3-Chloropropane	25.00	22.47	90	65-120	0	22		
1,2,4-Trichlorobenzene	25.00	24.12	96	73-121	2	20		
Hexachlorobutadiene	25.00	26.10	104	73-123	2	25		
Naphthalene	25.00	24.06	96	62-121	5	32		
1,2,3-Trichlorobenzene	25.00	25.71	103	66-123	3	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	94	77-120		
1,2-Dichloroethane-d4	86	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	100	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161182
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	25.00	27.73	111	75-120	
1,3,5-Trimethylbenzene	25.00	28.28	113	77-120	
2-Chlorotoluene	25.00	27.59	110	76-120	
4-Chlorotoluene	25.00	26.22	105	78-120	
tert-Butylbenzene	25.00	29.27	117	76-120	
1,2,4-Trimethylbenzene	25.00	26.91	108	77-120	
sec-Butylbenzene	25.00	29.26	117	80-120	
para-Isopropyl Toluene	25.00	27.58	110	76-120	
1,3-Dichlorobenzene	25.00	26.38	106	75-120	
1,4-Dichlorobenzene	25.00	26.07	104	77-120	
n-Butylbenzene	25.00	27.70	111	76-120	
1,2-Dichlorobenzene	25.00	25.87	103	76-120	
1,2-Dibromo-3-Chloropropane	25.00	22.70	91	65-120	
1,2,4-Trichlorobenzene	25.00	24.75	99	73-121	
Hexachlorobutadiene	25.00	28.50	114	73-123	
Naphthalene	25.00	23.78	95	62-121	
1,2,3-Trichlorobenzene	25.00	26.34	105	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161182
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Type: BSD Lab ID: QC537127

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	14.75	59	56-140	10	24		
Chloromethane	25.00	16.14	65	46-142	14	24		
Vinyl Chloride	25.00	18.28	73	49-136	9	24		
Bromomethane	25.00	25.31	101	42-154	9	24		
Chloroethane	25.00	21.56	86	51-133	10	25		
Trichlorofluoromethane	25.00	21.73	87	63-135	6	20		
Iodomethane	25.00	22.94	b 92	70-130	0	20		V9
Acetone	25.00	25.81	103	48-130	4	41		
1,1-Dichloroethene	25.00	27.62	110	68-133	10	20		
Methylene Chloride	25.00	24.44	98	71-120	5	20		
Carbon Disulfide	25.00	23.98	96	56-120	8	20		
MTBE	25.00	20.82	83	58-120	0	21		
trans-1,2-Dichloroethene	25.00	25.66	103	80-120	8	24		
Vinyl Acetate	25.00	31.56	126 *	63-124	6	24		L1
1,1-Dichloroethane	25.00	24.14	97	77-120	8	20		
2-Butanone	25.00	25.19	101	57-120	10	32		
cis-1,2-Dichloroethene	25.00	25.31	101	75-120	5	20		
2,2-Dichloropropane	25.00	27.49	110	72-128	7	24		
Chloroform	25.00	23.50	94	78-120	6	20		
Bromochloromethane	25.00	25.95	104	78-120	0	20		
1,1,1-Trichloroethane	25.00	23.49	94	78-120	10	20		
1,1-Dichloropropene	25.00	26.97	108	75-120	1	21		
Carbon Tetrachloride	25.00	24.57	98	80-120	3	21		
1,2-Dichloroethane	25.00	23.41	94	74-120	2	20		
Benzene	25.00	25.39	102	77-120	3	20		
Trichloroethene	25.00	24.84	99	78-122	3	20		
1,2-Dichloropropane	25.00	23.45	94	76-120	2	20		
Bromodichloromethane	25.00	23.12	92	78-120	4	20		
Dibromomethane	25.00	25.04	100	77-120	5	20		
4-Methyl-2-Pentanone	25.00	24.05	96	65-120	14	22		
cis-1,3-Dichloropropene	25.00	24.60	98	76-120	1	20		
Toluene	25.00	25.82	103	73-120	10	20		
trans-1,3-Dichloropropene	25.00	22.28	89	72-120	3	20		
1,1,2-Trichloroethane	25.00	25.81	103	76-120	1	20		
2-Hexanone	25.00	24.20	97	57-121	3	25		
1,3-Dichloropropane	25.00	25.50	102	75-120	4	20		
Tetrachloroethene	25.00	26.01	104	77-120	10	20		
Dibromochloromethane	25.00	24.27	97	76-120	2	20		
1,2-Dibromoethane	25.00	26.31	105	77-120	2	20		
Chlorobenzene	25.00	25.60	102	78-120	6	20		
1,1,1,2-Tetrachloroethane	25.00	25.56	102	77-120	4	20		
Ethylbenzene	25.00	26.51	106	78-120	7	26		
m,p-Xylenes	50.00	54.88	110	77-120	6	20		
o-Xylene	25.00	26.67	107	77-120	5	20		
Styrene	25.00	26.71	107	77-120	6	20		
Bromoform	25.00	25.61	102	74-121	3	21		
Isopropylbenzene	25.00	24.06	96	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	27.67	111	73-120	5	20		
1,2,3-Trichloropropane	25.00	26.69	107	72-120	5	20		
Propylbenzene	25.00	28.10	112	76-120	2	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161182
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Bromobenzene	25.00	27.43	110	75-120	1	20		
1,3,5-Trimethylbenzene	25.00	27.27	109	77-120	4	20		
2-Chlorotoluene	25.00	26.35	105	76-120	5	20		
4-Chlorotoluene	25.00	26.05	104	78-120	1	20		
tert-Butylbenzene	25.00	27.11	108	76-120	8	21		
1,2,4-Trimethylbenzene	25.00	26.22	105	77-120	3	20		
sec-Butylbenzene	25.00	28.30	113	80-120	3	21		
para-Isopropyl Toluene	25.00	26.73	107	76-120	3	20		
1,3-Dichlorobenzene	25.00	25.66	103	75-120	3	20		
1,4-Dichlorobenzene	25.00	25.68	103	77-120	1	23		
n-Butylbenzene	25.00	26.65	107	76-120	4	21		
1,2-Dichlorobenzene	25.00	25.88	104	76-120	0	20		
1,2-Dibromo-3-Chloropropane	25.00	24.97	100	65-120	10	22		
1,2,4-Trichlorobenzene	25.00	25.60	102	73-121	3	20		
Hexachlorobutadiene	25.00	27.38	110	73-123	4	25		
Naphthalene	25.00	26.27	105	62-121	10	32		
1,2,3-Trichlorobenzene	25.00	26.60	106	66-123	1	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	97	77-120		
1,2-Dichloroethane-d4	95	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	98	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537128	Batch#:	161182
Matrix:	Water	Analyzed:	03/23/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537128	Batch#:	161182
Matrix:	Water	Analyzed:	03/23/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	97	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	97	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161182
MSS Lab ID:	218839-011	Sampled:	03/16/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Type: MS Lab ID: QC537244

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	<0.1733	25.00	15.99	64	56-140		
Chloromethane	<0.2133	25.00	19.37	77	46-142		
Vinyl Chloride	<0.1202	25.00	23.63	95	49-136		
Bromomethane	<0.1692	25.00	26.28	105	42-154		
Chloroethane	<0.1670	25.00	22.82	91	51-133		
Trichlorofluoromethane	<0.1840	25.00	23.47	94	63-135		
Iodomethane	<0.1570	25.00	20.84	b 83	60-140	V9	
Acetone	0.8717	25.00	21.45	82	48-130		
1,1-Dichloroethene	<0.1000	25.00	29.29	117	68-133		
Methylene Chloride	<0.1458	25.00	24.80	99	71-120		
Carbon Disulfide	<0.1000	25.00	26.12	104	56-120		
MTBE	<0.1000	25.00	22.66	91	58-120		
trans-1,2-Dichloroethene	<0.1000	25.00	26.49	106	80-120		
Vinyl Acetate	<0.5118	25.00	30.33	121	63-124		
1,1-Dichloroethane	<0.1000	25.00	26.23	105	77-120		
2-Butanone	<0.2956	25.00	22.00	88	57-120		
cis-1,2-Dichloroethene	1.501	25.00	26.80	101	75-120		
2,2-Dichloropropane	<0.1000	25.00	27.75	111	72-128		
Chloroform	<0.1000	25.00	25.45	102	78-120		
Bromochloromethane	<0.1508	25.00	25.13	101	78-120		
1,1,1-Trichloroethane	<0.1000	25.00	27.19	109	78-120		
1,1-Dichloropropene	<0.1000	25.00	28.79	115	75-120		
Carbon Tetrachloride	<0.1000	25.00	27.05	108	80-120		
1,2-Dichloroethane	<0.1000	25.00	25.76	103	74-120		
Benzene	<0.1000	25.00	27.97	112	77-120		
Trichloroethene	0.1342	25.00	25.53	102	78-122		
1,2-Dichloropropane	<0.1501	25.00	24.53	98	76-120		
Bromodichloromethane	<0.1000	25.00	24.81	99	78-120		
Dibromomethane	<0.1000	25.00	25.16	101	77-120		
4-Methyl-2-Pentanone	<0.1884	25.00	23.55	94	65-120		
cis-1,3-Dichloropropene	<0.1000	25.00	24.04	96	76-120		
Toluene	<0.1000	25.00	26.61	106	73-120		
trans-1,3-Dichloropropene	<0.1000	25.00	21.89	88	72-120		
1,1,2-Trichloroethane	<0.1596	25.00	25.54	102	76-120		
2-Hexanone	<0.1592	25.00	22.77	91	57-121		
1,3-Dichloropropane	<0.1000	25.00	26.02	104	75-120		
Tetrachloroethene	<0.1000	25.00	24.72	99	77-120		
Dibromochloromethane	<0.1000	25.00	24.56	98	76-120		
1,2-Dibromoethane	<0.1000	25.00	25.45	102	77-120		
Chlorobenzene	<0.1136	25.00	25.43	102	78-120		
1,1,1,2-Tetrachloroethane	<0.1000	25.00	25.48	102	77-120		
Ethylbenzene	<0.1561	25.00	26.68	107	78-120		
m,p-Xylenes	<0.1000	50.00	56.44	113	77-120		
o-Xylene	<0.09974	25.00	26.68	107	77-120		
Styrene	<0.1000	25.00	26.90	108	77-120		
Bromoform	<0.1000	25.00	24.57	98	74-121		
Isopropylbenzene	<0.1000	25.00	23.66	95	71-120		
1,1,2,2-Tetrachloroethane	<0.1000	25.00	26.55	106	73-120		
1,2,3-Trichloropropane	<0.1388	25.00	25.29	101	72-120		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161182
MSS Lab ID:	218839-011	Sampled:	03/16/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Propylbenzene	<0.1074	25.00	27.65	111	76-120	
Bromobenzene	<0.1000	25.00	26.88	108	75-120	
1,3,5-Trimethylbenzene	<0.1017	25.00	27.60	110	77-120	
2-Chlorotoluene	<0.1027	25.00	27.23	109	76-120	
4-Chlorotoluene	<0.1554	25.00	25.38	102	78-120	
tert-Butylbenzene	<0.1000	25.00	27.25	109	76-120	
1,2,4-Trimethylbenzene	<0.1598	25.00	24.98	100	77-120	
sec-Butylbenzene	<0.1102	25.00	27.42	110	80-120	
para-Isopropyl Toluene	<0.1014	25.00	24.87	99	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	24.41	98	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.67	99	77-120	
n-Butylbenzene	<0.1011	25.00	24.56	98	76-120	
1,2-Dichlorobenzene	<0.1000	25.00	25.24	101	76-120	
1,2-Dibromo-3-Chloropropane	<0.1880	25.00	22.79	91	65-120	
1,2,4-Trichlorobenzene	<0.1138	25.00	22.34	89	73-121	
Hexachlorobutadiene	<0.1492	25.00	24.15	97	73-123	
Naphthalene	<0.1000	25.00	23.51	94	62-121	
1,2,3-Trichlorobenzene	<0.1000	25.00	23.76	95	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	97	78-120	

b= See narrative
 RPD= Relative Percent Difference
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Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161182
MSS Lab ID:	218839-011	Sampled:	03/16/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Type: MSD Lab ID: QC537245

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	15.00	60	56-140	6	24		
Chloromethane	25.00	17.53	70	46-142	10	24		
Vinyl Chloride	25.00	21.28	85	49-136	10	24		
Bromomethane	25.00	26.76	107	42-154	2	24		
Chloroethane	25.00	22.66	91	51-133	1	25		
Trichlorofluoromethane	25.00	22.61	90	63-135	4	20		
Iodomethane	25.00	24.60	b 98	60-140	17	30	V9	
Acetone	25.00	20.89	80	48-130	3	41		
1,1-Dichloroethene	25.00	28.74	115	68-133	2	20		
Methylene Chloride	25.00	24.58	98	71-120	1	20		
Carbon Disulfide	25.00	25.62	102	56-120	2	20		
MTBE	25.00	22.19	89	58-120	2	21		
trans-1,2-Dichloroethene	25.00	26.38	106	80-120	0	24		
Vinyl Acetate	25.00	28.67	115	63-124	6	24		
1,1-Dichloroethane	25.00	25.36	101	77-120	3	20		
2-Butanone	25.00	21.47	86	57-120	2	32		
cis-1,2-Dichloroethene	25.00	26.52	100	75-120	1	20		
2,2-Dichloropropane	25.00	26.69	107	72-128	4	24		
Chloroform	25.00	24.93	100	78-120	2	20		
Bromochloromethane	25.00	25.53	102	78-120	2	20		
1,1,1-Trichloroethane	25.00	27.06	108	78-120	0	20		
1,1-Dichloropropene	25.00	27.42	110	75-120	5	21		
Carbon Tetrachloride	25.00	25.98	104	80-120	4	21		
1,2-Dichloroethane	25.00	24.76	99	74-120	4	20		
Benzene	25.00	27.11	108	77-120	3	20		
Trichloroethene	25.00	25.68	102	78-122	1	20		
1,2-Dichloropropane	25.00	24.64	99	76-120	0	20		
Bromodichloromethane	25.00	24.60	98	78-120	1	20		
Dibromomethane	25.00	25.20	101	77-120	0	20		
4-Methyl-2-Pentanone	25.00	24.00	96	65-120	2	22		
cis-1,3-Dichloropropene	25.00	23.81	95	76-120	1	20		
Toluene	25.00	26.43	106	73-120	1	20		
trans-1,3-Dichloropropene	25.00	21.56	86	72-120	2	20		
1,1,2-Trichloroethane	25.00	26.54	106	76-120	4	20		
2-Hexanone	25.00	22.65	91	57-121	1	25		
1,3-Dichloropropane	25.00	26.01	104	75-120	0	20		
Tetrachloroethene	25.00	25.30	101	77-120	2	20		
Dibromochloromethane	25.00	24.70	99	76-120	1	20		
1,2-Dibromoethane	25.00	25.63	103	77-120	1	20		
Chlorobenzene	25.00	25.64	103	78-120	1	20		
1,1,1,2-Tetrachloroethane	25.00	25.60	102	77-120	0	20		
Ethylbenzene	25.00	27.32	109	78-120	2	26		
m,p-Xylenes	50.00	55.00	110	77-120	3	20		
o-Xylene	25.00	25.94	104	77-120	3	20		
Styrene	25.00	26.13	105	77-120	3	20		
Bromoform	25.00	24.87	99	74-121	1	21		
Isopropylbenzene	25.00	23.57	94	71-120	0	20		
1,1,2,2-Tetrachloroethane	25.00	26.21	105	73-120	1	20		
1,2,3-Trichloropropane	25.00	25.01	100	72-120	1	20		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218702	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161182
MSS Lab ID:	218839-011	Sampled:	03/16/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Propylbenzene	25.00	26.55	106	76-120	4	20		
Bromobenzene	25.00	25.74	103	75-120	4	20		
1,3,5-Trimethylbenzene	25.00	26.38	106	77-120	5	20		
2-Chlorotoluene	25.00	26.05	104	76-120	4	20		
4-Chlorotoluene	25.00	24.83	99	78-120	2	20		
tert-Butylbenzene	25.00	26.05	104	76-120	5	21		
1,2,4-Trimethylbenzene	25.00	25.70	103	77-120	3	20		
sec-Butylbenzene	25.00	27.12	108	80-120	1	21		
para-Isopropyl Toluene	25.00	24.28	97	76-120	2	20		
1,3-Dichlorobenzene	25.00	24.41	98	75-120	0	20		
1,4-Dichlorobenzene	25.00	24.23	97	77-120	2	23		
n-Butylbenzene	25.00	24.30	97	76-120	1	21		
1,2-Dichlorobenzene	25.00	24.52	98	76-120	3	20		
1,2-Dibromo-3-Chloropropane	25.00	22.58	90	65-120	1	22		
1,2,4-Trichlorobenzene	25.00	22.01	88	73-121	1	20		
Hexachlorobutadiene	25.00	23.92	96	73-123	1	25		
Naphthalene	25.00	22.95	92	62-121	2	32		
1,2,3-Trichlorobenzene	25.00	24.40	98	66-123	3	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	101	77-120		
1,2-Dichloroethane-d4	93	70-127		
Toluene-d8	103	83-125		
Bromofluorobenzene	98	78-120		

b= See narrative
 RPD= Relative Percent Difference
 Page 4 of 4

CURTIS & TOMPKINS BFB TUNE FOR 218702 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480039377003 File : iar03 Time : 27-JAN-2010 17:11

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	119490	17.70	
75	30% - 60% of mass 95	276672	40.99	
95		675029	100.00	
96	5% - 9% of mass 95	46176	6.84	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	508352	75.31	
175	5% - 9% of mass 174	37824	7.44	
176	> 95% and < 101% of mass 174	488896	96.17	
177	5% - 9% of mass 176	33058	6.76	

Analyst: BO Date: 01/28/10 Reviewer: LW Date: 01/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218702 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480117250004 File : icm04 Time : 22-MAR-2010 11:42

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	17582	20.43	
75	30% - 60% of mass 95	37702	43.82	
95		86042	100.00	
96	5% - 9% of mass 95	6198	7.20	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	60050	69.79	
175	5% - 9% of mass 174	4436	7.39	
176	> 95% and < 101% of mass 174	58453	97.34	
177	5% - 9% of mass 176	3983	6.81	

TDL 03/23/10 : Tune not adjusted

Analyst: TDL Date: 03/23/10 Reviewer: LW Date: 03/23/10

CURTIS & TOMPKINS BFB TUNE FOR 218702 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480118602002 File : icn02 Time : 23-MAR-2010 09:34

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	22108	18.88	
75	30% - 60% of mass 95	48805	41.68	
95		117090	100.00	
96	5% - 9% of mass 95	8567	7.32	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	87754	74.95	
175	5% - 9% of mass 174	6133	6.99	
176	> 95% and < 101% of mass 174	84192	95.94	
177	5% - 9% of mass 176	5512	6.55	

Analyst: BJP Date: 03/23/10 Reviewer: LW Date: 03/23/10

CURTIS & TOMPKINS BFB TUNE FOR 218702 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480118602010 File : icn10 Time : 23-MAR-2010 14:10

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13368	17.65	
75	30% - 60% of mass 95	29814	39.37	
95		75732	100.00	
96	5% - 9% of mass 95	5519	7.29	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	57106	75.41	
175	5% - 9% of mass 174	4221	7.39	
176	> 95% and < 101% of mass 174	55886	97.86	
177	5% - 9% of mass 176	3676	6.58	

Analyst: BJP Date: 03/23/10 Reviewer: LW Date: 03/23/10

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218702 MSVOA Water: EPA 8260B

Inst : MSVOA09
 Calnum : 480039377001
 Units : ug/L

Name : 826GOX9W
 Date : 27-JAN-2010 20:15
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	iar07	480039377007	.25/.5PPB	27-JAN-2010 20:15	S13745 (20000X), S13845 (20000X), S13747 (20000X), S13846 (100000X), S13687 (5000X)
L2	iar08	480039377008	0.5/1PPB	27-JAN-2010 20:49	S13745 (100000X), S13845 (100000X), S13747 (100000X), S13846 (50000X), S13687 (5000X)
L3	iar09	480039377009	2PPB	27-JAN-2010 21:22	S13745 (25000X), S13845 (25000X), S13747 (50000X), S13846 (25000X), S13687 (5000X)
L4	iar10	480039377010	5PPB	27-JAN-2010 21:55	S13745 (10000X), S13845 (10000X), S13747 (20000X), S13846 (10000X), S13687 (5000X)
L5	iar11	480039377011	10PPB	27-JAN-2010 22:28	S13745 (5000X), S13845 (5000X), S13747 (10000X), S13846 (5000X), S13687 (5000X)
L6	iar12	480039377012	20PPB	27-JAN-2010 23:01	S13680 (25000X), S13796 (25000X), S13625 (50000X), S13503 (25000X), S13687 (5000X)
L7	iar13	480039377013	50PPB	27-JAN-2010 23:34	S13680 (10000X), S13796 (10000X), S13625 (20000X), S13503 (10000X), S13687 (5000X)
L8	iar14	480039377014	75PPB	28-JAN-2010 00:07	S13680 (6667X), S13796 (6667X), S13625 (13330X), S13503 (6667X), S13687 (5000X)
L9	iar15	480039377015	100PPB	28-JAN-2010 00:39	S13680 (5000X), S13796 (5000X), S13625 (10000X), S13503 (5000X), S13687 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Freon 12		0.4272	0.6076	0.5551	0.6189	0.6131	0.6391	0.5765	0.5958	AVRG		1.72662		0.5792	12	15	0.05	0.99	
Chloromethane		0.8240	0.9930	0.9112	0.9272	0.9023	0.8693	0.8104	0.7946	AVRG		1.13767		0.8790	8	15	0.10	0.99	
Vinyl Chloride	0.5181	0.5422	0.7028	0.6832	0.6817	0.6816	0.6563	0.6083	0.5695	AVRG		1.59470		0.6271	11	15	0.05	0.99	
Bromomethane		0.3327	0.3778	0.3470	0.3376	0.3814	0.3741	0.3742	0.3632	AVRG		2.77001		0.3610	5	15	0.05	0.99	
Chloroethane		0.3935	0.4827	0.4630	0.4416	0.4633	0.4477	0.4193	0.4174	AVRG		2.26725		0.4411	7	15	0.05	0.99	
Trichlorofluoromethane		0.5190	0.6690	0.6150	0.6630	0.6423	0.6798	0.6145	0.6119	AVRG		1.59535		0.6268	8	15	0.05	0.99	
Acetone				0.1172	0.1133	0.1131	0.1053	0.0922	0.0927	AVRG		9.46550		0.1056	10	15	0.05	0.99	
1,1-Dichloroethene		0.3192	0.4324	0.3853	0.3906	0.3699	0.3637	0.3930	0.3876	AVRG		2.63014		0.3802	8	15	0.05	0.99	
Iodomethane				0.5282	0.5552	0.5997	0.6044	0.5951	0.6206	AVRG		1.71268		0.5839	6	15	0.05	0.99	
Methylene Chloride		0.5858	0.6009	0.5287	0.5011	0.5232	0.5143	0.5033	0.4935	AVRG		1.88203		0.5313	8	15	0.05	0.99	
Carbon Disulfide		1.5171	1.9736	1.7265	1.7529	1.6610	1.5889	1.6476	1.5771	AVRG		0.59503		1.6806	8	15	0.05	0.99	
MTBE		0.9320	1.0138	0.9931	0.9929	1.0189	0.9926	0.9195	0.8743	AVRG		1.03396		0.9672	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4406	0.5305	0.4618	0.4602	0.4757	0.4552	0.4688	0.4558	AVRG		2.13408		0.4686	6	15	0.05	0.99	
Vinyl Acetate			0.6282	0.6668	0.6830	0.7536	0.7417	0.8563	0.7420	AVRG		1.38026		0.7245	10	15	0.05	0.99	
1,1-Dichloroethane		0.8516	1.0446	0.9546	0.9019	0.9393	0.9119	0.8841	0.8458	AVRG		1.09085		0.9167	7	15	0.10	0.99	
2-Butanone			0.2069m	0.1893	0.1836	0.1851	0.1785	0.1526	0.1452	AVRG		5.63991		0.1773	12	15	0.05	0.99	
2,2-Dichloropropane		0.4892	0.6320	0.5236	0.5438	0.5313	0.4881	0.4891	0.4602	AVRG		1.92434		0.5197	10	15	0.05	0.99	
cis-1,2-Dichloroethene		0.4938	0.5578	0.4996	0.4958	0.5086	0.5035	0.5009	0.4937	AVRG		1.97351		0.5067	4	15	0.05	0.99	
Chloroform		0.7593	0.8988	0.8262	0.8030	0.8348	0.7985	0.7757	0.7543	AVRG		1.24021		0.8063	6	15	0.05	0.99	
Bromochloromethane		0.1840	0.2315	0.2099	0.2160	0.2219	0.2274	0.2192	0.2171	AVRG		4.63209		0.2159	7	15	0.05	0.99	
1,1,1-Trichloroethane		0.4684	0.6327	0.5630	0.5644	0.5706	0.5140	0.5506	0.5210	AVRG		1.82451		0.5481	9	15	0.05	0.99	
1,1-Dichloropropene		0.3158	0.4343	0.3542	0.3790	0.3680	0.3394	0.3705	0.3601	AVRG		2.73852		0.3652	9	15	0.05	0.99	
Carbon Tetrachloride		0.2519	0.3316	0.2884	0.2907	0.2825	0.2633	0.2915	0.2847	AVRG		3.50159		0.2856	8	15	0.05	0.99	
1,2-Dichloroethane		0.2690	0.3044	0.2819	0.2808	0.2982	0.2878	0.2677	0.2636	AVRG		3.55022		0.2817	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Benzene		1.0292	1.2652	1.0714	1.0609	1.1235	1.0294	1.0188	0.9650	AVRG		0.93423		1.0704	9	15	0.05	0.99	
Trichloroethene		0.2697	0.3259	0.2720	0.2774	0.2985	0.2818	0.2818	0.2765	AVRG		3.50319		0.2855	6	15	0.05	0.99	
1,2-Dichloropropane		0.3482	0.3804	0.3531	0.3345	0.3598	0.3425	0.3400	0.3296	AVRG		2.86920		0.3485	5	15	0.05	0.99	
Bromodichloromethane		0.3451	0.3918	0.3578	0.3454	0.3759	0.3633	0.3588	0.3558	AVRG		2.76456		0.3617	4	15	0.05	0.99	
Dibromomethane		0.1452	0.1603	0.1563	0.1543	0.1669	0.1664	0.1592	0.1572	AVRG		6.32076		0.1582	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.2356	0.2296	0.2350	0.2480	0.2457	0.2205	0.2116	AVRG		4.30507		0.2323	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4479	0.4924	0.4528	0.4573	0.4598	0.4598	0.4404	0.4315	AVRG		2.19668		0.4552	4	15	0.05	0.99	
Toluene		0.7703	0.9216	0.7566	0.7233	0.7824	0.7735	0.7985	0.7408	AVRG		1.27653		0.7834	8	15	0.05	0.99	
trans-1,3-Dichloropropene		0.4314	0.5131	0.4670	0.4468	0.4973	0.4610	0.4573	0.4396	AVRG		2.15431		0.4642	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.1337	0.1518	0.1406	0.1382	0.1505	0.1472	0.1433	0.1436	AVRG		6.96298		0.1436	4	15	0.05	0.99	
2-Hexanone			0.2239	0.2090	0.2014	0.2118	0.2130	0.1906	0.1791	AVRG		4.89948		0.2041	7	15	0.05	0.99	
1,3-Dichloropropane		0.4004	0.4631	0.4225	0.4249	0.4545	0.4640	0.4442	0.4221	AVRG		2.28843		0.4370	5	15	0.05	0.99	
Tetrachloroethene		0.2481	0.3488	0.2870	0.2869	0.3017	0.2822	0.3138	0.3106	AVRG		3.36270		0.2974	10	15	0.05	0.99	
Dibromochloromethane		0.2907	0.3097	0.2913	0.2895	0.3125	0.3115	0.3151	0.3032	AVRG		3.30100		0.3029	4	15	0.05	0.99	
1,2-Dibromoethane		0.2312	0.2553	0.2455	0.2401	0.2619	0.2651	0.2633	0.2596	AVRG		3.95653		0.2527	5	15	0.05	0.99	
Chlorobenzene		0.7993	0.9853	0.8244	0.8088	0.8858	0.8623	0.8392	0.8012	AVRG		1.17537		0.8508	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2826	0.3303	0.2747	0.2760	0.2980	0.3067	0.3047	0.2944	AVRG		3.37928		0.2959	6	15	0.05	0.99	
Ethylbenzene		1.3640	1.7214	1.3993	1.3607	1.4898	1.3585	1.3068	1.2120	AVRG		0.71350		1.4015	11	15	0.05	0.99	
m,p-Xylenes	0.5036	0.4527	0.6147	0.5056	0.4893	0.5384	0.5088	0.4958	0.4418	AVRG		1.97774		0.5056	10	15	0.05	0.99	
o-Xylene		0.4874	0.6016	0.5082	0.4965	0.5489	0.5334	0.5259	0.5097	AVRG		1.89951		0.5265	7	15	0.05	0.99	
Styrene		0.8609	1.0026	0.8795	0.8674	0.9605	0.9470	0.8954	0.8576	AVRG		1.10028		0.9089	6	15	0.05	0.99	
Bromoform		0.1512	0.1751	0.1615	0.1650	0.1814	0.1861	0.1861	0.1830	AVRG		5.75787		0.1737	7	15	0.10	0.99	
Isopropylbenzene		2.3217	3.1596	2.5691	2.5469	2.7063	2.4453	2.6712	2.4395	AVRG		0.38352		2.6074	10	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6030	0.5937	0.5909	0.5928	0.6153	0.6111	0.6410	0.6031	AVRG		1.64915		0.6064	3	15	0.30	0.99	
1,2,3-Trichloropropane		0.1447	0.1409	0.1299	0.1309	0.1378	0.1430	0.1410	0.1265	AVRG		7.30736		0.1368	5	15	0.05	0.99	
Propylbenzene		3.0497	3.9560	3.2048	3.2461	3.3629	3.0327	3.0560	2.6950	AVRG		0.31246		3.2004	11	15	0.05	0.99	
Bromobenzene		0.6665	0.7228	0.6435	0.6492	0.7032	0.7201	0.7249	0.6703	AVRG		1.45444		0.6876	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.9922	2.4458	2.0368	2.0219	2.1529	1.9990	1.9836	1.7635	AVRG		0.48793		2.0495	9	15	0.05	0.99	
2-Chlorotoluene		2.2554	2.5642	2.1161	2.1087	2.2652	2.0862	1.9834	1.7493	AVRG		0.46706		2.1411	11	15	0.05	0.99	
4-Chlorotoluene		2.1887	2.3464	1.9752	2.0153	2.0709	2.0599	2.0773	1.9065	AVRG		0.48076		2.0800	7	15	0.05	0.99	
tert-Butylbenzene		1.5755	2.0121	1.6313	1.6883	1.7810	1.6549	1.7601	1.6963	AVRG		0.57973		1.7249	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.1523	2.5130	2.0569	2.0414	2.2207	2.0902	2.1625	2.0170	AVRG		0.46366		2.1567	7	15	0.05	0.99	
sec-Butylbenzene		2.3579	3.0923	2.6227	2.6213	2.7538	2.5038	2.7910	2.5827	AVRG		0.37514		2.6657	8	15	0.05	0.99	
para-Isopropyl Toluene		1.8819	2.2981	1.9427	2.0129	2.1003	1.8867	2.1308	2.0144	AVRG		0.49177		2.0335	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.2368	1.4206	1.2144	1.2052	1.3068	1.2860	1.3439	1.2935	AVRG		0.77618		1.2884	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.3246	1.4816	1.2289	1.2471	1.3353	1.3172	1.3326	1.2740	AVRG		0.75892		1.3177	6	15	0.05	0.99	
n-Butylbenzene		1.9278	2.4190	1.9466	2.0219	2.1231	1.9181	2.1344	2.0210	AVRG		0.48450		2.0640	8	15	0.05	0.99	
1,2-Dichlorobenzene		1.1836	1.2168	1.1290	1.1069	1.1904	1.1946	1.2267	1.1710	AVRG		0.84933		1.1774	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.0812	0.1026	0.0896	0.0907	0.0912	0.0934	0.0870	0.0842	AVRG		11.1139		0.0900	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.6413	0.6999	0.6384	0.6552	0.6932	0.7048	0.7109	0.7232	AVRG		1.46338		0.6833	5	15	0.05	0.99	
Hexachlorobutadiene		0.2542	0.3630	0.3000	0.3125	0.3339	0.3017	0.3594	0.3585	AVRG		3.09685		0.3229	12	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Naphthalene		1.2171	1.2766	1.2470	1.2729	1.3320	1.3830	1.3625	1.3472	AVRG		0.76642		1.3048	5	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.5473	0.5994	0.5662	0.5762	0.6237	0.6325	0.6475	0.6396	AVRG		1.65553		0.6040	6	15	0.05	0.99	
Dibromofluoromethane	0.5626	0.5685	0.5730	0.5794	0.5894	0.5803	0.5742	0.5559	0.5424	AVRG		1.75583		0.5695	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.2776	0.2836	0.2948	0.2950	0.2948	0.2923	0.2665	0.2472	0.2356	AVRG		3.61858		0.2764	8	15	0.05	0.99	
Toluene-d8	1.3332	1.3494	1.4060	1.3911	1.4075	1.3829	1.3735	1.3651	1.3835	AVRG		0.72626		1.3769	2	15	0.05	0.99	
Bromofluorobenzene	1.0186	1.0587	1.0239	1.0392	1.0317	0.9937	1.0272	1.0417	1.0060	AVRG		0.97396		1.0267	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-26	2.000	5	5.000	-4	10.00	7	20.00	6	50.00	10	75.00	0	100.0	3
Chloromethane			1.000	-6	2.000	13	5.000	4	10.00	5	20.00	3	50.00	-1	75.00	-8	100.0	-10
Vinyl Chloride	0.500	-17	1.000	-14	2.000	12	5.000	9	10.00	9	20.00	9	50.00	5	75.00	-3	100.0	-9
Bromomethane			1.000	-8	2.000	5	5.000	-4	10.00	-6	20.00	6	50.00	4	75.00	4	100.0	1
Chloroethane			1.000	-11	2.000	9	5.000	5	10.00	0	20.00	5	50.00	2	75.00	-5	100.0	-5
Trichlorofluoromethane			1.000	-17	2.000	7	5.000	-2	10.00	6	20.00	2	50.00	8	75.00	-2	100.0	-2
Acetone							5.000	11	10.00	7	20.00	7	50.00	0	75.00	-13	100.0	-12
1,1-Dichloroethene			0.500	-16	2.000	14	5.000	1	10.00	3	20.00	-3	50.00	-4	75.00	3	100.0	2
Iodomethane							5.000	-10	10.00	-5	20.00	3	50.00	4	75.00	2	100.0	6
Methylene Chloride			0.500	10	2.000	13	5.000	-1	10.00	-6	20.00	-2	50.00	-3	75.00	-5	100.0	-7
Carbon Disulfide			0.500	-10	2.000	17	5.000	3	10.00	4	20.00	-1	50.00	-5	75.00	-2	100.0	-6
MTBE			0.500	-4	2.000	5	5.000	3	10.00	3	20.00	5	50.00	3	75.00	-5	100.0	-10
trans-1,2-Dichloroethene			0.500	-6	2.000	13	5.000	-1	10.00	-2	20.00	2	50.00	-3	75.00	0	100.0	-3
Vinyl Acetate					2.000	-13	5.000	-8	10.00	-6	20.00	4	50.00	2	75.00	18	100.0	2
1,1-Dichloroethane			0.500	-7	2.000	14	5.000	4	10.00	-2	20.00	2	50.00	-1	75.00	-4	100.0	-8
2-Butanone					2.000	17	5.000	7	10.00	4	20.00	4	50.00	1	75.00	-14	100.0	-18
2,2-Dichloropropane			0.500	-6	2.000	22	5.000	1	10.00	5	20.00	2	50.00	-6	75.00	-6	100.0	-11
cis-1,2-Dichloroethene			0.500	-3	2.000	10	5.000	-1	10.00	-2	20.00	0	50.00	-1	75.00	-1	100.0	-3
Chloroform			0.500	-6	2.000	11	5.000	2	10.00	0	20.00	4	50.00	-1	75.00	-4	100.0	-6
Bromochloromethane			0.500	-15	2.000	7	5.000	-3	10.00	0	20.00	3	50.00	5	75.00	2	100.0	1
1,1,1-Trichloroethane			0.500	-15	2.000	15	5.000	3	10.00	3	20.00	4	50.00	-6	75.00	0	100.0	-5
1,1-Dichloropropene			0.500	-14	2.000	19	5.000	-3	10.00	4	20.00	1	50.00	-7	75.00	1	100.0	-1
Carbon Tetrachloride			0.500	-12	2.000	16	5.000	1	10.00	2	20.00	-1	50.00	-8	75.00	2	100.0	0
1,2-Dichloroethane			0.500	-5	2.000	8	5.000	0	10.00	0	20.00	6	50.00	2	75.00	-5	100.0	-6
Benzene			0.500	-4	2.000	18	5.000	0	10.00	-1	20.00	5	50.00	-4	75.00	-5	100.0	-10
Trichloroethene			0.500	-6	2.000	14	5.000	-5	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-3
1,2-Dichloropropane			0.500	0	2.000	9	5.000	1	10.00	-4	20.00	3	50.00	-2	75.00	-2	100.0	-5
Bromodichloromethane			0.500	-5	2.000	8	5.000	-1	10.00	-5	20.00	4	50.00	0	75.00	-1	100.0	-2
Dibromomethane			0.500	-8	2.000	1	5.000	-1	10.00	-2	20.00	5	50.00	5	75.00	1	100.0	-1
4-Methyl-2-Pentanone					2.000	1	5.000	-1	10.00	1	20.00	7	50.00	6	75.00	-5	100.0	-9
cis-1,3-Dichloropropene			0.500	-2	2.000	8	5.000	-1	10.00	0	20.00	1	50.00	1	75.00	-3	100.0	-5
Toluene			0.500	-2	2.000	18	5.000	-3	10.00	-8	20.00	0	50.00	-1	75.00	2	100.0	-5
trans-1,3-Dichloropropene			0.500	-7	2.000	11	5.000	1	10.00	-4	20.00	7	50.00	-1	75.00	-1	100.0	-5
1,1,2-Trichloroethane			0.500	-7	2.000	6	5.000	-2	10.00	-4	20.00	5	50.00	3	75.00	0	100.0	0
2-Hexanone					2.000	10	5.000	2	10.00	-1	20.00	4	50.00	4	75.00	-7	100.0	-12
1,3-Dichloropropane			0.500	-8	2.000	6	5.000	-3	10.00	-3	20.00	4	50.00	6	75.00	2	100.0	-3
Tetrachloroethene			0.500	-17	2.000	17	5.000	-3	10.00	-4	20.00	1	50.00	-5	75.00	6	100.0	4
Dibromochloromethane			0.500	-4	2.000	2	5.000	-4	10.00	-4	20.00	3	50.00	3	75.00	4	100.0	0
1,2-Dibromoethane			0.500	-9	2.000	1	5.000	-3	10.00	-5	20.00	4	50.00	5	75.00	4	100.0	3
Chlorobenzene			0.500	-6	2.000	16	5.000	-3	10.00	-5	20.00	4	50.00	1	75.00	-1	100.0	-6
1,1,1,2-Tetrachloroethane			0.500	-4	2.000	12	5.000	-7	10.00	-7	20.00	1	50.00	4	75.00	3	100.0	-1
Ethylbenzene			0.500	-3	2.000	23	5.000	0	10.00	-3	20.00	6	50.00	-3	75.00	-7	100.0	-14

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	0	1.000	-10	4.000	22	10.00	0	20.00	-3	40.00	6	100.0	1	150.0	-2	200.0	-13
o-Xylene			0.500	-7	2.000	14	5.000	-3	10.00	-6	20.00	4	50.00	1	75.00	0	100.0	-3
Styrene			0.500	-5	2.000	10	5.000	-3	10.00	-5	20.00	6	50.00	4	75.00	-1	100.0	-6
Bromoform			0.500	-13	2.000	1	5.000	-7	10.00	-5	20.00	4	50.00	7	75.00	7	100.0	5
Isopropylbenzene			0.500	-11	2.000	21	5.000	-1	10.00	-2	20.00	4	50.00	-6	75.00	2	100.0	-6
1,1,2,2-Tetrachloroethane			0.500	-1	2.000	-2	5.000	-3	10.00	-2	20.00	1	50.00	1	75.00	6	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	3	5.000	-5	10.00	-4	20.00	1	50.00	5	75.00	3	100.0	-8
Propylbenzene			0.500	-5	2.000	24	5.000	0	10.00	1	20.00	5	50.00	-5	75.00	-5	100.0	-16
Bromobenzene			0.500	-3	2.000	5	5.000	-6	10.00	-6	20.00	2	50.00	5	75.00	5	100.0	-3
1,3,5-Trimethylbenzene			0.500	-3	2.000	19	5.000	-1	10.00	-1	20.00	5	50.00	-2	75.00	-3	100.0	-14
2-Chlorotoluene			0.500	5	2.000	20	5.000	-1	10.00	-2	20.00	6	50.00	-3	75.00	-7	100.0	-18
4-Chlorotoluene			0.500	5	2.000	13	5.000	-5	10.00	-3	20.00	0	50.00	-1	75.00	0	100.0	-8
tert-Butylbenzene			0.500	-9	2.000	17	5.000	-5	10.00	-2	20.00	3	50.00	-4	75.00	2	100.0	-2
1,2,4-Trimethylbenzene			0.500	0	2.000	17	5.000	-5	10.00	-5	20.00	3	50.00	-3	75.00	0	100.0	-6
sec-Butylbenzene			0.500	-12	2.000	16	5.000	-2	10.00	-2	20.00	3	50.00	-6	75.00	5	100.0	-3
para-Isopropyl Toluene			0.500	-7	2.000	13	5.000	-4	10.00	-1	20.00	3	50.00	-7	75.00	5	100.0	-1
1,3-Dichlorobenzene			0.500	-4	2.000	10	5.000	-6	10.00	-6	20.00	1	50.00	0	75.00	4	100.0	0
1,4-Dichlorobenzene			0.500	1	2.000	12	5.000	-7	10.00	-5	20.00	1	50.00	0	75.00	1	100.0	-3
n-Butylbenzene			0.500	-7	2.000	17	5.000	-6	10.00	-2	20.00	3	50.00	-7	75.00	3	100.0	-2
1,2-Dichlorobenzene			0.500	1	2.000	3	5.000	-4	10.00	-6	20.00	1	50.00	1	75.00	4	100.0	-1
1,2-Dibromo-3-Chloropropane			0.500	-10	2.000	14	5.000	0	10.00	1	20.00	1	50.00	4	75.00	-3	100.0	-6
1,2,4-Trichlorobenzene			0.500	-6	2.000	2	5.000	-7	10.00	-4	20.00	1	50.00	3	75.00	4	100.0	6
Hexachlorobutadiene			0.500	-21	2.000	12	5.000	-7	10.00	-3	20.00	3	50.00	-7	75.00	11	100.0	11
Naphthalene			0.500	-7	2.000	-2	5.000	-4	10.00	-2	20.00	2	50.00	6	75.00	4	100.0	3
1,2,3-Trichlorobenzene			0.500	-9	2.000	-1	5.000	-6	10.00	-5	20.00	3	50.00	5	75.00	7	100.0	6
Dibromofluoromethane	50.00	-1	50.00	0	50.00	1	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-2	50.00	-5
1,2-Dichloroethane-d4	50.00	0	50.00	3	50.00	7	50.00	7	50.00	7	50.00	6	50.00	-4	50.00	-11	50.00	-15
Toluene-d8	50.00	-3	50.00	-2	50.00	2	50.00	1	50.00	2	50.00	0	50.00	0	50.00	-1	50.00	0
Bromofluorobenzene	50.00	-1	50.00	3	50.00	0	50.00	1	50.00	0	50.00	-3	50.00	0	50.00	1	50.00	-2

BO 01/29/10 [Iodomethane]: cannot report 8260c

BO 01/29/10 [Cyclohexanone]: cannot report 8260c

BO 01/29/10 [2-Chloroethylvinylether]: cannot report 8260c

BO 01/29/10 [2-Butanone]: Corrected baseline noise or negative peak in 2PPB (iar09).

Analyst: BO

Date: 01/29/10

Reviewer: LW

Date: 01/29/10

m=manual integration

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

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480039377001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218702 MSVOA Water
EPA 8260B

Inst : MSVOA09
Calnum : 480039377001

Name : 826GOX9W
Cal Date : 27-JAN-2010

Type : WATER

ICV 480039377016 (iar16 28-JAN-2010) stds: S13817 (10000X), S13687 (5000X)
ICV 480039377017 (iar17 28-JAN-2010) stds: S13654 (10000X), S13639 (10000X),
S13492 (10000X), S13687 (5000X)

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
Freon 12	480039377016	25.00	20.09	ug/L	-20	25	
Chloromethane	480039377016	25.00	20.89	ug/L	-16	25	
Vinyl Chloride	480039377016	25.00	20.03	ug/L	-20	25	
Bromomethane	480039377016	25.00	22.30	ug/L	-11	25	
Chloroethane	480039377016	25.00	24.23	ug/L	-3	25	
Trichlorofluoromethane	480039377016	25.00	22.44	ug/L	-10	25	
Acetone	480039377017	25.00	21.54	ug/L	-14	25	
1,1-Dichloroethene	480039377017	25.00	26.91	ug/L	8	25	
Iodomethane	480039377017	25.00	18.32	ug/L	-27	25	v-
Methylene Chloride	480039377017	25.00	25.37	ug/L	1	25	
Carbon Disulfide	480039377017	25.00	23.28	ug/L	-7	25	
MTBE	480039377017	25.00	21.43	ug/L	-14	25	
trans-1,2-Dichloroethene	480039377017	25.00	26.20	ug/L	5	25	
Vinyl Acetate	480039377017	25.00	30.70	ug/L	23	25	
1,1-Dichloroethane	480039377017	25.00	24.42	ug/L	-2	25	
2-Butanone	480039377017	25.00	21.82	ug/L	-13	25	
2,2-Dichloropropane	480039377017	25.00	23.05	ug/L	-8	25	
cis-1,2-Dichloroethene	480039377017	25.00	26.25	ug/L	5	25	
Chloroform	480039377017	25.00	24.59	ug/L	-2	25	
Bromochloromethane	480039377017	25.00	27.00	ug/L	8	25	
1,1,1-Trichloroethane	480039377017	25.00	24.17	ug/L	-3	25	
1,1-Dichloropropene	480039377017	25.00	25.99	ug/L	4	25	
Carbon Tetrachloride	480039377017	25.00	25.34	ug/L	1	25	
1,2-Dichloroethane	480039377017	25.00	24.60	ug/L	-2	25	
Benzene	480039377017	25.00	27.05	ug/L	8	25	
Trichloroethene	480039377017	25.00	25.70	ug/L	3	25	
1,2-Dichloropropane	480039377017	25.00	24.27	ug/L	-3	25	
Bromodichloromethane	480039377017	25.00	25.33	ug/L	1	25	
Dibromomethane	480039377017	25.00	26.37	ug/L	5	25	
4-Methyl-2-Pentanone	480039377017	25.00	24.05	ug/L	-4	25	
cis-1,3-Dichloropropene	480039377017	25.00	26.24	ug/L	5	25	
Toluene	480039377017	25.00	27.48	ug/L	10	25	
trans-1,3-Dichloropropene	480039377017	25.00	23.44	ug/L	-6	25	
1,1,2-Trichloroethane	480039377017	25.00	27.04	ug/L	8	25	
2-Hexanone	480039377017	25.00	23.20	ug/L	-7	25	
1,3-Dichloropropane	480039377017	25.00	27.15	ug/L	9	25	
Tetrachloroethene	480039377017	25.00	26.80	ug/L	7	25	
Dibromochloromethane	480039377017	25.00	26.70	ug/L	7	25	
1,2-Dibromoethane	480039377017	25.00	28.03	ug/L	12	25	
Chlorobenzene	480039377017	25.00	26.33	ug/L	5	25	
1,1,1,2-Tetrachloroethane	480039377017	25.00	27.46	ug/L	10	25	
Ethylbenzene	480039377017	25.00	27.03	ug/L	8	25	
m,p-Xylenes	480039377017	50.00	57.68	ug/L	15	25	
o-Xylene	480039377017	25.00	27.64	ug/L	11	25	
Styrene	480039377017	25.00	27.93	ug/L	12	25	
Bromoform	480039377017	25.00	27.39	ug/L	10	25	
Isopropylbenzene	480039377017	25.00	24.25	ug/L	-3	25	

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	480039377017	25.00	27.95	ug/L	12	25	
1,2,3-Trichloropropane	480039377017	25.00	27.52	ug/L	10	25	
Propylbenzene	480039377017	25.00	27.56	ug/L	10	25	
Bromobenzene	480039377017	25.00	28.48	ug/L	14	25	
1,3,5-Trimethylbenzene	480039377017	25.00	27.77	ug/L	11	25	
2-Chlorotoluene	480039377017	25.00	27.96	ug/L	12	25	
4-Chlorotoluene	480039377017	25.00	26.81	ug/L	7	25	
tert-Butylbenzene	480039377017	25.00	27.81	ug/L	11	25	
1,2,4-Trimethylbenzene	480039377017	25.00	26.73	ug/L	7	25	
sec-Butylbenzene	480039377017	25.00	29.07	ug/L	16	25	
para-Isopropyl Toluene	480039377017	25.00	26.98	ug/L	8	25	
1,3-Dichlorobenzene	480039377017	25.00	26.38	ug/L	6	25	
1,4-Dichlorobenzene	480039377017	25.00	26.14	ug/L	5	25	
n-Butylbenzene	480039377017	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	480039377017	25.00	27.01	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	480039377017	25.00	26.21	ug/L	5	25	
1,2,4-Trichlorobenzene	480039377017	25.00	26.47	ug/L	6	25	
Hexachlorobutadiene	480039377017	25.00	27.55	ug/L	10	25	
Naphthalene	480039377017	25.00	27.87	ug/L	11	25	
1,2,3-Trichlorobenzene	480039377017	25.00	28.65	ug/L	15	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : 25PPB IDF : 1.0
 Seqnum : 480117250005.1 File : icm05 Time : 22-MAR-2010 12:09
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14216 (20000X), S14108 (20000X), S13625 (40000X), S13719 (20000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.5602	25.00	24.18	ug/L	-3	20	0.0500	
Chloromethane	0.8790	0.8498	25.00	24.17	ug/L	-3	20	0.1000	
Vinyl Chloride	0.6271	0.6724	25.00	26.81	ug/L	7	20	0.0500	
Bromomethane	0.3610	0.4126	25.00	28.58	ug/L	14	20	0.0500	
Chloroethane	0.4411	0.4314	25.00	24.45	ug/L	-2	20	0.0500	
Trichlorofluoromethane	0.6268	0.6270	25.00	25.01	ug/L	0	20	0.0500	
Acetone	0.1056	0.0971	25.00	22.98	ug/L	-8	20	0.0500	
1,1-Dichloroethene	0.3802	0.3921	25.00	25.78	ug/L	3	20	0.0500	
Iodomethane	0.5839	0.4781	25.00	20.47	ug/L	-18	20	0.0500	
Methylene Chloride	0.5313	0.5009	25.00	23.57	ug/L	-6	20	0.0500	
Carbon Disulfide	1.6806	1.8231	25.00	27.12	ug/L	8	20	0.0500	
MTBE	0.9672	0.8749	25.00	22.61	ug/L	-10	20	0.0500	
trans-1,2-Dichloroethene	0.4686	0.4521	25.00	24.12	ug/L	-4	20	0.0500	
Vinyl Acetate	0.7245	0.7991	25.00	27.58	ug/L	10	20	0.0500	
1,1-Dichloroethane	0.9167	0.9024	25.00	24.61	ug/L	-2	20	0.1000	
2-Butanone	0.1773	0.1515	25.00	21.36	ug/L	-15	20	0.0500	
2,2-Dichloropropane	0.5197	0.5816	25.00	27.98	ug/L	12	20	0.0500	
cis-1,2-Dichloroethene	0.5067	0.4999	25.00	24.66	ug/L	-1	20	0.0500	
Chloroform	0.8063	0.7853	25.00	24.35	ug/L	-3	20	0.0500	
Bromochloromethane	0.2159	0.2129	25.00	24.66	ug/L	-1	20	0.0500	
1,1,1-Trichloroethane	0.5481	0.5345	25.00	24.38	ug/L	-2	20	0.0500	
1,1-Dichloropropene	0.3652	0.3847	25.00	26.34	ug/L	5	20	0.0500	
Carbon Tetrachloride	0.2856	0.2811	25.00	24.61	ug/L	-2	20	0.0500	
1,2-Dichloroethane	0.2817	0.2571	25.00	22.82	ug/L	-9	20	0.0500	
Benzene	1.0704	1.1149	25.00	26.04	ug/L	4	20	0.0500	
Trichloroethene	0.2855	0.2717	25.00	23.79	ug/L	-5	20	0.0500	
1,2-Dichloropropane	0.3485	0.3373	25.00	24.20	ug/L	-3	20	0.0500	
Bromodichloromethane	0.3617	0.3280	25.00	22.67	ug/L	-9	20	0.0500	
Dibromomethane	0.1582	0.1472	25.00	23.26	ug/L	-7	20	0.0500	
4-Methyl-2-Pentanone	0.2323	0.2044	25.00	22.00	ug/L	-12	20	0.0500	
cis-1,3-Dichloropropene	0.4552	0.4344	25.00	23.85	ug/L	-5	20	0.0500	
Toluene	0.7834	0.8123	25.00	25.92	ug/L	4	20	0.0500	
trans-1,3-Dichloropropene	0.4642	0.4191	25.00	22.57	ug/L	-10	20	0.0500	
1,1,2-Trichloroethane	0.1436	0.1374	25.00	23.91	ug/L	-4	20	0.0500	
2-Hexanone	0.2041	0.1798	25.00	22.02	ug/L	-12	20	0.0500	
1,3-Dichloropropane	0.4370	0.4356	25.00	24.92	ug/L	0	20	0.0500	
Tetrachloroethene	0.2974	0.3088	25.00	25.96	ug/L	4	20	0.0500	
Dibromochloromethane	0.3029	0.2713	25.00	22.39	ug/L	-10	20	0.0500	
1,2-Dibromoethane	0.2527	0.2425	25.00	23.99	ug/L	-4	20	0.0500	
Chlorobenzene	0.8508	0.8507	25.00	25.00	ug/L	0	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2959	0.2913	25.00	24.61	ug/L	-2	20	0.0500	
Ethylbenzene	1.4015	1.4562	25.00	25.97	ug/L	4	20	0.0500	
m,p-Xylenes	0.5056	0.5555	50.00	54.93	ug/L	10	20	0.0500	
o-Xylene	0.5265	0.5396	25.00	25.63	ug/L	3	20	0.0500	
Styrene	0.9089	0.9513	25.00	26.17	ug/L	5	20	0.0500	
Bromoform	0.1737	0.1591	25.00	22.91	ug/L	-8	20	0.1000	
Isopropylbenzene	2.6074	2.7725	25.00	26.58	ug/L	6	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.6064	0.5830	25.00	24.04	ug/L	-4	20	0.3000	
1,2,3-Trichloropropane	0.1368	0.1233	25.00	22.53	ug/L	-10	20	0.0500	
Propylbenzene	3.2004	3.5145	25.00	27.45	ug/L	10	20	0.0500	
Bromobenzene	0.6876	0.7020	25.00	25.52	ug/L	2	20	0.0500	
1,3,5-Trimethylbenzene	2.0495	2.2142	25.00	27.01	ug/L	8	20	0.0500	
2-Chlorotoluene	2.1411	2.2515	25.00	26.29	ug/L	5	20	0.0500	
4-Chlorotoluene	2.0800	2.1135	25.00	25.40	ug/L	2	20	0.0500	
tert-Butylbenzene	1.7249	1.8493	25.00	26.80	ug/L	7	20	0.0500	
1,2,4-Trimethylbenzene	2.1567	2.1819	25.00	25.29	ug/L	1	20	0.0500	
sec-Butylbenzene	2.6657	2.9857	25.00	28.00	ug/L	12	20	0.0500	
para-Isopropyl Toluene	2.0335	2.2508	25.00	27.67	ug/L	11	20	0.0500	
1,3-Dichlorobenzene	1.2884	1.2697	25.00	24.64	ug/L	-1	20	0.0500	
1,4-Dichlorobenzene	1.3177	1.2988	25.00	24.64	ug/L	-1	20	0.0500	
n-Butylbenzene	2.0640	2.1700	25.00	26.28	ug/L	5	20	0.0500	
1,2-Dichlorobenzene	1.1774	1.1449	25.00	24.31	ug/L	-3	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0900	0.0749	25.00	20.81	ug/L	-17	20	0.0500	
1,2,4-Trichlorobenzene	0.6833	0.6729	25.00	24.62	ug/L	-2	20	0.0500	
Hexachlorobutadiene	0.3229	0.3553	25.00	27.51	ug/L	10	20	0.0500	
Naphthalene	1.3048	1.2146	25.00	23.27	ug/L	-7	20	0.0500	
1,2,3-Trichlorobenzene	0.6040	0.5965	25.00	24.69	ug/L	-1	20	0.0500	
Dibromofluoromethane	0.5695	0.5531	50.00	48.55	ug/L	-3	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.2630	50.00	47.58	ug/L	-5	20	0.0500	
Toluene-d8	1.3769	1.4158	50.00	51.41	ug/L	3	20	0.0500	
Bromofluorobenzene	1.0267	1.0130	50.00	49.33	ug/L	-1	20	0.0500	

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	2333442	11.12	12.37	12.37	0.00
1,4-Difluorobenzene	3438431	3764609	9.49	13.66	13.65	-0.01
Chlorobenzene-d5	2768728	2943360	6.31	17.68	17.66	-0.02
1,4-Dichlorobenzene-d4	1353103	1422491	5.13	20.18	20.17	-0.01

Analyst: TDL

Date: 03/24/10

Reviewer: LW

Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : 20PPB IDF : 1.0
 Seqnum : 480118602003.1 File : icn03 Time : 23-MAR-2010 10:03
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14216 (25000X), S14108 (25000X), S13625 (50000X), S13719 (25000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.6125	20.00	21.15	ug/L	6	20	0.0500	
Chloromethane	0.8790	0.9048	20.00	20.59	ug/L	3	20	0.1000	
Vinyl Chloride	0.6271	0.6691	20.00	21.34	ug/L	7	20	0.0500	
Bromomethane	0.3610	0.4191	20.00	23.22	ug/L	16	20	0.0500	
Chloroethane	0.4411	0.4417	20.00	20.03	ug/L	0	20	0.0500	
Trichlorofluoromethane	0.6268	0.6499	20.00	20.74	ug/L	4	20	0.0500	
Acetone	0.1056	0.0950	20.00	17.98	ug/L	-10	20	0.0500	
1,1-Dichloroethene	0.3802	0.4383	20.00	23.06	ug/L	15	20	0.0500	
Iodomethane	0.5839	0.4170	20.00	14.28	ug/L	-29	20	0.0500	c- ***
Methylene Chloride	0.5313	0.5201	20.00	19.58	ug/L	-2	20	0.0500	
Carbon Disulfide	1.6806	1.8819	20.00	22.40	ug/L	12	20	0.0500	
MTBE	0.9672	0.8984	20.00	18.58	ug/L	-7	20	0.0500	
trans-1,2-Dichloroethene	0.4686	0.4903	20.00	20.93	ug/L	5	20	0.0500	
Vinyl Acetate	0.7245	0.7748	20.00	21.39	ug/L	7	20	0.0500	
1,1-Dichloroethane	0.9167	0.9578	20.00	20.90	ug/L	4	20	0.1000	
2-Butanone	0.1773	0.1529	20.00	17.25	ug/L	-14	20	0.0500	
2,2-Dichloropropane	0.5197	0.6009	20.00	23.13	ug/L	16	20	0.0500	
cis-1,2-Dichloroethene	0.5067	0.5343	20.00	21.09	ug/L	5	20	0.0500	
Chloroform	0.8063	0.7957	20.00	19.74	ug/L	-1	20	0.0500	
Bromochloromethane	0.2159	0.2179	20.00	20.18	ug/L	1	20	0.0500	
1,1,1-Trichloroethane	0.5481	0.5545	20.00	20.24	ug/L	1	20	0.0500	
1,1-Dichloropropene	0.3652	0.3940	20.00	21.58	ug/L	8	20	0.0500	
Carbon Tetrachloride	0.2856	0.2912	20.00	20.39	ug/L	2	20	0.0500	
1,2-Dichloroethane	0.2817	0.2543	20.00	18.06	ug/L	-10	20	0.0500	
Benzene	1.0704	1.1366	20.00	21.24	ug/L	6	20	0.0500	
Trichloroethene	0.2855	0.2893	20.00	20.27	ug/L	1	20	0.0500	
1,2-Dichloropropane	0.3485	0.3379	20.00	19.39	ug/L	-3	20	0.0500	
Bromodichloromethane	0.3617	0.3313	20.00	18.32	ug/L	-8	20	0.0500	
Dibromomethane	0.1582	0.1482	20.00	18.73	ug/L	-6	20	0.0500	
4-Methyl-2-Pentanone	0.2323	0.1999	20.00	17.21	ug/L	-14	20	0.0500	
cis-1,3-Dichloropropene	0.4552	0.4253	20.00	18.68	ug/L	-7	20	0.0500	
Toluene	0.7834	0.8618	20.00	22.00	ug/L	10	20	0.0500	
trans-1,3-Dichloropropene	0.4642	0.4180	20.00	18.01	ug/L	-10	20	0.0500	
1,1,2-Trichloroethane	0.1436	0.1403	20.00	19.54	ug/L	-2	20	0.0500	
2-Hexanone	0.2041	0.1819	20.00	17.82	ug/L	-11	20	0.0500	
1,3-Dichloropropane	0.4370	0.4498	20.00	20.59	ug/L	3	20	0.0500	
Tetrachloroethene	0.2974	0.3308	20.00	22.25	ug/L	11	20	0.0500	
Dibromochloromethane	0.3029	0.2833	20.00	18.70	ug/L	-6	20	0.0500	
1,2-Dibromoethane	0.2527	0.2525	20.00	19.98	ug/L	0	20	0.0500	
Chlorobenzene	0.8508	0.9042	20.00	21.26	ug/L	6	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2959	0.3087	20.00	20.86	ug/L	4	20	0.0500	
Ethylbenzene	1.4015	1.5413	20.00	21.99	ug/L	10	20	0.0500	
m,p-Xylenes	0.5056	0.5647	40.00	44.67	ug/L	12	20	0.0500	
o-Xylene	0.5265	0.5742	20.00	21.81	ug/L	9	20	0.0500	
Styrene	0.9089	0.9834	20.00	21.64	ug/L	8	20	0.0500	
Bromoform	0.1737	0.1657	20.00	19.08	ug/L	-5	20	0.1000	
Isopropylbenzene	2.6074	2.9274	20.00	22.45	ug/L	12	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.6064	0.5877	20.00	19.39	ug/L	-3	20	0.3000	
1,2,3-Trichloropropane	0.1368	0.1210	20.00	17.69	ug/L	-12	20	0.0500	
Propylbenzene	3.2004	3.5666	20.00	22.29	ug/L	11	20	0.0500	
Bromobenzene	0.6876	0.7137	20.00	20.76	ug/L	4	20	0.0500	
1,3,5-Trimethylbenzene	2.0495	2.2175	20.00	21.64	ug/L	8	20	0.0500	
2-Chlorotoluene	2.1411	2.2691	20.00	21.20	ug/L	6	20	0.0500	
4-Chlorotoluene	2.0800	2.1284	20.00	20.47	ug/L	2	20	0.0500	
tert-Butylbenzene	1.7249	1.8880	20.00	21.89	ug/L	9	20	0.0500	
1,2,4-Trimethylbenzene	2.1567	2.3014	20.00	21.34	ug/L	7	20	0.0500	
sec-Butylbenzene	2.6657	3.0130	20.00	22.61	ug/L	13	20	0.0500	
para-Isopropyl Toluene	2.0335	2.1835	20.00	21.48	ug/L	7	20	0.0500	
1,3-Dichlorobenzene	1.2884	1.2980	20.00	20.15	ug/L	1	20	0.0500	
1,4-Dichlorobenzene	1.3177	1.3195	20.00	20.03	ug/L	0	20	0.0500	
n-Butylbenzene	2.0640	2.1400	20.00	20.74	ug/L	4	20	0.0500	
1,2-Dichlorobenzene	1.1774	1.1684	20.00	19.85	ug/L	-1	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0900	0.0750	20.00	16.67	ug/L	-17	20	0.0500	
1,2,4-Trichlorobenzene	0.6833	0.6567	20.00	19.22	ug/L	-4	20	0.0500	
Hexachlorobutadiene	0.3229	0.3491	20.00	21.62	ug/L	8	20	0.0500	
Naphthalene	1.3048	1.1535	20.00	17.68	ug/L	-12	20	0.0500	
1,2,3-Trichlorobenzene	0.6040	0.5769	20.00	19.10	ug/L	-4	20	0.0500	
Dibromofluoromethane	0.5695	0.5549	50.00	48.72	ug/L	-3	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.2572	50.00	46.54	ug/L	-7	20	0.0500	
Toluene-d8	1.3769	1.3947	50.00	50.64	ug/L	1	20	0.0500	
Bromofluorobenzene	1.0267	0.9923	50.00	48.32	ug/L	-3	20	0.0500	

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	2468042	17.53	12.37	12.37	0.00
1,4-Difluorobenzene	3438431	4063703	18.18	13.66	13.67	0.01
Chlorobenzene-d5	2768728	3125149	12.87	17.68	17.67	-0.01
1,4-Dichlorobenzene-d4	1353103	1544206	14.12	20.18	20.17	-0.01

Analyst: TDL

Date: 03/24/10

Reviewer: LW

Date: 03/24/10

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218702 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : 20PPB IDF : 1.0
 Seqnum : 480118602011.1 File : icn11 Time : 23-MAR-2010 14:37
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14216 (25000X), S14108 (25000X), S13625 (50000X), S13719 (25000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.5591	20.00	19.31	ug/L	-3	20	0.0500	
Chloromethane	0.8790	0.7805	20.00	17.76	ug/L	-11	20	0.1000	
Vinyl Chloride	0.6271	0.6013	20.00	19.18	ug/L	-4	20	0.0500	
Bromomethane	0.3610	0.3672	20.00	20.34	ug/L	2	20	0.0500	
Chloroethane	0.4411	0.4150	20.00	18.82	ug/L	-6	20	0.0500	
Trichlorofluoromethane	0.6268	0.6081	20.00	19.40	ug/L	-3	20	0.0500	
Acetone	0.1056	0.1008	20.00	19.08	ug/L	-5	20	0.0500	
1,1-Dichloroethene	0.3802	0.4052	20.00	21.31	ug/L	7	20	0.0500	
Iodomethane	0.5839	0.4114	20.00	14.09	ug/L	-30	20	0.0500	c- ***
Methylene Chloride	0.5313	0.5029	20.00	18.93	ug/L	-5	20	0.0500	
Carbon Disulfide	1.6806	1.8210	20.00	21.67	ug/L	8	20	0.0500	
MTBE	0.9672	0.8992	20.00	18.60	ug/L	-7	20	0.0500	
trans-1,2-Dichloroethene	0.4686	0.4621	20.00	19.72	ug/L	-1	20	0.0500	
Vinyl Acetate	0.7245	0.6940	20.00	19.16	ug/L	-4	20	0.0500	
1,1-Dichloroethane	0.9167	0.8695	20.00	18.97	ug/L	-5	20	0.1000	
2-Butanone	0.1773	0.1570	20.00	17.71	ug/L	-11	20	0.0500	
2,2-Dichloropropane	0.5197	0.5226	20.00	20.11	ug/L	1	20	0.0500	
cis-1,2-Dichloroethene	0.5067	0.5117	20.00	20.20	ug/L	1	20	0.0500	
Chloroform	0.8063	0.7614	20.00	18.89	ug/L	-6	20	0.0500	
Bromochloromethane	0.2159	0.2167	20.00	20.08	ug/L	0	20	0.0500	
1,1,1-Trichloroethane	0.5481	0.5140	20.00	18.76	ug/L	-6	20	0.0500	
1,1-Dichloropropene	0.3652	0.3572	20.00	19.56	ug/L	-2	20	0.0500	
Carbon Tetrachloride	0.2856	0.2731	20.00	19.13	ug/L	-4	20	0.0500	
1,2-Dichloroethane	0.2817	0.2454	20.00	17.43	ug/L	-13	20	0.0500	
Benzene	1.0704	1.0810	20.00	20.20	ug/L	1	20	0.0500	
Trichloroethene	0.2855	0.2830	20.00	19.83	ug/L	-1	20	0.0500	
1,2-Dichloropropane	0.3485	0.3324	20.00	19.08	ug/L	-5	20	0.0500	
Bromodichloromethane	0.3617	0.3245	20.00	17.94	ug/L	-10	20	0.0500	
Dibromomethane	0.1582	0.1520	20.00	19.21	ug/L	-4	20	0.0500	
4-Methyl-2-Pentanone	0.2323	0.2200	20.00	18.94	ug/L	-5	20	0.0500	
cis-1,3-Dichloropropene	0.4552	0.4117	20.00	18.09	ug/L	-10	20	0.0500	
Toluene	0.7834	0.8226	20.00	21.00	ug/L	5	20	0.0500	
trans-1,3-Dichloropropene	0.4642	0.4406	20.00	18.98	ug/L	-5	20	0.0500	
1,1,2-Trichloroethane	0.1436	0.1459	20.00	20.32	ug/L	2	20	0.0500	
2-Hexanone	0.2041	0.1880	20.00	18.42	ug/L	-8	20	0.0500	
1,3-Dichloropropane	0.4370	0.4602	20.00	21.06	ug/L	5	20	0.0500	
Tetrachloroethene	0.2974	0.3306	20.00	22.23	ug/L	11	20	0.0500	
Dibromochloromethane	0.3029	0.2873	20.00	18.97	ug/L	-5	20	0.0500	
1,2-Dibromoethane	0.2527	0.2604	20.00	20.61	ug/L	3	20	0.0500	
Chlorobenzene	0.8508	0.8743	20.00	20.55	ug/L	3	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2959	0.3105	20.00	20.99	ug/L	5	20	0.0500	
Ethylbenzene	1.4015	1.5185	20.00	21.67	ug/L	8	20	0.0500	
m,p-Xylenes	0.5056	0.5581	40.00	44.15	ug/L	10	20	0.0500	
o-Xylene	0.5265	0.5558	20.00	21.11	ug/L	6	20	0.0500	
Styrene	0.9089	0.9807	20.00	21.58	ug/L	8	20	0.0500	
Bromoform	0.1737	0.1773	20.00	20.42	ug/L	2	20	0.1000	
Isopropylbenzene	2.6074	2.7520	20.00	21.11	ug/L	6	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.6064	0.6151	20.00	20.29	ug/L	1	20	0.3000	
1,2,3-Trichloropropane	0.1368	0.1380	20.00	20.16	ug/L	1	20	0.0500	
Propylbenzene	3.2004	3.4714	20.00	21.69	ug/L	8	20	0.0500	
Bromobenzene	0.6876	0.7325	20.00	21.31	ug/L	7	20	0.0500	
1,3,5-Trimethylbenzene	2.0495	2.1463	20.00	20.94	ug/L	5	20	0.0500	
2-Chlorotoluene	2.1411	2.1801	20.00	20.36	ug/L	2	20	0.0500	
4-Chlorotoluene	2.0800	2.0785	20.00	19.99	ug/L	0	20	0.0500	
tert-Butylbenzene	1.7249	1.8316	20.00	21.24	ug/L	6	20	0.0500	
1,2,4-Trimethylbenzene	2.1567	2.1374	20.00	19.82	ug/L	-1	20	0.0500	
sec-Butylbenzene	2.6657	2.9238	20.00	21.94	ug/L	10	20	0.0500	
para-Isopropyl Toluene	2.0335	2.1624	20.00	21.27	ug/L	6	20	0.0500	
1,3-Dichlorobenzene	1.2884	1.2514	20.00	19.43	ug/L	-3	20	0.0500	
1,4-Dichlorobenzene	1.3177	1.2991	20.00	19.72	ug/L	-1	20	0.0500	
n-Butylbenzene	2.0640	2.0671	20.00	20.03	ug/L	0	20	0.0500	
1,2-Dichlorobenzene	1.1774	1.1895	20.00	20.21	ug/L	1	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0900	0.0776	20.00	17.25	ug/L	-14	20	0.0500	
1,2,4-Trichlorobenzene	0.6833	0.6895	20.00	20.18	ug/L	1	20	0.0500	
Hexachlorobutadiene	0.3229	0.3378	20.00	20.92	ug/L	5	20	0.0500	
Naphthalene	1.3048	1.2550	20.00	19.24	ug/L	-4	20	0.0500	
1,2,3-Trichlorobenzene	0.6040	0.6065	20.00	20.08	ug/L	0	20	0.0500	
Dibromofluoromethane	0.5695	0.5433	50.00	47.70	ug/L	-5	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.2556	50.00	46.25	ug/L	-8	20	0.0500	
Toluene-d8	1.3769	1.4060	50.00	51.06	ug/L	2	20	0.0500	
Bromofluorobenzene	1.0267	0.9748	50.00	47.47	ug/L	-5	20	0.0500	

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	2391021	13.86	12.37	12.38	0.01
1,4-Difluorobenzene	3438431	3825262	11.25	13.66	13.67	0.01
Chlorobenzene-d5	2768728	2979980	7.63	17.68	17.67	-0.01
1,4-Dichlorobenzene-d4	1353103	1494395	10.44	20.18	20.18	0.00

Analyst: TDL

Date: 03/24/10

Reviewer: LW

Date: 03/24/10

--low bias c=CCV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 480117250

Date : 03/22/10
 Sequence : MSVOA09 icm

Reference : iar13
 Analyzed : 01/27/10 23:34

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2099875	12.37	3438431	13.66	2768728	17.68	1353103	20.18
		LOWER LIMIT	1049938	11.87	1719216	13.16	1384364	17.18	676552	19.68
		UPPER LIMIT	4199750	12.87	6876862	14.16	5537456	18.18	2706206	20.68
003	CCV	25PPB	1956614	12.37	3185766	13.65	2606274	17.66	1337934	20.18
005	CCV	25PPB	2333442	12.37	3764609	13.65	2943360	17.66	1422491	20.17
008	LCS	QC536949	2366234	12.37	3899171	13.65	2989244	17.66	1444375	20.18
010	BLANK	QC536950	2336107	12.37	3691079	13.65	2909316	17.67	1324146	20.17
011	SAMPLE	218702-001	2189118	12.37	3586070	13.66	2751267	17.67	1271634	20.18
012	SAMPLE	218702-010	2019121	12.37	3320939	13.66	2556773	17.66	1171274	20.18
013	MSS	218702-002	1949222	12.37	3152062	13.66	2488120	17.67	1150461	20.17
014	SAMPLE	218702-008	1912387	12.38	3132544	13.66	2447651	17.66	1234391	20.18
015	SAMPLE	218702-008	2366630	12.37	3849371	13.66	3010869	17.67	1440282	20.18
016	SAMPLE	218702-004	2284642	12.38	3710280	13.66	2936016	17.67	1400185	20.18
017	SAMPLE	218702-009	2279152	12.38	3669745	13.66	2993401	17.67	1346700	20.18
018	SAMPLE	218702-011	2332325	12.37	3687650	13.66	2919224	17.67	1375205	20.17
019	SAMPLE	218702-012	2301028	12.37	3606670	13.66	2848417	17.67	1406065	20.17
020	SAMPLE	218702-007	2273236	12.37	3708450	13.66	2880749	17.67	1388921	20.18
021	SAMPLE	218702-003	2303859	12.37	3750075	13.65	2904123	17.67	1399863	20.17
022	SAMPLE	218702-005	2332419	12.37	3793867	13.66	2920314	17.67	1441473	20.17
023	SAMPLE	218702-006	2252703	12.37	3777850	13.66	2934886	17.67	1373754	20.18
024	SAMPLE	218720-022	2297753	12.37	3719589	13.65	2974545	17.67	1411281	20.17
025	MS	QC536951	2325231	12.37	3732741	13.66	2936590	17.67	1401862	20.17
026	MSD	QC536952	2357516	12.38	3829528	13.66	2925826	17.66	1408075	20.18
027	IB	IB	2318463	12.37	3703635	13.65	3047710	17.67	1592721	20.17
028	IB	IB	2346574	12.37	3782111	13.66	3084048	17.67	1511485	20.17
029	IB	IB	2375290	12.37	3788105	13.66	3003328	17.67	1409921	20.17

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 480118602

Date : 03/23/10
 Sequence : MSVOA09 icn

Reference : iar13
 Analyzed : 01/27/10 23:34

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2099875	12.37	3438431	13.66	2768728	17.68	1353103	20.18
		LOWER LIMIT	1049938	11.87	1719216	13.16	1384364	17.18	676552	19.68
		UPPER LIMIT	4199750	12.87	6876862	14.16	5537456	18.18	2706206	20.68
003	CCV	20PPB	2468042	12.37	4063703	13.67	3125149	17.67	1544206	20.17
004	BS	QC537126	2538789	12.38	4217306	13.67	3192902	17.66	1542260	20.18
005	BSD	QC537127	2581114	12.38	4180906	13.66	3307445	17.66	1562488	20.18
006	CCV/BS	QC537136	2563147	12.38	4116912	13.66	3237948	17.67	1510777	20.17
007	BSD	QC537137	2521942	12.38	4015501	13.67	3120024	17.67	1488305	20.17
011	CCV	20PPB	2391021	12.38	3825262	13.67	2979980	17.67	1494395	20.18
012	IB	IB	2505526	12.38	3952671	13.66	3166082	17.67	1572078	20.18
013	BLANK	QC537128	2424733	12.39	3897102	13.67	3003073	17.67	1456338	20.18
014	SAMPLE	218934-001	2523346	12.38	3935670	13.67	3098748	17.67	1499268	20.18
015	SAMPLE	218839-001	2390210	12.38	3989465	13.66	3157161	17.67	1525726	20.17
016	SAMPLE	218839-010	2438286	12.38	3900004	13.67	3071639	17.67	1505968	20.17
017	MSS	218839-011	2312379	12.38	3806992	13.67	2927658	17.67	1357931	20.17
018	SAMPLE	218835-005	2329320	12.38	3740253	13.67	2952026	17.67	1351682	20.18
019	SAMPLE	218869-001	2336403	12.38	3762622	13.66	2878329	17.67	1297447	20.17
020	SAMPLE	218869-003	2237600	12.38	3570975	13.66	2787522	17.66	1263133	20.18
021	SAMPLE	218841-002	2178016	12.38	3598925	13.66	2834150	17.67	1265758	20.17
022	SAMPLE	218841-003	2214747	12.38	3494742	13.67	2808706	17.66	1273553	20.18
023	SAMPLE	218702-006	2182002	12.38	3588750	13.66	2785034	17.66	1326441	20.18
024	SAMPLE	218720-007	2528995	12.38	4077138	13.67	3193317	17.67	1475754	20.17
025	SAMPLE	218720-015	2485113	12.38	4014884	13.66	3129675	17.66	1412453	20.17
026	MS	QC537244	2328928	12.38	3804864	13.66	3021456	17.67	1474172	20.17
027	MSD	QC537245	2454146	12.38	3935793	13.67	3115090	17.66	1523655	20.17
028	SAMPLE	218873-001	2519447	12.39	4218135	13.67	3122681	17.66	1471939	20.17
029	SAMPLE	218730-008	2623719	12.38	4181771	13.67	3264769	17.66	1565584	20.17
030	SAMPLE	218831-003	2662028	12.38	4277309	13.67	3229937	17.67	1518517	20.17

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 480118602

Instrument : MSVOA09 Begun : 03/23/10 08:42
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	icn01	X	IB			03/23/10 08:42	1.0	1	
002	icn02	TUN	BFB			03/23/10 09:34	1.0	2	
003	icn03	CCV	20PPB			03/23/10 10:03	1.0	3 4 5 6 1	
004	icn04	BS	QC537126	Water	161182	03/23/10 10:57	1.0	7 8 9 1	
005	icn05	BSD	QC537127	Water	161182	03/23/10 11:31	1.0	7 8 9 1	
006	icn06	CCV/BS	QC537136	Water	161182	03/23/10 12:05	1.0	10 1	
007	icn07	BSD	QC537137	Water	161182	03/23/10 12:39	1.0	10 1	
008	icn08	X	IB			03/23/10 13:13	1.0	1	
009	icn09	TUN	BFB			03/23/10 13:55	1.0	2	
010	icn10	TUN	BFB			03/23/10 14:10	1.0	2	
011	icn11	CCV	20PPB			03/23/10 14:37	1.0	3 4 5 6 1	
012	icn12	IB	IB			03/23/10 15:30	1.0	1	
013	icn13	BLANK	QC537128	Water	161182	03/23/10 16:04	1.0	1	
014	icn14	SAMPLE	218934-001	Water	161182	03/23/10 16:37	1.0	1	
015	icn15	SAMPLE	218839-001	Water	161182	03/23/10 17:11	1.0	1	
016	icn16	SAMPLE	218839-010	Water	161182	03/23/10 17:45	1.0	1	
017	icn17	MSS	218839-011	Water	161182	03/23/10 18:18	1.0	1	
018	icn18	SAMPLE	218835-005	Water	161182	03/23/10 18:52	1.0	1	
019	icn19	SAMPLE	218869-001	Water	161182	03/23/10 19:26	1.0	1	
020	icn20	SAMPLE	218869-003	Water	161182	03/23/10 20:00	1.0	1	1:MTBE=190
021	icn21	SAMPLE	218841-002	Water	161182	03/23/10 20:33	1.0	1	
022	icn22	SAMPLE	218841-003	Water	161182	03/23/10 21:07	1.0	1	
023	icn23	SAMPLE	218702-006	Water	161182	03/23/10 21:40	2.0	1	
024	icn24	SAMPLE	218720-007	Water	161182	03/23/10 22:14	40.0	1	headspace <= 1 mL
025	icn25	SAMPLE	218720-015	Water	161182	03/23/10 22:47	142.9	1	headspace <= 1 mL
026	icn26	MS	QC537244	Water	161182	03/23/10 23:21	1.0	7 8 9 1	
027	icn27	MSD	QC537245	Water	161182	03/23/10 23:54	1.0	7 8 9 1	
028	icn28	SAMPLE	218873-001	Water	161182	03/24/10 00:27	3.333	1	
029	icn29	SAMPLE	218730-008	Water	161182	03/24/10 01:01	20.0	1	
030	icn30	SAMPLE	218831-003	Water	161182	03/24/10 01:34	40.0	1	headspace > 1 mL
031	icn31	X	IB			03/24/10 02:09	1.0	1	
032	icn32	X	IB			03/24/10 02:44	1.0	1	
033	icn33	X	IB			03/24/10 03:18	1.0	1	

BJP 03/23/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 14.

TDL 03/24/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

TDL 03/24/10 : Runs 031-033 are IB's

Analyst: TDL Date: 03/24/10 Reviewer: LW Date: 03/24/10

Standards used: 1=S14026 2=S13652 3=S14216 4=S14108 5=S13625 6=S13719 7=S14092 8=S14234 9=S14144 10=S13447

GC/MS VOLATILE ORGANICS

Batch #: 161142

Water Sample Prep Sheet

Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	218702-1	A	✓	LV		9	1x IB	TPL 3/22/10
2	-2A	B					5x 1x	
3	-2	CDE	✓				1x MS/MS	
4	-3	B	✓				5x 502 1x Cool Cat	
5	-4						1x	
6	-5						5x 502 1x Cool Cat	
7	-6						5x 502 1x	
8	-7						5x 502 1x	
9	-8						1x	
10	-9							
11	-10	A					EB	
12	-11	B						
13	-12	J						
14	218720-22	C	✓	21	2		12.5x 10A CIT 2LK	
15								
16								
17								
18								
19								
20								
21								
22								
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Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 218730
ANALYTICAL REPORT

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 383868.US.60.61.QS
Location : Quarterly UST
Level : III

Table with 2 columns: Sample ID and Lab ID. Lists various sample identifiers and their corresponding lab IDs.

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

Signature: Senior Program Manager

Date: 03/25/2010

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 218730
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/11/10
Samples Received: 03/11/10

This data package contains sample and QC results for ten water samples, requested for the above referenced project on 03/11/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for iodomethane in the ICV analyzed 01/28/10 01:45; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for bromomethane in the CCV analyzed 03/22/10 12:27; this analyte met minimum response criteria, and affected data was qualified with "b". High response was observed for hexachlorobutadiene; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low responses were observed for iodomethane in the CCV analyzed 03/23/10 10:03 and the CCV analyzed 03/23/10 14:37; this analyte met minimum response criteria, and affected data was qualified with "b".

High recovery was observed for vinyl acetate in the BSD for batch 161182; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample.

No other analytical problems were encountered.

Chain of Custody

218730

38370-100310

Curtis & Tompkins Laboratories 2323 5th St. Berkeley, CA 94710 510-204-2221		Honeywell Chain Of Custody / Analysis Request		AESI Ref: 40242.58627 COC#: 37380	
Privileged & Confidential EDD To: Tuesday, Powers@Critigen.com Melanie.West@Critigen.com Sampler: <i>Derek Feola</i> PO #: PO-5101516/PN-397664/CC-6400 Analysis Turnaround Time (TAT): 7 Consultant Laboratory Contact Report Tier Level Full Report TAT: 7		Sky Harbor AZ PHOENIX, AZ Quarterly UST		Lab Proj # (SDG): Lab ID: CTBERK Site ID: SKYHARBOR Lab Job # Authorized User: Honeywell Text & Excel File Drive Only	
Sample Identification Location ID: Start Depth (ft) End Depth (ft) Field Sample ID 1 BC-7A - - TB-003-UST-1001 03/10/10 2 ASE-63A - - BC-7A-UST-1001 03/10/10 3 ASE-127A - - ASE-127A-UST-1001 03/10/10 4 ASE-64A - - ASE-64A-UST-1001 03/10/10 5 ASE-55A - - ASE-55A-UST-1001 03/10/10 6 PL-2102 - - PL-2102-UST-1001 03/10/10 7 ASE-61A - - ASE-61A-UST-1001 03/10/10 8 1001-003 - - UST-1001-003 03/10/10 9 ASE-63A - - ASE-63A-UST-1001 03/10/10 10 ASE-63A - - EB-003-UST-1001 03/10/10 11 12		Sample Date: 03/10/10 Sample Time: 0036 Sample Type: TB Sample Matrix: WATER Sample Purpose Cont: TB Sample # of Cont: 1 Composite/Grab: Units: G N X Field Filtered Sample #: Total VOCs (SW260B) (SW8015B) TRPH DRO C10-C22 -ORO C22-C32 Preservative: 8 1 MSMS		Lab Sample Numbers Sampling Method (code) Copyright AESI: Version 10.0 (11-25-08) Unauthorized use strictly prohibited.	
Relinquished by: <i>Derek Feola</i> Company: CH2MHILL Date/Time: 03/10/10 Relinquished by: <i>S. Evans</i> Company: <i>CH2M</i> Date/Time: 3-11-10 Relinquished by: <i>Derek Feola</i> Company: <i>CH2M</i> Date/Time: 03/10/10 Relinquished by: <i>Derek Feola</i> Company: <i>CH2M</i> Date/Time: 03/10/10		Received by: <i>S. Evans</i> Company: <i>CH2M</i> Date/Time: 3-11-10 Received by: <i>Derek Feola</i> Company: <i>CH2M</i> Date/Time: 03/10/10		Condition: Cooler Temp. Condition: Cooler Temp.	
Preservatives: (Other, Specify): 0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, pH>12); 7 (H2SO4, pH<2); 8 (HCl, pH<2); 9 (HCl, 4 Deg C); 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH, pH>12, 4 Deg, Ascorbic Acid); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); 14 (1-MeOH, 4 Deg C and 2-NaHSO4, 4 Deg C); 15 (NaOH, pH>12, 4 Deg C); sp (special instructions)					

FEBEX #

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218730 Date Received 3-11-10 Number of coolers 2
Client CH2M AZ Project QUARTERLY UST

Date Opened 3-11-10 By (print) S. EVANS (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) FEDEX # YES NO
Shipping info 8720 5038 8984

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many 1 EA Name SIGNATURE Date 3-10-10

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:

Type of ice used: Wet Blue/Gel None Temp(°C) 1.0, 0.5

Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 218730

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/10/10
Units:	ug/L	Received:	03/11/10
Batch#:	160979	Prepared:	03/16/10

Field ID: BC-7A-UST-10Q1 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/18/10
 Lab ID: 218730-002

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	109	50-120	

Field ID: ASE-127A-UST-10Q1 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/18/10
 Lab ID: 218730-003

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Field ID: ASE-64A-UST-10Q1 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/18/10
 Lab ID: 218730-004

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	2,800 Y	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

Field ID: ASE-55A-UST-10Q1 Diln Fac: 2.000
 Type: SAMPLE Analyzed: 03/19/10
 Lab ID: 218730-005

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	39,000	2,000	D2
Motor Oil C22-C32	ND	2,000	D2

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	103	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/10/10
Units:	ug/L	Received:	03/11/10
Batch#:	160979	Prepared:	03/16/10

Field ID: PL-2102-UST-10Q1 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/18/10
 Lab ID: 218730-006

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

Field ID: ASE-61A-UST-10Q1 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/18/10
 Lab ID: 218730-007

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	109	50-120	

Field ID: UST-10Q1-003 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/18/10
 Lab ID: 218730-008

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	2,100	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

Field ID: ASE-63A-UST-10Q1 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/18/10
 Lab ID: 218730-009

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	2,000	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	107	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/10/10
Units:	ug/L	Received:	03/11/10
Batch#:	160979	Prepared:	03/16/10

Field ID: EB-003-UST-10Q1 Diln Fac: 1.000
 Type: SAMPLE Analyzed: 03/18/10
 Lab ID: 218730-010

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	110	50-120	

Type: BLANK Diln Fac: 1.000
 Lab ID: QC536266 Analyzed: 03/18/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536267	Batch#:	160979
Matrix:	Water	Prepared:	03/16/10
Units:	ug/L	Analyzed:	03/18/10

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,441	98	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	109	50-120	

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-61A-UST-10Q1	Batch#:	160979
MSS Lab ID:	218730-007	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Prepared:	03/16/10
Diln Fac:	1.000		

Type: MS Analyzed: 03/19/10
 Lab ID: QC536268

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Diesel C10-C22	44.79	2,500	2,598	102	54-120		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	115	50-120		

Type: MSD Analyzed: 03/18/10
 Lab ID: QC536269

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Diesel C10-C22	2,500	2,638	104	54-120	2	31		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	114	50-120		

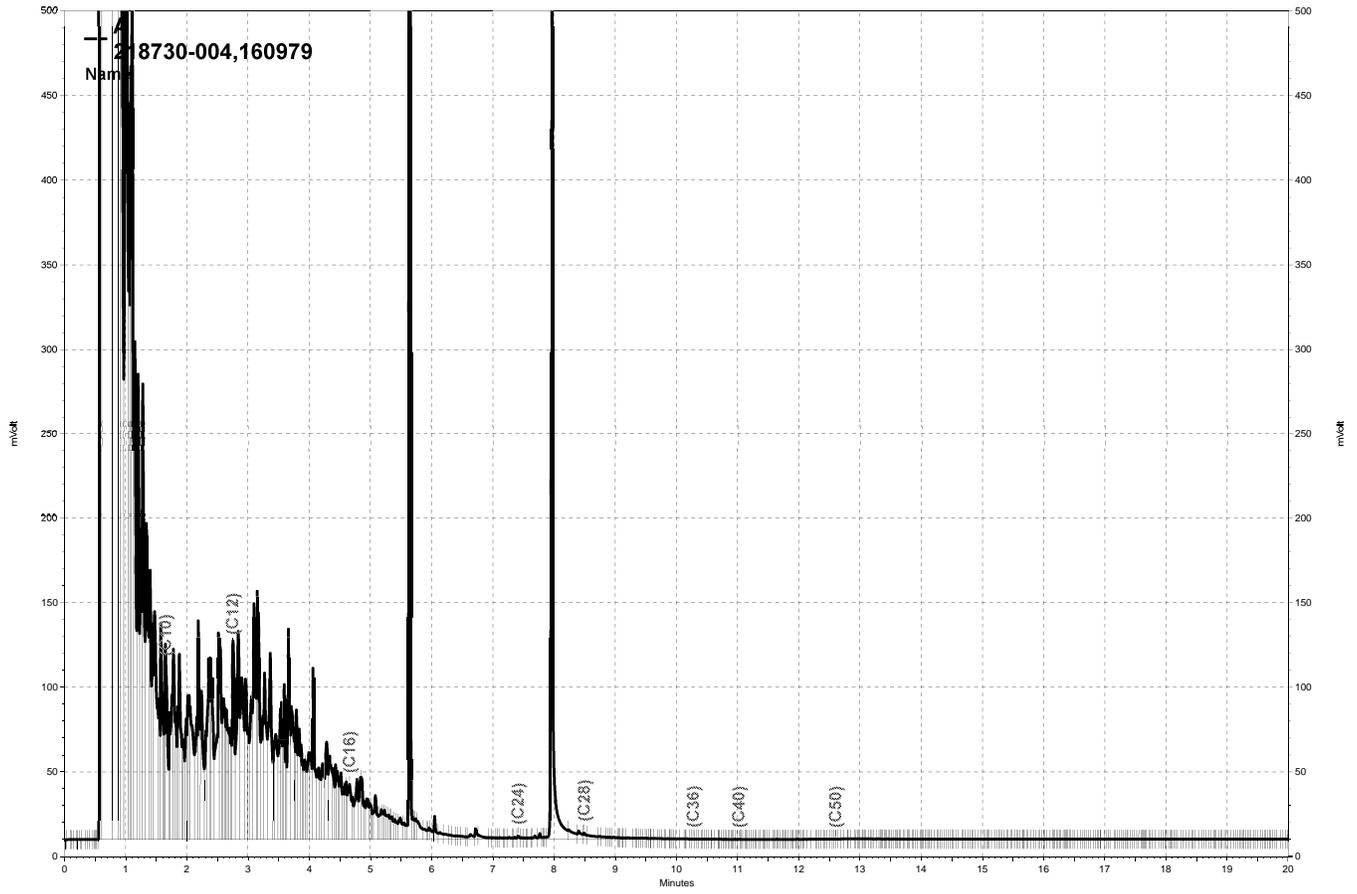
RPD= Relative Percent Difference

Batch QC Report

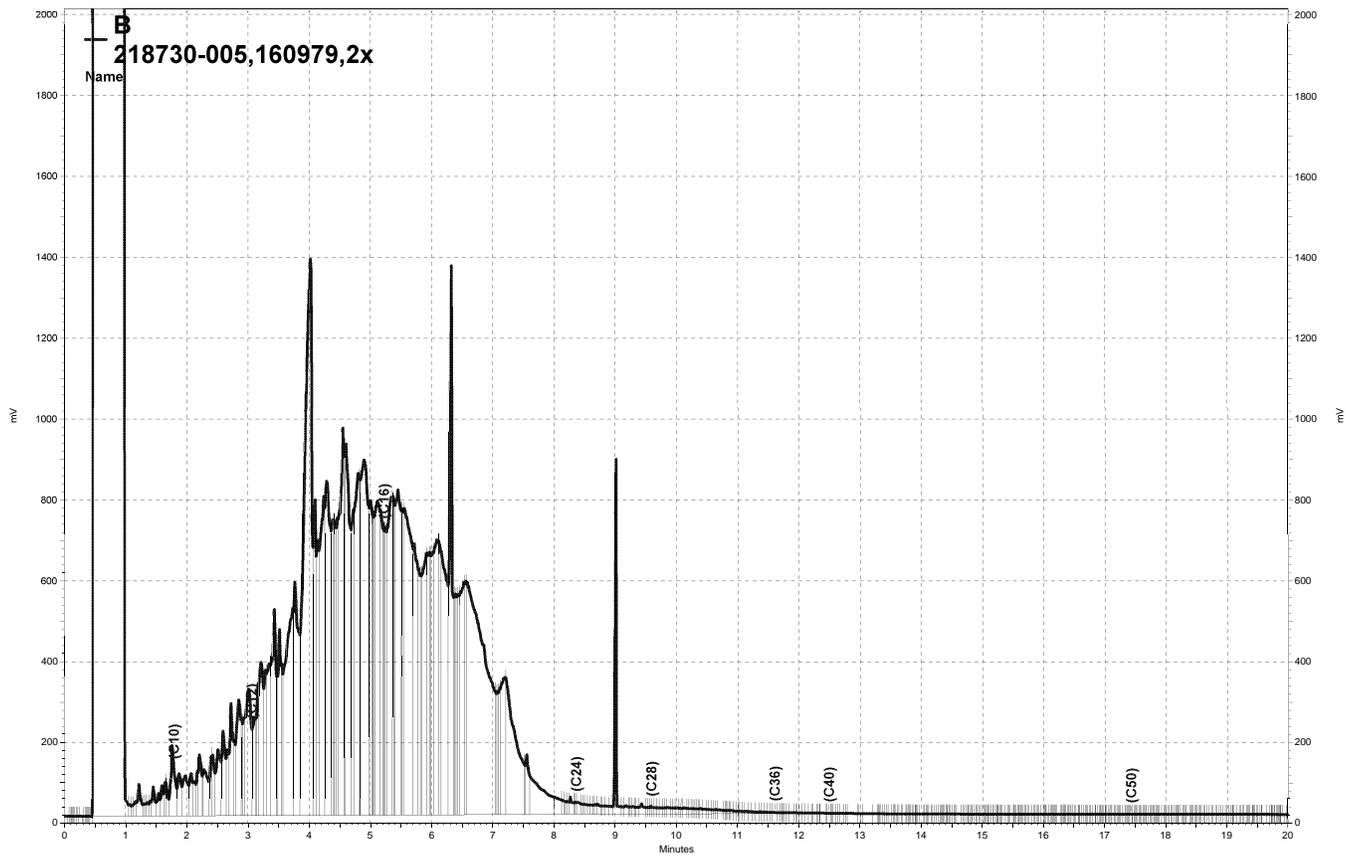
Total Extractable Hydrocarbons			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536270	Batch#:	160979
Matrix:	Water	Prepared:	03/16/10
Units:	ug/L	Analyzed:	03/18/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,846	114	61-139	

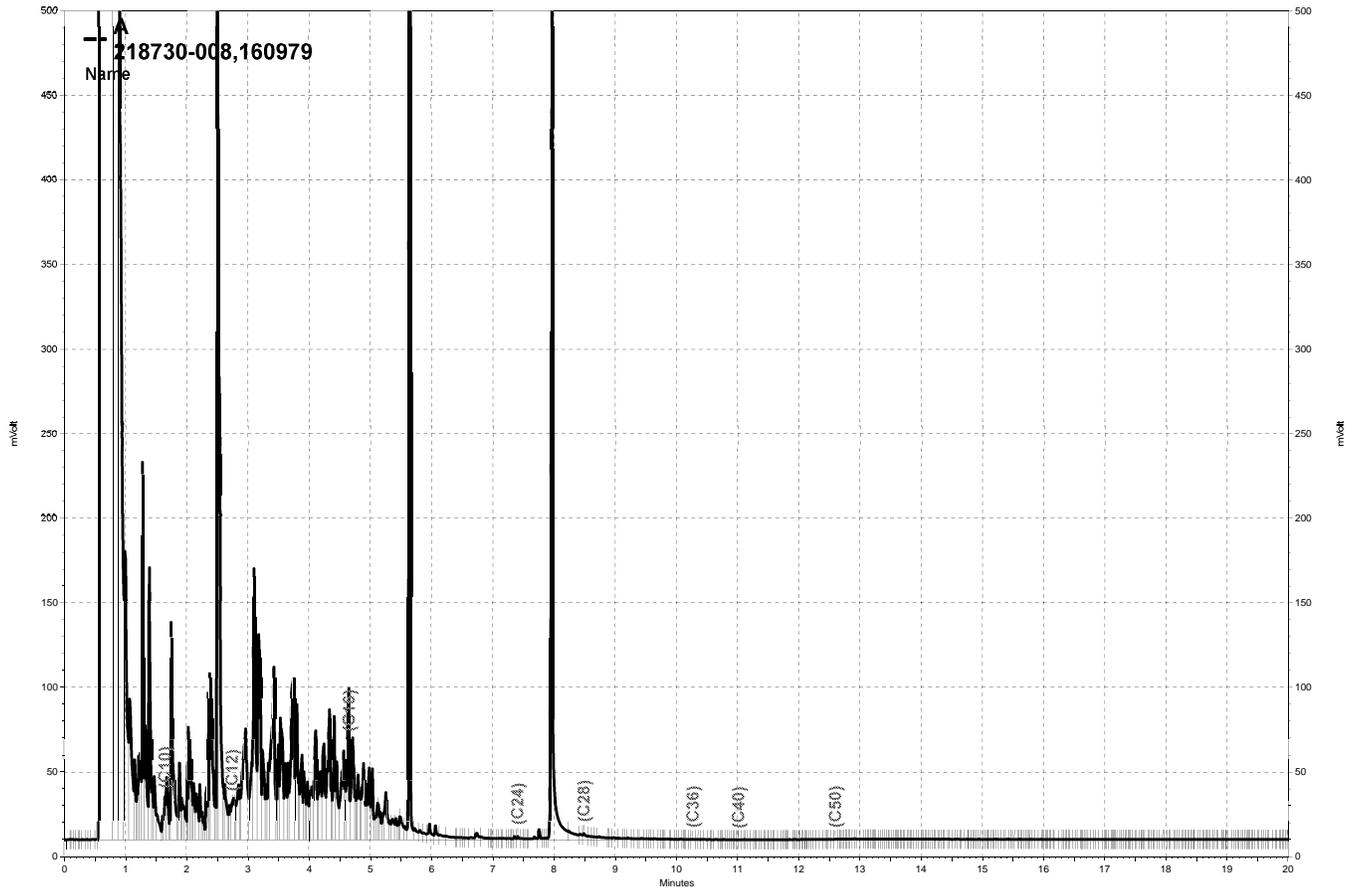
Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	109	50-120	



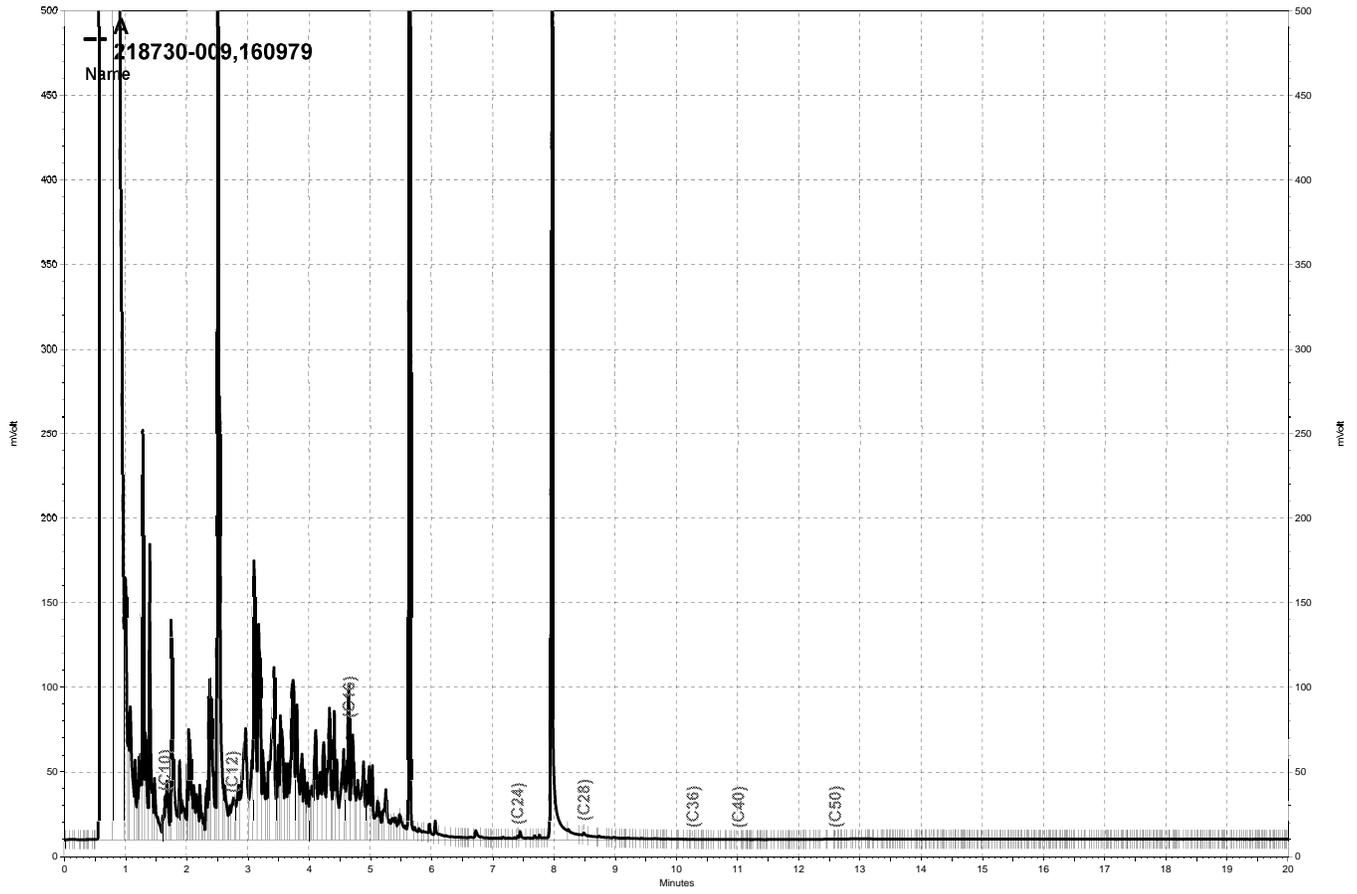
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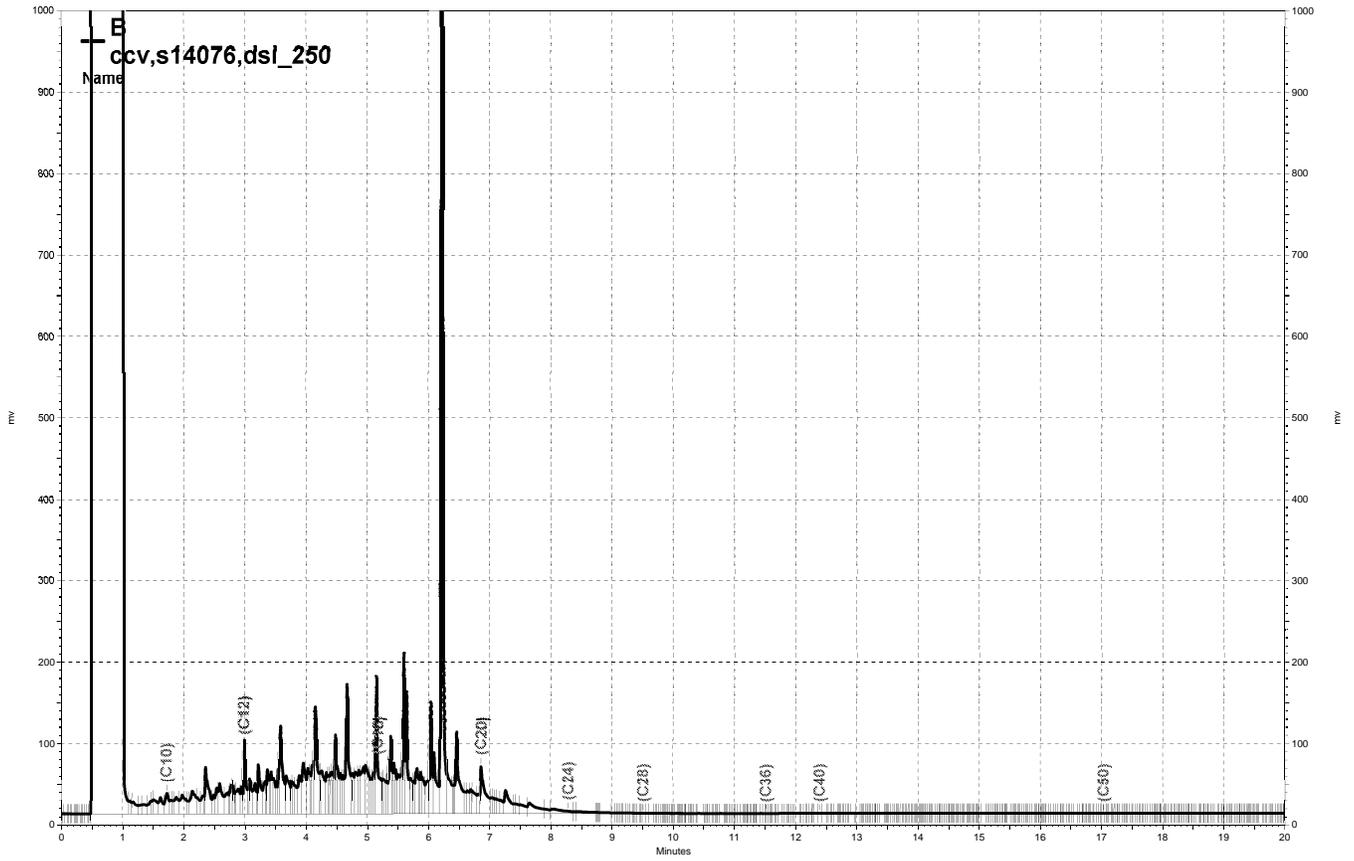
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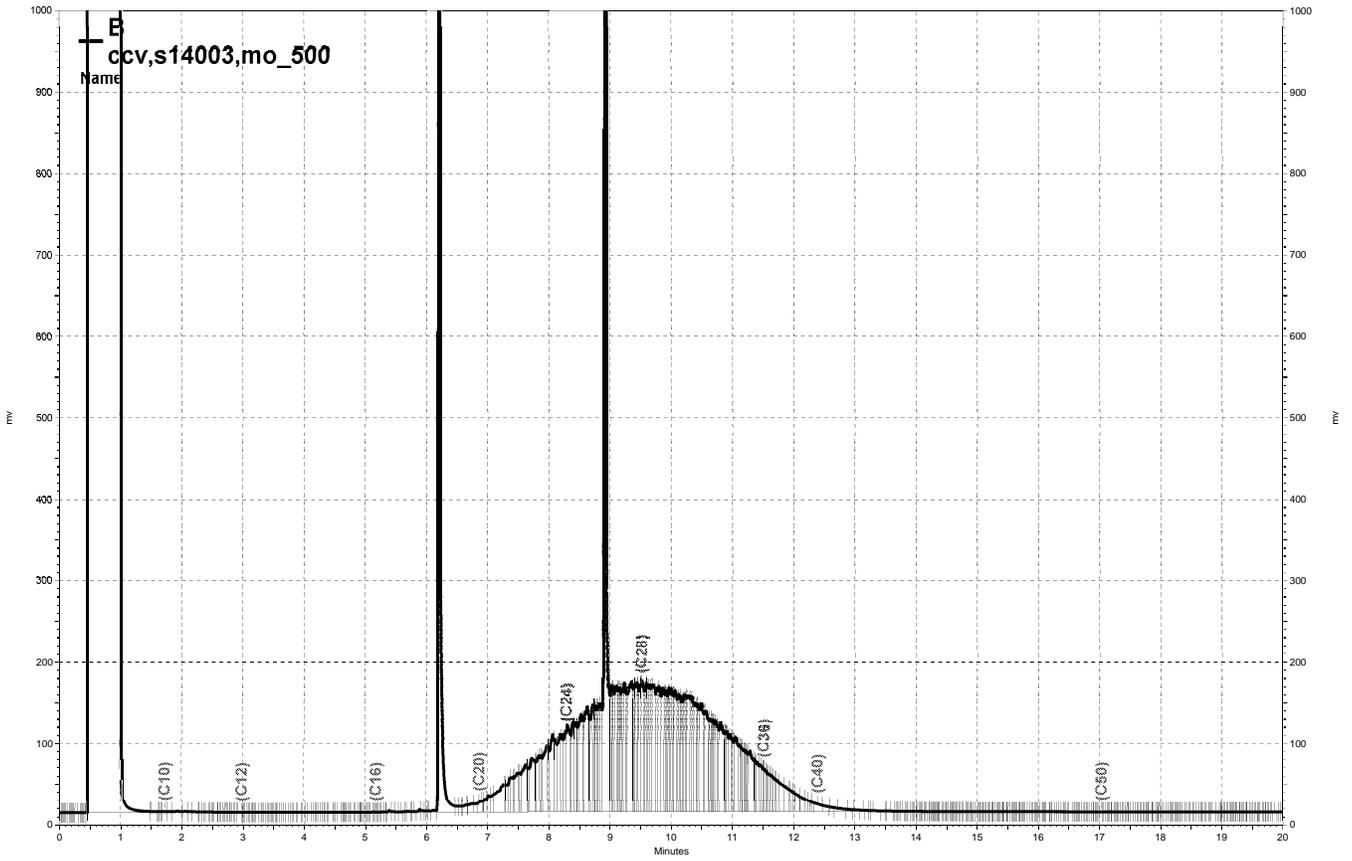
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CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220019637002
 Units : mg/L

Name : DSL_013
 Date : 14-JAN-2010 01:32
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	013_020	220019637020	DSL_10	14-JAN-2010 01:32	S13230
L2	013_021	220019637021	DSL_100	14-JAN-2010 02:00	S13231
L3	013_022	220019637022	DSL_500	14-JAN-2010 02:28	S13232
L4	013_023	220019637023	DSL_1000	14-JAN-2010 02:55	S13233
L5	013_024	220019637024	DSL_5000	14-JAN-2010 03:23	S13229
L6	013_025	220019637025	DSL_7500	14-JAN-2010 03:50	S13234

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	30857	41804	48676	43245	43072	44897	AVRG		2.38E-5		42092	14	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	-27	100.0	-1	500.0	16	1000	3	5000	2	7500	7

TFB 01/14/10 : Levels 1-3 and ICV: corrected automatically drawn baseline.

TFB 01/14/10 : Carbon Marker scanned in after EZChrom calibrations.

Analyst: TFB Date: 01/14/10 Reviewer: EAH Date: 01/15/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218730 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 220019637002

Name : DSL_013
Cal Date : 14-JAN-2010

ICV 220019637027 (013_027 14-JAN-2010) stds: S13457

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	501.4	mg/L	0	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220027250001
 Units : mg/L

Name : HEXOTP_018
 Date : 18-JAN-2010 16:02
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_004	220027250004	HEXOTP_5	18-JAN-2010 16:02	S13690
L2	018_005	220027250005	HEXOTP_10	18-JAN-2010 16:30	S13691
L3	018_006	220027250006	HEXOTP_25	18-JAN-2010 16:58	S13692
L4	018_007	220027250007	HEXOTP_50	18-JAN-2010 17:27	S13693
L5	018_008	220027250008	HEXOTP_100	18-JAN-2010 17:55	S13694

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	B	51987	51113	52393	50111	49558	AVRG		1.96E-5		51032	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	B	5.000	2	10.00	0	25.00	3	50.00	-2	100.0	-3

TFB 01/18/10 : Levels 2,4,5: corrected automatically drawn baseline.

TFB 01/19/10 : Level 6 dropped due to high %D in hexacosane. Dropped from OTP for consistency.

Analyst: TFB

Date: 01/18/10

Reviewer: EAH

Date: 01/19/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220091179001
 Units : mg/L

Name : MO_063
 Date : 04-MAR-2010 16:24
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	063_016	220091179016	MO_50	04-MAR-2010 16:24	S13804
L2	063_017	220091179017	MO_250	04-MAR-2010 16:52	S13805
L3	063_018	220091179018	MO_500	04-MAR-2010 17:21	S13806
L4	063_019	220091179019	MO_1000	04-MAR-2010 17:50	S13807
L5	063_020	220091179020	MO_5000	04-MAR-2010 18:18	S13808
L6	063_021	220091179021	MO_7500	04-MAR-2010 18:47	S13809

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	B	31871	31503	30804	30203	28364	26768	AVRG		3.34E-5		29919	7	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	B	50.00	7	250.0	5	500.0	3	1000	1	5000	-5	7500	-11

JDG 03/05/10 : GC14b 063_019: MO_1000

JDG 03/05/10 : GC14b 063_020: MO_5000

Analyst: JDG

Date: 03/05/10

Reviewer: EAH

Date: 03/05/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122008
 Units : mg/L

Name : HEXOTP_010
 Date : 10-JAN-2010 13:26
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b004	160015122004	HEXOTP_5	10-JAN-2010 13:26	S13690
L2	010b005	160015122005	HEXOTP_10	10-JAN-2010 13:54	S13691
L3	010b006	160015122006	HEXOTP_25	10-JAN-2010 14:21	S13692
L4	010b007	160015122007	HEXOTP_50	10-JAN-2010 14:49	S13693
L5	010b008	160015122008	HEXOTP_100	10-JAN-2010 15:17	S13694
L6	010b009	160015122009	HEXOTP_200	10-JAN-2010 15:45	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	64413	65438	65659	68934	63215	71786	AVRG		1.50E-5		66574	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-3	10.00	-2	25.00	-1	50.00	4	100.0	-5	200.0	8

CP 01/12/10 : JDG: Corrected automatically drawn baseline for all ICALS, except for HEXOTP_50.

Analyst: PRW

Date: 01/12/10

Reviewer: CP

Date: 01/12/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122002
 Units : mg/L

Name : DSL_010
 Date : 10-JAN-2010 16:41
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b011	160015122011	DSL_10	10-JAN-2010 16:41	S13230
L2	010b012	160015122012	DSL_100	10-JAN-2010 17:09	S13231
L3	010b013	160015122013	DSL_500	10-JAN-2010 17:37	S13232
L4	010b014	160015122014	DSL_1000	10-JAN-2010 18:05	S13233
L5	010b015	160015122015	DSL_5000	10-JAN-2010 18:33	S13229
L6	010b016	160015122016	DSL_7500	10-JAN-2010 19:01	S13234

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	46290	57423	63137	60591	59298	62684	AVRG		1.72E-5		58237	11	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-21	100.0	-1	500.0	8	1000	4	5000	2	7500	8

JDG 01/11/10 : Corrected automatically drawn baseline in DSL_10 (010b011).

Analyst: JDG Date: 01/11/10 Reviewer: EAH Date: 01/12/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218730 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 160015122002

Name : DSL_010
Cal Date : 10-JAN-2010

ICV 160015122018 (010b018 10-JAN-2010) stds: S13457

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	514.5	mg/L	3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 GCSV Water: EPA 8015B

Inst : GC26A
 Calnum : 860098416001
 Units : mg/L

Name : otphex_068
 Date : 09-MAR-2010 17:41
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	068a008	860098416008	HEXOTP_5	09-MAR-2010 17:41	S13690
L2	068a009	860098416009	HEXOTP_10	09-MAR-2010 18:09	S13691
L3	068a010	860098416010	HEXOTP_25	09-MAR-2010 18:38	S13692
L4	068a011	860098416011	HEXOTP_50	09-MAR-2010 19:07	S13693
L5	068a012	860098416012	HEXOTP_100	09-MAR-2010 19:35	S13694
L6	068a013	860098416013	HEXOTP_200	09-MAR-2010 20:04	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	26151	27561	28553	26454	26705	24322	AVRG		3.76E-5		26624	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-2	10.00	4	25.00	7	50.00	-1	100.0	0	200.0	-9

SFL 03/11/10 : Corrected automatically drawn baseline in all levels.

SFL 03/15/10 : Cmarker that ran before ICAL will be used. Retention time falls within window of last Cmarker.

Analyst: SFL

Date: 03/15/10

Reviewer: EAH

Date: 03/15/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 GCSV Water: EPA 8015B

Inst : GC26A
 Calnum : 860098416005
 Units : mg/L

Name : mo_068
 Date : 10-MAR-2010 01:47
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	068a025	860098416025	MO_25	10-MAR-2010 01:47	S13804 (2X)
L2	068a026	860098416026	MO_50	10-MAR-2010 02:16	S13804
L3	068a027	860098416027	MO_250	10-MAR-2010 02:44	S13805
L4	068a028	860098416028	MO_500	10-MAR-2010 03:13	S13806
L5	068a029	860098416029	MO_1000	10-MAR-2010 03:42	S13807
L6	068a030	860098416030	MO_2500	10-MAR-2010 04:11	S13808 (2X)

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	11578	12427	12299	12056	12746	12164	AVRG		8.19E-5		12212	3	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	25.00	-5	50.00	2	250.0	1	500.0	-1	1000	4	2500	0

SFL 03/11/10 : corrected automatically drawn baseline in all levels except mo_25, mo_250

Analyst: SFL

Date: 03/15/10

Reviewer: EAH

Date: 03/15/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 GCSV Water: EPA 8015B

Inst : GC26A
 Calnum : 860100125001
 Units : mg/L

Name : DSL_069
 Date : 10-MAR-2010 16:51
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a007	860100125007	DSL_10	10-MAR-2010 16:51	S13645
L2	069a008	860100125008	DSL_100	10-MAR-2010 17:20	S13231
L3	069a010	860100125010	DSL_1000	10-MAR-2010 18:17	S13233
L4	069a011	860100125011	DSL_5000	10-MAR-2010 20:30	S13229
L5	069a012	860100125012	DSL_7500	10-MAR-2010 20:59	S13234
L6	069a022	860100125022	DSL_500	11-MAR-2010 17:19	S14116

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	18895	24356	24398	23074	23345	24429	AVRG		4.33E-5		23083	9	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-18	100.0	6	1000	6	5000	0	7500	1	500.0	6

JDG: 03/15/10 SFL: 03/15/10 EAH: 03/15/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218730 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 860100125001

Name : DSL_069
Cal Date : 10-MAR-2010

ICV 860100125015 (069a015 11-MAR-2010) stds: S14077

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	549.6	mg/L	10	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220111677009 File : 077_009 Time : 18-MAR-2010 19:02
 Standards: S14003

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	30935	500.0	517.0	mg/L	3	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	54050	50.00	52.96	mg/L	6	15	

JDG 03/19/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
 Seqnum : 220111677020 File : 077_020 Time : 19-MAR-2010 00:17
 Standards: S14078

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	47431	1000	1127	mg/L	13	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	58026	50.00	56.85	mg/L	14	15	

JDG 03/19/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220111677021 File : 077_021 Time : 19-MAR-2010 00:44
 Standards: S14003

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	32102	500.0	536.5	mg/L	7	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	55787	50.00	54.66	mg/L	9	15	

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
 Seqnum : 220112800004 File : 078_004 Time : 19-MAR-2010 09:25
 Standards: S14077

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	46825	500.0	556.2	mg/L	11	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	55223	50.00	54.11	mg/L	8	15	

JDG 03/19/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220112800005 File : 078_005 Time : 19-MAR-2010 09:53
 Standards: S14003

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	30996	500.0	518.0	mg/L	4	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	53556	50.00	52.47	mg/L	5	15	

JDG 03/19/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
 Seqnum : 220112800010 File : 078_010 Time : 19-MAR-2010 13:35
 Standards: S14078

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	45900	1000	1090	mg/L	9	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	56119	50.00	54.98	mg/L	10	15	

JDG 03/19/10 : Separated from coeluting peak.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220112800011 File : 078_011 Time : 19-MAR-2010 14:04
 Standards: S14003

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	29565	500.0	494.1	mg/L	-1	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	51274	50.00	50.24	mg/L	0	15	

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
 Seqnum : 160112833004 File : 078b004 Time : 19-MAR-2010 09:56
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	44135	500.0	521.9	mg/L	4	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	67030	50.00	50.34	mg/L	1	15	

JDG 03/19/10 : Manually integrated fuel hump.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_250 IDF : 1.0
 Seqnum : 160112833005 File : 078b005 Time : 19-MAR-2010 10:24
 Standards: S14076

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	55193	250.0	236.9	mg/L	-5	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	62847	50.00	47.20	mg/L	-6	15	

JDG 03/19/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
 Seqnum : 160112833007 File : 078b007 Time : 19-MAR-2010 14:47
 Standards: S14077

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	54511	500.0	468.0	mg/L	-6	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	64509	50.00	48.45	mg/L	-3	15	

JDG 03/19/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC26A Run Name : MO_500 IDF : 1.0
 Seqnum : 860111535006 File : 077a006 Time : 18-MAR-2010 13:18
 Standards: S14003

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	860098416005	10-MAR-2010	12212	12056	500.0	493.6	mg/L	-1	15	
o-Terphenyl	860098416001	09-MAR-2010	26624	25499	50.00	47.89	mg/L	-4	15	

Analyst: JDG Date: 03/19/10 Reviewer: EAH Date: 03/23/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_500 IDF : 1.0
 Seqnum : 860111535007 File : 077a007 Time : 18-MAR-2010 18:11
 Standards: S14077

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	860100125001	10-MAR-2010	23083	26543	500.0	574.9	mg/L	15	15	
o-Terphenyl	860098416001	09-MAR-2010	26624	28699	50.00	53.90	mg/L	8	15	

JDG 03/19/10 [o-Terphenyl A]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/19/10 Reviewer: EAH Date: 03/23/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_1000 IDF : 1.0
 Seqnum : 860111535019 File : 077a019 Time : 19-MAR-2010 00:53
 Standards: S14078

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	860100125001	10-MAR-2010	23083	24545	1000	1063	mg/L	6	15	
o-Terphenyl	860098416001	09-MAR-2010	26624	25394	50.00	47.69	mg/L	-5	15	

JDG 03/19/10 [o-Terphenyl A]: Separated from coeluting peak.

Analyst: JDG Date: 03/19/10 Reviewer: EAH Date: 03/23/10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 160015122

Instrument : GC15B
 Method : EPA 8015B

Begun : 01/10/10 12:02
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	010b001	X	PRIMER			01/10/10 12:02	1.0	
002	010b002	X	IB			01/10/10 12:30	1.0	
003	010b003	X	IB			01/10/10 12:58	1.0	
004	010b004	ICAL	HEXOTP_5			01/10/10 13:26	1.0	1
005	010b005	ICAL	HEXOTP_10			01/10/10 13:54	1.0	2
006	010b006	ICAL	HEXOTP_25			01/10/10 14:21	1.0	3
007	010b007	ICAL	HEXOTP_50			01/10/10 14:49	1.0	4
008	010b008	ICAL	HEXOTP_100			01/10/10 15:17	1.0	5
009	010b009	ICAL	HEXOTP_200			01/10/10 15:45	1.0	6
010	010b010	IB	CALIB			01/10/10 16:13	1.0	
011	010b011	ICAL	DSL_10			01/10/10 16:41	1.0	7
012	010b012	ICAL	DSL_100			01/10/10 17:09	1.0	8
013	010b013	ICAL	DSL_500			01/10/10 17:37	1.0	9
014	010b014	ICAL	DSL_1000			01/10/10 18:05	1.0	10
015	010b015	ICAL	DSL_5000			01/10/10 18:33	1.0	11
016	010b016	ICAL	DSL_7500			01/10/10 19:01	1.0	12
017	010b017	IB	CALIB			01/10/10 19:29	1.0	
018	010b018	ICV	DSL_500			01/10/10 19:57	1.0	13
019	010b019	X	ICV			01/10/10 20:24	1.0	13
020	010b020	IB	CALIB			01/10/10 20:52	1.0	
021	010b021	ICAL	MO_50			01/10/10 21:20	1.0	14
022	010b022	ICAL	MO_250			01/10/10 21:47	1.0	15
023	010b023	ICAL	MO_500			01/10/10 22:15	1.0	16
024	010b024	ICAL	MO_1000			01/10/10 22:43	1.0	17
025	010b025	ICAL	MO_5000			01/10/10 23:10	1.0	18
026	010b026	ICAL	MO_7500			01/10/10 23:38	1.0	19
027	010b027	IB	CALIB			01/11/10 00:06	1.0	
028	010b028	ICAL	JET_10			01/11/10 00:33	1.0	20
029	010b029	ICAL	JET_100			01/11/10 01:01	1.0	21
030	010b030	ICAL	JET_500			01/11/10 01:28	1.0	22
031	010b031	ICAL	JET_1000			01/11/10 01:56	1.0	23
032	010b032	ICAL	JET_2000			01/11/10 02:24	1.0	24
033	010b033	ICAL	JET_3000			01/11/10 02:51	1.0	25
034	010b034	IB	CALIB			01/11/10 03:19	1.0	
035	010b035	ICAL	JP5_10			01/11/10 03:46	1.0	26
036	010b036	ICAL	JP5_100			01/11/10 04:14	1.0	27
037	010b037	ICAL	JP5_500			01/11/10 04:42	1.0	28
038	010b038	ICAL	JP5_1500			01/11/10 05:09	1.0	29
039	010b039	ICAL	JP5_2500			01/11/10 05:37	1.0	30
040	010b040	ICAL	JP5_5000			01/11/10 06:05	1.0	31
041	010b041	IB	CALIB			01/11/10 06:33	1.0	
042	010b042	ICAL	BUNK_50			01/11/10 07:01	1.0	32
043	010b043	ICAL	BUNK_250			01/11/10 07:28	1.0	33
044	010b044	ICAL	BUNK_500			01/11/10 07:56	1.0	34
045	010b045	ICAL	BUNK_1250			01/11/10 08:24	1.0	35
046	010b046	ICAL	BUNK_2500			01/11/10 08:52	1.0	36
047	010b047	ICAL	BUNK_5000			01/11/10 09:20	1.0	37
048	010b048	IB	CALIB			01/11/10 09:48	1.0	
049	010b049	CMARKER	C8_C50			01/11/10 10:16	1.0	38
050	010b050	IB	CALIB			01/11/10 10:44	1.0	

JDG 01/11/10 : I verified that the vials loaded on the instrument matched the

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 160112833

Instrument : GC15B Begun : 03/19/10 08:33
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078b001	X	PRIMER				03/19/10 08:33	1.0	
002	078b002	X	IB				03/19/10 09:00	1.0	
003	078b003	X	CMARKER				03/19/10 09:28	1.0	1
004	078b004	CCV	MO_500				03/19/10 09:56	1.0	2
005	078b005	CCV	DSL_250				03/19/10 10:24	1.0	3
006	078b006	MS	QC536268		Water	160979	03/19/10 14:07	1.0	
007	078b007	CCV	DSL_500				03/19/10 14:47	1.0	4
008	078b008	CCV	MO_500				03/19/10 15:40	1.0	2
009	078b009	X	CMARKER				03/19/10 16:08	1.0	1
010	078b010	BLANK	QC536422		Water	161015	03/19/10 17:40	1.0	
011	078b011	LCS	QC536423		Water	161015	03/19/10 18:08	1.0	
012	078b012	LCS	QC536426		Water	161015	03/19/10 18:36	1.0	
013	078b013	MSS	218768-008		Water	161015	03/19/10 19:04	1.0	
014	078b014	MS	QC536424		Water	161015	03/19/10 19:32	1.0	
015	078b015	MSD	QC536425		Water	161015	03/19/10 20:00	1.0	
016	078b016	SAMPLE	218768-002		Water	161015	03/19/10 20:27	1.0	
017	078b017	SAMPLE	218768-003		Water	161015	03/19/10 20:55	1.0	
018	078b018	SAMPLE	218768-004		Water	161015	03/19/10 21:23	1.0	
019	078b019	SAMPLE	218768-005		Water	161015	03/19/10 21:50	1.0	
020	078b020	CCV	DSL_1000				03/19/10 22:18	1.0	5
021	078b021	CCV	MO_500				03/19/10 22:46	1.0	2
022	078b022	X	CCV				03/19/10 23:13	1.0	5
023	078b023	X	CCV				03/19/10 23:41	1.0	2
024	078b024	SAMPLE	218883-001	S	Soil	161101	03/20/10 00:09	1.0	
025	078b025	SAMPLE	218893-001	S	Soil	161101	03/20/10 00:36	1.0	
026	078b026	SAMPLE	218893-002	S	Soil	161101	03/20/10 01:04	1.0	
027	078b027	SAMPLE	218893-003	S	Soil	161101	03/20/10 01:31	1.0	
028	078b028	SAMPLE	218893-004	S	Soil	161101	03/20/10 01:59	1.0	

JDG 03/19/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

SFL 03/21/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 28.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220019637

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/13/10 15:17
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	013_001	X	PRIMER			01/13/10 15:17	1.0	
002	013_002	X	IB			01/13/10 15:46	1.0	
003	013_003	X	CMARKER			01/13/10 16:14	1.0	1
004	013_004	X	DSL_500			01/13/10 16:43	1.0	2
005	013_005	X	MO_500			01/13/10 17:12	1.0	3
006	013_006	X	IB			01/13/10 17:48	1.0	
007	013_007	X	CMARKER			01/13/10 18:17	1.0	1
008	013_008	X	DSL_500			01/13/10 18:46	1.0	2
009	013_009	X	MO_500			01/13/10 19:15	1.0	3
010	013_010	X	IB			01/13/10 20:54	1.0	
011	013_011	X	IB			01/13/10 21:22	1.0	
012	013_012	IB	CALIB			01/13/10 21:50	1.0	
013	013_013	ICAL	HEXOTP_5			01/13/10 22:18	1.0	4
014	013_014	ICAL	HEXOTP_10			01/13/10 22:46	1.0	5
015	013_015	ICAL	HEXOTP_25			01/13/10 23:14	1.0	6
016	013_016	ICAL	HEXOTP_50			01/13/10 23:42	1.0	7
017	013_017	ICAL	HEXOTP_100			01/14/10 00:09	1.0	8
018	013_018	ICAL	HEXOTP_200			01/14/10 00:37	1.0	9
019	013_019	IB	CALIB			01/14/10 01:04	1.0	
020	013_020	ICAL	DSL_10			01/14/10 01:32	1.0	10
021	013_021	ICAL	DSL_100			01/14/10 02:00	1.0	11
022	013_022	ICAL	DSL_500			01/14/10 02:28	1.0	12
023	013_023	ICAL	DSL_1000			01/14/10 02:55	1.0	13
024	013_024	ICAL	DSL_5000			01/14/10 03:23	1.0	14
025	013_025	ICAL	DSL_7500			01/14/10 03:50	1.0	15
026	013_026	IB	CALIB			01/14/10 04:18	1.0	
027	013_027	ICV	DSL_500			01/14/10 04:46	1.0	2
028	013_028	X	ICV			01/14/10 05:14	1.0	2
029	013_029	IB	CALIB			01/14/10 05:43	1.0	
030	013_030	ICAL	MO_50			01/14/10 06:11	1.0	16
031	013_031	ICAL	MO_250			01/14/10 06:39	1.0	17
032	013_032	ICAL	MO_500			01/14/10 07:07	1.0	18
033	013_033	ICAL	MO_1000			01/14/10 07:34	1.0	19
034	013_034	ICAL	MO_5000			01/14/10 08:02	1.0	20
035	013_035	ICAL	MO_7500			01/14/10 08:30	1.0	21
036	013_036	IB	CALIB			01/14/10 08:58	1.0	
037	013_037	CMARKER	C8-C50			01/14/10 09:26	1.0	1
038	013_038	IB	CALIB			01/14/10 09:54	1.0	

TFB 01/14/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

Standards used: 1=S12636 2=S13457 3=S13471 4=S13690 5=S13691 6=S13692 7=S13693 8=S13694 9=S13695 10=S13230 11=S13231
 12=S13232 13=S13233 14=S13229 15=S13234 16=S12675 17=S12676 18=S12677 19=S12678 20=S12679 21=S12680

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220027250

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/18/10 14:37
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	018_001	X	PRIMER			01/18/10 14:37	1.0	
002	018_002	X	IB			01/18/10 15:05	1.0	
003	018_003	IB	CALIB			01/18/10 15:33	1.0	
004	018_004	ICAL	HEXOTP_5			01/18/10 16:02	1.0	1
005	018_005	ICAL	HEXOTP_10			01/18/10 16:30	1.0	2
006	018_006	ICAL	HEXOTP_25			01/18/10 16:58	1.0	3
007	018_007	ICAL	HEXOTP_50			01/18/10 17:27	1.0	4
008	018_008	ICAL	HEXOTP_100			01/18/10 17:55	1.0	5
009	018_009	X	HEXOTP_200			01/18/10 18:24	1.0	6
010	018_010	IB	CALIB			01/18/10 18:53	1.0	
011	018_011	ICAL	MO_50			01/18/10 19:21	1.0	7
012	018_012	ICAL	MO_250			01/18/10 19:49	1.0	8
013	018_013	ICAL	MO_500			01/18/10 20:18	1.0	9
014	018_014	ICAL	MO_1000			01/18/10 20:46	1.0	10
015	018_015	ICAL	MO_5000			01/18/10 21:14	1.0	11
016	018_016	ICAL	MO_7500			01/18/10 21:42	1.0	12
017	018_017	CMARKER	C8-C50			01/18/10 22:10	1.0	13
018	018_018	CCV	DSL_500			01/18/10 22:38	1.0	14
019	018_019	CCV	MO_500			01/18/10 23:06	1.0	15
020	018_020	BLANK	QC489059	Soil	149293	01/18/10 23:35	1.0	
021	018_021	MDL	207486-001	Soil	149293	01/19/10 00:03	1.0	
022	018_022	MDL	207486-002	Soil	149293	01/19/10 00:31	1.0	
023	018_023	MDL	207486-003	Soil	149293	01/19/10 00:59	1.0	
024	018_024	MDL	207486-004	Soil	149293	01/19/10 01:27	1.0	
025	018_025	MDL	207486-005	Soil	149293	01/19/10 01:55	1.0	
026	018_026	MDL	207486-006	Soil	149293	01/19/10 02:23	1.0	
027	018_027	MDL	207486-007	Soil	149293	01/19/10 02:50	1.0	
028	018_028	MDL	207486-008	Soil	149293	01/19/10 03:18	1.0	
029	018_029	LOD	212266-010	Water	159144	01/19/10 03:46	1.0	
030	018_030	CCV	DSL_250			01/19/10 04:15	1.0	16
031	018_031	CCV	MO_500			01/19/10 04:43	1.0	15
032	018_032	X	CCV			01/19/10 05:11	1.0	16
033	018_033	X	CCV			01/19/10 05:39	1.0	15

TFB 01/18/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S13690 2=S13691 3=S13692 4=S13693 5=S13694 6=S13695 7=S12675 8=S12676 9=S12677 10=S12678 11=S12679
 12=S12680 13=S12636 14=S13457 15=S13744 16=S13456

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220111677

Instrument : GC14B
 Method : EPA 8015B

Begun : 03/18/10 13:17
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	077_001	X	PRIMER				03/18/10 13:17	1.0	
002	077_002	X	IB				03/18/10 13:45	1.0	
003	077_003	X	CALIB				03/18/10 14:13	1.0	
004	077_004	X	ICAL				03/18/10 14:42	1.0	1
005	077_005	X	CAL				03/18/10 15:10	1.0	2
006	077_006	X	IB				03/18/10 15:56	1.0	
007	077_007	X	CMARKER				03/18/10 18:06	1.0	3
008	077_008	CCV	DSL_500				03/18/10 18:34	1.0	4
009	077_009	CCV	MO_500				03/18/10 19:02	1.0	5
010	077_010	BLANK	QC536266	S	Water	160979	03/18/10 19:38	1.0	
011	077_011	BLANK	QC536266		Water	160979	03/18/10 20:06	1.0	
012	077_012	LCS	QC536267	S	Water	160979	03/18/10 20:34	1.0	
013	077_013	LCS	QC536270		Water	160979	03/18/10 21:01	1.0	
014	077_014	SAMPLE	218812-001		Water	160979	03/18/10 21:29	1.0	
015	077_015	SAMPLE	218813-001		Water	160979	03/18/10 21:57	1.0	
016	077_016	MSS	218730-007		Water	160979	03/18/10 22:25	1.0	
017	077_017	X	QC536268		Water	160979	03/18/10 22:53	1.0	
018	077_018	MSD	QC536269		Water	160979	03/18/10 23:21	1.0	
019	077_019	SAMPLE	218818-001		Water	160979	03/18/10 23:49	1.0	
020	077_020	CCV	DSL_1000				03/19/10 00:17	1.0	6
021	077_021	CCV	MO_500				03/19/10 00:44	1.0	5
022	077_022	X	CCV				03/19/10 01:12	1.0	6
023	077_023	X	CCV				03/19/10 01:40	1.0	5
024	077_024	MSS	218862-011	S	Soil	161055	03/19/10 02:08	1.0	
025	077_025	MS	QC536580	S	Soil	161055	03/19/10 02:36	1.0	
026	077_026	MSD	QC536581	S	Soil	161055	03/19/10 03:04	1.0	
027	077_027	SAMPLE	218862-003	S	Soil	161055	03/19/10 03:32	1.0	
028	077_028	SAMPLE	218862-005	S	Soil	161055	03/19/10 04:00	1.0	
029	077_029	X	CMARKER				03/19/10 04:28	1.0	3
030	077_030	CCV	DSL_250				03/19/10 04:56	1.0	7
031	077_031	CCV	MO_500				03/19/10 05:24	1.0	5
032	077_032	X	CCV				03/19/10 05:52	1.0	7
033	077_033	X	CCV				03/19/10 06:20	1.0	5

JDG 03/19/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220112800

Instrument : GC14B
 Method : EPA 8015B

Begun : 03/19/10 08:00
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078_001	X	PRIMER				03/19/10 08:00	1.0	
002	078_002	X	IB				03/19/10 08:29	1.0	
003	078_003	X	CMARKER				03/19/10 08:57	1.0	1
004	078_004	CCV	DSL_500				03/19/10 09:25	1.0	2
005	078_005	CCV	MO_500				03/19/10 09:53	1.0	3
006	078_006	LOQ	218797-002		Soil	160917	03/19/10 10:55	1.0	
007	078_007	X	QC536268		Water	160979	03/19/10 11:24	1.0	
008	078_008	SAMPLE	218730-005		Water	160979	03/19/10 11:53	2.0	2:BUNKC:12-40=11000
009	078_009	SAMPLE	218862-002	S	Soil	161055	03/19/10 12:21	5.0	2:BUNKC:12-40=6100
010	078_010	CCV	DSL_1000				03/19/10 13:35	1.0	4
011	078_011	CCV	MO_500				03/19/10 14:04	1.0	3
012	078_012	X	CMARKER				03/19/10 15:55	1.0	1
013	078_013	CCV	JP5_250				03/19/10 17:48	1.0	5
014	078_014	CCV	JET_250				03/19/10 18:16	1.0	6
015	078_015	BLANK	QC536770		Soil	161101	03/19/10 18:50	1.0	
016	078_016	BLANK	QC536770	S	Soil	161101	03/19/10 19:18	1.0	
017	078_017	SAMPLE	218779-001	S	Soil	161101	03/19/10 19:46	1.0	
018	078_018	SAMPLE	218779-002	S	Soil	161101	03/19/10 20:14	10.0	
019	078_019	SAMPLE	218779-003	S	Soil	161101	03/19/10 20:41	10.0	
020	078_020	MSS	218794-015		Soil	161101	03/19/10 21:09	5.0	
021	078_021	MS	QC536772		Soil	161101	03/19/10 21:37	5.0	
022	078_022	MSD	QC536773		Soil	161101	03/19/10 22:05	5.0	
023	078_023	X	IB				03/19/10 22:33	1.0	
024	078_024	SAMPLE	218912-001		Soil	161101	03/19/10 23:01	1.0	
025	078_025	SAMPLE	218912-002		Soil	161101	03/19/10 23:28	1.0	
026	078_026	CCV	DSL_250				03/19/10 23:56	1.0	7
027	078_027	CCV	MO_500				03/20/10 00:24	1.0	3
028	078_028	CCV	JP5_250				03/20/10 00:52	1.0	5
029	078_029	CCV	JET_250				03/20/10 01:20	1.0	6
030	078_030	X	CCV				03/20/10 01:48	1.0	7
031	078_031	X	CCV				03/20/10 02:16	1.0	3
032	078_032	X	CCV				03/20/10 02:44	1.0	5
033	078_033	X	CCV				03/20/10 03:12	1.0	6
034	078_034	LCS	QC536771	S	Soil	161101	03/20/10 03:40	1.0	
035	078_035	SAMPLE	218801-009		Water	161015	03/20/10 04:08	1.0	
036	078_036	SAMPLE	218794-002		Soil	161101	03/20/10 04:36	5.0	
037	078_037	SAMPLE	218794-007		Soil	161101	03/20/10 05:04	5.0	
038	078_038	SAMPLE	218794-010		Soil	161101	03/20/10 05:32	5.0	
039	078_039	SAMPLE	218794-020		Soil	161101	03/20/10 06:01	1.0	
040	078_040	SAMPLE	218794-025		Soil	161101	03/20/10 06:29	20.0	
041	078_041	X	CMARKER				03/20/10 06:57	1.0	1
042	078_042	X	DSL_500				03/20/10 07:25	1.0	2
043	078_043	CCV	MO_500				03/20/10 07:53	1.0	3
044	078_044	CCV	CCV				03/20/10 08:21	1.0	2
045	078_045	X	CCV				03/20/10 08:49	1.0	3

JDG 03/19/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 11.

