Analytical Report 470337

for

Terranext

Project Manager: Chuck Gordon

WVBA

03103154

26-SEP-13

Collected By: Client

3725 E. Atlanta Ave, Phoenix, AZ 85040
Ph: (602) 437-0330

Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

26-SEP-13

Project Manager: **Chuck Gordon**
Terranext
4050 E. Cotton Center Blvd.
Phoenix, AZ 85040

Reference: TWA Report No(s): **470337**
WVBA
Project Address:

Chuck Gordon:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the TWA Report Number(s) 470337. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by TransWest Analytical. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 470337 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting TransWest Analytical to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Skip Harden
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
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Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Arizona Flags

All method blanks, laboratory spikes, and/or matrix spikes met quality control objectives for the parameters associated with this Work Order except as detailed below or on the Data Qualifier page of this report. Data Qualifiers used in this report are in accordance with ADEQ Arizona Data Qualifiers, Revision 3.0 9/20/2007. Data qualifiers (flags) contained within this analytical report have been issued to explain a quality control deficiency, and do not affect the quality (validity) of the data unless noted otherwise in the case narrative.

M1 Matrix spike recovery was high; the associated blank spike recovery was acceptable.

R5 MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.

Sample Cross Reference 470337

Terranext, Phoenix, AZ

WVBA

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
AVB106-0102-1000	W	09-17-13 08:00		470337-001
AVB106-0100-26101	W	09-17-13 08:35		470337-002
AVB12-0100-37105	W	09-17-13 09:25		470337-003
AVB14-0100-35109	W	09-17-13 09:55		470337-004
AVB69-0200-02120	W	09-17-13 10:50		470337-005
AVB88-0100-24116	W	09-17-13 11:30		470337-006
AVB97-0100-21119	W	09-17-13 12:15		470337-007
AVB126-0100-14135	W	09-17-13 12:55		470337-008
AVB126-0104-1000	W	09-17-13 14:00		470337-009

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB106-0102-1000** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-001 Date Collected: 09.17.13 08.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 09.18.13 11.43

Seq Number: 923601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	09.18.13 21.44		1
Benzene	71-43-2	<0.500	0.500	ug/L	09.18.13 21.44		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	09.18.13 21.44		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	09.18.13 21.44		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	09.18.13 21.44		1
Bromoform	75-25-2	<1.00	1.00	ug/L	09.18.13 21.44		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	09.18.13 21.44		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	09.18.13 21.44		1
MTBE	1634-04-4	<2.00	2.00	ug/L	09.18.13 21.44		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	09.18.13 21.44		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	09.18.13 21.44		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	09.18.13 21.44		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	09.18.13 21.44		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	09.18.13 21.44		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	09.18.13 21.44		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	09.18.13 21.44		1
Chloroform	67-66-3	<0.500	0.500	ug/L	09.18.13 21.44		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	09.18.13 21.44		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	09.18.13 21.44		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	09.18.13 21.44		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	09.18.13 21.44		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	09.18.13 21.44		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	09.18.13 21.44		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	09.18.13 21.44		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	09.18.13 21.44		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	09.18.13 21.44		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	09.18.13 21.44		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	09.18.13 21.44		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	09.18.13 21.44		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	09.18.13 21.44		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	09.18.13 21.44		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	09.18.13 21.44		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	09.18.13 21.44		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	09.18.13 21.44		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	09.18.13 21.44		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	09.18.13 21.44		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	09.18.13 21.44		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	09.18.13 21.44		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	09.18.13 21.44		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB106-0102-1000**
Lab Sample Id: 470337-001

Matrix: Water
Date Collected: 09.17.13 08.00

Date Received: 09.17.13 15.25

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 923601

Date Prep: 09.18.13 11.43

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	09.18.13 21.44		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	09.18.13 21.44		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	09.18.13 21.44		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	09.18.13 21.44		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	09.18.13 21.44		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	09.18.13 21.44		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	09.18.13 21.44		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	09.18.13 21.44		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	09.18.13 21.44		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	09.18.13 21.44		1
Styrene	100-42-5	<1.00	1.00	ug/L	09.18.13 21.44		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	09.18.13 21.44		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	09.18.13 21.44		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	09.18.13 21.44		1
Toluene	108-88-3	<2.00	2.00	ug/L	09.18.13 21.44		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	09.18.13 21.44		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	09.18.13 21.44		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	09.18.13 21.44		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	09.18.13 21.44		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	09.18.13 21.44		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	09.18.13 21.44		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	09.18.13 21.44		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	09.18.13 21.44		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	09.18.13 21.44		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	09.18.13 21.44		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	09.18.13 21.44		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	09.18.13 21.44		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	09.18.13 21.44		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	09.18.13 21.44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	69-133	09.18.13 21.44	
1,2-Dichloroethane-D4	17060-07-0	96	%	66-139	09.18.13 21.44	
Toluene-D8	2037-26-5	102	%	70-130	09.18.13 21.44	
4-Bromofluorobenzene	460-00-4	95	%	70-135	09.18.13 21.44	

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB106-0100-26101** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-002 Date Collected: 09.17.13 08.35

Analytical Method: Total Metals by EPA 6010B Prep Method: SW3010A

Tech: MLI % Moisture:

Analyst: MKO Date Prep: 09.19.13 09.00

Seq Number: 923153 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0188**	0.0100	mg/L	09.19.13 19.12		1

Analytical Method: Metals, Dissolved, by EPA 6010B Prep Method: SW3010A

Tech: MLI % Moisture:

Analyst: MKO Date Prep: 09.19.13 09.20

Seq Number: 923156 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	09.19.13 22.13		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB106-0100-26101** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-002 Date Collected: 09.17.13 08.35

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 09.18.13 11.43

Seq Number: 923601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	09.18.13 22.09		1
Benzene	71-43-2	<0.500	0.500	ug/L	09.18.13 22.09		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	09.18.13 22.09		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	09.18.13 22.09		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	09.18.13 22.09		1
Bromoform	75-25-2	<1.00	1.00	ug/L	09.18.13 22.09		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	09.18.13 22.09		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	09.18.13 22.09		1
MTBE	1634-04-4	<2.00	2.00	ug/L	09.18.13 22.09		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	09.18.13 22.09		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	09.18.13 22.09		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	09.18.13 22.09		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	09.18.13 22.09		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	09.18.13 22.09		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	09.18.13 22.09		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	09.18.13 22.09		1
Chloroform	67-66-3	**7.72**	0.500	ug/L	09.18.13 22.09		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	09.18.13 22.09		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	09.18.13 22.09		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	09.18.13 22.09		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	09.18.13 22.09		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	09.18.13 22.09		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	09.18.13 22.09		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	09.18.13 22.09		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	09.18.13 22.09		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	09.18.13 22.09		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	09.18.13 22.09		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	09.18.13 22.09		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	09.18.13 22.09		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	09.18.13 22.09		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	09.18.13 22.09		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	09.18.13 22.09		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	09.18.13 22.09		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	09.18.13 22.09		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	09.18.13 22.09		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	09.18.13 22.09		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	09.18.13 22.09		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	09.18.13 22.09		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	09.18.13 22.09		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB106-0100-26101** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-002 Date Collected: 09.17.13 08.35