TFB 03/19/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 12 through 14.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 860098416

Instrument : GC26A
 Method : EPA 8015B

Begun : 03/09/10 08:16
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	068a001	X	PRIMER			03/09/10 08:16	1.0	
002	068a002	X	IB			03/09/10 08:44	1.0	
003	068a003	X	IB			03/09/10 09:12	1.0	
004	068a004	CMARKER	C8-C50			03/09/10 09:41	1.0	1
005	068a005	CCV	DSL_1000			03/09/10 10:10	1.0	2
006	068a006	CCV	MO_500			03/09/10 10:38	1.0	3
007	068a007	IB	CALIB			03/09/10 17:12	1.0	
008	068a008	ICAL	HEXOTP_5			03/09/10 17:41	1.0	4
009	068a009	ICAL	HEXOTP_10			03/09/10 18:09	1.0	5
010	068a010	ICAL	HEXOTP_25			03/09/10 18:38	1.0	6
011	068a011	ICAL	HEXOTP_50			03/09/10 19:07	1.0	7
012	068a012	ICAL	HEXOTP_100			03/09/10 19:35	1.0	8
013	068a013	ICAL	HEXOTP_200			03/09/10 20:04	1.0	9
014	068a014	IB	CALIB			03/09/10 20:32	1.0	
015	068a015	X	DSL_10			03/09/10 21:01	1.0	10
016	068a016	X	DSL_100			03/09/10 21:29	1.0	11
017	068a017	X	DSL_500			03/09/10 21:58	1.0	12
018	068a018	X	DSL_1000			03/09/10 22:27	1.0	12
019	068a019	X	DSL_5000			03/09/10 22:55	1.0	13
020	068a020	X	DSL_7500			03/09/10 23:24	1.0	14
021	068a021	IB	CALIB			03/09/10 23:53	1.0	
022	068a022	ICV	DSL_500			03/10/10 00:21	1.0	15
023	068a023	X	ICV			03/10/10 00:50	1.0	15
024	068a024	IB	CALIB			03/10/10 01:19	1.0	
025	068a025	ICAL	MO_25			03/10/10 01:47	1.0	16
026	068a026	ICAL	MO_50			03/10/10 02:16	1.0	16
027	068a027	ICAL	MO_250			03/10/10 02:44	1.0	17
028	068a028	ICAL	MO_500			03/10/10 03:13	1.0	18
029	068a029	ICAL	MO_1000			03/10/10 03:42	1.0	19
030	068a030	ICAL	MO_2500			03/10/10 04:11	1.0	20
031	068a031	IB	CALIB			03/10/10 04:39	1.0	
032	068a032	ICAL	JP5_10			03/10/10 05:07	1.0	21
033	068a033	ICAL	JP5_100			03/10/10 05:36	1.0	22
034	068a034	ICAL	JP5_500			03/10/10 06:04	1.0	23
035	068a035	ICAL	JP5_1500			03/10/10 06:32	1.0	24
036	068a036	ICAL	JP5_2500			03/10/10 07:00	1.0	25
037	068a037	ICAL	JP5_5000			03/10/10 07:29	1.0	26
038	068a038	IB	CALIB			03/10/10 07:57	1.0	
039	068a039	ICAL	JET_10			03/10/10 08:25	1.0	27
040	068a040	ICAL	JET_100			03/10/10 08:53	1.0	28
041	068a041	ICAL	JET_500			03/10/10 09:21	1.0	29
042	068a042	ICAL	JET_1000			03/10/10 09:49	1.0	30
043	068a043	ICAL	JET_2000			03/10/10 10:18	1.0	31
044	068a044	ICAL	JET_3000			03/10/10 10:46	1.0	32
045	068a045	IB	CALIB			03/10/10 11:14	1.0	
046	068a046	X	C8-C50			03/10/10 11:42	1.0	1
047	068a047	IB	CALIB			03/10/10 12:10	1.0	

SFL 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 860100125

Instrument : GC26A
 Method : EPA 8015B

Begun : 03/10/10 12:45
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	069a001	X	PRIMER			03/10/10 12:45	1.0	
002	069a002	X	IB			03/10/10 13:14	1.0	
003	069a003	X	C-8-C50			03/10/10 13:42	1.0	1
004	069a004	X	DSL_500			03/10/10 14:11	1.0	2
005	069a005	X	MO_500			03/10/10 14:40	1.0	3
006	069a006	IB	CALIB			03/10/10 16:02	1.0	
007	069a007	ICAL	DSL_10			03/10/10 16:51	1.0	4
008	069a008	ICAL	DSL_100			03/10/10 17:20	1.0	5
009	069a009	X	DSL_500			03/10/10 17:49	1.0	6
010	069a010	ICAL	DSL_1000			03/10/10 18:17	1.0	6
011	069a011	ICAL	DSL_5000			03/10/10 20:30	1.0	7
012	069a012	ICAL	DSL_7500			03/10/10 20:59	1.0	8
013	069a013	IB	CALIB			03/10/10 21:28	1.0	
014	069a014	IB	CALIB			03/11/10 10:10	1.0	
015	069a015	ICV	DSL_500			03/11/10 10:38	1.0	2
016	069a016	X	DSL_500			03/11/10 12:16	1.0	2
017	069a017	IB	CALIB			03/11/10 12:44	1.0	
018	069a018	CMARKER	C8-C50			03/11/10 13:30	1.0	1
019	069a019	IB	CALIB			03/11/10 13:58	1.0	
020	069a020	IB	CALIB			03/11/10 15:53	1.0	
021	069a021	IB	CALIB			03/11/10 16:22	1.0	
022	069a022	ICAL	DSL_500			03/11/10 17:19	1.0	9
023	069a023	IB	CALIB			03/11/10 17:48	1.0	

JDG 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 23.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 860111535

Instrument : GC26A Begun : 03/18/10 10:55
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	077a001	X	PRIMER				03/18/10 10:55	1.0	
002	077a002	X	IB				03/18/10 11:24	1.0	
003	077a003	X	IB				03/18/10 11:52	1.0	
004	077a004	X	CMARKER				03/18/10 12:21	1.0	1
005	077a005	X	CCV				03/18/10 12:50	1.0	2
006	077a006	CCV	MO_500				03/18/10 13:18	1.0	3
007	077a007	CCV	DSL_500				03/18/10 18:11	1.0	4
008	077a008	SAMPLE	218730-002		Water	160979	03/18/10 19:43	1.0	
009	077a009	SAMPLE	218730-003		Water	160979	03/18/10 20:11	1.0	
010	077a010	SAMPLE	218730-004		Water	160979	03/18/10 20:40	1.0	
011	077a011	SAMPLE	218730-005		Water	160979	03/18/10 21:08	1.0	9:DSL:16-24=9700
012	077a012	SAMPLE	218730-006		Water	160979	03/18/10 21:36	1.0	
013	077a013	SAMPLE	218730-008		Water	160979	03/18/10 22:04	1.0	
014	077a014	SAMPLE	218730-009		Water	160979	03/18/10 22:32	1.0	
015	077a015	SAMPLE	218730-010		Water	160979	03/18/10 23:00	1.0	
016	077a016	SAMPLE	218757-002	S	Water	160979	03/18/10 23:28	1.0	
017	077a017	SAMPLE	218757-003	S	Water	160979	03/18/10 23:57	1.0	
018	077a018	X	CMARKER				03/19/10 00:24	1.0	1
019	077a019	CCV	DSL_1000				03/19/10 00:53	1.0	5
020	077a020	CCV	MO_500				03/19/10 01:21	1.0	3
021	077a021	X	CCV				03/19/10 01:49	1.0	5
022	077a022	X	CCV				03/19/10 02:17	1.0	3

JDG 03/19/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

SAMPLE PREPARATION SUMMARY

Batch # : 160979
 Started By : NAV
 Method : 3520C
 Spike #1 ID : S14152

Prep Date : 16-MAR-2010 16:30
 Spike #2 ID : S14101

Analysis : TEHM
 Finished By : MB2
 Units : mL
 Spike #3 ID : S13010

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
218730-002		Water	500	2.5	1	0.005	7	.5				TEHM	
218730-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218730-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218730-005		Water	500	2.5	1	0.005	7	.5				TEHM	
218730-006		Water	500	2.5	1	0.005	7	.5				TEHM	
218730-007		Water	500	2.5	1	0.005	7	.5				TEHM	mss
218730-008		Water	500	2.5	1	0.005	7	.5				TEHM	
218730-009		Water	500	2.5	1	0.005	7	.5				TEHM	
218730-010		Water	500	2.5	1	0.005	7	.5				TEHM	
218757-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218757-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218757-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218757-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218812-001		Water	500	2.5	1	0.005	7	.5				TEHM	
218813-001		Water	500	2.5	1	0.005	7	.5				TEHM	
218818-001		Water	500	2.5	1	0.005		.5				TEHM	
QC536266	BLANK	Water	500	2.5	1	0.005		.5			3630C	TEHM	
QC536267	LCS	Water	500	2.5	1	0.005		.5	.5		3630C	TEHM	
QC536268	MS	Water	500	2.5	1	0.005	7	.5	.5			TEHM	
QC536269	MSD	Water	500	2.5	1	0.005	7	.5	.5			TEHM	
QC536270	LCS	Water	500	2.5	1	0.005		.5		.5		TEHM	

Analyst: JDG

Date: 03/19/10

Reviewer: PRW

Date: 03/19/10

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

LIMS Batch No: 160979
 LIMS Analysis: TEHM
 Date Extracted: 3/16/10

Extraction Method:
 mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

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Cleanup Method (if needed):
 EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
218730-002	E	500	7	2.5		
	-003					
	-004					
	-005					
	-006					
	-007					
	-008					MSS
	-009					
	-010					
218757-002	H				X	
	-003					
	-004					
	-005					
218812-001	J					
218813-001						
218818-001	R					
MBQC536266	N/A		N/A		X	
ILS	7					
MS	8					
MSD	9					
*ICS	70		N/A			
PRW 3/16/10						

0.5 mL of TEH_SURR was added to all samples
 *0.5/0.5 mL of TEH_SP was added to all spikes
 pH of all samples adjusted to pH ≤ 2 with H₂SO₄

3520c: Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time: 16.30
 Extraction End Time: 10.30

3510c: Samples were extracted 3 times with 60 mL of CH₂Cl₂
 Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄
 Concentrated to final volume at temperature (degrees C)
 Relinquished to TEH Department

Mfg & Lot# / LIMS # / Time	Date/Initials
5141524	3/16/10 NAV
514101A/513010C*	
ES094395	
EM49338	
1630	
1030	DDC 3/17/10
NA	MBZ 3/16/10
EM49044931	
100	
✓	

[Signature]
 Extraction Chemist Date 3/16/10

Continued from Page 1
 Continued on Page 1

[Signature] 3/19/10
 Reviewed by Date

Prep Chemist: MB2
 Cleanup Date: 3/18/10

Benchbook # **BK 3005**
 Page 3

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
218 757 -002	160979	1.0	1.0	
↓ 003	↓	↓	↓	
↓ 004	↓	↓	↓	
↓ 005	↓	↓	↓	
5 MB QC 536266	↓	↓	↓	
LCS ↓ >	↓	↓	↓	

Extracts were cleaned up using C&T assembled _____ g columns

Extracts were cleaned up using 1.0 g cartridges

Extracts were eluted with 4.0 mL CH₂Cl₂

Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
NA	MB2 3/18/10
SP1476801	↓
EM49309	↓

Michael Baker 3/18/10
 Extraction Chemist / Date

Continued from page /
 Continued on page /

Porter Williams 3/19/10
 Reviewed by / Date

Laboratory Job Number 218730

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-003-UST-10Q1	Batch#:	161143
Lab ID:	218730-001	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-003-UST-10Q1	Batch#:	161143
Lab ID:	218730-001	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	117	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-7A-UST-10Q1	Batch#:	161143
Lab ID:	218730-002	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.5	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.9	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-7A-UST-10Q1	Batch#:	161143
Lab ID:	218730-002	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	117	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-127A-UST-10Q1	Batch#:	161143
Lab ID:	218730-003	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-127A-UST-10Q1	Batch#:	161143
Lab ID:	218730-003	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	119	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-64A-UST-10Q1	Batch#:	161143
Lab ID:	218730-004	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	4.1	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-64A-UST-10Q1	Batch#:	161143
Lab ID:	218730-004	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	33	0.5	
m,p-Xylenes	59	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	54	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	26	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	11	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	1.4	0.5	
1,2,4-Trimethylbenzene	30	0.5	
sec-Butylbenzene	7.3	0.5	
para-Isopropyl Toluene	2.5	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	3.4	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	27	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	59	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	119	70-127	
Toluene-d8	98	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-55A-UST-10Q1	Batch#:	161143
Lab ID:	218730-005	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	8.8	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	1.8	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	1.3	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	2.7	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	0.9	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.6	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-55A-UST-10Q1	Batch#:	161143
Lab ID:	218730-005	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	0.6	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	2.6	0.5	
m,p-Xylenes	4.5	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	7.1	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	4.4	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	0.9	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	0.5	0.5	
1,2,4-Trimethylbenzene	2.9	0.5	
sec-Butylbenzene	2.0	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	3.0	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	4.6	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	4.5	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	95	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	98	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2102-UST-10Q1	Batch#:	161143
Lab ID:	218730-006	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	0.9	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.3	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	0.9	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2102-UST-10Q1	Batch#:	161143
Lab ID:	218730-006	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	0.8	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	1.3	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	0.9	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	0.8	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	0.8	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	96	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	94	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-61A-UST-10Q1	Batch#:	161143
Lab ID:	218730-007	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	1.5	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	1.2	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.0	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	2.0	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-61A-UST-10Q1	Batch#:	161143
Lab ID:	218730-007	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	0.6	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	94	77-120	
1,2-Dichloroethane-d4	110	70-127	
Toluene-d8	98	83-125	
Bromofluorobenzene	95	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-003	Batch#:	161182
Lab ID:	218730-008	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	20.00		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	20	D2
Chloromethane	ND	20	D2
Vinyl Chloride	ND	10	D2
Bromomethane	ND	20	D2
Chloroethane	ND	20	D2
Trichlorofluoromethane	ND	20	D2
Iodomethane	ND	200	D2 V9
Acetone	ND	200	D2
1,1-Dichloroethene	ND	10	D2
Methylene Chloride	ND	200	D2
Carbon Disulfide	ND	10	D2
MTBE	66	10	D2
trans-1,2-Dichloroethene	ND	10	D2
Vinyl Acetate	ND	200	D2 L1
1,1-Dichloroethane	ND	10	D2
2-Butanone	ND	200	D2
cis-1,2-Dichloroethene	ND	10	D2
2,2-Dichloropropane	ND	10	D2
Chloroform	ND	10	D2
Bromochloromethane	ND	10	D2
1,1,1-Trichloroethane	ND	10	D2
1,1-Dichloropropene	ND	10	D2
Carbon Tetrachloride	ND	10	D2
1,2-Dichloroethane	ND	10	D2
Benzene	1,400	10	D2
Trichloroethene	ND	10	D2
1,2-Dichloropropane	ND	10	D2
Bromodichloromethane	ND	10	D2
Dibromomethane	ND	10	D2
4-Methyl-2-Pentanone	ND	200	D2
cis-1,3-Dichloropropene	ND	10	D2
Toluene	ND	10	D2
trans-1,3-Dichloropropene	ND	10	D2
1,1,2-Trichloroethane	ND	10	D2
2-Hexanone	ND	200	D2
1,3-Dichloropropane	ND	10	D2
Tetrachloroethene	ND	10	D2

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-003	Batch#:	161182
Lab ID:	218730-008	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	20.00		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	10	D2
1,2-Dibromoethane	ND	10	D2
Chlorobenzene	ND	10	D2
1,1,1,2-Tetrachloroethane	ND	10	D2
Ethylbenzene	ND	10	D2
m,p-Xylenes	ND	10	D2
o-Xylene	ND	10	D2
Styrene	ND	10	D2
Bromoform	ND	20	D2
Isopropylbenzene	78	10	D2
1,1,2,2-Tetrachloroethane	ND	10	D2
1,2,3-Trichloropropane	ND	10	D2
Propylbenzene	58	10	D2
Bromobenzene	ND	10	D2
1,3,5-Trimethylbenzene	ND	10	D2
2-Chlorotoluene	ND	10	D2
4-Chlorotoluene	ND	10	D2
tert-Butylbenzene	ND	10	D2
1,2,4-Trimethylbenzene	ND	10	D2
sec-Butylbenzene	ND	10	D2
para-Isopropyl Toluene	ND	10	D2
1,3-Dichlorobenzene	ND	10	D2
1,4-Dichlorobenzene	ND	10	D2
n-Butylbenzene	10	10	D2
1,2-Dichlorobenzene	ND	10	D2
1,2-Dibromo-3-Chloropropane	ND	40	D2
1,2,4-Trichlorobenzene	ND	10	D2
Hexachlorobutadiene	ND	40	D2
Naphthalene	190	40	D2
1,2,3-Trichlorobenzene	ND	10	D2
Xylene (total)	ND	10	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	97	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-63A-UST-10Q1	Batch#:	161143
Lab ID:	218730-009	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	20.00		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	20	D2
Chloromethane	ND	20	D2
Vinyl Chloride	ND	10	D2
Bromomethane	ND	20	D2 V9
Chloroethane	ND	20	D2
Trichlorofluoromethane	ND	20	D2
Iodomethane	ND	200	D2
Acetone	ND	200	D2
1,1-Dichloroethene	ND	10	D2
Methylene Chloride	ND	200	D2
Carbon Disulfide	ND	10	D2
MTBE	62	10	D2
trans-1,2-Dichloroethene	ND	10	D2
Vinyl Acetate	ND	200	D2
1,1-Dichloroethane	ND	10	D2
2-Butanone	ND	200	D2
cis-1,2-Dichloroethene	ND	10	D2
2,2-Dichloropropane	ND	10	D2
Chloroform	ND	10	D2
Bromochloromethane	ND	10	D2
1,1,1-Trichloroethane	ND	10	D2
1,1-Dichloropropene	ND	10	D2
Carbon Tetrachloride	ND	10	D2
1,2-Dichloroethane	ND	10	D2
Benzene	1,300	10	D2
Trichloroethene	ND	10	D2
1,2-Dichloropropane	ND	10	D2
Bromodichloromethane	ND	10	D2
Dibromomethane	ND	10	D2
4-Methyl-2-Pentanone	ND	200	D2
cis-1,3-Dichloropropene	ND	10	D2
Toluene	ND	10	D2
trans-1,3-Dichloropropene	ND	10	D2
1,1,2-Trichloroethane	ND	10	D2
2-Hexanone	ND	200	D2
1,3-Dichloropropane	ND	10	D2
Tetrachloroethene	ND	10	D2

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-63A-UST-10Q1	Batch#:	161143
Lab ID:	218730-009	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	20.00		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	10	D2
1,2-Dibromoethane	ND	10	D2
Chlorobenzene	ND	10	D2
1,1,1,2-Tetrachloroethane	ND	10	D2
Ethylbenzene	ND	10	D2
m,p-Xylenes	ND	10	D2
o-Xylene	ND	10	D2
Styrene	ND	10	D2
Bromoform	ND	20	D2
Isopropylbenzene	69	10	D2
1,1,2,2-Tetrachloroethane	ND	10	D2
1,2,3-Trichloropropane	ND	10	D2
Propylbenzene	50	10	D2
Bromobenzene	ND	10	D2
1,3,5-Trimethylbenzene	ND	10	D2
2-Chlorotoluene	ND	10	D2
4-Chlorotoluene	ND	10	D2
tert-Butylbenzene	ND	10	D2
1,2,4-Trimethylbenzene	ND	10	D2
sec-Butylbenzene	ND	10	D2
para-Isopropyl Toluene	ND	10	D2
1,3-Dichlorobenzene	ND	10	D2
1,4-Dichlorobenzene	ND	10	D2
n-Butylbenzene	ND	10	D2
1,2-Dichlorobenzene	ND	10	D2
1,2-Dibromo-3-Chloropropane	ND	40	D2
1,2,4-Trichlorobenzene	ND	10	D2
Hexachlorobutadiene	ND	40	D2 V1
Naphthalene	170	40	D2
1,2,3-Trichlorobenzene	ND	10	D2
Xylene (total)	ND	10	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	95	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	98	83-125	
Bromofluorobenzene	95	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-003-UST-10Q1	Batch#:	161143
Lab ID:	218730-010	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	0.7	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-003-UST-10Q1	Batch#:	161143
Lab ID:	218730-010	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	116	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536954	Batch#:	161143
Matrix:	Water	Analyzed:	03/22/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	18.15	73	56-140	
Chloromethane	25.00	16.53	66	46-142	
Vinyl Chloride	25.00	17.36	69	49-136	
Bromomethane	25.00	19.73 b	79	42-154	V9
Chloroethane	25.00	19.33	77	51-133	
Trichlorofluoromethane	25.00	22.54	90	63-135	
Iodomethane	25.00	26.39	106	70-130	
Acetone	25.00	27.53	110	48-130	
1,1-Dichloroethene	25.00	22.86	91	68-133	
Methylene Chloride	25.00	22.49	90	71-120	
Carbon Disulfide	25.00	20.40	82	56-120	
MTBE	25.00	21.09	84	58-120	
trans-1,2-Dichloroethene	25.00	22.70	91	80-120	
Vinyl Acetate	25.00	25.39	102	63-124	
1,1-Dichloroethane	25.00	22.62	90	77-120	
2-Butanone	25.00	25.80	103	57-120	
cis-1,2-Dichloroethene	25.00	22.77	91	75-120	
2,2-Dichloropropane	25.00	27.51	110	72-128	
Chloroform	25.00	24.37	97	78-120	
Bromochloromethane	25.00	23.86	95	78-120	
1,1,1-Trichloroethane	25.00	26.40	106	78-120	
1,1-Dichloropropene	25.00	27.34	109	75-120	
Carbon Tetrachloride	25.00	29.41	118	80-120	
1,2-Dichloroethane	25.00	27.89	112	74-120	
Benzene	25.00	25.25	101	77-120	
Trichloroethene	25.00	26.23	105	78-122	
1,2-Dichloropropane	25.00	24.06	96	76-120	
Bromodichloromethane	25.00	26.35	105	78-120	
Dibromomethane	25.00	24.77	99	77-120	
4-Methyl-2-Pentanone	25.00	25.62	102	65-120	
cis-1,3-Dichloropropene	25.00	25.41	102	76-120	
Toluene	25.00	24.51	98	73-120	
trans-1,3-Dichloropropene	25.00	23.87	95	72-120	
1,1,2-Trichloroethane	25.00	24.79	99	76-120	
2-Hexanone	25.00	27.83	111	57-121	
1,3-Dichloropropane	25.00	25.06	100	75-120	
Tetrachloroethene	25.00	27.13	109	77-120	
Dibromochloromethane	25.00	25.81	103	76-120	

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536954	Batch#:	161143
Matrix:	Water	Analyzed:	03/22/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	26.12	104	77-120	
Chlorobenzene	25.00	24.34	97	78-120	
1,1,1,2-Tetrachloroethane	25.00	26.04	104	77-120	
Ethylbenzene	25.00	25.53	102	78-120	
m,p-Xylenes	50.00	50.42	101	77-120	
o-Xylene	25.00	24.76	99	77-120	
Styrene	25.00	24.65	99	77-120	
Bromoform	25.00	26.80	107	74-121	
Isopropylbenzene	25.00	21.78	87	71-120	
1,1,2,2-Tetrachloroethane	25.00	23.18	93	73-120	
1,2,3-Trichloropropane	25.00	24.80	99	72-120	
Propylbenzene	25.00	24.59	98	76-120	
Bromobenzene	25.00	24.94	100	75-120	
1,3,5-Trimethylbenzene	25.00	25.09	100	77-120	
2-Chlorotoluene	25.00	24.82	99	76-120	
4-Chlorotoluene	25.00	23.59	94	78-120	
tert-Butylbenzene	25.00	25.34	101	76-120	
1,2,4-Trimethylbenzene	25.00	24.10	96	77-120	
sec-Butylbenzene	25.00	25.97	104	80-120	
para-Isopropyl Toluene	25.00	24.66	99	76-120	
1,3-Dichlorobenzene	25.00	23.77	95	75-120	
1,4-Dichlorobenzene	25.00	23.70	95	77-120	
n-Butylbenzene	25.00	25.09	100	76-120	
1,2-Dichlorobenzene	25.00	24.24	97	76-120	
1,2-Dibromo-3-Chloropropane	25.00	26.73	107	65-120	
1,2,4-Trichlorobenzene	25.00	24.87	99	73-121	
Hexachlorobutadiene	25.00	30.52 b	122	73-123	V3
Naphthalene	25.00	21.40	86	62-121	
1,2,3-Trichlorobenzene	25.00	25.59	102	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	116	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	99	78-120	

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536955	Batch#:	161143
Matrix:	Water	Analyzed:	03/22/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC536955	Batch#:	161143
Matrix:	Water	Analyzed:	03/22/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	117	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-61A-UST-10Q1	Batch#:	161143
MSS Lab ID:	218730-007	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Type: MS Lab ID: QC536967

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	<0.1510	25.00	19.46	78	56-140		
Chloromethane	<0.1377	25.00	15.22	61	46-142		
Vinyl Chloride	<0.1540	25.00	17.26	69	49-136		
Bromomethane	<0.2087	25.00	12.96	b 52	42-154	V9	
Chloroethane	<0.1811	25.00	18.90	76	51-133		
Trichlorofluoromethane	<0.1234	25.00	22.78	91	63-135		
Iodomethane	<0.1689	25.00	24.96	100	60-140		
Acetone	0.6435	25.00	21.06	82	48-130		
1,1-Dichloroethene	1.489	25.00	24.72	93	68-133		
Methylene Chloride	0.2620	25.00	22.04	87	71-120		
Carbon Disulfide	<0.1094	25.00	19.58	78	56-120		
MTBE	<0.1000	25.00	19.80	79	58-120		
trans-1,2-Dichloroethene	<0.1385	25.00	22.57	90	80-120		
Vinyl Acetate	<0.1502	25.00	20.76	83	63-124		
1,1-Dichloroethane	0.3827	25.00	21.85	86	77-120		
2-Butanone	<0.4234	25.00	21.31	85	57-120		
cis-1,2-Dichloroethene	<0.1018	25.00	22.48	90	75-120		
2,2-Dichloropropane	<0.1401	25.00	24.14	97	72-128		
Chloroform	1.210	25.00	24.34	93	78-120		
Bromochloromethane	<0.1000	25.00	23.97	96	78-120		
1,1,1-Trichloroethane	<0.1280	25.00	25.80	103	78-120		
1,1-Dichloropropene	<0.1000	25.00	26.93	108	75-120		
Carbon Tetrachloride	<0.1000	25.00	29.77	119	80-120		
1,2-Dichloroethane	<0.1000	25.00	26.50	106	74-120		
Benzene	<0.1000	25.00	24.39	98	77-120		
Trichloroethene	0.9507	25.00	27.06	104	78-122		
1,2-Dichloropropane	<0.1000	25.00	22.52	90	76-120		
Bromodichloromethane	0.1770	25.00	25.07	100	78-120		
Dibromomethane	<0.1000	25.00	25.29	101	77-120		
4-Methyl-2-Pentanone	<0.1051	25.00	23.81	95	65-120		
cis-1,3-Dichloropropene	<0.1000	25.00	23.00	92	76-120		
Toluene	<0.1000	25.00	24.83	99	73-120		
trans-1,3-Dichloropropene	<0.1000	25.00	20.47	82	72-120		
1,1,2-Trichloroethane	<0.1065	25.00	24.31	97	76-120		
2-Hexanone	<0.1731	25.00	24.64	99	57-121		
1,3-Dichloropropane	<0.1000	25.00	25.24	101	75-120		
Tetrachloroethene	2.004	25.00	29.62	110	77-120		
Dibromochloromethane	<0.1000	25.00	24.78	99	76-120		
1,2-Dibromoethane	<0.1000	25.00	26.71	107	77-120		
Chlorobenzene	<0.1000	25.00	24.74	99	78-120		
1,1,1,2-Tetrachloroethane	<0.1111	25.00	26.74	107	77-120		
Ethylbenzene	0.1358	25.00	25.66	102	78-120		
m,p-Xylenes	0.2937	50.00	51.00	101	77-120		
o-Xylene	<0.1322	25.00	24.95	100	77-120		
Styrene	<0.1000	25.00	22.41	90	77-120		
Bromoform	<0.1438	25.00	23.70	95	74-121		
Isopropylbenzene	0.5556	25.00	22.43	88	71-120		
1,1,2,2-Tetrachloroethane	<0.1000	25.00	23.08	92	73-120		
1,2,3-Trichloropropane	<0.1124	25.00	24.17	97	72-120		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-61A-UST-10Q1	Batch#:	161143
MSS Lab ID:	218730-007	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Propylbenzene	0.4674	25.00	24.98	98	76-120	
Bromobenzene	<0.1000	25.00	25.71	103	75-120	
1,3,5-Trimethylbenzene	0.1442	25.00	24.96	99	77-120	
2-Chlorotoluene	<0.1488	25.00	24.33	97	76-120	
4-Chlorotoluene	<0.1000	25.00	23.45	94	78-120	
tert-Butylbenzene	<0.1219	25.00	25.79	103	76-120	
1,2,4-Trimethylbenzene	0.3876	25.00	24.52	97	77-120	
sec-Butylbenzene	0.1848	25.00	26.08	104	80-120	
para-Isopropyl Toluene	<0.1000	25.00	25.01	100	76-120	
1,3-Dichlorobenzene	<0.1468	25.00	24.20	97	75-120	
1,4-Dichlorobenzene	<0.1106	25.00	24.16	97	77-120	
n-Butylbenzene	0.1307	25.00	25.35	101	76-120	
1,2-Dichlorobenzene	<0.1000	25.00	24.75	99	76-120	
1,2-Dibromo-3-Chloropropane	<0.3256	25.00	26.46	106	65-120	
1,2,4-Trichlorobenzene	<0.1141	25.00	25.21	101	73-121	
Hexachlorobutadiene	<0.1821	25.00	30.49	b 122	73-123	V3
Naphthalene	0.3713	25.00	23.54	93	62-121	
1,2,3-Trichlorobenzene	<0.1000	25.00	26.64	107	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	95	77-120	
1,2-Dichloroethane-d4	105	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	94	78-120	

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-61A-UST-10Q1	Batch#:	161143
MSS Lab ID:	218730-007	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Type: MSD Lab ID: QC536968

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	17.64	71	56-140	10	24		
Chloromethane	25.00	13.97	56	46-142	9	24		
Vinyl Chloride	25.00	15.76	63	49-136	9	24		
Bromomethane	25.00	16.12 b	64	42-154	22	24	V9	
Chloroethane	25.00	16.90	68	51-133	11	25		
Trichlorofluoromethane	25.00	21.69	87	63-135	5	20		
Iodomethane	25.00	26.95	108	60-140	8	30		
Acetone	25.00	20.56	80	48-130	2	41		
1,1-Dichloroethene	25.00	23.11	87	68-133	7	20		
Methylene Chloride	25.00	20.58	81	71-120	7	20		
Carbon Disulfide	25.00	18.03	72	56-120	8	20		
MTBE	25.00	19.86	79	58-120	0	21		
trans-1,2-Dichloroethene	25.00	21.43	86	80-120	5	24		
Vinyl Acetate	25.00	20.81	83	63-124	0	24		
1,1-Dichloroethane	25.00	20.82	82	77-120	5	20		
2-Butanone	25.00	21.73	87	57-120	2	32		
cis-1,2-Dichloroethene	25.00	21.32	85	75-120	5	20		
2,2-Dichloropropane	25.00	21.90	88	72-128	10	24		
Chloroform	25.00	22.84	87	78-120	6	20		
Bromochloromethane	25.00	22.91	92	78-120	4	20		
1,1,1-Trichloroethane	25.00	24.29	97	78-120	6	20		
1,1-Dichloropropene	25.00	25.59	102	75-120	5	21		
Carbon Tetrachloride	25.00	28.78	115	80-120	3	21		
1,2-Dichloroethane	25.00	25.83	103	74-120	3	20		
Benzene	25.00	23.56	94	77-120	3	20		
Trichloroethene	25.00	25.74	99	78-122	5	20		
1,2-Dichloropropane	25.00	21.69	87	76-120	4	20		
Bromodichloromethane	25.00	23.90	95	78-120	5	20		
Dibromomethane	25.00	24.91	100	77-120	1	20		
4-Methyl-2-Pentanone	25.00	24.27	97	65-120	2	22		
cis-1,3-Dichloropropene	25.00	20.94	84	76-120	9	20		
Toluene	25.00	23.72	95	73-120	5	20		
trans-1,3-Dichloropropene	25.00	19.16	77	72-120	7	20		
1,1,2-Trichloroethane	25.00	24.41	98	76-120	0	20		
2-Hexanone	25.00	24.30	97	57-121	1	25		
1,3-Dichloropropane	25.00	24.52	98	75-120	3	20		
Tetrachloroethene	25.00	29.01	108	77-120	2	20		
Dibromochloromethane	25.00	23.60	94	76-120	5	20		
1,2-Dibromoethane	25.00	26.69	107	77-120	0	20		
Chlorobenzene	25.00	23.46	94	78-120	5	20		
1,1,1,2-Tetrachloroethane	25.00	25.83	103	77-120	3	20		
Ethylbenzene	25.00	24.33	97	78-120	5	26		
m,p-Xylenes	50.00	47.54	94	77-120	7	20		
o-Xylene	25.00	23.77	95	77-120	5	20		
Styrene	25.00	21.68	87	77-120	3	20		
Bromoform	25.00	21.12	84	74-121	12	21		
Isopropylbenzene	25.00	21.66	84	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	23.99	96	73-120	4	20		
1,2,3-Trichloropropane	25.00	24.69	99	72-120	2	20		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-61A-UST-10Q1	Batch#:	161143
MSS Lab ID:	218730-007	Sampled:	03/10/10
Matrix:	Water	Received:	03/11/10
Units:	ug/L	Analyzed:	03/22/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Propylbenzene	25.00	24.26	95	76-120	3	20		
Bromobenzene	25.00	25.33	101	75-120	1	20		
1,3,5-Trimethylbenzene	25.00	24.24	96	77-120	3	20		
2-Chlorotoluene	25.00	23.57	94	76-120	3	20		
4-Chlorotoluene	25.00	22.69	91	78-120	3	20		
tert-Butylbenzene	25.00	24.80	99	76-120	4	21		
1,2,4-Trimethylbenzene	25.00	23.58	93	77-120	4	20		
sec-Butylbenzene	25.00	25.16	100	80-120	4	21		
para-Isopropyl Toluene	25.00	23.87	95	76-120	5	20		
1,3-Dichlorobenzene	25.00	23.47	94	75-120	3	20		
1,4-Dichlorobenzene	25.00	23.54	94	77-120	3	23		
n-Butylbenzene	25.00	24.10	96	76-120	5	21		
1,2-Dichlorobenzene	25.00	24.18	97	76-120	2	20		
1,2-Dibromo-3-Chloropropane	25.00	27.23	109	65-120	3	22		
1,2,4-Trichlorobenzene	25.00	25.48	102	73-121	1	20		
Hexachlorobutadiene	25.00	30.26 b	121	73-123	1	25	V3	
Naphthalene	25.00	24.11	95	62-121	2	32		
1,2,3-Trichlorobenzene	25.00	27.00	108	66-123	1	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	96	77-120		
1,2-Dichloroethane-d4	106	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	97	78-120		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161182
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Type: BS Lab ID: QC537126

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	25.00	16.33	65	56-140		
Chloromethane	25.00	18.52	74	46-142		
Vinyl Chloride	25.00	20.07	80	49-136		
Bromomethane	25.00	27.62	110	42-154		
Chloroethane	25.00	23.94	96	51-133		
Trichlorofluoromethane	25.00	23.03	92	63-135		
Iodomethane	25.00	22.83	b 91	70-130	V9	
Acetone	25.00	24.79	99	48-130		
1,1-Dichloroethene	25.00	30.55	122	68-133		
Methylene Chloride	25.00	25.77	103	71-120		
Carbon Disulfide	25.00	26.11	104	56-120		
MTBE	25.00	20.87	83	58-120		
trans-1,2-Dichloroethene	25.00	27.89	112	80-120		
Vinyl Acetate	25.00	29.80	119	63-124		
1,1-Dichloroethane	25.00	26.16	105	77-120		
2-Butanone	25.00	22.79	91	57-120		
cis-1,2-Dichloroethene	25.00	26.55	106	75-120		
2,2-Dichloropropane	25.00	29.59	118	72-128		
Chloroform	25.00	24.85	99	78-120		
Bromochloromethane	25.00	26.02	104	78-120		
1,1,1-Trichloroethane	25.00	26.04	104	78-120		
1,1-Dichloropropene	25.00	26.76	107	75-120		
Carbon Tetrachloride	25.00	25.33	101	80-120		
1,2-Dichloroethane	25.00	22.87	91	74-120		
Benzene	25.00	26.28	105	77-120		
Trichloroethene	25.00	25.59	102	78-122		
1,2-Dichloropropane	25.00	23.89	96	76-120		
Bromodichloromethane	25.00	24.10	96	78-120		
Dibromomethane	25.00	23.83	95	77-120		
4-Methyl-2-Pentanone	25.00	20.99	84	65-120		
cis-1,3-Dichloropropene	25.00	24.46	98	76-120		
Toluene	25.00	28.45	114	73-120		
trans-1,3-Dichloropropene	25.00	21.57	86	72-120		
1,1,2-Trichloroethane	25.00	26.07	104	76-120		
2-Hexanone	25.00	23.38	94	57-121		
1,3-Dichloropropane	25.00	26.45	106	75-120		
Tetrachloroethene	25.00	28.65	115	77-120		
Dibromochloromethane	25.00	24.74	99	76-120		
1,2-Dibromoethane	25.00	25.84	103	77-120		
Chlorobenzene	25.00	27.15	109	78-120		
1,1,1,2-Tetrachloroethane	25.00	26.69	107	77-120		
Ethylbenzene	25.00	28.52	114	78-120		
m,p-Xylenes	50.00	58.30	117	77-120		
o-Xylene	25.00	27.93	112	77-120		
Styrene	25.00	28.23	113	77-120		
Bromoform	25.00	24.82	99	74-121		
Isopropylbenzene	25.00	24.91	100	71-120		
1,1,2,2-Tetrachloroethane	25.00	26.41	106	73-120		
1,2,3-Trichloropropane	25.00	25.43	102	72-120		
Propylbenzene	25.00	28.59	114	76-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161182
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	25.00	27.73	111	75-120	
1,3,5-Trimethylbenzene	25.00	28.28	113	77-120	
2-Chlorotoluene	25.00	27.59	110	76-120	
4-Chlorotoluene	25.00	26.22	105	78-120	
tert-Butylbenzene	25.00	29.27	117	76-120	
1,2,4-Trimethylbenzene	25.00	26.91	108	77-120	
sec-Butylbenzene	25.00	29.26	117	80-120	
para-Isopropyl Toluene	25.00	27.58	110	76-120	
1,3-Dichlorobenzene	25.00	26.38	106	75-120	
1,4-Dichlorobenzene	25.00	26.07	104	77-120	
n-Butylbenzene	25.00	27.70	111	76-120	
1,2-Dichlorobenzene	25.00	25.87	103	76-120	
1,2-Dibromo-3-Chloropropane	25.00	22.70	91	65-120	
1,2,4-Trichlorobenzene	25.00	24.75	99	73-121	
Hexachlorobutadiene	25.00	28.50	114	73-123	
Naphthalene	25.00	23.78	95	62-121	
1,2,3-Trichlorobenzene	25.00	26.34	105	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	90	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	98	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161182
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Type: BSD Lab ID: QC537127

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	14.75	59	56-140	10	24		
Chloromethane	25.00	16.14	65	46-142	14	24		
Vinyl Chloride	25.00	18.28	73	49-136	9	24		
Bromomethane	25.00	25.31	101	42-154	9	24		
Chloroethane	25.00	21.56	86	51-133	10	25		
Trichlorofluoromethane	25.00	21.73	87	63-135	6	20		
Iodomethane	25.00	22.94	b 92	70-130	0	20		V9
Acetone	25.00	25.81	103	48-130	4	41		
1,1-Dichloroethene	25.00	27.62	110	68-133	10	20		
Methylene Chloride	25.00	24.44	98	71-120	5	20		
Carbon Disulfide	25.00	23.98	96	56-120	8	20		
MTBE	25.00	20.82	83	58-120	0	21		
trans-1,2-Dichloroethene	25.00	25.66	103	80-120	8	24		
Vinyl Acetate	25.00	31.56	126 *	63-124	6	24		L1
1,1-Dichloroethane	25.00	24.14	97	77-120	8	20		
2-Butanone	25.00	25.19	101	57-120	10	32		
cis-1,2-Dichloroethene	25.00	25.31	101	75-120	5	20		
2,2-Dichloropropane	25.00	27.49	110	72-128	7	24		
Chloroform	25.00	23.50	94	78-120	6	20		
Bromochloromethane	25.00	25.95	104	78-120	0	20		
1,1,1-Trichloroethane	25.00	23.49	94	78-120	10	20		
1,1-Dichloropropene	25.00	26.97	108	75-120	1	21		
Carbon Tetrachloride	25.00	24.57	98	80-120	3	21		
1,2-Dichloroethane	25.00	23.41	94	74-120	2	20		
Benzene	25.00	25.39	102	77-120	3	20		
Trichloroethene	25.00	24.84	99	78-122	3	20		
1,2-Dichloropropane	25.00	23.45	94	76-120	2	20		
Bromodichloromethane	25.00	23.12	92	78-120	4	20		
Dibromomethane	25.00	25.04	100	77-120	5	20		
4-Methyl-2-Pentanone	25.00	24.05	96	65-120	14	22		
cis-1,3-Dichloropropene	25.00	24.60	98	76-120	1	20		
Toluene	25.00	25.82	103	73-120	10	20		
trans-1,3-Dichloropropene	25.00	22.28	89	72-120	3	20		
1,1,2-Trichloroethane	25.00	25.81	103	76-120	1	20		
2-Hexanone	25.00	24.20	97	57-121	3	25		
1,3-Dichloropropane	25.00	25.50	102	75-120	4	20		
Tetrachloroethene	25.00	26.01	104	77-120	10	20		
Dibromochloromethane	25.00	24.27	97	76-120	2	20		
1,2-Dibromoethane	25.00	26.31	105	77-120	2	20		
Chlorobenzene	25.00	25.60	102	78-120	6	20		
1,1,1,2-Tetrachloroethane	25.00	25.56	102	77-120	4	20		
Ethylbenzene	25.00	26.51	106	78-120	7	26		
m,p-Xylenes	50.00	54.88	110	77-120	6	20		
o-Xylene	25.00	26.67	107	77-120	5	20		
Styrene	25.00	26.71	107	77-120	6	20		
Bromoform	25.00	25.61	102	74-121	3	21		
Isopropylbenzene	25.00	24.06	96	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	27.67	111	73-120	5	20		
1,2,3-Trichloropropane	25.00	26.69	107	72-120	5	20		
Propylbenzene	25.00	28.10	112	76-120	2	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161182
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Bromobenzene	25.00	27.43	110	75-120	1	20		
1,3,5-Trimethylbenzene	25.00	27.27	109	77-120	4	20		
2-Chlorotoluene	25.00	26.35	105	76-120	5	20		
4-Chlorotoluene	25.00	26.05	104	78-120	1	20		
tert-Butylbenzene	25.00	27.11	108	76-120	8	21		
1,2,4-Trimethylbenzene	25.00	26.22	105	77-120	3	20		
sec-Butylbenzene	25.00	28.30	113	80-120	3	21		
para-Isopropyl Toluene	25.00	26.73	107	76-120	3	20		
1,3-Dichlorobenzene	25.00	25.66	103	75-120	3	20		
1,4-Dichlorobenzene	25.00	25.68	103	77-120	1	23		
n-Butylbenzene	25.00	26.65	107	76-120	4	21		
1,2-Dichlorobenzene	25.00	25.88	104	76-120	0	20		
1,2-Dibromo-3-Chloropropane	25.00	24.97	100	65-120	10	22		
1,2,4-Trichlorobenzene	25.00	25.60	102	73-121	3	20		
Hexachlorobutadiene	25.00	27.38	110	73-123	4	25		
Naphthalene	25.00	26.27	105	62-121	10	32		
1,2,3-Trichlorobenzene	25.00	26.60	106	66-123	1	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	97	77-120		
1,2-Dichloroethane-d4	95	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	98	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537128	Batch#:	161182
Matrix:	Water	Analyzed:	03/23/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	L1
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537128	Batch#:	161182
Matrix:	Water	Analyzed:	03/23/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	97	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	97	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161182
MSS Lab ID:	218839-011	Sampled:	03/16/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Type: MS Lab ID: QC537244

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	<0.1733	25.00	15.99	64	56-140		
Chloromethane	<0.2133	25.00	19.37	77	46-142		
Vinyl Chloride	<0.1202	25.00	23.63	95	49-136		
Bromomethane	<0.1692	25.00	26.28	105	42-154		
Chloroethane	<0.1670	25.00	22.82	91	51-133		
Trichlorofluoromethane	<0.1840	25.00	23.47	94	63-135		
Iodomethane	<0.1570	25.00	20.84	b 83	60-140	V9	
Acetone	0.8717	25.00	21.45	82	48-130		
1,1-Dichloroethene	<0.1000	25.00	29.29	117	68-133		
Methylene Chloride	<0.1458	25.00	24.80	99	71-120		
Carbon Disulfide	<0.1000	25.00	26.12	104	56-120		
MTBE	<0.1000	25.00	22.66	91	58-120		
trans-1,2-Dichloroethene	<0.1000	25.00	26.49	106	80-120		
Vinyl Acetate	<0.5118	25.00	30.33	121	63-124		
1,1-Dichloroethane	<0.1000	25.00	26.23	105	77-120		
2-Butanone	<0.2956	25.00	22.00	88	57-120		
cis-1,2-Dichloroethene	1.501	25.00	26.80	101	75-120		
2,2-Dichloropropane	<0.1000	25.00	27.75	111	72-128		
Chloroform	<0.1000	25.00	25.45	102	78-120		
Bromochloromethane	<0.1508	25.00	25.13	101	78-120		
1,1,1-Trichloroethane	<0.1000	25.00	27.19	109	78-120		
1,1-Dichloropropene	<0.1000	25.00	28.79	115	75-120		
Carbon Tetrachloride	<0.1000	25.00	27.05	108	80-120		
1,2-Dichloroethane	<0.1000	25.00	25.76	103	74-120		
Benzene	<0.1000	25.00	27.97	112	77-120		
Trichloroethene	0.1342	25.00	25.53	102	78-122		
1,2-Dichloropropane	<0.1501	25.00	24.53	98	76-120		
Bromodichloromethane	<0.1000	25.00	24.81	99	78-120		
Dibromomethane	<0.1000	25.00	25.16	101	77-120		
4-Methyl-2-Pentanone	<0.1884	25.00	23.55	94	65-120		
cis-1,3-Dichloropropene	<0.1000	25.00	24.04	96	76-120		
Toluene	<0.1000	25.00	26.61	106	73-120		
trans-1,3-Dichloropropene	<0.1000	25.00	21.89	88	72-120		
1,1,2-Trichloroethane	<0.1596	25.00	25.54	102	76-120		
2-Hexanone	<0.1592	25.00	22.77	91	57-121		
1,3-Dichloropropane	<0.1000	25.00	26.02	104	75-120		
Tetrachloroethene	<0.1000	25.00	24.72	99	77-120		
Dibromochloromethane	<0.1000	25.00	24.56	98	76-120		
1,2-Dibromoethane	<0.1000	25.00	25.45	102	77-120		
Chlorobenzene	<0.1136	25.00	25.43	102	78-120		
1,1,1,2-Tetrachloroethane	<0.1000	25.00	25.48	102	77-120		
Ethylbenzene	<0.1561	25.00	26.68	107	78-120		
m,p-Xylenes	<0.1000	50.00	56.44	113	77-120		
o-Xylene	<0.09974	25.00	26.68	107	77-120		
Styrene	<0.1000	25.00	26.90	108	77-120		
Bromoform	<0.1000	25.00	24.57	98	74-121		
Isopropylbenzene	<0.1000	25.00	23.66	95	71-120		
1,1,2,2-Tetrachloroethane	<0.1000	25.00	26.55	106	73-120		
1,2,3-Trichloropropane	<0.1388	25.00	25.29	101	72-120		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161182
MSS Lab ID:	218839-011	Sampled:	03/16/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
Propylbenzene	<0.1074	25.00	27.65	111	76-120	
Bromobenzene	<0.1000	25.00	26.88	108	75-120	
1,3,5-Trimethylbenzene	<0.1017	25.00	27.60	110	77-120	
2-Chlorotoluene	<0.1027	25.00	27.23	109	76-120	
4-Chlorotoluene	<0.1554	25.00	25.38	102	78-120	
tert-Butylbenzene	<0.1000	25.00	27.25	109	76-120	
1,2,4-Trimethylbenzene	<0.1598	25.00	24.98	100	77-120	
sec-Butylbenzene	<0.1102	25.00	27.42	110	80-120	
para-Isopropyl Toluene	<0.1014	25.00	24.87	99	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	24.41	98	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	24.67	99	77-120	
n-Butylbenzene	<0.1011	25.00	24.56	98	76-120	
1,2-Dichlorobenzene	<0.1000	25.00	25.24	101	76-120	
1,2-Dibromo-3-Chloropropane	<0.1880	25.00	22.79	91	65-120	
1,2,4-Trichlorobenzene	<0.1138	25.00	22.34	89	73-121	
Hexachlorobutadiene	<0.1492	25.00	24.15	97	73-123	
Naphthalene	<0.1000	25.00	23.51	94	62-121	
1,2,3-Trichlorobenzene	<0.1000	25.00	23.76	95	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	97	78-120	

b= See narrative
 RPD= Relative Percent Difference
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Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161182
MSS Lab ID:	218839-011	Sampled:	03/16/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Type: MSD Lab ID: QC537245

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	15.00	60	56-140	6	24		
Chloromethane	25.00	17.53	70	46-142	10	24		
Vinyl Chloride	25.00	21.28	85	49-136	10	24		
Bromomethane	25.00	26.76	107	42-154	2	24		
Chloroethane	25.00	22.66	91	51-133	1	25		
Trichlorofluoromethane	25.00	22.61	90	63-135	4	20		
Iodomethane	25.00	24.60	b 98	60-140	17	30	V9	
Acetone	25.00	20.89	80	48-130	3	41		
1,1-Dichloroethene	25.00	28.74	115	68-133	2	20		
Methylene Chloride	25.00	24.58	98	71-120	1	20		
Carbon Disulfide	25.00	25.62	102	56-120	2	20		
MTBE	25.00	22.19	89	58-120	2	21		
trans-1,2-Dichloroethene	25.00	26.38	106	80-120	0	24		
Vinyl Acetate	25.00	28.67	115	63-124	6	24		
1,1-Dichloroethane	25.00	25.36	101	77-120	3	20		
2-Butanone	25.00	21.47	86	57-120	2	32		
cis-1,2-Dichloroethene	25.00	26.52	100	75-120	1	20		
2,2-Dichloropropane	25.00	26.69	107	72-128	4	24		
Chloroform	25.00	24.93	100	78-120	2	20		
Bromochloromethane	25.00	25.53	102	78-120	2	20		
1,1,1-Trichloroethane	25.00	27.06	108	78-120	0	20		
1,1-Dichloropropene	25.00	27.42	110	75-120	5	21		
Carbon Tetrachloride	25.00	25.98	104	80-120	4	21		
1,2-Dichloroethane	25.00	24.76	99	74-120	4	20		
Benzene	25.00	27.11	108	77-120	3	20		
Trichloroethene	25.00	25.68	102	78-122	1	20		
1,2-Dichloropropane	25.00	24.64	99	76-120	0	20		
Bromodichloromethane	25.00	24.60	98	78-120	1	20		
Dibromomethane	25.00	25.20	101	77-120	0	20		
4-Methyl-2-Pentanone	25.00	24.00	96	65-120	2	22		
cis-1,3-Dichloropropene	25.00	23.81	95	76-120	1	20		
Toluene	25.00	26.43	106	73-120	1	20		
trans-1,3-Dichloropropene	25.00	21.56	86	72-120	2	20		
1,1,2-Trichloroethane	25.00	26.54	106	76-120	4	20		
2-Hexanone	25.00	22.65	91	57-121	1	25		
1,3-Dichloropropane	25.00	26.01	104	75-120	0	20		
Tetrachloroethene	25.00	25.30	101	77-120	2	20		
Dibromochloromethane	25.00	24.70	99	76-120	1	20		
1,2-Dibromoethane	25.00	25.63	103	77-120	1	20		
Chlorobenzene	25.00	25.64	103	78-120	1	20		
1,1,1,2-Tetrachloroethane	25.00	25.60	102	77-120	0	20		
Ethylbenzene	25.00	27.32	109	78-120	2	26		
m,p-Xylenes	50.00	55.00	110	77-120	3	20		
o-Xylene	25.00	25.94	104	77-120	3	20		
Styrene	25.00	26.13	105	77-120	3	20		
Bromoform	25.00	24.87	99	74-121	1	21		
Isopropylbenzene	25.00	23.57	94	71-120	0	20		
1,1,2,2-Tetrachloroethane	25.00	26.21	105	73-120	1	20		
1,2,3-Trichloropropane	25.00	25.01	100	72-120	1	20		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218730	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161182
MSS Lab ID:	218839-011	Sampled:	03/16/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/23/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Propylbenzene	25.00	26.55	106	76-120	4	20		
Bromobenzene	25.00	25.74	103	75-120	4	20		
1,3,5-Trimethylbenzene	25.00	26.38	106	77-120	5	20		
2-Chlorotoluene	25.00	26.05	104	76-120	4	20		
4-Chlorotoluene	25.00	24.83	99	78-120	2	20		
tert-Butylbenzene	25.00	26.05	104	76-120	5	21		
1,2,4-Trimethylbenzene	25.00	25.70	103	77-120	3	20		
sec-Butylbenzene	25.00	27.12	108	80-120	1	21		
para-Isopropyl Toluene	25.00	24.28	97	76-120	2	20		
1,3-Dichlorobenzene	25.00	24.41	98	75-120	0	20		
1,4-Dichlorobenzene	25.00	24.23	97	77-120	2	23		
n-Butylbenzene	25.00	24.30	97	76-120	1	21		
1,2-Dichlorobenzene	25.00	24.52	98	76-120	3	20		
1,2-Dibromo-3-Chloropropane	25.00	22.58	90	65-120	1	22		
1,2,4-Trichlorobenzene	25.00	22.01	88	73-121	1	20		
Hexachlorobutadiene	25.00	23.92	96	73-123	1	25		
Naphthalene	25.00	22.95	92	62-121	2	32		
1,2,3-Trichlorobenzene	25.00	24.40	98	66-123	3	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	101	77-120		
1,2-Dichloroethane-d4	93	70-127		
Toluene-d8	103	83-125		
Bromofluorobenzene	98	78-120		

b= See narrative
 RPD= Relative Percent Difference
 Page 4 of 4

CURTIS & TOMPKINS BFB TUNE FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480039377003 File : iar03 Time : 27-JAN-2010 17:11

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	119490	17.70	
75	30% - 60% of mass 95	276672	40.99	
95		675029	100.00	
96	5% - 9% of mass 95	46176	6.84	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	508352	75.31	
175	5% - 9% of mass 174	37824	7.44	
176	> 95% and < 101% of mass 174	488896	96.17	
177	5% - 9% of mass 176	33058	6.76	

Analyst: BO Date: 01/28/10 Reviewer: LW Date: 01/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480118602002 File : icn02 Time : 23-MAR-2010 09:34

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	22108	18.88	
75	30% - 60% of mass 95	48805	41.68	
95		117090	100.00	
96	5% - 9% of mass 95	8567	7.32	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	87754	74.95	
175	5% - 9% of mass 174	6133	6.99	
176	> 95% and < 101% of mass 174	84192	95.94	
177	5% - 9% of mass 176	5512	6.55	

Analyst: BJP Date: 03/23/10 Reviewer: LW Date: 03/23/10

CURTIS & TOMPKINS BFB TUNE FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480118602010 File : icn10 Time : 23-MAR-2010 14:10

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	13368	17.65	
75	30% - 60% of mass 95	29814	39.37	
95		75732	100.00	
96	5% - 9% of mass 95	5519	7.29	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	57106	75.41	
175	5% - 9% of mass 174	4221	7.39	
176	> 95% and < 101% of mass 174	55886	97.86	
177	5% - 9% of mass 176	3676	6.58	

Analyst: BJP Date: 03/23/10 Reviewer: LW Date: 03/23/10

CURTIS & TOMPKINS BFB TUNE FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490027869008 File : jaj08 Time : 19-JAN-2010 15:39

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	37570	17.43	
75	30% - 60% of mass 95	88520	41.07	
95		215530	100.00	
96	5% - 9% of mass 95	14801	6.87	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	166912	77.44	
175	5% - 9% of mass 174	12330	7.39	
176	> 95% and < 101% of mass 174	162773	97.52	
177	5% - 9% of mass 176	10436	6.41	

Analyst: BO Date: 01/20/10 Reviewer: LW Date: 01/22/10

CURTIS & TOMPKINS BFB TUNE FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490117331002 File : jcm02 Time : 22-MAR-2010 12:09

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	38597	21.77	
75	30% - 60% of mass 95	81613	46.04	
95		177258	100.00	
96	5% - 9% of mass 95	12170	6.87	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	132589	74.80	
175	5% - 9% of mass 174	10225	7.71	
176	> 95% and < 101% of mass 174	128557	96.96	
177	5% - 9% of mass 176	8461	6.58	

Analyst: PDM Date: 03/23/10 Reviewer: LW Date: 03/23/10

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 MSVOA Water: EPA 8260B

Inst : MSVOA09
 Calnum : 480039377001
 Units : ug/L

Name : 826GOX9W
 Date : 27-JAN-2010 20:15
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	iar07	480039377007	.25/.5PPB	27-JAN-2010 20:15	S13745 (20000X), S13845 (20000X), S13747 (20000X), S13846 (100000X), S13687 (5000X)
L2	iar08	480039377008	0.5/1PPB	27-JAN-2010 20:49	S13745 (100000X), S13845 (100000X), S13747 (100000X), S13846 (50000X), S13687 (5000X)
L3	iar09	480039377009	2PPB	27-JAN-2010 21:22	S13745 (25000X), S13845 (25000X), S13747 (50000X), S13846 (25000X), S13687 (5000X)
L4	iar10	480039377010	5PPB	27-JAN-2010 21:55	S13745 (10000X), S13845 (10000X), S13747 (20000X), S13846 (10000X), S13687 (5000X)
L5	iar11	480039377011	10PPB	27-JAN-2010 22:28	S13745 (5000X), S13845 (5000X), S13747 (10000X), S13846 (5000X), S13687 (5000X)
L6	iar12	480039377012	20PPB	27-JAN-2010 23:01	S13680 (25000X), S13796 (25000X), S13625 (50000X), S13503 (25000X), S13687 (5000X)
L7	iar13	480039377013	50PPB	27-JAN-2010 23:34	S13680 (10000X), S13796 (10000X), S13625 (20000X), S13503 (10000X), S13687 (5000X)
L8	iar14	480039377014	75PPB	28-JAN-2010 00:07	S13680 (6667X), S13796 (6667X), S13625 (13330X), S13503 (6667X), S13687 (5000X)
L9	iar15	480039377015	100PPB	28-JAN-2010 00:39	S13680 (5000X), S13796 (5000X), S13625 (10000X), S13503 (5000X), S13687 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Freon 12		0.4272	0.6076	0.5551	0.6189	0.6131	0.6391	0.5765	0.5958	AVRG		1.72662		0.5792	12	15	0.05	0.99	
Chloromethane		0.8240	0.9930	0.9112	0.9272	0.9023	0.8693	0.8104	0.7946	AVRG		1.13767		0.8790	8	15	0.10	0.99	
Vinyl Chloride	0.5181	0.5422	0.7028	0.6832	0.6817	0.6816	0.6563	0.6083	0.5695	AVRG		1.59470		0.6271	11	15	0.05	0.99	
Bromomethane		0.3327	0.3778	0.3470	0.3376	0.3814	0.3741	0.3742	0.3632	AVRG		2.77001		0.3610	5	15	0.05	0.99	
Chloroethane		0.3935	0.4827	0.4630	0.4416	0.4633	0.4477	0.4193	0.4174	AVRG		2.26725		0.4411	7	15	0.05	0.99	
Trichlorofluoromethane		0.5190	0.6690	0.6150	0.6630	0.6423	0.6798	0.6145	0.6119	AVRG		1.59535		0.6268	8	15	0.05	0.99	
Acetone				0.1172	0.1133	0.1131	0.1053	0.0922	0.0927	AVRG		9.46550		0.1056	10	15	0.05	0.99	
1,1-Dichloroethene		0.3192	0.4324	0.3853	0.3906	0.3699	0.3637	0.3930	0.3876	AVRG		2.63014		0.3802	8	15	0.05	0.99	
Iodomethane				0.5282	0.5552	0.5997	0.6044	0.5951	0.6206	AVRG		1.71268		0.5839	6	15	0.05	0.99	
Methylene Chloride		0.5858	0.6009	0.5287	0.5011	0.5232	0.5143	0.5033	0.4935	AVRG		1.88203		0.5313	8	15	0.05	0.99	
Carbon Disulfide		1.5171	1.9736	1.7265	1.7529	1.6610	1.5889	1.6476	1.5771	AVRG		0.59503		1.6806	8	15	0.05	0.99	
MTBE		0.9320	1.0138	0.9931	0.9929	1.0189	0.9926	0.9195	0.8743	AVRG		1.03396		0.9672	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4406	0.5305	0.4618	0.4602	0.4757	0.4552	0.4688	0.4558	AVRG		2.13408		0.4686	6	15	0.05	0.99	
Vinyl Acetate			0.6282	0.6668	0.6830	0.7536	0.7417	0.8563	0.7420	AVRG		1.38026		0.7245	10	15	0.05	0.99	
1,1-Dichloroethane		0.8516	1.0446	0.9546	0.9019	0.9393	0.9119	0.8841	0.8458	AVRG		1.09085		0.9167	7	15	0.10	0.99	
2-Butanone			0.2069m	0.1893	0.1836	0.1851	0.1785	0.1526	0.1452	AVRG		5.63991		0.1773	12	15	0.05	0.99	
2,2-Dichloropropane		0.4892	0.6320	0.5236	0.5438	0.5313	0.4881	0.4891	0.4602	AVRG		1.92434		0.5197	10	15	0.05	0.99	
cis-1,2-Dichloroethene		0.4938	0.5578	0.4996	0.4958	0.5086	0.5035	0.5009	0.4937	AVRG		1.97351		0.5067	4	15	0.05	0.99	
Chloroform		0.7593	0.8988	0.8262	0.8030	0.8348	0.7985	0.7757	0.7543	AVRG		1.24021		0.8063	6	15	0.05	0.99	
Bromochloromethane		0.1840	0.2315	0.2099	0.2160	0.2219	0.2274	0.2192	0.2171	AVRG		4.63209		0.2159	7	15	0.05	0.99	
1,1,1-Trichloroethane		0.4684	0.6327	0.5630	0.5644	0.5706	0.5140	0.5506	0.5210	AVRG		1.82451		0.5481	9	15	0.05	0.99	
1,1-Dichloropropene		0.3158	0.4343	0.3542	0.3790	0.3680	0.3394	0.3705	0.3601	AVRG		2.73852		0.3652	9	15	0.05	0.99	
Carbon Tetrachloride		0.2519	0.3316	0.2884	0.2907	0.2825	0.2633	0.2915	0.2847	AVRG		3.50159		0.2856	8	15	0.05	0.99	
1,2-Dichloroethane		0.2690	0.3044	0.2819	0.2808	0.2982	0.2878	0.2677	0.2636	AVRG		3.55022		0.2817	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Benzene		1.0292	1.2652	1.0714	1.0609	1.1235	1.0294	1.0188	0.9650	AVRG		0.93423		1.0704	9	15	0.05	0.99	
Trichloroethene		0.2697	0.3259	0.2720	0.2774	0.2985	0.2818	0.2818	0.2765	AVRG		3.50319		0.2855	6	15	0.05	0.99	
1,2-Dichloropropane		0.3482	0.3804	0.3531	0.3345	0.3598	0.3425	0.3400	0.3296	AVRG		2.86920		0.3485	5	15	0.05	0.99	
Bromodichloromethane		0.3451	0.3918	0.3578	0.3454	0.3759	0.3633	0.3588	0.3558	AVRG		2.76456		0.3617	4	15	0.05	0.99	
Dibromomethane		0.1452	0.1603	0.1563	0.1543	0.1669	0.1664	0.1592	0.1572	AVRG		6.32076		0.1582	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.2356	0.2296	0.2350	0.2480	0.2457	0.2205	0.2116	AVRG		4.30507		0.2323	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4479	0.4924	0.4528	0.4573	0.4598	0.4598	0.4404	0.4315	AVRG		2.19668		0.4552	4	15	0.05	0.99	
Toluene		0.7703	0.9216	0.7566	0.7233	0.7824	0.7735	0.7985	0.7408	AVRG		1.27653		0.7834	8	15	0.05	0.99	
trans-1,3-Dichloropropene		0.4314	0.5131	0.4670	0.4468	0.4973	0.4610	0.4573	0.4396	AVRG		2.15431		0.4642	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.1337	0.1518	0.1406	0.1382	0.1505	0.1472	0.1433	0.1436	AVRG		6.96298		0.1436	4	15	0.05	0.99	
2-Hexanone			0.2239	0.2090	0.2014	0.2118	0.2130	0.1906	0.1791	AVRG		4.89948		0.2041	7	15	0.05	0.99	
1,3-Dichloropropane		0.4004	0.4631	0.4225	0.4249	0.4545	0.4640	0.4442	0.4221	AVRG		2.28843		0.4370	5	15	0.05	0.99	
Tetrachloroethene		0.2481	0.3488	0.2870	0.2869	0.3017	0.2822	0.3138	0.3106	AVRG		3.36270		0.2974	10	15	0.05	0.99	
Dibromochloromethane		0.2907	0.3097	0.2913	0.2895	0.3125	0.3115	0.3151	0.3032	AVRG		3.30100		0.3029	4	15	0.05	0.99	
1,2-Dibromoethane		0.2312	0.2553	0.2455	0.2401	0.2619	0.2651	0.2633	0.2596	AVRG		3.95653		0.2527	5	15	0.05	0.99	
Chlorobenzene		0.7993	0.9853	0.8244	0.8088	0.8858	0.8623	0.8392	0.8012	AVRG		1.17537		0.8508	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2826	0.3303	0.2747	0.2760	0.2980	0.3067	0.3047	0.2944	AVRG		3.37928		0.2959	6	15	0.05	0.99	
Ethylbenzene		1.3640	1.7214	1.3993	1.3607	1.4898	1.3585	1.3068	1.2120	AVRG		0.71350		1.4015	11	15	0.05	0.99	
m,p-Xylenes	0.5036	0.4527	0.6147	0.5056	0.4893	0.5384	0.5088	0.4958	0.4418	AVRG		1.97774		0.5056	10	15	0.05	0.99	
o-Xylene		0.4874	0.6016	0.5082	0.4965	0.5489	0.5334	0.5259	0.5097	AVRG		1.89951		0.5265	7	15	0.05	0.99	
Styrene		0.8609	1.0026	0.8795	0.8674	0.9605	0.9470	0.8954	0.8576	AVRG		1.10028		0.9089	6	15	0.05	0.99	
Bromoform		0.1512	0.1751	0.1615	0.1650	0.1814	0.1861	0.1861	0.1830	AVRG		5.75787		0.1737	7	15	0.10	0.99	
Isopropylbenzene		2.3217	3.1596	2.5691	2.5469	2.7063	2.4453	2.6712	2.4395	AVRG		0.38352		2.6074	10	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6030	0.5937	0.5909	0.5928	0.6153	0.6111	0.6410	0.6031	AVRG		1.64915		0.6064	3	15	0.30	0.99	
1,2,3-Trichloropropane		0.1447	0.1409	0.1299	0.1309	0.1378	0.1430	0.1410	0.1265	AVRG		7.30736		0.1368	5	15	0.05	0.99	
Propylbenzene		3.0497	3.9560	3.2048	3.2461	3.3629	3.0327	3.0560	2.6950	AVRG		0.31246		3.2004	11	15	0.05	0.99	
Bromobenzene		0.6665	0.7228	0.6435	0.6492	0.7032	0.7201	0.7249	0.6703	AVRG		1.45444		0.6876	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.9922	2.4458	2.0368	2.0219	2.1529	1.9990	1.9836	1.7635	AVRG		0.48793		2.0495	9	15	0.05	0.99	
2-Chlorotoluene		2.2554	2.5642	2.1161	2.1087	2.2652	2.0862	1.9834	1.7493	AVRG		0.46706		2.1411	11	15	0.05	0.99	
4-Chlorotoluene		2.1887	2.3464	1.9752	2.0153	2.0709	2.0599	2.0773	1.9065	AVRG		0.48076		2.0800	7	15	0.05	0.99	
tert-Butylbenzene		1.5755	2.0121	1.6313	1.6883	1.7810	1.6549	1.7601	1.6963	AVRG		0.57973		1.7249	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.1523	2.5130	2.0569	2.0414	2.2207	2.0902	2.1625	2.0170	AVRG		0.46366		2.1567	7	15	0.05	0.99	
sec-Butylbenzene		2.3579	3.0923	2.6227	2.6213	2.7538	2.5038	2.7910	2.5827	AVRG		0.37514		2.6657	8	15	0.05	0.99	
para-Isopropyl Toluene		1.8819	2.2981	1.9427	2.0129	2.1003	1.8867	2.1308	2.0144	AVRG		0.49177		2.0335	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.2368	1.4206	1.2144	1.2052	1.3068	1.2860	1.3439	1.2935	AVRG		0.77618		1.2884	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.3246	1.4816	1.2289	1.2471	1.3353	1.3172	1.3326	1.2740	AVRG		0.75892		1.3177	6	15	0.05	0.99	
n-Butylbenzene		1.9278	2.4190	1.9466	2.0219	2.1231	1.9181	2.1344	2.0210	AVRG		0.48450		2.0640	8	15	0.05	0.99	
1,2-Dichlorobenzene		1.1836	1.2168	1.1290	1.1069	1.1904	1.1946	1.2267	1.1710	AVRG		0.84933		1.1774	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.0812	0.1026	0.0896	0.0907	0.0912	0.0934	0.0870	0.0842	AVRG		11.1139		0.0900	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.6413	0.6999	0.6384	0.6552	0.6932	0.7048	0.7109	0.7232	AVRG		1.46338		0.6833	5	15	0.05	0.99	
Hexachlorobutadiene		0.2542	0.3630	0.3000	0.3125	0.3339	0.3017	0.3594	0.3585	AVRG		3.09685		0.3229	12	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Naphthalene		1.2171	1.2766	1.2470	1.2729	1.3320	1.3830	1.3625	1.3472	AVRG		0.76642		1.3048	5	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.5473	0.5994	0.5662	0.5762	0.6237	0.6325	0.6475	0.6396	AVRG		1.65553		0.6040	6	15	0.05	0.99	
Dibromofluoromethane	0.5626	0.5685	0.5730	0.5794	0.5894	0.5803	0.5742	0.5559	0.5424	AVRG		1.75583		0.5695	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.2776	0.2836	0.2948	0.2950	0.2948	0.2923	0.2665	0.2472	0.2356	AVRG		3.61858		0.2764	8	15	0.05	0.99	
Toluene-d8	1.3332	1.3494	1.4060	1.3911	1.4075	1.3829	1.3735	1.3651	1.3835	AVRG		0.72626		1.3769	2	15	0.05	0.99	
Bromofluorobenzene	1.0186	1.0587	1.0239	1.0392	1.0317	0.9937	1.0272	1.0417	1.0060	AVRG		0.97396		1.0267	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-26	2.000	5	5.000	-4	10.00	7	20.00	6	50.00	10	75.00	0	100.0	3
Chloromethane			1.000	-6	2.000	13	5.000	4	10.00	5	20.00	3	50.00	-1	75.00	-8	100.0	-10
Vinyl Chloride	0.500	-17	1.000	-14	2.000	12	5.000	9	10.00	9	20.00	9	50.00	5	75.00	-3	100.0	-9
Bromomethane			1.000	-8	2.000	5	5.000	-4	10.00	-6	20.00	6	50.00	4	75.00	4	100.0	1
Chloroethane			1.000	-11	2.000	9	5.000	5	10.00	0	20.00	5	50.00	2	75.00	-5	100.0	-5
Trichlorofluoromethane			1.000	-17	2.000	7	5.000	-2	10.00	6	20.00	2	50.00	8	75.00	-2	100.0	-2
Acetone							5.000	11	10.00	7	20.00	7	50.00	0	75.00	-13	100.0	-12
1,1-Dichloroethene			0.500	-16	2.000	14	5.000	1	10.00	3	20.00	-3	50.00	-4	75.00	3	100.0	2
Iodomethane							5.000	-10	10.00	-5	20.00	3	50.00	4	75.00	2	100.0	6
Methylene Chloride			0.500	10	2.000	13	5.000	-1	10.00	-6	20.00	-2	50.00	-3	75.00	-5	100.0	-7
Carbon Disulfide			0.500	-10	2.000	17	5.000	3	10.00	4	20.00	-1	50.00	-5	75.00	-2	100.0	-6
MTBE			0.500	-4	2.000	5	5.000	3	10.00	3	20.00	5	50.00	3	75.00	-5	100.0	-10
trans-1,2-Dichloroethene			0.500	-6	2.000	13	5.000	-1	10.00	-2	20.00	2	50.00	-3	75.00	0	100.0	-3
Vinyl Acetate					2.000	-13	5.000	-8	10.00	-6	20.00	4	50.00	2	75.00	18	100.0	2
1,1-Dichloroethane			0.500	-7	2.000	14	5.000	4	10.00	-2	20.00	2	50.00	-1	75.00	-4	100.0	-8
2-Butanone					2.000	17	5.000	7	10.00	4	20.00	4	50.00	1	75.00	-14	100.0	-18
2,2-Dichloropropane			0.500	-6	2.000	22	5.000	1	10.00	5	20.00	2	50.00	-6	75.00	-6	100.0	-11
cis-1,2-Dichloroethene			0.500	-3	2.000	10	5.000	-1	10.00	-2	20.00	0	50.00	-1	75.00	-1	100.0	-3
Chloroform			0.500	-6	2.000	11	5.000	2	10.00	0	20.00	4	50.00	-1	75.00	-4	100.0	-6
Bromochloromethane			0.500	-15	2.000	7	5.000	-3	10.00	0	20.00	3	50.00	5	75.00	2	100.0	1
1,1,1-Trichloroethane			0.500	-15	2.000	15	5.000	3	10.00	3	20.00	4	50.00	-6	75.00	0	100.0	-5
1,1-Dichloropropene			0.500	-14	2.000	19	5.000	-3	10.00	4	20.00	1	50.00	-7	75.00	1	100.0	-1
Carbon Tetrachloride			0.500	-12	2.000	16	5.000	1	10.00	2	20.00	-1	50.00	-8	75.00	2	100.0	0
1,2-Dichloroethane			0.500	-5	2.000	8	5.000	0	10.00	0	20.00	6	50.00	2	75.00	-5	100.0	-6
Benzene			0.500	-4	2.000	18	5.000	0	10.00	-1	20.00	5	50.00	-4	75.00	-5	100.0	-10
Trichloroethene			0.500	-6	2.000	14	5.000	-5	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-3
1,2-Dichloropropane			0.500	0	2.000	9	5.000	1	10.00	-4	20.00	3	50.00	-2	75.00	-2	100.0	-5
Bromodichloromethane			0.500	-5	2.000	8	5.000	-1	10.00	-5	20.00	4	50.00	0	75.00	-1	100.0	-2
Dibromomethane			0.500	-8	2.000	1	5.000	-1	10.00	-2	20.00	5	50.00	5	75.00	1	100.0	-1
4-Methyl-2-Pentanone					2.000	1	5.000	-1	10.00	1	20.00	7	50.00	6	75.00	-5	100.0	-9
cis-1,3-Dichloropropene			0.500	-2	2.000	8	5.000	-1	10.00	0	20.00	1	50.00	1	75.00	-3	100.0	-5
Toluene			0.500	-2	2.000	18	5.000	-3	10.00	-8	20.00	0	50.00	-1	75.00	2	100.0	-5
trans-1,3-Dichloropropene			0.500	-7	2.000	11	5.000	1	10.00	-4	20.00	7	50.00	-1	75.00	-1	100.0	-5
1,1,2-Trichloroethane			0.500	-7	2.000	6	5.000	-2	10.00	-4	20.00	5	50.00	3	75.00	0	100.0	0
2-Hexanone					2.000	10	5.000	2	10.00	-1	20.00	4	50.00	4	75.00	-7	100.0	-12
1,3-Dichloropropane			0.500	-8	2.000	6	5.000	-3	10.00	-3	20.00	4	50.00	6	75.00	2	100.0	-3
Tetrachloroethene			0.500	-17	2.000	17	5.000	-3	10.00	-4	20.00	1	50.00	-5	75.00	6	100.0	4
Dibromochloromethane			0.500	-4	2.000	2	5.000	-4	10.00	-4	20.00	3	50.00	3	75.00	4	100.0	0
1,2-Dibromoethane			0.500	-9	2.000	1	5.000	-3	10.00	-5	20.00	4	50.00	5	75.00	4	100.0	3
Chlorobenzene			0.500	-6	2.000	16	5.000	-3	10.00	-5	20.00	4	50.00	1	75.00	-1	100.0	-6
1,1,1,2-Tetrachloroethane			0.500	-4	2.000	12	5.000	-7	10.00	-7	20.00	1	50.00	4	75.00	3	100.0	-1
Ethylbenzene			0.500	-3	2.000	23	5.000	0	10.00	-3	20.00	6	50.00	-3	75.00	-7	100.0	-14

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	0	1.000	-10	4.000	22	10.00	0	20.00	-3	40.00	6	100.0	1	150.0	-2	200.0	-13
o-Xylene			0.500	-7	2.000	14	5.000	-3	10.00	-6	20.00	4	50.00	1	75.00	0	100.0	-3
Styrene			0.500	-5	2.000	10	5.000	-3	10.00	-5	20.00	6	50.00	4	75.00	-1	100.0	-6
Bromoform			0.500	-13	2.000	1	5.000	-7	10.00	-5	20.00	4	50.00	7	75.00	7	100.0	5
Isopropylbenzene			0.500	-11	2.000	21	5.000	-1	10.00	-2	20.00	4	50.00	-6	75.00	2	100.0	-6
1,1,2,2-Tetrachloroethane			0.500	-1	2.000	-2	5.000	-3	10.00	-2	20.00	1	50.00	1	75.00	6	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	3	5.000	-5	10.00	-4	20.00	1	50.00	5	75.00	3	100.0	-8
Propylbenzene			0.500	-5	2.000	24	5.000	0	10.00	1	20.00	5	50.00	-5	75.00	-5	100.0	-16
Bromobenzene			0.500	-3	2.000	5	5.000	-6	10.00	-6	20.00	2	50.00	5	75.00	5	100.0	-3
1,3,5-Trimethylbenzene			0.500	-3	2.000	19	5.000	-1	10.00	-1	20.00	5	50.00	-2	75.00	-3	100.0	-14
2-Chlorotoluene			0.500	5	2.000	20	5.000	-1	10.00	-2	20.00	6	50.00	-3	75.00	-7	100.0	-18
4-Chlorotoluene			0.500	5	2.000	13	5.000	-5	10.00	-3	20.00	0	50.00	-1	75.00	0	100.0	-8
tert-Butylbenzene			0.500	-9	2.000	17	5.000	-5	10.00	-2	20.00	3	50.00	-4	75.00	2	100.0	-2
1,2,4-Trimethylbenzene			0.500	0	2.000	17	5.000	-5	10.00	-5	20.00	3	50.00	-3	75.00	0	100.0	-6
sec-Butylbenzene			0.500	-12	2.000	16	5.000	-2	10.00	-2	20.00	3	50.00	-6	75.00	5	100.0	-3
para-Isopropyl Toluene			0.500	-7	2.000	13	5.000	-4	10.00	-1	20.00	3	50.00	-7	75.00	5	100.0	-1
1,3-Dichlorobenzene			0.500	-4	2.000	10	5.000	-6	10.00	-6	20.00	1	50.00	0	75.00	4	100.0	0
1,4-Dichlorobenzene			0.500	1	2.000	12	5.000	-7	10.00	-5	20.00	1	50.00	0	75.00	1	100.0	-3
n-Butylbenzene			0.500	-7	2.000	17	5.000	-6	10.00	-2	20.00	3	50.00	-7	75.00	3	100.0	-2
1,2-Dichlorobenzene			0.500	1	2.000	3	5.000	-4	10.00	-6	20.00	1	50.00	1	75.00	4	100.0	-1
1,2-Dibromo-3-Chloropropane			0.500	-10	2.000	14	5.000	0	10.00	1	20.00	1	50.00	4	75.00	-3	100.0	-6
1,2,4-Trichlorobenzene			0.500	-6	2.000	2	5.000	-7	10.00	-4	20.00	1	50.00	3	75.00	4	100.0	6
Hexachlorobutadiene			0.500	-21	2.000	12	5.000	-7	10.00	-3	20.00	3	50.00	-7	75.00	11	100.0	11
Naphthalene			0.500	-7	2.000	-2	5.000	-4	10.00	-2	20.00	2	50.00	6	75.00	4	100.0	3
1,2,3-Trichlorobenzene			0.500	-9	2.000	-1	5.000	-6	10.00	-5	20.00	3	50.00	5	75.00	7	100.0	6
Dibromofluoromethane	50.00	-1	50.00	0	50.00	1	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-2	50.00	-5
1,2-Dichloroethane-d4	50.00	0	50.00	3	50.00	7	50.00	7	50.00	7	50.00	6	50.00	-4	50.00	-11	50.00	-15
Toluene-d8	50.00	-3	50.00	-2	50.00	2	50.00	1	50.00	2	50.00	0	50.00	0	50.00	-1	50.00	0
Bromofluorobenzene	50.00	-1	50.00	3	50.00	0	50.00	1	50.00	0	50.00	-3	50.00	0	50.00	1	50.00	-2

BO 01/29/10 [Iodomethane]: cannot report 8260c

BO 01/29/10 [Cyclohexanone]: cannot report 8260c

BO 01/29/10 [2-Chloroethylvinylether]: cannot report 8260c

BO 01/29/10 [2-Butanone]: Corrected baseline noise or negative peak in 2PPB (iar09).

Analyst: BO

Date: 01/29/10

Reviewer: LW

Date: 01/29/10

m=manual integration

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

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480039377001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA09
Calnum : 480039377001

Name : 826GOX9W
Cal Date : 27-JAN-2010

Type : WATER

ICV 480039377016 (iar16 28-JAN-2010) stds: S13817 (10000X), S13687 (5000X)
ICV 480039377017 (iar17 28-JAN-2010) stds: S13654 (10000X), S13639 (10000X),
S13492 (10000X), S13687 (5000X)

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
Freon 12	480039377016	25.00	20.09	ug/L	-20	25	
Chloromethane	480039377016	25.00	20.89	ug/L	-16	25	
Vinyl Chloride	480039377016	25.00	20.03	ug/L	-20	25	
Bromomethane	480039377016	25.00	22.30	ug/L	-11	25	
Chloroethane	480039377016	25.00	24.23	ug/L	-3	25	
Trichlorofluoromethane	480039377016	25.00	22.44	ug/L	-10	25	
Acetone	480039377017	25.00	21.54	ug/L	-14	25	
1,1-Dichloroethene	480039377017	25.00	26.91	ug/L	8	25	
Iodomethane	480039377017	25.00	18.32	ug/L	-27	25	v-
Methylene Chloride	480039377017	25.00	25.37	ug/L	1	25	
Carbon Disulfide	480039377017	25.00	23.28	ug/L	-7	25	
MTBE	480039377017	25.00	21.43	ug/L	-14	25	
trans-1,2-Dichloroethene	480039377017	25.00	26.20	ug/L	5	25	
Vinyl Acetate	480039377017	25.00	30.70	ug/L	23	25	
1,1-Dichloroethane	480039377017	25.00	24.42	ug/L	-2	25	
2-Butanone	480039377017	25.00	21.82	ug/L	-13	25	
2,2-Dichloropropane	480039377017	25.00	23.05	ug/L	-8	25	
cis-1,2-Dichloroethene	480039377017	25.00	26.25	ug/L	5	25	
Chloroform	480039377017	25.00	24.59	ug/L	-2	25	
Bromochloromethane	480039377017	25.00	27.00	ug/L	8	25	
1,1,1-Trichloroethane	480039377017	25.00	24.17	ug/L	-3	25	
1,1-Dichloropropene	480039377017	25.00	25.99	ug/L	4	25	
Carbon Tetrachloride	480039377017	25.00	25.34	ug/L	1	25	
1,2-Dichloroethane	480039377017	25.00	24.60	ug/L	-2	25	
Benzene	480039377017	25.00	27.05	ug/L	8	25	
Trichloroethene	480039377017	25.00	25.70	ug/L	3	25	
1,2-Dichloropropane	480039377017	25.00	24.27	ug/L	-3	25	
Bromodichloromethane	480039377017	25.00	25.33	ug/L	1	25	
Dibromomethane	480039377017	25.00	26.37	ug/L	5	25	
4-Methyl-2-Pentanone	480039377017	25.00	24.05	ug/L	-4	25	
cis-1,3-Dichloropropene	480039377017	25.00	26.24	ug/L	5	25	
Toluene	480039377017	25.00	27.48	ug/L	10	25	
trans-1,3-Dichloropropene	480039377017	25.00	23.44	ug/L	-6	25	
1,1,2-Trichloroethane	480039377017	25.00	27.04	ug/L	8	25	
2-Hexanone	480039377017	25.00	23.20	ug/L	-7	25	
1,3-Dichloropropane	480039377017	25.00	27.15	ug/L	9	25	
Tetrachloroethene	480039377017	25.00	26.80	ug/L	7	25	
Dibromochloromethane	480039377017	25.00	26.70	ug/L	7	25	
1,2-Dibromoethane	480039377017	25.00	28.03	ug/L	12	25	
Chlorobenzene	480039377017	25.00	26.33	ug/L	5	25	
1,1,1,2-Tetrachloroethane	480039377017	25.00	27.46	ug/L	10	25	
Ethylbenzene	480039377017	25.00	27.03	ug/L	8	25	
m,p-Xylenes	480039377017	50.00	57.68	ug/L	15	25	
o-Xylene	480039377017	25.00	27.64	ug/L	11	25	
Styrene	480039377017	25.00	27.93	ug/L	12	25	
Bromoform	480039377017	25.00	27.39	ug/L	10	25	
Isopropylbenzene	480039377017	25.00	24.25	ug/L	-3	25	

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	480039377017	25.00	27.95	ug/L	12	25	
1,2,3-Trichloropropane	480039377017	25.00	27.52	ug/L	10	25	
Propylbenzene	480039377017	25.00	27.56	ug/L	10	25	
Bromobenzene	480039377017	25.00	28.48	ug/L	14	25	
1,3,5-Trimethylbenzene	480039377017	25.00	27.77	ug/L	11	25	
2-Chlorotoluene	480039377017	25.00	27.96	ug/L	12	25	
4-Chlorotoluene	480039377017	25.00	26.81	ug/L	7	25	
tert-Butylbenzene	480039377017	25.00	27.81	ug/L	11	25	
1,2,4-Trimethylbenzene	480039377017	25.00	26.73	ug/L	7	25	
sec-Butylbenzene	480039377017	25.00	29.07	ug/L	16	25	
para-Isopropyl Toluene	480039377017	25.00	26.98	ug/L	8	25	
1,3-Dichlorobenzene	480039377017	25.00	26.38	ug/L	6	25	
1,4-Dichlorobenzene	480039377017	25.00	26.14	ug/L	5	25	
n-Butylbenzene	480039377017	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	480039377017	25.00	27.01	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	480039377017	25.00	26.21	ug/L	5	25	
1,2,4-Trichlorobenzene	480039377017	25.00	26.47	ug/L	6	25	
Hexachlorobutadiene	480039377017	25.00	27.55	ug/L	10	25	
Naphthalene	480039377017	25.00	27.87	ug/L	11	25	
1,2,3-Trichlorobenzene	480039377017	25.00	28.65	ug/L	15	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218730 MSVOA Water: EPA 8260B

Inst : MSVOA10
 Calnum : 490027869001
 Units : ug/L

Name : 826GOX10
 Date : 19-JAN-2010 18:58
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	jaj12	490027869012	.25/.5PPB	19-JAN-2010 18:58	S13745 (20000X), S13746 (20000X), S13747 (20000X), S13748 (10000X), S13615 (2500X)
L2	jaj13	490027869013	0.5/1PPB	19-JAN-2010 19:32	S13745 (10000X), S13746 (10000X), S13747 (10000X), S13748 (50000X), S13615 (2500X)
L3	jaj14	490027869014	2PPB	19-JAN-2010 20:07	S13745 (25000X), S13746 (25000X), S13747 (50000X), S13748 (25000X), S13615 (2500X)
L4	jaj15	490027869015	5PPB	19-JAN-2010 20:42	S13745 (10000X), S13746 (10000X), S13747 (20000X), S13748 (10000X), S13615 (2500X)
L5	jaj16	490027869016	10PPB	19-JAN-2010 21:17	S13745 (5000X), S13746 (5000X), S13747 (10000X), S13748 (5000X), S13615 (2500X)
L6	jaj17	490027869017	20PPB	19-JAN-2010 21:51	S13680 (25000X), S13586 (25000X), S13625 (50000X), S13503 (25000X), S13615 (2500X)
L7	jaj18	490027869018	50PPB	19-JAN-2010 22:26	S13680 (10000X), S13586 (10000X), S13625 (20000X), S13503 (10000X), S13615 (2500X)
L8	jaj19	490027869019	75PPB	19-JAN-2010 23:01	S13680 (6667X), S13586 (6667X), S13625 (13330X), S13503 (6667X), S13615 (2500X)
L9	jaj20	490027869020	100PPB	19-JAN-2010 23:35	S13680 (5000X), S13586 (5000X), S13625 (10000X), S13503 (5000X), S13615 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.3918	0.6916	0.6069m	0.6327	0.6573	0.7062			QUAD	0.18210	1.56885	-0.00448	0.6144	1.000	15	0.05	0.99	
Chloromethane		0.9525	1.0916m	1.0509	1.0071	0.9526	0.9903	0.9559	0.9085	AVRG		1.01145		0.9887	6	15	0.10	0.99	
Vinyl Chloride	0.7254	0.6064	0.8278	0.8382	0.7852	0.8017	0.8279	0.7825	0.7655	AVRG		1.29299		0.7734	9	15	0.05	0.99	
Bromomethane		0.4138	0.4729m	0.4748	0.4397	0.4360	0.4925	0.4880	0.4634	AVRG		2.17319		0.4602	6	15	0.05	0.99	
Chloroethane		0.4443m	0.4834m	0.4592m	0.4676	0.4510	0.4609	0.4413	0.4233	AVRG		2.20328		0.4539	4	15	0.05	0.99	
Trichlorofluoromethane		0.3817	0.6879	0.6368	0.6590	0.6730	0.6968			QUAD	0.22115	1.49397	-0.00187	0.6225	1.000	15	0.05	0.99	
Acetone				0.1936	0.1630	0.1407	0.1841	0.1655	0.1600	AVRG		5.95858		0.1678	11	15	0.05	0.99	
1,1-Dichloroethene		0.4959m	0.5767	0.6106	0.5879	0.5852	0.5594	0.5802	0.5611	AVRG		1.75556		0.5696	6	15	0.05	0.99	
Iodomethane			0.5906	0.7037	0.7318	0.5257	0.5613	0.5475	0.5298	AVRG		1.67051		0.5986	14	15	0.05	0.99	
Methylene Chloride		0.8469	0.7815	0.7512	0.7187	0.7252	0.7686	0.7365	0.7067	AVRG		1.32554		0.7544	6	15	0.05	0.99	
Carbon Disulfide		1.9085	2.4192	2.5698	2.4448	2.4480	2.4513	2.4485	2.3702	AVRG		0.41972		2.3825	8	15	0.05	0.99	
MTBE		1.5356	1.6609	1.6438	1.6234	1.5890	1.7290	1.6509	1.5851	AVRG		0.61454		1.6272	4	15	0.05	0.99	
trans-1,2-Dichloroethene		0.6320	0.6779	0.6780	0.6807	0.6724	0.6798	0.6753	0.6531	AVRG		1.49555		0.6687	3	15	0.05	0.99	
Vinyl Acetate			1.4467	1.3662	1.3674	1.4708	1.6053	1.5563	1.4683	AVRG		0.68087		1.4687	6	15	0.05	0.99	
1,1-Dichloroethane		1.0643	1.1998	1.2389	1.2046	1.2031	1.2289	1.2004	1.1576	AVRG		0.84233		1.1872	5	15	0.10	0.99	
2-Butanone			0.2978	0.2763	0.2694	0.2323	0.2836	0.2590	0.2566	AVRG		3.73358		0.2678	8	15	0.05	0.99	
2,2-Dichloropropane		0.6757	0.7276	0.7403	0.6863	0.6873	0.6681	0.6749	0.6415	AVRG		1.45412		0.6877	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.7204	0.7106	0.6859	0.6917	0.6975	0.7284	0.7094	0.6857	AVRG		1.42107		0.7037	2	15	0.05	0.99	
Chloroform		0.9388	1.0291	1.0289	1.0217	1.0228	1.0628	1.0350	0.9708	AVRG		0.98644		1.0137	4	15	0.05	0.99	
Bromochloromethane		0.3080	0.3276	0.3319	0.3366	0.3337	0.3581	0.3440	0.3303	AVRG		2.99603		0.3338	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.5394	0.6557	0.6833	0.6635	0.6956	0.6706	0.6901	0.6779	AVRG		1.51627		0.6595	8	15	0.05	0.99	
1,1-Dichloropropene		0.3343	0.4453	0.4718	0.4471	0.4583	0.4447	0.4569	0.4372	AVRG		2.28864		0.4369	10	15	0.05	0.99	
Carbon Tetrachloride		0.2165	0.2877	0.3180	0.3109	0.3127	0.2982	0.3095	0.3047	AVRG		3.39243		0.2948	11	15	0.05	0.99	
1,2-Dichloroethane		0.3478	0.3616	0.3803	0.3806	0.3856	0.4024	0.3796	0.3628	AVRG		2.66595		0.3751	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.2680	1.3599	1.4254	1.3984	1.3877	1.4206	1.3726	1.2892	AVRG		0.73248		1.3652	4	15	0.05	0.99	
Trichloroethene		0.2922	0.3180	0.3575	0.3518	0.3551	0.3569	0.3523	0.3438	AVRG		2.93293		0.3410	7	15	0.05	0.99	
1,2-Dichloropropane		0.4079	0.4008	0.4191	0.4248	0.4061	0.4466	0.4236	0.4076	AVRG		2.39776		0.4171	4	15	0.05	0.99	
Bromodichloromethane		0.4122	0.4221	0.4427	0.4372	0.4384	0.4684	0.4476	0.4261	AVRG		2.28903		0.4369	4	15	0.05	0.99	
Dibromomethane		0.2186	0.2282	0.2333	0.2258	0.2293	0.2476	0.2369	0.2248	AVRG		4.33774		0.2305	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3340	0.3217	0.3214	0.2921	0.3566	0.3350	0.3224	AVRG		3.06596		0.3262	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.5750	0.5610	0.5820	0.5819	0.5732	0.6180	0.5885	0.5523	AVRG		1.72722		0.5790	3	15	0.05	0.99	
Toluene		0.9530	0.9690	0.9911	0.9610	0.9673	0.9894	0.9666	0.9247	AVRG		1.03598		0.9653	2	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5178	0.5628	0.5849	0.5685	0.5694	0.6272	0.5955	0.5659	AVRG		1.74212		0.5740	5	15	0.05	0.99	
1,1,2-Trichloroethane		0.1892	0.1941	0.2061	0.1972	0.1971	0.2197	0.2037	0.1969	AVRG		4.98735		0.2005	5	15	0.05	0.99	
2-Hexanone			0.2843	0.2413	0.2451	0.2371	0.2836	0.2591	0.2540	AVRG		3.87915		0.2578	7	15	0.05	0.99	
1,3-Dichloropropane		0.5398	0.5934	0.5905	0.6052	0.5852	0.6412	0.6115	0.5872	AVRG		1.68276		0.5943	5	15	0.05	0.99	
Tetrachloroethene		0.3033	0.3598	0.3944	0.3774	0.3880	0.3800	0.3860	0.3774	AVRG		2.69689		0.3708	8	15	0.05	0.99	
Dibromochloromethane		0.3437	0.3530	0.3738	0.3709	0.3728	0.4166	0.3927	0.3774	AVRG		2.66591		0.3751	6	15	0.05	0.99	
1,2-Dibromoethane		0.3057	0.3362	0.3526	0.3513	0.3501	0.3915	0.3716	0.3532	AVRG		2.84479		0.3515	7	15	0.05	0.99	
Chlorobenzene		1.0531	1.0536	1.1044	1.0812	1.0923	1.1462	1.0966	1.0330	AVRG		0.92374		1.0826	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3096	0.3309	0.3385	0.3290	0.3369	0.3576	0.3471	0.3239	AVRG		2.99234		0.3342	4	15	0.05	0.99	
Ethylbenzene		1.6500	1.7827	1.8447	1.8008	1.8122	1.8127	1.7761	1.6781	AVRG		0.56508		1.7697	4	15	0.05	0.99	
m,p-Xylenes	0.7326	0.6241	0.6797	0.6930	0.6793	0.6793	0.6821	0.6607	0.6269	AVRG		1.48570		0.6731	5	15	0.05	0.99	
o-Xylene		0.6283	0.6409	0.6946	0.6643	0.6770	0.6972	0.6705	0.6373	AVRG		1.50652		0.6638	4	15	0.05	0.99	
Styrene		1.0406	1.1627	1.2311	1.2098	1.2251	1.2781	1.2105	1.1436	AVRG		0.84197		1.1877	6	15	0.05	0.99	
Bromoform		0.1964	0.2203	0.2317	0.2267	0.2276	0.2591	0.2451	0.2364	AVRG		4.33951		0.2304	8	15	0.10	0.99	
Isopropylbenzene		2.9948	3.3679	3.5241	3.4842	3.4035	3.3814	3.3183	3.1713	AVRG		0.30024		3.3307	5	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.8634	0.9388	0.9230	0.9478	0.9028	1.0130	0.9497	0.9175	AVRG		1.07298		0.9320	5	15	0.30	0.99	
1,2,3-Trichloropropane		0.8131	0.7442	0.7575	0.7291	0.7036	0.7780	0.7350	0.7021	AVRG		1.34168		0.7453	5	15	0.05	0.99	
Propylbenzene		3.8415	4.2083	4.4710	4.4582	4.3750	4.2436	4.1775	3.9757	AVRG		0.23703		4.2189	5	15	0.05	0.99	
Bromobenzene		0.9139	0.8760	0.8746	0.8897	0.8916	0.9348	0.8925	0.8432	AVRG		1.12420		0.8895	3	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.5580	2.7063	2.8266	2.7814	2.8072	2.7882	2.7232	2.5554	AVRG		0.36788		2.7183	4	15	0.05	0.99	
2-Chlorotoluene		2.7142	2.7171	2.8270	2.7395	2.7646	2.7823	2.6919	2.5142	AVRG		0.36780		2.7188	3	15	0.05	0.99	
4-Chlorotoluene		2.5567	2.4605	2.6264	2.6572	2.6019	2.7049	2.5911	2.4565	AVRG		0.38731		2.5819	3	15	0.05	0.99	
tert-Butylbenzene		1.9102	2.2307	2.3379	2.3503	2.3537	2.2889	2.2921	2.2090	AVRG		0.44512		2.2466	7	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.7826	2.7787	2.8993	2.9118	2.8776	2.9550	2.8359	2.7052	AVRG		0.35171		2.8433	3	15	0.05	0.99	
sec-Butylbenzene		2.9770	3.6151	3.7665	3.7770	3.6964	3.5787	3.6421	3.4951	AVRG		0.28023		3.5685	7	15	0.05	0.99	
para-Isopropyl Toluene		2.3366	2.7451	2.8866	2.9148	2.9033	2.8430	2.8287	2.7468	AVRG		0.36028		2.7756	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.6381	1.6631	1.7085	1.7222	1.7035	1.7980	1.7299	1.6200	AVRG		0.58896		1.6979	3	15	0.05	0.99	
1,4-Dichlorobenzene		1.6778	1.7282	1.7702	1.7656	1.7528	1.8472	1.7667	1.6569	AVRG		0.57285		1.7457	3	15	0.05	0.99	
n-Butylbenzene		2.4792	2.7039	2.9085	2.8499	2.8497	2.7808	2.7966	2.7111	AVRG		0.36232		2.7600	5	15	0.05	0.99	
1,2-Dichlorobenzene		1.4027	1.5685	1.5678	1.5997	1.5870	1.7042	1.6245	1.5228	AVRG		0.63607		1.5721	6	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.0991	0.1225	0.1188	0.1064	0.1262	0.1187	0.1144	AVRG		8.68367		0.1152	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.8558	0.9018	0.9209	0.9250	0.9263	0.9824	0.9485	0.9113	AVRG		1.08517		0.9215	4	15	0.05	0.99	
Hexachlorobutadiene		0.1934	0.2667	0.2972	0.2876	0.3049	0.2844	0.3056	0.3025	AVRG		3.56770		0.2803	13	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.7939	1.9260	1.9940	1.9976	1.9369	2.1935	2.0997	2.0470	AVRG		0.50036		1.9986	6	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7439	0.7428	0.7816	0.7984	0.7980	0.8729	0.8407	0.7902	AVRG		1.25619		0.7961	6	15	0.05	0.99	
Dibromofluoromethane	0.5743	0.5645	0.5823	0.5690	0.5749	0.5655	0.5729	0.5738	0.5767	AVRG		1.74622		0.5727	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.2823	0.2827	0.2826	0.2829	0.2793	0.2721	0.2732	0.2671	0.2658	AVRG		3.61733		0.2764	3	15	0.05	0.99	
Toluene-d8	1.3510	1.3456	1.3389	1.3520	1.3395	1.3495	1.3651	1.3481	1.3459	AVRG		0.74162		1.3484	1	15	0.05	0.99	
Bromofluorobenzene	0.9927	1.0105	0.9774	0.9906	1.0040	0.9879	0.9870	0.9890	0.9773	AVRG		1.00937		0.9907	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-20	2.000	17	5.000	-2	10.00	-1	20.00	0	50.00	0				
Chloromethane			1.000	-4	2.000	10	5.000	6	10.00	2	20.00	-4	50.00	0	75.00	-3	100.0	-8
Vinyl Chloride	0.500	-6	1.000	-22	2.000	7	5.000	8	10.00	2	20.00	4	50.00	7	75.00	1	100.0	-1
Bromomethane			1.000	-10	2.000	3	5.000	3	10.00	-4	20.00	-5	50.00	7	75.00	6	100.0	1
Chloroethane			1.000	-2	2.000	7	5.000	1	10.00	3	20.00	-1	50.00	2	75.00	-3	100.0	-7
Trichlorofluoromethane			1.000	-21	2.000	14	5.000	-1	10.00	0	20.00	0	50.00	0				
Acetone							5.000	15	10.00	-3	20.00	-16	50.00	10	75.00	-1	100.0	-5
1,1-Dichloroethene			0.500	-13	2.000	1	5.000	7	10.00	3	20.00	3	50.00	-2	75.00	2	100.0	-2
Iodomethane					2.000	-1	5.000	18	10.00	22	20.00	-12	50.00	-6	75.00	-9	100.0	-12
Methylene Chloride			0.500	12	2.000	4	5.000	0	10.00	-5	20.00	-4	50.00	2	75.00	-2	100.0	-6
Carbon Disulfide			0.500	-20	2.000	2	5.000	8	10.00	3	20.00	3	50.00	3	75.00	3	100.0	-1
MTBE			0.500	-6	2.000	2	5.000	1	10.00	0	20.00	-2	50.00	6	75.00	1	100.0	-3
trans-1,2-Dichloroethene			0.500	-5	2.000	1	5.000	1	10.00	2	20.00	1	50.00	2	75.00	1	100.0	-2
Vinyl Acetate					2.000	-1	5.000	-7	10.00	-7	20.00	0	50.00	9	75.00	6	100.0	0
1,1-Dichloroethane			0.500	-10	2.000	1	5.000	4	10.00	1	20.00	1	50.00	4	75.00	1	100.0	-2
2-Butanone					2.000	11	5.000	3	10.00	1	20.00	-13	50.00	6	75.00	-3	100.0	-4
2,2-Dichloropropane			0.500	-2	2.000	6	5.000	8	10.00	0	20.00	0	50.00	-3	75.00	-2	100.0	-7
cis-1,2-Dichloroethene			0.500	2	2.000	1	5.000	-3	10.00	-2	20.00	-1	50.00	4	75.00	1	100.0	-3
Chloroform			0.500	-7	2.000	2	5.000	1	10.00	1	20.00	1	50.00	5	75.00	2	100.0	-4
Bromochloromethane			0.500	-8	2.000	-2	5.000	-1	10.00	1	20.00	0	50.00	7	75.00	3	100.0	-1
1,1,1-Trichloroethane			0.500	-18	2.000	-1	5.000	4	10.00	1	20.00	5	50.00	2	75.00	5	100.0	3
1,1-Dichloropropene			0.500	-23	2.000	2	5.000	8	10.00	2	20.00	5	50.00	2	75.00	5	100.0	0
Carbon Tetrachloride			0.500	-27	2.000	-2	5.000	8	10.00	5	20.00	6	50.00	1	75.00	5	100.0	3
1,2-Dichloroethane			0.500	-7	2.000	-4	5.000	1	10.00	1	20.00	3	50.00	7	75.00	1	100.0	-3
Benzene			0.500	-7	2.000	0	5.000	4	10.00	2	20.00	2	50.00	4	75.00	1	100.0	-6
Trichloroethene			0.500	-14	2.000	-7	5.000	5	10.00	3	20.00	4	50.00	5	75.00	3	100.0	1
1,2-Dichloropropane			0.500	-2	2.000	-4	5.000	0	10.00	2	20.00	-3	50.00	7	75.00	2	100.0	-2
Bromodichloromethane			0.500	-6	2.000	-3	5.000	1	10.00	0	20.00	0	50.00	7	75.00	2	100.0	-2
Dibromomethane			0.500	-5	2.000	-1	5.000	1	10.00	-2	20.00	-1	50.00	7	75.00	3	100.0	-3
4-Methyl-2-Pentanone					2.000	2	5.000	-1	10.00	-1	20.00	-10	50.00	9	75.00	3	100.0	-1
cis-1,3-Dichloropropene			0.500	-1	2.000	-3	5.000	1	10.00	1	20.00	-1	50.00	7	75.00	2	100.0	-5
Toluene			0.500	-1	2.000	0	5.000	3	10.00	0	20.00	0	50.00	3	75.00	0	100.0	-4
trans-1,3-Dichloropropene			0.500	-10	2.000	-2	5.000	2	10.00	-1	20.00	-1	50.00	9	75.00	4	100.0	-1
1,1,2-Trichloroethane			0.500	-6	2.000	-3	5.000	3	10.00	-2	20.00	-2	50.00	10	75.00	2	100.0	-2
2-Hexanone					2.000	10	5.000	-6	10.00	-5	20.00	-8	50.00	10	75.00	1	100.0	-1
1,3-Dichloropropane			0.500	-9	2.000	0	5.000	-1	10.00	2	20.00	-2	50.00	8	75.00	3	100.0	-1
Tetrachloroethene			0.500	-18	2.000	-3	5.000	6	10.00	2	20.00	5	50.00	2	75.00	4	100.0	2
Dibromochloromethane			0.500	-8	2.000	-6	5.000	0	10.00	-1	20.00	-1	50.00	11	75.00	5	100.0	1
1,2-Dibromoethane			0.500	-13	2.000	-4	5.000	0	10.00	0	20.00	0	50.00	11	75.00	6	100.0	0
Chlorobenzene			0.500	-3	2.000	-3	5.000	2	10.00	0	20.00	1	50.00	6	75.00	1	100.0	-5
1,1,1,2-Tetrachloroethane			0.500	-7	2.000	-1	5.000	1	10.00	-2	20.00	1	50.00	7	75.00	4	100.0	-3
Ethylbenzene			0.500	-7	2.000	1	5.000	4	10.00	2	20.00	2	50.00	2	75.00	0	100.0	-5

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	9	1.000	-7	4.000	1	10.00	3	20.00	1	40.00	1	100.0	1	150.0	-2	200.0	-7
o-Xylene			0.500	-5	2.000	-3	5.000	5	10.00	0	20.00	2	50.00	5	75.00	1	100.0	-4
Styrene			0.500	-12	2.000	-2	5.000	4	10.00	2	20.00	3	50.00	8	75.00	2	100.0	-4
Bromoform			0.500	-15	2.000	-4	5.000	1	10.00	-2	20.00	-1	50.00	12	75.00	6	100.0	3
Isopropylbenzene			0.500	-10	2.000	1	5.000	6	10.00	5	20.00	2	50.00	2	75.00	0	100.0	-5
1,1,2,2-Tetrachloroethane			0.500	-7	2.000	1	5.000	-1	10.00	2	20.00	-3	50.00	9	75.00	2	100.0	-2
1,2,3-Trichloropropane			0.500	9	2.000	0	5.000	2	10.00	-2	20.00	-6	50.00	4	75.00	-1	100.0	-6
Propylbenzene			0.500	-9	2.000	0	5.000	6	10.00	6	20.00	4	50.00	1	75.00	-1	100.0	-6
Bromobenzene			0.500	3	2.000	-2	5.000	-2	10.00	0	20.00	0	50.00	5	75.00	0	100.0	-5
1,3,5-Trimethylbenzene			0.500	-6	2.000	0	5.000	4	10.00	2	20.00	3	50.00	3	75.00	0	100.0	-6
2-Chlorotoluene			0.500	0	2.000	0	5.000	4	10.00	1	20.00	2	50.00	2	75.00	-1	100.0	-8
4-Chlorotoluene			0.500	-1	2.000	-5	5.000	2	10.00	3	20.00	1	50.00	5	75.00	0	100.0	-5
tert-Butylbenzene			0.500	-15	2.000	-1	5.000	4	10.00	5	20.00	5	50.00	2	75.00	2	100.0	-2
1,2,4-Trimethylbenzene			0.500	-2	2.000	-2	5.000	2	10.00	2	20.00	1	50.00	4	75.00	0	100.0	-5
sec-Butylbenzene			0.500	-17	2.000	1	5.000	6	10.00	6	20.00	4	50.00	0	75.00	2	100.0	-2
para-Isopropyl Toluene			0.500	-16	2.000	-1	5.000	4	10.00	5	20.00	5	50.00	2	75.00	2	100.0	-1
1,3-Dichlorobenzene			0.500	-4	2.000	-2	5.000	1	10.00	1	20.00	0	50.00	6	75.00	2	100.0	-5
1,4-Dichlorobenzene			0.500	-4	2.000	-1	5.000	1	10.00	1	20.00	0	50.00	6	75.00	1	100.0	-5
n-Butylbenzene			0.500	-10	2.000	-2	5.000	5	10.00	3	20.00	3	50.00	1	75.00	1	100.0	-2
1,2-Dichlorobenzene			0.500	-11	2.000	0	5.000	0	10.00	2	20.00	1	50.00	8	75.00	3	100.0	-3
1,2-Dibromo-3-Chloropropane					2.000	-14	5.000	6	10.00	3	20.00	-8	50.00	10	75.00	3	100.0	-1
1,2,4-Trichlorobenzene			0.500	-7	2.000	-2	5.000	0	10.00	0	20.00	1	50.00	7	75.00	3	100.0	-1
Hexachlorobutadiene			0.500	-31	2.000	-5	5.000	6	10.00	3	20.00	9	50.00	1	75.00	9	100.0	8
Naphthalene			0.500	-10	2.000	-4	5.000	0	10.00	0	20.00	-3	50.00	10	75.00	5	100.0	2
1,2,3-Trichlorobenzene			0.500	-7	2.000	-7	5.000	-2	10.00	0	20.00	0	50.00	10	75.00	6	100.0	-1
Dibromofluoromethane	50.00	0	50.00	-1	50.00	2	50.00	-1	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	1
1,2-Dichloroethane-d4	50.00	2	50.00	2	50.00	2	50.00	2	50.00	1	50.00	-2	50.00	-1	50.00	-3	50.00	-4
Toluene-d8	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	-1	50.00	0	50.00	1	50.00	0	50.00	0
Bromofluorobenzene	50.00	0	50.00	2	50.00	-1	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1

BO 01/20/10 [Chloromethane]: Corrected fronting or tailing peak integration in 2PPB (jaj14).

BO 01/20/10 [Chloroethane]: Corrected baseline noise or negative peak in multiple levels.

BO 01/20/10 [1,1-Dichloroethene]: Corrected fronting or tailing peak integration1PPB (jaj13).

BO 01/20/10 [Isopropyl Ether (DIPE)]: Corrected fronting or tailing peak integration1PPB (jaj13).

BO 01/22/10 [n-Hexane]: DO NOT USE

Analyst: BO

Date: 01/22/10

Reviewer: LW

Date: 01/22/10

m=manual integration

Instrument amount = $a_0 + \text{response} * a_1 + \text{response}^2 * a_2$; AVRG=Average response factor; QUAD=Quadratic regression

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490027869001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA10
Calnum : 490027869001

Name : 826GOX10
Cal Date : 19-JAN-2010

Type : WATER

ICV 490027869021 (jaj21 20-JAN-2010) stds: S13817 (10000X), S13615 (2500X)
ICV 490027869022 (jaj22 20-JAN-2010) stds: S13559 (10000X), S13639 (10000X),
S13492 (10000X), S13615 (2500X)

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
Freon 12	490027869021	25.00	27.46	ug/L	10	25	
Chloromethane	490027869021	25.00	25.14	ug/L	1	25	
Vinyl Chloride	490027869021	25.00	24.91	ug/L	0	25	
Bromomethane	490027869021	25.00	25.54	ug/L	2	25	
Chloroethane	490027869021	25.00	26.12	ug/L	4	25	
Trichlorofluoromethane	490027869021	25.00	24.17	ug/L	-3	25	
Acetone	490027869022	25.00	25.77	ug/L	3	25	
1,1-Dichloroethene	490027869022	25.00	26.60	ug/L	6	25	
Iodomethane	490027869022	25.00	21.78	ug/L	-13	25	
Methylene Chloride	490027869022	25.00	25.48	ug/L	2	25	
Carbon Disulfide	490027869022	25.00	22.36	ug/L	-11	25	
MTBE	490027869022	25.00	23.83	ug/L	-5	25	
trans-1,2-Dichloroethene	490027869022	25.00	26.75	ug/L	7	25	
Vinyl Acetate	490027869022	25.00	25.72	ug/L	3	25	
1,1-Dichloroethane	490027869022	25.00	26.55	ug/L	6	25	
2-Butanone	490027869022	25.00	24.40	ug/L	-2	25	
2,2-Dichloropropane	490027869022	25.00	25.34	ug/L	1	25	
cis-1,2-Dichloroethene	490027869022	25.00	26.87	ug/L	7	25	
Chloroform	490027869022	25.00	26.37	ug/L	5	25	
Bromochloromethane	490027869022	25.00	26.60	ug/L	6	25	
1,1,1-Trichloroethane	490027869022	25.00	27.92	ug/L	12	25	
1,1-Dichloropropene	490027869022	25.00	28.30	ug/L	13	25	
Carbon Tetrachloride	490027869022	25.00	28.51	ug/L	14	25	
1,2-Dichloroethane	490027869022	25.00	25.99	ug/L	4	25	
Benzene	490027869022	25.00	27.78	ug/L	11	25	
Trichloroethene	490027869022	25.00	28.04	ug/L	12	25	
1,2-Dichloropropane	490027869022	25.00	26.34	ug/L	5	25	
Bromodichloromethane	490027869022	25.00	26.54	ug/L	6	25	
Dibromomethane	490027869022	25.00	26.27	ug/L	5	25	
4-Methyl-2-Pentanone	490027869022	25.00	24.92	ug/L	0	25	
cis-1,3-Dichloropropene	490027869022	25.00	26.68	ug/L	7	25	
Toluene	490027869022	25.00	27.42	ug/L	10	25	
trans-1,3-Dichloropropene	490027869022	25.00	24.15	ug/L	-3	25	
1,1,2-Trichloroethane	490027869022	25.00	26.11	ug/L	4	25	
2-Hexanone	490027869022	25.00	25.89	ug/L	4	25	
1,3-Dichloropropane	490027869022	25.00	26.99	ug/L	8	25	
Tetrachloroethene	490027869022	25.00	27.37	ug/L	9	25	
Dibromochloromethane	490027869022	25.00	26.43	ug/L	6	25	
1,2-Dibromoethane	490027869022	25.00	27.39	ug/L	10	25	
Chlorobenzene	490027869022	25.00	26.86	ug/L	7	25	
1,1,1,2-Tetrachloroethane	490027869022	25.00	27.37	ug/L	9	25	
Ethylbenzene	490027869022	25.00	27.80	ug/L	11	25	
m,p-Xylenes	490027869022	50.00	55.23	ug/L	10	25	
o-Xylene	490027869022	25.00	27.24	ug/L	9	25	
Styrene	490027869022	25.00	28.01	ug/L	12	25	
Bromoform	490027869022	25.00	26.32	ug/L	5	25	
Isopropylbenzene	490027869022	25.00	24.49	ug/L	-2	25	

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	490027869022	25.00	25.59	ug/L	2	25	
1,2,3-Trichloropropane	490027869022	25.00	26.29	ug/L	5	25	
Propylbenzene	490027869022	25.00	27.54	ug/L	10	25	
Bromobenzene	490027869022	25.00	26.97	ug/L	8	25	
1,3,5-Trimethylbenzene	490027869022	25.00	27.50	ug/L	10	25	
2-Chlorotoluene	490027869022	25.00	27.75	ug/L	11	25	
4-Chlorotoluene	490027869022	25.00	26.75	ug/L	7	25	
tert-Butylbenzene	490027869022	25.00	27.62	ug/L	10	25	
1,2,4-Trimethylbenzene	490027869022	25.00	26.71	ug/L	7	25	
sec-Butylbenzene	490027869022	25.00	27.97	ug/L	12	25	
para-Isopropyl Toluene	490027869022	25.00	27.08	ug/L	8	25	
1,3-Dichlorobenzene	490027869022	25.00	26.62	ug/L	6	25	
1,4-Dichlorobenzene	490027869022	25.00	26.46	ug/L	6	25	
n-Butylbenzene	490027869022	25.00	27.91	ug/L	12	25	
1,2-Dichlorobenzene	490027869022	25.00	27.02	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	490027869022	25.00	27.27	ug/L	9	25	
1,2,4-Trichlorobenzene	490027869022	25.00	26.94	ug/L	8	25	
Hexachlorobutadiene	490027869022	25.00	27.97	ug/L	12	25	
Naphthalene	490027869022	25.00	27.76	ug/L	11	25	
1,2,3-Trichlorobenzene	490027869022	25.00	27.97	ug/L	12	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : 20PPB IDF : 1.0
 Seqnum : 480118602003.1 File : icn03 Time : 23-MAR-2010 10:03
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14216 (25000X), S14108 (25000X), S13625 (50000X), S13719 (25000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.6125	20.00	21.15	ug/L	6	20	0.0500	
Chloromethane	0.8790	0.9048	20.00	20.59	ug/L	3	20	0.1000	
Vinyl Chloride	0.6271	0.6691	20.00	21.34	ug/L	7	20	0.0500	
Bromomethane	0.3610	0.4191	20.00	23.22	ug/L	16	20	0.0500	
Chloroethane	0.4411	0.4417	20.00	20.03	ug/L	0	20	0.0500	
Trichlorofluoromethane	0.6268	0.6499	20.00	20.74	ug/L	4	20	0.0500	
Acetone	0.1056	0.0950	20.00	17.98	ug/L	-10	20	0.0500	
1,1-Dichloroethene	0.3802	0.4383	20.00	23.06	ug/L	15	20	0.0500	
Iodomethane	0.5839	0.4170	20.00	14.28	ug/L	-29	20	0.0500	c- ***
Methylene Chloride	0.5313	0.5201	20.00	19.58	ug/L	-2	20	0.0500	
Carbon Disulfide	1.6806	1.8819	20.00	22.40	ug/L	12	20	0.0500	
MTBE	0.9672	0.8984	20.00	18.58	ug/L	-7	20	0.0500	
trans-1,2-Dichloroethene	0.4686	0.4903	20.00	20.93	ug/L	5	20	0.0500	
Vinyl Acetate	0.7245	0.7748	20.00	21.39	ug/L	7	20	0.0500	
1,1-Dichloroethane	0.9167	0.9578	20.00	20.90	ug/L	4	20	0.1000	
2-Butanone	0.1773	0.1529	20.00	17.25	ug/L	-14	20	0.0500	
2,2-Dichloropropane	0.5197	0.6009	20.00	23.13	ug/L	16	20	0.0500	
cis-1,2-Dichloroethene	0.5067	0.5343	20.00	21.09	ug/L	5	20	0.0500	
Chloroform	0.8063	0.7957	20.00	19.74	ug/L	-1	20	0.0500	
Bromochloromethane	0.2159	0.2179	20.00	20.18	ug/L	1	20	0.0500	
1,1,1-Trichloroethane	0.5481	0.5545	20.00	20.24	ug/L	1	20	0.0500	
1,1-Dichloropropene	0.3652	0.3940	20.00	21.58	ug/L	8	20	0.0500	
Carbon Tetrachloride	0.2856	0.2912	20.00	20.39	ug/L	2	20	0.0500	
1,2-Dichloroethane	0.2817	0.2543	20.00	18.06	ug/L	-10	20	0.0500	
Benzene	1.0704	1.1366	20.00	21.24	ug/L	6	20	0.0500	
Trichloroethene	0.2855	0.2893	20.00	20.27	ug/L	1	20	0.0500	
1,2-Dichloropropane	0.3485	0.3379	20.00	19.39	ug/L	-3	20	0.0500	
Bromodichloromethane	0.3617	0.3313	20.00	18.32	ug/L	-8	20	0.0500	
Dibromomethane	0.1582	0.1482	20.00	18.73	ug/L	-6	20	0.0500	
4-Methyl-2-Pentanone	0.2323	0.1999	20.00	17.21	ug/L	-14	20	0.0500	
cis-1,3-Dichloropropene	0.4552	0.4253	20.00	18.68	ug/L	-7	20	0.0500	
Toluene	0.7834	0.8618	20.00	22.00	ug/L	10	20	0.0500	
trans-1,3-Dichloropropene	0.4642	0.4180	20.00	18.01	ug/L	-10	20	0.0500	
1,1,2-Trichloroethane	0.1436	0.1403	20.00	19.54	ug/L	-2	20	0.0500	
2-Hexanone	0.2041	0.1819	20.00	17.82	ug/L	-11	20	0.0500	
1,3-Dichloropropane	0.4370	0.4498	20.00	20.59	ug/L	3	20	0.0500	
Tetrachloroethene	0.2974	0.3308	20.00	22.25	ug/L	11	20	0.0500	
Dibromochloromethane	0.3029	0.2833	20.00	18.70	ug/L	-6	20	0.0500	
1,2-Dibromoethane	0.2527	0.2525	20.00	19.98	ug/L	0	20	0.0500	
Chlorobenzene	0.8508	0.9042	20.00	21.26	ug/L	6	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2959	0.3087	20.00	20.86	ug/L	4	20	0.0500	
Ethylbenzene	1.4015	1.5413	20.00	21.99	ug/L	10	20	0.0500	
m,p-Xylenes	0.5056	0.5647	40.00	44.67	ug/L	12	20	0.0500	
o-Xylene	0.5265	0.5742	20.00	21.81	ug/L	9	20	0.0500	
Styrene	0.9089	0.9834	20.00	21.64	ug/L	8	20	0.0500	
Bromoform	0.1737	0.1657	20.00	19.08	ug/L	-5	20	0.1000	
Isopropylbenzene	2.6074	2.9274	20.00	22.45	ug/L	12	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.6064	0.5877	20.00	19.39	ug/L	-3	20	0.3000	
1,2,3-Trichloropropane	0.1368	0.1210	20.00	17.69	ug/L	-12	20	0.0500	
Propylbenzene	3.2004	3.5666	20.00	22.29	ug/L	11	20	0.0500	
Bromobenzene	0.6876	0.7137	20.00	20.76	ug/L	4	20	0.0500	
1,3,5-Trimethylbenzene	2.0495	2.2175	20.00	21.64	ug/L	8	20	0.0500	
2-Chlorotoluene	2.1411	2.2691	20.00	21.20	ug/L	6	20	0.0500	
4-Chlorotoluene	2.0800	2.1284	20.00	20.47	ug/L	2	20	0.0500	
tert-Butylbenzene	1.7249	1.8880	20.00	21.89	ug/L	9	20	0.0500	
1,2,4-Trimethylbenzene	2.1567	2.3014	20.00	21.34	ug/L	7	20	0.0500	
sec-Butylbenzene	2.6657	3.0130	20.00	22.61	ug/L	13	20	0.0500	
para-Isopropyl Toluene	2.0335	2.1835	20.00	21.48	ug/L	7	20	0.0500	
1,3-Dichlorobenzene	1.2884	1.2980	20.00	20.15	ug/L	1	20	0.0500	
1,4-Dichlorobenzene	1.3177	1.3195	20.00	20.03	ug/L	0	20	0.0500	
n-Butylbenzene	2.0640	2.1400	20.00	20.74	ug/L	4	20	0.0500	
1,2-Dichlorobenzene	1.1774	1.1684	20.00	19.85	ug/L	-1	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0900	0.0750	20.00	16.67	ug/L	-17	20	0.0500	
1,2,4-Trichlorobenzene	0.6833	0.6567	20.00	19.22	ug/L	-4	20	0.0500	
Hexachlorobutadiene	0.3229	0.3491	20.00	21.62	ug/L	8	20	0.0500	
Naphthalene	1.3048	1.1535	20.00	17.68	ug/L	-12	20	0.0500	
1,2,3-Trichlorobenzene	0.6040	0.5769	20.00	19.10	ug/L	-4	20	0.0500	
Dibromofluoromethane	0.5695	0.5549	50.00	48.72	ug/L	-3	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.2572	50.00	46.54	ug/L	-7	20	0.0500	
Toluene-d8	1.3769	1.3947	50.00	50.64	ug/L	1	20	0.0500	
Bromofluorobenzene	1.0267	0.9923	50.00	48.32	ug/L	-3	20	0.0500	

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	2468042	17.53	12.37	12.37	0.00
1,4-Difluorobenzene	3438431	4063703	18.18	13.66	13.67	0.01
Chlorobenzene-d5	2768728	3125149	12.87	17.68	17.67	-0.01
1,4-Dichlorobenzene-d4	1353103	1544206	14.12	20.18	20.17	-0.01

Analyst: TDL

Date: 03/24/10

Reviewer: LW

Date: 03/24/10

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : 20PPB IDF : 1.0
 Seqnum : 480118602011.1 File : icn11 Time : 23-MAR-2010 14:37
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14216 (25000X), S14108 (25000X), S13625 (50000X), S13719 (25000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.5591	20.00	19.31	ug/L	-3	20	0.0500	
Chloromethane	0.8790	0.7805	20.00	17.76	ug/L	-11	20	0.1000	
Vinyl Chloride	0.6271	0.6013	20.00	19.18	ug/L	-4	20	0.0500	
Bromomethane	0.3610	0.3672	20.00	20.34	ug/L	2	20	0.0500	
Chloroethane	0.4411	0.4150	20.00	18.82	ug/L	-6	20	0.0500	
Trichlorofluoromethane	0.6268	0.6081	20.00	19.40	ug/L	-3	20	0.0500	
Acetone	0.1056	0.1008	20.00	19.08	ug/L	-5	20	0.0500	
1,1-Dichloroethene	0.3802	0.4052	20.00	21.31	ug/L	7	20	0.0500	
Iodomethane	0.5839	0.4114	20.00	14.09	ug/L	-30	20	0.0500	c- ***
Methylene Chloride	0.5313	0.5029	20.00	18.93	ug/L	-5	20	0.0500	
Carbon Disulfide	1.6806	1.8210	20.00	21.67	ug/L	8	20	0.0500	
MTBE	0.9672	0.8992	20.00	18.60	ug/L	-7	20	0.0500	
trans-1,2-Dichloroethene	0.4686	0.4621	20.00	19.72	ug/L	-1	20	0.0500	
Vinyl Acetate	0.7245	0.6940	20.00	19.16	ug/L	-4	20	0.0500	
1,1-Dichloroethane	0.9167	0.8695	20.00	18.97	ug/L	-5	20	0.1000	
2-Butanone	0.1773	0.1570	20.00	17.71	ug/L	-11	20	0.0500	
2,2-Dichloropropane	0.5197	0.5226	20.00	20.11	ug/L	1	20	0.0500	
cis-1,2-Dichloroethene	0.5067	0.5117	20.00	20.20	ug/L	1	20	0.0500	
Chloroform	0.8063	0.7614	20.00	18.89	ug/L	-6	20	0.0500	
Bromochloromethane	0.2159	0.2167	20.00	20.08	ug/L	0	20	0.0500	
1,1,1-Trichloroethane	0.5481	0.5140	20.00	18.76	ug/L	-6	20	0.0500	
1,1-Dichloropropene	0.3652	0.3572	20.00	19.56	ug/L	-2	20	0.0500	
Carbon Tetrachloride	0.2856	0.2731	20.00	19.13	ug/L	-4	20	0.0500	
1,2-Dichloroethane	0.2817	0.2454	20.00	17.43	ug/L	-13	20	0.0500	
Benzene	1.0704	1.0810	20.00	20.20	ug/L	1	20	0.0500	
Trichloroethene	0.2855	0.2830	20.00	19.83	ug/L	-1	20	0.0500	
1,2-Dichloropropane	0.3485	0.3324	20.00	19.08	ug/L	-5	20	0.0500	
Bromodichloromethane	0.3617	0.3245	20.00	17.94	ug/L	-10	20	0.0500	
Dibromomethane	0.1582	0.1520	20.00	19.21	ug/L	-4	20	0.0500	
4-Methyl-2-Pentanone	0.2323	0.2200	20.00	18.94	ug/L	-5	20	0.0500	
cis-1,3-Dichloropropene	0.4552	0.4117	20.00	18.09	ug/L	-10	20	0.0500	
Toluene	0.7834	0.8226	20.00	21.00	ug/L	5	20	0.0500	
trans-1,3-Dichloropropene	0.4642	0.4406	20.00	18.98	ug/L	-5	20	0.0500	
1,1,2-Trichloroethane	0.1436	0.1459	20.00	20.32	ug/L	2	20	0.0500	
2-Hexanone	0.2041	0.1880	20.00	18.42	ug/L	-8	20	0.0500	
1,3-Dichloropropane	0.4370	0.4602	20.00	21.06	ug/L	5	20	0.0500	
Tetrachloroethene	0.2974	0.3306	20.00	22.23	ug/L	11	20	0.0500	
Dibromochloromethane	0.3029	0.2873	20.00	18.97	ug/L	-5	20	0.0500	
1,2-Dibromoethane	0.2527	0.2604	20.00	20.61	ug/L	3	20	0.0500	
Chlorobenzene	0.8508	0.8743	20.00	20.55	ug/L	3	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2959	0.3105	20.00	20.99	ug/L	5	20	0.0500	
Ethylbenzene	1.4015	1.5185	20.00	21.67	ug/L	8	20	0.0500	
m,p-Xylenes	0.5056	0.5581	40.00	44.15	ug/L	10	20	0.0500	
o-Xylene	0.5265	0.5558	20.00	21.11	ug/L	6	20	0.0500	
Styrene	0.9089	0.9807	20.00	21.58	ug/L	8	20	0.0500	
Bromoform	0.1737	0.1773	20.00	20.42	ug/L	2	20	0.1000	
Isopropylbenzene	2.6074	2.7520	20.00	21.11	ug/L	6	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.6064	0.6151	20.00	20.29	ug/L	1	20	0.3000	
1,2,3-Trichloropropane	0.1368	0.1380	20.00	20.16	ug/L	1	20	0.0500	
Propylbenzene	3.2004	3.4714	20.00	21.69	ug/L	8	20	0.0500	
Bromobenzene	0.6876	0.7325	20.00	21.31	ug/L	7	20	0.0500	
1,3,5-Trimethylbenzene	2.0495	2.1463	20.00	20.94	ug/L	5	20	0.0500	
2-Chlorotoluene	2.1411	2.1801	20.00	20.36	ug/L	2	20	0.0500	
4-Chlorotoluene	2.0800	2.0785	20.00	19.99	ug/L	0	20	0.0500	
tert-Butylbenzene	1.7249	1.8316	20.00	21.24	ug/L	6	20	0.0500	
1,2,4-Trimethylbenzene	2.1567	2.1374	20.00	19.82	ug/L	-1	20	0.0500	
sec-Butylbenzene	2.6657	2.9238	20.00	21.94	ug/L	10	20	0.0500	
para-Isopropyl Toluene	2.0335	2.1624	20.00	21.27	ug/L	6	20	0.0500	
1,3-Dichlorobenzene	1.2884	1.2514	20.00	19.43	ug/L	-3	20	0.0500	
1,4-Dichlorobenzene	1.3177	1.2991	20.00	19.72	ug/L	-1	20	0.0500	
n-Butylbenzene	2.0640	2.0671	20.00	20.03	ug/L	0	20	0.0500	
1,2-Dichlorobenzene	1.1774	1.1895	20.00	20.21	ug/L	1	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0900	0.0776	20.00	17.25	ug/L	-14	20	0.0500	
1,2,4-Trichlorobenzene	0.6833	0.6895	20.00	20.18	ug/L	1	20	0.0500	
Hexachlorobutadiene	0.3229	0.3378	20.00	20.92	ug/L	5	20	0.0500	
Naphthalene	1.3048	1.2550	20.00	19.24	ug/L	-4	20	0.0500	
1,2,3-Trichlorobenzene	0.6040	0.6065	20.00	20.08	ug/L	0	20	0.0500	
Dibromofluoromethane	0.5695	0.5433	50.00	47.70	ug/L	-5	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.2556	50.00	46.25	ug/L	-8	20	0.0500	
Toluene-d8	1.3769	1.4060	50.00	51.06	ug/L	2	20	0.0500	
Bromofluorobenzene	1.0267	0.9748	50.00	47.47	ug/L	-5	20	0.0500	

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	2391021	13.86	12.37	12.38	0.01
1,4-Difluorobenzene	3438431	3825262	11.25	13.66	13.67	0.01
Chlorobenzene-d5	2768728	2979980	7.63	17.68	17.67	-0.01
1,4-Dichlorobenzene-d4	1353103	1494395	10.44	20.18	20.18	0.00

Analyst: TDL

Date: 03/24/10

Reviewer: LW

Date: 03/24/10

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218730 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 20PPB IDF : 1.0
 Seqnum : 490117331003.1 File : jcm03 Time : 22-MAR-2010 12:27
 Cal : 490027869001 Caldate : 19-JAN-2010 Caltype : WATER
 Standards: S13952 (25000X), S13719 (25000X), S14108 (25000X), S13625 (50000X),
 S14145 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6144	0.6465	20.00	19.72	ug/L	-1	20	0.0500	
Chloromethane	0.9887	0.8237	20.00	16.66	ug/L	-17	20	0.1000	
Vinyl Chloride	0.7734	0.7042	20.00	18.21	ug/L	-9	20	0.0500	
Bromomethane	0.4602	0.3531	20.00	15.35	ug/L	-23	20	0.0500	c- ***
Chloroethane	0.4539	0.3892	20.00	17.15	ug/L	-14	20	0.0500	
Trichlorofluoromethane	0.6225	0.6406	20.00	19.05	ug/L	-5	20	0.0500	
Acetone	0.1678	0.1833	20.00	21.84	ug/L	9	20	0.0500	
1,1-Dichloroethene	0.5696	0.5131	20.00	18.02	ug/L	-10	20	0.0500	
Iodomethane	0.5986	0.4806	20.00	16.06	ug/L	-20	20	0.0500	
Methylene Chloride	0.7544	0.6974	20.00	18.49	ug/L	-8	20	0.0500	
Carbon Disulfide	2.3825	2.2135	20.00	18.58	ug/L	-7	20	0.0500	
MTBE	1.6272	1.5799	20.00	19.42	ug/L	-3	20	0.0500	
trans-1,2-Dichloroethene	0.6687	0.6009	20.00	17.97	ug/L	-10	20	0.0500	
Vinyl Acetate	1.4687	1.4439	20.00	19.66	ug/L	-2	20	0.0500	
1,1-Dichloroethane	1.1872	1.1237	20.00	18.93	ug/L	-5	20	0.1000	
2-Butanone	0.2678	0.2642	20.00	19.73	ug/L	-1	20	0.0500	
2,2-Dichloropropane	0.6877	0.7893	20.00	22.95	ug/L	15	20	0.0500	
cis-1,2-Dichloroethene	0.7037	0.6721	20.00	19.10	ug/L	-4	20	0.0500	
Chloroform	1.0137	1.0396	20.00	20.51	ug/L	3	20	0.0500	
Bromochloromethane	0.3338	0.3220	20.00	19.30	ug/L	-4	20	0.0500	
1,1,1-Trichloroethane	0.6595	0.7142	20.00	21.66	ug/L	8	20	0.0500	
1,1-Dichloropropene	0.4369	0.4552	20.00	20.84	ug/L	4	20	0.0500	
Carbon Tetrachloride	0.2948	0.3485	20.00	23.65	ug/L	18	20	0.0500	
1,2-Dichloroethane	0.3751	0.4422	20.00	23.58	ug/L	18	20	0.0500	
Benzene	1.3652	1.4099	20.00	20.65	ug/L	3	20	0.0500	
Trichloroethene	0.3410	0.3631	20.00	21.30	ug/L	6	20	0.0500	
1,2-Dichloropropane	0.4171	0.3994	20.00	19.15	ug/L	-4	20	0.0500	
Bromodichloromethane	0.4369	0.4609	20.00	21.10	ug/L	5	20	0.0500	
Dibromomethane	0.2305	0.2373	20.00	20.59	ug/L	3	20	0.0500	
4-Methyl-2-Pentanone	0.3262	0.3431	20.00	21.04	ug/L	5	20	0.0500	
cis-1,3-Dichloropropene	0.5790	0.5998	20.00	20.72	ug/L	4	20	0.0500	
Toluene	0.9653	0.9715	20.00	20.13	ug/L	1	20	0.0500	
trans-1,3-Dichloropropene	0.5740	0.5932	20.00	20.67	ug/L	3	20	0.0500	
1,1,2-Trichloroethane	0.2005	0.1985	20.00	19.80	ug/L	-1	20	0.0500	
2-Hexanone	0.2578	0.2560	20.00	19.86	ug/L	-1	20	0.0500	
1,3-Dichloropropane	0.5943	0.6000	20.00	20.19	ug/L	1	20	0.0500	
Tetrachloroethene	0.3708	0.3955	20.00	21.33	ug/L	7	20	0.0500	
Dibromochloromethane	0.3751	0.3856	20.00	20.56	ug/L	3	20	0.0500	
1,2-Dibromoethane	0.3515	0.3683	20.00	20.95	ug/L	5	20	0.0500	
Chlorobenzene	1.0826	1.0718	20.00	19.80	ug/L	-1	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3342	0.3515	20.00	21.04	ug/L	5	20	0.0500	
Ethylbenzene	1.7697	1.8335	20.00	20.72	ug/L	4	20	0.0500	
m,p-Xylenes	0.6731	0.6840	40.00	40.65	ug/L	2	20	0.0500	
o-Xylene	0.6638	0.6656	20.00	20.05	ug/L	0	20	0.0500	
Styrene	1.1877	1.1880	20.00	20.00	ug/L	0	20	0.0500	
Bromoform	0.2304	0.2464	20.00	21.39	ug/L	7	20	0.1000	
Isopropylbenzene	3.3307	3.4655	20.00	20.81	ug/L	4	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9320	0.8737	20.00	18.75	ug/L	-6	20	0.3000	
1,2,3-Trichloropropane	0.7453	0.7725	20.00	20.73	ug/L	4	20	0.0500	
Propylbenzene	4.2189	4.4449	20.00	21.07	ug/L	5	20	0.0500	
Bromobenzene	0.8895	0.9217	20.00	20.72	ug/L	4	20	0.0500	
1,3,5-Trimethylbenzene	2.7183	2.8761	20.00	21.16	ug/L	6	20	0.0500	
2-Chlorotoluene	2.7188	2.8271	20.00	20.80	ug/L	4	20	0.0500	
4-Chlorotoluene	2.5819	2.6247	20.00	20.33	ug/L	2	20	0.0500	
tert-Butylbenzene	2.2466	2.3504	20.00	20.92	ug/L	5	20	0.0500	
1,2,4-Trimethylbenzene	2.8433	2.8530	20.00	20.07	ug/L	0	20	0.0500	
sec-Butylbenzene	3.5685	3.7427	20.00	20.98	ug/L	5	20	0.0500	
para-Isopropyl Toluene	2.7756	2.9437	20.00	21.21	ug/L	6	20	0.0500	
1,3-Dichlorobenzene	1.6979	1.6713	20.00	19.69	ug/L	-2	20	0.0500	
1,4-Dichlorobenzene	1.7457	1.7128	20.00	19.62	ug/L	-2	20	0.0500	
n-Butylbenzene	2.7600	2.9157	20.00	21.13	ug/L	6	20	0.0500	
1,2-Dichlorobenzene	1.5721	1.5897	20.00	20.22	ug/L	1	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1152	0.1269	20.00	22.04	ug/L	10	20	0.0500	
1,2,4-Trichlorobenzene	0.9215	0.9540	20.00	20.70	ug/L	4	20	0.0500	
Hexachlorobutadiene	0.2803	0.3529	20.00	25.18	ug/L	26	20	0.0500	c+ ***
Naphthalene	1.9986	1.6238	20.00	16.25	ug/L	-19	20	0.0500	
1,2,3-Trichlorobenzene	0.7961	0.8163	20.00	20.51	ug/L	3	20	0.0500	
Dibromofluoromethane	0.5727	0.5684	50.00	49.63	ug/L	-1	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.3222	50.00	58.27	ug/L	17	20	0.0500	
Toluene-d8	1.3484	1.3714	50.00	50.85	ug/L	2	20	0.0500	
Bromofluorobenzene	0.9907	1.0338	50.00	52.18	ug/L	4	20	0.0500	

ISTD (ICAL jaj18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	704216	684066	-2.86	10.97	10.92	-0.05
1,4-Difluorobenzene	1214372	1125783	-7.30	12.14	12.09	-0.05
Chlorobenzene-d5	1037725	972087	-6.33	16.07	16.03	-0.04
1,4-Dichlorobenzene-d4	517916	488226	-5.73	18.78	18.73	-0.05

Analyst: TDL

Date: 03/24/10

Reviewer: LW

Date: 03/24/10

+ = high bias - = low bias c = CCV

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 480118602

Date : 03/23/10
 Sequence : MSVOA09 icn

Reference : iar13
 Analyzed : 01/27/10 23:34

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2099875	12.37	3438431	13.66	2768728	17.68	1353103	20.18
		LOWER LIMIT	1049938	11.87	1719216	13.16	1384364	17.18	676552	19.68
		UPPER LIMIT	4199750	12.87	6876862	14.16	5537456	18.18	2706206	20.68
003	CCV	20PPB	2468042	12.37	4063703	13.67	3125149	17.67	1544206	20.17
004	BS	QC537126	2538789	12.38	4217306	13.67	3192902	17.66	1542260	20.18
005	BSD	QC537127	2581114	12.38	4180906	13.66	3307445	17.66	1562488	20.18
006	CCV/BS	QC537136	2563147	12.38	4116912	13.66	3237948	17.67	1510777	20.17
007	BSD	QC537137	2521942	12.38	4015501	13.67	3120024	17.67	1488305	20.17
011	CCV	20PPB	2391021	12.38	3825262	13.67	2979980	17.67	1494395	20.18
012	IB	IB	2505526	12.38	3952671	13.66	3166082	17.67	1572078	20.18
013	BLANK	QC537128	2424733	12.39	3897102	13.67	3003073	17.67	1456338	20.18
014	SAMPLE	218934-001	2523346	12.38	3935670	13.67	3098748	17.67	1499268	20.18
015	SAMPLE	218839-001	2390210	12.38	3989465	13.66	3157161	17.67	1525726	20.17
016	SAMPLE	218839-010	2438286	12.38	3900004	13.67	3071639	17.67	1505968	20.17
017	MSS	218839-011	2312379	12.38	3806992	13.67	2927658	17.67	1357931	20.17
018	SAMPLE	218835-005	2329320	12.38	3740253	13.67	2952026	17.67	1351682	20.18
019	SAMPLE	218869-001	2336403	12.38	3762622	13.66	2878329	17.67	1297447	20.17
020	SAMPLE	218869-003	2237600	12.38	3570975	13.66	2787522	17.66	1263133	20.18
021	SAMPLE	218841-002	2178016	12.38	3598925	13.66	2834150	17.67	1265758	20.17
022	SAMPLE	218841-003	2214747	12.38	3494742	13.67	2808706	17.66	1273553	20.18
023	SAMPLE	218702-006	2182002	12.38	3588750	13.66	2785034	17.66	1326441	20.18
024	SAMPLE	218720-007	2528995	12.38	4077138	13.67	3193317	17.67	1475754	20.17
025	SAMPLE	218720-015	2485113	12.38	4014884	13.66	3129675	17.66	1412453	20.17
026	MS	QC537244	2328928	12.38	3804864	13.66	3021456	17.67	1474172	20.17
027	MSD	QC537245	2454146	12.38	3935793	13.67	3115090	17.66	1523655	20.17
028	SAMPLE	218873-001	2519447	12.39	4218135	13.67	3122681	17.66	1471939	20.17
029	SAMPLE	218730-008	2623719	12.38	4181771	13.67	3264769	17.66	1565584	20.17
030	SAMPLE	218831-003	2662028	12.38	4277309	13.67	3229937	17.67	1518517	20.17

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 490117331

Date : 03/22/10
 Sequence : MSVOA10 jcm

Reference : jaj18
 Analyzed : 01/19/10 22:26

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	704216	10.97	1214372	12.14	1037725	16.07	517916	18.78
		LOWER LIMIT	352108	10.47	607186	11.64	518863	15.57	258958	18.28
		UPPER LIMIT	1408432	11.47	2428744	12.64	2075450	16.57	1035832	19.28
003	CCV	20PPB	684066	10.92	1125783	12.09	972087	16.03	488226	18.73
004	LCS	QC536954	697650	10.92	1140397	12.09	971611	16.03	500079	18.73
006	BLANK	QC536955	684363	10.92	1124149	12.09	967409	16.03	487593	18.74
007	SAMPLE	218730-001	668755	10.92	1096107	12.09	936804	16.03	471756	18.74
008	SAMPLE	218730-010	679705	10.92	1126256	12.09	956059	16.03	474622	18.74
009	SAMPLE	218720-002	661567	10.92	1084894	12.09	937145	16.03	467082	18.74
010	SAMPLE	218730-002	682047	10.92	1136973	12.10	975225	16.03	477683	18.74
011	SAMPLE	218730-003	656547	10.92	1087570	12.09	941110	16.03	471168	18.75
012	SAMPLE	218730-004	673509	10.92	1083838	12.10	941782	16.04	478955	18.74
013	SAMPLE	218730-005	730334	10.92	1163492	12.09	999018	16.04	508204	18.74
014	SAMPLE	218730-006	716376	10.94	1131728	12.11	966384	16.05	505620	18.75
015	MSS	218730-007	724998	10.93	1137615	12.10	976986	16.05	497165	18.76
016	SAMPLE	218730-008	728621	10.92	1136454	12.09	959457	16.04	498442	18.74
017	SAMPLE	218730-009	706240	10.92	1125476	12.09	975571	16.04	505318	18.74
018	MS	QC536967	696297	10.92	1112252	12.09	960460	16.03	498705	18.74
019	MSD	QC536968	734321	10.92	1166201	12.09	991329	16.03	496792	18.74
020	SAMPLE	218758-004	712518	10.93	1132532	12.10	978028	16.04	500608	18.74
021	SAMPLE	218758-018	700576	10.93	1118026	12.10	956616	16.04	494919	18.74
022	SAMPLE	218758-019	727990	10.92	1163560	12.09	1008736	16.03	514991	18.74

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 480118602

Instrument : MSVOA09 Begun : 03/23/10 08:42
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	icn01	X	IB			03/23/10 08:42	1.0	1	
002	icn02	TUN	BFB			03/23/10 09:34	1.0	2	
003	icn03	CCV	20PPB			03/23/10 10:03	1.0	3 4 5 6 1	
004	icn04	BS	QC537126	Water	161182	03/23/10 10:57	1.0	7 8 9 1	
005	icn05	BSD	QC537127	Water	161182	03/23/10 11:31	1.0	7 8 9 1	
006	icn06	CCV/BS	QC537136	Water	161182	03/23/10 12:05	1.0	10 1	
007	icn07	BSD	QC537137	Water	161182	03/23/10 12:39	1.0	10 1	
008	icn08	X	IB			03/23/10 13:13	1.0	1	
009	icn09	TUN	BFB			03/23/10 13:55	1.0	2	
010	icn10	TUN	BFB			03/23/10 14:10	1.0	2	
011	icn11	CCV	20PPB			03/23/10 14:37	1.0	3 4 5 6 1	
012	icn12	IB	IB			03/23/10 15:30	1.0	1	
013	icn13	BLANK	QC537128	Water	161182	03/23/10 16:04	1.0	1	
014	icn14	SAMPLE	218934-001	Water	161182	03/23/10 16:37	1.0	1	
015	icn15	SAMPLE	218839-001	Water	161182	03/23/10 17:11	1.0	1	
016	icn16	SAMPLE	218839-010	Water	161182	03/23/10 17:45	1.0	1	
017	icn17	MSS	218839-011	Water	161182	03/23/10 18:18	1.0	1	
018	icn18	SAMPLE	218835-005	Water	161182	03/23/10 18:52	1.0	1	
019	icn19	SAMPLE	218869-001	Water	161182	03/23/10 19:26	1.0	1	
020	icn20	SAMPLE	218869-003	Water	161182	03/23/10 20:00	1.0	1	1:MTBE=190
021	icn21	SAMPLE	218841-002	Water	161182	03/23/10 20:33	1.0	1	
022	icn22	SAMPLE	218841-003	Water	161182	03/23/10 21:07	1.0	1	
023	icn23	SAMPLE	218702-006	Water	161182	03/23/10 21:40	2.0	1	
024	icn24	SAMPLE	218720-007	Water	161182	03/23/10 22:14	40.0	1	headspace <= 1 mL
025	icn25	SAMPLE	218720-015	Water	161182	03/23/10 22:47	142.9	1	headspace <= 1 mL
026	icn26	MS	QC537244	Water	161182	03/23/10 23:21	1.0	7 8 9 1	
027	icn27	MSD	QC537245	Water	161182	03/23/10 23:54	1.0	7 8 9 1	
028	icn28	SAMPLE	218873-001	Water	161182	03/24/10 00:27	3.333	1	
029	icn29	SAMPLE	218730-008	Water	161182	03/24/10 01:01	20.0	1	
030	icn30	SAMPLE	218831-003	Water	161182	03/24/10 01:34	40.0	1	headspace > 1 mL
031	icn31	X	IB			03/24/10 02:09	1.0	1	
032	icn32	X	IB			03/24/10 02:44	1.0	1	
033	icn33	X	IB			03/24/10 03:18	1.0	1	

BJP 03/23/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 14.

TDL 03/24/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 33.

TDL 03/24/10 : Runs 031-033 are IB's

Analyst: TDL Date: 03/24/10 Reviewer: LW Date: 03/24/10

Standards used: 1=S14026 2=S13652 3=S14216 4=S14108 5=S13625 6=S13719 7=S14092 8=S14234 9=S14144 10=S13447

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 490027869

Instrument : MSVOA10 Begun : 01/19/10 08:29
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	jaj01	X	IB			01/19/10 08:29	1.0	1
002	jaj02	X	LOW PT			01/19/10 09:26	1.0	1
003	jaj03	X	LOW PT			01/19/10 10:09	1.0	1
004	jaj04	X	LOW PT			01/19/10 10:43	1.0	1
005	jaj05	X	LOW PT			01/19/10 11:49	1.0	1
006	jaj06	X	LOW PT			01/19/10 14:28	1.0	1
007	jaj07	X	LOW PT			01/19/10 15:02	1.0	1
008	jaj08	TUN	BFB			01/19/10 15:39	1.0	2
009	jaj09	X	IB			01/19/10 17:14	1.0	1
010	jaj10	X	IB			01/19/10 17:49	1.0	1
011	jaj11	IB	CALIB IB			01/19/10 18:23	1.0	1
012	jaj12	ICAL	.25/.5PPB			01/19/10 18:58	1.0	3 4 5 6 1
013	jaj13	ICAL	0.5/1PPB			01/19/10 19:32	1.0	3 4 5 6 1
014	jaj14	ICAL	2PPB			01/19/10 20:07	1.0	3 4 5 6 1
015	jaj15	ICAL	5PPB			01/19/10 20:42	1.0	3 4 5 6 1
016	jaj16	ICAL	10PPB			01/19/10 21:17	1.0	3 4 5 6 1
017	jaj17	ICAL	20PPB			01/19/10 21:51	1.0	7 8 9 10 1
018	jaj18	ICAL	50PPB			01/19/10 22:26	1.0	7 8 9 10 1
019	jaj19	ICAL	75PPB			01/19/10 23:01	1.0	7 8 9 10 1
020	jaj20	ICAL	100PPB			01/19/10 23:35	1.0	7 8 9 10 1
021	jaj21	ICV	25PPB			01/20/10 00:10	1.0	11 1
022	jaj22	ICV	25PPB			01/20/10 00:44	1.0	12 13 14 1
023	jaj23	X	IB			01/20/10 01:19	1.0	1
024	jaj24	X	IB			01/20/10 01:54	1.0	1
025	jaj25	X	IB			01/20/10 02:28	1.0	1

BO 01/20/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 25.

Analyst: BO Date: 01/20/10 Reviewer: LW Date: 01/22/10
 Standards used: 1=S13615 2=S13652 3=S13745 4=S13746 5=S13747 6=S13748 7=S13680 8=S13586 9=S13625 10=S13503 11=S13817
 12=S13559 13=S13639 14=S13492

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 490117331

Instrument : MSVOA10 Begun : 03/22/10 11:31
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	jcm01	X	IB			03/22/10 11:31	1.0	1
002	jcm02	TUN	BFB			03/22/10 12:09	1.0	2
003	jcm03	CCV	20PPB			03/22/10 12:27	1.0	3 4 5 6 1
004	jcm04	LCS	QC536954	Water	161143	03/22/10 13:16	1.0	7 8 9 1
005	jcm05	X	IB			03/22/10 13:51	1.0	1
006	jcm06	BLANK	QC536955	Water	161143	03/22/10 14:26	1.0	1
007	jcm07	SAMPLE	218730-001	Water	161143	03/22/10 15:03	1.0	1
008	jcm08	SAMPLE	218730-010	Water	161143	03/22/10 15:38	1.0	1
009	jcm09	SAMPLE	218720-002	Water	161143	03/22/10 16:14	6.25	1
010	jcm10	SAMPLE	218730-002	Water	161143	03/22/10 16:49	1.0	1
011	jcm11	SAMPLE	218730-003	Water	161143	03/22/10 17:25	1.0	1
012	jcm12	SAMPLE	218730-004	Water	161143	03/22/10 18:00	1.0	1
013	jcm13	SAMPLE	218730-005	Water	161143	03/22/10 18:36	1.0	1
014	jcm14	SAMPLE	218730-006	Water	161143	03/22/10 19:11	1.0	1
015	jcm15	MSS	218730-007	Water	161143	03/22/10 19:47	1.0	1
016	jcm16	SAMPLE	218730-008	Water	161143	03/22/10 20:22	40.0	1
017	jcm17	SAMPLE	218730-009	Water	161143	03/22/10 20:57	20.0	1
018	jcm18	MS	QC536967	Water	161143	03/22/10 21:32	1.0	1 7 8 9
019	jcm19	MSD	QC536968	Water	161143	03/22/10 22:07	1.0	1 7 8 9
020	jcm20	SAMPLE	218758-004	Water	161143	03/22/10 22:42	1.0	1
021	jcm21	SAMPLE	218758-018	Water	161143	03/22/10 23:17	1.0	1
022	jcm22	SAMPLE	218758-019	Water	161143	03/22/10 23:52	1.0	1
023	jcm23	X	IB			03/23/10 00:27	1.0	1
024	jcm24	X	IB			03/23/10 01:02	1.0	1
025	jcm25	X	IB			03/23/10 01:37	1.0	1

PDM 03/23/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 025.

Analyst: PDM Date: 03/23/10 Reviewer: LW Date: 03/23/10

Standards used: 1=S14145 2=S13652 3=S13952 4=S13719 5=S14108 6=S13625 7=S14092 8=S14144 9=S14234



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 218768
ANALYTICAL REPORT

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 383868.US.60.61.QS
Location : Quarterly UST
Level : III

<u>Sample ID</u>	<u>Lab ID</u>
TB-004-UST-10Q1	218768-001
BC-8B-UST-10Q1	218768-002
UST-10Q1-001	218768-003
ASE-97A-UST-10Q1	218768-004
ASE-126A-UST-10Q1	218768-005
ASE-84A-UST-10Q1	218768-006
ASE-125A-UST-10Q1	218768-007
ASE-95A-UST-10Q1	218768-008
EB-004-UST-10Q1	218768-009

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

Signature: _____
Senior Program Manager

Date: 03/29/2010

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 218768
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/12/10
Samples Received: 03/12/10

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 03/12/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for iodomethane in the ICV analyzed 01/28/10 01:45; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High responses were observed for carbon tetrachloride, 2,2-dichloropropane, and hexachlorobutadiene in the CCV analyzed 03/24/10 22:31; these analytes were not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for 2-butanone in the CCV analyzed 03/24/10 16:16; this analyte met minimum response criteria, and affected data was qualified with "b".

Low response was observed for 2-butanone in the CCV analyzed 03/24/10 11:34; this analyte met minimum response criteria, and affected data was qualified with "b". High response was observed for bromomethane; affected data was qualified with "b".

Low responses were observed for bromomethane, iodomethane, and naphthalene in the CCV analyzed 03/24/10 12:18; these analytes met minimum response criteria, and affected data was qualified with "b".

Low recoveries were observed for Freon 12 in the BS/BSD for batch 161232; the associated RPD was within limits. High recoveries were observed for sec-butylbenzene and tert-butylbenzene in the BS for batch 161232; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample.

High recoveries were observed for carbon tetrachloride and hexachlorobutadiene in the BS/BSD for batch 161239; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the

CASE NARRATIVE

Laboratory number: 218768
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/12/10
Samples Received: 03/12/10

Volatile Organics by GC/MS (EPA 8260B):

associated samples.

Low recoveries were observed for a number of analytes in the MS/MSD for batch 161232; the parent sample was not a project sample, and the BS/BSD were within limits. High RPD was observed for 1,2-dibromo-3-chloropropane; the RPD was acceptable in the BS/BSD, and this analyte was not detected at or above the RL in the associated sample.

High recoveries were observed for carbon tetrachloride and hexachlorobutadiene in the MS/MSD of ASE-95A-UST-10Q1 (lab # 218768-008); the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples.

No other analytical problems were encountered.

Chain of Custody

218768

37380-100311
38370-6F

Curtis & Tompkins Laboratories 2323 5th St Berkeley, CA 94710 510-204-2221		Honeywell Chain Of Custody / Analysis Request		AESI Ref: 40242.59627 COC#: 37380									
Sampling Co.: CH2MHILL Client Contact (name, co., address): CH2M HILL 2625 South Plaza Drive, Suite 300 Tempe, AZ 85282 Preliminary Data To:		Site Name: Sky Harbor AZ Location of Site: PHOENIX, AZ Phase: Sampling Program Quarterny UST		Lab Prof # (SDG): Lab ID: CTBERK Site ID: SKYHARBOR Lab Job #: Authorized User: Honeywell									
Sample Receipt Acknowledgement To: Hard Copy To: Tuesday Powers and Melanie West, Critigen Invoice To: Honeywell/Copy Boney Kidd, CH2M HILL/Copy Melanie West, Critigen		Preservative 8 Field Filtered Sample ? Composite/Grab Units		Text & Excel File Dir: Order									
Sample Identification		Sample Matrix		Copyright AESI Version 10.0 (1-25-04) Unauthorized use strictly prohibited.									
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Field Filtered Sample ?	Composite/Grab	Units	Lab Sample Numbers
1			TR-004-UST-1001	03110		Bik-water	WATER	TR	1			G	
2			BC-80-UST-1001	03110	0018	GW-GWS	Water	REG	5			G	
3			UST-1001-001	03110	0028	GW-GWS	Water	REG	5			G	
4			ASE-97A-UST-1001	03110	0050	GW-GWS	Water	REG	5			G	
5			ASE-126A-UST-1001	03110	0139	GW-GWS	Water	REG	5			G	
6			ASE-84A-UST-1001	03110	0216	GW-GWS	Water	REG	5			G	
7			ASE-125A-UST-1001	03110	0255	GW-GWS	Water	REG	5			G	
8			ASE-95A-UST-1001	03110	0334	GW-GWS	Water	REG	15			G	
9			EB-004-UST-1001	03110	0420	Bik-water	Water	EB	5			G	
10													
11													
12													
Relinquished by:		Company: CH2M HILL		Received by: S. EVANS		Company:		Date/Time: 3-12-10 1000		Condition: Cooler Temp.		Custody Seals Intact:	
Relinquished by:		Company:		Received by:		Company:		Date/Time:		Condition: Cooler Temp.		Custody Seals Intact:	
Preservatives: (Other; Specify): 0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4, pH<2, 4 Deg C); 8 (HCl, pH<2, 4 Deg C); 9 (HCl, 4 Deg C); 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH, pH>12, 4 Deg, Ascorbic Acid); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); 14 (1-MeOH, 4 Deg C and 2-NaHSO4, 4 Deg C); 15 (NaOH, pH>12, 4 Deg C); sp (special instructions)													

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218768 Date Received 3-12-10 Number of coolers 2
Client HONEYWELL / CH2M AZ Project QUARTERLY UST

Date Opened 3-12-10 By (print) S. EVANS (sign) [Signature]
Date Logged in [Signature] By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) Fedex # YES NO
Shipping info 8720 5038 8995

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many 1 EA Name SIGNATURE Date 3-11-10

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:

Type of ice used: Wet Blue/Gel None Temp(°C) 2.0 / 8

Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are samples in the appropriate containers for indicated tests? _____ YES NO

11. Are sample labels present, in good condition and complete? _____ YES NO

12. Do the sample labels agree with custody papers? _____ YES NO

13. Was sufficient amount of sample sent for tests requested? _____ YES NO

14. Are the samples appropriately preserved? _____ YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 218768

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/11/10
Units:	ug/L	Received:	03/12/10
Diln Fac:	1.000	Prepared:	03/17/10
Batch#:	161015	Analyzed:	03/19/10

Field ID: BC-8B-UST-10Q1 Lab ID: 218768-002
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	94	50-120	

Field ID: UST-10Q1-001 Lab ID: 218768-003
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	92	50-120	

Field ID: ASE-97A-UST-10Q1 Lab ID: 218768-004
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	96	50-120	

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/11/10
Units:	ug/L	Received:	03/12/10
Diln Fac:	1.000	Prepared:	03/17/10
Batch#:	161015	Analyzed:	03/19/10

Field ID: ASE-126A-UST-10Q1 Lab ID: 218768-005
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	94	50-120	

Field ID: ASE-84A-UST-10Q1 Lab ID: 218768-006
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	98	50-120	

Field ID: ASE-125A-UST-10Q1 Lab ID: 218768-007
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	97	50-120	

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/11/10
Units:	ug/L	Received:	03/12/10
Diln Fac:	1.000	Prepared:	03/17/10
Batch#:	161015	Analyzed:	03/19/10

Field ID: ASE-95A-UST-10Q1 Lab ID: 218768-008
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	97	50-120	

Field ID: EB-004-UST-10Q1 Lab ID: 218768-009
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	94	50-120	

Type: BLANK Lab ID: QC536422

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536423	Batch#:	161015
Matrix:	Water	Prepared:	03/17/10
Units:	ug/L	Analyzed:	03/19/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	1,814	73	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	95	50-120	

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-95A-UST-10Q1	Batch#:	161015
MSS Lab ID:	218768-008	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Prepared:	03/17/10
Diln Fac:	1.000	Analyzed:	03/19/10

Type: MS Lab ID: QC536424

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Diesel C10-C22	74.07	2,500	2,271	88	54-120		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	101	50-120		

Type: MSD Lab ID: QC536425

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Diesel C10-C22	2,500	2,126	82	54-120	7	31		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	96	50-120		

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536426	Batch#:	161015
Matrix:	Water	Prepared:	03/17/10
Units:	ug/L	Analyzed:	03/19/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,370	95	61-139	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	93	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218768 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122008
 Units : mg/L

Name : HEXOTP_010
 Date : 10-JAN-2010 13:26
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b004	160015122004	HEXOTP_5	10-JAN-2010 13:26	S13690
L2	010b005	160015122005	HEXOTP_10	10-JAN-2010 13:54	S13691
L3	010b006	160015122006	HEXOTP_25	10-JAN-2010 14:21	S13692
L4	010b007	160015122007	HEXOTP_50	10-JAN-2010 14:49	S13693
L5	010b008	160015122008	HEXOTP_100	10-JAN-2010 15:17	S13694
L6	010b009	160015122009	HEXOTP_200	10-JAN-2010 15:45	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	64413	65438	65659	68934	63215	71786	AVRG		1.50E-5		66574	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-3	10.00	-2	25.00	-1	50.00	4	100.0	-5	200.0	8

CP 01/12/10 : JDG: Corrected automatically drawn baseline for all ICALS, except for HEXOTP_50.

Analyst: PRW

Date: 01/12/10

Reviewer: CP

Date: 01/12/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218768 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122002
 Units : mg/L

Name : DSL_010
 Date : 10-JAN-2010 16:41
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b011	160015122011	DSL_10	10-JAN-2010 16:41	S13230
L2	010b012	160015122012	DSL_100	10-JAN-2010 17:09	S13231
L3	010b013	160015122013	DSL_500	10-JAN-2010 17:37	S13232
L4	010b014	160015122014	DSL_1000	10-JAN-2010 18:05	S13233
L5	010b015	160015122015	DSL_5000	10-JAN-2010 18:33	S13229
L6	010b016	160015122016	DSL_7500	10-JAN-2010 19:01	S13234

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	46290	57423	63137	60591	59298	62684	AVRG		1.72E-5		58237	11	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-21	100.0	-1	500.0	8	1000	4	5000	2	7500	8

JDG 01/11/10 : Corrected automatically drawn baseline in DSL_10 (010b011).

Analyst: JDG

Date: 01/11/10

Reviewer: EAH

Date: 01/12/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218768 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 160015122002

Name : DSL_010
Cal Date : 10-JAN-2010

ICV 160015122018 (010b018 10-JAN-2010) stds: S13457

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	514.5	mg/L	3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218768 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122003
 Units : mg/L

Name : MO_010
 Date : 10-JAN-2010 21:20
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b021	160015122021	MO_50	10-JAN-2010 21:20	S12675
L2	010b022	160015122022	MO_250	10-JAN-2010 21:47	S12676
L3	010b023	160015122023	MO_500	10-JAN-2010 22:15	S12677
L4	010b024	160015122024	MO_1000	10-JAN-2010 22:43	S12678
L5	010b025	160015122025	MO_5000	10-JAN-2010 23:10	S12679
L6	010b026	160015122026	MO_7500	10-JAN-2010 23:38	S12680

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	45439	44674	45779	46295	36737	34758	AVRG		2.37E-5		42280	12	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	6	500.0	8	1000	9	5000	-13	7500	-18

JDG 01/11/10 : Manually integrated fuel hump: MO_50,1000, & 7500.

Analyst: JDG

Date: 01/11/10

Reviewer: EAH

Date: 01/12/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218768 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399001
 Units : mg/L

Name : DSL_069
 Date : 10-MAR-2010 09:30
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a004	170100399004	DSL_10	10-MAR-2010 09:30	S14114
L2	069a005	170100399005	DSL_100	10-MAR-2010 09:58	S14115
L3	069a006	170100399006	DSL_500	10-MAR-2010 10:25	S14116
L4	069a007	170100399007	DSL_1000	10-MAR-2010 10:52	S14117
L5	069a008	170100399008	DSL_5000	10-MAR-2010 11:20	S14113
L6	069a009	170100399009	DSL_7500	10-MAR-2010 11:48	S14118

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	38992	57098	61023	62848	63686	64949	AVRG		1.72E-5		58099	17	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-33	100.0	-2	500.0	5	1000	8	5000	10	7500	12

JDG 03/11/10 : Corrected automatically baseline for: Levels 1-5.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218768 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 170100399001

Name : DSL_069
Cal Date : 10-MAR-2010

ICV 170100399011 (069a011 10-MAR-2010) stds: S14077

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	542.9	mg/L	9	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218768 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399002
 Units : mg/L

Name : MO_069
 Date : 10-MAR-2010 14:05
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a014	170100399014	MO_50	10-MAR-2010 14:05	S13804
L2	069a015	170100399015	MO_250	10-MAR-2010 14:32	S13805
L3	069a016	170100399016	MO_500	10-MAR-2010 15:00	S13806
L4	069a017	170100399017	MO_1000	10-MAR-2010 15:27	S13807
L5	069a018	170100399018	MO_5000	10-MAR-2010 15:55	S13808
L6	069a019	170100399019	MO_7500	10-MAR-2010 16:23	S13809

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	44768	46378	45947	46506	45328	45626	AVRG		2.19E-5		45759	1	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	-2	250.0	1	500.0	0	1000	2	5000	-1	7500	0

JDG 03/11/10 : Corrected automatically drawn baseline for levels 2-6.

Analyst: JDG Date: 03/11/10 Reviewer: EAH Date: 03/11/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218768 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170108447001
 Units : mg/L

Name : HEXOTP_075
 Date : 16-MAR-2010 15:35
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	075a012	170108447012	HEXOTP_5	16-MAR-2010 15:35	S13690
L2	075a013	170108447013	HEXOTP_10	16-MAR-2010 16:03	S13691
L3	075a014	170108447014	HEXOTP_25	16-MAR-2010 16:30	S13692
L4	075a015	170108447015	HEXOTP_50	16-MAR-2010 16:58	S13693
L5	075a016	170108447016	HEXOTP_100	16-MAR-2010 17:25	S13694
L6	075a017	170108447017	HEXOTP_200	16-MAR-2010 17:53	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	73067	76327	75701	75675	73539	74396	AVRG		1.34E-5		74784	2	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-2	10.00	2	25.00	1	50.00	1	100.0	-2	200.0	-1

JDG 03/17/10 : Corrected automatically drawn baseline for L1 & L2.

Analyst: JDG

Date: 03/17/10

Reviewer: EAH

Date: 03/17/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
 Seqnum : 160112833007 File : 078b007 Time : 19-MAR-2010 14:47
 Standards: S14077

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	54511	500.0	468.0	mg/L	-6	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	64509	50.00	48.45	mg/L	-3	15	

JDG 03/19/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
 Seqnum : 160112833008 File : 078b008 Time : 19-MAR-2010 15:40
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	42292	500.0	500.1	mg/L	0	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	65292	50.00	49.04	mg/L	-2	15	

TFB 03/19/10 : Corrected automatically drawn baseline.

Analyst: TFB Date: 03/19/10 Reviewer: SFL Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
 Seqnum : 160112833020 File : 078b020 Time : 19-MAR-2010 22:18
 Standards: S14078

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	55600	1000	954.7	mg/L	-5	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	65486	50.00	49.18	mg/L	-2	15	

SFL 03/21/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/21/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
 Seqnum : 160112833021 File : 078b021 Time : 19-MAR-2010 22:46
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	41416	500.0	489.8	mg/L	-2	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	63018	50.00	47.33	mg/L	-5	15	

SFL 03/21/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/21/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170112795004 File : 078a004 Time : 19-MAR-2010 09:17
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	50073	500.0	547.1	mg/L	9	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	76397	50.00	51.08	mg/L	2	15	

TFB 03/19/10 : Corrected automatically drawn baseline.

Analyst: TFB Date: 03/19/10 Reviewer: SFL Date: 03/21/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
 Seqnum : 170112795005 File : 078a005 Time : 19-MAR-2010 09:45
 Standards: S14077

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	170100399001	10-MAR-2010	58099	66333	500.0	570.9	mg/L	14	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	81060	50.00	54.20	mg/L	8	15	

TFB 03/19/10 : Corrected automatically drawn baseline.

Analyst: TFB Date: 03/19/10 Reviewer: SFL Date: 03/21/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170112795017 File : 078a017 Time : 19-MAR-2010 22:55
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	51357	500.0	561.2	mg/L	12	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	79257	50.00	52.99	mg/L	6	15	

SFL 03/21/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/21/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
 Seqnum : 170112795018 File : 078a018 Time : 19-MAR-2010 23:22
 Standards: S14076

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	170100399001	10-MAR-2010	58099	64491	250.0	277.5	mg/L	11	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	78480	50.00	52.47	mg/L	5	15	

SFL 03/21/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/21/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 160015122

Instrument : GC15B
 Method : EPA 8015B

Begun : 01/10/10 12:02
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	010b001	X	PRIMER			01/10/10 12:02	1.0	
002	010b002	X	IB			01/10/10 12:30	1.0	
003	010b003	X	IB			01/10/10 12:58	1.0	
004	010b004	ICAL	HEXOTP_5			01/10/10 13:26	1.0	1
005	010b005	ICAL	HEXOTP_10			01/10/10 13:54	1.0	2
006	010b006	ICAL	HEXOTP_25			01/10/10 14:21	1.0	3
007	010b007	ICAL	HEXOTP_50			01/10/10 14:49	1.0	4
008	010b008	ICAL	HEXOTP_100			01/10/10 15:17	1.0	5
009	010b009	ICAL	HEXOTP_200			01/10/10 15:45	1.0	6
010	010b010	IB	CALIB			01/10/10 16:13	1.0	
011	010b011	ICAL	DSL_10			01/10/10 16:41	1.0	7
012	010b012	ICAL	DSL_100			01/10/10 17:09	1.0	8
013	010b013	ICAL	DSL_500			01/10/10 17:37	1.0	9
014	010b014	ICAL	DSL_1000			01/10/10 18:05	1.0	10
015	010b015	ICAL	DSL_5000			01/10/10 18:33	1.0	11
016	010b016	ICAL	DSL_7500			01/10/10 19:01	1.0	12
017	010b017	IB	CALIB			01/10/10 19:29	1.0	
018	010b018	ICV	DSL_500			01/10/10 19:57	1.0	13
019	010b019	X	ICV			01/10/10 20:24	1.0	13
020	010b020	IB	CALIB			01/10/10 20:52	1.0	
021	010b021	ICAL	MO_50			01/10/10 21:20	1.0	14
022	010b022	ICAL	MO_250			01/10/10 21:47	1.0	15
023	010b023	ICAL	MO_500			01/10/10 22:15	1.0	16
024	010b024	ICAL	MO_1000			01/10/10 22:43	1.0	17
025	010b025	ICAL	MO_5000			01/10/10 23:10	1.0	18
026	010b026	ICAL	MO_7500			01/10/10 23:38	1.0	19
027	010b027	IB	CALIB			01/11/10 00:06	1.0	
028	010b028	ICAL	JET_10			01/11/10 00:33	1.0	20
029	010b029	ICAL	JET_100			01/11/10 01:01	1.0	21
030	010b030	ICAL	JET_500			01/11/10 01:28	1.0	22
031	010b031	ICAL	JET_1000			01/11/10 01:56	1.0	23
032	010b032	ICAL	JET_2000			01/11/10 02:24	1.0	24
033	010b033	ICAL	JET_3000			01/11/10 02:51	1.0	25
034	010b034	IB	CALIB			01/11/10 03:19	1.0	
035	010b035	ICAL	JP5_10			01/11/10 03:46	1.0	26
036	010b036	ICAL	JP5_100			01/11/10 04:14	1.0	27
037	010b037	ICAL	JP5_500			01/11/10 04:42	1.0	28
038	010b038	ICAL	JP5_1500			01/11/10 05:09	1.0	29
039	010b039	ICAL	JP5_2500			01/11/10 05:37	1.0	30
040	010b040	ICAL	JP5_5000			01/11/10 06:05	1.0	31
041	010b041	IB	CALIB			01/11/10 06:33	1.0	
042	010b042	ICAL	BUNK_50			01/11/10 07:01	1.0	32
043	010b043	ICAL	BUNK_250			01/11/10 07:28	1.0	33
044	010b044	ICAL	BUNK_500			01/11/10 07:56	1.0	34
045	010b045	ICAL	BUNK_1250			01/11/10 08:24	1.0	35
046	010b046	ICAL	BUNK_2500			01/11/10 08:52	1.0	36
047	010b047	ICAL	BUNK_5000			01/11/10 09:20	1.0	37
048	010b048	IB	CALIB			01/11/10 09:48	1.0	
049	010b049	CMARKER	C8_C50			01/11/10 10:16	1.0	38
050	010b050	IB	CALIB			01/11/10 10:44	1.0	

JDG 01/11/10 : I verified that the vials loaded on the instrument matched the

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 160112833

Instrument : GC15B Begun : 03/19/10 08:33
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078b001	X	PRIMER				03/19/10 08:33	1.0	
002	078b002	X	IB				03/19/10 09:00	1.0	
003	078b003	X	CMARKER				03/19/10 09:28	1.0	1
004	078b004	CCV	MO_500				03/19/10 09:56	1.0	2
005	078b005	CCV	DSL_250				03/19/10 10:24	1.0	3
006	078b006	MS	QC536268		Water	160979	03/19/10 14:07	1.0	
007	078b007	CCV	DSL_500				03/19/10 14:47	1.0	4
008	078b008	CCV	MO_500				03/19/10 15:40	1.0	2
009	078b009	X	CMARKER				03/19/10 16:08	1.0	1
010	078b010	BLANK	QC536422		Water	161015	03/19/10 17:40	1.0	
011	078b011	LCS	QC536423		Water	161015	03/19/10 18:08	1.0	
012	078b012	LCS	QC536426		Water	161015	03/19/10 18:36	1.0	
013	078b013	MSS	218768-008		Water	161015	03/19/10 19:04	1.0	
014	078b014	MS	QC536424		Water	161015	03/19/10 19:32	1.0	
015	078b015	MSD	QC536425		Water	161015	03/19/10 20:00	1.0	
016	078b016	SAMPLE	218768-002		Water	161015	03/19/10 20:27	1.0	
017	078b017	SAMPLE	218768-003		Water	161015	03/19/10 20:55	1.0	
018	078b018	SAMPLE	218768-004		Water	161015	03/19/10 21:23	1.0	
019	078b019	SAMPLE	218768-005		Water	161015	03/19/10 21:50	1.0	
020	078b020	CCV	DSL_1000				03/19/10 22:18	1.0	5
021	078b021	CCV	MO_500				03/19/10 22:46	1.0	2
022	078b022	X	CCV				03/19/10 23:13	1.0	5
023	078b023	X	CCV				03/19/10 23:41	1.0	2
024	078b024	SAMPLE	218883-001	S	Soil	161101	03/20/10 00:09	1.0	
025	078b025	SAMPLE	218893-001	S	Soil	161101	03/20/10 00:36	1.0	
026	078b026	SAMPLE	218893-002	S	Soil	161101	03/20/10 01:04	1.0	
027	078b027	SAMPLE	218893-003	S	Soil	161101	03/20/10 01:31	1.0	
028	078b028	SAMPLE	218893-004	S	Soil	161101	03/20/10 01:59	1.0	

JDG 03/19/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

SFL 03/21/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 28.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170100399

Instrument : GC17A Begun : 03/10/10 08:00
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	069a001	X	PRIMER			03/10/10 08:00	1.0	
002	069a002	X	IB			03/10/10 08:28	1.0	
003	069a003	IB	CALIB			03/10/10 08:55	1.0	
004	069a004	ICAL	DSL_10			03/10/10 09:30	1.0	1
005	069a005	ICAL	DSL_100			03/10/10 09:58	1.0	2
006	069a006	ICAL	DSL_500			03/10/10 10:25	1.0	3
007	069a007	ICAL	DSL_1000			03/10/10 10:52	1.0	4
008	069a008	ICAL	DSL_5000			03/10/10 11:20	1.0	5
009	069a009	ICAL	DSL_7500			03/10/10 11:48	1.0	6
010	069a010	IB	CALIB			03/10/10 12:15	1.0	
011	069a011	ICV	DSL_500			03/10/10 12:42	1.0	7
012	069a012	X	ICV			03/10/10 13:09	1.0	7
013	069a013	IB	CALIB			03/10/10 13:37	1.0	
014	069a014	ICAL	MO_50			03/10/10 14:05	1.0	8
015	069a015	ICAL	MO_250			03/10/10 14:32	1.0	9
016	069a016	ICAL	MO_500			03/10/10 15:00	1.0	10
017	069a017	ICAL	MO_1000			03/10/10 15:27	1.0	11
018	069a018	ICAL	MO_5000			03/10/10 15:55	1.0	12
019	069a019	ICAL	MO_7500			03/10/10 16:23	1.0	13
020	069a020	IB	CALIB			03/10/10 16:51	1.0	
021	069a021	CMARKER	C8-C50			03/10/10 17:19	1.0	14
022	069a022	IB	CALIB			03/10/10 17:46	1.0	

JDG 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

Standards used: 1=S14114 2=S14115 3=S14116 4=S14117 5=S14113 6=S14118 7=S14077 8=S13804 9=S13805 10=S13806 11=S13807
 12=S13808 13=S13809 14=S13646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170108447

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/16/10 07:27
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	075a001	X	PRIMER				03/16/10 07:27	1.0	
002	075a002	X	IB				03/16/10 07:55	1.0	
003	075a003	X	CMARKER				03/16/10 08:24	1.0	1
004	075a004	X	MO_500				03/16/10 08:52	1.0	2
005	075a005	X	DSL_500				03/16/10 09:19	1.0	3
006	075a006	X	JP5_250				03/16/10 09:47	1.0	4
007	075a007	X	IB				03/16/10 12:53	1.0	
008	075a008	X	CMARKER				03/16/10 13:21	1.0	1
009	075a009	X	MO_500				03/16/10 13:48	1.0	2
010	075a010	X	IB				03/16/10 14:40	1.0	
011	075a011	IB	CALIB				03/16/10 15:07	1.0	
012	075a012	ICAL	HEXOTP_5				03/16/10 15:35	1.0	5
013	075a013	ICAL	HEXOTP_10				03/16/10 16:03	1.0	6
014	075a014	ICAL	HEXOTP_25				03/16/10 16:30	1.0	7
015	075a015	ICAL	HEXOTP_50				03/16/10 16:58	1.0	8
016	075a016	ICAL	HEXOTP_100				03/16/10 17:25	1.0	9
017	075a017	ICAL	HEXOTP_200				03/16/10 17:53	1.0	10
018	075a018	IB	CALIB				03/16/10 18:20	1.0	
019	075a019	CMARKER	C8-C50				03/16/10 18:48	1.0	1
020	075a020	CCV	MO_500				03/16/10 19:15	1.0	2
021	075a021	CCV	DSL_250				03/16/10 19:42	1.0	11
022	075a022	X	CCV				03/16/10 20:10	1.0	2
023	075a023	X	CCV				03/16/10 20:37	1.0	11
024	075a024	BLANK	QC535926		Water	160891	03/16/10 21:05	1.0	
025	075a025	SAMPLE	218714-001	S	Water	160843	03/16/10 21:32	1.0	
026	075a026	BLANK	QC536089	S	Water	160933	03/16/10 22:00	1.0	
027	075a027	BLANK	QC536089		Water	160933	03/16/10 22:27	1.0	
028	075a028	BS	QC536090	S	Water	160933	03/16/10 22:54	1.0	
029	075a029	BSD	QC536091	S	Water	160933	03/16/10 23:22	1.0	
030	075a030	SAMPLE	218778-001		Water	160933	03/16/10 23:49	1.0	
031	075a031	SAMPLE	218778-002		Water	160933	03/17/10 00:17	1.0	
032	075a032	SAMPLE	218778-003		Water	160933	03/17/10 00:45	1.0	
033	075a033	SAMPLE	218778-004		Water	160933	03/17/10 01:12	1.0	
034	075a034	CCV	MO_500				03/17/10 01:39	1.0	2
035	075a035	CCV	DSL_1000				03/17/10 02:07	1.0	12
036	075a036	X	CCV				03/17/10 02:34	1.0	2
037	075a037	X	CCV				03/17/10 03:02	1.0	12
038	075a038	SAMPLE	218787-006	S	Water	160933	03/17/10 03:29	1.0	
039	075a039	SAMPLE	218787-007	S	Water	160933	03/17/10 03:56	1.0	
040	075a040	SAMPLE	218789-001	S	Water	160933	03/17/10 04:24	1.0	
041	075a041	SAMPLE	218789-002	S	Water	160933	03/17/10 04:52	1.0	
042	075a042	SAMPLE	218789-003	S	Water	160933	03/17/10 05:19	1.0	
043	075a043	X	CMARKER				03/17/10 05:47	1.0	1
044	075a044	X	MO_500				03/17/10 06:14	1.0	2
045	075a045	CCV	DSL_500				03/17/10 06:41	1.0	3
046	075a046	CCV	MO_500				03/17/10 07:09	1.0	2
047	075a047	X	CCV				03/17/10 07:36	1.0	3

JDG 03/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170112795

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/19/10 07:55
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	078a001	X	PRIMER			03/19/10 07:55	1.0	
002	078a002	X	IB			03/19/10 08:23	1.0	
003	078a003	CMARKER	C8-C50			03/19/10 08:50	1.0	1
004	078a004	CCV	MO_500			03/19/10 09:17	1.0	2
005	078a005	CCV	DSL_500			03/19/10 09:45	1.0	3
006	078a006	SAMPLE	218768-006	Water	161015	03/19/10 17:53	1.0	
007	078a007	SAMPLE	218768-007	Water	161015	03/19/10 18:20	1.0	
008	078a008	SAMPLE	218768-009	Water	161015	03/19/10 18:48	1.0	
009	078a009	SAMPLE	218801-002	Water	161015	03/19/10 19:16	1.0	
010	078a010	SAMPLE	218801-003	Water	161015	03/19/10 19:43	1.0	
011	078a011	SAMPLE	218801-004	Water	161015	03/19/10 20:10	1.0	
012	078a012	SAMPLE	218801-005	Water	161015	03/19/10 20:37	1.0	
013	078a013	SAMPLE	218801-006	Water	161015	03/19/10 21:05	1.0	
014	078a014	SAMPLE	218801-007	Water	161015	03/19/10 21:33	1.0	
015	078a015	SAMPLE	218801-008	Water	161015	03/19/10 22:00	1.0	
016	078a016	X	CMARKER			03/19/10 22:27	1.0	1
017	078a017	CCV	MO_500			03/19/10 22:55	1.0	2
018	078a018	CCV	DSL_250			03/19/10 23:22	1.0	4
019	078a019	X	CCV			03/19/10 23:49	1.0	2
020	078a020	X	CCV			03/20/10 00:17	1.0	4

SFL 03/21/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

SAMPLE PREPARATION SUMMARY

Batch # : 161015
 Started By : DJT
 Method : 3520C
 Spike #1 ID : S14152

Prep Date : 17-MAR-2010 15:00
 Spike #2 ID : S14101

Analysis : TEHM
 Finished By : KCL
 Units : mL
 Spike #3 ID : S13010

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
218768-002		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-005		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-006		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-007		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-008		Water	500	2.5	1	0.005	7	.5				TEHM	mss
218768-009		Water	500	2.5	1	0.005	5	.5				TEHM	
218801-002		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-005		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-006		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-007		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-008		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-009		Water	500	2.5	1	0.005	5	.5				TEHM	
QC536422	BLANK	Water	500	2.5	1	0.005		.5				TEHM	
QC536423	LCS	Water	500	2.5	1	0.005		.5	.5			TEHM	
QC536424	MS	Water	500	2.5	1	0.005	7	.5	.5			TEHM	
QC536425	MSD	Water	500	2.5	1	0.005	7	.5	.5			TEHM	
QC536426	LCS	Water	500	2.5	1	0.005		.5		.5		TEHM	

Analyst: SFL

Date: 03/24/10

Reviewer: JDG

Date: 03/24/10

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

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BK 2968

LIMS Batch No: 161015
 LIMS Analysis: TEHM
 Date Extracted: 3/17/10

Extraction Method:
 mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
 EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
2158768-002	D	500	7	2.5		
	003					
	004					
	005					
5	006					
	007					
	008		↓			MSS
	009		5			
10	218801-002		7			
	003					
	004					
	005					
	006					
	007					
15	008		↓			
	009		5			
	MB QC 536422	NA	NA			
	LCS	3	↓			
	MS	4	J	7		
20	MSD	5	K	↓		
*	LCS	6	NA	↓		
<i>KRL 3/22/10</i>						

Mfg & Lot# / LIMS # / Time Date/ Initials

0.5 mL of TEH_SURR was added to all samples 514152A DJS 3/17/10

0.5 mL of TEH_SP was added to all spikes 514101c/813010c*

pH of all samples adjusted to pH ≤ 2 with H₂SO₄ F5094395

3520c: Samples were continually extracted about 450 mL of CH₂Cl₂ E149338

Extraction Start Time: 1500

Extraction End Time: 900 DDC 3/18/10

3510c: Samples were extracted 3 times with 60 mL of CH₂Cl₂ N/A KCL 3/18/10

Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄ E14944931

Concentrated to final volume at temperature (degrees C) 100

Relinquished to TEH Department

[Signature] 3/17/10
 Extraction Chemist Date

Continued from Page _____
 Continued on Page _____

[Signature] 3/22/10
 Reviewed by Date

Laboratory Job Number 218768

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-004-UST-10Q1	Batch#:	161232
Lab ID:	218768-001	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	L2
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	V9
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-004-UST-10Q1	Batch#:	161232
Lab ID:	218768-001	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	L1
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-8B-UST-10Q1	Batch#:	161239
Lab ID:	218768-002	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	2.0	D2
Chloromethane	ND	2.0	D2
Vinyl Chloride	ND	1.0	D2
Bromomethane	ND	2.0	D2
Chloroethane	ND	2.0	D2
Trichlorofluoromethane	ND	2.0	D2
Iodomethane	ND	20	D2
Acetone	ND	20	D2
1,1-Dichloroethene	ND	1.0	D2
Methylene Chloride	ND	20	D2
Carbon Disulfide	ND	1.0	D2
MTBE	120	1.0	D2
trans-1,2-Dichloroethene	ND	1.0	D2
Vinyl Acetate	ND	20	D2
1,1-Dichloroethane	4.0	1.0	D2
2-Butanone	ND	20	D2
cis-1,2-Dichloroethene	ND	1.0	D2
2,2-Dichloropropane	ND	1.0	D2 V1
Chloroform	ND	1.0	D2
Bromochloromethane	ND	1.0	D2
1,1,1-Trichloroethane	ND	1.0	D2
1,1-Dichloropropene	ND	1.0	D2
Carbon Tetrachloride	ND	1.0	D2 L1 V1
1,2-Dichloroethane	ND	1.0	D2
Benzene	1.1	1.0	D2
Trichloroethene	2.7	1.0	D2
1,2-Dichloropropane	ND	1.0	D2
Bromodichloromethane	ND	1.0	D2
Dibromomethane	ND	1.0	D2
4-Methyl-2-Pentanone	ND	20	D2
cis-1,3-Dichloropropene	ND	1.0	D2
Toluene	ND	1.0	D2
trans-1,3-Dichloropropene	ND	1.0	D2
1,1,2-Trichloroethane	ND	1.0	D2
2-Hexanone	ND	20	D2
1,3-Dichloropropane	ND	1.0	D2
Tetrachloroethene	ND	1.0	D2

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	BC-8B-UST-10Q1	Batch#:	161239
Lab ID:	218768-002	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	1.0	D2
1,2-Dibromoethane	ND	1.0	D2
Chlorobenzene	ND	1.0	D2
1,1,1,2-Tetrachloroethane	ND	1.0	D2
Ethylbenzene	ND	1.0	D2
m,p-Xylenes	ND	1.0	D2
o-Xylene	ND	1.0	D2
Styrene	ND	1.0	D2
Bromoform	ND	2.0	D2
Isopropylbenzene	1.1	1.0	D2
1,1,2,2-Tetrachloroethane	ND	1.0	D2
1,2,3-Trichloropropane	ND	1.0	D2
Propylbenzene	ND	1.0	D2
Bromobenzene	ND	1.0	D2
1,3,5-Trimethylbenzene	ND	1.0	D2
2-Chlorotoluene	ND	1.0	D2
4-Chlorotoluene	ND	1.0	D2
tert-Butylbenzene	ND	1.0	D2
1,2,4-Trimethylbenzene	ND	1.0	D2
sec-Butylbenzene	ND	1.0	D2
para-Isopropyl Toluene	ND	1.0	D2
1,3-Dichlorobenzene	ND	1.0	D2
1,4-Dichlorobenzene	ND	1.0	D2
n-Butylbenzene	ND	1.0	D2
1,2-Dichlorobenzene	ND	1.0	D2
1,2-Dibromo-3-Chloropropane	ND	4.0	D2
1,2,4-Trichlorobenzene	ND	1.0	D2
Hexachlorobutadiene	ND	4.0	D2 L1 V1
Naphthalene	ND	4.0	D2
1,2,3-Trichlorobenzene	ND	1.0	D2
Xylene (total)	ND	1.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	114	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-001	Batch#:	161282
Lab ID:	218768-003	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	2.0	D2
Chloromethane	ND	2.0	D2
Vinyl Chloride	ND	1.0	D2
Bromomethane	ND	2.0	D2
Chloroethane	ND	2.0	D2
Trichlorofluoromethane	ND	2.0	D2
Iodomethane	ND	20	D2
Acetone	ND	20	D2
1,1-Dichloroethene	ND	1.0	D2
Methylene Chloride	ND	20	D2
Carbon Disulfide	ND	1.0	D2
MTBE	140	1.0	D2
trans-1,2-Dichloroethene	ND	1.0	D2
Vinyl Acetate	ND	20	D2
1,1-Dichloroethane	4.5	1.0	D2
2-Butanone	ND	20	D2
cis-1,2-Dichloroethene	ND	1.0	D2
2,2-Dichloropropane	ND	1.0	D2
Chloroform	ND	1.0	D2
Bromochloromethane	ND	1.0	D2
1,1,1-Trichloroethane	ND	1.0	D2
1,1-Dichloropropene	ND	1.0	D2
Carbon Tetrachloride	ND	1.0	D2
1,2-Dichloroethane	ND	1.0	D2
Benzene	1.1	1.0	D2
Trichloroethene	2.8	1.0	D2
1,2-Dichloropropane	ND	1.0	D2
Bromodichloromethane	ND	1.0	D2
Dibromomethane	ND	1.0	D2
4-Methyl-2-Pentanone	ND	20	D2
cis-1,3-Dichloropropene	ND	1.0	D2
Toluene	ND	1.0	D2
trans-1,3-Dichloropropene	ND	1.0	D2
1,1,2-Trichloroethane	ND	1.0	D2
2-Hexanone	ND	20	D2
1,3-Dichloropropane	ND	1.0	D2
Tetrachloroethene	ND	1.0	D2

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-001	Batch#:	161282
Lab ID:	218768-003	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	2.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	1.0	D2
1,2-Dibromoethane	ND	1.0	D2
Chlorobenzene	ND	1.0	D2
1,1,1,2-Tetrachloroethane	ND	1.0	D2
Ethylbenzene	ND	1.0	D2
m,p-Xylenes	ND	1.0	D2
o-Xylene	ND	1.0	D2
Styrene	ND	1.0	D2
Bromoform	ND	2.0	D2
Isopropylbenzene	1.1	1.0	D2
1,1,2,2-Tetrachloroethane	ND	1.0	D2
1,2,3-Trichloropropane	ND	1.0	D2
Propylbenzene	1.1	1.0	D2
Bromobenzene	ND	1.0	D2
1,3,5-Trimethylbenzene	ND	1.0	D2
2-Chlorotoluene	ND	1.0	D2
4-Chlorotoluene	ND	1.0	D2
tert-Butylbenzene	ND	1.0	D2
1,2,4-Trimethylbenzene	ND	1.0	D2
sec-Butylbenzene	ND	1.0	D2
para-Isopropyl Toluene	ND	1.0	D2
1,3-Dichlorobenzene	ND	1.0	D2
1,4-Dichlorobenzene	ND	1.0	D2
n-Butylbenzene	ND	1.0	D2
1,2-Dichlorobenzene	ND	1.0	D2
1,2-Dibromo-3-Chloropropane	ND	4.0	D2
1,2,4-Trichlorobenzene	ND	1.0	D2
Hexachlorobutadiene	ND	4.0	D2
Naphthalene	ND	4.0	D2
1,2,3-Trichlorobenzene	ND	1.0	D2
Xylene (total)	ND	1.0	D2

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-97A-UST-10Q1	Batch#:	161239
Lab ID:	218768-004	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	0.7	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	2.4	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	19	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	11	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.7	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-97A-UST-10Q1	Batch#:	161239
Lab ID:	218768-004	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	0.7	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	0.7	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	98	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-126A-UST-10Q1	Batch#:	161239
Lab ID:	218768-005	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	0.8	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	1.3	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	31	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	10	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	1.0	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	1.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-126A-UST-10Q1	Batch#:	161239
Lab ID:	218768-005	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	1.3	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	0.6	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	1.0	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	113	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-84A-UST-10Q1	Batch#:	161239
Lab ID:	218768-006	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	2.9	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	0.7	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	2.4	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-84A-UST-10Q1	Batch#:	161239
Lab ID:	218768-006	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	0.5	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	0.5	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	113	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-125A-UST-10Q1	Batch#:	161239
Lab ID:	218768-007	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-125A-UST-10Q1	Batch#:	161239
Lab ID:	218768-007	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	111	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-95A-UST-10Q1	Batch#:	161239
Lab ID:	218768-008	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	18	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 M1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-95A-UST-10Q1	Batch#:	161239
Lab ID:	218768-008	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 M1 V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	113	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-004-UST-10Q1	Batch#:	161239
Lab ID:	218768-009	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	0.6	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-004-UST-10Q1	Batch#:	161239
Lab ID:	218768-009	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	112	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161232
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Type: BS Lab ID: QC537341

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	25.00	12.80	51 *	56-140	L2	
Chloromethane	25.00	17.44	70	46-142		
Vinyl Chloride	25.00	19.50	78	49-136		
Bromomethane	25.00	28.44	b 114	42-154	V3	
Chloroethane	25.00	22.72	91	51-133		
Trichlorofluoromethane	25.00	22.55	90	63-135		
Iodomethane	25.00	23.77	b 95	70-130		
Acetone	25.00	20.63	83	48-130		
1,1-Dichloroethene	25.00	29.67	119	68-133		
Methylene Chloride	25.00	24.39	98	71-120		
Carbon Disulfide	25.00	26.56	106	56-120		
MTBE	25.00	20.51	82	58-120		
trans-1,2-Dichloroethene	25.00	26.97	108	80-120		
Vinyl Acetate	25.00	25.96	104	63-124		
1,1-Dichloroethane	25.00	25.20	101	77-120		
2-Butanone	25.00	19.53	b 78	57-120	V9	
cis-1,2-Dichloroethene	25.00	25.82	103	75-120		
2,2-Dichloropropane	25.00	27.62	110	72-128		
Chloroform	25.00	24.24	97	78-120		
Bromochloromethane	25.00	24.11	96	78-120		
1,1,1-Trichloroethane	25.00	25.50	102	78-120		
1,1-Dichloropropene	25.00	26.33	105	75-120		
Carbon Tetrachloride	25.00	25.48	102	80-120		
1,2-Dichloroethane	25.00	21.52	86	74-120		
Benzene	25.00	26.30	105	77-120		
Trichloroethene	25.00	24.89	100	78-122		
1,2-Dichloropropane	25.00	22.93	92	76-120		
Bromodichloromethane	25.00	23.58	94	78-120		
Dibromomethane	25.00	23.21	93	77-120		
4-Methyl-2-Pentanone	25.00	20.20	81	65-120		
cis-1,3-Dichloropropene	25.00	23.38	94	76-120		
Toluene	25.00	28.45	114	73-120		
trans-1,3-Dichloropropene	25.00	21.54	86	72-120		
1,1,2-Trichloroethane	25.00	24.66	99	76-120		
2-Hexanone	25.00	21.31	85	57-121		
1,3-Dichloropropane	25.00	24.71	99	75-120		
Tetrachloroethene	25.00	29.41	118	77-120		
Dibromochloromethane	25.00	24.06	96	76-120		
1,2-Dibromoethane	25.00	24.84	99	77-120		
Chlorobenzene	25.00	27.77	111	78-120		
1,1,1,2-Tetrachloroethane	25.00	26.63	107	77-120		
Ethylbenzene	25.00	28.57	114	78-120		
m,p-Xylenes	50.00	58.78	118	77-120		
o-Xylene	25.00	29.50	118	77-120		
Styrene	25.00	28.92	116	77-120		
Bromoform	25.00	24.83	99	74-121		
Isopropylbenzene	25.00	26.88	108	71-120		
1,1,2,2-Tetrachloroethane	25.00	25.04	100	73-120		
1,2,3-Trichloropropane	25.00	25.20	101	72-120		
Propylbenzene	25.00	29.85	119	76-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161232
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	25.00	28.58	114	75-120	
1,3,5-Trimethylbenzene	25.00	29.85	119	77-120	
2-Chlorotoluene	25.00	28.77	115	76-120	
4-Chlorotoluene	25.00	27.55	110	78-120	
tert-Butylbenzene	25.00	30.25	121 *	76-120	L1
1,2,4-Trimethylbenzene	25.00	28.65	115	77-120	
sec-Butylbenzene	25.00	30.65	123 *	80-120	L1
para-Isopropyl Toluene	25.00	29.69	119	76-120	
1,3-Dichlorobenzene	25.00	27.73	111	75-120	
1,4-Dichlorobenzene	25.00	26.57	106	77-120	
n-Butylbenzene	25.00	28.66	115	76-120	
1,2-Dichlorobenzene	25.00	27.57	110	76-120	
1,2-Dibromo-3-Chloropropane	25.00	21.14	85	65-120	
1,2,4-Trichlorobenzene	25.00	25.73	103	73-121	
Hexachlorobutadiene	25.00	29.76	119	73-123	
Naphthalene	25.00	24.33	97	62-121	
1,2,3-Trichlorobenzene	25.00	26.84	107	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	96	77-120	
1,2-Dichloroethane-d4	88	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	100	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161232
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Type: BSD Lab ID: QC537342

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	11.90	48 *	56-140	7	24	L2	
Chloromethane	25.00	15.19	61	46-142	14	24		
Vinyl Chloride	25.00	17.84	71	49-136	9	24		
Bromomethane	25.00	25.73 b	103	42-154	10	24	V3	
Chloroethane	25.00	20.62	82	51-133	10	25		
Trichlorofluoromethane	25.00	20.44	82	63-135	10	20		
Iodomethane	25.00	24.30 b	97	70-130	2	20		
Acetone	25.00	19.18	77	48-130	7	41		
1,1-Dichloroethene	25.00	27.58	110	68-133	7	20		
Methylene Chloride	25.00	23.51	94	71-120	4	20		
Carbon Disulfide	25.00	24.80	99	56-120	7	20		
MTBE	25.00	20.99	84	58-120	2	21		
trans-1,2-Dichloroethene	25.00	25.56	102	80-120	5	24		
Vinyl Acetate	25.00	26.40	106	63-124	2	24		
1,1-Dichloroethane	25.00	23.64	95	77-120	6	20		
2-Butanone	25.00	20.01 b	80	57-120	2	32	V9	
cis-1,2-Dichloroethene	25.00	25.17	101	75-120	3	20		
2,2-Dichloropropane	25.00	26.89	108	72-128	3	24		
Chloroform	25.00	23.23	93	78-120	4	20		
Bromochloromethane	25.00	24.03	96	78-120	0	20		
1,1,1-Trichloroethane	25.00	24.01	96	78-120	6	20		
1,1-Dichloropropene	25.00	25.49	102	75-120	3	21		
Carbon Tetrachloride	25.00	24.73	99	80-120	3	21		
1,2-Dichloroethane	25.00	21.43	86	74-120	0	20		
Benzene	25.00	25.44	102	77-120	3	20		
Trichloroethene	25.00	24.37	97	78-122	2	20		
1,2-Dichloropropane	25.00	22.59	90	76-120	1	20		
Bromodichloromethane	25.00	22.70	91	78-120	4	20		
Dibromomethane	25.00	23.58	94	77-120	2	20		
4-Methyl-2-Pentanone	25.00	20.96	84	65-120	4	22		
cis-1,3-Dichloropropene	25.00	22.84	91	76-120	2	20		
Toluene	25.00	29.17	117	73-120	3	20		
trans-1,3-Dichloropropene	25.00	22.67	91	72-120	5	20		
1,1,2-Trichloroethane	25.00	26.03	104	76-120	5	20		
2-Hexanone	25.00	24.29	97	57-121	13	25		
1,3-Dichloropropane	25.00	26.95	108	75-120	9	20		
Tetrachloroethene	25.00	29.68	119	77-120	1	20		
Dibromochloromethane	25.00	25.90	104	76-120	7	20		
1,2-Dibromoethane	25.00	26.78	107	77-120	8	20		
Chlorobenzene	25.00	27.15	109	78-120	2	20		
1,1,1,2-Tetrachloroethane	25.00	26.66	107	77-120	0	20		
Ethylbenzene	25.00	28.93	116	78-120	1	26		
m,p-Xylenes	50.00	59.30	119	77-120	1	20		
o-Xylene	25.00	29.26	117	77-120	1	20		
Styrene	25.00	29.50	118	77-120	2	20		
Bromoform	25.00	26.68	107	74-121	7	21		
Isopropylbenzene	25.00	25.27	101	71-120	6	20		
1,1,2,2-Tetrachloroethane	25.00	25.87	103	73-120	3	20		
1,2,3-Trichloropropane	25.00	25.50	102	72-120	1	20		
Propylbenzene	25.00	28.41	114	76-120	5	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161232
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Bromobenzene	25.00	28.22	113	75-120	1	20		
1,3,5-Trimethylbenzene	25.00	28.11	112	77-120	6	20		
2-Chlorotoluene	25.00	27.11	108	76-120	6	20		
4-Chlorotoluene	25.00	26.89	108	78-120	2	20		
tert-Butylbenzene	25.00	28.29	113	76-120	7	21		
1,2,4-Trimethylbenzene	25.00	27.24	109	77-120	5	20		
sec-Butylbenzene	25.00	29.59	118	80-120	4	21		
para-Isopropyl Toluene	25.00	27.91	112	76-120	6	20		
1,3-Dichlorobenzene	25.00	26.68	107	75-120	4	20		
1,4-Dichlorobenzene	25.00	25.99	104	77-120	2	23		
n-Butylbenzene	25.00	27.48	110	76-120	4	21		
1,2-Dichlorobenzene	25.00	26.53	106	76-120	4	20		
1,2-Dibromo-3-Chloropropane	25.00	22.58	90	65-120	7	22		
1,2,4-Trichlorobenzene	25.00	25.34	101	73-121	2	20		
Hexachlorobutadiene	25.00	28.10	112	73-123	6	25		
Naphthalene	25.00	24.47	98	62-121	1	32		
1,2,3-Trichlorobenzene	25.00	26.26	105	66-123	2	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	95	77-120		
1,2-Dichloroethane-d4	91	70-127		
Toluene-d8	109	83-125		
Bromofluorobenzene	101	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537345	Batch#:	161232
Matrix:	Water	Analyzed:	03/24/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	L2
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	V9
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537345	Batch#:	161232
Matrix:	Water	Analyzed:	03/24/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	L1
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	L1
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	95	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	103	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161239
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Type: BS Lab ID: QC537368

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	25.00	14.32	57	56-140		
Chloromethane	25.00	13.38	54	46-142		
Vinyl Chloride	25.00	15.27	61	49-136		
Bromomethane	25.00	15.98	b 64	42-154	V9	
Chloroethane	25.00	18.31	73	51-133		
Trichlorofluoromethane	25.00	21.52	86	63-135		
Iodomethane	25.00	21.28	b 85	70-130	V9	
Acetone	25.00	25.83	103	48-130		
1,1-Dichloroethene	25.00	23.46	94	68-133		
Methylene Chloride	25.00	21.80	87	71-120		
Carbon Disulfide	25.00	21.22	85	56-120		
MTBE	25.00	20.93	84	58-120		
trans-1,2-Dichloroethene	25.00	22.62	90	80-120		
Vinyl Acetate	25.00	22.71	91	63-124		
1,1-Dichloroethane	25.00	22.62	90	77-120		
2-Butanone	25.00	23.09	92	57-120		
cis-1,2-Dichloroethene	25.00	22.97	92	75-120		
2,2-Dichloropropane	25.00	27.23	109	72-128		
Chloroform	25.00	23.83	95	78-120		
Bromochloromethane	25.00	23.51	94	78-120		
1,1,1-Trichloroethane	25.00	26.83	107	78-120		
1,1-Dichloropropene	25.00	27.01	108	75-120		
Carbon Tetrachloride	25.00	30.79	123 *	80-120	L1	
1,2-Dichloroethane	25.00	26.09	104	74-120		
Benzene	25.00	24.77	99	77-120		
Trichloroethene	25.00	25.81	103	78-122		
1,2-Dichloropropane	25.00	22.68	91	76-120		
Bromodichloromethane	25.00	25.05	100	78-120		
Dibromomethane	25.00	24.95	100	77-120		
4-Methyl-2-Pentanone	25.00	23.79	95	65-120		
cis-1,3-Dichloropropene	25.00	23.72	95	76-120		
Toluene	25.00	24.97	100	73-120		
trans-1,3-Dichloropropene	25.00	21.75	87	72-120		
1,1,2-Trichloroethane	25.00	23.80	95	76-120		
2-Hexanone	25.00	24.50	98	57-121		
1,3-Dichloropropane	25.00	24.03	96	75-120		
Tetrachloroethene	25.00	28.87	115	77-120		
Dibromochloromethane	25.00	24.44	98	76-120		
1,2-Dibromoethane	25.00	25.48	102	77-120		
Chlorobenzene	25.00	24.38	98	78-120		
1,1,1,2-Tetrachloroethane	25.00	25.82	103	77-120		
Ethylbenzene	25.00	25.91	104	78-120		
m,p-Xylenes	50.00	50.50	101	77-120		
o-Xylene	25.00	25.13	101	77-120		
Styrene	25.00	24.63	99	77-120		
Bromoform	25.00	25.70	103	74-121		
Isopropylbenzene	25.00	22.48	90	71-120		
1,1,2,2-Tetrachloroethane	25.00	21.92	88	73-120		
1,2,3-Trichloropropane	25.00	23.46	94	72-120		
Propylbenzene	25.00	25.46	102	76-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161239
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Bromobenzene	25.00	24.81	99	75-120	
1,3,5-Trimethylbenzene	25.00	25.79	103	77-120	
2-Chlorotoluene	25.00	25.13	101	76-120	
4-Chlorotoluene	25.00	24.23	97	78-120	
tert-Butylbenzene	25.00	26.57	106	76-120	
1,2,4-Trimethylbenzene	25.00	24.98	100	77-120	
sec-Butylbenzene	25.00	26.93	108	80-120	
para-Isopropyl Toluene	25.00	25.89	104	76-120	
1,3-Dichlorobenzene	25.00	24.28	97	75-120	
1,4-Dichlorobenzene	25.00	24.09	96	77-120	
n-Butylbenzene	25.00	26.70	107	76-120	
1,2-Dichlorobenzene	25.00	24.61	98	76-120	
1,2-Dibromo-3-Chloropropane	25.00	25.76	103	65-120	
1,2,4-Trichlorobenzene	25.00	25.09	100	73-121	
Hexachlorobutadiene	25.00	31.45	126 *	73-123	L1
Naphthalene	25.00	21.61 b	86	62-121	V9
1,2,3-Trichlorobenzene	25.00	26.45	106	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	97	77-120	
1,2-Dichloroethane-d4	110	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	97	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161239
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Type: BSD Lab ID: QC537369

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	14.26	57	56-140	0	24		
Chloromethane	25.00	13.71	55	46-142	2	24		
Vinyl Chloride	25.00	14.83	59	49-136	3	24		
Bromomethane	25.00	16.18	b 65	42-154	1	24	V9	
Chloroethane	25.00	17.09	68	51-133	7	25		
Trichlorofluoromethane	25.00	20.82	83	63-135	3	20		
Iodomethane	25.00	22.78	b 91	70-130	7	20	V9	
Acetone	25.00	24.55	98	48-130	5	41		
1,1-Dichloroethene	25.00	23.91	96	68-133	2	20		
Methylene Chloride	25.00	21.56	86	71-120	1	20		
Carbon Disulfide	25.00	21.48	86	56-120	1	20		
MTBE	25.00	21.12	84	58-120	1	21		
trans-1,2-Dichloroethene	25.00	22.82	91	80-120	1	24		
Vinyl Acetate	25.00	22.36	89	63-124	2	24		
1,1-Dichloroethane	25.00	22.29	89	77-120	1	20		
2-Butanone	25.00	23.28	93	57-120	1	32		
cis-1,2-Dichloroethene	25.00	23.44	94	75-120	2	20		
2,2-Dichloropropane	25.00	27.39	110	72-128	1	24		
Chloroform	25.00	24.18	97	78-120	1	20		
Bromochloromethane	25.00	23.98	96	78-120	2	20		
1,1,1-Trichloroethane	25.00	27.01	108	78-120	1	20		
1,1-Dichloropropene	25.00	27.38	110	75-120	1	21		
Carbon Tetrachloride	25.00	31.21	125	* 80-120	1	21	L1	
1,2-Dichloroethane	25.00	26.16	105	74-120	0	20		
Benzene	25.00	25.61	102	77-120	3	20		
Trichloroethene	25.00	25.85	103	78-122	0	20		
1,2-Dichloropropane	25.00	22.78	91	76-120	0	20		
Bromodichloromethane	25.00	25.47	102	78-120	2	20		
Dibromomethane	25.00	25.25	101	77-120	1	20		
4-Methyl-2-Pentanone	25.00	24.15	97	65-120	1	22		
cis-1,3-Dichloropropene	25.00	24.11	96	76-120	2	20		
Toluene	25.00	25.35	101	73-120	2	20		
trans-1,3-Dichloropropene	25.00	21.86	87	72-120	1	20		
1,1,2-Trichloroethane	25.00	24.36	97	76-120	2	20		
2-Hexanone	25.00	25.45	102	57-121	4	25		
1,3-Dichloropropane	25.00	24.57	98	75-120	2	20		
Tetrachloroethene	25.00	29.09	116	77-120	1	20		
Dibromochloromethane	25.00	25.55	102	76-120	4	20		
1,2-Dibromoethane	25.00	26.14	105	77-120	3	20		
Chlorobenzene	25.00	25.09	100	78-120	3	20		
1,1,1,2-Tetrachloroethane	25.00	26.38	106	77-120	2	20		
Ethylbenzene	25.00	26.33	105	78-120	2	26		
m,p-Xylenes	50.00	52.12	104	77-120	3	20		
o-Xylene	25.00	25.82	103	77-120	3	20		
Styrene	25.00	25.28	101	77-120	3	20		
Bromoform	25.00	26.56	106	74-121	3	21		
Isopropylbenzene	25.00	22.94	92	71-120	2	20		
1,1,2,2-Tetrachloroethane	25.00	23.42	94	73-120	7	20		
1,2,3-Trichloropropane	25.00	24.00	96	72-120	2	20		
Propylbenzene	25.00	26.35	105	76-120	3	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161239
Units:	ug/L	Analyzed:	03/24/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Bromobenzene	25.00	26.08	104	75-120	5	20		
1,3,5-Trimethylbenzene	25.00	26.47	106	77-120	3	20		
2-Chlorotoluene	25.00	25.87	103	76-120	3	20		
4-Chlorotoluene	25.00	25.14	101	78-120	4	20		
tert-Butylbenzene	25.00	27.61	110	76-120	4	21		
1,2,4-Trimethylbenzene	25.00	25.18	101	77-120	1	20		
sec-Butylbenzene	25.00	28.19	113	80-120	5	21		
para-Isopropyl Toluene	25.00	26.55	106	76-120	3	20		
1,3-Dichlorobenzene	25.00	25.37	101	75-120	4	20		
1,4-Dichlorobenzene	25.00	25.23	101	77-120	5	23		
n-Butylbenzene	25.00	27.34	109	76-120	2	21		
1,2-Dichlorobenzene	25.00	25.67	103	76-120	4	20		
1,2-Dibromo-3-Chloropropane	25.00	25.62	102	65-120	1	22		
1,2,4-Trichlorobenzene	25.00	26.37	105	73-121	5	20		
Hexachlorobutadiene	25.00	32.38	130	* 73-123	3	25		L1
Naphthalene	25.00	22.87 b	91	62-121	6	32		V9
1,2,3-Trichlorobenzene	25.00	27.52	110	66-123	4	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	97	77-120		
1,2-Dichloroethane-d4	107	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	97	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537370	Batch#:	161239
Matrix:	Water	Analyzed:	03/24/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537370	Batch#:	161239
Matrix:	Water	Analyzed:	03/24/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1
Naphthalene	ND	2.0	V9
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	97	77-120	
1,2-Dichloroethane-d4	113	70-127	
Toluene-d8	98	83-125	
Bromofluorobenzene	96	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161232
MSS Lab ID:	218841-006	Sampled:	03/15/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Type: MS Lab ID: QC537438

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	<0.1733	25.00	22.56	90	56-140		
Chloromethane	<0.2133	25.00	19.33	77	46-142		
Vinyl Chloride	<0.1202	25.00	22.13	89	49-136		
Bromomethane	<0.1692	25.00	29.53	118	42-154		
Chloroethane	<0.1670	25.00	23.21	93	51-133		
Trichlorofluoromethane	<0.1840	25.00	23.60	94	63-135		
Iodomethane	<0.1570	25.00	25.20	b 101	60-140		
Acetone	0.7831	25.00	19.29	74	48-130		
1,1-Dichloroethene	0.1910	25.00	27.03	107	68-133		
Methylene Chloride	0.1809	25.00	23.18	92	71-120		
Carbon Disulfide	<0.1000	25.00	24.21	97	56-120		
MTBE	12.99	25.00	32.74	79	58-120		
trans-1,2-Dichloroethene	2.259	25.00	27.20	100	80-120		
Vinyl Acetate	<0.5118	25.00	16.91	68	63-124		
1,1-Dichloroethane	<0.1000	25.00	23.60	94	77-120		
2-Butanone	<0.2956	25.00	19.19	b 77	57-120	V9	
cis-1,2-Dichloroethene	9.238	25.00	33.87	99	75-120		
2,2-Dichloropropane	<0.1000	25.00	24.55	98	72-128		
Chloroform	<0.1000	25.00	23.22	93	78-120		
Bromochloromethane	<0.1508	25.00	24.92	100	78-120		
1,1,1-Trichloroethane	<0.1000	25.00	23.39	94	78-120		
1,1-Dichloropropene	<0.1000	25.00	24.95	100	75-120		
Carbon Tetrachloride	<0.1000	25.00	24.05	96	80-120		
1,2-Dichloroethane	<0.1000	25.00	21.38	86	74-120		
Benzene	<0.1000	25.00	25.25	101	77-120		
Trichloroethene	31.44	25.00	49.99	74 *	78-122	M2	
1,2-Dichloropropane	<0.1501	25.00	22.43	90	76-120		
Bromodichloromethane	<0.1000	25.00	22.24	89	78-120		
Dibromomethane	<0.1000	25.00	23.76	95	77-120		
4-Methyl-2-Pentanone	<0.1884	25.00	21.75	87	65-120		
cis-1,3-Dichloropropene	<0.1000	25.00	22.63	91	76-120		
Toluene	<0.1000	25.00	27.76	111	73-120		
trans-1,3-Dichloropropene	<0.1000	25.00	20.57	82	72-120		
1,1,2-Trichloroethane	<0.1596	25.00	25.92	104	76-120		
2-Hexanone	<0.1592	25.00	22.72	91	57-121		
1,3-Dichloropropane	<0.1000	25.00	26.01	104	75-120		
Tetrachloroethene	55.58	25.00	74.08	74 *	77-120	M2	
Dibromochloromethane	<0.1000	25.00	25.50	102	76-120		
1,2-Dibromoethane	<0.1000	25.00	26.35	105	77-120		
Chlorobenzene	<0.1136	25.00	27.13	109	78-120		
1,1,1,2-Tetrachloroethane	<0.1000	25.00	26.32	105	77-120		
Ethylbenzene	<0.1561	25.00	28.29	113	78-120		
m,p-Xylenes	<0.1000	50.00	57.26	115	77-120		
o-Xylene	<0.09974	25.00	27.81	111	77-120		
Styrene	<0.1000	25.00	12.34	49 *	77-120	M2	
Bromoform	<0.1000	25.00	26.92	108	74-121		
Isopropylbenzene	<0.1000	25.00	25.03	100	71-120		
1,1,2,2-Tetrachloroethane	<0.1000	25.00	26.62	106	73-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161232
MSS Lab ID:	218841-006	Sampled:	03/15/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1388	25.00	25.60	102	72-120	
Propylbenzene	<0.1074	25.00	28.20	113	76-120	
Bromobenzene	<0.1000	25.00	29.14	117	75-120	
1,3,5-Trimethylbenzene	<0.1017	25.00	28.04	112	77-120	
2-Chlorotoluene	<0.1027	25.00	26.87	107	76-120	
4-Chlorotoluene	<0.1554	25.00	26.40	106	78-120	
tert-Butylbenzene	<0.1000	25.00	28.90	116	76-120	
1,2,4-Trimethylbenzene	<0.1598	25.00	27.08	108	77-120	
sec-Butylbenzene	<0.1102	25.00	28.88	116	80-120	
para-Isopropyl Toluene	<0.1014	25.00	27.36	109	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	26.58	106	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	26.45	106	77-120	
n-Butylbenzene	<0.1011	25.00	25.96	104	76-120	
1,2-Dichlorobenzene	<0.1000	25.00	27.01	108	76-120	
1,2-Dibromo-3-Chloropropane	<0.1880	25.00	0.1220	0 *	65-120	M2
1,2,4-Trichlorobenzene	<0.1138	25.00	24.96	100	73-121	
Hexachlorobutadiene	<0.1492	25.00	25.89	104	73-123	
Naphthalene	<0.1000	25.00	25.25	101	62-121	
1,2,3-Trichlorobenzene	<0.1000	25.00	25.82	103	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	94	77-120	
1,2-Dichloroethane-d4	89	70-127	
Toluene-d8	104	83-125	
Bromofluorobenzene	101	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161232
MSS Lab ID:	218841-006	Sampled:	03/15/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Type: MSD Lab ID: QC537439

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	23.39	94	56-140	4	24		
Chloromethane	25.00	20.63	83	46-142	7	24		
Vinyl Chloride	25.00	22.63	91	49-136	2	24		
Bromomethane	25.00	31.13	125	42-154	5	24		
Chloroethane	25.00	24.12	96	51-133	4	25		
Trichlorofluoromethane	25.00	24.73	99	63-135	5	20		
Iodomethane	25.00	26.68	b 107	60-140	6	30		
Acetone	25.00	20.28	78	48-130	5	41		
1,1-Dichloroethene	25.00	28.24	112	68-133	4	20		
Methylene Chloride	25.00	24.58	98	71-120	6	20		
Carbon Disulfide	25.00	24.71	99	56-120	2	20		
MTBE	25.00	35.09	88	58-120	7	21		
trans-1,2-Dichloroethene	25.00	27.99	103	80-120	3	24		
Vinyl Acetate	25.00	17.50	70	63-124	3	24		
1,1-Dichloroethane	25.00	24.00	96	77-120	2	20		
2-Butanone	25.00	19.58	b 78	57-120	2	32	V9	
cis-1,2-Dichloroethene	25.00	33.62	98	75-120	1	20		
2,2-Dichloropropane	25.00	24.47	98	72-128	0	24		
Chloroform	25.00	23.45	94	78-120	1	20		
Bromochloromethane	25.00	25.22	101	78-120	1	20		
1,1,1-Trichloroethane	25.00	23.41	94	78-120	0	20		
1,1-Dichloropropene	25.00	24.76	99	75-120	1	21		
Carbon Tetrachloride	25.00	24.14	97	80-120	0	21		
1,2-Dichloroethane	25.00	21.30	85	74-120	0	20		
Benzene	25.00	24.65	99	77-120	2	20		
Trichloroethene	25.00	49.74	73 *	78-122	0	20	M2	
1,2-Dichloropropane	25.00	22.69	91	76-120	1	20		
Bromodichloromethane	25.00	22.99	92	78-120	3	20		
Dibromomethane	25.00	23.95	96	77-120	1	20		
4-Methyl-2-Pentanone	25.00	22.22	89	65-120	2	22		
cis-1,3-Dichloropropene	25.00	22.21	89	76-120	2	20		
Toluene	25.00	27.37	109	73-120	1	20		
trans-1,3-Dichloropropene	25.00	20.53	82	72-120	0	20		
1,1,2-Trichloroethane	25.00	25.62	102	76-120	1	20		
2-Hexanone	25.00	21.28	85	57-121	7	25		
1,3-Dichloropropane	25.00	24.19	97	75-120	7	20		
Tetrachloroethene	25.00	73.25	71 *	77-120	1	20	M2	
Dibromochloromethane	25.00	24.63	99	76-120	3	20		
1,2-Dibromoethane	25.00	25.38	102	77-120	4	20		
Chlorobenzene	25.00	25.94	104	78-120	4	20		
1,1,1,2-Tetrachloroethane	25.00	25.87	103	77-120	2	20		
Ethylbenzene	25.00	26.73	107	78-120	6	26		
m,p-Xylenes	50.00	54.80	110	77-120	4	20		
o-Xylene	25.00	26.77	107	77-120	4	20		
Styrene	25.00	11.45	46 *	77-120	8	20	M2	
Bromoform	25.00	26.43	106	74-121	2	21		
Isopropylbenzene	25.00	24.32	97	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	27.08	108	73-120	2	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161232
MSS Lab ID:	218841-006	Sampled:	03/15/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,2,3-Trichloropropane	25.00	24.76	99	72-120	3	20		
Propylbenzene	25.00	27.37	109	76-120	3	20		
Bromobenzene	25.00	27.89	112	75-120	4	20		
1,3,5-Trimethylbenzene	25.00	27.23	109	77-120	3	20		
2-Chlorotoluene	25.00	26.44	106	76-120	2	20		
4-Chlorotoluene	25.00	26.07	104	78-120	1	20		
tert-Butylbenzene	25.00	26.99	108	76-120	7	21		
1,2,4-Trimethylbenzene	25.00	25.90	104	77-120	4	20		
sec-Butylbenzene	25.00	28.81	115	80-120	0	21		
para-Isopropyl Toluene	25.00	26.49	106	76-120	3	20		
1,3-Dichlorobenzene	25.00	26.24	105	75-120	1	20		
1,4-Dichlorobenzene	25.00	25.58	102	77-120	3	23		
n-Butylbenzene	25.00	26.24	105	76-120	1	21		
1,2-Dichlorobenzene	25.00	26.19	105	76-120	3	20		
1,2-Dibromo-3-Chloropropane	25.00	0.05090	0 *	65-120	82 *	22	M2	R2
1,2,4-Trichlorobenzene	25.00	24.63	99	73-121	1	20		
Hexachlorobutadiene	25.00	25.29	101	73-123	2	25		
Naphthalene	25.00	24.59	98	62-121	3	32		
1,2,3-Trichlorobenzene	25.00	25.51	102	66-123	1	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	95	77-120		
1,2-Dichloroethane-d4	88	70-127		
Toluene-d8	98	83-125		
Bromofluorobenzene	100	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-95A-UST-10Q1	Batch#:	161239
MSS Lab ID:	218768-008	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Type: MS Lab ID: QC537442

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	<0.1510	25.00	30.50	122	56-140		
Chloromethane	<0.1377	25.00	19.86	79	46-142		
Vinyl Chloride	<0.1540	25.00	23.69	95	49-136		
Bromomethane	<0.2087	25.00	27.16	109	42-154		
Chloroethane	<0.1811	25.00	23.76	95	51-133		
Trichlorofluoromethane	<0.1234	25.00	27.48	110	63-135		
Iodomethane	<0.1689	25.00	22.23	89	60-140		
Acetone	<0.3676	25.00	22.46	87	48-130		
1,1-Dichloroethene	<0.1000	25.00	25.42	102	68-133		
Methylene Chloride	0.3505	25.00	23.57	93	71-120		
Carbon Disulfide	<0.1094	25.00	23.13	93	56-120		
MTBE	18.28	25.00	40.07	87	58-120		
trans-1,2-Dichloroethene	<0.1385	25.00	24.38	98	80-120		
Vinyl Acetate	<0.1502	25.00	19.81	79	63-124		
1,1-Dichloroethane	0.2767	25.00	25.73	102	77-120		
2-Butanone	<0.4234	25.00	22.49	90	57-120		
cis-1,2-Dichloroethene	<0.1018	25.00	25.34	101	75-120		
2,2-Dichloropropane	<0.1401	25.00	25.80	b 103	72-128	V3	
Chloroform	<0.1169	25.00	25.89	104	78-120		
Bromochloromethane	<0.1000	25.00	24.93	100	78-120		
1,1,1-Trichloroethane	<0.1280	25.00	29.22	117	78-120		
1,1-Dichloropropene	<0.1000	25.00	28.28	113	75-120		
Carbon Tetrachloride	<0.1000	25.00	31.61	b 126 *	80-120	M1 V3	
1,2-Dichloroethane	<0.1000	25.00	27.37	109	74-120		
Benzene	0.1535	25.00	26.85	107	77-120		
Trichloroethene	<0.1161	25.00	27.56	110	78-122		
1,2-Dichloropropane	<0.1000	25.00	24.59	98	76-120		
Bromodichloromethane	<0.1000	25.00	26.25	105	78-120		
Dibromomethane	<0.1000	25.00	25.92	104	77-120		
4-Methyl-2-Pentanone	<0.1051	25.00	23.56	94	65-120		
cis-1,3-Dichloropropene	<0.1000	25.00	23.29	93	76-120		
Toluene	<0.1000	25.00	26.15	105	73-120		
trans-1,3-Dichloropropene	<0.1000	25.00	20.19	81	72-120		
1,1,2-Trichloroethane	<0.1065	25.00	24.45	98	76-120		
2-Hexanone	<0.1731	25.00	23.14	93	57-121		
1,3-Dichloropropane	<0.1000	25.00	25.03	100	75-120		
Tetrachloroethene	0.1408	25.00	28.97	115	77-120		
Dibromochloromethane	<0.1000	25.00	23.99	96	76-120		
1,2-Dibromoethane	<0.1000	25.00	25.95	104	77-120		
Chlorobenzene	<0.1000	25.00	25.76	103	78-120		
1,1,1,2-Tetrachloroethane	<0.1111	25.00	26.31	105	77-120		
Ethylbenzene	<0.1022	25.00	27.20	109	78-120		
m,p-Xylenes	<0.1357	50.00	53.25	107	77-120		
o-Xylene	<0.1322	25.00	26.40	106	77-120		
Styrene	<0.1000	25.00	24.80	99	77-120		
Bromoform	<0.1438	25.00	22.17	89	74-121		
Isopropylbenzene	0.3443	25.00	24.55	97	71-120		
1,1,2,2-Tetrachloroethane	<0.1000	25.00	23.33	93	73-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-95A-UST-10Q1	Batch#:	161239
MSS Lab ID:	218768-008	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1124	25.00	24.87	99	72-120	
Propylbenzene	0.3289	25.00	28.15	111	76-120	
Bromobenzene	<0.1000	25.00	27.19	109	75-120	
1,3,5-Trimethylbenzene	<0.1307	25.00	27.59	110	77-120	
2-Chlorotoluene	<0.1488	25.00	27.53	110	76-120	
4-Chlorotoluene	<0.1000	25.00	26.59	106	78-120	
tert-Butylbenzene	<0.1219	25.00	28.58	114	76-120	
1,2,4-Trimethylbenzene	<0.1278	25.00	26.41	106	77-120	
sec-Butylbenzene	0.1259	25.00	28.72	114	80-120	
para-Isopropyl Toluene	<0.1000	25.00	27.61	110	76-120	
1,3-Dichlorobenzene	<0.1468	25.00	26.11	104	75-120	
1,4-Dichlorobenzene	<0.1106	25.00	25.51	102	77-120	
n-Butylbenzene	<0.1000	25.00	27.91	112	76-120	
1,2-Dichlorobenzene	<0.1000	25.00	26.46	106	76-120	
1,2-Dibromo-3-Chloropropane	<0.3256	25.00	25.18	101	65-120	
1,2,4-Trichlorobenzene	<0.1141	25.00	26.09	104	73-121	
Hexachlorobutadiene	<0.1821	25.00	31.30	b 125 *	73-123	M1 V3
Naphthalene	0.4268	25.00	22.66	89	62-121	
1,2,3-Trichlorobenzene	<0.1000	25.00	26.56	106	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	100	77-120	
1,2-Dichloroethane-d4	107	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	99	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-95A-UST-10Q1	Batch#:	161239
MSS Lab ID:	218768-008	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Type: MSD Lab ID: QC537443

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	27.75	111	56-140	9	24		
Chloromethane	25.00	18.91	76	46-142	5	24		
Vinyl Chloride	25.00	21.50	86	49-136	10	24		
Bromomethane	25.00	25.27	101	42-154	7	24		
Chloroethane	25.00	22.44	90	51-133	6	25		
Trichlorofluoromethane	25.00	26.13	105	63-135	5	20		
Iodomethane	25.00	23.62	94	60-140	6	30		
Acetone	25.00	21.94	85	48-130	2	41		
1,1-Dichloroethene	25.00	23.84	95	68-133	6	20		
Methylene Chloride	25.00	22.48	89	71-120	5	20		
Carbon Disulfide	25.00	21.44	86	56-120	8	20		
MTBE	25.00	38.82	82	58-120	3	21		
trans-1,2-Dichloroethene	25.00	23.39	94	80-120	4	24		
Vinyl Acetate	25.00	18.75	75	63-124	5	24		
1,1-Dichloroethane	25.00	23.36	92	77-120	10	20		
2-Butanone	25.00	21.47	86	57-120	5	32		
cis-1,2-Dichloroethene	25.00	23.77	95	75-120	6	20		
2,2-Dichloropropane	25.00	23.23	b 93	72-128	10	24	V3	
Chloroform	25.00	24.22	97	78-120	7	20		
Bromochloromethane	25.00	24.09	96	78-120	3	20		
1,1,1-Trichloroethane	25.00	27.31	109	78-120	7	20		
1,1-Dichloropropene	25.00	26.44	106	75-120	7	21		
Carbon Tetrachloride	25.00	30.49	b 122	* 80-120	4	21	M1	V3
1,2-Dichloroethane	25.00	25.87	103	74-120	6	20		
Benzene	25.00	24.89	99	77-120	8	20		
Trichloroethene	25.00	25.30	101	78-122	9	20		
1,2-Dichloropropane	25.00	23.01	92	76-120	7	20		
Bromodichloromethane	25.00	24.28	97	78-120	8	20		
Dibromomethane	25.00	24.47	98	77-120	6	20		
4-Methyl-2-Pentanone	25.00	22.38	90	65-120	5	22		
cis-1,3-Dichloropropene	25.00	21.82	87	76-120	7	20		
Toluene	25.00	24.49	98	73-120	7	20		
trans-1,3-Dichloropropene	25.00	19.24	77	72-120	5	20		
1,1,2-Trichloroethane	25.00	22.85	91	76-120	7	20		
2-Hexanone	25.00	22.18	89	57-121	4	25		
1,3-Dichloropropane	25.00	23.32	93	75-120	7	20		
Tetrachloroethene	25.00	26.84	107	77-120	8	20		
Dibromochloromethane	25.00	22.82	91	76-120	5	20		
1,2-Dibromoethane	25.00	24.35	97	77-120	6	20		
Chlorobenzene	25.00	24.33	97	78-120	6	20		
1,1,1,2-Tetrachloroethane	25.00	24.82	99	77-120	6	20		
Ethylbenzene	25.00	25.28	101	78-120	7	26		
m,p-Xylenes	50.00	49.53	99	77-120	7	20		
o-Xylene	25.00	24.34	97	77-120	8	20		
Styrene	25.00	23.22	93	77-120	7	20		
Bromoform	25.00	20.90	84	74-121	6	21		
Isopropylbenzene	25.00	22.86	90	71-120	7	20		
1,1,1,2,2-Tetrachloroethane	25.00	22.13	89	73-120	5	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-95A-UST-10Q1	Batch#:	161239
MSS Lab ID:	218768-008	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,2,3-Trichloropropane	25.00	23.04	92	72-120	8	20		
Propylbenzene	25.00	25.80	102	76-120	9	20		
Bromobenzene	25.00	25.35	101	75-120	7	20		
1,3,5-Trimethylbenzene	25.00	25.60	102	77-120	7	20		
2-Chlorotoluene	25.00	25.00	100	76-120	10	20		
4-Chlorotoluene	25.00	24.64	99	78-120	8	20		
tert-Butylbenzene	25.00	26.56	106	76-120	7	21		
1,2,4-Trimethylbenzene	25.00	24.83	99	77-120	6	20		
sec-Butylbenzene	25.00	26.96	107	80-120	6	21		
para-Isopropyl Toluene	25.00	25.09	100	76-120	10	20		
1,3-Dichlorobenzene	25.00	23.95	96	75-120	9	20		
1,4-Dichlorobenzene	25.00	24.02	96	77-120	6	23		
n-Butylbenzene	25.00	25.78	103	76-120	8	21		
1,2-Dichlorobenzene	25.00	24.37	97	76-120	8	20		
1,2-Dibromo-3-Chloropropane	25.00	23.83	95	65-120	6	22		
1,2,4-Trichlorobenzene	25.00	24.77	99	73-121	5	20		
Hexachlorobutadiene	25.00	28.94 b	116	73-123	8	25	V3	
Naphthalene	25.00	22.28	87	62-121	2	32		
1,2,3-Trichlorobenzene	25.00	25.69	103	66-123	3	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	100	77-120		
1,2-Dichloroethane-d4	108	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	99	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537559	Batch#:	161239
Matrix:	Water	Analyzed:	03/24/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	V1
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	L1 V1
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537559	Batch#:	161239
Matrix:	Water	Analyzed:	03/24/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	L1 V1
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	109	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161282
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
1,3-Dichloropropane	25.00	24.74	99	75-120		
Tetrachloroethene	25.00	26.02	104	77-120		
Dibromochloromethane	25.00	25.85	103	76-120		
1,2-Dibromoethane	25.00	24.24	97	77-120		
Chlorobenzene	25.00	26.07	104	78-120		
1,1,1,2-Tetrachloroethane	25.00	25.81	103	77-120		
Ethylbenzene	25.00	26.05	104	78-120		
m,p-Xylenes	50.00	52.37	105	77-120		
o-Xylene	25.00	27.02	108	77-120		
Styrene	25.00	27.30	109	77-120		
Bromoform	25.00	25.59	102	74-121		
Isopropylbenzene	25.00	22.89	92	71-120		
1,1,2,2-Tetrachloroethane	25.00	22.41	90	73-120		
1,2,3-Trichloropropane	25.00	22.63	91	72-120		
Propylbenzene	25.00	25.84	103	76-120		
Bromobenzene	25.00	25.28	101	75-120		
1,3,5-Trimethylbenzene	25.00	26.45	106	77-120		
2-Chlorotoluene	25.00	25.86	103	76-120		
4-Chlorotoluene	25.00	25.66	103	78-120		
tert-Butylbenzene	25.00	26.37	105	76-120		
1,2,4-Trimethylbenzene	25.00	26.81	107	77-120		
sec-Butylbenzene	25.00	27.01	108	80-120		
para-Isopropyl Toluene	25.00	26.17	105	76-120		
1,3-Dichlorobenzene	25.00	25.84	103	75-120		
1,4-Dichlorobenzene	25.00	25.52	102	77-120		
n-Butylbenzene	25.00	27.36	109	76-120		
1,2-Dichlorobenzene	25.00	25.96	104	76-120		
1,2-Dibromo-3-Chloropropane	25.00	21.73	87	65-120		
1,2,4-Trichlorobenzene	25.00	25.48	102	73-121		
Hexachlorobutadiene	25.00	25.74	103	73-123		
Naphthalene	25.00	24.97	100	62-121		
1,2,3-Trichlorobenzene	25.00	26.12	104	66-123		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	101	77-120		
1,2-Dichloroethane-d4	99	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	98	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161282
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,3-Dichloropropane	25.00	24.24	97	75-120	2	20		
Tetrachloroethene	25.00	24.59	98	77-120	6	20		
Dibromochloromethane	25.00	24.96	100	76-120	3	20		
1,2-Dibromoethane	25.00	23.91	96	77-120	1	20		
Chlorobenzene	25.00	24.70	99	78-120	5	20		
1,1,1,2-Tetrachloroethane	25.00	24.56	98	77-120	5	20		
Ethylbenzene	25.00	24.79	99	78-120	5	26		
m,p-Xylenes	50.00	49.52	99	77-120	6	20		
o-Xylene	25.00	25.71	103	77-120	5	20		
Styrene	25.00	26.01	104	77-120	5	20		
Bromoform	25.00	24.97	100	74-121	2	21		
Isopropylbenzene	25.00	21.49	86	71-120	6	20		
1,1,2,2-Tetrachloroethane	25.00	22.23	89	73-120	1	20		
1,2,3-Trichloropropane	25.00	22.14	89	72-120	2	20		
Propylbenzene	25.00	24.19	97	76-120	7	20		
Bromobenzene	25.00	23.96	96	75-120	5	20		
1,3,5-Trimethylbenzene	25.00	24.77	99	77-120	7	20		
2-Chlorotoluene	25.00	24.12	96	76-120	7	20		
4-Chlorotoluene	25.00	24.08	96	78-120	6	20		
tert-Butylbenzene	25.00	24.76	99	76-120	6	21		
1,2,4-Trimethylbenzene	25.00	25.19	101	77-120	6	20		
sec-Butylbenzene	25.00	25.26	101	80-120	7	21		
para-Isopropyl Toluene	25.00	24.53	98	76-120	6	20		
1,3-Dichlorobenzene	25.00	24.26	97	75-120	6	20		
1,4-Dichlorobenzene	25.00	24.20	97	77-120	5	23		
n-Butylbenzene	25.00	25.51	102	76-120	7	21		
1,2-Dichlorobenzene	25.00	24.55	98	76-120	6	20		
1,2-Dibromo-3-Chloropropane	25.00	21.51	86	65-120	1	22		
1,2,4-Trichlorobenzene	25.00	24.28	97	73-121	5	20		
Hexachlorobutadiene	25.00	24.41	98	73-123	5	25		
Naphthalene	25.00	24.61	98	62-121	1	32		
1,2,3-Trichlorobenzene	25.00	24.93	100	66-123	5	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	101	77-120		
1,2-Dichloroethane-d4	99	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	97	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537566	Batch#:	161282
Matrix:	Water	Analyzed:	03/25/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218768	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537566	Batch#:	161282
Matrix:	Water	Analyzed:	03/25/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected

RL= Reporting Limit

CURTIS & TOMPKINS BFB TUNE FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480039377003 File : iar03 Time : 27-JAN-2010 17:11

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	119490	17.70	
75	30% - 60% of mass 95	276672	40.99	
95		675029	100.00	
96	5% - 9% of mass 95	46176	6.84	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	508352	75.31	
175	5% - 9% of mass 174	37824	7.44	
176	> 95% and < 101% of mass 174	488896	96.17	
177	5% - 9% of mass 176	33058	6.76	

Analyst: BO Date: 01/28/10 Reviewer: LW Date: 01/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480120073004 File : ico04 Time : 24-MAR-2010 11:15

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	14153	18.73	
75	30% - 60% of mass 95	31853	42.16	
95		75554	100.00	
96	5% - 9% of mass 95	5323	7.05	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	54285	71.85	
175	5% - 9% of mass 174	4003	7.37	
176	> 95% and < 101% of mass 174	51952	95.70	
177	5% - 9% of mass 176	3813	7.34	

Analyst: BJP Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480120073011 File : icoll Time : 24-MAR-2010 15:49

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	12759	16.16	
75	30% - 60% of mass 95	31042	39.31	
95		78965	100.00	
96	5% - 9% of mass 95	5758	7.29	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	60770	76.96	
175	5% - 9% of mass 174	4558	7.50	
176	> 95% and < 101% of mass 174	60048	98.81	
177	5% - 9% of mass 176	4023	6.70	

Analyst: BJP Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490027869008 File : jaj08 Time : 19-JAN-2010 15:39

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	37570	17.43	
75	30% - 60% of mass 95	88520	41.07	
95		215530	100.00	
96	5% - 9% of mass 95	14801	6.87	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	166912	77.44	
175	5% - 9% of mass 174	12330	7.39	
176	> 95% and < 101% of mass 174	162773	97.52	
177	5% - 9% of mass 176	10436	6.41	

Analyst: BO Date: 01/20/10 Reviewer: LW Date: 01/22/10

CURTIS & TOMPKINS BFB TUNE FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490120216002 File : jco02 Time : 24-MAR-2010 11:36

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	38272	20.09	
75	30% - 60% of mass 95	85626	44.96	
95		190464	100.00	
96	5% - 9% of mass 95	13295	6.98	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	151266	79.42	
175	5% - 9% of mass 174	11362	7.51	
176	> 95% and < 101% of mass 174	149176	98.62	
177	5% - 9% of mass 176	9513	6.38	

Analyst: BJP Date: 03/24/10 Reviewer: LW Date: 03/24/10

CURTIS & TOMPKINS BFB TUNE FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : BFB IDF : 1.0
Seqnum : 490120216014 File : jco14 Time : 24-MAR-2010 21:51

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	38858	20.50	
75	30% - 60% of mass 95	84712	44.69	
95		189568	100.00	
96	5% - 9% of mass 95	11888	6.27	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	152000	80.18	
175	5% - 9% of mass 174	11369	7.48	
176	> 95% and < 101% of mass 174	147010	96.72	
177	5% - 9% of mass 176	9594	6.53	

Analyst: PDM Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950120036005 File : nco05 Time : 24-MAR-2010 09:41

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	4822	19.42	
75	30% - 60% of mass 95	12859	51.78	
95		24835	100.00	
96	5% - 9% of mass 95	1752	7.05	
173	< 2% of mass 174	239	1.15	
174	> 50% and < 100% of mass 95	20741	83.52	
175	5% - 9% of mass 174	1520	7.33	
176	> 95% and < 101% of mass 174	20107	96.94	
177	5% - 9% of mass 176	1376	6.84	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950121459002 File : ncp02 Time : 25-MAR-2010 08:47

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	4456	20.71	
75	30% - 60% of mass 95	11186	51.99	
95		21517	100.00	
96	5% - 9% of mass 95	1581	7.35	
173	< 2% of mass 174	204	1.12	
174	> 50% and < 100% of mass 95	18261	84.87	
175	5% - 9% of mass 174	1425	7.80	
176	> 95% and < 101% of mass 174	18018	98.67	
177	5% - 9% of mass 176	1260	6.99	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218768 MSVOA Water: EPA 8260B

Inst : MSVOA09
 Calnum : 480039377001
 Units : ug/L

Name : 826GOX9W
 Date : 27-JAN-2010 20:15
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	iar07	480039377007	.25/.5PPB	27-JAN-2010 20:15	S13745 (20000X), S13845 (20000X), S13747 (20000X), S13846 (100000X), S13687 (5000X)
L2	iar08	480039377008	0.5/1PPB	27-JAN-2010 20:49	S13745 (100000X), S13845 (100000X), S13747 (100000X), S13846 (50000X), S13687 (5000X)
L3	iar09	480039377009	2PPB	27-JAN-2010 21:22	S13745 (25000X), S13845 (25000X), S13747 (50000X), S13846 (25000X), S13687 (5000X)
L4	iar10	480039377010	5PPB	27-JAN-2010 21:55	S13745 (10000X), S13845 (10000X), S13747 (20000X), S13846 (10000X), S13687 (5000X)
L5	iar11	480039377011	10PPB	27-JAN-2010 22:28	S13745 (5000X), S13845 (5000X), S13747 (10000X), S13846 (5000X), S13687 (5000X)
L6	iar12	480039377012	20PPB	27-JAN-2010 23:01	S13680 (25000X), S13796 (25000X), S13625 (50000X), S13503 (25000X), S13687 (5000X)
L7	iar13	480039377013	50PPB	27-JAN-2010 23:34	S13680 (10000X), S13796 (10000X), S13625 (20000X), S13503 (10000X), S13687 (5000X)
L8	iar14	480039377014	75PPB	28-JAN-2010 00:07	S13680 (6667X), S13796 (6667X), S13625 (13330X), S13503 (6667X), S13687 (5000X)
L9	iar15	480039377015	100PPB	28-JAN-2010 00:39	S13680 (5000X), S13796 (5000X), S13625 (10000X), S13503 (5000X), S13687 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Freon 12		0.4272	0.6076	0.5551	0.6189	0.6131	0.6391	0.5765	0.5958	AVRG		1.72662		0.5792	12	15	0.05	0.99	
Chloromethane		0.8240	0.9930	0.9112	0.9272	0.9023	0.8693	0.8104	0.7946	AVRG		1.13767		0.8790	8	15	0.10	0.99	
Vinyl Chloride	0.5181	0.5422	0.7028	0.6832	0.6817	0.6816	0.6563	0.6083	0.5695	AVRG		1.59470		0.6271	11	15	0.05	0.99	
Bromomethane		0.3327	0.3778	0.3470	0.3376	0.3814	0.3741	0.3742	0.3632	AVRG		2.77001		0.3610	5	15	0.05	0.99	
Chloroethane		0.3935	0.4827	0.4630	0.4416	0.4633	0.4477	0.4193	0.4174	AVRG		2.26725		0.4411	7	15	0.05	0.99	
Trichlorofluoromethane		0.5190	0.6690	0.6150	0.6630	0.6423	0.6798	0.6145	0.6119	AVRG		1.59535		0.6268	8	15	0.05	0.99	
Acetone				0.1172	0.1133	0.1131	0.1053	0.0922	0.0927	AVRG		9.46550		0.1056	10	15	0.05	0.99	
1,1-Dichloroethene		0.3192	0.4324	0.3853	0.3906	0.3699	0.3637	0.3930	0.3876	AVRG		2.63014		0.3802	8	15	0.05	0.99	
Iodomethane				0.5282	0.5552	0.5997	0.6044	0.5951	0.6206	AVRG		1.71268		0.5839	6	15	0.05	0.99	
Methylene Chloride		0.5858	0.6009	0.5287	0.5011	0.5232	0.5143	0.5033	0.4935	AVRG		1.88203		0.5313	8	15	0.05	0.99	
Carbon Disulfide		1.5171	1.9736	1.7265	1.7529	1.6610	1.5889	1.6476	1.5771	AVRG		0.59503		1.6806	8	15	0.05	0.99	
MTBE		0.9320	1.0138	0.9931	0.9929	1.0189	0.9926	0.9195	0.8743	AVRG		1.03396		0.9672	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4406	0.5305	0.4618	0.4602	0.4757	0.4552	0.4688	0.4558	AVRG		2.13408		0.4686	6	15	0.05	0.99	
Vinyl Acetate			0.6282	0.6668	0.6830	0.7536	0.7417	0.8563	0.7420	AVRG		1.38026		0.7245	10	15	0.05	0.99	
1,1-Dichloroethane		0.8516	1.0446	0.9546	0.9019	0.9393	0.9119	0.8841	0.8458	AVRG		1.09085		0.9167	7	15	0.10	0.99	
2-Butanone			0.2069m	0.1893	0.1836	0.1851	0.1785	0.1526	0.1452	AVRG		5.63991		0.1773	12	15	0.05	0.99	
2,2-Dichloropropane		0.4892	0.6320	0.5236	0.5438	0.5313	0.4881	0.4891	0.4602	AVRG		1.92434		0.5197	10	15	0.05	0.99	
cis-1,2-Dichloroethene		0.4938	0.5578	0.4996	0.4958	0.5086	0.5035	0.5009	0.4937	AVRG		1.97351		0.5067	4	15	0.05	0.99	
Chloroform		0.7593	0.8988	0.8262	0.8030	0.8348	0.7985	0.7757	0.7543	AVRG		1.24021		0.8063	6	15	0.05	0.99	
Bromochloromethane		0.1840	0.2315	0.2099	0.2160	0.2219	0.2274	0.2192	0.2171	AVRG		4.63209		0.2159	7	15	0.05	0.99	
1,1,1-Trichloroethane		0.4684	0.6327	0.5630	0.5644	0.5706	0.5140	0.5506	0.5210	AVRG		1.82451		0.5481	9	15	0.05	0.99	
1,1-Dichloropropene		0.3158	0.4343	0.3542	0.3790	0.3680	0.3394	0.3705	0.3601	AVRG		2.73852		0.3652	9	15	0.05	0.99	
Carbon Tetrachloride		0.2519	0.3316	0.2884	0.2907	0.2825	0.2633	0.2915	0.2847	AVRG		3.50159		0.2856	8	15	0.05	0.99	
1,2-Dichloroethane		0.2690	0.3044	0.2819	0.2808	0.2982	0.2878	0.2677	0.2636	AVRG		3.55022		0.2817	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Benzene		1.0292	1.2652	1.0714	1.0609	1.1235	1.0294	1.0188	0.9650	AVRG		0.93423		1.0704	9	15	0.05	0.99	
Trichloroethene		0.2697	0.3259	0.2720	0.2774	0.2985	0.2818	0.2818	0.2765	AVRG		3.50319		0.2855	6	15	0.05	0.99	
1,2-Dichloropropane		0.3482	0.3804	0.3531	0.3345	0.3598	0.3425	0.3400	0.3296	AVRG		2.86920		0.3485	5	15	0.05	0.99	
Bromodichloromethane		0.3451	0.3918	0.3578	0.3454	0.3759	0.3633	0.3588	0.3558	AVRG		2.76456		0.3617	4	15	0.05	0.99	
Dibromomethane		0.1452	0.1603	0.1563	0.1543	0.1669	0.1664	0.1592	0.1572	AVRG		6.32076		0.1582	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.2356	0.2296	0.2350	0.2480	0.2457	0.2205	0.2116	AVRG		4.30507		0.2323	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4479	0.4924	0.4528	0.4573	0.4598	0.4598	0.4404	0.4315	AVRG		2.19668		0.4552	4	15	0.05	0.99	
Toluene		0.7703	0.9216	0.7566	0.7233	0.7824	0.7735	0.7985	0.7408	AVRG		1.27653		0.7834	8	15	0.05	0.99	
trans-1,3-Dichloropropene		0.4314	0.5131	0.4670	0.4468	0.4973	0.4610	0.4573	0.4396	AVRG		2.15431		0.4642	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.1337	0.1518	0.1406	0.1382	0.1505	0.1472	0.1433	0.1436	AVRG		6.96298		0.1436	4	15	0.05	0.99	
2-Hexanone			0.2239	0.2090	0.2014	0.2118	0.2130	0.1906	0.1791	AVRG		4.89948		0.2041	7	15	0.05	0.99	
1,3-Dichloropropane		0.4004	0.4631	0.4225	0.4249	0.4545	0.4640	0.4442	0.4221	AVRG		2.28843		0.4370	5	15	0.05	0.99	
Tetrachloroethene		0.2481	0.3488	0.2870	0.2869	0.3017	0.2822	0.3138	0.3106	AVRG		3.36270		0.2974	10	15	0.05	0.99	
Dibromochloromethane		0.2907	0.3097	0.2913	0.2895	0.3125	0.3115	0.3151	0.3032	AVRG		3.30100		0.3029	4	15	0.05	0.99	
1,2-Dibromoethane		0.2312	0.2553	0.2455	0.2401	0.2619	0.2651	0.2633	0.2596	AVRG		3.95653		0.2527	5	15	0.05	0.99	
Chlorobenzene		0.7993	0.9853	0.8244	0.8088	0.8858	0.8623	0.8392	0.8012	AVRG		1.17537		0.8508	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2826	0.3303	0.2747	0.2760	0.2980	0.3067	0.3047	0.2944	AVRG		3.37928		0.2959	6	15	0.05	0.99	
Ethylbenzene		1.3640	1.7214	1.3993	1.3607	1.4898	1.3585	1.3068	1.2120	AVRG		0.71350		1.4015	11	15	0.05	0.99	
m,p-Xylenes	0.5036	0.4527	0.6147	0.5056	0.4893	0.5384	0.5088	0.4958	0.4418	AVRG		1.97774		0.5056	10	15	0.05	0.99	
o-Xylene		0.4874	0.6016	0.5082	0.4965	0.5489	0.5334	0.5259	0.5097	AVRG		1.89951		0.5265	7	15	0.05	0.99	
Styrene		0.8609	1.0026	0.8795	0.8674	0.9605	0.9470	0.8954	0.8576	AVRG		1.10028		0.9089	6	15	0.05	0.99	
Bromoform		0.1512	0.1751	0.1615	0.1650	0.1814	0.1861	0.1861	0.1830	AVRG		5.75787		0.1737	7	15	0.10	0.99	
Isopropylbenzene		2.3217	3.1596	2.5691	2.5469	2.7063	2.4453	2.6712	2.4395	AVRG		0.38352		2.6074	10	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6030	0.5937	0.5909	0.5928	0.6153	0.6111	0.6410	0.6031	AVRG		1.64915		0.6064	3	15	0.30	0.99	
1,2,3-Trichloropropane		0.1447	0.1409	0.1299	0.1309	0.1378	0.1430	0.1410	0.1265	AVRG		7.30736		0.1368	5	15	0.05	0.99	
Propylbenzene		3.0497	3.9560	3.2048	3.2461	3.3629	3.0327	3.0560	2.6950	AVRG		0.31246		3.2004	11	15	0.05	0.99	
Bromobenzene		0.6665	0.7228	0.6435	0.6492	0.7032	0.7201	0.7249	0.6703	AVRG		1.45444		0.6876	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.9922	2.4458	2.0368	2.0219	2.1529	1.9990	1.9836	1.7635	AVRG		0.48793		2.0495	9	15	0.05	0.99	
2-Chlorotoluene		2.2554	2.5642	2.1161	2.1087	2.2652	2.0862	1.9834	1.7493	AVRG		0.46706		2.1411	11	15	0.05	0.99	
4-Chlorotoluene		2.1887	2.3464	1.9752	2.0153	2.0709	2.0599	2.0773	1.9065	AVRG		0.48076		2.0800	7	15	0.05	0.99	
tert-Butylbenzene		1.5755	2.0121	1.6313	1.6883	1.7810	1.6549	1.7601	1.6963	AVRG		0.57973		1.7249	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.1523	2.5130	2.0569	2.0414	2.2207	2.0902	2.1625	2.0170	AVRG		0.46366		2.1567	7	15	0.05	0.99	
sec-Butylbenzene		2.3579	3.0923	2.6227	2.6213	2.7538	2.5038	2.7910	2.5827	AVRG		0.37514		2.6657	8	15	0.05	0.99	
para-Isopropyl Toluene		1.8819	2.2981	1.9427	2.0129	2.1003	1.8867	2.1308	2.0144	AVRG		0.49177		2.0335	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.2368	1.4206	1.2144	1.2052	1.3068	1.2860	1.3439	1.2935	AVRG		0.77618		1.2884	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.3246	1.4816	1.2289	1.2471	1.3353	1.3172	1.3326	1.2740	AVRG		0.75892		1.3177	6	15	0.05	0.99	
n-Butylbenzene		1.9278	2.4190	1.9466	2.0219	2.1231	1.9181	2.1344	2.0210	AVRG		0.48450		2.0640	8	15	0.05	0.99	
1,2-Dichlorobenzene		1.1836	1.2168	1.1290	1.1069	1.1904	1.1946	1.2267	1.1710	AVRG		0.84933		1.1774	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.0812	0.1026	0.0896	0.0907	0.0912	0.0934	0.0870	0.0842	AVRG		11.1139		0.0900	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.6413	0.6999	0.6384	0.6552	0.6932	0.7048	0.7109	0.7232	AVRG		1.46338		0.6833	5	15	0.05	0.99	
Hexachlorobutadiene		0.2542	0.3630	0.3000	0.3125	0.3339	0.3017	0.3594	0.3585	AVRG		3.09685		0.3229	12	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Naphthalene		1.2171	1.2766	1.2470	1.2729	1.3320	1.3830	1.3625	1.3472	AVRG		0.76642		1.3048	5	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.5473	0.5994	0.5662	0.5762	0.6237	0.6325	0.6475	0.6396	AVRG		1.65553		0.6040	6	15	0.05	0.99	
Dibromofluoromethane	0.5626	0.5685	0.5730	0.5794	0.5894	0.5803	0.5742	0.5559	0.5424	AVRG		1.75583		0.5695	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.2776	0.2836	0.2948	0.2950	0.2948	0.2923	0.2665	0.2472	0.2356	AVRG		3.61858		0.2764	8	15	0.05	0.99	
Toluene-d8	1.3332	1.3494	1.4060	1.3911	1.4075	1.3829	1.3735	1.3651	1.3835	AVRG		0.72626		1.3769	2	15	0.05	0.99	
Bromofluorobenzene	1.0186	1.0587	1.0239	1.0392	1.0317	0.9937	1.0272	1.0417	1.0060	AVRG		0.97396		1.0267	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-26	2.000	5	5.000	-4	10.00	7	20.00	6	50.00	10	75.00	0	100.0	3
Chloromethane			1.000	-6	2.000	13	5.000	4	10.00	5	20.00	3	50.00	-1	75.00	-8	100.0	-10
Vinyl Chloride	0.500	-17	1.000	-14	2.000	12	5.000	9	10.00	9	20.00	9	50.00	5	75.00	-3	100.0	-9
Bromomethane			1.000	-8	2.000	5	5.000	-4	10.00	-6	20.00	6	50.00	4	75.00	4	100.0	1
Chloroethane			1.000	-11	2.000	9	5.000	5	10.00	0	20.00	5	50.00	2	75.00	-5	100.0	-5
Trichlorofluoromethane			1.000	-17	2.000	7	5.000	-2	10.00	6	20.00	2	50.00	8	75.00	-2	100.0	-2
Acetone							5.000	11	10.00	7	20.00	7	50.00	0	75.00	-13	100.0	-12
1,1-Dichloroethene			0.500	-16	2.000	14	5.000	1	10.00	3	20.00	-3	50.00	-4	75.00	3	100.0	2
Iodomethane							5.000	-10	10.00	-5	20.00	3	50.00	4	75.00	2	100.0	6
Methylene Chloride			0.500	10	2.000	13	5.000	-1	10.00	-6	20.00	-2	50.00	-3	75.00	-5	100.0	-7
Carbon Disulfide			0.500	-10	2.000	17	5.000	3	10.00	4	20.00	-1	50.00	-5	75.00	-2	100.0	-6
MTBE			0.500	-4	2.000	5	5.000	3	10.00	3	20.00	5	50.00	3	75.00	-5	100.0	-10
trans-1,2-Dichloroethene			0.500	-6	2.000	13	5.000	-1	10.00	-2	20.00	2	50.00	-3	75.00	0	100.0	-3
Vinyl Acetate					2.000	-13	5.000	-8	10.00	-6	20.00	4	50.00	2	75.00	18	100.0	2
1,1-Dichloroethane			0.500	-7	2.000	14	5.000	4	10.00	-2	20.00	2	50.00	-1	75.00	-4	100.0	-8
2-Butanone					2.000	17	5.000	7	10.00	4	20.00	4	50.00	1	75.00	-14	100.0	-18
2,2-Dichloropropane			0.500	-6	2.000	22	5.000	1	10.00	5	20.00	2	50.00	-6	75.00	-6	100.0	-11
cis-1,2-Dichloroethene			0.500	-3	2.000	10	5.000	-1	10.00	-2	20.00	0	50.00	-1	75.00	-1	100.0	-3
Chloroform			0.500	-6	2.000	11	5.000	2	10.00	0	20.00	4	50.00	-1	75.00	-4	100.0	-6
Bromochloromethane			0.500	-15	2.000	7	5.000	-3	10.00	0	20.00	3	50.00	5	75.00	2	100.0	1
1,1,1-Trichloroethane			0.500	-15	2.000	15	5.000	3	10.00	3	20.00	4	50.00	-6	75.00	0	100.0	-5
1,1-Dichloropropene			0.500	-14	2.000	19	5.000	-3	10.00	4	20.00	1	50.00	-7	75.00	1	100.0	-1
Carbon Tetrachloride			0.500	-12	2.000	16	5.000	1	10.00	2	20.00	-1	50.00	-8	75.00	2	100.0	0
1,2-Dichloroethane			0.500	-5	2.000	8	5.000	0	10.00	0	20.00	6	50.00	2	75.00	-5	100.0	-6
Benzene			0.500	-4	2.000	18	5.000	0	10.00	-1	20.00	5	50.00	-4	75.00	-5	100.0	-10
Trichloroethene			0.500	-6	2.000	14	5.000	-5	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-3
1,2-Dichloropropane			0.500	0	2.000	9	5.000	1	10.00	-4	20.00	3	50.00	-2	75.00	-2	100.0	-5
Bromodichloromethane			0.500	-5	2.000	8	5.000	-1	10.00	-5	20.00	4	50.00	0	75.00	-1	100.0	-2
Dibromomethane			0.500	-8	2.000	1	5.000	-1	10.00	-2	20.00	5	50.00	5	75.00	1	100.0	-1
4-Methyl-2-Pentanone					2.000	1	5.000	-1	10.00	1	20.00	7	50.00	6	75.00	-5	100.0	-9
cis-1,3-Dichloropropene			0.500	-2	2.000	8	5.000	-1	10.00	0	20.00	1	50.00	1	75.00	-3	100.0	-5
Toluene			0.500	-2	2.000	18	5.000	-3	10.00	-8	20.00	0	50.00	-1	75.00	2	100.0	-5
trans-1,3-Dichloropropene			0.500	-7	2.000	11	5.000	1	10.00	-4	20.00	7	50.00	-1	75.00	-1	100.0	-5
1,1,2-Trichloroethane			0.500	-7	2.000	6	5.000	-2	10.00	-4	20.00	5	50.00	3	75.00	0	100.0	0
2-Hexanone					2.000	10	5.000	2	10.00	-1	20.00	4	50.00	4	75.00	-7	100.0	-12
1,3-Dichloropropane			0.500	-8	2.000	6	5.000	-3	10.00	-3	20.00	4	50.00	6	75.00	2	100.0	-3
Tetrachloroethene			0.500	-17	2.000	17	5.000	-3	10.00	-4	20.00	1	50.00	-5	75.00	6	100.0	4
Dibromochloromethane			0.500	-4	2.000	2	5.000	-4	10.00	-4	20.00	3	50.00	3	75.00	4	100.0	0
1,2-Dibromoethane			0.500	-9	2.000	1	5.000	-3	10.00	-5	20.00	4	50.00	5	75.00	4	100.0	3
Chlorobenzene			0.500	-6	2.000	16	5.000	-3	10.00	-5	20.00	4	50.00	1	75.00	-1	100.0	-6
1,1,1,2-Tetrachloroethane			0.500	-4	2.000	12	5.000	-7	10.00	-7	20.00	1	50.00	4	75.00	3	100.0	-1
Ethylbenzene			0.500	-3	2.000	23	5.000	0	10.00	-3	20.00	6	50.00	-3	75.00	-7	100.0	-14

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	0	1.000	-10	4.000	22	10.00	0	20.00	-3	40.00	6	100.0	1	150.0	-2	200.0	-13
o-Xylene			0.500	-7	2.000	14	5.000	-3	10.00	-6	20.00	4	50.00	1	75.00	0	100.0	-3
Styrene			0.500	-5	2.000	10	5.000	-3	10.00	-5	20.00	6	50.00	4	75.00	-1	100.0	-6
Bromoform			0.500	-13	2.000	1	5.000	-7	10.00	-5	20.00	4	50.00	7	75.00	7	100.0	5
Isopropylbenzene			0.500	-11	2.000	21	5.000	-1	10.00	-2	20.00	4	50.00	-6	75.00	2	100.0	-6
1,1,2,2-Tetrachloroethane			0.500	-1	2.000	-2	5.000	-3	10.00	-2	20.00	1	50.00	1	75.00	6	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	3	5.000	-5	10.00	-4	20.00	1	50.00	5	75.00	3	100.0	-8
Propylbenzene			0.500	-5	2.000	24	5.000	0	10.00	1	20.00	5	50.00	-5	75.00	-5	100.0	-16
Bromobenzene			0.500	-3	2.000	5	5.000	-6	10.00	-6	20.00	2	50.00	5	75.00	5	100.0	-3
1,3,5-Trimethylbenzene			0.500	-3	2.000	19	5.000	-1	10.00	-1	20.00	5	50.00	-2	75.00	-3	100.0	-14
2-Chlorotoluene			0.500	5	2.000	20	5.000	-1	10.00	-2	20.00	6	50.00	-3	75.00	-7	100.0	-18
4-Chlorotoluene			0.500	5	2.000	13	5.000	-5	10.00	-3	20.00	0	50.00	-1	75.00	0	100.0	-8
tert-Butylbenzene			0.500	-9	2.000	17	5.000	-5	10.00	-2	20.00	3	50.00	-4	75.00	2	100.0	-2
1,2,4-Trimethylbenzene			0.500	0	2.000	17	5.000	-5	10.00	-5	20.00	3	50.00	-3	75.00	0	100.0	-6
sec-Butylbenzene			0.500	-12	2.000	16	5.000	-2	10.00	-2	20.00	3	50.00	-6	75.00	5	100.0	-3
para-Isopropyl Toluene			0.500	-7	2.000	13	5.000	-4	10.00	-1	20.00	3	50.00	-7	75.00	5	100.0	-1
1,3-Dichlorobenzene			0.500	-4	2.000	10	5.000	-6	10.00	-6	20.00	1	50.00	0	75.00	4	100.0	0
1,4-Dichlorobenzene			0.500	1	2.000	12	5.000	-7	10.00	-5	20.00	1	50.00	0	75.00	1	100.0	-3
n-Butylbenzene			0.500	-7	2.000	17	5.000	-6	10.00	-2	20.00	3	50.00	-7	75.00	3	100.0	-2
1,2-Dichlorobenzene			0.500	1	2.000	3	5.000	-4	10.00	-6	20.00	1	50.00	1	75.00	4	100.0	-1
1,2-Dibromo-3-Chloropropane			0.500	-10	2.000	14	5.000	0	10.00	1	20.00	1	50.00	4	75.00	-3	100.0	-6
1,2,4-Trichlorobenzene			0.500	-6	2.000	2	5.000	-7	10.00	-4	20.00	1	50.00	3	75.00	4	100.0	6
Hexachlorobutadiene			0.500	-21	2.000	12	5.000	-7	10.00	-3	20.00	3	50.00	-7	75.00	11	100.0	11
Naphthalene			0.500	-7	2.000	-2	5.000	-4	10.00	-2	20.00	2	50.00	6	75.00	4	100.0	3
1,2,3-Trichlorobenzene			0.500	-9	2.000	-1	5.000	-6	10.00	-5	20.00	3	50.00	5	75.00	7	100.0	6
Dibromofluoromethane	50.00	-1	50.00	0	50.00	1	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-2	50.00	-5
1,2-Dichloroethane-d4	50.00	0	50.00	3	50.00	7	50.00	7	50.00	7	50.00	6	50.00	-4	50.00	-11	50.00	-15
Toluene-d8	50.00	-3	50.00	-2	50.00	2	50.00	1	50.00	2	50.00	0	50.00	0	50.00	-1	50.00	0
Bromofluorobenzene	50.00	-1	50.00	3	50.00	0	50.00	1	50.00	0	50.00	-3	50.00	0	50.00	1	50.00	-2

BO 01/29/10 [Iodomethane]: cannot report 8260c

BO 01/29/10 [Cyclohexanone]: cannot report 8260c

BO 01/29/10 [2-Chloroethylvinylether]: cannot report 8260c

BO 01/29/10 [2-Butanone]: Corrected baseline noise or negative peak in 2PPB (iar09).

Analyst: BO

Date: 01/29/10

Reviewer: LW

Date: 01/29/10

m=manual integration

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

Page 5 of 5

480039377001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA09
Calnum : 480039377001

Name : 826GOX9W
Cal Date : 27-JAN-2010

Type : WATER

ICV 480039377016 (iar16 28-JAN-2010) stds: S13817 (10000X), S13687 (5000X)
ICV 480039377017 (iar17 28-JAN-2010) stds: S13654 (10000X), S13639 (10000X),
S13492 (10000X), S13687 (5000X)

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
Freon 12	480039377016	25.00	20.09	ug/L	-20	25	
Chloromethane	480039377016	25.00	20.89	ug/L	-16	25	
Vinyl Chloride	480039377016	25.00	20.03	ug/L	-20	25	
Bromomethane	480039377016	25.00	22.30	ug/L	-11	25	
Chloroethane	480039377016	25.00	24.23	ug/L	-3	25	
Trichlorofluoromethane	480039377016	25.00	22.44	ug/L	-10	25	
Acetone	480039377017	25.00	21.54	ug/L	-14	25	
1,1-Dichloroethene	480039377017	25.00	26.91	ug/L	8	25	
Iodomethane	480039377017	25.00	18.32	ug/L	-27	25	v-
Methylene Chloride	480039377017	25.00	25.37	ug/L	1	25	
Carbon Disulfide	480039377017	25.00	23.28	ug/L	-7	25	
MTBE	480039377017	25.00	21.43	ug/L	-14	25	
trans-1,2-Dichloroethene	480039377017	25.00	26.20	ug/L	5	25	
Vinyl Acetate	480039377017	25.00	30.70	ug/L	23	25	
1,1-Dichloroethane	480039377017	25.00	24.42	ug/L	-2	25	
2-Butanone	480039377017	25.00	21.82	ug/L	-13	25	
2,2-Dichloropropane	480039377017	25.00	23.05	ug/L	-8	25	
cis-1,2-Dichloroethene	480039377017	25.00	26.25	ug/L	5	25	
Chloroform	480039377017	25.00	24.59	ug/L	-2	25	
Bromochloromethane	480039377017	25.00	27.00	ug/L	8	25	
1,1,1-Trichloroethane	480039377017	25.00	24.17	ug/L	-3	25	
1,1-Dichloropropene	480039377017	25.00	25.99	ug/L	4	25	
Carbon Tetrachloride	480039377017	25.00	25.34	ug/L	1	25	
1,2-Dichloroethane	480039377017	25.00	24.60	ug/L	-2	25	
Benzene	480039377017	25.00	27.05	ug/L	8	25	
Trichloroethene	480039377017	25.00	25.70	ug/L	3	25	
1,2-Dichloropropane	480039377017	25.00	24.27	ug/L	-3	25	
Bromodichloromethane	480039377017	25.00	25.33	ug/L	1	25	
Dibromomethane	480039377017	25.00	26.37	ug/L	5	25	
4-Methyl-2-Pentanone	480039377017	25.00	24.05	ug/L	-4	25	
cis-1,3-Dichloropropene	480039377017	25.00	26.24	ug/L	5	25	
Toluene	480039377017	25.00	27.48	ug/L	10	25	
trans-1,3-Dichloropropene	480039377017	25.00	23.44	ug/L	-6	25	
1,1,2-Trichloroethane	480039377017	25.00	27.04	ug/L	8	25	
2-Hexanone	480039377017	25.00	23.20	ug/L	-7	25	
1,3-Dichloropropane	480039377017	25.00	27.15	ug/L	9	25	
Tetrachloroethene	480039377017	25.00	26.80	ug/L	7	25	
Dibromochloromethane	480039377017	25.00	26.70	ug/L	7	25	
1,2-Dibromoethane	480039377017	25.00	28.03	ug/L	12	25	
Chlorobenzene	480039377017	25.00	26.33	ug/L	5	25	
1,1,1,2-Tetrachloroethane	480039377017	25.00	27.46	ug/L	10	25	
Ethylbenzene	480039377017	25.00	27.03	ug/L	8	25	
m,p-Xylenes	480039377017	50.00	57.68	ug/L	15	25	
o-Xylene	480039377017	25.00	27.64	ug/L	11	25	
Styrene	480039377017	25.00	27.93	ug/L	12	25	
Bromoform	480039377017	25.00	27.39	ug/L	10	25	
Isopropylbenzene	480039377017	25.00	24.25	ug/L	-3	25	

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	480039377017	25.00	27.95	ug/L	12	25	
1,2,3-Trichloropropane	480039377017	25.00	27.52	ug/L	10	25	
Propylbenzene	480039377017	25.00	27.56	ug/L	10	25	
Bromobenzene	480039377017	25.00	28.48	ug/L	14	25	
1,3,5-Trimethylbenzene	480039377017	25.00	27.77	ug/L	11	25	
2-Chlorotoluene	480039377017	25.00	27.96	ug/L	12	25	
4-Chlorotoluene	480039377017	25.00	26.81	ug/L	7	25	
tert-Butylbenzene	480039377017	25.00	27.81	ug/L	11	25	
1,2,4-Trimethylbenzene	480039377017	25.00	26.73	ug/L	7	25	
sec-Butylbenzene	480039377017	25.00	29.07	ug/L	16	25	
para-Isopropyl Toluene	480039377017	25.00	26.98	ug/L	8	25	
1,3-Dichlorobenzene	480039377017	25.00	26.38	ug/L	6	25	
1,4-Dichlorobenzene	480039377017	25.00	26.14	ug/L	5	25	
n-Butylbenzene	480039377017	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	480039377017	25.00	27.01	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	480039377017	25.00	26.21	ug/L	5	25	
1,2,4-Trichlorobenzene	480039377017	25.00	26.47	ug/L	6	25	
Hexachlorobutadiene	480039377017	25.00	27.55	ug/L	10	25	
Naphthalene	480039377017	25.00	27.87	ug/L	11	25	
1,2,3-Trichlorobenzene	480039377017	25.00	28.65	ug/L	15	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218768 MSVOA Water: EPA 8260B

Inst : MSVOA10
 Calnum : 490027869001
 Units : ug/L

Name : 826GOX10
 Date : 19-JAN-2010 18:58
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	jaj12	490027869012	.25/.5PPB	19-JAN-2010 18:58	S13745 (20000X), S13746 (20000X), S13747 (20000X), S13748 (10000X), S13615 (2500X)
L2	jaj13	490027869013	0.5/1PPB	19-JAN-2010 19:32	S13745 (10000X), S13746 (10000X), S13747 (10000X), S13748 (50000X), S13615 (2500X)
L3	jaj14	490027869014	2PPB	19-JAN-2010 20:07	S13745 (25000X), S13746 (25000X), S13747 (50000X), S13748 (25000X), S13615 (2500X)
L4	jaj15	490027869015	5PPB	19-JAN-2010 20:42	S13745 (10000X), S13746 (10000X), S13747 (20000X), S13748 (10000X), S13615 (2500X)
L5	jaj16	490027869016	10PPB	19-JAN-2010 21:17	S13745 (5000X), S13746 (5000X), S13747 (10000X), S13748 (5000X), S13615 (2500X)
L6	jaj17	490027869017	20PPB	19-JAN-2010 21:51	S13680 (25000X), S13586 (25000X), S13625 (50000X), S13503 (25000X), S13615 (2500X)
L7	jaj18	490027869018	50PPB	19-JAN-2010 22:26	S13680 (10000X), S13586 (10000X), S13625 (20000X), S13503 (10000X), S13615 (2500X)
L8	jaj19	490027869019	75PPB	19-JAN-2010 23:01	S13680 (6667X), S13586 (6667X), S13625 (13330X), S13503 (6667X), S13615 (2500X)
L9	jaj20	490027869020	100PPB	19-JAN-2010 23:35	S13680 (5000X), S13586 (5000X), S13625 (10000X), S13503 (5000X), S13615 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.3918	0.6916	0.6069m	0.6327	0.6573	0.7062			QUAD	0.18210	1.56885	-0.00448	0.6144	1.000	15	0.05	0.99	
Chloromethane		0.9525	1.0916m	1.0509	1.0071	0.9526	0.9903	0.9559	0.9085	AVRG		1.01145		0.9887	6	15	0.10	0.99	
Vinyl Chloride	0.7254	0.6064	0.8278	0.8382	0.7852	0.8017	0.8279	0.7825	0.7655	AVRG		1.29299		0.7734	9	15	0.05	0.99	
Bromomethane		0.4138	0.4729m	0.4748	0.4397	0.4360	0.4925	0.4880	0.4634	AVRG		2.17319		0.4602	6	15	0.05	0.99	
Chloroethane		0.4443m	0.4834m	0.4592m	0.4676	0.4510	0.4609	0.4413	0.4233	AVRG		2.20328		0.4539	4	15	0.05	0.99	
Trichlorofluoromethane		0.3817	0.6879	0.6368	0.6590	0.6730	0.6968			QUAD	0.22115	1.49397	-0.00187	0.6225	1.000	15	0.05	0.99	
Acetone				0.1936	0.1630	0.1407	0.1841	0.1655	0.1600	AVRG		5.95858		0.1678	11	15	0.05	0.99	
1,1-Dichloroethene		0.4959m	0.5767	0.6106	0.5879	0.5852	0.5594	0.5802	0.5611	AVRG		1.75556		0.5696	6	15	0.05	0.99	
Iodomethane			0.5906	0.7037	0.7318	0.5257	0.5613	0.5475	0.5298	AVRG		1.67051		0.5986	14	15	0.05	0.99	
Methylene Chloride		0.8469	0.7815	0.7512	0.7187	0.7252	0.7686	0.7365	0.7067	AVRG		1.32554		0.7544	6	15	0.05	0.99	
Carbon Disulfide		1.9085	2.4192	2.5698	2.4448	2.4480	2.4513	2.4485	2.3702	AVRG		0.41972		2.3825	8	15	0.05	0.99	
MTBE		1.5356	1.6609	1.6438	1.6234	1.5890	1.7290	1.6509	1.5851	AVRG		0.61454		1.6272	4	15	0.05	0.99	
trans-1,2-Dichloroethene		0.6320	0.6779	0.6780	0.6807	0.6724	0.6798	0.6753	0.6531	AVRG		1.49555		0.6687	3	15	0.05	0.99	
Vinyl Acetate			1.4467	1.3662	1.3674	1.4708	1.6053	1.5563	1.4683	AVRG		0.68087		1.4687	6	15	0.05	0.99	
1,1-Dichloroethane		1.0643	1.1998	1.2389	1.2046	1.2031	1.2289	1.2004	1.1576	AVRG		0.84233		1.1872	5	15	0.10	0.99	
2-Butanone			0.2978	0.2763	0.2694	0.2323	0.2836	0.2590	0.2566	AVRG		3.73358		0.2678	8	15	0.05	0.99	
2,2-Dichloropropane		0.6757	0.7276	0.7403	0.6863	0.6873	0.6681	0.6749	0.6415	AVRG		1.45412		0.6877	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.7204	0.7106	0.6859	0.6917	0.6975	0.7284	0.7094	0.6857	AVRG		1.42107		0.7037	2	15	0.05	0.99	
Chloroform		0.9388	1.0291	1.0289	1.0217	1.0228	1.0628	1.0350	0.9708	AVRG		0.98644		1.0137	4	15	0.05	0.99	
Bromochloromethane		0.3080	0.3276	0.3319	0.3366	0.3337	0.3581	0.3440	0.3303	AVRG		2.99603		0.3338	4	15	0.05	0.99	
1,1,1-Trichloroethane		0.5394	0.6557	0.6833	0.6635	0.6956	0.6706	0.6901	0.6779	AVRG		1.51627		0.6595	8	15	0.05	0.99	
1,1-Dichloropropene		0.3343	0.4453	0.4718	0.4471	0.4583	0.4447	0.4569	0.4372	AVRG		2.28864		0.4369	10	15	0.05	0.99	
Carbon Tetrachloride		0.2165	0.2877	0.3180	0.3109	0.3127	0.2982	0.3095	0.3047	AVRG		3.39243		0.2948	11	15	0.05	0.99	
1,2-Dichloroethane		0.3478	0.3616	0.3803	0.3806	0.3856	0.4024	0.3796	0.3628	AVRG		2.66595		0.3751	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.2680	1.3599	1.4254	1.3984	1.3877	1.4206	1.3726	1.2892	AVRG		0.73248		1.3652	4	15	0.05	0.99	
Trichloroethene		0.2922	0.3180	0.3575	0.3518	0.3551	0.3569	0.3523	0.3438	AVRG		2.93293		0.3410	7	15	0.05	0.99	
1,2-Dichloropropane		0.4079	0.4008	0.4191	0.4248	0.4061	0.4466	0.4236	0.4076	AVRG		2.39776		0.4171	4	15	0.05	0.99	
Bromodichloromethane		0.4122	0.4221	0.4427	0.4372	0.4384	0.4684	0.4476	0.4261	AVRG		2.28903		0.4369	4	15	0.05	0.99	
Dibromomethane		0.2186	0.2282	0.2333	0.2258	0.2293	0.2476	0.2369	0.2248	AVRG		4.33774		0.2305	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3340	0.3217	0.3214	0.2921	0.3566	0.3350	0.3224	AVRG		3.06596		0.3262	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.5750	0.5610	0.5820	0.5819	0.5732	0.6180	0.5885	0.5523	AVRG		1.72722		0.5790	3	15	0.05	0.99	
Toluene		0.9530	0.9690	0.9911	0.9610	0.9673	0.9894	0.9666	0.9247	AVRG		1.03598		0.9653	2	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5178	0.5628	0.5849	0.5685	0.5694	0.6272	0.5955	0.5659	AVRG		1.74212		0.5740	5	15	0.05	0.99	
1,1,2-Trichloroethane		0.1892	0.1941	0.2061	0.1972	0.1971	0.2197	0.2037	0.1969	AVRG		4.98735		0.2005	5	15	0.05	0.99	
2-Hexanone			0.2843	0.2413	0.2451	0.2371	0.2836	0.2591	0.2540	AVRG		3.87915		0.2578	7	15	0.05	0.99	
1,3-Dichloropropane		0.5398	0.5934	0.5905	0.6052	0.5852	0.6412	0.6115	0.5872	AVRG		1.68276		0.5943	5	15	0.05	0.99	
Tetrachloroethene		0.3033	0.3598	0.3944	0.3774	0.3880	0.3800	0.3860	0.3774	AVRG		2.69689		0.3708	8	15	0.05	0.99	
Dibromochloromethane		0.3437	0.3530	0.3738	0.3709	0.3728	0.4166	0.3927	0.3774	AVRG		2.66591		0.3751	6	15	0.05	0.99	
1,2-Dibromoethane		0.3057	0.3362	0.3526	0.3513	0.3501	0.3915	0.3716	0.3532	AVRG		2.84479		0.3515	7	15	0.05	0.99	
Chlorobenzene		1.0531	1.0536	1.1044	1.0812	1.0923	1.1462	1.0966	1.0330	AVRG		0.92374		1.0826	3	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3096	0.3309	0.3385	0.3290	0.3369	0.3576	0.3471	0.3239	AVRG		2.99234		0.3342	4	15	0.05	0.99	
Ethylbenzene		1.6500	1.7827	1.8447	1.8008	1.8122	1.8127	1.7761	1.6781	AVRG		0.56508		1.7697	4	15	0.05	0.99	
m,p-Xylenes	0.7326	0.6241	0.6797	0.6930	0.6793	0.6793	0.6821	0.6607	0.6269	AVRG		1.48570		0.6731	5	15	0.05	0.99	
o-Xylene		0.6283	0.6409	0.6946	0.6643	0.6770	0.6972	0.6705	0.6373	AVRG		1.50652		0.6638	4	15	0.05	0.99	
Styrene		1.0406	1.1627	1.2311	1.2098	1.2251	1.2781	1.2105	1.1436	AVRG		0.84197		1.1877	6	15	0.05	0.99	
Bromoform		0.1964	0.2203	0.2317	0.2267	0.2276	0.2591	0.2451	0.2364	AVRG		4.33951		0.2304	8	15	0.10	0.99	
Isopropylbenzene		2.9948	3.3679	3.5241	3.4842	3.4035	3.3814	3.3183	3.1713	AVRG		0.30024		3.3307	5	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.8634	0.9388	0.9230	0.9478	0.9028	1.0130	0.9497	0.9175	AVRG		1.07298		0.9320	5	15	0.30	0.99	
1,2,3-Trichloropropane		0.8131	0.7442	0.7575	0.7291	0.7036	0.7780	0.7350	0.7021	AVRG		1.34168		0.7453	5	15	0.05	0.99	
Propylbenzene		3.8415	4.2083	4.4710	4.4582	4.3750	4.2436	4.1775	3.9757	AVRG		0.23703		4.2189	5	15	0.05	0.99	
Bromobenzene		0.9139	0.8760	0.8746	0.8897	0.8916	0.9348	0.8925	0.8432	AVRG		1.12420		0.8895	3	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.5580	2.7063	2.8266	2.7814	2.8072	2.7882	2.7232	2.5554	AVRG		0.36788		2.7183	4	15	0.05	0.99	
2-Chlorotoluene		2.7142	2.7171	2.8270	2.7395	2.7646	2.7823	2.6919	2.5142	AVRG		0.36780		2.7188	3	15	0.05	0.99	
4-Chlorotoluene		2.5567	2.4605	2.6264	2.6572	2.6019	2.7049	2.5911	2.4565	AVRG		0.38731		2.5819	3	15	0.05	0.99	
tert-Butylbenzene		1.9102	2.2307	2.3379	2.3503	2.3537	2.2889	2.2921	2.2090	AVRG		0.44512		2.2466	7	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.7826	2.7787	2.8993	2.9118	2.8776	2.9550	2.8359	2.7052	AVRG		0.35171		2.8433	3	15	0.05	0.99	
sec-Butylbenzene		2.9770	3.6151	3.7665	3.7770	3.6964	3.5787	3.6421	3.4951	AVRG		0.28023		3.5685	7	15	0.05	0.99	
para-Isopropyl Toluene		2.3366	2.7451	2.8866	2.9148	2.9033	2.8430	2.8287	2.7468	AVRG		0.36028		2.7756	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.6381	1.6631	1.7085	1.7222	1.7035	1.7980	1.7299	1.6200	AVRG		0.58896		1.6979	3	15	0.05	0.99	
1,4-Dichlorobenzene		1.6778	1.7282	1.7702	1.7656	1.7528	1.8472	1.7667	1.6569	AVRG		0.57285		1.7457	3	15	0.05	0.99	
n-Butylbenzene		2.4792	2.7039	2.9085	2.8499	2.8497	2.7808	2.7966	2.7111	AVRG		0.36232		2.7600	5	15	0.05	0.99	
1,2-Dichlorobenzene		1.4027	1.5685	1.5678	1.5997	1.5870	1.7042	1.6245	1.5228	AVRG		0.63607		1.5721	6	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.0991	0.1225	0.1188	0.1064	0.1262	0.1187	0.1144	AVRG		8.68367		0.1152	8	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.8558	0.9018	0.9209	0.9250	0.9263	0.9824	0.9485	0.9113	AVRG		1.08517		0.9215	4	15	0.05	0.99	
Hexachlorobutadiene		0.1934	0.2667	0.2972	0.2876	0.3049	0.2844	0.3056	0.3025	AVRG		3.56770		0.2803	13	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		1.7939	1.9260	1.9940	1.9976	1.9369	2.1935	2.0997	2.0470	AVRG		0.50036		1.9986	6	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7439	0.7428	0.7816	0.7984	0.7980	0.8729	0.8407	0.7902	AVRG		1.25619		0.7961	6	15	0.05	0.99	
Dibromofluoromethane	0.5743	0.5645	0.5823	0.5690	0.5749	0.5655	0.5729	0.5738	0.5767	AVRG		1.74622		0.5727	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.2823	0.2827	0.2826	0.2829	0.2793	0.2721	0.2732	0.2671	0.2658	AVRG		3.61733		0.2764	3	15	0.05	0.99	
Toluene-d8	1.3510	1.3456	1.3389	1.3520	1.3395	1.3495	1.3651	1.3481	1.3459	AVRG		0.74162		1.3484	1	15	0.05	0.99	
Bromofluorobenzene	0.9927	1.0105	0.9774	0.9906	1.0040	0.9879	0.9870	0.9890	0.9773	AVRG		1.00937		0.9907	1	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-20	2.000	17	5.000	-2	10.00	-1	20.00	0	50.00	0				
Chloromethane			1.000	-4	2.000	10	5.000	6	10.00	2	20.00	-4	50.00	0	75.00	-3	100.0	-8
Vinyl Chloride	0.500	-6	1.000	-22	2.000	7	5.000	8	10.00	2	20.00	4	50.00	7	75.00	1	100.0	-1
Bromomethane			1.000	-10	2.000	3	5.000	3	10.00	-4	20.00	-5	50.00	7	75.00	6	100.0	1
Chloroethane			1.000	-2	2.000	7	5.000	1	10.00	3	20.00	-1	50.00	2	75.00	-3	100.0	-7
Trichlorofluoromethane			1.000	-21	2.000	14	5.000	-1	10.00	0	20.00	0	50.00	0				
Acetone							5.000	15	10.00	-3	20.00	-16	50.00	10	75.00	-1	100.0	-5
1,1-Dichloroethene			0.500	-13	2.000	1	5.000	7	10.00	3	20.00	3	50.00	-2	75.00	2	100.0	-2
Iodomethane					2.000	-1	5.000	18	10.00	22	20.00	-12	50.00	-6	75.00	-9	100.0	-12
Methylene Chloride			0.500	12	2.000	4	5.000	0	10.00	-5	20.00	-4	50.00	2	75.00	-2	100.0	-6
Carbon Disulfide			0.500	-20	2.000	2	5.000	8	10.00	3	20.00	3	50.00	3	75.00	3	100.0	-1
MTBE			0.500	-6	2.000	2	5.000	1	10.00	0	20.00	-2	50.00	6	75.00	1	100.0	-3
trans-1,2-Dichloroethene			0.500	-5	2.000	1	5.000	1	10.00	2	20.00	1	50.00	2	75.00	1	100.0	-2
Vinyl Acetate					2.000	-1	5.000	-7	10.00	-7	20.00	0	50.00	9	75.00	6	100.0	0
1,1-Dichloroethane			0.500	-10	2.000	1	5.000	4	10.00	1	20.00	1	50.00	4	75.00	1	100.0	-2
2-Butanone					2.000	11	5.000	3	10.00	1	20.00	-13	50.00	6	75.00	-3	100.0	-4
2,2-Dichloropropane			0.500	-2	2.000	6	5.000	8	10.00	0	20.00	0	50.00	-3	75.00	-2	100.0	-7
cis-1,2-Dichloroethene			0.500	2	2.000	1	5.000	-3	10.00	-2	20.00	-1	50.00	4	75.00	1	100.0	-3
Chloroform			0.500	-7	2.000	2	5.000	1	10.00	1	20.00	1	50.00	5	75.00	2	100.0	-4
Bromochloromethane			0.500	-8	2.000	-2	5.000	-1	10.00	1	20.00	0	50.00	7	75.00	3	100.0	-1
1,1,1-Trichloroethane			0.500	-18	2.000	-1	5.000	4	10.00	1	20.00	5	50.00	2	75.00	5	100.0	3
1,1-Dichloropropene			0.500	-23	2.000	2	5.000	8	10.00	2	20.00	5	50.00	2	75.00	5	100.0	0
Carbon Tetrachloride			0.500	-27	2.000	-2	5.000	8	10.00	5	20.00	6	50.00	1	75.00	5	100.0	3
1,2-Dichloroethane			0.500	-7	2.000	-4	5.000	1	10.00	1	20.00	3	50.00	7	75.00	1	100.0	-3
Benzene			0.500	-7	2.000	0	5.000	4	10.00	2	20.00	2	50.00	4	75.00	1	100.0	-6
Trichloroethene			0.500	-14	2.000	-7	5.000	5	10.00	3	20.00	4	50.00	5	75.00	3	100.0	1
1,2-Dichloropropane			0.500	-2	2.000	-4	5.000	0	10.00	2	20.00	-3	50.00	7	75.00	2	100.0	-2
Bromodichloromethane			0.500	-6	2.000	-3	5.000	1	10.00	0	20.00	0	50.00	7	75.00	2	100.0	-2
Dibromomethane			0.500	-5	2.000	-1	5.000	1	10.00	-2	20.00	-1	50.00	7	75.00	3	100.0	-3
4-Methyl-2-Pentanone					2.000	2	5.000	-1	10.00	-1	20.00	-10	50.00	9	75.00	3	100.0	-1
cis-1,3-Dichloropropene			0.500	-1	2.000	-3	5.000	1	10.00	1	20.00	-1	50.00	7	75.00	2	100.0	-5
Toluene			0.500	-1	2.000	0	5.000	3	10.00	0	20.00	0	50.00	3	75.00	0	100.0	-4
trans-1,3-Dichloropropene			0.500	-10	2.000	-2	5.000	2	10.00	-1	20.00	-1	50.00	9	75.00	4	100.0	-1
1,1,2-Trichloroethane			0.500	-6	2.000	-3	5.000	3	10.00	-2	20.00	-2	50.00	10	75.00	2	100.0	-2
2-Hexanone					2.000	10	5.000	-6	10.00	-5	20.00	-8	50.00	10	75.00	1	100.0	-1
1,3-Dichloropropane			0.500	-9	2.000	0	5.000	-1	10.00	2	20.00	-2	50.00	8	75.00	3	100.0	-1
Tetrachloroethene			0.500	-18	2.000	-3	5.000	6	10.00	2	20.00	5	50.00	2	75.00	4	100.0	2
Dibromochloromethane			0.500	-8	2.000	-6	5.000	0	10.00	-1	20.00	-1	50.00	11	75.00	5	100.0	1
1,2-Dibromoethane			0.500	-13	2.000	-4	5.000	0	10.00	0	20.00	0	50.00	11	75.00	6	100.0	0
Chlorobenzene			0.500	-3	2.000	-3	5.000	2	10.00	0	20.00	1	50.00	6	75.00	1	100.0	-5
1,1,1,2-Tetrachloroethane			0.500	-7	2.000	-1	5.000	1	10.00	-2	20.00	1	50.00	7	75.00	4	100.0	-3
Ethylbenzene			0.500	-7	2.000	1	5.000	4	10.00	2	20.00	2	50.00	2	75.00	0	100.0	-5

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	9	1.000	-7	4.000	1	10.00	3	20.00	1	40.00	1	100.0	1	150.0	-2	200.0	-7
o-Xylene			0.500	-5	2.000	-3	5.000	5	10.00	0	20.00	2	50.00	5	75.00	1	100.0	-4
Styrene			0.500	-12	2.000	-2	5.000	4	10.00	2	20.00	3	50.00	8	75.00	2	100.0	-4
Bromoform			0.500	-15	2.000	-4	5.000	1	10.00	-2	20.00	-1	50.00	12	75.00	6	100.0	3
Isopropylbenzene			0.500	-10	2.000	1	5.000	6	10.00	5	20.00	2	50.00	2	75.00	0	100.0	-5
1,1,2,2-Tetrachloroethane			0.500	-7	2.000	1	5.000	-1	10.00	2	20.00	-3	50.00	9	75.00	2	100.0	-2
1,2,3-Trichloropropane			0.500	9	2.000	0	5.000	2	10.00	-2	20.00	-6	50.00	4	75.00	-1	100.0	-6
Propylbenzene			0.500	-9	2.000	0	5.000	6	10.00	6	20.00	4	50.00	1	75.00	-1	100.0	-6
Bromobenzene			0.500	3	2.000	-2	5.000	-2	10.00	0	20.00	0	50.00	5	75.00	0	100.0	-5
1,3,5-Trimethylbenzene			0.500	-6	2.000	0	5.000	4	10.00	2	20.00	3	50.00	3	75.00	0	100.0	-6
2-Chlorotoluene			0.500	0	2.000	0	5.000	4	10.00	1	20.00	2	50.00	2	75.00	-1	100.0	-8
4-Chlorotoluene			0.500	-1	2.000	-5	5.000	2	10.00	3	20.00	1	50.00	5	75.00	0	100.0	-5
tert-Butylbenzene			0.500	-15	2.000	-1	5.000	4	10.00	5	20.00	5	50.00	2	75.00	2	100.0	-2
1,2,4-Trimethylbenzene			0.500	-2	2.000	-2	5.000	2	10.00	2	20.00	1	50.00	4	75.00	0	100.0	-5
sec-Butylbenzene			0.500	-17	2.000	1	5.000	6	10.00	6	20.00	4	50.00	0	75.00	2	100.0	-2
para-Isopropyl Toluene			0.500	-16	2.000	-1	5.000	4	10.00	5	20.00	5	50.00	2	75.00	2	100.0	-1
1,3-Dichlorobenzene			0.500	-4	2.000	-2	5.000	1	10.00	1	20.00	0	50.00	6	75.00	2	100.0	-5
1,4-Dichlorobenzene			0.500	-4	2.000	-1	5.000	1	10.00	1	20.00	0	50.00	6	75.00	1	100.0	-5
n-Butylbenzene			0.500	-10	2.000	-2	5.000	5	10.00	3	20.00	3	50.00	1	75.00	1	100.0	-2
1,2-Dichlorobenzene			0.500	-11	2.000	0	5.000	0	10.00	2	20.00	1	50.00	8	75.00	3	100.0	-3
1,2-Dibromo-3-Chloropropane					2.000	-14	5.000	6	10.00	3	20.00	-8	50.00	10	75.00	3	100.0	-1
1,2,4-Trichlorobenzene			0.500	-7	2.000	-2	5.000	0	10.00	0	20.00	1	50.00	7	75.00	3	100.0	-1
Hexachlorobutadiene			0.500	-31	2.000	-5	5.000	6	10.00	3	20.00	9	50.00	1	75.00	9	100.0	8
Naphthalene			0.500	-10	2.000	-4	5.000	0	10.00	0	20.00	-3	50.00	10	75.00	5	100.0	2
1,2,3-Trichlorobenzene			0.500	-7	2.000	-7	5.000	-2	10.00	0	20.00	0	50.00	10	75.00	6	100.0	-1
Dibromofluoromethane	50.00	0	50.00	-1	50.00	2	50.00	-1	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	1
1,2-Dichloroethane-d4	50.00	2	50.00	2	50.00	2	50.00	2	50.00	1	50.00	-2	50.00	-1	50.00	-3	50.00	-4
Toluene-d8	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	-1	50.00	0	50.00	1	50.00	0	50.00	0
Bromofluorobenzene	50.00	0	50.00	2	50.00	-1	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	-1

BO 01/20/10 [Chloromethane]: Corrected fronting or tailing peak integration in 2PPB (jaj14).

BO 01/20/10 [Chloroethane]: Corrected baseline noise or negative peak in multiple levels.

BO 01/20/10 [1,1-Dichloroethene]: Corrected fronting or tailing peak integration1PPB (jaj13).

BO 01/20/10 [Isopropyl Ether (DIPE)]: Corrected fronting or tailing peak integration1PPB (jaj13).

BO 01/22/10 [n-Hexane]: DO NOT USE

Analyst: BO

Date: 01/22/10

Reviewer: LW

Date: 01/22/10

m=manual integration

Instrument amount = $a_0 + \text{response} * a_1 + \text{response}^2 * a_2$; AVRG=Average response factor; QUAD=Quadratic regression

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490027869001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA10
Calnum : 490027869001

Name : 826GOX10
Cal Date : 19-JAN-2010

Type : WATER

ICV 490027869021 (jaj21 20-JAN-2010) stds: S13817 (10000X), S13615 (2500X)
ICV 490027869022 (jaj22 20-JAN-2010) stds: S13559 (10000X), S13639 (10000X),
S13492 (10000X), S13615 (2500X)

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
Freon 12	490027869021	25.00	27.46	ug/L	10	25	
Chloromethane	490027869021	25.00	25.14	ug/L	1	25	
Vinyl Chloride	490027869021	25.00	24.91	ug/L	0	25	
Bromomethane	490027869021	25.00	25.54	ug/L	2	25	
Chloroethane	490027869021	25.00	26.12	ug/L	4	25	
Trichlorofluoromethane	490027869021	25.00	24.17	ug/L	-3	25	
Acetone	490027869022	25.00	25.77	ug/L	3	25	
1,1-Dichloroethene	490027869022	25.00	26.60	ug/L	6	25	
Iodomethane	490027869022	25.00	21.78	ug/L	-13	25	
Methylene Chloride	490027869022	25.00	25.48	ug/L	2	25	
Carbon Disulfide	490027869022	25.00	22.36	ug/L	-11	25	
MTBE	490027869022	25.00	23.83	ug/L	-5	25	
trans-1,2-Dichloroethene	490027869022	25.00	26.75	ug/L	7	25	
Vinyl Acetate	490027869022	25.00	25.72	ug/L	3	25	
1,1-Dichloroethane	490027869022	25.00	26.55	ug/L	6	25	
2-Butanone	490027869022	25.00	24.40	ug/L	-2	25	
2,2-Dichloropropane	490027869022	25.00	25.34	ug/L	1	25	
cis-1,2-Dichloroethene	490027869022	25.00	26.87	ug/L	7	25	
Chloroform	490027869022	25.00	26.37	ug/L	5	25	
Bromochloromethane	490027869022	25.00	26.60	ug/L	6	25	
1,1,1-Trichloroethane	490027869022	25.00	27.92	ug/L	12	25	
1,1-Dichloropropene	490027869022	25.00	28.30	ug/L	13	25	
Carbon Tetrachloride	490027869022	25.00	28.51	ug/L	14	25	
1,2-Dichloroethane	490027869022	25.00	25.99	ug/L	4	25	
Benzene	490027869022	25.00	27.78	ug/L	11	25	
Trichloroethene	490027869022	25.00	28.04	ug/L	12	25	
1,2-Dichloropropane	490027869022	25.00	26.34	ug/L	5	25	
Bromodichloromethane	490027869022	25.00	26.54	ug/L	6	25	
Dibromomethane	490027869022	25.00	26.27	ug/L	5	25	
4-Methyl-2-Pentanone	490027869022	25.00	24.92	ug/L	0	25	
cis-1,3-Dichloropropene	490027869022	25.00	26.68	ug/L	7	25	
Toluene	490027869022	25.00	27.42	ug/L	10	25	
trans-1,3-Dichloropropene	490027869022	25.00	24.15	ug/L	-3	25	
1,1,2-Trichloroethane	490027869022	25.00	26.11	ug/L	4	25	
2-Hexanone	490027869022	25.00	25.89	ug/L	4	25	
1,3-Dichloropropane	490027869022	25.00	26.99	ug/L	8	25	
Tetrachloroethene	490027869022	25.00	27.37	ug/L	9	25	
Dibromochloromethane	490027869022	25.00	26.43	ug/L	6	25	
1,2-Dibromoethane	490027869022	25.00	27.39	ug/L	10	25	
Chlorobenzene	490027869022	25.00	26.86	ug/L	7	25	
1,1,1,2-Tetrachloroethane	490027869022	25.00	27.37	ug/L	9	25	
Ethylbenzene	490027869022	25.00	27.80	ug/L	11	25	
m,p-Xylenes	490027869022	50.00	55.23	ug/L	10	25	
o-Xylene	490027869022	25.00	27.24	ug/L	9	25	
Styrene	490027869022	25.00	28.01	ug/L	12	25	
Bromoform	490027869022	25.00	26.32	ug/L	5	25	
Isopropylbenzene	490027869022	25.00	24.49	ug/L	-2	25	

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	490027869022	25.00	25.59	ug/L	2	25	
1,2,3-Trichloropropane	490027869022	25.00	26.29	ug/L	5	25	
Propylbenzene	490027869022	25.00	27.54	ug/L	10	25	
Bromobenzene	490027869022	25.00	26.97	ug/L	8	25	
1,3,5-Trimethylbenzene	490027869022	25.00	27.50	ug/L	10	25	
2-Chlorotoluene	490027869022	25.00	27.75	ug/L	11	25	
4-Chlorotoluene	490027869022	25.00	26.75	ug/L	7	25	
tert-Butylbenzene	490027869022	25.00	27.62	ug/L	10	25	
1,2,4-Trimethylbenzene	490027869022	25.00	26.71	ug/L	7	25	
sec-Butylbenzene	490027869022	25.00	27.97	ug/L	12	25	
para-Isopropyl Toluene	490027869022	25.00	27.08	ug/L	8	25	
1,3-Dichlorobenzene	490027869022	25.00	26.62	ug/L	6	25	
1,4-Dichlorobenzene	490027869022	25.00	26.46	ug/L	6	25	
n-Butylbenzene	490027869022	25.00	27.91	ug/L	12	25	
1,2-Dichlorobenzene	490027869022	25.00	27.02	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	490027869022	25.00	27.27	ug/L	9	25	
1,2,4-Trichlorobenzene	490027869022	25.00	26.94	ug/L	8	25	
Hexachlorobutadiene	490027869022	25.00	27.97	ug/L	12	25	
Naphthalene	490027869022	25.00	27.76	ug/L	11	25	
1,2,3-Trichlorobenzene	490027869022	25.00	27.97	ug/L	12	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218768 MSVOA Water: EPA 8260B

Inst : MSVOA14
 Calnum : 950120036001
 Units : ug/L

Date : 24-MAR-2010 11:10

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	nco08	950120036008	.25/.5PPB	24-MAR-2010 11:10	S14217 (20000X), S14254 (20000X), S14255 (20000X), S14256 (10000X), S14027 (2500X)
L2	nco09	950120036009	0.5/1PPB	24-MAR-2010 11:39	S14217 (10000X), S14254 (10000X), S14255 (10000X), S14256 (5000X), S14027 (2500X)
L3	nco10	950120036010	2PPB	24-MAR-2010 12:08	S14217 (25000X), S14254 (25000X), S14255 (50000X), S14256 (25000X), S14027 (2500X)
L4	nco11	950120036011	5PPB	24-MAR-2010 12:37	S14217 (10000X), S14254 (10000X), S14255 (20000X), S14256 (10000X), S14027 (2500X)
L5	nco12	950120036012	10PPB	24-MAR-2010 13:06	S14217 (5000X), S14254 (5000X), S14255 (10000X), S14256 (5000X), S14027 (2500X)
L6	nco13	950120036013	20PPB	24-MAR-2010 13:35	S14216 (25000X), S14108 (25000X), S14228 (50000X), S13719 (25000X), S14027 (2500X)
L7	nco14	950120036014	50PPB	24-MAR-2010 14:04	S14216 (10000X), S14108 (10000X), S14228 (20000X), S13719 (10000X), S14027 (2500X)
L8	nco15	950120036015	75PPB	24-MAR-2010 14:34	S14216 (6667X), S14108 (6667X), S14228 (13330X), S13719 (6667X), S14027 (2500X)
L9	nco16	950120036016	100PPB	24-MAR-2010 15:03	S14216 (5000X), S14108 (5000X), S14228 (10000X), S13719 (5000X), S14027 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.4426	0.4192	0.4924	0.4686	0.4842	0.5350	0.5214	0.5361	AVRG	R		2.05152		0.4874	9	15	0.05	0.99	
Chloromethane		0.5958	0.5484	0.5476	0.5535	0.5649	0.5607	0.5367	0.5373	AVRG	R		1.79978		0.5556	3	15	0.10	0.99	
Vinyl Chloride	0.6799	0.6473	0.6171	0.6244	0.6037	0.6445	0.6760	0.6429	0.6579	AVRG	R		1.55343		0.6437	4	15	0.05	0.99	
Bromomethane		0.4326	0.4764	0.4409	0.4365	0.4208	0.3917	0.3939	0.4153	AVRG	R		2.34733		0.4260	6	15	0.05	0.99	
Chloroethane		0.4541m	0.4101m	0.3825m	0.3711m	0.3839m	0.3830m	0.3782m	0.3766m	AVRG	R		2.54815		0.3924	7	15	0.05	0.99	
Trichlorofluoromethane		0.6726	0.6740	0.7336	0.6984	0.7170	0.7713	0.9981	0.7820	AVRG	R		1.32296		0.7559	14	15	0.05	0.99	
Acetone			0.2309	0.2128	0.2050	0.1906	0.1893	0.1676	0.1731	AVRG	R		5.11215		0.1956	11	15	0.05	0.99	
1,1-Dichloroethene		0.4876	0.4128	0.3867	0.3690	0.3831	0.4014	0.3623	0.3924	AVRG	R		2.50364		0.3994	10	15	0.05	0.99	
Iodomethane				0.1703	0.2235	0.3291	0.4598	0.4727	0.5564	QUAD	A	-1.0872	0.34702	0.002148	0.3686	0.998	15	0.05	0.99	
Methylene Chloride		0.5355	0.4644	0.4511	0.4481	0.4745	0.4520	0.4457	0.4465	AVRG	R		2.15180		0.4647	7	15	0.05	0.99	
Carbon Disulfide		1.5793	1.4576	1.4697	1.4760	1.6477	1.7140	1.4453	1.6765	AVRG	R		0.64174		1.5583	7	15	0.05	0.99	
MTBE		1.5163	1.4091	1.4161	1.4146	1.5392	1.5374	1.5100	1.5140	AVRG	R		0.67472		1.4821	4	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5027	0.4296	0.4156	0.4198	0.4368	0.4376	0.4261	0.4263	AVRG	R		2.28920		0.4368	6	15	0.05	0.99	
Vinyl Acetate			0.7133	0.7484m	0.7531	1.0818	1.1054	1.0648	1.0764	LINR	R	1.22640	0.91453		0.9347	0.999	15	0.05	0.99	
1,1-Dichloroethane		0.9193	0.8246	0.8044	0.8118	0.8494	0.8368	0.8016	0.8074	AVRG	R		1.20207		0.8319	5	15	0.10	0.99	
2-Butanone			0.2660	0.2620	0.2509	0.2636	0.2649	0.2597	0.2504	AVRG	R		3.85138		0.2596	2	15	0.05	0.99	
2,2-Dichloropropane		0.6968	0.6945	0.6859	0.6647	0.6916	0.7086	0.6837	0.6687	AVRG	R		1.45600		0.6868	2	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6199	0.4989	0.4934	0.4864	0.5122	0.5115	0.4923	0.4997	AVRG	R		1.94444		0.5143	8	15	0.05	0.99	
Chloroform		0.9555	0.8333	0.8207	0.8170	0.8515	0.8406	0.8025	0.8163	AVRG	R		1.18743		0.8422	6	15	0.05	0.99	
Bromochloromethane		0.2827	0.2432	0.2405	0.2363	0.2505	0.2454	0.2380	0.2408	AVRG	R		4.04573		0.2472	6	15	0.05	0.99	
1,1,1-Trichloroethane		0.7348	0.6831	0.6921	0.6683	0.6673	0.6899	0.6761	0.6699	AVRG	R		1.45942		0.6852	3	15	0.05	0.99	
1,1-Dichloropropene		0.3826	0.3841	0.3864	0.3793	0.3771	0.4067	0.4086	0.4007	AVRG	R		2.55961		0.3907	3	15	0.05	0.99	
Carbon Tetrachloride		0.2878	0.3270	0.3425	0.3364	0.3270	0.3586	0.3652	0.3556	AVRG	R		2.96297		0.3375	7	15	0.05	0.99	
1,2-Dichloroethane		0.4792	0.4431	0.4380	0.4304	0.4560	0.4459	0.4302	0.4338	AVRG	R		2.24932		0.4446	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3772	1.1901	1.1801	1.1999	1.2348	1.2498	1.2100	1.2198	AVRG	R		0.81122		1.2327	5	15	0.05	0.99	
Trichloroethene		0.3444	0.3098	0.3096	0.3039	0.3007	0.3104	0.3046	0.3037	AVRG	R		3.21643		0.3109	5	15	0.05	0.99	
1,2-Dichloropropane		0.3460	0.3089	0.3055	0.3052	0.3186	0.3200	0.3069	0.3101	AVRG	R		3.17301		0.3152	4	15	0.05	0.99	
Bromodichloromethane		0.4193	0.3817	0.3816	0.3852	0.4123	0.4134	0.4032	0.4095	AVRG	R		2.49516		0.4008	4	15	0.05	0.99	
Dibromomethane		0.1993	0.2020	0.2016	0.1963	0.2073	0.2064	0.2025	0.2028	AVRG	R		4.94379		0.2023	2	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3081	0.3134	0.3153	0.3396	0.3508	0.3489	0.3398	AVRG	R		3.02275		0.3308	5	15	0.05	0.99	
cis-1,3-Dichloropropene		0.5441	0.4922	0.4996	0.5041	0.5394	0.5388	0.5258	0.5321	AVRG	R		1.91568		0.5220	4	15	0.05	0.99	
Toluene		1.6313	1.4024	1.3869	1.3763	1.3976	1.4047	1.3637	1.3616	AVRG	R		0.70643		1.4156	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5422	0.4955	0.5141	0.5051	0.5449	0.5464	0.5345	0.5389	AVRG	R		1.89501		0.5277	4	15	0.05	0.99	
1,1,2-Trichloroethane		0.1709	0.1676	0.1635	0.1596	0.1670	0.1666	0.1647	0.1635	AVRG	R		6.04475		0.1654	2	15	0.05	0.99	
2-Hexanone			0.2263	0.2307	0.2290	0.2477	0.2581	0.2594	0.2518	AVRG	R		4.11041		0.2433	6	15	0.05	0.99	
1,3-Dichloropropane		0.5837	0.5460	0.5465	0.5293	0.5625	0.5562	0.5438	0.5450	AVRG	R		1.81281		0.5516	3	15	0.05	0.99	
Tetrachloroethene		0.3247	0.3467	0.3361	0.3257	0.3106	0.3335	0.3386	0.3293	AVRG	R		3.02431		0.3307	3	15	0.05	0.99	
Dibromochloromethane		0.3265	0.3061	0.3076	0.3087	0.3313	0.3404	0.3393	0.3438	AVRG	R		3.07271		0.3254	5	15	0.05	0.99	
1,2-Dibromoethane		0.3433	0.3233	0.3193	0.3140	0.3345	0.3337	0.3317	0.3316	AVRG	R		3.04014		0.3289	3	15	0.05	0.99	
Chlorobenzene		1.0623	0.9443	0.9272	0.9311	0.9513	0.9643	0.9437	0.9604	AVRG	R		1.04106		0.9606	4	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3328	0.3090	0.3163	0.3128	0.3293	0.3352	0.3262	0.3314	AVRG	R		3.08518		0.3241	3	15	0.05	0.99	
Ethylbenzene		1.7871m	1.6160	1.5869	1.5866	1.5713	1.6333	1.6135	1.6076	AVRG	R		0.61528		1.6253	4	15	0.05	0.99	
m,p-Xylenes	0.7693	0.6378	0.5849	0.6058	0.6098	0.6076	0.6399	0.6345	0.6405	AVRG	R		1.57066		0.6367	8	15	0.05	0.99	
o-Xylene		0.6209	0.5683	0.5822	0.5896	0.6036	0.6263	0.6156	0.6265	AVRG	R		1.65533		0.6041	4	15	0.05	0.99	
Styrene		1.0275	0.9562	0.9937	0.9993	1.0707	1.1044	1.0870	1.1079	AVRG	R		0.95846		1.0433	5	15	0.05	0.99	
Bromoform		0.2060	0.2242	0.2292	0.2324	0.2583	0.2766	0.2790	0.2836	AVRG	R		4.02161		0.2487	12	15	0.10	0.99	
Isopropylbenzene		2.8438	2.7431	2.7606	2.7613	2.6789	2.8416	2.8512	2.8256	AVRG	R		0.35865		2.7883	2	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.8117	0.7951	0.7716	0.7551	0.8079	0.7981	0.7869	0.7728	AVRG	R		1.26998		0.7874	2	15	0.30	0.99	
1,2,3-Trichloropropane		0.9355	0.8232	0.7917	0.7812	0.8116	0.8014	0.7896	0.7766	AVRG	R		1.22874		0.8138	6	15	0.05	0.99	
Propylbenzene		3.7017	3.4125	3.4429	3.4238	3.2785	3.4373	3.4043	3.3316	AVRG	R		0.29162		3.4291	4	15	0.05	0.99	
Bromobenzene		0.9453	0.7804	0.7544	0.7529	0.7826	0.7771	0.7577	0.7655	AVRG	R		1.26666		0.7895	8	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.4806	2.2832	2.3037	2.3281	2.2835	2.3912	2.3607	2.3525	AVRG	R		0.42590		2.3479	3	15	0.05	0.99	
2-Chlorotoluene		2.7852	2.3363	2.2875	2.3102	2.2860	2.3198	2.2472	2.2418	AVRG	R		0.42521		2.3518	8	15	0.05	0.99	
4-Chlorotoluene		2.5040	2.1113	2.1336	2.1196	2.1367	2.1612	2.0893	2.0919	AVRG	R		0.46116		2.1684	6	15	0.05	0.99	
tert-Butylbenzene		2.1704	2.0127	2.0535	2.0436	1.9424	2.0836	2.0785	2.0446	AVRG	R		0.48694		2.0536	3	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.4310	2.3013	2.3636	2.3875	2.3837	2.4737	2.4179	2.4295	AVRG	R		0.41692		2.3985	2	15	0.05	0.99	
sec-Butylbenzene		2.9194	2.8866	3.0315	2.9813	2.7923	3.0490	3.0863	3.0031	AVRG	R		0.33685		2.9687	3	15	0.05	0.99	
para-Isopropyl Toluene		2.4460m	2.3347	2.5292	2.5141	2.4467	2.6513	2.6658	2.6210	AVRG	R		0.39587		2.5261	5	15	0.05	0.99	
1,3-Dichlorobenzene		1.6673	1.4359	1.4353	1.4216	1.4569	1.4668	1.4205	1.4302	AVRG	R		0.68175		1.4668	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.7629	1.5398	1.5003	1.4896	1.5099	1.5285	1.4733	1.4820	AVRG	R		0.65113		1.5358	6	15	0.05	0.99	
n-Butylbenzene		2.2433	2.1917	2.2993	2.2754	2.1925	2.3956	2.4185	2.3521	AVRG	R		0.43553		2.2961	4	15	0.05	0.99	
1,2-Dichlorobenzene		1.5697	1.3691	1.3644	1.3552	1.4053	1.4074	1.3594	1.3697	AVRG	R		0.71427		1.4000	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1856	0.1666	0.1585	0.1677	0.1721	0.1728	0.1668	AVRG	R		5.88259		0.1700	5	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.9426	0.8563	0.8839	0.9034	0.9556	0.9969	0.9772	0.9845	AVRG	R		1.06660		0.9376	5	15	0.05	0.99	
Hexachlorobutadiene		0.3935	0.4189	0.4508	0.4325	0.4046	0.4533	0.4612	0.4399	AVRG	R		2.31565		0.4318	6	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		2.1209	2.1073	2.1795	2.2301	2.4717	2.6261	2.5916	2.5804	AVRG	R		0.42311		2.3635	10	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.8740	0.7694	0.8057	0.8120	0.8698	0.9037	0.8842	0.8843	AVRG	R		1.17594		0.8504	6	15	0.05	0.99	
Dibromofluoromethane	0.4594	0.4641	0.4613	0.4609	0.4612	0.4651	0.4681	0.4633	0.4660	AVRG	R		2.15861		0.4633	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3725	0.3739	0.3700	0.3720	0.3743	0.3741	0.3782	0.3786	0.3814	AVRG	R		2.66655		0.3750	1	15	0.05	0.99	
Toluene-d8	1.3469	1.3415	1.3492	1.3473	1.3460	1.3328	1.3201	1.3219	1.3158	AVRG	R		0.74865		1.3357	1	15	0.05	0.99	
Bromofluorobenzene	0.9415	0.9379	0.9224	0.9147	0.9148	0.9031	0.8964	0.8982	0.8915	AVRG	R		1.09482		0.9134	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-9	2.000	-14	5.000	1	10.00	-4	20.00	-1	50.00	10	75.00	7	100.0	10
Chloromethane			1.000	7	2.000	-1	5.000	-1	10.00	0	20.00	2	50.00	1	75.00	-3	100.0	-3
Vinyl Chloride	0.500	6	1.000	1	2.000	-4	5.000	-3	10.00	-6	20.00	0	50.00	5	75.00	0	100.0	2
Bromomethane			1.000	2	2.000	12	5.000	4	10.00	2	20.00	-1	50.00	-8	75.00	-8	100.0	-3
Chloroethane			1.000	16	2.000	5	5.000	-3	10.00	-5	20.00	-2	50.00	-2	75.00	-4	100.0	-4
Trichlorofluoromethane			1.000	-11	2.000	-11	5.000	-3	10.00	-8	20.00	-5	50.00	2	75.00	32	100.0	3
Acetone					2.000	18	5.000	9	10.00	5	20.00	-3	50.00	-3	75.00	-14	100.0	-11
1,1-Dichloroethene			0.500	22	2.000	3	5.000	-3	10.00	-8	20.00	-4	50.00	0	75.00	-9	100.0	-2
Iodomethane							5.000	8	10.00	-9	20.00	-2	50.00	5	75.00	-3	100.0	1
Methylene Chloride			0.500	15	2.000	0	5.000	-3	10.00	-4	20.00	2	50.00	-3	75.00	-4	100.0	-4
Carbon Disulfide			0.500	1	2.000	-6	5.000	-6	10.00	-5	20.00	6	50.00	10	75.00	-7	100.0	8
MTBE			0.500	2	2.000	-5	5.000	-4	10.00	-5	20.00	4	50.00	4	75.00	2	100.0	2
trans-1,2-Dichloroethene			0.500	15	2.000	-2	5.000	-5	10.00	-4	20.00	0	50.00	0	75.00	-2	100.0	-2
Vinyl Acetate					2.000	27	5.000	-7	10.00	-19	20.00	5	50.00	4	75.00	-1	100.0	0
1,1-Dichloroethane			0.500	11	2.000	-1	5.000	-3	10.00	-2	20.00	2	50.00	1	75.00	-4	100.0	-3
2-Butanone					2.000	2	5.000	1	10.00	-3	20.00	2	50.00	2	75.00	0	100.0	-4
2,2-Dichloropropane			0.500	1	2.000	1	5.000	0	10.00	-3	20.00	1	50.00	3	75.00	0	100.0	-3
cis-1,2-Dichloroethene			0.500	21	2.000	-3	5.000	-4	10.00	-5	20.00	0	50.00	-1	75.00	-4	100.0	-3
Chloroform			0.500	13	2.000	-1	5.000	-3	10.00	-3	20.00	1	50.00	0	75.00	-5	100.0	-3
Bromochloromethane			0.500	14	2.000	-2	5.000	-3	10.00	-4	20.00	1	50.00	-1	75.00	-4	100.0	-3
1,1,1-Trichloroethane			0.500	7	2.000	0	5.000	1	10.00	-2	20.00	-3	50.00	1	75.00	-1	100.0	-2
1,1-Dichloropropene			0.500	-2	2.000	-2	5.000	-1	10.00	-3	20.00	-3	50.00	4	75.00	5	100.0	3
Carbon Tetrachloride			0.500	-15	2.000	-3	5.000	1	10.00	0	20.00	-3	50.00	6	75.00	8	100.0	5
1,2-Dichloroethane			0.500	8	2.000	0	5.000	-1	10.00	-3	20.00	3	50.00	0	75.00	-3	100.0	-2
Benzene			0.500	12	2.000	-3	5.000	-4	10.00	-3	20.00	0	50.00	1	75.00	-2	100.0	-1
Trichloroethene			0.500	11	2.000	0	5.000	0	10.00	-2	20.00	-3	50.00	0	75.00	-2	100.0	-2
1,2-Dichloropropane			0.500	10	2.000	-2	5.000	-3	10.00	-3	20.00	1	50.00	2	75.00	-3	100.0	-2
Bromodichloromethane			0.500	5	2.000	-5	5.000	-5	10.00	-4	20.00	3	50.00	3	75.00	1	100.0	2
Dibromomethane			0.500	-1	2.000	0	5.000	0	10.00	-3	20.00	2	50.00	2	75.00	0	100.0	0
4-Methyl-2-Pentanone					2.000	-7	5.000	-5	10.00	-5	20.00	3	50.00	6	75.00	5	100.0	3
cis-1,3-Dichloropropene			0.500	4	2.000	-6	5.000	-4	10.00	-3	20.00	3	50.00	3	75.00	1	100.0	2
Toluene			0.500	15	2.000	-1	5.000	-2	10.00	-3	20.00	-1	50.00	-1	75.00	-4	100.0	-4
trans-1,3-Dichloropropene			0.500	3	2.000	-6	5.000	-3	10.00	-4	20.00	3	50.00	4	75.00	1	100.0	2
1,1,2-Trichloroethane			0.500	3	2.000	1	5.000	-1	10.00	-4	20.00	1	50.00	1	75.00	0	100.0	-1
2-Hexanone					2.000	-7	5.000	-5	10.00	-6	20.00	2	50.00	6	75.00	7	100.0	4
1,3-Dichloropropane			0.500	6	2.000	-1	5.000	-1	10.00	-4	20.00	2	50.00	1	75.00	-1	100.0	-1
Tetrachloroethene			0.500	-2	2.000	5	5.000	2	10.00	-2	20.00	-6	50.00	1	75.00	2	100.0	0
Dibromochloromethane			0.500	0	2.000	-6	5.000	-5	10.00	-5	20.00	2	50.00	5	75.00	4	100.0	6
1,2-Dibromoethane			0.500	4	2.000	-2	5.000	-3	10.00	-5	20.00	2	50.00	1	75.00	1	100.0	1
Chlorobenzene			0.500	11	2.000	-2	5.000	-3	10.00	-3	20.00	-1	50.00	0	75.00	-2	100.0	0
1,1,1,2-Tetrachloroethane			0.500	3	2.000	-5	5.000	-2	10.00	-3	20.00	2	50.00	3	75.00	1	100.0	2
Ethylbenzene			0.500	10	2.000	-1	5.000	-2	10.00	-2	20.00	-3	50.00	0	75.00	-1	100.0	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	21	1.000	0	4.000	-8	10.00	-5	20.00	-4	40.00	-5	100.0	0	150.0	0	200.0	1
o-Xylene			0.500	3	2.000	-6	5.000	-4	10.00	-2	20.00	0	50.00	4	75.00	2	100.0	4
Styrene			0.500	-2	2.000	-8	5.000	-5	10.00	-4	20.00	3	50.00	6	75.00	4	100.0	6
Bromoform			0.500	-17	2.000	-10	5.000	-8	10.00	-7	20.00	4	50.00	11	75.00	12	100.0	14
Isopropylbenzene			0.500	2	2.000	-2	5.000	-1	10.00	-1	20.00	-4	50.00	2	75.00	2	100.0	1
1,1,2,2-Tetrachloroethane			0.500	3	2.000	1	5.000	-2	10.00	-4	20.00	3	50.00	1	75.00	0	100.0	-2
1,2,3-Trichloropropane			0.500	15	2.000	1	5.000	-3	10.00	-4	20.00	0	50.00	-2	75.00	-3	100.0	-5
Propylbenzene			0.500	8	2.000	0	5.000	0	10.00	0	20.00	-4	50.00	0	75.00	-1	100.0	-3
Bromobenzene			0.500	20	2.000	-1	5.000	-4	10.00	-5	20.00	-1	50.00	-2	75.00	-4	100.0	-3
1,3,5-Trimethylbenzene			0.500	6	2.000	-3	5.000	-2	10.00	-1	20.00	-3	50.00	2	75.00	1	100.0	0
2-Chlorotoluene			0.500	18	2.000	-1	5.000	-3	10.00	-2	20.00	-3	50.00	-1	75.00	-4	100.0	-5
4-Chlorotoluene			0.500	15	2.000	-3	5.000	-2	10.00	-2	20.00	-1	50.00	0	75.00	-4	100.0	-4
tert-Butylbenzene			0.500	6	2.000	-2	5.000	0	10.00	0	20.00	-5	50.00	1	75.00	1	100.0	0
1,2,4-Trimethylbenzene			0.500	1	2.000	-4	5.000	-1	10.00	0	20.00	-1	50.00	3	75.00	1	100.0	1
sec-Butylbenzene			0.500	-2	2.000	-3	5.000	2	10.00	0	20.00	-6	50.00	3	75.00	4	100.0	1
para-Isopropyl Toluene			0.500	-3	2.000	-8	5.000	0	10.00	0	20.00	-3	50.00	5	75.00	6	100.0	4
1,3-Dichlorobenzene			0.500	14	2.000	-2	5.000	-2	10.00	-3	20.00	-1	50.00	0	75.00	-3	100.0	-2
1,4-Dichlorobenzene			0.500	15	2.000	0	5.000	-2	10.00	-3	20.00	-2	50.00	0	75.00	-4	100.0	-4
n-Butylbenzene			0.500	-2	2.000	-5	5.000	0	10.00	-1	20.00	-5	50.00	4	75.00	5	100.0	2
1,2-Dichlorobenzene			0.500	12	2.000	-2	5.000	-3	10.00	-3	20.00	0	50.00	1	75.00	-3	100.0	-2
1,2-Dibromo-3-Chloropropane					2.000	9	5.000	-2	10.00	-7	20.00	-1	50.00	1	75.00	2	100.0	-2
1,2,4-Trichlorobenzene			0.500	1	2.000	-9	5.000	-6	10.00	-4	20.00	2	50.00	6	75.00	4	100.0	5
Hexachlorobutadiene			0.500	-9	2.000	-3	5.000	4	10.00	0	20.00	-6	50.00	5	75.00	7	100.0	2
Naphthalene			0.500	-10	2.000	-11	5.000	-8	10.00	-6	20.00	5	50.00	11	75.00	10	100.0	9
1,2,3-Trichlorobenzene			0.500	3	2.000	-10	5.000	-5	10.00	-5	20.00	2	50.00	6	75.00	4	100.0	4
Dibromofluoromethane	50.00	-1	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	0	50.00	1
1,2-Dichloroethane-d4	50.00	-1	50.00	0	50.00	-1	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	1	50.00	2
Toluene-d8	50.00	1	50.00	0	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	-1
Bromofluorobenzene	50.00	3	50.00	3	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	-2

BO 03/25/10 [Chloroethane]: Corrected baseline noise or negative peak in all levels.