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 09.18.13 11.43

Seq Number: 923601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	09.18.13 22.09		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	09.18.13 22.09		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	09.18.13 22.09		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	09.18.13 22.09		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	09.18.13 22.09		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	09.18.13 22.09		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	09.18.13 22.09		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	09.18.13 22.09		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	09.18.13 22.09		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	09.18.13 22.09		1
Styrene	100-42-5	<1.00	1.00	ug/L	09.18.13 22.09		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	09.18.13 22.09		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	09.18.13 22.09		1
Tetrachloroethylene	127-18-4	**2.68**	0.500	ug/L	09.18.13 22.09		1
Toluene	108-88-3	<2.00	2.00	ug/L	09.18.13 22.09		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	09.18.13 22.09		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	09.18.13 22.09		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	09.18.13 22.09		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	09.18.13 22.09		1
Trichloroethene	79-01-6	**9.73**	0.500	ug/L	09.18.13 22.09		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	09.18.13 22.09		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	09.18.13 22.09		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	09.18.13 22.09		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	09.18.13 22.09		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	09.18.13 22.09		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	09.18.13 22.09		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	09.18.13 22.09		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	09.18.13 22.09		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	09.18.13 22.09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	107	%	69-133	09.18.13 22.09	
1,2-Dichloroethane-D4	17060-07-0	100	%	66-139	09.18.13 22.09	
Toluene-D8	2037-26-5	102	%	70-130	09.18.13 22.09	
4-Bromofluorobenzene	460-00-4	96	%	70-135	09.18.13 22.09	

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB12-0100-37105** Matrix: Water Date Received:09.17.13 15.25
Lab Sample Id: 470337-003 Date Collected: 09.17.13 09.25

Analytical Method: Total Metals by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.00
Seq Number: 923153 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.193**	0.0100	mg/L	09.19.13 19.30		1

Analytical Method: Metals, Dissolved, by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.20
Seq Number: 923156 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0221**	0.0100	mg/L	09.19.13 22.19		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB12-0100-37105** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-003 Date Collected: 09.17.13 09.25

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 09.18.13 11.43

Seq Number: 923601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	09.18.13 22.34		1
Benzene	71-43-2	<0.500	0.500	ug/L	09.18.13 22.34		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	09.18.13 22.34		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	09.18.13 22.34		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	09.18.13 22.34		1
Bromoform	75-25-2	<1.00	1.00	ug/L	09.18.13 22.34		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	09.18.13 22.34		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	09.18.13 22.34		1
MTBE	1634-04-4	<2.00	2.00	ug/L	09.18.13 22.34		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	09.18.13 22.34		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	09.18.13 22.34		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	09.18.13 22.34		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	09.18.13 22.34		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	09.18.13 22.34		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	09.18.13 22.34		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	09.18.13 22.34		1
Chloroform	67-66-3	**0.530**	0.500	ug/L	09.18.13 22.34		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	09.18.13 22.34		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	09.18.13 22.34		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	09.18.13 22.34		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	09.18.13 22.34		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	09.18.13 22.34		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	09.18.13 22.34		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	09.18.13 22.34		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	09.18.13 22.34		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	09.18.13 22.34		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	09.18.13 22.34		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	09.18.13 22.34		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	09.18.13 22.34		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	09.18.13 22.34		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	09.18.13 22.34		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	09.18.13 22.34		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	09.18.13 22.34		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	09.18.13 22.34		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	09.18.13 22.34		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	09.18.13 22.34		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	09.18.13 22.34		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	09.18.13 22.34		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	09.18.13 22.34		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB12-0100-37105** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-003 Date Collected: 09.17.13 09.25

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 09.18.13 11.43

Seq Number: 923601

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	09.18.13 22.34		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	09.18.13 22.34		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	09.18.13 22.34		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	09.18.13 22.34		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	09.18.13 22.34		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	09.18.13 22.34		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	09.18.13 22.34		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	09.18.13 22.34		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	09.18.13 22.34		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	09.18.13 22.34		1
Styrene	100-42-5	<1.00	1.00	ug/L	09.18.13 22.34		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	09.18.13 22.34		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	09.18.13 22.34		1
Tetrachloroethylene	127-18-4	**1.84**	0.500	ug/L	09.18.13 22.34		1
Toluene	108-88-3	<2.00	2.00	ug/L	09.18.13 22.34		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	09.18.13 22.34		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	09.18.13 22.34		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	09.18.13 22.34		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	09.18.13 22.34		1
Trichloroethene	79-01-6	**2.27**	0.500	ug/L	09.18.13 22.34		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	09.18.13 22.34		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	09.18.13 22.34		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	09.18.13 22.34		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	09.18.13 22.34		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	09.18.13 22.34		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	09.18.13 22.34		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	09.18.13 22.34		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	09.18.13 22.34		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	09.18.13 22.34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	105	%	69-133	09.18.13 22.34	
1,2-Dichloroethane-D4	17060-07-0	99	%	66-139	09.18.13 22.34	
Toluene-D8	2037-26-5	101	%	70-130	09.18.13 22.34	
4-Bromofluorobenzene	460-00-4	94	%	70-135	09.18.13 22.34	

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB14-0100-35109** Matrix: Water Date Received:09.17.13 15.25
Lab Sample Id: 470337-004 Date Collected: 09.17.13 09.55

Analytical Method: Total Metals by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.00
Seq Number: 923153 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.205**	0.0100	mg/L	09.19.13 19.35		1

Analytical Method: Metals, Dissolved, by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.20
Seq Number: 923156 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0102**	0.0100	mg/L	09.19.13 22.24		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB14-0100-35109**
Lab Sample Id: 470337-004

Matrix: Water
Date Collected: 09.17.13 09.55

Date Received: 09.17.13 15.25

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 923605

Date Prep: 09.19.13 12.14

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	09.19.13 15.02		1
Benzene	71-43-2	<0.500	0.500	ug/L	09.19.13 15.02		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	09.19.13 15.02		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	09.19.13 15.02		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	09.19.13 15.02		1
Bromoform	75-25-2	<1.00	1.00	ug/L	09.19.13 15.02		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	09.19.13 15.02		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	09.19.13 15.02		1
MTBE	1634-04-4	<2.00	2.00	ug/L	09.19.13 15.02		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	09.19.13 15.02		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	09.19.13 15.02		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	09.19.13 15.02		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	09.19.13 15.02		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	09.19.13 15.02		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	09.19.13 15.02		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	09.19.13 15.02		1
Chloroform	67-66-3	**2.83**	0.500	ug/L	09.19.13 15.02		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	09.19.13 15.02		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	09.19.13 15.02		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	09.19.13 15.02		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	09.19.13 15.02		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	09.19.13 15.02		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	09.19.13 15.02		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	09.19.13 15.02		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	09.19.13 15.02		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	09.19.13 15.02		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	09.19.13 15.02		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	09.19.13 15.02		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	09.19.13 15.02		1
1,1-Dichloroethane	75-34-3	**1.37**	0.500	ug/L	09.19.13 15.02		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	09.19.13 15.02		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	09.19.13 15.02		1
cis-1,2-Dichloroethene	156-59-2	**1.61**	0.500	ug/L	09.19.13 15.02		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	09.19.13 15.02		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	09.19.13 15.02		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	09.19.13 15.02		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	09.19.13 15.02		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	09.19.13 15.02		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	09.19.13 15.02		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB14-0100-35109**
Lab Sample Id: 470337-004

Matrix: Water
Date Collected: 09.17.13 09.55

Date Received: 09.17.13 15.25

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 923605

Date Prep: 09.19.13 12.14

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	09.19.13 15.02		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	09.19.13 15.02		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	09.19.13 15.02		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	09.19.13 15.02		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	09.19.13 15.02		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	09.19.13 15.02		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	09.19.13 15.02		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	09.19.13 15.02		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	09.19.13 15.02		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	09.19.13 15.02		1
Styrene	100-42-5	<1.00	1.00	ug/L	09.19.13 15.02		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	09.19.13 15.02		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	09.19.13 15.02		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	09.19.13 15.02		1
Toluene	108-88-3	<2.00	2.00	ug/L	09.19.13 15.02		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	09.19.13 15.02		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	09.19.13 15.02		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	09.19.13 15.02		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	09.19.13 15.02		1
Trichloroethene	79-01-6	**5.84**	0.500	ug/L	09.19.13 15.02		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	09.19.13 15.02		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	09.19.13 15.02		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	09.19.13 15.02		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	09.19.13 15.02		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	09.19.13 15.02		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	09.19.13 15.02		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	09.19.13 15.02		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	09.19.13 15.02		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	09.19.13 15.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	09.19.13 15.02	
1,2-Dichloroethane-D4	17060-07-0	94	%	66-139	09.19.13 15.02	
Toluene-D8	2037-26-5	99	%	70-130	09.19.13 15.02	
4-Bromofluorobenzene	460-00-4	96	%	70-135	09.19.13 15.02	

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB69-0200-02120** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-005 Date Collected: 09.17.13 10.50

Analytical Method: Total Metals by EPA 6010B Prep Method: SW3010A

Tech: MLI % Moisture:

Analyst: MKO Date Prep: 09.19.13 09.00

Seq Number: 923153 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.157**	0.0100	mg/L	09.19.13 19.41		1

Analytical Method: Metals, Dissolved, by EPA 6010B Prep Method: SW3010A

Tech: MLI % Moisture:

Analyst: MKO Date Prep: 09.19.13 09.20

Seq Number: 923156 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	09.19.13 22.42		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB69-0200-02120**
Lab Sample Id: 470337-005

Matrix: Water
Date Collected: 09.17.13 10.50

Date Received: 09.17.13 15.25

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 923605

Date Prep: 09.19.13 12.14

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	09.19.13 15.27		1
Benzene	71-43-2	<0.500	0.500	ug/L	09.19.13 15.27		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	09.19.13 15.27		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	09.19.13 15.27		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	09.19.13 15.27		1
Bromoform	75-25-2	<1.00	1.00	ug/L	09.19.13 15.27		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	09.19.13 15.27		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	09.19.13 15.27		1
MTBE	1634-04-4	<2.00	2.00	ug/L	09.19.13 15.27		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	09.19.13 15.27		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	09.19.13 15.27		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	09.19.13 15.27		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	09.19.13 15.27		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	09.19.13 15.27		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	09.19.13 15.27		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	09.19.13 15.27		1
Chloroform	67-66-3	<0.500	0.500	ug/L	09.19.13 15.27		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	09.19.13 15.27		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	09.19.13 15.27		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	09.19.13 15.27		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	09.19.13 15.27		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	09.19.13 15.27		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	09.19.13 15.27		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	09.19.13 15.27		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	09.19.13 15.27		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	09.19.13 15.27		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	09.19.13 15.27		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	09.19.13 15.27		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	09.19.13 15.27		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	09.19.13 15.27		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	09.19.13 15.27		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	09.19.13 15.27		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	09.19.13 15.27		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	09.19.13 15.27		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	09.19.13 15.27		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	09.19.13 15.27		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	09.19.13 15.27		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	09.19.13 15.27		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	09.19.13 15.27		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB69-0200-02120**
Lab Sample Id: 470337-005

Matrix: Water
Date Collected: 09.17.13 10.50

Date Received: 09.17.13 15.25

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 923605

Date Prep: 09.19.13 12.14

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	09.19.13 15.27		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	09.19.13 15.27		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	09.19.13 15.27		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	09.19.13 15.27		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	09.19.13 15.27		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	09.19.13 15.27		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	09.19.13 15.27		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	09.19.13 15.27		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	09.19.13 15.27		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	09.19.13 15.27		1
Styrene	100-42-5	<1.00	1.00	ug/L	09.19.13 15.27		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	09.19.13 15.27		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	09.19.13 15.27		1
Tetrachloroethylene	127-18-4	**5.28**	0.500	ug/L	09.19.13 15.27		1
Toluene	108-88-3	<2.00	2.00	ug/L	09.19.13 15.27		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	09.19.13 15.27		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	09.19.13 15.27		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	09.19.13 15.27		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	09.19.13 15.27		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	09.19.13 15.27		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	09.19.13 15.27		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	09.19.13 15.27		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	09.19.13 15.27		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	09.19.13 15.27		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	09.19.13 15.27		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	09.19.13 15.27		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	09.19.13 15.27		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	09.19.13 15.27		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	09.19.13 15.27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	09.19.13 15.27	
1,2-Dichloroethane-D4	17060-07-0	97	%	66-139	09.19.13 15.27	
Toluene-D8	2037-26-5	99	%	70-130	09.19.13 15.27	
4-Bromofluorobenzene	460-00-4	91	%	70-135	09.19.13 15.27	

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB88-0100-24116** Matrix: Water Date Received:09.17.13 15.25
Lab Sample Id: 470337-006 Date Collected: 09.17.13 11.30

Analytical Method: Total Metals by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.00
Seq Number: 923153 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.247**	0.0100	mg/L	09.19.13 19.47		1

Analytical Method: Metals, Dissolved, by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.20
Seq Number: 923156 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	09.19.13 22.48		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB88-0100-24116** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-006 Date Collected: 09.17.13 11.30