BO 03/25/10 [Vinyl Acetate]: Corrected baseline noise or negative peak in 5PPB (nc011).

BO 03/25/10 [Ethylbenzene]: Separated from coeluting peak1PPB (nc09).

BO 03/25/10 [para-Isopropyl Toluene]: Corrected baseline noise or negative peak1PPB (nc09).

BO 03/25/10 [2-Chloroethylvinylether]: Cannot report 8260C due to ICV failure

Analyst: BO

Date: 03/25/10

Reviewer: LW

Date: 03/25/10

m=manual integration

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA14
Calnum : 950120036001

Cal Date : 24-MAR-2010

ICV 950121459004 (ncp04 25-MAR-2010) stds: S14253 (10000X), S13925 (10000X),
S14144 (10000X), S14236 (10000X), S14027 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	27.91	ug/L	12	25	
Chloromethane	25.00	25.82	ug/L	3	25	
Vinyl Chloride	25.00	24.18	ug/L	-3	25	
Bromomethane	25.00	27.66	ug/L	11	25	
Chloroethane	25.00	26.23	ug/L	5	25	m
Trichlorofluoromethane	25.00	25.11	ug/L	0	25	
Acetone	25.00	28.27	ug/L	13	25	
1,1-Dichloroethene	25.00	24.95	ug/L	0	25	
Iodomethane	25.00	30.56	ug/L	22	25	
Methylene Chloride	25.00	26.13	ug/L	5	25	
Carbon Disulfide	25.00	23.74	ug/L	-5	25	
MTBE	25.00	23.12	ug/L	-8	25	
trans-1,2-Dichloroethene	25.00	26.96	ug/L	8	25	
Vinyl Acetate	25.00	25.06	ug/L	0	25	
1,1-Dichloroethane	25.00	26.33	ug/L	5	25	
2-Butanone	25.00	24.81	ug/L	-1	25	
2,2-Dichloropropane	25.00	26.87	ug/L	7	25	
cis-1,2-Dichloroethene	25.00	26.29	ug/L	5	25	
Chloroform	25.00	25.57	ug/L	2	25	
Bromochloromethane	25.00	26.29	ug/L	5	25	
1,1,1-Trichloroethane	25.00	25.87	ug/L	3	25	
1,1-Dichloropropene	25.00	25.56	ug/L	2	25	
Carbon Tetrachloride	25.00	26.66	ug/L	7	25	
1,2-Dichloroethane	25.00	25.03	ug/L	0	25	
Benzene	25.00	26.28	ug/L	5	25	
Trichloroethene	25.00	25.25	ug/L	1	25	
1,2-Dichloropropane	25.00	25.52	ug/L	2	25	
Bromodichloromethane	25.00	26.48	ug/L	6	25	
Dibromomethane	25.00	25.64	ug/L	3	25	
4-Methyl-2-Pentanone	25.00	21.99	ug/L	-12	25	
cis-1,3-Dichloropropene	25.00	26.20	ug/L	5	25	
Toluene	25.00	25.69	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	23.19	ug/L	-7	25	
1,1,2-Trichloroethane	25.00	24.69	ug/L	-1	25	
2-Hexanone	25.00	23.70	ug/L	-5	25	
1,3-Dichloropropane	25.00	24.74	ug/L	-1	25	
Tetrachloroethene	25.00	26.02	ug/L	4	25	
Dibromochloromethane	25.00	25.85	ug/L	3	25	
1,2-Dibromoethane	25.00	24.24	ug/L	-3	25	
Chlorobenzene	25.00	26.07	ug/L	4	25	
1,1,1,2-Tetrachloroethane	25.00	25.81	ug/L	3	25	
Ethylbenzene	25.00	26.05	ug/L	4	25	
m,p-Xylenes	50.00	52.37	ug/L	5	25	
o-Xylene	25.00	27.02	ug/L	8	25	
Styrene	25.00	27.30	ug/L	9	25	
Bromoform	25.00	25.59	ug/L	2	25	
Isopropylbenzene	25.00	22.89	ug/L	-8	25	
1,1,2,2-Tetrachloroethane	25.00	22.41	ug/L	-10	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	22.63	ug/L	-9	25	
Propylbenzene	25.00	25.84	ug/L	3	25	
Bromobenzene	25.00	25.28	ug/L	1	25	
1,3,5-Trimethylbenzene	25.00	26.45	ug/L	6	25	
2-Chlorotoluene	25.00	25.86	ug/L	3	25	
4-Chlorotoluene	25.00	25.66	ug/L	3	25	
tert-Butylbenzene	25.00	26.37	ug/L	5	25	
1,2,4-Trimethylbenzene	25.00	26.81	ug/L	7	25	
sec-Butylbenzene	25.00	27.01	ug/L	8	25	
para-Isopropyl Toluene	25.00	26.17	ug/L	5	25	
1,3-Dichlorobenzene	25.00	25.84	ug/L	3	25	
1,4-Dichlorobenzene	25.00	25.52	ug/L	2	25	
n-Butylbenzene	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	25.00	25.96	ug/L	4	25	
1,2-Dibromo-3-Chloropropane	25.00	21.73	ug/L	-13	25	
1,2,4-Trichlorobenzene	25.00	25.48	ug/L	2	25	
Hexachlorobutadiene	25.00	25.74	ug/L	3	25	
Naphthalene	25.00	24.97	ug/L	0	25	
1,2,3-Trichlorobenzene	25.00	26.12	ug/L	4	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : QC537564 IDF : 1.0
 Seqnum : 950121459004.2 File : ncp04 Time : 25-MAR-2010 09:51
 Cal : 950120036001 Caldate : 24-MAR-2010
 Standards: S14253 (10000X), S13925 (10000X), S14144 (10000X), S14236 (10000X),
 S14027 (2500X)

Analyte	Avg		Spiked	Quant	Units	%D	Max	Flags
	RF/CF	RF/CF						
Freon 12	0.4874	0.5442	25.00	27.91	ug/L	12	25	u
Chloromethane	0.5556	0.5738	25.00	25.82	ug/L	3	25	u
Vinyl Chloride	0.6437	0.6227	25.00	24.18	ug/L	-3	25	u
Bromomethane	0.4260	0.4713	25.00	27.66	ug/L	11	25	u
Chloroethane	0.3924	0.4117	25.00	26.23	ug/L	5	25	m u
Trichlorofluoromethane	0.7559	0.7591	25.00	25.11	ug/L	0	25	u
Iodomethane	0.3686	0.4609	25.00	30.56	ug/L	22	25	u
Acetone	0.1956	0.2212	25.00	28.27	ug/L	13	25	u
1,1-Dichloroethene	0.3994	0.3986	25.00	24.95	ug/L	0	25	u
Methylene Chloride	0.4647	0.4857	25.00	26.13	ug/L	5	25	u
Carbon Disulfide	1.5583	1.4800	25.00	23.74	ug/L	-5	25	u
MTBE	1.4821	1.3705	25.00	23.12	ug/L	-8	25	u
trans-1,2-Dichloroethene	0.4368	0.4710	25.00	26.96	ug/L	8	25	u
Vinyl Acetate	0.9347	1.0424	25.00	25.06	ug/L	0	25	u
1,1-Dichloroethane	0.8319	0.8761	25.00	26.33	ug/L	5	25	u
2-Butanone	0.2596	0.2577	25.00	24.81	ug/L	-1	25	u
cis-1,2-Dichloroethene	0.5143	0.5409	25.00	26.29	ug/L	5	25	u
2,2-Dichloropropane	0.6868	0.7382	25.00	26.87	ug/L	7	25	u
Chloroform	0.8422	0.8615	25.00	25.57	ug/L	2	25	u
Bromochloromethane	0.2472	0.2599	25.00	26.29	ug/L	5	25	u
1,1,1-Trichloroethane	0.6852	0.7091	25.00	25.87	ug/L	3	25	u
1,1-Dichloropropene	0.3907	0.3995	25.00	25.56	ug/L	2	25	u
Carbon Tetrachloride	0.3375	0.3598	25.00	26.66	ug/L	7	25	u
1,2-Dichloroethane	0.4446	0.4450	25.00	25.03	ug/L	0	25	u
Benzene	1.2327	1.2958	25.00	26.28	ug/L	5	25	u
Trichloroethene	0.3109	0.3140	25.00	25.25	ug/L	1	25	u
1,2-Dichloropropane	0.3152	0.3217	25.00	25.52	ug/L	2	25	u
Bromodichloromethane	0.4008	0.4245	25.00	26.48	ug/L	6	25	u
Dibromomethane	0.2023	0.2075	25.00	25.64	ug/L	3	25	u
4-Methyl-2-Pentanone	0.3308	0.2910	25.00	21.99	ug/L	-12	25	u
cis-1,3-Dichloropropene	0.5220	0.5470	25.00	26.20	ug/L	5	25	u
Toluene	1.4156	1.4544	25.00	25.69	ug/L	3	25	u
trans-1,3-Dichloropropene	0.5277	0.4896	25.00	23.19	ug/L	-7	25	u
1,1,2-Trichloroethane	0.1654	0.1634	25.00	24.69	ug/L	-1	25	u
2-Hexanone	0.2433	0.2307	25.00	23.70	ug/L	-5	25	u
1,3-Dichloropropane	0.5516	0.5460	25.00	24.74	ug/L	-1	25	u
Tetrachloroethene	0.3307	0.3441	25.00	26.02	ug/L	4	25	u
Dibromochloromethane	0.3254	0.3365	25.00	25.85	ug/L	3	25	u
1,2-Dibromoethane	0.3289	0.3189	25.00	24.24	ug/L	-3	25	u
Chlorobenzene	0.9606	1.0018	25.00	26.07	ug/L	4	25	u
1,1,1,2-Tetrachloroethane	0.3241	0.3347	25.00	25.81	ug/L	3	25	u
Ethylbenzene	1.6253	1.6934	25.00	26.05	ug/L	4	25	u
m,p-Xylenes	0.6367	0.6668	50.00	52.37	ug/L	5	25	u
o-Xylene	0.6041	0.6529	25.00	27.02	ug/L	8	25	u
Styrene	1.0433	1.1392	25.00	27.30	ug/L	9	25	u
Bromoform	0.2487	0.2546	25.00	25.59	ug/L	2	25	u
Isopropylbenzene	2.7883	2.5529	25.00	22.89	ug/L	-8	25	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	0.7874	0.7058	25.00	22.41	ug/L	-10	25	u
1,2,3-Trichloropropane	0.8138	0.7366	25.00	22.63	ug/L	-9	25	u
Propylbenzene	3.4291	3.5444	25.00	25.84	ug/L	3	25	u
Bromobenzene	0.7895	0.7985	25.00	25.28	ug/L	1	25	u
1,3,5-Trimethylbenzene	2.3479	2.4844	25.00	26.45	ug/L	6	25	u
2-Chlorotoluene	2.3518	2.4325	25.00	25.86	ug/L	3	25	u
4-Chlorotoluene	2.1684	2.2258	25.00	25.66	ug/L	3	25	u
tert-Butylbenzene	2.0536	2.1659	25.00	26.37	ug/L	5	25	u
1,2,4-Trimethylbenzene	2.3985	2.5720	25.00	26.81	ug/L	7	25	u
sec-Butylbenzene	2.9687	3.2078	25.00	27.01	ug/L	8	25	u
para-Isopropyl Toluene	2.5261	2.6438	25.00	26.17	ug/L	5	25	u
1,3-Dichlorobenzene	1.4668	1.5161	25.00	25.84	ug/L	3	25	u
1,4-Dichlorobenzene	1.5358	1.5675	25.00	25.52	ug/L	2	25	u
n-Butylbenzene	2.2961	2.5129	25.00	27.36	ug/L	9	25	u
1,2-Dichlorobenzene	1.4000	1.4537	25.00	25.96	ug/L	4	25	u
1,2-Dibromo-3-Chloropropane	0.1700	0.1478	25.00	21.73	ug/L	-13	25	u
1,2,4-Trichlorobenzene	0.9376	0.9556	25.00	25.48	ug/L	2	25	u
Hexachlorobutadiene	0.4318	0.4447	25.00	25.74	ug/L	3	25	u
Naphthalene	2.3635	2.3605	25.00	24.97	ug/L	0	25	u
1,2,3-Trichlorobenzene	0.8504	0.8883	25.00	26.12	ug/L	4	25	u

ISTD (ICAL ncol4)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	750650	717300	-4.44	11.53	11.53	0.00
1,4-Difluorobenzene	1177090	1129178	-4.07	12.37	12.37	0.00
Chlorobenzene-d5	1151283	1090354	-5.29	15.20	15.20	0.00
1,4-Dichlorobenzene-d4	645405	611487	-5.26	17.26	17.26	0.00

BO 03/25/10 [Chloroethane]: Integrated to match integration of ICAL and CCV.
[general version]

Analyst: PDM Date: 03/26/10 Reviewer: LW Date: 03/26/10

m=manual integration u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : 30PPB IDF : 1.0
 Seqnum : 480120073005.1 File : ico05 Time : 24-MAR-2010 11:34
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14216 (16670X), S14108 (16670X), S13625 (33330X), S13719 (16670X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.5474	30.00	28.36	ug/L	-5	20	0.0500	
Chloromethane	0.8790	0.8020	30.00	27.37	ug/L	-9	20	0.1000	
Vinyl Chloride	0.6271	0.6756	30.00	32.32	ug/L	8	20	0.0500	
Bromomethane	0.3610	0.4541	30.00	37.73	ug/L	26	20	0.0500	c+ ***
Chloroethane	0.4411	0.4180	30.00	28.43	ug/L	-5	20	0.0500	
Trichlorofluoromethane	0.6268	0.6126	30.00	29.32	ug/L	-2	20	0.0500	
Acetone	0.1056	0.0871	30.00	24.75	ug/L	-18	20	0.0500	
1,1-Dichloroethene	0.3802	0.3432	30.00	27.08	ug/L	-10	20	0.0500	
Iodomethane	0.5839	0.5265	30.00	27.05	ug/L	-10	20	0.0500	
Methylene Chloride	0.5313	0.4531	30.00	25.58	ug/L	-15	20	0.0500	
Carbon Disulfide	1.6806	1.4399	30.00	25.70	ug/L	-14	20	0.0500	
MTBE	0.9672	0.8095	30.00	25.11	ug/L	-16	20	0.0500	
trans-1,2-Dichloroethene	0.4686	0.4143	30.00	26.52	ug/L	-12	20	0.0500	
Vinyl Acetate	0.7245	0.7422	30.00	30.73	ug/L	2	20	0.0500	
1,1-Dichloroethane	0.9167	0.8500	30.00	27.82	ug/L	-7	20	0.1000	
2-Butanone	0.1773	0.1395	30.00	23.60	ug/L	-21	20	0.0500	c- ***
2,2-Dichloropropane	0.5197	0.5482	30.00	31.65	ug/L	5	20	0.0500	
cis-1,2-Dichloroethene	0.5067	0.4739	30.00	28.06	ug/L	-6	20	0.0500	
Chloroform	0.8063	0.7611	30.00	28.32	ug/L	-6	20	0.0500	
Bromochloromethane	0.2159	0.1977	30.00	27.47	ug/L	-8	20	0.0500	
1,1,1-Trichloroethane	0.5481	0.5074	30.00	27.77	ug/L	-7	20	0.0500	
1,1-Dichloropropene	0.3652	0.3553	30.00	29.19	ug/L	-3	20	0.0500	
Carbon Tetrachloride	0.2856	0.2618	30.00	27.50	ug/L	-8	20	0.0500	
1,2-Dichloroethane	0.2817	0.2377	30.00	25.32	ug/L	-16	20	0.0500	
Benzene	1.0704	1.0346	30.00	29.00	ug/L	-3	20	0.0500	
Trichloroethene	0.2855	0.2618	30.00	27.52	ug/L	-8	20	0.0500	
1,2-Dichloropropane	0.3485	0.3262	30.00	28.08	ug/L	-6	20	0.0500	
Bromodichloromethane	0.3617	0.3291	30.00	27.30	ug/L	-9	20	0.0500	
Dibromomethane	0.1582	0.1434	30.00	27.19	ug/L	-9	20	0.0500	
4-Methyl-2-Pentanone	0.2323	0.1964	30.00	25.37	ug/L	-15	20	0.0500	
cis-1,3-Dichloropropene	0.4552	0.4183	30.00	27.57	ug/L	-8	20	0.0500	
Toluene	0.7834	0.8067	30.00	30.89	ug/L	3	20	0.0500	
trans-1,3-Dichloropropene	0.4642	0.4320	30.00	27.92	ug/L	-7	20	0.0500	
1,1,2-Trichloroethane	0.1436	0.1451	30.00	30.31	ug/L	1	20	0.0500	
2-Hexanone	0.2041	0.1796	30.00	26.40	ug/L	-12	20	0.0500	
1,3-Dichloropropane	0.4370	0.4355	30.00	29.90	ug/L	0	20	0.0500	
Tetrachloroethene	0.2974	0.3096	30.00	31.23	ug/L	4	20	0.0500	
Dibromochloromethane	0.3029	0.2903	30.00	28.75	ug/L	-4	20	0.0500	
1,2-Dibromoethane	0.2527	0.2504	30.00	29.73	ug/L	-1	20	0.0500	
Chlorobenzene	0.8508	0.9011	30.00	31.77	ug/L	6	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2959	0.3149	30.00	31.92	ug/L	6	20	0.0500	
Ethylbenzene	1.4015	1.5280	30.00	32.71	ug/L	9	20	0.0500	
m,p-Xylenes	0.5056	0.5603	60.00	66.49	ug/L	11	20	0.0500	
o-Xylene	0.5265	0.5724	30.00	32.62	ug/L	9	20	0.0500	
Styrene	0.9089	0.9801	30.00	32.35	ug/L	8	20	0.0500	
Bromoform	0.1737	0.1688	30.00	29.15	ug/L	-3	20	0.1000	
Isopropylbenzene	2.6074	3.0077	30.00	34.61	ug/L	15	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.6064	0.6175	30.00	30.55	ug/L	2	20	0.3000	
1,2,3-Trichloropropane	0.1368	0.1372	30.00	30.09	ug/L	0	20	0.0500	
Propylbenzene	3.2004	3.6441	30.00	34.16	ug/L	14	20	0.0500	
Bromobenzene	0.6876	0.7598	30.00	33.15	ug/L	11	20	0.0500	
1,3,5-Trimethylbenzene	2.0495	2.3275	30.00	34.07	ug/L	14	20	0.0500	
2-Chlorotoluene	2.1411	2.3523	30.00	32.96	ug/L	10	20	0.0500	
4-Chlorotoluene	2.0800	2.2480	30.00	32.42	ug/L	8	20	0.0500	
tert-Butylbenzene	1.7249	2.0086	30.00	34.93	ug/L	16	20	0.0500	
1,2,4-Trimethylbenzene	2.1567	2.3930	30.00	33.29	ug/L	11	20	0.0500	
sec-Butylbenzene	2.6657	3.1715	30.00	35.69	ug/L	19	20	0.0500	
para-Isopropyl Toluene	2.0335	2.2811	30.00	33.65	ug/L	12	20	0.0500	
1,3-Dichlorobenzene	1.2884	1.3729	30.00	31.97	ug/L	7	20	0.0500	
1,4-Dichlorobenzene	1.3177	1.3614	30.00	31.00	ug/L	3	20	0.0500	
n-Butylbenzene	2.0640	2.1628	30.00	31.44	ug/L	5	20	0.0500	
1,2-Dichlorobenzene	1.1774	1.1984	30.00	30.53	ug/L	2	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0900	0.0812	30.00	27.06	ug/L	-10	20	0.0500	
1,2,4-Trichlorobenzene	0.6833	0.6884	30.00	30.22	ug/L	1	20	0.0500	
Hexachlorobutadiene	0.3229	0.3727	30.00	34.62	ug/L	15	20	0.0500	
Naphthalene	1.3048	1.2084	30.00	27.78	ug/L	-7	20	0.0500	
1,2,3-Trichlorobenzene	0.6040	0.6143	30.00	30.51	ug/L	2	20	0.0500	
Dibromofluoromethane	0.5695	0.5520	50.00	48.46	ug/L	-3	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.2544	50.00	46.04	ug/L	-8	20	0.0500	
Toluene-d8	1.3769	1.4203	50.00	51.57	ug/L	3	20	0.0500	
Bromofluorobenzene	1.0267	1.0413	50.00	50.71	ug/L	1	20	0.0500	

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	2846338	35.55	12.37	12.40	0.03
1,4-Difluorobenzene	3438431	4603358	33.88	13.66	13.68	0.02
Chlorobenzene-d5	2768728	3481497	25.74	17.68	17.67	-0.01
1,4-Dichlorobenzene-d4	1353103	1632609	20.66	20.18	20.18	0.00

Analyst: PDM

Date: 03/26/10

Reviewer: LW

Date: 03/26/10

+ = high bias - = low bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : 30PPB IDF : 1.0
 Seqnum : 480120073012.1 File : ico12 Time : 24-MAR-2010 16:16
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14216 (16670X), S14108 (16670X), S13625 (33330X), S13719 (16670X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.5208	30.00	26.98	ug/L	-10	20	0.0500	
Chloromethane	0.8790	0.7581	30.00	25.88	ug/L	-14	20	0.1000	
Vinyl Chloride	0.6271	0.6115	30.00	29.25	ug/L	-2	20	0.0500	
Bromomethane	0.3610	0.4089	30.00	33.98	ug/L	13	20	0.0500	
Chloroethane	0.4411	0.4154	30.00	28.26	ug/L	-6	20	0.0500	
Trichlorofluoromethane	0.6268	0.6035	30.00	28.88	ug/L	-4	20	0.0500	
Acetone	0.1056	0.0875	30.00	24.85	ug/L	-17	20	0.0500	
1,1-Dichloroethene	0.3802	0.4186	30.00	33.03	ug/L	10	20	0.0500	
Iodomethane	0.5839	0.4964	30.00	25.51	ug/L	-15	20	0.0500	
Methylene Chloride	0.5313	0.4949	30.00	27.94	ug/L	-7	20	0.0500	
Carbon Disulfide	1.6806	1.8585	30.00	33.18	ug/L	11	20	0.0500	
MTBE	0.9672	0.8508	30.00	26.39	ug/L	-12	20	0.0500	
trans-1,2-Dichloroethene	0.4686	0.4760	30.00	30.48	ug/L	2	20	0.0500	
Vinyl Acetate	0.7245	0.7235	30.00	29.96	ug/L	0	20	0.0500	
1,1-Dichloroethane	0.9167	0.8698	30.00	28.46	ug/L	-5	20	0.1000	
2-Butanone	0.1773	0.1371	30.00	23.20	ug/L	-23	20	0.0500	c- ***
2,2-Dichloropropane	0.5197	0.5837	30.00	33.70	ug/L	12	20	0.0500	
cis-1,2-Dichloroethene	0.5067	0.5076	30.00	30.05	ug/L	0	20	0.0500	
Chloroform	0.8063	0.7513	30.00	27.95	ug/L	-7	20	0.0500	
Bromochloromethane	0.2159	0.2100	30.00	29.19	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.5481	0.5211	30.00	28.52	ug/L	-5	20	0.0500	
1,1-Dichloropropene	0.3652	0.3802	30.00	31.24	ug/L	4	20	0.0500	
Carbon Tetrachloride	0.2856	0.2793	30.00	29.34	ug/L	-2	20	0.0500	
1,2-Dichloroethane	0.2817	0.2408	30.00	25.64	ug/L	-15	20	0.0500	
Benzene	1.0704	1.0812	30.00	30.30	ug/L	1	20	0.0500	
Trichloroethene	0.2855	0.2776	30.00	29.18	ug/L	-3	20	0.0500	
1,2-Dichloropropane	0.3485	0.3245	30.00	27.93	ug/L	-7	20	0.0500	
Bromodichloromethane	0.3617	0.3150	30.00	26.12	ug/L	-13	20	0.0500	
Dibromomethane	0.1582	0.1466	30.00	27.81	ug/L	-7	20	0.0500	
4-Methyl-2-Pentanone	0.2323	0.1906	30.00	24.61	ug/L	-18	20	0.0500	
cis-1,3-Dichloropropene	0.4552	0.4187	30.00	27.59	ug/L	-8	20	0.0500	
Toluene	0.7834	0.8565	30.00	32.80	ug/L	9	20	0.0500	
trans-1,3-Dichloropropene	0.4642	0.4372	30.00	28.25	ug/L	-6	20	0.0500	
1,1,2-Trichloroethane	0.1436	0.1409	30.00	29.43	ug/L	-2	20	0.0500	
2-Hexanone	0.2041	0.1742	30.00	25.61	ug/L	-15	20	0.0500	
1,3-Dichloropropane	0.4370	0.4424	30.00	30.37	ug/L	1	20	0.0500	
Tetrachloroethene	0.2974	0.3473	30.00	35.04	ug/L	17	20	0.0500	
Dibromochloromethane	0.3029	0.2917	30.00	28.88	ug/L	-4	20	0.0500	
1,2-Dibromoethane	0.2527	0.2566	30.00	30.46	ug/L	2	20	0.0500	
Chlorobenzene	0.8508	0.9009	30.00	31.77	ug/L	6	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2959	0.3135	30.00	31.78	ug/L	6	20	0.0500	
Ethylbenzene	1.4015	1.5229	30.00	32.60	ug/L	9	20	0.0500	
m,p-Xylenes	0.5056	0.5500	60.00	65.26	ug/L	9	20	0.0500	
o-Xylene	0.5265	0.5557	30.00	31.67	ug/L	6	20	0.0500	
Styrene	0.9089	0.9630	30.00	31.79	ug/L	6	20	0.0500	
Bromoform	0.1737	0.1756	30.00	30.33	ug/L	1	20	0.1000	
Isopropylbenzene	2.6074	2.9050	30.00	33.42	ug/L	11	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.6064	0.6232	30.00	30.83	ug/L	3	20	0.3000	
1,2,3-Trichloropropane	0.1368	0.1329	30.00	29.14	ug/L	-3	20	0.0500	
Propylbenzene	3.2004	3.4756	30.00	32.58	ug/L	9	20	0.0500	
Bromobenzene	0.6876	0.7456	30.00	32.53	ug/L	8	20	0.0500	
1,3,5-Trimethylbenzene	2.0495	2.2255	30.00	32.58	ug/L	9	20	0.0500	
2-Chlorotoluene	2.1411	2.2676	30.00	31.77	ug/L	6	20	0.0500	
4-Chlorotoluene	2.0800	2.1892	30.00	31.57	ug/L	5	20	0.0500	
tert-Butylbenzene	1.7249	1.9240	30.00	33.46	ug/L	12	20	0.0500	
1,2,4-Trimethylbenzene	2.1567	2.2848	30.00	31.78	ug/L	6	20	0.0500	
sec-Butylbenzene	2.6657	3.0266	30.00	34.06	ug/L	14	20	0.0500	
para-Isopropyl Toluene	2.0335	2.2382	30.00	33.02	ug/L	10	20	0.0500	
1,3-Dichlorobenzene	1.2884	1.3605	30.00	31.68	ug/L	6	20	0.0500	
1,4-Dichlorobenzene	1.3177	1.3420	30.00	30.55	ug/L	2	20	0.0500	
n-Butylbenzene	2.0640	2.1890	30.00	31.82	ug/L	6	20	0.0500	
1,2-Dichlorobenzene	1.1774	1.2210	30.00	31.11	ug/L	4	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0900	0.0793	30.00	26.45	ug/L	-12	20	0.0500	
1,2,4-Trichlorobenzene	0.6833	0.6869	30.00	30.16	ug/L	1	20	0.0500	
Hexachlorobutadiene	0.3229	0.3599	30.00	33.44	ug/L	11	20	0.0500	
Naphthalene	1.3048	1.2165	30.00	27.97	ug/L	-7	20	0.0500	
1,2,3-Trichlorobenzene	0.6040	0.5976	30.00	29.68	ug/L	-1	20	0.0500	
Dibromofluoromethane	0.5695	0.5310	50.00	46.61	ug/L	-7	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.2463	50.00	44.56	ug/L	-11	20	0.0500	
Toluene-d8	1.3769	1.4068	50.00	51.08	ug/L	2	20	0.0500	
Bromofluorobenzene	1.0267	1.0128	50.00	49.32	ug/L	-1	20	0.0500	

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	2733984	30.20	12.37	12.39	0.02
1,4-Difluorobenzene	3438431	4391230	27.71	13.66	13.68	0.02
Chlorobenzene-d5	2768728	3283416	18.59	17.68	17.67	-0.01
1,4-Dichlorobenzene-d4	1353103	1598081	18.10	20.18	20.18	0.00

Analyst: PDM

Date: 03/26/10

Reviewer: LW

Date: 03/26/10

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 20PPB IDF : 1.0
 Seqnum : 490120216003.2 File : jco03 Time : 24-MAR-2010 12:18
 Cal : 490027869001 Caldate : 19-JAN-2010 Caltype : WATER
 Standards: S13952 (25000X), S13719 (25000X), S14108 (25000X), S13625 (50000X),
 S14145 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6144	0.7124	20.00	21.63	ug/L	8	20	0.0500	
Chloromethane	0.9887	0.7974	20.00	16.13	ug/L	-19	20	0.1000	
Vinyl Chloride	0.7734	0.7350	20.00	19.01	ug/L	-5	20	0.0500	
Bromomethane	0.4602	0.2779	20.00	12.08	ug/L	-40	20	0.0500	c- ***
Chloroethane	0.4539	0.3921	20.00	17.28	ug/L	-14	20	0.0500	
Trichlorofluoromethane	0.6225	0.6961	20.00	20.66	ug/L	3	20	0.0500	
Acetone	0.1678	0.1756	20.00	20.93	ug/L	5	20	0.0500	
1,1-Dichloroethene	0.5696	0.5345	20.00	18.77	ug/L	-6	20	0.0500	
Iodomethane	0.5986	0.4035	20.00	13.48	ug/L	-33	20	0.0500	c- ***
Methylene Chloride	0.7544	0.6782	20.00	17.98	ug/L	-10	20	0.0500	
Carbon Disulfide	2.3825	2.3328	20.00	19.58	ug/L	-2	20	0.0500	
MTBE	1.6272	1.4981	20.00	18.41	ug/L	-8	20	0.0500	
trans-1,2-Dichloroethene	0.6687	0.6103	20.00	18.25	ug/L	-9	20	0.0500	
Vinyl Acetate	1.4687	1.3776	20.00	18.76	ug/L	-6	20	0.0500	
1,1-Dichloroethane	1.1872	1.0994	20.00	18.52	ug/L	-7	20	0.1000	
2-Butanone	0.2678	0.2446	20.00	18.26	ug/L	-9	20	0.0500	
2,2-Dichloropropane	0.6877	0.7645	20.00	22.23	ug/L	11	20	0.0500	
cis-1,2-Dichloroethene	0.7037	0.6620	20.00	18.81	ug/L	-6	20	0.0500	
Chloroform	1.0137	1.0026	20.00	19.78	ug/L	-1	20	0.0500	
Bromochloromethane	0.3338	0.3238	20.00	19.40	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.6595	0.6841	20.00	20.75	ug/L	4	20	0.0500	
1,1-Dichloropropene	0.4369	0.4505	20.00	20.62	ug/L	3	20	0.0500	
Carbon Tetrachloride	0.2948	0.3357	20.00	22.78	ug/L	14	20	0.0500	
1,2-Dichloroethane	0.3751	0.4117	20.00	21.95	ug/L	10	20	0.0500	
Benzene	1.3652	1.3403	20.00	19.64	ug/L	-2	20	0.0500	
Trichloroethene	0.3410	0.3410	20.00	20.00	ug/L	0	20	0.0500	
1,2-Dichloropropane	0.4171	0.3887	20.00	18.64	ug/L	-7	20	0.0500	
Bromodichloromethane	0.4369	0.4463	20.00	20.43	ug/L	2	20	0.0500	
Dibromomethane	0.2305	0.2340	20.00	20.30	ug/L	1	20	0.0500	
4-Methyl-2-Pentanone	0.3262	0.3110	20.00	19.07	ug/L	-5	20	0.0500	
cis-1,3-Dichloropropene	0.5790	0.5608	20.00	19.37	ug/L	-3	20	0.0500	
Toluene	0.9653	0.9051	20.00	18.75	ug/L	-6	20	0.0500	
trans-1,3-Dichloropropene	0.5740	0.5526	20.00	19.25	ug/L	-4	20	0.0500	
1,1,2-Trichloroethane	0.2005	0.1899	20.00	18.94	ug/L	-5	20	0.0500	
2-Hexanone	0.2578	0.2468	20.00	19.15	ug/L	-4	20	0.0500	
1,3-Dichloropropane	0.5943	0.5798	20.00	19.51	ug/L	-2	20	0.0500	
Tetrachloroethene	0.3708	0.3628	20.00	19.57	ug/L	-2	20	0.0500	
Dibromochloromethane	0.3751	0.3684	20.00	19.64	ug/L	-2	20	0.0500	
1,2-Dibromoethane	0.3515	0.3557	20.00	20.24	ug/L	1	20	0.0500	
Chlorobenzene	1.0826	0.9838	20.00	18.17	ug/L	-9	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3342	0.3323	20.00	19.89	ug/L	-1	20	0.0500	
Ethylbenzene	1.7697	1.5982	20.00	18.06	ug/L	-10	20	0.0500	
m,p-Xylenes	0.6731	0.5918	40.00	35.17	ug/L	-12	20	0.0500	
o-Xylene	0.6638	0.5940	20.00	17.90	ug/L	-11	20	0.0500	
Styrene	1.1877	1.0715	20.00	18.04	ug/L	-10	20	0.0500	
Bromoform	0.2304	0.2274	20.00	19.74	ug/L	-1	20	0.1000	
Isopropylbenzene	3.3307	2.8671	20.00	17.22	ug/L	-14	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9320	0.8329	20.00	17.87	ug/L	-11	20	0.3000	
1,2,3-Trichloropropane	0.7453	0.6921	20.00	18.57	ug/L	-7	20	0.0500	
Propylbenzene	4.2189	3.5800	20.00	16.97	ug/L	-15	20	0.0500	
Bromobenzene	0.8895	0.8426	20.00	18.95	ug/L	-5	20	0.0500	
1,3,5-Trimethylbenzene	2.7183	2.3431	20.00	17.24	ug/L	-14	20	0.0500	
2-Chlorotoluene	2.7188	2.4103	20.00	17.73	ug/L	-11	20	0.0500	
4-Chlorotoluene	2.5819	2.2842	20.00	17.69	ug/L	-12	20	0.0500	
tert-Butylbenzene	2.2466	1.8856	20.00	16.79	ug/L	-16	20	0.0500	
1,2,4-Trimethylbenzene	2.8433	2.3805	20.00	16.74	ug/L	-16	20	0.0500	
sec-Butylbenzene	3.5685	2.9295	20.00	16.42	ug/L	-18	20	0.0500	
para-Isopropyl Toluene	2.7756	2.3184	20.00	16.71	ug/L	-16	20	0.0500	
1,3-Dichlorobenzene	1.6979	1.4766	20.00	17.39	ug/L	-13	20	0.0500	
1,4-Dichlorobenzene	1.7457	1.5225	20.00	17.44	ug/L	-13	20	0.0500	
n-Butylbenzene	2.7600	2.2082	20.00	16.00	ug/L	-20	20	0.0500	
1,2-Dichlorobenzene	1.5721	1.3920	20.00	17.71	ug/L	-11	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1152	0.1153	20.00	20.03	ug/L	0	20	0.0500	
1,2,4-Trichlorobenzene	0.9215	0.7958	20.00	17.27	ug/L	-14	20	0.0500	
Hexachlorobutadiene	0.2803	0.2742	20.00	19.56	ug/L	-2	20	0.0500	
Naphthalene	1.9986	1.4548	20.00	14.56	ug/L	-27	20	0.0500	c- ***
1,2,3-Trichlorobenzene	0.7961	0.6919	20.00	17.38	ug/L	-13	20	0.0500	
Dibromofluoromethane	0.5727	0.5639	50.00	49.24	ug/L	-2	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.3038	50.00	54.95	ug/L	10	20	0.0500	
Toluene-d8	1.3484	1.3559	50.00	50.28	ug/L	1	20	0.0500	
Bromofluorobenzene	0.9907	0.9710	50.00	49.01	ug/L	-2	20	0.0500	

ISTD (ICAL jaj18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	704216	713589	1.33	10.97	10.92	-0.05
1,4-Difluorobenzene	1214372	1169432	-3.70	12.14	12.10	-0.04
Chlorobenzene-d5	1037725	994271	-4.19	16.07	16.03	-0.04
1,4-Dichlorobenzene-d4	517916	496821	-4.07	18.78	18.74	-0.04

Analyst: PDM

Date: 03/26/10

Reviewer: LW

Date: 03/26/10

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name : 20PPB IDF : 1.0
 Seqnum : 490120216015.2 File : jco15 Time : 24-MAR-2010 22:31
 Cal : 490027869001 Caldate : 19-JAN-2010 Caltype : WATER
 Standards: S13952 (25000X), S13719 (25000X), S14108 (25000X), S13625 (50000X), S14145 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.6144	0.7155	20.00	21.72	ug/L	9	20	0.0500	
Chloromethane	0.9887	0.7879	20.00	15.94	ug/L	-20	20	0.1000	
Vinyl Chloride	0.7734	0.7663	20.00	19.82	ug/L	-1	20	0.0500	
Bromomethane	0.4602	0.3990	20.00	17.34	ug/L	-13	20	0.0500	
Chloroethane	0.4539	0.4083	20.00	17.99	ug/L	-10	20	0.0500	
Trichlorofluoromethane	0.6225	0.7340	20.00	21.75	ug/L	9	20	0.0500	
Acetone	0.1678	0.1568	20.00	18.68	ug/L	-7	20	0.0500	
1,1-Dichloroethene	0.5696	0.5472	20.00	19.21	ug/L	-4	20	0.0500	
Iodomethane	0.5986	0.4967	20.00	16.60	ug/L	-17	20	0.0500	
Methylene Chloride	0.7544	0.7528	20.00	19.96	ug/L	0	20	0.0500	
Carbon Disulfide	2.3825	2.3342	20.00	19.59	ug/L	-2	20	0.0500	
MTBE	1.6272	1.5401	20.00	18.93	ug/L	-5	20	0.0500	
trans-1,2-Dichloroethene	0.6687	0.6252	20.00	18.70	ug/L	-7	20	0.0500	
Vinyl Acetate	1.4687	1.4041	20.00	19.12	ug/L	-4	20	0.0500	
1,1-Dichloroethane	1.1872	1.1385	20.00	19.18	ug/L	-4	20	0.1000	
2-Butanone	0.2678	0.2566	20.00	19.16	ug/L	-4	20	0.0500	
2,2-Dichloropropane	0.6877	0.8315	20.00	24.18	ug/L	21	20	0.0500	c+ ***
cis-1,2-Dichloroethene	0.7037	0.6857	20.00	19.49	ug/L	-3	20	0.0500	
Chloroform	1.0137	1.0297	20.00	20.31	ug/L	2	20	0.0500	
Bromochloromethane	0.3338	0.3306	20.00	19.81	ug/L	-1	20	0.0500	
1,1,1-Trichloroethane	0.6595	0.7368	20.00	22.34	ug/L	12	20	0.0500	
1,1-Dichloropropene	0.4369	0.4970	20.00	22.75	ug/L	14	20	0.0500	
Carbon Tetrachloride	0.2948	0.3588	20.00	24.35	ug/L	22	20	0.0500	c+ ***
1,2-Dichloroethane	0.3751	0.4171	20.00	22.24	ug/L	11	20	0.0500	
Benzene	1.3652	1.4136	20.00	20.71	ug/L	4	20	0.0500	
Trichloroethene	0.3410	0.3667	20.00	21.51	ug/L	8	20	0.0500	
1,2-Dichloropropane	0.4171	0.4023	20.00	19.29	ug/L	-4	20	0.0500	
Bromodichloromethane	0.4369	0.4514	20.00	20.67	ug/L	3	20	0.0500	
Dibromomethane	0.2305	0.2345	20.00	20.34	ug/L	2	20	0.0500	
4-Methyl-2-Pentanone	0.3262	0.3158	20.00	19.37	ug/L	-3	20	0.0500	
cis-1,3-Dichloropropene	0.5790	0.5895	20.00	20.36	ug/L	2	20	0.0500	
Toluene	0.9653	0.9762	20.00	20.23	ug/L	1	20	0.0500	
trans-1,3-Dichloropropene	0.5740	0.5935	20.00	20.68	ug/L	3	20	0.0500	
1,1,2-Trichloroethane	0.2005	0.1996	20.00	19.91	ug/L	0	20	0.0500	
2-Hexanone	0.2578	0.2513	20.00	19.50	ug/L	-3	20	0.0500	
1,3-Dichloropropane	0.5943	0.6032	20.00	20.30	ug/L	2	20	0.0500	
Tetrachloroethene	0.3708	0.4139	20.00	22.32	ug/L	12	20	0.0500	
Dibromochloromethane	0.3751	0.3914	20.00	20.87	ug/L	4	20	0.0500	
1,2-Dibromoethane	0.3515	0.3759	20.00	21.39	ug/L	7	20	0.0500	
Chlorobenzene	1.0826	1.0858	20.00	20.06	ug/L	0	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3342	0.3549	20.00	21.24	ug/L	6	20	0.0500	
Ethylbenzene	1.7697	1.8067	20.00	20.42	ug/L	2	20	0.0500	
m,p-Xylenes	0.6731	0.6783	40.00	40.31	ug/L	1	20	0.0500	
o-Xylene	0.6638	0.6455	20.00	19.45	ug/L	-3	20	0.0500	
Styrene	1.1877	1.1738	20.00	19.77	ug/L	-1	20	0.0500	
Bromoform	0.2304	0.2391	20.00	20.75	ug/L	4	20	0.1000	
Isopropylbenzene	3.3307	3.4141	20.00	20.50	ug/L	3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.9320	0.8671	20.00	18.61	ug/L	-7	20	0.3000	
1,2,3-Trichloropropane	0.7453	0.7488	20.00	20.09	ug/L	0	20	0.0500	
Propylbenzene	4.2189	4.3073	20.00	20.42	ug/L	2	20	0.0500	
Bromobenzene	0.8895	0.9131	20.00	20.53	ug/L	3	20	0.0500	
1,3,5-Trimethylbenzene	2.7183	2.7241	20.00	20.04	ug/L	0	20	0.0500	
2-Chlorotoluene	2.7188	2.7465	20.00	20.20	ug/L	1	20	0.0500	
4-Chlorotoluene	2.5819	2.5361	20.00	19.65	ug/L	-2	20	0.0500	
tert-Butylbenzene	2.2466	2.2521	20.00	20.05	ug/L	0	20	0.0500	
1,2,4-Trimethylbenzene	2.8433	2.7772	20.00	19.54	ug/L	-2	20	0.0500	
sec-Butylbenzene	3.5685	3.6206	20.00	20.29	ug/L	1	20	0.0500	
para-Isopropyl Toluene	2.7756	2.8787	20.00	20.74	ug/L	4	20	0.0500	
1,3-Dichlorobenzene	1.6979	1.6426	20.00	19.35	ug/L	-3	20	0.0500	
1,4-Dichlorobenzene	1.7457	1.7272	20.00	19.79	ug/L	-1	20	0.0500	
n-Butylbenzene	2.7600	2.7950	20.00	20.25	ug/L	1	20	0.0500	
1,2-Dichlorobenzene	1.5721	1.5308	20.00	19.47	ug/L	-3	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1152	0.1240	20.00	21.53	ug/L	8	20	0.0500	
1,2,4-Trichlorobenzene	0.9215	0.9313	20.00	20.21	ug/L	1	20	0.0500	
Hexachlorobutadiene	0.2803	0.4070	20.00	29.04	ug/L	45	20	0.0500	c+ ***
Naphthalene	1.9986	1.5972	20.00	15.98	ug/L	-20	20	0.0500	
1,2,3-Trichlorobenzene	0.7961	0.7976	20.00	20.04	ug/L	0	20	0.0500	
Dibromofluoromethane	0.5727	0.5646	50.00	49.30	ug/L	-1	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.3095	50.00	55.98	ug/L	12	20	0.0500	
Toluene-d8	1.3484	1.3719	50.00	50.87	ug/L	2	20	0.0500	
Bromofluorobenzene	0.9907	0.9829	50.00	49.61	ug/L	-1	20	0.0500	

ISTD (ICAL jaj18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	704216	717193	1.84	10.97	10.93	-0.04
1,4-Difluorobenzene	1214372	1187890	-2.18	12.14	12.10	-0.04
Chlorobenzene-d5	1037725	1006252	-3.03	16.07	16.03	-0.04
1,4-Dichlorobenzene-d4	517916	500680	-3.33	18.78	18.74	-0.04

Analyst: PDM

Date: 03/26/10

Reviewer: LW

Date: 03/26/10

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218768 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : 20PPB IDF : 1.0
 Seqnum : 950121459003.1 File : ncp03 Time : 25-MAR-2010 09:05
 Cal : 950120036001 Caldate : 24-MAR-2010
 Standards: S14216 (25000X), S14108 (25000X), S14228 (50000X), S13719 (25000X),
 S14027 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.4874	0.5209	20.00	21.37	ug/L	7	20	0.0500	
Chloromethane	0.5556	0.5950	20.00	21.42	ug/L	7	20	0.1000	
Vinyl Chloride	0.6437	0.6746	20.00	20.96	ug/L	5	20	0.0500	
Bromomethane	0.4260	0.4702	20.00	22.07	ug/L	10	20	0.0500	
Chloroethane	0.3924	0.4083	20.00	20.81	ug/L	4	20	0.0500	m
Trichlorofluoromethane	0.7559	0.7422	20.00	19.64	ug/L	-2	20	0.0500	
Acetone	0.1956	0.1900	20.00	19.43	ug/L	-3	20	0.0500	
1,1-Dichloroethene	0.3994	0.3706	20.00	18.56	ug/L	-7	20	0.0500	
Iodomethane	0.3686	0.3376	20.00	20.09	ug/L	0	20	0.0500	
Methylene Chloride	0.4647	0.4785	20.00	20.59	ug/L	3	20	0.0500	
Carbon Disulfide	1.5583	1.5128	20.00	19.42	ug/L	-3	20	0.0500	
MTBE	1.4821	1.4546	20.00	19.63	ug/L	-2	20	0.0500	
trans-1,2-Dichloroethene	0.4368	0.4481	20.00	20.52	ug/L	3	20	0.0500	
Vinyl Acetate	0.9347	1.0008	20.00	19.53	ug/L	-2	20	0.0500	
1,1-Dichloroethane	0.8319	0.8608	20.00	20.69	ug/L	3	20	0.1000	
2-Butanone	0.2596	0.2319	20.00	17.86	ug/L	-11	20	0.0500	
2,2-Dichloropropane	0.6868	0.7341	20.00	21.38	ug/L	7	20	0.0500	
cis-1,2-Dichloroethene	0.5143	0.5228	20.00	20.33	ug/L	2	20	0.0500	
Chloroform	0.8422	0.8669	20.00	20.59	ug/L	3	20	0.0500	
Bromochloromethane	0.2472	0.2562	20.00	20.73	ug/L	4	20	0.0500	
1,1,1-Trichloroethane	0.6852	0.6803	20.00	19.86	ug/L	-1	20	0.0500	
1,1-Dichloropropene	0.3907	0.3889	20.00	19.91	ug/L	0	20	0.0500	
Carbon Tetrachloride	0.3375	0.3408	20.00	20.20	ug/L	1	20	0.0500	
1,2-Dichloroethane	0.4446	0.4492	20.00	20.21	ug/L	1	20	0.0500	
Benzene	1.2327	1.2671	20.00	20.56	ug/L	3	20	0.0500	
Trichloroethene	0.3109	0.3109	20.00	20.00	ug/L	0	20	0.0500	
1,2-Dichloropropane	0.3152	0.3265	20.00	20.72	ug/L	4	20	0.0500	
Bromodichloromethane	0.4008	0.4184	20.00	20.88	ug/L	4	20	0.0500	
Dibromomethane	0.2023	0.2022	20.00	20.00	ug/L	0	20	0.0500	
4-Methyl-2-Pentanone	0.3308	0.2828	20.00	17.10	ug/L	-15	20	0.0500	
cis-1,3-Dichloropropene	0.5220	0.5463	20.00	20.93	ug/L	5	20	0.0500	
Toluene	1.4156	1.4197	20.00	20.06	ug/L	0	20	0.0500	
trans-1,3-Dichloropropene	0.5277	0.5404	20.00	20.48	ug/L	2	20	0.0500	
1,1,2-Trichloroethane	0.1654	0.1614	20.00	19.52	ug/L	-2	20	0.0500	
2-Hexanone	0.2433	0.2123	20.00	17.45	ug/L	-13	20	0.0500	
1,3-Dichloropropane	0.5516	0.5453	20.00	19.77	ug/L	-1	20	0.0500	
Tetrachloroethene	0.3307	0.3225	20.00	19.51	ug/L	-2	20	0.0500	
Dibromochloromethane	0.3254	0.3272	20.00	20.11	ug/L	1	20	0.0500	
1,2-Dibromoethane	0.3289	0.3168	20.00	19.26	ug/L	-4	20	0.0500	
Chlorobenzene	0.9606	0.9836	20.00	20.48	ug/L	2	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3241	0.3350	20.00	20.67	ug/L	3	20	0.0500	
Ethylbenzene	1.6253	1.6189	20.00	19.92	ug/L	0	20	0.0500	
m,p-Xylenes	0.6367	0.6371	40.00	40.03	ug/L	0	20	0.0500	
o-Xylene	0.6041	0.6270	20.00	20.76	ug/L	4	20	0.0500	
Styrene	1.0433	1.0975	20.00	21.04	ug/L	5	20	0.0500	
Bromoform	0.2487	0.2425	20.00	19.50	ug/L	-2	20	0.1000	
Isopropylbenzene	2.7883	2.7015	20.00	19.38	ug/L	-3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7874	0.7049	20.00	17.91	ug/L	-10	20	0.3000	
1,2,3-Trichloropropane	0.8138	0.7176	20.00	17.63	ug/L	-12	20	0.0500	
Propylbenzene	3.4291	3.3399	20.00	19.48	ug/L	-3	20	0.0500	
Bromobenzene	0.7895	0.7812	20.00	19.79	ug/L	-1	20	0.0500	
1,3,5-Trimethylbenzene	2.3479	2.3298	20.00	19.85	ug/L	-1	20	0.0500	
2-Chlorotoluene	2.3518	2.3295	20.00	19.81	ug/L	-1	20	0.0500	
4-Chlorotoluene	2.1684	2.1778	20.00	20.09	ug/L	0	20	0.0500	
tert-Butylbenzene	2.0536	1.9702	20.00	19.19	ug/L	-4	20	0.0500	
1,2,4-Trimethylbenzene	2.3985	2.4394	20.00	20.34	ug/L	2	20	0.0500	
sec-Butylbenzene	2.9687	2.7893	20.00	18.79	ug/L	-6	20	0.0500	
para-Isopropyl Toluene	2.5261	2.4471	20.00	19.37	ug/L	-3	20	0.0500	
1,3-Dichlorobenzene	1.4668	1.4714	20.00	20.06	ug/L	0	20	0.0500	
1,4-Dichlorobenzene	1.5358	1.5254	20.00	19.86	ug/L	-1	20	0.0500	
n-Butylbenzene	2.2961	2.1705	20.00	18.91	ug/L	-5	20	0.0500	
1,2-Dichlorobenzene	1.4000	1.3916	20.00	19.88	ug/L	-1	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1700	0.1435	20.00	16.88	ug/L	-16	20	0.0500	
1,2,4-Trichlorobenzene	0.9376	0.9345	20.00	19.94	ug/L	0	20	0.0500	
Hexachlorobutadiene	0.4318	0.3712	20.00	17.19	ug/L	-14	20	0.0500	
Naphthalene	2.3635	2.1617	20.00	18.29	ug/L	-9	20	0.0500	
1,2,3-Trichlorobenzene	0.8504	0.8191	20.00	19.26	ug/L	-4	20	0.0500	
Dibromofluoromethane	0.4633	0.4623	50.00	49.90	ug/L	0	20	0.0500	
1,2-Dichloroethane-d4	0.3750	0.3707	50.00	49.43	ug/L	-1	20	0.0500	
Toluene-d8	1.3357	1.3352	50.00	49.98	ug/L	0	20	0.0500	
Bromofluorobenzene	0.9134	0.8877	50.00	48.59	ug/L	-3	20	0.0500	

ISTD (ICAL ncol4)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	750650	714417	-4.83	11.53	11.53	0.00
1,4-Difluorobenzene	1177090	1125838	-4.35	12.37	12.37	0.00
Chlorobenzene-d5	1151283	1084034	-5.84	15.20	15.20	0.00
1,4-Dichlorobenzene-d4	645405	607896	-5.81	17.26	17.26	0.00

BO 03/25/10 [Chloroethane]: Integrated to match integration of ICAL and CCV.
[general version]

Analyst: TDL Date: 03/26/10 Reviewer: LW Date: 03/26/10

m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 480120073

Date : 03/24/10
 Sequence : MSVOA09 ico

Reference : iar13
 Analyzed : 01/27/10 23:34

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2099875	12.37	3438431	13.66	2768728	17.68	1353103	20.18
		LOWER LIMIT	1049938	11.87	1719216	13.16	1384364	17.18	676552	19.68
		UPPER LIMIT	4199750	12.87	6876862	14.16	5537456	18.18	2706206	20.68
003	CCV	30PPB	2446859	12.40	3977528	13.68	3234352	17.67	1589001	20.18
005	CCV	30PPB	2846338	12.40	4603358	13.68	3481497	17.67	1632609	20.18
006	BS	QC537341	2803816	12.40	4563692	13.68	3443217	17.66	1622280	20.18
007	BSD	QC537342	2868385	12.39	4593517	13.68	3284027	17.67	1653776	20.17
008	CCV/BS	QC537343	2767154	12.40	4325730	13.68	3327228	17.67	1600139	20.18
009	BSD	QC537344	2766224	12.39	4379931	13.68	3275146	17.67	1578038	20.18
012	CCV	30PPB	2733984	12.39	4391230	13.68	3283416	17.67	1598081	20.18
013	CCV		2710126	12.39	4258548	13.68	3309010	17.67	1544126	20.17
014	IB	IB	2477129	12.39	3979737	13.67	3315788	17.67	1684223	20.18
015	BLANK	QC537345	2716754	12.39	4293579	13.67	3293242	17.66	1578895	20.18
016	SAMPLE	218768-001	2614211	12.38	4354389	13.67	3477525	17.67	1802323	20.17
017	SAMPLE	218768-001	2783060	12.40	4494153	13.68	3508669	17.67	1636625	20.18
018	SAMPLE	218869-003	2845217	12.40	4521581	13.68	3469062	17.67	1595608	20.18
019	MSS	218841-006	2715885	12.40	4443254	13.68	3440157	17.67	1562440	20.17
020	SAMPLE	218841-007	2637026	12.40	4382821	13.68	3340030	17.67	1522685	20.18
021	SAMPLE	218841-005	2563657	12.39	4181656	13.68	3169177	17.67	1419868	20.17
022	SAMPLE	218841-009	2583863	12.40	4171446	13.68	3224580	17.67	1393516	20.17
023	SAMPLE	218910-007	2487038	12.39	3993264	13.68	3081609	17.67	1463358	20.17
024	SAMPLE	218910-011	2708429	12.40	4335767	13.68	3276210	17.66	1535394	20.18
025	SAMPLE	218910-001	2838563	12.40	4504602	13.68	3360734	17.66	1655407	20.17
026	SAMPLE	218910-006	2770811	12.40	4527345	13.68	3366018	17.67	1419839	20.18
027	SAMPLE	218910-012	2869901	12.40	4554831	13.68	3410244	17.66	1573270	20.17
028	SAMPLE	218910-004	2881428	12.40	4518155	13.68	3499572	17.66	1551577	20.17
029	SAMPLE	218910-005	2813667	12.40	4483135	13.68	3380131	17.66	1607195	20.18
030	MS	QC537438	2814631	12.39	4478591	13.67	3343913	17.67	1627713	20.17
031	MSD	QC537439	2712460	12.39	4417620	13.68	3428518	17.67	1647629	20.18

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 480120073

Date : 03/24/10
 Sequence : MSVOA09 ico

Reference : ibm08
 Analyzed : 02/22/10 16:23

#	Type	Sample ID	CLBZD5-TIC	RT
		ICAL STD	6292999	17.66
		LOWER LIMIT	3146500	17.16
		UPPER LIMIT	12585998	18.16
008	CCV/BS	QC537343	9788733	17.67
013	CCV		9721558	17.67
023	SAMPLE	218910-007	9482436	17.67
024	SAMPLE	218910-011	9624296	17.66
025	SAMPLE	218910-001	9816999	17.66
026	SAMPLE	218910-006	9849404	17.67
027	SAMPLE	218910-012	9844360	17.66
028	SAMPLE	218910-004	9939168	17.66
029	SAMPLE	218910-005	9726332	17.66

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 490120216

Date : 03/24/10
 Sequence : MSVOA10 jco

Reference : jaj18
 Analyzed : 01/19/10 22:26

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	704216	10.97	1214372	12.14	1037725	16.07	517916	18.78
		LOWER LIMIT	352108	10.47	607186	11.64	518863	15.57	258958	18.28
		UPPER LIMIT	1408432	11.47	2428744	12.64	2075450	16.57	1035832	19.28
003	CCV	20PPB	713589	10.92	1169432	12.10	994271	16.03	496821	18.74
004	BS	QC537368	715341	10.92	1155115	12.09	989004	16.03	507170	18.74
005	BSD	QC537369	701632	10.92	1131390	12.09	973053	16.03	495592	18.74
007	BLANK	QC537370	677541	10.93	1105419	12.10	960642	16.04	488539	18.74
008	SAMPLE	218988-009	731811	10.93	1189779	12.10	1020693	16.04	503557	18.74
009	SAMPLE	218758-008	707458	10.93	1142819	12.10	991613	16.04	497369	18.74
010	SAMPLE	218758-011	716917	10.93	1174429	12.10	1003862	16.04	494032	18.74
011	SAMPLE	218988-008	672414	10.93	1102974	12.10	943291	16.04	479551	18.74
012	SAMPLE	218758-015	700611	10.93	1134970	12.10	977053	16.04	493212	18.74
013	SAMPLE	218758-016	690967	10.92	1119813	12.11	976925	16.03	485855	18.74
015	CCV	20PPB	717193	10.93	1187890	12.10	1006252	16.03	500680	18.74
017	BLANK	QC537559	713745	10.92	1176606	12.09	988680	16.03	484970	18.74
018	SAMPLE	218909-005	692887	10.93	1133744	12.10	990119	16.03	492769	18.74
019	SAMPLE	218909-006	693563	10.92	1149834	12.10	968289	16.03	485210	18.74
020	SAMPLE	218909-007	682507	10.93	1125281	12.10	970914	16.04	480935	18.74
021	SAMPLE	218768-009	696312	10.92	1144475	12.09	971000	16.03	484583	18.74
022	SAMPLE	218768-004	684936	10.93	1121700	12.10	969282	16.04	487417	18.73
023	SAMPLE	218768-005	690224	10.92	1128909	12.10	973955	16.04	485076	18.73
024	SAMPLE	218768-006	679952	10.93	1121170	12.10	961172	16.04	479258	18.73
025	SAMPLE	218768-007	690410	10.92	1135503	12.09	961848	16.03	480568	18.74
026	MSS	218768-008	693548	10.92	1133732	12.09	969845	16.03	478305	18.73
027	SAMPLE	218735-008	678128	10.91	1121352	12.09	962817	16.02	485123	18.73
028	SAMPLE	218841-010	701682	10.92	1162900	12.09	1019358	16.03	497266	18.73
029	SAMPLE	218735-006	677159	10.92	1140293	12.09	982505	16.03	483299	18.74
030	SAMPLE	218768-002	693748	10.92	1146225	12.09	1004788	16.03	493418	18.73
031	SAMPLE	218768-003	700333	10.91	1166448	12.08	995495	16.02	488301	18.73
032	MS	QC537442	665512	10.91	1116438	12.08	960413	16.02	475147	18.73
033	MSD	QC537443	689833	10.91	1154752	12.08	995066	16.02	493035	18.73

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 950121459

Date : 03/25/10
 Sequence : MSVOA14 ncp

Reference : ncol4
 Analyzed : 03/24/10 14:04

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	750650	11.53	1177090	12.37	1151283	15.20	645405	17.26
		LOWER LIMIT	375325	11.03	588545	11.87	575642	14.70	322703	16.76
		UPPER LIMIT	1501300	12.03	2354180	12.87	2302566	15.70	1290810	17.76
003	CCV	20PPB	714417	11.53	1125838	12.37	1084034	15.20	607896	17.26
004	ICV/BS	QC537564	717300	11.53	1129178	12.37	1090354	15.20	611487	17.26
005	BSD	QC537565	735079	11.53	1159626	12.37	1119863	15.20	633122	17.26
007	BLANK	QC537566	699767	11.53	1118635	12.37	1059759	15.20	542251	17.26
008	SAMPLE	218735-006	689228	11.53	1095116	12.37	1033799	15.20	522916	17.26
009	SAMPLE	218768-003	699681	11.53	1110663	12.37	1046514	15.20	531114	17.26
010	SAMPLE	218801-001	686454	11.53	1100441	12.37	1036595	15.20	521956	17.26
011	SAMPLE	218801-009	679721	11.53	1088157	12.37	1032402	15.20	520528	17.26
012	SAMPLE	218834-001	660301	11.53	1058082	12.37	1001508	15.20	515174	17.26
013	SAMPLE	218834-005	668972	11.53	1076567	12.37	1019444	15.20	513548	17.26
014	SAMPLE	218801-002	668544	11.53	1074843	12.37	1012692	15.20	512095	17.26
015	SAMPLE	218801-003	665081	11.53	1073326	12.37	1005176	15.20	500906	17.26
016	SAMPLE	218801-004	647729	11.53	1051481	12.37	994145	15.20	504476	17.26
017	SAMPLE	218801-005	637468	11.53	1037131	12.37	976769	15.20	493076	17.26
018	SAMPLE	218801-006	638284	11.53	1040300	12.37	976695	15.20	489620	17.26
019	SAMPLE	218801-007	629820	11.53	1034440	12.37	972775	15.20	490910	17.26
020	SAMPLE	218801-008	623472	11.53	1026435	12.37	973796	15.20	490944	17.26
021	SAMPLE	218834-002	605834	11.53	993769	12.37	945851	15.20	488303	17.26
022	SAMPLE	218834-003	617414	11.53	1001081	12.37	945231	15.20	483790	17.26
023	SAMPLE	218834-004	601057	11.53	986112	12.37	937448	15.20	492998	17.26
024	SAMPLE	218834-006	614719	11.53	1013056	12.37	958339	15.20	490727	17.26
025	SAMPLE	218834-007	599283	11.53	984975	12.37	931270	15.20	473991	17.26
026	SAMPLE	218834-008	594259	11.53	978732	12.37	926260	15.20	470508	17.26
027	SAMPLE	218834-009	589530	11.53	968463	12.37	925414	15.20	479540	17.26
031	IB	VIALCHECK	572251	11.53	947792	12.37	895266	15.20	463037	17.26
032	IB	VIALCHECK	574499	11.53	949439	12.37	895338	15.20	462545	17.26

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 480039377

Instrument : MSVOA09 Begun : 01/27/10 08:17
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	iar01	X	IB			01/27/10 08:17	1.0	1
002	iar02	X	IB			01/27/10 08:50	1.0	1
003	iar03	TUN	BFB			01/27/10 17:11	1.0	2
004	iar04	X	IB			01/27/10 18:36	1.0	1
005	iar05	X	IB			01/27/10 19:09	1.0	1
006	iar06	IB	CALIB IB			01/27/10 19:42	1.0	1
007	iar07	ICAL	.25/.5PPB			01/27/10 20:15	1.0	3 4 5 6 1
008	iar08	ICAL	0.5/1PPB			01/27/10 20:49	1.0	3 4 5 6 1
009	iar09	ICAL	2PPB			01/27/10 21:22	1.0	3 4 5 6 1
010	iar10	ICAL	5PPB			01/27/10 21:55	1.0	3 4 5 6 1
011	iar11	ICAL	10PPB			01/27/10 22:28	1.0	3 4 5 6 1
012	iar12	ICAL	20PPB			01/27/10 23:01	1.0	7 8 9 10 1
013	iar13	ICAL	50PPB			01/27/10 23:34	1.0	7 8 9 10 1
014	iar14	ICAL	75PPB			01/28/10 00:07	1.0	7 8 9 10 1
015	iar15	ICAL	100PPB			01/28/10 00:39	1.0	7 8 9 10 1
016	iar16	ICV	25PPB			01/28/10 01:12	1.0	11 1
017	iar17	ICV	25PPB			01/28/10 01:45	1.0	12 13 14 1
018	iar18	X	IB			01/28/10 02:18	1.0	1
019	iar19	X	IB			01/28/10 02:51	1.0	1
020	iar20	X	IB			01/28/10 03:24	1.0	1

BO 01/29/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

Analyst: BO Date: 01/29/10 Reviewer: LW Date: 01/29/10
 Standards used: 1=S13687 2=S13652 3=S13745 4=S13845 5=S13747 6=S13846 7=S13680 8=S13796 9=S13625 10=S13503 11=S13817
 12=S13654 13=S13639 14=S13492

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 490027869

Instrument : MSVOA10 Begun : 01/19/10 08:29
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	jaj01	X	IB			01/19/10 08:29	1.0	1
002	jaj02	X	LOW PT			01/19/10 09:26	1.0	1
003	jaj03	X	LOW PT			01/19/10 10:09	1.0	1
004	jaj04	X	LOW PT			01/19/10 10:43	1.0	1
005	jaj05	X	LOW PT			01/19/10 11:49	1.0	1
006	jaj06	X	LOW PT			01/19/10 14:28	1.0	1
007	jaj07	X	LOW PT			01/19/10 15:02	1.0	1
008	jaj08	TUN	BFB			01/19/10 15:39	1.0	2
009	jaj09	X	IB			01/19/10 17:14	1.0	1
010	jaj10	X	IB			01/19/10 17:49	1.0	1
011	jaj11	IB	CALIB IB			01/19/10 18:23	1.0	1
012	jaj12	ICAL	.25/.5PPB			01/19/10 18:58	1.0	3 4 5 6 1
013	jaj13	ICAL	0.5/1PPB			01/19/10 19:32	1.0	3 4 5 6 1
014	jaj14	ICAL	2PPB			01/19/10 20:07	1.0	3 4 5 6 1
015	jaj15	ICAL	5PPB			01/19/10 20:42	1.0	3 4 5 6 1
016	jaj16	ICAL	10PPB			01/19/10 21:17	1.0	3 4 5 6 1
017	jaj17	ICAL	20PPB			01/19/10 21:51	1.0	7 8 9 10 1
018	jaj18	ICAL	50PPB			01/19/10 22:26	1.0	7 8 9 10 1
019	jaj19	ICAL	75PPB			01/19/10 23:01	1.0	7 8 9 10 1
020	jaj20	ICAL	100PPB			01/19/10 23:35	1.0	7 8 9 10 1
021	jaj21	ICV	25PPB			01/20/10 00:10	1.0	11 1
022	jaj22	ICV	25PPB			01/20/10 00:44	1.0	12 13 14 1
023	jaj23	X	IB			01/20/10 01:19	1.0	1
024	jaj24	X	IB			01/20/10 01:54	1.0	1
025	jaj25	X	IB			01/20/10 02:28	1.0	1

BO 01/20/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 25.

Analyst: BO Date: 01/20/10 Reviewer: LW Date: 01/22/10
 Standards used: 1=S13615 2=S13652 3=S13745 4=S13746 5=S13747 6=S13748 7=S13680 8=S13586 9=S13625 10=S13503 11=S13817
 12=S13559 13=S13639 14=S13492

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 490120216

Instrument : MSVOA10 Begun : 03/24/10 11:36
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
002	jco02	TUN	BFB			03/24/10 11:36	1.0	1	
003	jco03	CCV	20PPB			03/24/10 12:18	1.0	2 3 4 5 6	
004	jco04	BS	QC537368	Water	161239	03/24/10 13:02	1.0	7 8 9 10 6	
005	jco05	BSD	QC537369	Water	161239	03/24/10 13:37	1.0	7 8 9 10 6	
006	jco06	X	IB			03/24/10 14:12	1.0	6	
007	jco07	BLANK	QC537370	Water	161239	03/24/10 14:47	1.0	6	
008	jco08	SAMPLE	218988-009	Water	161239	03/24/10 15:52	1.0	6	
009	jco09	SAMPLE	218758-008	Water	161239	03/24/10 16:27	1.0	6	1:ISOPROH=1500
010	jco10	SAMPLE	218758-011	Water	161239	03/24/10 17:02	40.0	6	
011	jco11	SAMPLE	218988-008	Water	161239	03/24/10 17:37	1.0	6	
012	jco12	SAMPLE	218758-015	Water	161239	03/24/10 18:12	2.0	6	
013	jco13	SAMPLE	218758-016	Water	161239	03/24/10 18:47	20.0	6	1:TCE=100
014	jco14	TUN	BFB			03/24/10 21:51	1.0	1	
015	jco15	CCV	20PPB			03/24/10 22:31	1.0	2 3 4 5 6	
016	jco16	X	IB			03/24/10 23:17	1.0	6	
017	jco17	BLANK	QC537559	Water	161239	03/24/10 23:52	1.0	6	
018	jco18	SAMPLE	218909-005	Water	161239	03/25/10 00:26	1.0	6	
019	jco19	SAMPLE	218909-006	Water	161239	03/25/10 01:00	1.0	6	
020	jco20	SAMPLE	218909-007	Water	161239	03/25/10 01:35	1.0	6	pH > 2
021	jco21	SAMPLE	218768-009	Water	161239	03/25/10 02:10	1.0	6	
022	jco22	SAMPLE	218768-004	Water	161239	03/25/10 02:44	1.0	6	
023	jco23	SAMPLE	218768-005	Water	161239	03/25/10 03:18	1.0	6	
024	jco24	SAMPLE	218768-006	Water	161239	03/25/10 03:53	1.0	6	
025	jco25	SAMPLE	218768-007	Water	161239	03/25/10 04:27	1.0	6	
026	jco26	MSS	218768-008	Water	161239	03/25/10 05:02	1.0	6	
027	jco27	SAMPLE	218735-008	Water	161239	03/25/10 05:36	3.333	6	pH > 2
028	jco28	SAMPLE	218841-010	Water	161239	03/25/10 06:10	5.0	6	
029	jco29	SAMPLE	218735-006	Water	161239	03/25/10 06:45	10.0	6	
030	jco30	SAMPLE	218768-002	Water	161239	03/25/10 07:19	2.0	6	
031	jco31	SAMPLE	218768-003	Water	161239	03/25/10 07:54	4.0	6	
032	jco32	MS	QC537442	Water	161239	03/25/10 08:28	1.0	7 8 9 10 6	
033	jco33	MSD	QC537443	Water	161239	03/25/10 09:03	1.0	7 8 9 10 6	
034	jco34	X	IB			03/25/10 09:37	1.0	6	

BJP 03/24/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 11.

PDM 03/25/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 001 through 034.

Analyst: PDM Date: 03/25/10 Reviewer: LW Date: 03/25/10

Standards used: 1=S13652 2=S13952 3=S13719 4=S14108 5=S13625 6=S14145 7=S14253 8=S14144 9=S14234 10=S13925

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 950120036

Instrument : MSVOA14 Begun : 03/24/10 08:36
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	nco01	X	IB			03/24/10 08:36	1.0	1
002	nco02	TUN	BFB			03/24/10 09:05	1.0	2
003	nco03	TUN	BFB			03/24/10 09:15	1.0	2
004	nco04	TUN	BFB			03/24/10 09:27	1.0	2
005	nco05	TUN	BFB			03/24/10 09:41	1.0	2
006	nco06	X	IB			03/24/10 10:13	1.0	1
007	nco07	IB	CALIB			03/24/10 10:42	1.0	1
008	nco08	ICAL	.25/.5PPB			03/24/10 11:10	1.0	3 4 5 6 1
009	nco09	ICAL	0.5/1PPB			03/24/10 11:39	1.0	3 4 5 6 1
010	nco10	ICAL	2PPB			03/24/10 12:08	1.0	3 4 5 6 1
011	nco11	ICAL	5PPB			03/24/10 12:37	1.0	3 4 5 6 1
012	nco12	ICAL	10PPB			03/24/10 13:06	1.0	3 4 5 6 1
013	nco13	ICAL	20PPB			03/24/10 13:35	1.0	7 8 9 10 1
014	nco14	ICAL	50PPB			03/24/10 14:04	1.0	7 8 9 10 1
015	nco15	ICAL	75PPB			03/24/10 14:34	1.0	7 8 9 10 1
016	nco16	ICAL	100PPB			03/24/10 15:03	1.0	7 8 9 10 1
017	nco17	ICV	25PPB			03/24/10 15:33	1.0	11 1
018	nco18	ICV	25PPB			03/24/10 16:02	1.0	12 13 14 1
019	nco19	ICV	25PPB			03/24/10 16:32	1.0	15 1
020	nco20	X	IB			03/24/10 17:01	1.0	1
021	nco21	X	IB			03/24/10 17:30	1.0	1

BO 03/25/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 21.

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10
 Standards used: 1=S14027 2=S13652 3=S14217 4=S14254 5=S14255 6=S14256 7=S14216 8=S14108 9=S14228 10=S13719 11=S14234
 12=S13925 13=S14144 14=S14253 15=S14236

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 950121459

Instrument : MSVOA14 Begun : 03/25/10 08:19
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used			
001	ncp01	X	IB			03/25/10 08:19	1.0	1			
002	ncp02	TUN	BFB			03/25/10 08:47	1.0	2			
003	ncp03	CCV	20PPB			03/25/10 09:05	1.0	3	4	5	6
004	ncp04	ICV/BS	QC537564	Water	161282	03/25/10 09:51	1.0	7	8	9	10
005	ncp05	BSD	QC537565	Water	161282	03/25/10 10:19	1.0	7	8	9	10
006	ncp06	X	IB			03/25/10 10:47	1.0	1			
007	ncp07	BLANK	QC537566	Water	161282	03/25/10 11:16	1.0	1			
008	ncp08	SAMPLE	218735-006	Water	161282	03/25/10 11:44	1.0	1			
009	ncp09	SAMPLE	218768-003	Water	161282	03/25/10 12:13	2.0	1			
010	ncp10	SAMPLE	218801-001	Water	161282	03/25/10 12:42	1.0	1			
011	ncp11	SAMPLE	218801-009	Water	161282	03/25/10 13:11	1.0	1			
012	ncp12	SAMPLE	218834-001	Water	161282	03/25/10 13:40	1.0	1			
013	ncp13	SAMPLE	218834-005	Water	161282	03/25/10 14:09	1.0	1			
014	ncp14	SAMPLE	218801-002	Water	161282	03/25/10 14:38	1.0	1			
015	ncp15	SAMPLE	218801-003	Water	161282	03/25/10 15:07	1.0	1			
016	ncp16	SAMPLE	218801-004	Water	161282	03/25/10 15:37	1.0	1			
017	ncp17	SAMPLE	218801-005	Water	161282	03/25/10 16:06	1.0	1			
018	ncp18	SAMPLE	218801-006	Water	161282	03/25/10 16:36	1.0	1			
019	ncp19	SAMPLE	218801-007	Water	161282	03/25/10 17:05	1.0	1			
020	ncp20	SAMPLE	218801-008	Water	161282	03/25/10 17:34	1.0	1			
021	ncp21	SAMPLE	218834-002	Water	161282	03/25/10 18:03	1.0	1			
022	ncp22	SAMPLE	218834-003	Water	161282	03/25/10 18:33	1.0	1			
023	ncp23	SAMPLE	218834-004	Water	161282	03/25/10 19:02	1.0	1			
024	ncp24	SAMPLE	218834-006	Water	161282	03/25/10 19:31	1.0	1			
025	ncp25	SAMPLE	218834-007	Water	161282	03/25/10 20:00	1.0	1			
026	ncp26	SAMPLE	218834-008	Water	161282	03/25/10 20:29	1.0	1			
027	ncp27	SAMPLE	218834-009	Water	161282	03/25/10 20:57	1.0	1			
028	ncp28	X	IB			03/25/10 21:26	1.0	1			
029	ncp29	X	IB			03/25/10 21:54	1.0	1			
030	ncp30	X	IB			03/25/10 22:23	1.0	1			
031	ncp31	IB	VIALCHECK			03/25/10 22:52	1.0	1			
032	ncp32	IB	VIALCHECK			03/25/10 23:20	1.0	1			

BO 03/25/10 : Reviewed to ncp05

BJP 03/26/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 32.

BJP 03/26/10 : Matrix spikes were not performed for this analysis in batch 161282 due to insufficient sample amount.

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/26/10

Standards used: 1=S14027 2=S13652 3=S14216 4=S14108 5=S14228 6=S13719 7=S14253 8=S13925 9=S14144 10=S14236

GC/MS VOLATILE ORGANICS

Batch #: 161239

Water Sample Prep Sheet

Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
210758-008	C	<2		22		10	RR @ 1x OD	PAH 3/24/10
-011	I	<2			3		RR @ 40x cis 12DCE >RR	
-015	I	I			5		RR @ 2x OD	
-16	I	I			6		RR 20x C12DCE cov	
210768-009	H	<2					1x Carbon Dioxide c- hit	
210735-006	A	2.5		21	1		10x	
-008	A	2.5			2		3.2x	
210909-001	S	I		25			1x put off	
-002	I	I						
-003	I	I						
-004	I	I						
-005	I	<2						
-006	I	I						
-007	I	I						
210841-010	A	2.2		23	A		5x	
210909-8	D	I					RR 1x OD	
218768-4	A	I					1x	
-5	I	I						
-6	I	I						
-7	I	I						
-8	I	I					1x 1755	
-8	I	<2					AS/MSD	
-9	A	I					EB	
-2	V	<2					2x	
-3	B	I					4x	



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

Laboratory Job Number 218801
ANALYTICAL REPORT

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 383868.US.60.61.QS
Location : Quarterly UST
Level : III

Table with 2 columns: Sample ID and Lab ID. Lists various sample IDs like TB-005-UST-10Q1 and their corresponding Lab IDs like 218801-001.

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

Signature: Senior Program Manager

Date: 03/26/2010

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 218801
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/15/10
Samples Received: 03/13/10

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 03/15/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

Chain of Custody

718801

37380 - 100312

Curtis & Tompkins Laboratories		Honeywell Chain Of Custody / Analysis Request									
2323 5th St. Berkeley, CA 94710 510-204-2221		Privileged & Confidential		Site Name:		Sky Harbor AZ		Phase: Sampling Program		AESI Ref: 40242.58627	
Sampling Co.: CH2M HILL		EDD To: Tuesdal Powers@Critigen.com Melanie.West@Critigen.com		Location of Site: PHOENIX, AZ		Quarterly UST		Lab Proj # (SDG):		COC# 37380	
Client Contact: (name, co., address) CH2M HILL 2625 South Plaza Drive, Suite 300 Tempe, AZ 85282		Sampler: NEREX TOEHL PO-5101516/PN-397864/CC-6400		Preservative: 8		1		Lab ID		CTBERK	
Preliminary Data To: Tuesdal Powers, Critigen Melanie West, Critigen		Analysis Turnaround Time (TAT): Consultant		Field Filtered Sample ?		MS/MSD		Site ID		SKYHARBOR	
Sample Receipt Acknowledgement To: Melanie West, Critigen		Laboratory Contact		Composite/Grab		Total VOCs (SW826B)		Lab Job #		Honeywell	
Hard Copy To: Tuesdal Powers and Melanie West, Critigen		Report Tier Level		Sample Purpose Cont.		7		Authorized User:		Excel & Text File Order	
Invoice To: Honeywell/Copy Berney Kidd, CH2M HILL/Copy Melanie West, Critigen		Full Report TAT:		# of		7		Text & Excel File Drive		Order	
Sample Identification		Sample Matrix		Sample Type		Sample Time		Sample Date		Sample Matrix	
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Matrix	Sample Type	Sample Time	Sample Date	Sample Matrix	Sample Date	Sample Matrix	Sample Date
1	-	-	TB-005-UST-1001	BK-A41 GW-SWS WATER	TIB	---	031210	---	---	---	---
2	ASE-110A	-	ASE-10A-UST-1001	GW-SWS water	REG	0110	031210	---	---	---	---
3	ASE-123A	-	ASE-123A-UST-1001	GW-SWS water	REG	0154	031210	---	---	---	---
4	ASE-109A	-	ASE-109A-UST-1001	GW-SWS water	REG	0233	031210	---	---	---	---
5	ASE-101A	-	ASE-101A-UST-1001	GW-SWS water	REG	0319	031210	---	---	---	---
6	ASE-100A	-	ASE-100A-UST-1001	GW-SWS water	REG	0503	031210	---	---	---	---
7	ASE-103A	-	ASE-103A-UST-1001	GW-SWS water	REG	0543	031210	---	---	---	---
8	ASE-129A	-	ASE-129A-UST-1001	GW-SWS water	REG	0614	031210	---	---	---	---
9	ASE-129A	-	EB-005-UST-1001	BK-A41 water	EB	0630	031210	---	---	---	---
10											
11											
12											

Relinquished by: CH2MHILL Company Date/Time: 03/12/10
 Received by: [Signature] Date/Time: 3/12/10
 Relinquished by: [Signature] Company Date/Time: [Blank]
 Received by: [Signature] Company Date/Time: [Blank]

Condition: Custody Seals Intact
 Cooler Temp: [Blank]
 Condition: Custody Seals Intact
 Cooler Temp: [Blank]

Preservatives: (Other, Specify):
 0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, pH>12); 7 (H2SO4, pH<2); 8 (HCl, pH<2, 4 Deg C); 9 (HCl, 4 Deg C); 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH, pH>12, 4 Deg C); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); 14 (1-MeOH, 4 Deg C and 2-NaHSO4, 4 Deg C); 15 (NaOH, pH>12, 4 Deg C); sp (special instructions)

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218801 Date Received 3/13 Number of coolers 2
 Client CH2M HILL Project Hoveywell AD
 Date Opened 3/10/10 By (print) J. G. Smith (sign) [Signature]
 Date Logged in 3-15-10 By (print) S. Evans (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) (YES) NO
 Shipping info Fed Ex 7955 344 4610

2A. Were custody seals present? ... YES (circle) or cooler on samples NO
 How many 1 ea trunk Name D. Fisher Date 3/12/10

2B. Were custody seals intact upon arrival? (YES) NO N/A

3. Were custody papers dry and intact when received? (YES) NO

4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO

5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:
 Type of ice used: Wet Blue/Gel None Temp(°C) 1.8°, 1.9°

- Samples Received on ice & cold without a temperature blank
- Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? (NO) YES
 If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? (YES) NO

10. Are samples in the appropriate containers for indicated tests? (YES) NO

11. Are sample labels present, in good condition and complete? (YES) NO

12. Do the sample labels agree with custody papers? (YES) NO

13. Was sufficient amount of sample sent for tests requested? (YES) NO

14. Are the samples appropriately preserved? (YES) NO N/A

15. Are bubbles > 6mm absent in VOA samples? (YES) NO N/A

16. Was the client contacted concerning this sample delivery? (YES) NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 218801

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/12/10
Units:	ug/L	Received:	03/13/10
Diln Fac:	1.000	Prepared:	03/17/10
Batch#:	161015		

Field ID: ASE-110A-UST-10Q1 Lab ID: 218801-002
 Type: SAMPLE Analyzed: 03/19/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	103	50-120	

Field ID: ASE-123A-UST-10Q1 Lab ID: 218801-003
 Type: SAMPLE Analyzed: 03/19/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	107	50-120	

Field ID: ASE-109A-UST-10Q1 Lab ID: 218801-004
 Type: SAMPLE Analyzed: 03/19/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	102	50-120	

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/12/10
Units:	ug/L	Received:	03/13/10
Diln Fac:	1.000	Prepared:	03/17/10
Batch#:	161015		

Field ID: ASE-101A-UST-10Q1 Lab ID: 218801-005
 Type: SAMPLE Analyzed: 03/19/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Field ID: ASE-100A-UST-10Q1 Lab ID: 218801-006
 Type: SAMPLE Analyzed: 03/19/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

Field ID: ASE-103A-UST-10Q1 Lab ID: 218801-007
 Type: SAMPLE Analyzed: 03/19/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	102	50-120	

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/12/10
Units:	ug/L	Received:	03/13/10
Diln Fac:	1.000	Prepared:	03/17/10
Batch#:	161015		

Field ID: ASE-129A-UST-10Q1 Lab ID: 218801-008
 Type: SAMPLE Analyzed: 03/19/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	97	50-120	

Field ID: EB-005-UST-10Q1 Lab ID: 218801-009
 Type: SAMPLE Analyzed: 03/21/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

Type: BLANK Analyzed: 03/19/10
 Lab ID: QC536422

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536423	Batch#:	161015
Matrix:	Water	Prepared:	03/17/10
Units:	ug/L	Analyzed:	03/19/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	1,814	73	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	95	50-120	

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-95A-UST-10Q1	Batch#:	161015
MSS Lab ID:	218768-008	Sampled:	03/11/10
Matrix:	Water	Received:	03/12/10
Units:	ug/L	Prepared:	03/17/10
Diln Fac:	1.000	Analyzed:	03/19/10

Type: MS Lab ID: QC536424

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Diesel C10-C22	74.07	2,500	2,271	88	54-120		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	101	50-120		

Type: MSD Lab ID: QC536425

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Diesel C10-C22	2,500	2,126	82	54-120	7	31		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	96	50-120		

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536426	Batch#:	161015
Matrix:	Water	Prepared:	03/17/10
Units:	ug/L	Analyzed:	03/19/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,370	95	61-139	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	93	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220019637002
 Units : mg/L

Name : DSL_013
 Date : 14-JAN-2010 01:32
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	013_020	220019637020	DSL_10	14-JAN-2010 01:32	S13230
L2	013_021	220019637021	DSL_100	14-JAN-2010 02:00	S13231
L3	013_022	220019637022	DSL_500	14-JAN-2010 02:28	S13232
L4	013_023	220019637023	DSL_1000	14-JAN-2010 02:55	S13233
L5	013_024	220019637024	DSL_5000	14-JAN-2010 03:23	S13229
L6	013_025	220019637025	DSL_7500	14-JAN-2010 03:50	S13234

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	30857	41804	48676	43245	43072	44897	AVRG		2.38E-5		42092	14	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	-27	100.0	-1	500.0	16	1000	3	5000	2	7500	7

TFB 01/14/10 : Levels 1-3 and ICV: corrected automatically drawn baseline.

TFB 01/14/10 : Carbon Marker scanned in after EZChrom calibrations.

Analyst: TFB Date: 01/14/10 Reviewer: EAH Date: 01/15/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218801 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 220019637002

Name : DSL_013
Cal Date : 14-JAN-2010

ICV 220019637027 (013_027 14-JAN-2010) stds: S13457

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	501.4	mg/L	0	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220027250001
 Units : mg/L

Name : HEXOTP_018
 Date : 18-JAN-2010 16:02
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_004	220027250004	HEXOTP_5	18-JAN-2010 16:02	S13690
L2	018_005	220027250005	HEXOTP_10	18-JAN-2010 16:30	S13691
L3	018_006	220027250006	HEXOTP_25	18-JAN-2010 16:58	S13692
L4	018_007	220027250007	HEXOTP_50	18-JAN-2010 17:27	S13693
L5	018_008	220027250008	HEXOTP_100	18-JAN-2010 17:55	S13694

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	B	51987	51113	52393	50111	49558	AVRG		1.96E-5		51032	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	B	5.000	2	10.00	0	25.00	3	50.00	-2	100.0	-3

TFB 01/18/10 : Levels 2,4,5: corrected automatically drawn baseline.

TFB 01/19/10 : Level 6 dropped due to high %D in hexacosane. Dropped from OTP for consistency.

Analyst: TFB

Date: 01/18/10

Reviewer: EAH

Date: 01/19/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220091179001
 Units : mg/L

Name : MO_063
 Date : 04-MAR-2010 16:24
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	063_016	220091179016	MO_50	04-MAR-2010 16:24	S13804
L2	063_017	220091179017	MO_250	04-MAR-2010 16:52	S13805
L3	063_018	220091179018	MO_500	04-MAR-2010 17:21	S13806
L4	063_019	220091179019	MO_1000	04-MAR-2010 17:50	S13807
L5	063_020	220091179020	MO_5000	04-MAR-2010 18:18	S13808
L6	063_021	220091179021	MO_7500	04-MAR-2010 18:47	S13809

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Motor Oil C22-C32	B	31871	31503	30804	30203	28364	26768	AVRG		3.34E-5		29919	7	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	B	50.00	7	250.0	5	500.0	3	1000	1	5000	-5	7500	-11

JDG 03/05/10 : GC14b 063_019: MO_1000

JDG 03/05/10 : GC14b 063_020: MO_5000

Analyst: JDG

Date: 03/05/10

Reviewer: EAH

Date: 03/05/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122008
 Units : mg/L

Name : HEXOTP_010
 Date : 10-JAN-2010 13:26
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b004	160015122004	HEXOTP_5	10-JAN-2010 13:26	S13690
L2	010b005	160015122005	HEXOTP_10	10-JAN-2010 13:54	S13691
L3	010b006	160015122006	HEXOTP_25	10-JAN-2010 14:21	S13692
L4	010b007	160015122007	HEXOTP_50	10-JAN-2010 14:49	S13693
L5	010b008	160015122008	HEXOTP_100	10-JAN-2010 15:17	S13694
L6	010b009	160015122009	HEXOTP_200	10-JAN-2010 15:45	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	64413	65438	65659	68934	63215	71786	AVRG		1.50E-5		66574	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-3	10.00	-2	25.00	-1	50.00	4	100.0	-5	200.0	8

CP 01/12/10 : JDG: Corrected automatically drawn baseline for all ICALS, except for HEXOTP_50.

Analyst: PRW

Date: 01/12/10

Reviewer: CP

Date: 01/12/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122002
 Units : mg/L

Name : DSL_010
 Date : 10-JAN-2010 16:41
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b011	160015122011	DSL_10	10-JAN-2010 16:41	S13230
L2	010b012	160015122012	DSL_100	10-JAN-2010 17:09	S13231
L3	010b013	160015122013	DSL_500	10-JAN-2010 17:37	S13232
L4	010b014	160015122014	DSL_1000	10-JAN-2010 18:05	S13233
L5	010b015	160015122015	DSL_5000	10-JAN-2010 18:33	S13229
L6	010b016	160015122016	DSL_7500	10-JAN-2010 19:01	S13234

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	46290	57423	63137	60591	59298	62684	AVRG		1.72E-5		58237	11	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-21	100.0	-1	500.0	8	1000	4	5000	2	7500	8

JDG 01/11/10 : Corrected automatically drawn baseline in DSL_10 (010b011).

Analyst: JDG Date: 01/11/10 Reviewer: EAH Date: 01/12/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218801 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 160015122002

Name : DSL_010
Cal Date : 10-JAN-2010

ICV 160015122018 (010b018 10-JAN-2010) stds: S13457

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	514.5	mg/L	3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 160015122003
 Units : mg/L

Name : MO_010
 Date : 10-JAN-2010 21:20
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	010b021	160015122021	MO_50	10-JAN-2010 21:20	S12675
L2	010b022	160015122022	MO_250	10-JAN-2010 21:47	S12676
L3	010b023	160015122023	MO_500	10-JAN-2010 22:15	S12677
L4	010b024	160015122024	MO_1000	10-JAN-2010 22:43	S12678
L5	010b025	160015122025	MO_5000	10-JAN-2010 23:10	S12679
L6	010b026	160015122026	MO_7500	10-JAN-2010 23:38	S12680

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	45439	44674	45779	46295	36737	34758	AVRG		2.37E-5		42280	12	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	7	250.0	6	500.0	8	1000	9	5000	-13	7500	-18

JDG 01/11/10 : Manually integrated fuel hump: MO_50,1000, & 7500.

Analyst: JDG

Date: 01/11/10

Reviewer: EAH

Date: 01/12/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399001
 Units : mg/L

Name : DSL_069
 Date : 10-MAR-2010 09:30
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a004	170100399004	DSL_10	10-MAR-2010 09:30	S14114
L2	069a005	170100399005	DSL_100	10-MAR-2010 09:58	S14115
L3	069a006	170100399006	DSL_500	10-MAR-2010 10:25	S14116
L4	069a007	170100399007	DSL_1000	10-MAR-2010 10:52	S14117
L5	069a008	170100399008	DSL_5000	10-MAR-2010 11:20	S14113
L6	069a009	170100399009	DSL_7500	10-MAR-2010 11:48	S14118

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	38992	57098	61023	62848	63686	64949	AVRG		1.72E-5		58099	17	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-33	100.0	-2	500.0	5	1000	8	5000	10	7500	12

JDG 03/11/10 : Corrected automatically baseline for: Levels 1-5.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218801 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 170100399001

Name : DSL_069
Cal Date : 10-MAR-2010

ICV 170100399011 (069a011 10-MAR-2010) stds: S14077

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	542.9	mg/L	9	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399002
 Units : mg/L

Name : MO_069
 Date : 10-MAR-2010 14:05
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a014	170100399014	MO_50	10-MAR-2010 14:05	S13804
L2	069a015	170100399015	MO_250	10-MAR-2010 14:32	S13805
L3	069a016	170100399016	MO_500	10-MAR-2010 15:00	S13806
L4	069a017	170100399017	MO_1000	10-MAR-2010 15:27	S13807
L5	069a018	170100399018	MO_5000	10-MAR-2010 15:55	S13808
L6	069a019	170100399019	MO_7500	10-MAR-2010 16:23	S13809

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	44768	46378	45947	46506	45328	45626	AVRG		2.19E-5		45759	1	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	-2	250.0	1	500.0	0	1000	2	5000	-1	7500	0

JDG 03/11/10 : Corrected automatically drawn baseline for levels 2-6.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170108447001
 Units : mg/L

Name : HEXOTP_075
 Date : 16-MAR-2010 15:35
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	075a012	170108447012	HEXOTP_5	16-MAR-2010 15:35	S13690
L2	075a013	170108447013	HEXOTP_10	16-MAR-2010 16:03	S13691
L3	075a014	170108447014	HEXOTP_25	16-MAR-2010 16:30	S13692
L4	075a015	170108447015	HEXOTP_50	16-MAR-2010 16:58	S13693
L5	075a016	170108447016	HEXOTP_100	16-MAR-2010 17:25	S13694
L6	075a017	170108447017	HEXOTP_200	16-MAR-2010 17:53	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	73067	76327	75701	75675	73539	74396	AVRG		1.34E-5		74784	2	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-2	10.00	2	25.00	1	50.00	1	100.0	-2	200.0	-1

JDG 03/17/10 : Corrected automatically drawn baseline for L1 & L2.

Analyst: JDG

Date: 03/17/10

Reviewer: EAH

Date: 03/17/10

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

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
 Seqnum : 220115810007 File : 080_007 Time : 21-MAR-2010 18:28
 Standards: S14077

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	45547	500.0	541.0	mg/L	8	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	53527	50.00	52.44	mg/L	5	15	

SFL 03/22/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/22/10 Reviewer: EAH Date: 03/22/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
 Seqnum : 220115810024 File : 080_024 Time : 22-MAR-2010 02:29
 Standards: S14078

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	44983	1000	1069	mg/L	7	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	55877	50.00	54.75	mg/L	9	15	

SFL 03/22/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/22/10 Reviewer: EAH Date: 03/23/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_500 IDF : 1.0
 Seqnum : 160112833007 File : 078b007 Time : 19-MAR-2010 14:47
 Standards: S14077

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	54511	500.0	468.0	mg/L	-6	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	64509	50.00	48.45	mg/L	-3	15	

JDG 03/19/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/19/10 Reviewer: PRW Date: 03/19/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
 Seqnum : 160112833008 File : 078b008 Time : 19-MAR-2010 15:40
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	42292	500.0	500.1	mg/L	0	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	65292	50.00	49.04	mg/L	-2	15	

TFB 03/19/10 : Corrected automatically drawn baseline.

Analyst: TFB Date: 03/19/10 Reviewer: SFL Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC15B Run Name : DSL_1000 IDF : 1.0
 Seqnum : 160112833020 File : 078b020 Time : 19-MAR-2010 22:18
 Standards: S14078

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	160015122002	10-JAN-2010	58237	55600	1000	954.7	mg/L	-5	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	65486	50.00	49.18	mg/L	-2	15	

SFL 03/21/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/21/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC15B Run Name : MO_500 IDF : 1.0
 Seqnum : 160112833021 File : 078b021 Time : 19-MAR-2010 22:46
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	160015122003	10-JAN-2010	42280	41416	500.0	489.8	mg/L	-2	15	
o-Terphenyl	160015122008	10-JAN-2010	66574	63018	50.00	47.33	mg/L	-5	15	

SFL 03/21/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/21/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170112795004 File : 078a004 Time : 19-MAR-2010 09:17
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	50073	500.0	547.1	mg/L	9	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	76397	50.00	51.08	mg/L	2	15	

TFB 03/19/10 : Corrected automatically drawn baseline.

Analyst: TFB Date: 03/19/10 Reviewer: SFL Date: 03/21/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
Seqnum : 170112795005 File : 078a005 Time : 19-MAR-2010 09:45
Standards: S14077

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	170100399001	10-MAR-2010	58099	66333	500.0	570.9	mg/L	14	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	81060	50.00	54.20	mg/L	8	15	

TFB 03/19/10 : Corrected automatically drawn baseline.

Analyst: TFB Date: 03/19/10 Reviewer: SFL Date: 03/21/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170112795017 File : 078a017 Time : 19-MAR-2010 22:55
 Standards: S14003

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	51357	500.0	561.2	mg/L	12	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	79257	50.00	52.99	mg/L	6	15	

SFL 03/21/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/21/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
 Seqnum : 170112795018 File : 078a018 Time : 19-MAR-2010 23:22
 Standards: S14076

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	170100399001	10-MAR-2010	58099	64491	250.0	277.5	mg/L	11	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	78480	50.00	52.47	mg/L	5	15	

SFL 03/21/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/21/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 160015122

Instrument : GC15B
 Method : EPA 8015B

Begun : 01/10/10 12:02
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	010b001	X	PRIMER			01/10/10 12:02	1.0	
002	010b002	X	IB			01/10/10 12:30	1.0	
003	010b003	X	IB			01/10/10 12:58	1.0	
004	010b004	ICAL	HEXOTP_5			01/10/10 13:26	1.0	1
005	010b005	ICAL	HEXOTP_10			01/10/10 13:54	1.0	2
006	010b006	ICAL	HEXOTP_25			01/10/10 14:21	1.0	3
007	010b007	ICAL	HEXOTP_50			01/10/10 14:49	1.0	4
008	010b008	ICAL	HEXOTP_100			01/10/10 15:17	1.0	5
009	010b009	ICAL	HEXOTP_200			01/10/10 15:45	1.0	6
010	010b010	IB	CALIB			01/10/10 16:13	1.0	
011	010b011	ICAL	DSL_10			01/10/10 16:41	1.0	7
012	010b012	ICAL	DSL_100			01/10/10 17:09	1.0	8
013	010b013	ICAL	DSL_500			01/10/10 17:37	1.0	9
014	010b014	ICAL	DSL_1000			01/10/10 18:05	1.0	10
015	010b015	ICAL	DSL_5000			01/10/10 18:33	1.0	11
016	010b016	ICAL	DSL_7500			01/10/10 19:01	1.0	12
017	010b017	IB	CALIB			01/10/10 19:29	1.0	
018	010b018	ICV	DSL_500			01/10/10 19:57	1.0	13
019	010b019	X	ICV			01/10/10 20:24	1.0	13
020	010b020	IB	CALIB			01/10/10 20:52	1.0	
021	010b021	ICAL	MO_50			01/10/10 21:20	1.0	14
022	010b022	ICAL	MO_250			01/10/10 21:47	1.0	15
023	010b023	ICAL	MO_500			01/10/10 22:15	1.0	16
024	010b024	ICAL	MO_1000			01/10/10 22:43	1.0	17
025	010b025	ICAL	MO_5000			01/10/10 23:10	1.0	18
026	010b026	ICAL	MO_7500			01/10/10 23:38	1.0	19
027	010b027	IB	CALIB			01/11/10 00:06	1.0	
028	010b028	ICAL	JET_10			01/11/10 00:33	1.0	20
029	010b029	ICAL	JET_100			01/11/10 01:01	1.0	21
030	010b030	ICAL	JET_500			01/11/10 01:28	1.0	22
031	010b031	ICAL	JET_1000			01/11/10 01:56	1.0	23
032	010b032	ICAL	JET_2000			01/11/10 02:24	1.0	24
033	010b033	ICAL	JET_3000			01/11/10 02:51	1.0	25
034	010b034	IB	CALIB			01/11/10 03:19	1.0	
035	010b035	ICAL	JP5_10			01/11/10 03:46	1.0	26
036	010b036	ICAL	JP5_100			01/11/10 04:14	1.0	27
037	010b037	ICAL	JP5_500			01/11/10 04:42	1.0	28
038	010b038	ICAL	JP5_1500			01/11/10 05:09	1.0	29
039	010b039	ICAL	JP5_2500			01/11/10 05:37	1.0	30
040	010b040	ICAL	JP5_5000			01/11/10 06:05	1.0	31
041	010b041	IB	CALIB			01/11/10 06:33	1.0	
042	010b042	ICAL	BUNK_50			01/11/10 07:01	1.0	32
043	010b043	ICAL	BUNK_250			01/11/10 07:28	1.0	33
044	010b044	ICAL	BUNK_500			01/11/10 07:56	1.0	34
045	010b045	ICAL	BUNK_1250			01/11/10 08:24	1.0	35
046	010b046	ICAL	BUNK_2500			01/11/10 08:52	1.0	36
047	010b047	ICAL	BUNK_5000			01/11/10 09:20	1.0	37
048	010b048	IB	CALIB			01/11/10 09:48	1.0	
049	010b049	CMARKER	C8_C50			01/11/10 10:16	1.0	38
050	010b050	IB	CALIB			01/11/10 10:44	1.0	

JDG 01/11/10 : I verified that the vials loaded on the instrument matched the

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 160112833

Instrument : GC15B Begun : 03/19/10 08:33
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	078b001	X	PRIMER				03/19/10 08:33	1.0	
002	078b002	X	IB				03/19/10 09:00	1.0	
003	078b003	X	CMARKER				03/19/10 09:28	1.0	1
004	078b004	CCV	MO_500				03/19/10 09:56	1.0	2
005	078b005	CCV	DSL_250				03/19/10 10:24	1.0	3
006	078b006	MS	QC536268		Water	160979	03/19/10 14:07	1.0	
007	078b007	CCV	DSL_500				03/19/10 14:47	1.0	4
008	078b008	CCV	MO_500				03/19/10 15:40	1.0	2
009	078b009	X	CMARKER				03/19/10 16:08	1.0	1
010	078b010	BLANK	QC536422		Water	161015	03/19/10 17:40	1.0	
011	078b011	LCS	QC536423		Water	161015	03/19/10 18:08	1.0	
012	078b012	LCS	QC536426		Water	161015	03/19/10 18:36	1.0	
013	078b013	MSS	218768-008		Water	161015	03/19/10 19:04	1.0	
014	078b014	MS	QC536424		Water	161015	03/19/10 19:32	1.0	
015	078b015	MSD	QC536425		Water	161015	03/19/10 20:00	1.0	
016	078b016	SAMPLE	218768-002		Water	161015	03/19/10 20:27	1.0	
017	078b017	SAMPLE	218768-003		Water	161015	03/19/10 20:55	1.0	
018	078b018	SAMPLE	218768-004		Water	161015	03/19/10 21:23	1.0	
019	078b019	SAMPLE	218768-005		Water	161015	03/19/10 21:50	1.0	
020	078b020	CCV	DSL_1000				03/19/10 22:18	1.0	5
021	078b021	CCV	MO_500				03/19/10 22:46	1.0	2
022	078b022	X	CCV				03/19/10 23:13	1.0	5
023	078b023	X	CCV				03/19/10 23:41	1.0	2
024	078b024	SAMPLE	218883-001	S	Soil	161101	03/20/10 00:09	1.0	
025	078b025	SAMPLE	218893-001	S	Soil	161101	03/20/10 00:36	1.0	
026	078b026	SAMPLE	218893-002	S	Soil	161101	03/20/10 01:04	1.0	
027	078b027	SAMPLE	218893-003	S	Soil	161101	03/20/10 01:31	1.0	
028	078b028	SAMPLE	218893-004	S	Soil	161101	03/20/10 01:59	1.0	

JDG 03/19/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 7.

SFL 03/21/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 8 through 28.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170100399

Instrument : GC17A Begun : 03/10/10 08:00
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	069a001	X	PRIMER			03/10/10 08:00	1.0	
002	069a002	X	IB			03/10/10 08:28	1.0	
003	069a003	IB	CALIB			03/10/10 08:55	1.0	
004	069a004	ICAL	DSL_10			03/10/10 09:30	1.0	1
005	069a005	ICAL	DSL_100			03/10/10 09:58	1.0	2
006	069a006	ICAL	DSL_500			03/10/10 10:25	1.0	3
007	069a007	ICAL	DSL_1000			03/10/10 10:52	1.0	4
008	069a008	ICAL	DSL_5000			03/10/10 11:20	1.0	5
009	069a009	ICAL	DSL_7500			03/10/10 11:48	1.0	6
010	069a010	IB	CALIB			03/10/10 12:15	1.0	
011	069a011	ICV	DSL_500			03/10/10 12:42	1.0	7
012	069a012	X	ICV			03/10/10 13:09	1.0	7
013	069a013	IB	CALIB			03/10/10 13:37	1.0	
014	069a014	ICAL	MO_50			03/10/10 14:05	1.0	8
015	069a015	ICAL	MO_250			03/10/10 14:32	1.0	9
016	069a016	ICAL	MO_500			03/10/10 15:00	1.0	10
017	069a017	ICAL	MO_1000			03/10/10 15:27	1.0	11
018	069a018	ICAL	MO_5000			03/10/10 15:55	1.0	12
019	069a019	ICAL	MO_7500			03/10/10 16:23	1.0	13
020	069a020	IB	CALIB			03/10/10 16:51	1.0	
021	069a021	CMARKER	C8-C50			03/10/10 17:19	1.0	14
022	069a022	IB	CALIB			03/10/10 17:46	1.0	

JDG 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

Standards used: 1=S14114 2=S14115 3=S14116 4=S14117 5=S14113 6=S14118 7=S14077 8=S13804 9=S13805 10=S13806 11=S13807
 12=S13808 13=S13809 14=S13646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170108447

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/16/10 07:27
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	075a001	X	PRIMER				03/16/10 07:27	1.0	
002	075a002	X	IB				03/16/10 07:55	1.0	
003	075a003	X	CMARKER				03/16/10 08:24	1.0	1
004	075a004	X	MO_500				03/16/10 08:52	1.0	2
005	075a005	X	DSL_500				03/16/10 09:19	1.0	3
006	075a006	X	JP5_250				03/16/10 09:47	1.0	4
007	075a007	X	IB				03/16/10 12:53	1.0	
008	075a008	X	CMARKER				03/16/10 13:21	1.0	1
009	075a009	X	MO_500				03/16/10 13:48	1.0	2
010	075a010	X	IB				03/16/10 14:40	1.0	
011	075a011	IB	CALIB				03/16/10 15:07	1.0	
012	075a012	ICAL	HEXOTP_5				03/16/10 15:35	1.0	5
013	075a013	ICAL	HEXOTP_10				03/16/10 16:03	1.0	6
014	075a014	ICAL	HEXOTP_25				03/16/10 16:30	1.0	7
015	075a015	ICAL	HEXOTP_50				03/16/10 16:58	1.0	8
016	075a016	ICAL	HEXOTP_100				03/16/10 17:25	1.0	9
017	075a017	ICAL	HEXOTP_200				03/16/10 17:53	1.0	10
018	075a018	IB	CALIB				03/16/10 18:20	1.0	
019	075a019	CMARKER	C8-C50				03/16/10 18:48	1.0	1
020	075a020	CCV	MO_500				03/16/10 19:15	1.0	2
021	075a021	CCV	DSL_250				03/16/10 19:42	1.0	11
022	075a022	X	CCV				03/16/10 20:10	1.0	2
023	075a023	X	CCV				03/16/10 20:37	1.0	11
024	075a024	BLANK	QC535926		Water	160891	03/16/10 21:05	1.0	
025	075a025	SAMPLE	218714-001	S	Water	160843	03/16/10 21:32	1.0	
026	075a026	BLANK	QC536089	S	Water	160933	03/16/10 22:00	1.0	
027	075a027	BLANK	QC536089		Water	160933	03/16/10 22:27	1.0	
028	075a028	BS	QC536090	S	Water	160933	03/16/10 22:54	1.0	
029	075a029	BSD	QC536091	S	Water	160933	03/16/10 23:22	1.0	
030	075a030	SAMPLE	218778-001		Water	160933	03/16/10 23:49	1.0	
031	075a031	SAMPLE	218778-002		Water	160933	03/17/10 00:17	1.0	
032	075a032	SAMPLE	218778-003		Water	160933	03/17/10 00:45	1.0	
033	075a033	SAMPLE	218778-004		Water	160933	03/17/10 01:12	1.0	
034	075a034	CCV	MO_500				03/17/10 01:39	1.0	2
035	075a035	CCV	DSL_1000				03/17/10 02:07	1.0	12
036	075a036	X	CCV				03/17/10 02:34	1.0	2
037	075a037	X	CCV				03/17/10 03:02	1.0	12
038	075a038	SAMPLE	218787-006	S	Water	160933	03/17/10 03:29	1.0	
039	075a039	SAMPLE	218787-007	S	Water	160933	03/17/10 03:56	1.0	
040	075a040	SAMPLE	218789-001	S	Water	160933	03/17/10 04:24	1.0	
041	075a041	SAMPLE	218789-002	S	Water	160933	03/17/10 04:52	1.0	
042	075a042	SAMPLE	218789-003	S	Water	160933	03/17/10 05:19	1.0	
043	075a043	X	CMARKER				03/17/10 05:47	1.0	1
044	075a044	X	MO_500				03/17/10 06:14	1.0	2
045	075a045	CCV	DSL_500				03/17/10 06:41	1.0	3
046	075a046	CCV	MO_500				03/17/10 07:09	1.0	2
047	075a047	X	CCV				03/17/10 07:36	1.0	3

JDG 03/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170112795

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/19/10 07:55
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	078a001	X	PRIMER			03/19/10 07:55	1.0	
002	078a002	X	IB			03/19/10 08:23	1.0	
003	078a003	CMARKER	C8-C50			03/19/10 08:50	1.0	1
004	078a004	CCV	MO_500			03/19/10 09:17	1.0	2
005	078a005	CCV	DSL_500			03/19/10 09:45	1.0	3
006	078a006	SAMPLE	218768-006	Water	161015	03/19/10 17:53	1.0	
007	078a007	SAMPLE	218768-007	Water	161015	03/19/10 18:20	1.0	
008	078a008	SAMPLE	218768-009	Water	161015	03/19/10 18:48	1.0	
009	078a009	SAMPLE	218801-002	Water	161015	03/19/10 19:16	1.0	
010	078a010	SAMPLE	218801-003	Water	161015	03/19/10 19:43	1.0	
011	078a011	SAMPLE	218801-004	Water	161015	03/19/10 20:10	1.0	
012	078a012	SAMPLE	218801-005	Water	161015	03/19/10 20:37	1.0	
013	078a013	SAMPLE	218801-006	Water	161015	03/19/10 21:05	1.0	
014	078a014	SAMPLE	218801-007	Water	161015	03/19/10 21:33	1.0	
015	078a015	SAMPLE	218801-008	Water	161015	03/19/10 22:00	1.0	
016	078a016	X	CMARKER			03/19/10 22:27	1.0	1
017	078a017	CCV	MO_500			03/19/10 22:55	1.0	2
018	078a018	CCV	DSL_250			03/19/10 23:22	1.0	4
019	078a019	X	CCV			03/19/10 23:49	1.0	2
020	078a020	X	CCV			03/20/10 00:17	1.0	4

SFL 03/21/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220019637

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/13/10 15:17
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	013_001	X	PRIMER			01/13/10 15:17	1.0	
002	013_002	X	IB			01/13/10 15:46	1.0	
003	013_003	X	CMARKER			01/13/10 16:14	1.0	1
004	013_004	X	DSL_500			01/13/10 16:43	1.0	2
005	013_005	X	MO_500			01/13/10 17:12	1.0	3
006	013_006	X	IB			01/13/10 17:48	1.0	
007	013_007	X	CMARKER			01/13/10 18:17	1.0	1
008	013_008	X	DSL_500			01/13/10 18:46	1.0	2
009	013_009	X	MO_500			01/13/10 19:15	1.0	3
010	013_010	X	IB			01/13/10 20:54	1.0	
011	013_011	X	IB			01/13/10 21:22	1.0	
012	013_012	IB	CALIB			01/13/10 21:50	1.0	
013	013_013	ICAL	HEXOTP_5			01/13/10 22:18	1.0	4
014	013_014	ICAL	HEXOTP_10			01/13/10 22:46	1.0	5
015	013_015	ICAL	HEXOTP_25			01/13/10 23:14	1.0	6
016	013_016	ICAL	HEXOTP_50			01/13/10 23:42	1.0	7
017	013_017	ICAL	HEXOTP_100			01/14/10 00:09	1.0	8
018	013_018	ICAL	HEXOTP_200			01/14/10 00:37	1.0	9
019	013_019	IB	CALIB			01/14/10 01:04	1.0	
020	013_020	ICAL	DSL_10			01/14/10 01:32	1.0	10
021	013_021	ICAL	DSL_100			01/14/10 02:00	1.0	11
022	013_022	ICAL	DSL_500			01/14/10 02:28	1.0	12
023	013_023	ICAL	DSL_1000			01/14/10 02:55	1.0	13
024	013_024	ICAL	DSL_5000			01/14/10 03:23	1.0	14
025	013_025	ICAL	DSL_7500			01/14/10 03:50	1.0	15
026	013_026	IB	CALIB			01/14/10 04:18	1.0	
027	013_027	ICV	DSL_500			01/14/10 04:46	1.0	2
028	013_028	X	ICV			01/14/10 05:14	1.0	2
029	013_029	IB	CALIB			01/14/10 05:43	1.0	
030	013_030	ICAL	MO_50			01/14/10 06:11	1.0	16
031	013_031	ICAL	MO_250			01/14/10 06:39	1.0	17
032	013_032	ICAL	MO_500			01/14/10 07:07	1.0	18
033	013_033	ICAL	MO_1000			01/14/10 07:34	1.0	19
034	013_034	ICAL	MO_5000			01/14/10 08:02	1.0	20
035	013_035	ICAL	MO_7500			01/14/10 08:30	1.0	21
036	013_036	IB	CALIB			01/14/10 08:58	1.0	
037	013_037	CMARKER	C8-C50			01/14/10 09:26	1.0	1
038	013_038	IB	CALIB			01/14/10 09:54	1.0	

TFB 01/14/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

Standards used: 1=S12636 2=S13457 3=S13471 4=S13690 5=S13691 6=S13692 7=S13693 8=S13694 9=S13695 10=S13230 11=S13231
 12=S13232 13=S13233 14=S13229 15=S13234 16=S12675 17=S12676 18=S12677 19=S12678 20=S12679 21=S12680

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220027250

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/18/10 14:37
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	018_001	X	PRIMER			01/18/10 14:37	1.0	
002	018_002	X	IB			01/18/10 15:05	1.0	
003	018_003	IB	CALIB			01/18/10 15:33	1.0	
004	018_004	ICAL	HEXOTP_5			01/18/10 16:02	1.0	1
005	018_005	ICAL	HEXOTP_10			01/18/10 16:30	1.0	2
006	018_006	ICAL	HEXOTP_25			01/18/10 16:58	1.0	3
007	018_007	ICAL	HEXOTP_50			01/18/10 17:27	1.0	4
008	018_008	ICAL	HEXOTP_100			01/18/10 17:55	1.0	5
009	018_009	X	HEXOTP_200			01/18/10 18:24	1.0	6
010	018_010	IB	CALIB			01/18/10 18:53	1.0	
011	018_011	ICAL	MO_50			01/18/10 19:21	1.0	7
012	018_012	ICAL	MO_250			01/18/10 19:49	1.0	8
013	018_013	ICAL	MO_500			01/18/10 20:18	1.0	9
014	018_014	ICAL	MO_1000			01/18/10 20:46	1.0	10
015	018_015	ICAL	MO_5000			01/18/10 21:14	1.0	11
016	018_016	ICAL	MO_7500			01/18/10 21:42	1.0	12
017	018_017	CMARKER	C8-C50			01/18/10 22:10	1.0	13
018	018_018	CCV	DSL_500			01/18/10 22:38	1.0	14
019	018_019	CCV	MO_500			01/18/10 23:06	1.0	15
020	018_020	BLANK	QC489059	Soil	149293	01/18/10 23:35	1.0	
021	018_021	MDL	207486-001	Soil	149293	01/19/10 00:03	1.0	
022	018_022	MDL	207486-002	Soil	149293	01/19/10 00:31	1.0	
023	018_023	MDL	207486-003	Soil	149293	01/19/10 00:59	1.0	
024	018_024	MDL	207486-004	Soil	149293	01/19/10 01:27	1.0	
025	018_025	MDL	207486-005	Soil	149293	01/19/10 01:55	1.0	
026	018_026	MDL	207486-006	Soil	149293	01/19/10 02:23	1.0	
027	018_027	MDL	207486-007	Soil	149293	01/19/10 02:50	1.0	
028	018_028	MDL	207486-008	Soil	149293	01/19/10 03:18	1.0	
029	018_029	LOD	212266-010	Water	159144	01/19/10 03:46	1.0	
030	018_030	CCV	DSL_250			01/19/10 04:15	1.0	16
031	018_031	CCV	MO_500			01/19/10 04:43	1.0	15
032	018_032	X	CCV			01/19/10 05:11	1.0	16
033	018_033	X	CCV			01/19/10 05:39	1.0	15

TFB 01/18/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S13690 2=S13691 3=S13692 4=S13693 5=S13694 6=S13695 7=S12675 8=S12676 9=S12677 10=S12678 11=S12679
 12=S12680 13=S12636 14=S13457 15=S13744 16=S13456

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220091179

Instrument : GC14B
 Method : EPA 8015B

Begun : 03/04/10 07:39
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	063_001	X	PRIMER				03/04/10 07:39	1.0		
002	063_002	X	IB				03/04/10 08:07	1.0		
003	063_003	X	CMARKER				03/04/10 08:35	1.0	1	
004	063_004	CCV	DSL_1000				03/04/10 09:03	1.0	2	
005	063_005	LCS	QC534387		Filtrate	160497	03/04/10 09:47	1.0		
006	063_006	BLANK	QC534591		Soil	160553	03/04/10 10:23	1.0		
007	063_007	SAMPLE	218513-001		Soil	160553	03/04/10 10:51	5.0		15:BUNKC:12-40=270000
008	063_008	X	IB				03/04/10 11:29	1.0		
009	063_009	BS	QC534589	S	Water	160552	03/04/10 11:57	1.0		
010	063_010	BSD	QC534590	S	Water	160552	03/04/10 12:25	1.0		
011	063_011	SAMPLE	218491-001	S	Water	160552	03/04/10 12:53	1.0		
012	063_012	CCV	DSL_500				03/04/10 13:20	1.0	3	
013	063_013	X	CMARKER				03/04/10 13:48	1.0	1	
014	063_014	X	IB				03/04/10 15:27	1.0		
015	063_015	IB	CALIB				03/04/10 15:55	1.0		
016	063_016	ICAL	MO_50				03/04/10 16:24	1.0	4	
017	063_017	ICAL	MO_250				03/04/10 16:52	1.0	5	
018	063_018	ICAL	MO_500				03/04/10 17:21	1.0	6	
019	063_019	ICAL	MO_1000				03/04/10 17:50	1.0	7	
020	063_020	ICAL	MO_5000				03/04/10 18:18	1.0	8	
021	063_021	ICAL	MO_7500				03/04/10 18:47	1.0	9	
022	063_022	IB	CALIB				03/04/10 19:15	1.0		
023	063_023	CMARKER	C8-C50				03/04/10 19:44	1.0	1	
024	063_024	IB	CALIB				03/04/10 20:12	1.0		

JDG 03/04/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 13.

JDG 03/05/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 14 through 24.

Standards used: 1=S13646 2=S13458 3=S14077 4=S13804 5=S13805 6=S13806 7=S13807 8=S13808 9=S13809

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220115810

Instrument : GC14B Begun : 03/21/10 10:10
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	080_001	X	PRIMER				03/21/10 10:10	1.0	
002	080_002	X	IB				03/21/10 10:38	1.0	
003	080_003	X	CMARKER				03/21/10 11:06	1.0	1
004	080_004	CCV	DSL_250				03/21/10 11:34	1.0	2
005	080_005	CCV	MO_500				03/21/10 12:02	1.0	3
006	080_006	LCS	QC536771	S	Soil	161101	03/21/10 17:59	1.0	
007	080_007	CCV	DSL_500				03/21/10 18:28	1.0	4
008	080_008	CCV	MO_500				03/21/10 18:56	1.0	3
009	080_009	X	CCV				03/21/10 19:25	1.0	4
010	080_010	X	CCV				03/21/10 19:53	1.0	3
011	080_011	SAMPLE	218801-009		Water	161015	03/21/10 20:21	1.0	
012	080_012	SAMPLE	218883-001	S	Soil	161101	03/21/10 20:50	1.0	
013	080_013	SAMPLE	218893-001	S	Soil	161101	03/21/10 21:18	1.0	
014	080_014	SAMPLE	218893-002	S	Soil	161101	03/21/10 21:47	1.0	
015	080_015	SAMPLE	218893-003	S	Soil	161101	03/21/10 22:15	1.0	
016	080_016	SAMPLE	218794-020		Soil	161101	03/21/10 22:43	1.0	
017	080_017	SAMPLE	218794-002		Soil	161101	03/21/10 23:12	5.0	
018	080_018	X	IB				03/21/10 23:40	1.0	
019	080_019	SAMPLE	218794-007		Soil	161101	03/22/10 00:08	5.0	
020	080_020	SAMPLE	218794-010		Soil	161101	03/22/10 00:36	5.0	
021	080_021	SAMPLE	218794-025		Soil	161101	03/22/10 01:05	20.0	
022	080_022	X	IB		Soil		03/22/10 01:33	1.0	
023	080_023	X	CMARKER				03/22/10 02:01	1.0	1
024	080_024	CCV	DSL_1000				03/22/10 02:29	1.0	5
025	080_025	CCV	MO_500				03/22/10 02:58	1.0	3
026	080_026	X	CCV				03/22/10 03:26	1.0	5
027	080_027	X	CCV				03/22/10 03:54	1.0	3

SFL 03/22/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 27.

SAMPLE PREPARATION SUMMARY

Batch # : 161015
 Started By : DJT
 Method : 3520C
 Spike #1 ID : S14152

Prep Date : 17-MAR-2010 15:00
 Spike #2 ID : S14101

Analysis : TEHM
 Finished By : KCL
 Units : mL
 Spike #3 ID : S13010

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
218768-002		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-005		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-006		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-007		Water	500	2.5	1	0.005	7	.5				TEHM	
218768-008		Water	500	2.5	1	0.005	7	.5				TEHM	mss
218768-009		Water	500	2.5	1	0.005	5	.5				TEHM	
218801-002		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-005		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-006		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-007		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-008		Water	500	2.5	1	0.005	7	.5				TEHM	
218801-009		Water	500	2.5	1	0.005	5	.5				TEHM	
QC536422	BLANK	Water	500	2.5	1	0.005		.5				TEHM	
QC536423	LCS	Water	500	2.5	1	0.005		.5	.5			TEHM	
QC536424	MS	Water	500	2.5	1	0.005	7	.5	.5			TEHM	
QC536425	MSD	Water	500	2.5	1	0.005	7	.5	.5			TEHM	
QC536426	LCS	Water	500	2.5	1	0.005		.5		.5		TEHM	

Analyst: SFL

Date: 03/24/10

Reviewer: JDG

Date: 03/24/10

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

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BK 2968

LIMS Batch No: 161015
 LIMS Analysis: TEHM
 Date Extracted: 3/17/10

Extraction Method:
 mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
 EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
2158768-002	D	500	7	2.5		
	003					
	004					
	005					
5	006					
	007					
	008		↓			MSS
	009		5			
10	218801-002		7			
	003					
	004					
	005					
	006					
	007					
15	008		↓			
	009		5			
	MB QC 536422	NA	NA			
	LCS	3	↓			
	MS	4	J	7		
20	MSD	5	K	↓		
*	LCS	6	NA	↓		
<i>KRL 3/22/10</i>						

Mfg & Lot# / LIMS # / Time Date/ Initials
 0.5 mL of TEH_SURR was added to all samples 514152A DJS 3/17/10
 0.5 mL of TEH_SP was added to all spikes 514101c/813010c*
 pH of all samples adjusted to pH ≤ 2 with H₂SO₄ F5094395
 3520c: Samples were continually extracted about 450 mL of CH₂Cl₂ EM49338
 Extraction Start Time: 1500
 Extraction End Time: 900 DDC 3/18/10
 3510c: Samples were extracted 3 times with 60 mL of CH₂Cl₂ N/A KCL 3/18/10
 Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄ EM49044931
 Concentrated to final volume at temperature (degrees C) 100
 Relinquished to TEH Department

[Signature] 3/17/10
 Extraction Chemist Date

Continued from Page _____
 Continued on Page _____

[Signature] 3/22/10
 Reviewed by Date

Laboratory Job Number 218801

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-005-UST-10Q1	Batch#:	161282
Lab ID:	218801-001	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-005-UST-10Q1	Batch#:	161282
Lab ID:	218801-001	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	101	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-110A-UST-10Q1	Batch#:	161282
Lab ID:	218801-002	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-110A-UST-10Q1	Batch#:	161282
Lab ID:	218801-002	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-123A-UST-10Q1	Batch#:	161282
Lab ID:	218801-003	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-123A-UST-10Q1	Batch#:	161282
Lab ID:	218801-003	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-109A-UST-10Q1	Batch#:	161282
Lab ID:	218801-004	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-109A-UST-10Q1	Batch#:	161282
Lab ID:	218801-004	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-101A-UST-10Q1	Batch#:	161282
Lab ID:	218801-005	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	0.6	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-101A-UST-10Q1	Batch#:	161282
Lab ID:	218801-005	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-100A-UST-10Q1	Batch#:	161282
Lab ID:	218801-006	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-100A-UST-10Q1	Batch#:	161282
Lab ID:	218801-006	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-103A-UST-10Q1	Batch#:	161282
Lab ID:	218801-007	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-103A-UST-10Q1	Batch#:	161282
Lab ID:	218801-007	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-129A-UST-10Q1	Batch#:	161282
Lab ID:	218801-008	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-129A-UST-10Q1	Batch#:	161282
Lab ID:	218801-008	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-005-UST-10Q1	Batch#:	161282
Lab ID:	218801-009	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-005-UST-10Q1	Batch#:	161282
Lab ID:	218801-009	Sampled:	03/12/10
Matrix:	Water	Received:	03/13/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	104	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161282
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Type: BS Lab ID: QC537564

Analyte	Spiked	Result	%REC	Limits ADEQ	Flags
Freon 12	25.00	27.91	112	56-140	
Chloromethane	25.00	25.82	103	46-142	
Vinyl Chloride	25.00	24.18	97	49-136	
Bromomethane	25.00	27.66	111	42-154	
Chloroethane	25.00	26.23	105	51-133	
Trichlorofluoromethane	25.00	25.11	100	63-135	
Iodomethane	25.00	30.56	122	70-130	
Acetone	25.00	28.27	113	48-130	
1,1-Dichloroethene	25.00	24.95	100	68-133	
Methylene Chloride	25.00	26.13	105	71-120	
Carbon Disulfide	25.00	23.74	95	56-120	
MTBE	25.00	23.12	92	58-120	
trans-1,2-Dichloroethene	25.00	26.96	108	80-120	
Vinyl Acetate	25.00	25.06	100	63-124	
1,1-Dichloroethane	25.00	26.33	105	77-120	
2-Butanone	25.00	24.81	99	57-120	
cis-1,2-Dichloroethene	25.00	26.29	105	75-120	
2,2-Dichloropropane	25.00	26.87	107	72-128	
Chloroform	25.00	25.57	102	78-120	
Bromochloromethane	25.00	26.29	105	78-120	
1,1,1-Trichloroethane	25.00	25.87	103	78-120	
1,1-Dichloropropene	25.00	25.56	102	75-120	
Carbon Tetrachloride	25.00	26.66	107	80-120	
1,2-Dichloroethane	25.00	25.03	100	74-120	
Benzene	25.00	26.28	105	77-120	
Trichloroethene	25.00	25.25	101	78-122	
1,2-Dichloropropane	25.00	25.52	102	76-120	
Bromodichloromethane	25.00	26.48	106	78-120	
Dibromomethane	25.00	25.64	103	77-120	
4-Methyl-2-Pentanone	25.00	21.99	88	65-120	
cis-1,3-Dichloropropene	25.00	26.20	105	76-120	
Toluene	25.00	25.69	103	73-120	
trans-1,3-Dichloropropene	25.00	23.19	93	72-120	
1,1,2-Trichloroethane	25.00	24.69	99	76-120	
2-Hexanone	25.00	23.70	95	57-121	

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161282
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
1,3-Dichloropropane	25.00	24.74	99	75-120		
Tetrachloroethene	25.00	26.02	104	77-120		
Dibromochloromethane	25.00	25.85	103	76-120		
1,2-Dibromoethane	25.00	24.24	97	77-120		
Chlorobenzene	25.00	26.07	104	78-120		
1,1,1,2-Tetrachloroethane	25.00	25.81	103	77-120		
Ethylbenzene	25.00	26.05	104	78-120		
m,p-Xylenes	50.00	52.37	105	77-120		
o-Xylene	25.00	27.02	108	77-120		
Styrene	25.00	27.30	109	77-120		
Bromoform	25.00	25.59	102	74-121		
Isopropylbenzene	25.00	22.89	92	71-120		
1,1,2,2-Tetrachloroethane	25.00	22.41	90	73-120		
1,2,3-Trichloropropane	25.00	22.63	91	72-120		
Propylbenzene	25.00	25.84	103	76-120		
Bromobenzene	25.00	25.28	101	75-120		
1,3,5-Trimethylbenzene	25.00	26.45	106	77-120		
2-Chlorotoluene	25.00	25.86	103	76-120		
4-Chlorotoluene	25.00	25.66	103	78-120		
tert-Butylbenzene	25.00	26.37	105	76-120		
1,2,4-Trimethylbenzene	25.00	26.81	107	77-120		
sec-Butylbenzene	25.00	27.01	108	80-120		
para-Isopropyl Toluene	25.00	26.17	105	76-120		
1,3-Dichlorobenzene	25.00	25.84	103	75-120		
1,4-Dichlorobenzene	25.00	25.52	102	77-120		
n-Butylbenzene	25.00	27.36	109	76-120		
1,2-Dichlorobenzene	25.00	25.96	104	76-120		
1,2-Dibromo-3-Chloropropane	25.00	21.73	87	65-120		
1,2,4-Trichlorobenzene	25.00	25.48	102	73-121		
Hexachlorobutadiene	25.00	25.74	103	73-123		
Naphthalene	25.00	24.97	100	62-121		
1,2,3-Trichlorobenzene	25.00	26.12	104	66-123		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	101	77-120		
1,2-Dichloroethane-d4	99	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	98	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161282
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,3-Dichloropropane	25.00	24.24	97	75-120	2	20		
Tetrachloroethene	25.00	24.59	98	77-120	6	20		
Dibromochloromethane	25.00	24.96	100	76-120	3	20		
1,2-Dibromoethane	25.00	23.91	96	77-120	1	20		
Chlorobenzene	25.00	24.70	99	78-120	5	20		
1,1,1,2-Tetrachloroethane	25.00	24.56	98	77-120	5	20		
Ethylbenzene	25.00	24.79	99	78-120	5	26		
m,p-Xylenes	50.00	49.52	99	77-120	6	20		
o-Xylene	25.00	25.71	103	77-120	5	20		
Styrene	25.00	26.01	104	77-120	5	20		
Bromoform	25.00	24.97	100	74-121	2	21		
Isopropylbenzene	25.00	21.49	86	71-120	6	20		
1,1,2,2-Tetrachloroethane	25.00	22.23	89	73-120	1	20		
1,2,3-Trichloropropane	25.00	22.14	89	72-120	2	20		
Propylbenzene	25.00	24.19	97	76-120	7	20		
Bromobenzene	25.00	23.96	96	75-120	5	20		
1,3,5-Trimethylbenzene	25.00	24.77	99	77-120	7	20		
2-Chlorotoluene	25.00	24.12	96	76-120	7	20		
4-Chlorotoluene	25.00	24.08	96	78-120	6	20		
tert-Butylbenzene	25.00	24.76	99	76-120	6	21		
1,2,4-Trimethylbenzene	25.00	25.19	101	77-120	6	20		
sec-Butylbenzene	25.00	25.26	101	80-120	7	21		
para-Isopropyl Toluene	25.00	24.53	98	76-120	6	20		
1,3-Dichlorobenzene	25.00	24.26	97	75-120	6	20		
1,4-Dichlorobenzene	25.00	24.20	97	77-120	5	23		
n-Butylbenzene	25.00	25.51	102	76-120	7	21		
1,2-Dichlorobenzene	25.00	24.55	98	76-120	6	20		
1,2-Dibromo-3-Chloropropane	25.00	21.51	86	65-120	1	22		
1,2,4-Trichlorobenzene	25.00	24.28	97	73-121	5	20		
Hexachlorobutadiene	25.00	24.41	98	73-123	5	25		
Naphthalene	25.00	24.61	98	62-121	1	32		
1,2,3-Trichlorobenzene	25.00	24.93	100	66-123	5	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	101	77-120		
1,2-Dichloroethane-d4	99	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	97	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537566	Batch#:	161282
Matrix:	Water	Analyzed:	03/25/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218801	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537566	Batch#:	161282
Matrix:	Water	Analyzed:	03/25/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected

RL= Reporting Limit

CURTIS & TOMPKINS BFB TUNE FOR 218801 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950120036005 File : nco05 Time : 24-MAR-2010 09:41

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	4822	19.42	
75	30% - 60% of mass 95	12859	51.78	
95		24835	100.00	
96	5% - 9% of mass 95	1752	7.05	
173	< 2% of mass 174	239	1.15	
174	> 50% and < 100% of mass 95	20741	83.52	
175	5% - 9% of mass 174	1520	7.33	
176	> 95% and < 101% of mass 174	20107	96.94	
177	5% - 9% of mass 176	1376	6.84	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218801 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950121459002 File : ncp02 Time : 25-MAR-2010 08:47

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	4456	20.71	
75	30% - 60% of mass 95	11186	51.99	
95		21517	100.00	
96	5% - 9% of mass 95	1581	7.35	
173	< 2% of mass 174	204	1.12	
174	> 50% and < 100% of mass 95	18261	84.87	
175	5% - 9% of mass 174	1425	7.80	
176	> 95% and < 101% of mass 174	18018	98.67	
177	5% - 9% of mass 176	1260	6.99	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218801 MSVOA Water: EPA 8260B

Inst : MSVOA14
 Calnum : 950120036001
 Units : ug/L

Date : 24-MAR-2010 11:10

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	nco08	950120036008	.25/.5PPB	24-MAR-2010 11:10	S14217 (20000X), S14254 (20000X), S14255 (20000X), S14256 (10000X), S14027 (2500X)
L2	nco09	950120036009	0.5/1PPB	24-MAR-2010 11:39	S14217 (10000X), S14254 (10000X), S14255 (10000X), S14256 (5000X), S14027 (2500X)
L3	nco10	950120036010	2PPB	24-MAR-2010 12:08	S14217 (25000X), S14254 (25000X), S14255 (50000X), S14256 (25000X), S14027 (2500X)
L4	nco11	950120036011	5PPB	24-MAR-2010 12:37	S14217 (10000X), S14254 (10000X), S14255 (20000X), S14256 (10000X), S14027 (2500X)
L5	nco12	950120036012	10PPB	24-MAR-2010 13:06	S14217 (5000X), S14254 (5000X), S14255 (10000X), S14256 (5000X), S14027 (2500X)
L6	nco13	950120036013	20PPB	24-MAR-2010 13:35	S14216 (25000X), S14108 (25000X), S14228 (50000X), S13719 (25000X), S14027 (2500X)
L7	nco14	950120036014	50PPB	24-MAR-2010 14:04	S14216 (10000X), S14108 (10000X), S14228 (20000X), S13719 (10000X), S14027 (2500X)
L8	nco15	950120036015	75PPB	24-MAR-2010 14:34	S14216 (6667X), S14108 (6667X), S14228 (13330X), S13719 (6667X), S14027 (2500X)
L9	nco16	950120036016	100PPB	24-MAR-2010 15:03	S14216 (5000X), S14108 (5000X), S14228 (10000X), S13719 (5000X), S14027 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.4426	0.4192	0.4924	0.4686	0.4842	0.5350	0.5214	0.5361	AVRG	R		2.05152		0.4874	9	15	0.05	0.99	
Chloromethane		0.5958	0.5484	0.5476	0.5535	0.5649	0.5607	0.5367	0.5373	AVRG	R		1.79978		0.5556	3	15	0.10	0.99	
Vinyl Chloride	0.6799	0.6473	0.6171	0.6244	0.6037	0.6445	0.6760	0.6429	0.6579	AVRG	R		1.55343		0.6437	4	15	0.05	0.99	
Bromomethane		0.4326	0.4764	0.4409	0.4365	0.4208	0.3917	0.3939	0.4153	AVRG	R		2.34733		0.4260	6	15	0.05	0.99	
Chloroethane		0.4541m	0.4101m	0.3825m	0.3711m	0.3839m	0.3830m	0.3782m	0.3766m	AVRG	R		2.54815		0.3924	7	15	0.05	0.99	
Trichlorofluoromethane		0.6726	0.6740	0.7336	0.6984	0.7170	0.7713	0.9981	0.7820	AVRG	R		1.32296		0.7559	14	15	0.05	0.99	
Acetone			0.2309	0.2128	0.2050	0.1906	0.1893	0.1676	0.1731	AVRG	R		5.11215		0.1956	11	15	0.05	0.99	
1,1-Dichloroethene		0.4876	0.4128	0.3867	0.3690	0.3831	0.4014	0.3623	0.3924	AVRG	R		2.50364		0.3994	10	15	0.05	0.99	
Iodomethane				0.1703	0.2235	0.3291	0.4598	0.4727	0.5564	QUAD	A	-1.0872	0.34702	0.002148	0.3686	0.998	15	0.05	0.99	
Methylene Chloride		0.5355	0.4644	0.4511	0.4481	0.4745	0.4520	0.4457	0.4465	AVRG	R		2.15180		0.4647	7	15	0.05	0.99	
Carbon Disulfide		1.5793	1.4576	1.4697	1.4760	1.6477	1.7140	1.4453	1.6765	AVRG	R		0.64174		1.5583	7	15	0.05	0.99	
MTBE		1.5163	1.4091	1.4161	1.4146	1.5392	1.5374	1.5100	1.5140	AVRG	R		0.67472		1.4821	4	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5027	0.4296	0.4156	0.4198	0.4368	0.4376	0.4261	0.4263	AVRG	R		2.28920		0.4368	6	15	0.05	0.99	
Vinyl Acetate			0.7133	0.7484m	0.7531	1.0818	1.1054	1.0648	1.0764	LINR	R	1.22640	0.91453		0.9347	0.999	15	0.05	0.99	
1,1-Dichloroethane		0.9193	0.8246	0.8044	0.8118	0.8494	0.8368	0.8016	0.8074	AVRG	R		1.20207		0.8319	5	15	0.10	0.99	
2-Butanone			0.2660	0.2620	0.2509	0.2636	0.2649	0.2597	0.2504	AVRG	R		3.85138		0.2596	2	15	0.05	0.99	
2,2-Dichloropropane		0.6968	0.6945	0.6859	0.6647	0.6916	0.7086	0.6837	0.6687	AVRG	R		1.45600		0.6868	2	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6199	0.4989	0.4934	0.4864	0.5122	0.5115	0.4923	0.4997	AVRG	R		1.94444		0.5143	8	15	0.05	0.99	
Chloroform		0.9555	0.8333	0.8207	0.8170	0.8515	0.8406	0.8025	0.8163	AVRG	R		1.18743		0.8422	6	15	0.05	0.99	
Bromochloromethane		0.2827	0.2432	0.2405	0.2363	0.2505	0.2454	0.2380	0.2408	AVRG	R		4.04573		0.2472	6	15	0.05	0.99	
1,1,1-Trichloroethane		0.7348	0.6831	0.6921	0.6683	0.6673	0.6899	0.6761	0.6699	AVRG	R		1.45942		0.6852	3	15	0.05	0.99	
1,1-Dichloropropene		0.3826	0.3841	0.3864	0.3793	0.3771	0.4067	0.4086	0.4007	AVRG	R		2.55961		0.3907	3	15	0.05	0.99	
Carbon Tetrachloride		0.2878	0.3270	0.3425	0.3364	0.3270	0.3586	0.3652	0.3556	AVRG	R		2.96297		0.3375	7	15	0.05	0.99	
1,2-Dichloroethane		0.4792	0.4431	0.4380	0.4304	0.4560	0.4459	0.4302	0.4338	AVRG	R		2.24932		0.4446	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3772	1.1901	1.1801	1.1999	1.2348	1.2498	1.2100	1.2198	AVRG	R		0.81122		1.2327	5	15	0.05	0.99	
Trichloroethene		0.3444	0.3098	0.3096	0.3039	0.3007	0.3104	0.3046	0.3037	AVRG	R		3.21643		0.3109	5	15	0.05	0.99	
1,2-Dichloropropane		0.3460	0.3089	0.3055	0.3052	0.3186	0.3200	0.3069	0.3101	AVRG	R		3.17301		0.3152	4	15	0.05	0.99	
Bromodichloromethane		0.4193	0.3817	0.3816	0.3852	0.4123	0.4134	0.4032	0.4095	AVRG	R		2.49516		0.4008	4	15	0.05	0.99	
Dibromomethane		0.1993	0.2020	0.2016	0.1963	0.2073	0.2064	0.2025	0.2028	AVRG	R		4.94379		0.2023	2	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3081	0.3134	0.3153	0.3396	0.3508	0.3489	0.3398	AVRG	R		3.02275		0.3308	5	15	0.05	0.99	
cis-1,3-Dichloropropene		0.5441	0.4922	0.4996	0.5041	0.5394	0.5388	0.5258	0.5321	AVRG	R		1.91568		0.5220	4	15	0.05	0.99	
Toluene		1.6313	1.4024	1.3869	1.3763	1.3976	1.4047	1.3637	1.3616	AVRG	R		0.70643		1.4156	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5422	0.4955	0.5141	0.5051	0.5449	0.5464	0.5345	0.5389	AVRG	R		1.89501		0.5277	4	15	0.05	0.99	
1,1,2-Trichloroethane		0.1709	0.1676	0.1635	0.1596	0.1670	0.1666	0.1647	0.1635	AVRG	R		6.04475		0.1654	2	15	0.05	0.99	
2-Hexanone			0.2263	0.2307	0.2290	0.2477	0.2581	0.2594	0.2518	AVRG	R		4.11041		0.2433	6	15	0.05	0.99	
1,3-Dichloropropane		0.5837	0.5460	0.5465	0.5293	0.5625	0.5562	0.5438	0.5450	AVRG	R		1.81281		0.5516	3	15	0.05	0.99	
Tetrachloroethene		0.3247	0.3467	0.3361	0.3257	0.3106	0.3335	0.3386	0.3293	AVRG	R		3.02431		0.3307	3	15	0.05	0.99	
Dibromochloromethane		0.3265	0.3061	0.3076	0.3087	0.3313	0.3404	0.3393	0.3438	AVRG	R		3.07271		0.3254	5	15	0.05	0.99	
1,2-Dibromoethane		0.3433	0.3233	0.3193	0.3140	0.3345	0.3337	0.3317	0.3316	AVRG	R		3.04014		0.3289	3	15	0.05	0.99	
Chlorobenzene		1.0623	0.9443	0.9272	0.9311	0.9513	0.9643	0.9437	0.9604	AVRG	R		1.04106		0.9606	4	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3328	0.3090	0.3163	0.3128	0.3293	0.3352	0.3262	0.3314	AVRG	R		3.08518		0.3241	3	15	0.05	0.99	
Ethylbenzene		1.7871m	1.6160	1.5869	1.5866	1.5713	1.6333	1.6135	1.6076	AVRG	R		0.61528		1.6253	4	15	0.05	0.99	
m,p-Xylenes	0.7693	0.6378	0.5849	0.6058	0.6098	0.6076	0.6399	0.6345	0.6405	AVRG	R		1.57066		0.6367	8	15	0.05	0.99	
o-Xylene		0.6209	0.5683	0.5822	0.5896	0.6036	0.6263	0.6156	0.6265	AVRG	R		1.65533		0.6041	4	15	0.05	0.99	
Styrene		1.0275	0.9562	0.9937	0.9993	1.0707	1.1044	1.0870	1.1079	AVRG	R		0.95846		1.0433	5	15	0.05	0.99	
Bromoform		0.2060	0.2242	0.2292	0.2324	0.2583	0.2766	0.2790	0.2836	AVRG	R		4.02161		0.2487	12	15	0.10	0.99	
Isopropylbenzene		2.8438	2.7431	2.7606	2.7613	2.6789	2.8416	2.8512	2.8256	AVRG	R		0.35865		2.7883	2	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.8117	0.7951	0.7716	0.7551	0.8079	0.7981	0.7869	0.7728	AVRG	R		1.26998		0.7874	2	15	0.30	0.99	
1,2,3-Trichloropropane		0.9355	0.8232	0.7917	0.7812	0.8116	0.8014	0.7896	0.7766	AVRG	R		1.22874		0.8138	6	15	0.05	0.99	
Propylbenzene		3.7017	3.4125	3.4429	3.4238	3.2785	3.4373	3.4043	3.3316	AVRG	R		0.29162		3.4291	4	15	0.05	0.99	
Bromobenzene		0.9453	0.7804	0.7544	0.7529	0.7826	0.7771	0.7577	0.7655	AVRG	R		1.26666		0.7895	8	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.4806	2.2832	2.3037	2.3281	2.2835	2.3912	2.3607	2.3525	AVRG	R		0.42590		2.3479	3	15	0.05	0.99	
2-Chlorotoluene		2.7852	2.3363	2.2875	2.3102	2.2860	2.3198	2.2472	2.2418	AVRG	R		0.42521		2.3518	8	15	0.05	0.99	
4-Chlorotoluene		2.5040	2.1113	2.1336	2.1196	2.1367	2.1612	2.0893	2.0919	AVRG	R		0.46116		2.1684	6	15	0.05	0.99	
tert-Butylbenzene		2.1704	2.0127	2.0535	2.0436	1.9424	2.0836	2.0785	2.0446	AVRG	R		0.48694		2.0536	3	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.4310	2.3013	2.3636	2.3875	2.3837	2.4737	2.4179	2.4295	AVRG	R		0.41692		2.3985	2	15	0.05	0.99	
sec-Butylbenzene		2.9194	2.8866	3.0315	2.9813	2.7923	3.0490	3.0863	3.0031	AVRG	R		0.33685		2.9687	3	15	0.05	0.99	
para-Isopropyl Toluene		2.4460m	2.3347	2.5292	2.5141	2.4467	2.6513	2.6658	2.6210	AVRG	R		0.39587		2.5261	5	15	0.05	0.99	
1,3-Dichlorobenzene		1.6673	1.4359	1.4353	1.4216	1.4569	1.4668	1.4205	1.4302	AVRG	R		0.68175		1.4668	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.7629	1.5398	1.5003	1.4896	1.5099	1.5285	1.4733	1.4820	AVRG	R		0.65113		1.5358	6	15	0.05	0.99	
n-Butylbenzene		2.2433	2.1917	2.2993	2.2754	2.1925	2.3956	2.4185	2.3521	AVRG	R		0.43553		2.2961	4	15	0.05	0.99	
1,2-Dichlorobenzene		1.5697	1.3691	1.3644	1.3552	1.4053	1.4074	1.3594	1.3697	AVRG	R		0.71427		1.4000	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1856	0.1666	0.1585	0.1677	0.1721	0.1728	0.1668	AVRG	R		5.88259		0.1700	5	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.9426	0.8563	0.8839	0.9034	0.9556	0.9969	0.9772	0.9845	AVRG	R		1.06660		0.9376	5	15	0.05	0.99	
Hexachlorobutadiene		0.3935	0.4189	0.4508	0.4325	0.4046	0.4533	0.4612	0.4399	AVRG	R		2.31565		0.4318	6	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		2.1209	2.1073	2.1795	2.2301	2.4717	2.6261	2.5916	2.5804	AVRG	R		0.42311		2.3635	10	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.8740	0.7694	0.8057	0.8120	0.8698	0.9037	0.8842	0.8843	AVRG	R		1.17594		0.8504	6	15	0.05	0.99	
Dibromofluoromethane	0.4594	0.4641	0.4613	0.4609	0.4612	0.4651	0.4681	0.4633	0.4660	AVRG	R		2.15861		0.4633	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3725	0.3739	0.3700	0.3720	0.3743	0.3741	0.3782	0.3786	0.3814	AVRG	R		2.66655		0.3750	1	15	0.05	0.99	
Toluene-d8	1.3469	1.3415	1.3492	1.3473	1.3460	1.3328	1.3201	1.3219	1.3158	AVRG	R		0.74865		1.3357	1	15	0.05	0.99	
Bromofluorobenzene	0.9415	0.9379	0.9224	0.9147	0.9148	0.9031	0.8964	0.8982	0.8915	AVRG	R		1.09482		0.9134	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-9	2.000	-14	5.000	1	10.00	-4	20.00	-1	50.00	10	75.00	7	100.0	10
Chloromethane			1.000	7	2.000	-1	5.000	-1	10.00	0	20.00	2	50.00	1	75.00	-3	100.0	-3
Vinyl Chloride	0.500	6	1.000	1	2.000	-4	5.000	-3	10.00	-6	20.00	0	50.00	5	75.00	0	100.0	2
Bromomethane			1.000	2	2.000	12	5.000	4	10.00	2	20.00	-1	50.00	-8	75.00	-8	100.0	-3
Chloroethane			1.000	16	2.000	5	5.000	-3	10.00	-5	20.00	-2	50.00	-2	75.00	-4	100.0	-4
Trichlorofluoromethane			1.000	-11	2.000	-11	5.000	-3	10.00	-8	20.00	-5	50.00	2	75.00	32	100.0	3
Acetone					2.000	18	5.000	9	10.00	5	20.00	-3	50.00	-3	75.00	-14	100.0	-11
1,1-Dichloroethene			0.500	22	2.000	3	5.000	-3	10.00	-8	20.00	-4	50.00	0	75.00	-9	100.0	-2
Iodomethane							5.000	8	10.00	-9	20.00	-2	50.00	5	75.00	-3	100.0	1
Methylene Chloride			0.500	15	2.000	0	5.000	-3	10.00	-4	20.00	2	50.00	-3	75.00	-4	100.0	-4
Carbon Disulfide			0.500	1	2.000	-6	5.000	-6	10.00	-5	20.00	6	50.00	10	75.00	-7	100.0	8
MTBE			0.500	2	2.000	-5	5.000	-4	10.00	-5	20.00	4	50.00	4	75.00	2	100.0	2
trans-1,2-Dichloroethene			0.500	15	2.000	-2	5.000	-5	10.00	-4	20.00	0	50.00	0	75.00	-2	100.0	-2
Vinyl Acetate					2.000	27	5.000	-7	10.00	-19	20.00	5	50.00	4	75.00	-1	100.0	0
1,1-Dichloroethane			0.500	11	2.000	-1	5.000	-3	10.00	-2	20.00	2	50.00	1	75.00	-4	100.0	-3
2-Butanone					2.000	2	5.000	1	10.00	-3	20.00	2	50.00	2	75.00	0	100.0	-4
2,2-Dichloropropane			0.500	1	2.000	1	5.000	0	10.00	-3	20.00	1	50.00	3	75.00	0	100.0	-3
cis-1,2-Dichloroethene			0.500	21	2.000	-3	5.000	-4	10.00	-5	20.00	0	50.00	-1	75.00	-4	100.0	-3
Chloroform			0.500	13	2.000	-1	5.000	-3	10.00	-3	20.00	1	50.00	0	75.00	-5	100.0	-3
Bromochloromethane			0.500	14	2.000	-2	5.000	-3	10.00	-4	20.00	1	50.00	-1	75.00	-4	100.0	-3
1,1,1-Trichloroethane			0.500	7	2.000	0	5.000	1	10.00	-2	20.00	-3	50.00	1	75.00	-1	100.0	-2
1,1-Dichloropropene			0.500	-2	2.000	-2	5.000	-1	10.00	-3	20.00	-3	50.00	4	75.00	5	100.0	3
Carbon Tetrachloride			0.500	-15	2.000	-3	5.000	1	10.00	0	20.00	-3	50.00	6	75.00	8	100.0	5
1,2-Dichloroethane			0.500	8	2.000	0	5.000	-1	10.00	-3	20.00	3	50.00	0	75.00	-3	100.0	-2
Benzene			0.500	12	2.000	-3	5.000	-4	10.00	-3	20.00	0	50.00	1	75.00	-2	100.0	-1
Trichloroethene			0.500	11	2.000	0	5.000	0	10.00	-2	20.00	-3	50.00	0	75.00	-2	100.0	-2
1,2-Dichloropropane			0.500	10	2.000	-2	5.000	-3	10.00	-3	20.00	1	50.00	2	75.00	-3	100.0	-2
Bromodichloromethane			0.500	5	2.000	-5	5.000	-5	10.00	-4	20.00	3	50.00	3	75.00	1	100.0	2
Dibromomethane			0.500	-1	2.000	0	5.000	0	10.00	-3	20.00	2	50.00	2	75.00	0	100.0	0
4-Methyl-2-Pentanone					2.000	-7	5.000	-5	10.00	-5	20.00	3	50.00	6	75.00	5	100.0	3
cis-1,3-Dichloropropene			0.500	4	2.000	-6	5.000	-4	10.00	-3	20.00	3	50.00	3	75.00	1	100.0	2
Toluene			0.500	15	2.000	-1	5.000	-2	10.00	-3	20.00	-1	50.00	-1	75.00	-4	100.0	-4
trans-1,3-Dichloropropene			0.500	3	2.000	-6	5.000	-3	10.00	-4	20.00	3	50.00	4	75.00	1	100.0	2
1,1,2-Trichloroethane			0.500	3	2.000	1	5.000	-1	10.00	-4	20.00	1	50.00	1	75.00	0	100.0	-1
2-Hexanone					2.000	-7	5.000	-5	10.00	-6	20.00	2	50.00	6	75.00	7	100.0	4
1,3-Dichloropropane			0.500	6	2.000	-1	5.000	-1	10.00	-4	20.00	2	50.00	1	75.00	-1	100.0	-1
Tetrachloroethene			0.500	-2	2.000	5	5.000	2	10.00	-2	20.00	-6	50.00	1	75.00	2	100.0	0
Dibromochloromethane			0.500	0	2.000	-6	5.000	-5	10.00	-5	20.00	2	50.00	5	75.00	4	100.0	6
1,2-Dibromoethane			0.500	4	2.000	-2	5.000	-3	10.00	-5	20.00	2	50.00	1	75.00	1	100.0	1
Chlorobenzene			0.500	11	2.000	-2	5.000	-3	10.00	-3	20.00	-1	50.00	0	75.00	-2	100.0	0
1,1,1,2-Tetrachloroethane			0.500	3	2.000	-5	5.000	-2	10.00	-3	20.00	2	50.00	3	75.00	1	100.0	2
Ethylbenzene			0.500	10	2.000	-1	5.000	-2	10.00	-2	20.00	-3	50.00	0	75.00	-1	100.0	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	21	1.000	0	4.000	-8	10.00	-5	20.00	-4	40.00	-5	100.0	0	150.0	0	200.0	1
o-Xylene			0.500	3	2.000	-6	5.000	-4	10.00	-2	20.00	0	50.00	4	75.00	2	100.0	4
Styrene			0.500	-2	2.000	-8	5.000	-5	10.00	-4	20.00	3	50.00	6	75.00	4	100.0	6
Bromoform			0.500	-17	2.000	-10	5.000	-8	10.00	-7	20.00	4	50.00	11	75.00	12	100.0	14
Isopropylbenzene			0.500	2	2.000	-2	5.000	-1	10.00	-1	20.00	-4	50.00	2	75.00	2	100.0	1
1,1,2,2-Tetrachloroethane			0.500	3	2.000	1	5.000	-2	10.00	-4	20.00	3	50.00	1	75.00	0	100.0	-2
1,2,3-Trichloropropane			0.500	15	2.000	1	5.000	-3	10.00	-4	20.00	0	50.00	-2	75.00	-3	100.0	-5
Propylbenzene			0.500	8	2.000	0	5.000	0	10.00	0	20.00	-4	50.00	0	75.00	-1	100.0	-3
Bromobenzene			0.500	20	2.000	-1	5.000	-4	10.00	-5	20.00	-1	50.00	-2	75.00	-4	100.0	-3
1,3,5-Trimethylbenzene			0.500	6	2.000	-3	5.000	-2	10.00	-1	20.00	-3	50.00	2	75.00	1	100.0	0
2-Chlorotoluene			0.500	18	2.000	-1	5.000	-3	10.00	-2	20.00	-3	50.00	-1	75.00	-4	100.0	-5
4-Chlorotoluene			0.500	15	2.000	-3	5.000	-2	10.00	-2	20.00	-1	50.00	0	75.00	-4	100.0	-4
tert-Butylbenzene			0.500	6	2.000	-2	5.000	0	10.00	0	20.00	-5	50.00	1	75.00	1	100.0	0
1,2,4-Trimethylbenzene			0.500	1	2.000	-4	5.000	-1	10.00	0	20.00	-1	50.00	3	75.00	1	100.0	1
sec-Butylbenzene			0.500	-2	2.000	-3	5.000	2	10.00	0	20.00	-6	50.00	3	75.00	4	100.0	1
para-Isopropyl Toluene			0.500	-3	2.000	-8	5.000	0	10.00	0	20.00	-3	50.00	5	75.00	6	100.0	4
1,3-Dichlorobenzene			0.500	14	2.000	-2	5.000	-2	10.00	-3	20.00	-1	50.00	0	75.00	-3	100.0	-2
1,4-Dichlorobenzene			0.500	15	2.000	0	5.000	-2	10.00	-3	20.00	-2	50.00	0	75.00	-4	100.0	-4
n-Butylbenzene			0.500	-2	2.000	-5	5.000	0	10.00	-1	20.00	-5	50.00	4	75.00	5	100.0	2
1,2-Dichlorobenzene			0.500	12	2.000	-2	5.000	-3	10.00	-3	20.00	0	50.00	1	75.00	-3	100.0	-2
1,2-Dibromo-3-Chloropropane					2.000	9	5.000	-2	10.00	-7	20.00	-1	50.00	1	75.00	2	100.0	-2
1,2,4-Trichlorobenzene			0.500	1	2.000	-9	5.000	-6	10.00	-4	20.00	2	50.00	6	75.00	4	100.0	5
Hexachlorobutadiene			0.500	-9	2.000	-3	5.000	4	10.00	0	20.00	-6	50.00	5	75.00	7	100.0	2
Naphthalene			0.500	-10	2.000	-11	5.000	-8	10.00	-6	20.00	5	50.00	11	75.00	10	100.0	9
1,2,3-Trichlorobenzene			0.500	3	2.000	-10	5.000	-5	10.00	-5	20.00	2	50.00	6	75.00	4	100.0	4
Dibromofluoromethane	50.00	-1	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	0	50.00	1
1,2-Dichloroethane-d4	50.00	-1	50.00	0	50.00	-1	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	1	50.00	2
Toluene-d8	50.00	1	50.00	0	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	-1
Bromofluorobenzene	50.00	3	50.00	3	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	-2

BO 03/25/10 [Chloroethane]: Corrected baseline noise or negative peak in all levels.