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 09.19.13 12.14

Seq Number: 923605

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	09.19.13 15.53		1
Benzene	71-43-2	<0.500	0.500	ug/L	09.19.13 15.53		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	09.19.13 15.53		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	09.19.13 15.53		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	09.19.13 15.53		1
Bromoform	75-25-2	<1.00	1.00	ug/L	09.19.13 15.53		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	09.19.13 15.53		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	09.19.13 15.53		1
MTBE	1634-04-4	<2.00	2.00	ug/L	09.19.13 15.53		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	09.19.13 15.53		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	09.19.13 15.53		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	09.19.13 15.53		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	09.19.13 15.53		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	09.19.13 15.53		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	09.19.13 15.53		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	09.19.13 15.53		1
Chloroform	67-66-3	<0.500	0.500	ug/L	09.19.13 15.53		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	09.19.13 15.53		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	09.19.13 15.53		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	09.19.13 15.53		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	09.19.13 15.53		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	09.19.13 15.53		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	09.19.13 15.53		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	09.19.13 15.53		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	09.19.13 15.53		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	09.19.13 15.53		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	09.19.13 15.53		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	09.19.13 15.53		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	09.19.13 15.53		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	09.19.13 15.53		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	09.19.13 15.53		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	09.19.13 15.53		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	09.19.13 15.53		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	09.19.13 15.53		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	09.19.13 15.53		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	09.19.13 15.53		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	09.19.13 15.53		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	09.19.13 15.53		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	09.19.13 15.53		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB88-0100-24116**
Lab Sample Id: 470337-006

Matrix: Water
Date Collected: 09.17.13 11.30

Date Received: 09.17.13 15.25

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 923605

Date Prep: 09.19.13 12.14

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	09.19.13 15.53		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	09.19.13 15.53		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	09.19.13 15.53		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	09.19.13 15.53		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	09.19.13 15.53		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	09.19.13 15.53		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	09.19.13 15.53		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	09.19.13 15.53		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	09.19.13 15.53		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	09.19.13 15.53		1
Styrene	100-42-5	<1.00	1.00	ug/L	09.19.13 15.53		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	09.19.13 15.53		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	09.19.13 15.53		1
Tetrachloroethylene	127-18-4	**9.28**	0.500	ug/L	09.19.13 15.53		1
Toluene	108-88-3	<2.00	2.00	ug/L	09.19.13 15.53		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	09.19.13 15.53		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	09.19.13 15.53		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	09.19.13 15.53		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	09.19.13 15.53		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	09.19.13 15.53		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	09.19.13 15.53		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	09.19.13 15.53		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	09.19.13 15.53		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	09.19.13 15.53		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	09.19.13 15.53		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	09.19.13 15.53		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	09.19.13 15.53		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	09.19.13 15.53		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	09.19.13 15.53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	98	%	69-133	09.19.13 15.53	
1,2-Dichloroethane-D4	17060-07-0	95	%	66-139	09.19.13 15.53	
Toluene-D8	2037-26-5	99	%	70-130	09.19.13 15.53	
4-Bromofluorobenzene	460-00-4	94	%	70-135	09.19.13 15.53	

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB97-0100-21119** Matrix: Water Date Received:09.17.13 15.25
Lab Sample Id: 470337-007 Date Collected: 09.17.13 12.15

Analytical Method: Total Metals by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.00
Seq Number: 923153 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.104**	0.0100	mg/L	09.19.13 19.53		1

Analytical Method: Metals, Dissolved, by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.20
Seq Number: 923156 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0312**	0.0100	mg/L	09.19.13 22.54		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB97-0100-21119**
Lab Sample Id: 470337-007

Matrix: Water
Date Collected: 09.17.13 12.15

Date Received: 09.17.13 15.25

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 923605

Date Prep: 09.19.13 12.14

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	09.19.13 16.19		1
Benzene	71-43-2	<0.500	0.500	ug/L	09.19.13 16.19		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	09.19.13 16.19		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	09.19.13 16.19		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	09.19.13 16.19		1
Bromoform	75-25-2	<1.00	1.00	ug/L	09.19.13 16.19		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	09.19.13 16.19		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	09.19.13 16.19		1
MTBE	1634-04-4	<2.00	2.00	ug/L	09.19.13 16.19		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	09.19.13 16.19		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	09.19.13 16.19		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	09.19.13 16.19		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	09.19.13 16.19		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	09.19.13 16.19		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	09.19.13 16.19		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	09.19.13 16.19		1
Chloroform	67-66-3	**0.900**	0.500	ug/L	09.19.13 16.19		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	09.19.13 16.19		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	09.19.13 16.19		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	09.19.13 16.19		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	09.19.13 16.19		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	09.19.13 16.19		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	09.19.13 16.19		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	09.19.13 16.19		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	09.19.13 16.19		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	09.19.13 16.19		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	09.19.13 16.19		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	09.19.13 16.19		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	09.19.13 16.19		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	09.19.13 16.19		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	09.19.13 16.19		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	09.19.13 16.19		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	09.19.13 16.19		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	09.19.13 16.19		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	09.19.13 16.19		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	09.19.13 16.19		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	09.19.13 16.19		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	09.19.13 16.19		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	09.19.13 16.19		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB97-0100-21119**
Lab Sample Id: 470337-007

Matrix: Water
Date Collected: 09.17.13 12.15

Date Received: 09.17.13 15.25

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 923605

Date Prep: 09.19.13 12.14

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	09.19.13 16.19		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	09.19.13 16.19		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	09.19.13 16.19		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	09.19.13 16.19		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	09.19.13 16.19		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	09.19.13 16.19		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	09.19.13 16.19		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	09.19.13 16.19		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	09.19.13 16.19		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	09.19.13 16.19		1
Styrene	100-42-5	<1.00	1.00	ug/L	09.19.13 16.19		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	09.19.13 16.19		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	09.19.13 16.19		1
Tetrachloroethylene	127-18-4	**0.680**	0.500	ug/L	09.19.13 16.19		1
Toluene	108-88-3	<2.00	2.00	ug/L	09.19.13 16.19		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	09.19.13 16.19		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	09.19.13 16.19		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	09.19.13 16.19		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	09.19.13 16.19		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	09.19.13 16.19		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	09.19.13 16.19		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	09.19.13 16.19		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	09.19.13 16.19		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	09.19.13 16.19		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	09.19.13 16.19		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	09.19.13 16.19		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	09.19.13 16.19		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	09.19.13 16.19		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	09.19.13 16.19		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	09.19.13 16.19	
1,2-Dichloroethane-D4	17060-07-0	96	%	66-139	09.19.13 16.19	
Toluene-D8	2037-26-5	99	%	70-130	09.19.13 16.19	
4-Bromofluorobenzene	460-00-4	95	%	70-135	09.19.13 16.19	

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB126-0100-14135** Matrix: Water Date Received:09.17.13 15.25
Lab Sample Id: 470337-008 Date Collected: 09.17.13 12.55

Analytical Method: Total Metals by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.00
Seq Number: 923153 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0156**	0.0100	mg/L	09.19.13 19.59		1

Analytical Method: Metals, Dissolved, by EPA 6010B Prep Method: SW3010A
Tech: MLI % Moisture:
Analyst: MKO Date Prep: 09.19.13 09.20
Seq Number: 923156 SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	**0.0136**	0.0100	mg/L	09.19.13 22.59		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB126-0100-14135** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-008 Date Collected: 09.17.13 12.55

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 09.19.13 12.14

Seq Number: 923605

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	09.19.13 16.44		1
Benzene	71-43-2	<0.500	0.500	ug/L	09.19.13 16.44		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	09.19.13 16.44		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	09.19.13 16.44		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	09.19.13 16.44		1
Bromoform	75-25-2	<1.00	1.00	ug/L	09.19.13 16.44		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	09.19.13 16.44		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	09.19.13 16.44		1
MTBE	1634-04-4	<2.00	2.00	ug/L	09.19.13 16.44		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	09.19.13 16.44		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	09.19.13 16.44		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	09.19.13 16.44		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	09.19.13 16.44		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	09.19.13 16.44		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	09.19.13 16.44		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	09.19.13 16.44		1
Chloroform	67-66-3	**0.840**	0.500	ug/L	09.19.13 16.44		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	09.19.13 16.44		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	09.19.13 16.44		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	09.19.13 16.44		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	09.19.13 16.44		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	09.19.13 16.44		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	09.19.13 16.44		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	09.19.13 16.44		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	09.19.13 16.44		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	09.19.13 16.44		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	09.19.13 16.44		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	09.19.13 16.44		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	09.19.13 16.44		1
1,1-Dichloroethane	75-34-3	**0.840**	0.500	ug/L	09.19.13 16.44		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	09.19.13 16.44		1
1,1-Dichloroethene	75-35-4	**1.21**	0.500	ug/L	09.19.13 16.44		1
cis-1,2-Dichloroethene	156-59-2	**1.21**	0.500	ug/L	09.19.13 16.44		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	09.19.13 16.44		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	09.19.13 16.44		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	09.19.13 16.44		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	09.19.13 16.44		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	09.19.13 16.44		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	09.19.13 16.44		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB126-0100-14135** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-008 Date Collected: 09.17.13 12.55

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 09.19.13 12.14

Seq Number: 923605

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	09.19.13 16.44		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	09.19.13 16.44		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	09.19.13 16.44		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	09.19.13 16.44		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	09.19.13 16.44		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	09.19.13 16.44		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	09.19.13 16.44		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	09.19.13 16.44		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	09.19.13 16.44		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	09.19.13 16.44		1
Styrene	100-42-5	<1.00	1.00	ug/L	09.19.13 16.44		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	09.19.13 16.44		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	09.19.13 16.44		1
Tetrachloroethylene	127-18-4	**2.43**	0.500	ug/L	09.19.13 16.44		1
Toluene	108-88-3	<2.00	2.00	ug/L	09.19.13 16.44		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	09.19.13 16.44		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	09.19.13 16.44		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	09.19.13 16.44		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	09.19.13 16.44		1
Trichloroethene	79-01-6	**4.36**	0.500	ug/L	09.19.13 16.44		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	09.19.13 16.44		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	09.19.13 16.44		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	09.19.13 16.44		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	09.19.13 16.44		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	09.19.13 16.44		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	09.19.13 16.44		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	09.19.13 16.44		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	09.19.13 16.44		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	09.19.13 16.44		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	09.19.13 16.44	
1,2-Dichloroethane-D4	17060-07-0	97	%	66-139	09.19.13 16.44	
Toluene-D8	2037-26-5	100	%	70-130	09.19.13 16.44	
4-Bromofluorobenzene	460-00-4	93	%	70-135	09.19.13 16.44	

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB126-0104-1000**
Lab Sample Id: 470337-009

Matrix: Water
Date Collected: 09.17.13 14.00

Date Received: 09.17.13 15.25

Analytical Method: Metals, Dissolved, by EPA 6010B
Tech: MLI
Analyst: MKO
Seq Number: 923156

Date Prep: 09.19.13 09.20

Prep Method: SW3010A
% Moisture:

SUB: AZ0765

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chromium	7440-47-3	<0.0100	0.0100	mg/L	09.19.13 23.05		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB126-0104-1000**
Lab Sample Id: 470337-009

Matrix: Water
Date Collected: 09.17.13 14.00

Date Received: 09.17.13 15.25

Analytical Method: VOCs by EPA 8260B
Tech: OEM
Analyst: OEM
Seq Number: 923605

Date Prep: 09.19.13 12.14

Prep Method: SW5030C
% Moisture:

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Acetone	67-64-1	<20.0	20.0	ug/L	09.19.13 17.10		1
Benzene	71-43-2	<0.500	0.500	ug/L	09.19.13 17.10		1
Bromobenzene	108-86-1	<1.50	1.50	ug/L	09.19.13 17.10		1
Bromochloromethane	74-97-5	<0.500	0.500	ug/L	09.19.13 17.10		1
Bromodichloromethane	75-27-4	<0.500	0.500	ug/L	09.19.13 17.10		1
Bromoform	75-25-2	<1.00	1.00	ug/L	09.19.13 17.10		1
Bromomethane	74-83-9	<5.00	5.00	ug/L	09.19.13 17.10		1
2-Butanone	78-93-3	<5.00	5.00	ug/L	09.19.13 17.10		1
MTBE	1634-04-4	<2.00	2.00	ug/L	09.19.13 17.10		1
n-Butylbenzene	104-51-8	<2.50	2.50	ug/L	09.19.13 17.10		1
Sec-Butylbenzene	135-98-8	<1.50	1.50	ug/L	09.19.13 17.10		1
tert-Butylbenzene	98-06-6	<2.50	2.50	ug/L	09.19.13 17.10		1
Carbon Disulfide	75-15-0	<0.500	0.500	ug/L	09.19.13 17.10		1
Carbon Tetrachloride	56-23-5	<0.500	0.500	ug/L	09.19.13 17.10		1
Chlorobenzene	108-90-7	<0.500	0.500	ug/L	09.19.13 17.10		1
Chloroethane	75-00-3	<4.00	4.00	ug/L	09.19.13 17.10		1
Chloroform	67-66-3	<0.500	0.500	ug/L	09.19.13 17.10		1
Chloromethane	74-87-3	<5.00	5.00	ug/L	09.19.13 17.10		1
2-Chlorotoluene	95-49-8	<1.50	1.50	ug/L	09.19.13 17.10		1
4-Chlorotoluene	106-43-4	<2.00	2.00	ug/L	09.19.13 17.10		1
p-Cymene (p-Isopropyltoluene)	99-87-6	<1.50	1.50	ug/L	09.19.13 17.10		1
Dibromochloromethane	124-48-1	<0.500	0.500	ug/L	09.19.13 17.10		1
1,2-Dibromo-3-Chloropropane	96-12-8	<2.00	2.00	ug/L	09.19.13 17.10		1
1,2-Dibromoethane	106-93-4	<0.500	0.500	ug/L	09.19.13 17.10		1
Dibromomethane	74-95-3	<0.500	0.500	ug/L	09.19.13 17.10		1
1,2-Dichlorobenzene	95-50-1	<1.50	1.50	ug/L	09.19.13 17.10		1
1,3-Dichlorobenzene	541-73-1	<1.50	1.50	ug/L	09.19.13 17.10		1
1,4-Dichlorobenzene	106-46-7	<1.50	1.50	ug/L	09.19.13 17.10		1
Dichlorodifluoromethane	75-71-8	<2.00	2.00	ug/L	09.19.13 17.10		1
1,1-Dichloroethane	75-34-3	<0.500	0.500	ug/L	09.19.13 17.10		1
1,2-Dichloroethane	107-06-2	<0.500	0.500	ug/L	09.19.13 17.10		1
1,1-Dichloroethene	75-35-4	<0.500	0.500	ug/L	09.19.13 17.10		1
cis-1,2-Dichloroethene	156-59-2	<0.500	0.500	ug/L	09.19.13 17.10		1
trans-1,2-dichloroethene	156-60-5	<0.500	0.500	ug/L	09.19.13 17.10		1
1,2-Dichloropropane	78-87-5	<0.500	0.500	ug/L	09.19.13 17.10		1
1,3-Dichloropropane	142-28-9	<1.00	1.00	ug/L	09.19.13 17.10		1
2,2-Dichloropropane	594-20-7	<0.500	0.500	ug/L	09.19.13 17.10		1
1,1-Dichloropropene	563-58-6	<1.00	1.00	ug/L	09.19.13 17.10		1
cis-1,3-Dichloropropene	10061-01-5	<1.00	1.00	ug/L	09.19.13 17.10		1

Certificate of Analytical Results 470337

Terranext, Phoenix, AZ

WVBA

Sample Id: **AVB126-0104-1000** Matrix: Water Date Received:09.17.13 15.25

Lab Sample Id: 470337-009 Date Collected: 09.17.13 14.00

Analytical Method: VOCs by EPA 8260B Prep Method: SW5030C

Tech: OEM % Moisture:

Analyst: OEM Date Prep: 09.19.13 12.14

Seq Number: 923605

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
trans-1,3-dichloropropene	10061-02-6	<0.500	0.500	ug/L	09.19.13 17.10		1
Ethylbenzene	100-41-4	<2.00	2.00	ug/L	09.19.13 17.10		1
Hexachlorobutadiene	87-68-3	<5.00	5.00	ug/L	09.19.13 17.10		1
2-Hexanone	591-78-6	<5.00	5.00	ug/L	09.19.13 17.10		1
isopropylbenzene	98-82-8	<2.50	2.50	ug/L	09.19.13 17.10		1
Methylene Chloride	75-09-2	<3.00	3.00	ug/L	09.19.13 17.10		1
Iodomethane (Methyl Iodide)	74-88-4	<2.00	2.00	ug/L	09.19.13 17.10		1
4-Methyl-2-Pentanone	108-10-1	<5.00	5.00	ug/L	09.19.13 17.10		1
Naphthalene	91-20-3	<5.00	5.00	ug/L	09.19.13 17.10		1
n-Propylbenzene	103-65-1	<2.00	2.00	ug/L	09.19.13 17.10		1
Styrene	100-42-5	<1.00	1.00	ug/L	09.19.13 17.10		1
1,1,1,2-Tetrachloroethane	630-20-6	<0.500	0.500	ug/L	09.19.13 17.10		1
1,1,2,2-Tetrachloroethane	79-34-5	<0.500	0.500	ug/L	09.19.13 17.10		1
Tetrachloroethylene	127-18-4	<0.500	0.500	ug/L	09.19.13 17.10		1
Toluene	108-88-3	<2.00	2.00	ug/L	09.19.13 17.10		1
1,2,3-Trichlorobenzene	87-61-6	<5.00	5.00	ug/L	09.19.13 17.10		1
1,2,4-Trichlorobenzene	120-82-1	<5.00	5.00	ug/L	09.19.13 17.10		1
1,1,1-Trichloroethane	71-55-6	<0.500	0.500	ug/L	09.19.13 17.10		1
1,1,2-Trichloroethane	79-00-5	<0.500	0.500	ug/L	09.19.13 17.10		1
Trichloroethene	79-01-6	<0.500	0.500	ug/L	09.19.13 17.10		1
Trichlorofluoromethane	75-69-4	<2.00	2.00	ug/L	09.19.13 17.10		1
1,2,3-Trichloropropane	96-18-4	<1.00	1.00	ug/L	09.19.13 17.10		1
1,2,4-Trimethylbenzene	95-63-6	<2.00	2.00	ug/L	09.19.13 17.10		1
1,3,5-Trimethylbenzene	108-67-8	<1.50	1.50	ug/L	09.19.13 17.10		1
o-Xylene	95-47-6	<1.00	1.00	ug/L	09.19.13 17.10		1
m,p-Xylenes	179601-23-1	<2.00	2.00	ug/L	09.19.13 17.10		1
Vinyl Acetate	108-05-4	<5.00	5.00	ug/L	09.19.13 17.10		1
Vinyl Chloride	75-01-4	<0.500	0.500	ug/L	09.19.13 17.10		1
Total Xylenes	1330-20-7	<1.00	1.00	ug/L	09.19.13 17.10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
Dibromofluoromethane	1868-53-7	101	%	69-133	09.19.13 17.10	
1,2-Dichloroethane-D4	17060-07-0	96	%	66-139	09.19.13 17.10	
Toluene-D8	2037-26-5	98	%	70-130	09.19.13 17.10	
4-Bromofluorobenzene	460-00-4	92	%	70-135	09.19.13 17.10	

QC Summary 470337

Terranext
WVBA

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Seq Number: 923153 Matrix: Water Date Prep: 09.19.13
MB Sample Id: 644051-1-BLK LCS Sample Id: 644051-1-BKS LCSD Sample Id: 644051-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chromium	<0.0100	1.00	1.02	102	1.01	101	80-120	1	20	mg/L	09.19.13 17:27	