BO 03/25/10 [Vinyl Acetate]: Corrected baseline noise or negative peak in 5PPB (nc011).

BO 03/25/10 [Ethylbenzene]: Separated from coeluting peak1PPB (nc09).

BO 03/25/10 [para-Isopropyl Toluene]: Corrected baseline noise or negative peak1PPB (nc09).

BO 03/25/10 [2-Chloroethylvinylether]: Cannot report 8260C due to ICV failure

Analyst: BO

Date: 03/25/10

Reviewer: LW

Date: 03/25/10

m>manual integration

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218801 MSVOA Water
EPA 8260B

Inst : MSVOA14
Calnum : 950120036001

Cal Date : 24-MAR-2010

ICV 950121459004 (ncp04 25-MAR-2010) stds: S14253 (10000X), S13925 (10000X),
S14144 (10000X), S14236 (10000X), S14027 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	27.91	ug/L	12	25	
Chloromethane	25.00	25.82	ug/L	3	25	
Vinyl Chloride	25.00	24.18	ug/L	-3	25	
Bromomethane	25.00	27.66	ug/L	11	25	
Chloroethane	25.00	26.23	ug/L	5	25	m
Trichlorofluoromethane	25.00	25.11	ug/L	0	25	
Acetone	25.00	28.27	ug/L	13	25	
1,1-Dichloroethene	25.00	24.95	ug/L	0	25	
Iodomethane	25.00	30.56	ug/L	22	25	
Methylene Chloride	25.00	26.13	ug/L	5	25	
Carbon Disulfide	25.00	23.74	ug/L	-5	25	
MTBE	25.00	23.12	ug/L	-8	25	
trans-1,2-Dichloroethene	25.00	26.96	ug/L	8	25	
Vinyl Acetate	25.00	25.06	ug/L	0	25	
1,1-Dichloroethane	25.00	26.33	ug/L	5	25	
2-Butanone	25.00	24.81	ug/L	-1	25	
2,2-Dichloropropane	25.00	26.87	ug/L	7	25	
cis-1,2-Dichloroethene	25.00	26.29	ug/L	5	25	
Chloroform	25.00	25.57	ug/L	2	25	
Bromochloromethane	25.00	26.29	ug/L	5	25	
1,1,1-Trichloroethane	25.00	25.87	ug/L	3	25	
1,1-Dichloropropene	25.00	25.56	ug/L	2	25	
Carbon Tetrachloride	25.00	26.66	ug/L	7	25	
1,2-Dichloroethane	25.00	25.03	ug/L	0	25	
Benzene	25.00	26.28	ug/L	5	25	
Trichloroethene	25.00	25.25	ug/L	1	25	
1,2-Dichloropropane	25.00	25.52	ug/L	2	25	
Bromodichloromethane	25.00	26.48	ug/L	6	25	
Dibromomethane	25.00	25.64	ug/L	3	25	
4-Methyl-2-Pentanone	25.00	21.99	ug/L	-12	25	
cis-1,3-Dichloropropene	25.00	26.20	ug/L	5	25	
Toluene	25.00	25.69	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	23.19	ug/L	-7	25	
1,1,2-Trichloroethane	25.00	24.69	ug/L	-1	25	
2-Hexanone	25.00	23.70	ug/L	-5	25	
1,3-Dichloropropane	25.00	24.74	ug/L	-1	25	
Tetrachloroethene	25.00	26.02	ug/L	4	25	
Dibromochloromethane	25.00	25.85	ug/L	3	25	
1,2-Dibromoethane	25.00	24.24	ug/L	-3	25	
Chlorobenzene	25.00	26.07	ug/L	4	25	
1,1,1,2-Tetrachloroethane	25.00	25.81	ug/L	3	25	
Ethylbenzene	25.00	26.05	ug/L	4	25	
m,p-Xylenes	50.00	52.37	ug/L	5	25	
o-Xylene	25.00	27.02	ug/L	8	25	
Styrene	25.00	27.30	ug/L	9	25	
Bromoform	25.00	25.59	ug/L	2	25	
Isopropylbenzene	25.00	22.89	ug/L	-8	25	
1,1,2,2-Tetrachloroethane	25.00	22.41	ug/L	-10	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	22.63	ug/L	-9	25	
Propylbenzene	25.00	25.84	ug/L	3	25	
Bromobenzene	25.00	25.28	ug/L	1	25	
1,3,5-Trimethylbenzene	25.00	26.45	ug/L	6	25	
2-Chlorotoluene	25.00	25.86	ug/L	3	25	
4-Chlorotoluene	25.00	25.66	ug/L	3	25	
tert-Butylbenzene	25.00	26.37	ug/L	5	25	
1,2,4-Trimethylbenzene	25.00	26.81	ug/L	7	25	
sec-Butylbenzene	25.00	27.01	ug/L	8	25	
para-Isopropyl Toluene	25.00	26.17	ug/L	5	25	
1,3-Dichlorobenzene	25.00	25.84	ug/L	3	25	
1,4-Dichlorobenzene	25.00	25.52	ug/L	2	25	
n-Butylbenzene	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	25.00	25.96	ug/L	4	25	
1,2-Dibromo-3-Chloropropane	25.00	21.73	ug/L	-13	25	
1,2,4-Trichlorobenzene	25.00	25.48	ug/L	2	25	
Hexachlorobutadiene	25.00	25.74	ug/L	3	25	
Naphthalene	25.00	24.97	ug/L	0	25	
1,2,3-Trichlorobenzene	25.00	26.12	ug/L	4	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218801 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : QC537564 IDF : 1.0
 Seqnum : 950121459004.3 File : ncp04 Time : 25-MAR-2010 09:51
 Cal : 950120036001 Caldate : 24-MAR-2010
 Standards: S14253 (10000X), S13925 (10000X), S14144 (10000X), S14236 (10000X),
 S14027 (2500X)

Analyte	Avg		Spiked	Quant	Units	%D	Max	Flags
	RF/CF	RF/CF						
Freon 12	0.4874	0.5442	25.00	27.91	ug/L	12	25	u
Chloromethane	0.5556	0.5738	25.00	25.82	ug/L	3	25	u
Vinyl Chloride	0.6437	0.6227	25.00	24.18	ug/L	-3	25	u
Bromomethane	0.4260	0.4713	25.00	27.66	ug/L	11	25	u
Chloroethane	0.3924	0.4117	25.00	26.23	ug/L	5	25	m u
Trichlorofluoromethane	0.7559	0.7591	25.00	25.11	ug/L	0	25	u
Iodomethane	0.3686	0.4609	25.00	30.56	ug/L	22	25	u
Acetone	0.1956	0.2212	25.00	28.27	ug/L	13	25	u
1,1-Dichloroethene	0.3994	0.3986	25.00	24.95	ug/L	0	25	u
Methylene Chloride	0.4647	0.4857	25.00	26.13	ug/L	5	25	u
Carbon Disulfide	1.5583	1.4800	25.00	23.74	ug/L	-5	25	u
MTBE	1.4821	1.3705	25.00	23.12	ug/L	-8	25	u
trans-1,2-Dichloroethene	0.4368	0.4710	25.00	26.96	ug/L	8	25	u
Vinyl Acetate	0.9347	1.0424	25.00	25.06	ug/L	0	25	u
1,1-Dichloroethane	0.8319	0.8761	25.00	26.33	ug/L	5	25	u
2-Butanone	0.2596	0.2577	25.00	24.81	ug/L	-1	25	u
cis-1,2-Dichloroethene	0.5143	0.5409	25.00	26.29	ug/L	5	25	u
2,2-Dichloropropane	0.6868	0.7382	25.00	26.87	ug/L	7	25	u
Chloroform	0.8422	0.8615	25.00	25.57	ug/L	2	25	u
Bromochloromethane	0.2472	0.2599	25.00	26.29	ug/L	5	25	u
1,1,1-Trichloroethane	0.6852	0.7091	25.00	25.87	ug/L	3	25	u
1,1-Dichloropropene	0.3907	0.3995	25.00	25.56	ug/L	2	25	u
Carbon Tetrachloride	0.3375	0.3598	25.00	26.66	ug/L	7	25	u
1,2-Dichloroethane	0.4446	0.4450	25.00	25.03	ug/L	0	25	u
Benzene	1.2327	1.2958	25.00	26.28	ug/L	5	25	u
Trichloroethene	0.3109	0.3140	25.00	25.25	ug/L	1	25	u
1,2-Dichloropropane	0.3152	0.3217	25.00	25.52	ug/L	2	25	u
Bromodichloromethane	0.4008	0.4245	25.00	26.48	ug/L	6	25	u
Dibromomethane	0.2023	0.2075	25.00	25.64	ug/L	3	25	u
4-Methyl-2-Pentanone	0.3308	0.2910	25.00	21.99	ug/L	-12	25	u
cis-1,3-Dichloropropene	0.5220	0.5470	25.00	26.20	ug/L	5	25	u
Toluene	1.4156	1.4544	25.00	25.69	ug/L	3	25	u
trans-1,3-Dichloropropene	0.5277	0.4896	25.00	23.19	ug/L	-7	25	u
1,1,2-Trichloroethane	0.1654	0.1634	25.00	24.69	ug/L	-1	25	u
2-Hexanone	0.2433	0.2307	25.00	23.70	ug/L	-5	25	u
1,3-Dichloropropane	0.5516	0.5460	25.00	24.74	ug/L	-1	25	u
Tetrachloroethene	0.3307	0.3441	25.00	26.02	ug/L	4	25	u
Dibromochloromethane	0.3254	0.3365	25.00	25.85	ug/L	3	25	u
1,2-Dibromoethane	0.3289	0.3189	25.00	24.24	ug/L	-3	25	u
Chlorobenzene	0.9606	1.0018	25.00	26.07	ug/L	4	25	u
1,1,1,2-Tetrachloroethane	0.3241	0.3347	25.00	25.81	ug/L	3	25	u
Ethylbenzene	1.6253	1.6934	25.00	26.05	ug/L	4	25	u
m,p-Xylenes	0.6367	0.6668	50.00	52.37	ug/L	5	25	u
o-Xylene	0.6041	0.6529	25.00	27.02	ug/L	8	25	u
Styrene	1.0433	1.1392	25.00	27.30	ug/L	9	25	u
Bromoform	0.2487	0.2546	25.00	25.59	ug/L	2	25	u
Isopropylbenzene	2.7883	2.5529	25.00	22.89	ug/L	-8	25	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	0.7874	0.7058	25.00	22.41	ug/L	-10	25	u
1,2,3-Trichloropropane	0.8138	0.7366	25.00	22.63	ug/L	-9	25	u
Propylbenzene	3.4291	3.5444	25.00	25.84	ug/L	3	25	u
Bromobenzene	0.7895	0.7985	25.00	25.28	ug/L	1	25	u
1,3,5-Trimethylbenzene	2.3479	2.4844	25.00	26.45	ug/L	6	25	u
2-Chlorotoluene	2.3518	2.4325	25.00	25.86	ug/L	3	25	u
4-Chlorotoluene	2.1684	2.2258	25.00	25.66	ug/L	3	25	u
tert-Butylbenzene	2.0536	2.1659	25.00	26.37	ug/L	5	25	u
1,2,4-Trimethylbenzene	2.3985	2.5720	25.00	26.81	ug/L	7	25	u
sec-Butylbenzene	2.9687	3.2078	25.00	27.01	ug/L	8	25	u
para-Isopropyl Toluene	2.5261	2.6438	25.00	26.17	ug/L	5	25	u
1,3-Dichlorobenzene	1.4668	1.5161	25.00	25.84	ug/L	3	25	u
1,4-Dichlorobenzene	1.5358	1.5675	25.00	25.52	ug/L	2	25	u
n-Butylbenzene	2.2961	2.5129	25.00	27.36	ug/L	9	25	u
1,2-Dichlorobenzene	1.4000	1.4537	25.00	25.96	ug/L	4	25	u
1,2-Dibromo-3-Chloropropane	0.1700	0.1478	25.00	21.73	ug/L	-13	25	u
1,2,4-Trichlorobenzene	0.9376	0.9556	25.00	25.48	ug/L	2	25	u
Hexachlorobutadiene	0.4318	0.4447	25.00	25.74	ug/L	3	25	u
Naphthalene	2.3635	2.3605	25.00	24.97	ug/L	0	25	u
1,2,3-Trichlorobenzene	0.8504	0.8883	25.00	26.12	ug/L	4	25	u

ISTD (ICAL ncol4)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	750650	717300	-4.44	11.53	11.53	0.00
1,4-Difluorobenzene	1177090	1129178	-4.07	12.37	12.37	0.00
Chlorobenzene-d5	1151283	1090354	-5.29	15.20	15.20	0.00
1,4-Dichlorobenzene-d4	645405	611487	-5.26	17.26	17.26	0.00

BO 03/25/10 [Chloroethane]: Integrated to match integration of ICAL and CCV.
[general version]

Analyst: TDL Date: 03/26/10 Reviewer: LW Date: 03/26/10

m=manual integration u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218801 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : 20PPB IDF : 1.0
 Seqnum : 950121459003.1 File : ncp03 Time : 25-MAR-2010 09:05
 Cal : 950120036001 Caldate : 24-MAR-2010
 Standards: S14216 (25000X), S14108 (25000X), S14228 (50000X), S13719 (25000X),
 S14027 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.4874	0.5209	20.00	21.37	ug/L	7	20	0.0500	
Chloromethane	0.5556	0.5950	20.00	21.42	ug/L	7	20	0.1000	
Vinyl Chloride	0.6437	0.6746	20.00	20.96	ug/L	5	20	0.0500	
Bromomethane	0.4260	0.4702	20.00	22.07	ug/L	10	20	0.0500	
Chloroethane	0.3924	0.4083	20.00	20.81	ug/L	4	20	0.0500	m
Trichlorofluoromethane	0.7559	0.7422	20.00	19.64	ug/L	-2	20	0.0500	
Acetone	0.1956	0.1900	20.00	19.43	ug/L	-3	20	0.0500	
1,1-Dichloroethene	0.3994	0.3706	20.00	18.56	ug/L	-7	20	0.0500	
Iodomethane	0.3686	0.3376	20.00	20.09	ug/L	0	20	0.0500	
Methylene Chloride	0.4647	0.4785	20.00	20.59	ug/L	3	20	0.0500	
Carbon Disulfide	1.5583	1.5128	20.00	19.42	ug/L	-3	20	0.0500	
MTBE	1.4821	1.4546	20.00	19.63	ug/L	-2	20	0.0500	
trans-1,2-Dichloroethene	0.4368	0.4481	20.00	20.52	ug/L	3	20	0.0500	
Vinyl Acetate	0.9347	1.0008	20.00	19.53	ug/L	-2	20	0.0500	
1,1-Dichloroethane	0.8319	0.8608	20.00	20.69	ug/L	3	20	0.1000	
2-Butanone	0.2596	0.2319	20.00	17.86	ug/L	-11	20	0.0500	
2,2-Dichloropropane	0.6868	0.7341	20.00	21.38	ug/L	7	20	0.0500	
cis-1,2-Dichloroethene	0.5143	0.5228	20.00	20.33	ug/L	2	20	0.0500	
Chloroform	0.8422	0.8669	20.00	20.59	ug/L	3	20	0.0500	
Bromochloromethane	0.2472	0.2562	20.00	20.73	ug/L	4	20	0.0500	
1,1,1-Trichloroethane	0.6852	0.6803	20.00	19.86	ug/L	-1	20	0.0500	
1,1-Dichloropropene	0.3907	0.3889	20.00	19.91	ug/L	0	20	0.0500	
Carbon Tetrachloride	0.3375	0.3408	20.00	20.20	ug/L	1	20	0.0500	
1,2-Dichloroethane	0.4446	0.4492	20.00	20.21	ug/L	1	20	0.0500	
Benzene	1.2327	1.2671	20.00	20.56	ug/L	3	20	0.0500	
Trichloroethene	0.3109	0.3109	20.00	20.00	ug/L	0	20	0.0500	
1,2-Dichloropropane	0.3152	0.3265	20.00	20.72	ug/L	4	20	0.0500	
Bromodichloromethane	0.4008	0.4184	20.00	20.88	ug/L	4	20	0.0500	
Dibromomethane	0.2023	0.2022	20.00	20.00	ug/L	0	20	0.0500	
4-Methyl-2-Pentanone	0.3308	0.2828	20.00	17.10	ug/L	-15	20	0.0500	
cis-1,3-Dichloropropene	0.5220	0.5463	20.00	20.93	ug/L	5	20	0.0500	
Toluene	1.4156	1.4197	20.00	20.06	ug/L	0	20	0.0500	
trans-1,3-Dichloropropene	0.5277	0.5404	20.00	20.48	ug/L	2	20	0.0500	
1,1,2-Trichloroethane	0.1654	0.1614	20.00	19.52	ug/L	-2	20	0.0500	
2-Hexanone	0.2433	0.2123	20.00	17.45	ug/L	-13	20	0.0500	
1,3-Dichloropropane	0.5516	0.5453	20.00	19.77	ug/L	-1	20	0.0500	
Tetrachloroethene	0.3307	0.3225	20.00	19.51	ug/L	-2	20	0.0500	
Dibromochloromethane	0.3254	0.3272	20.00	20.11	ug/L	1	20	0.0500	
1,2-Dibromoethane	0.3289	0.3168	20.00	19.26	ug/L	-4	20	0.0500	
Chlorobenzene	0.9606	0.9836	20.00	20.48	ug/L	2	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3241	0.3350	20.00	20.67	ug/L	3	20	0.0500	
Ethylbenzene	1.6253	1.6189	20.00	19.92	ug/L	0	20	0.0500	
m,p-Xylenes	0.6367	0.6371	40.00	40.03	ug/L	0	20	0.0500	
o-Xylene	0.6041	0.6270	20.00	20.76	ug/L	4	20	0.0500	
Styrene	1.0433	1.0975	20.00	21.04	ug/L	5	20	0.0500	
Bromoform	0.2487	0.2425	20.00	19.50	ug/L	-2	20	0.1000	
Isopropylbenzene	2.7883	2.7015	20.00	19.38	ug/L	-3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7874	0.7049	20.00	17.91	ug/L	-10	20	0.3000	
1,2,3-Trichloropropane	0.8138	0.7176	20.00	17.63	ug/L	-12	20	0.0500	
Propylbenzene	3.4291	3.3399	20.00	19.48	ug/L	-3	20	0.0500	
Bromobenzene	0.7895	0.7812	20.00	19.79	ug/L	-1	20	0.0500	
1,3,5-Trimethylbenzene	2.3479	2.3298	20.00	19.85	ug/L	-1	20	0.0500	
2-Chlorotoluene	2.3518	2.3295	20.00	19.81	ug/L	-1	20	0.0500	
4-Chlorotoluene	2.1684	2.1778	20.00	20.09	ug/L	0	20	0.0500	
tert-Butylbenzene	2.0536	1.9702	20.00	19.19	ug/L	-4	20	0.0500	
1,2,4-Trimethylbenzene	2.3985	2.4394	20.00	20.34	ug/L	2	20	0.0500	
sec-Butylbenzene	2.9687	2.7893	20.00	18.79	ug/L	-6	20	0.0500	
para-Isopropyl Toluene	2.5261	2.4471	20.00	19.37	ug/L	-3	20	0.0500	
1,3-Dichlorobenzene	1.4668	1.4714	20.00	20.06	ug/L	0	20	0.0500	
1,4-Dichlorobenzene	1.5358	1.5254	20.00	19.86	ug/L	-1	20	0.0500	
n-Butylbenzene	2.2961	2.1705	20.00	18.91	ug/L	-5	20	0.0500	
1,2-Dichlorobenzene	1.4000	1.3916	20.00	19.88	ug/L	-1	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1700	0.1435	20.00	16.88	ug/L	-16	20	0.0500	
1,2,4-Trichlorobenzene	0.9376	0.9345	20.00	19.94	ug/L	0	20	0.0500	
Hexachlorobutadiene	0.4318	0.3712	20.00	17.19	ug/L	-14	20	0.0500	
Naphthalene	2.3635	2.1617	20.00	18.29	ug/L	-9	20	0.0500	
1,2,3-Trichlorobenzene	0.8504	0.8191	20.00	19.26	ug/L	-4	20	0.0500	
Dibromofluoromethane	0.4633	0.4623	50.00	49.90	ug/L	0	20	0.0500	
1,2-Dichloroethane-d4	0.3750	0.3707	50.00	49.43	ug/L	-1	20	0.0500	
Toluene-d8	1.3357	1.3352	50.00	49.98	ug/L	0	20	0.0500	
Bromofluorobenzene	0.9134	0.8877	50.00	48.59	ug/L	-3	20	0.0500	

ISTD (ICAL ncol4)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	750650	714417	-4.83	11.53	11.53	0.00
1,4-Difluorobenzene	1177090	1125838	-4.35	12.37	12.37	0.00
Chlorobenzene-d5	1151283	1084034	-5.84	15.20	15.20	0.00
1,4-Dichlorobenzene-d4	645405	607896	-5.81	17.26	17.26	0.00

BO 03/25/10 [Chloroethane]: Integrated to match integration of ICAL and CCV.
[general version]

Analyst: TDL Date: 03/26/10 Reviewer: LW Date: 03/26/10

m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 950121459

Date : 03/25/10
 Sequence : MSVOA14 ncp

Reference : ncol4
 Analyzed : 03/24/10 14:04

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	750650	11.53	1177090	12.37	1151283	15.20	645405	17.26
		LOWER LIMIT	375325	11.03	588545	11.87	575642	14.70	322703	16.76
		UPPER LIMIT	1501300	12.03	2354180	12.87	2302566	15.70	1290810	17.76
003	CCV	20PPB	714417	11.53	1125838	12.37	1084034	15.20	607896	17.26
004	ICV/BS	QC537564	717300	11.53	1129178	12.37	1090354	15.20	611487	17.26
005	BSD	QC537565	735079	11.53	1159626	12.37	1119863	15.20	633122	17.26
007	BLANK	QC537566	699767	11.53	1118635	12.37	1059759	15.20	542251	17.26
008	SAMPLE	218735-006	689228	11.53	1095116	12.37	1033799	15.20	522916	17.26
009	SAMPLE	218768-003	699681	11.53	1110663	12.37	1046514	15.20	531114	17.26
010	SAMPLE	218801-001	686454	11.53	1100441	12.37	1036595	15.20	521956	17.26
011	SAMPLE	218801-009	679721	11.53	1088157	12.37	1032402	15.20	520528	17.26
012	SAMPLE	218834-001	660301	11.53	1058082	12.37	1001508	15.20	515174	17.26
013	SAMPLE	218834-005	668972	11.53	1076567	12.37	1019444	15.20	513548	17.26
014	SAMPLE	218801-002	668544	11.53	1074843	12.37	1012692	15.20	512095	17.26
015	SAMPLE	218801-003	665081	11.53	1073326	12.37	1005176	15.20	500906	17.26
016	SAMPLE	218801-004	647729	11.53	1051481	12.37	994145	15.20	504476	17.26
017	SAMPLE	218801-005	637468	11.53	1037131	12.37	976769	15.20	493076	17.26
018	SAMPLE	218801-006	638284	11.53	1040300	12.37	976695	15.20	489620	17.26
019	SAMPLE	218801-007	629820	11.53	1034440	12.37	972775	15.20	490910	17.26
020	SAMPLE	218801-008	623472	11.53	1026435	12.37	973796	15.20	490944	17.26
021	SAMPLE	218834-002	605834	11.53	993769	12.37	945851	15.20	488303	17.26
022	SAMPLE	218834-003	617414	11.53	1001081	12.37	945231	15.20	483790	17.26
023	SAMPLE	218834-004	601057	11.53	986112	12.37	937448	15.20	492998	17.26
024	SAMPLE	218834-006	614719	11.53	1013056	12.37	958339	15.20	490727	17.26
025	SAMPLE	218834-007	599283	11.53	984975	12.37	931270	15.20	473991	17.26
026	SAMPLE	218834-008	594259	11.53	978732	12.37	926260	15.20	470508	17.26
027	SAMPLE	218834-009	589530	11.53	968463	12.37	925414	15.20	479540	17.26
031	IB	VIALCHECK	572251	11.53	947792	12.37	895266	15.20	463037	17.26
032	IB	VIALCHECK	574499	11.53	949439	12.37	895338	15.20	462545	17.26

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 950120036

Instrument : MSVOA14 Begun : 03/24/10 08:36
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	nco01	X	IB			03/24/10 08:36	1.0	1
002	nco02	TUN	BFB			03/24/10 09:05	1.0	2
003	nco03	TUN	BFB			03/24/10 09:15	1.0	2
004	nco04	TUN	BFB			03/24/10 09:27	1.0	2
005	nco05	TUN	BFB			03/24/10 09:41	1.0	2
006	nco06	X	IB			03/24/10 10:13	1.0	1
007	nco07	IB	CALIB			03/24/10 10:42	1.0	1
008	nco08	ICAL	.25/.5PPB			03/24/10 11:10	1.0	3 4 5 6 1
009	nco09	ICAL	0.5/1PPB			03/24/10 11:39	1.0	3 4 5 6 1
010	nco10	ICAL	2PPB			03/24/10 12:08	1.0	3 4 5 6 1
011	nco11	ICAL	5PPB			03/24/10 12:37	1.0	3 4 5 6 1
012	nco12	ICAL	10PPB			03/24/10 13:06	1.0	3 4 5 6 1
013	nco13	ICAL	20PPB			03/24/10 13:35	1.0	7 8 9 10 1
014	nco14	ICAL	50PPB			03/24/10 14:04	1.0	7 8 9 10 1
015	nco15	ICAL	75PPB			03/24/10 14:34	1.0	7 8 9 10 1
016	nco16	ICAL	100PPB			03/24/10 15:03	1.0	7 8 9 10 1
017	nco17	ICV	25PPB			03/24/10 15:33	1.0	11 1
018	nco18	ICV	25PPB			03/24/10 16:02	1.0	12 13 14 1
019	nco19	ICV	25PPB			03/24/10 16:32	1.0	15 1
020	nco20	X	IB			03/24/10 17:01	1.0	1
021	nco21	X	IB			03/24/10 17:30	1.0	1

BO 03/25/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 21.

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10
 Standards used: 1=S14027 2=S13652 3=S14217 4=S14254 5=S14255 6=S14256 7=S14216 8=S14108 9=S14228 10=S13719 11=S14234
 12=S13925 13=S14144 14=S14253 15=S14236

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 950121459

Instrument : MSVOA14 Begun : 03/25/10 08:19
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used						
001	ncp01	X	IB			03/25/10 08:19	1.0	1						
002	ncp02	TUN	BFB			03/25/10 08:47	1.0	2						
003	ncp03	CCV	20PPB			03/25/10 09:05	1.0	3	4	5	6	1		
004	ncp04	ICV/BS	QC537564	Water	161282	03/25/10 09:51	1.0	7	8	9	10	1		
005	ncp05	BSD	QC537565	Water	161282	03/25/10 10:19	1.0	7	8	9	10	1		
006	ncp06	X	IB			03/25/10 10:47	1.0	1						
007	ncp07	BLANK	QC537566	Water	161282	03/25/10 11:16	1.0	1						
008	ncp08	SAMPLE	218735-006	Water	161282	03/25/10 11:44	1.0	1						
009	ncp09	SAMPLE	218768-003	Water	161282	03/25/10 12:13	2.0	1						
010	ncp10	SAMPLE	218801-001	Water	161282	03/25/10 12:42	1.0	1						
011	ncp11	SAMPLE	218801-009	Water	161282	03/25/10 13:11	1.0	1						
012	ncp12	SAMPLE	218834-001	Water	161282	03/25/10 13:40	1.0	1						
013	ncp13	SAMPLE	218834-005	Water	161282	03/25/10 14:09	1.0	1						
014	ncp14	SAMPLE	218801-002	Water	161282	03/25/10 14:38	1.0	1						
015	ncp15	SAMPLE	218801-003	Water	161282	03/25/10 15:07	1.0	1						
016	ncp16	SAMPLE	218801-004	Water	161282	03/25/10 15:37	1.0	1						
017	ncp17	SAMPLE	218801-005	Water	161282	03/25/10 16:06	1.0	1						
018	ncp18	SAMPLE	218801-006	Water	161282	03/25/10 16:36	1.0	1						
019	ncp19	SAMPLE	218801-007	Water	161282	03/25/10 17:05	1.0	1						
020	ncp20	SAMPLE	218801-008	Water	161282	03/25/10 17:34	1.0	1						
021	ncp21	SAMPLE	218834-002	Water	161282	03/25/10 18:03	1.0	1						
022	ncp22	SAMPLE	218834-003	Water	161282	03/25/10 18:33	1.0	1						
023	ncp23	SAMPLE	218834-004	Water	161282	03/25/10 19:02	1.0	1						
024	ncp24	SAMPLE	218834-006	Water	161282	03/25/10 19:31	1.0	1						
025	ncp25	SAMPLE	218834-007	Water	161282	03/25/10 20:00	1.0	1						
026	ncp26	SAMPLE	218834-008	Water	161282	03/25/10 20:29	1.0	1						
027	ncp27	SAMPLE	218834-009	Water	161282	03/25/10 20:57	1.0	1						
028	ncp28	X	IB			03/25/10 21:26	1.0	1						
029	ncp29	X	IB			03/25/10 21:54	1.0	1						
030	ncp30	X	IB			03/25/10 22:23	1.0	1						
031	ncp31	IB	VIALCHECK			03/25/10 22:52	1.0	1						
032	ncp32	IB	VIALCHECK			03/25/10 23:20	1.0	1						

BO 03/25/10 : Reviewed to ncp05

BJP 03/26/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 32.

BJP 03/26/10 : Matrix spikes were not performed for this analysis in batch 161282 due to insufficient sample amount.

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/26/10

Standards used: 1=S14027 2=S13652 3=S14216 4=S14108 5=S14228 6=S13719 7=S14253 8=S13925 9=S14144 10=S14236



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 218834
ANALYTICAL REPORT

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 383868.US.60.61.QS
Location : Quarterly UST
Level : III

<u>Sample ID</u>	<u>Lab ID</u>
TB-006-UST-10Q1	218834-001
ASE-124A-UST-10Q1	218834-002
ASE-96A-UST-10Q1	218834-003
UST-10Q1-005	218834-004
EB-006-UST-10Q1	218834-005
ASE-106A-UST-10Q1	218834-006
ASE-122A-UST-10Q1	218834-007
ASE-113A-UST-10Q1	218834-008
ASE-114A-UST-10Q1	218834-009

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

Signature: _____
Senior Program Manager

Date: 03/31/2010

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 218834
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/16/10
Samples Received: 03/16/10

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 03/16/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

TPH-Extractables by GC (EPA 8015B):

High response was observed for motor oil C22-C32 in the CCV analyzed 03/23/10 10:46.

No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

High response was observed for Freon 12 in the CCV analyzed 03/26/10 09:10; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recovery was observed for carbon tetrachloride in the MS of ASE-68A-UST-10Q1 (lab # 218866-005); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample.

No other analytical problems were encountered.

Chain of Custody

37380-100315

218834

Curtis & Tompkins Laboratories 2323 5th St. Berkeley, CA 94710 510-204-2221		Honeywell Chain Of Custody / Analysis Request		AESI Ref: 40242.58627 COC#: 37380									
Sampling Co.: CH2M HILL Client Contact: (name, co., address) CH2M HILL 2625 South Plaza Drive, Suite 300 Tempe, AZ 85282		Privileged & Confidential Tuesday Powers@critigen.com Melanie.West@critigen.com		Sky Harbor AZ PHOENIX, AZ									
Preliminary Data To: Tuesday Powers, Critigen Melanie West, Critigen		Site Name: Location of Site: Phoenix, AZ		Phase: Sampling Program M/MSD									
Sample Receipt Acknowledgement To: Tuesday Powers, Critigen Melanie West, Critigen		Field Filtered Sample? Composite/Grab Units		Quaterly UST Honeywell Text & Excel File Drive Order									
Hard Copy To: Tuesday Powers and Melanie West, Critigen Honeywell/Copy Bemei Kidd, CH2M HILL/Copy Melanie West, Critigen		Report Tier Level: Full Report TAT: 7		Lab ID Site ID Lab Job # Authorized User: Honeywell									
Invoice To: Tuesday Powers, Critigen Melanie West, Critigen		Analysis Turnaround Time (TAT): Consultant Laboratory Contact Report Tier Level Full Report TAT: 7		CTBERK SKYHARBOR									
Sample Identification		Sample Date		Sampling Method (code)									
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Field Filtered Sample?	Composite/Grab	Lab Sample Numbers
1	---	---	TB-006-UST-1001	03/11/0	---	SKYHARBOR GW-GWS	WATER	TB	1	G	N	X	
2	---	---	ASE-124A-UST-1001	03/11/0	2340	GW-GWS WATER	WATER	REG	5	G	N	X	
3	---	---	ASE-96A-UST-1001	03/15/0	0026	GW-GWS WATER	WATER	REG	5	G	N	X	
4	---	---	UST-1001-005	03/15/0	0030	GW-GWS WATER	WATER	REG	5	G	N	X	
5	---	---	EB-006-UST-1001	03/15/0	0015	SKYHARBOR WATER	WATER	EB	5	G	N	X	
6	---	---	ASE-106A-UST-1001	03/17/0	0120	GW-GWS WATER	WATER	REG	5	G	N	X	
7	---	---	ASE-122A-UST-1001	03/17/0	0153	GW-GWS WATER	WATER	REG	5	G	N	X	
8	---	---	ASE-113A-UST-1001	03/15/0	0235	GW-GWS WATER	WATER	REG	5	G	N	X	
9	---	---	ASE-114A-UST-1001	03/15/0	0354	GW-GWS WATER	WATER	REG	5	G	N	X	
10													
11													
12													
Relinquished by: <i>Debra Cook</i>		Company: CH2M Hill		Received by: <i>Janet</i>		Company:		Condition:		Custody Seals Intact:			
Relinquished by:		Date/Time: 03/15/0		Received by:		Company:		Condition:		Custody Seals Intact:			
Relinquished by:		Date/Time:		Received by:		Company:		Condition:		Custody Seals Intact:			
Preservatives: (Other; Specify):													

9 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, Zn Acetate); 7 (H2SO4, pH<2, 4 Deg C); 8 (HCl, pH<2, 4 Deg C); 9 (HCl, 4 Deg C); 10 (HNO3, pH<2, 4 Deg C); 11 (NaOH, pH>12, 4 Deg, Ascorbic Acid); 12 (H2SO4, Na2S2O3, 4 Deg C, pH<2); 13 (Zn Acetate); 14 (1-MeOH, 4 Deg C and 2-NaHSO4, 4 Deg C); 15 (NaOH, pH>12, 4 Deg C); sp (special instructions)

3-16-10 WWS CAT

2.4.2

FED Ex #

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 219824 Date Received 3-16-10 Number of coolers 2
Client CH2M HILL / HANWELL Project QUARTERLY VST

Date Opened 3-16-10 By (print) S. EVANS (sign) [Signature]
Date Logged in + By (print) + (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) FedEx # (YES) NO
Shipping info 8720 5038 3294

2A. Were custody seals present? ... (YES) YES (circle) on cooler on samples NO
How many 1 EA Name SIGNATURE Date 3-15-10

2B. Were custody seals intact upon arrival? (YES) YES NO N/A

3. Were custody papers dry and intact when received? (YES) YES NO

4. Were custody papers filled out properly (ink, signed, etc)? (YES) YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:

Type of ice used: Wet Blue/Gel None Temp(°C) 2.5, 1.0

Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? _____ YES (NO)
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ (YES) YES NO

10. Are samples in the appropriate containers for indicated tests? _____ (YES) YES NO

11. Are sample labels present, in good condition and complete? _____ (YES) YES NO

12. Do the sample labels agree with custody papers? _____ (YES) YES NO

13. Was sufficient amount of sample sent for tests requested? _____ (YES) YES NO

14. Are the samples appropriately preserved? _____ (YES) YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ (YES) YES NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 218834

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/14/10
Units:	ug/L	Received:	03/16/10
Diln Fac:	1.000	Prepared:	03/19/10
Batch#:	161107	Analyzed:	03/23/10

Field ID: ASE-124A-UST-10Q1 Lab ID: 218834-002
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	108	50-120	

Field ID: ASE-96A-UST-10Q1 Lab ID: 218834-003
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Field ID: UST-10Q1-005 Lab ID: 218834-004
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/14/10
Units:	ug/L	Received:	03/16/10
Diln Fac:	1.000	Prepared:	03/19/10
Batch#:	161107	Analyzed:	03/23/10

Field ID: EB-006-UST-10Q1 Lab ID: 218834-005
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	109	50-120	

Field ID: ASE-106A-UST-10Q1 Lab ID: 218834-006
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	111	50-120	

Field ID: ASE-122A-UST-10Q1 Lab ID: 218834-007
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	110	50-120	

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/14/10
Units:	ug/L	Received:	03/16/10
Diln Fac:	1.000	Prepared:	03/19/10
Batch#:	161107	Analyzed:	03/23/10

Field ID: ASE-113A-UST-10Q1 Lab ID: 218834-008
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	108	50-120	

Field ID: ASE-114A-UST-10Q1 Lab ID: 218834-009
 Type: SAMPLE

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	110	50-120	

Type: BLANK Lab ID: QC536796

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	V1

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	109	50-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536797	Batch#:	161107
Matrix:	Water	Prepared:	03/19/10
Units:	ug/L	Analyzed:	03/23/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	2,539	102	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	109	50-120	

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	161107
MSS Lab ID:	218891-009	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L	Prepared:	03/19/10
Diln Fac:	1.000	Analyzed:	03/23/10

Type: MS Cleanup Method: EPA 3630C
 Lab ID: QC536798

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Diesel C10-C22	24.33	2,500	2,631	104	54-120		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	119	50-120		

Type: MSD Cleanup Method: EPA 3630C
 Lab ID: QC536799

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Diesel C10-C22	2,500	2,470	98	54-120	6	31		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	111	50-120		

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536800	Batch#:	161107
Matrix:	Water	Prepared:	03/19/10
Units:	ug/L	Analyzed:	03/24/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,707	108	61-139	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	103	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218834 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220019637002
 Units : mg/L

Name : DSL_013
 Date : 14-JAN-2010 01:32
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	013_020	220019637020	DSL_10	14-JAN-2010 01:32	S13230
L2	013_021	220019637021	DSL_100	14-JAN-2010 02:00	S13231
L3	013_022	220019637022	DSL_500	14-JAN-2010 02:28	S13232
L4	013_023	220019637023	DSL_1000	14-JAN-2010 02:55	S13233
L5	013_024	220019637024	DSL_5000	14-JAN-2010 03:23	S13229
L6	013_025	220019637025	DSL_7500	14-JAN-2010 03:50	S13234

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	30857	41804	48676	43245	43072	44897	AVRG		2.38E-5		42092	14	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	-27	100.0	-1	500.0	16	1000	3	5000	2	7500	7

TFB 01/14/10 : Levels 1-3 and ICV: corrected automatically drawn baseline.

TFB 01/14/10 : Carbon Marker scanned in after EZChrom calibrations.

Analyst: TFB Date: 01/14/10 Reviewer: EAH Date: 01/15/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218834 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 220019637002

Name : DSL_013
Cal Date : 14-JAN-2010

ICV 220019637027 (013_027 14-JAN-2010) stds: S13457

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	501.4	mg/L	0	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218834 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220027250001
 Units : mg/L

Name : HEXOTP_018
 Date : 18-JAN-2010 16:02
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_004	220027250004	HEXOTP_5	18-JAN-2010 16:02	S13690
L2	018_005	220027250005	HEXOTP_10	18-JAN-2010 16:30	S13691
L3	018_006	220027250006	HEXOTP_25	18-JAN-2010 16:58	S13692
L4	018_007	220027250007	HEXOTP_50	18-JAN-2010 17:27	S13693
L5	018_008	220027250008	HEXOTP_100	18-JAN-2010 17:55	S13694

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	51987	51113	52393	50111	49558	AVRG		1.96E-5		51032	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	B	5.000	2	10.00	0	25.00	3	50.00	-2	100.0	-3

TFB 01/18/10 : Levels 2,4,5: corrected automatically drawn baseline.

TFB 01/19/10 : Level 6 dropped due to high %D in hexacosane. Dropped from OTP for consistency.

Analyst: TFB

Date: 01/18/10

Reviewer: EAH

Date: 01/19/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218834 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220091179001
 Units : mg/L

Name : MO_063
 Date : 04-MAR-2010 16:24
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	063_016	220091179016	MO_50	04-MAR-2010 16:24	S13804
L2	063_017	220091179017	MO_250	04-MAR-2010 16:52	S13805
L3	063_018	220091179018	MO_500	04-MAR-2010 17:21	S13806
L4	063_019	220091179019	MO_1000	04-MAR-2010 17:50	S13807
L5	063_020	220091179020	MO_5000	04-MAR-2010 18:18	S13808
L6	063_021	220091179021	MO_7500	04-MAR-2010 18:47	S13809

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	B	31871	31503	30804	30203	28364	26768	AVRG		3.34E-5		29919	7	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	B	50.00	7	250.0	5	500.0	3	1000	1	5000	-5	7500	-11

JDG 03/05/10 : GC14b 063_019: MO_1000

JDG 03/05/10 : GC14b 063_020: MO_5000

Analyst: JDG

Date: 03/05/10

Reviewer: EAH

Date: 03/05/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218834 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399001
 Units : mg/L

Name : DSL_069
 Date : 10-MAR-2010 09:30
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a004	170100399004	DSL_10	10-MAR-2010 09:30	S14114
L2	069a005	170100399005	DSL_100	10-MAR-2010 09:58	S14115
L3	069a006	170100399006	DSL_500	10-MAR-2010 10:25	S14116
L4	069a007	170100399007	DSL_1000	10-MAR-2010 10:52	S14117
L5	069a008	170100399008	DSL_5000	10-MAR-2010 11:20	S14113
L6	069a009	170100399009	DSL_7500	10-MAR-2010 11:48	S14118

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	38992	57098	61023	62848	63686	64949	AVRG		1.72E-5		58099	17	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-33	100.0	-2	500.0	5	1000	8	5000	10	7500	12

JDG 03/11/10 : Corrected automatically baseline for: Levels 1-5.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218834 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 170100399001

Name : DSL_069
Cal Date : 10-MAR-2010

ICV 170100399011 (069a011 10-MAR-2010) stds: S14077

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	542.9	mg/L	9	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218834 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399002
 Units : mg/L

Name : MO_069
 Date : 10-MAR-2010 14:05
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a014	170100399014	MO_50	10-MAR-2010 14:05	S13804
L2	069a015	170100399015	MO_250	10-MAR-2010 14:32	S13805
L3	069a016	170100399016	MO_500	10-MAR-2010 15:00	S13806
L4	069a017	170100399017	MO_1000	10-MAR-2010 15:27	S13807
L5	069a018	170100399018	MO_5000	10-MAR-2010 15:55	S13808
L6	069a019	170100399019	MO_7500	10-MAR-2010 16:23	S13809

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	44768	46378	45947	46506	45328	45626	AVRG		2.19E-5		45759	1	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	-2	250.0	1	500.0	0	1000	2	5000	-1	7500	0

JDG 03/11/10 : Corrected automatically drawn baseline for levels 2-6.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218834 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170108447001
 Units : mg/L

Name : HEXOTP_075
 Date : 16-MAR-2010 15:35
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	075a012	170108447012	HEXOTP_5	16-MAR-2010 15:35	S13690
L2	075a013	170108447013	HEXOTP_10	16-MAR-2010 16:03	S13691
L3	075a014	170108447014	HEXOTP_25	16-MAR-2010 16:30	S13692
L4	075a015	170108447015	HEXOTP_50	16-MAR-2010 16:58	S13693
L5	075a016	170108447016	HEXOTP_100	16-MAR-2010 17:25	S13694
L6	075a017	170108447017	HEXOTP_200	16-MAR-2010 17:53	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	73067	76327	75701	75675	73539	74396	AVRG		1.34E-5		74784	2	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-2	10.00	2	25.00	1	50.00	1	100.0	-2	200.0	-1

JDG 03/17/10 : Corrected automatically drawn baseline for L1 & L2.

Analyst: JDG

Date: 03/17/10

Reviewer: EAH

Date: 03/17/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218834 GCSV Water: EPA 8015B

Inst : GC26A
 Calnum : 860098416001
 Units : mg/L

Name : otphex_068
 Date : 09-MAR-2010 17:41
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	068a008	860098416008	HEXOTP_5	09-MAR-2010 17:41	S13690
L2	068a009	860098416009	HEXOTP_10	09-MAR-2010 18:09	S13691
L3	068a010	860098416010	HEXOTP_25	09-MAR-2010 18:38	S13692
L4	068a011	860098416011	HEXOTP_50	09-MAR-2010 19:07	S13693
L5	068a012	860098416012	HEXOTP_100	09-MAR-2010 19:35	S13694
L6	068a013	860098416013	HEXOTP_200	09-MAR-2010 20:04	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
o-Terphenyl	26151	27561	28553	26454	26705	24322	AVRG		3.76E-5		26624	5	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-2	10.00	4	25.00	7	50.00	-1	100.0	0	200.0	-9

SFL 03/11/10 : Corrected automatically drawn baseline in all levels.

SFL 03/15/10 : Cmarker that ran before ICAL will be used. Retention time falls within window of last Cmarker.

Analyst: SFL

Date: 03/15/10

Reviewer: EAH

Date: 03/15/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218834 GCSV Water: EPA 8015B

Inst : GC26A
 Calnum : 860100125001
 Units : mg/L

Name : DSL_069
 Date : 10-MAR-2010 16:51
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a007	860100125007	DSL_10	10-MAR-2010 16:51	S13645
L2	069a008	860100125008	DSL_100	10-MAR-2010 17:20	S13231
L3	069a010	860100125010	DSL_1000	10-MAR-2010 18:17	S13233
L4	069a011	860100125011	DSL_5000	10-MAR-2010 20:30	S13229
L5	069a012	860100125012	DSL_7500	10-MAR-2010 20:59	S13234
L6	069a022	860100125022	DSL_500	11-MAR-2010 17:19	S14116

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Flg
Diesel C10-C22	18895	24356	24398	23074	23345	24429	AVRG		4.33E-5		23083	9	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-18	100.0	6	1000	6	5000	0	7500	1	500.0	6

JDG: 03/15/10 SFL: 03/15/10 EAH: 03/15/10

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218834 GCSV Water
EPA 8015B

Inst : GC26A
Calnum : 860100125001

Name : DSL_069
Cal Date : 10-MAR-2010

ICV 860100125015 (069a015 11-MAR-2010) stds: S14077

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	549.6	mg/L	10	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
 Seqnum : 220118541010 File : 082_010 Time : 23-MAR-2010 12:35
 Standards: S14077

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	44956	500.0	534.0	mg/L	7	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	53065	50.00	51.99	mg/L	4	15	

SFL 03/23/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/23/10 Reviewer: JDG Date: 03/23/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220118541011 File : 082_011 Time : 23-MAR-2010 13:04
 Standards: S14243

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	28993	500.0	484.5	mg/L	-3	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	51085	50.00	50.05	mg/L	0	15	

SFL 03/23/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/23/10 Reviewer: JDG Date: 03/23/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220118541023 File : 082_023 Time : 23-MAR-2010 21:38
 Standards: S14243

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	29388	500.0	491.1	mg/L	-2	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	53107	50.00	52.03	mg/L	4	15	

SFL 03/24/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/24/10 Reviewer: EAH Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170118643004 File : 082a004 Time : 23-MAR-2010 10:46
 Standards: S14003

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	53755	500.0	587.4	mg/L	17	15	c+ ***
o-Terphenyl	170108447001	16-MAR-2010	74784	82402	50.00	55.09	mg/L	10	15	

Analyst: SFL Date: 03/23/10 Reviewer: JDG Date: 03/24/10

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
Seqnum : 170118643005 File : 082a005 Time : 23-MAR-2010 11:13
Standards: S14076

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	170100399001	10-MAR-2010	58099	62122	250.0	267.3	mg/L	7	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	75352	50.00	50.38	mg/L	1	15	

SFL 03/24/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/24/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170118643021 File : 082a021 Time : 23-MAR-2010 23:25
 Standards: S14243

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	48043	500.0	525.0	mg/L	5	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	74960	50.00	50.12	mg/L	0	15	

SFL 03/24/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/24/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
 Seqnum : 170118643022 File : 082a022 Time : 23-MAR-2010 23:52
 Standards: S14077

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	170100399001	10-MAR-2010	58099	62473	500.0	537.6	mg/L	8	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	77185	50.00	51.61	mg/L	3	15	

Analyst: SFL Date: 03/24/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170120005004 File : 083a004 Time : 24-MAR-2010 09:28
 Standards: S14243

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	48671	500.0	531.8	mg/L	6	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	75381	50.00	50.40	mg/L	1	15	

JDG 03/24/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/24/10 Reviewer: SFL Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170120005009 File : 083a009 Time : 24-MAR-2010 12:25
 Standards: S14243

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	46524	500.0	508.4	mg/L	2	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	74238	50.00	49.63	mg/L	-1	15	

SFL 03/24/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/24/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_250 IDF : 1.0
 Seqnum : 860118553005 File : 082a005 Time : 23-MAR-2010 09:48
 Standards: S14076

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	860100125001	10-MAR-2010	23083	24729	250.0	267.8	mg/L	7	15	
o-Terphenyl	860098416001	09-MAR-2010	26624	25675	50.00	48.22	mg/L	-4	15	

Analyst: SFL Date: 03/23/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 GCSV Water
EPA 8015B

Inst : GC26A Run Name : DSL_500 IDF : 1.0
 Seqnum : 860118553017 File : 082a017 Time : 23-MAR-2010 20:51
 Standards: S14077

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	860100125001	10-MAR-2010	23083	24932	500.0	540.1	mg/L	8	15	
o-Terphenyl	860098416001	09-MAR-2010	26624	26239	50.00	49.28	mg/L	-1	15	

SFL 03/24/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/24/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170100399

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/10/10 08:00
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	069a001	X	PRIMER			03/10/10 08:00	1.0	
002	069a002	X	IB			03/10/10 08:28	1.0	
003	069a003	IB	CALIB			03/10/10 08:55	1.0	
004	069a004	ICAL	DSL_10			03/10/10 09:30	1.0	1
005	069a005	ICAL	DSL_100			03/10/10 09:58	1.0	2
006	069a006	ICAL	DSL_500			03/10/10 10:25	1.0	3
007	069a007	ICAL	DSL_1000			03/10/10 10:52	1.0	4
008	069a008	ICAL	DSL_5000			03/10/10 11:20	1.0	5
009	069a009	ICAL	DSL_7500			03/10/10 11:48	1.0	6
010	069a010	IB	CALIB			03/10/10 12:15	1.0	
011	069a011	ICV	DSL_500			03/10/10 12:42	1.0	7
012	069a012	X	ICV			03/10/10 13:09	1.0	7
013	069a013	IB	CALIB			03/10/10 13:37	1.0	
014	069a014	ICAL	MO_50			03/10/10 14:05	1.0	8
015	069a015	ICAL	MO_250			03/10/10 14:32	1.0	9
016	069a016	ICAL	MO_500			03/10/10 15:00	1.0	10
017	069a017	ICAL	MO_1000			03/10/10 15:27	1.0	11
018	069a018	ICAL	MO_5000			03/10/10 15:55	1.0	12
019	069a019	ICAL	MO_7500			03/10/10 16:23	1.0	13
020	069a020	IB	CALIB			03/10/10 16:51	1.0	
021	069a021	CMARKER	C8-C50			03/10/10 17:19	1.0	14
022	069a022	IB	CALIB			03/10/10 17:46	1.0	

JDG 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

Standards used: 1=S14114 2=S14115 3=S14116 4=S14117 5=S14113 6=S14118 7=S14077 8=S13804 9=S13805 10=S13806 11=S13807
 12=S13808 13=S13809 14=S13646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170108447

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/16/10 07:27
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	075a001	X	PRIMER				03/16/10 07:27	1.0	
002	075a002	X	IB				03/16/10 07:55	1.0	
003	075a003	X	CMARKER				03/16/10 08:24	1.0	1
004	075a004	X	MO_500				03/16/10 08:52	1.0	2
005	075a005	X	DSL_500				03/16/10 09:19	1.0	3
006	075a006	X	JP5_250				03/16/10 09:47	1.0	4
007	075a007	X	IB				03/16/10 12:53	1.0	
008	075a008	X	CMARKER				03/16/10 13:21	1.0	1
009	075a009	X	MO_500				03/16/10 13:48	1.0	2
010	075a010	X	IB				03/16/10 14:40	1.0	
011	075a011	IB	CALIB				03/16/10 15:07	1.0	
012	075a012	ICAL	HEXOTP_5				03/16/10 15:35	1.0	5
013	075a013	ICAL	HEXOTP_10				03/16/10 16:03	1.0	6
014	075a014	ICAL	HEXOTP_25				03/16/10 16:30	1.0	7
015	075a015	ICAL	HEXOTP_50				03/16/10 16:58	1.0	8
016	075a016	ICAL	HEXOTP_100				03/16/10 17:25	1.0	9
017	075a017	ICAL	HEXOTP_200				03/16/10 17:53	1.0	10
018	075a018	IB	CALIB				03/16/10 18:20	1.0	
019	075a019	CMARKER	C8-C50				03/16/10 18:48	1.0	1
020	075a020	CCV	MO_500				03/16/10 19:15	1.0	2
021	075a021	CCV	DSL_250				03/16/10 19:42	1.0	11
022	075a022	X	CCV				03/16/10 20:10	1.0	2
023	075a023	X	CCV				03/16/10 20:37	1.0	11
024	075a024	BLANK	QC535926		Water	160891	03/16/10 21:05	1.0	
025	075a025	SAMPLE	218714-001	S	Water	160843	03/16/10 21:32	1.0	
026	075a026	BLANK	QC536089	S	Water	160933	03/16/10 22:00	1.0	
027	075a027	BLANK	QC536089		Water	160933	03/16/10 22:27	1.0	
028	075a028	BS	QC536090	S	Water	160933	03/16/10 22:54	1.0	
029	075a029	BSD	QC536091	S	Water	160933	03/16/10 23:22	1.0	
030	075a030	SAMPLE	218778-001		Water	160933	03/16/10 23:49	1.0	
031	075a031	SAMPLE	218778-002		Water	160933	03/17/10 00:17	1.0	
032	075a032	SAMPLE	218778-003		Water	160933	03/17/10 00:45	1.0	
033	075a033	SAMPLE	218778-004		Water	160933	03/17/10 01:12	1.0	
034	075a034	CCV	MO_500				03/17/10 01:39	1.0	2
035	075a035	CCV	DSL_1000				03/17/10 02:07	1.0	12
036	075a036	X	CCV				03/17/10 02:34	1.0	2
037	075a037	X	CCV				03/17/10 03:02	1.0	12
038	075a038	SAMPLE	218787-006	S	Water	160933	03/17/10 03:29	1.0	
039	075a039	SAMPLE	218787-007	S	Water	160933	03/17/10 03:56	1.0	
040	075a040	SAMPLE	218789-001	S	Water	160933	03/17/10 04:24	1.0	
041	075a041	SAMPLE	218789-002	S	Water	160933	03/17/10 04:52	1.0	
042	075a042	SAMPLE	218789-003	S	Water	160933	03/17/10 05:19	1.0	
043	075a043	X	CMARKER				03/17/10 05:47	1.0	1
044	075a044	X	MO_500				03/17/10 06:14	1.0	2
045	075a045	CCV	DSL_500				03/17/10 06:41	1.0	3
046	075a046	CCV	MO_500				03/17/10 07:09	1.0	2
047	075a047	X	CCV				03/17/10 07:36	1.0	3

JDG 03/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170118643

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/23/10 09:23
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	082a001	X	PRIMER				03/23/10 09:23	1.0	
002	082a002	X	IB				03/23/10 09:50	1.0	
003	082a003	X	CMARKER				03/23/10 10:18	1.0	1
004	082a004	CCV	MO_500				03/23/10 10:46	1.0	2
005	082a005	CCV	DSL_250				03/23/10 11:13	1.0	3
006	082a006	X	MO SPIKE				03/23/10 13:03	1.0	4
007	082a007	X	MO SPIKE TEST				03/23/10 13:31	1.0	4
008	082a008	X	TEH SPIKE TEST				03/23/10 13:59	1.0	5
009	082a009	CCV	BUNK_500				03/23/10 15:53	1.0	6
010	082a010	BLANK	QC536796	S	Water	161107	03/23/10 16:27	1.0	
011	082a011	BLANK	QC536796		Water	161107	03/23/10 16:54	1.0	
012	082a012	LCS	QC536797	S	Water	161107	03/23/10 17:22	1.0	
013	082a013	LCS	QC536797		Water	161107	03/23/10 17:49	1.0	
014	082a014	SAMPLE	218905-001	S	Water	161107	03/23/10 18:17	1.0	
015	082a015	SAMPLE	218905-001		Water	161107	03/23/10 18:44	1.0	
016	082a016	LCS	QC536800		Water	161107	03/23/10 19:12	1.0	
017	082a017	BLANK	QC537191		Soil	161199	03/23/10 21:35	1.0	
018	082a018	LCS	QC537192	S	Soil	161199	03/23/10 22:03	1.0	
019	082a019	LCS	QC537195		Soil	161199	03/23/10 22:30	1.0	
020	082a020	X	CMARKER				03/23/10 22:57	1.0	1
021	082a021	CCV	MO_500				03/23/10 23:25	1.0	7
022	082a022	CCV	DSL_500				03/23/10 23:52	1.0	8
023	082a023	CCV	BUNK_500				03/24/10 00:19	1.0	6
024	082a024	X	CCV				03/24/10 00:47	1.0	7
025	082a025	X	CCV				03/24/10 01:15	1.0	8
026	082a026	X	CCV				03/24/10 01:42	1.0	6
027	082a027	SAMPLE	218975-002		Soil	161199	03/24/10 02:09	1.0	
028	082a028	SAMPLE	218975-001		Soil	161199	03/24/10 02:36	5.0	3:BUNKC:12-40=18000
029	082a029	MSS	218941-008		Soil	161199	03/24/10 03:04	1.0	
030	082a030	MS	QC537193		Soil	161199	03/24/10 03:31	1.0	
031	082a031	MSD	QC537194		Soil	161199	03/24/10 03:59	1.0	
032	082a032	X	IB				03/24/10 04:26	1.0	
033	082a033	SAMPLE	218941-001		Soil	161199	03/24/10 04:53	1.0	
034	082a034	SAMPLE	218941-002		Soil	161199	03/24/10 05:21	1.0	
035	082a035	SAMPLE	218941-003		Soil	161199	03/24/10 05:48	1.0	
036	082a036	SAMPLE	218941-005		Soil	161199	03/24/10 06:16	1.0	
037	082a037	SAMPLE	218941-006		Soil	161199	03/24/10 06:43	1.0	
038	082a038	CCV	MO_500				03/24/10 07:10	1.0	7
039	082a039	CCV	DSL_1000				03/24/10 07:37	1.0	9

SFL 03/24/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

Standards used: 1=S13646 2=S14003 3=S14076 4=S13010 5=S14250 6=S13844 7=S14243 8=S14077 9=S14078

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170120005

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/24/10 08:05
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	083a001	X	PRIMER				03/24/10 08:05	1.0	
002	083a002	X	IB				03/24/10 08:33	1.0	
003	083a003	X	CMARKER				03/24/10 09:00	1.0	1
004	083a004	CCV	MO_500				03/24/10 09:28	1.0	2
005	083a005	CCV	DSL_250				03/24/10 09:55	1.0	3
006	083a006	LCS	QC536800		Water	161107	03/24/10 10:32	1.0	
007	083a007	SAMPLE	218893-004	S	Soil	161101	03/24/10 11:00	1.0	
008	083a008	MSD	QC537194		Soil	161199	03/24/10 11:27	1.0	
009	083a009	CCV	MO_500				03/24/10 12:25	1.0	2
010	083a010	CCV	DSL_500				03/24/10 12:53	1.0	4
011	083a011	CCV	JET_250				03/24/10 13:21	1.0	5
012	083a012	BLANK	QC536998	S	Water	161154	03/24/10 15:37	1.0	
013	083a013	LCS	QC536999	S	Water	161154	03/24/10 16:04	1.0	
014	083a014	BLANK	QC536998		Water	161154	03/24/10 16:31	1.0	
015	083a015	LCS	QC537002	S	Water	161154	03/24/10 16:59	1.0	
016	083a016	MSS	218866-005		Water	161154	03/24/10 17:26	1.0	
017	083a017	MS	QC537000		Water	161154	03/24/10 17:53	1.0	
018	083a018	MSD	QC537001		Water	161154	03/24/10 18:21	1.0	
019	083a019	SAMPLE	218938-001		Water	161154	03/24/10 18:48	1.0	
020	083a020	SAMPLE	218936-001	S	Water	161154	03/24/10 19:15	1.0	
021	083a021	SAMPLE	218936-002	S	Water	161154	03/24/10 19:42	1.0	
022	083a022	CCV	MO_500				03/24/10 20:10	1.0	2
023	083a023	CCV	DSL_1000				03/24/10 20:37	1.0	6
024	083a024	CCV	JET_250				03/24/10 21:05	1.0	5
025	083a025	X	CCV				03/24/10 21:32	1.0	2
026	083a026	X	CCV				03/24/10 22:00	1.0	6
027	083a027	X	CCV				03/24/10 22:28	1.0	5
028	083a028	BS	QC537205		Water	161203	03/24/10 22:55	1.0	
029	083a029	BSD	QC537206		Water	161203	03/24/10 23:23	1.0	
030	083a030	SAMPLE	218866-006		Water	161154	03/24/10 23:51	1.0	
031	083a031	SAMPLE	218941-009		Soil	161199	03/25/10 00:18	1.0	
032	083a032	SAMPLE	218944-012		Soil	161199	03/25/10 00:46	1.0	
033	083a033	SAMPLE	218941-004		Soil	161199	03/25/10 01:13	10.0	
034	083a034	X	IB				03/25/10 01:41	1.0	
035	083a035	SAMPLE	218944-007		Soil	161199	03/25/10 02:09	5.0	
036	083a036	SAMPLE	218944-002		Soil	161199	03/25/10 02:36	5.0	
037	083a037	SAMPLE	218941-007		Soil	161199	03/25/10 03:04	10.0	
038	083a038	X	IB				03/25/10 03:32	1.0	
039	083a039	SAMPLE	218866-007		Water	161154	03/25/10 03:59	1.0	
040	083a040	X	CMARKER				03/25/10 04:27	1.0	1
041	083a041	CCV	MO_500				03/25/10 04:54	1.0	2
042	083a042	CCV	DSL_250				03/25/10 05:22	1.0	3
043	083a043	X	CCV				03/25/10 05:49	1.0	2
044	083a044	X	CCV				03/25/10 06:17	1.0	3
045	083a045	CCV	BUNK_500				03/25/10 08:10	1.0	7
046	083a046	BLANK	QC537204		Water	161203	03/25/10 08:42	1.0	
047	083a047	LCS	QC536800		Water	161107	03/25/10 09:09	1.0	
048	083a048	SAMPLE	218868-008		Water	161203	03/25/10 09:36	1.0	
049	083a049	SAMPLE	218889-001	S	Water	161154	03/25/10 10:04	1.0	
050	083a050	SAMPLE	218889-003	S	Water	161154	03/25/10 10:31	1.0	
051	083a051	SAMPLE	218933-001		Water	161203	03/25/10 10:59	1.0	
052	083a052	SAMPLE	218933-010		Water	161203	03/25/10 11:26	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170120005

Instrument : GC17A Begun : 03/24/10 08:05
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
053	083a053	SAMPLE	218933-011		Water	161203	03/25/10 11:54	1.0	
054	083a054	CCV	MO_500				03/25/10 12:32	1.0	2
055	083a055	CCV	DSL_250				03/25/10 13:00	1.0	3
056	083a056	SAMPLE	218933-016		Water	161203	03/25/10 13:28	20.0	
057	083a057	CCV	BUNK_500				03/25/10 13:56	1.0	7
058	083a058	CCV	DSL_250				03/25/10 14:24	1.0	3

SFL 03/24/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 11.

JDG 03/25/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 12 through 58.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220019637

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/13/10 15:17
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	013_001	X	PRIMER			01/13/10 15:17	1.0	
002	013_002	X	IB			01/13/10 15:46	1.0	
003	013_003	X	CMARKER			01/13/10 16:14	1.0	1
004	013_004	X	DSL_500			01/13/10 16:43	1.0	2
005	013_005	X	MO_500			01/13/10 17:12	1.0	3
006	013_006	X	IB			01/13/10 17:48	1.0	
007	013_007	X	CMARKER			01/13/10 18:17	1.0	1
008	013_008	X	DSL_500			01/13/10 18:46	1.0	2
009	013_009	X	MO_500			01/13/10 19:15	1.0	3
010	013_010	X	IB			01/13/10 20:54	1.0	
011	013_011	X	IB			01/13/10 21:22	1.0	
012	013_012	IB	CALIB			01/13/10 21:50	1.0	
013	013_013	ICAL	HEXOTP_5			01/13/10 22:18	1.0	4
014	013_014	ICAL	HEXOTP_10			01/13/10 22:46	1.0	5
015	013_015	ICAL	HEXOTP_25			01/13/10 23:14	1.0	6
016	013_016	ICAL	HEXOTP_50			01/13/10 23:42	1.0	7
017	013_017	ICAL	HEXOTP_100			01/14/10 00:09	1.0	8
018	013_018	ICAL	HEXOTP_200			01/14/10 00:37	1.0	9
019	013_019	IB	CALIB			01/14/10 01:04	1.0	
020	013_020	ICAL	DSL_10			01/14/10 01:32	1.0	10
021	013_021	ICAL	DSL_100			01/14/10 02:00	1.0	11
022	013_022	ICAL	DSL_500			01/14/10 02:28	1.0	12
023	013_023	ICAL	DSL_1000			01/14/10 02:55	1.0	13
024	013_024	ICAL	DSL_5000			01/14/10 03:23	1.0	14
025	013_025	ICAL	DSL_7500			01/14/10 03:50	1.0	15
026	013_026	IB	CALIB			01/14/10 04:18	1.0	
027	013_027	ICV	DSL_500			01/14/10 04:46	1.0	2
028	013_028	X	ICV			01/14/10 05:14	1.0	2
029	013_029	IB	CALIB			01/14/10 05:43	1.0	
030	013_030	ICAL	MO_50			01/14/10 06:11	1.0	16
031	013_031	ICAL	MO_250			01/14/10 06:39	1.0	17
032	013_032	ICAL	MO_500			01/14/10 07:07	1.0	18
033	013_033	ICAL	MO_1000			01/14/10 07:34	1.0	19
034	013_034	ICAL	MO_5000			01/14/10 08:02	1.0	20
035	013_035	ICAL	MO_7500			01/14/10 08:30	1.0	21
036	013_036	IB	CALIB			01/14/10 08:58	1.0	
037	013_037	CMARKER	C8-C50			01/14/10 09:26	1.0	1
038	013_038	IB	CALIB			01/14/10 09:54	1.0	

TFB 01/14/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

Standards used: 1=S12636 2=S13457 3=S13471 4=S13690 5=S13691 6=S13692 7=S13693 8=S13694 9=S13695 10=S13230 11=S13231
 12=S13232 13=S13233 14=S13229 15=S13234 16=S12675 17=S12676 18=S12677 19=S12678 20=S12679 21=S12680

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220027250

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/18/10 14:37
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	018_001	X	PRIMER			01/18/10 14:37	1.0	
002	018_002	X	IB			01/18/10 15:05	1.0	
003	018_003	IB	CALIB			01/18/10 15:33	1.0	
004	018_004	ICAL	HEXOTP_5			01/18/10 16:02	1.0	1
005	018_005	ICAL	HEXOTP_10			01/18/10 16:30	1.0	2
006	018_006	ICAL	HEXOTP_25			01/18/10 16:58	1.0	3
007	018_007	ICAL	HEXOTP_50			01/18/10 17:27	1.0	4
008	018_008	ICAL	HEXOTP_100			01/18/10 17:55	1.0	5
009	018_009	X	HEXOTP_200			01/18/10 18:24	1.0	6
010	018_010	IB	CALIB			01/18/10 18:53	1.0	
011	018_011	ICAL	MO_50			01/18/10 19:21	1.0	7
012	018_012	ICAL	MO_250			01/18/10 19:49	1.0	8
013	018_013	ICAL	MO_500			01/18/10 20:18	1.0	9
014	018_014	ICAL	MO_1000			01/18/10 20:46	1.0	10
015	018_015	ICAL	MO_5000			01/18/10 21:14	1.0	11
016	018_016	ICAL	MO_7500			01/18/10 21:42	1.0	12
017	018_017	CMARKER	C8-C50			01/18/10 22:10	1.0	13
018	018_018	CCV	DSL_500			01/18/10 22:38	1.0	14
019	018_019	CCV	MO_500			01/18/10 23:06	1.0	15
020	018_020	BLANK	QC489059	Soil	149293	01/18/10 23:35	1.0	
021	018_021	MDL	207486-001	Soil	149293	01/19/10 00:03	1.0	
022	018_022	MDL	207486-002	Soil	149293	01/19/10 00:31	1.0	
023	018_023	MDL	207486-003	Soil	149293	01/19/10 00:59	1.0	
024	018_024	MDL	207486-004	Soil	149293	01/19/10 01:27	1.0	
025	018_025	MDL	207486-005	Soil	149293	01/19/10 01:55	1.0	
026	018_026	MDL	207486-006	Soil	149293	01/19/10 02:23	1.0	
027	018_027	MDL	207486-007	Soil	149293	01/19/10 02:50	1.0	
028	018_028	MDL	207486-008	Soil	149293	01/19/10 03:18	1.0	
029	018_029	LOD	212266-010	Water	159144	01/19/10 03:46	1.0	
030	018_030	CCV	DSL_250			01/19/10 04:15	1.0	16
031	018_031	CCV	MO_500			01/19/10 04:43	1.0	15
032	018_032	X	CCV			01/19/10 05:11	1.0	16
033	018_033	X	CCV			01/19/10 05:39	1.0	15

TFB 01/18/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S13690 2=S13691 3=S13692 4=S13693 5=S13694 6=S13695 7=S12675 8=S12676 9=S12677 10=S12678 11=S12679
 12=S12680 13=S12636 14=S13457 15=S13744 16=S13456

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220118541

Instrument : GC14B
 Method : EPA 8015B

Begun : 03/23/10 07:41
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	082_001	X	PRIMER				03/23/10 07:41	1.0	
002	082_002	X	IB				03/23/10 08:09	1.0	
003	082_003	X	CMARKER				03/23/10 08:37	1.0	1
004	082_004	CCV	DSL_250				03/23/10 09:05	1.0	2
005	082_005	CCV	MO_500				03/23/10 09:34	1.0	3
006	082_006	BLANK	QC536801	S	Water	161108	03/23/10 10:35	1.0	
007	082_007	SAMPLE	218961-001	S	Soil	161146	03/23/10 11:03	10.0	2:BUNKC:12-40=9200
008	082_008	SAMPLE	218945-004		Soil	161132	03/23/10 11:32	20.0	3:BUNKC:12-40=10000
009	082_009	MSS	218879-003	S	Soil	161132	03/23/10 12:00	1.0	
010	082_010	CCV	DSL_500				03/23/10 12:35	1.0	4
011	082_011	CCV	MO_500				03/23/10 13:04	1.0	5
012	082_012	SAMPLE	218891-011	S	Water	161107	03/23/10 16:31	1.0	
013	082_013	SAMPLE	218891-012	S	Water	161107	03/23/10 16:59	1.0	
014	082_014	SAMPLE	218834-002		Water	161107	03/23/10 17:27	1.0	
015	082_015	SAMPLE	218834-003		Water	161107	03/23/10 17:55	1.0	
016	082_016	SAMPLE	218834-004		Water	161107	03/23/10 18:23	1.0	
017	082_017	SAMPLE	218834-005		Water	161107	03/23/10 18:51	1.0	
018	082_018	SAMPLE	218834-006		Water	161107	03/23/10 19:19	1.0	
019	082_019	SAMPLE	218834-007		Water	161107	03/23/10 19:47	1.0	
020	082_020	SAMPLE	218834-008		Water	161107	03/23/10 20:15	1.0	
021	082_021	SAMPLE	218834-009		Water	161107	03/23/10 20:43	1.0	
022	082_022	CCV	DSL_1000				03/23/10 21:10	1.0	6
023	082_023	CCV	MO_500				03/23/10 21:38	1.0	5
024	082_024	X	CCV				03/23/10 22:06	1.0	6
025	082_025	X	CCV				03/23/10 22:33	1.0	5
026	082_026	X	CMARKER				03/23/10 23:01	1.0	1

JDG 03/23/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 11.

SFL 03/24/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 12 through 26.

Standards used: 1=S13646 2=S14076 3=S14003 4=S14077 5=S14243 6=S14078

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 860098416

Instrument : GC26A
 Method : EPA 8015B

Begun : 03/09/10 08:16
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	068a001	X	PRIMER			03/09/10 08:16	1.0	
002	068a002	X	IB			03/09/10 08:44	1.0	
003	068a003	X	IB			03/09/10 09:12	1.0	
004	068a004	CMARKER	C8-C50			03/09/10 09:41	1.0	1
005	068a005	CCV	DSL_1000			03/09/10 10:10	1.0	2
006	068a006	CCV	MO_500			03/09/10 10:38	1.0	3
007	068a007	IB	CALIB			03/09/10 17:12	1.0	
008	068a008	ICAL	HEXOTP_5			03/09/10 17:41	1.0	4
009	068a009	ICAL	HEXOTP_10			03/09/10 18:09	1.0	5
010	068a010	ICAL	HEXOTP_25			03/09/10 18:38	1.0	6
011	068a011	ICAL	HEXOTP_50			03/09/10 19:07	1.0	7
012	068a012	ICAL	HEXOTP_100			03/09/10 19:35	1.0	8
013	068a013	ICAL	HEXOTP_200			03/09/10 20:04	1.0	9
014	068a014	IB	CALIB			03/09/10 20:32	1.0	
015	068a015	X	DSL_10			03/09/10 21:01	1.0	10
016	068a016	X	DSL_100			03/09/10 21:29	1.0	11
017	068a017	X	DSL_500			03/09/10 21:58	1.0	12
018	068a018	X	DSL_1000			03/09/10 22:27	1.0	12
019	068a019	X	DSL_5000			03/09/10 22:55	1.0	13
020	068a020	X	DSL_7500			03/09/10 23:24	1.0	14
021	068a021	IB	CALIB			03/09/10 23:53	1.0	
022	068a022	ICV	DSL_500			03/10/10 00:21	1.0	15
023	068a023	X	ICV			03/10/10 00:50	1.0	15
024	068a024	IB	CALIB			03/10/10 01:19	1.0	
025	068a025	ICAL	MO_25			03/10/10 01:47	1.0	16
026	068a026	ICAL	MO_50			03/10/10 02:16	1.0	16
027	068a027	ICAL	MO_250			03/10/10 02:44	1.0	17
028	068a028	ICAL	MO_500			03/10/10 03:13	1.0	18
029	068a029	ICAL	MO_1000			03/10/10 03:42	1.0	19
030	068a030	ICAL	MO_2500			03/10/10 04:11	1.0	20
031	068a031	IB	CALIB			03/10/10 04:39	1.0	
032	068a032	ICAL	JP5_10			03/10/10 05:07	1.0	21
033	068a033	ICAL	JP5_100			03/10/10 05:36	1.0	22
034	068a034	ICAL	JP5_500			03/10/10 06:04	1.0	23
035	068a035	ICAL	JP5_1500			03/10/10 06:32	1.0	24
036	068a036	ICAL	JP5_2500			03/10/10 07:00	1.0	25
037	068a037	ICAL	JP5_5000			03/10/10 07:29	1.0	26
038	068a038	IB	CALIB			03/10/10 07:57	1.0	
039	068a039	ICAL	JET_10			03/10/10 08:25	1.0	27
040	068a040	ICAL	JET_100			03/10/10 08:53	1.0	28
041	068a041	ICAL	JET_500			03/10/10 09:21	1.0	29
042	068a042	ICAL	JET_1000			03/10/10 09:49	1.0	30
043	068a043	ICAL	JET_2000			03/10/10 10:18	1.0	31
044	068a044	ICAL	JET_3000			03/10/10 10:46	1.0	32
045	068a045	IB	CALIB			03/10/10 11:14	1.0	
046	068a046	X	C8-C50			03/10/10 11:42	1.0	1
047	068a047	IB	CALIB			03/10/10 12:10	1.0	

SFL 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 860100125

Instrument : GC26A
 Method : EPA 8015B

Begun : 03/10/10 12:45
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	069a001	X	PRIMER			03/10/10 12:45	1.0	
002	069a002	X	IB			03/10/10 13:14	1.0	
003	069a003	X	C-8-C50			03/10/10 13:42	1.0	1
004	069a004	X	DSL_500			03/10/10 14:11	1.0	2
005	069a005	X	MO_500			03/10/10 14:40	1.0	3
006	069a006	IB	CALIB			03/10/10 16:02	1.0	
007	069a007	ICAL	DSL_10			03/10/10 16:51	1.0	4
008	069a008	ICAL	DSL_100			03/10/10 17:20	1.0	5
009	069a009	X	DSL_500			03/10/10 17:49	1.0	6
010	069a010	ICAL	DSL_1000			03/10/10 18:17	1.0	6
011	069a011	ICAL	DSL_5000			03/10/10 20:30	1.0	7
012	069a012	ICAL	DSL_7500			03/10/10 20:59	1.0	8
013	069a013	IB	CALIB			03/10/10 21:28	1.0	
014	069a014	IB	CALIB			03/11/10 10:10	1.0	
015	069a015	ICV	DSL_500			03/11/10 10:38	1.0	2
016	069a016	X	DSL_500			03/11/10 12:16	1.0	2
017	069a017	IB	CALIB			03/11/10 12:44	1.0	
018	069a018	CMARKER	C8-C50			03/11/10 13:30	1.0	1
019	069a019	IB	CALIB			03/11/10 13:58	1.0	
020	069a020	IB	CALIB			03/11/10 15:53	1.0	
021	069a021	IB	CALIB			03/11/10 16:22	1.0	
022	069a022	ICAL	DSL_500			03/11/10 17:19	1.0	9
023	069a023	IB	CALIB			03/11/10 17:48	1.0	

JDG 03/12/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 23.

SAMPLE PREPARATION SUMMARY

Batch # : 161107		Analysis : TEH
Started By : DJT	Prep Date : 19-MAR-2010 18:00	Finished By : MB2
Method : 3520C	SOP Version : TEH_3520_rv12	Units : mL
Spike #1 ID : S14152	Spike #2 ID : S14101	Spike #3 ID : S13010

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
218834-002		Water	500	2.5	1	0.005	7	.5				TEHM	
218834-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218834-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218834-005		Water	500	2.5	1	0.005	5	.5				TEHM	
218834-006		Water	500	2.5	1	0.005	7	.5				TEHM	
218834-007		Water	500	2.5	1	0.005	7	.5				TEHM	
218834-008		Water	500	2.5	1	0.005	7	.5				TEHM	
218834-009		Water	500	2.5	1	0.005	7	.5				TEHM	
218867-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218867-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218867-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218867-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218867-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218891-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218891-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	See comment 1 below
218891-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	mss
218891-011		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218891-012		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218905-001		Water	500	2.5	1	0.005	7	.5			3630C	TEH	
QC536796	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC536797	LCS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC536798	MS	Water	500	2.5	1	0.005	7	.5	.5		3630C		
QC536799	MSD	Water	500	2.5	1	0.005	7	.5	.5		3630C		
QC536800	LCS	Water	500	2.5	1	0.005		.5		.5			

Comment 1: NO C&T LABEL(setup by client id)

Analyst: SFL Date: 03/24/10 Reviewer: JDG Date: 03/24/10

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

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BK 2968

LIMS Batch No: 161107
 LIMS Analysis: TEH/M
 Date Extracted: 3/19/10

Extraction Method:
 mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
 EPA 3630c Silica Gel

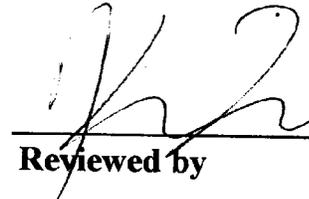
Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
218834-002	D	500	7	25		
	003		↓			
	004		↓			
	005		5			
	006		7			
	007					
	008					
	009					
218867-001	J				X	
	002					
	003					
	004					
	005					
218891-002	G					
	007					NO CFT LABEL/SETUP BY CLIENT ID
	009					MIS
	011					
	012					
218905-001	E					
MB QC 536796	NA		NA			
LCS	797		↓			
MS	798		7			
MSD	799		↓			
LCS	800		NA			

Mfg & Lot# / LIMS # / Time Date/ Initials

0.5 mL of TEH_SURR was added to all samples	SM1152A	DTT 3/19/10
0.5 mL of TEH_SP was added to all spikes	SM1101A / *S 130100	
pH of all samples adjusted to pH ≤ 2 with H ₂ SO ₄	FS 094395	
<input checked="" type="checkbox"/> 3520c: Samples were continually extracted about 450 mL of CH ₂ Cl ₂	EM49338	
Extraction Start Time:	1800	
Extraction End Time:	1620	GRD 3/20/10
<input type="checkbox"/> 3510c: Samples were extracted 3 times with 60 mL of CH ₂ Cl ₂	NA	MBS 3/23/10
Extracts filtered through baked, CH ₂ Cl ₂ -rinsed granular Na ₂ SO ₄	EM49044931	
Concentrated to final volume at temperature (degrees C)	100	
Relinquished to TEH Department	✓	✓


 Extraction Chemist 3/19/10
 Date

Continued from Page 1
 Continued on Page 1


 Reviewed by 3/23/10
 Date

Prep Chemist: MBZ
 Cleanup Date: 3/23/10

Benchbook # **BK 3005**
 Page 8

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
218867-001	161107	1.0	1.0	
↓ 002	↓	↓	↓	
003	↓	↓	↓	
004	↓	↓	↓	
5 ↓ 005	↓	↓	↓	
218891-002	↓	↓	↓	
007	↓	↓	↓	
009	↓	↓	↓	
10 ↓ 011	↓	↓	↓	MSS
012	↓	↓	↓	
218905-001	↓	↓	↓	
MBZ Qc536796	↓	↓	↓	
LLS ↓ 97	↓	↓	↓	
MS ↓ 98	↓	↓	↓	
15 MSD ↓ 99	↓	↓	↓	
NAL 3/23/10				

- Extracts were cleaned up using C&T assembled _____ g columns
- Extracts were cleaned up using 1.0 g cartridges
- Extracts were eluted with 4.0 mL CH₂Cl₂
- Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
NA	MBZ 3/23/10
SP1476801	↓
EM49338	↓

Wendy Baha 3/23/10
 Extraction Chemist / Date

Continued from page _____
 Continued on page _____

[Signature] 3/23/10
 Reviewed by / Date

Laboratory Job Number 218834

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-006-UST-10Q1	Batch#:	161282
Lab ID:	218834-001	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-006-UST-10Q1	Batch#:	161282
Lab ID:	218834-001	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-124A-UST-10Q1	Batch#:	161282
Lab ID:	218834-002	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	6.2	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-124A-UST-10Q1	Batch#:	161282
Lab ID:	218834-002	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-96A-UST-10Q1	Batch#:	161282
Lab ID:	218834-003	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	49	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-96A-UST-10Q1	Batch#:	161282
Lab ID:	218834-003	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-005	Batch#:	161282
Lab ID:	218834-004	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	49	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-005	Batch#:	161282
Lab ID:	218834-004	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-006-UST-10Q1	Batch#:	161282
Lab ID:	218834-005	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-006-UST-10Q1	Batch#:	161282
Lab ID:	218834-005	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-106A-UST-10Q1	Batch#:	161282
Lab ID:	218834-006	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-106A-UST-10Q1	Batch#:	161282
Lab ID:	218834-006	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	100	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-122A-UST-10Q1	Batch#:	161282
Lab ID:	218834-007	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-122A-UST-10Q1	Batch#:	161282
Lab ID:	218834-007	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-UST-10Q1	Batch#:	161282
Lab ID:	218834-008	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-113A-UST-10Q1	Batch#:	161282
Lab ID:	218834-008	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-114A-UST-10Q1	Batch#:	161338
Lab ID:	218834-009	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-114A-UST-10Q1	Batch#:	161338
Lab ID:	218834-009	Sampled:	03/14/10
Matrix:	Water	Received:	03/16/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161282
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
1,3-Dichloropropane	25.00	24.74	99	75-120		
Tetrachloroethene	25.00	26.02	104	77-120		
Dibromochloromethane	25.00	25.85	103	76-120		
1,2-Dibromoethane	25.00	24.24	97	77-120		
Chlorobenzene	25.00	26.07	104	78-120		
1,1,1,2-Tetrachloroethane	25.00	25.81	103	77-120		
Ethylbenzene	25.00	26.05	104	78-120		
m,p-Xylenes	50.00	52.37	105	77-120		
o-Xylene	25.00	27.02	108	77-120		
Styrene	25.00	27.30	109	77-120		
Bromoform	25.00	25.59	102	74-121		
Isopropylbenzene	25.00	22.89	92	71-120		
1,1,2,2-Tetrachloroethane	25.00	22.41	90	73-120		
1,2,3-Trichloropropane	25.00	22.63	91	72-120		
Propylbenzene	25.00	25.84	103	76-120		
Bromobenzene	25.00	25.28	101	75-120		
1,3,5-Trimethylbenzene	25.00	26.45	106	77-120		
2-Chlorotoluene	25.00	25.86	103	76-120		
4-Chlorotoluene	25.00	25.66	103	78-120		
tert-Butylbenzene	25.00	26.37	105	76-120		
1,2,4-Trimethylbenzene	25.00	26.81	107	77-120		
sec-Butylbenzene	25.00	27.01	108	80-120		
para-Isopropyl Toluene	25.00	26.17	105	76-120		
1,3-Dichlorobenzene	25.00	25.84	103	75-120		
1,4-Dichlorobenzene	25.00	25.52	102	77-120		
n-Butylbenzene	25.00	27.36	109	76-120		
1,2-Dichlorobenzene	25.00	25.96	104	76-120		
1,2-Dibromo-3-Chloropropane	25.00	21.73	87	65-120		
1,2,4-Trichlorobenzene	25.00	25.48	102	73-121		
Hexachlorobutadiene	25.00	25.74	103	73-123		
Naphthalene	25.00	24.97	100	62-121		
1,2,3-Trichlorobenzene	25.00	26.12	104	66-123		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	101	77-120		
1,2-Dichloroethane-d4	99	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	98	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161282
Units:	ug/L	Analyzed:	03/25/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,3-Dichloropropane	25.00	24.24	97	75-120	2	20		
Tetrachloroethene	25.00	24.59	98	77-120	6	20		
Dibromochloromethane	25.00	24.96	100	76-120	3	20		
1,2-Dibromoethane	25.00	23.91	96	77-120	1	20		
Chlorobenzene	25.00	24.70	99	78-120	5	20		
1,1,1,2-Tetrachloroethane	25.00	24.56	98	77-120	5	20		
Ethylbenzene	25.00	24.79	99	78-120	5	26		
m,p-Xylenes	50.00	49.52	99	77-120	6	20		
o-Xylene	25.00	25.71	103	77-120	5	20		
Styrene	25.00	26.01	104	77-120	5	20		
Bromoform	25.00	24.97	100	74-121	2	21		
Isopropylbenzene	25.00	21.49	86	71-120	6	20		
1,1,2,2-Tetrachloroethane	25.00	22.23	89	73-120	1	20		
1,2,3-Trichloropropane	25.00	22.14	89	72-120	2	20		
Propylbenzene	25.00	24.19	97	76-120	7	20		
Bromobenzene	25.00	23.96	96	75-120	5	20		
1,3,5-Trimethylbenzene	25.00	24.77	99	77-120	7	20		
2-Chlorotoluene	25.00	24.12	96	76-120	7	20		
4-Chlorotoluene	25.00	24.08	96	78-120	6	20		
tert-Butylbenzene	25.00	24.76	99	76-120	6	21		
1,2,4-Trimethylbenzene	25.00	25.19	101	77-120	6	20		
sec-Butylbenzene	25.00	25.26	101	80-120	7	21		
para-Isopropyl Toluene	25.00	24.53	98	76-120	6	20		
1,3-Dichlorobenzene	25.00	24.26	97	75-120	6	20		
1,4-Dichlorobenzene	25.00	24.20	97	77-120	5	23		
n-Butylbenzene	25.00	25.51	102	76-120	7	21		
1,2-Dichlorobenzene	25.00	24.55	98	76-120	6	20		
1,2-Dibromo-3-Chloropropane	25.00	21.51	86	65-120	1	22		
1,2,4-Trichlorobenzene	25.00	24.28	97	73-121	5	20		
Hexachlorobutadiene	25.00	24.41	98	73-123	5	25		
Naphthalene	25.00	24.61	98	62-121	1	32		
1,2,3-Trichlorobenzene	25.00	24.93	100	66-123	5	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	101	77-120		
1,2-Dichloroethane-d4	99	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	97	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537566	Batch#:	161282
Matrix:	Water	Analyzed:	03/25/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537566	Batch#:	161282
Matrix:	Water	Analyzed:	03/25/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC537783	Batch#:	161338
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	28.29 b	113	56-140	V3
Chloromethane	25.00	25.68	103	46-142	
Vinyl Chloride	25.00	24.06	96	49-136	
Bromomethane	25.00	26.84	107	42-154	
Chloroethane	25.00	25.98	104	51-133	
Trichlorofluoromethane	25.00	24.73	99	63-135	
Iodomethane	25.00	29.33	117	70-130	
Acetone	25.00	23.28	93	48-130	
1,1-Dichloroethene	25.00	26.27	105	68-133	
Methylene Chloride	25.00	25.96	104	71-120	
Carbon Disulfide	25.00	25.06	100	56-120	
MTBE	25.00	22.48	90	58-120	
trans-1,2-Dichloroethene	25.00	26.52	106	80-120	
Vinyl Acetate	25.00	24.38	98	63-124	
1,1-Dichloroethane	25.00	26.30	105	77-120	
2-Butanone	25.00	22.22	89	57-120	
cis-1,2-Dichloroethene	25.00	25.48	102	75-120	
2,2-Dichloropropane	25.00	27.02	108	72-128	
Chloroform	25.00	24.88	100	78-120	
Bromochloromethane	25.00	25.76	103	78-120	
1,1,1-Trichloroethane	25.00	26.67	107	78-120	
1,1-Dichloropropene	25.00	26.19	105	75-120	
Carbon Tetrachloride	25.00	27.84	111	80-120	
1,2-Dichloroethane	25.00	24.06	96	74-120	
Benzene	25.00	25.75	103	77-120	
Trichloroethene	25.00	24.57	98	78-122	
1,2-Dichloropropane	25.00	24.90	100	76-120	
Bromodichloromethane	25.00	25.54	102	78-120	
Dibromomethane	25.00	24.64	99	77-120	
4-Methyl-2-Pentanone	25.00	21.28	85	65-120	
cis-1,3-Dichloropropene	25.00	25.44	102	76-120	
Toluene	25.00	24.96	100	73-120	
trans-1,3-Dichloropropene	25.00	22.02	88	72-120	
1,1,2-Trichloroethane	25.00	23.81	95	76-120	
2-Hexanone	25.00	21.02	84	57-121	
1,3-Dichloropropane	25.00	23.90	96	75-120	
Tetrachloroethene	25.00	25.85	103	77-120	
Dibromochloromethane	25.00	24.91	100	76-120	

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC537783	Batch#:	161338
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	23.07	92	77-120	
Chlorobenzene	25.00	25.02	100	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.36	97	77-120	
Ethylbenzene	25.00	25.26	101	78-120	
m,p-Xylenes	50.00	50.88	102	77-120	
o-Xylene	25.00	25.83	103	77-120	
Styrene	25.00	26.09	104	77-120	
Bromoform	25.00	24.16	97	74-121	
Isopropylbenzene	25.00	21.87	87	71-120	
1,1,2,2-Tetrachloroethane	25.00	21.20	85	73-120	
1,2,3-Trichloropropane	25.00	21.05	84	72-120	
Propylbenzene	25.00	24.62	98	76-120	
Bromobenzene	25.00	23.49	94	75-120	
1,3,5-Trimethylbenzene	25.00	25.03	100	77-120	
2-Chlorotoluene	25.00	24.32	97	76-120	
4-Chlorotoluene	25.00	23.78	95	78-120	
tert-Butylbenzene	25.00	25.11	100	76-120	
1,2,4-Trimethylbenzene	25.00	25.25	101	77-120	
sec-Butylbenzene	25.00	26.22	105	80-120	
para-Isopropyl Toluene	25.00	24.93	100	76-120	
1,3-Dichlorobenzene	25.00	23.91	96	75-120	
1,4-Dichlorobenzene	25.00	23.81	95	77-120	
n-Butylbenzene	25.00	26.08	104	76-120	
1,2-Dichlorobenzene	25.00	24.15	97	76-120	
1,2-Dibromo-3-Chloropropane	25.00	20.17	81	65-120	
1,2,4-Trichlorobenzene	25.00	23.68	95	73-121	
Hexachlorobutadiene	25.00	24.78	99	73-123	
Naphthalene	25.00	22.94	92	62-121	
1,2,3-Trichlorobenzene	25.00	24.27	97	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	95	78-120	

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537784	Batch#:	161338
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537784	Batch#:	161338
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
MSS Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Type: MS Lab ID: QC537798

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	<0.2000	25.00	28.42	b 114	56-140	V3	
Chloromethane	<0.2000	25.00	26.38	106	46-142		
Vinyl Chloride	4.256	25.00	28.39	97	49-136		
Bromomethane	<0.2000	25.00	24.16	97	42-154		
Chloroethane	<0.2000	25.00	30.51	122	51-133		
Trichlorofluoromethane	<0.2000	25.00	26.43	106	63-135		
Iodomethane	<1.000	25.00	27.04	108	60-140		
Acetone	<1.000	25.00	25.20	101	48-130		
1,1-Dichloroethene	0.2762	25.00	28.15	112	68-133		
Methylene Chloride	<0.1895	25.00	27.94	112	71-120		
Carbon Disulfide	1.328	25.00	28.76	110	56-120		
MTBE	38.03	25.00	62.96	100	58-120		
trans-1,2-Dichloroethene	<0.1385	25.00	28.66	115	80-120		
Vinyl Acetate	<1.000	25.00	23.90	96	63-124		
1,1-Dichloroethane	15.14	25.00	41.89	107	77-120		
2-Butanone	<1.000	25.00	25.74	103	57-120		
cis-1,2-Dichloroethene	0.7819	25.00	27.56	107	75-120		
2,2-Dichloropropane	<0.1039	25.00	25.06	100	72-128		
Chloroform	0.1223	25.00	26.36	105	78-120		
Bromochloromethane	<0.1423	25.00	27.44	110	78-120		
1,1,1-Trichloroethane	<0.1000	25.00	28.51	114	78-120		
1,1-Dichloropropene	<0.1000	25.00	28.34	113	75-120		
Carbon Tetrachloride	<0.1000	25.00	30.19	121 *	80-120	M1	
1,2-Dichloroethane	<0.1000	25.00	25.40	102	74-120		
Benzene	4.294	25.00	31.57	109	77-120		
Trichloroethene	0.5378	25.00	26.68	105	78-122		
1,2-Dichloropropane	<0.1172	25.00	27.02	108	76-120		
Bromodichloromethane	<0.1000	25.00	27.65	109	78-120		
Dibromomethane	<0.1000	25.00	26.92	107	77-120		
4-Methyl-2-Pentanone	<1.000	25.00	26.17	105	65-120		
cis-1,3-Dichloropropene	<0.1000	25.00	26.36	105	76-120		
Toluene	<0.1000	25.00	26.73	107	73-120		
trans-1,3-Dichloropropene	<0.1000	25.00	22.85	91	72-120		
1,1,2-Trichloroethane	<0.1173	25.00	25.85	103	76-120		
2-Hexanone	<1.000	25.00	26.36	105	57-121		
1,3-Dichloropropane	<0.1000	25.00	25.69	103	75-120		
Tetrachloroethene	0.3159	25.00	27.86	110	77-120		
Dibromochloromethane	<0.1000	25.00	26.69	107	76-120		
1,2-Dibromoethane	<0.1000	25.00	25.30	101	77-120		
Chlorobenzene	<0.1000	25.00	26.50	106	78-120		
1,1,1,2-Tetrachloroethane	<0.1000	25.00	25.99	104	77-120		
Ethylbenzene	0.2408	25.00	27.38	109	78-120		
m,p-Xylenes	<0.1000	50.00	54.63	109	77-120		
o-Xylene	<0.1000	25.00	27.69	111	77-120		
Styrene	<0.1000	25.00	27.63	111	77-120		
Bromoform	<0.2000	25.00	26.76	107	74-121		
Isopropylbenzene	1.353	25.00	24.58	93	71-120		
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.17	99	73-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
MSS Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1000	25.00	23.80	95	72-120	
Propylbenzene	0.8510	25.00	27.04	105	76-120	
Bromobenzene	<0.1000	25.00	24.53	98	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.70	107	77-120	
2-Chlorotoluene	<0.1000	25.00	25.64	103	76-120	
4-Chlorotoluene	<0.1000	25.00	25.00	100	78-120	
tert-Butylbenzene	0.6154	25.00	27.53	108	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.99	108	77-120	
sec-Butylbenzene	0.8495	25.00	28.83	112	80-120	
para-Isopropyl Toluene	0.1356	25.00	26.76	106	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.26	101	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	25.03	100	77-120	
n-Butylbenzene	0.5032	25.00	28.46	112	76-120	
1,2-Dichlorobenzene	<0.1000	25.00	25.65	103	76-120	
1,2-Dibromo-3-Chloropropane	<0.3139	25.00	24.89	100	65-120	
1,2,4-Trichlorobenzene	<0.1238	25.00	26.73	107	73-121	
Hexachlorobutadiene	<0.1027	25.00	27.62	110	73-123	
Naphthalene	0.9073	25.00	29.51	114	62-121	
1,2,3-Trichlorobenzene	<0.1000	25.00	27.97	112	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	95	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
MSS Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Type: MSD Lab ID: QC537799

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	28.52 b	114	56-140	0	24	V3	
Chloromethane	25.00	24.96	100	46-142	6	24		
Vinyl Chloride	25.00	28.31	96	49-136	0	24		
Bromomethane	25.00	21.04	84	42-154	14	24		
Chloroethane	25.00	29.98	120	51-133	2	25		
Trichlorofluoromethane	25.00	25.94	104	63-135	2	20		
Iodomethane	25.00	22.78	91	60-140	17	30		
Acetone	25.00	24.27	97	48-130	4	41		
1,1-Dichloroethene	25.00	27.08	107	68-133	4	20		
Methylene Chloride	25.00	26.62	106	71-120	5	20		
Carbon Disulfide	25.00	28.02	107	56-120	3	20		
MTBE	25.00	61.78	95	58-120	2	21		
trans-1,2-Dichloroethene	25.00	27.38	110	80-120	5	24		
Vinyl Acetate	25.00	22.82	91	63-124	5	24		
1,1-Dichloroethane	25.00	39.88	99	77-120	5	20		
2-Butanone	25.00	24.24	97	57-120	6	32		
cis-1,2-Dichloroethene	25.00	26.17	102	75-120	5	20		
2,2-Dichloropropane	25.00	23.53	94	72-128	6	24		
Chloroform	25.00	25.13	100	78-120	5	20		
Bromochloromethane	25.00	26.12	104	78-120	5	20		
1,1,1-Trichloroethane	25.00	27.03	108	78-120	5	20		
1,1-Dichloropropene	25.00	26.98	108	75-120	5	21		
Carbon Tetrachloride	25.00	28.77	115	80-120	5	21		
1,2-Dichloroethane	25.00	24.46	98	74-120	4	20		
Benzene	25.00	30.16	103	77-120	5	20		
Trichloroethene	25.00	25.62	100	78-122	4	20		
1,2-Dichloropropane	25.00	25.69	103	76-120	5	20		
Bromodichloromethane	25.00	26.55	104	78-120	4	20		
Dibromomethane	25.00	25.87	103	77-120	4	20		
4-Methyl-2-Pentanone	25.00	25.38	102	65-120	3	22		
cis-1,3-Dichloropropene	25.00	25.40	102	76-120	4	20		
Toluene	25.00	25.52	102	73-120	5	20		
trans-1,3-Dichloropropene	25.00	22.19	89	72-120	3	20		
1,1,2-Trichloroethane	25.00	25.10	100	76-120	3	20		
2-Hexanone	25.00	25.69	103	57-121	3	25		
1,3-Dichloropropane	25.00	25.01	100	75-120	3	20		
Tetrachloroethene	25.00	26.34	104	77-120	6	20		
Dibromochloromethane	25.00	25.94	104	76-120	3	20		
1,2-Dibromoethane	25.00	24.64	99	77-120	3	20		
Chlorobenzene	25.00	25.52	102	78-120	4	20		
1,1,1,2-Tetrachloroethane	25.00	24.79	99	77-120	5	20		
Ethylbenzene	25.00	26.19	104	78-120	4	26		
m,p-Xylenes	50.00	52.10	104	77-120	5	20		
o-Xylene	25.00	26.48	106	77-120	4	20		
Styrene	25.00	26.47	106	77-120	4	20		
Bromoform	25.00	26.10	104	74-121	3	21		
Isopropylbenzene	25.00	23.76	90	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	24.38	96	73-120	3	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218834	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
MSS Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,2,3-Trichloropropane	25.00	23.01	92	72-120	3	20		
Propylbenzene	25.00	25.91	100	76-120	4	20		
Bromobenzene	25.00	23.87	95	75-120	3	20		
1,3,5-Trimethylbenzene	25.00	25.74	103	77-120	4	20		
2-Chlorotoluene	25.00	24.60	98	76-120	4	20		
4-Chlorotoluene	25.00	24.21	97	78-120	3	20		
tert-Butylbenzene	25.00	26.68	104	76-120	3	21		
1,2,4-Trimethylbenzene	25.00	25.96	104	77-120	4	20		
sec-Butylbenzene	25.00	27.66	107	80-120	4	21		
para-Isopropyl Toluene	25.00	25.69	102	76-120	4	20		
1,3-Dichlorobenzene	25.00	24.35	97	75-120	4	20		
1,4-Dichlorobenzene	25.00	24.28	97	77-120	3	23		
n-Butylbenzene	25.00	27.18	107	76-120	5	21		
1,2-Dichlorobenzene	25.00	24.80	99	76-120	3	20		
1,2-Dibromo-3-Chloropropane	25.00	23.65	95	65-120	5	22		
1,2,4-Trichlorobenzene	25.00	25.67	103	73-121	4	20		
Hexachlorobutadiene	25.00	26.39	106	73-123	5	25		
Naphthalene	25.00	28.81	112	62-121	2	32		
1,2,3-Trichlorobenzene	25.00	26.80	107	66-123	4	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	103	77-120		
1,2-Dichloroethane-d4	99	70-127		
Toluene-d8	99	83-125		
Bromofluorobenzene	95	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 218834 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950120036005 File : nco05 Time : 24-MAR-2010 09:41

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	4822	19.42	
75	30% - 60% of mass 95	12859	51.78	
95		24835	100.00	
96	5% - 9% of mass 95	1752	7.05	
173	< 2% of mass 174	239	1.15	
174	> 50% and < 100% of mass 95	20741	83.52	
175	5% - 9% of mass 174	1520	7.33	
176	> 95% and < 101% of mass 174	20107	96.94	
177	5% - 9% of mass 176	1376	6.84	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218834 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950121459002 File : ncp02 Time : 25-MAR-2010 08:47

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	4456	20.71	
75	30% - 60% of mass 95	11186	51.99	
95		21517	100.00	
96	5% - 9% of mass 95	1581	7.35	
173	< 2% of mass 174	204	1.12	
174	> 50% and < 100% of mass 95	18261	84.87	
175	5% - 9% of mass 174	1425	7.80	
176	> 95% and < 101% of mass 174	18018	98.67	
177	5% - 9% of mass 176	1260	6.99	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218834 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950122909002 File : ncq02 Time : 26-MAR-2010 08:52

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	3728	19.75	
75	30% - 60% of mass 95	9253	49.01	
95		18880	100.00	
96	5% - 9% of mass 95	1264	6.69	
173	< 2% of mass 174	166	1.02	
174	> 50% and < 100% of mass 95	16267	86.16	
175	5% - 9% of mass 174	1206	7.41	
176	> 95% and < 101% of mass 174	15587	95.82	
177	5% - 9% of mass 176	1157	7.42	

Analyst: BO Date: 03/26/10 Reviewer: LW Date: 03/29/10

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218834 MSVOA Water: EPA 8260B

Inst : MSVOA14
 Calnum : 950120036001
 Units : ug/L

Date : 24-MAR-2010 11:10

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	nco08	950120036008	.25/.5PPB	24-MAR-2010 11:10	S14217 (20000X), S14254 (20000X), S14255 (20000X), S14256 (10000X), S14027 (2500X)
L2	nco09	950120036009	0.5/1PPB	24-MAR-2010 11:39	S14217 (10000X), S14254 (10000X), S14255 (10000X), S14256 (5000X), S14027 (2500X)
L3	nco10	950120036010	2PPB	24-MAR-2010 12:08	S14217 (25000X), S14254 (25000X), S14255 (50000X), S14256 (25000X), S14027 (2500X)
L4	nco11	950120036011	5PPB	24-MAR-2010 12:37	S14217 (10000X), S14254 (10000X), S14255 (20000X), S14256 (10000X), S14027 (2500X)
L5	nco12	950120036012	10PPB	24-MAR-2010 13:06	S14217 (5000X), S14254 (5000X), S14255 (10000X), S14256 (5000X), S14027 (2500X)
L6	nco13	950120036013	20PPB	24-MAR-2010 13:35	S14216 (25000X), S14108 (25000X), S14228 (50000X), S13719 (25000X), S14027 (2500X)
L7	nco14	950120036014	50PPB	24-MAR-2010 14:04	S14216 (10000X), S14108 (10000X), S14228 (20000X), S13719 (10000X), S14027 (2500X)
L8	nco15	950120036015	75PPB	24-MAR-2010 14:34	S14216 (6667X), S14108 (6667X), S14228 (13330X), S13719 (6667X), S14027 (2500X)
L9	nco16	950120036016	100PPB	24-MAR-2010 15:03	S14216 (5000X), S14108 (5000X), S14228 (10000X), S13719 (5000X), S14027 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.4426	0.4192	0.4924	0.4686	0.4842	0.5350	0.5214	0.5361	AVRG	R		2.05152		0.4874	9	15	0.05	0.99	
Chloromethane		0.5958	0.5484	0.5476	0.5535	0.5649	0.5607	0.5367	0.5373	AVRG	R		1.79978		0.5556	3	15	0.10	0.99	
Vinyl Chloride	0.6799	0.6473	0.6171	0.6244	0.6037	0.6445	0.6760	0.6429	0.6579	AVRG	R		1.55343		0.6437	4	15	0.05	0.99	
Bromomethane		0.4326	0.4764	0.4409	0.4365	0.4208	0.3917	0.3939	0.4153	AVRG	R		2.34733		0.4260	6	15	0.05	0.99	
Chloroethane		0.4541m	0.4101m	0.3825m	0.3711m	0.3839m	0.3830m	0.3782m	0.3766m	AVRG	R		2.54815		0.3924	7	15	0.05	0.99	
Trichlorofluoromethane		0.6726	0.6740	0.7336	0.6984	0.7170	0.7713	0.9981	0.7820	AVRG	R		1.32296		0.7559	14	15	0.05	0.99	
Acetone			0.2309	0.2128	0.2050	0.1906	0.1893	0.1676	0.1731	AVRG	R		5.11215		0.1956	11	15	0.05	0.99	
1,1-Dichloroethene		0.4876	0.4128	0.3867	0.3690	0.3831	0.4014	0.3623	0.3924	AVRG	R		2.50364		0.3994	10	15	0.05	0.99	
Iodomethane				0.1703	0.2235	0.3291	0.4598	0.4727	0.5564	QUAD	A	-1.0872	0.34702	0.002148	0.3686	0.998	15	0.05	0.99	
Methylene Chloride		0.5355	0.4644	0.4511	0.4481	0.4745	0.4520	0.4457	0.4465	AVRG	R		2.15180		0.4647	7	15	0.05	0.99	
Carbon Disulfide		1.5793	1.4576	1.4697	1.4760	1.6477	1.7140	1.4453	1.6765	AVRG	R		0.64174		1.5583	7	15	0.05	0.99	
MTBE		1.5163	1.4091	1.4161	1.4146	1.5392	1.5374	1.5100	1.5140	AVRG	R		0.67472		1.4821	4	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5027	0.4296	0.4156	0.4198	0.4368	0.4376	0.4261	0.4263	AVRG	R		2.28920		0.4368	6	15	0.05	0.99	
Vinyl Acetate			0.7133	0.7484m	0.7531	1.0818	1.1054	1.0648	1.0764	LINR	R	1.22640	0.91453		0.9347	0.999	15	0.05	0.99	
1,1-Dichloroethane		0.9193	0.8246	0.8044	0.8118	0.8494	0.8368	0.8016	0.8074	AVRG	R		1.20207		0.8319	5	15	0.10	0.99	
2-Butanone			0.2660	0.2620	0.2509	0.2636	0.2649	0.2597	0.2504	AVRG	R		3.85138		0.2596	2	15	0.05	0.99	
2,2-Dichloropropane		0.6968	0.6945	0.6859	0.6647	0.6916	0.7086	0.6837	0.6687	AVRG	R		1.45600		0.6868	2	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6199	0.4989	0.4934	0.4864	0.5122	0.5115	0.4923	0.4997	AVRG	R		1.94444		0.5143	8	15	0.05	0.99	
Chloroform		0.9555	0.8333	0.8207	0.8170	0.8515	0.8406	0.8025	0.8163	AVRG	R		1.18743		0.8422	6	15	0.05	0.99	
Bromochloromethane		0.2827	0.2432	0.2405	0.2363	0.2505	0.2454	0.2380	0.2408	AVRG	R		4.04573		0.2472	6	15	0.05	0.99	
1,1,1-Trichloroethane		0.7348	0.6831	0.6921	0.6683	0.6673	0.6899	0.6761	0.6699	AVRG	R		1.45942		0.6852	3	15	0.05	0.99	
1,1-Dichloropropene		0.3826	0.3841	0.3864	0.3793	0.3771	0.4067	0.4086	0.4007	AVRG	R		2.55961		0.3907	3	15	0.05	0.99	
Carbon Tetrachloride		0.2878	0.3270	0.3425	0.3364	0.3270	0.3586	0.3652	0.3556	AVRG	R		2.96297		0.3375	7	15	0.05	0.99	
1,2-Dichloroethane		0.4792	0.4431	0.4380	0.4304	0.4560	0.4459	0.4302	0.4338	AVRG	R		2.24932		0.4446	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3772	1.1901	1.1801	1.1999	1.2348	1.2498	1.2100	1.2198	AVRG	R		0.81122		1.2327	5	15	0.05	0.99	
Trichloroethene		0.3444	0.3098	0.3096	0.3039	0.3007	0.3104	0.3046	0.3037	AVRG	R		3.21643		0.3109	5	15	0.05	0.99	
1,2-Dichloropropane		0.3460	0.3089	0.3055	0.3052	0.3186	0.3200	0.3069	0.3101	AVRG	R		3.17301		0.3152	4	15	0.05	0.99	
Bromodichloromethane		0.4193	0.3817	0.3816	0.3852	0.4123	0.4134	0.4032	0.4095	AVRG	R		2.49516		0.4008	4	15	0.05	0.99	
Dibromomethane		0.1993	0.2020	0.2016	0.1963	0.2073	0.2064	0.2025	0.2028	AVRG	R		4.94379		0.2023	2	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3081	0.3134	0.3153	0.3396	0.3508	0.3489	0.3398	AVRG	R		3.02275		0.3308	5	15	0.05	0.99	
cis-1,3-Dichloropropene		0.5441	0.4922	0.4996	0.5041	0.5394	0.5388	0.5258	0.5321	AVRG	R		1.91568		0.5220	4	15	0.05	0.99	
Toluene		1.6313	1.4024	1.3869	1.3763	1.3976	1.4047	1.3637	1.3616	AVRG	R		0.70643		1.4156	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5422	0.4955	0.5141	0.5051	0.5449	0.5464	0.5345	0.5389	AVRG	R		1.89501		0.5277	4	15	0.05	0.99	
1,1,2-Trichloroethane		0.1709	0.1676	0.1635	0.1596	0.1670	0.1666	0.1647	0.1635	AVRG	R		6.04475		0.1654	2	15	0.05	0.99	
2-Hexanone			0.2263	0.2307	0.2290	0.2477	0.2581	0.2594	0.2518	AVRG	R		4.11041		0.2433	6	15	0.05	0.99	
1,3-Dichloropropane		0.5837	0.5460	0.5465	0.5293	0.5625	0.5562	0.5438	0.5450	AVRG	R		1.81281		0.5516	3	15	0.05	0.99	
Tetrachloroethene		0.3247	0.3467	0.3361	0.3257	0.3106	0.3335	0.3386	0.3293	AVRG	R		3.02431		0.3307	3	15	0.05	0.99	
Dibromochloromethane		0.3265	0.3061	0.3076	0.3087	0.3313	0.3404	0.3393	0.3438	AVRG	R		3.07271		0.3254	5	15	0.05	0.99	
1,2-Dibromoethane		0.3433	0.3233	0.3193	0.3140	0.3345	0.3337	0.3317	0.3316	AVRG	R		3.04014		0.3289	3	15	0.05	0.99	
Chlorobenzene		1.0623	0.9443	0.9272	0.9311	0.9513	0.9643	0.9437	0.9604	AVRG	R		1.04106		0.9606	4	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3328	0.3090	0.3163	0.3128	0.3293	0.3352	0.3262	0.3314	AVRG	R		3.08518		0.3241	3	15	0.05	0.99	
Ethylbenzene		1.7871m	1.6160	1.5869	1.5866	1.5713	1.6333	1.6135	1.6076	AVRG	R		0.61528		1.6253	4	15	0.05	0.99	
m,p-Xylenes	0.7693	0.6378	0.5849	0.6058	0.6098	0.6076	0.6399	0.6345	0.6405	AVRG	R		1.57066		0.6367	8	15	0.05	0.99	
o-Xylene		0.6209	0.5683	0.5822	0.5896	0.6036	0.6263	0.6156	0.6265	AVRG	R		1.65533		0.6041	4	15	0.05	0.99	
Styrene		1.0275	0.9562	0.9937	0.9993	1.0707	1.1044	1.0870	1.1079	AVRG	R		0.95846		1.0433	5	15	0.05	0.99	
Bromoform		0.2060	0.2242	0.2292	0.2324	0.2583	0.2766	0.2790	0.2836	AVRG	R		4.02161		0.2487	12	15	0.10	0.99	
Isopropylbenzene		2.8438	2.7431	2.7606	2.7613	2.6789	2.8416	2.8512	2.8256	AVRG	R		0.35865		2.7883	2	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.8117	0.7951	0.7716	0.7551	0.8079	0.7981	0.7869	0.7728	AVRG	R		1.26998		0.7874	2	15	0.30	0.99	
1,2,3-Trichloropropane		0.9355	0.8232	0.7917	0.7812	0.8116	0.8014	0.7896	0.7766	AVRG	R		1.22874		0.8138	6	15	0.05	0.99	
Propylbenzene		3.7017	3.4125	3.4429	3.4238	3.2785	3.4373	3.4043	3.3316	AVRG	R		0.29162		3.4291	4	15	0.05	0.99	
Bromobenzene		0.9453	0.7804	0.7544	0.7529	0.7826	0.7771	0.7577	0.7655	AVRG	R		1.26666		0.7895	8	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.4806	2.2832	2.3037	2.3281	2.2835	2.3912	2.3607	2.3525	AVRG	R		0.42590		2.3479	3	15	0.05	0.99	
2-Chlorotoluene		2.7852	2.3363	2.2875	2.3102	2.2860	2.3198	2.2472	2.2418	AVRG	R		0.42521		2.3518	8	15	0.05	0.99	
4-Chlorotoluene		2.5040	2.1113	2.1336	2.1196	2.1367	2.1612	2.0893	2.0919	AVRG	R		0.46116		2.1684	6	15	0.05	0.99	
tert-Butylbenzene		2.1704	2.0127	2.0535	2.0436	1.9424	2.0836	2.0785	2.0446	AVRG	R		0.48694		2.0536	3	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.4310	2.3013	2.3636	2.3875	2.3837	2.4737	2.4179	2.4295	AVRG	R		0.41692		2.3985	2	15	0.05	0.99	
sec-Butylbenzene		2.9194	2.8866	3.0315	2.9813	2.7923	3.0490	3.0863	3.0031	AVRG	R		0.33685		2.9687	3	15	0.05	0.99	
para-Isopropyl Toluene		2.4460m	2.3347	2.5292	2.5141	2.4467	2.6513	2.6658	2.6210	AVRG	R		0.39587		2.5261	5	15	0.05	0.99	
1,3-Dichlorobenzene		1.6673	1.4359	1.4353	1.4216	1.4569	1.4668	1.4205	1.4302	AVRG	R		0.68175		1.4668	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.7629	1.5398	1.5003	1.4896	1.5099	1.5285	1.4733	1.4820	AVRG	R		0.65113		1.5358	6	15	0.05	0.99	
n-Butylbenzene		2.2433	2.1917	2.2993	2.2754	2.1925	2.3956	2.4185	2.3521	AVRG	R		0.43553		2.2961	4	15	0.05	0.99	
1,2-Dichlorobenzene		1.5697	1.3691	1.3644	1.3552	1.4053	1.4074	1.3594	1.3697	AVRG	R		0.71427		1.4000	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1856	0.1666	0.1585	0.1677	0.1721	0.1728	0.1668	AVRG	R		5.88259		0.1700	5	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.9426	0.8563	0.8839	0.9034	0.9556	0.9969	0.9772	0.9845	AVRG	R		1.06660		0.9376	5	15	0.05	0.99	
Hexachlorobutadiene		0.3935	0.4189	0.4508	0.4325	0.4046	0.4533	0.4612	0.4399	AVRG	R		2.31565		0.4318	6	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		2.1209	2.1073	2.1795	2.2301	2.4717	2.6261	2.5916	2.5804	AVRG	R		0.42311		2.3635	10	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.8740	0.7694	0.8057	0.8120	0.8698	0.9037	0.8842	0.8843	AVRG	R		1.17594		0.8504	6	15	0.05	0.99	
Dibromofluoromethane	0.4594	0.4641	0.4613	0.4609	0.4612	0.4651	0.4681	0.4633	0.4660	AVRG	R		2.15861		0.4633	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3725	0.3739	0.3700	0.3720	0.3743	0.3741	0.3782	0.3786	0.3814	AVRG	R		2.66655		0.3750	1	15	0.05	0.99	
Toluene-d8	1.3469	1.3415	1.3492	1.3473	1.3460	1.3328	1.3201	1.3219	1.3158	AVRG	R		0.74865		1.3357	1	15	0.05	0.99	
Bromofluorobenzene	0.9415	0.9379	0.9224	0.9147	0.9148	0.9031	0.8964	0.8982	0.8915	AVRG	R		1.09482		0.9134	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-9	2.000	-14	5.000	1	10.00	-4	20.00	-1	50.00	10	75.00	7	100.0	10
Chloromethane			1.000	7	2.000	-1	5.000	-1	10.00	0	20.00	2	50.00	1	75.00	-3	100.0	-3
Vinyl Chloride	0.500	6	1.000	1	2.000	-4	5.000	-3	10.00	-6	20.00	0	50.00	5	75.00	0	100.0	2
Bromomethane			1.000	2	2.000	12	5.000	4	10.00	2	20.00	-1	50.00	-8	75.00	-8	100.0	-3
Chloroethane			1.000	16	2.000	5	5.000	-3	10.00	-5	20.00	-2	50.00	-2	75.00	-4	100.0	-4
Trichlorofluoromethane			1.000	-11	2.000	-11	5.000	-3	10.00	-8	20.00	-5	50.00	2	75.00	32	100.0	3
Acetone					2.000	18	5.000	9	10.00	5	20.00	-3	50.00	-3	75.00	-14	100.0	-11
1,1-Dichloroethene			0.500	22	2.000	3	5.000	-3	10.00	-8	20.00	-4	50.00	0	75.00	-9	100.0	-2
Iodomethane							5.000	8	10.00	-9	20.00	-2	50.00	5	75.00	-3	100.0	1
Methylene Chloride			0.500	15	2.000	0	5.000	-3	10.00	-4	20.00	2	50.00	-3	75.00	-4	100.0	-4
Carbon Disulfide			0.500	1	2.000	-6	5.000	-6	10.00	-5	20.00	6	50.00	10	75.00	-7	100.0	8
MTBE			0.500	2	2.000	-5	5.000	-4	10.00	-5	20.00	4	50.00	4	75.00	2	100.0	2
trans-1,2-Dichloroethene			0.500	15	2.000	-2	5.000	-5	10.00	-4	20.00	0	50.00	0	75.00	-2	100.0	-2
Vinyl Acetate					2.000	27	5.000	-7	10.00	-19	20.00	5	50.00	4	75.00	-1	100.0	0
1,1-Dichloroethane			0.500	11	2.000	-1	5.000	-3	10.00	-2	20.00	2	50.00	1	75.00	-4	100.0	-3
2-Butanone					2.000	2	5.000	1	10.00	-3	20.00	2	50.00	2	75.00	0	100.0	-4
2,2-Dichloropropane			0.500	1	2.000	1	5.000	0	10.00	-3	20.00	1	50.00	3	75.00	0	100.0	-3
cis-1,2-Dichloroethene			0.500	21	2.000	-3	5.000	-4	10.00	-5	20.00	0	50.00	-1	75.00	-4	100.0	-3
Chloroform			0.500	13	2.000	-1	5.000	-3	10.00	-3	20.00	1	50.00	0	75.00	-5	100.0	-3
Bromochloromethane			0.500	14	2.000	-2	5.000	-3	10.00	-4	20.00	1	50.00	-1	75.00	-4	100.0	-3
1,1,1-Trichloroethane			0.500	7	2.000	0	5.000	1	10.00	-2	20.00	-3	50.00	1	75.00	-1	100.0	-2
1,1-Dichloropropene			0.500	-2	2.000	-2	5.000	-1	10.00	-3	20.00	-3	50.00	4	75.00	5	100.0	3
Carbon Tetrachloride			0.500	-15	2.000	-3	5.000	1	10.00	0	20.00	-3	50.00	6	75.00	8	100.0	5
1,2-Dichloroethane			0.500	8	2.000	0	5.000	-1	10.00	-3	20.00	3	50.00	0	75.00	-3	100.0	-2
Benzene			0.500	12	2.000	-3	5.000	-4	10.00	-3	20.00	0	50.00	1	75.00	-2	100.0	-1
Trichloroethene			0.500	11	2.000	0	5.000	0	10.00	-2	20.00	-3	50.00	0	75.00	-2	100.0	-2
1,2-Dichloropropane			0.500	10	2.000	-2	5.000	-3	10.00	-3	20.00	1	50.00	2	75.00	-3	100.0	-2
Bromodichloromethane			0.500	5	2.000	-5	5.000	-5	10.00	-4	20.00	3	50.00	3	75.00	1	100.0	2
Dibromomethane			0.500	-1	2.000	0	5.000	0	10.00	-3	20.00	2	50.00	2	75.00	0	100.0	0
4-Methyl-2-Pentanone					2.000	-7	5.000	-5	10.00	-5	20.00	3	50.00	6	75.00	5	100.0	3
cis-1,3-Dichloropropene			0.500	4	2.000	-6	5.000	-4	10.00	-3	20.00	3	50.00	3	75.00	1	100.0	2
Toluene			0.500	15	2.000	-1	5.000	-2	10.00	-3	20.00	-1	50.00	-1	75.00	-4	100.0	-4
trans-1,3-Dichloropropene			0.500	3	2.000	-6	5.000	-3	10.00	-4	20.00	3	50.00	4	75.00	1	100.0	2
1,1,2-Trichloroethane			0.500	3	2.000	1	5.000	-1	10.00	-4	20.00	1	50.00	1	75.00	0	100.0	-1
2-Hexanone					2.000	-7	5.000	-5	10.00	-6	20.00	2	50.00	6	75.00	7	100.0	4
1,3-Dichloropropane			0.500	6	2.000	-1	5.000	-1	10.00	-4	20.00	2	50.00	1	75.00	-1	100.0	-1
Tetrachloroethene			0.500	-2	2.000	5	5.000	2	10.00	-2	20.00	-6	50.00	1	75.00	2	100.0	0
Dibromochloromethane			0.500	0	2.000	-6	5.000	-5	10.00	-5	20.00	2	50.00	5	75.00	4	100.0	6
1,2-Dibromoethane			0.500	4	2.000	-2	5.000	-3	10.00	-5	20.00	2	50.00	1	75.00	1	100.0	1
Chlorobenzene			0.500	11	2.000	-2	5.000	-3	10.00	-3	20.00	-1	50.00	0	75.00	-2	100.0	0
1,1,1,2-Tetrachloroethane			0.500	3	2.000	-5	5.000	-2	10.00	-3	20.00	2	50.00	3	75.00	1	100.0	2
Ethylbenzene			0.500	10	2.000	-1	5.000	-2	10.00	-2	20.00	-3	50.00	0	75.00	-1	100.0	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	21	1.000	0	4.000	-8	10.00	-5	20.00	-4	40.00	-5	100.0	0	150.0	0	200.0	1
o-Xylene			0.500	3	2.000	-6	5.000	-4	10.00	-2	20.00	0	50.00	4	75.00	2	100.0	4
Styrene			0.500	-2	2.000	-8	5.000	-5	10.00	-4	20.00	3	50.00	6	75.00	4	100.0	6
Bromoform			0.500	-17	2.000	-10	5.000	-8	10.00	-7	20.00	4	50.00	11	75.00	12	100.0	14
Isopropylbenzene			0.500	2	2.000	-2	5.000	-1	10.00	-1	20.00	-4	50.00	2	75.00	2	100.0	1
1,1,2,2-Tetrachloroethane			0.500	3	2.000	1	5.000	-2	10.00	-4	20.00	3	50.00	1	75.00	0	100.0	-2
1,2,3-Trichloropropane			0.500	15	2.000	1	5.000	-3	10.00	-4	20.00	0	50.00	-2	75.00	-3	100.0	-5
Propylbenzene			0.500	8	2.000	0	5.000	0	10.00	0	20.00	-4	50.00	0	75.00	-1	100.0	-3
Bromobenzene			0.500	20	2.000	-1	5.000	-4	10.00	-5	20.00	-1	50.00	-2	75.00	-4	100.0	-3
1,3,5-Trimethylbenzene			0.500	6	2.000	-3	5.000	-2	10.00	-1	20.00	-3	50.00	2	75.00	1	100.0	0
2-Chlorotoluene			0.500	18	2.000	-1	5.000	-3	10.00	-2	20.00	-3	50.00	-1	75.00	-4	100.0	-5
4-Chlorotoluene			0.500	15	2.000	-3	5.000	-2	10.00	-2	20.00	-1	50.00	0	75.00	-4	100.0	-4
tert-Butylbenzene			0.500	6	2.000	-2	5.000	0	10.00	0	20.00	-5	50.00	1	75.00	1	100.0	0
1,2,4-Trimethylbenzene			0.500	1	2.000	-4	5.000	-1	10.00	0	20.00	-1	50.00	3	75.00	1	100.0	1
sec-Butylbenzene			0.500	-2	2.000	-3	5.000	2	10.00	0	20.00	-6	50.00	3	75.00	4	100.0	1
para-Isopropyl Toluene			0.500	-3	2.000	-8	5.000	0	10.00	0	20.00	-3	50.00	5	75.00	6	100.0	4
1,3-Dichlorobenzene			0.500	14	2.000	-2	5.000	-2	10.00	-3	20.00	-1	50.00	0	75.00	-3	100.0	-2
1,4-Dichlorobenzene			0.500	15	2.000	0	5.000	-2	10.00	-3	20.00	-2	50.00	0	75.00	-4	100.0	-4
n-Butylbenzene			0.500	-2	2.000	-5	5.000	0	10.00	-1	20.00	-5	50.00	4	75.00	5	100.0	2
1,2-Dichlorobenzene			0.500	12	2.000	-2	5.000	-3	10.00	-3	20.00	0	50.00	1	75.00	-3	100.0	-2
1,2-Dibromo-3-Chloropropane					2.000	9	5.000	-2	10.00	-7	20.00	-1	50.00	1	75.00	2	100.0	-2
1,2,4-Trichlorobenzene			0.500	1	2.000	-9	5.000	-6	10.00	-4	20.00	2	50.00	6	75.00	4	100.0	5
Hexachlorobutadiene			0.500	-9	2.000	-3	5.000	4	10.00	0	20.00	-6	50.00	5	75.00	7	100.0	2
Naphthalene			0.500	-10	2.000	-11	5.000	-8	10.00	-6	20.00	5	50.00	11	75.00	10	100.0	9
1,2,3-Trichlorobenzene			0.500	3	2.000	-10	5.000	-5	10.00	-5	20.00	2	50.00	6	75.00	4	100.0	4
Dibromofluoromethane	50.00	-1	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	0	50.00	1
1,2-Dichloroethane-d4	50.00	-1	50.00	0	50.00	-1	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	1	50.00	2
Toluene-d8	50.00	1	50.00	0	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	-1
Bromofluorobenzene	50.00	3	50.00	3	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	-2

BO 03/25/10 [Chloroethane]: Corrected baseline noise or negative peak in all levels.

BO 03/25/10 [Vinyl Acetate]: Corrected baseline noise or negative peak in 5PPB (nc011).

BO 03/25/10 [Ethylbenzene]: Separated from coeluting peak1PPB (nc09).

BO 03/25/10 [para-Isopropyl Toluene]: Corrected baseline noise or negative peak1PPB (nc09).

BO 03/25/10 [2-Chloroethylvinylether]: Cannot report 8260C due to ICV failure

Analyst: BO

Date: 03/25/10

Reviewer: LW

Date: 03/25/10

m>manual integration

X=A: Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); X=R: Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218834 MSVOA Water
EPA 8260B

Inst : MSVOA14
Calnum : 950120036001

Cal Date : 24-MAR-2010

ICV 950121459004 (ncp04 25-MAR-2010) stds: S14253 (10000X), S13925 (10000X),
S14144 (10000X), S14236 (10000X), S14027 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	27.91	ug/L	12	25	
Chloromethane	25.00	25.82	ug/L	3	25	
Vinyl Chloride	25.00	24.18	ug/L	-3	25	
Bromomethane	25.00	27.66	ug/L	11	25	
Chloroethane	25.00	26.23	ug/L	5	25	m
Trichlorofluoromethane	25.00	25.11	ug/L	0	25	
Acetone	25.00	28.27	ug/L	13	25	
1,1-Dichloroethene	25.00	24.95	ug/L	0	25	
Iodomethane	25.00	30.56	ug/L	22	25	
Methylene Chloride	25.00	26.13	ug/L	5	25	
Carbon Disulfide	25.00	23.74	ug/L	-5	25	
MTBE	25.00	23.12	ug/L	-8	25	
trans-1,2-Dichloroethene	25.00	26.96	ug/L	8	25	
Vinyl Acetate	25.00	25.06	ug/L	0	25	
1,1-Dichloroethane	25.00	26.33	ug/L	5	25	
2-Butanone	25.00	24.81	ug/L	-1	25	
2,2-Dichloropropane	25.00	26.87	ug/L	7	25	
cis-1,2-Dichloroethene	25.00	26.29	ug/L	5	25	
Chloroform	25.00	25.57	ug/L	2	25	
Bromochloromethane	25.00	26.29	ug/L	5	25	
1,1,1-Trichloroethane	25.00	25.87	ug/L	3	25	
1,1-Dichloropropene	25.00	25.56	ug/L	2	25	
Carbon Tetrachloride	25.00	26.66	ug/L	7	25	
1,2-Dichloroethane	25.00	25.03	ug/L	0	25	
Benzene	25.00	26.28	ug/L	5	25	
Trichloroethene	25.00	25.25	ug/L	1	25	
1,2-Dichloropropane	25.00	25.52	ug/L	2	25	
Bromodichloromethane	25.00	26.48	ug/L	6	25	
Dibromomethane	25.00	25.64	ug/L	3	25	
4-Methyl-2-Pentanone	25.00	21.99	ug/L	-12	25	
cis-1,3-Dichloropropene	25.00	26.20	ug/L	5	25	
Toluene	25.00	25.69	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	23.19	ug/L	-7	25	
1,1,2-Trichloroethane	25.00	24.69	ug/L	-1	25	
2-Hexanone	25.00	23.70	ug/L	-5	25	
1,3-Dichloropropane	25.00	24.74	ug/L	-1	25	
Tetrachloroethene	25.00	26.02	ug/L	4	25	
Dibromochloromethane	25.00	25.85	ug/L	3	25	
1,2-Dibromoethane	25.00	24.24	ug/L	-3	25	
Chlorobenzene	25.00	26.07	ug/L	4	25	
1,1,1,2-Tetrachloroethane	25.00	25.81	ug/L	3	25	
Ethylbenzene	25.00	26.05	ug/L	4	25	
m,p-Xylenes	50.00	52.37	ug/L	5	25	
o-Xylene	25.00	27.02	ug/L	8	25	
Styrene	25.00	27.30	ug/L	9	25	
Bromoform	25.00	25.59	ug/L	2	25	
Isopropylbenzene	25.00	22.89	ug/L	-8	25	
1,1,2,2-Tetrachloroethane	25.00	22.41	ug/L	-10	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	22.63	ug/L	-9	25	
Propylbenzene	25.00	25.84	ug/L	3	25	
Bromobenzene	25.00	25.28	ug/L	1	25	
1,3,5-Trimethylbenzene	25.00	26.45	ug/L	6	25	
2-Chlorotoluene	25.00	25.86	ug/L	3	25	
4-Chlorotoluene	25.00	25.66	ug/L	3	25	
tert-Butylbenzene	25.00	26.37	ug/L	5	25	
1,2,4-Trimethylbenzene	25.00	26.81	ug/L	7	25	
sec-Butylbenzene	25.00	27.01	ug/L	8	25	
para-Isopropyl Toluene	25.00	26.17	ug/L	5	25	
1,3-Dichlorobenzene	25.00	25.84	ug/L	3	25	
1,4-Dichlorobenzene	25.00	25.52	ug/L	2	25	
n-Butylbenzene	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	25.00	25.96	ug/L	4	25	
1,2-Dibromo-3-Chloropropane	25.00	21.73	ug/L	-13	25	
1,2,4-Trichlorobenzene	25.00	25.48	ug/L	2	25	
Hexachlorobutadiene	25.00	25.74	ug/L	3	25	
Naphthalene	25.00	24.97	ug/L	0	25	
1,2,3-Trichlorobenzene	25.00	26.12	ug/L	4	25	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 218834 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : QC537564 IDF : 1.0
 Seqnum : 950121459004.4 File : ncp04 Time : 25-MAR-2010 09:51
 Cal : 950120036001 Caldate : 24-MAR-2010
 Standards: S14253 (10000X), S13925 (10000X), S14144 (10000X), S14236 (10000X),
 S14027 (2500X)

Analyte	Avg		Spiked	Quant	Units	%D	Max	Flags
	RF/CF	RF/CF						
Freon 12	0.4874	0.5442	25.00	27.91	ug/L	12	25	u
Chloromethane	0.5556	0.5738	25.00	25.82	ug/L	3	25	u
Vinyl Chloride	0.6437	0.6227	25.00	24.18	ug/L	-3	25	u
Bromomethane	0.4260	0.4713	25.00	27.66	ug/L	11	25	u
Chloroethane	0.3924	0.4117	25.00	26.23	ug/L	5	25	m u
Trichlorofluoromethane	0.7559	0.7591	25.00	25.11	ug/L	0	25	u
Iodomethane	0.3686	0.4609	25.00	30.56	ug/L	22	25	u
Acetone	0.1956	0.2212	25.00	28.27	ug/L	13	25	u
1,1-Dichloroethene	0.3994	0.3986	25.00	24.95	ug/L	0	25	u
Methylene Chloride	0.4647	0.4857	25.00	26.13	ug/L	5	25	u
Carbon Disulfide	1.5583	1.4800	25.00	23.74	ug/L	-5	25	u
MTBE	1.4821	1.3705	25.00	23.12	ug/L	-8	25	u
trans-1,2-Dichloroethene	0.4368	0.4710	25.00	26.96	ug/L	8	25	u
Vinyl Acetate	0.9347	1.0424	25.00	25.06	ug/L	0	25	u
1,1-Dichloroethane	0.8319	0.8761	25.00	26.33	ug/L	5	25	u
2-Butanone	0.2596	0.2577	25.00	24.81	ug/L	-1	25	u
cis-1,2-Dichloroethene	0.5143	0.5409	25.00	26.29	ug/L	5	25	u
2,2-Dichloropropane	0.6868	0.7382	25.00	26.87	ug/L	7	25	u
Chloroform	0.8422	0.8615	25.00	25.57	ug/L	2	25	u
Bromochloromethane	0.2472	0.2599	25.00	26.29	ug/L	5	25	u
1,1,1-Trichloroethane	0.6852	0.7091	25.00	25.87	ug/L	3	25	u
1,1-Dichloropropene	0.3907	0.3995	25.00	25.56	ug/L	2	25	u
Carbon Tetrachloride	0.3375	0.3598	25.00	26.66	ug/L	7	25	u
1,2-Dichloroethane	0.4446	0.4450	25.00	25.03	ug/L	0	25	u
Benzene	1.2327	1.2958	25.00	26.28	ug/L	5	25	u
Trichloroethene	0.3109	0.3140	25.00	25.25	ug/L	1	25	u
1,2-Dichloropropane	0.3152	0.3217	25.00	25.52	ug/L	2	25	u
Bromodichloromethane	0.4008	0.4245	25.00	26.48	ug/L	6	25	u
Dibromomethane	0.2023	0.2075	25.00	25.64	ug/L	3	25	u
4-Methyl-2-Pentanone	0.3308	0.2910	25.00	21.99	ug/L	-12	25	u
cis-1,3-Dichloropropene	0.5220	0.5470	25.00	26.20	ug/L	5	25	u
Toluene	1.4156	1.4544	25.00	25.69	ug/L	3	25	u
trans-1,3-Dichloropropene	0.5277	0.4896	25.00	23.19	ug/L	-7	25	u
1,1,2-Trichloroethane	0.1654	0.1634	25.00	24.69	ug/L	-1	25	u
2-Hexanone	0.2433	0.2307	25.00	23.70	ug/L	-5	25	u
1,3-Dichloropropane	0.5516	0.5460	25.00	24.74	ug/L	-1	25	u
Tetrachloroethene	0.3307	0.3441	25.00	26.02	ug/L	4	25	u
Dibromochloromethane	0.3254	0.3365	25.00	25.85	ug/L	3	25	u
1,2-Dibromoethane	0.3289	0.3189	25.00	24.24	ug/L	-3	25	u
Chlorobenzene	0.9606	1.0018	25.00	26.07	ug/L	4	25	u
1,1,1,2-Tetrachloroethane	0.3241	0.3347	25.00	25.81	ug/L	3	25	u
Ethylbenzene	1.6253	1.6934	25.00	26.05	ug/L	4	25	u
m,p-Xylenes	0.6367	0.6668	50.00	52.37	ug/L	5	25	u
o-Xylene	0.6041	0.6529	25.00	27.02	ug/L	8	25	u
Styrene	1.0433	1.1392	25.00	27.30	ug/L	9	25	u
Bromoform	0.2487	0.2546	25.00	25.59	ug/L	2	25	u
Isopropylbenzene	2.7883	2.5529	25.00	22.89	ug/L	-8	25	u

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	0.7874	0.7058	25.00	22.41	ug/L	-10	25	u
1,2,3-Trichloropropane	0.8138	0.7366	25.00	22.63	ug/L	-9	25	u
Propylbenzene	3.4291	3.5444	25.00	25.84	ug/L	3	25	u
Bromobenzene	0.7895	0.7985	25.00	25.28	ug/L	1	25	u
1,3,5-Trimethylbenzene	2.3479	2.4844	25.00	26.45	ug/L	6	25	u
2-Chlorotoluene	2.3518	2.4325	25.00	25.86	ug/L	3	25	u
4-Chlorotoluene	2.1684	2.2258	25.00	25.66	ug/L	3	25	u
tert-Butylbenzene	2.0536	2.1659	25.00	26.37	ug/L	5	25	u
1,2,4-Trimethylbenzene	2.3985	2.5720	25.00	26.81	ug/L	7	25	u
sec-Butylbenzene	2.9687	3.2078	25.00	27.01	ug/L	8	25	u
para-Isopropyl Toluene	2.5261	2.6438	25.00	26.17	ug/L	5	25	u
1,3-Dichlorobenzene	1.4668	1.5161	25.00	25.84	ug/L	3	25	u
1,4-Dichlorobenzene	1.5358	1.5675	25.00	25.52	ug/L	2	25	u
n-Butylbenzene	2.2961	2.5129	25.00	27.36	ug/L	9	25	u
1,2-Dichlorobenzene	1.4000	1.4537	25.00	25.96	ug/L	4	25	u
1,2-Dibromo-3-Chloropropane	0.1700	0.1478	25.00	21.73	ug/L	-13	25	u
1,2,4-Trichlorobenzene	0.9376	0.9556	25.00	25.48	ug/L	2	25	u
Hexachlorobutadiene	0.4318	0.4447	25.00	25.74	ug/L	3	25	u
Naphthalene	2.3635	2.3605	25.00	24.97	ug/L	0	25	u
1,2,3-Trichlorobenzene	0.8504	0.8883	25.00	26.12	ug/L	4	25	u

ISTD (ICAL ncol4)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	750650	717300	-4.44	11.53	11.53	0.00
1,4-Difluorobenzene	1177090	1129178	-4.07	12.37	12.37	0.00
Chlorobenzene-d5	1151283	1090354	-5.29	15.20	15.20	0.00
1,4-Dichlorobenzene-d4	645405	611487	-5.26	17.26	17.26	0.00

BO 03/25/10 [Chloroethane]: Integrated to match integration of ICAL and CCV.
[general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

m=manual integration u=use

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : 20PPB IDF : 1.0
 Seqnum : 950121459003.1 File : ncp03 Time : 25-MAR-2010 09:05
 Cal : 950120036001 Caldate : 24-MAR-2010
 Standards: S14216 (25000X), S14108 (25000X), S14228 (50000X), S13719 (25000X), S14027 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.4874	0.5209	20.00	21.37	ug/L	7	20	0.0500	
Chloromethane	0.5556	0.5950	20.00	21.42	ug/L	7	20	0.1000	
Vinyl Chloride	0.6437	0.6746	20.00	20.96	ug/L	5	20	0.0500	
Bromomethane	0.4260	0.4702	20.00	22.07	ug/L	10	20	0.0500	
Chloroethane	0.3924	0.4083	20.00	20.81	ug/L	4	20	0.0500	m
Trichlorofluoromethane	0.7559	0.7422	20.00	19.64	ug/L	-2	20	0.0500	
Acetone	0.1956	0.1900	20.00	19.43	ug/L	-3	20	0.0500	
1,1-Dichloroethene	0.3994	0.3706	20.00	18.56	ug/L	-7	20	0.0500	
Iodomethane	0.3686	0.3376	20.00	20.09	ug/L	0	20	0.0500	
Methylene Chloride	0.4647	0.4785	20.00	20.59	ug/L	3	20	0.0500	
Carbon Disulfide	1.5583	1.5128	20.00	19.42	ug/L	-3	20	0.0500	
MTBE	1.4821	1.4546	20.00	19.63	ug/L	-2	20	0.0500	
trans-1,2-Dichloroethene	0.4368	0.4481	20.00	20.52	ug/L	3	20	0.0500	
Vinyl Acetate	0.9347	1.0008	20.00	19.53	ug/L	-2	20	0.0500	
1,1-Dichloroethane	0.8319	0.8608	20.00	20.69	ug/L	3	20	0.1000	
2-Butanone	0.2596	0.2319	20.00	17.86	ug/L	-11	20	0.0500	
2,2-Dichloropropane	0.6868	0.7341	20.00	21.38	ug/L	7	20	0.0500	
cis-1,2-Dichloroethene	0.5143	0.5228	20.00	20.33	ug/L	2	20	0.0500	
Chloroform	0.8422	0.8669	20.00	20.59	ug/L	3	20	0.0500	
Bromochloromethane	0.2472	0.2562	20.00	20.73	ug/L	4	20	0.0500	
1,1,1-Trichloroethane	0.6852	0.6803	20.00	19.86	ug/L	-1	20	0.0500	
1,1-Dichloropropene	0.3907	0.3889	20.00	19.91	ug/L	0	20	0.0500	
Carbon Tetrachloride	0.3375	0.3408	20.00	20.20	ug/L	1	20	0.0500	
1,2-Dichloroethane	0.4446	0.4492	20.00	20.21	ug/L	1	20	0.0500	
Benzene	1.2327	1.2671	20.00	20.56	ug/L	3	20	0.0500	
Trichloroethene	0.3109	0.3109	20.00	20.00	ug/L	0	20	0.0500	
1,2-Dichloropropane	0.3152	0.3265	20.00	20.72	ug/L	4	20	0.0500	
Bromodichloromethane	0.4008	0.4184	20.00	20.88	ug/L	4	20	0.0500	
Dibromomethane	0.2023	0.2022	20.00	20.00	ug/L	0	20	0.0500	
4-Methyl-2-Pentanone	0.3308	0.2828	20.00	17.10	ug/L	-15	20	0.0500	
cis-1,3-Dichloropropene	0.5220	0.5463	20.00	20.93	ug/L	5	20	0.0500	
Toluene	1.4156	1.4197	20.00	20.06	ug/L	0	20	0.0500	
trans-1,3-Dichloropropene	0.5277	0.5404	20.00	20.48	ug/L	2	20	0.0500	
1,1,2-Trichloroethane	0.1654	0.1614	20.00	19.52	ug/L	-2	20	0.0500	
2-Hexanone	0.2433	0.2123	20.00	17.45	ug/L	-13	20	0.0500	
1,3-Dichloropropane	0.5516	0.5453	20.00	19.77	ug/L	-1	20	0.0500	
Tetrachloroethene	0.3307	0.3225	20.00	19.51	ug/L	-2	20	0.0500	
Dibromochloromethane	0.3254	0.3272	20.00	20.11	ug/L	1	20	0.0500	
1,2-Dibromoethane	0.3289	0.3168	20.00	19.26	ug/L	-4	20	0.0500	
Chlorobenzene	0.9606	0.9836	20.00	20.48	ug/L	2	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3241	0.3350	20.00	20.67	ug/L	3	20	0.0500	
Ethylbenzene	1.6253	1.6189	20.00	19.92	ug/L	0	20	0.0500	
m,p-Xylenes	0.6367	0.6371	40.00	40.03	ug/L	0	20	0.0500	
o-Xylene	0.6041	0.6270	20.00	20.76	ug/L	4	20	0.0500	
Styrene	1.0433	1.0975	20.00	21.04	ug/L	5	20	0.0500	
Bromoform	0.2487	0.2425	20.00	19.50	ug/L	-2	20	0.1000	
Isopropylbenzene	2.7883	2.7015	20.00	19.38	ug/L	-3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7874	0.7049	20.00	17.91	ug/L	-10	20	0.3000	
1,2,3-Trichloropropane	0.8138	0.7176	20.00	17.63	ug/L	-12	20	0.0500	
Propylbenzene	3.4291	3.3399	20.00	19.48	ug/L	-3	20	0.0500	
Bromobenzene	0.7895	0.7812	20.00	19.79	ug/L	-1	20	0.0500	
1,3,5-Trimethylbenzene	2.3479	2.3298	20.00	19.85	ug/L	-1	20	0.0500	
2-Chlorotoluene	2.3518	2.3295	20.00	19.81	ug/L	-1	20	0.0500	
4-Chlorotoluene	2.1684	2.1778	20.00	20.09	ug/L	0	20	0.0500	
tert-Butylbenzene	2.0536	1.9702	20.00	19.19	ug/L	-4	20	0.0500	
1,2,4-Trimethylbenzene	2.3985	2.4394	20.00	20.34	ug/L	2	20	0.0500	
sec-Butylbenzene	2.9687	2.7893	20.00	18.79	ug/L	-6	20	0.0500	
para-Isopropyl Toluene	2.5261	2.4471	20.00	19.37	ug/L	-3	20	0.0500	
1,3-Dichlorobenzene	1.4668	1.4714	20.00	20.06	ug/L	0	20	0.0500	
1,4-Dichlorobenzene	1.5358	1.5254	20.00	19.86	ug/L	-1	20	0.0500	
n-Butylbenzene	2.2961	2.1705	20.00	18.91	ug/L	-5	20	0.0500	
1,2-Dichlorobenzene	1.4000	1.3916	20.00	19.88	ug/L	-1	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1700	0.1435	20.00	16.88	ug/L	-16	20	0.0500	
1,2,4-Trichlorobenzene	0.9376	0.9345	20.00	19.94	ug/L	0	20	0.0500	
Hexachlorobutadiene	0.4318	0.3712	20.00	17.19	ug/L	-14	20	0.0500	
Naphthalene	2.3635	2.1617	20.00	18.29	ug/L	-9	20	0.0500	
1,2,3-Trichlorobenzene	0.8504	0.8191	20.00	19.26	ug/L	-4	20	0.0500	
Dibromofluoromethane	0.4633	0.4623	50.00	49.90	ug/L	0	20	0.0500	
1,2-Dichloroethane-d4	0.3750	0.3707	50.00	49.43	ug/L	-1	20	0.0500	
Toluene-d8	1.3357	1.3352	50.00	49.98	ug/L	0	20	0.0500	
Bromofluorobenzene	0.9134	0.8877	50.00	48.59	ug/L	-3	20	0.0500	

ISTD (ICAL ncol4)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	750650	714417	-4.83	11.53	11.53	0.00
1,4-Difluorobenzene	1177090	1125838	-4.35	12.37	12.37	0.00
Chlorobenzene-d5	1151283	1084034	-5.84	15.20	15.20	0.00
1,4-Dichlorobenzene-d4	645405	607896	-5.81	17.26	17.26	0.00

BO 03/25/10 [Chloroethane]: Integrated to match integration of ICAL and CCV.
[general version]

Analyst: TDL Date: 03/26/10 Reviewer: LW Date: 03/26/10

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218834 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : 25PPB IDF : 1.0
 Seqnum : 950122909003.1 File : ncq03 Time : 26-MAR-2010 09:10
 Cal : 950120036001 Caldate : 24-MAR-2010
 Standards: S14216 (20000X), S14108 (20000X), S14228 (40000X), S13719 (20000X),
 S14027 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.4874	0.5938	25.00	30.46	ug/L	22	20	0.0500	c+ ***
Chloromethane	0.5556	0.6261	25.00	28.17	ug/L	13	20	0.1000	
Vinyl Chloride	0.6437	0.7418	25.00	28.81	ug/L	15	20	0.0500	
Bromomethane	0.4260	0.4594	25.00	26.96	ug/L	8	20	0.0500	
Chloroethane	0.3924	0.4107	25.00	26.16	ug/L	5	20	0.0500	m
Trichlorofluoromethane	0.7559	0.8021	25.00	26.53	ug/L	6	20	0.0500	
Acetone	0.1956	0.1837	25.00	23.48	ug/L	-6	20	0.0500	
1,1-Dichloroethene	0.3994	0.4072	25.00	25.49	ug/L	2	20	0.0500	
Iodomethane	0.3686	0.3505	25.00	24.63	ug/L	-1	20	0.0500	
Methylene Chloride	0.4647	0.4882	25.00	26.26	ug/L	5	20	0.0500	
Carbon Disulfide	1.5583	1.7443	25.00	27.98	ug/L	12	20	0.0500	
MTBE	1.4821	1.4630	25.00	24.68	ug/L	-1	20	0.0500	
trans-1,2-Dichloroethene	0.4368	0.4503	25.00	25.77	ug/L	3	20	0.0500	
Vinyl Acetate	0.9347	1.0379	25.00	24.96	ug/L	0	20	0.0500	
1,1-Dichloroethane	0.8319	0.8801	25.00	26.45	ug/L	6	20	0.1000	
2-Butanone	0.2596	0.2294	25.00	22.09	ug/L	-12	20	0.0500	
2,2-Dichloropropane	0.6868	0.7448	25.00	27.11	ug/L	8	20	0.0500	
cis-1,2-Dichloroethene	0.5143	0.5168	25.00	25.12	ug/L	0	20	0.0500	
Chloroform	0.8422	0.8595	25.00	25.51	ug/L	2	20	0.0500	
Bromochloromethane	0.2472	0.2581	25.00	26.11	ug/L	4	20	0.0500	
1,1,1-Trichloroethane	0.6852	0.7033	25.00	25.66	ug/L	3	20	0.0500	
1,1-Dichloropropene	0.3907	0.4007	25.00	25.64	ug/L	3	20	0.0500	
Carbon Tetrachloride	0.3375	0.3552	25.00	26.31	ug/L	5	20	0.0500	
1,2-Dichloroethane	0.4446	0.4439	25.00	24.96	ug/L	0	20	0.0500	
Benzene	1.2327	1.2623	25.00	25.60	ug/L	2	20	0.0500	
Trichloroethene	0.3109	0.3068	25.00	24.67	ug/L	-1	20	0.0500	
1,2-Dichloropropane	0.3152	0.3241	25.00	25.71	ug/L	3	20	0.0500	
Bromodichloromethane	0.4008	0.4115	25.00	25.67	ug/L	3	20	0.0500	
Dibromomethane	0.2023	0.2022	25.00	25.00	ug/L	0	20	0.0500	
4-Methyl-2-Pentanone	0.3308	0.2877	25.00	21.74	ug/L	-13	20	0.0500	
cis-1,3-Dichloropropene	0.5220	0.5438	25.00	26.04	ug/L	4	20	0.0500	
Toluene	1.4156	1.3926	25.00	24.60	ug/L	-2	20	0.0500	
trans-1,3-Dichloropropene	0.5277	0.5242	25.00	24.83	ug/L	-1	20	0.0500	
1,1,2-Trichloroethane	0.1654	0.1599	25.00	24.17	ug/L	-3	20	0.0500	
2-Hexanone	0.2433	0.2010	25.00	20.65	ug/L	-17	20	0.0500	
1,3-Dichloropropane	0.5516	0.5367	25.00	24.33	ug/L	-3	20	0.0500	
Tetrachloroethene	0.3307	0.3251	25.00	24.58	ug/L	-2	20	0.0500	
Dibromochloromethane	0.3254	0.3224	25.00	24.77	ug/L	-1	20	0.0500	
1,2-Dibromoethane	0.3289	0.3092	25.00	23.50	ug/L	-6	20	0.0500	
Chlorobenzene	0.9606	0.9570	25.00	24.91	ug/L	0	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3241	0.3243	25.00	25.02	ug/L	0	20	0.0500	
Ethylbenzene	1.6253	1.6050	25.00	24.69	ug/L	-1	20	0.0500	
m,p-Xylenes	0.6367	0.6355	50.00	49.91	ug/L	0	20	0.0500	
o-Xylene	0.6041	0.6105	25.00	25.27	ug/L	1	20	0.0500	
Styrene	1.0433	1.0741	25.00	25.74	ug/L	3	20	0.0500	
Bromoform	0.2487	0.2395	25.00	24.08	ug/L	-4	20	0.1000	
Isopropylbenzene	2.7883	2.7037	25.00	24.24	ug/L	-3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7874	0.6857	25.00	21.77	ug/L	-13	20	0.3000	
1,2,3-Trichloropropane	0.8138	0.6976	25.00	21.43	ug/L	-14	20	0.0500	
Propylbenzene	3.4291	3.3374	25.00	24.33	ug/L	-3	20	0.0500	
Bromobenzene	0.7895	0.7393	25.00	23.41	ug/L	-6	20	0.0500	
1,3,5-Trimethylbenzene	2.3479	2.3124	25.00	24.62	ug/L	-2	20	0.0500	
2-Chlorotoluene	2.3518	2.2384	25.00	23.80	ug/L	-5	20	0.0500	
4-Chlorotoluene	2.1684	2.0840	25.00	24.03	ug/L	-4	20	0.0500	
tert-Butylbenzene	2.0536	2.0085	25.00	24.45	ug/L	-2	20	0.0500	
1,2,4-Trimethylbenzene	2.3985	2.3997	25.00	25.01	ug/L	0	20	0.0500	
sec-Butylbenzene	2.9687	2.9434	25.00	24.79	ug/L	-1	20	0.0500	
para-Isopropyl Toluene	2.5261	2.5376	25.00	25.11	ug/L	0	20	0.0500	
1,3-Dichlorobenzene	1.4668	1.4081	25.00	24.00	ug/L	-4	20	0.0500	
1,4-Dichlorobenzene	1.5358	1.4709	25.00	23.94	ug/L	-4	20	0.0500	
n-Butylbenzene	2.2961	2.2913	25.00	24.95	ug/L	0	20	0.0500	
1,2-Dichlorobenzene	1.4000	1.3498	25.00	24.10	ug/L	-4	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1700	0.1410	25.00	20.73	ug/L	-17	20	0.0500	
1,2,4-Trichlorobenzene	0.9376	0.9135	25.00	24.36	ug/L	-3	20	0.0500	
Hexachlorobutadiene	0.4318	0.4195	25.00	24.28	ug/L	-3	20	0.0500	
Naphthalene	2.3635	2.1211	25.00	22.44	ug/L	-10	20	0.0500	
1,2,3-Trichlorobenzene	0.8504	0.8126	25.00	23.89	ug/L	-4	20	0.0500	
Dibromofluoromethane	0.4633	0.4794	50.00	51.74	ug/L	3	20	0.0500	
1,2-Dichloroethane-d4	0.3750	0.3712	50.00	49.49	ug/L	-1	20	0.0500	
Toluene-d8	1.3357	1.3427	50.00	50.26	ug/L	1	20	0.0500	
Bromofluorobenzene	0.9134	0.8776	50.00	48.04	ug/L	-4	20	0.0500	

ISTD (ICAL ncol4)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	750650	633093	-15.66	11.53	11.53	0.00
1,4-Difluorobenzene	1177090	1007628	-14.40	12.37	12.37	0.00
Chlorobenzene-d5	1151283	991217	-13.90	15.20	15.20	0.00
1,4-Dichlorobenzene-d4	645405	567231	-12.11	17.26	17.26	0.00

BO 03/26/10 [Chloroethane]: Integrated to match integration of ICAL and CCV.
[general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

+ = high bias c = CCV m = manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 950121459

Date : 03/25/10
 Sequence : MSVOA14 ncp

Reference : ncol4
 Analyzed : 03/24/10 14:04

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	750650	11.53	1177090	12.37	1151283	15.20	645405	17.26
		LOWER LIMIT	375325	11.03	588545	11.87	575642	14.70	322703	16.76
		UPPER LIMIT	1501300	12.03	2354180	12.87	2302566	15.70	1290810	17.76
003	CCV	20PPB	714417	11.53	1125838	12.37	1084034	15.20	607896	17.26
004	ICV/BS	QC537564	717300	11.53	1129178	12.37	1090354	15.20	611487	17.26
005	BSD	QC537565	735079	11.53	1159626	12.37	1119863	15.20	633122	17.26
007	BLANK	QC537566	699767	11.53	1118635	12.37	1059759	15.20	542251	17.26
008	SAMPLE	218735-006	689228	11.53	1095116	12.37	1033799	15.20	522916	17.26
009	SAMPLE	218768-003	699681	11.53	1110663	12.37	1046514	15.20	531114	17.26
010	SAMPLE	218801-001	686454	11.53	1100441	12.37	1036595	15.20	521956	17.26
011	SAMPLE	218801-009	679721	11.53	1088157	12.37	1032402	15.20	520528	17.26
012	SAMPLE	218834-001	660301	11.53	1058082	12.37	1001508	15.20	515174	17.26
013	SAMPLE	218834-005	668972	11.53	1076567	12.37	1019444	15.20	513548	17.26
014	SAMPLE	218801-002	668544	11.53	1074843	12.37	1012692	15.20	512095	17.26
015	SAMPLE	218801-003	665081	11.53	1073326	12.37	1005176	15.20	500906	17.26
016	SAMPLE	218801-004	647729	11.53	1051481	12.37	994145	15.20	504476	17.26
017	SAMPLE	218801-005	637468	11.53	1037131	12.37	976769	15.20	493076	17.26
018	SAMPLE	218801-006	638284	11.53	1040300	12.37	976695	15.20	489620	17.26
019	SAMPLE	218801-007	629820	11.53	1034440	12.37	972775	15.20	490910	17.26
020	SAMPLE	218801-008	623472	11.53	1026435	12.37	973796	15.20	490944	17.26
021	SAMPLE	218834-002	605834	11.53	993769	12.37	945851	15.20	488303	17.26
022	SAMPLE	218834-003	617414	11.53	1001081	12.37	945231	15.20	483790	17.26
023	SAMPLE	218834-004	601057	11.53	986112	12.37	937448	15.20	492998	17.26
024	SAMPLE	218834-006	614719	11.53	1013056	12.37	958339	15.20	490727	17.26
025	SAMPLE	218834-007	599283	11.53	984975	12.37	931270	15.20	473991	17.26
026	SAMPLE	218834-008	594259	11.53	978732	12.37	926260	15.20	470508	17.26
027	SAMPLE	218834-009	589530	11.53	968463	12.37	925414	15.20	479540	17.26
031	IB	VIALCHECK	572251	11.53	947792	12.37	895266	15.20	463037	17.26
032	IB	VIALCHECK	574499	11.53	949439	12.37	895338	15.20	462545	17.26

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 950122909

Date : 03/26/10
 Sequence : MSVOA14 ncq

Reference : ncol4
 Analyzed : 03/24/10 14:04

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	750650	11.53	1177090	12.37	1151283	15.20	645405	17.26
		LOWER LIMIT	375325	11.03	588545	11.87	575642	14.70	322703	16.76
		UPPER LIMIT	1501300	12.03	2354180	12.87	2302566	15.70	1290810	17.76
003	CCV	25PPB	633093	11.53	1007628	12.37	991217	15.20	567231	17.26
004	LCS	QC537783	644946	11.53	1028641	12.37	1014300	15.20	582878	17.26
006	BLANK	QC537784	607277	11.53	994095	12.37	934367	15.20	488028	17.26
007	SAMPLE	218948-012	600677	11.53	979688	12.37	928389	15.20	481514	17.26
008	SAMPLE	218834-009	587205	11.53	959570	12.37	917504	15.20	486856	17.26
009	MSS	218866-005	611918	11.53	990741	12.37	954443	15.20	514164	17.26
010	SAMPLE	218891-002	604068	11.53	984851	12.37	942952	15.20	492871	17.26
011	SAMPLE	218891-003	593943	11.53	968692	12.37	917088	15.20	479181	17.26
012	SAMPLE	218891-005	583879	11.53	952347	12.37	906150	15.20	471613	17.26
013	SAMPLE	218891-006	579184	11.53	947647	12.37	910539	15.20	492538	17.26
014	SAMPLE	218948-001	545239	11.53	919211	12.37	878900	15.20	452834	17.26
015	SAMPLE	218948-005	554759	11.53	919594	12.37	876167	15.20	469156	17.26
016	SAMPLE	218948-006	564739	11.53	945612	12.37	906339	15.20	472404	17.26
017	SAMPLE	218948-008	559793	11.53	927600	12.37	896420	15.20	490734	17.26
018	SAMPLE	218948-009	587795	11.53	956857	12.37	930144	15.20	511532	17.26
019	SAMPLE	218948-010	621934	11.53	1007096	12.37	976269	15.20	526777	17.26
020	SAMPLE	218948-013	626824	11.53	1011179	12.37	966096	15.20	508069	17.26
021	SAMPLE	218948-014	612297	11.53	984152	12.37	940317	15.20	494338	17.26
022	SAMPLE	218948-015	597779	11.53	967031	12.37	934007	15.20	490401	17.26
023	SAMPLE	218866-006	585044	11.53	958530	12.37	913815	15.20	494162	17.26
024	SAMPLE	218948-007	589697	11.53	959042	12.37	916338	15.20	485440	17.26
025	MS	QC537798	614117	11.53	974353	12.37	963988	15.20	560531	17.26
026	MSD	QC537799	637516	11.53	1001867	12.37	989902	15.20	569453	17.26

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 950120036

Instrument : MSVOA14 Begun : 03/24/10 08:36
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	nco01	X	IB			03/24/10 08:36	1.0	1
002	nco02	TUN	BFB			03/24/10 09:05	1.0	2
003	nco03	TUN	BFB			03/24/10 09:15	1.0	2
004	nco04	TUN	BFB			03/24/10 09:27	1.0	2
005	nco05	TUN	BFB			03/24/10 09:41	1.0	2
006	nco06	X	IB			03/24/10 10:13	1.0	1
007	nco07	IB	CALIB			03/24/10 10:42	1.0	1
008	nco08	ICAL	.25/.5PPB			03/24/10 11:10	1.0	3 4 5 6 1
009	nco09	ICAL	0.5/1PPB			03/24/10 11:39	1.0	3 4 5 6 1
010	nco10	ICAL	2PPB			03/24/10 12:08	1.0	3 4 5 6 1
011	nco11	ICAL	5PPB			03/24/10 12:37	1.0	3 4 5 6 1
012	nco12	ICAL	10PPB			03/24/10 13:06	1.0	3 4 5 6 1
013	nco13	ICAL	20PPB			03/24/10 13:35	1.0	7 8 9 10 1
014	nco14	ICAL	50PPB			03/24/10 14:04	1.0	7 8 9 10 1
015	nco15	ICAL	75PPB			03/24/10 14:34	1.0	7 8 9 10 1
016	nco16	ICAL	100PPB			03/24/10 15:03	1.0	7 8 9 10 1
017	nco17	ICV	25PPB			03/24/10 15:33	1.0	11 1
018	nco18	ICV	25PPB			03/24/10 16:02	1.0	12 13 14 1
019	nco19	ICV	25PPB			03/24/10 16:32	1.0	15 1
020	nco20	X	IB			03/24/10 17:01	1.0	1
021	nco21	X	IB			03/24/10 17:30	1.0	1

BO 03/25/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 21.