Analytical Method: **Total Metals by EPA 6010B** Prep Method: SW3010A
Seq Number: 923153 Matrix: Water Date Prep: 09.19.13
Parent Sample Id: 470164-002 MS Sample Id: 470164-002 S MSD Sample Id: 470164-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chromium	0.0607	1.00	1.05	99	1.03	97	75-125	2	20	mg/L	09.19.13 17:45	

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Seq Number: 923156 Matrix: Water Date Prep: 09.19.13
MB Sample Id: 644053-1-BLK LCS Sample Id: 644053-1-BKS LCSD Sample Id: 644053-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chromium	<0.0100	1.00	0.980	98	0.979	98	80-120	0	20	mg/L	09.19.13 20:28	

Analytical Method: **Metals, Dissolved, by EPA 6010B** Prep Method: SW3010A
Seq Number: 923156 Matrix: Water Date Prep: 09.19.13
Parent Sample Id: 470164-002 MS Sample Id: 470164-002 S MSD Sample Id: 470164-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chromium	<0.0100	1.00	0.973	97	0.964	96	75-125	1	20	mg/L	09.19.13 20:45	

QC Summary 470337

Terranext
WVBA

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Seq Number: 923601 Matrix: Water Date Prep: 09.18.13
MB Sample Id: 644123-1-BLK LCS Sample Id: 644123-1-BKS LCSD Sample Id: 644123-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Acetone	<20.0	40.0	47.6	119	44.5	111	55-165	7	28	ug/L	09.18.13 14:56	
Benzene	<0.500	20.0	20.7	104	20.3	102	70-130	2	20	ug/L	09.18.13 14:56	
Bromobenzene	<1.50	20.0	20.4	102	19.7	99	70-130	3	20	ug/L	09.18.13 14:56	
Bromochloromethane	<0.500	20.0	21.5	108	20.5	103	67-125	5	24	ug/L	09.18.13 14:56	
Bromodichloromethane	<0.500	20.0	22.5	113	21.2	106	70-130	6	20	ug/L	09.18.13 14:56	
Bromoform	<1.00	20.0	20.9	105	19.3	97	69-130	8	20	ug/L	09.18.13 14:56	
Bromomethane	<5.00	20.0	22.6	113	19.8	99	58-138	13	25	ug/L	09.18.13 14:56	
2-Butanone	<5.00	40.0	45.3	113	41.0	103	58-146	10	27	ug/L	09.18.13 14:56	
MTBE	<2.00	20.0	22.3	112	20.6	103	70-130	8	21	ug/L	09.18.13 14:56	
n-Butylbenzene	<2.50	20.0	19.1	96	20.1	101	58-128	5	20	ug/L	09.18.13 14:56	
Sec-Butylbenzene	<1.50	20.0	21.2	106	21.8	109	61-133	3	20	ug/L	09.18.13 14:56	
tert-Butylbenzene	<2.50	20.0	20.7	104	21.3	107	65-128	3	20	ug/L	09.18.13 14:56	
Carbon Disulfide	<0.500	20.0	18.0	90	18.5	93	59-138	3	22	ug/L	09.18.13 14:56	
Carbon Tetrachloride	<0.500	20.0	20.1	101	19.6	98	57-140	3	21	ug/L	09.18.13 14:56	
Chlorobenzene	<0.500	20.0	20.8	104	20.9	105	70-130	0	20	ug/L	09.18.13 14:56	
Chloroethane	<4.00	20.0	17.5	88	18.2	91	60-146	4	24	ug/L	09.18.13 14:56	
Chloroform	<0.500	20.0	21.1	106	20.5	103	66-128	3	24	ug/L	09.18.13 14:56	
Chloromethane	<5.00	20.0	17.2	86	18.8	94	47-144	9	26	ug/L	09.18.13 14:56	
2-Chlorotoluene	<1.50	20.0	21.4	107	21.3	107	70-130	0	20	ug/L	09.18.13 14:56	
4-Chlorotoluene	<2.00	20.0	21.9	110	22.7	114	70-130	4	28	ug/L	09.18.13 14:56	
p-Cymene (p-Isopropyltoluene)	<1.50	20.0	20.8	104	21.7	109	67-135	4	20	ug/L	09.18.13 14:56	
Dibromochloromethane	<0.500	20.0	21.0	105	19.7	99	70-130	6	20	ug/L	09.18.13 14:56	
1,2-Dibromo-3-Chloropropane	<2.00	20.0	20.5	103	19.2	96	60-128	7	21	ug/L	09.18.13 14:56	
1,2-Dibromoethane	<0.500	20.0	21.5	108	19.9	100	70-130	8	20	ug/L	09.18.13 14:56	
Dibromomethane	<0.500	20.0	21.9	110	20.2	101	70-130	8	23	ug/L	09.18.13 14:56	
1,2-Dichlorobenzene	<1.50	20.0	20.6	103	21.0	105	70-130	2	20	ug/L	09.18.13 14:56	
1,3-Dichlorobenzene	<1.50	20.0	20.7	104	20.9	105	70-130	1	20	ug/L	09.18.13 14:56	
1,4-Dichlorobenzene	<1.50	20.0	19.0	95	19.0	95	70-130	0	20	ug/L	09.18.13 14:56	
Dichlorodifluoromethane	<2.00	20.0	12.1	61	12.3	62	9-134	2	27	ug/L	09.18.13 14:56	
1,1-Dichloroethane	<0.500	20.0	21.9	110	21.4	107	66-132	2	20	ug/L	09.18.13 14:56	
1,2-Dichloroethane	<0.500	20.0	22.6	113	21.1	106	70-130	7	20	ug/L	09.18.13 14:56	
1,1-Dichloroethene	<0.500	20.0	19.7	99	19.7	99	58-144	0	21	ug/L	09.18.13 14:56	
cis-1,2-Dichloroethene	<0.500	20.0	20.2	101	19.5	98	67-129	4	24	ug/L	09.18.13 14:56	
trans-1,2-dichloroethene	<0.500	20.0	20.7	104	20.4	102	63-137	1	21	ug/L	09.18.13 14:56	
1,2-Dichloropropane	<0.500	20.0	20.9	105	19.7	99	70-130	6	20	ug/L	09.18.13 14:56	
1,3-Dichloropropane	<1.00	20.0	22.1	111	20.6	103	70-130	7	20	ug/L	09.18.13 14:56	
2,2-Dichloropropane	<0.500	20.0	21.0	105	20.5	103	60-141	2	24	ug/L	09.18.13 14:56	
1,1-Dichloropropene	<1.00	20.0	20.3	102	19.9	100	64-135	2	20	ug/L	09.18.13 14:56	
cis-1,3-Dichloropropene	<1.00	20.0	22.5	113	20.8	104	70-130	8	20	ug/L	09.18.13 14:56	
trans-1,3-dichloropropene	<0.500	20.0	22.6	113	21.3	107	70-130	6	20	ug/L	09.18.13 14:56	
Ethylbenzene	<2.00	20.0	19.9	100	20.1	101	70-130	1	20	ug/L	09.18.13 14:56	
Hexachlorobutadiene	<5.00	20.0	18.2	91	19.9	100	54-145	9	22	ug/L	09.18.13 14:56	
2-Hexanone	<5.00	40.0	44.1	110	40.7	102	65-129	8	20	ug/L	09.18.13 14:56	
isopropylbenzene	<2.50	20.0	20.4	102	20.6	103	70-130	1	20	ug/L	09.18.13 14:56	
Methylene Chloride	<3.00	20.0	19.7	99	19.4	97	61-127	2	20	ug/L	09.18.13 14:56	
Iodomethane (Methyl Iodide)	<2.00	20.0	21.4	107	20.5	103	68-128	4	22	ug/L	09.18.13 14:56	
4-Methyl-2-Pentanone	<5.00	40.0	48.1	120	42.1	105	67-131	13	21	ug/L	09.18.13 14:56	
Naphthalene	<5.00	20.0	19.5	98	19.8	99	64-133	2	27	ug/L	09.18.13 14:56	
n-Propylbenzene	<2.00	20.0	21.8	109	22.2	111	65-128	2	20	ug/L	09.18.13 14:56	
Styrene	<1.00	20.0	20.9	105	20.9	105	70-130	0	20	ug/L	09.18.13 14:56	
1,1,1,2-Tetrachloroethane	<0.500	20.0	20.3	102	19.5	98	70-130	4	20	ug/L	09.18.13 14:56	
1,1,2,2-Tetrachloroethane	<0.500	20.0	21.1	106	20.0	100	70-130	5	20	ug/L	09.18.13 14:56	