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10
 Standards used: 1=S14027 2=S13652 3=S14217 4=S14254 5=S14255 6=S14256 7=S14216 8=S14108 9=S14228 10=S13719 11=S14234
 12=S13925 13=S14144 14=S14253 15=S14236

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 950121459

Instrument : MSVOA14 Begun : 03/25/10 08:19
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used						
001	ncp01	X	IB			03/25/10 08:19	1.0	1						
002	ncp02	TUN	BFB			03/25/10 08:47	1.0	2						
003	ncp03	CCV	20PPB			03/25/10 09:05	1.0	3	4	5	6	1		
004	ncp04	ICV/BS	QC537564	Water	161282	03/25/10 09:51	1.0	7	8	9	10	1		
005	ncp05	BSD	QC537565	Water	161282	03/25/10 10:19	1.0	7	8	9	10	1		
006	ncp06	X	IB			03/25/10 10:47	1.0	1						
007	ncp07	BLANK	QC537566	Water	161282	03/25/10 11:16	1.0	1						
008	ncp08	SAMPLE	218735-006	Water	161282	03/25/10 11:44	1.0	1						
009	ncp09	SAMPLE	218768-003	Water	161282	03/25/10 12:13	2.0	1						
010	ncp10	SAMPLE	218801-001	Water	161282	03/25/10 12:42	1.0	1						
011	ncp11	SAMPLE	218801-009	Water	161282	03/25/10 13:11	1.0	1						
012	ncp12	SAMPLE	218834-001	Water	161282	03/25/10 13:40	1.0	1						
013	ncp13	SAMPLE	218834-005	Water	161282	03/25/10 14:09	1.0	1						
014	ncp14	SAMPLE	218801-002	Water	161282	03/25/10 14:38	1.0	1						
015	ncp15	SAMPLE	218801-003	Water	161282	03/25/10 15:07	1.0	1						
016	ncp16	SAMPLE	218801-004	Water	161282	03/25/10 15:37	1.0	1						
017	ncp17	SAMPLE	218801-005	Water	161282	03/25/10 16:06	1.0	1						
018	ncp18	SAMPLE	218801-006	Water	161282	03/25/10 16:36	1.0	1						
019	ncp19	SAMPLE	218801-007	Water	161282	03/25/10 17:05	1.0	1						
020	ncp20	SAMPLE	218801-008	Water	161282	03/25/10 17:34	1.0	1						
021	ncp21	SAMPLE	218834-002	Water	161282	03/25/10 18:03	1.0	1						
022	ncp22	SAMPLE	218834-003	Water	161282	03/25/10 18:33	1.0	1						
023	ncp23	SAMPLE	218834-004	Water	161282	03/25/10 19:02	1.0	1						
024	ncp24	SAMPLE	218834-006	Water	161282	03/25/10 19:31	1.0	1						
025	ncp25	SAMPLE	218834-007	Water	161282	03/25/10 20:00	1.0	1						
026	ncp26	SAMPLE	218834-008	Water	161282	03/25/10 20:29	1.0	1						
027	ncp27	SAMPLE	218834-009	Water	161282	03/25/10 20:57	1.0	1						
028	ncp28	X	IB			03/25/10 21:26	1.0	1						
029	ncp29	X	IB			03/25/10 21:54	1.0	1						
030	ncp30	X	IB			03/25/10 22:23	1.0	1						
031	ncp31	IB	VIALCHECK			03/25/10 22:52	1.0	1						
032	ncp32	IB	VIALCHECK			03/25/10 23:20	1.0	1						

BO 03/25/10 : Reviewed to ncp05

BJP 03/26/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 32.

BJP 03/26/10 : Matrix spikes were not performed for this analysis in batch 161282 due to insufficient sample amount.

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/26/10

Standards used: 1=S14027 2=S13652 3=S14216 4=S14108 5=S14228 6=S13719 7=S14253 8=S13925 9=S14144 10=S14236



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 218866
ANALYTICAL REPORT**

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 383868.US.60.61.QS
Location : Quarterly UST
Level : III

<u>Sample ID</u>	<u>Lab ID</u>
TB-007-UST-10Q1	218866-001
ASE-54A-UST-10Q1	218866-002
PL-2101-UST-10Q1	218866-003
UST-10Q1-006	218866-004
ASE-68A-UST-10Q1	218866-005
ASE-52A-UST-10Q1	218866-006
EB-007-UST-10Q1	218866-007
ASE-60A-UST-10Q1	218866-008

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

Signature: _____
Senior Program Manager

Date: 03/31/2010

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 218866
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/17/10
Samples Received: 03/17/10

This data package contains sample and QC results for eight water samples, requested for the above referenced project on 03/17/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for iodomethane in the ICV analyzed 01/28/10 01:45; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for naphthalene in the CCV analyzed 03/26/10 13:45; this analyte met minimum response criteria. High response was observed for Freon 12; this analyte was not detected at or above the RL in the associated samples.

Low responses were observed for acetone and iodomethane in the CCV analyzed 03/27/10 14:22; these analytes met minimum response criteria, and affected data was qualified with "b".

Low responses were observed for bromomethane and iodomethane in the CCV analyzed 03/28/10 14:19; these analytes met minimum response criteria, and affected data was qualified with "b". High response was observed for chloroethane; this analyte was not detected at or above the RL in the associated sample.

High response was observed for Freon 12 in the CCV analyzed 03/26/10 09:10; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

High recovery was observed for carbon tetrachloride in the MS of ASE-68A-UST-10Q1 (lab # 218866-005); the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample.

Low recovery was observed for iodomethane in the LCS for batch 161380.

Low recovery was observed for iodomethane in the MS for batch 161380; the

CASE NARRATIVE

Laboratory number: 218866
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/17/10
Samples Received: 03/17/10

Volatile Organics by GC/MS (EPA 8260B):

parent sample was not a project sample, and the associated RPD was within limits. High recovery was observed for cis-1,2-dichloroethene in the MSD for batch 161380; the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample.

Responses exceeding the instrument's linear range were observed for tetrachloroethene in the MS/MSD for batch 161380.

No other analytical problems were encountered.

Chain of Custody

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 210866 Date Received 3-17-10 Number of coolers 2
Client CHZMAR Project QUARTERLY UST

Date Opened 3-17-10 By (print) S. EVAN (sign) [Signature]
Date Logged in 1 By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) VEREX# YES NO
Shipping info 8723 1036 1721

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many 1 EA Name SIGNATURE Date 3-16-10

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (if so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

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

7. Temperature documentation:

Type of ice used: Wet Blue/Gel None Temp(°C) 1.2, 0.9

Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are samples in the appropriate containers for indicated tests? _____ YES NO

11. Are sample labels present, in good condition and complete? _____ YES NO

12. Do the sample labels agree with custody papers? _____ YES NO

13. Was sufficient amount of sample sent for tests requested? _____ YES NO

14. Are the samples appropriately preserved? _____ YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

16. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Laboratory Job Number 218866

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/16/10
Units:	ug/L	Received:	03/17/10
Diln Fac:	1.000	Prepared:	03/22/10
Batch#:	161154		

Field ID: ASE-54A-UST-10Q1 Lab ID: 218866-002
 Type: SAMPLE Analyzed: 03/25/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	113	50-120	

Field ID: PL-2101-UST-10Q1 Lab ID: 218866-003
 Type: SAMPLE Analyzed: 03/25/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Field ID: UST-10Q1-006 Lab ID: 218866-004
 Type: SAMPLE Analyzed: 03/25/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	111	50-120	

Field ID: ASE-68A-UST-10Q1 Lab ID: 218866-005
 Type: SAMPLE Analyzed: 03/24/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

Total Extractable Hydrocarbons			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/16/10
Units:	ug/L	Received:	03/17/10
Diln Fac:	1.000	Prepared:	03/22/10
Batch#:	161154		

Field ID: ASE-52A-UST-10Q1 Lab ID: 218866-006
 Type: SAMPLE Analyzed: 03/24/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	
Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

Field ID: EB-007-UST-10Q1 Lab ID: 218866-007
 Type: SAMPLE Analyzed: 03/25/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	
Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Field ID: ASE-60A-UST-10Q1 Lab ID: 218866-008
 Type: SAMPLE Analyzed: 03/25/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	
Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	102	50-120	

Type: BLANK Analyzed: 03/24/10
 Lab ID: QC536998

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	
Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	101	50-120	

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC536999	Batch#:	161154
Matrix:	Water	Prepared:	03/22/10
Units:	ug/L	Analyzed:	03/24/10

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Diesel C10-C22	2,500	1,715	69	54-120	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	75	50-120	

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161154
MSS Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Prepared:	03/22/10
Diln Fac:	1.000	Analyzed:	03/24/10

Type: MS Lab ID: QC537000

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Diesel C10-C22	485.8	2,500	3,061	103	54-120		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	107	50-120		

Type: MSD Lab ID: QC537001

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Diesel C10-C22	2,500	2,988	100	54-120	2	31		

Surrogate	%REC	Limits	ADEQ	Flags
o-Terphenyl	107	50-120		

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC537002	Batch#:	161154
Matrix:	Water	Prepared:	03/22/10
Units:	ug/L	Analyzed:	03/24/10

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,791	112	61-139	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	103	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218866 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220019637002
 Units : mg/L

Name : DSL_013
 Date : 14-JAN-2010 01:32
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	013_020	220019637020	DSL_10	14-JAN-2010 01:32	S13230
L2	013_021	220019637021	DSL_100	14-JAN-2010 02:00	S13231
L3	013_022	220019637022	DSL_500	14-JAN-2010 02:28	S13232
L4	013_023	220019637023	DSL_1000	14-JAN-2010 02:55	S13233
L5	013_024	220019637024	DSL_5000	14-JAN-2010 03:23	S13229
L6	013_025	220019637025	DSL_7500	14-JAN-2010 03:50	S13234

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	30857	41804	48676	43245	43072	44897	AVRG		2.38E-5		42092	14	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	-27	100.0	-1	500.0	16	1000	3	5000	2	7500	7

TFB 01/14/10 : Levels 1-3 and ICV: corrected automatically drawn baseline.

TFB 01/14/10 : Carbon Marker scanned in after EZChrom calibrations.

Analyst: TFB Date: 01/14/10 Reviewer: EAH Date: 01/15/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218866 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 220019637002

Name : DSL_013
Cal Date : 14-JAN-2010

ICV 220019637027 (013_027 14-JAN-2010) stds: S13457

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	501.4	mg/L	0	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218866 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220027250001
 Units : mg/L

Name : HEXOTP_018
 Date : 18-JAN-2010 16:02
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_004	220027250004	HEXOTP_5	18-JAN-2010 16:02	S13690
L2	018_005	220027250005	HEXOTP_10	18-JAN-2010 16:30	S13691
L3	018_006	220027250006	HEXOTP_25	18-JAN-2010 16:58	S13692
L4	018_007	220027250007	HEXOTP_50	18-JAN-2010 17:27	S13693
L5	018_008	220027250008	HEXOTP_100	18-JAN-2010 17:55	S13694

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	51987	51113	52393	50111	49558	AVRG		1.96E-5		51032	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	B	5.000	2	10.00	0	25.00	3	50.00	-2	100.0	-3

TFB 01/18/10 : Levels 2,4,5: corrected automatically drawn baseline.

TFB 01/19/10 : Level 6 dropped due to high %D in hexacosane. Dropped from OTP for consistency.

Analyst: TFB

Date: 01/18/10

Reviewer: EAH

Date: 01/19/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218866 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220091179001
 Units : mg/L

Name : MO_063
 Date : 04-MAR-2010 16:24
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	063_016	220091179016	MO_50	04-MAR-2010 16:24	S13804
L2	063_017	220091179017	MO_250	04-MAR-2010 16:52	S13805
L3	063_018	220091179018	MO_500	04-MAR-2010 17:21	S13806
L4	063_019	220091179019	MO_1000	04-MAR-2010 17:50	S13807
L5	063_020	220091179020	MO_5000	04-MAR-2010 18:18	S13808
L6	063_021	220091179021	MO_7500	04-MAR-2010 18:47	S13809

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	B	31871	31503	30804	30203	28364	26768	AVRG		3.34E-5		29919	7	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	B	50.00	7	250.0	5	500.0	3	1000	1	5000	-5	7500	-11

JDG 03/05/10 : GC14b 063_019: MO_1000

JDG 03/05/10 : GC14b 063_020: MO_5000

Analyst: JDG

Date: 03/05/10

Reviewer: EAH

Date: 03/05/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218866 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399001
 Units : mg/L

Name : DSL_069
 Date : 10-MAR-2010 09:30
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a004	170100399004	DSL_10	10-MAR-2010 09:30	S14114
L2	069a005	170100399005	DSL_100	10-MAR-2010 09:58	S14115
L3	069a006	170100399006	DSL_500	10-MAR-2010 10:25	S14116
L4	069a007	170100399007	DSL_1000	10-MAR-2010 10:52	S14117
L5	069a008	170100399008	DSL_5000	10-MAR-2010 11:20	S14113
L6	069a009	170100399009	DSL_7500	10-MAR-2010 11:48	S14118

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	38992	57098	61023	62848	63686	64949	AVRG		1.72E-5		58099	17	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-33	100.0	-2	500.0	5	1000	8	5000	10	7500	12

JDG 03/11/10 : Corrected automatically baseline for: Levels 1-5.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218866 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 170100399001

Name : DSL_069
Cal Date : 10-MAR-2010

ICV 170100399011 (069a011 10-MAR-2010) stds: S14077

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	542.9	mg/L	9	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218866 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399002
 Units : mg/L

Name : MO_069
 Date : 10-MAR-2010 14:05
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a014	170100399014	MO_50	10-MAR-2010 14:05	S13804
L2	069a015	170100399015	MO_250	10-MAR-2010 14:32	S13805
L3	069a016	170100399016	MO_500	10-MAR-2010 15:00	S13806
L4	069a017	170100399017	MO_1000	10-MAR-2010 15:27	S13807
L5	069a018	170100399018	MO_5000	10-MAR-2010 15:55	S13808
L6	069a019	170100399019	MO_7500	10-MAR-2010 16:23	S13809

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	44768	46378	45947	46506	45328	45626	AVRG		2.19E-5		45759	1	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	-2	250.0	1	500.0	0	1000	2	5000	-1	7500	0

JDG 03/11/10 : Corrected automatically drawn baseline for levels 2-6.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218866 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170108447001
 Units : mg/L

Name : HEXOTP_075
 Date : 16-MAR-2010 15:35
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	075a012	170108447012	HEXOTP_5	16-MAR-2010 15:35	S13690
L2	075a013	170108447013	HEXOTP_10	16-MAR-2010 16:03	S13691
L3	075a014	170108447014	HEXOTP_25	16-MAR-2010 16:30	S13692
L4	075a015	170108447015	HEXOTP_50	16-MAR-2010 16:58	S13693
L5	075a016	170108447016	HEXOTP_100	16-MAR-2010 17:25	S13694
L6	075a017	170108447017	HEXOTP_200	16-MAR-2010 17:53	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	73067	76327	75701	75675	73539	74396	AVRG		1.34E-5		74784	2	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-2	10.00	2	25.00	1	50.00	1	100.0	-2	200.0	-1

JDG 03/17/10 : Corrected automatically drawn baseline for L1 & L2.

Analyst: JDG

Date: 03/17/10

Reviewer: EAH

Date: 03/17/10

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

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_1000 IDF : 1.0
 Seqnum : 220119956032 File : 083_032 Time : 25-MAR-2010 03:22
 Standards: S14078

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	45777	1000	1088	mg/L	9	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	55857	50.00	54.73	mg/L	9	15	

JDG 03/25/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/25/10 Reviewer: TFB Date: 03/25/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220119956033 File : 083_033 Time : 25-MAR-2010 03:50
 Standards: S14243

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	29571	500.0	494.2	mg/L	-1	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	53156	50.00	52.08	mg/L	4	15	

JDG 03/25/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/25/10 Reviewer: TFB Date: 03/25/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_500 IDF : 1.0
 Seqnum : 220119956048 File : 083_048 Time : 25-MAR-2010 12:32
 Standards: S14077

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	45390	500.0	539.2	mg/L	8	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	53017	50.00	51.94	mg/L	4	15	

JDG 03/25/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/25/10 Reviewer: TFB Date: 03/25/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220119956049 File : 083_049 Time : 25-MAR-2010 13:01
 Standards: S14243

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	29125	500.0	486.7	mg/L	-3	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	51815	50.00	50.77	mg/L	2	15	

JDG 03/25/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/25/10 Reviewer: TFB Date: 03/25/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170120005009 File : 083a009 Time : 24-MAR-2010 12:25
 Standards: S14243

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	46524	500.0	508.4	mg/L	2	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	74238	50.00	49.63	mg/L	-1	15	

SFL 03/24/10 : Corrected automatically drawn baseline.

Analyst: SFL Date: 03/24/10 Reviewer: JDG Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
 Seqnum : 170120005010 File : 083a010 Time : 24-MAR-2010 12:53
 Standards: S14077

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	170100399001	10-MAR-2010	58099	63984	500.0	550.6	mg/L	10	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	77875	50.00	52.07	mg/L	4	15	

Analyst: SFL Date: 03/24/10 Reviewer: EAH Date: 03/24/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170120005022 File : 083a022 Time : 24-MAR-2010 20:10
 Standards: S14243

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	48665	500.0	531.8	mg/L	6	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	75449	50.00	50.44	mg/L	1	15	

JDG 03/25/10 : MO_500: S14243

JDG 03/25/10 : Manually integrated fuel hump.

Analyst: JDG Date: 03/25/10 Reviewer: SFL Date: 03/25/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_1000 IDF : 1.0
Seqnum : 170120005023 File : 083a023 Time : 24-MAR-2010 20:37
Standards: S14078

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	170100399001	10-MAR-2010	58099	64860	1000	1116	mg/L	12	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	79894	50.00	53.42	mg/L	7	15	

JDG 03/25/10 : DSL_1000: S14078

JDG 03/25/10 [o-Terphenyl A]: Separated from coeluting peak.

Analyst: JDG Date: 03/25/10 Reviewer: SFL Date: 03/25/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170120005041 File : 083a041 Time : 25-MAR-2010 04:54
 Standards: S14243

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	49387	500.0	539.6	mg/L	8	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	76950	50.00	51.45	mg/L	3	15	

Analyst: JDG

Date: 03/25/10

Reviewer: PRW

Date: 03/25/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_250 IDF : 1.0
 Seqnum : 170120005042 File : 083a042 Time : 25-MAR-2010 05:22
 Cal : 170100399001 Caldate : 10-MAR-2010
 Standards: S14076

Analyte	Avg		Spiked	Quant	Units	%D	Max %D	Flags
	RF/CF	RF/CF						
Diesel C10-C22	58099	65081	250.0	280.0	mg/L	12	15	

JDG 03/25/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/25/10 Reviewer: PRW Date: 03/25/10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170100399

Instrument : GC17A Begun : 03/10/10 08:00
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	069a001	X	PRIMER			03/10/10 08:00	1.0	
002	069a002	X	IB			03/10/10 08:28	1.0	
003	069a003	IB	CALIB			03/10/10 08:55	1.0	
004	069a004	ICAL	DSL_10			03/10/10 09:30	1.0	1
005	069a005	ICAL	DSL_100			03/10/10 09:58	1.0	2
006	069a006	ICAL	DSL_500			03/10/10 10:25	1.0	3
007	069a007	ICAL	DSL_1000			03/10/10 10:52	1.0	4
008	069a008	ICAL	DSL_5000			03/10/10 11:20	1.0	5
009	069a009	ICAL	DSL_7500			03/10/10 11:48	1.0	6
010	069a010	IB	CALIB			03/10/10 12:15	1.0	
011	069a011	ICV	DSL_500			03/10/10 12:42	1.0	7
012	069a012	X	ICV			03/10/10 13:09	1.0	7
013	069a013	IB	CALIB			03/10/10 13:37	1.0	
014	069a014	ICAL	MO_50			03/10/10 14:05	1.0	8
015	069a015	ICAL	MO_250			03/10/10 14:32	1.0	9
016	069a016	ICAL	MO_500			03/10/10 15:00	1.0	10
017	069a017	ICAL	MO_1000			03/10/10 15:27	1.0	11
018	069a018	ICAL	MO_5000			03/10/10 15:55	1.0	12
019	069a019	ICAL	MO_7500			03/10/10 16:23	1.0	13
020	069a020	IB	CALIB			03/10/10 16:51	1.0	
021	069a021	CMARKER	C8-C50			03/10/10 17:19	1.0	14
022	069a022	IB	CALIB			03/10/10 17:46	1.0	

JDG 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

Standards used: 1=S14114 2=S14115 3=S14116 4=S14117 5=S14113 6=S14118 7=S14077 8=S13804 9=S13805 10=S13806 11=S13807
 12=S13808 13=S13809 14=S13646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170108447

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/16/10 07:27
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	075a001	X	PRIMER				03/16/10 07:27	1.0	
002	075a002	X	IB				03/16/10 07:55	1.0	
003	075a003	X	CMARKER				03/16/10 08:24	1.0	1
004	075a004	X	MO_500				03/16/10 08:52	1.0	2
005	075a005	X	DSL_500				03/16/10 09:19	1.0	3
006	075a006	X	JP5_250				03/16/10 09:47	1.0	4
007	075a007	X	IB				03/16/10 12:53	1.0	
008	075a008	X	CMARKER				03/16/10 13:21	1.0	1
009	075a009	X	MO_500				03/16/10 13:48	1.0	2
010	075a010	X	IB				03/16/10 14:40	1.0	
011	075a011	IB	CALIB				03/16/10 15:07	1.0	
012	075a012	ICAL	HEXOTP_5				03/16/10 15:35	1.0	5
013	075a013	ICAL	HEXOTP_10				03/16/10 16:03	1.0	6
014	075a014	ICAL	HEXOTP_25				03/16/10 16:30	1.0	7
015	075a015	ICAL	HEXOTP_50				03/16/10 16:58	1.0	8
016	075a016	ICAL	HEXOTP_100				03/16/10 17:25	1.0	9
017	075a017	ICAL	HEXOTP_200				03/16/10 17:53	1.0	10
018	075a018	IB	CALIB				03/16/10 18:20	1.0	
019	075a019	CMARKER	C8-C50				03/16/10 18:48	1.0	1
020	075a020	CCV	MO_500				03/16/10 19:15	1.0	2
021	075a021	CCV	DSL_250				03/16/10 19:42	1.0	11
022	075a022	X	CCV				03/16/10 20:10	1.0	2
023	075a023	X	CCV				03/16/10 20:37	1.0	11
024	075a024	BLANK	QC535926		Water	160891	03/16/10 21:05	1.0	
025	075a025	SAMPLE	218714-001	S	Water	160843	03/16/10 21:32	1.0	
026	075a026	BLANK	QC536089	S	Water	160933	03/16/10 22:00	1.0	
027	075a027	BLANK	QC536089		Water	160933	03/16/10 22:27	1.0	
028	075a028	BS	QC536090	S	Water	160933	03/16/10 22:54	1.0	
029	075a029	BSD	QC536091	S	Water	160933	03/16/10 23:22	1.0	
030	075a030	SAMPLE	218778-001		Water	160933	03/16/10 23:49	1.0	
031	075a031	SAMPLE	218778-002		Water	160933	03/17/10 00:17	1.0	
032	075a032	SAMPLE	218778-003		Water	160933	03/17/10 00:45	1.0	
033	075a033	SAMPLE	218778-004		Water	160933	03/17/10 01:12	1.0	
034	075a034	CCV	MO_500				03/17/10 01:39	1.0	2
035	075a035	CCV	DSL_1000				03/17/10 02:07	1.0	12
036	075a036	X	CCV				03/17/10 02:34	1.0	2
037	075a037	X	CCV				03/17/10 03:02	1.0	12
038	075a038	SAMPLE	218787-006	S	Water	160933	03/17/10 03:29	1.0	
039	075a039	SAMPLE	218787-007	S	Water	160933	03/17/10 03:56	1.0	
040	075a040	SAMPLE	218789-001	S	Water	160933	03/17/10 04:24	1.0	
041	075a041	SAMPLE	218789-002	S	Water	160933	03/17/10 04:52	1.0	
042	075a042	SAMPLE	218789-003	S	Water	160933	03/17/10 05:19	1.0	
043	075a043	X	CMARKER				03/17/10 05:47	1.0	1
044	075a044	X	MO_500				03/17/10 06:14	1.0	2
045	075a045	CCV	DSL_500				03/17/10 06:41	1.0	3
046	075a046	CCV	MO_500				03/17/10 07:09	1.0	2
047	075a047	X	CCV				03/17/10 07:36	1.0	3

JDG 03/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170120005

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/24/10 08:05
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	083a001	X	PRIMER				03/24/10 08:05	1.0	
002	083a002	X	IB				03/24/10 08:33	1.0	
003	083a003	X	CMARKER				03/24/10 09:00	1.0	1
004	083a004	CCV	MO_500				03/24/10 09:28	1.0	2
005	083a005	CCV	DSL_250				03/24/10 09:55	1.0	3
006	083a006	LCS	QC536800		Water	161107	03/24/10 10:32	1.0	
007	083a007	SAMPLE	218893-004	S	Soil	161101	03/24/10 11:00	1.0	
008	083a008	MSD	QC537194		Soil	161199	03/24/10 11:27	1.0	
009	083a009	CCV	MO_500				03/24/10 12:25	1.0	2
010	083a010	CCV	DSL_500				03/24/10 12:53	1.0	4
011	083a011	CCV	JET_250				03/24/10 13:21	1.0	5
012	083a012	BLANK	QC536998	S	Water	161154	03/24/10 15:37	1.0	
013	083a013	LCS	QC536999	S	Water	161154	03/24/10 16:04	1.0	
014	083a014	BLANK	QC536998		Water	161154	03/24/10 16:31	1.0	
015	083a015	LCS	QC537002	S	Water	161154	03/24/10 16:59	1.0	
016	083a016	MSS	218866-005		Water	161154	03/24/10 17:26	1.0	
017	083a017	MS	QC537000		Water	161154	03/24/10 17:53	1.0	
018	083a018	MSD	QC537001		Water	161154	03/24/10 18:21	1.0	
019	083a019	SAMPLE	218938-001		Water	161154	03/24/10 18:48	1.0	
020	083a020	SAMPLE	218936-001	S	Water	161154	03/24/10 19:15	1.0	
021	083a021	SAMPLE	218936-002	S	Water	161154	03/24/10 19:42	1.0	
022	083a022	CCV	MO_500				03/24/10 20:10	1.0	2
023	083a023	CCV	DSL_1000				03/24/10 20:37	1.0	6
024	083a024	CCV	JET_250				03/24/10 21:05	1.0	5
025	083a025	X	CCV				03/24/10 21:32	1.0	2
026	083a026	X	CCV				03/24/10 22:00	1.0	6
027	083a027	X	CCV				03/24/10 22:28	1.0	5
028	083a028	BS	QC537205		Water	161203	03/24/10 22:55	1.0	
029	083a029	BSD	QC537206		Water	161203	03/24/10 23:23	1.0	
030	083a030	SAMPLE	218866-006		Water	161154	03/24/10 23:51	1.0	
031	083a031	SAMPLE	218941-009		Soil	161199	03/25/10 00:18	1.0	
032	083a032	SAMPLE	218944-012		Soil	161199	03/25/10 00:46	1.0	
033	083a033	SAMPLE	218941-004		Soil	161199	03/25/10 01:13	10.0	
034	083a034	X	IB				03/25/10 01:41	1.0	
035	083a035	SAMPLE	218944-007		Soil	161199	03/25/10 02:09	5.0	
036	083a036	SAMPLE	218944-002		Soil	161199	03/25/10 02:36	5.0	
037	083a037	SAMPLE	218941-007		Soil	161199	03/25/10 03:04	10.0	
038	083a038	X	IB				03/25/10 03:32	1.0	
039	083a039	SAMPLE	218866-007		Water	161154	03/25/10 03:59	1.0	
040	083a040	X	CMARKER				03/25/10 04:27	1.0	1
041	083a041	CCV	MO_500				03/25/10 04:54	1.0	2
042	083a042	CCV	DSL_250				03/25/10 05:22	1.0	3
043	083a043	X	CCV				03/25/10 05:49	1.0	2
044	083a044	X	CCV				03/25/10 06:17	1.0	3
045	083a045	CCV	BUNK_500				03/25/10 08:10	1.0	7
046	083a046	BLANK	QC537204		Water	161203	03/25/10 08:42	1.0	
047	083a047	LCS	QC536800		Water	161107	03/25/10 09:09	1.0	
048	083a048	SAMPLE	218868-008		Water	161203	03/25/10 09:36	1.0	
049	083a049	SAMPLE	218889-001	S	Water	161154	03/25/10 10:04	1.0	
050	083a050	SAMPLE	218889-003	S	Water	161154	03/25/10 10:31	1.0	
051	083a051	SAMPLE	218933-001		Water	161203	03/25/10 10:59	1.0	
052	083a052	SAMPLE	218933-010		Water	161203	03/25/10 11:26	1.0	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170120005

Instrument : GC17A Begun : 03/24/10 08:05
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
053	083a053	SAMPLE	218933-011		Water	161203	03/25/10 11:54	1.0	
054	083a054	CCV	MO_500				03/25/10 12:32	1.0	2
055	083a055	CCV	DSL_250				03/25/10 13:00	1.0	3
056	083a056	SAMPLE	218933-016		Water	161203	03/25/10 13:28	20.0	
057	083a057	CCV	BUNK_500				03/25/10 13:56	1.0	7
058	083a058	CCV	DSL_250				03/25/10 14:24	1.0	3

SFL 03/24/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 11.

JDG 03/25/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 12 through 58.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220019637

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/13/10 15:17
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	013_001	X	PRIMER			01/13/10 15:17	1.0	
002	013_002	X	IB			01/13/10 15:46	1.0	
003	013_003	X	CMARKER			01/13/10 16:14	1.0	1
004	013_004	X	DSL_500			01/13/10 16:43	1.0	2
005	013_005	X	MO_500			01/13/10 17:12	1.0	3
006	013_006	X	IB			01/13/10 17:48	1.0	
007	013_007	X	CMARKER			01/13/10 18:17	1.0	1
008	013_008	X	DSL_500			01/13/10 18:46	1.0	2
009	013_009	X	MO_500			01/13/10 19:15	1.0	3
010	013_010	X	IB			01/13/10 20:54	1.0	
011	013_011	X	IB			01/13/10 21:22	1.0	
012	013_012	IB	CALIB			01/13/10 21:50	1.0	
013	013_013	ICAL	HEXOTP_5			01/13/10 22:18	1.0	4
014	013_014	ICAL	HEXOTP_10			01/13/10 22:46	1.0	5
015	013_015	ICAL	HEXOTP_25			01/13/10 23:14	1.0	6
016	013_016	ICAL	HEXOTP_50			01/13/10 23:42	1.0	7
017	013_017	ICAL	HEXOTP_100			01/14/10 00:09	1.0	8
018	013_018	ICAL	HEXOTP_200			01/14/10 00:37	1.0	9
019	013_019	IB	CALIB			01/14/10 01:04	1.0	
020	013_020	ICAL	DSL_10			01/14/10 01:32	1.0	10
021	013_021	ICAL	DSL_100			01/14/10 02:00	1.0	11
022	013_022	ICAL	DSL_500			01/14/10 02:28	1.0	12
023	013_023	ICAL	DSL_1000			01/14/10 02:55	1.0	13
024	013_024	ICAL	DSL_5000			01/14/10 03:23	1.0	14
025	013_025	ICAL	DSL_7500			01/14/10 03:50	1.0	15
026	013_026	IB	CALIB			01/14/10 04:18	1.0	
027	013_027	ICV	DSL_500			01/14/10 04:46	1.0	2
028	013_028	X	ICV			01/14/10 05:14	1.0	2
029	013_029	IB	CALIB			01/14/10 05:43	1.0	
030	013_030	ICAL	MO_50			01/14/10 06:11	1.0	16
031	013_031	ICAL	MO_250			01/14/10 06:39	1.0	17
032	013_032	ICAL	MO_500			01/14/10 07:07	1.0	18
033	013_033	ICAL	MO_1000			01/14/10 07:34	1.0	19
034	013_034	ICAL	MO_5000			01/14/10 08:02	1.0	20
035	013_035	ICAL	MO_7500			01/14/10 08:30	1.0	21
036	013_036	IB	CALIB			01/14/10 08:58	1.0	
037	013_037	CMARKER	C8-C50			01/14/10 09:26	1.0	1
038	013_038	IB	CALIB			01/14/10 09:54	1.0	

TFB 01/14/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

Standards used: 1=S12636 2=S13457 3=S13471 4=S13690 5=S13691 6=S13692 7=S13693 8=S13694 9=S13695 10=S13230 11=S13231
 12=S13232 13=S13233 14=S13229 15=S13234 16=S12675 17=S12676 18=S12677 19=S12678 20=S12679 21=S12680

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220027250

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/18/10 14:37
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	018_001	X	PRIMER			01/18/10 14:37	1.0	
002	018_002	X	IB			01/18/10 15:05	1.0	
003	018_003	IB	CALIB			01/18/10 15:33	1.0	
004	018_004	ICAL	HEXOTP_5			01/18/10 16:02	1.0	1
005	018_005	ICAL	HEXOTP_10			01/18/10 16:30	1.0	2
006	018_006	ICAL	HEXOTP_25			01/18/10 16:58	1.0	3
007	018_007	ICAL	HEXOTP_50			01/18/10 17:27	1.0	4
008	018_008	ICAL	HEXOTP_100			01/18/10 17:55	1.0	5
009	018_009	X	HEXOTP_200			01/18/10 18:24	1.0	6
010	018_010	IB	CALIB			01/18/10 18:53	1.0	
011	018_011	ICAL	MO_50			01/18/10 19:21	1.0	7
012	018_012	ICAL	MO_250			01/18/10 19:49	1.0	8
013	018_013	ICAL	MO_500			01/18/10 20:18	1.0	9
014	018_014	ICAL	MO_1000			01/18/10 20:46	1.0	10
015	018_015	ICAL	MO_5000			01/18/10 21:14	1.0	11
016	018_016	ICAL	MO_7500			01/18/10 21:42	1.0	12
017	018_017	CMARKER	C8-C50			01/18/10 22:10	1.0	13
018	018_018	CCV	DSL_500			01/18/10 22:38	1.0	14
019	018_019	CCV	MO_500			01/18/10 23:06	1.0	15
020	018_020	BLANK	QC489059	Soil	149293	01/18/10 23:35	1.0	
021	018_021	MDL	207486-001	Soil	149293	01/19/10 00:03	1.0	
022	018_022	MDL	207486-002	Soil	149293	01/19/10 00:31	1.0	
023	018_023	MDL	207486-003	Soil	149293	01/19/10 00:59	1.0	
024	018_024	MDL	207486-004	Soil	149293	01/19/10 01:27	1.0	
025	018_025	MDL	207486-005	Soil	149293	01/19/10 01:55	1.0	
026	018_026	MDL	207486-006	Soil	149293	01/19/10 02:23	1.0	
027	018_027	MDL	207486-007	Soil	149293	01/19/10 02:50	1.0	
028	018_028	MDL	207486-008	Soil	149293	01/19/10 03:18	1.0	
029	018_029	LOD	212266-010	Water	159144	01/19/10 03:46	1.0	
030	018_030	CCV	DSL_250			01/19/10 04:15	1.0	16
031	018_031	CCV	MO_500			01/19/10 04:43	1.0	15
032	018_032	X	CCV			01/19/10 05:11	1.0	16
033	018_033	X	CCV			01/19/10 05:39	1.0	15

TFB 01/18/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S13690 2=S13691 3=S13692 4=S13693 5=S13694 6=S13695 7=S12675 8=S12676 9=S12677 10=S12678 11=S12679
 12=S12680 13=S12636 14=S13457 15=S13744 16=S13456

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220091179

Instrument : GC14B Begun : 03/04/10 07:39
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used	
001	063_001	X	PRIMER				03/04/10 07:39	1.0		
002	063_002	X	IB				03/04/10 08:07	1.0		
003	063_003	X	CMARKER				03/04/10 08:35	1.0	1	
004	063_004	CCV	DSL_1000				03/04/10 09:03	1.0	2	
005	063_005	LCS	QC534387		Filtrate	160497	03/04/10 09:47	1.0		
006	063_006	BLANK	QC534591		Soil	160553	03/04/10 10:23	1.0		
007	063_007	SAMPLE	218513-001		Soil	160553	03/04/10 10:51	5.0		15:BUNKC:12-40=270000
008	063_008	X	IB				03/04/10 11:29	1.0		
009	063_009	BS	QC534589	S	Water	160552	03/04/10 11:57	1.0		
010	063_010	BSD	QC534590	S	Water	160552	03/04/10 12:25	1.0		
011	063_011	SAMPLE	218491-001	S	Water	160552	03/04/10 12:53	1.0		
012	063_012	CCV	DSL_500				03/04/10 13:20	1.0	3	
013	063_013	X	CMARKER				03/04/10 13:48	1.0	1	
014	063_014	X	IB				03/04/10 15:27	1.0		
015	063_015	IB	CALIB				03/04/10 15:55	1.0		
016	063_016	ICAL	MO_50				03/04/10 16:24	1.0	4	
017	063_017	ICAL	MO_250				03/04/10 16:52	1.0	5	
018	063_018	ICAL	MO_500				03/04/10 17:21	1.0	6	
019	063_019	ICAL	MO_1000				03/04/10 17:50	1.0	7	
020	063_020	ICAL	MO_5000				03/04/10 18:18	1.0	8	
021	063_021	ICAL	MO_7500				03/04/10 18:47	1.0	9	
022	063_022	IB	CALIB				03/04/10 19:15	1.0		
023	063_023	CMARKER	C8-C50				03/04/10 19:44	1.0	1	
024	063_024	IB	CALIB				03/04/10 20:12	1.0		

JDG 03/04/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 13.

JDG 03/05/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 14 through 24.

Standards used: 1=S13646 2=S13458 3=S14077 4=S13804 5=S13805 6=S13806 7=S13807 8=S13808 9=S13809

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220119956

Instrument : GC14B
 Method : EPA 8015B

Begun : 03/24/10 07:16
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	083_001	X	PRIMER				03/24/10 07:16	1.0	
002	083_002	X	IB				03/24/10 07:44	1.0	
003	083_003	X	CMARKER				03/24/10 08:11	1.0	1
004	083_004	CCV	DSL_250				03/24/10 08:40	1.0	2
005	083_005	CCV	MO_500				03/24/10 09:08	1.0	3
006	083_006	CCV	BUNK_500				03/24/10 11:00	1.0	4
007	083_007	X	CMARKER				03/24/10 15:38	1.0	1
008	083_008	SAMPLE	218897-001	S	Water	161154	03/24/10 16:08	1.0	
009	083_009	SAMPLE	218897-002	S	Water	161154	03/24/10 16:36	1.0	
010	083_010	SAMPLE	218897-003	S	Water	161154	03/24/10 17:05	1.0	
011	083_011	SAMPLE	218897-006	S	Water	161154	03/24/10 17:33	1.0	
012	083_012	SAMPLE	218897-007	S	Water	161154	03/24/10 18:01	1.0	
013	083_013	SAMPLE	218897-008	S	Water	161154	03/24/10 18:29	1.0	
014	083_014	SAMPLE	218933-004		Water	161203	03/24/10 18:56	1.0	
015	083_015	X	IB				03/24/10 19:24	1.0	
016	083_016	SAMPLE	218933-006		Water	161203	03/24/10 19:52	1.0	
017	083_017	SAMPLE	218933-003		Water	161203	03/24/10 20:20	1.0	
018	083_018	SAMPLE	218933-005		Water	161203	03/24/10 20:48	1.0	
019	083_019	CCV	DSL_500				03/24/10 21:17	1.0	5
020	083_020	CCV	MO_500				03/24/10 21:45	1.0	3
021	083_021	CCV	BUNK_500				03/24/10 22:13	1.0	4
022	083_022	X	CCV				03/24/10 22:41	1.0	5
023	083_023	X	CCV				03/24/10 23:09	1.0	3
024	083_024	X	CCV				03/24/10 23:37	1.0	4
025	083_025	SAMPLE	218933-008		Water	161203	03/25/10 00:05	1.0	
026	083_026	SAMPLE	218933-015		Water	161203	03/25/10 00:33	1.0	
027	083_027	SAMPLE	218933-017		Water	161203	03/25/10 01:01	1.0	
028	083_028	SAMPLE	218933-016		Water	161203	03/25/10 01:29	1.0	2:BUNKC:12-40=7800
029	083_029	SAMPLE	218933-007		Water	161203	03/25/10 01:58	1.0	
030	083_030	SAMPLE	218933-002		Water	161203	03/25/10 02:26	1.0	
031	083_031	X	CMARKER				03/25/10 02:54	1.0	1
032	083_032	CCV	DSL_1000				03/25/10 03:22	1.0	6
033	083_033	CCV	MO_500				03/25/10 03:50	1.0	3
034	083_034	CCV	BUNK_500				03/25/10 04:18	1.0	4
035	083_035	X	CCV				03/25/10 04:46	1.0	6
036	083_036	X	CCV				03/25/10 05:14	1.0	3
037	083_037	X	CCV				03/25/10 05:41	1.0	4
039	083_039	SAMPLE	218933-014		Water	161203	03/25/10 08:21	1.0	
040	083_040	SAMPLE	218933-009		Water	161203	03/25/10 08:49	1.0	
041	083_041	SAMPLE	218866-002		Water	161154	03/25/10 09:16	1.0	
042	083_042	SAMPLE	218866-003		Water	161154	03/25/10 09:44	1.0	
043	083_043	SAMPLE	218866-004		Water	161154	03/25/10 10:12	1.0	
044	083_044	SAMPLE	218866-008		Water	161154	03/25/10 10:40	1.0	
045	083_045	SAMPLE	218936-003	S	Water	161154	03/25/10 11:08	1.0	
046	083_046	SAMPLE	218936-004	S	Water	161154	03/25/10 11:36	1.0	
047	083_047	X	CMARKER				03/25/10 12:04	1.0	1
048	083_048	CCV	DSL_500				03/25/10 12:32	1.0	5
049	083_049	CCV	MO_500				03/25/10 13:01	1.0	3
050	083_050	CCV	BUNK_500				03/25/10 13:29	1.0	4

SFL 03/25/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 37.

SAMPLE PREPARATION SUMMARY

Batch # : 161154
 Started By : DJT
 Method : 3520C
 Spike #1 ID : S14152

Prep Date : 22-MAR-2010 16:00
 SOP Version : TEH_3520_rv12
 Spike #2 ID : S14101

Analysis : TEH
 Finished By : KCL
 Units : mL
 Spike #3 ID : S13010

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
218866-002		Water	500	2.5	1	0.005	7	.5				TEHM	mss
218866-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218866-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218866-005		Water	500	2.5	1	0.005	7	.5				TEHM	
218866-006		Water	500	2.5	1	0.005	7	.5				TEHM	
218866-007		Water	500	2.5	1	0.005	5	.5				TEHM	
218866-008		Water	500	2.5	1	0.005	7	.5				TEHM	
218889-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218889-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218897-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218897-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218897-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218897-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218897-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218897-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218936-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218936-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218936-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218936-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218938-001		Water	500	2.5	1	0.005	5	.5				TEHM	
QC536998	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC536999	LCS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC537000	MS	Water	500	2.5	1	0.005	7	.5	.5				
QC537001	MSD	Water	500	2.5	1	0.005	7	.5	.5				
QC537002	LCS	Water	500	2.5	1	0.005		.5		.5			

Analyst: SFL

Date: 03/25/10

Reviewer: JDG

Date: 03/25/10

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

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BK 2968

LIMS Batch No: 161154
 LIMS Analysis: TEHM
 Date Extracted: 3/22/10

Extraction Method:
 mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
 EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
218866-002	D	500	7	2.5		
	003					
	004					
	005					MSS
	006					
	007		5			
	008		7			
218889-001	J				X	
	003					
218897-001	F					
	002					
	003					
	006					
	007					
	008					
218936-001						
	002					
	003					
	004					
218938-001	A		5			
MB QC 536998	NA		NA		X	
LCS	6999					
MS	7000		7			
MSD	7001					
LCS	7002		NA			

Mfg & Lot# / LIMS # / Time Date / Initials

0.5 mL of TEH_SURR was added to all samples	S14152B	RT 3/22/10
0.5 mL of TEH_SP was added to all spikes	S14101B/*513010c	
pH of all samples adjusted to pH ≤ 2 with H ₂ SO ₄	FS094395	
<input checked="" type="checkbox"/> 3520c: Samples were continually extracted about 450 mL of CH ₂ Cl ₂	EM49338	
Extraction Start Time:	1600	
Extraction End Time:	1008	DL 3/23/10
<input type="checkbox"/> 3510c: Samples were extracted 3 times with 60 mL of CH ₂ Cl ₂	N/A	KCL 3/24/10
Extracts filtered through baked, CH ₂ Cl ₂ -rinsed granular Na ₂ SO ₄	EM49044931	
Concentrated to final volume at temperature (degrees C)	10c	
Relinquished to TEH Department		


 Extraction Chemist 3/22/10
 Date

Continued from Page
 Continued on Page


 Reviewed by 3/24/10
 Date

Prep Chemist: Vcl
 Cleanup Date: 3/24/10

Benchbook # **BK 3005**
 Page 10

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
218889-001	161154	1.0	1.0	
↓ -003				
218897-001				
↓ -002				
↓ -003				
↓ -006				
↓ -007				
↓ -008				
218936-001				
↓ -002				
↓ -003				
↓ -004				
Blank AC536998 LCS ↓ 99				

Extracts were cleaned up using C&T assembled 1.0 g columns

Extracts were cleaned up using 1.0 g cartridges

Extracts were eluted with 40 mL CH₂Cl₂

Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
NA	Vcl 3/24/10
SP1476801	
EM44338	
✓	

[Signature] 3/24/10
 Extraction Chemist / Date

Continued from page 9
 Continued on page 10

[Signature] 3/24/10
 Reviewed by / Date

Laboratory Job Number 218866

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-007-UST-10Q1	Batch#:	161337
Lab ID:	218866-001	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-007-UST-10Q1	Batch#:	161337
Lab ID:	218866-001	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	V9
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	107	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-54A-UST-10Q1	Diln Fac:	1.000
Lab ID:	218866-002	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ	Flags
Freon 12	ND	1.0	161337	03/26/10		VI
Chloromethane	ND	1.0	161337	03/26/10		
Vinyl Chloride	ND	0.5	161337	03/26/10		
Bromomethane	ND	1.0	161337	03/26/10		
Chloroethane	ND	1.0	161337	03/26/10		
Trichlorofluoromethane	ND	1.0	161337	03/26/10		
Iodomethane	ND	10	161337	03/26/10		
Acetone	ND	10	161337	03/26/10		
1,1-Dichloroethene	0.5	0.5	161337	03/26/10		
Methylene Chloride	ND	10	161337	03/26/10		
Carbon Disulfide	ND	0.5	161337	03/26/10		
MTBE	ND	0.5	161337	03/26/10		
trans-1,2-Dichloroethene	ND	0.5	161337	03/26/10		
Vinyl Acetate	ND	10	161337	03/26/10		
1,1-Dichloroethane	0.7	0.5	161337	03/26/10		
2-Butanone	ND	10	161337	03/26/10		
cis-1,2-Dichloroethene	ND	0.5	161337	03/26/10		
2,2-Dichloropropane	ND	0.5	161337	03/26/10		
Chloroform	1.1	0.5	161337	03/26/10		
Bromochloromethane	ND	0.5	161337	03/26/10		
1,1,1-Trichloroethane	ND	0.5	161337	03/26/10		
1,1-Dichloropropene	ND	0.5	161337	03/26/10		
Carbon Tetrachloride	ND	0.5	161337	03/26/10		
1,2-Dichloroethane	ND	0.5	161337	03/26/10		
Benzene	ND	0.5	161337	03/26/10		
Trichloroethene	1.9	0.5	161337	03/26/10		
1,2-Dichloropropane	ND	0.5	161337	03/26/10		
Bromodichloromethane	ND	0.5	161337	03/26/10		
Dibromomethane	ND	0.5	161337	03/26/10		
4-Methyl-2-Pentanone	ND	10	161337	03/26/10		
cis-1,3-Dichloropropene	ND	0.5	161337	03/26/10		
Toluene	ND	0.5	161337	03/26/10		
trans-1,3-Dichloropropene	ND	0.5	161337	03/26/10		
1,1,2-Trichloroethane	ND	0.5	161337	03/26/10		
2-Hexanone	ND	10	161337	03/26/10		
1,3-Dichloropropane	ND	0.5	161337	03/26/10		
Tetrachloroethene	0.9	0.5	161337	03/26/10		
Dibromochloromethane	ND	0.5	161337	03/26/10		
1,2-Dibromoethane	ND	0.5	161337	03/26/10		
Chlorobenzene	ND	0.5	161337	03/26/10		
1,1,1,2-Tetrachloroethane	ND	0.5	161337	03/26/10		
Ethylbenzene	ND	0.5	161337	03/26/10		
m,p-Xylenes	ND	0.5	161337	03/26/10		
o-Xylene	ND	0.5	161337	03/26/10		
Styrene	ND	0.5	161337	03/26/10		
Bromoform	ND	1.0	161337	03/26/10		
Isopropylbenzene	ND	0.5	161337	03/26/10		
1,1,2,2-Tetrachloroethane	ND	0.5	161337	03/26/10		
1,2,3-Trichloropropane	ND	0.5	161337	03/26/10		
Propylbenzene	ND	0.5	161337	03/26/10		
Bromobenzene	ND	0.5	161337	03/26/10		
1,3,5-Trimethylbenzene	ND	0.5	161337	03/26/10		
2-Chlorotoluene	ND	0.5	161337	03/26/10		
4-Chlorotoluene	ND	0.5	161337	03/26/10		
tert-Butylbenzene	ND	0.5	161337	03/26/10		

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-54A-UST-10Q1	Diln Fac:	1.000
Lab ID:	218866-002	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
1,2,4-Trimethylbenzene	ND	0.5	161337	03/26/10	
sec-Butylbenzene	ND	0.5	161337	03/26/10	
para-Isopropyl Toluene	ND	0.5	161337	03/26/10	
1,3-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,4-Dichlorobenzene	ND	0.5	161337	03/26/10	
n-Butylbenzene	ND	0.5	161337	03/26/10	
1,2-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,2-Dibromo-3-Chloropropane	ND	2.0	161337	03/26/10	
1,2,4-Trichlorobenzene	ND	0.5	161337	03/26/10	
Hexachlorobutadiene	ND	2.0	161337	03/26/10	
Naphthalene	ND	2.0	161366	03/27/10	
1,2,3-Trichlorobenzene	ND	0.5	161337	03/26/10	
Xylene (total)	ND	0.5	161337	03/26/10	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	108	77-120	161337	03/26/10	
Dibromofluoromethane	101	77-120	161366	03/27/10	
1,2-Dichloroethane-d4	105	70-127	161337	03/26/10	
1,2-Dichloroethane-d4	105	70-127	161366	03/27/10	
Toluene-d8	99	83-125	161337	03/26/10	
Toluene-d8	106	83-125	161366	03/27/10	
Bromofluorobenzene	106	78-120	161337	03/26/10	
Bromofluorobenzene	103	78-120	161366	03/27/10	

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2101-UST-10Q1	Diln Fac:	1.000
Lab ID:	218866-003	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ	Flags
Freon 12	ND	1.0	161337	03/26/10		V1
Chloromethane	ND	1.0	161337	03/26/10		
Vinyl Chloride	1.1	0.5	161337	03/26/10		
Bromomethane	ND	1.0	161337	03/26/10		
Chloroethane	ND	1.0	161337	03/26/10		
Trichlorofluoromethane	ND	1.0	161337	03/26/10		
Iodomethane	ND	10	161337	03/26/10		
Acetone	ND	10	161337	03/26/10		
1,1-Dichloroethene	ND	0.5	161337	03/26/10		
Methylene Chloride	ND	10	161337	03/26/10		
Carbon Disulfide	ND	0.5	161337	03/26/10		
MTBE	1.3	0.5	161337	03/26/10		
trans-1,2-Dichloroethene	ND	0.5	161337	03/26/10		
Vinyl Acetate	ND	10	161337	03/26/10		
1,1-Dichloroethane	10	0.5	161337	03/26/10		
2-Butanone	ND	10	161337	03/26/10		
cis-1,2-Dichloroethene	ND	0.5	161337	03/26/10		
2,2-Dichloropropane	ND	0.5	161337	03/26/10		
Chloroform	ND	0.5	161337	03/26/10		
Bromochloromethane	ND	0.5	161337	03/26/10		
1,1,1-Trichloroethane	ND	0.5	161337	03/26/10		
1,1-Dichloropropene	ND	0.5	161337	03/26/10		
Carbon Tetrachloride	ND	0.5	161337	03/26/10		
1,2-Dichloroethane	ND	0.5	161337	03/26/10		
Benzene	ND	0.5	161337	03/26/10		
Trichloroethene	0.9	0.5	161337	03/26/10		
1,2-Dichloropropane	ND	0.5	161337	03/26/10		
Bromodichloromethane	ND	0.5	161337	03/26/10		
Dibromomethane	ND	0.5	161337	03/26/10		
4-Methyl-2-Pentanone	ND	10	161337	03/26/10		
cis-1,3-Dichloropropene	ND	0.5	161337	03/26/10		
Toluene	ND	0.5	161337	03/26/10		
trans-1,3-Dichloropropene	ND	0.5	161337	03/26/10		
1,1,2-Trichloroethane	ND	0.5	161337	03/26/10		
2-Hexanone	ND	10	161337	03/26/10		
1,3-Dichloropropane	ND	0.5	161337	03/26/10		
Tetrachloroethene	ND	0.5	161337	03/26/10		
Dibromochloromethane	ND	0.5	161337	03/26/10		
1,2-Dibromoethane	ND	0.5	161337	03/26/10		
Chlorobenzene	ND	0.5	161337	03/26/10		
1,1,1,2-Tetrachloroethane	ND	0.5	161337	03/26/10		
Ethylbenzene	ND	0.5	161337	03/26/10		
m,p-Xylenes	ND	0.5	161337	03/26/10		
o-Xylene	ND	0.5	161337	03/26/10		
Styrene	ND	0.5	161337	03/26/10		
Bromoform	ND	1.0	161337	03/26/10		
Isopropylbenzene	ND	0.5	161337	03/26/10		
1,1,2,2-Tetrachloroethane	ND	0.5	161337	03/26/10		
1,2,3-Trichloropropane	ND	0.5	161337	03/26/10		
Propylbenzene	ND	0.5	161337	03/26/10		
Bromobenzene	ND	0.5	161337	03/26/10		
1,3,5-Trimethylbenzene	ND	0.5	161337	03/26/10		
2-Chlorotoluene	ND	0.5	161337	03/26/10		
4-Chlorotoluene	ND	0.5	161337	03/26/10		
tert-Butylbenzene	ND	0.5	161337	03/26/10		

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	PL-2101-UST-10Q1	Diln Fac:	1.000
Lab ID:	218866-003	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
1,2,4-Trimethylbenzene	ND	0.5	161337	03/26/10	
sec-Butylbenzene	0.7	0.5	161337	03/26/10	
para-Isopropyl Toluene	ND	0.5	161337	03/26/10	
1,3-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,4-Dichlorobenzene	ND	0.5	161337	03/26/10	
n-Butylbenzene	ND	0.5	161337	03/26/10	
1,2-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,2-Dibromo-3-Chloropropane	ND	2.0	161337	03/26/10	
1,2,4-Trichlorobenzene	ND	0.5	161337	03/26/10	
Hexachlorobutadiene	ND	2.0	161337	03/26/10	
Naphthalene	ND	2.0	161366	03/27/10	
1,2,3-Trichlorobenzene	ND	0.5	161337	03/26/10	
Xylene (total)	ND	0.5	161337	03/26/10	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	108	77-120	161337	03/26/10	
Dibromofluoromethane	104	77-120	161366	03/27/10	
1,2-Dichloroethane-d4	106	70-127	161337	03/26/10	
1,2-Dichloroethane-d4	105	70-127	161366	03/27/10	
Toluene-d8	99	83-125	161337	03/26/10	
Toluene-d8	108	83-125	161366	03/27/10	
Bromofluorobenzene	105	78-120	161337	03/26/10	
Bromofluorobenzene	101	78-120	161366	03/27/10	

ND= Not Detected
 RL= Reporting Limit
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Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-006	Diln Fac:	1.000
Lab ID:	218866-004	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	161337	03/26/10	VI
Chloromethane	ND	1.0	161337	03/26/10	
Vinyl Chloride	1.0	0.5	161337	03/26/10	
Bromomethane	ND	1.0	161337	03/26/10	
Chloroethane	ND	1.0	161337	03/26/10	
Trichlorofluoromethane	ND	1.0	161337	03/26/10	
Iodomethane	ND	10	161337	03/26/10	
Acetone	ND	10	161337	03/26/10	
1,1-Dichloroethene	ND	0.5	161337	03/26/10	
Methylene Chloride	ND	10	161337	03/26/10	
Carbon Disulfide	ND	0.5	161337	03/26/10	
MTBE	1.4	0.5	161337	03/26/10	
trans-1,2-Dichloroethene	ND	0.5	161337	03/26/10	
Vinyl Acetate	ND	10	161337	03/26/10	
1,1-Dichloroethane	10	0.5	161337	03/26/10	
2-Butanone	ND	10	161337	03/26/10	
cis-1,2-Dichloroethene	ND	0.5	161337	03/26/10	
2,2-Dichloropropane	ND	0.5	161337	03/26/10	
Chloroform	ND	0.5	161337	03/26/10	
Bromochloromethane	ND	0.5	161337	03/26/10	
1,1,1-Trichloroethane	ND	0.5	161337	03/26/10	
1,1-Dichloropropene	ND	0.5	161337	03/26/10	
Carbon Tetrachloride	ND	0.5	161337	03/26/10	
1,2-Dichloroethane	ND	0.5	161337	03/26/10	
Benzene	ND	0.5	161337	03/26/10	
Trichloroethene	0.9	0.5	161337	03/26/10	
1,2-Dichloropropane	ND	0.5	161337	03/26/10	
Bromodichloromethane	ND	0.5	161337	03/26/10	
Dibromomethane	ND	0.5	161337	03/26/10	
4-Methyl-2-Pentanone	ND	10	161337	03/26/10	
cis-1,3-Dichloropropene	ND	0.5	161337	03/26/10	
Toluene	ND	0.5	161337	03/26/10	
trans-1,3-Dichloropropene	ND	0.5	161337	03/26/10	
1,1,2-Trichloroethane	ND	0.5	161337	03/26/10	
2-Hexanone	ND	10	161337	03/26/10	
1,3-Dichloropropane	ND	0.5	161337	03/26/10	
Tetrachloroethene	ND	0.5	161337	03/26/10	
Dibromochloromethane	ND	0.5	161337	03/26/10	
1,2-Dibromoethane	ND	0.5	161337	03/26/10	
Chlorobenzene	ND	0.5	161337	03/26/10	
1,1,1,2-Tetrachloroethane	ND	0.5	161337	03/26/10	
Ethylbenzene	ND	0.5	161337	03/26/10	
m,p-Xylenes	ND	0.5	161337	03/26/10	
o-Xylene	ND	0.5	161337	03/26/10	
Styrene	ND	0.5	161337	03/26/10	
Bromoform	ND	1.0	161337	03/26/10	
Isopropylbenzene	ND	0.5	161337	03/26/10	
1,1,2,2-Tetrachloroethane	ND	0.5	161337	03/26/10	
1,2,3-Trichloropropane	ND	0.5	161337	03/26/10	
Propylbenzene	ND	0.5	161337	03/26/10	
Bromobenzene	ND	0.5	161337	03/26/10	
1,3,5-Trimethylbenzene	ND	0.5	161337	03/26/10	
2-Chlorotoluene	ND	0.5	161337	03/26/10	
4-Chlorotoluene	ND	0.5	161337	03/26/10	
tert-Butylbenzene	ND	0.5	161337	03/26/10	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-006	Diln Fac:	1.000
Lab ID:	218866-004	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
1,2,4-Trimethylbenzene	ND	0.5	161337	03/26/10	
sec-Butylbenzene	0.8	0.5	161337	03/26/10	
para-Isopropyl Toluene	ND	0.5	161337	03/26/10	
1,3-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,4-Dichlorobenzene	ND	0.5	161337	03/26/10	
n-Butylbenzene	ND	0.5	161337	03/26/10	
1,2-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,2-Dibromo-3-Chloropropane	ND	2.0	161337	03/26/10	
1,2,4-Trichlorobenzene	ND	0.5	161337	03/26/10	
Hexachlorobutadiene	ND	2.0	161337	03/26/10	
Naphthalene	ND	2.0	161366	03/27/10	
1,2,3-Trichlorobenzene	ND	0.5	161337	03/26/10	
Xylene (total)	ND	0.5	161337	03/26/10	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	110	77-120	161337	03/26/10	
Dibromofluoromethane	103	77-120	161366	03/27/10	
1,2-Dichloroethane-d4	107	70-127	161337	03/26/10	
1,2-Dichloroethane-d4	106	70-127	161366	03/27/10	
Toluene-d8	100	83-125	161337	03/26/10	
Toluene-d8	107	83-125	161366	03/27/10	
Bromofluorobenzene	106	78-120	161337	03/26/10	
Bromofluorobenzene	105	78-120	161366	03/27/10	

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	4.3	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	1.3	0.5	
MTBE	38	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	15	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	0.8	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	M1
1,2-Dichloroethane	ND	0.5	
Benzene	4.3	0.5	
Trichloroethene	0.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	1.4	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	0.9	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	0.6	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	0.8	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	0.5	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-52A-UST-10Q1	Batch#:	161366
Lab ID:	218866-006	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	V9
1,1-Dichloroethene	1.1	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	19	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	4.9	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	1.4	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	78	0.5	
Trichloroethene	2.6	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.1	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-52A-UST-10Q1	Batch#:	161366
Lab ID:	218866-006	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	8.1	0.5	
m,p-Xylenes	4.6	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	4.1	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	4.4	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	1.1	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	16	0.5	
sec-Butylbenzene	1.7	0.5	
para-Isopropyl Toluene	1.4	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	1.7	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	17	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	4.6	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	96	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	102	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-007-UST-10Q1	Batch#:	161337
Lab ID:	218866-007	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-007-UST-10Q1	Batch#:	161337
Lab ID:	218866-007	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	V9
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	106	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-60A-UST-10Q1	Batch#:	161380
Lab ID:	218866-008	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/28/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2 V9
Acetone	ND	10	
1,1-Dichloroethene	1.2	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	8.2	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	19	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	0.7	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.0	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-60A-UST-10Q1	Batch#:	161380
Lab ID:	218866-008	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/28/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	97	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161337
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
1,3-Dichloropropane	25.00	25.27	101	75-120		
Tetrachloroethene	25.00	26.36	105	77-120		
Dibromochloromethane	25.00	25.32	101	76-120		
1,2-Dibromoethane	25.00	23.56	94	77-120		
Chlorobenzene	25.00	24.94	100	78-120		
1,1,1,2-Tetrachloroethane	25.00	24.25	97	77-120		
Ethylbenzene	25.00	25.86	103	78-120		
m,p-Xylenes	50.00	49.33	99	77-120		
o-Xylene	25.00	26.09	104	77-120		
Styrene	25.00	25.11	100	77-120		
Bromoform	25.00	22.45	90	74-121		
Isopropylbenzene	25.00	22.88	92	71-120		
1,1,2,2-Tetrachloroethane	25.00	23.90	96	73-120		
1,2,3-Trichloropropane	25.00	22.74	91	72-120		
Propylbenzene	25.00	26.59	106	76-120		
Bromobenzene	25.00	24.46	98	75-120		
1,3,5-Trimethylbenzene	25.00	26.00	104	77-120		
2-Chlorotoluene	25.00	25.74	103	76-120		
4-Chlorotoluene	25.00	25.51	102	78-120		
tert-Butylbenzene	25.00	26.50	106	76-120		
1,2,4-Trimethylbenzene	25.00	26.28	105	77-120		
sec-Butylbenzene	25.00	27.44	110	80-120		
para-Isopropyl Toluene	25.00	25.50	102	76-120		
1,3-Dichlorobenzene	25.00	25.19	101	75-120		
1,4-Dichlorobenzene	25.00	24.50	98	77-120		
n-Butylbenzene	25.00	27.56	110	76-120		
1,2-Dichlorobenzene	25.00	25.17	101	76-120		
1,2-Dibromo-3-Chloropropane	25.00	20.29	81	65-120		
1,2,4-Trichlorobenzene	25.00	24.29	97	73-121		
Hexachlorobutadiene	25.00	24.71	99	73-123		
Naphthalene	25.00	21.75	87	62-121		
1,2,3-Trichlorobenzene	25.00	24.72	99	66-123		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	104	77-120		
1,2-Dichloroethane-d4	102	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	101	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161337
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,3-Dichloropropane	25.00	24.97	100	75-120	1	20		
Tetrachloroethene	25.00	25.44	102	77-120	4	20		
Dibromochloromethane	25.00	25.49	102	76-120	1	20		
1,2-Dibromoethane	25.00	24.27	97	77-120	3	20		
Chlorobenzene	25.00	24.09	96	78-120	3	20		
1,1,1,2-Tetrachloroethane	25.00	24.13	97	77-120	1	20		
Ethylbenzene	25.00	25.08	100	78-120	3	26		
m,p-Xylenes	50.00	48.01	96	77-120	3	20		
o-Xylene	25.00	25.38	102	77-120	3	20		
Styrene	25.00	24.67	99	77-120	2	20		
Bromoform	25.00	23.33	93	74-121	4	21		
Isopropylbenzene	25.00	22.28	89	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	24.57	98	73-120	3	20		
1,2,3-Trichloropropane	25.00	23.67	95	72-120	4	20		
Propylbenzene	25.00	25.75	103	76-120	3	20		
Bromobenzene	25.00	24.29	97	75-120	1	20		
1,3,5-Trimethylbenzene	25.00	25.44	102	77-120	2	20		
2-Chlorotoluene	25.00	25.06	100	76-120	3	20		
4-Chlorotoluene	25.00	24.88	100	78-120	3	20		
tert-Butylbenzene	25.00	25.89	104	76-120	2	21		
1,2,4-Trimethylbenzene	25.00	25.62	102	77-120	3	20		
sec-Butylbenzene	25.00	26.61	106	80-120	3	21		
para-Isopropyl Toluene	25.00	24.66	99	76-120	3	20		
1,3-Dichlorobenzene	25.00	24.89	100	75-120	1	20		
1,4-Dichlorobenzene	25.00	24.16	97	77-120	1	23		
n-Butylbenzene	25.00	26.55	106	76-120	4	21		
1,2-Dichlorobenzene	25.00	25.26	101	76-120	0	20		
1,2-Dibromo-3-Chloropropane	25.00	22.20	89	65-120	9	22		
1,2,4-Trichlorobenzene	25.00	24.07	96	73-121	1	20		
Hexachlorobutadiene	25.00	24.76	99	73-123	0	25		
Naphthalene	25.00	22.81	91	62-121	5	32		
1,2,3-Trichlorobenzene	25.00	25.09	100	66-123	1	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	106	77-120		
1,2-Dichloroethane-d4	103	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	101	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537781	Batch#:	161337
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537781	Batch#:	161337
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	106	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	106	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537782	Batch#:	161337
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537782	Batch#:	161337
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	V9
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	107	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC537783	Batch#:	161338
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Freon 12	25.00	28.29 b	113	56-140	V3
Chloromethane	25.00	25.68	103	46-142	
Vinyl Chloride	25.00	24.06	96	49-136	
Bromomethane	25.00	26.84	107	42-154	
Chloroethane	25.00	25.98	104	51-133	
Trichlorofluoromethane	25.00	24.73	99	63-135	
Iodomethane	25.00	29.33	117	70-130	
Acetone	25.00	23.28	93	48-130	
1,1-Dichloroethene	25.00	26.27	105	68-133	
Methylene Chloride	25.00	25.96	104	71-120	
Carbon Disulfide	25.00	25.06	100	56-120	
MTBE	25.00	22.48	90	58-120	
trans-1,2-Dichloroethene	25.00	26.52	106	80-120	
Vinyl Acetate	25.00	24.38	98	63-124	
1,1-Dichloroethane	25.00	26.30	105	77-120	
2-Butanone	25.00	22.22	89	57-120	
cis-1,2-Dichloroethene	25.00	25.48	102	75-120	
2,2-Dichloropropane	25.00	27.02	108	72-128	
Chloroform	25.00	24.88	100	78-120	
Bromochloromethane	25.00	25.76	103	78-120	
1,1,1-Trichloroethane	25.00	26.67	107	78-120	
1,1-Dichloropropene	25.00	26.19	105	75-120	
Carbon Tetrachloride	25.00	27.84	111	80-120	
1,2-Dichloroethane	25.00	24.06	96	74-120	
Benzene	25.00	25.75	103	77-120	
Trichloroethene	25.00	24.57	98	78-122	
1,2-Dichloropropane	25.00	24.90	100	76-120	
Bromodichloromethane	25.00	25.54	102	78-120	
Dibromomethane	25.00	24.64	99	77-120	
4-Methyl-2-Pentanone	25.00	21.28	85	65-120	
cis-1,3-Dichloropropene	25.00	25.44	102	76-120	
Toluene	25.00	24.96	100	73-120	
trans-1,3-Dichloropropene	25.00	22.02	88	72-120	
1,1,2-Trichloroethane	25.00	23.81	95	76-120	
2-Hexanone	25.00	21.02	84	57-121	
1,3-Dichloropropane	25.00	23.90	96	75-120	
Tetrachloroethene	25.00	25.85	103	77-120	
Dibromochloromethane	25.00	24.91	100	76-120	

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC537783	Batch#:	161338
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,2-Dibromoethane	25.00	23.07	92	77-120	
Chlorobenzene	25.00	25.02	100	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.36	97	77-120	
Ethylbenzene	25.00	25.26	101	78-120	
m,p-Xylenes	50.00	50.88	102	77-120	
o-Xylene	25.00	25.83	103	77-120	
Styrene	25.00	26.09	104	77-120	
Bromoform	25.00	24.16	97	74-121	
Isopropylbenzene	25.00	21.87	87	71-120	
1,1,2,2-Tetrachloroethane	25.00	21.20	85	73-120	
1,2,3-Trichloropropane	25.00	21.05	84	72-120	
Propylbenzene	25.00	24.62	98	76-120	
Bromobenzene	25.00	23.49	94	75-120	
1,3,5-Trimethylbenzene	25.00	25.03	100	77-120	
2-Chlorotoluene	25.00	24.32	97	76-120	
4-Chlorotoluene	25.00	23.78	95	78-120	
tert-Butylbenzene	25.00	25.11	100	76-120	
1,2,4-Trimethylbenzene	25.00	25.25	101	77-120	
sec-Butylbenzene	25.00	26.22	105	80-120	
para-Isopropyl Toluene	25.00	24.93	100	76-120	
1,3-Dichlorobenzene	25.00	23.91	96	75-120	
1,4-Dichlorobenzene	25.00	23.81	95	77-120	
n-Butylbenzene	25.00	26.08	104	76-120	
1,2-Dichlorobenzene	25.00	24.15	97	76-120	
1,2-Dibromo-3-Chloropropane	25.00	20.17	81	65-120	
1,2,4-Trichlorobenzene	25.00	23.68	95	73-121	
Hexachlorobutadiene	25.00	24.78	99	73-123	
Naphthalene	25.00	22.94	92	62-121	
1,2,3-Trichlorobenzene	25.00	24.27	97	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	103	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	95	78-120	

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537784	Batch#:	161338
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537784	Batch#:	161338
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	105	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	102	83-125	
Bromofluorobenzene	100	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
MSS Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Type: MS Lab ID: QC537798

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	<0.2000	25.00	28.42	b 114	56-140	V3	
Chloromethane	<0.2000	25.00	26.38	106	46-142		
Vinyl Chloride	4.256	25.00	28.39	97	49-136		
Bromomethane	<0.2000	25.00	24.16	97	42-154		
Chloroethane	<0.2000	25.00	30.51	122	51-133		
Trichlorofluoromethane	<0.2000	25.00	26.43	106	63-135		
Iodomethane	<1.000	25.00	27.04	108	60-140		
Acetone	<1.000	25.00	25.20	101	48-130		
1,1-Dichloroethene	0.2762	25.00	28.15	112	68-133		
Methylene Chloride	<0.1895	25.00	27.94	112	71-120		
Carbon Disulfide	1.328	25.00	28.76	110	56-120		
MTBE	38.03	25.00	62.96	100	58-120		
trans-1,2-Dichloroethene	<0.1385	25.00	28.66	115	80-120		
Vinyl Acetate	<1.000	25.00	23.90	96	63-124		
1,1-Dichloroethane	15.14	25.00	41.89	107	77-120		
2-Butanone	<1.000	25.00	25.74	103	57-120		
cis-1,2-Dichloroethene	0.7819	25.00	27.56	107	75-120		
2,2-Dichloropropane	<0.1039	25.00	25.06	100	72-128		
Chloroform	0.1223	25.00	26.36	105	78-120		
Bromochloromethane	<0.1423	25.00	27.44	110	78-120		
1,1,1-Trichloroethane	<0.1000	25.00	28.51	114	78-120		
1,1-Dichloropropene	<0.1000	25.00	28.34	113	75-120		
Carbon Tetrachloride	<0.1000	25.00	30.19	121 *	80-120	M1	
1,2-Dichloroethane	<0.1000	25.00	25.40	102	74-120		
Benzene	4.294	25.00	31.57	109	77-120		
Trichloroethene	0.5378	25.00	26.68	105	78-122		
1,2-Dichloropropane	<0.1172	25.00	27.02	108	76-120		
Bromodichloromethane	<0.1000	25.00	27.65	109	78-120		
Dibromomethane	<0.1000	25.00	26.92	107	77-120		
4-Methyl-2-Pentanone	<1.000	25.00	26.17	105	65-120		
cis-1,3-Dichloropropene	<0.1000	25.00	26.36	105	76-120		
Toluene	<0.1000	25.00	26.73	107	73-120		
trans-1,3-Dichloropropene	<0.1000	25.00	22.85	91	72-120		
1,1,2-Trichloroethane	<0.1173	25.00	25.85	103	76-120		
2-Hexanone	<1.000	25.00	26.36	105	57-121		
1,3-Dichloropropane	<0.1000	25.00	25.69	103	75-120		
Tetrachloroethene	0.3159	25.00	27.86	110	77-120		
Dibromochloromethane	<0.1000	25.00	26.69	107	76-120		
1,2-Dibromoethane	<0.1000	25.00	25.30	101	77-120		
Chlorobenzene	<0.1000	25.00	26.50	106	78-120		
1,1,1,2-Tetrachloroethane	<0.1000	25.00	25.99	104	77-120		
Ethylbenzene	0.2408	25.00	27.38	109	78-120		
m,p-Xylenes	<0.1000	50.00	54.63	109	77-120		
o-Xylene	<0.1000	25.00	27.69	111	77-120		
Styrene	<0.1000	25.00	27.63	111	77-120		
Bromoform	<0.2000	25.00	26.76	107	74-121		
Isopropylbenzene	1.353	25.00	24.58	93	71-120		
1,1,2,2-Tetrachloroethane	<0.1000	25.00	25.17	99	73-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
MSS Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ Flags
1,2,3-Trichloropropane	<0.1000	25.00	23.80	95	72-120	
Propylbenzene	0.8510	25.00	27.04	105	76-120	
Bromobenzene	<0.1000	25.00	24.53	98	75-120	
1,3,5-Trimethylbenzene	<0.1000	25.00	26.70	107	77-120	
2-Chlorotoluene	<0.1000	25.00	25.64	103	76-120	
4-Chlorotoluene	<0.1000	25.00	25.00	100	78-120	
tert-Butylbenzene	0.6154	25.00	27.53	108	76-120	
1,2,4-Trimethylbenzene	<0.1000	25.00	26.99	108	77-120	
sec-Butylbenzene	0.8495	25.00	28.83	112	80-120	
para-Isopropyl Toluene	0.1356	25.00	26.76	106	76-120	
1,3-Dichlorobenzene	<0.1000	25.00	25.26	101	75-120	
1,4-Dichlorobenzene	<0.1000	25.00	25.03	100	77-120	
n-Butylbenzene	0.5032	25.00	28.46	112	76-120	
1,2-Dichlorobenzene	<0.1000	25.00	25.65	103	76-120	
1,2-Dibromo-3-Chloropropane	<0.3139	25.00	24.89	100	65-120	
1,2,4-Trichlorobenzene	<0.1238	25.00	26.73	107	73-121	
Hexachlorobutadiene	<0.1027	25.00	27.62	110	73-123	
Naphthalene	0.9073	25.00	29.51	114	62-121	
1,2,3-Trichlorobenzene	<0.1000	25.00	27.97	112	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	104	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	95	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
MSS Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Type: MSD Lab ID: QC537799

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	28.52 b	114	56-140	0	24	V3	
Chloromethane	25.00	24.96	100	46-142	6	24		
Vinyl Chloride	25.00	28.31	96	49-136	0	24		
Bromomethane	25.00	21.04	84	42-154	14	24		
Chloroethane	25.00	29.98	120	51-133	2	25		
Trichlorofluoromethane	25.00	25.94	104	63-135	2	20		
Iodomethane	25.00	22.78	91	60-140	17	30		
Acetone	25.00	24.27	97	48-130	4	41		
1,1-Dichloroethene	25.00	27.08	107	68-133	4	20		
Methylene Chloride	25.00	26.62	106	71-120	5	20		
Carbon Disulfide	25.00	28.02	107	56-120	3	20		
MTBE	25.00	61.78	95	58-120	2	21		
trans-1,2-Dichloroethene	25.00	27.38	110	80-120	5	24		
Vinyl Acetate	25.00	22.82	91	63-124	5	24		
1,1-Dichloroethane	25.00	39.88	99	77-120	5	20		
2-Butanone	25.00	24.24	97	57-120	6	32		
cis-1,2-Dichloroethene	25.00	26.17	102	75-120	5	20		
2,2-Dichloropropane	25.00	23.53	94	72-128	6	24		
Chloroform	25.00	25.13	100	78-120	5	20		
Bromochloromethane	25.00	26.12	104	78-120	5	20		
1,1,1-Trichloroethane	25.00	27.03	108	78-120	5	20		
1,1-Dichloropropene	25.00	26.98	108	75-120	5	21		
Carbon Tetrachloride	25.00	28.77	115	80-120	5	21		
1,2-Dichloroethane	25.00	24.46	98	74-120	4	20		
Benzene	25.00	30.16	103	77-120	5	20		
Trichloroethene	25.00	25.62	100	78-122	4	20		
1,2-Dichloropropane	25.00	25.69	103	76-120	5	20		
Bromodichloromethane	25.00	26.55	104	78-120	4	20		
Dibromomethane	25.00	25.87	103	77-120	4	20		
4-Methyl-2-Pentanone	25.00	25.38	102	65-120	3	22		
cis-1,3-Dichloropropene	25.00	25.40	102	76-120	4	20		
Toluene	25.00	25.52	102	73-120	5	20		
trans-1,3-Dichloropropene	25.00	22.19	89	72-120	3	20		
1,1,2-Trichloroethane	25.00	25.10	100	76-120	3	20		
2-Hexanone	25.00	25.69	103	57-121	3	25		
1,3-Dichloropropane	25.00	25.01	100	75-120	3	20		
Tetrachloroethene	25.00	26.34	104	77-120	6	20		
Dibromochloromethane	25.00	25.94	104	76-120	3	20		
1,2-Dibromoethane	25.00	24.64	99	77-120	3	20		
Chlorobenzene	25.00	25.52	102	78-120	4	20		
1,1,1,2-Tetrachloroethane	25.00	24.79	99	77-120	5	20		
Ethylbenzene	25.00	26.19	104	78-120	4	26		
m,p-Xylenes	50.00	52.10	104	77-120	5	20		
o-Xylene	25.00	26.48	106	77-120	4	20		
Styrene	25.00	26.47	106	77-120	4	20		
Bromoform	25.00	26.10	104	74-121	3	21		
Isopropylbenzene	25.00	23.76	90	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	24.38	96	73-120	3	20		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-68A-UST-10Q1	Batch#:	161338
MSS Lab ID:	218866-005	Sampled:	03/16/10
Matrix:	Water	Received:	03/17/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,2,3-Trichloropropane	25.00	23.01	92	72-120	3	20		
Propylbenzene	25.00	25.91	100	76-120	4	20		
Bromobenzene	25.00	23.87	95	75-120	3	20		
1,3,5-Trimethylbenzene	25.00	25.74	103	77-120	4	20		
2-Chlorotoluene	25.00	24.60	98	76-120	4	20		
4-Chlorotoluene	25.00	24.21	97	78-120	3	20		
tert-Butylbenzene	25.00	26.68	104	76-120	3	21		
1,2,4-Trimethylbenzene	25.00	25.96	104	77-120	4	20		
sec-Butylbenzene	25.00	27.66	107	80-120	4	21		
para-Isopropyl Toluene	25.00	25.69	102	76-120	4	20		
1,3-Dichlorobenzene	25.00	24.35	97	75-120	4	20		
1,4-Dichlorobenzene	25.00	24.28	97	77-120	3	23		
n-Butylbenzene	25.00	27.18	107	76-120	5	21		
1,2-Dichlorobenzene	25.00	24.80	99	76-120	3	20		
1,2-Dibromo-3-Chloropropane	25.00	23.65	95	65-120	5	22		
1,2,4-Trichlorobenzene	25.00	25.67	103	73-121	4	20		
Hexachlorobutadiene	25.00	26.39	106	73-123	5	25		
Naphthalene	25.00	28.81	112	62-121	2	32		
1,2,3-Trichlorobenzene	25.00	26.80	107	66-123	4	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	103	77-120		
1,2-Dichloroethane-d4	99	70-127		
Toluene-d8	99	83-125		
Bromofluorobenzene	95	78-120		

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537896	Batch#:	161366
Matrix:	Water	Analyzed:	03/27/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	V9
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537896	Batch#:	161366
Matrix:	Water	Analyzed:	03/27/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161366
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Type: BS Lab ID: QC537897

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	25.00	20.04	80	56-140		
Chloromethane	25.00	20.44	82	46-142		
Vinyl Chloride	25.00	21.89	88	49-136		
Bromomethane	25.00	27.52	110	42-154		
Chloroethane	25.00	23.64	95	51-133		
Trichlorofluoromethane	25.00	22.58	90	63-135		
Iodomethane	25.00	20.87	b 83	70-130	V9	
Acetone	25.00	24.85	b 99	48-130	V9	
1,1-Dichloroethene	25.00	25.88	104	68-133		
Methylene Chloride	25.00	22.84	91	71-120		
Carbon Disulfide	25.00	22.80	91	56-120		
MTBE	25.00	20.56	82	58-120		
trans-1,2-Dichloroethene	25.00	24.30	97	80-120		
Vinyl Acetate	25.00	26.79	107	63-124		
1,1-Dichloroethane	25.00	23.57	94	77-120		
2-Butanone	25.00	22.24	89	57-120		
cis-1,2-Dichloroethene	25.00	24.87	99	75-120		
2,2-Dichloropropane	25.00	28.62	114	72-128		
Chloroform	25.00	23.35	93	78-120		
Bromochloromethane	25.00	23.90	96	78-120		
1,1,1-Trichloroethane	25.00	24.73	99	78-120		
1,1-Dichloropropene	25.00	25.48	102	75-120		
Carbon Tetrachloride	25.00	25.20	101	80-120		
1,2-Dichloroethane	25.00	21.47	86	74-120		
Benzene	25.00	25.77	103	77-120		
Trichloroethene	25.00	23.86	95	78-122		
1,2-Dichloropropane	25.00	22.89	92	76-120		
Bromodichloromethane	25.00	22.65	91	78-120		
Dibromomethane	25.00	22.98	92	77-120		
4-Methyl-2-Pentanone	25.00	19.80	79	65-120		
cis-1,3-Dichloropropene	25.00	22.55	90	76-120		
Toluene	25.00	26.28	105	73-120		
trans-1,3-Dichloropropene	25.00	20.60	82	72-120		
1,1,2-Trichloroethane	25.00	23.61	94	76-120		
2-Hexanone	25.00	23.32	93	57-121		
1,3-Dichloropropane	25.00	24.32	97	75-120		
Tetrachloroethene	25.00	26.15	105	77-120		
Dibromochloromethane	25.00	22.86	91	76-120		
1,2-Dibromoethane	25.00	23.57	94	77-120		
Chlorobenzene	25.00	24.73	99	78-120		
1,1,1,2-Tetrachloroethane	25.00	24.43	98	77-120		
Ethylbenzene	25.00	26.53	106	78-120		
m,p-Xylenes	50.00	56.29	113	77-120		
o-Xylene	25.00	26.62	106	77-120		
Styrene	25.00	26.61	106	77-120		
Bromoform	25.00	22.80	91	74-121		
Isopropylbenzene	25.00	25.44	102	71-120		
1,1,2,2-Tetrachloroethane	25.00	24.93	100	73-120		
1,2,3-Trichloropropane	25.00	23.62	94	72-120		
Propylbenzene	25.00	29.15	117	76-120		
Bromobenzene	25.00	27.10	108	75-120		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161366
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,3,5-Trimethylbenzene	25.00	28.15	113	77-120	
2-Chlorotoluene	25.00	27.85	111	76-120	
4-Chlorotoluene	25.00	25.92	104	78-120	
tert-Butylbenzene	25.00	28.23	113	76-120	
1,2,4-Trimethylbenzene	25.00	26.57	106	77-120	
sec-Butylbenzene	25.00	28.90	116	80-120	
para-Isopropyl Toluene	25.00	27.49	110	76-120	
1,3-Dichlorobenzene	25.00	25.82	103	75-120	
1,4-Dichlorobenzene	25.00	24.75	99	77-120	
n-Butylbenzene	25.00	28.23	113	76-120	
1,2-Dichlorobenzene	25.00	25.44	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	20.84	83	65-120	
1,2,4-Trichlorobenzene	25.00	23.96	96	73-121	
Hexachlorobutadiene	25.00	27.03	108	73-123	
Naphthalene	25.00	23.72	95	62-121	
1,2,3-Trichlorobenzene	25.00	24.29	97	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	102	78-120	

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161366
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Type: BSD Lab ID: QC537898

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	20.01	80	56-140	0	24		
Chloromethane	25.00	19.68	79	46-142	4	24		
Vinyl Chloride	25.00	21.84	87	49-136	0	24		
Bromomethane	25.00	26.23	105	42-154	5	24		
Chloroethane	25.00	23.25	93	51-133	2	25		
Trichlorofluoromethane	25.00	23.09	92	63-135	2	20		
Iodomethane	25.00	22.00	b 88	70-130	5	20	V9	
Acetone	25.00	26.46	b 106	48-130	6	41	V9	
1,1-Dichloroethene	25.00	26.20	105	68-133	1	20		
Methylene Chloride	25.00	23.49	94	71-120	3	20		
Carbon Disulfide	25.00	23.73	95	56-120	4	20		
MTBE	25.00	20.89	84	58-120	2	21		
trans-1,2-Dichloroethene	25.00	25.44	102	80-120	5	24		
Vinyl Acetate	25.00	27.38	110	63-124	2	24		
1,1-Dichloroethane	25.00	24.44	98	77-120	4	20		
2-Butanone	25.00	23.46	94	57-120	5	32		
cis-1,2-Dichloroethene	25.00	25.79	103	75-120	4	20		
2,2-Dichloropropane	25.00	27.75	111	72-128	3	24		
Chloroform	25.00	23.90	96	78-120	2	20		
Bromochloromethane	25.00	24.58	98	78-120	3	20		
1,1,1-Trichloroethane	25.00	24.98	100	78-120	1	20		
1,1-Dichloropropene	25.00	25.83	103	75-120	1	21		
Carbon Tetrachloride	25.00	24.80	99	80-120	2	21		
1,2-Dichloroethane	25.00	21.59	86	74-120	1	20		
Benzene	25.00	25.52	102	77-120	1	20		
Trichloroethene	25.00	23.85	95	78-122	0	20		
1,2-Dichloropropane	25.00	22.40	90	76-120	2	20		
Bromodichloromethane	25.00	22.95	92	78-120	1	20		
Dibromomethane	25.00	23.44	94	77-120	2	20		
4-Methyl-2-Pentanone	25.00	21.48	86	65-120	8	22		
cis-1,3-Dichloropropene	25.00	23.05	92	76-120	2	20		
Toluene	25.00	25.88	104	73-120	2	20		
trans-1,3-Dichloropropene	25.00	20.23	81	72-120	2	20		
1,1,2-Trichloroethane	25.00	23.94	96	76-120	1	20		
2-Hexanone	25.00	23.16	93	57-121	1	25		
1,3-Dichloropropane	25.00	23.79	95	75-120	2	20		
Tetrachloroethene	25.00	26.85	107	77-120	3	20		
Dibromochloromethane	25.00	22.62	90	76-120	1	20		
1,2-Dibromoethane	25.00	23.67	95	77-120	0	20		
Chlorobenzene	25.00	25.31	101	78-120	2	20		
1,1,1,2-Tetrachloroethane	25.00	24.61	98	77-120	1	20		
Ethylbenzene	25.00	27.05	108	78-120	2	26		
m,p-Xylenes	50.00	53.66	107	77-120	5	20		
o-Xylene	25.00	26.22	105	77-120	2	20		
Styrene	25.00	25.96	104	77-120	2	20		
Bromoform	25.00	23.34	93	74-121	2	21		
Isopropylbenzene	25.00	24.54	98	71-120	4	20		
1,1,2,2-Tetrachloroethane	25.00	24.92	100	73-120	0	20		
1,2,3-Trichloropropane	25.00	24.05	96	72-120	2	20		
Propylbenzene	25.00	28.79	115	76-120	1	20		
Bromobenzene	25.00	27.50	110	75-120	1	20		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161366
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,3,5-Trimethylbenzene	25.00	28.97	116	77-120	3	20		
2-Chlorotoluene	25.00	28.22	113	76-120	1	20		
4-Chlorotoluene	25.00	25.81	103	78-120	0	20		
tert-Butylbenzene	25.00	27.82	111	76-120	1	21		
1,2,4-Trimethylbenzene	25.00	27.49	110	77-120	3	20		
sec-Butylbenzene	25.00	28.90	116	80-120	0	21		
para-Isopropyl Toluene	25.00	26.60	106	76-120	3	20		
1,3-Dichlorobenzene	25.00	25.67	103	75-120	1	20		
1,4-Dichlorobenzene	25.00	25.25	101	77-120	2	23		
n-Butylbenzene	25.00	27.22	109	76-120	4	21		
1,2-Dichlorobenzene	25.00	25.32	101	76-120	0	20		
1,2-Dibromo-3-Chloropropane	25.00	21.79	87	65-120	4	22		
1,2,4-Trichlorobenzene	25.00	24.46	98	73-121	2	20		
Hexachlorobutadiene	25.00	27.19	109	73-123	1	25		
Naphthalene	25.00	23.85	95	62-121	1	32		
1,2,3-Trichlorobenzene	25.00	24.91	100	66-123	3	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	99	77-120		
1,2-Dichloroethane-d4	94	70-127		
Toluene-d8	101	83-125		
Bromofluorobenzene	101	78-120		

b= See narrative
 RPD= Relative Percent Difference
 Page 4 of 4

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537951	Batch#:	161380
Matrix:	Water	Analyzed:	03/28/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	V9
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	L2 V9
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537951	Batch#:	161380
Matrix:	Water	Analyzed:	03/28/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	108	77-120	
1,2-Dichloroethane-d4	99	70-127	
Toluene-d8	101	83-125	
Bromofluorobenzene	101	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC537953	Batch#:	161380
Matrix:	Water	Analyzed:	03/28/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	25.00	27.61	110	56-140		
Chloromethane	25.00	21.89	88	46-142		
Vinyl Chloride	25.00	24.64	99	49-136		
Bromomethane	25.00	17.85 b	71	42-154	V9	
Chloroethane	25.00	26.64	107	51-133		
Trichlorofluoromethane	25.00	26.05	104	63-135		
Iodomethane	25.00	13.35 b	53 *	70-130	L2 V9	
Acetone	25.00	25.44	102	48-130		
1,1-Dichloroethene	25.00	26.00	104	68-133		
Methylene Chloride	25.00	26.39	106	71-120		
Carbon Disulfide	25.00	23.94	96	56-120		
MTBE	25.00	24.15	97	58-120		
trans-1,2-Dichloroethene	25.00	27.05	108	80-120		
Vinyl Acetate	25.00	26.48	106	63-124		
1,1-Dichloroethane	25.00	26.85	107	77-120		
2-Butanone	25.00	25.77	103	57-120		
cis-1,2-Dichloroethene	25.00	26.01	104	75-120		
2,2-Dichloropropane	25.00	26.80	107	72-128		
Chloroform	25.00	25.68	103	78-120		
Bromochloromethane	25.00	25.77	103	78-120		
1,1,1-Trichloroethane	25.00	27.35	109	78-120		
1,1-Dichloropropene	25.00	26.94	108	75-120		
Carbon Tetrachloride	25.00	27.92	112	80-120		
1,2-Dichloroethane	25.00	24.34	97	74-120		
Benzene	25.00	26.74	107	77-120		
Trichloroethene	25.00	25.43	102	78-122		
1,2-Dichloropropane	25.00	25.95	104	76-120		
Bromodichloromethane	25.00	26.27	105	78-120		
Dibromomethane	25.00	24.95	100	77-120		
4-Methyl-2-Pentanone	25.00	25.38	102	65-120		
cis-1,3-Dichloropropene	25.00	25.75	103	76-120		
Toluene	25.00	25.82	103	73-120		
trans-1,3-Dichloropropene	25.00	22.27	89	72-120		
1,1,2-Trichloroethane	25.00	24.82	99	76-120		
2-Hexanone	25.00	24.76	99	57-121		
1,3-Dichloropropane	25.00	25.02	100	75-120		
Tetrachloroethene	25.00	26.42	106	77-120		

*= Value outside of QC limits; see narrative

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC537953	Batch#:	161380
Matrix:	Water	Analyzed:	03/28/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Dibromochloromethane	25.00	25.02	100	76-120	
1,2-Dibromoethane	25.00	23.87	95	77-120	
Chlorobenzene	25.00	25.37	101	78-120	
1,1,1,2-Tetrachloroethane	25.00	24.37	97	77-120	
Ethylbenzene	25.00	26.19	105	78-120	
m,p-Xylenes	50.00	52.35	105	77-120	
o-Xylene	25.00	26.49	106	77-120	
Styrene	25.00	26.62	106	77-120	
Bromoform	25.00	25.07	100	74-121	
Isopropylbenzene	25.00	22.35	89	71-120	
1,1,2,2-Tetrachloroethane	25.00	22.75	91	73-120	
1,2,3-Trichloropropane	25.00	22.70	91	72-120	
Propylbenzene	25.00	25.58	102	76-120	
Bromobenzene	25.00	23.34	93	75-120	
1,3,5-Trimethylbenzene	25.00	25.60	102	77-120	
2-Chlorotoluene	25.00	24.87	99	76-120	
4-Chlorotoluene	25.00	24.35	97	78-120	
tert-Butylbenzene	25.00	25.94	104	76-120	
1,2,4-Trimethylbenzene	25.00	25.77	103	77-120	
sec-Butylbenzene	25.00	26.96	108	80-120	
para-Isopropyl Toluene	25.00	25.56	102	76-120	
1,3-Dichlorobenzene	25.00	24.07	96	75-120	
1,4-Dichlorobenzene	25.00	24.10	96	77-120	
n-Butylbenzene	25.00	27.06	108	76-120	
1,2-Dichlorobenzene	25.00	24.65	99	76-120	
1,2-Dibromo-3-Chloropropane	25.00	22.45	90	65-120	
1,2,4-Trichlorobenzene	25.00	24.56	98	73-121	
Hexachlorobutadiene	25.00	26.06	104	73-123	
Naphthalene	25.00	25.91	104	62-121	
1,2,3-Trichlorobenzene	25.00	25.75	103	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	102	77-120	
1,2-Dichloroethane-d4	98	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	95	78-120	

*= Value outside of QC limits; see narrative

b= See narrative

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161380
MSS Lab ID:	219035-005	Sampled:	03/23/10
Matrix:	Water	Received:	03/25/10
Units:	ug/L	Analyzed:	03/28/10
Diln Fac:	1.000		

Type: MS Lab ID: QC537972

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	<0.2000	25.00	25.92	104	56-140		
Chloromethane	<0.2000	25.00	22.96	92	46-142		
Vinyl Chloride	<0.1000	25.00	24.18	97	49-136		
Bromomethane	<0.2000	25.00	18.99	b 76	42-154	V9	
Chloroethane	<0.2000	25.00	26.58	106	51-133		
Trichlorofluoromethane	<0.2000	25.00	25.88	104	63-135		
Iodomethane	<1.000	25.00	13.05	b 52 *	60-140	M2	V9
Acetone	<1.000	25.00	25.09	100	48-130		
1,1-Dichloroethene	<0.1002	25.00	26.20	105	68-133		
Methylene Chloride	<0.1895	25.00	27.49	110	71-120		
Carbon Disulfide	<0.1000	25.00	24.67	99	56-120		
MTBE	1.575	25.00	26.54	100	58-120		
trans-1,2-Dichloroethene	<0.1385	25.00	28.33	113	80-120		
Vinyl Acetate	<1.000	25.00	25.68	103	63-124		
1,1-Dichloroethane	<0.1081	25.00	28.01	112	77-120		
2-Butanone	<1.000	25.00	25.41	102	57-120		
cis-1,2-Dichloroethene	5.088	25.00	34.45	117	75-120		
2,2-Dichloropropane	<0.1039	25.00	25.32	101	72-128		
Chloroform	<0.1000	25.00	26.69	107	78-120		
Bromochloromethane	<0.1423	25.00	26.73	107	78-120		
1,1,1-Trichloroethane	<0.1000	25.00	28.40	114	78-120		
1,1-Dichloropropene	<0.1000	25.00	27.19	109	75-120		
Carbon Tetrachloride	<0.1000	25.00	28.44	114	80-120		
1,2-Dichloroethane	<0.1000	25.00	24.62	98	74-120		
Benzene	<0.1000	25.00	27.73	111	77-120		
Trichloroethene	15.69	25.00	45.30	118	78-122		
1,2-Dichloropropane	<0.1172	25.00	26.59	106	76-120		
Bromodichloromethane	<0.1000	25.00	26.88	108	78-120		
Dibromomethane	<0.1000	25.00	25.54	102	77-120		
4-Methyl-2-Pentanone	<1.000	25.00	25.30	101	65-120		
cis-1,3-Dichloropropene	<0.1000	25.00	25.88	104	76-120		
Toluene	<0.1000	25.00	26.98	108	73-120		
trans-1,3-Dichloropropene	<0.1000	25.00	21.49	86	72-120		
1,1,2-Trichloroethane	<0.1173	25.00	24.72	99	76-120		
2-Hexanone	<1.000	25.00	24.25	97	57-121		
1,3-Dichloropropane	<0.1000	25.00	25.19	101	75-120		
Tetrachloroethene	187.3 >LR	25.00	247.4 >LR	241 NM	77-120	M1	M3
Dibromochloromethane	<0.1000	25.00	25.06	100	76-120		
1,2-Dibromoethane	<0.1000	25.00	23.42	94	77-120		
Chlorobenzene	<0.1000	25.00	25.34	101	78-120		
1,1,1,2-Tetrachloroethane	<0.1000	25.00	24.58	98	77-120		
Ethylbenzene	<0.1000	25.00	26.57	106	78-120		
m,p-Xylenes	<0.1000	50.00	53.25	107	77-120		
o-Xylene	<0.1000	25.00	26.50	106	77-120		
Styrene	<0.1000	25.00	26.26	105	77-120		

*= Value outside of QC limits; see narrative

b= See narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161380
MSS Lab ID:	219035-005	Sampled:	03/23/10
Matrix:	Water	Received:	03/25/10
Units:	ug/L	Analyzed:	03/28/10
Diln Fac:	1.000		

Analyte	MSS Result	Spiked	Result	%REC	Limits	ADEQ	Flags
Bromoform	<0.2000	25.00	24.32	97	74-121		
Isopropylbenzene	<0.1000	25.00	22.01	88	71-120		
1,1,2,2-Tetrachloroethane	<0.1000	25.00	22.57	90	73-120		
1,2,3-Trichloropropane	<0.1000	25.00	22.58	90	72-120		
Propylbenzene	<0.1000	25.00	25.37	101	76-120		
Bromobenzene	<0.1000	25.00	23.17	93	75-120		
1,3,5-Trimethylbenzene	<0.1000	25.00	25.60	102	77-120		
2-Chlorotoluene	<0.1000	25.00	24.85	99	76-120		
4-Chlorotoluene	<0.1000	25.00	24.19	97	78-120		
tert-Butylbenzene	<0.1000	25.00	25.66	103	76-120		
1,2,4-Trimethylbenzene	<0.1000	25.00	25.73	103	77-120		
sec-Butylbenzene	<0.1000	25.00	26.70	107	80-120		
para-Isopropyl Toluene	<0.1000	25.00	24.94	100	76-120		
1,3-Dichlorobenzene	<0.1000	25.00	23.61	94	75-120		
1,4-Dichlorobenzene	<0.1000	25.00	23.83	95	77-120		
n-Butylbenzene	<0.1000	25.00	26.66	107	76-120		
1,2-Dichlorobenzene	<0.1000	25.00	24.08	96	76-120		
1,2-Dibromo-3-Chloropropane	<0.3139	25.00	21.01	84	65-120		
1,2,4-Trichlorobenzene	<0.1238	25.00	22.72	91	73-121		
Hexachlorobutadiene	<0.1027	25.00	24.53	98	73-123		
Naphthalene	<0.1000	25.00	24.54	98	62-121		
1,2,3-Trichlorobenzene	<0.1000	25.00	24.53	98	66-123		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	106	77-120		
1,2-Dichloroethane-d4	100	70-127		
Toluene-d8	101	83-125		
Bromofluorobenzene	94	78-120		

*= Value outside of QC limits; see narrative
 b= See narrative
 NC= Not Calculated
 NM= Not Meaningful: Sample concentration > 4X spike concentration
 >LR= Response exceeds instrument's linear range
 RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161380
MSS Lab ID:	219035-005	Sampled:	03/23/10
Matrix:	Water	Received:	03/25/10
Units:	ug/L	Analyzed:	03/28/10
Diln Fac:	1.000		

Type: MSD Lab ID: QC537973

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	28.50	114	56-140	9	24		
Chloromethane	25.00	24.55	98	46-142	7	24		
Vinyl Chloride	25.00	26.41	106	49-136	9	24		
Bromomethane	25.00	23.07 b	92	42-154	19	24	V9	
Chloroethane	25.00	28.14	113	51-133	6	25		
Trichlorofluoromethane	25.00	27.28	109	63-135	5	20		
Iodomethane	25.00	16.74 b	67	60-140	25	30	V9	
Acetone	25.00	24.86	99	48-130	1	41		
1,1-Dichloroethene	25.00	27.29	109	68-133	4	20		
Methylene Chloride	25.00	27.95	112	71-120	2	20		
Carbon Disulfide	25.00	25.38	102	56-120	3	20		
MTBE	25.00	26.88	101	58-120	1	21		
trans-1,2-Dichloroethene	25.00	29.15	117	80-120	3	24		
Vinyl Acetate	25.00	26.31	105	63-124	2	24		
1,1-Dichloroethane	25.00	28.61	114	77-120	2	20		
2-Butanone	25.00	25.69	103	57-120	1	32		
cis-1,2-Dichloroethene	25.00	35.38	121 *	75-120	3	20	M1	
2,2-Dichloropropane	25.00	25.50	102	72-128	1	24		
Chloroform	25.00	27.21	109	78-120	2	20		
Bromochloromethane	25.00	27.56	110	78-120	3	20		
1,1,1-Trichloroethane	25.00	28.74	115	78-120	1	20		
1,1-Dichloropropene	25.00	27.91	112	75-120	3	21		
Carbon Tetrachloride	25.00	28.86	115	80-120	1	21		
1,2-Dichloroethane	25.00	25.05	100	74-120	2	20		
Benzene	25.00	28.31	113	77-120	2	20		
Trichloroethene	25.00	46.15	122	78-122	2	20		
1,2-Dichloropropane	25.00	26.96	108	76-120	1	20		
Bromodichloromethane	25.00	27.12	108	78-120	1	20		
Dibromomethane	25.00	26.29	105	77-120	3	20		
4-Methyl-2-Pentanone	25.00	25.78	103	65-120	2	22		
cis-1,3-Dichloropropene	25.00	26.45	106	76-120	2	20		
Toluene	25.00	27.67	111	73-120	3	20		
trans-1,3-Dichloropropene	25.00	22.34	89	72-120	4	20		
1,1,2-Trichloroethane	25.00	25.59	102	76-120	3	20		
2-Hexanone	25.00	25.27	101	57-121	4	25		
1,3-Dichloropropane	25.00	25.71	103	75-120	2	20		
Tetrachloroethene	25.00	252.6 >LR	261 NM	77-120	NC	20	M1 M3	
Dibromochloromethane	25.00	25.75	103	76-120	3	20		
1,2-Dibromoethane	25.00	23.91	96	77-120	2	20		
Chlorobenzene	25.00	25.95	104	78-120	2	20		
1,1,1,2-Tetrachloroethane	25.00	24.94	100	77-120	1	20		
Ethylbenzene	25.00	27.18	109	78-120	2	26		
m,p-Xylenes	50.00	54.63	109	77-120	3	20		
o-Xylene	25.00	27.15	109	77-120	2	20		
Styrene	25.00	26.67	107	77-120	2	20		

*= Value outside of QC limits; see narrative

b= See narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218866	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	161380
MSS Lab ID:	219035-005	Sampled:	03/23/10
Matrix:	Water	Received:	03/25/10
Units:	ug/L	Analyzed:	03/28/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Bromoform	25.00	25.17	101	74-121	3	21		
Isopropylbenzene	25.00	22.76	91	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	23.15	93	73-120	3	20		
1,2,3-Trichloropropane	25.00	23.18	93	72-120	3	20		
Propylbenzene	25.00	26.35	105	76-120	4	20		
Bromobenzene	25.00	23.86	95	75-120	3	20		
1,3,5-Trimethylbenzene	25.00	26.43	106	77-120	3	20		
2-Chlorotoluene	25.00	25.62	102	76-120	3	20		
4-Chlorotoluene	25.00	25.00	100	78-120	3	20		
tert-Butylbenzene	25.00	26.53	106	76-120	3	21		
1,2,4-Trimethylbenzene	25.00	26.57	106	77-120	3	20		
sec-Butylbenzene	25.00	27.64	111	80-120	3	21		
para-Isopropyl Toluene	25.00	25.86	103	76-120	4	20		
1,3-Dichlorobenzene	25.00	24.54	98	75-120	4	20		
1,4-Dichlorobenzene	25.00	24.60	98	77-120	3	23		
n-Butylbenzene	25.00	27.51	110	76-120	3	21		
1,2-Dichlorobenzene	25.00	24.94	100	76-120	4	20		
1,2-Dibromo-3-Chloropropane	25.00	21.94	88	65-120	4	22		
1,2,4-Trichlorobenzene	25.00	23.61	94	73-121	4	20		
Hexachlorobutadiene	25.00	25.77	103	73-123	5	25		
Naphthalene	25.00	25.24	101	62-121	3	32		
1,2,3-Trichlorobenzene	25.00	25.16	101	66-123	3	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	106	77-120		
1,2-Dichloroethane-d4	99	70-127		
Toluene-d8	101	83-125		
Bromofluorobenzene	95	78-120		

*= Value outside of QC limits; see narrative
 b= See narrative
 NC= Not Calculated
 NM= Not Meaningful: Sample concentration > 4X spike concentration
 >LR= Response exceeds instrument's linear range
 RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480039377003 File : iar03 Time : 27-JAN-2010 17:11

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	119490	17.70	
75	30% - 60% of mass 95	276672	40.99	
95		675029	100.00	
96	5% - 9% of mass 95	46176	6.84	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	508352	75.31	
175	5% - 9% of mass 174	37824	7.44	
176	> 95% and < 101% of mass 174	488896	96.17	
177	5% - 9% of mass 176	33058	6.76	

Analyst: BO Date: 01/28/10 Reviewer: LW Date: 01/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480124525003 File : icr03 Time : 27-MAR-2010 13:56

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	18863	20.30	
75	30% - 60% of mass 95	40342	43.42	
95		92919	100.00	
96	5% - 9% of mass 95	6443	6.93	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	64766	69.70	
175	5% - 9% of mass 174	4745	7.33	
176	> 95% and < 101% of mass 174	62861	97.06	
177	5% - 9% of mass 176	4075	6.48	

Analyst: BJP Date: 03/28/10 Reviewer: LW Date: 03/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : BFB IDF : 1.0
Seqnum : 880120005002 File : lco02 Time : 24-MAR-2010 09:32

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	6943	21.25	
75	30% - 60% of mass 95	16797	51.40	
95		32680	100.00	
96	5% - 9% of mass 95	2230	6.82	
173	< 2% of mass 174	252	1.01	
174	> 50% and < 100% of mass 95	24933	76.29	
175	5% - 9% of mass 174	1827	7.33	
176	> 95% and < 101% of mass 174	24242	97.23	
177	5% - 9% of mass 176	1814	7.48	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : BFB IDF : 1.0
Seqnum : 880121453002 File : lcp02 Time : 25-MAR-2010 08:58

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	6837	23.38	
75	30% - 60% of mass 95	15600	53.35	
95		29242	100.00	
96	5% - 9% of mass 95	2127	7.27	
173	< 2% of mass 174	207	0.90	
174	> 50% and < 100% of mass 95	23053	78.84	
175	5% - 9% of mass 174	1676	7.27	
176	> 95% and < 101% of mass 174	22173	96.18	
177	5% - 9% of mass 176	1602	7.23	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/26/10

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : BFB IDF : 1.0
Seqnum : 880122884002 File : lcq02 Time : 26-MAR-2010 08:37

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	5390	23.84	
75	30% - 60% of mass 95	11728	51.88	
95		22605	100.00	
96	5% - 9% of mass 95	1595	7.06	
173	< 2% of mass 174	73	0.44	
174	> 50% and < 100% of mass 95	16669	73.74	
175	5% - 9% of mass 174	1209	7.25	
176	> 95% and < 101% of mass 174	16703	100.20	
177	5% - 9% of mass 176	1148	6.87	

Analyst: BO Date: 03/26/10 Reviewer: LW Date: 03/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : BFB IDF : 1.0
Seqnum : 880122884012 File : lcq12 Time : 26-MAR-2010 13:29

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	6441	20.86	
75	30% - 60% of mass 95	15043	48.71	
95		30880	100.00	
96	5% - 9% of mass 95	2005	6.49	
173	< 2% of mass 174	252	1.11	
174	> 50% and < 100% of mass 95	22752	73.68	
175	5% - 9% of mass 174	1573	6.91	
176	> 95% and < 101% of mass 174	21706	95.40	
177	5% - 9% of mass 176	1588	7.32	

Analyst: BO Date: 03/26/10 Reviewer: LW Date: 03/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950120036005 File : nco05 Time : 24-MAR-2010 09:41

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	4822	19.42	
75	30% - 60% of mass 95	12859	51.78	
95		24835	100.00	
96	5% - 9% of mass 95	1752	7.05	
173	< 2% of mass 174	239	1.15	
174	> 50% and < 100% of mass 95	20741	83.52	
175	5% - 9% of mass 174	1520	7.33	
176	> 95% and < 101% of mass 174	20107	96.94	
177	5% - 9% of mass 176	1376	6.84	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950121459002 File : ncp02 Time : 25-MAR-2010 08:47

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	4456	20.71	
75	30% - 60% of mass 95	11186	51.99	
95		21517	100.00	
96	5% - 9% of mass 95	1581	7.35	
173	< 2% of mass 174	204	1.12	
174	> 50% and < 100% of mass 95	18261	84.87	
175	5% - 9% of mass 174	1425	7.80	
176	> 95% and < 101% of mass 174	18018	98.67	
177	5% - 9% of mass 176	1260	6.99	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950122909002 File : ncq02 Time : 26-MAR-2010 08:52

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	3728	19.75	
75	30% - 60% of mass 95	9253	49.01	
95		18880	100.00	
96	5% - 9% of mass 95	1264	6.69	
173	< 2% of mass 174	166	1.02	
174	> 50% and < 100% of mass 95	16267	86.16	
175	5% - 9% of mass 174	1206	7.41	
176	> 95% and < 101% of mass 174	15587	95.82	
177	5% - 9% of mass 176	1157	7.42	

Analyst: BO Date: 03/26/10 Reviewer: LW Date: 03/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : BFB IDF : 1.0
Seqnum : 950126012003 File : ncs03 Time : 28-MAR-2010 13:23

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	3477	19.74	
75	30% - 60% of mass 95	8538	48.46	
95		17618	100.00	
96	5% - 9% of mass 95	1220	6.92	
173	< 2% of mass 174	198	1.37	
174	> 50% and < 100% of mass 95	14440	81.96	
175	5% - 9% of mass 174	1081	7.49	
176	> 95% and < 101% of mass 174	14097	97.62	
177	5% - 9% of mass 176	987	7.00	

Analyst: PDM Date: 03/29/10 Reviewer: BO Date: 03/29/10

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218866 MSVOA Water: EPA 8260B

Inst : MSVOA09
 Calnum : 480039377001
 Units : ug/L

Name : 826GOX9W
 Date : 27-JAN-2010 20:15
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	iar07	480039377007	.25/.5PPB	27-JAN-2010 20:15	S13745 (20000X), S13845 (20000X), S13747 (20000X), S13846 (100000X), S13687 (5000X)
L2	iar08	480039377008	0.5/1PPB	27-JAN-2010 20:49	S13745 (100000X), S13845 (100000X), S13747 (100000X), S13846 (50000X), S13687 (5000X)
L3	iar09	480039377009	2PPB	27-JAN-2010 21:22	S13745 (25000X), S13845 (25000X), S13747 (50000X), S13846 (25000X), S13687 (5000X)
L4	iar10	480039377010	5PPB	27-JAN-2010 21:55	S13745 (10000X), S13845 (10000X), S13747 (20000X), S13846 (10000X), S13687 (5000X)
L5	iar11	480039377011	10PPB	27-JAN-2010 22:28	S13745 (5000X), S13845 (5000X), S13747 (10000X), S13846 (5000X), S13687 (5000X)
L6	iar12	480039377012	20PPB	27-JAN-2010 23:01	S13680 (25000X), S13796 (25000X), S13625 (50000X), S13503 (25000X), S13687 (5000X)
L7	iar13	480039377013	50PPB	27-JAN-2010 23:34	S13680 (10000X), S13796 (10000X), S13625 (20000X), S13503 (10000X), S13687 (5000X)
L8	iar14	480039377014	75PPB	28-JAN-2010 00:07	S13680 (6667X), S13796 (6667X), S13625 (13330X), S13503 (6667X), S13687 (5000X)
L9	iar15	480039377015	100PPB	28-JAN-2010 00:39	S13680 (5000X), S13796 (5000X), S13625 (10000X), S13503 (5000X), S13687 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Freon 12		0.4272	0.6076	0.5551	0.6189	0.6131	0.6391	0.5765	0.5958	AVRG		1.72662		0.5792	12	15	0.05	0.99	
Chloromethane		0.8240	0.9930	0.9112	0.9272	0.9023	0.8693	0.8104	0.7946	AVRG		1.13767		0.8790	8	15	0.10	0.99	
Vinyl Chloride	0.5181	0.5422	0.7028	0.6832	0.6817	0.6816	0.6563	0.6083	0.5695	AVRG		1.59470		0.6271	11	15	0.05	0.99	
Bromomethane		0.3327	0.3778	0.3470	0.3376	0.3814	0.3741	0.3742	0.3632	AVRG		2.77001		0.3610	5	15	0.05	0.99	
Chloroethane		0.3935	0.4827	0.4630	0.4416	0.4633	0.4477	0.4193	0.4174	AVRG		2.26725		0.4411	7	15	0.05	0.99	
Trichlorofluoromethane		0.5190	0.6690	0.6150	0.6630	0.6423	0.6798	0.6145	0.6119	AVRG		1.59535		0.6268	8	15	0.05	0.99	
Acetone				0.1172	0.1133	0.1131	0.1053	0.0922	0.0927	AVRG		9.46550		0.1056	10	15	0.05	0.99	
1,1-Dichloroethene		0.3192	0.4324	0.3853	0.3906	0.3699	0.3637	0.3930	0.3876	AVRG		2.63014		0.3802	8	15	0.05	0.99	
Iodomethane				0.5282	0.5552	0.5997	0.6044	0.5951	0.6206	AVRG		1.71268		0.5839	6	15	0.05	0.99	
Methylene Chloride		0.5858	0.6009	0.5287	0.5011	0.5232	0.5143	0.5033	0.4935	AVRG		1.88203		0.5313	8	15	0.05	0.99	
Carbon Disulfide		1.5171	1.9736	1.7265	1.7529	1.6610	1.5889	1.6476	1.5771	AVRG		0.59503		1.6806	8	15	0.05	0.99	
MTBE		0.9320	1.0138	0.9931	0.9929	1.0189	0.9926	0.9195	0.8743	AVRG		1.03396		0.9672	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4406	0.5305	0.4618	0.4602	0.4757	0.4552	0.4688	0.4558	AVRG		2.13408		0.4686	6	15	0.05	0.99	
Vinyl Acetate			0.6282	0.6668	0.6830	0.7536	0.7417	0.8563	0.7420	AVRG		1.38026		0.7245	10	15	0.05	0.99	
1,1-Dichloroethane		0.8516	1.0446	0.9546	0.9019	0.9393	0.9119	0.8841	0.8458	AVRG		1.09085		0.9167	7	15	0.10	0.99	
2-Butanone			0.2069m	0.1893	0.1836	0.1851	0.1785	0.1526	0.1452	AVRG		5.63991		0.1773	12	15	0.05	0.99	
2,2-Dichloropropane		0.4892	0.6320	0.5236	0.5438	0.5313	0.4881	0.4891	0.4602	AVRG		1.92434		0.5197	10	15	0.05	0.99	
cis-1,2-Dichloroethene		0.4938	0.5578	0.4996	0.4958	0.5086	0.5035	0.5009	0.4937	AVRG		1.97351		0.5067	4	15	0.05	0.99	
Chloroform		0.7593	0.8988	0.8262	0.8030	0.8348	0.7985	0.7757	0.7543	AVRG		1.24021		0.8063	6	15	0.05	0.99	
Bromochloromethane		0.1840	0.2315	0.2099	0.2160	0.2219	0.2274	0.2192	0.2171	AVRG		4.63209		0.2159	7	15	0.05	0.99	
1,1,1-Trichloroethane		0.4684	0.6327	0.5630	0.5644	0.5706	0.5140	0.5506	0.5210	AVRG		1.82451		0.5481	9	15	0.05	0.99	
1,1-Dichloropropene		0.3158	0.4343	0.3542	0.3790	0.3680	0.3394	0.3705	0.3601	AVRG		2.73852		0.3652	9	15	0.05	0.99	
Carbon Tetrachloride		0.2519	0.3316	0.2884	0.2907	0.2825	0.2633	0.2915	0.2847	AVRG		3.50159		0.2856	8	15	0.05	0.99	
1,2-Dichloroethane		0.2690	0.3044	0.2819	0.2808	0.2982	0.2878	0.2677	0.2636	AVRG		3.55022		0.2817	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Benzene		1.0292	1.2652	1.0714	1.0609	1.1235	1.0294	1.0188	0.9650	AVRG		0.93423		1.0704	9	15	0.05	0.99	
Trichloroethene		0.2697	0.3259	0.2720	0.2774	0.2985	0.2818	0.2818	0.2765	AVRG		3.50319		0.2855	6	15	0.05	0.99	
1,2-Dichloropropane		0.3482	0.3804	0.3531	0.3345	0.3598	0.3425	0.3400	0.3296	AVRG		2.86920		0.3485	5	15	0.05	0.99	
Bromodichloromethane		0.3451	0.3918	0.3578	0.3454	0.3759	0.3633	0.3588	0.3558	AVRG		2.76456		0.3617	4	15	0.05	0.99	
Dibromomethane		0.1452	0.1603	0.1563	0.1543	0.1669	0.1664	0.1592	0.1572	AVRG		6.32076		0.1582	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.2356	0.2296	0.2350	0.2480	0.2457	0.2205	0.2116	AVRG		4.30507		0.2323	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4479	0.4924	0.4528	0.4573	0.4598	0.4598	0.4404	0.4315	AVRG		2.19668		0.4552	4	15	0.05	0.99	
Toluene		0.7703	0.9216	0.7566	0.7233	0.7824	0.7735	0.7985	0.7408	AVRG		1.27653		0.7834	8	15	0.05	0.99	
trans-1,3-Dichloropropene		0.4314	0.5131	0.4670	0.4468	0.4973	0.4610	0.4573	0.4396	AVRG		2.15431		0.4642	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.1337	0.1518	0.1406	0.1382	0.1505	0.1472	0.1433	0.1436	AVRG		6.96298		0.1436	4	15	0.05	0.99	
2-Hexanone			0.2239	0.2090	0.2014	0.2118	0.2130	0.1906	0.1791	AVRG		4.89948		0.2041	7	15	0.05	0.99	
1,3-Dichloropropane		0.4004	0.4631	0.4225	0.4249	0.4545	0.4640	0.4442	0.4221	AVRG		2.28843		0.4370	5	15	0.05	0.99	
Tetrachloroethene		0.2481	0.3488	0.2870	0.2869	0.3017	0.2822	0.3138	0.3106	AVRG		3.36270		0.2974	10	15	0.05	0.99	
Dibromochloromethane		0.2907	0.3097	0.2913	0.2895	0.3125	0.3115	0.3151	0.3032	AVRG		3.30100		0.3029	4	15	0.05	0.99	
1,2-Dibromoethane		0.2312	0.2553	0.2455	0.2401	0.2619	0.2651	0.2633	0.2596	AVRG		3.95653		0.2527	5	15	0.05	0.99	
Chlorobenzene		0.7993	0.9853	0.8244	0.8088	0.8858	0.8623	0.8392	0.8012	AVRG		1.17537		0.8508	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2826	0.3303	0.2747	0.2760	0.2980	0.3067	0.3047	0.2944	AVRG		3.37928		0.2959	6	15	0.05	0.99	
Ethylbenzene		1.3640	1.7214	1.3993	1.3607	1.4898	1.3585	1.3068	1.2120	AVRG		0.71350		1.4015	11	15	0.05	0.99	
m,p-Xylenes	0.5036	0.4527	0.6147	0.5056	0.4893	0.5384	0.5088	0.4958	0.4418	AVRG		1.97774		0.5056	10	15	0.05	0.99	
o-Xylene		0.4874	0.6016	0.5082	0.4965	0.5489	0.5334	0.5259	0.5097	AVRG		1.89951		0.5265	7	15	0.05	0.99	
Styrene		0.8609	1.0026	0.8795	0.8674	0.9605	0.9470	0.8954	0.8576	AVRG		1.10028		0.9089	6	15	0.05	0.99	
Bromoform		0.1512	0.1751	0.1615	0.1650	0.1814	0.1861	0.1861	0.1830	AVRG		5.75787		0.1737	7	15	0.10	0.99	
Isopropylbenzene		2.3217	3.1596	2.5691	2.5469	2.7063	2.4453	2.6712	2.4395	AVRG		0.38352		2.6074	10	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6030	0.5937	0.5909	0.5928	0.6153	0.6111	0.6410	0.6031	AVRG		1.64915		0.6064	3	15	0.30	0.99	
1,2,3-Trichloropropane		0.1447	0.1409	0.1299	0.1309	0.1378	0.1430	0.1410	0.1265	AVRG		7.30736		0.1368	5	15	0.05	0.99	
Propylbenzene		3.0497	3.9560	3.2048	3.2461	3.3629	3.0327	3.0560	2.6950	AVRG		0.31246		3.2004	11	15	0.05	0.99	
Bromobenzene		0.6665	0.7228	0.6435	0.6492	0.7032	0.7201	0.7249	0.6703	AVRG		1.45444		0.6876	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.9922	2.4458	2.0368	2.0219	2.1529	1.9990	1.9836	1.7635	AVRG		0.48793		2.0495	9	15	0.05	0.99	
2-Chlorotoluene		2.2554	2.5642	2.1161	2.1087	2.2652	2.0862	1.9834	1.7493	AVRG		0.46706		2.1411	11	15	0.05	0.99	
4-Chlorotoluene		2.1887	2.3464	1.9752	2.0153	2.0709	2.0599	2.0773	1.9065	AVRG		0.48076		2.0800	7	15	0.05	0.99	
tert-Butylbenzene		1.5755	2.0121	1.6313	1.6883	1.7810	1.6549	1.7601	1.6963	AVRG		0.57973		1.7249	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.1523	2.5130	2.0569	2.0414	2.2207	2.0902	2.1625	2.0170	AVRG		0.46366		2.1567	7	15	0.05	0.99	
sec-Butylbenzene		2.3579	3.0923	2.6227	2.6213	2.7538	2.5038	2.7910	2.5827	AVRG		0.37514		2.6657	8	15	0.05	0.99	
para-Isopropyl Toluene		1.8819	2.2981	1.9427	2.0129	2.1003	1.8867	2.1308	2.0144	AVRG		0.49177		2.0335	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.2368	1.4206	1.2144	1.2052	1.3068	1.2860	1.3439	1.2935	AVRG		0.77618		1.2884	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.3246	1.4816	1.2289	1.2471	1.3353	1.3172	1.3326	1.2740	AVRG		0.75892		1.3177	6	15	0.05	0.99	
n-Butylbenzene		1.9278	2.4190	1.9466	2.0219	2.1231	1.9181	2.1344	2.0210	AVRG		0.48450		2.0640	8	15	0.05	0.99	
1,2-Dichlorobenzene		1.1836	1.2168	1.1290	1.1069	1.1904	1.1946	1.2267	1.1710	AVRG		0.84933		1.1774	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.0812	0.1026	0.0896	0.0907	0.0912	0.0934	0.0870	0.0842	AVRG		11.1139		0.0900	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.6413	0.6999	0.6384	0.6552	0.6932	0.7048	0.7109	0.7232	AVRG		1.46338		0.6833	5	15	0.05	0.99	
Hexachlorobutadiene		0.2542	0.3630	0.3000	0.3125	0.3339	0.3017	0.3594	0.3585	AVRG		3.09685		0.3229	12	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Naphthalene		1.2171	1.2766	1.2470	1.2729	1.3320	1.3830	1.3625	1.3472	AVRG		0.76642		1.3048	5	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.5473	0.5994	0.5662	0.5762	0.6237	0.6325	0.6475	0.6396	AVRG		1.65553		0.6040	6	15	0.05	0.99	
Dibromofluoromethane	0.5626	0.5685	0.5730	0.5794	0.5894	0.5803	0.5742	0.5559	0.5424	AVRG		1.75583		0.5695	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.2776	0.2836	0.2948	0.2950	0.2948	0.2923	0.2665	0.2472	0.2356	AVRG		3.61858		0.2764	8	15	0.05	0.99	
Toluene-d8	1.3332	1.3494	1.4060	1.3911	1.4075	1.3829	1.3735	1.3651	1.3835	AVRG		0.72626		1.3769	2	15	0.05	0.99	
Bromofluorobenzene	1.0186	1.0587	1.0239	1.0392	1.0317	0.9937	1.0272	1.0417	1.0060	AVRG		0.97396		1.0267	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-26	2.000	5	5.000	-4	10.00	7	20.00	6	50.00	10	75.00	0	100.0	3
Chloromethane			1.000	-6	2.000	13	5.000	4	10.00	5	20.00	3	50.00	-1	75.00	-8	100.0	-10
Vinyl Chloride	0.500	-17	1.000	-14	2.000	12	5.000	9	10.00	9	20.00	9	50.00	5	75.00	-3	100.0	-9
Bromomethane			1.000	-8	2.000	5	5.000	-4	10.00	-6	20.00	6	50.00	4	75.00	4	100.0	1
Chloroethane			1.000	-11	2.000	9	5.000	5	10.00	0	20.00	5	50.00	2	75.00	-5	100.0	-5
Trichlorofluoromethane			1.000	-17	2.000	7	5.000	-2	10.00	6	20.00	2	50.00	8	75.00	-2	100.0	-2
Acetone							5.000	11	10.00	7	20.00	7	50.00	0	75.00	-13	100.0	-12
1,1-Dichloroethene			0.500	-16	2.000	14	5.000	1	10.00	3	20.00	-3	50.00	-4	75.00	3	100.0	2
Iodomethane							5.000	-10	10.00	-5	20.00	3	50.00	4	75.00	2	100.0	6
Methylene Chloride			0.500	10	2.000	13	5.000	-1	10.00	-6	20.00	-2	50.00	-3	75.00	-5	100.0	-7
Carbon Disulfide			0.500	-10	2.000	17	5.000	3	10.00	4	20.00	-1	50.00	-5	75.00	-2	100.0	-6
MTBE			0.500	-4	2.000	5	5.000	3	10.00	3	20.00	5	50.00	3	75.00	-5	100.0	-10
trans-1,2-Dichloroethene			0.500	-6	2.000	13	5.000	-1	10.00	-2	20.00	2	50.00	-3	75.00	0	100.0	-3
Vinyl Acetate					2.000	-13	5.000	-8	10.00	-6	20.00	4	50.00	2	75.00	18	100.0	2
1,1-Dichloroethane			0.500	-7	2.000	14	5.000	4	10.00	-2	20.00	2	50.00	-1	75.00	-4	100.0	-8
2-Butanone					2.000	17	5.000	7	10.00	4	20.00	4	50.00	1	75.00	-14	100.0	-18
2,2-Dichloropropane			0.500	-6	2.000	22	5.000	1	10.00	5	20.00	2	50.00	-6	75.00	-6	100.0	-11
cis-1,2-Dichloroethene			0.500	-3	2.000	10	5.000	-1	10.00	-2	20.00	0	50.00	-1	75.00	-1	100.0	-3
Chloroform			0.500	-6	2.000	11	5.000	2	10.00	0	20.00	4	50.00	-1	75.00	-4	100.0	-6
Bromochloromethane			0.500	-15	2.000	7	5.000	-3	10.00	0	20.00	3	50.00	5	75.00	2	100.0	1
1,1,1-Trichloroethane			0.500	-15	2.000	15	5.000	3	10.00	3	20.00	4	50.00	-6	75.00	0	100.0	-5
1,1-Dichloropropene			0.500	-14	2.000	19	5.000	-3	10.00	4	20.00	1	50.00	-7	75.00	1	100.0	-1
Carbon Tetrachloride			0.500	-12	2.000	16	5.000	1	10.00	2	20.00	-1	50.00	-8	75.00	2	100.0	0
1,2-Dichloroethane			0.500	-5	2.000	8	5.000	0	10.00	0	20.00	6	50.00	2	75.00	-5	100.0	-6
Benzene			0.500	-4	2.000	18	5.000	0	10.00	-1	20.00	5	50.00	-4	75.00	-5	100.0	-10
Trichloroethene			0.500	-6	2.000	14	5.000	-5	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-3
1,2-Dichloropropane			0.500	0	2.000	9	5.000	1	10.00	-4	20.00	3	50.00	-2	75.00	-2	100.0	-5
Bromodichloromethane			0.500	-5	2.000	8	5.000	-1	10.00	-5	20.00	4	50.00	0	75.00	-1	100.0	-2
Dibromomethane			0.500	-8	2.000	1	5.000	-1	10.00	-2	20.00	5	50.00	5	75.00	1	100.0	-1
4-Methyl-2-Pentanone					2.000	1	5.000	-1	10.00	1	20.00	7	50.00	6	75.00	-5	100.0	-9
cis-1,3-Dichloropropene			0.500	-2	2.000	8	5.000	-1	10.00	0	20.00	1	50.00	1	75.00	-3	100.0	-5
Toluene			0.500	-2	2.000	18	5.000	-3	10.00	-8	20.00	0	50.00	-1	75.00	2	100.0	-5
trans-1,3-Dichloropropene			0.500	-7	2.000	11	5.000	1	10.00	-4	20.00	7	50.00	-1	75.00	-1	100.0	-5
1,1,2-Trichloroethane			0.500	-7	2.000	6	5.000	-2	10.00	-4	20.00	5	50.00	3	75.00	0	100.0	0
2-Hexanone					2.000	10	5.000	2	10.00	-1	20.00	4	50.00	4	75.00	-7	100.0	-12
1,3-Dichloropropane			0.500	-8	2.000	6	5.000	-3	10.00	-3	20.00	4	50.00	6	75.00	2	100.0	-3
Tetrachloroethene			0.500	-17	2.000	17	5.000	-3	10.00	-4	20.00	1	50.00	-5	75.00	6	100.0	4
Dibromochloromethane			0.500	-4	2.000	2	5.000	-4	10.00	-4	20.00	3	50.00	3	75.00	4	100.0	0
1,2-Dibromoethane			0.500	-9	2.000	1	5.000	-3	10.00	-5	20.00	4	50.00	5	75.00	4	100.0	3
Chlorobenzene			0.500	-6	2.000	16	5.000	-3	10.00	-5	20.00	4	50.00	1	75.00	-1	100.0	-6
1,1,1,2-Tetrachloroethane			0.500	-4	2.000	12	5.000	-7	10.00	-7	20.00	1	50.00	4	75.00	3	100.0	-1
Ethylbenzene			0.500	-3	2.000	23	5.000	0	10.00	-3	20.00	6	50.00	-3	75.00	-7	100.0	-14

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	0	1.000	-10	4.000	22	10.00	0	20.00	-3	40.00	6	100.0	1	150.0	-2	200.0	-13
o-Xylene			0.500	-7	2.000	14	5.000	-3	10.00	-6	20.00	4	50.00	1	75.00	0	100.0	-3
Styrene			0.500	-5	2.000	10	5.000	-3	10.00	-5	20.00	6	50.00	4	75.00	-1	100.0	-6
Bromoform			0.500	-13	2.000	1	5.000	-7	10.00	-5	20.00	4	50.00	7	75.00	7	100.0	5
Isopropylbenzene			0.500	-11	2.000	21	5.000	-1	10.00	-2	20.00	4	50.00	-6	75.00	2	100.0	-6
1,1,2,2-Tetrachloroethane			0.500	-1	2.000	-2	5.000	-3	10.00	-2	20.00	1	50.00	1	75.00	6	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	3	5.000	-5	10.00	-4	20.00	1	50.00	5	75.00	3	100.0	-8
Propylbenzene			0.500	-5	2.000	24	5.000	0	10.00	1	20.00	5	50.00	-5	75.00	-5	100.0	-16
Bromobenzene			0.500	-3	2.000	5	5.000	-6	10.00	-6	20.00	2	50.00	5	75.00	5	100.0	-3
1,3,5-Trimethylbenzene			0.500	-3	2.000	19	5.000	-1	10.00	-1	20.00	5	50.00	-2	75.00	-3	100.0	-14
2-Chlorotoluene			0.500	5	2.000	20	5.000	-1	10.00	-2	20.00	6	50.00	-3	75.00	-7	100.0	-18
4-Chlorotoluene			0.500	5	2.000	13	5.000	-5	10.00	-3	20.00	0	50.00	-1	75.00	0	100.0	-8
tert-Butylbenzene			0.500	-9	2.000	17	5.000	-5	10.00	-2	20.00	3	50.00	-4	75.00	2	100.0	-2
1,2,4-Trimethylbenzene			0.500	0	2.000	17	5.000	-5	10.00	-5	20.00	3	50.00	-3	75.00	0	100.0	-6
sec-Butylbenzene			0.500	-12	2.000	16	5.000	-2	10.00	-2	20.00	3	50.00	-6	75.00	5	100.0	-3
para-Isopropyl Toluene			0.500	-7	2.000	13	5.000	-4	10.00	-1	20.00	3	50.00	-7	75.00	5	100.0	-1
1,3-Dichlorobenzene			0.500	-4	2.000	10	5.000	-6	10.00	-6	20.00	1	50.00	0	75.00	4	100.0	0
1,4-Dichlorobenzene			0.500	1	2.000	12	5.000	-7	10.00	-5	20.00	1	50.00	0	75.00	1	100.0	-3
n-Butylbenzene			0.500	-7	2.000	17	5.000	-6	10.00	-2	20.00	3	50.00	-7	75.00	3	100.0	-2
1,2-Dichlorobenzene			0.500	1	2.000	3	5.000	-4	10.00	-6	20.00	1	50.00	1	75.00	4	100.0	-1
1,2-Dibromo-3-Chloropropane			0.500	-10	2.000	14	5.000	0	10.00	1	20.00	1	50.00	4	75.00	-3	100.0	-6
1,2,4-Trichlorobenzene			0.500	-6	2.000	2	5.000	-7	10.00	-4	20.00	1	50.00	3	75.00	4	100.0	6
Hexachlorobutadiene			0.500	-21	2.000	12	5.000	-7	10.00	-3	20.00	3	50.00	-7	75.00	11	100.0	11
Naphthalene			0.500	-7	2.000	-2	5.000	-4	10.00	-2	20.00	2	50.00	6	75.00	4	100.0	3
1,2,3-Trichlorobenzene			0.500	-9	2.000	-1	5.000	-6	10.00	-5	20.00	3	50.00	5	75.00	7	100.0	6
Dibromofluoromethane	50.00	-1	50.00	0	50.00	1	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-2	50.00	-5
1,2-Dichloroethane-d4	50.00	0	50.00	3	50.00	7	50.00	7	50.00	7	50.00	6	50.00	-4	50.00	-11	50.00	-15
Toluene-d8	50.00	-3	50.00	-2	50.00	2	50.00	1	50.00	2	50.00	0	50.00	0	50.00	-1	50.00	0
Bromofluorobenzene	50.00	-1	50.00	3	50.00	0	50.00	1	50.00	0	50.00	-3	50.00	0	50.00	1	50.00	-2

BO 01/29/10 [Iodomethane]: cannot report 8260c

BO 01/29/10 [Cyclohexanone]: cannot report 8260c

BO 01/29/10 [2-Chloroethylvinylether]: cannot report 8260c

BO 01/29/10 [2-Butanone]: Corrected baseline noise or negative peak in 2PPB (iar09).

Analyst: BO

Date: 01/29/10

Reviewer: LW

Date: 01/29/10

m=manual integration

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

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480039377001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA09
Calnum : 480039377001

Name : 826GOX9W
Cal Date : 27-JAN-2010

Type : WATER

ICV 480039377016 (iar16 28-JAN-2010) stds: S13817 (10000X), S13687 (5000X)
ICV 480039377017 (iar17 28-JAN-2010) stds: S13654 (10000X), S13639 (10000X),
S13492 (10000X), S13687 (5000X)

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
Freon 12	480039377016	25.00	20.09	ug/L	-20	25	
Chloromethane	480039377016	25.00	20.89	ug/L	-16	25	
Vinyl Chloride	480039377016	25.00	20.03	ug/L	-20	25	
Bromomethane	480039377016	25.00	22.30	ug/L	-11	25	
Chloroethane	480039377016	25.00	24.23	ug/L	-3	25	
Trichlorofluoromethane	480039377016	25.00	22.44	ug/L	-10	25	
Acetone	480039377017	25.00	21.54	ug/L	-14	25	
1,1-Dichloroethene	480039377017	25.00	26.91	ug/L	8	25	
Iodomethane	480039377017	25.00	18.32	ug/L	-27	25	v-
Methylene Chloride	480039377017	25.00	25.37	ug/L	1	25	
Carbon Disulfide	480039377017	25.00	23.28	ug/L	-7	25	
MTBE	480039377017	25.00	21.43	ug/L	-14	25	
trans-1,2-Dichloroethene	480039377017	25.00	26.20	ug/L	5	25	
Vinyl Acetate	480039377017	25.00	30.70	ug/L	23	25	
1,1-Dichloroethane	480039377017	25.00	24.42	ug/L	-2	25	
2-Butanone	480039377017	25.00	21.82	ug/L	-13	25	
2,2-Dichloropropane	480039377017	25.00	23.05	ug/L	-8	25	
cis-1,2-Dichloroethene	480039377017	25.00	26.25	ug/L	5	25	
Chloroform	480039377017	25.00	24.59	ug/L	-2	25	
Bromochloromethane	480039377017	25.00	27.00	ug/L	8	25	
1,1,1-Trichloroethane	480039377017	25.00	24.17	ug/L	-3	25	
1,1-Dichloropropene	480039377017	25.00	25.99	ug/L	4	25	
Carbon Tetrachloride	480039377017	25.00	25.34	ug/L	1	25	
1,2-Dichloroethane	480039377017	25.00	24.60	ug/L	-2	25	
Benzene	480039377017	25.00	27.05	ug/L	8	25	
Trichloroethene	480039377017	25.00	25.70	ug/L	3	25	
1,2-Dichloropropane	480039377017	25.00	24.27	ug/L	-3	25	
Bromodichloromethane	480039377017	25.00	25.33	ug/L	1	25	
Dibromomethane	480039377017	25.00	26.37	ug/L	5	25	
4-Methyl-2-Pentanone	480039377017	25.00	24.05	ug/L	-4	25	
cis-1,3-Dichloropropene	480039377017	25.00	26.24	ug/L	5	25	
Toluene	480039377017	25.00	27.48	ug/L	10	25	
trans-1,3-Dichloropropene	480039377017	25.00	23.44	ug/L	-6	25	
1,1,2-Trichloroethane	480039377017	25.00	27.04	ug/L	8	25	
2-Hexanone	480039377017	25.00	23.20	ug/L	-7	25	
1,3-Dichloropropane	480039377017	25.00	27.15	ug/L	9	25	
Tetrachloroethene	480039377017	25.00	26.80	ug/L	7	25	
Dibromochloromethane	480039377017	25.00	26.70	ug/L	7	25	
1,2-Dibromoethane	480039377017	25.00	28.03	ug/L	12	25	
Chlorobenzene	480039377017	25.00	26.33	ug/L	5	25	
1,1,1,2-Tetrachloroethane	480039377017	25.00	27.46	ug/L	10	25	
Ethylbenzene	480039377017	25.00	27.03	ug/L	8	25	
m,p-Xylenes	480039377017	50.00	57.68	ug/L	15	25	
o-Xylene	480039377017	25.00	27.64	ug/L	11	25	
Styrene	480039377017	25.00	27.93	ug/L	12	25	
Bromoform	480039377017	25.00	27.39	ug/L	10	25	
Isopropylbenzene	480039377017	25.00	24.25	ug/L	-3	25	

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	480039377017	25.00	27.95	ug/L	12	25	
1,2,3-Trichloropropane	480039377017	25.00	27.52	ug/L	10	25	
Propylbenzene	480039377017	25.00	27.56	ug/L	10	25	
Bromobenzene	480039377017	25.00	28.48	ug/L	14	25	
1,3,5-Trimethylbenzene	480039377017	25.00	27.77	ug/L	11	25	
2-Chlorotoluene	480039377017	25.00	27.96	ug/L	12	25	
4-Chlorotoluene	480039377017	25.00	26.81	ug/L	7	25	
tert-Butylbenzene	480039377017	25.00	27.81	ug/L	11	25	
1,2,4-Trimethylbenzene	480039377017	25.00	26.73	ug/L	7	25	
sec-Butylbenzene	480039377017	25.00	29.07	ug/L	16	25	
para-Isopropyl Toluene	480039377017	25.00	26.98	ug/L	8	25	
1,3-Dichlorobenzene	480039377017	25.00	26.38	ug/L	6	25	
1,4-Dichlorobenzene	480039377017	25.00	26.14	ug/L	5	25	
n-Butylbenzene	480039377017	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	480039377017	25.00	27.01	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	480039377017	25.00	26.21	ug/L	5	25	
1,2,4-Trichlorobenzene	480039377017	25.00	26.47	ug/L	6	25	
Hexachlorobutadiene	480039377017	25.00	27.55	ug/L	10	25	
Naphthalene	480039377017	25.00	27.87	ug/L	11	25	
1,2,3-Trichlorobenzene	480039377017	25.00	28.65	ug/L	15	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218866 MSVOA Water: EPA 8260B

Inst : MSVOA12
 Calnum : 880120005001
 Units : ug/L

Name : 8260G12W
 Date : 24-MAR-2010 11:42
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	lco05	880120005005	.25/.5PPB	24-MAR-2010 11:42	S14217 (20000X), S14254 (20000X), S14255 (20000X), S14256 (10000X), S14026 (5000X)
L2	lco06	880120005006	0.5/1PPB	24-MAR-2010 12:14	S14217 (10000X), S14254 (10000X), S14255 (10000X), S14256 (5000X), S14026 (5000X)
L3	lco07	880120005007	2PPB	24-MAR-2010 12:47	S14217 (25000X), S14254 (25000X), S14255 (50000X), S14256 (25000X), S14026 (5000X)
L4	lco08	880120005008	5PPB	24-MAR-2010 13:19	S14217 (10000X), S14254 (10000X), S14255 (20000X), S14256 (10000X), S14026 (5000X)
L5	lco09	880120005009	10PPB	24-MAR-2010 13:52	S14217 (5000X), S14254 (5000X), S14255 (10000X), S14256 (5000X), S14026 (5000X)
L6	lco10	880120005010	20PPB	24-MAR-2010 14:25	S14216 (25000X), S14108 (25000X), S14228 (50000X), S13719 (25000X), S14026 (5000X)
L7	lco11	880120005011	50PPB	24-MAR-2010 14:57	S14216 (10000X), S14108 (10000X), S14228 (20000X), S13719 (10000X), S14026 (5000X)
L8	lco12	880120005012	75PPB	24-MAR-2010 15:30	S14216 (6667X), S14108 (6667X), S14228 (13330X), S13719 (6667X), S14026 (5000X)
L9	lco13	880120005013	100PPB	24-MAR-2010 16:03	S14216 (5000X), S14108 (5000X), S14228 (10000X), S13719 (5000X), S14026 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.4294	0.4822m	0.6101m	0.5657m	0.6100m	0.6592m	0.6561m	0.6704m	AVRG		1.70829		0.5854	15	15	0.05	0.99	
Chloromethane		1.2602	1.1749	1.1273	1.1464m	1.2302m	1.1866m	1.1637m	1.1559m	AVRG		0.84701		1.1806	4	15	0.10	0.99	
Vinyl Chloride	0.8221	0.7717	0.7941m	0.8308m	0.7998	0.8631	0.8863m	0.8637	0.8796	AVRG		1.19820		0.8346	5	15	0.05	0.99	
Bromomethane		0.6261	0.6507m	0.5139	0.5049	0.4995	0.4841	0.4810	0.4960	AVRG		1.87961		0.5320	13	15	0.05	0.99	
Chloroethane		0.4419	0.4707	0.4764m	0.4635	0.5084m	0.5019m	0.4885	0.4928m	AVRG		2.08116		0.4805	5	15	0.05	0.99	
Trichlorofluoromethane		0.7077	0.6864	0.8155m	0.7610m	0.8213	0.8755	0.8477	0.8754	AVRG		1.25186		0.7988	9	15	0.05	0.99	
Acetone			0.3258	0.3051	0.3145m	0.2849	0.2592	0.2560	0.2521	AVRG		3.50416		0.2854	11	15	0.05	0.99	
1,1-Dichloroethene		0.4127	0.4086	0.4433m	0.4302m	0.4533	0.4755	0.4693	0.4592	AVRG		2.25216		0.4440	6	15	0.05	0.99	
Iodomethane				0.4790	0.5564	0.6679	0.6784	0.6534	0.6639	AVRG		1.62204		0.6165	13	15	0.05	0.99	
Methylene Chloride		0.6673	0.5504	0.5644	0.5682	0.6251	0.5989	0.5722	0.5790	AVRG		1.69298		0.5907	7	15	0.05	0.99	
Carbon Disulfide		1.6742	1.7602	1.7824	1.7855	1.9746	2.0251	1.9579	1.9556	AVRG		0.53635		1.8645	7	15	0.05	0.99	
MTBE		2.2359	2.0076	1.9639	1.9672	2.1406	2.0479	1.9769	2.0071	AVRG		0.48938		2.0434	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.6296	0.5142	0.4961	0.5211	0.5591	0.5461	0.5206	0.5256	AVRG		1.85512		0.5390	8	15	0.05	0.99	
Vinyl Acetate					1.3307	1.9928	1.8973	1.8480	1.8617	AVRG		0.55987		1.7861	15	15	0.05	0.99	
1,1-Dichloroethane		1.2243	1.0868	1.0850	1.1071	1.1926	1.1502	1.1032	1.1208	AVRG		0.88203		1.1338	5	15	0.10	0.99	
2-Butanone			0.4374m	0.4425m	0.4659	0.4528	0.4263	0.4242	0.4181	AVRG		2.28220		0.4382	4	15	0.05	0.99	
2,2-Dichloropropane		0.8823	0.9106	0.8617	0.8091	0.8523	0.8569	0.8014	0.7814	AVRG		1.18417		0.8445	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6758	0.5870	0.5909	0.5993	0.6379	0.6330	0.6018	0.6165	AVRG		1.61870		0.6178	5	15	0.05	0.99	
Chloroform		1.1544	1.0214	1.0125	1.0111	1.0575	1.0386	0.9802	0.9973	AVRG		0.96700		1.0341	5	15	0.05	0.99	
Bromochloromethane		0.2558	0.2945	0.2724	0.2735	0.2989	0.2880	0.2750	0.2808	AVRG		3.57292		0.2799	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.7233	0.7925	0.8149	0.7868	0.7875	0.8201	0.7985	0.7972	AVRG		1.26566		0.7901	4	15	0.05	0.99	
1,1-Dichloropropene		0.4881	0.4027	0.4359	0.4348	0.4412	0.4618	0.4584	0.4453	AVRG		2.24199		0.4460	6	15	0.05	0.99	
Carbon Tetrachloride		0.3427	0.3640	0.3719	0.3597	0.3735	0.3947	0.3997	0.3890	AVRG		2.67089		0.3744	5	15	0.05	0.99	
1,2-Dichloroethane		0.5036	0.4840	0.4680	0.4706	0.5251	0.5003	0.4835	0.4879	AVRG		2.03927		0.4904	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.6182	1.3698	1.3378	1.3553	1.4441	1.4027	1.3444	1.3491	AVRG		0.71293		1.4027	7	15	0.05	0.99	
Trichloroethene		0.2952	0.3204	0.3249	0.3272	0.3341	0.3371	0.3272	0.3258	AVRG		3.08640		0.3240	4	15	0.05	0.99	
1,2-Dichloropropane		0.4202	0.3815	0.3657	0.3744	0.4003	0.3887	0.3756	0.3763	AVRG		2.59515		0.3853	5	15	0.05	0.99	
Bromodichloromethane		0.4908	0.4362	0.4294	0.4367	0.4655	0.4555	0.4467	0.4513	AVRG		2.21478		0.4515	4	15	0.05	0.99	
Dibromomethane		0.2106	0.2035	0.2061	0.2090	0.2263	0.2168	0.2123	0.2164	AVRG		4.70339		0.2126	3	15	0.05	0.99	
4-Methyl-2-Pentanone			0.5017	0.4737	0.5008	0.5413	0.5143	0.5184	0.5047	AVRG		1.96909		0.5078	4	15	0.05	0.99	
cis-1,3-Dichloropropene		0.6544	0.5774	0.5610	0.5688	0.6243	0.5965	0.5732	0.5772	AVRG		1.69034		0.5916	5	15	0.05	0.99	
Toluene		0.8595	0.8077	0.7718	0.7863	0.8228	0.8171	0.7955	0.7871	AVRG		1.24072		0.8060	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.6232	0.5483	0.5380	0.5373	0.5831	0.5634	0.5506	0.5426	AVRG		1.78314		0.5608	5	15	0.05	0.99	
1,1,2-Trichloroethane		0.1769	0.1805	0.1699	0.1664	0.1759	0.1729	0.1708	0.1705	AVRG		5.78101		0.1730	3	15	0.05	0.99	
2-Hexanone			0.3646	0.3512	0.3534	0.3665	0.3512	0.3563	0.3388	AVRG		2.82033		0.3546	3	15	0.05	0.99	
1,3-Dichloropropane		0.5942	0.5517	0.5778	0.5708	0.6084	0.5820	0.5697	0.5630	AVRG		1.73250		0.5772	3	15	0.05	0.99	
Tetrachloroethene		0.2813	0.3083	0.3073	0.3105	0.2906	0.3048	0.3144	0.2985	AVRG		3.31154		0.3020	4	15	0.05	0.99	
Dibromochloromethane		0.2981	0.2975	0.3133	0.3097	0.3422	0.3419	0.3352	0.3366	AVRG		3.10739		0.3218	6	15	0.05	0.99	
1,2-Dibromoethane		0.3343	0.3195	0.3111	0.3168	0.3386	0.3305	0.3252	0.3231	AVRG		3.07799		0.3249	3	15	0.05	0.99	
Chlorobenzene		1.0636	0.8636	0.8736	0.8841	0.9170	0.9078	0.8893	0.8884	AVRG		1.09778		0.9109	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3289	0.3007	0.2905	0.3033	0.3223	0.3178	0.3051	0.3122	AVRG		3.22465		0.3101	4	15	0.05	0.99	
Ethylbenzene		1.8164	1.5576m	1.5472	1.5279	1.5599	1.5735	1.5605	1.5359	AVRG		0.63097		1.5849	6	15	0.05	0.99	
m,p-Xylenes	0.8126	0.6670	0.6081	0.5951	0.5963	0.6093	0.6113	0.6055	0.6005	AVRG		1.57737		0.6340	11	15	0.05	0.99	
o-Xylene		0.6225	0.5769	0.5965	0.5842	0.6160	0.6173	0.6131	0.6167	AVRG		1.65179		0.6054	3	15	0.05	0.99	
Styrene		1.1809	1.0293	1.0230	1.0098	1.1069	1.0979	1.0741	1.0791	AVRG		0.93013		1.0751	5	15	0.05	0.99	
Bromoform		0.2813	0.2451	0.2429	0.2536	0.2790	0.2805	0.2814	0.2838	AVRG		3.72499		0.2685	7	15	0.10	0.99	
Isopropylbenzene		2.6340	2.4459	2.4644	2.4619	2.3837	2.4531	2.4177	2.3521	AVRG		0.40790		2.4516	3	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6988	0.7477	0.7321	0.7559	0.8181	0.7875	0.7754	0.7719	AVRG		1.31420		0.7609	5	15	0.30	0.99	
1,2,3-Trichloropropane		0.8644	0.7826	0.7281	0.7408	0.7769	0.7517	0.7331	0.7298	AVRG		1.30990		0.7634	6	15	0.05	0.99	
Propylbenzene		3.4233	3.1723	3.1627	3.1608	3.0333	3.1172	3.0570	2.9549	AVRG		0.31896		3.1352	4	15	0.05	0.99	
Bromobenzene		0.7453	0.6405	0.6075	0.6202	0.6505	0.6394	0.6125	0.6182	AVRG		1.55823		0.6418	7	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.3847	2.1816	2.1170	2.1704	2.2076	2.2163	2.1687	2.1520	AVRG		0.45459		2.1998	4	15	0.05	0.99	
2-Chlorotoluene		2.5177	2.2972	2.0882	2.1245	2.1564	2.1026	2.0532	2.0128	AVRG		0.46103		2.1691	8	15	0.05	0.99	
4-Chlorotoluene		2.1289	2.0436	1.9709	1.9732	2.0311	1.9769	1.9074	1.9073	AVRG		0.50190		1.9924	4	15	0.05	0.99	
tert-Butylbenzene		1.7200	1.7102	1.7261	1.7717	1.7091	1.8039	1.8059	1.7634	AVRG		0.57102		1.7513	2	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.2835	2.0267	2.1002	2.2105	2.2639	2.2789	2.2246	2.2158	AVRG		0.45444		2.2005	4	15	0.05	0.99	
sec-Butylbenzene		2.5397	2.5243	2.6290	2.6544	2.5200	2.7086	2.7411	2.6581	AVRG		0.38140		2.6219	3	15	0.05	0.99	
para-Isopropyl Toluene		2.2804	2.0799	2.1212	2.1721	2.1754	2.3166	2.3444	2.3022	AVRG		0.44963		2.2240	4	15	0.05	0.99	
1,3-Dichlorobenzene		1.4707	1.2728	1.2681	1.2735	1.3519	1.3248	1.2883	1.2874	AVRG		0.75919		1.3172	5	15	0.05	0.99	
1,4-Dichlorobenzene		1.7209	1.3696	1.3416	1.3403	1.3998	1.3475	1.3265	1.3408	AVRG		0.71511		1.3984	9	15	0.05	0.99	
n-Butylbenzene		1.8659	1.6810	1.7742m	1.8291	1.8708	2.0956	2.1699	2.1163	AVRG		0.51939		1.9253	9	15	0.05	0.99	
1,2-Dichlorobenzene		1.4253	1.2568	1.2342	1.2459	1.3406	1.3156	1.2748	1.2868	AVRG		0.77071		1.2975	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.2382	0.2164	0.1995	0.2032	0.2213	0.2137	0.2173	0.2113	AVRG		4.64849		0.2151	5	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.8564	0.6993	0.7330	0.8043	0.8930	0.9412	0.9506	0.9371	AVRG		1.17386		0.8519	11	15	0.05	0.99	
Hexachlorobutadiene		0.3762	0.3410	0.3453	0.3430	0.3390	0.3645	0.3750	0.3662	AVRG		2.80675		0.3563	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene			1.3519	1.4167	1.6466	1.8947	2.0609	2.1572		QUAD	1.19899	0.50952	-0.00033	1.7547	1.000	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7894	0.7057	0.7080	0.7655	0.8475	0.8934	0.8925	0.8741	AVRG		1.23532		0.8095	10	15	0.05	0.99	
Dibromofluoromethane	0.5159	0.5197	0.5294	0.5255	0.5272	0.5257	0.5233	0.5238	0.5260	AVRG		1.90820		0.5241	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3957	0.4045	0.4084	0.4050	0.4119	0.4054	0.3926	0.3888	0.3902	AVRG		2.49827		0.4003	2	15	0.05	0.99	
Toluene-d8	1.2865	1.2817	1.2760	1.2809	1.2685	1.2769	1.2720	1.2689	1.2483	AVRG		0.78535		1.2733	1	15	0.05	0.99	
Bromofluorobenzene	0.9247	0.9156	0.9084	0.8931	0.8981	0.8844	0.8810	0.8682	0.8640	AVRG		1.11971		0.8931	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-27	2.000	-18	5.000	4	10.00	-3	20.00	4	50.00	13	75.00	12	100.0	15
Chloromethane			1.000	7	2.000	0	5.000	-5	10.00	-3	20.00	4	50.00	1	75.00	-1	100.0	-2
Vinyl Chloride	0.500	-1	1.000	-8	2.000	-5	5.000	0	10.00	-4	20.00	3	50.00	6	75.00	3	100.0	5
Bromomethane			1.000	18	2.000	22	5.000	-3	10.00	-5	20.00	-6	50.00	-9	75.00	-10	100.0	-7
Chloroethane			1.000	-8	2.000	-2	5.000	-1	10.00	-4	20.00	6	50.00	4	75.00	2	100.0	3
Trichlorofluoromethane			1.000	-11	2.000	-14	5.000	2	10.00	-5	20.00	3	50.00	10	75.00	6	100.0	10
Acetone					2.000	14	5.000	7	10.00	10	20.00	0	50.00	-9	75.00	-10	100.0	-12
1,1-Dichloroethene			0.500	-7	2.000	-8	5.000	0	10.00	-3	20.00	2	50.00	7	75.00	6	100.0	3
Iodomethane							5.000	-22	10.00	-10	20.00	8	50.00	10	75.00	6	100.0	8
Methylene Chloride			0.500	13	2.000	-7	5.000	-4	10.00	-4	20.00	6	50.00	1	75.00	-3	100.0	-2
Carbon Disulfide			0.500	-10	2.000	-6	5.000	-4	10.00	-4	20.00	6	50.00	9	75.00	5	100.0	5
MTBE			0.500	9	2.000	-2	5.000	-4	10.00	-4	20.00	5	50.00	0	75.00	-3	100.0	-2
trans-1,2-Dichloroethene			0.500	17	2.000	-5	5.000	-8	10.00	-3	20.00	4	50.00	1	75.00	-3	100.0	-2
Vinyl Acetate									10.00	-25	20.00	12	50.00	6	75.00	3	100.0	4
1,1-Dichloroethane			0.500	8	2.000	-4	5.000	-4	10.00	-2	20.00	5	50.00	1	75.00	-3	100.0	-1
2-Butanone					2.000	0	5.000	1	10.00	6	20.00	3	50.00	-3	75.00	-3	100.0	-5
2,2-Dichloropropane			0.500	4	2.000	8	5.000	2	10.00	-4	20.00	1	50.00	1	75.00	-5	100.0	-7
cis-1,2-Dichloroethene			0.500	9	2.000	-5	5.000	-4	10.00	-3	20.00	3	50.00	2	75.00	-3	100.0	0
Chloroform			0.500	12	2.000	-1	5.000	-2	10.00	-2	20.00	2	50.00	0	75.00	-5	100.0	-4
Bromochloromethane			0.500	-9	2.000	5	5.000	-3	10.00	-2	20.00	7	50.00	3	75.00	-2	100.0	0
1,1,1-Trichloroethane			0.500	-8	2.000	0	5.000	3	10.00	0	20.00	0	50.00	4	75.00	1	100.0	1
1,1-Dichloropropene			0.500	9	2.000	-10	5.000	-2	10.00	-3	20.00	-1	50.00	4	75.00	3	100.0	0
Carbon Tetrachloride			0.500	-8	2.000	-3	5.000	-1	10.00	-4	20.00	0	50.00	5	75.00	7	100.0	4
1,2-Dichloroethane			0.500	3	2.000	-1	5.000	-5	10.00	-4	20.00	7	50.00	2	75.00	-1	100.0	-1
Benzene			0.500	15	2.000	-2	5.000	-5	10.00	-3	20.00	3	50.00	0	75.00	-4	100.0	-4
Trichloroethene			0.500	-9	2.000	-1	5.000	0	10.00	1	20.00	3	50.00	4	75.00	1	100.0	1
1,2-Dichloropropane			0.500	9	2.000	-1	5.000	-5	10.00	-3	20.00	4	50.00	1	75.00	-3	100.0	-2
Bromodichloromethane			0.500	9	2.000	-3	5.000	-5	10.00	-3	20.00	3	50.00	1	75.00	-1	100.0	0
Dibromomethane			0.500	-1	2.000	-4	5.000	-3	10.00	-2	20.00	6	50.00	2	75.00	0	100.0	2
4-Methyl-2-Pentanone					2.000	-1	5.000	-7	10.00	-1	20.00	7	50.00	1	75.00	2	100.0	-1
cis-1,3-Dichloropropene			0.500	11	2.000	-2	5.000	-5	10.00	-4	20.00	6	50.00	1	75.00	-3	100.0	-2
Toluene			0.500	7	2.000	0	5.000	-4	10.00	-2	20.00	2	50.00	1	75.00	-1	100.0	-2
trans-1,3-Dichloropropene			0.500	11	2.000	-2	5.000	-4	10.00	-4	20.00	4	50.00	0	75.00	-2	100.0	-3
1,1,2-Trichloroethane			0.500	2	2.000	4	5.000	-2	10.00	-4	20.00	2	50.00	0	75.00	-1	100.0	-1
2-Hexanone					2.000	3	5.000	-1	10.00	0	20.00	3	50.00	-1	75.00	0	100.0	-4
1,3-Dichloropropane			0.500	3	2.000	-4	5.000	0	10.00	-1	20.00	5	50.00	1	75.00	-1	100.0	-2
Tetrachloroethene			0.500	-7	2.000	2	5.000	2	10.00	3	20.00	-4	50.00	1	75.00	4	100.0	-1
Dibromochloromethane			0.500	-7	2.000	-8	5.000	-3	10.00	-4	20.00	6	50.00	6	75.00	4	100.0	5
1,2-Dibromoethane			0.500	3	2.000	-2	5.000	-4	10.00	-2	20.00	4	50.00	2	75.00	0	100.0	-1
Chlorobenzene			0.500	17	2.000	-5	5.000	-4	10.00	-3	20.00	1	50.00	0	75.00	-2	100.0	-2
1,1,1,2-Tetrachloroethane			0.500	6	2.000	-3	5.000	-6	10.00	-2	20.00	4	50.00	2	75.00	-2	100.0	1
Ethylbenzene			0.500	15	2.000	-2	5.000	-2	10.00	-4	20.00	-2	50.00	-1	75.00	-2	100.0	-3

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	28	1.000	5	4.000	-4	10.00	-6	20.00	-6	40.00	-4	100.0	-4	150.0	-4	200.0	-5
o-Xylene			0.500	3	2.000	-5	5.000	-1	10.00	-3	20.00	2	50.00	2	75.00	1	100.0	2
Styrene			0.500	10	2.000	-4	5.000	-5	10.00	-6	20.00	3	50.00	2	75.00	0	100.0	0
Bromoform			0.500	5	2.000	-9	5.000	-10	10.00	-6	20.00	4	50.00	4	75.00	5	100.0	6
Isopropylbenzene			0.500	7	2.000	0	5.000	1	10.00	0	20.00	-3	50.00	0	75.00	-1	100.0	-4
1,1,2,2-Tetrachloroethane			0.500	-8	2.000	-2	5.000	-4	10.00	-1	20.00	8	50.00	3	75.00	2	100.0	1
1,2,3-Trichloropropane			0.500	13	2.000	3	5.000	-5	10.00	-3	20.00	2	50.00	-2	75.00	-4	100.0	-4
Propylbenzene			0.500	9	2.000	1	5.000	1	10.00	1	20.00	-3	50.00	-1	75.00	-2	100.0	-6
Bromobenzene			0.500	16	2.000	0	5.000	-5	10.00	-3	20.00	1	50.00	0	75.00	-5	100.0	-4
1,3,5-Trimethylbenzene			0.500	8	2.000	-1	5.000	-4	10.00	-1	20.00	0	50.00	1	75.00	-1	100.0	-2
2-Chlorotoluene			0.500	16	2.000	6	5.000	-4	10.00	-2	20.00	-1	50.00	-3	75.00	-5	100.0	-7
4-Chlorotoluene			0.500	7	2.000	3	5.000	-1	10.00	-1	20.00	2	50.00	-1	75.00	-4	100.0	-4
tert-Butylbenzene			0.500	-2	2.000	-2	5.000	-1	10.00	1	20.00	-2	50.00	3	75.00	3	100.0	1
1,2,4-Trimethylbenzene			0.500	4	2.000	-8	5.000	-5	10.00	0	20.00	3	50.00	4	75.00	1	100.0	1
sec-Butylbenzene			0.500	-3	2.000	-4	5.000	0	10.00	1	20.00	-4	50.00	3	75.00	5	100.0	1
para-Isopropyl Toluene			0.500	3	2.000	-6	5.000	-5	10.00	-2	20.00	-2	50.00	4	75.00	5	100.0	4
1,3-Dichlorobenzene			0.500	12	2.000	-3	5.000	-4	10.00	-3	20.00	3	50.00	1	75.00	-2	100.0	-2
1,4-Dichlorobenzene			0.500	23	2.000	-2	5.000	-4	10.00	-4	20.00	0	50.00	-4	75.00	-5	100.0	-4
n-Butylbenzene			0.500	-3	2.000	-13	5.000	-8	10.00	-5	20.00	-3	50.00	9	75.00	13	100.0	10
1,2-Dichlorobenzene			0.500	10	2.000	-3	5.000	-5	10.00	-4	20.00	3	50.00	1	75.00	-2	100.0	-1
1,2-Dibromo-3-Chloropropane			0.500	11	2.000	1	5.000	-7	10.00	-6	20.00	3	50.00	-1	75.00	1	100.0	-2
1,2,4-Trichlorobenzene			0.500	1	2.000	-18	5.000	-14	10.00	-6	20.00	5	50.00	10	75.00	12	100.0	10
Hexachlorobutadiene			0.500	6	2.000	-4	5.000	-3	10.00	-4	20.00	-5	50.00	2	75.00	5	100.0	3
Naphthalene					2.000	29	5.000	-4	10.00	-5	20.00	0	50.00	0	75.00	0		
1,2,3-Trichlorobenzene			0.500	-2	2.000	-13	5.000	-13	10.00	-5	20.00	5	50.00	10	75.00	10	100.0	8
Dibromofluoromethane	50.00	-2	50.00	-1	50.00	1	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	0
1,2-Dichloroethane-d4	50.00	-1	50.00	1	50.00	2	50.00	1	50.00	3	50.00	1	50.00	-2	50.00	-3	50.00	-3
Toluene-d8	50.00	1	50.00	1	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	0	50.00	-2
Bromofluorobenzene	50.00	4	50.00	3	50.00	2	50.00	0	50.00	1	50.00	-1	50.00	-1	50.00	-3	50.00	-3

BO 03/25/10 [Freon 12]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Chloromethane]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Vinyl Chloride]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Chloroethane]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Bromomethane]: Corrected fronting or tailing peak integration in 2PPB (lco07).

BO 03/25/10 [Trichlorofluoromethane]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Acetone]: Corrected baseline noise or negative peak in 10PPB (lco09).
BO 03/25/10 [Freon 113]: Corrected fronting or tailing peak integration in 10PPB (lco09).
BO 03/25/10 [1,1-Dichloroethene]: Corrected fronting or tailing peak integration in multiple levels.
BO 03/25/10 [2-Butanone]: Corrected baseline noise or negative peak in multiple levels.
BO 03/25/10 [Ethylbenzene]: Corrected baseline noise or negative peak in 2PPB (lco07).
BO 03/25/10 [n-Butylbenzene]: Corrected baseline noise or negative peak in 5PPB (lco08).
BO 03/25/10 [2-Chloroethylvinylether]: Cannot report 8260c due to ICV failure
BO 03/25/10 [Naphthalene]: Quad curve

Analyst: BO

Date: 03/25/10

Reviewer: LW

Date: 03/26/10

m=manual integration

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA12
Calnum : 880120005001

Name : 8260G12W
Cal Date : 24-MAR-2010

Type : WATER

ICV 880121453004 (lcp04 25-MAR-2010) stds: S14253 (10000X), S14144 (10000X), S13925 (10000X), S14236 (10000X), S14026 (5000X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	29.21	ug/L	17	25	m
Chloromethane	25.00	23.54	ug/L	-6	25	m
Vinyl Chloride	25.00	24.43	ug/L	-2	25	
Bromomethane	25.00	24.63	ug/L	-1	25	
Chloroethane	25.00	27.14	ug/L	9	25	
Trichlorofluoromethane	25.00	26.85	ug/L	7	25	
Acetone	25.00	27.27	ug/L	9	25	
1,1-Dichloroethene	25.00	26.84	ug/L	7	25	
Iodomethane	25.00	29.08	ug/L	16	25	
Methylene Chloride	25.00	26.15	ug/L	5	25	
Carbon Disulfide	25.00	24.45	ug/L	-2	25	
MTBE	25.00	22.75	ug/L	-9	25	
trans-1,2-Dichloroethene	25.00	26.55	ug/L	6	25	
Vinyl Acetate	25.00	26.24	ug/L	5	25	
1,1-Dichloroethane	25.00	26.46	ug/L	6	25	
2-Butanone	25.00	24.53	ug/L	-2	25	
2,2-Dichloropropane	25.00	28.35	ug/L	13	25	
cis-1,2-Dichloroethene	25.00	27.02	ug/L	8	25	
Chloroform	25.00	25.83	ug/L	3	25	
Bromochloromethane	25.00	26.44	ug/L	6	25	
1,1,1-Trichloroethane	25.00	27.05	ug/L	8	25	
1,1-Dichloropropene	25.00	26.19	ug/L	5	25	
Carbon Tetrachloride	25.00	27.25	ug/L	9	25	
1,2-Dichloroethane	25.00	25.08	ug/L	0	25	
Benzene	25.00	25.55	ug/L	2	25	
Trichloroethene	25.00	25.53	ug/L	2	25	
1,2-Dichloropropane	25.00	25.40	ug/L	2	25	
Bromodichloromethane	25.00	25.69	ug/L	3	25	
Dibromomethane	25.00	25.74	ug/L	3	25	
4-Methyl-2-Pentanone	25.00	22.95	ug/L	-8	25	
cis-1,3-Dichloropropene	25.00	25.42	ug/L	2	25	
Toluene	25.00	27.03	ug/L	8	25	
trans-1,3-Dichloropropene	25.00	23.33	ug/L	-7	25	
1,1,2-Trichloroethane	25.00	25.32	ug/L	1	25	
2-Hexanone	25.00	23.57	ug/L	-6	25	
1,3-Dichloropropane	25.00	25.47	ug/L	2	25	
Tetrachloroethene	25.00	26.30	ug/L	5	25	
Dibromochloromethane	25.00	25.73	ug/L	3	25	
1,2-Dibromoethane	25.00	24.32	ug/L	-3	25	
Chlorobenzene	25.00	24.65	ug/L	-1	25	
1,1,1,2-Tetrachloroethane	25.00	24.72	ug/L	-1	25	
Ethylbenzene	25.00	25.67	ug/L	3	25	
m,p-Xylenes	50.00	50.87	ug/L	2	25	
o-Xylene	25.00	27.05	ug/L	8	25	
Styrene	25.00	26.32	ug/L	5	25	
Bromoform	25.00	24.19	ug/L	-3	25	
Isopropylbenzene	25.00	22.72	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	23.73	ug/L	-5	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	22.38	ug/L	-10	25	
Propylbenzene	25.00	26.27	ug/L	5	25	
Bromobenzene	25.00	24.64	ug/L	-1	25	
1,3,5-Trimethylbenzene	25.00	26.28	ug/L	5	25	
2-Chlorotoluene	25.00	25.34	ug/L	1	25	
4-Chlorotoluene	25.00	25.15	ug/L	1	25	
tert-Butylbenzene	25.00	26.38	ug/L	6	25	
1,2,4-Trimethylbenzene	25.00	25.91	ug/L	4	25	
sec-Butylbenzene	25.00	27.06	ug/L	8	25	
para-Isopropyl Toluene	25.00	24.76	ug/L	-1	25	
1,3-Dichlorobenzene	25.00	25.52	ug/L	2	25	
1,4-Dichlorobenzene	25.00	24.36	ug/L	-3	25	
n-Butylbenzene	25.00	25.80	ug/L	3	25	
1,2-Dichlorobenzene	25.00	25.54	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	21.41	ug/L	-14	25	
1,2,4-Trichlorobenzene	25.00	23.60	ug/L	-6	25	
Hexachlorobutadiene	25.00	25.89	ug/L	4	25	
Naphthalene	25.00	21.44	ug/L	-14	25	
1,2,3-Trichlorobenzene	25.00	24.33	ug/L	-3	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218866 MSVOA Water: EPA 8260B

Inst : MSVOA14
 Calnum : 950120036001
 Units : ug/L

Date : 24-MAR-2010 11:10

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	nco08	950120036008	.25/.5PPB	24-MAR-2010 11:10	S14217 (20000X), S14254 (20000X), S14255 (20000X), S14256 (100000X), S14027 (2500X)
L2	nco09	950120036009	0.5/1PPB	24-MAR-2010 11:39	S14217 (100000X), S14254 (100000X), S14255 (100000X), S14256 (50000X), S14027 (2500X)
L3	nco10	950120036010	2PPB	24-MAR-2010 12:08	S14217 (25000X), S14254 (25000X), S14255 (50000X), S14256 (25000X), S14027 (2500X)
L4	nco11	950120036011	5PPB	24-MAR-2010 12:37	S14217 (10000X), S14254 (10000X), S14255 (20000X), S14256 (10000X), S14027 (2500X)
L5	nco12	950120036012	10PPB	24-MAR-2010 13:06	S14217 (5000X), S14254 (5000X), S14255 (10000X), S14256 (5000X), S14027 (2500X)
L6	nco13	950120036013	20PPB	24-MAR-2010 13:35	S14216 (25000X), S14108 (25000X), S14228 (50000X), S13719 (25000X), S14027 (2500X)
L7	nco14	950120036014	50PPB	24-MAR-2010 14:04	S14216 (10000X), S14108 (10000X), S14228 (20000X), S13719 (10000X), S14027 (2500X)
L8	nco15	950120036015	75PPB	24-MAR-2010 14:34	S14216 (6667X), S14108 (6667X), S14228 (13330X), S13719 (6667X), S14027 (2500X)
L9	nco16	950120036016	100PPB	24-MAR-2010 15:03	S14216 (5000X), S14108 (5000X), S14228 (10000X), S13719 (5000X), S14027 (2500X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.4426	0.4192	0.4924	0.4686	0.4842	0.5350	0.5214	0.5361	AVRG	R		2.05152		0.4874	9	15	0.05	0.99	
Chloromethane		0.5958	0.5484	0.5476	0.5535	0.5649	0.5607	0.5367	0.5373	AVRG	R		1.79978		0.5556	3	15	0.10	0.99	
Vinyl Chloride	0.6799	0.6473	0.6171	0.6244	0.6037	0.6445	0.6760	0.6429	0.6579	AVRG	R		1.55343		0.6437	4	15	0.05	0.99	
Bromomethane		0.4326	0.4764	0.4409	0.4365	0.4208	0.3917	0.3939	0.4153	AVRG	R		2.34733		0.4260	6	15	0.05	0.99	
Chloroethane		0.4541m	0.4101m	0.3825m	0.3711m	0.3839m	0.3830m	0.3782m	0.3766m	AVRG	R		2.54815		0.3924	7	15	0.05	0.99	
Trichlorofluoromethane		0.6726	0.6740	0.7336	0.6984	0.7170	0.7713	0.9981	0.7820	AVRG	R		1.32296		0.7559	14	15	0.05	0.99	
Acetone			0.2309	0.2128	0.2050	0.1906	0.1893	0.1676	0.1731	AVRG	R		5.11215		0.1956	11	15	0.05	0.99	
1,1-Dichloroethene		0.4876	0.4128	0.3867	0.3690	0.3831	0.4014	0.3623	0.3924	AVRG	R		2.50364		0.3994	10	15	0.05	0.99	
Iodomethane				0.1703	0.2235	0.3291	0.4598	0.4727	0.5564	QUAD	A	-1.0872	0.34702	0.002148	0.3686	0.998	15	0.05	0.99	
Methylene Chloride		0.5355	0.4644	0.4511	0.4481	0.4745	0.4520	0.4457	0.4465	AVRG	R		2.15180		0.4647	7	15	0.05	0.99	
Carbon Disulfide		1.5793	1.4576	1.4697	1.4760	1.6477	1.7140	1.4453	1.6765	AVRG	R		0.64174		1.5583	7	15	0.05	0.99	
MTBE		1.5163	1.4091	1.4161	1.4146	1.5392	1.5374	1.5100	1.5140	AVRG	R		0.67472		1.4821	4	15	0.05	0.99	
trans-1,2-Dichloroethene		0.5027	0.4296	0.4156	0.4198	0.4368	0.4376	0.4261	0.4263	AVRG	R		2.28920		0.4368	6	15	0.05	0.99	
Vinyl Acetate			0.7133	0.7484m	0.7531	1.0818	1.1054	1.0648	1.0764	LINR	R	1.22640	0.91453		0.9347	0.999	15	0.05	0.99	
1,1-Dichloroethane		0.9193	0.8246	0.8044	0.8118	0.8494	0.8368	0.8016	0.8074	AVRG	R		1.20207		0.8319	5	15	0.10	0.99	
2-Butanone			0.2660	0.2620	0.2509	0.2636	0.2649	0.2597	0.2504	AVRG	R		3.85138		0.2596	2	15	0.05	0.99	
2,2-Dichloropropane		0.6968	0.6945	0.6859	0.6647	0.6916	0.7086	0.6837	0.6687	AVRG	R		1.45600		0.6868	2	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6199	0.4989	0.4934	0.4864	0.5122	0.5115	0.4923	0.4997	AVRG	R		1.94444		0.5143	8	15	0.05	0.99	
Chloroform		0.9555	0.8333	0.8207	0.8170	0.8515	0.8406	0.8025	0.8163	AVRG	R		1.18743		0.8422	6	15	0.05	0.99	
Bromochloromethane		0.2827	0.2432	0.2405	0.2363	0.2505	0.2454	0.2380	0.2408	AVRG	R		4.04573		0.2472	6	15	0.05	0.99	
1,1,1-Trichloroethane		0.7348	0.6831	0.6921	0.6683	0.6673	0.6899	0.6761	0.6699	AVRG	R		1.45942		0.6852	3	15	0.05	0.99	
1,1-Dichloropropene		0.3826	0.3841	0.3864	0.3793	0.3771	0.4067	0.4086	0.4007	AVRG	R		2.55961		0.3907	3	15	0.05	0.99	
Carbon Tetrachloride		0.2878	0.3270	0.3425	0.3364	0.3270	0.3586	0.3652	0.3556	AVRG	R		2.96297		0.3375	7	15	0.05	0.99	
1,2-Dichloroethane		0.4792	0.4431	0.4380	0.4304	0.4560	0.4459	0.4302	0.4338	AVRG	R		2.24932		0.4446	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.3772	1.1901	1.1801	1.1999	1.2348	1.2498	1.2100	1.2198	AVRG	R		0.81122		1.2327	5	15	0.05	0.99	
Trichloroethene		0.3444	0.3098	0.3096	0.3039	0.3007	0.3104	0.3046	0.3037	AVRG	R		3.21643		0.3109	5	15	0.05	0.99	
1,2-Dichloropropane		0.3460	0.3089	0.3055	0.3052	0.3186	0.3200	0.3069	0.3101	AVRG	R		3.17301		0.3152	4	15	0.05	0.99	
Bromodichloromethane		0.4193	0.3817	0.3816	0.3852	0.4123	0.4134	0.4032	0.4095	AVRG	R		2.49516		0.4008	4	15	0.05	0.99	
Dibromomethane		0.1993	0.2020	0.2016	0.1963	0.2073	0.2064	0.2025	0.2028	AVRG	R		4.94379		0.2023	2	15	0.05	0.99	
4-Methyl-2-Pentanone			0.3081	0.3134	0.3153	0.3396	0.3508	0.3489	0.3398	AVRG	R		3.02275		0.3308	5	15	0.05	0.99	
cis-1,3-Dichloropropene		0.5441	0.4922	0.4996	0.5041	0.5394	0.5388	0.5258	0.5321	AVRG	R		1.91568		0.5220	4	15	0.05	0.99	
Toluene		1.6313	1.4024	1.3869	1.3763	1.3976	1.4047	1.3637	1.3616	AVRG	R		0.70643		1.4156	6	15	0.05	0.99	
trans-1,3-Dichloropropene		0.5422	0.4955	0.5141	0.5051	0.5449	0.5464	0.5345	0.5389	AVRG	R		1.89501		0.5277	4	15	0.05	0.99	
1,1,2-Trichloroethane		0.1709	0.1676	0.1635	0.1596	0.1670	0.1666	0.1647	0.1635	AVRG	R		6.04475		0.1654	2	15	0.05	0.99	
2-Hexanone			0.2263	0.2307	0.2290	0.2477	0.2581	0.2594	0.2518	AVRG	R		4.11041		0.2433	6	15	0.05	0.99	
1,3-Dichloropropane		0.5837	0.5460	0.5465	0.5293	0.5625	0.5562	0.5438	0.5450	AVRG	R		1.81281		0.5516	3	15	0.05	0.99	
Tetrachloroethene		0.3247	0.3467	0.3361	0.3257	0.3106	0.3335	0.3386	0.3293	AVRG	R		3.02431		0.3307	3	15	0.05	0.99	
Dibromochloromethane		0.3265	0.3061	0.3076	0.3087	0.3313	0.3404	0.3393	0.3438	AVRG	R		3.07271		0.3254	5	15	0.05	0.99	
1,2-Dibromoethane		0.3433	0.3233	0.3193	0.3140	0.3345	0.3337	0.3317	0.3316	AVRG	R		3.04014		0.3289	3	15	0.05	0.99	
Chlorobenzene		1.0623	0.9443	0.9272	0.9311	0.9513	0.9643	0.9437	0.9604	AVRG	R		1.04106		0.9606	4	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3328	0.3090	0.3163	0.3128	0.3293	0.3352	0.3262	0.3314	AVRG	R		3.08518		0.3241	3	15	0.05	0.99	
Ethylbenzene		1.7871m	1.6160	1.5869	1.5866	1.5713	1.6333	1.6135	1.6076	AVRG	R		0.61528		1.6253	4	15	0.05	0.99	
m,p-Xylenes	0.7693	0.6378	0.5849	0.6058	0.6098	0.6076	0.6399	0.6345	0.6405	AVRG	R		1.57066		0.6367	8	15	0.05	0.99	
o-Xylene		0.6209	0.5683	0.5822	0.5896	0.6036	0.6263	0.6156	0.6265	AVRG	R		1.65533		0.6041	4	15	0.05	0.99	
Styrene		1.0275	0.9562	0.9937	0.9993	1.0707	1.1044	1.0870	1.1079	AVRG	R		0.95846		1.0433	5	15	0.05	0.99	
Bromoform		0.2060	0.2242	0.2292	0.2324	0.2583	0.2766	0.2790	0.2836	AVRG	R		4.02161		0.2487	12	15	0.10	0.99	
Isopropylbenzene		2.8438	2.7431	2.7606	2.7613	2.6789	2.8416	2.8512	2.8256	AVRG	R		0.35865		2.7883	2	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.8117	0.7951	0.7716	0.7551	0.8079	0.7981	0.7869	0.7728	AVRG	R		1.26998		0.7874	2	15	0.30	0.99	
1,2,3-Trichloropropane		0.9355	0.8232	0.7917	0.7812	0.8116	0.8014	0.7896	0.7766	AVRG	R		1.22874		0.8138	6	15	0.05	0.99	
Propylbenzene		3.7017	3.4125	3.4429	3.4238	3.2785	3.4373	3.4043	3.3316	AVRG	R		0.29162		3.4291	4	15	0.05	0.99	
Bromobenzene		0.9453	0.7804	0.7544	0.7529	0.7826	0.7771	0.7577	0.7655	AVRG	R		1.26666		0.7895	8	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.4806	2.2832	2.3037	2.3281	2.2835	2.3912	2.3607	2.3525	AVRG	R		0.42590		2.3479	3	15	0.05	0.99	
2-Chlorotoluene		2.7852	2.3363	2.2875	2.3102	2.2860	2.3198	2.2472	2.2418	AVRG	R		0.42521		2.3518	8	15	0.05	0.99	
4-Chlorotoluene		2.5040	2.1113	2.1336	2.1196	2.1367	2.1612	2.0893	2.0919	AVRG	R		0.46116		2.1684	6	15	0.05	0.99	
tert-Butylbenzene		2.1704	2.0127	2.0535	2.0436	1.9424	2.0836	2.0785	2.0446	AVRG	R		0.48694		2.0536	3	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.4310	2.3013	2.3636	2.3875	2.3837	2.4737	2.4179	2.4295	AVRG	R		0.41692		2.3985	2	15	0.05	0.99	
sec-Butylbenzene		2.9194	2.8866	3.0315	2.9813	2.7923	3.0490	3.0863	3.0031	AVRG	R		0.33685		2.9687	3	15	0.05	0.99	
para-Isopropyl Toluene		2.4460m	2.3347	2.5292	2.5141	2.4467	2.6513	2.6658	2.6210	AVRG	R		0.39587		2.5261	5	15	0.05	0.99	
1,3-Dichlorobenzene		1.6673	1.4359	1.4353	1.4216	1.4569	1.4668	1.4205	1.4302	AVRG	R		0.68175		1.4668	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.7629	1.5398	1.5003	1.4896	1.5099	1.5285	1.4733	1.4820	AVRG	R		0.65113		1.5358	6	15	0.05	0.99	
n-Butylbenzene		2.2433	2.1917	2.2993	2.2754	2.1925	2.3956	2.4185	2.3521	AVRG	R		0.43553		2.2961	4	15	0.05	0.99	
1,2-Dichlorobenzene		1.5697	1.3691	1.3644	1.3552	1.4053	1.4074	1.3594	1.3697	AVRG	R		0.71427		1.4000	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane			0.1856	0.1666	0.1585	0.1677	0.1721	0.1728	0.1668	AVRG	R		5.88259		0.1700	5	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.9426	0.8563	0.8839	0.9034	0.9556	0.9969	0.9772	0.9845	AVRG	R		1.06660		0.9376	5	15	0.05	0.99	
Hexachlorobutadiene		0.3935	0.4189	0.4508	0.4325	0.4046	0.4533	0.4612	0.4399	AVRG	R		2.31565		0.4318	6	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	X	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene		2.1209	2.1073	2.1795	2.2301	2.4717	2.6261	2.5916	2.5804	AVRG	R		0.42311		2.3635	10	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.8740	0.7694	0.8057	0.8120	0.8698	0.9037	0.8842	0.8843	AVRG	R		1.17594		0.8504	6	15	0.05	0.99	
Dibromofluoromethane	0.4594	0.4641	0.4613	0.4609	0.4612	0.4651	0.4681	0.4633	0.4660	AVRG	R		2.15861		0.4633	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3725	0.3739	0.3700	0.3720	0.3743	0.3741	0.3782	0.3786	0.3814	AVRG	R		2.66655		0.3750	1	15	0.05	0.99	
Toluene-d8	1.3469	1.3415	1.3492	1.3473	1.3460	1.3328	1.3201	1.3219	1.3158	AVRG	R		0.74865		1.3357	1	15	0.05	0.99	
Bromofluorobenzene	0.9415	0.9379	0.9224	0.9147	0.9148	0.9031	0.8964	0.8982	0.8915	AVRG	R		1.09482		0.9134	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-9	2.000	-14	5.000	1	10.00	-4	20.00	-1	50.00	10	75.00	7	100.0	10
Chloromethane			1.000	7	2.000	-1	5.000	-1	10.00	0	20.00	2	50.00	1	75.00	-3	100.0	-3
Vinyl Chloride	0.500	6	1.000	1	2.000	-4	5.000	-3	10.00	-6	20.00	0	50.00	5	75.00	0	100.0	2
Bromomethane			1.000	2	2.000	12	5.000	4	10.00	2	20.00	-1	50.00	-8	75.00	-8	100.0	-3
Chloroethane			1.000	16	2.000	5	5.000	-3	10.00	-5	20.00	-2	50.00	-2	75.00	-4	100.0	-4
Trichlorofluoromethane			1.000	-11	2.000	-11	5.000	-3	10.00	-8	20.00	-5	50.00	2	75.00	32	100.0	3
Acetone					2.000	18	5.000	9	10.00	5	20.00	-3	50.00	-3	75.00	-14	100.0	-11
1,1-Dichloroethene			0.500	22	2.000	3	5.000	-3	10.00	-8	20.00	-4	50.00	0	75.00	-9	100.0	-2
Iodomethane							5.000	8	10.00	-9	20.00	-2	50.00	5	75.00	-3	100.0	1
Methylene Chloride			0.500	15	2.000	0	5.000	-3	10.00	-4	20.00	2	50.00	-3	75.00	-4	100.0	-4
Carbon Disulfide			0.500	1	2.000	-6	5.000	-6	10.00	-5	20.00	6	50.00	10	75.00	-7	100.0	8
MTBE			0.500	2	2.000	-5	5.000	-4	10.00	-5	20.00	4	50.00	4	75.00	2	100.0	2
trans-1,2-Dichloroethene			0.500	15	2.000	-2	5.000	-5	10.00	-4	20.00	0	50.00	0	75.00	-2	100.0	-2
Vinyl Acetate					2.000	27	5.000	-7	10.00	-19	20.00	5	50.00	4	75.00	-1	100.0	0
1,1-Dichloroethane			0.500	11	2.000	-1	5.000	-3	10.00	-2	20.00	2	50.00	1	75.00	-4	100.0	-3
2-Butanone					2.000	2	5.000	1	10.00	-3	20.00	2	50.00	2	75.00	0	100.0	-4
2,2-Dichloropropane			0.500	1	2.000	1	5.000	0	10.00	-3	20.00	1	50.00	3	75.00	0	100.0	-3
cis-1,2-Dichloroethene			0.500	21	2.000	-3	5.000	-4	10.00	-5	20.00	0	50.00	-1	75.00	-4	100.0	-3
Chloroform			0.500	13	2.000	-1	5.000	-3	10.00	-3	20.00	1	50.00	0	75.00	-5	100.0	-3
Bromochloromethane			0.500	14	2.000	-2	5.000	-3	10.00	-4	20.00	1	50.00	-1	75.00	-4	100.0	-3
1,1,1-Trichloroethane			0.500	7	2.000	0	5.000	1	10.00	-2	20.00	-3	50.00	1	75.00	-1	100.0	-2
1,1-Dichloropropene			0.500	-2	2.000	-2	5.000	-1	10.00	-3	20.00	-3	50.00	4	75.00	5	100.0	3
Carbon Tetrachloride			0.500	-15	2.000	-3	5.000	1	10.00	0	20.00	-3	50.00	6	75.00	8	100.0	5
1,2-Dichloroethane			0.500	8	2.000	0	5.000	-1	10.00	-3	20.00	3	50.00	0	75.00	-3	100.0	-2
Benzene			0.500	12	2.000	-3	5.000	-4	10.00	-3	20.00	0	50.00	1	75.00	-2	100.0	-1
Trichloroethene			0.500	11	2.000	0	5.000	0	10.00	-2	20.00	-3	50.00	0	75.00	-2	100.0	-2
1,2-Dichloropropane			0.500	10	2.000	-2	5.000	-3	10.00	-3	20.00	1	50.00	2	75.00	-3	100.0	-2
Bromodichloromethane			0.500	5	2.000	-5	5.000	-5	10.00	-4	20.00	3	50.00	3	75.00	1	100.0	2
Dibromomethane			0.500	-1	2.000	0	5.000	0	10.00	-3	20.00	2	50.00	2	75.00	0	100.0	0
4-Methyl-2-Pentanone					2.000	-7	5.000	-5	10.00	-5	20.00	3	50.00	6	75.00	5	100.0	3
cis-1,3-Dichloropropene			0.500	4	2.000	-6	5.000	-4	10.00	-3	20.00	3	50.00	3	75.00	1	100.0	2
Toluene			0.500	15	2.000	-1	5.000	-2	10.00	-3	20.00	-1	50.00	-1	75.00	-4	100.0	-4
trans-1,3-Dichloropropene			0.500	3	2.000	-6	5.000	-3	10.00	-4	20.00	3	50.00	4	75.00	1	100.0	2
1,1,2-Trichloroethane			0.500	3	2.000	1	5.000	-1	10.00	-4	20.00	1	50.00	1	75.00	0	100.0	-1
2-Hexanone					2.000	-7	5.000	-5	10.00	-6	20.00	2	50.00	6	75.00	7	100.0	4
1,3-Dichloropropane			0.500	6	2.000	-1	5.000	-1	10.00	-4	20.00	2	50.00	1	75.00	-1	100.0	-1
Tetrachloroethene			0.500	-2	2.000	5	5.000	2	10.00	-2	20.00	-6	50.00	1	75.00	2	100.0	0
Dibromochloromethane			0.500	0	2.000	-6	5.000	-5	10.00	-5	20.00	2	50.00	5	75.00	4	100.0	6
1,2-Dibromoethane			0.500	4	2.000	-2	5.000	-3	10.00	-5	20.00	2	50.00	1	75.00	1	100.0	1
Chlorobenzene			0.500	11	2.000	-2	5.000	-3	10.00	-3	20.00	-1	50.00	0	75.00	-2	100.0	0
1,1,1,2-Tetrachloroethane			0.500	3	2.000	-5	5.000	-2	10.00	-3	20.00	2	50.00	3	75.00	1	100.0	2
Ethylbenzene			0.500	10	2.000	-1	5.000	-2	10.00	-2	20.00	-3	50.00	0	75.00	-1	100.0	-1

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	21	1.000	0	4.000	-8	10.00	-5	20.00	-4	40.00	-5	100.0	0	150.0	0	200.0	1
o-Xylene			0.500	3	2.000	-6	5.000	-4	10.00	-2	20.00	0	50.00	4	75.00	2	100.0	4
Styrene			0.500	-2	2.000	-8	5.000	-5	10.00	-4	20.00	3	50.00	6	75.00	4	100.0	6
Bromoform			0.500	-17	2.000	-10	5.000	-8	10.00	-7	20.00	4	50.00	11	75.00	12	100.0	14
Isopropylbenzene			0.500	2	2.000	-2	5.000	-1	10.00	-1	20.00	-4	50.00	2	75.00	2	100.0	1
1,1,2,2-Tetrachloroethane			0.500	3	2.000	1	5.000	-2	10.00	-4	20.00	3	50.00	1	75.00	0	100.0	-2
1,2,3-Trichloropropane			0.500	15	2.000	1	5.000	-3	10.00	-4	20.00	0	50.00	-2	75.00	-3	100.0	-5
Propylbenzene			0.500	8	2.000	0	5.000	0	10.00	0	20.00	-4	50.00	0	75.00	-1	100.0	-3
Bromobenzene			0.500	20	2.000	-1	5.000	-4	10.00	-5	20.00	-1	50.00	-2	75.00	-4	100.0	-3
1,3,5-Trimethylbenzene			0.500	6	2.000	-3	5.000	-2	10.00	-1	20.00	-3	50.00	2	75.00	1	100.0	0
2-Chlorotoluene			0.500	18	2.000	-1	5.000	-3	10.00	-2	20.00	-3	50.00	-1	75.00	-4	100.0	-5
4-Chlorotoluene			0.500	15	2.000	-3	5.000	-2	10.00	-2	20.00	-1	50.00	0	75.00	-4	100.0	-4
tert-Butylbenzene			0.500	6	2.000	-2	5.000	0	10.00	0	20.00	-5	50.00	1	75.00	1	100.0	0
1,2,4-Trimethylbenzene			0.500	1	2.000	-4	5.000	-1	10.00	0	20.00	-1	50.00	3	75.00	1	100.0	1
sec-Butylbenzene			0.500	-2	2.000	-3	5.000	2	10.00	0	20.00	-6	50.00	3	75.00	4	100.0	1
para-Isopropyl Toluene			0.500	-3	2.000	-8	5.000	0	10.00	0	20.00	-3	50.00	5	75.00	6	100.0	4
1,3-Dichlorobenzene			0.500	14	2.000	-2	5.000	-2	10.00	-3	20.00	-1	50.00	0	75.00	-3	100.0	-2
1,4-Dichlorobenzene			0.500	15	2.000	0	5.000	-2	10.00	-3	20.00	-2	50.00	0	75.00	-4	100.0	-4
n-Butylbenzene			0.500	-2	2.000	-5	5.000	0	10.00	-1	20.00	-5	50.00	4	75.00	5	100.0	2
1,2-Dichlorobenzene			0.500	12	2.000	-2	5.000	-3	10.00	-3	20.00	0	50.00	1	75.00	-3	100.0	-2
1,2-Dibromo-3-Chloropropane					2.000	9	5.000	-2	10.00	-7	20.00	-1	50.00	1	75.00	2	100.0	-2
1,2,4-Trichlorobenzene			0.500	1	2.000	-9	5.000	-6	10.00	-4	20.00	2	50.00	6	75.00	4	100.0	5
Hexachlorobutadiene			0.500	-9	2.000	-3	5.000	4	10.00	0	20.00	-6	50.00	5	75.00	7	100.0	2
Naphthalene			0.500	-10	2.000	-11	5.000	-8	10.00	-6	20.00	5	50.00	11	75.00	10	100.0	9
1,2,3-Trichlorobenzene			0.500	3	2.000	-10	5.000	-5	10.00	-5	20.00	2	50.00	6	75.00	4	100.0	4
Dibromofluoromethane	50.00	-1	50.00	0	50.00	0	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	0	50.00	1
1,2-Dichloroethane-d4	50.00	-1	50.00	0	50.00	-1	50.00	-1	50.00	0	50.00	0	50.00	1	50.00	1	50.00	2
Toluene-d8	50.00	1	50.00	0	50.00	1	50.00	1	50.00	1	50.00	0	50.00	-1	50.00	-1	50.00	-1
Bromofluorobenzene	50.00	3	50.00	3	50.00	1	50.00	0	50.00	0	50.00	-1	50.00	-2	50.00	-2	50.00	-2

BO 03/25/10 [Chloroethane]: Corrected baseline noise or negative peak in all levels.

BO 03/25/10 [Vinyl Acetate]: Corrected baseline noise or negative peak in 5PPB (nc011).

BO 03/25/10 [Ethylbenzene]: Separated from coeluting peak1PPB (nc09).

BO 03/25/10 [para-Isopropyl Toluene]: Corrected baseline noise or negative peak1PPB (nc09).

BO 03/25/10 [2-Chloroethylvinylether]: Cannot report 8260C due to ICV failure

Analyst: BO

Date: 03/25/10

Reviewer: LW

Date: 03/25/10

m>manual integration

X=A: Instrument response = $a_0 + \text{amount} * a_1 + \text{amount}^2 * a_2$ (invert equation before quantitating); X=R: Instrument amount = $a_0 + \text{response} * a_1 + \text{response}^2 * a_2$; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA14
Calnum : 950120036001

Cal Date : 24-MAR-2010

ICV 950121459004 (ncp04 25-MAR-2010) stds: S14253 (10000X), S13925 (10000X),
S14144 (10000X), S14236 (10000X), S14027 (2500X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	27.91	ug/L	12	25	
Chloromethane	25.00	25.82	ug/L	3	25	
Vinyl Chloride	25.00	24.18	ug/L	-3	25	
Bromomethane	25.00	27.66	ug/L	11	25	
Chloroethane	25.00	26.23	ug/L	5	25	m
Trichlorofluoromethane	25.00	25.11	ug/L	0	25	
Acetone	25.00	28.27	ug/L	13	25	
1,1-Dichloroethene	25.00	24.95	ug/L	0	25	
Iodomethane	25.00	30.56	ug/L	22	25	
Methylene Chloride	25.00	26.13	ug/L	5	25	
Carbon Disulfide	25.00	23.74	ug/L	-5	25	
MTBE	25.00	23.12	ug/L	-8	25	
trans-1,2-Dichloroethene	25.00	26.96	ug/L	8	25	
Vinyl Acetate	25.00	25.06	ug/L	0	25	
1,1-Dichloroethane	25.00	26.33	ug/L	5	25	
2-Butanone	25.00	24.81	ug/L	-1	25	
2,2-Dichloropropane	25.00	26.87	ug/L	7	25	
cis-1,2-Dichloroethene	25.00	26.29	ug/L	5	25	
Chloroform	25.00	25.57	ug/L	2	25	
Bromochloromethane	25.00	26.29	ug/L	5	25	
1,1,1-Trichloroethane	25.00	25.87	ug/L	3	25	
1,1-Dichloropropene	25.00	25.56	ug/L	2	25	
Carbon Tetrachloride	25.00	26.66	ug/L	7	25	
1,2-Dichloroethane	25.00	25.03	ug/L	0	25	
Benzene	25.00	26.28	ug/L	5	25	
Trichloroethene	25.00	25.25	ug/L	1	25	
1,2-Dichloropropane	25.00	25.52	ug/L	2	25	
Bromodichloromethane	25.00	26.48	ug/L	6	25	
Dibromomethane	25.00	25.64	ug/L	3	25	
4-Methyl-2-Pentanone	25.00	21.99	ug/L	-12	25	
cis-1,3-Dichloropropene	25.00	26.20	ug/L	5	25	
Toluene	25.00	25.69	ug/L	3	25	
trans-1,3-Dichloropropene	25.00	23.19	ug/L	-7	25	
1,1,2-Trichloroethane	25.00	24.69	ug/L	-1	25	
2-Hexanone	25.00	23.70	ug/L	-5	25	
1,3-Dichloropropane	25.00	24.74	ug/L	-1	25	
Tetrachloroethene	25.00	26.02	ug/L	4	25	
Dibromochloromethane	25.00	25.85	ug/L	3	25	
1,2-Dibromoethane	25.00	24.24	ug/L	-3	25	
Chlorobenzene	25.00	26.07	ug/L	4	25	
1,1,1,2-Tetrachloroethane	25.00	25.81	ug/L	3	25	
Ethylbenzene	25.00	26.05	ug/L	4	25	
m,p-Xylenes	50.00	52.37	ug/L	5	25	
o-Xylene	25.00	27.02	ug/L	8	25	
Styrene	25.00	27.30	ug/L	9	25	
Bromoform	25.00	25.59	ug/L	2	25	
Isopropylbenzene	25.00	22.89	ug/L	-8	25	
1,1,2,2-Tetrachloroethane	25.00	22.41	ug/L	-10	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	22.63	ug/L	-9	25	
Propylbenzene	25.00	25.84	ug/L	3	25	
Bromobenzene	25.00	25.28	ug/L	1	25	
1,3,5-Trimethylbenzene	25.00	26.45	ug/L	6	25	
2-Chlorotoluene	25.00	25.86	ug/L	3	25	
4-Chlorotoluene	25.00	25.66	ug/L	3	25	
tert-Butylbenzene	25.00	26.37	ug/L	5	25	
1,2,4-Trimethylbenzene	25.00	26.81	ug/L	7	25	
sec-Butylbenzene	25.00	27.01	ug/L	8	25	
para-Isopropyl Toluene	25.00	26.17	ug/L	5	25	
1,3-Dichlorobenzene	25.00	25.84	ug/L	3	25	
1,4-Dichlorobenzene	25.00	25.52	ug/L	2	25	
n-Butylbenzene	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	25.00	25.96	ug/L	4	25	
1,2-Dibromo-3-Chloropropane	25.00	21.73	ug/L	-13	25	
1,2,4-Trichlorobenzene	25.00	25.48	ug/L	2	25	
Hexachlorobutadiene	25.00	25.74	ug/L	3	25	
Naphthalene	25.00	24.97	ug/L	0	25	
1,2,3-Trichlorobenzene	25.00	26.12	ug/L	4	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : 20PPB IDF : 1.0
 Seqnum : 480124525004.1 File : icr04 Time : 27-MAR-2010 14:22
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14216 (25000X), S14108 (25000X), S13625 (50000X), S13719 (25000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.4918	20.00	16.98	ug/L	-15	20	0.0500	
Chloromethane	0.8790	0.7923	20.00	18.03	ug/L	-10	20	0.1000	
Vinyl Chloride	0.6271	0.6157	20.00	19.64	ug/L	-2	20	0.0500	
Bromomethane	0.3610	0.3813	20.00	21.12	ug/L	6	20	0.0500	
Chloroethane	0.4411	0.3971	20.00	18.01	ug/L	-10	20	0.0500	
Trichlorofluoromethane	0.6268	0.5392	20.00	17.21	ug/L	-14	20	0.0500	m
Acetone	0.1056	0.0829	20.00	15.70	ug/L	-21	20	0.0500	c- ***
1,1-Dichloroethene	0.3802	0.4077	20.00	21.45	ug/L	7	20	0.0500	
Iodomethane	0.5839	0.3677	20.00	12.60	ug/L	-37	20	0.0500	c- ***
Methylene Chloride	0.5313	0.4830	20.00	18.18	ug/L	-9	20	0.0500	
Carbon Disulfide	1.6806	1.8228	20.00	21.69	ug/L	8	20	0.0500	
MTBE	0.9672	0.8706	20.00	18.00	ug/L	-10	20	0.0500	
trans-1,2-Dichloroethene	0.4686	0.4435	20.00	18.93	ug/L	-5	20	0.0500	
Vinyl Acetate	0.7245	0.8157	20.00	22.52	ug/L	13	20	0.0500	
1,1-Dichloroethane	0.9167	0.8991	20.00	19.62	ug/L	-2	20	0.1000	
2-Butanone	0.1773	0.1496	20.00	16.88	ug/L	-16	20	0.0500	
2,2-Dichloropropane	0.5197	0.5959	20.00	22.94	ug/L	15	20	0.0500	
cis-1,2-Dichloroethene	0.5067	0.4892	20.00	19.31	ug/L	-3	20	0.0500	
Chloroform	0.8063	0.7623	20.00	18.91	ug/L	-5	20	0.0500	
Bromochloromethane	0.2159	0.2042	20.00	18.92	ug/L	-5	20	0.0500	
1,1,1-Trichloroethane	0.5481	0.5323	20.00	19.42	ug/L	-3	20	0.0500	
1,1-Dichloropropene	0.3652	0.3611	20.00	19.78	ug/L	-1	20	0.0500	
Carbon Tetrachloride	0.2856	0.2726	20.00	19.09	ug/L	-5	20	0.0500	
1,2-Dichloroethane	0.2817	0.2483	20.00	17.63	ug/L	-12	20	0.0500	
Benzene	1.0704	1.0567	20.00	19.74	ug/L	-1	20	0.0500	
Trichloroethene	0.2855	0.2610	20.00	18.29	ug/L	-9	20	0.0500	
1,2-Dichloropropane	0.3485	0.3166	20.00	18.17	ug/L	-9	20	0.0500	
Bromodichloromethane	0.3617	0.3112	20.00	17.21	ug/L	-14	20	0.0500	
Dibromomethane	0.1582	0.1367	20.00	17.28	ug/L	-14	20	0.0500	
4-Methyl-2-Pentanone	0.2323	0.1903	20.00	16.39	ug/L	-18	20	0.0500	
cis-1,3-Dichloropropene	0.4552	0.4105	20.00	18.03	ug/L	-10	20	0.0500	
Toluene	0.7834	0.7415	20.00	18.93	ug/L	-5	20	0.0500	
trans-1,3-Dichloropropene	0.4642	0.4134	20.00	17.81	ug/L	-11	20	0.0500	
1,1,2-Trichloroethane	0.1436	0.1305	20.00	18.17	ug/L	-9	20	0.0500	
2-Hexanone	0.2041	0.1641	20.00	16.08	ug/L	-20	20	0.0500	
1,3-Dichloropropane	0.4370	0.4041	20.00	18.50	ug/L	-8	20	0.0500	
Tetrachloroethene	0.2974	0.2871	20.00	19.31	ug/L	-3	20	0.0500	
Dibromochloromethane	0.3029	0.2562	20.00	16.91	ug/L	-15	20	0.0500	
1,2-Dibromoethane	0.2527	0.2283	20.00	18.07	ug/L	-10	20	0.0500	
Chlorobenzene	0.8508	0.8110	20.00	19.06	ug/L	-5	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2959	0.2657	20.00	17.96	ug/L	-10	20	0.0500	
Ethylbenzene	1.4015	1.4241	20.00	20.32	ug/L	2	20	0.0500	
m,p-Xylenes	0.5056	0.5372	40.00	42.50	ug/L	6	20	0.0500	
o-Xylene	0.5265	0.5153	20.00	19.58	ug/L	-2	20	0.0500	
Styrene	0.9089	0.8950	20.00	19.70	ug/L	-2	20	0.0500	
Bromoform	0.1737	0.1479	20.00	17.03	ug/L	-15	20	0.1000	
Isopropylbenzene	2.6074	2.7800	20.00	21.32	ug/L	7	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.6064	0.5872	20.00	19.37	ug/L	-3	20	0.3000	
1,2,3-Trichloropropane	0.1368	0.1301	20.00	19.02	ug/L	-5	20	0.0500	
Propylbenzene	3.2004	3.5421	20.00	22.14	ug/L	11	20	0.0500	
Bromobenzene	0.6876	0.7013	20.00	20.40	ug/L	2	20	0.0500	
1,3,5-Trimethylbenzene	2.0495	2.2262	20.00	21.73	ug/L	9	20	0.0500	
2-Chlorotoluene	2.1411	2.2926	20.00	21.42	ug/L	7	20	0.0500	
4-Chlorotoluene	2.0800	2.1052	20.00	20.24	ug/L	1	20	0.0500	
tert-Butylbenzene	1.7249	1.7591	20.00	20.40	ug/L	2	20	0.0500	
1,2,4-Trimethylbenzene	2.1567	2.2124	20.00	20.52	ug/L	3	20	0.0500	
sec-Butylbenzene	2.6657	2.9649	20.00	22.25	ug/L	11	20	0.0500	
para-Isopropyl Toluene	2.0335	2.2229	20.00	21.86	ug/L	9	20	0.0500	
1,3-Dichlorobenzene	1.2884	1.2408	20.00	19.26	ug/L	-4	20	0.0500	
1,4-Dichlorobenzene	1.3177	1.2539	20.00	19.03	ug/L	-5	20	0.0500	
n-Butylbenzene	2.0640	2.1518	20.00	20.85	ug/L	4	20	0.0500	
1,2-Dichlorobenzene	1.1774	1.1234	20.00	19.08	ug/L	-5	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0900	0.0755	20.00	16.78	ug/L	-16	20	0.0500	
1,2,4-Trichlorobenzene	0.6833	0.6368	20.00	18.64	ug/L	-7	20	0.0500	
Hexachlorobutadiene	0.3229	0.3348	20.00	20.74	ug/L	4	20	0.0500	
Naphthalene	1.3048	1.2037	20.00	18.45	ug/L	-8	20	0.0500	
1,2,3-Trichlorobenzene	0.6040	0.5573	20.00	18.45	ug/L	-8	20	0.0500	
Dibromofluoromethane	0.5695	0.5700	50.00	50.04	ug/L	0	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.2691	50.00	48.69	ug/L	-3	20	0.0500	
Toluene-d8	1.3769	1.4306	50.00	51.95	ug/L	4	20	0.0500	
Bromofluorobenzene	1.0267	1.0376	50.00	50.53	ug/L	1	20	0.0500	

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	1864450	-11.21	12.37	12.35	-0.02
1,4-Difluorobenzene	3438431	3070975	-10.69	13.66	13.64	-0.02
Chlorobenzene-d5	2768728	2396784	-13.43	17.68	17.66	-0.02
1,4-Dichlorobenzene-d4	1353103	1105843	-18.27	20.18	20.16	-0.02

BJP 03/27/10 [Trichlorofluoromethane]: Picked or reassigned peak. [general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

--low bias c=CCV m>manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : 25PPB IDF : 1.0
 Seqnum : 880122884003.1 File : lcg03 Time : 26-MAR-2010 08:53
 Cal : 880120005001 Caldate : 24-MAR-2010 Caltype : WATER
 Standards: S14216 (20000X), S14108 (20000X), S14228 (40000X), S13719 (20000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5854	0.6929	25.00	29.59	ug/L	18	20	0.0500	m
Chloromethane	1.1806	1.1663	25.00	24.70	ug/L	-1	20	0.1000	
Vinyl Chloride	0.8346	0.9027	25.00	27.04	ug/L	8	20	0.0500	
Bromomethane	0.5320	0.4923	25.00	23.13	ug/L	-7	20	0.0500	
Chloroethane	0.4805	0.4830	25.00	25.13	ug/L	1	20	0.0500	
Trichlorofluoromethane	0.7988	0.8638	25.00	27.03	ug/L	8	20	0.0500	m
Acetone	0.2854	0.2798	25.00	24.51	ug/L	-2	20	0.0500	
1,1-Dichloroethene	0.4440	0.4566	25.00	25.71	ug/L	3	20	0.0500	
Iodomethane	0.6165	0.5438	25.00	22.05	ug/L	-12	20	0.0500	
Methylene Chloride	0.5907	0.6206	25.00	26.27	ug/L	5	20	0.0500	
Carbon Disulfide	1.8645	2.0571	25.00	27.58	ug/L	10	20	0.0500	
MTBE	2.0434	2.0640	25.00	25.25	ug/L	1	20	0.0500	
trans-1,2-Dichloroethene	0.5390	0.5383	25.00	24.97	ug/L	0	20	0.0500	
Vinyl Acetate	1.7861	1.9750	25.00	27.64	ug/L	11	20	0.0500	
1,1-Dichloroethane	1.1338	1.2085	25.00	26.65	ug/L	7	20	0.1000	
2-Butanone	0.4382	0.4457	25.00	25.43	ug/L	2	20	0.0500	
2,2-Dichloropropane	0.8445	0.9649	25.00	28.56	ug/L	14	20	0.0500	
cis-1,2-Dichloroethene	0.6178	0.6355	25.00	25.72	ug/L	3	20	0.0500	
Chloroform	1.0341	1.0752	25.00	25.99	ug/L	4	20	0.0500	
Bromochloromethane	0.2799	0.2942	25.00	26.28	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.7901	0.8512	25.00	26.93	ug/L	8	20	0.0500	
1,1-Dichloropropene	0.4460	0.4541	25.00	25.45	ug/L	2	20	0.0500	
Carbon Tetrachloride	0.3744	0.3701	25.00	24.72	ug/L	-1	20	0.0500	
1,2-Dichloroethane	0.4904	0.5085	25.00	25.93	ug/L	4	20	0.0500	
Benzene	1.4027	1.4007	25.00	24.97	ug/L	0	20	0.0500	
Trichloroethene	0.3240	0.3259	25.00	25.15	ug/L	1	20	0.0500	
1,2-Dichloropropane	0.3853	0.3990	25.00	25.89	ug/L	4	20	0.0500	
Bromodichloromethane	0.4515	0.4511	25.00	24.98	ug/L	0	20	0.0500	
Dibromomethane	0.2126	0.2197	25.00	25.83	ug/L	3	20	0.0500	
4-Methyl-2-Pentanone	0.5078	0.4792	25.00	23.59	ug/L	-6	20	0.0500	
cis-1,3-Dichloropropene	0.5916	0.6163	25.00	26.05	ug/L	4	20	0.0500	
Toluene	0.8060	0.7777	25.00	24.12	ug/L	-4	20	0.0500	
trans-1,3-Dichloropropene	0.5608	0.5631	25.00	25.10	ug/L	0	20	0.0500	
1,1,2-Trichloroethane	0.1730	0.1711	25.00	24.73	ug/L	-1	20	0.0500	
2-Hexanone	0.3546	0.3202	25.00	22.58	ug/L	-10	20	0.0500	
1,3-Dichloropropane	0.5772	0.5785	25.00	25.05	ug/L	0	20	0.0500	
Tetrachloroethene	0.3020	0.2838	25.00	23.50	ug/L	-6	20	0.0500	
Dibromochloromethane	0.3218	0.3149	25.00	24.46	ug/L	-2	20	0.0500	
1,2-Dibromoethane	0.3249	0.3105	25.00	23.90	ug/L	-4	20	0.0500	
Chlorobenzene	0.9109	0.8648	25.00	23.73	ug/L	-5	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3101	0.2996	25.00	24.15	ug/L	-3	20	0.0500	
Ethylbenzene	1.5849	1.5085	25.00	23.80	ug/L	-5	20	0.0500	
m,p-Xylenes	0.6340	0.5814	50.00	45.86	ug/L	-8	20	0.0500	
o-Xylene	0.6054	0.5831	25.00	24.08	ug/L	-4	20	0.0500	
Styrene	1.0751	1.0409	25.00	24.20	ug/L	-3	20	0.0500	
Bromoform	0.2685	0.2416	25.00	22.50	ug/L	-10	20	0.1000	
Isopropylbenzene	2.4516	2.3757	25.00	24.23	ug/L	-3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7609	0.7532	25.00	24.75	ug/L	-1	20	0.3000	
1,2,3-Trichloropropane	0.7634	0.6964	25.00	22.81	ug/L	-9	20	0.0500	
Propylbenzene	3.1352	3.0963	25.00	24.69	ug/L	-1	20	0.0500	
Bromobenzene	0.6418	0.6101	25.00	23.77	ug/L	-5	20	0.0500	
1,3,5-Trimethylbenzene	2.1998	2.1476	25.00	24.41	ug/L	-2	20	0.0500	
2-Chlorotoluene	2.1691	2.0787	25.00	23.96	ug/L	-4	20	0.0500	
4-Chlorotoluene	1.9924	1.9465	25.00	24.42	ug/L	-2	20	0.0500	
tert-Butylbenzene	1.7513	1.7082	25.00	24.39	ug/L	-2	20	0.0500	
1,2,4-Trimethylbenzene	2.2005	2.1673	25.00	24.62	ug/L	-2	20	0.0500	
sec-Butylbenzene	2.6219	2.6059	25.00	24.85	ug/L	-1	20	0.0500	
para-Isopropyl Toluene	2.2240	2.1226	25.00	23.86	ug/L	-5	20	0.0500	
1,3-Dichlorobenzene	1.3172	1.2674	25.00	24.06	ug/L	-4	20	0.0500	
1,4-Dichlorobenzene	1.3984	1.3004	25.00	23.25	ug/L	-7	20	0.0500	
n-Butylbenzene	1.9253	1.8680	25.00	24.25	ug/L	-3	20	0.0500	
1,2-Dichlorobenzene	1.2975	1.2572	25.00	24.22	ug/L	-3	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.2151	0.1873	25.00	21.77	ug/L	-13	20	0.0500	
1,2,4-Trichlorobenzene	0.8519	0.8004	25.00	23.49	ug/L	-6	20	0.0500	
Hexachlorobutadiene	0.3563	0.3364	25.00	23.60	ug/L	-6	20	0.0500	
Naphthalene	1.7547	1.5903	25.00	20.93	ug/L	-16	20	0.0500	
1,2,3-Trichlorobenzene	0.8095	0.7567	25.00	23.37	ug/L	-7	20	0.0500	
Dibromofluoromethane	0.5241	0.5515	50.00	52.62	ug/L	5	20	0.0500	
1,2-Dichloroethane-d4	0.4003	0.4056	50.00	50.67	ug/L	1	20	0.0500	
Toluene-d8	1.2733	1.2662	50.00	49.72	ug/L	-1	20	0.0500	
Bromofluorobenzene	0.8931	0.9080	50.00	50.83	ug/L	2	20	0.0500	

ISTD (ICAL lcoll)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	428911	372321	-13.19	9.95	9.95	0.00
1,4-Difluorobenzene	747306	678416	-9.22	10.81	10.81	0.00
Chlorobenzene-d5	776886	715312	-7.93	13.71	13.71	0.00
1,4-Dichlorobenzene-d4	496877	445730	-10.29	15.79	15.79	0.01

BO 03/26/10 [Freon 12]: Corrected fronting or tailing peak integration. [general version]

BO 03/26/10 [Trichlorofluoromethane]: Corrected fronting or tailing peak integration. [general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : 25PPB IDF : 1.0
 Seqnum : 880122884013.1 File : lcq13 Time : 26-MAR-2010 13:45
 Cal : 880120005001 Caldate : 24-MAR-2010 Caltype : WATER
 Standards: S14216 (20000X), S14108 (20000X), S14228 (40000X), S13719 (20000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5854	0.7342	25.00	31.36	ug/L	25	20	0.0500	c+ m ***
Chloromethane	1.1806	1.2706	25.00	26.90	ug/L	8	20	0.1000	
Vinyl Chloride	0.8346	0.9690	25.00	29.03	ug/L	16	20	0.0500	m
Bromomethane	0.5320	0.5244	25.00	24.64	ug/L	-1	20	0.0500	
Chloroethane	0.4805	0.5503	25.00	28.63	ug/L	15	20	0.0500	m
Trichlorofluoromethane	0.7988	0.9322	25.00	29.17	ug/L	17	20	0.0500	m
Acetone	0.2854	0.2626	25.00	23.00	ug/L	-8	20	0.0500	
1,1-Dichloroethene	0.4440	0.4992	25.00	28.11	ug/L	12	20	0.0500	
Iodomethane	0.6165	0.5903	25.00	23.94	ug/L	-4	20	0.0500	
Methylene Chloride	0.5907	0.6341	25.00	26.84	ug/L	7	20	0.0500	
Carbon Disulfide	1.8645	2.2145	25.00	29.69	ug/L	19	20	0.0500	
MTBE	2.0434	2.0617	25.00	25.22	ug/L	1	20	0.0500	
trans-1,2-Dichloroethene	0.5390	0.5684	25.00	26.36	ug/L	5	20	0.0500	
Vinyl Acetate	1.7861	1.9173	25.00	26.84	ug/L	7	20	0.0500	
1,1-Dichloroethane	1.1338	1.2587	25.00	27.76	ug/L	11	20	0.1000	
2-Butanone	0.4382	0.4237	25.00	24.17	ug/L	-3	20	0.0500	
2,2-Dichloropropane	0.8445	0.9790	25.00	28.98	ug/L	16	20	0.0500	
cis-1,2-Dichloroethene	0.6178	0.6618	25.00	26.78	ug/L	7	20	0.0500	
Chloroform	1.0341	1.1174	25.00	27.01	ug/L	8	20	0.0500	
Bromochloromethane	0.2799	0.3032	25.00	27.09	ug/L	8	20	0.0500	
1,1,1-Trichloroethane	0.7901	0.8820	25.00	27.91	ug/L	12	20	0.0500	
1,1-Dichloropropene	0.4460	0.4819	25.00	27.01	ug/L	8	20	0.0500	
Carbon Tetrachloride	0.3744	0.4074	25.00	27.20	ug/L	9	20	0.0500	
1,2-Dichloroethane	0.4904	0.5125	25.00	26.13	ug/L	5	20	0.0500	
Benzene	1.4027	1.4673	25.00	26.15	ug/L	5	20	0.0500	
Trichloroethene	0.3240	0.3479	25.00	26.84	ug/L	7	20	0.0500	
1,2-Dichloropropane	0.3853	0.4094	25.00	26.56	ug/L	6	20	0.0500	
Bromodichloromethane	0.4515	0.4648	25.00	25.73	ug/L	3	20	0.0500	
Dibromomethane	0.2126	0.2267	25.00	26.65	ug/L	7	20	0.0500	
4-Methyl-2-Pentanone	0.5078	0.5152	25.00	25.36	ug/L	1	20	0.0500	
cis-1,3-Dichloropropene	0.5916	0.6186	25.00	26.14	ug/L	5	20	0.0500	
Toluene	0.8060	0.8063	25.00	25.01	ug/L	0	20	0.0500	
trans-1,3-Dichloropropene	0.5608	0.5395	25.00	24.05	ug/L	-4	20	0.0500	
1,1,2-Trichloroethane	0.1730	0.1645	25.00	23.78	ug/L	-5	20	0.0500	
2-Hexanone	0.3546	0.3350	25.00	23.62	ug/L	-6	20	0.0500	
1,3-Dichloropropane	0.5772	0.5613	25.00	24.31	ug/L	-3	20	0.0500	
Tetrachloroethene	0.3020	0.2990	25.00	24.75	ug/L	-1	20	0.0500	
Dibromochloromethane	0.3218	0.3102	25.00	24.10	ug/L	-4	20	0.0500	
1,2-Dibromoethane	0.3249	0.3043	25.00	23.42	ug/L	-6	20	0.0500	
Chlorobenzene	0.9109	0.8818	25.00	24.20	ug/L	-3	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3101	0.2905	25.00	23.42	ug/L	-6	20	0.0500	
Ethylbenzene	1.5849	1.6116	25.00	25.42	ug/L	2	20	0.0500	
m,p-Xylenes	0.6340	0.6416	50.00	50.60	ug/L	1	20	0.0500	
o-Xylene	0.6054	0.6350	25.00	26.22	ug/L	5	20	0.0500	
Styrene	1.0751	1.1004	25.00	25.59	ug/L	2	20	0.0500	
Bromoform	0.2685	0.2352	25.00	21.91	ug/L	-12	20	0.1000	
Isopropylbenzene	2.4516	2.5024	25.00	25.52	ug/L	2	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7609	0.7244	25.00	23.80	ug/L	-5	20	0.3000	
1,2,3-Trichloropropane	0.7634	0.6858	25.00	22.46	ug/L	-10	20	0.0500	
Propylbenzene	3.1352	3.2415	25.00	25.85	ug/L	3	20	0.0500	
Bromobenzene	0.6418	0.6135	25.00	23.90	ug/L	-4	20	0.0500	
1,3,5-Trimethylbenzene	2.1998	2.2005	25.00	25.01	ug/L	0	20	0.0500	
2-Chlorotoluene	2.1691	2.1912	25.00	25.25	ug/L	1	20	0.0500	
4-Chlorotoluene	1.9924	2.0701	25.00	25.97	ug/L	4	20	0.0500	
tert-Butylbenzene	1.7513	1.8019	25.00	25.72	ug/L	3	20	0.0500	
1,2,4-Trimethylbenzene	2.2005	2.1665	25.00	24.61	ug/L	-2	20	0.0500	
sec-Butylbenzene	2.6219	2.7385	25.00	26.11	ug/L	4	20	0.0500	
para-Isopropyl Toluene	2.2240	2.1710	25.00	24.40	ug/L	-2	20	0.0500	
1,3-Dichlorobenzene	1.3172	1.2996	25.00	24.67	ug/L	-1	20	0.0500	
1,4-Dichlorobenzene	1.3984	1.3328	25.00	23.83	ug/L	-5	20	0.0500	
n-Butylbenzene	1.9253	1.9041	25.00	24.72	ug/L	-1	20	0.0500	
1,2-Dichlorobenzene	1.2975	1.2702	25.00	24.47	ug/L	-2	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.2151	0.1926	25.00	22.38	ug/L	-10	20	0.0500	
1,2,4-Trichlorobenzene	0.8519	0.7775	25.00	22.82	ug/L	-9	20	0.0500	
Hexachlorobutadiene	0.3563	0.3327	25.00	23.35	ug/L	-7	20	0.0500	
Naphthalene	1.7547	1.4741	25.00	19.52	ug/L	-22	20	0.0500	c- ***
1,2,3-Trichlorobenzene	0.8095	0.7301	25.00	22.55	ug/L	-10	20	0.0500	
Dibromofluoromethane	0.5241	0.5580	50.00	53.24	ug/L	6	20	0.0500	
1,2-Dichloroethane-d4	0.4003	0.4032	50.00	50.36	ug/L	1	20	0.0500	
Toluene-d8	1.2733	1.2494	50.00	49.06	ug/L	-2	20	0.0500	
Bromofluorobenzene	0.8931	0.9000	50.00	50.39	ug/L	1	20	0.0500	

ISTD (ICAL lcoll)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	428911	373727	-12.87	9.95	9.95	0.00
1,4-Difluorobenzene	747306	663328	-11.24	10.81	10.81	0.00
Chlorobenzene-d5	776886	731231	-5.88	13.71	13.71	0.00
1,4-Dichlorobenzene-d4	496877	470745	-5.26	15.79	15.79	0.01

BO 03/26/10 [Freon 12]: Corrected fronting or tailing peak integration.
[general version]

BO 03/26/10 [Vinyl Chloride]: Corrected fronting or tailing peak integration.
[general version]

BO 03/26/10 [Chloroethane]: Corrected fronting or tailing peak integration.
[general version]

BO 03/26/10 [Trichlorofluoromethane]: Corrected fronting or tailing peak integration.
[general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

+ = high bias -- = low bias c = CCV m = manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : 25PPB IDF : 1.0
 Seqnum : 950122909003.1 File : ncq03 Time : 26-MAR-2010 09:10
 Cal : 950120036001 Caldate : 24-MAR-2010
 Standards: S14216 (20000X), S14108 (20000X), S14228 (40000X), S13719 (20000X),
 S14027 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.4874	0.5938	25.00	30.46	ug/L	22	20	0.0500	c+ ***
Chloromethane	0.5556	0.6261	25.00	28.17	ug/L	13	20	0.1000	
Vinyl Chloride	0.6437	0.7418	25.00	28.81	ug/L	15	20	0.0500	
Bromomethane	0.4260	0.4594	25.00	26.96	ug/L	8	20	0.0500	
Chloroethane	0.3924	0.4107	25.00	26.16	ug/L	5	20	0.0500	m
Trichlorofluoromethane	0.7559	0.8021	25.00	26.53	ug/L	6	20	0.0500	
Acetone	0.1956	0.1837	25.00	23.48	ug/L	-6	20	0.0500	
1,1-Dichloroethene	0.3994	0.4072	25.00	25.49	ug/L	2	20	0.0500	
Iodomethane	0.3686	0.3505	25.00	24.63	ug/L	-1	20	0.0500	
Methylene Chloride	0.4647	0.4882	25.00	26.26	ug/L	5	20	0.0500	
Carbon Disulfide	1.5583	1.7443	25.00	27.98	ug/L	12	20	0.0500	
MTBE	1.4821	1.4630	25.00	24.68	ug/L	-1	20	0.0500	
trans-1,2-Dichloroethene	0.4368	0.4503	25.00	25.77	ug/L	3	20	0.0500	
Vinyl Acetate	0.9347	1.0379	25.00	24.96	ug/L	0	20	0.0500	
1,1-Dichloroethane	0.8319	0.8801	25.00	26.45	ug/L	6	20	0.1000	
2-Butanone	0.2596	0.2294	25.00	22.09	ug/L	-12	20	0.0500	
2,2-Dichloropropane	0.6868	0.7448	25.00	27.11	ug/L	8	20	0.0500	
cis-1,2-Dichloroethene	0.5143	0.5168	25.00	25.12	ug/L	0	20	0.0500	
Chloroform	0.8422	0.8595	25.00	25.51	ug/L	2	20	0.0500	
Bromochloromethane	0.2472	0.2581	25.00	26.11	ug/L	4	20	0.0500	
1,1,1-Trichloroethane	0.6852	0.7033	25.00	25.66	ug/L	3	20	0.0500	
1,1-Dichloropropene	0.3907	0.4007	25.00	25.64	ug/L	3	20	0.0500	
Carbon Tetrachloride	0.3375	0.3552	25.00	26.31	ug/L	5	20	0.0500	
1,2-Dichloroethane	0.4446	0.4439	25.00	24.96	ug/L	0	20	0.0500	
Benzene	1.2327	1.2623	25.00	25.60	ug/L	2	20	0.0500	
Trichloroethene	0.3109	0.3068	25.00	24.67	ug/L	-1	20	0.0500	
1,2-Dichloropropane	0.3152	0.3241	25.00	25.71	ug/L	3	20	0.0500	
Bromodichloromethane	0.4008	0.4115	25.00	25.67	ug/L	3	20	0.0500	
Dibromomethane	0.2023	0.2022	25.00	25.00	ug/L	0	20	0.0500	
4-Methyl-2-Pentanone	0.3308	0.2877	25.00	21.74	ug/L	-13	20	0.0500	
cis-1,3-Dichloropropene	0.5220	0.5438	25.00	26.04	ug/L	4	20	0.0500	
Toluene	1.4156	1.3926	25.00	24.60	ug/L	-2	20	0.0500	
trans-1,3-Dichloropropene	0.5277	0.5242	25.00	24.83	ug/L	-1	20	0.0500	
1,1,2-Trichloroethane	0.1654	0.1599	25.00	24.17	ug/L	-3	20	0.0500	
2-Hexanone	0.2433	0.2010	25.00	20.65	ug/L	-17	20	0.0500	
1,3-Dichloropropane	0.5516	0.5367	25.00	24.33	ug/L	-3	20	0.0500	
Tetrachloroethene	0.3307	0.3251	25.00	24.58	ug/L	-2	20	0.0500	
Dibromochloromethane	0.3254	0.3224	25.00	24.77	ug/L	-1	20	0.0500	
1,2-Dibromoethane	0.3289	0.3092	25.00	23.50	ug/L	-6	20	0.0500	
Chlorobenzene	0.9606	0.9570	25.00	24.91	ug/L	0	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3241	0.3243	25.00	25.02	ug/L	0	20	0.0500	
Ethylbenzene	1.6253	1.6050	25.00	24.69	ug/L	-1	20	0.0500	
m,p-Xylenes	0.6367	0.6355	50.00	49.91	ug/L	0	20	0.0500	
o-Xylene	0.6041	0.6105	25.00	25.27	ug/L	1	20	0.0500	
Styrene	1.0433	1.0741	25.00	25.74	ug/L	3	20	0.0500	
Bromoform	0.2487	0.2395	25.00	24.08	ug/L	-4	20	0.1000	
Isopropylbenzene	2.7883	2.7037	25.00	24.24	ug/L	-3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7874	0.6857	25.00	21.77	ug/L	-13	20	0.3000	
1,2,3-Trichloropropane	0.8138	0.6976	25.00	21.43	ug/L	-14	20	0.0500	
Propylbenzene	3.4291	3.3374	25.00	24.33	ug/L	-3	20	0.0500	
Bromobenzene	0.7895	0.7393	25.00	23.41	ug/L	-6	20	0.0500	
1,3,5-Trimethylbenzene	2.3479	2.3124	25.00	24.62	ug/L	-2	20	0.0500	
2-Chlorotoluene	2.3518	2.2384	25.00	23.80	ug/L	-5	20	0.0500	
4-Chlorotoluene	2.1684	2.0840	25.00	24.03	ug/L	-4	20	0.0500	
tert-Butylbenzene	2.0536	2.0085	25.00	24.45	ug/L	-2	20	0.0500	
1,2,4-Trimethylbenzene	2.3985	2.3997	25.00	25.01	ug/L	0	20	0.0500	
sec-Butylbenzene	2.9687	2.9434	25.00	24.79	ug/L	-1	20	0.0500	
para-Isopropyl Toluene	2.5261	2.5376	25.00	25.11	ug/L	0	20	0.0500	
1,3-Dichlorobenzene	1.4668	1.4081	25.00	24.00	ug/L	-4	20	0.0500	
1,4-Dichlorobenzene	1.5358	1.4709	25.00	23.94	ug/L	-4	20	0.0500	
n-Butylbenzene	2.2961	2.2913	25.00	24.95	ug/L	0	20	0.0500	
1,2-Dichlorobenzene	1.4000	1.3498	25.00	24.10	ug/L	-4	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1700	0.1410	25.00	20.73	ug/L	-17	20	0.0500	
1,2,4-Trichlorobenzene	0.9376	0.9135	25.00	24.36	ug/L	-3	20	0.0500	
Hexachlorobutadiene	0.4318	0.4195	25.00	24.28	ug/L	-3	20	0.0500	
Naphthalene	2.3635	2.1211	25.00	22.44	ug/L	-10	20	0.0500	
1,2,3-Trichlorobenzene	0.8504	0.8126	25.00	23.89	ug/L	-4	20	0.0500	
Dibromofluoromethane	0.4633	0.4794	50.00	51.74	ug/L	3	20	0.0500	
1,2-Dichloroethane-d4	0.3750	0.3712	50.00	49.49	ug/L	-1	20	0.0500	
Toluene-d8	1.3357	1.3427	50.00	50.26	ug/L	1	20	0.0500	
Bromofluorobenzene	0.9134	0.8776	50.00	48.04	ug/L	-4	20	0.0500	

ISTD (ICAL ncol4)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	750650	633093	-15.66	11.53	11.53	0.00
1,4-Difluorobenzene	1177090	1007628	-14.40	12.37	12.37	0.00
Chlorobenzene-d5	1151283	991217	-13.90	15.20	15.20	0.00
1,4-Dichlorobenzene-d4	645405	567231	-12.11	17.26	17.26	0.00

BO 03/26/10 [Chloroethane]: Integrated to match integration of ICAL and CCV.
[general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

+ = high bias c = CCV m = manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218866 MSVOA Water
EPA 8260B

Inst : MSVOA14 Run Name : 25PPB IDF : 1.0
 Seqnum : 950126012005.7 File : ncs05 Time : 28-MAR-2010 14:19
 Cal : 950120036001 Caldate : 24-MAR-2010
 Standards: S14253 (10000X), S13925 (10000X), S14144 (10000X), S14236 (10000X),
 S14027 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.4874	0.5400	25.00	27.70	ug/L	11	20	0.0500	
Chloromethane	0.5556	0.5024	25.00	22.60	ug/L	-10	20	0.1000	
Vinyl Chloride	0.6437	0.6452	25.00	25.06	ug/L	0	20	0.0500	
Bromomethane	0.4260	0.3206	25.00	18.82	ug/L	-25	20	0.0500	c- ***
Chloroethane	0.3924	0.4404	25.00	28.06	ug/L	12	20	0.0500	m
Trichlorofluoromethane	0.7559	0.7963	25.00	26.34	ug/L	5	20	0.0500	
Acetone	0.1956	0.2286	25.00	29.22	ug/L	17	20	0.0500	
1,1-Dichloroethene	0.3994	0.4274	25.00	26.75	ug/L	7	20	0.0500	
Iodomethane	0.3686	0.1494	25.00	12.87	ug/L	-49	20	0.0500	c- ***
Methylene Chloride	0.4647	0.5088	25.00	27.37	ug/L	9	20	0.0500	
Carbon Disulfide	1.5583	1.5586	25.00	25.00	ug/L	0	20	0.0500	
MTBE	1.4821	1.4762	25.00	24.90	ug/L	0	20	0.0500	
trans-1,2-Dichloroethene	0.4368	0.4911	25.00	28.11	ug/L	12	20	0.0500	
Vinyl Acetate	0.9347	1.1943	25.00	28.53	ug/L	14	20	0.0500	
1,1-Dichloroethane	0.8319	0.9363	25.00	28.14	ug/L	13	20	0.1000	
2-Butanone	0.2596	0.3036	25.00	29.23	ug/L	17	20	0.0500	
2,2-Dichloropropane	0.6868	0.7811	25.00	28.43	ug/L	14	20	0.0500	
cis-1,2-Dichloroethene	0.5143	0.5574	25.00	27.09	ug/L	8	20	0.0500	
Chloroform	0.8422	0.9000	25.00	26.72	ug/L	7	20	0.0500	
Bromochloromethane	0.2472	0.2684	25.00	27.15	ug/L	9	20	0.0500	
1,1,1-Trichloroethane	0.6852	0.7796	25.00	28.45	ug/L	14	20	0.0500	
1,1-Dichloropropene	0.3907	0.4357	25.00	27.88	ug/L	12	20	0.0500	
Carbon Tetrachloride	0.3375	0.3895	25.00	28.85	ug/L	15	20	0.0500	
1,2-Dichloroethane	0.4446	0.4537	25.00	25.51	ug/L	2	20	0.0500	
Benzene	1.2327	1.3614	25.00	27.61	ug/L	10	20	0.0500	
Trichloroethene	0.3109	0.3287	25.00	26.43	ug/L	6	20	0.0500	
1,2-Dichloropropane	0.3152	0.3403	25.00	26.99	ug/L	8	20	0.0500	
Bromodichloromethane	0.4008	0.4378	25.00	27.31	ug/L	9	20	0.0500	
Dibromomethane	0.2023	0.2158	25.00	26.67	ug/L	7	20	0.0500	
4-Methyl-2-Pentanone	0.3308	0.3728	25.00	28.17	ug/L	13	20	0.0500	
cis-1,3-Dichloropropene	0.5220	0.5689	25.00	27.25	ug/L	9	20	0.0500	
Toluene	1.4156	1.5174	25.00	26.80	ug/L	7	20	0.0500	
trans-1,3-Dichloropropene	0.5277	0.4969	25.00	23.54	ug/L	-6	20	0.0500	
1,1,2-Trichloroethane	0.1654	0.1749	25.00	26.42	ug/L	6	20	0.0500	
2-Hexanone	0.2433	0.2700	25.00	27.74	ug/L	11	20	0.0500	
1,3-Dichloropropane	0.5516	0.5791	25.00	26.25	ug/L	5	20	0.0500	
Tetrachloroethene	0.3307	0.3630	25.00	27.44	ug/L	10	20	0.0500	
Dibromochloromethane	0.3254	0.3446	25.00	26.47	ug/L	6	20	0.0500	
1,2-Dibromoethane	0.3289	0.3301	25.00	25.09	ug/L	0	20	0.0500	
Chlorobenzene	0.9606	1.0166	25.00	26.46	ug/L	6	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3241	0.3320	25.00	25.61	ug/L	2	20	0.0500	
Ethylbenzene	1.6253	1.7881	25.00	27.51	ug/L	10	20	0.0500	
m,p-Xylenes	0.6367	0.6962	50.00	54.68	ug/L	9	20	0.0500	
o-Xylene	0.6041	0.6643	25.00	27.49	ug/L	10	20	0.0500	
Styrene	1.0433	1.1601	25.00	27.80	ug/L	11	20	0.0500	
Bromoform	0.2487	0.2650	25.00	26.65	ug/L	7	20	0.1000	
Isopropylbenzene	2.7883	2.5765	25.00	23.10	ug/L	-8	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7874	0.7675	25.00	24.37	ug/L	-3	20	0.3000	
1,2,3-Trichloropropane	0.8138	0.7869	25.00	24.17	ug/L	-3	20	0.0500	
Propylbenzene	3.4291	3.6386	25.00	26.53	ug/L	6	20	0.0500	
Bromobenzene	0.7895	0.7735	25.00	24.49	ug/L	-2	20	0.0500	
1,3,5-Trimethylbenzene	2.3479	2.5154	25.00	26.78	ug/L	7	20	0.0500	
2-Chlorotoluene	2.3518	2.4443	25.00	25.98	ug/L	4	20	0.0500	
4-Chlorotoluene	2.1684	2.2012	25.00	25.38	ug/L	2	20	0.0500	
tert-Butylbenzene	2.0536	2.2053	25.00	26.85	ug/L	7	20	0.0500	
1,2,4-Trimethylbenzene	2.3985	2.5731	25.00	26.82	ug/L	7	20	0.0500	
sec-Butylbenzene	2.9687	3.3239	25.00	27.99	ug/L	12	20	0.0500	
para-Isopropyl Toluene	2.5261	2.6809	25.00	26.53	ug/L	6	20	0.0500	
1,3-Dichlorobenzene	1.4668	1.4753	25.00	25.15	ug/L	1	20	0.0500	
1,4-Dichlorobenzene	1.5358	1.5446	25.00	25.14	ug/L	1	20	0.0500	
n-Butylbenzene	2.2961	2.5985	25.00	28.29	ug/L	13	20	0.0500	
1,2-Dichlorobenzene	1.4000	1.4364	25.00	25.65	ug/L	3	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.1700	0.1668	25.00	24.53	ug/L	-2	20	0.0500	
1,2,4-Trichlorobenzene	0.9376	0.9590	25.00	25.57	ug/L	2	20	0.0500	
Hexachlorobutadiene	0.4318	0.4669	25.00	27.03	ug/L	8	20	0.0500	
Naphthalene	2.3635	2.5981	25.00	27.48	ug/L	10	20	0.0500	
1,2,3-Trichlorobenzene	0.8504	0.9226	25.00	27.12	ug/L	8	20	0.0500	
Dibromofluoromethane	0.4633	0.4809	50.00	51.90	ug/L	4	20	0.0500	
1,2-Dichloroethane-d4	0.3750	0.3709	50.00	49.45	ug/L	-1	20	0.0500	
Toluene-d8	1.3357	1.3360	50.00	50.01	ug/L	0	20	0.0500	
Bromofluorobenzene	0.9134	0.8584	50.00	46.99	ug/L	-6	20	0.0500	

ISTD (ICAL ncol4)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	750650	597402	-20.42	11.53	11.53	0.00
1,4-Difluorobenzene	1177090	958227	-18.59	12.37	12.37	0.00
Chlorobenzene-d5	1151283	947653	-17.69	15.20	15.20	0.00
1,4-Dichlorobenzene-d4	645405	553516	-14.24	17.26	17.26	0.00

PDM 03/29/10 [Chloroethane]: Integrated to match integration of ICAL and CCV.
[general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

--low bias c=CCV m>manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 480124525

Date : 03/27/10
 Sequence : MSVOA09 icr

Reference : iar13
 Analyzed : 01/27/10 23:34

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2099875	12.37	3438431	13.66	2768728	17.68	1353103	20.18
		LOWER LIMIT	1049938	11.87	1719216	13.16	1384364	17.18	676552	19.68
		UPPER LIMIT	4199750	12.87	6876862	14.16	5537456	18.18	2706206	20.68
004	CCV	20PPB	1864450	12.35	3070975	13.64	2396784	17.66	1105843	20.16
005	BS	QC537897	2000992	12.35	3229025	13.65	2491335	17.66	1150347	20.16
006	BSD	QC537898	1974488	12.36	3259288	13.64	2542290	17.66	1177828	20.17
007	IB	IB	1944885	12.36	3286809	13.64	2652163	17.65	1236142	20.17
008	BLANK	QC537896	1953224	12.36	3136475	13.64	2386813	17.65	1110599	20.17
009	SAMPLE	218866-002	1905889	12.35	3060923	13.65	2361546	17.66	1083244	20.16
010	SAMPLE	218866-003	1776544	12.36	2959830	13.64	2308963	17.65	1062104	20.17
011	SAMPLE	218866-004	1790988	12.36	2923209	13.64	2235446	17.65	1012310	20.17
012	SAMPLE	218881-002	1767053	12.36	2843998	13.64	2267038	17.66	1071305	20.16
013	SAMPLE	218881-004	1894537	12.35	3193255	13.64	2436260	17.66	1119039	20.16
014	SAMPLE	218881-007	1943886	12.35	3100759	13.65	2425502	17.66	1135529	20.16
015	SAMPLE	218881-003	1943260	12.36	3263625	13.64	2407971	17.66	1134855	20.16
016	SAMPLE	218866-006	1955673	12.36	3125676	13.64	2462465	17.65	1129995	20.17
017	SAMPLE	218881-005	1993508	12.36	3260988	13.64	2523899	17.65	1141863	20.16

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 880122884

Date : 03/26/10
 Sequence : MSVOA12 lcq

Reference : lcoll
 Analyzed : 03/24/10 14:57

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	428911	9.95	747306	10.81	776886	13.71	496877	15.79
		LOWER LIMIT	214456	9.45	373653	10.31	388443	13.21	248439	15.29
		UPPER LIMIT	857822	10.45	1494612	11.31	1553772	14.21	993754	16.29
003	CCV	25PPB	372321	9.95	678416	10.81	715312	13.71	445730	15.79
004	BS	QC537779	375242	9.94	675147	10.80	708960	13.71	443113	15.79
005	BSD	QC537780	373801	9.94	683995	10.81	714255	13.71	446358	15.79
007	BLANK	QC537781	374569	9.95	673881	10.81	711617	13.71	417609	15.79
008	SAMPLE	218916-002	376420	9.94	674892	10.81	706453	13.71	415914	15.79
009	SAMPLE	218995-001	376260	9.94	670855	10.81	706311	13.71	415439	15.79
013	CCV	25PPB	373727	9.95	663328	10.81	731231	13.71	470745	15.79
015	BLANK	QC537782	369006	9.95	667601	10.81	712485	13.71	420156	15.79
016	SAMPLE	218881-001	371266	9.94	672811	10.81	710790	13.71	413942	15.79
017	SAMPLE	218866-001	379431	9.94	676711	10.81	718294	13.71	417615	15.79
018	SAMPLE	218866-007	371533	9.95	667874	10.81	707698	13.71	418886	15.79
019	SAMPLE	218881-006	369579	9.95	671212	10.81	710842	13.71	413467	15.79
020	SAMPLE	218837-001	370945	9.95	676035	10.81	710317	13.71	416747	15.79
021	SAMPLE	218818-001	365801	9.95	672092	10.81	715596	13.71	418780	15.79
022	SAMPLE	218818-002	369102	9.95	672831	10.81	714096	13.71	416915	15.79
023	SAMPLE	218818-003	370370	9.95	672712	10.81	710543	13.71	417056	15.79
024	SAMPLE	218881-002	372111	9.95	672447	10.81	725165	13.71	434786	15.79
025	SAMPLE	218881-004	375193	9.95	676452	10.81	723745	13.71	440094	15.79
026	SAMPLE	218881-007	370220	9.95	680710	10.81	724602	13.71	435754	15.79
027	SAMPLE	219011-001	377430	9.94	681848	10.81	722367	13.71	432655	15.79
028	SAMPLE	218866-002	372204	9.95	685451	10.81	723297	13.71	428513	15.79
029	SAMPLE	218866-003	368299	9.95	674504	10.81	719394	13.71	430773	15.79
030	SAMPLE	218866-004	371416	9.95	676892	10.81	720499	13.71	426098	15.79
031	SAMPLE	218866-008	373537	9.95	675598	10.81	729325	13.71	434236	15.79
032	SAMPLE	218881-003	375972	9.95	686205	10.81	727257	13.71	436898	15.79
033	SAMPLE	218881-005	371082	9.95	677416	10.81	727516	13.71	430488	15.79
037	SAMPLE	218963-002	362416	9.95	662917	10.81	707334	13.71	419459	15.79
038	SAMPLE	218963-004	359239	9.94	664547	10.81	698820	13.71	409553	15.79
039	SAMPLE	218964-002	363584	9.94	658535	10.81	703059	13.71	414098	15.79

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 950122909

Date : 03/26/10
 Sequence : MSVOA14 ncq

Reference : ncol4
 Analyzed : 03/24/10 14:04

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	750650	11.53	1177090	12.37	1151283	15.20	645405	17.26
		LOWER LIMIT	375325	11.03	588545	11.87	575642	14.70	322703	16.76
		UPPER LIMIT	1501300	12.03	2354180	12.87	2302566	15.70	1290810	17.76
003	CCV	25PPB	633093	11.53	1007628	12.37	991217	15.20	567231	17.26
004	LCS	QC537783	644946	11.53	1028641	12.37	1014300	15.20	582878	17.26
006	BLANK	QC537784	607277	11.53	994095	12.37	934367	15.20	488028	17.26
007	SAMPLE	218948-012	600677	11.53	979688	12.37	928389	15.20	481514	17.26
008	SAMPLE	218834-009	587205	11.53	959570	12.37	917504	15.20	486856	17.26
009	MSS	218866-005	611918	11.53	990741	12.37	954443	15.20	514164	17.26
010	SAMPLE	218891-002	604068	11.53	984851	12.37	942952	15.20	492871	17.26
011	SAMPLE	218891-003	593943	11.53	968692	12.37	917088	15.20	479181	17.26
012	SAMPLE	218891-005	583879	11.53	952347	12.37	906150	15.20	471613	17.26
013	SAMPLE	218891-006	579184	11.53	947647	12.37	910539	15.20	492538	17.26
014	SAMPLE	218948-001	545239	11.53	919211	12.37	878900	15.20	452834	17.26
015	SAMPLE	218948-005	554759	11.53	919594	12.37	876167	15.20	469156	17.26
016	SAMPLE	218948-006	564739	11.53	945612	12.37	906339	15.20	472404	17.26
017	SAMPLE	218948-008	559793	11.53	927600	12.37	896420	15.20	490734	17.26
018	SAMPLE	218948-009	587795	11.53	956857	12.37	930144	15.20	511532	17.26
019	SAMPLE	218948-010	621934	11.53	1007096	12.37	976269	15.20	526777	17.26
020	SAMPLE	218948-013	626824	11.53	1011179	12.37	966096	15.20	508069	17.26
021	SAMPLE	218948-014	612297	11.53	984152	12.37	940317	15.20	494338	17.26
022	SAMPLE	218948-015	597779	11.53	967031	12.37	934007	15.20	490401	17.26
023	SAMPLE	218866-006	585044	11.53	958530	12.37	913815	15.20	494162	17.26
024	SAMPLE	218948-007	589697	11.53	959042	12.37	916338	15.20	485440	17.26
025	MS	QC537798	614117	11.53	974353	12.37	963988	15.20	560531	17.26
026	MSD	QC537799	637516	11.53	1001867	12.37	989902	15.20	569453	17.26

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 950126012

Date : 03/28/10
 Sequence : MSVOA14 ncs

Reference : ncol4
 Analyzed : 03/24/10 14:04

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	750650	11.53	1177090	12.37	1151283	15.20	645405	17.26
		LOWER LIMIT	375325	11.03	588545	11.87	575642	14.70	322703	16.76
		UPPER LIMIT	1501300	12.03	2354180	12.87	2302566	15.70	1290810	17.76
005	CCV	25PPB	597402	11.53	958227	12.37	947653	15.20	553516	17.26
006	LCS	QC537953	601189	11.53	956820	12.37	949476	15.20	549675	17.26
008	BLANK	QC537951	555901	11.53	926383	12.37	893065	15.20	470569	17.26
009	SAMPLE	218948-007	544580	11.53	905034	12.37	874788	15.20	486801	17.26
010	SAMPLE	218866-008	558080	11.53	926400	12.37	900180	15.20	486064	17.26
011	SAMPLE	219022-001	555324	11.53	913035	12.37	879734	15.20	471443	17.26
012	SAMPLE	219022-004	536564	11.53	889660	12.37	857676	15.20	463025	17.26
013	SAMPLE	219035-001	520219	11.53	865420	12.37	834276	15.20	450359	17.26
014	SAMPLE	219035-002	529890	11.53	889738	12.37	858148	15.20	458133	17.26
015	SAMPLE	219035-003	514058	11.53	868126	12.37	835071	15.20	442365	17.26
016	SAMPLE	219035-004	523093	11.53	885219	12.37	850862	15.20	452859	17.26
017	MSS	219035-005	504383	11.53	845626	12.37	818689	15.20	432583	17.26
018	SAMPLE	219035-006	513915	11.53	879144	12.37	846256	15.20	443527	17.26
019	SAMPLE	219035-009	512044	11.53	876725	12.37	837695	15.20	450093	17.26
020	SAMPLE	219035-007	511900	11.53	850723	12.37	820363	15.20	455517	17.26
021	SAMPLE	219035-008	513044	11.53	850265	12.37	810908	15.20	431385	17.26
022	SAMPLE	219051-002	496376	11.53	849344	12.37	819876	15.20	458521	17.26
023	MS	QC537972	547861	11.53	888712	12.37	893891	15.20	519957	17.26
024	MSD	QC537973	554311	11.53	896776	12.37	894967	15.20	516529	17.26
025	IB	NP	531052	11.53	884540	12.37	881346	15.20	494966	17.26
026	IB	NP	523214	11.52	881198	12.37	868945	15.20	487751	17.26
027	IB	NP	523172	11.53	873418	12.37	874448	15.20	486940	17.26

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 480124525

Instrument : MSVOA09 Begun : 03/27/10 11:25
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	icr01	X	IB			03/27/10 11:25	1.0	1
002	icr02	TUN	BFB			03/27/10 13:42	1.0	2
003	icr03	TUN	BFB			03/27/10 13:56	1.0	2
004	icr04	CCV	20PPB			03/27/10 14:22	1.0	3 4 5 6 1
005	icr05	BS	QC537897	Water	161366	03/27/10 15:04	1.0	7 8 9 1
006	icr06	BSD	QC537898	Water	161366	03/27/10 15:38	1.0	7 8 9 1
007	icr07	IB	IB			03/27/10 16:11	1.0	1
008	icr08	BLANK	QC537896	Water	161366	03/27/10 16:45	1.0	1
009	icr09	SAMPLE	218866-002	Water	161366	03/27/10 17:18	1.0	1
010	icr10	SAMPLE	218866-003	Water	161366	03/27/10 17:51	1.0	1
011	icr11	SAMPLE	218866-004	Water	161366	03/27/10 18:25	1.0	1
012	icr12	SAMPLE	218881-002	Water	161366	03/27/10 18:58	1.0	1
013	icr13	SAMPLE	218881-004	Water	161366	03/27/10 19:31	1.0	1
014	icr14	SAMPLE	218881-007	Water	161366	03/27/10 20:05	1.0	1
015	icr15	SAMPLE	218881-003	Water	161366	03/27/10 20:38	1.0	1
016	icr16	SAMPLE	218866-006	Water	161366	03/27/10 21:11	1.0	1
017	icr17	SAMPLE	218881-005	Water	161366	03/27/10 21:45	7.143	1
018	icr18	X	IB			03/27/10 22:18	1.0	1
019	icr19	X	IB			03/27/10 22:51	1.0	1
020	icr20	X	IB			03/27/10 23:24	1.0	1

BJP 03/28/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

BJP 03/28/10 : Matrix spikes were not performed for this analysis in batch 161366 due to insufficient sample amount.

Analyst: BJP Date: 03/28/10 Reviewer: LW Date: 03/29/10

Standards used: 1=S14026 2=S13652 3=S14216 4=S14108 5=S13625 6=S13719 7=S14253 8=S14236 9=S14144

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 880121453

Instrument : MSVOA12 Begun : 03/25/10 08:13
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	lcp01	X	IB			03/25/10 08:13	1.0	1
002	lcp02	TUN	BFB			03/25/10 08:58	1.0	2
003	lcp03	CCV	20PPB			03/25/10 09:15	1.0	3 4 5 6 1
004	lcp04	ICV/BS	QC537567	Water	161283	03/25/10 10:05	1.0	7 8 9 10 1
005	lcp05	BSD	QC537568	Water	161283	03/25/10 10:38	1.0	7 8 9 10 1
006	lcp06	X	IB			03/25/10 11:10	1.0	1
007	lcp07	BLANK	QC537569	Water	161283	03/25/10 11:43	1.0	1
008	lcp08	SAMPLE	218918-004	Water	161283	03/25/10 12:15	1.0	1
009	lcp09	TUN	BFB			03/25/10 12:39	1.0	2
010	lcp10	CCV	20PPB			03/25/10 12:56	1.0	3 4 5 6 1
011	lcp11	X	IB			03/25/10 13:28	1.0	1
012	lcp12	BLANK	QC537605	Water	161283	03/25/10 14:01	1.0	1
013	lcp13	SAMPLE	218814-004	Water	161283	03/25/10 15:41	1.0	1
014	lcp14	SAMPLE	218924-004	Water	161283	03/25/10 16:14	1.0	1
015	lcp15	SAMPLE	218922-003	Water	161283	03/25/10 16:46	1.0	1
016	lcp16	SAMPLE	218919-003	Water	161283	03/25/10 17:19	1.0	1
017	lcp17	SAMPLE	218914-008	Water	161283	03/25/10 17:51	1.0	1
018	lcp18	SAMPLE	218916-001	Water	161283	03/25/10 18:24	1.0	1
019	lcp19	SAMPLE	218814-001	Water	161283	03/25/10 18:57	1.0	1
020	lcp20	SAMPLE	218814-002	Water	161283	03/25/10 19:29	1.0	1
021	lcp21	SAMPLE	218814-003	Water	161283	03/25/10 20:02	1.0	1
022	lcp22	SAMPLE	218924-001	Water	161283	03/25/10 20:34	1.0	1
023	lcp23	SAMPLE	218924-002	Water	161283	03/25/10 21:07	1.0	1
024	lcp24	SAMPLE	218922-001	Water	161283	03/25/10 21:39	1.0	1
025	lcp25	SAMPLE	218922-002	Water	161283	03/25/10 22:11	1.0	1
026	lcp26	SAMPLE	218919-001	Water	161283	03/25/10 22:44	1.0	1
027	lcp27	SAMPLE	218919-002	Water	161283	03/25/10 23:16	1.0	1
028	lcp28	SAMPLE	218914-001	Water	161283	03/25/10 23:49	1.0	1
029	lcp29	SAMPLE	218914-002	Water	161283	03/26/10 00:21	1.0	1
030	lcp30	SAMPLE	218914-003	Water	161283	03/26/10 00:54	1.0	1
031	lcp31	SAMPLE	218914-005	Water	161283	03/26/10 01:26	8.333	1
032	lcp32	X	IB			03/26/10 01:59	1.0	1
033	lcp33	X	IB			03/26/10 02:31	1.0	1
034	lcp34	X	IB			03/26/10 03:03	1.0	1

BO 03/25/10 : Reviewed to lcp04

BJP 03/26/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 34.

BJP 03/26/10 : Matrix spikes were not performed for this analysis in batch 161283 due to insufficient sample amount.

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/26/10

Standards used: 1=S14026 2=S13652 3=S14216 4=S14108 5=S14228 6=S13719 7=S14253 8=S14144 9=S13925 10=S14236

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 880122884

Instrument : MSVOA12 Begun : 03/26/10 08:04
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	lcq01	X	IB			03/26/10 08:04	1.0	1
002	lcq02	TUN	BFB			03/26/10 08:37	1.0	2
003	lcq03	CCV	25PPB			03/26/10 08:53	1.0	3 4 5 6 1
004	lcq04	BS	QC537779	Water	161337	03/26/10 09:37	1.0	7 8 9 10 1
005	lcq05	BSD	QC537780	Water	161337	03/26/10 10:09	1.0	7 8 9 10 1
006	lcq06	X	IB			03/26/10 10:42	1.0	1
007	lcq07	BLANK	QC537781	Water	161337	03/26/10 11:14	1.0	1
008	lcq08	SAMPLE	218916-002	Water	161337	03/26/10 11:47	1.0	1
009	lcq09	SAMPLE	218995-001	Water	161337	03/26/10 12:19	1.0	1
010	lcq10	X	IB			03/26/10 12:47	1.0	1
011	lcq11	TUN	BFB			03/26/10 13:12	1.0	2
012	lcq12	TUN	BFB			03/26/10 13:29	1.0	2
013	lcq13	CCV	25PPB			03/26/10 13:45	1.0	3 4 5 6 1
014	lcq14	X	IB			03/26/10 14:18	1.0	1
015	lcq15	BLANK	QC537782	Water	161337	03/26/10 14:51	1.0	1
016	lcq16	SAMPLE	218881-001	Water	161337	03/26/10 15:23	1.0	1
017	lcq17	SAMPLE	218866-001	Water	161337	03/26/10 15:56	1.0	1
018	lcq18	SAMPLE	218866-007	Water	161337	03/26/10 16:29	1.0	1
019	lcq19	SAMPLE	218881-006	Water	161337	03/26/10 17:01	1.0	1
020	lcq20	SAMPLE	218837-001	Water	161337	03/26/10 17:34	1.0	1
021	lcq21	SAMPLE	218818-001	Water	161337	03/26/10 18:06	1.0	1
022	lcq22	SAMPLE	218818-002	Water	161337	03/26/10 18:39	1.0	1
023	lcq23	SAMPLE	218818-003	Water	161337	03/26/10 19:12	1.0	1
024	lcq24	SAMPLE	218881-002	Water	161337	03/26/10 19:44	1.0	1
025	lcq25	SAMPLE	218881-004	Water	161337	03/26/10 20:17	1.0	1
026	lcq26	SAMPLE	218881-007	Water	161337	03/26/10 20:49	1.0	1
027	lcq27	SAMPLE	219011-001	Water	161337	03/26/10 21:22	1.0	1
028	lcq28	SAMPLE	218866-002	Water	161337	03/26/10 21:54	1.0	1
029	lcq29	SAMPLE	218866-003	Water	161337	03/26/10 22:26	1.0	1
030	lcq30	SAMPLE	218866-004	Water	161337	03/26/10 22:59	1.0	1
031	lcq31	SAMPLE	218866-008	Water	161337	03/26/10 23:31	1.0	1
032	lcq32	SAMPLE	218881-003	Water	161337	03/27/10 00:03	3.333	1
033	lcq33	SAMPLE	218881-005	Water	161337	03/27/10 00:36	7.143	1
034	lcq34	X	IB			03/27/10 01:08	1.0	1
035	lcq35	X	IB			03/27/10 01:41	1.0	1
036	lcq36	X	IB			03/27/10 02:13	1.0	1
037	lcq37	SAMPLE	218963-002	Water	161365	03/27/10 02:45	1.0	1
038	lcq38	SAMPLE	218963-004	Water	161365	03/27/10 03:18	1.0	1
039	lcq39	SAMPLE	218964-002	Water	161365	03/27/10 03:50	1.0	1

BJP 03/27/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

BJP 03/27/10 : Matrix spikes were not performed for this analysis in batch 161337 due to insufficient sample amount.

Analyst: BJP Date: 03/27/10 Reviewer: LW Date: 03/29/10

Standards used: 1=S14026 2=S13652 3=S14216 4=S14108 5=S14228 6=S13719 7=S14253 8=S14144 9=S13925 10=S14236

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 950120036

Instrument : MSVOA14 Begun : 03/24/10 08:36
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	nco01	X	IB			03/24/10 08:36	1.0	1
002	nco02	TUN	BFB			03/24/10 09:05	1.0	2
003	nco03	TUN	BFB			03/24/10 09:15	1.0	2
004	nco04	TUN	BFB			03/24/10 09:27	1.0	2
005	nco05	TUN	BFB			03/24/10 09:41	1.0	2
006	nco06	X	IB			03/24/10 10:13	1.0	1
007	nco07	IB	CALIB			03/24/10 10:42	1.0	1
008	nco08	ICAL	.25/.5PPB			03/24/10 11:10	1.0	3 4 5 6 1
009	nco09	ICAL	0.5/1PPB			03/24/10 11:39	1.0	3 4 5 6 1
010	nco10	ICAL	2PPB			03/24/10 12:08	1.0	3 4 5 6 1
011	nco11	ICAL	5PPB			03/24/10 12:37	1.0	3 4 5 6 1
012	nco12	ICAL	10PPB			03/24/10 13:06	1.0	3 4 5 6 1
013	nco13	ICAL	20PPB			03/24/10 13:35	1.0	7 8 9 10 1
014	nco14	ICAL	50PPB			03/24/10 14:04	1.0	7 8 9 10 1
015	nco15	ICAL	75PPB			03/24/10 14:34	1.0	7 8 9 10 1
016	nco16	ICAL	100PPB			03/24/10 15:03	1.0	7 8 9 10 1
017	nco17	ICV	25PPB			03/24/10 15:33	1.0	11 1
018	nco18	ICV	25PPB			03/24/10 16:02	1.0	12 13 14 1
019	nco19	ICV	25PPB			03/24/10 16:32	1.0	15 1
020	nco20	X	IB			03/24/10 17:01	1.0	1
021	nco21	X	IB			03/24/10 17:30	1.0	1

BO 03/25/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 21.

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10
 Standards used: 1=S14027 2=S13652 3=S14217 4=S14254 5=S14255 6=S14256 7=S14216 8=S14108 9=S14228 10=S13719 11=S14234
 12=S13925 13=S14144 14=S14253 15=S14236

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 950121459

Instrument : MSVOA14 Begun : 03/25/10 08:19
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	ncp01	X	IB			03/25/10 08:19	1.0	1
002	ncp02	TUN	BFB			03/25/10 08:47	1.0	2
003	ncp03	CCV	20PPB			03/25/10 09:05	1.0	3 4 5 6 1
004	ncp04	ICV/BS	QC537564	Water	161282	03/25/10 09:51	1.0	7 8 9 10 1
005	ncp05	BSD	QC537565	Water	161282	03/25/10 10:19	1.0	7 8 9 10 1
006	ncp06	X	IB			03/25/10 10:47	1.0	1
007	ncp07	BLANK	QC537566	Water	161282	03/25/10 11:16	1.0	1
008	ncp08	SAMPLE	218735-006	Water	161282	03/25/10 11:44	1.0	1
009	ncp09	SAMPLE	218768-003	Water	161282	03/25/10 12:13	2.0	1
010	ncp10	SAMPLE	218801-001	Water	161282	03/25/10 12:42	1.0	1
011	ncp11	SAMPLE	218801-009	Water	161282	03/25/10 13:11	1.0	1
012	ncp12	SAMPLE	218834-001	Water	161282	03/25/10 13:40	1.0	1
013	ncp13	SAMPLE	218834-005	Water	161282	03/25/10 14:09	1.0	1
014	ncp14	SAMPLE	218801-002	Water	161282	03/25/10 14:38	1.0	1
015	ncp15	SAMPLE	218801-003	Water	161282	03/25/10 15:07	1.0	1
016	ncp16	SAMPLE	218801-004	Water	161282	03/25/10 15:37	1.0	1
017	ncp17	SAMPLE	218801-005	Water	161282	03/25/10 16:06	1.0	1
018	ncp18	SAMPLE	218801-006	Water	161282	03/25/10 16:36	1.0	1
019	ncp19	SAMPLE	218801-007	Water	161282	03/25/10 17:05	1.0	1
020	ncp20	SAMPLE	218801-008	Water	161282	03/25/10 17:34	1.0	1
021	ncp21	SAMPLE	218834-002	Water	161282	03/25/10 18:03	1.0	1
022	ncp22	SAMPLE	218834-003	Water	161282	03/25/10 18:33	1.0	1
023	ncp23	SAMPLE	218834-004	Water	161282	03/25/10 19:02	1.0	1
024	ncp24	SAMPLE	218834-006	Water	161282	03/25/10 19:31	1.0	1
025	ncp25	SAMPLE	218834-007	Water	161282	03/25/10 20:00	1.0	1
026	ncp26	SAMPLE	218834-008	Water	161282	03/25/10 20:29	1.0	1
027	ncp27	SAMPLE	218834-009	Water	161282	03/25/10 20:57	1.0	1
028	ncp28	X	IB			03/25/10 21:26	1.0	1
029	ncp29	X	IB			03/25/10 21:54	1.0	1
030	ncp30	X	IB			03/25/10 22:23	1.0	1
031	ncp31	IB	VIALCHECK			03/25/10 22:52	1.0	1
032	ncp32	IB	VIALCHECK			03/25/10 23:20	1.0	1

BO 03/25/10 : Reviewed to ncp05

BJP 03/26/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 32.

BJP 03/26/10 : Matrix spikes were not performed for this analysis in batch 161282 due to insufficient sample amount.

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/26/10

Standards used: 1=S14027 2=S13652 3=S14216 4=S14108 5=S14228 6=S13719 7=S14253 8=S13925 9=S14144 10=S14236

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 950122909

Instrument : MSVOA14
 Method : EPA 8260B

Begun : 03/26/10 08:29
 SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	ncq01	X	IB			03/26/10 08:29	1.0	1	
002	ncq02	TUN	BFB			03/26/10 08:52	1.0	2	
003	ncq03	CCV	25PPB			03/26/10 09:10	1.0	3 4 5 6 1	
004	ncq04	LCS	QC537783	Water	161338	03/26/10 09:50	1.0	7 8 9 10 1	
005	ncq05	X	IB			03/26/10 10:18	1.0	1	
006	ncq06	BLANK	QC537784	Water	161338	03/26/10 10:46	1.0	1	
007	ncq07	SAMPLE	218948-012	Water	161338	03/26/10 11:15	1.0	1	
008	ncq08	SAMPLE	218834-009	Water	161338	03/26/10 11:43	1.0	1	
009	ncq09	MSS	218866-005	Water	161338	03/26/10 12:12	1.0	1	
010	ncq10	SAMPLE	218891-002	Water	161338	03/26/10 12:41	1.0	1	
011	ncq11	SAMPLE	218891-003	Water	161338	03/26/10 13:10	1.0	1	
012	ncq12	SAMPLE	218891-005	Water	161338	03/26/10 13:39	1.0	1	
013	ncq13	SAMPLE	218891-006	Water	161338	03/26/10 14:08	1.0	1	
014	ncq14	SAMPLE	218948-001	Water	161338	03/26/10 14:37	1.0	1	
015	ncq15	SAMPLE	218948-005	Water	161338	03/26/10 15:06	1.0	1	
016	ncq16	SAMPLE	218948-006	Water	161338	03/26/10 15:36	1.0	1	1:ACE=210
017	ncq17	SAMPLE	218948-008	Water	161338	03/26/10 16:05	1.0	1	
018	ncq18	SAMPLE	218948-009	Water	161338	03/26/10 16:34	1.0	1	
019	ncq19	SAMPLE	218948-010	Water	161338	03/26/10 17:03	1.0	1	
020	ncq20	SAMPLE	218948-013	Water	161338	03/26/10 17:33	1.0	1	1:ACE=700
021	ncq21	SAMPLE	218948-014	Water	161338	03/26/10 18:02	1.0	1	1:ACE=440
022	ncq22	SAMPLE	218948-015	Water	161338	03/26/10 18:31	1.0	1	1:ACE=970
023	ncq23	SAMPLE	218866-006	Water	161338	03/26/10 19:01	3.333	1	
024	ncq24	SAMPLE	218948-007	Water	161338	03/26/10 19:30	10.0	1	
025	ncq25	MS	QC537798	Water	161338	03/26/10 19:59	1.0	1 7 8 9 10	
026	ncq26	MSD	QC537799	Water	161338	03/26/10 20:28	1.0	1 7 8 9 10	
027	ncq27	X	IB			03/26/10 20:57	1.0	1	
028	ncq28	X	IB			03/26/10 21:26	1.0	1	
029	ncq29	X	IB			03/26/10 21:54	1.0	1	

BJP 03/27/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 29.

Analyst: BJP Date: 03/27/10 Reviewer: LW Date: 03/29/10

Standards used: 1=S14027 2=S13652 3=S14216 4=S14108 5=S14228 6=S13719 7=S14253 8=S13925 9=S14144 10=S14236

GC/MS VOLATILE ORGANICS

Batch #: 161338

Water Sample Prep Sheet

Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	218834-009	5.2				14	IR	
2	218866-5	↓					IR MS	CCV 2008 / EV 2570
3	1	<2					MS/MSD	203/26/10
4	2	↓					3.3x	
5	218891-2	↓			1		IR	
6	3	↓						
7	4	↓						
8	5	↓						
9	6	↓						
10	218948-1	<2					IR	
11	7	↓						
12	8	↓						
13	9	<2			2		10x	
14	10	↓					IR	
15	11	↓						
16	12	↓						
17	13	↓					EB	
18	14	↓					IR	
19	15	↓						
20	16	↓						
21	17							
22	18							
23	19							
24	20							
25	21							
26	22							
27	23							
28	24							
29	25							
30	26							
31	27							
32	28							
33	29							
34	30							
35	31							

GC/MS VOLATILE ORGANICS

Batch #: 161380

Water Sample Prep Sheet

Sample Number	Sample Vial	pH	Head space?	Shelf	Dil'n Flask	MS#	Comments	Initials & Date
1	218948-7	<2				14	12x Naph con	JH 3/28/10
2	218866-8						12x Naph c-	
3	219035-1						1x	
4	-2							
5	-3							
6	-4							
7	-5	4					1755	
8	-5	<2					12/1/10	
9	-6							
10	-7	<2						
11	-8	<2					silty ↓	
12	-9	<2						
13	219022-1							
14	-4							
15	219051-2	<2			3	↓	12 2x OD	
16	218966-5						12 25x TCE > CR	put off
17	218945-1						2x	put off
18	-2						1x ↓	
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 218881
ANALYTICAL REPORT**

CH2M Hill
2625 South Plaza Drive
Tempe, AZ 85282-3397

Project : 383868.US.60.61.QS
Location : Quarterly UST
Level : III

<u>Sample ID</u>	<u>Lab ID</u>
TB-008-UST-10Q1	218881-001
ASE-37A-UST-10Q1	218881-002
ASE-116A-UST-10Q1	218881-003
UST-10Q1-007	218881-004
ASE-38A-UST-10Q1	218881-005
EB-008-UST-10Q1	218881-006
ASE-120-UST-10Q1	218881-007

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

Signature: _____

Senior Program Manager

Date: 03/31/2010

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 218881
Client: CH2M Hill
Project: 383868.US.60.61.QS
Location: Quarterly UST
Request Date: 03/18/10
Samples Received: 03/18/10

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 03/18/10. See attached cooler receipt form for any sample receipt problems or discrepancies.

Arizona Environmental Laboratory Licenses AZ0478 & AZ0747.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for iodomethane in the ICV analyzed 01/28/10 01:45; this analyte was not detected at or above the RL in the associated samples, and affected data was qualified with "b".

Low response was observed for naphthalene in the CCV analyzed 03/26/10 13:45; this analyte met minimum response criteria. High response was observed for Freon 12; this analyte was not detected at or above the RL in the associated samples.

Low responses were observed for acetone and iodomethane in the CCV analyzed 03/27/10 14:22; these analytes met minimum response criteria, and affected data was qualified with "b".

No other analytical problems were encountered.

Chain of Custody

218801

37380-100317

Curtis & Tompkins Laboratories 2323 5th St. Berkeley, CA 94710 510-204-2221		Honeywell Chain Of Custody / Analysis Request		AESI Ref: 40242.58627 COC#: 37380														
Privileged & Confidential EDD To: Tuesday.Powers@Critigen.com Melanie.West@Critigen.com		Site Name: Sky Harbor AZ Location of Site: PHOENIX, AZ		Lab Proj # (SDG): Lab ID: CTBERK Site ID: SKYHARBOR														
Sampler: DEPEX FEHR PO #: PO-5101516/PN-397664/CC-6400 Analysis Turnaround Time (TAT): 7 Consultant		Preservative: 8 Total VOCs (SW826B) Field Filtered Sample?		Phase: Sampling Program Quarterly UST														
Laboratory Contact Report Tier Level Full Report TAT: 7		Composite/Grab Units		Authorized User: Honeywell Text & Excel File Drive Excel & Text File Order														
Sample Receipt Acknowledgement To: Melanie.West, Critigen Hard Copy To: Tuesday.Powers and Melanie West, Critigen Invoice To: Honeywell/Copy Berny Kidd, CH2M HILL/Copy Melanie West, Critigen		Sample Date Sample Time Sample Type Sample Matrix Sample Purpose # of Cont.		Sampling Method (code) Lab Sample Numbers														
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	Units	Field Filtered Sample?	Composite/Grab	Preservative	Location of Site	Site Name	Phase: Sampling Program	Quarterly UST	
1	-	-	TB-008-UST-1001	031710	-	REG-6WS	WATER	TB	1	G	N	X	8	PHOENIX, AZ	Sky Harbor AZ	MSMSD		
2	ASE-37A	-	ASE-37A-UST-1001	031710	0149	6W-6WS	WATER	REG	5	G	N	X	8	PHOENIX, AZ	MSMSD			
3	ASE-116A	-	ASE-116A-UST-1001	031710	0249	6W-6WS	WATER	REG	5	G	N	X	8	PHOENIX, AZ	MSMSD			
4	1001-007	-	UST-1001-007	031710	0259	6W-6WS	WATER	REG	5	G	N	X	8	PHOENIX, AZ	MSMSD			
5	ASE-38A	-	ASE-38A-UST-1001	031710	0335	6W-6WS	WATER	REG	5	G	N	X	8	PHOENIX, AZ	MSMSD			
6	ASE-38A	-	EB-008-UST-1001	031710	0350	6W-6WS	WATER	EB	5	G	N	X	8	PHOENIX, AZ	MSMSD			
7	ASE-120	-	ASE-120-UST-1001	031710	0434	6W-6WS	WATER	REG	3	G	N	X	8	PHOENIX, AZ	MSMSD			
8																		
9																		
10																		
11																		
12																		

Relinquished by: *CH2M Hill* Company: *CH2M Hill* Received by: *Chia Tardit* Date/Time: *3-18-10 17:00*

Relinquished by: *Deepti Jaiswal* Company: *CH2M Hill* Received by: *Chia Tardit* Date/Time: *3-18-10 17:00*

Preservatives: (Other: Specify):
 0 (none); 1 (4 Deg C); 2 (HCl, pH<2); 3 (HNO3, pH<2); 4 (H2SO4, pH<2); 5 (NaOH, pH>12); 6 (NaOH, pH>12); 7 (H2SO4, pH<2); 8 (HCl, pH<2); 9 (HCl, 4 Deg C); 10 (HNO3, pH<2); 11 (NaOH, pH>12); 12 (H2SO4, Na2SO3, 4 Deg C, pH<2); 13 (Zn Acetate); 14 (1-MeOH, 4 Deg C and 2-NaHSO4, 4 Deg C); 15 (NaOH, pH>12, 4 Deg C); sp. (special instructions)

FEDEX #

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 218881 Date Received 3-18 Number of coolers 1
Client Honeywell Project Sky Harbor
Date Opened 3-18 By (print) Elina Tsachik (sign) Elina Tsachik
Date Logged in By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info FedEx 9720 5038 3489

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many 2 Name Signature Date 3-17

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)
Bubble Wrap Foam blocks Bags None
Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation:
Type of ice used: X Wet Blue/Gel None Temp(C) 2.8
Samples Received on ice & cold without a temperature blank
Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Are bubbles > 6mm absent in VOA samples? YES NO N/A

16. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

Laboratory Job Number 218881

ANALYTICAL REPORT

TPH-Extractables by GC

Matrix: Water

Total Extractable Hydrocarbons			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/17/10
Units:	ug/L	Received:	03/18/10
Diln Fac:	1.000	Prepared:	03/24/10
Batch#:	161242		

Field ID: ASE-37A-UST-10Q1 Lab ID: 218881-002
 Type: SAMPLE Analyzed: 03/26/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	113	50-120	

Field ID: ASE-116A-UST-10Q1 Lab ID: 218881-003
 Type: SAMPLE Analyzed: 03/25/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

Field ID: UST-10Q1-007 Lab ID: 218881-004
 Type: SAMPLE Analyzed: 03/25/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	100	50-120	

ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	03/17/10
Units:	ug/L	Received:	03/18/10
Diln Fac:	1.000	Prepared:	03/24/10
Batch#:	161242		

Field ID: ASE-38A-UST-10Q1 Lab ID: 218881-005
 Type: SAMPLE Analyzed: 03/25/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	105	50-120	

Field ID: EB-008-UST-10Q1 Lab ID: 218881-006
 Type: SAMPLE Analyzed: 03/25/10

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	99	50-120	

Type: BLANK Analyzed: 03/25/10
 Lab ID: QC537379

Analyte	Result	RL	ADEQ Flags
Diesel C10-C22	ND	1,000	
Motor Oil C22-C32	ND	1,000	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	106	50-120	

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 3520C
Project#:	383868.US.60.61.QS	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC537382	Batch#:	161242
Matrix:	Water	Prepared:	03/24/10
Units:	ug/L	Analyzed:	03/25/10

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
Motor Oil C22-C32	2,500	2,914	117	61-139	

Surrogate	%REC	Limits	ADEQ Flags
o-Terphenyl	111	50-120	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218881 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220019637002
 Units : mg/L

Name : DSL_013
 Date : 14-JAN-2010 01:32
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	013_020	220019637020	DSL_10	14-JAN-2010 01:32	S13230
L2	013_021	220019637021	DSL_100	14-JAN-2010 02:00	S13231
L3	013_022	220019637022	DSL_500	14-JAN-2010 02:28	S13232
L4	013_023	220019637023	DSL_1000	14-JAN-2010 02:55	S13233
L5	013_024	220019637024	DSL_5000	14-JAN-2010 03:23	S13229
L6	013_025	220019637025	DSL_7500	14-JAN-2010 03:50	S13234

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	B	30857	41804	48676	43245	43072	44897	AVRG		2.38E-5		42092	14	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	B	10.00	-27	100.0	-1	500.0	16	1000	3	5000	2	7500	7

TFB 01/14/10 : Levels 1-3 and ICV: corrected automatically drawn baseline.

TFB 01/14/10 : Carbon Marker scanned in after EZChrom calibrations.

Analyst: TFB

Date: 01/14/10

Reviewer: EAH

Date: 01/15/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218881 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 220019637002

Name : DSL_013
Cal Date : 14-JAN-2010

ICV 220019637027 (013_027 14-JAN-2010) stds: S13457

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	B	500.0	501.4	mg/L	0	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218881 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220027250001
 Units : mg/L

Name : HEXOTP_018
 Date : 18-JAN-2010 16:02
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	018_004	220027250004	HEXOTP_5	18-JAN-2010 16:02	S13690
L2	018_005	220027250005	HEXOTP_10	18-JAN-2010 16:30	S13691
L3	018_006	220027250006	HEXOTP_25	18-JAN-2010 16:58	S13692
L4	018_007	220027250007	HEXOTP_50	18-JAN-2010 17:27	S13693
L5	018_008	220027250008	HEXOTP_100	18-JAN-2010 17:55	S13694

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	B	51987	51113	52393	50111	49558	AVRG		1.96E-5		51032	2	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
o-Terphenyl	B	5.000	2	10.00	0	25.00	3	50.00	-2	100.0	-3

TFB 01/18/10 : Levels 2,4,5: corrected automatically drawn baseline.

TFB 01/19/10 : Level 6 dropped due to high %D in hexacosane. Dropped from OTP for consistency.

Analyst: TFB

Date: 01/18/10

Reviewer: EAH

Date: 01/19/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218881 GCSV Water: EPA 8015B

Inst : GC14B
 Calnum : 220091179001
 Units : mg/L

Name : MO_063
 Date : 04-MAR-2010 16:24
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	063_016	220091179016	MO_50	04-MAR-2010 16:24	S13804
L2	063_017	220091179017	MO_250	04-MAR-2010 16:52	S13805
L3	063_018	220091179018	MO_500	04-MAR-2010 17:21	S13806
L4	063_019	220091179019	MO_1000	04-MAR-2010 17:50	S13807
L5	063_020	220091179020	MO_5000	04-MAR-2010 18:18	S13808
L6	063_021	220091179021	MO_7500	04-MAR-2010 18:47	S13809

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	B	31871	31503	30804	30203	28364	26768	AVRG		3.34E-5		29919	7	0.995	20	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	B	50.00	7	250.0	5	500.0	3	1000	1	5000	-5	7500	-11

JDG 03/05/10 : GC14b 063_019: MO_1000

JDG 03/05/10 : GC14b 063_020: MO_5000

Analyst: JDG

Date: 03/05/10

Reviewer: EAH

Date: 03/05/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218881 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399001
 Units : mg/L

Name : DSL_069
 Date : 10-MAR-2010 09:30
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a004	170100399004	DSL_10	10-MAR-2010 09:30	S14114
L2	069a005	170100399005	DSL_100	10-MAR-2010 09:58	S14115
L3	069a006	170100399006	DSL_500	10-MAR-2010 10:25	S14116
L4	069a007	170100399007	DSL_1000	10-MAR-2010 10:52	S14117
L5	069a008	170100399008	DSL_5000	10-MAR-2010 11:20	S14113
L6	069a009	170100399009	DSL_7500	10-MAR-2010 11:48	S14118

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Diesel C10-C22	38992	57098	61023	62848	63686	64949	AVRG		1.72E-5		58099	17	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Diesel C10-C22	10.00	-33	100.0	-2	500.0	5	1000	8	5000	10	7500	12

JDG 03/11/10 : Corrected automatically baseline for: Levels 1-5.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218881 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 170100399001

Name : DSL_069
Cal Date : 10-MAR-2010

ICV 170100399011 (069a011 10-MAR-2010) stds: S14077

Analyte	Spiked	Quant	Units	%D	Max	Flags
Diesel C10-C22	500.0	542.9	mg/L	9	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218881 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170100399002
 Units : mg/L

Name : MO_069
 Date : 10-MAR-2010 14:05
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	069a014	170100399014	MO_50	10-MAR-2010 14:05	S13804
L2	069a015	170100399015	MO_250	10-MAR-2010 14:32	S13805
L3	069a016	170100399016	MO_500	10-MAR-2010 15:00	S13806
L4	069a017	170100399017	MO_1000	10-MAR-2010 15:27	S13807
L5	069a018	170100399018	MO_5000	10-MAR-2010 15:55	S13808
L6	069a019	170100399019	MO_7500	10-MAR-2010 16:23	S13809

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
Motor Oil C22-C32	44768	46378	45947	46506	45328	45626	AVRG		2.19E-5		45759	1	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
Motor Oil C22-C32	50.00	-2	250.0	1	500.0	0	1000	2	5000	-1	7500	0

JDG 03/11/10 : Corrected automatically drawn baseline for levels 2-6.

Analyst: JDG

Date: 03/11/10

Reviewer: EAH

Date: 03/11/10

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

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218881 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 170108447001
 Units : mg/L

Name : HEXOTP_075
 Date : 16-MAR-2010 15:35
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	075a012	170108447012	HEXOTP_5	16-MAR-2010 15:35	S13690
L2	075a013	170108447013	HEXOTP_10	16-MAR-2010 16:03	S13691
L3	075a014	170108447014	HEXOTP_25	16-MAR-2010 16:30	S13692
L4	075a015	170108447015	HEXOTP_50	16-MAR-2010 16:58	S13693
L5	075a016	170108447016	HEXOTP_100	16-MAR-2010 17:25	S13694
L6	075a017	170108447017	HEXOTP_200	16-MAR-2010 17:53	S13695

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	MxRSD	Flg
o-Terphenyl	73067	76327	75701	75675	73539	74396	AVRG		1.34E-5		74784	2	0.995	20	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D
o-Terphenyl	5.000	-2	10.00	2	25.00	1	50.00	1	100.0	-2	200.0	-1

JDG 03/17/10 : Corrected automatically drawn baseline for L1 & L2.

Analyst: JDG

Date: 03/17/10

Reviewer: EAH

Date: 03/17/10

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

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218881 GCSV Water
EPA 8015B

Inst : GC14B Run Name : DSL_250 IDF : 1.0
 Seqnum : 220121806006 File : 084_006 Time : 25-MAR-2010 16:33
 Standards: S14076

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Diesel C10-C22	B	220019637002	14-JAN-2010	42092	44190	250.0	262.5	mg/L	5	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	51110	50.00	50.08	mg/L	0	15	

JDG 03/26/10 [o-Terphenyl B]: Corrected automatically drawn baseline.

Analyst: JDG Date: 03/26/10 Reviewer: TFB Date: 03/26/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218881 GCSV Water
EPA 8015B

Inst : GC14B Run Name : MO_500 IDF : 1.0
 Seqnum : 220121806018 File : 084_018 Time : 25-MAR-2010 22:18
 Standards: S14243

Analyte	Ch	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
				RF/CF	RF/CF						
Motor Oil C22-C32	B	220091179001	04-MAR-2010	29919	28772	500.0	480.8	mg/L	-4	15	
o-Terphenyl	B	220027250001	18-JAN-2010	51032	52768	50.00	51.70	mg/L	3	15	

JDG 03/26/10 : Corrected automatically drawn baseline.

Analyst: JDG Date: 03/26/10 Reviewer: TFB Date: 03/26/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218881 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170121422004 File : 084a004 Time : 25-MAR-2010 15:51
 Standards: S14243

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	47831	500.0	522.6	mg/L	5	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	74074	50.00	49.53	mg/L	-1	15	

JDG 03/26/10 : Manually integrated fuel hump.

Analyst: JDG Date: 03/26/10 Reviewer: TFB Date: 03/26/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218881 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_1000 IDF : 1.0
 Seqnum : 170121422005 File : 084a005 Time : 25-MAR-2010 16:19
 Standards: S14078

Analyte	Cal	Caldate	Avg		Spiked	Quant	Units	%D	Max %D	Flags
			RF/CF	RF/CF						
Diesel C10-C22	170100399001	10-MAR-2010	58099	62692	1000	1079	mg/L	8	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	79233	50.00	52.97	mg/L	6	15	

Analyst: JDG Date: 03/26/10 Reviewer: TFB Date: 03/26/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218881 GCSV Water
EPA 8015B

Inst : GC17A Run Name : MO_500 IDF : 1.0
 Seqnum : 170121422017 File : 084a017 Time : 25-MAR-2010 23:06
 Standards: S14243

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Motor Oil C22-C32	170100399002	10-MAR-2010	45759	51815	500.0	566.2	mg/L	13	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	79831	50.00	53.37	mg/L	7	15	

JDG 03/26/10 : Separated from coeluting peak.

Analyst: JDG Date: 03/26/10 Reviewer: TFB Date: 03/26/10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218881 GCSV Water
EPA 8015B

Inst : GC17A Run Name : DSL_500 IDF : 1.0
 Seqnum : 170121422018 File : 084a018 Time : 25-MAR-2010 23:33
 Standards: S14077

Analyte	Cal	Caldate	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Diesel C10-C22	170100399001	10-MAR-2010	58099	63924	500.0	550.1	mg/L	10	15	
o-Terphenyl	170108447001	16-MAR-2010	74784	77511	50.00	51.82	mg/L	4	15	

Analyst: JDG Date: 03/26/10 Reviewer: TFB Date: 03/26/10

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170100399

Instrument : GC17A Begun : 03/10/10 08:00
 Method : EPA 8015B SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	069a001	X	PRIMER			03/10/10 08:00	1.0	
002	069a002	X	IB			03/10/10 08:28	1.0	
003	069a003	IB	CALIB			03/10/10 08:55	1.0	
004	069a004	ICAL	DSL_10			03/10/10 09:30	1.0	1
005	069a005	ICAL	DSL_100			03/10/10 09:58	1.0	2
006	069a006	ICAL	DSL_500			03/10/10 10:25	1.0	3
007	069a007	ICAL	DSL_1000			03/10/10 10:52	1.0	4
008	069a008	ICAL	DSL_5000			03/10/10 11:20	1.0	5
009	069a009	ICAL	DSL_7500			03/10/10 11:48	1.0	6
010	069a010	IB	CALIB			03/10/10 12:15	1.0	
011	069a011	ICV	DSL_500			03/10/10 12:42	1.0	7
012	069a012	X	ICV			03/10/10 13:09	1.0	7
013	069a013	IB	CALIB			03/10/10 13:37	1.0	
014	069a014	ICAL	MO_50			03/10/10 14:05	1.0	8
015	069a015	ICAL	MO_250			03/10/10 14:32	1.0	9
016	069a016	ICAL	MO_500			03/10/10 15:00	1.0	10
017	069a017	ICAL	MO_1000			03/10/10 15:27	1.0	11
018	069a018	ICAL	MO_5000			03/10/10 15:55	1.0	12
019	069a019	ICAL	MO_7500			03/10/10 16:23	1.0	13
020	069a020	IB	CALIB			03/10/10 16:51	1.0	
021	069a021	CMARKER	C8-C50			03/10/10 17:19	1.0	14
022	069a022	IB	CALIB			03/10/10 17:46	1.0	

JDG 03/11/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 22.

Standards used: 1=S14114 2=S14115 3=S14116 4=S14117 5=S14113 6=S14118 7=S14077 8=S13804 9=S13805 10=S13806 11=S13807
 12=S13808 13=S13809 14=S13646

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170108447

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/16/10 07:27
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	075a001	X	PRIMER				03/16/10 07:27	1.0	
002	075a002	X	IB				03/16/10 07:55	1.0	
003	075a003	X	CMARKER				03/16/10 08:24	1.0	1
004	075a004	X	MO_500				03/16/10 08:52	1.0	2
005	075a005	X	DSL_500				03/16/10 09:19	1.0	3
006	075a006	X	JP5_250				03/16/10 09:47	1.0	4
007	075a007	X	IB				03/16/10 12:53	1.0	
008	075a008	X	CMARKER				03/16/10 13:21	1.0	1
009	075a009	X	MO_500				03/16/10 13:48	1.0	2
010	075a010	X	IB				03/16/10 14:40	1.0	
011	075a011	IB	CALIB				03/16/10 15:07	1.0	
012	075a012	ICAL	HEXOTP_5				03/16/10 15:35	1.0	5
013	075a013	ICAL	HEXOTP_10				03/16/10 16:03	1.0	6
014	075a014	ICAL	HEXOTP_25				03/16/10 16:30	1.0	7
015	075a015	ICAL	HEXOTP_50				03/16/10 16:58	1.0	8
016	075a016	ICAL	HEXOTP_100				03/16/10 17:25	1.0	9
017	075a017	ICAL	HEXOTP_200				03/16/10 17:53	1.0	10
018	075a018	IB	CALIB				03/16/10 18:20	1.0	
019	075a019	CMARKER	C8-C50				03/16/10 18:48	1.0	1
020	075a020	CCV	MO_500				03/16/10 19:15	1.0	2
021	075a021	CCV	DSL_250				03/16/10 19:42	1.0	11
022	075a022	X	CCV				03/16/10 20:10	1.0	2
023	075a023	X	CCV				03/16/10 20:37	1.0	11
024	075a024	BLANK	QC535926		Water	160891	03/16/10 21:05	1.0	
025	075a025	SAMPLE	218714-001	S	Water	160843	03/16/10 21:32	1.0	
026	075a026	BLANK	QC536089	S	Water	160933	03/16/10 22:00	1.0	
027	075a027	BLANK	QC536089		Water	160933	03/16/10 22:27	1.0	
028	075a028	BS	QC536090	S	Water	160933	03/16/10 22:54	1.0	
029	075a029	BSD	QC536091	S	Water	160933	03/16/10 23:22	1.0	
030	075a030	SAMPLE	218778-001		Water	160933	03/16/10 23:49	1.0	
031	075a031	SAMPLE	218778-002		Water	160933	03/17/10 00:17	1.0	
032	075a032	SAMPLE	218778-003		Water	160933	03/17/10 00:45	1.0	
033	075a033	SAMPLE	218778-004		Water	160933	03/17/10 01:12	1.0	
034	075a034	CCV	MO_500				03/17/10 01:39	1.0	2
035	075a035	CCV	DSL_1000				03/17/10 02:07	1.0	12
036	075a036	X	CCV				03/17/10 02:34	1.0	2
037	075a037	X	CCV				03/17/10 03:02	1.0	12
038	075a038	SAMPLE	218787-006	S	Water	160933	03/17/10 03:29	1.0	
039	075a039	SAMPLE	218787-007	S	Water	160933	03/17/10 03:56	1.0	
040	075a040	SAMPLE	218789-001	S	Water	160933	03/17/10 04:24	1.0	
041	075a041	SAMPLE	218789-002	S	Water	160933	03/17/10 04:52	1.0	
042	075a042	SAMPLE	218789-003	S	Water	160933	03/17/10 05:19	1.0	
043	075a043	X	CMARKER				03/17/10 05:47	1.0	1
044	075a044	X	MO_500				03/17/10 06:14	1.0	2
045	075a045	CCV	DSL_500				03/17/10 06:41	1.0	3
046	075a046	CCV	MO_500				03/17/10 07:09	1.0	2
047	075a047	X	CCV				03/17/10 07:36	1.0	3

JDG 03/17/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 170121422

Instrument : GC17A
 Method : EPA 8015B

Begun : 03/25/10 07:42
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	084a001	X	PRIMER			03/25/10 07:42	1.0	
002	084a002	X	IB			03/25/10 14:56	1.0	
003	084a003	X	CMARKER			03/25/10 15:23	1.0	1
004	084a004	CCV	MO_500			03/25/10 15:51	1.0	2
005	084a005	CCV	DSL_1000			03/25/10 16:19	1.0	3
006	084a006	X	BUNK_500			03/25/10 17:43	1.0	4
007	084a007	BLANK	QC537379	Water	161242	03/25/10 18:16	1.0	
008	084a008	LCS	QC537382	Water	161242	03/25/10 18:43	1.0	
009	084a009	SAMPLE	218881-003	Water	161242	03/25/10 19:11	1.0	
010	084a010	SAMPLE	218881-004	Water	161242	03/25/10 19:38	1.0	
011	084a011	SAMPLE	218881-005	Water	161242	03/25/10 20:06	1.0	
012	084a012	SAMPLE	218881-006	Water	161242	03/25/10 20:33	1.0	
013	084a013	BLANK	QC537657	Soil	161308	03/25/10 21:17	1.0	
014	084a014	LCS	QC537658	Soil	161308	03/25/10 21:44	1.0	
015	084a015	SAMPLE	219016-003	Soil	161308	03/25/10 22:11	1.0	
016	084a016	SAMPLE	219016-005	Soil	161308	03/25/10 22:39	1.0	
017	084a017	CCV	MO_500			03/25/10 23:06	1.0	2
018	084a018	CCV	DSL_500			03/25/10 23:33	1.0	5
019	084a019	X	CCV			03/26/10 00:00	1.0	2
020	084a020	X	CCV			03/26/10 00:28	1.0	5
021	084a021	MSS	219027-001	Soil	161308	03/26/10 00:55	5.0	
022	084a022	MS	QC537659	Soil	161308	03/26/10 01:22	5.0	
023	084a023	MSD	QC537660	Soil	161308	03/26/10 01:49	5.0	
024	084a024	SAMPLE	219025-001	Soil	161308	03/26/10 02:17	10.0	
025	084a025	X	IB			03/26/10 02:44	1.0	
026	084a026	SAMPLE	219016-010	Soil	161308	03/26/10 03:12	1.0	
027	084a027	SAMPLE	219016-011	Soil	161308	03/26/10 03:39	1.0	
028	084a028	X	CMARKER			03/26/10 04:06	1.0	1
029	084a029	CCV	MO_500			03/26/10 04:34	1.0	2
030	084a030	CCV	DSL_250			03/26/10 05:01	1.0	6
031	084a031	X	CCV			03/26/10 05:29	1.0	2
032	084a032	X	CCV			03/26/10 05:56	1.0	6

JDG 03/26/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 32.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220019637

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/13/10 15:17
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	013_001	X	PRIMER			01/13/10 15:17	1.0	
002	013_002	X	IB			01/13/10 15:46	1.0	
003	013_003	X	CMARKER			01/13/10 16:14	1.0	1
004	013_004	X	DSL_500			01/13/10 16:43	1.0	2
005	013_005	X	MO_500			01/13/10 17:12	1.0	3
006	013_006	X	IB			01/13/10 17:48	1.0	
007	013_007	X	CMARKER			01/13/10 18:17	1.0	1
008	013_008	X	DSL_500			01/13/10 18:46	1.0	2
009	013_009	X	MO_500			01/13/10 19:15	1.0	3
010	013_010	X	IB			01/13/10 20:54	1.0	
011	013_011	X	IB			01/13/10 21:22	1.0	
012	013_012	IB	CALIB			01/13/10 21:50	1.0	
013	013_013	ICAL	HEXOTP_5			01/13/10 22:18	1.0	4
014	013_014	ICAL	HEXOTP_10			01/13/10 22:46	1.0	5
015	013_015	ICAL	HEXOTP_25			01/13/10 23:14	1.0	6
016	013_016	ICAL	HEXOTP_50			01/13/10 23:42	1.0	7
017	013_017	ICAL	HEXOTP_100			01/14/10 00:09	1.0	8
018	013_018	ICAL	HEXOTP_200			01/14/10 00:37	1.0	9
019	013_019	IB	CALIB			01/14/10 01:04	1.0	
020	013_020	ICAL	DSL_10			01/14/10 01:32	1.0	10
021	013_021	ICAL	DSL_100			01/14/10 02:00	1.0	11
022	013_022	ICAL	DSL_500			01/14/10 02:28	1.0	12
023	013_023	ICAL	DSL_1000			01/14/10 02:55	1.0	13
024	013_024	ICAL	DSL_5000			01/14/10 03:23	1.0	14
025	013_025	ICAL	DSL_7500			01/14/10 03:50	1.0	15
026	013_026	IB	CALIB			01/14/10 04:18	1.0	
027	013_027	ICV	DSL_500			01/14/10 04:46	1.0	2
028	013_028	X	ICV			01/14/10 05:14	1.0	2
029	013_029	IB	CALIB			01/14/10 05:43	1.0	
030	013_030	ICAL	MO_50			01/14/10 06:11	1.0	16
031	013_031	ICAL	MO_250			01/14/10 06:39	1.0	17
032	013_032	ICAL	MO_500			01/14/10 07:07	1.0	18
033	013_033	ICAL	MO_1000			01/14/10 07:34	1.0	19
034	013_034	ICAL	MO_5000			01/14/10 08:02	1.0	20
035	013_035	ICAL	MO_7500			01/14/10 08:30	1.0	21
036	013_036	IB	CALIB			01/14/10 08:58	1.0	
037	013_037	CMARKER	C8-C50			01/14/10 09:26	1.0	1
038	013_038	IB	CALIB			01/14/10 09:54	1.0	

TFB 01/14/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

Standards used: 1=S12636 2=S13457 3=S13471 4=S13690 5=S13691 6=S13692 7=S13693 8=S13694 9=S13695 10=S13230 11=S13231
 12=S13232 13=S13233 14=S13229 15=S13234 16=S12675 17=S12676 18=S12677 19=S12678 20=S12679 21=S12680

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220027250

Instrument : GC14B
 Method : EPA 8015B

Begun : 01/18/10 14:37
 SOP Version : TEH_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	018_001	X	PRIMER			01/18/10 14:37	1.0	
002	018_002	X	IB			01/18/10 15:05	1.0	
003	018_003	IB	CALIB			01/18/10 15:33	1.0	
004	018_004	ICAL	HEXOTP_5			01/18/10 16:02	1.0	1
005	018_005	ICAL	HEXOTP_10			01/18/10 16:30	1.0	2
006	018_006	ICAL	HEXOTP_25			01/18/10 16:58	1.0	3
007	018_007	ICAL	HEXOTP_50			01/18/10 17:27	1.0	4
008	018_008	ICAL	HEXOTP_100			01/18/10 17:55	1.0	5
009	018_009	X	HEXOTP_200			01/18/10 18:24	1.0	6
010	018_010	IB	CALIB			01/18/10 18:53	1.0	
011	018_011	ICAL	MO_50			01/18/10 19:21	1.0	7
012	018_012	ICAL	MO_250			01/18/10 19:49	1.0	8
013	018_013	ICAL	MO_500			01/18/10 20:18	1.0	9
014	018_014	ICAL	MO_1000			01/18/10 20:46	1.0	10
015	018_015	ICAL	MO_5000			01/18/10 21:14	1.0	11
016	018_016	ICAL	MO_7500			01/18/10 21:42	1.0	12
017	018_017	CMARKER	C8-C50			01/18/10 22:10	1.0	13
018	018_018	CCV	DSL_500			01/18/10 22:38	1.0	14
019	018_019	CCV	MO_500			01/18/10 23:06	1.0	15
020	018_020	BLANK	QC489059	Soil	149293	01/18/10 23:35	1.0	
021	018_021	MDL	207486-001	Soil	149293	01/19/10 00:03	1.0	
022	018_022	MDL	207486-002	Soil	149293	01/19/10 00:31	1.0	
023	018_023	MDL	207486-003	Soil	149293	01/19/10 00:59	1.0	
024	018_024	MDL	207486-004	Soil	149293	01/19/10 01:27	1.0	
025	018_025	MDL	207486-005	Soil	149293	01/19/10 01:55	1.0	
026	018_026	MDL	207486-006	Soil	149293	01/19/10 02:23	1.0	
027	018_027	MDL	207486-007	Soil	149293	01/19/10 02:50	1.0	
028	018_028	MDL	207486-008	Soil	149293	01/19/10 03:18	1.0	
029	018_029	LOD	212266-010	Water	159144	01/19/10 03:46	1.0	
030	018_030	CCV	DSL_250			01/19/10 04:15	1.0	16
031	018_031	CCV	MO_500			01/19/10 04:43	1.0	15
032	018_032	X	CCV			01/19/10 05:11	1.0	16
033	018_033	X	CCV			01/19/10 05:39	1.0	15

TFB 01/18/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 17.

Standards used: 1=S13690 2=S13691 3=S13692 4=S13693 5=S13694 6=S13695 7=S12675 8=S12676 9=S12677 10=S12678 11=S12679
 12=S12680 13=S12636 14=S13457 15=S13744 16=S13456

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 220121806

Instrument : GC14B
 Method : EPA 8015B

Begun : 03/25/10 14:06
 SOP Version : TEH_rv13

#	File	Type	Sample ID	P	Matrix	Batch	Analyzed	IDF	Stds Used
001	084_001	X	PRIMER				03/25/10 14:06	1.0	
002	084_002	X	IB				03/25/10 14:34	1.0	
003	084_003	X	CMARKER				03/25/10 15:02	1.0	1
004	084_004	X	CCV				03/25/10 15:30	1.0	2
005	084_005	CCV	MO_500				03/25/10 15:59	1.0	3
006	084_006	CCV	DSL_250				03/25/10 16:33	1.0	2
007	084_007	LOQ	218797-002		Soil	161292	03/25/10 17:12	1.0	
008	084_008	BLANK	QC537379	S	Water	161242	03/25/10 17:40	1.0	
009	084_009	BS	QC537380	S	Water	161242	03/25/10 18:09	1.0	
010	084_010	BSD	QC537381	S	Water	161242	03/25/10 18:37	1.0	
011	084_011	SAMPLE	218948-001	S	Water	161242	03/25/10 19:05	1.0	
012	084_012	SAMPLE	218948-002	S	Water	161242	03/25/10 19:32	1.0	
013	084_013	SAMPLE	218948-003	S	Water	161242	03/25/10 20:00	1.0	
014	084_014	SAMPLE	218948-006	S	Water	161242	03/25/10 20:27	1.0	
015	084_015	SAMPLE	218948-007	S	Water	161242	03/25/10 20:55	1.0	
016	084_016	SAMPLE	218948-008	S	Water	161242	03/25/10 21:23	1.0	
017	084_017	CCV	DSL_500				03/25/10 21:50	1.0	4
018	084_018	CCV	MO_500				03/25/10 22:18	1.0	3
019	084_019	X	CCV				03/25/10 22:45	1.0	4
020	084_020	X	CCV				03/25/10 23:13	1.0	3
021	084_021	SAMPLE	218948-009	S	Water	161242	03/25/10 23:40	1.0	
022	084_022	SAMPLE	218948-010	S	Water	161242	03/26/10 00:08	1.0	
023	084_023	SAMPLE	218948-012	S	Water	161242	03/26/10 00:35	1.0	
024	084_024	SAMPLE	218948-013	S	Water	161242	03/26/10 01:03	1.0	
025	084_025	SAMPLE	218948-014	S	Water	161242	03/26/10 01:31	1.0	
026	084_026	SAMPLE	218948-015	S	Water	161242	03/26/10 01:58	1.0	
027	084_027	SAMPLE	218989-003	S	Water	161242	03/26/10 02:26	1.0	
028	084_028	SAMPLE	218989-004	S	Water	161242	03/26/10 02:53	1.0	
029	084_029	SAMPLE	218989-005	S	Water	161242	03/26/10 03:21	1.0	
030	084_030	SAMPLE	218881-002		Water	161242	03/26/10 03:49	1.0	
031	084_031	X	CMARKER				03/26/10 04:16	1.0	1
032	084_032	CCV	DSL_1000				03/26/10 04:44	1.0	5
033	084_033	CCV	MO_500				03/26/10 05:12	1.0	3
034	084_034	X	CCV				03/26/10 05:39	1.0	5
035	084_035	X	CCV				03/26/10 06:07	1.0	3

JDG 03/26/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 35.

SAMPLE PREPARATION SUMMARY

Batch # : 161242		Analysis : TEH
Started By : DJT	Prep Date : 24-MAR-2010 14:45	Finished By : KCL
Method : 3520C	SOP Version : TEH_3520_rv12	Units : mL
Spike #1 ID : S14152	Spike #2 ID : S14101	Spike #3 ID : S14251

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
218881-002		Water	500	2.5	1	0.005	7	.5				TEHM	
218881-003		Water	500	2.5	1	0.005	7	.5				TEHM	
218881-004		Water	500	2.5	1	0.005	7	.5				TEHM	
218881-005		Water	500	2.5	1	0.005	7	.5				TEHM	
218881-006		Water	500	2.5	1	0.005	5	.5				TEHM	
218948-001		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-002		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-006		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-007		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-008		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-009		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-010		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-012		Water	500	2.5	1	0.005	5	.5			3630C	TEHM	
218948-013		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-014		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218948-015		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	Poss sharpie
218989-003		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218989-004		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
218989-005		Water	500	2.5	1	0.005	7	.5			3630C	TEHM	
QC537379	BLANK	Water	500	2.5	1	0.005		.5			3630C		
QC537380	BS	Water	500	2.5	1	0.005		.5	.5		3630C		
QC537381	BSD	Water	500	2.5	1	0.005		.5	.5		3630C		
QC537382	LCS	Water	500	2.5	1	0.005		.5		.5			

TFB 03/26/10 : Matrix spikes were not performed for this analysis in batch 161242 due to insufficient sample amount.

Analyst: TFB Date: 03/26/10 Reviewer: PRW Date: 03/26/10

TEH (8015) Water Prep Log

Curtis & Tompkins, Ltd.

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BK 2968

LIMS Batch No: 161242
 LIMS Analysis: TEHM
 Date Extracted: 3/24/10

Extraction Method:
 mod. EPA 3510c sep. funnel
 mod. EPA 3520c cont. L/L

Cleanup Method (if needed):
 EPA 3630c Silica Gel

Sample #	Container ID	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
218881-002	E	500	7	2.5		
↓ 003	↓	↓	↓	↓	↓	
↓ 004	↓	↓	↓	↓	↓	
↓ 005	↓	↓	↓	↓	↓	
5 ↓ 006	↓	↓	5	↓	↓	
218948-001	I		7		X	
↓ 002	E	↓	↓	↓	↓	
↓ 003	↓	↓	↓	↓	↓	
↓ 006	P	↓	↓	↓	↓	
10 ↓ 007	↓	↓	↓	↓	↓	
↓ 008	↓	↓	↓	↓	↓	
↓ 009	↓	↓	↓	↓	↓	
↓ 010	↓	↓	↓	↓	↓	
↓ 012	H	↓	5	↓	↓	
15 ↓ 013	↓	↓	7	↓	↓	
↓ 014	↓	↓	↓	↓	↓	
↓ 015	↓	↓	↓	↓	↓	possible sharpie cont
218989-003	I					
↓ 004	↓	↓	↓	↓	↓	
20 ↓ 005	↓	↓	↓	↓	↓	
MBQL537379	NA		NA			
BS	80	↓	↓	↓	↓	
BSD	81	↓	↓	↓	↓	
*LCS	82	↓	↓	↓	↓	

Mfg & Lot# / LIMS # / Time Date/Initials

0.5 mL of TEH_SURR was added to all samples S14152B DOT 3/24/10

0.5 mL of TEH_SP was added to all spikes S14101B/*514251A ↓

pH of all samples adjusted to pH ≤ 2 with H₂SO₄ FS094395 ↓

3520c: Samples were continually extracted about 450 mL of CH₂Cl₂ EM49338 ↓

Extraction Start Time: 1445 ↓

Extraction End Time: 840 DDC 3/25/10

3510c: Samples were extracted 3 times with 60 mL of CH₂Cl₂ N/A LCL 3/25/10

Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄ EM49044 931 ↓

Concentrated to final volume at temperature (degrees C) 100 ↓

Relinquished to TEH Department - ↓


 Extraction Chemist 3/24/10 Date

Continued from Page /
 Continued on Page /

TFB 3/26/10
 Reviewed by Date

Prep Chemist: KCL
 Cleanup Date: 3/25/10

Benchbook # **BK 3005**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
218948-001	161242	1.0	1.0	
-002				
-003				
-004				
-007				
-008				
-009				
-010				
-012				
-013				
-014				
-015				Pos Sharpie
218989-003				
-004				
-005				
MB QCS37374				
BS QCS37380				
BSD 81				
TFB 3/26/10				

- Extracts were cleaned up using C&T assembled 1.0 g columns
- Extracts were cleaned up using 1.0 g cartridges
- Extracts were eluted with 40 mL CH₂Cl₂
- Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
N/A	KCL 3/25/10
SPK170001	
EM 49338	

[Signature] 3/25/10
 Extraction Chemist / Date

Continued from page 1
 Continued on page 1

TFB 3/26/10
 Reviewed by / Date

Laboratory Job Number 218881

ANALYTICAL REPORT

Volatile Organics by GC/MS

Matrix: Water

Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-008-UST-10Q1	Batch#:	161337
Lab ID:	218881-001	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	TB-008-UST-10Q1	Batch#:	161337
Lab ID:	218881-001	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	V9
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	100	83-125	
Bromofluorobenzene	107	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-37A-UST-10Q1	Diln Fac:	1.000
Lab ID:	218881-002	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	161337	03/26/10	V1
Chloromethane	ND	1.0	161337	03/26/10	
Vinyl Chloride	ND	0.5	161337	03/26/10	
Bromomethane	ND	1.0	161337	03/26/10	
Chloroethane	ND	1.0	161337	03/26/10	
Trichlorofluoromethane	ND	1.0	161337	03/26/10	
Iodomethane	ND	10	161337	03/26/10	
Acetone	ND	10	161337	03/26/10	
1,1-Dichloroethene	ND	0.5	161337	03/26/10	
Methylene Chloride	ND	10	161337	03/26/10	
Carbon Disulfide	ND	0.5	161337	03/26/10	
MTBE	7.0	0.5	161337	03/26/10	
trans-1,2-Dichloroethene	ND	0.5	161337	03/26/10	
Vinyl Acetate	ND	10	161337	03/26/10	
1,1-Dichloroethane	ND	0.5	161337	03/26/10	
2-Butanone	ND	10	161337	03/26/10	
cis-1,2-Dichloroethene	ND	0.5	161337	03/26/10	
2,2-Dichloropropane	ND	0.5	161337	03/26/10	
Chloroform	ND	0.5	161337	03/26/10	
Bromochloromethane	ND	0.5	161337	03/26/10	
1,1,1-Trichloroethane	ND	0.5	161337	03/26/10	
1,1-Dichloropropene	ND	0.5	161337	03/26/10	
Carbon Tetrachloride	ND	0.5	161337	03/26/10	
1,2-Dichloroethane	ND	0.5	161337	03/26/10	
Benzene	73	0.5	161337	03/26/10	
Trichloroethene	0.7	0.5	161337	03/26/10	
1,2-Dichloropropane	ND	0.5	161337	03/26/10	
Bromodichloromethane	ND	0.5	161337	03/26/10	
Dibromomethane	ND	0.5	161337	03/26/10	
4-Methyl-2-Pentanone	ND	10	161337	03/26/10	
cis-1,3-Dichloropropene	ND	0.5	161337	03/26/10	
Toluene	ND	0.5	161337	03/26/10	
trans-1,3-Dichloropropene	ND	0.5	161337	03/26/10	
1,1,2-Trichloroethane	ND	0.5	161337	03/26/10	
2-Hexanone	ND	10	161337	03/26/10	
1,3-Dichloropropane	ND	0.5	161337	03/26/10	
Tetrachloroethene	ND	0.5	161337	03/26/10	
Dibromochloromethane	ND	0.5	161337	03/26/10	
1,2-Dibromoethane	ND	0.5	161337	03/26/10	
Chlorobenzene	ND	0.5	161337	03/26/10	
1,1,1,2-Tetrachloroethane	ND	0.5	161337	03/26/10	
Ethylbenzene	0.7	0.5	161337	03/26/10	
m,p-Xylenes	ND	0.5	161337	03/26/10	
o-Xylene	ND	0.5	161337	03/26/10	
Styrene	ND	0.5	161337	03/26/10	
Bromoform	ND	1.0	161337	03/26/10	
Isopropylbenzene	8.3	0.5	161337	03/26/10	
1,1,2,2-Tetrachloroethane	ND	0.5	161337	03/26/10	
1,2,3-Trichloropropane	ND	0.5	161337	03/26/10	
Propylbenzene	6.1	0.5	161337	03/26/10	
Bromobenzene	ND	0.5	161337	03/26/10	
1,3,5-Trimethylbenzene	ND	0.5	161337	03/26/10	
2-Chlorotoluene	ND	0.5	161337	03/26/10	
4-Chlorotoluene	ND	0.5	161337	03/26/10	
tert-Butylbenzene	ND	0.5	161337	03/26/10	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-37A-UST-10Q1	Diln Fac:	1.000
Lab ID:	218881-002	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
1,2,4-Trimethylbenzene	2.1	0.5	161337	03/26/10	
sec-Butylbenzene	2.0	0.5	161337	03/26/10	
para-Isopropyl Toluene	ND	0.5	161337	03/26/10	
1,3-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,4-Dichlorobenzene	ND	0.5	161337	03/26/10	
n-Butylbenzene	1.2	0.5	161337	03/26/10	
1,2-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,2-Dibromo-3-Chloropropane	ND	2.0	161337	03/26/10	
1,2,4-Trichlorobenzene	ND	0.5	161337	03/26/10	
Hexachlorobutadiene	ND	2.0	161337	03/26/10	
Naphthalene	6.8	2.0	161366	03/27/10	
1,2,3-Trichlorobenzene	ND	0.5	161337	03/26/10	
Xylene (total)	ND	0.5	161337	03/26/10	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	107	77-120	161337	03/26/10	
Dibromofluoromethane	103	77-120	161366	03/27/10	
1,2-Dichloroethane-d4	106	70-127	161337	03/26/10	
1,2-Dichloroethane-d4	107	70-127	161366	03/27/10	
Toluene-d8	98	83-125	161337	03/26/10	
Toluene-d8	108	83-125	161366	03/27/10	
Bromofluorobenzene	104	78-120	161337	03/26/10	
Bromofluorobenzene	102	78-120	161366	03/27/10	

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-116A-UST-10Q1	Batch#:	161366
Lab ID:	218881-003	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	V9
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	8.1	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	57	0.5	
Trichloroethene	1.5	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	1.1	0.5	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-116A-UST-10Q1	Batch#:	161366
Lab ID:	218881-003	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	9.6	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	7.2	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	1.3	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	0.8	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	10	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	94	70-127	
Toluene-d8	106	83-125	
Bromofluorobenzene	99	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-007	Diln Fac:	1.000
Lab ID:	218881-004	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
Freon 12	ND	1.0	161337	03/26/10	VI
Chloromethane	ND	1.0	161337	03/26/10	
Vinyl Chloride	ND	0.5	161337	03/26/10	
Bromomethane	ND	1.0	161337	03/26/10	
Chloroethane	ND	1.0	161337	03/26/10	
Trichlorofluoromethane	ND	1.0	161337	03/26/10	
Iodomethane	ND	10	161337	03/26/10	
Acetone	ND	10	161337	03/26/10	
1,1-Dichloroethene	0.5	0.5	161337	03/26/10	
Methylene Chloride	ND	10	161337	03/26/10	
Carbon Disulfide	ND	0.5	161337	03/26/10	
MTBE	10	0.5	161337	03/26/10	
trans-1,2-Dichloroethene	ND	0.5	161337	03/26/10	
Vinyl Acetate	ND	10	161337	03/26/10	
1,1-Dichloroethane	ND	0.5	161337	03/26/10	
2-Butanone	ND	10	161337	03/26/10	
cis-1,2-Dichloroethene	ND	0.5	161337	03/26/10	
2,2-Dichloropropane	ND	0.5	161337	03/26/10	
Chloroform	ND	0.5	161337	03/26/10	
Bromochloromethane	ND	0.5	161337	03/26/10	
1,1,1-Trichloroethane	ND	0.5	161337	03/26/10	
1,1-Dichloropropene	ND	0.5	161337	03/26/10	
Carbon Tetrachloride	ND	0.5	161337	03/26/10	
1,2-Dichloroethane	ND	0.5	161337	03/26/10	
Benzene	72	0.5	161337	03/26/10	
Trichloroethene	1.8	0.5	161337	03/26/10	
1,2-Dichloropropane	ND	0.5	161337	03/26/10	
Bromodichloromethane	ND	0.5	161337	03/26/10	
Dibromomethane	ND	0.5	161337	03/26/10	
4-Methyl-2-Pentanone	ND	10	161337	03/26/10	
cis-1,3-Dichloropropene	ND	0.5	161337	03/26/10	
Toluene	ND	0.5	161337	03/26/10	
trans-1,3-Dichloropropene	ND	0.5	161337	03/26/10	
1,1,2-Trichloroethane	ND	0.5	161337	03/26/10	
2-Hexanone	ND	10	161337	03/26/10	
1,3-Dichloropropane	ND	0.5	161337	03/26/10	
Tetrachloroethene	1.1	0.5	161337	03/26/10	
Dibromochloromethane	ND	0.5	161337	03/26/10	
1,2-Dibromoethane	ND	0.5	161337	03/26/10	
Chlorobenzene	ND	0.5	161337	03/26/10	
1,1,1,2-Tetrachloroethane	ND	0.5	161337	03/26/10	
Ethylbenzene	ND	0.5	161337	03/26/10	
m,p-Xylenes	ND	0.5	161337	03/26/10	
o-Xylene	ND	0.5	161337	03/26/10	
Styrene	ND	0.5	161337	03/26/10	
Bromoform	ND	1.0	161337	03/26/10	
Isopropylbenzene	10	0.5	161337	03/26/10	
1,1,2,2-Tetrachloroethane	ND	0.5	161337	03/26/10	
1,2,3-Trichloropropane	ND	0.5	161337	03/26/10	
Propylbenzene	8.0	0.5	161337	03/26/10	
Bromobenzene	ND	0.5	161337	03/26/10	
1,3,5-Trimethylbenzene	ND	0.5	161337	03/26/10	
2-Chlorotoluene	ND	0.5	161337	03/26/10	
4-Chlorotoluene	ND	0.5	161337	03/26/10	
tert-Butylbenzene	ND	0.5	161337	03/26/10	

ND= Not Detected
 RL= Reporting Limit
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Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	UST-10Q1-007	Diln Fac:	1.000
Lab ID:	218881-004	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
1,2,4-Trimethylbenzene	ND	0.5	161337	03/26/10	
sec-Butylbenzene	1.4	0.5	161337	03/26/10	
para-Isopropyl Toluene	ND	0.5	161337	03/26/10	
1,3-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,4-Dichlorobenzene	ND	0.5	161337	03/26/10	
n-Butylbenzene	0.9	0.5	161366	03/27/10	
1,2-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,2-Dibromo-3-Chloropropane	ND	2.0	161337	03/26/10	
1,2,4-Trichlorobenzene	ND	0.5	161337	03/26/10	
Hexachlorobutadiene	ND	2.0	161337	03/26/10	
Naphthalene	11	2.0	161366	03/27/10	
1,2,3-Trichlorobenzene	ND	0.5	161337	03/26/10	
Xylene (total)	ND	0.5	161337	03/26/10	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	107	77-120	161337	03/26/10	
Dibromofluoromethane	100	77-120	161366	03/27/10	
1,2-Dichloroethane-d4	105	70-127	161337	03/26/10	
1,2-Dichloroethane-d4	93	70-127	161366	03/27/10	
Toluene-d8	99	83-125	161337	03/26/10	
Toluene-d8	103	83-125	161366	03/27/10	
Bromofluorobenzene	103	78-120	161337	03/26/10	
Bromofluorobenzene	103	78-120	161366	03/27/10	

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-38A-UST-10Q1	Diln Fac:	7.143
Lab ID:	218881-005	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L	Analyzed:	03/27/10

Analyte	Result	RL	Batch#	ADEQ	Flags
Freon 12	ND	7.1	161337	D2	V1
Chloromethane	ND	7.1	161337	D2	
Vinyl Chloride	ND	3.6	161337	D2	
Bromomethane	ND	7.1	161337	D2	
Chloroethane	ND	7.1	161337	D2	
Trichlorofluoromethane	ND	7.1	161337	D2	
Iodomethane	ND	71	161337	D2	
Acetone	ND	71	161337	D2	
1,1-Dichloroethene	ND	3.6	161337	D2	
Methylene Chloride	ND	71	161337	D2	
Carbon Disulfide	ND	3.6	161337	D2	
MTBE	12	3.6	161337	D2	
trans-1,2-Dichloroethene	ND	3.6	161337	D2	
Vinyl Acetate	ND	71	161337	D2	
1,1-Dichloroethane	ND	3.6	161337	D2	
2-Butanone	ND	71	161337	D2	
cis-1,2-Dichloroethene	ND	3.6	161337	D2	
2,2-Dichloropropane	ND	3.6	161337	D2	
Chloroform	ND	3.6	161337	D2	
Bromochloromethane	ND	3.6	161337	D2	
1,1,1-Trichloroethane	ND	3.6	161337	D2	
1,1-Dichloropropene	ND	3.6	161337	D2	
Carbon Tetrachloride	ND	3.6	161337	D2	
1,2-Dichloroethane	ND	3.6	161337	D2	
Benzene	540	3.6	161337	D2	
Trichloroethene	ND	3.6	161337	D2	
1,2-Dichloropropane	ND	3.6	161337	D2	
Bromodichloromethane	ND	3.6	161337	D2	
Dibromomethane	ND	3.6	161337	D2	
4-Methyl-2-Pentanone	ND	71	161337	D2	
cis-1,3-Dichloropropene	ND	3.6	161337	D2	
Toluene	ND	3.6	161337	D2	
trans-1,3-Dichloropropene	ND	3.6	161337	D2	
1,1,2-Trichloroethane	ND	3.6	161337	D2	
2-Hexanone	ND	71	161337	D2	
1,3-Dichloropropane	ND	3.6	161337	D2	
Tetrachloroethene	ND	3.6	161337	D2	
Dibromochloromethane	ND	3.6	161337	D2	
1,2-Dibromoethane	ND	3.6	161337	D2	
Chlorobenzene	ND	3.6	161337	D2	
1,1,1,2-Tetrachloroethane	ND	3.6	161337	D2	
Ethylbenzene	8.1	3.6	161337	D2	
m,p-Xylenes	ND	3.6	161337	D2	
o-Xylene	ND	3.6	161337	D2	
Styrene	ND	3.6	161337	D2	
Bromoform	ND	7.1	161337	D2	
Isopropylbenzene	14	3.6	161337	D2	
1,1,2,2-Tetrachloroethane	ND	3.6	161337	D2	
1,2,3-Trichloropropane	ND	3.6	161337	D2	
Propylbenzene	11	3.6	161337	D2	
Bromobenzene	ND	3.6	161337	D2	
1,3,5-Trimethylbenzene	ND	3.6	161337	D2	
2-Chlorotoluene	ND	3.6	161337	D2	
4-Chlorotoluene	ND	3.6	161337	D2	
tert-Butylbenzene	ND	3.6	161337	D2	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-38A-UST-10Q1	Diln Fac:	7.143
Lab ID:	218881-005	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L	Analyzed:	03/27/10

Analyte	Result	RL	Batch#	ADEQ	Flags
1,2,4-Trimethylbenzene	ND	3.6	161337	D2	
sec-Butylbenzene	ND	3.6	161337	D2	
para-Isopropyl Toluene	ND	3.6	161337	D2	
1,3-Dichlorobenzene	ND	3.6	161337	D2	
1,4-Dichlorobenzene	ND	3.6	161337	D2	
n-Butylbenzene	ND	3.6	161337	D2	
1,2-Dichlorobenzene	ND	3.6	161337	D2	
1,2-Dibromo-3-Chloropropane	ND	14	161337	D2	
1,2,4-Trichlorobenzene	ND	3.6	161337	D2	
Hexachlorobutadiene	ND	14	161337	D2	
Naphthalene	35	14	161366	D2	
1,2,3-Trichlorobenzene	ND	3.6	161337	D2	
Xylene (total)	ND	3.6	161337	D2	

Surrogate	%REC	Limits	Batch#	ADEQ	Flags
Dibromofluoromethane	108	77-120	161337		
Dibromofluoromethane	97	77-120	161366		
1,2-Dichloroethane-d4	105	70-127	161337		
1,2-Dichloroethane-d4	90	70-127	161366		
Toluene-d8	99	83-125	161337		
Toluene-d8	101	83-125	161366		
Bromofluorobenzene	107	78-120	161337		
Bromofluorobenzene	106	78-120	161366		

ND= Not Detected
 RL= Reporting Limit
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Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-008-UST-10Q1	Batch#:	161337
Lab ID:	218881-006	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	EB-008-UST-10Q1	Batch#:	161337
Lab ID:	218881-006	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	V9
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	108	78-120	

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-120-UST-10Q1	Diln Fac:	1.000
Lab ID:	218881-007	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ	Flags
Freon 12	ND	1.0	161337	03/26/10		V1
Chloromethane	ND	1.0	161337	03/26/10		
Vinyl Chloride	ND	0.5	161337	03/26/10		
Bromomethane	ND	1.0	161337	03/26/10		
Chloroethane	ND	1.0	161337	03/26/10		
Trichlorofluoromethane	ND	1.0	161337	03/26/10		
Iodomethane	ND	10	161337	03/26/10		
Acetone	ND	10	161337	03/26/10		
1,1-Dichloroethene	21	0.5	161337	03/26/10		
Methylene Chloride	ND	10	161337	03/26/10		
Carbon Disulfide	ND	0.5	161337	03/26/10		
MTBE	ND	0.5	161337	03/26/10		
trans-1,2-Dichloroethene	ND	0.5	161337	03/26/10		
Vinyl Acetate	ND	10	161337	03/26/10		
1,1-Dichloroethane	17	0.5	161337	03/26/10		
2-Butanone	ND	10	161337	03/26/10		
cis-1,2-Dichloroethene	16	0.5	161337	03/26/10		
2,2-Dichloropropane	ND	0.5	161337	03/26/10		
Chloroform	1.6	0.5	161337	03/26/10		
Bromochloromethane	ND	0.5	161337	03/26/10		
1,1,1-Trichloroethane	ND	0.5	161337	03/26/10		
1,1-Dichloropropene	ND	0.5	161337	03/26/10		
Carbon Tetrachloride	ND	0.5	161337	03/26/10		
1,2-Dichloroethane	ND	0.5	161337	03/26/10		
Benzene	1.8	0.5	161337	03/26/10		
Trichloroethene	85	0.5	161337	03/26/10		
1,2-Dichloropropane	ND	0.5	161337	03/26/10		
Bromodichloromethane	ND	0.5	161337	03/26/10		
Dibromomethane	ND	0.5	161337	03/26/10		
4-Methyl-2-Pentanone	ND	10	161337	03/26/10		
cis-1,3-Dichloropropene	ND	0.5	161337	03/26/10		
Toluene	ND	0.5	161337	03/26/10		
trans-1,3-Dichloropropene	ND	0.5	161337	03/26/10		
1,1,2-Trichloroethane	ND	0.5	161337	03/26/10		
2-Hexanone	ND	10	161337	03/26/10		
1,3-Dichloropropane	ND	0.5	161337	03/26/10		
Tetrachloroethene	1.7	0.5	161337	03/26/10		
Dibromochloromethane	ND	0.5	161337	03/26/10		
1,2-Dibromoethane	ND	0.5	161337	03/26/10		
Chlorobenzene	ND	0.5	161337	03/26/10		
1,1,1,2-Tetrachloroethane	ND	0.5	161337	03/26/10		
Ethylbenzene	ND	0.5	161337	03/26/10		
m,p-Xylenes	ND	0.5	161337	03/26/10		
o-Xylene	ND	0.5	161337	03/26/10		
Styrene	ND	0.5	161337	03/26/10		
Bromoform	ND	1.0	161337	03/26/10		
Isopropylbenzene	1.4	0.5	161337	03/26/10		
1,1,2,2-Tetrachloroethane	ND	0.5	161337	03/26/10		
1,2,3-Trichloropropane	ND	0.5	161337	03/26/10		
Propylbenzene	1.2	0.5	161337	03/26/10		
Bromobenzene	ND	0.5	161337	03/26/10		
1,3,5-Trimethylbenzene	ND	0.5	161337	03/26/10		
2-Chlorotoluene	ND	0.5	161337	03/26/10		
4-Chlorotoluene	ND	0.5	161337	03/26/10		
tert-Butylbenzene	ND	0.5	161337	03/26/10		

ND= Not Detected
 RL= Reporting Limit
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Purgeable Organics by GC/MS

Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Field ID:	ASE-120-UST-10Q1	Diln Fac:	1.000
Lab ID:	218881-007	Sampled:	03/17/10
Matrix:	Water	Received:	03/18/10
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed	ADEQ Flags
1,2,4-Trimethylbenzene	ND	0.5	161337	03/26/10	
sec-Butylbenzene	ND	0.5	161337	03/26/10	
para-Isopropyl Toluene	ND	0.5	161337	03/26/10	
1,3-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,4-Dichlorobenzene	ND	0.5	161337	03/26/10	
n-Butylbenzene	ND	0.5	161337	03/26/10	
1,2-Dichlorobenzene	ND	0.5	161337	03/26/10	
1,2-Dibromo-3-Chloropropane	ND	2.0	161337	03/26/10	
1,2,4-Trichlorobenzene	ND	0.5	161337	03/26/10	
Hexachlorobutadiene	ND	2.0	161337	03/26/10	
Naphthalene	ND	2.0	161366	03/27/10	
1,2,3-Trichlorobenzene	ND	0.5	161337	03/26/10	
Xylene (total)	ND	0.5	161337	03/26/10	

Surrogate	%REC	Limits	Batch#	Analyzed	ADEQ Flags
Dibromofluoromethane	108	77-120	161337	03/26/10	
Dibromofluoromethane	99	77-120	161366	03/27/10	
1,2-Dichloroethane-d4	105	70-127	161337	03/26/10	
1,2-Dichloroethane-d4	103	70-127	161366	03/27/10	
Toluene-d8	99	83-125	161337	03/26/10	
Toluene-d8	105	83-125	161366	03/27/10	
Bromofluorobenzene	105	78-120	161337	03/26/10	
Bromofluorobenzene	102	78-120	161366	03/27/10	

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161337
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
1,3-Dichloropropane	25.00	25.27	101	75-120		
Tetrachloroethene	25.00	26.36	105	77-120		
Dibromochloromethane	25.00	25.32	101	76-120		
1,2-Dibromoethane	25.00	23.56	94	77-120		
Chlorobenzene	25.00	24.94	100	78-120		
1,1,1,2-Tetrachloroethane	25.00	24.25	97	77-120		
Ethylbenzene	25.00	25.86	103	78-120		
m,p-Xylenes	50.00	49.33	99	77-120		
o-Xylene	25.00	26.09	104	77-120		
Styrene	25.00	25.11	100	77-120		
Bromoform	25.00	22.45	90	74-121		
Isopropylbenzene	25.00	22.88	92	71-120		
1,1,2,2-Tetrachloroethane	25.00	23.90	96	73-120		
1,2,3-Trichloropropane	25.00	22.74	91	72-120		
Propylbenzene	25.00	26.59	106	76-120		
Bromobenzene	25.00	24.46	98	75-120		
1,3,5-Trimethylbenzene	25.00	26.00	104	77-120		
2-Chlorotoluene	25.00	25.74	103	76-120		
4-Chlorotoluene	25.00	25.51	102	78-120		
tert-Butylbenzene	25.00	26.50	106	76-120		
1,2,4-Trimethylbenzene	25.00	26.28	105	77-120		
sec-Butylbenzene	25.00	27.44	110	80-120		
para-Isopropyl Toluene	25.00	25.50	102	76-120		
1,3-Dichlorobenzene	25.00	25.19	101	75-120		
1,4-Dichlorobenzene	25.00	24.50	98	77-120		
n-Butylbenzene	25.00	27.56	110	76-120		
1,2-Dichlorobenzene	25.00	25.17	101	76-120		
1,2-Dibromo-3-Chloropropane	25.00	20.29	81	65-120		
1,2,4-Trichlorobenzene	25.00	24.29	97	73-121		
Hexachlorobutadiene	25.00	24.71	99	73-123		
Naphthalene	25.00	21.75	87	62-121		
1,2,3-Trichlorobenzene	25.00	24.72	99	66-123		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	104	77-120		
1,2-Dichloroethane-d4	102	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	101	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161337
Units:	ug/L	Analyzed:	03/26/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,3-Dichloropropane	25.00	24.97	100	75-120	1	20		
Tetrachloroethene	25.00	25.44	102	77-120	4	20		
Dibromochloromethane	25.00	25.49	102	76-120	1	20		
1,2-Dibromoethane	25.00	24.27	97	77-120	3	20		
Chlorobenzene	25.00	24.09	96	78-120	3	20		
1,1,1,2-Tetrachloroethane	25.00	24.13	97	77-120	1	20		
Ethylbenzene	25.00	25.08	100	78-120	3	26		
m,p-Xylenes	50.00	48.01	96	77-120	3	20		
o-Xylene	25.00	25.38	102	77-120	3	20		
Styrene	25.00	24.67	99	77-120	2	20		
Bromoform	25.00	23.33	93	74-121	4	21		
Isopropylbenzene	25.00	22.28	89	71-120	3	20		
1,1,2,2-Tetrachloroethane	25.00	24.57	98	73-120	3	20		
1,2,3-Trichloropropane	25.00	23.67	95	72-120	4	20		
Propylbenzene	25.00	25.75	103	76-120	3	20		
Bromobenzene	25.00	24.29	97	75-120	1	20		
1,3,5-Trimethylbenzene	25.00	25.44	102	77-120	2	20		
2-Chlorotoluene	25.00	25.06	100	76-120	3	20		
4-Chlorotoluene	25.00	24.88	100	78-120	3	20		
tert-Butylbenzene	25.00	25.89	104	76-120	2	21		
1,2,4-Trimethylbenzene	25.00	25.62	102	77-120	3	20		
sec-Butylbenzene	25.00	26.61	106	80-120	3	21		
para-Isopropyl Toluene	25.00	24.66	99	76-120	3	20		
1,3-Dichlorobenzene	25.00	24.89	100	75-120	1	20		
1,4-Dichlorobenzene	25.00	24.16	97	77-120	1	23		
n-Butylbenzene	25.00	26.55	106	76-120	4	21		
1,2-Dichlorobenzene	25.00	25.26	101	76-120	0	20		
1,2-Dibromo-3-Chloropropane	25.00	22.20	89	65-120	9	22		
1,2,4-Trichlorobenzene	25.00	24.07	96	73-121	1	20		
Hexachlorobutadiene	25.00	24.76	99	73-123	0	25		
Naphthalene	25.00	22.81	91	62-121	5	32		
1,2,3-Trichlorobenzene	25.00	25.09	100	66-123	1	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	106	77-120		
1,2-Dichloroethane-d4	103	70-127		
Toluene-d8	100	83-125		
Bromofluorobenzene	101	78-120		

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537782	Batch#:	161337
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	V1
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537782	Batch#:	161337
Matrix:	Water	Analyzed:	03/26/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	V9
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	107	77-120	
1,2-Dichloroethane-d4	104	70-127	
Toluene-d8	99	83-125	
Bromofluorobenzene	107	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537896	Batch#:	161366
Matrix:	Water	Analyzed:	03/27/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Freon 12	ND	1.0	
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Trichlorofluoromethane	ND	1.0	
Iodomethane	ND	10	V9
Acetone	ND	10	V9
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	10	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
2,2-Dichloropropane	ND	0.5	
Chloroform	ND	0.5	
Bromochloromethane	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
1,1-Dichloropropene	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
Dibromomethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
1,3-Dichloropropane	ND	0.5	
Tetrachloroethene	ND	0.5	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC537896	Batch#:	161366
Matrix:	Water	Analyzed:	03/27/10
Units:	ug/L		

Analyte	Result	RL	ADEQ Flags
Dibromochloromethane	ND	0.5	
1,2-Dibromoethane	ND	0.5	
Chlorobenzene	ND	0.5	
1,1,1,2-Tetrachloroethane	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes	ND	0.5	
o-Xylene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
Isopropylbenzene	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	0.5	
1,2,3-Trichloropropane	ND	0.5	
Propylbenzene	ND	0.5	
Bromobenzene	ND	0.5	
1,3,5-Trimethylbenzene	ND	0.5	
2-Chlorotoluene	ND	0.5	
4-Chlorotoluene	ND	0.5	
tert-Butylbenzene	ND	0.5	
1,2,4-Trimethylbenzene	ND	0.5	
sec-Butylbenzene	ND	0.5	
para-Isopropyl Toluene	ND	0.5	
1,3-Dichlorobenzene	ND	0.5	
1,4-Dichlorobenzene	ND	0.5	
n-Butylbenzene	ND	0.5	
1,2-Dichlorobenzene	ND	0.5	
1,2-Dibromo-3-Chloropropane	ND	2.0	
1,2,4-Trichlorobenzene	ND	0.5	
Hexachlorobutadiene	ND	2.0	
Naphthalene	ND	2.0	
1,2,3-Trichlorobenzene	ND	0.5	
Xylene (total)	ND	0.5	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	99	77-120	
1,2-Dichloroethane-d4	103	70-127	
Toluene-d8	108	83-125	
Bromofluorobenzene	103	78-120	

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161366
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Type: BS Lab ID: QC537897

Analyte	Spiked	Result	%REC	Limits	ADEQ	Flags
Freon 12	25.00	20.04	80	56-140		
Chloromethane	25.00	20.44	82	46-142		
Vinyl Chloride	25.00	21.89	88	49-136		
Bromomethane	25.00	27.52	110	42-154		
Chloroethane	25.00	23.64	95	51-133		
Trichlorofluoromethane	25.00	22.58	90	63-135		
Iodomethane	25.00	20.87	b 83	70-130	V9	
Acetone	25.00	24.85	b 99	48-130	V9	
1,1-Dichloroethene	25.00	25.88	104	68-133		
Methylene Chloride	25.00	22.84	91	71-120		
Carbon Disulfide	25.00	22.80	91	56-120		
MTBE	25.00	20.56	82	58-120		
trans-1,2-Dichloroethene	25.00	24.30	97	80-120		
Vinyl Acetate	25.00	26.79	107	63-124		
1,1-Dichloroethane	25.00	23.57	94	77-120		
2-Butanone	25.00	22.24	89	57-120		
cis-1,2-Dichloroethene	25.00	24.87	99	75-120		
2,2-Dichloropropane	25.00	28.62	114	72-128		
Chloroform	25.00	23.35	93	78-120		
Bromochloromethane	25.00	23.90	96	78-120		
1,1,1-Trichloroethane	25.00	24.73	99	78-120		
1,1-Dichloropropene	25.00	25.48	102	75-120		
Carbon Tetrachloride	25.00	25.20	101	80-120		
1,2-Dichloroethane	25.00	21.47	86	74-120		
Benzene	25.00	25.77	103	77-120		
Trichloroethene	25.00	23.86	95	78-122		
1,2-Dichloropropane	25.00	22.89	92	76-120		
Bromodichloromethane	25.00	22.65	91	78-120		
Dibromomethane	25.00	22.98	92	77-120		
4-Methyl-2-Pentanone	25.00	19.80	79	65-120		
cis-1,3-Dichloropropene	25.00	22.55	90	76-120		
Toluene	25.00	26.28	105	73-120		
trans-1,3-Dichloropropene	25.00	20.60	82	72-120		
1,1,2-Trichloroethane	25.00	23.61	94	76-120		
2-Hexanone	25.00	23.32	93	57-121		
1,3-Dichloropropane	25.00	24.32	97	75-120		
Tetrachloroethene	25.00	26.15	105	77-120		
Dibromochloromethane	25.00	22.86	91	76-120		
1,2-Dibromoethane	25.00	23.57	94	77-120		
Chlorobenzene	25.00	24.73	99	78-120		
1,1,1,2-Tetrachloroethane	25.00	24.43	98	77-120		
Ethylbenzene	25.00	26.53	106	78-120		
m,p-Xylenes	50.00	56.29	113	77-120		
o-Xylene	25.00	26.62	106	77-120		
Styrene	25.00	26.61	106	77-120		
Bromoform	25.00	22.80	91	74-121		
Isopropylbenzene	25.00	25.44	102	71-120		
1,1,2,2-Tetrachloroethane	25.00	24.93	100	73-120		
1,2,3-Trichloropropane	25.00	23.62	94	72-120		
Propylbenzene	25.00	29.15	117	76-120		
Bromobenzene	25.00	27.10	108	75-120		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161366
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	ADEQ Flags
1,3,5-Trimethylbenzene	25.00	28.15	113	77-120	
2-Chlorotoluene	25.00	27.85	111	76-120	
4-Chlorotoluene	25.00	25.92	104	78-120	
tert-Butylbenzene	25.00	28.23	113	76-120	
1,2,4-Trimethylbenzene	25.00	26.57	106	77-120	
sec-Butylbenzene	25.00	28.90	116	80-120	
para-Isopropyl Toluene	25.00	27.49	110	76-120	
1,3-Dichlorobenzene	25.00	25.82	103	75-120	
1,4-Dichlorobenzene	25.00	24.75	99	77-120	
n-Butylbenzene	25.00	28.23	113	76-120	
1,2-Dichlorobenzene	25.00	25.44	102	76-120	
1,2-Dibromo-3-Chloropropane	25.00	20.84	83	65-120	
1,2,4-Trichlorobenzene	25.00	23.96	96	73-121	
Hexachlorobutadiene	25.00	27.03	108	73-123	
Naphthalene	25.00	23.72	95	62-121	
1,2,3-Trichlorobenzene	25.00	24.29	97	66-123	

Surrogate	%REC	Limits	ADEQ Flags
Dibromofluoromethane	98	77-120	
1,2-Dichloroethane-d4	95	70-127	
Toluene-d8	105	83-125	
Bromofluorobenzene	102	78-120	

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161366
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Type: BSD Lab ID: QC537898

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
Freon 12	25.00	20.01	80	56-140	0	24		
Chloromethane	25.00	19.68	79	46-142	4	24		
Vinyl Chloride	25.00	21.84	87	49-136	0	24		
Bromomethane	25.00	26.23	105	42-154	5	24		
Chloroethane	25.00	23.25	93	51-133	2	25		
Trichlorofluoromethane	25.00	23.09	92	63-135	2	20		
Iodomethane	25.00	22.00	b 88	70-130	5	20	V9	
Acetone	25.00	26.46	b 106	48-130	6	41	V9	
1,1-Dichloroethene	25.00	26.20	105	68-133	1	20		
Methylene Chloride	25.00	23.49	94	71-120	3	20		
Carbon Disulfide	25.00	23.73	95	56-120	4	20		
MTBE	25.00	20.89	84	58-120	2	21		
trans-1,2-Dichloroethene	25.00	25.44	102	80-120	5	24		
Vinyl Acetate	25.00	27.38	110	63-124	2	24		
1,1-Dichloroethane	25.00	24.44	98	77-120	4	20		
2-Butanone	25.00	23.46	94	57-120	5	32		
cis-1,2-Dichloroethene	25.00	25.79	103	75-120	4	20		
2,2-Dichloropropane	25.00	27.75	111	72-128	3	24		
Chloroform	25.00	23.90	96	78-120	2	20		
Bromochloromethane	25.00	24.58	98	78-120	3	20		
1,1,1-Trichloroethane	25.00	24.98	100	78-120	1	20		
1,1-Dichloropropene	25.00	25.83	103	75-120	1	21		
Carbon Tetrachloride	25.00	24.80	99	80-120	2	21		
1,2-Dichloroethane	25.00	21.59	86	74-120	1	20		
Benzene	25.00	25.52	102	77-120	1	20		
Trichloroethene	25.00	23.85	95	78-122	0	20		
1,2-Dichloropropane	25.00	22.40	90	76-120	2	20		
Bromodichloromethane	25.00	22.95	92	78-120	1	20		
Dibromomethane	25.00	23.44	94	77-120	2	20		
4-Methyl-2-Pentanone	25.00	21.48	86	65-120	8	22		
cis-1,3-Dichloropropene	25.00	23.05	92	76-120	2	20		
Toluene	25.00	25.88	104	73-120	2	20		
trans-1,3-Dichloropropene	25.00	20.23	81	72-120	2	20		
1,1,2-Trichloroethane	25.00	23.94	96	76-120	1	20		
2-Hexanone	25.00	23.16	93	57-121	1	25		
1,3-Dichloropropane	25.00	23.79	95	75-120	2	20		
Tetrachloroethene	25.00	26.85	107	77-120	3	20		
Dibromochloromethane	25.00	22.62	90	76-120	1	20		
1,2-Dibromoethane	25.00	23.67	95	77-120	0	20		
Chlorobenzene	25.00	25.31	101	78-120	2	20		
1,1,1,2-Tetrachloroethane	25.00	24.61	98	77-120	1	20		
Ethylbenzene	25.00	27.05	108	78-120	2	26		
m,p-Xylenes	50.00	53.66	107	77-120	5	20		
o-Xylene	25.00	26.22	105	77-120	2	20		
Styrene	25.00	25.96	104	77-120	2	20		
Bromoform	25.00	23.34	93	74-121	2	21		
Isopropylbenzene	25.00	24.54	98	71-120	4	20		
1,1,2,2-Tetrachloroethane	25.00	24.92	100	73-120	0	20		
1,2,3-Trichloropropane	25.00	24.05	96	72-120	2	20		
Propylbenzene	25.00	28.79	115	76-120	1	20		
Bromobenzene	25.00	27.50	110	75-120	1	20		

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	218881	Location:	Quarterly UST
Client:	CH2M Hill	Prep:	EPA 5030B
Project#:	383868.US.60.61.QS	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	161366
Units:	ug/L	Analyzed:	03/27/10
Diln Fac:	1.000		

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	ADEQ	Flags
1,3,5-Trimethylbenzene	25.00	28.97	116	77-120	3	20		
2-Chlorotoluene	25.00	28.22	113	76-120	1	20		
4-Chlorotoluene	25.00	25.81	103	78-120	0	20		
tert-Butylbenzene	25.00	27.82	111	76-120	1	21		
1,2,4-Trimethylbenzene	25.00	27.49	110	77-120	3	20		
sec-Butylbenzene	25.00	28.90	116	80-120	0	21		
para-Isopropyl Toluene	25.00	26.60	106	76-120	3	20		
1,3-Dichlorobenzene	25.00	25.67	103	75-120	1	20		
1,4-Dichlorobenzene	25.00	25.25	101	77-120	2	23		
n-Butylbenzene	25.00	27.22	109	76-120	4	21		
1,2-Dichlorobenzene	25.00	25.32	101	76-120	0	20		
1,2-Dibromo-3-Chloropropane	25.00	21.79	87	65-120	4	22		
1,2,4-Trichlorobenzene	25.00	24.46	98	73-121	2	20		
Hexachlorobutadiene	25.00	27.19	109	73-123	1	25		
Naphthalene	25.00	23.85	95	62-121	1	32		
1,2,3-Trichlorobenzene	25.00	24.91	100	66-123	3	29		

Surrogate	%REC	Limits	ADEQ	Flags
Dibromofluoromethane	99	77-120		
1,2-Dichloroethane-d4	94	70-127		
Toluene-d8	101	83-125		
Bromofluorobenzene	101	78-120		

b= See narrative

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480039377003 File : iar03 Time : 27-JAN-2010 17:11

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	119490	17.70	
75	30% - 60% of mass 95	276672	40.99	
95		675029	100.00	
96	5% - 9% of mass 95	46176	6.84	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	508352	75.31	
175	5% - 9% of mass 174	37824	7.44	
176	> 95% and < 101% of mass 174	488896	96.17	
177	5% - 9% of mass 176	33058	6.76	

Analyst: BO Date: 01/28/10 Reviewer: LW Date: 01/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : BFB IDF : 1.0
Seqnum : 480124525003 File : icr03 Time : 27-MAR-2010 13:56

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	18863	20.30	
75	30% - 60% of mass 95	40342	43.42	
95		92919	100.00	
96	5% - 9% of mass 95	6443	6.93	
173	< 2% of mass 174	0	0.00	
174	> 50% and < 100% of mass 95	64766	69.70	
175	5% - 9% of mass 174	4745	7.33	
176	> 95% and < 101% of mass 174	62861	97.06	
177	5% - 9% of mass 176	4075	6.48	

Analyst: BJP Date: 03/28/10 Reviewer: LW Date: 03/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : BFB IDF : 1.0
Seqnum : 880120005002 File : lco02 Time : 24-MAR-2010 09:32

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	6943	21.25	
75	30% - 60% of mass 95	16797	51.40	
95		32680	100.00	
96	5% - 9% of mass 95	2230	6.82	
173	< 2% of mass 174	252	1.01	
174	> 50% and < 100% of mass 95	24933	76.29	
175	5% - 9% of mass 174	1827	7.33	
176	> 95% and < 101% of mass 174	24242	97.23	
177	5% - 9% of mass 176	1814	7.48	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/25/10

CURTIS & TOMPKINS BFB TUNE FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : BFB IDF : 1.0
Seqnum : 880121453002 File : lcp02 Time : 25-MAR-2010 08:58

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	6837	23.38	
75	30% - 60% of mass 95	15600	53.35	
95		29242	100.00	
96	5% - 9% of mass 95	2127	7.27	
173	< 2% of mass 174	207	0.90	
174	> 50% and < 100% of mass 95	23053	78.84	
175	5% - 9% of mass 174	1676	7.27	
176	> 95% and < 101% of mass 174	22173	96.18	
177	5% - 9% of mass 176	1602	7.23	

Analyst: BO Date: 03/25/10 Reviewer: LW Date: 03/26/10

CURTIS & TOMPKINS BFB TUNE FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : BFB IDF : 1.0
Seqnum : 880122884002 File : lcq02 Time : 26-MAR-2010 08:37

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	5390	23.84	
75	30% - 60% of mass 95	11728	51.88	
95		22605	100.00	
96	5% - 9% of mass 95	1595	7.06	
173	< 2% of mass 174	73	0.44	
174	> 50% and < 100% of mass 95	16669	73.74	
175	5% - 9% of mass 174	1209	7.25	
176	> 95% and < 101% of mass 174	16703	100.20	
177	5% - 9% of mass 176	1148	6.87	

Analyst: BO Date: 03/26/10 Reviewer: LW Date: 03/29/10

CURTIS & TOMPKINS BFB TUNE FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : BFB IDF : 1.0
Seqnum : 880122884012 File : lcq12 Time : 26-MAR-2010 13:29

Standards: S13652

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15% - 40% of mass 95	6441	20.86	
75	30% - 60% of mass 95	15043	48.71	
95		30880	100.00	
96	5% - 9% of mass 95	2005	6.49	
173	< 2% of mass 174	252	1.11	
174	> 50% and < 100% of mass 95	22752	73.68	
175	5% - 9% of mass 174	1573	6.91	
176	> 95% and < 101% of mass 174	21706	95.40	
177	5% - 9% of mass 176	1588	7.32	

Analyst: BO Date: 03/26/10 Reviewer: LW Date: 03/29/10

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218881 MSVOA Water: EPA 8260B

Inst : MSVOA09
 Calnum : 480039377001
 Units : ug/L

Name : 826GOX9W
 Date : 27-JAN-2010 20:15
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	iar07	480039377007	.25/.5PPB	27-JAN-2010 20:15	S13745 (20000X), S13845 (20000X), S13747 (20000X), S13846 (100000X), S13687 (5000X)
L2	iar08	480039377008	0.5/1PPB	27-JAN-2010 20:49	S13745 (100000X), S13845 (100000X), S13747 (100000X), S13846 (50000X), S13687 (5000X)
L3	iar09	480039377009	2PPB	27-JAN-2010 21:22	S13745 (25000X), S13845 (25000X), S13747 (50000X), S13846 (25000X), S13687 (5000X)
L4	iar10	480039377010	5PPB	27-JAN-2010 21:55	S13745 (10000X), S13845 (10000X), S13747 (20000X), S13846 (10000X), S13687 (5000X)
L5	iar11	480039377011	10PPB	27-JAN-2010 22:28	S13745 (5000X), S13845 (5000X), S13747 (10000X), S13846 (5000X), S13687 (5000X)
L6	iar12	480039377012	20PPB	27-JAN-2010 23:01	S13680 (25000X), S13796 (25000X), S13625 (50000X), S13503 (25000X), S13687 (5000X)
L7	iar13	480039377013	50PPB	27-JAN-2010 23:34	S13680 (10000X), S13796 (10000X), S13625 (20000X), S13503 (10000X), S13687 (5000X)
L8	iar14	480039377014	75PPB	28-JAN-2010 00:07	S13680 (6667X), S13796 (6667X), S13625 (13330X), S13503 (6667X), S13687 (5000X)
L9	iar15	480039377015	100PPB	28-JAN-2010 00:39	S13680 (5000X), S13796 (5000X), S13625 (10000X), S13503 (5000X), S13687 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Freon 12		0.4272	0.6076	0.5551	0.6189	0.6131	0.6391	0.5765	0.5958	AVRG		1.72662		0.5792	12	15	0.05	0.99	
Chloromethane		0.8240	0.9930	0.9112	0.9272	0.9023	0.8693	0.8104	0.7946	AVRG		1.13767		0.8790	8	15	0.10	0.99	
Vinyl Chloride	0.5181	0.5422	0.7028	0.6832	0.6817	0.6816	0.6563	0.6083	0.5695	AVRG		1.59470		0.6271	11	15	0.05	0.99	
Bromomethane		0.3327	0.3778	0.3470	0.3376	0.3814	0.3741	0.3742	0.3632	AVRG		2.77001		0.3610	5	15	0.05	0.99	
Chloroethane		0.3935	0.4827	0.4630	0.4416	0.4633	0.4477	0.4193	0.4174	AVRG		2.26725		0.4411	7	15	0.05	0.99	
Trichlorofluoromethane		0.5190	0.6690	0.6150	0.6630	0.6423	0.6798	0.6145	0.6119	AVRG		1.59535		0.6268	8	15	0.05	0.99	
Acetone				0.1172	0.1133	0.1131	0.1053	0.0922	0.0927	AVRG		9.46550		0.1056	10	15	0.05	0.99	
1,1-Dichloroethene		0.3192	0.4324	0.3853	0.3906	0.3699	0.3637	0.3930	0.3876	AVRG		2.63014		0.3802	8	15	0.05	0.99	
Iodomethane				0.5282	0.5552	0.5997	0.6044	0.5951	0.6206	AVRG		1.71268		0.5839	6	15	0.05	0.99	
Methylene Chloride		0.5858	0.6009	0.5287	0.5011	0.5232	0.5143	0.5033	0.4935	AVRG		1.88203		0.5313	8	15	0.05	0.99	
Carbon Disulfide		1.5171	1.9736	1.7265	1.7529	1.6610	1.5889	1.6476	1.5771	AVRG		0.59503		1.6806	8	15	0.05	0.99	
MTBE		0.9320	1.0138	0.9931	0.9929	1.0189	0.9926	0.9195	0.8743	AVRG		1.03396		0.9672	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.4406	0.5305	0.4618	0.4602	0.4757	0.4552	0.4688	0.4558	AVRG		2.13408		0.4686	6	15	0.05	0.99	
Vinyl Acetate			0.6282	0.6668	0.6830	0.7536	0.7417	0.8563	0.7420	AVRG		1.38026		0.7245	10	15	0.05	0.99	
1,1-Dichloroethane		0.8516	1.0446	0.9546	0.9019	0.9393	0.9119	0.8841	0.8458	AVRG		1.09085		0.9167	7	15	0.10	0.99	
2-Butanone			0.2069m	0.1893	0.1836	0.1851	0.1785	0.1526	0.1452	AVRG		5.63991		0.1773	12	15	0.05	0.99	
2,2-Dichloropropane		0.4892	0.6320	0.5236	0.5438	0.5313	0.4881	0.4891	0.4602	AVRG		1.92434		0.5197	10	15	0.05	0.99	
cis-1,2-Dichloroethene		0.4938	0.5578	0.4996	0.4958	0.5086	0.5035	0.5009	0.4937	AVRG		1.97351		0.5067	4	15	0.05	0.99	
Chloroform		0.7593	0.8988	0.8262	0.8030	0.8348	0.7985	0.7757	0.7543	AVRG		1.24021		0.8063	6	15	0.05	0.99	
Bromochloromethane		0.1840	0.2315	0.2099	0.2160	0.2219	0.2274	0.2192	0.2171	AVRG		4.63209		0.2159	7	15	0.05	0.99	
1,1,1-Trichloroethane		0.4684	0.6327	0.5630	0.5644	0.5706	0.5140	0.5506	0.5210	AVRG		1.82451		0.5481	9	15	0.05	0.99	
1,1-Dichloropropene		0.3158	0.4343	0.3542	0.3790	0.3680	0.3394	0.3705	0.3601	AVRG		2.73852		0.3652	9	15	0.05	0.99	
Carbon Tetrachloride		0.2519	0.3316	0.2884	0.2907	0.2825	0.2633	0.2915	0.2847	AVRG		3.50159		0.2856	8	15	0.05	0.99	
1,2-Dichloroethane		0.2690	0.3044	0.2819	0.2808	0.2982	0.2878	0.2677	0.2636	AVRG		3.55022		0.2817	5	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Benzene		1.0292	1.2652	1.0714	1.0609	1.1235	1.0294	1.0188	0.9650	AVRG		0.93423		1.0704	9	15	0.05	0.99	
Trichloroethene		0.2697	0.3259	0.2720	0.2774	0.2985	0.2818	0.2818	0.2765	AVRG		3.50319		0.2855	6	15	0.05	0.99	
1,2-Dichloropropane		0.3482	0.3804	0.3531	0.3345	0.3598	0.3425	0.3400	0.3296	AVRG		2.86920		0.3485	5	15	0.05	0.99	
Bromodichloromethane		0.3451	0.3918	0.3578	0.3454	0.3759	0.3633	0.3588	0.3558	AVRG		2.76456		0.3617	4	15	0.05	0.99	
Dibromomethane		0.1452	0.1603	0.1563	0.1543	0.1669	0.1664	0.1592	0.1572	AVRG		6.32076		0.1582	4	15	0.05	0.99	
4-Methyl-2-Pentanone			0.2356	0.2296	0.2350	0.2480	0.2457	0.2205	0.2116	AVRG		4.30507		0.2323	6	15	0.05	0.99	
cis-1,3-Dichloropropene		0.4479	0.4924	0.4528	0.4573	0.4598	0.4598	0.4404	0.4315	AVRG		2.19668		0.4552	4	15	0.05	0.99	
Toluene		0.7703	0.9216	0.7566	0.7233	0.7824	0.7735	0.7985	0.7408	AVRG		1.27653		0.7834	8	15	0.05	0.99	
trans-1,3-Dichloropropene		0.4314	0.5131	0.4670	0.4468	0.4973	0.4610	0.4573	0.4396	AVRG		2.15431		0.4642	6	15	0.05	0.99	
1,1,2-Trichloroethane		0.1337	0.1518	0.1406	0.1382	0.1505	0.1472	0.1433	0.1436	AVRG		6.96298		0.1436	4	15	0.05	0.99	
2-Hexanone			0.2239	0.2090	0.2014	0.2118	0.2130	0.1906	0.1791	AVRG		4.89948		0.2041	7	15	0.05	0.99	
1,3-Dichloropropane		0.4004	0.4631	0.4225	0.4249	0.4545	0.4640	0.4442	0.4221	AVRG		2.28843		0.4370	5	15	0.05	0.99	
Tetrachloroethene		0.2481	0.3488	0.2870	0.2869	0.3017	0.2822	0.3138	0.3106	AVRG		3.36270		0.2974	10	15	0.05	0.99	
Dibromochloromethane		0.2907	0.3097	0.2913	0.2895	0.3125	0.3115	0.3151	0.3032	AVRG		3.30100		0.3029	4	15	0.05	0.99	
1,2-Dibromoethane		0.2312	0.2553	0.2455	0.2401	0.2619	0.2651	0.2633	0.2596	AVRG		3.95653		0.2527	5	15	0.05	0.99	
Chlorobenzene		0.7993	0.9853	0.8244	0.8088	0.8858	0.8623	0.8392	0.8012	AVRG		1.17537		0.8508	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.2826	0.3303	0.2747	0.2760	0.2980	0.3067	0.3047	0.2944	AVRG		3.37928		0.2959	6	15	0.05	0.99	
Ethylbenzene		1.3640	1.7214	1.3993	1.3607	1.4898	1.3585	1.3068	1.2120	AVRG		0.71350		1.4015	11	15	0.05	0.99	
m,p-Xylenes	0.5036	0.4527	0.6147	0.5056	0.4893	0.5384	0.5088	0.4958	0.4418	AVRG		1.97774		0.5056	10	15	0.05	0.99	
o-Xylene		0.4874	0.6016	0.5082	0.4965	0.5489	0.5334	0.5259	0.5097	AVRG		1.89951		0.5265	7	15	0.05	0.99	
Styrene		0.8609	1.0026	0.8795	0.8674	0.9605	0.9470	0.8954	0.8576	AVRG		1.10028		0.9089	6	15	0.05	0.99	
Bromoform		0.1512	0.1751	0.1615	0.1650	0.1814	0.1861	0.1861	0.1830	AVRG		5.75787		0.1737	7	15	0.10	0.99	
Isopropylbenzene		2.3217	3.1596	2.5691	2.5469	2.7063	2.4453	2.6712	2.4395	AVRG		0.38352		2.6074	10	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6030	0.5937	0.5909	0.5928	0.6153	0.6111	0.6410	0.6031	AVRG		1.64915		0.6064	3	15	0.30	0.99	
1,2,3-Trichloropropane		0.1447	0.1409	0.1299	0.1309	0.1378	0.1430	0.1410	0.1265	AVRG		7.30736		0.1368	5	15	0.05	0.99	
Propylbenzene		3.0497	3.9560	3.2048	3.2461	3.3629	3.0327	3.0560	2.6950	AVRG		0.31246		3.2004	11	15	0.05	0.99	
Bromobenzene		0.6665	0.7228	0.6435	0.6492	0.7032	0.7201	0.7249	0.6703	AVRG		1.45444		0.6876	5	15	0.05	0.99	
1,3,5-Trimethylbenzene		1.9922	2.4458	2.0368	2.0219	2.1529	1.9990	1.9836	1.7635	AVRG		0.48793		2.0495	9	15	0.05	0.99	
2-Chlorotoluene		2.2554	2.5642	2.1161	2.1087	2.2652	2.0862	1.9834	1.7493	AVRG		0.46706		2.1411	11	15	0.05	0.99	
4-Chlorotoluene		2.1887	2.3464	1.9752	2.0153	2.0709	2.0599	2.0773	1.9065	AVRG		0.48076		2.0800	7	15	0.05	0.99	
tert-Butylbenzene		1.5755	2.0121	1.6313	1.6883	1.7810	1.6549	1.7601	1.6963	AVRG		0.57973		1.7249	8	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.1523	2.5130	2.0569	2.0414	2.2207	2.0902	2.1625	2.0170	AVRG		0.46366		2.1567	7	15	0.05	0.99	
sec-Butylbenzene		2.3579	3.0923	2.6227	2.6213	2.7538	2.5038	2.7910	2.5827	AVRG		0.37514		2.6657	8	15	0.05	0.99	
para-Isopropyl Toluene		1.8819	2.2981	1.9427	2.0129	2.1003	1.8867	2.1308	2.0144	AVRG		0.49177		2.0335	7	15	0.05	0.99	
1,3-Dichlorobenzene		1.2368	1.4206	1.2144	1.2052	1.3068	1.2860	1.3439	1.2935	AVRG		0.77618		1.2884	6	15	0.05	0.99	
1,4-Dichlorobenzene		1.3246	1.4816	1.2289	1.2471	1.3353	1.3172	1.3326	1.2740	AVRG		0.75892		1.3177	6	15	0.05	0.99	
n-Butylbenzene		1.9278	2.4190	1.9466	2.0219	2.1231	1.9181	2.1344	2.0210	AVRG		0.48450		2.0640	8	15	0.05	0.99	
1,2-Dichlorobenzene		1.1836	1.2168	1.1290	1.1069	1.1904	1.1946	1.2267	1.1710	AVRG		0.84933		1.1774	3	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.0812	0.1026	0.0896	0.0907	0.0912	0.0934	0.0870	0.0842	AVRG		11.1139		0.0900	7	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.6413	0.6999	0.6384	0.6552	0.6932	0.7048	0.7109	0.7232	AVRG		1.46338		0.6833	5	15	0.05	0.99	
Hexachlorobutadiene		0.2542	0.3630	0.3000	0.3125	0.3339	0.3017	0.3594	0.3585	AVRG		3.09685		0.3229	12	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Naphthalene		1.2171	1.2766	1.2470	1.2729	1.3320	1.3830	1.3625	1.3472	AVRG		0.76642		1.3048	5	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.5473	0.5994	0.5662	0.5762	0.6237	0.6325	0.6475	0.6396	AVRG		1.65553		0.6040	6	15	0.05	0.99	
Dibromofluoromethane	0.5626	0.5685	0.5730	0.5794	0.5894	0.5803	0.5742	0.5559	0.5424	AVRG		1.75583		0.5695	2	15	0.05	0.99	
1,2-Dichloroethane-d4	0.2776	0.2836	0.2948	0.2950	0.2948	0.2923	0.2665	0.2472	0.2356	AVRG		3.61858		0.2764	8	15	0.05	0.99	
Toluene-d8	1.3332	1.3494	1.4060	1.3911	1.4075	1.3829	1.3735	1.3651	1.3835	AVRG		0.72626		1.3769	2	15	0.05	0.99	
Bromofluorobenzene	1.0186	1.0587	1.0239	1.0392	1.0317	0.9937	1.0272	1.0417	1.0060	AVRG		0.97396		1.0267	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-26	2.000	5	5.000	-4	10.00	7	20.00	6	50.00	10	75.00	0	100.0	3
Chloromethane			1.000	-6	2.000	13	5.000	4	10.00	5	20.00	3	50.00	-1	75.00	-8	100.0	-10
Vinyl Chloride	0.500	-17	1.000	-14	2.000	12	5.000	9	10.00	9	20.00	9	50.00	5	75.00	-3	100.0	-9
Bromomethane			1.000	-8	2.000	5	5.000	-4	10.00	-6	20.00	6	50.00	4	75.00	4	100.0	1
Chloroethane			1.000	-11	2.000	9	5.000	5	10.00	0	20.00	5	50.00	2	75.00	-5	100.0	-5
Trichlorofluoromethane			1.000	-17	2.000	7	5.000	-2	10.00	6	20.00	2	50.00	8	75.00	-2	100.0	-2
Acetone							5.000	11	10.00	7	20.00	7	50.00	0	75.00	-13	100.0	-12
1,1-Dichloroethene			0.500	-16	2.000	14	5.000	1	10.00	3	20.00	-3	50.00	-4	75.00	3	100.0	2
Iodomethane							5.000	-10	10.00	-5	20.00	3	50.00	4	75.00	2	100.0	6
Methylene Chloride			0.500	10	2.000	13	5.000	-1	10.00	-6	20.00	-2	50.00	-3	75.00	-5	100.0	-7
Carbon Disulfide			0.500	-10	2.000	17	5.000	3	10.00	4	20.00	-1	50.00	-5	75.00	-2	100.0	-6
MTBE			0.500	-4	2.000	5	5.000	3	10.00	3	20.00	5	50.00	3	75.00	-5	100.0	-10
trans-1,2-Dichloroethene			0.500	-6	2.000	13	5.000	-1	10.00	-2	20.00	2	50.00	-3	75.00	0	100.0	-3
Vinyl Acetate					2.000	-13	5.000	-8	10.00	-6	20.00	4	50.00	2	75.00	18	100.0	2
1,1-Dichloroethane			0.500	-7	2.000	14	5.000	4	10.00	-2	20.00	2	50.00	-1	75.00	-4	100.0	-8
2-Butanone					2.000	17	5.000	7	10.00	4	20.00	4	50.00	1	75.00	-14	100.0	-18
2,2-Dichloropropane			0.500	-6	2.000	22	5.000	1	10.00	5	20.00	2	50.00	-6	75.00	-6	100.0	-11
cis-1,2-Dichloroethene			0.500	-3	2.000	10	5.000	-1	10.00	-2	20.00	0	50.00	-1	75.00	-1	100.0	-3
Chloroform			0.500	-6	2.000	11	5.000	2	10.00	0	20.00	4	50.00	-1	75.00	-4	100.0	-6
Bromochloromethane			0.500	-15	2.000	7	5.000	-3	10.00	0	20.00	3	50.00	5	75.00	2	100.0	1
1,1,1-Trichloroethane			0.500	-15	2.000	15	5.000	3	10.00	3	20.00	4	50.00	-6	75.00	0	100.0	-5
1,1-Dichloropropene			0.500	-14	2.000	19	5.000	-3	10.00	4	20.00	1	50.00	-7	75.00	1	100.0	-1
Carbon Tetrachloride			0.500	-12	2.000	16	5.000	1	10.00	2	20.00	-1	50.00	-8	75.00	2	100.0	0
1,2-Dichloroethane			0.500	-5	2.000	8	5.000	0	10.00	0	20.00	6	50.00	2	75.00	-5	100.0	-6
Benzene			0.500	-4	2.000	18	5.000	0	10.00	-1	20.00	5	50.00	-4	75.00	-5	100.0	-10
Trichloroethene			0.500	-6	2.000	14	5.000	-5	10.00	-3	20.00	5	50.00	-1	75.00	-1	100.0	-3
1,2-Dichloropropane			0.500	0	2.000	9	5.000	1	10.00	-4	20.00	3	50.00	-2	75.00	-2	100.0	-5
Bromodichloromethane			0.500	-5	2.000	8	5.000	-1	10.00	-5	20.00	4	50.00	0	75.00	-1	100.0	-2
Dibromomethane			0.500	-8	2.000	1	5.000	-1	10.00	-2	20.00	5	50.00	5	75.00	1	100.0	-1
4-Methyl-2-Pentanone					2.000	1	5.000	-1	10.00	1	20.00	7	50.00	6	75.00	-5	100.0	-9
cis-1,3-Dichloropropene			0.500	-2	2.000	8	5.000	-1	10.00	0	20.00	1	50.00	1	75.00	-3	100.0	-5
Toluene			0.500	-2	2.000	18	5.000	-3	10.00	-8	20.00	0	50.00	-1	75.00	2	100.0	-5
trans-1,3-Dichloropropene			0.500	-7	2.000	11	5.000	1	10.00	-4	20.00	7	50.00	-1	75.00	-1	100.0	-5
1,1,2-Trichloroethane			0.500	-7	2.000	6	5.000	-2	10.00	-4	20.00	5	50.00	3	75.00	0	100.0	0
2-Hexanone					2.000	10	5.000	2	10.00	-1	20.00	4	50.00	4	75.00	-7	100.0	-12
1,3-Dichloropropane			0.500	-8	2.000	6	5.000	-3	10.00	-3	20.00	4	50.00	6	75.00	2	100.0	-3
Tetrachloroethene			0.500	-17	2.000	17	5.000	-3	10.00	-4	20.00	1	50.00	-5	75.00	6	100.0	4
Dibromochloromethane			0.500	-4	2.000	2	5.000	-4	10.00	-4	20.00	3	50.00	3	75.00	4	100.0	0
1,2-Dibromoethane			0.500	-9	2.000	1	5.000	-3	10.00	-5	20.00	4	50.00	5	75.00	4	100.0	3
Chlorobenzene			0.500	-6	2.000	16	5.000	-3	10.00	-5	20.00	4	50.00	1	75.00	-1	100.0	-6
1,1,1,2-Tetrachloroethane			0.500	-4	2.000	12	5.000	-7	10.00	-7	20.00	1	50.00	4	75.00	3	100.0	-1
Ethylbenzene			0.500	-3	2.000	23	5.000	0	10.00	-3	20.00	6	50.00	-3	75.00	-7	100.0	-14

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	0	1.000	-10	4.000	22	10.00	0	20.00	-3	40.00	6	100.0	1	150.0	-2	200.0	-13
o-Xylene			0.500	-7	2.000	14	5.000	-3	10.00	-6	20.00	4	50.00	1	75.00	0	100.0	-3
Styrene			0.500	-5	2.000	10	5.000	-3	10.00	-5	20.00	6	50.00	4	75.00	-1	100.0	-6
Bromoform			0.500	-13	2.000	1	5.000	-7	10.00	-5	20.00	4	50.00	7	75.00	7	100.0	5
Isopropylbenzene			0.500	-11	2.000	21	5.000	-1	10.00	-2	20.00	4	50.00	-6	75.00	2	100.0	-6
1,1,2,2-Tetrachloroethane			0.500	-1	2.000	-2	5.000	-3	10.00	-2	20.00	1	50.00	1	75.00	6	100.0	-1
1,2,3-Trichloropropane			0.500	6	2.000	3	5.000	-5	10.00	-4	20.00	1	50.00	5	75.00	3	100.0	-8
Propylbenzene			0.500	-5	2.000	24	5.000	0	10.00	1	20.00	5	50.00	-5	75.00	-5	100.0	-16
Bromobenzene			0.500	-3	2.000	5	5.000	-6	10.00	-6	20.00	2	50.00	5	75.00	5	100.0	-3
1,3,5-Trimethylbenzene			0.500	-3	2.000	19	5.000	-1	10.00	-1	20.00	5	50.00	-2	75.00	-3	100.0	-14
2-Chlorotoluene			0.500	5	2.000	20	5.000	-1	10.00	-2	20.00	6	50.00	-3	75.00	-7	100.0	-18
4-Chlorotoluene			0.500	5	2.000	13	5.000	-5	10.00	-3	20.00	0	50.00	-1	75.00	0	100.0	-8
tert-Butylbenzene			0.500	-9	2.000	17	5.000	-5	10.00	-2	20.00	3	50.00	-4	75.00	2	100.0	-2
1,2,4-Trimethylbenzene			0.500	0	2.000	17	5.000	-5	10.00	-5	20.00	3	50.00	-3	75.00	0	100.0	-6
sec-Butylbenzene			0.500	-12	2.000	16	5.000	-2	10.00	-2	20.00	3	50.00	-6	75.00	5	100.0	-3
para-Isopropyl Toluene			0.500	-7	2.000	13	5.000	-4	10.00	-1	20.00	3	50.00	-7	75.00	5	100.0	-1
1,3-Dichlorobenzene			0.500	-4	2.000	10	5.000	-6	10.00	-6	20.00	1	50.00	0	75.00	4	100.0	0
1,4-Dichlorobenzene			0.500	1	2.000	12	5.000	-7	10.00	-5	20.00	1	50.00	0	75.00	1	100.0	-3
n-Butylbenzene			0.500	-7	2.000	17	5.000	-6	10.00	-2	20.00	3	50.00	-7	75.00	3	100.0	-2
1,2-Dichlorobenzene			0.500	1	2.000	3	5.000	-4	10.00	-6	20.00	1	50.00	1	75.00	4	100.0	-1
1,2-Dibromo-3-Chloropropane			0.500	-10	2.000	14	5.000	0	10.00	1	20.00	1	50.00	4	75.00	-3	100.0	-6
1,2,4-Trichlorobenzene			0.500	-6	2.000	2	5.000	-7	10.00	-4	20.00	1	50.00	3	75.00	4	100.0	6
Hexachlorobutadiene			0.500	-21	2.000	12	5.000	-7	10.00	-3	20.00	3	50.00	-7	75.00	11	100.0	11
Naphthalene			0.500	-7	2.000	-2	5.000	-4	10.00	-2	20.00	2	50.00	6	75.00	4	100.0	3
1,2,3-Trichlorobenzene			0.500	-9	2.000	-1	5.000	-6	10.00	-5	20.00	3	50.00	5	75.00	7	100.0	6
Dibromofluoromethane	50.00	-1	50.00	0	50.00	1	50.00	2	50.00	3	50.00	2	50.00	1	50.00	-2	50.00	-5
1,2-Dichloroethane-d4	50.00	0	50.00	3	50.00	7	50.00	7	50.00	7	50.00	6	50.00	-4	50.00	-11	50.00	-15
Toluene-d8	50.00	-3	50.00	-2	50.00	2	50.00	1	50.00	2	50.00	0	50.00	0	50.00	-1	50.00	0
Bromofluorobenzene	50.00	-1	50.00	3	50.00	0	50.00	1	50.00	0	50.00	-3	50.00	0	50.00	1	50.00	-2

BO 01/29/10 [Iodomethane]: cannot report 8260c

BO 01/29/10 [Cyclohexanone]: cannot report 8260c

BO 01/29/10 [2-Chloroethylvinylether]: cannot report 8260c

BO 01/29/10 [2-Butanone]: Corrected baseline noise or negative peak in 2PPB (iar09).

Analyst: BO

Date: 01/29/10

Reviewer: LW

Date: 01/29/10

m=manual integration

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

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480039377001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA09
Calnum : 480039377001

Name : 826GOX9W
Cal Date : 27-JAN-2010

Type : WATER

ICV 480039377016 (iar16 28-JAN-2010) stds: S13817 (10000X), S13687 (5000X)
ICV 480039377017 (iar17 28-JAN-2010) stds: S13654 (10000X), S13639 (10000X),
S13492 (10000X), S13687 (5000X)

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
Freon 12	480039377016	25.00	20.09	ug/L	-20	25	
Chloromethane	480039377016	25.00	20.89	ug/L	-16	25	
Vinyl Chloride	480039377016	25.00	20.03	ug/L	-20	25	
Bromomethane	480039377016	25.00	22.30	ug/L	-11	25	
Chloroethane	480039377016	25.00	24.23	ug/L	-3	25	
Trichlorofluoromethane	480039377016	25.00	22.44	ug/L	-10	25	
Acetone	480039377017	25.00	21.54	ug/L	-14	25	
1,1-Dichloroethene	480039377017	25.00	26.91	ug/L	8	25	
Iodomethane	480039377017	25.00	18.32	ug/L	-27	25	v-
Methylene Chloride	480039377017	25.00	25.37	ug/L	1	25	
Carbon Disulfide	480039377017	25.00	23.28	ug/L	-7	25	
MTBE	480039377017	25.00	21.43	ug/L	-14	25	
trans-1,2-Dichloroethene	480039377017	25.00	26.20	ug/L	5	25	
Vinyl Acetate	480039377017	25.00	30.70	ug/L	23	25	
1,1-Dichloroethane	480039377017	25.00	24.42	ug/L	-2	25	
2-Butanone	480039377017	25.00	21.82	ug/L	-13	25	
2,2-Dichloropropane	480039377017	25.00	23.05	ug/L	-8	25	
cis-1,2-Dichloroethene	480039377017	25.00	26.25	ug/L	5	25	
Chloroform	480039377017	25.00	24.59	ug/L	-2	25	
Bromochloromethane	480039377017	25.00	27.00	ug/L	8	25	
1,1,1-Trichloroethane	480039377017	25.00	24.17	ug/L	-3	25	
1,1-Dichloropropene	480039377017	25.00	25.99	ug/L	4	25	
Carbon Tetrachloride	480039377017	25.00	25.34	ug/L	1	25	
1,2-Dichloroethane	480039377017	25.00	24.60	ug/L	-2	25	
Benzene	480039377017	25.00	27.05	ug/L	8	25	
Trichloroethene	480039377017	25.00	25.70	ug/L	3	25	
1,2-Dichloropropane	480039377017	25.00	24.27	ug/L	-3	25	
Bromodichloromethane	480039377017	25.00	25.33	ug/L	1	25	
Dibromomethane	480039377017	25.00	26.37	ug/L	5	25	
4-Methyl-2-Pentanone	480039377017	25.00	24.05	ug/L	-4	25	
cis-1,3-Dichloropropene	480039377017	25.00	26.24	ug/L	5	25	
Toluene	480039377017	25.00	27.48	ug/L	10	25	
trans-1,3-Dichloropropene	480039377017	25.00	23.44	ug/L	-6	25	
1,1,2-Trichloroethane	480039377017	25.00	27.04	ug/L	8	25	
2-Hexanone	480039377017	25.00	23.20	ug/L	-7	25	
1,3-Dichloropropane	480039377017	25.00	27.15	ug/L	9	25	
Tetrachloroethene	480039377017	25.00	26.80	ug/L	7	25	
Dibromochloromethane	480039377017	25.00	26.70	ug/L	7	25	
1,2-Dibromoethane	480039377017	25.00	28.03	ug/L	12	25	
Chlorobenzene	480039377017	25.00	26.33	ug/L	5	25	
1,1,1,2-Tetrachloroethane	480039377017	25.00	27.46	ug/L	10	25	
Ethylbenzene	480039377017	25.00	27.03	ug/L	8	25	
m,p-Xylenes	480039377017	50.00	57.68	ug/L	15	25	
o-Xylene	480039377017	25.00	27.64	ug/L	11	25	
Styrene	480039377017	25.00	27.93	ug/L	12	25	
Bromoform	480039377017	25.00	27.39	ug/L	10	25	
Isopropylbenzene	480039377017	25.00	24.25	ug/L	-3	25	

Analyte	ICV Seqnum	Spiked	Quant	Units	%D	Max	Flags
1,1,2,2-Tetrachloroethane	480039377017	25.00	27.95	ug/L	12	25	
1,2,3-Trichloropropane	480039377017	25.00	27.52	ug/L	10	25	
Propylbenzene	480039377017	25.00	27.56	ug/L	10	25	
Bromobenzene	480039377017	25.00	28.48	ug/L	14	25	
1,3,5-Trimethylbenzene	480039377017	25.00	27.77	ug/L	11	25	
2-Chlorotoluene	480039377017	25.00	27.96	ug/L	12	25	
4-Chlorotoluene	480039377017	25.00	26.81	ug/L	7	25	
tert-Butylbenzene	480039377017	25.00	27.81	ug/L	11	25	
1,2,4-Trimethylbenzene	480039377017	25.00	26.73	ug/L	7	25	
sec-Butylbenzene	480039377017	25.00	29.07	ug/L	16	25	
para-Isopropyl Toluene	480039377017	25.00	26.98	ug/L	8	25	
1,3-Dichlorobenzene	480039377017	25.00	26.38	ug/L	6	25	
1,4-Dichlorobenzene	480039377017	25.00	26.14	ug/L	5	25	
n-Butylbenzene	480039377017	25.00	27.36	ug/L	9	25	
1,2-Dichlorobenzene	480039377017	25.00	27.01	ug/L	8	25	
1,2-Dibromo-3-Chloropropane	480039377017	25.00	26.21	ug/L	5	25	
1,2,4-Trichlorobenzene	480039377017	25.00	26.47	ug/L	6	25	
Hexachlorobutadiene	480039377017	25.00	27.55	ug/L	10	25	
Naphthalene	480039377017	25.00	27.87	ug/L	11	25	
1,2,3-Trichlorobenzene	480039377017	25.00	28.65	ug/L	15	25	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 218881 MSVOA Water: EPA 8260B

Inst : MSVOA12
 Calnum : 880120005001
 Units : ug/L

Name : 8260G12W
 Date : 24-MAR-2010 11:42
 X Axis : R

Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	lco05	880120005005	.25/.5PPB	24-MAR-2010 11:42	S14217 (20000X), S14254 (20000X), S14255 (20000X), S14256 (10000X), S14026 (5000X)
L2	lco06	880120005006	0.5/1PPB	24-MAR-2010 12:14	S14217 (10000X), S14254 (10000X), S14255 (10000X), S14256 (5000X), S14026 (5000X)
L3	lco07	880120005007	2PPB	24-MAR-2010 12:47	S14217 (25000X), S14254 (25000X), S14255 (50000X), S14256 (25000X), S14026 (5000X)
L4	lco08	880120005008	5PPB	24-MAR-2010 13:19	S14217 (10000X), S14254 (10000X), S14255 (20000X), S14256 (10000X), S14026 (5000X)
L5	lco09	880120005009	10PPB	24-MAR-2010 13:52	S14217 (5000X), S14254 (5000X), S14255 (10000X), S14256 (5000X), S14026 (5000X)
L6	lco10	880120005010	20PPB	24-MAR-2010 14:25	S14216 (25000X), S14108 (25000X), S14228 (50000X), S13719 (25000X), S14026 (5000X)
L7	lco11	880120005011	50PPB	24-MAR-2010 14:57	S14216 (10000X), S14108 (10000X), S14228 (20000X), S13719 (10000X), S14026 (5000X)
L8	lco12	880120005012	75PPB	24-MAR-2010 15:30	S14216 (6667X), S14108 (6667X), S14228 (13330X), S13719 (6667X), S14026 (5000X)
L9	lco13	880120005013	100PPB	24-MAR-2010 16:03	S14216 (5000X), S14108 (5000X), S14228 (10000X), S13719 (5000X), S14026 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Freon 12		0.4294	0.4822m	0.6101m	0.5657m	0.6100m	0.6592m	0.6561m	0.6704m	AVRG		1.70829		0.5854	15	15	0.05	0.99	
Chloromethane		1.2602	1.1749	1.1273	1.1464m	1.2302m	1.1866m	1.1637m	1.1559m	AVRG		0.84701		1.1806	4	15	0.10	0.99	
Vinyl Chloride	0.8221	0.7717	0.7941m	0.8308m	0.7998	0.8631	0.8863m	0.8637	0.8796	AVRG		1.19820		0.8346	5	15	0.05	0.99	
Bromomethane		0.6261	0.6507m	0.5139	0.5049	0.4995	0.4841	0.4810	0.4960	AVRG		1.87961		0.5320	13	15	0.05	0.99	
Chloroethane		0.4419	0.4707	0.4764m	0.4635	0.5084m	0.5019m	0.4885	0.4928m	AVRG		2.08116		0.4805	5	15	0.05	0.99	
Trichlorofluoromethane		0.7077	0.6864	0.8155m	0.7610m	0.8213	0.8755	0.8477	0.8754	AVRG		1.25186		0.7988	9	15	0.05	0.99	
Acetone			0.3258	0.3051	0.3145m	0.2849	0.2592	0.2560	0.2521	AVRG		3.50416		0.2854	11	15	0.05	0.99	
1,1-Dichloroethene		0.4127	0.4086	0.4433m	0.4302m	0.4533	0.4755	0.4693	0.4592	AVRG		2.25216		0.4440	6	15	0.05	0.99	
Iodomethane				0.4790	0.5564	0.6679	0.6784	0.6534	0.6639	AVRG		1.62204		0.6165	13	15	0.05	0.99	
Methylene Chloride		0.6673	0.5504	0.5644	0.5682	0.6251	0.5989	0.5722	0.5790	AVRG		1.69298		0.5907	7	15	0.05	0.99	
Carbon Disulfide		1.6742	1.7602	1.7824	1.7855	1.9746	2.0251	1.9579	1.9556	AVRG		0.53635		1.8645	7	15	0.05	0.99	
MTBE		2.2359	2.0076	1.9639	1.9672	2.1406	2.0479	1.9769	2.0071	AVRG		0.48938		2.0434	5	15	0.05	0.99	
trans-1,2-Dichloroethene		0.6296	0.5142	0.4961	0.5211	0.5591	0.5461	0.5206	0.5256	AVRG		1.85512		0.5390	8	15	0.05	0.99	
Vinyl Acetate					1.3307	1.9928	1.8973	1.8480	1.8617	AVRG		0.55987		1.7861	15	15	0.05	0.99	
1,1-Dichloroethane		1.2243	1.0868	1.0850	1.1071	1.1926	1.1502	1.1032	1.1208	AVRG		0.88203		1.1338	5	15	0.10	0.99	
2-Butanone			0.4374m	0.4425m	0.4659	0.4528	0.4263	0.4242	0.4181	AVRG		2.28220		0.4382	4	15	0.05	0.99	
2,2-Dichloropropane		0.8823	0.9106	0.8617	0.8091	0.8523	0.8569	0.8014	0.7814	AVRG		1.18417		0.8445	5	15	0.05	0.99	
cis-1,2-Dichloroethene		0.6758	0.5870	0.5909	0.5993	0.6379	0.6330	0.6018	0.6165	AVRG		1.61870		0.6178	5	15	0.05	0.99	
Chloroform		1.1544	1.0214	1.0125	1.0111	1.0575	1.0386	0.9802	0.9973	AVRG		0.96700		1.0341	5	15	0.05	0.99	
Bromochloromethane		0.2558	0.2945	0.2724	0.2735	0.2989	0.2880	0.2750	0.2808	AVRG		3.57292		0.2799	5	15	0.05	0.99	
1,1,1-Trichloroethane		0.7233	0.7925	0.8149	0.7868	0.7875	0.8201	0.7985	0.7972	AVRG		1.26566		0.7901	4	15	0.05	0.99	
1,1-Dichloropropene		0.4881	0.4027	0.4359	0.4348	0.4412	0.4618	0.4584	0.4453	AVRG		2.24199		0.4460	6	15	0.05	0.99	
Carbon Tetrachloride		0.3427	0.3640	0.3719	0.3597	0.3735	0.3947	0.3997	0.3890	AVRG		2.67089		0.3744	5	15	0.05	0.99	
1,2-Dichloroethane		0.5036	0.4840	0.4680	0.4706	0.5251	0.5003	0.4835	0.4879	AVRG		2.03927		0.4904	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Benzene		1.6182	1.3698	1.3378	1.3553	1.4441	1.4027	1.3444	1.3491	AVRG		0.71293		1.4027	7	15	0.05	0.99	
Trichloroethene		0.2952	0.3204	0.3249	0.3272	0.3341	0.3371	0.3272	0.3258	AVRG		3.08640		0.3240	4	15	0.05	0.99	
1,2-Dichloropropane		0.4202	0.3815	0.3657	0.3744	0.4003	0.3887	0.3756	0.3763	AVRG		2.59515		0.3853	5	15	0.05	0.99	
Bromodichloromethane		0.4908	0.4362	0.4294	0.4367	0.4655	0.4555	0.4467	0.4513	AVRG		2.21478		0.4515	4	15	0.05	0.99	
Dibromomethane		0.2106	0.2035	0.2061	0.2090	0.2263	0.2168	0.2123	0.2164	AVRG		4.70339		0.2126	3	15	0.05	0.99	
4-Methyl-2-Pentanone			0.5017	0.4737	0.5008	0.5413	0.5143	0.5184	0.5047	AVRG		1.96909		0.5078	4	15	0.05	0.99	
cis-1,3-Dichloropropene		0.6544	0.5774	0.5610	0.5688	0.6243	0.5965	0.5732	0.5772	AVRG		1.69034		0.5916	5	15	0.05	0.99	
Toluene		0.8595	0.8077	0.7718	0.7863	0.8228	0.8171	0.7955	0.7871	AVRG		1.24072		0.8060	3	15	0.05	0.99	
trans-1,3-Dichloropropene		0.6232	0.5483	0.5380	0.5373	0.5831	0.5634	0.5506	0.5426	AVRG		1.78314		0.5608	5	15	0.05	0.99	
1,1,2-Trichloroethane		0.1769	0.1805	0.1699	0.1664	0.1759	0.1729	0.1708	0.1705	AVRG		5.78101		0.1730	3	15	0.05	0.99	
2-Hexanone			0.3646	0.3512	0.3534	0.3665	0.3512	0.3563	0.3388	AVRG		2.82033		0.3546	3	15	0.05	0.99	
1,3-Dichloropropane		0.5942	0.5517	0.5778	0.5708	0.6084	0.5820	0.5697	0.5630	AVRG		1.73250		0.5772	3	15	0.05	0.99	
Tetrachloroethene		0.2813	0.3083	0.3073	0.3105	0.2906	0.3048	0.3144	0.2985	AVRG		3.31154		0.3020	4	15	0.05	0.99	
Dibromochloromethane		0.2981	0.2975	0.3133	0.3097	0.3422	0.3419	0.3352	0.3366	AVRG		3.10739		0.3218	6	15	0.05	0.99	
1,2-Dibromoethane		0.3343	0.3195	0.3111	0.3168	0.3386	0.3305	0.3252	0.3231	AVRG		3.07799		0.3249	3	15	0.05	0.99	
Chlorobenzene		1.0636	0.8636	0.8736	0.8841	0.9170	0.9078	0.8893	0.8884	AVRG		1.09778		0.9109	7	15	0.30	0.99	
1,1,1,2-Tetrachloroethane		0.3289	0.3007	0.2905	0.3033	0.3223	0.3178	0.3051	0.3122	AVRG		3.22465		0.3101	4	15	0.05	0.99	
Ethylbenzene		1.8164	1.5576m	1.5472	1.5279	1.5599	1.5735	1.5605	1.5359	AVRG		0.63097		1.5849	6	15	0.05	0.99	
m,p-Xylenes	0.8126	0.6670	0.6081	0.5951	0.5963	0.6093	0.6113	0.6055	0.6005	AVRG		1.57737		0.6340	11	15	0.05	0.99	
o-Xylene		0.6225	0.5769	0.5965	0.5842	0.6160	0.6173	0.6131	0.6167	AVRG		1.65179		0.6054	3	15	0.05	0.99	
Styrene		1.1809	1.0293	1.0230	1.0098	1.1069	1.0979	1.0741	1.0791	AVRG		0.93013		1.0751	5	15	0.05	0.99	
Bromoform		0.2813	0.2451	0.2429	0.2536	0.2790	0.2805	0.2814	0.2838	AVRG		3.72499		0.2685	7	15	0.10	0.99	
Isopropylbenzene		2.6340	2.4459	2.4644	2.4619	2.3837	2.4531	2.4177	2.3521	AVRG		0.40790		2.4516	3	15	0.05	0.99	
1,1,2,2-Tetrachloroethane		0.6988	0.7477	0.7321	0.7559	0.8181	0.7875	0.7754	0.7719	AVRG		1.31420		0.7609	5	15	0.30	0.99	
1,2,3-Trichloropropane		0.8644	0.7826	0.7281	0.7408	0.7769	0.7517	0.7331	0.7298	AVRG		1.30990		0.7634	6	15	0.05	0.99	
Propylbenzene		3.4233	3.1723	3.1627	3.1608	3.0333	3.1172	3.0570	2.9549	AVRG		0.31896		3.1352	4	15	0.05	0.99	
Bromobenzene		0.7453	0.6405	0.6075	0.6202	0.6505	0.6394	0.6125	0.6182	AVRG		1.55823		0.6418	7	15	0.05	0.99	
1,3,5-Trimethylbenzene		2.3847	2.1816	2.1170	2.1704	2.2076	2.2163	2.1687	2.1520	AVRG		0.45459		2.1998	4	15	0.05	0.99	
2-Chlorotoluene		2.5177	2.2972	2.0882	2.1245	2.1564	2.1026	2.0532	2.0128	AVRG		0.46103		2.1691	8	15	0.05	0.99	
4-Chlorotoluene		2.1289	2.0436	1.9709	1.9732	2.0311	1.9769	1.9074	1.9073	AVRG		0.50190		1.9924	4	15	0.05	0.99	
tert-Butylbenzene		1.7200	1.7102	1.7261	1.7717	1.7091	1.8039	1.8059	1.7634	AVRG		0.57102		1.7513	2	15	0.05	0.99	
1,2,4-Trimethylbenzene		2.2835	2.0267	2.1002	2.2105	2.2639	2.2789	2.2246	2.2158	AVRG		0.45444		2.2005	4	15	0.05	0.99	
sec-Butylbenzene		2.5397	2.5243	2.6290	2.6544	2.5200	2.7086	2.7411	2.6581	AVRG		0.38140		2.6219	3	15	0.05	0.99	
para-Isopropyl Toluene		2.2804	2.0799	2.1212	2.1721	2.1754	2.3166	2.3444	2.3022	AVRG		0.44963		2.2240	4	15	0.05	0.99	
1,3-Dichlorobenzene		1.4707	1.2728	1.2681	1.2735	1.3519	1.3248	1.2883	1.2874	AVRG		0.75919		1.3172	5	15	0.05	0.99	
1,4-Dichlorobenzene		1.7209	1.3696	1.3416	1.3403	1.3998	1.3475	1.3265	1.3408	AVRG		0.71511		1.3984	9	15	0.05	0.99	
n-Butylbenzene		1.8659	1.6810	1.7742m	1.8291	1.8708	2.0956	2.1699	2.1163	AVRG		0.51939		1.9253	9	15	0.05	0.99	
1,2-Dichlorobenzene		1.4253	1.2568	1.2342	1.2459	1.3406	1.3156	1.2748	1.2868	AVRG		0.77071		1.2975	5	15	0.05	0.99	
1,2-Dibromo-3-Chloropropane		0.2382	0.2164	0.1995	0.2032	0.2213	0.2137	0.2173	0.2113	AVRG		4.64849		0.2151	5	15	0.05	0.99	
1,2,4-Trichlorobenzene		0.8564	0.6993	0.7330	0.8043	0.8930	0.9412	0.9506	0.9371	AVRG		1.17386		0.8519	11	15	0.05	0.99	
Hexachlorobutadiene		0.3762	0.3410	0.3453	0.3430	0.3390	0.3645	0.3750	0.3662	AVRG		2.80675		0.3563	4	15	0.05	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r^2 %RSD	Max %RSD	Min RF	Min r^2	Flg
Naphthalene			1.3519	1.4167	1.6466	1.8947	2.0609	2.1572		QUAD	1.19899	0.50952	-0.00033	1.7547	1.000	15	0.05	0.99	
1,2,3-Trichlorobenzene		0.7894	0.7057	0.7080	0.7655	0.8475	0.8934	0.8925	0.8741	AVRG		1.23532		0.8095	10	15	0.05	0.99	
Dibromofluoromethane	0.5159	0.5197	0.5294	0.5255	0.5272	0.5257	0.5233	0.5238	0.5260	AVRG		1.90820		0.5241	1	15	0.05	0.99	
1,2-Dichloroethane-d4	0.3957	0.4045	0.4084	0.4050	0.4119	0.4054	0.3926	0.3888	0.3902	AVRG		2.49827		0.4003	2	15	0.05	0.99	
Toluene-d8	1.2865	1.2817	1.2760	1.2809	1.2685	1.2769	1.2720	1.2689	1.2483	AVRG		0.78535		1.2733	1	15	0.05	0.99	
Bromofluorobenzene	0.9247	0.9156	0.9084	0.8931	0.8981	0.8844	0.8810	0.8682	0.8640	AVRG		1.11971		0.8931	2	15	0.05	0.99	

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
Freon 12			1.000	-27	2.000	-18	5.000	4	10.00	-3	20.00	4	50.00	13	75.00	12	100.0	15
Chloromethane			1.000	7	2.000	0	5.000	-5	10.00	-3	20.00	4	50.00	1	75.00	-1	100.0	-2
Vinyl Chloride	0.500	-1	1.000	-8	2.000	-5	5.000	0	10.00	-4	20.00	3	50.00	6	75.00	3	100.0	5
Bromomethane			1.000	18	2.000	22	5.000	-3	10.00	-5	20.00	-6	50.00	-9	75.00	-10	100.0	-7
Chloroethane			1.000	-8	2.000	-2	5.000	-1	10.00	-4	20.00	6	50.00	4	75.00	2	100.0	3
Trichlorofluoromethane			1.000	-11	2.000	-14	5.000	2	10.00	-5	20.00	3	50.00	10	75.00	6	100.0	10
Acetone					2.000	14	5.000	7	10.00	10	20.00	0	50.00	-9	75.00	-10	100.0	-12
1,1-Dichloroethene			0.500	-7	2.000	-8	5.000	0	10.00	-3	20.00	2	50.00	7	75.00	6	100.0	3
Iodomethane							5.000	-22	10.00	-10	20.00	8	50.00	10	75.00	6	100.0	8
Methylene Chloride			0.500	13	2.000	-7	5.000	-4	10.00	-4	20.00	6	50.00	1	75.00	-3	100.0	-2
Carbon Disulfide			0.500	-10	2.000	-6	5.000	-4	10.00	-4	20.00	6	50.00	9	75.00	5	100.0	5
MTBE			0.500	9	2.000	-2	5.000	-4	10.00	-4	20.00	5	50.00	0	75.00	-3	100.0	-2
trans-1,2-Dichloroethene			0.500	17	2.000	-5	5.000	-8	10.00	-3	20.00	4	50.00	1	75.00	-3	100.0	-2
Vinyl Acetate									10.00	-25	20.00	12	50.00	6	75.00	3	100.0	4
1,1-Dichloroethane			0.500	8	2.000	-4	5.000	-4	10.00	-2	20.00	5	50.00	1	75.00	-3	100.0	-1
2-Butanone					2.000	0	5.000	1	10.00	6	20.00	3	50.00	-3	75.00	-3	100.0	-5
2,2-Dichloropropane			0.500	4	2.000	8	5.000	2	10.00	-4	20.00	1	50.00	1	75.00	-5	100.0	-7
cis-1,2-Dichloroethene			0.500	9	2.000	-5	5.000	-4	10.00	-3	20.00	3	50.00	2	75.00	-3	100.0	0
Chloroform			0.500	12	2.000	-1	5.000	-2	10.00	-2	20.00	2	50.00	0	75.00	-5	100.0	-4
Bromochloromethane			0.500	-9	2.000	5	5.000	-3	10.00	-2	20.00	7	50.00	3	75.00	-2	100.0	0
1,1,1-Trichloroethane			0.500	-8	2.000	0	5.000	3	10.00	0	20.00	0	50.00	4	75.00	1	100.0	1
1,1-Dichloropropene			0.500	9	2.000	-10	5.000	-2	10.00	-3	20.00	-1	50.00	4	75.00	3	100.0	0
Carbon Tetrachloride			0.500	-8	2.000	-3	5.000	-1	10.00	-4	20.00	0	50.00	5	75.00	7	100.0	4
1,2-Dichloroethane			0.500	3	2.000	-1	5.000	-5	10.00	-4	20.00	7	50.00	2	75.00	-1	100.0	-1
Benzene			0.500	15	2.000	-2	5.000	-5	10.00	-3	20.00	3	50.00	0	75.00	-4	100.0	-4
Trichloroethene			0.500	-9	2.000	-1	5.000	0	10.00	1	20.00	3	50.00	4	75.00	1	100.0	1
1,2-Dichloropropane			0.500	9	2.000	-1	5.000	-5	10.00	-3	20.00	4	50.00	1	75.00	-3	100.0	-2
Bromodichloromethane			0.500	9	2.000	-3	5.000	-5	10.00	-3	20.00	3	50.00	1	75.00	-1	100.0	0
Dibromomethane			0.500	-1	2.000	-4	5.000	-3	10.00	-2	20.00	6	50.00	2	75.00	0	100.0	2
4-Methyl-2-Pentanone					2.000	-1	5.000	-7	10.00	-1	20.00	7	50.00	1	75.00	2	100.0	-1
cis-1,3-Dichloropropene			0.500	11	2.000	-2	5.000	-5	10.00	-4	20.00	6	50.00	1	75.00	-3	100.0	-2
Toluene			0.500	7	2.000	0	5.000	-4	10.00	-2	20.00	2	50.00	1	75.00	-1	100.0	-2
trans-1,3-Dichloropropene			0.500	11	2.000	-2	5.000	-4	10.00	-4	20.00	4	50.00	0	75.00	-2	100.0	-3
1,1,2-Trichloroethane			0.500	2	2.000	4	5.000	-2	10.00	-4	20.00	2	50.00	0	75.00	-1	100.0	-1
2-Hexanone					2.000	3	5.000	-1	10.00	0	20.00	3	50.00	-1	75.00	0	100.0	-4
1,3-Dichloropropane			0.500	3	2.000	-4	5.000	0	10.00	-1	20.00	5	50.00	1	75.00	-1	100.0	-2
Tetrachloroethene			0.500	-7	2.000	2	5.000	2	10.00	3	20.00	-4	50.00	1	75.00	4	100.0	-1
Dibromochloromethane			0.500	-7	2.000	-8	5.000	-3	10.00	-4	20.00	6	50.00	6	75.00	4	100.0	5
1,2-Dibromoethane			0.500	3	2.000	-2	5.000	-4	10.00	-2	20.00	4	50.00	2	75.00	0	100.0	-1
Chlorobenzene			0.500	17	2.000	-5	5.000	-4	10.00	-3	20.00	1	50.00	0	75.00	-2	100.0	-2
1,1,1,2-Tetrachloroethane			0.500	6	2.000	-3	5.000	-6	10.00	-2	20.00	4	50.00	2	75.00	-2	100.0	1
Ethylbenzene			0.500	15	2.000	-2	5.000	-2	10.00	-4	20.00	-2	50.00	-1	75.00	-2	100.0	-3

Spiked Amounts / Drifts	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D	L6	%D	L7	%D	L8	%D	L9	%D
m,p-Xylenes	0.500	28	1.000	5	4.000	-4	10.00	-6	20.00	-6	40.00	-4	100.0	-4	150.0	-4	200.0	-5
o-Xylene			0.500	3	2.000	-5	5.000	-1	10.00	-3	20.00	2	50.00	2	75.00	1	100.0	2
Styrene			0.500	10	2.000	-4	5.000	-5	10.00	-6	20.00	3	50.00	2	75.00	0	100.0	0
Bromoform			0.500	5	2.000	-9	5.000	-10	10.00	-6	20.00	4	50.00	4	75.00	5	100.0	6
Isopropylbenzene			0.500	7	2.000	0	5.000	1	10.00	0	20.00	-3	50.00	0	75.00	-1	100.0	-4
1,1,2,2-Tetrachloroethane			0.500	-8	2.000	-2	5.000	-4	10.00	-1	20.00	8	50.00	3	75.00	2	100.0	1
1,2,3-Trichloropropane			0.500	13	2.000	3	5.000	-5	10.00	-3	20.00	2	50.00	-2	75.00	-4	100.0	-4
Propylbenzene			0.500	9	2.000	1	5.000	1	10.00	1	20.00	-3	50.00	-1	75.00	-2	100.0	-6
Bromobenzene			0.500	16	2.000	0	5.000	-5	10.00	-3	20.00	1	50.00	0	75.00	-5	100.0	-4
1,3,5-Trimethylbenzene			0.500	8	2.000	-1	5.000	-4	10.00	-1	20.00	0	50.00	1	75.00	-1	100.0	-2
2-Chlorotoluene			0.500	16	2.000	6	5.000	-4	10.00	-2	20.00	-1	50.00	-3	75.00	-5	100.0	-7
4-Chlorotoluene			0.500	7	2.000	3	5.000	-1	10.00	-1	20.00	2	50.00	-1	75.00	-4	100.0	-4
tert-Butylbenzene			0.500	-2	2.000	-2	5.000	-1	10.00	1	20.00	-2	50.00	3	75.00	3	100.0	1
1,2,4-Trimethylbenzene			0.500	4	2.000	-8	5.000	-5	10.00	0	20.00	3	50.00	4	75.00	1	100.0	1
sec-Butylbenzene			0.500	-3	2.000	-4	5.000	0	10.00	1	20.00	-4	50.00	3	75.00	5	100.0	1
para-Isopropyl Toluene			0.500	3	2.000	-6	5.000	-5	10.00	-2	20.00	-2	50.00	4	75.00	5	100.0	4
1,3-Dichlorobenzene			0.500	12	2.000	-3	5.000	-4	10.00	-3	20.00	3	50.00	1	75.00	-2	100.0	-2
1,4-Dichlorobenzene			0.500	23	2.000	-2	5.000	-4	10.00	-4	20.00	0	50.00	-4	75.00	-5	100.0	-4
n-Butylbenzene			0.500	-3	2.000	-13	5.000	-8	10.00	-5	20.00	-3	50.00	9	75.00	13	100.0	10
1,2-Dichlorobenzene			0.500	10	2.000	-3	5.000	-5	10.00	-4	20.00	3	50.00	1	75.00	-2	100.0	-1
1,2-Dibromo-3-Chloropropane			0.500	11	2.000	1	5.000	-7	10.00	-6	20.00	3	50.00	-1	75.00	1	100.0	-2
1,2,4-Trichlorobenzene			0.500	1	2.000	-18	5.000	-14	10.00	-6	20.00	5	50.00	10	75.00	12	100.0	10
Hexachlorobutadiene			0.500	6	2.000	-4	5.000	-3	10.00	-4	20.00	-5	50.00	2	75.00	5	100.0	3
Naphthalene					2.000	29	5.000	-4	10.00	-5	20.00	0	50.00	0	75.00	0		
1,2,3-Trichlorobenzene			0.500	-2	2.000	-13	5.000	-13	10.00	-5	20.00	5	50.00	10	75.00	10	100.0	8
Dibromofluoromethane	50.00	-2	50.00	-1	50.00	1	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	0
1,2-Dichloroethane-d4	50.00	-1	50.00	1	50.00	2	50.00	1	50.00	3	50.00	1	50.00	-2	50.00	-3	50.00	-3
Toluene-d8	50.00	1	50.00	1	50.00	0	50.00	1	50.00	0	50.00	0	50.00	0	50.00	0	50.00	-2
Bromofluorobenzene	50.00	4	50.00	3	50.00	2	50.00	0	50.00	1	50.00	-1	50.00	-1	50.00	-3	50.00	-3

BO 03/25/10 [Freon 12]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Chloromethane]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Vinyl Chloride]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Chloroethane]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Bromomethane]: Corrected fronting or tailing peak integration in 2PPB (lco07).

BO 03/25/10 [Trichlorofluoromethane]: Corrected fronting or tailing peak integration in multiple levels.

BO 03/25/10 [Acetone]: Corrected baseline noise or negative peak in 10PPB (lco09).
BO 03/25/10 [Freon 113]: Corrected fronting or tailing peak integration in 10PPB (lco09).
BO 03/25/10 [1,1-Dichloroethene]: Corrected fronting or tailing peak integration in multiple levels.
BO 03/25/10 [2-Butanone]: Corrected baseline noise or negative peak in multiple levels.
BO 03/25/10 [Ethylbenzene]: Corrected baseline noise or negative peak in 2PPB (lco07).
BO 03/25/10 [n-Butylbenzene]: Corrected baseline noise or negative peak in 5PPB (lco08).
BO 03/25/10 [2-Chloroethylvinylether]: Cannot report 8260c due to ICV failure
BO 03/25/10 [Naphthalene]: Quad curve

Analyst: BO

Date: 03/25/10

Reviewer: LW

Date: 03/26/10

m=manual integration

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

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA12
Calnum : 880120005001

Name : 8260G12W
Cal Date : 24-MAR-2010

Type : WATER

ICV 880121453004 (lcp04 25-MAR-2010) stds: S14253 (10000X), S14144 (10000X),
S13925 (10000X), S14236 (10000X), S14026 (5000X)

Analyte	Spiked	Quant	Units	%D	Max	Flags
Freon 12	25.00	29.21	ug/L	17	25	m
Chloromethane	25.00	23.54	ug/L	-6	25	m
Vinyl Chloride	25.00	24.43	ug/L	-2	25	
Bromomethane	25.00	24.63	ug/L	-1	25	
Chloroethane	25.00	27.14	ug/L	9	25	
Trichlorofluoromethane	25.00	26.85	ug/L	7	25	
Acetone	25.00	27.27	ug/L	9	25	
1,1-Dichloroethene	25.00	26.84	ug/L	7	25	
Iodomethane	25.00	29.08	ug/L	16	25	
Methylene Chloride	25.00	26.15	ug/L	5	25	
Carbon Disulfide	25.00	24.45	ug/L	-2	25	
MTBE	25.00	22.75	ug/L	-9	25	
trans-1,2-Dichloroethene	25.00	26.55	ug/L	6	25	
Vinyl Acetate	25.00	26.24	ug/L	5	25	
1,1-Dichloroethane	25.00	26.46	ug/L	6	25	
2-Butanone	25.00	24.53	ug/L	-2	25	
2,2-Dichloropropane	25.00	28.35	ug/L	13	25	
cis-1,2-Dichloroethene	25.00	27.02	ug/L	8	25	
Chloroform	25.00	25.83	ug/L	3	25	
Bromochloromethane	25.00	26.44	ug/L	6	25	
1,1,1-Trichloroethane	25.00	27.05	ug/L	8	25	
1,1-Dichloropropene	25.00	26.19	ug/L	5	25	
Carbon Tetrachloride	25.00	27.25	ug/L	9	25	
1,2-Dichloroethane	25.00	25.08	ug/L	0	25	
Benzene	25.00	25.55	ug/L	2	25	
Trichloroethene	25.00	25.53	ug/L	2	25	
1,2-Dichloropropane	25.00	25.40	ug/L	2	25	
Bromodichloromethane	25.00	25.69	ug/L	3	25	
Dibromomethane	25.00	25.74	ug/L	3	25	
4-Methyl-2-Pentanone	25.00	22.95	ug/L	-8	25	
cis-1,3-Dichloropropene	25.00	25.42	ug/L	2	25	
Toluene	25.00	27.03	ug/L	8	25	
trans-1,3-Dichloropropene	25.00	23.33	ug/L	-7	25	
1,1,2-Trichloroethane	25.00	25.32	ug/L	1	25	
2-Hexanone	25.00	23.57	ug/L	-6	25	
1,3-Dichloropropane	25.00	25.47	ug/L	2	25	
Tetrachloroethene	25.00	26.30	ug/L	5	25	
Dibromochloromethane	25.00	25.73	ug/L	3	25	
1,2-Dibromoethane	25.00	24.32	ug/L	-3	25	
Chlorobenzene	25.00	24.65	ug/L	-1	25	
1,1,1,2-Tetrachloroethane	25.00	24.72	ug/L	-1	25	
Ethylbenzene	25.00	25.67	ug/L	3	25	
m,p-Xylenes	50.00	50.87	ug/L	2	25	
o-Xylene	25.00	27.05	ug/L	8	25	
Styrene	25.00	26.32	ug/L	5	25	
Bromoform	25.00	24.19	ug/L	-3	25	
Isopropylbenzene	25.00	22.72	ug/L	-9	25	
1,1,2,2-Tetrachloroethane	25.00	23.73	ug/L	-5	25	

Analyte	Spiked	Quant	Units	%D	Max	Flags
1,2,3-Trichloropropane	25.00	22.38	ug/L	-10	25	
Propylbenzene	25.00	26.27	ug/L	5	25	
Bromobenzene	25.00	24.64	ug/L	-1	25	
1,3,5-Trimethylbenzene	25.00	26.28	ug/L	5	25	
2-Chlorotoluene	25.00	25.34	ug/L	1	25	
4-Chlorotoluene	25.00	25.15	ug/L	1	25	
tert-Butylbenzene	25.00	26.38	ug/L	6	25	
1,2,4-Trimethylbenzene	25.00	25.91	ug/L	4	25	
sec-Butylbenzene	25.00	27.06	ug/L	8	25	
para-Isopropyl Toluene	25.00	24.76	ug/L	-1	25	
1,3-Dichlorobenzene	25.00	25.52	ug/L	2	25	
1,4-Dichlorobenzene	25.00	24.36	ug/L	-3	25	
n-Butylbenzene	25.00	25.80	ug/L	3	25	
1,2-Dichlorobenzene	25.00	25.54	ug/L	2	25	
1,2-Dibromo-3-Chloropropane	25.00	21.41	ug/L	-14	25	
1,2,4-Trichlorobenzene	25.00	23.60	ug/L	-6	25	
Hexachlorobutadiene	25.00	25.89	ug/L	4	25	
Naphthalene	25.00	21.44	ug/L	-14	25	
1,2,3-Trichlorobenzene	25.00	24.33	ug/L	-3	25	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name : 20PPB IDF : 1.0
 Seqnum : 480124525004.1 File : icr04 Time : 27-MAR-2010 14:22
 Cal : 480039377001 Caldate : 27-JAN-2010 Caltype : WATER
 Standards: S14216 (25000X), S14108 (25000X), S13625 (50000X), S13719 (25000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5792	0.4918	20.00	16.98	ug/L	-15	20	0.0500	
Chloromethane	0.8790	0.7923	20.00	18.03	ug/L	-10	20	0.1000	
Vinyl Chloride	0.6271	0.6157	20.00	19.64	ug/L	-2	20	0.0500	
Bromomethane	0.3610	0.3813	20.00	21.12	ug/L	6	20	0.0500	
Chloroethane	0.4411	0.3971	20.00	18.01	ug/L	-10	20	0.0500	
Trichlorofluoromethane	0.6268	0.5392	20.00	17.21	ug/L	-14	20	0.0500	m
Acetone	0.1056	0.0829	20.00	15.70	ug/L	-21	20	0.0500	c- ***
1,1-Dichloroethene	0.3802	0.4077	20.00	21.45	ug/L	7	20	0.0500	
Iodomethane	0.5839	0.3677	20.00	12.60	ug/L	-37	20	0.0500	c- ***
Methylene Chloride	0.5313	0.4830	20.00	18.18	ug/L	-9	20	0.0500	
Carbon Disulfide	1.6806	1.8228	20.00	21.69	ug/L	8	20	0.0500	
MTBE	0.9672	0.8706	20.00	18.00	ug/L	-10	20	0.0500	
trans-1,2-Dichloroethene	0.4686	0.4435	20.00	18.93	ug/L	-5	20	0.0500	
Vinyl Acetate	0.7245	0.8157	20.00	22.52	ug/L	13	20	0.0500	
1,1-Dichloroethane	0.9167	0.8991	20.00	19.62	ug/L	-2	20	0.1000	
2-Butanone	0.1773	0.1496	20.00	16.88	ug/L	-16	20	0.0500	
2,2-Dichloropropane	0.5197	0.5959	20.00	22.94	ug/L	15	20	0.0500	
cis-1,2-Dichloroethene	0.5067	0.4892	20.00	19.31	ug/L	-3	20	0.0500	
Chloroform	0.8063	0.7623	20.00	18.91	ug/L	-5	20	0.0500	
Bromochloromethane	0.2159	0.2042	20.00	18.92	ug/L	-5	20	0.0500	
1,1,1-Trichloroethane	0.5481	0.5323	20.00	19.42	ug/L	-3	20	0.0500	
1,1-Dichloropropene	0.3652	0.3611	20.00	19.78	ug/L	-1	20	0.0500	
Carbon Tetrachloride	0.2856	0.2726	20.00	19.09	ug/L	-5	20	0.0500	
1,2-Dichloroethane	0.2817	0.2483	20.00	17.63	ug/L	-12	20	0.0500	
Benzene	1.0704	1.0567	20.00	19.74	ug/L	-1	20	0.0500	
Trichloroethene	0.2855	0.2610	20.00	18.29	ug/L	-9	20	0.0500	
1,2-Dichloropropane	0.3485	0.3166	20.00	18.17	ug/L	-9	20	0.0500	
Bromodichloromethane	0.3617	0.3112	20.00	17.21	ug/L	-14	20	0.0500	
Dibromomethane	0.1582	0.1367	20.00	17.28	ug/L	-14	20	0.0500	
4-Methyl-2-Pentanone	0.2323	0.1903	20.00	16.39	ug/L	-18	20	0.0500	
cis-1,3-Dichloropropene	0.4552	0.4105	20.00	18.03	ug/L	-10	20	0.0500	
Toluene	0.7834	0.7415	20.00	18.93	ug/L	-5	20	0.0500	
trans-1,3-Dichloropropene	0.4642	0.4134	20.00	17.81	ug/L	-11	20	0.0500	
1,1,2-Trichloroethane	0.1436	0.1305	20.00	18.17	ug/L	-9	20	0.0500	
2-Hexanone	0.2041	0.1641	20.00	16.08	ug/L	-20	20	0.0500	
1,3-Dichloropropane	0.4370	0.4041	20.00	18.50	ug/L	-8	20	0.0500	
Tetrachloroethene	0.2974	0.2871	20.00	19.31	ug/L	-3	20	0.0500	
Dibromochloromethane	0.3029	0.2562	20.00	16.91	ug/L	-15	20	0.0500	
1,2-Dibromoethane	0.2527	0.2283	20.00	18.07	ug/L	-10	20	0.0500	
Chlorobenzene	0.8508	0.8110	20.00	19.06	ug/L	-5	20	0.3000	
1,1,1,2-Tetrachloroethane	0.2959	0.2657	20.00	17.96	ug/L	-10	20	0.0500	
Ethylbenzene	1.4015	1.4241	20.00	20.32	ug/L	2	20	0.0500	
m,p-Xylenes	0.5056	0.5372	40.00	42.50	ug/L	6	20	0.0500	
o-Xylene	0.5265	0.5153	20.00	19.58	ug/L	-2	20	0.0500	
Styrene	0.9089	0.8950	20.00	19.70	ug/L	-2	20	0.0500	
Bromoform	0.1737	0.1479	20.00	17.03	ug/L	-15	20	0.1000	
Isopropylbenzene	2.6074	2.7800	20.00	21.32	ug/L	7	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.6064	0.5872	20.00	19.37	ug/L	-3	20	0.3000	
1,2,3-Trichloropropane	0.1368	0.1301	20.00	19.02	ug/L	-5	20	0.0500	
Propylbenzene	3.2004	3.5421	20.00	22.14	ug/L	11	20	0.0500	
Bromobenzene	0.6876	0.7013	20.00	20.40	ug/L	2	20	0.0500	
1,3,5-Trimethylbenzene	2.0495	2.2262	20.00	21.73	ug/L	9	20	0.0500	
2-Chlorotoluene	2.1411	2.2926	20.00	21.42	ug/L	7	20	0.0500	
4-Chlorotoluene	2.0800	2.1052	20.00	20.24	ug/L	1	20	0.0500	
tert-Butylbenzene	1.7249	1.7591	20.00	20.40	ug/L	2	20	0.0500	
1,2,4-Trimethylbenzene	2.1567	2.2124	20.00	20.52	ug/L	3	20	0.0500	
sec-Butylbenzene	2.6657	2.9649	20.00	22.25	ug/L	11	20	0.0500	
para-Isopropyl Toluene	2.0335	2.2229	20.00	21.86	ug/L	9	20	0.0500	
1,3-Dichlorobenzene	1.2884	1.2408	20.00	19.26	ug/L	-4	20	0.0500	
1,4-Dichlorobenzene	1.3177	1.2539	20.00	19.03	ug/L	-5	20	0.0500	
n-Butylbenzene	2.0640	2.1518	20.00	20.85	ug/L	4	20	0.0500	
1,2-Dichlorobenzene	1.1774	1.1234	20.00	19.08	ug/L	-5	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.0900	0.0755	20.00	16.78	ug/L	-16	20	0.0500	
1,2,4-Trichlorobenzene	0.6833	0.6368	20.00	18.64	ug/L	-7	20	0.0500	
Hexachlorobutadiene	0.3229	0.3348	20.00	20.74	ug/L	4	20	0.0500	
Naphthalene	1.3048	1.2037	20.00	18.45	ug/L	-8	20	0.0500	
1,2,3-Trichlorobenzene	0.6040	0.5573	20.00	18.45	ug/L	-8	20	0.0500	
Dibromofluoromethane	0.5695	0.5700	50.00	50.04	ug/L	0	20	0.0500	
1,2-Dichloroethane-d4	0.2764	0.2691	50.00	48.69	ug/L	-3	20	0.0500	
Toluene-d8	1.3769	1.4306	50.00	51.95	ug/L	4	20	0.0500	
Bromofluorobenzene	1.0267	1.0376	50.00	50.53	ug/L	1	20	0.0500	

ISTD (ICAL iar13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	2099875	1864450	-11.21	12.37	12.35	-0.02
1,4-Difluorobenzene	3438431	3070975	-10.69	13.66	13.64	-0.02
Chlorobenzene-d5	2768728	2396784	-13.43	17.68	17.66	-0.02
1,4-Dichlorobenzene-d4	1353103	1105843	-18.27	20.18	20.16	-0.02

BJP 03/27/10 [Trichlorofluoromethane]: Picked or reassigned peak. [general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

--low bias c=CCV m>manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : 25PPB IDF : 1.0
 Seqnum : 880122884003.1 File : lcg03 Time : 26-MAR-2010 08:53
 Cal : 880120005001 Caldate : 24-MAR-2010 Caltype : WATER
 Standards: S14216 (20000X), S14108 (20000X), S14228 (40000X), S13719 (20000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5854	0.6929	25.00	29.59	ug/L	18	20	0.0500	m
Chloromethane	1.1806	1.1663	25.00	24.70	ug/L	-1	20	0.1000	
Vinyl Chloride	0.8346	0.9027	25.00	27.04	ug/L	8	20	0.0500	
Bromomethane	0.5320	0.4923	25.00	23.13	ug/L	-7	20	0.0500	
Chloroethane	0.4805	0.4830	25.00	25.13	ug/L	1	20	0.0500	
Trichlorofluoromethane	0.7988	0.8638	25.00	27.03	ug/L	8	20	0.0500	m
Acetone	0.2854	0.2798	25.00	24.51	ug/L	-2	20	0.0500	
1,1-Dichloroethene	0.4440	0.4566	25.00	25.71	ug/L	3	20	0.0500	
Iodomethane	0.6165	0.5438	25.00	22.05	ug/L	-12	20	0.0500	
Methylene Chloride	0.5907	0.6206	25.00	26.27	ug/L	5	20	0.0500	
Carbon Disulfide	1.8645	2.0571	25.00	27.58	ug/L	10	20	0.0500	
MTBE	2.0434	2.0640	25.00	25.25	ug/L	1	20	0.0500	
trans-1,2-Dichloroethene	0.5390	0.5383	25.00	24.97	ug/L	0	20	0.0500	
Vinyl Acetate	1.7861	1.9750	25.00	27.64	ug/L	11	20	0.0500	
1,1-Dichloroethane	1.1338	1.2085	25.00	26.65	ug/L	7	20	0.1000	
2-Butanone	0.4382	0.4457	25.00	25.43	ug/L	2	20	0.0500	
2,2-Dichloropropane	0.8445	0.9649	25.00	28.56	ug/L	14	20	0.0500	
cis-1,2-Dichloroethene	0.6178	0.6355	25.00	25.72	ug/L	3	20	0.0500	
Chloroform	1.0341	1.0752	25.00	25.99	ug/L	4	20	0.0500	
Bromochloromethane	0.2799	0.2942	25.00	26.28	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.7901	0.8512	25.00	26.93	ug/L	8	20	0.0500	
1,1-Dichloropropene	0.4460	0.4541	25.00	25.45	ug/L	2	20	0.0500	
Carbon Tetrachloride	0.3744	0.3701	25.00	24.72	ug/L	-1	20	0.0500	
1,2-Dichloroethane	0.4904	0.5085	25.00	25.93	ug/L	4	20	0.0500	
Benzene	1.4027	1.4007	25.00	24.97	ug/L	0	20	0.0500	
Trichloroethene	0.3240	0.3259	25.00	25.15	ug/L	1	20	0.0500	
1,2-Dichloropropane	0.3853	0.3990	25.00	25.89	ug/L	4	20	0.0500	
Bromodichloromethane	0.4515	0.4511	25.00	24.98	ug/L	0	20	0.0500	
Dibromomethane	0.2126	0.2197	25.00	25.83	ug/L	3	20	0.0500	
4-Methyl-2-Pentanone	0.5078	0.4792	25.00	23.59	ug/L	-6	20	0.0500	
cis-1,3-Dichloropropene	0.5916	0.6163	25.00	26.05	ug/L	4	20	0.0500	
Toluene	0.8060	0.7777	25.00	24.12	ug/L	-4	20	0.0500	
trans-1,3-Dichloropropene	0.5608	0.5631	25.00	25.10	ug/L	0	20	0.0500	
1,1,2-Trichloroethane	0.1730	0.1711	25.00	24.73	ug/L	-1	20	0.0500	
2-Hexanone	0.3546	0.3202	25.00	22.58	ug/L	-10	20	0.0500	
1,3-Dichloropropane	0.5772	0.5785	25.00	25.05	ug/L	0	20	0.0500	
Tetrachloroethene	0.3020	0.2838	25.00	23.50	ug/L	-6	20	0.0500	
Dibromochloromethane	0.3218	0.3149	25.00	24.46	ug/L	-2	20	0.0500	
1,2-Dibromoethane	0.3249	0.3105	25.00	23.90	ug/L	-4	20	0.0500	
Chlorobenzene	0.9109	0.8648	25.00	23.73	ug/L	-5	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3101	0.2996	25.00	24.15	ug/L	-3	20	0.0500	
Ethylbenzene	1.5849	1.5085	25.00	23.80	ug/L	-5	20	0.0500	
m,p-Xylenes	0.6340	0.5814	50.00	45.86	ug/L	-8	20	0.0500	
o-Xylene	0.6054	0.5831	25.00	24.08	ug/L	-4	20	0.0500	
Styrene	1.0751	1.0409	25.00	24.20	ug/L	-3	20	0.0500	
Bromoform	0.2685	0.2416	25.00	22.50	ug/L	-10	20	0.1000	
Isopropylbenzene	2.4516	2.3757	25.00	24.23	ug/L	-3	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7609	0.7532	25.00	24.75	ug/L	-1	20	0.3000	
1,2,3-Trichloropropane	0.7634	0.6964	25.00	22.81	ug/L	-9	20	0.0500	
Propylbenzene	3.1352	3.0963	25.00	24.69	ug/L	-1	20	0.0500	
Bromobenzene	0.6418	0.6101	25.00	23.77	ug/L	-5	20	0.0500	
1,3,5-Trimethylbenzene	2.1998	2.1476	25.00	24.41	ug/L	-2	20	0.0500	
2-Chlorotoluene	2.1691	2.0787	25.00	23.96	ug/L	-4	20	0.0500	
4-Chlorotoluene	1.9924	1.9465	25.00	24.42	ug/L	-2	20	0.0500	
tert-Butylbenzene	1.7513	1.7082	25.00	24.39	ug/L	-2	20	0.0500	
1,2,4-Trimethylbenzene	2.2005	2.1673	25.00	24.62	ug/L	-2	20	0.0500	
sec-Butylbenzene	2.6219	2.6059	25.00	24.85	ug/L	-1	20	0.0500	
para-Isopropyl Toluene	2.2240	2.1226	25.00	23.86	ug/L	-5	20	0.0500	
1,3-Dichlorobenzene	1.3172	1.2674	25.00	24.06	ug/L	-4	20	0.0500	
1,4-Dichlorobenzene	1.3984	1.3004	25.00	23.25	ug/L	-7	20	0.0500	
n-Butylbenzene	1.9253	1.8680	25.00	24.25	ug/L	-3	20	0.0500	
1,2-Dichlorobenzene	1.2975	1.2572	25.00	24.22	ug/L	-3	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.2151	0.1873	25.00	21.77	ug/L	-13	20	0.0500	
1,2,4-Trichlorobenzene	0.8519	0.8004	25.00	23.49	ug/L	-6	20	0.0500	
Hexachlorobutadiene	0.3563	0.3364	25.00	23.60	ug/L	-6	20	0.0500	
Naphthalene	1.7547	1.5903	25.00	20.93	ug/L	-16	20	0.0500	
1,2,3-Trichlorobenzene	0.8095	0.7567	25.00	23.37	ug/L	-7	20	0.0500	
Dibromofluoromethane	0.5241	0.5515	50.00	52.62	ug/L	5	20	0.0500	
1,2-Dichloroethane-d4	0.4003	0.4056	50.00	50.67	ug/L	1	20	0.0500	
Toluene-d8	1.2733	1.2662	50.00	49.72	ug/L	-1	20	0.0500	
Bromofluorobenzene	0.8931	0.9080	50.00	50.83	ug/L	2	20	0.0500	

ISTD (ICAL lcoll)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	428911	372321	-13.19	9.95	9.95	0.00
1,4-Difluorobenzene	747306	678416	-9.22	10.81	10.81	0.00
Chlorobenzene-d5	776886	715312	-7.93	13.71	13.71	0.00
1,4-Dichlorobenzene-d4	496877	445730	-10.29	15.79	15.79	0.01

BO 03/26/10 [Freon 12]: Corrected fronting or tailing peak integration. [general version]

BO 03/26/10 [Trichlorofluoromethane]: Corrected fronting or tailing peak integration. [general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 218881 MSVOA Water
EPA 8260B

Inst : MSVOA12 Run Name : 25PPB IDF : 1.0
 Seqnum : 880122884013.1 File : lcq13 Time : 26-MAR-2010 13:45
 Cal : 880120005001 Caldate : 24-MAR-2010 Caltype : WATER
 Standards: S14216 (20000X), S14108 (20000X), S14228 (40000X), S13719 (20000X),
 S14026 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Freon 12	0.5854	0.7342	25.00	31.36	ug/L	25	20	0.0500	c+ m ***
Chloromethane	1.1806	1.2706	25.00	26.90	ug/L	8	20	0.1000	
Vinyl Chloride	0.8346	0.9690	25.00	29.03	ug/L	16	20	0.0500	m
Bromomethane	0.5320	0.5244	25.00	24.64	ug/L	-1	20	0.0500	
Chloroethane	0.4805	0.5503	25.00	28.63	ug/L	15	20	0.0500	m
Trichlorofluoromethane	0.7988	0.9322	25.00	29.17	ug/L	17	20	0.0500	m
Acetone	0.2854	0.2626	25.00	23.00	ug/L	-8	20	0.0500	
1,1-Dichloroethene	0.4440	0.4992	25.00	28.11	ug/L	12	20	0.0500	
Iodomethane	0.6165	0.5903	25.00	23.94	ug/L	-4	20	0.0500	
Methylene Chloride	0.5907	0.6341	25.00	26.84	ug/L	7	20	0.0500	
Carbon Disulfide	1.8645	2.2145	25.00	29.69	ug/L	19	20	0.0500	
MTBE	2.0434	2.0617	25.00	25.22	ug/L	1	20	0.0500	
trans-1,2-Dichloroethene	0.5390	0.5684	25.00	26.36	ug/L	5	20	0.0500	
Vinyl Acetate	1.7861	1.9173	25.00	26.84	ug/L	7	20	0.0500	
1,1-Dichloroethane	1.1338	1.2587	25.00	27.76	ug/L	11	20	0.1000	
2-Butanone	0.4382	0.4237	25.00	24.17	ug/L	-3	20	0.0500	
2,2-Dichloropropane	0.8445	0.9790	25.00	28.98	ug/L	16	20	0.0500	
cis-1,2-Dichloroethene	0.6178	0.6618	25.00	26.78	ug/L	7	20	0.0500	
Chloroform	1.0341	1.1174	25.00	27.01	ug/L	8	20	0.0500	
Bromochloromethane	0.2799	0.3032	25.00	27.09	ug/L	8	20	0.0500	
1,1,1-Trichloroethane	0.7901	0.8820	25.00	27.91	ug/L	12	20	0.0500	
1,1-Dichloropropene	0.4460	0.4819	25.00	27.01	ug/L	8	20	0.0500	
Carbon Tetrachloride	0.3744	0.4074	25.00	27.20	ug/L	9	20	0.0500	
1,2-Dichloroethane	0.4904	0.5125	25.00	26.13	ug/L	5	20	0.0500	
Benzene	1.4027	1.4673	25.00	26.15	ug/L	5	20	0.0500	
Trichloroethene	0.3240	0.3479	25.00	26.84	ug/L	7	20	0.0500	
1,2-Dichloropropane	0.3853	0.4094	25.00	26.56	ug/L	6	20	0.0500	
Bromodichloromethane	0.4515	0.4648	25.00	25.73	ug/L	3	20	0.0500	
Dibromomethane	0.2126	0.2267	25.00	26.65	ug/L	7	20	0.0500	
4-Methyl-2-Pentanone	0.5078	0.5152	25.00	25.36	ug/L	1	20	0.0500	
cis-1,3-Dichloropropene	0.5916	0.6186	25.00	26.14	ug/L	5	20	0.0500	
Toluene	0.8060	0.8063	25.00	25.01	ug/L	0	20	0.0500	
trans-1,3-Dichloropropene	0.5608	0.5395	25.00	24.05	ug/L	-4	20	0.0500	
1,1,2-Trichloroethane	0.1730	0.1645	25.00	23.78	ug/L	-5	20	0.0500	
2-Hexanone	0.3546	0.3350	25.00	23.62	ug/L	-6	20	0.0500	
1,3-Dichloropropane	0.5772	0.5613	25.00	24.31	ug/L	-3	20	0.0500	
Tetrachloroethene	0.3020	0.2990	25.00	24.75	ug/L	-1	20	0.0500	
Dibromochloromethane	0.3218	0.3102	25.00	24.10	ug/L	-4	20	0.0500	
1,2-Dibromoethane	0.3249	0.3043	25.00	23.42	ug/L	-6	20	0.0500	
Chlorobenzene	0.9109	0.8818	25.00	24.20	ug/L	-3	20	0.3000	
1,1,1,2-Tetrachloroethane	0.3101	0.2905	25.00	23.42	ug/L	-6	20	0.0500	
Ethylbenzene	1.5849	1.6116	25.00	25.42	ug/L	2	20	0.0500	
m,p-Xylenes	0.6340	0.6416	50.00	50.60	ug/L	1	20	0.0500	
o-Xylene	0.6054	0.6350	25.00	26.22	ug/L	5	20	0.0500	
Styrene	1.0751	1.1004	25.00	25.59	ug/L	2	20	0.0500	
Bromoform	0.2685	0.2352	25.00	21.91	ug/L	-12	20	0.1000	
Isopropylbenzene	2.4516	2.5024	25.00	25.52	ug/L	2	20	0.0500	

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
1,1,2,2-Tetrachloroethane	0.7609	0.7244	25.00	23.80	ug/L	-5	20	0.3000	
1,2,3-Trichloropropane	0.7634	0.6858	25.00	22.46	ug/L	-10	20	0.0500	
Propylbenzene	3.1352	3.2415	25.00	25.85	ug/L	3	20	0.0500	
Bromobenzene	0.6418	0.6135	25.00	23.90	ug/L	-4	20	0.0500	
1,3,5-Trimethylbenzene	2.1998	2.2005	25.00	25.01	ug/L	0	20	0.0500	
2-Chlorotoluene	2.1691	2.1912	25.00	25.25	ug/L	1	20	0.0500	
4-Chlorotoluene	1.9924	2.0701	25.00	25.97	ug/L	4	20	0.0500	
tert-Butylbenzene	1.7513	1.8019	25.00	25.72	ug/L	3	20	0.0500	
1,2,4-Trimethylbenzene	2.2005	2.1665	25.00	24.61	ug/L	-2	20	0.0500	
sec-Butylbenzene	2.6219	2.7385	25.00	26.11	ug/L	4	20	0.0500	
para-Isopropyl Toluene	2.2240	2.1710	25.00	24.40	ug/L	-2	20	0.0500	
1,3-Dichlorobenzene	1.3172	1.2996	25.00	24.67	ug/L	-1	20	0.0500	
1,4-Dichlorobenzene	1.3984	1.3328	25.00	23.83	ug/L	-5	20	0.0500	
n-Butylbenzene	1.9253	1.9041	25.00	24.72	ug/L	-1	20	0.0500	
1,2-Dichlorobenzene	1.2975	1.2702	25.00	24.47	ug/L	-2	20	0.0500	
1,2-Dibromo-3-Chloropropane	0.2151	0.1926	25.00	22.38	ug/L	-10	20	0.0500	
1,2,4-Trichlorobenzene	0.8519	0.7775	25.00	22.82	ug/L	-9	20	0.0500	
Hexachlorobutadiene	0.3563	0.3327	25.00	23.35	ug/L	-7	20	0.0500	
Naphthalene	1.7547	1.4741	25.00	19.52	ug/L	-22	20	0.0500	c- ***
1,2,3-Trichlorobenzene	0.8095	0.7301	25.00	22.55	ug/L	-10	20	0.0500	
Dibromofluoromethane	0.5241	0.5580	50.00	53.24	ug/L	6	20	0.0500	
1,2-Dichloroethane-d4	0.4003	0.4032	50.00	50.36	ug/L	1	20	0.0500	
Toluene-d8	1.2733	1.2494	50.00	49.06	ug/L	-2	20	0.0500	
Bromofluorobenzene	0.8931	0.9000	50.00	50.39	ug/L	1	20	0.0500	

ISTD (ICAL lcoll)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	428911	373727	-12.87	9.95	9.95	0.00
1,4-Difluorobenzene	747306	663328	-11.24	10.81	10.81	0.00
Chlorobenzene-d5	776886	731231	-5.88	13.71	13.71	0.00
1,4-Dichlorobenzene-d4	496877	470745	-5.26	15.79	15.79	0.01

BO 03/26/10 [Freon 12]: Corrected fronting or tailing peak integration.
[general version]

BO 03/26/10 [Vinyl Chloride]: Corrected fronting or tailing peak integration.
[general version]

BO 03/26/10 [Chloroethane]: Corrected fronting or tailing peak integration.
[general version]

BO 03/26/10 [Trichlorofluoromethane]: Corrected fronting or tailing peak integration.
[general version]

Analyst: BJP Date: 03/29/10 Reviewer: LLH Date: 03/29/10

+ = high bias -- = low bias c = CCV m = manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 480124525

Date : 03/27/10
 Sequence : MSVOA09 icr

Reference : iar13
 Analyzed : 01/27/10 23:34

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	2099875	12.37	3438431	13.66	2768728	17.68	1353103	20.18
		LOWER LIMIT	1049938	11.87	1719216	13.16	1384364	17.18	676552	19.68
		UPPER LIMIT	4199750	12.87	6876862	14.16	5537456	18.18	2706206	20.68
004	CCV	20PPB	1864450	12.35	3070975	13.64	2396784	17.66	1105843	20.16
005	BS	QC537897	2000992	12.35	3229025	13.65	2491335	17.66	1150347	20.16
006	BSD	QC537898	1974488	12.36	3259288	13.64	2542290	17.66	1177828	20.17
007	IB	IB	1944885	12.36	3286809	13.64	2652163	17.65	1236142	20.17
008	BLANK	QC537896	1953224	12.36	3136475	13.64	2386813	17.65	1110599	20.17
009	SAMPLE	218866-002	1905889	12.35	3060923	13.65	2361546	17.66	1083244	20.16
010	SAMPLE	218866-003	1776544	12.36	2959830	13.64	2308963	17.65	1062104	20.17
011	SAMPLE	218866-004	1790988	12.36	2923209	13.64	2235446	17.65	1012310	20.17
012	SAMPLE	218881-002	1767053	12.36	2843998	13.64	2267038	17.66	1071305	20.16
013	SAMPLE	218881-004	1894537	12.35	3193255	13.64	2436260	17.66	1119039	20.16
014	SAMPLE	218881-007	1943886	12.35	3100759	13.65	2425502	17.66	1135529	20.16
015	SAMPLE	218881-003	1943260	12.36	3263625	13.64	2407971	17.66	1134855	20.16
016	SAMPLE	218866-006	1955673	12.36	3125676	13.64	2462465	17.65	1129995	20.17
017	SAMPLE	218881-005	1993508	12.36	3260988	13.64	2523899	17.65	1141863	20.16

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 880122884

Date : 03/26/10
 Sequence : MSVOA12 lcq

Reference : lcoll
 Analyzed : 03/24/10 14:57

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	428911	9.95	747306	10.81	776886	13.71	496877	15.79
		LOWER LIMIT	214456	9.45	373653	10.31	388443	13.21	248439	15.29
		UPPER LIMIT	857822	10.45	1494612	11.31	1553772	14.21	993754	16.29
003	CCV	25PPB	372321	9.95	678416	10.81	715312	13.71	445730	15.79
004	BS	QC537779	375242	9.94	675147	10.80	708960	13.71	443113	15.79
005	BSD	QC537780	373801	9.94	683995	10.81	714255	13.71	446358	15.79
007	BLANK	QC537781	374569	9.95	673881	10.81	711617	13.71	417609	15.79
008	SAMPLE	218916-002	376420	9.94	674892	10.81	706453	13.71	415914	15.79
009	SAMPLE	218995-001	376260	9.94	670855	10.81	706311	13.71	415439	15.79
013	CCV	25PPB	373727	9.95	663328	10.81	731231	13.71	470745	15.79
015	BLANK	QC537782	369006	9.95	667601	10.81	712485	13.71	420156	15.79
016	SAMPLE	218881-001	371266	9.94	672811	10.81	710790	13.71	413942	15.79
017	SAMPLE	218866-001	379431	9.94	676711	10.81	718294	13.71	417615	15.79
018	SAMPLE	218866-007	371533	9.95	667874	10.81	707698	13.71	418886	15.79
019	SAMPLE	218881-006	369579	9.95	671212	10.81	710842	13.71	413467	15.79
020	SAMPLE	218837-001	370945	9.95	676035	10.81	710317	13.71	416747	15.79
021	SAMPLE	218818-001	365801	9.95	672092	10.81	715596	13.71	418780	15.79
022	SAMPLE	218818-002	369102	9.95	672831	10.81	714096	13.71	416915	15.79
023	SAMPLE	218818-003	370370	9.95	672712	10.81	710543	13.71	417056	15.79
024	SAMPLE	218881-002	372111	9.95	672447	10.81	725165	13.71	434786	15.79
025	SAMPLE	218881-004	375193	9.95	676452	10.81	723745	13.71	440094	15.79
026	SAMPLE	218881-007	370220	9.95	680710	10.81	724602	13.71	435754	15.79
027	SAMPLE	219011-001	377430	9.94	681848	10.81	722367	13.71	432655	15.79
028	SAMPLE	218866-002	372204	9.95	685451	10.81	723297	13.71	428513	15.79
029	SAMPLE	218866-003	368299	9.95	674504	10.81	719394	13.71	430773	15.79
030	SAMPLE	218866-004	371416	9.95	676892	10.81	720499	13.71	426098	15.79
031	SAMPLE	218866-008	373537	9.95	675598	10.81	729325	13.71	434236	15.79
032	SAMPLE	218881-003	375972	9.95	686205	10.81	727257	13.71	436898	15.79
033	SAMPLE	218881-005	371082	9.95	677416	10.81	727516	13.71	430488	15.79
037	SAMPLE	218963-002	362416	9.95	662917	10.81	707334	13.71	419459	15.79
038	SAMPLE	218963-004	359239	9.94	664547	10.81	698820	13.71	409553	15.79
039	SAMPLE	218964-002	363584	9.94	658535	10.81	703059	13.71	414098	15.79

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 480124525

Instrument : MSVOA09 Begun : 03/27/10 11:25
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	icr01	X	IB			03/27/10 11:25	1.0	1
002	icr02	TUN	BFB			03/27/10 13:42	1.0	2
003	icr03	TUN	BFB			03/27/10 13:56	1.0	2
004	icr04	CCV	20PPB			03/27/10 14:22	1.0	3 4 5 6 1
005	icr05	BS	QC537897	Water	161366	03/27/10 15:04	1.0	7 8 9 1
006	icr06	BSD	QC537898	Water	161366	03/27/10 15:38	1.0	7 8 9 1
007	icr07	IB	IB			03/27/10 16:11	1.0	1
008	icr08	BLANK	QC537896	Water	161366	03/27/10 16:45	1.0	1
009	icr09	SAMPLE	218866-002	Water	161366	03/27/10 17:18	1.0	1
010	icr10	SAMPLE	218866-003	Water	161366	03/27/10 17:51	1.0	1
011	icr11	SAMPLE	218866-004	Water	161366	03/27/10 18:25	1.0	1
012	icr12	SAMPLE	218881-002	Water	161366	03/27/10 18:58	1.0	1
013	icr13	SAMPLE	218881-004	Water	161366	03/27/10 19:31	1.0	1
014	icr14	SAMPLE	218881-007	Water	161366	03/27/10 20:05	1.0	1
015	icr15	SAMPLE	218881-003	Water	161366	03/27/10 20:38	1.0	1
016	icr16	SAMPLE	218866-006	Water	161366	03/27/10 21:11	1.0	1
017	icr17	SAMPLE	218881-005	Water	161366	03/27/10 21:45	7.143	1
018	icr18	X	IB			03/27/10 22:18	1.0	1
019	icr19	X	IB			03/27/10 22:51	1.0	1
020	icr20	X	IB			03/27/10 23:24	1.0	1

BJP 03/28/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 20.

BJP 03/28/10 : Matrix spikes were not performed for this analysis in batch 161366 due to insufficient sample amount.

Analyst: BJP Date: 03/28/10 Reviewer: LW Date: 03/29/10

Standards used: 1=S14026 2=S13652 3=S14216 4=S14108 5=S13625 6=S13719 7=S14253 8=S14236 9=S14144

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 880122884

Instrument : MSVOA12 Begun : 03/26/10 08:04
 Method : EPA 8260B SOP Version : TVH_8260B_rv0

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
001	lcq01	X	IB			03/26/10 08:04	1.0	1
002	lcq02	TUN	BFB			03/26/10 08:37	1.0	2
003	lcq03	CCV	25PPB			03/26/10 08:53	1.0	3 4 5 6 1
004	lcq04	BS	QC537779	Water	161337	03/26/10 09:37	1.0	7 8 9 10 1
005	lcq05	BSD	QC537780	Water	161337	03/26/10 10:09	1.0	7 8 9 10 1
006	lcq06	X	IB			03/26/10 10:42	1.0	1
007	lcq07	BLANK	QC537781	Water	161337	03/26/10 11:14	1.0	1
008	lcq08	SAMPLE	218916-002	Water	161337	03/26/10 11:47	1.0	1
009	lcq09	SAMPLE	218995-001	Water	161337	03/26/10 12:19	1.0	1
010	lcq10	X	IB			03/26/10 12:47	1.0	1
011	lcq11	TUN	BFB			03/26/10 13:12	1.0	2
012	lcq12	TUN	BFB			03/26/10 13:29	1.0	2
013	lcq13	CCV	25PPB			03/26/10 13:45	1.0	3 4 5 6 1
014	lcq14	X	IB			03/26/10 14:18	1.0	1
015	lcq15	BLANK	QC537782	Water	161337	03/26/10 14:51	1.0	1
016	lcq16	SAMPLE	218881-001	Water	161337	03/26/10 15:23	1.0	1
017	lcq17	SAMPLE	218866-001	Water	161337	03/26/10 15:56	1.0	1
018	lcq18	SAMPLE	218866-007	Water	161337	03/26/10 16:29	1.0	1
019	lcq19	SAMPLE	218881-006	Water	161337	03/26/10 17:01	1.0	1
020	lcq20	SAMPLE	218837-001	Water	161337	03/26/10 17:34	1.0	1
021	lcq21	SAMPLE	218818-001	Water	161337	03/26/10 18:06	1.0	1
022	lcq22	SAMPLE	218818-002	Water	161337	03/26/10 18:39	1.0	1
023	lcq23	SAMPLE	218818-003	Water	161337	03/26/10 19:12	1.0	1
024	lcq24	SAMPLE	218881-002	Water	161337	03/26/10 19:44	1.0	1
025	lcq25	SAMPLE	218881-004	Water	161337	03/26/10 20:17	1.0	1
026	lcq26	SAMPLE	218881-007	Water	161337	03/26/10 20:49	1.0	1
027	lcq27	SAMPLE	219011-001	Water	161337	03/26/10 21:22	1.0	1
028	lcq28	SAMPLE	218866-002	Water	161337	03/26/10 21:54	1.0	1
029	lcq29	SAMPLE	218866-003	Water	161337	03/26/10 22:26	1.0	1
030	lcq30	SAMPLE	218866-004	Water	161337	03/26/10 22:59	1.0	1
031	lcq31	SAMPLE	218866-008	Water	161337	03/26/10 23:31	1.0	1
032	lcq32	SAMPLE	218881-003	Water	161337	03/27/10 00:03	3.333	1
033	lcq33	SAMPLE	218881-005	Water	161337	03/27/10 00:36	7.143	1
034	lcq34	X	IB			03/27/10 01:08	1.0	1
035	lcq35	X	IB			03/27/10 01:41	1.0	1
036	lcq36	X	IB			03/27/10 02:13	1.0	1
037	lcq37	SAMPLE	218963-002	Water	161365	03/27/10 02:45	1.0	1
038	lcq38	SAMPLE	218963-004	Water	161365	03/27/10 03:18	1.0	1
039	lcq39	SAMPLE	218964-002	Water	161365	03/27/10 03:50	1.0	1

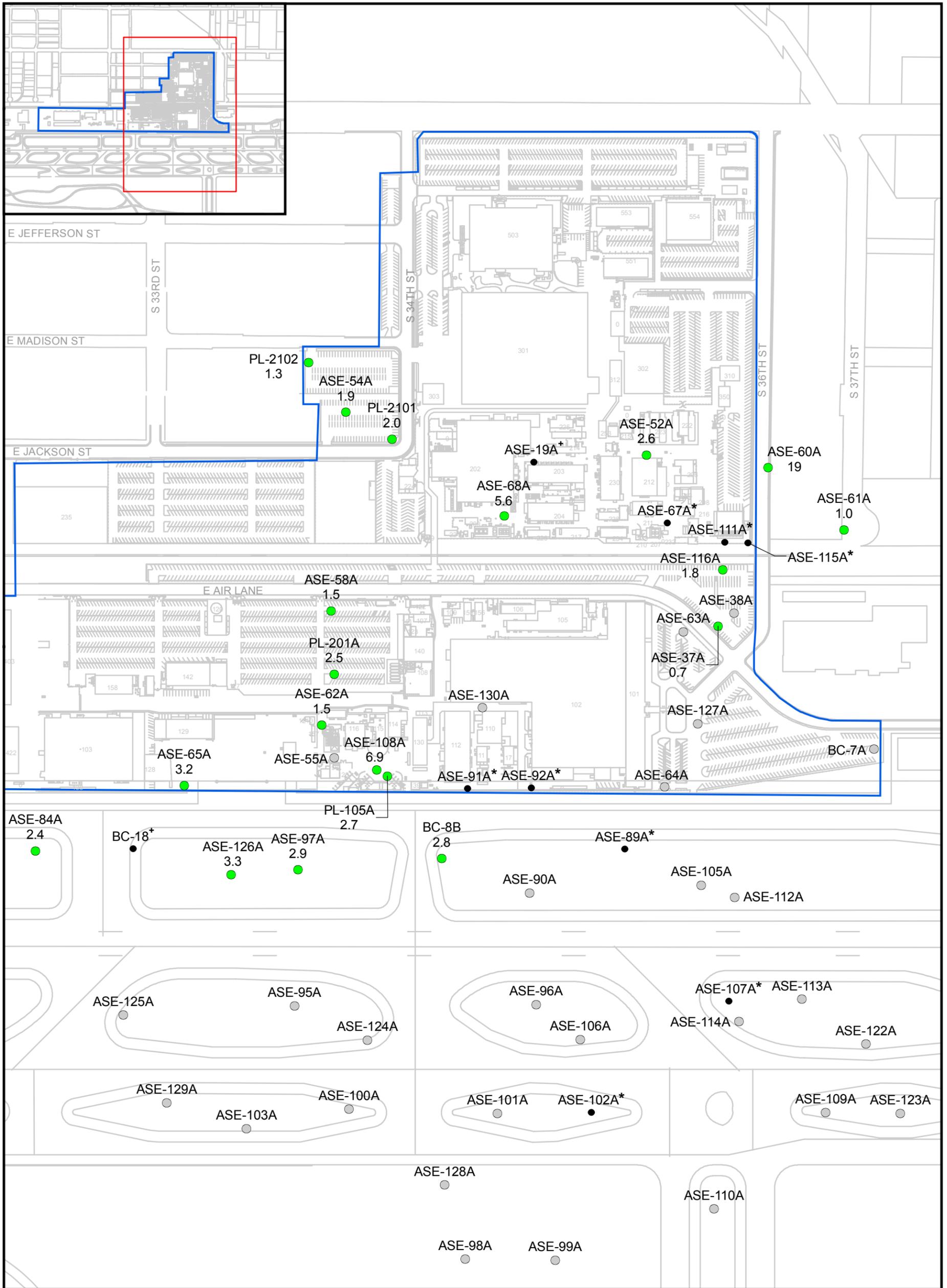
BJP 03/27/10 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 39.

BJP 03/27/10 : Matrix spikes were not performed for this analysis in batch 161337 due to insufficient sample amount.

Analyst: BJP Date: 03/27/10 Reviewer: LW Date: 03/29/10

Standards used: 1=S14026 2=S13652 3=S14216 4=S14108 5=S14228 6=S13719 7=S14253 8=S14144 9=S13925 10=S14236

Appendix I
Total TCE and Total TCA Figures,
Groundwater Parameters



Legend

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



0 150 300 600 Feet

Notes:
 1. µg/L = micrograms per liter
 2. Value posted is the sum of trichloroethene, cis-1,2-dichloroethene, and vinyl chloride.
 3. Samples collected between March 8, 2010 and March 17, 2010.
 4. * Indicates monitoring well not sampled due to presence of free product per CH2M HILL, 2008b.
 5. * Indicates monitoring well not sampled due to insufficient water in well.

FIGURE I-1
TOTAL TRICHLOROETHENE
MARCH 2010
GROUNDWATER PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona

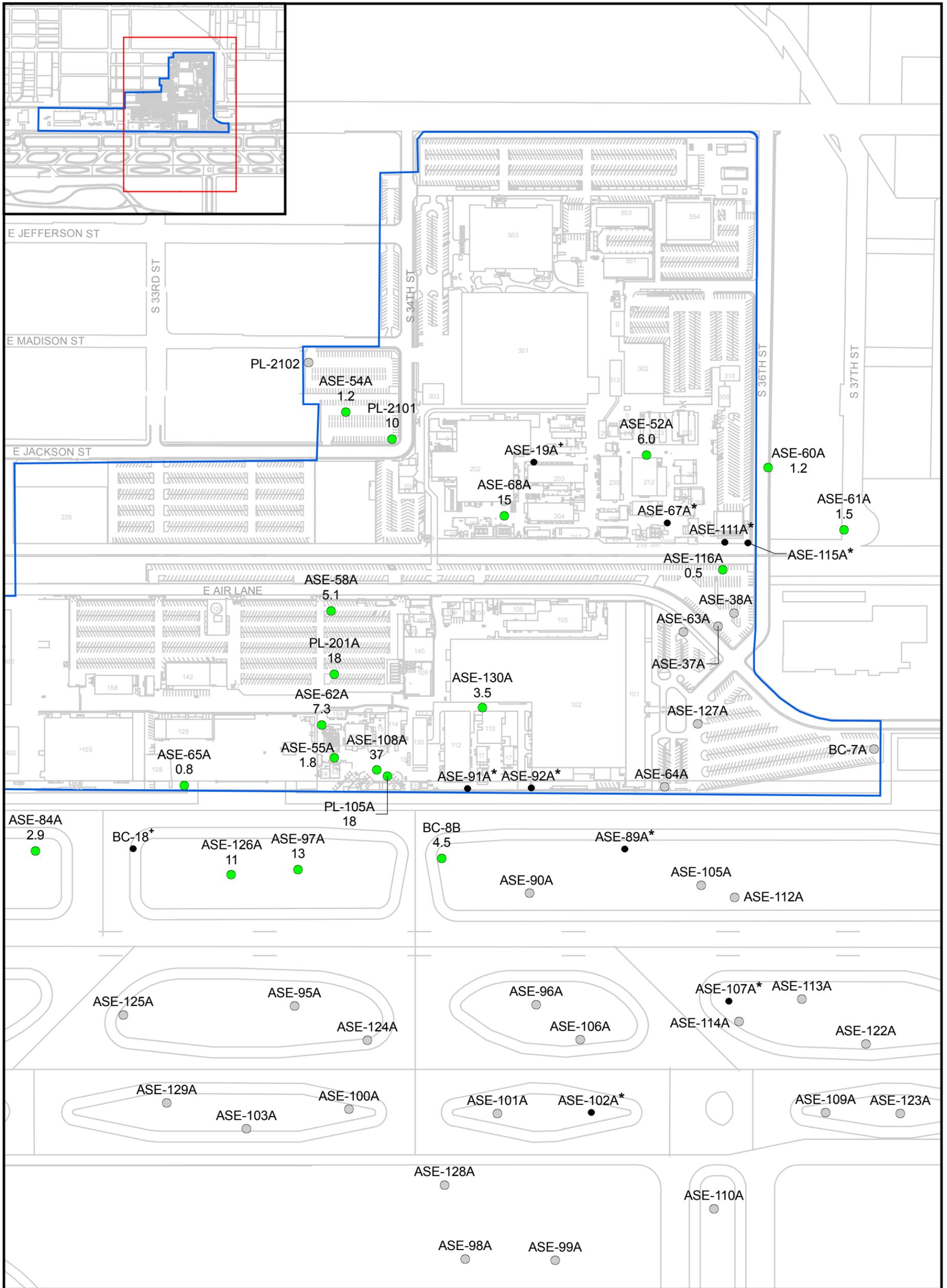


FIGURE I-2
TOTAL TRICHLOROETHANE
MARCH 2010
GROUNDWATER PARAMETERS
Honeywell 34th Street Facility
Phoenix, Arizona