QC Summary 470337

Terranext
WVBA

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Seq Number: 923601 Matrix: Water Date Prep: 09.18.13
MB Sample Id: 644123-1-BLK LCS Sample Id: 644123-1-BKS LCSD Sample Id: 644123-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Tetrachloroethylene	<0.500	20.0	19.7	99	20.2	101	63-127	3	20	ug/L	09.18.13 14:56	
Toluene	<2.00	20.0	19.5	98	19.2	96	70-130	2	20	ug/L	09.18.13 14:56	
1,2,3-Trichlorobenzene	<5.00	20.0	18.5	93	18.3	92	66-131	1	27	ug/L	09.18.13 14:56	
1,2,4-Trichlorobenzene	<5.00	20.0	18.8	94	18.5	93	69-127	2	20	ug/L	09.18.13 14:56	
1,1,1-Trichloroethane	<0.500	20.0	20.6	103	20.5	103	62-133	0	20	ug/L	09.18.13 14:56	
1,1,2-Trichloroethane	<0.500	20.0	21.8	109	20.2	101	70-130	8	20	ug/L	09.18.13 14:56	
Trichloroethene	<0.500	20.0	20.6	103	20.4	102	70-130	1	20	ug/L	09.18.13 14:56	
Trichlorofluoromethane	<2.00	20.0	16.8	84	16.7	84	45-151	1	22	ug/L	09.18.13 14:56	
1,2,3-Trichloropropane	<1.00	20.0	22.1	111	20.1	101	70-130	9	20	ug/L	09.18.13 14:56	
1,2,4-Trimethylbenzene	<2.00	20.0	19.7	99	20.1	101	70-130	2	20	ug/L	09.18.13 14:56	
1,3,5-Trimethylbenzene	<1.50	20.0	19.4	97	19.7	99	70-130	2	20	ug/L	09.18.13 14:56	
o-Xylene	<1.00	20.0	21.5	108	21.5	108	70-130	0	20	ug/L	09.18.13 14:56	
m,p-Xylenes	<2.00	40.0	42.1	105	42.1	105	70-130	0	20	ug/L	09.18.13 14:56	
Vinyl Acetate	<5.00	20.0	18.7	94	17.3	87	52-142	8	22	ug/L	09.18.13 14:56	
Vinyl Chloride	<0.500	20.0	16.6	83	17.0	85	43-120	2	25	ug/L	09.18.13 14:56	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	104		102		97		69-133	%	09.18.13 14:56
1,2-Dichloroethane-D4	99		107		95		66-139	%	09.18.13 14:56
Toluene-D8	105		106		101		70-130	%	09.18.13 14:56
4-Bromofluorobenzene	94		101		99		70-135	%	09.18.13 14:56

QC Summary 470337

Terranext
WVBA

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Seq Number: 923605 Matrix: Water Date Prep: 09.19.13
MB Sample Id: 644126-1-BLK LCS Sample Id: 644126-1-BKS LCSD Sample Id: 644126-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Acetone	<20.0	40.0	36.9	92	43.4	109	55-165	16	28	ug/L	09.19.13 14:11	
Benzene	<0.500	20.0	20.7	104	20.4	102	70-130	1	20	ug/L	09.19.13 14:11	
Bromobenzene	<1.50	20.0	20.1	101	20.2	101	70-130	0	20	ug/L	09.19.13 14:11	
Bromochloromethane	<0.500	20.0	20.6	103	20.2	101	67-125	2	24	ug/L	09.19.13 14:11	
Bromodichloromethane	<0.500	20.0	22.2	111	22.1	111	70-130	0	20	ug/L	09.19.13 14:11	
Bromoform	<1.00	20.0	18.7	94	19.7	99	69-130	5	20	ug/L	09.19.13 14:11	
Bromomethane	<5.00	20.0	27.3	137	26.0	130	58-138	5	25	ug/L	09.19.13 14:11	
2-Butanone	<5.00	40.0	36.6	92	38.9	97	58-146	6	27	ug/L	09.19.13 14:11	
MTBE	<2.00	20.0	19.2	96	19.8	99	70-130	3	21	ug/L	09.19.13 14:11	
n-Butylbenzene	<2.50	20.0	20.6	103	20.8	104	58-128	1	20	ug/L	09.19.13 14:11	
Sec-Butylbenzene	<1.50	20.0	22.4	112	22.5	113	61-133	0	20	ug/L	09.19.13 14:11	
tert-Butylbenzene	<2.50	20.0	22.1	111	22.1	111	65-128	0	20	ug/L	09.19.13 14:11	
Carbon Disulfide	<0.500	20.0	22.9	115	19.3	97	59-138	17	22	ug/L	09.19.13 14:11	
Carbon Tetrachloride	<0.500	20.0	21.1	106	20.8	104	57-140	1	21	ug/L	09.19.13 14:11	
Chlorobenzene	<0.500	20.0	21.5	108	21.6	108	70-130	0	20	ug/L	09.19.13 14:11	
Chloroethane	<4.00	20.0	20.4	102	20.7	104	60-146	1	24	ug/L	09.19.13 14:11	
Chloroform	<0.500	20.0	22.3	112	21.7	109	66-128	3	24	ug/L	09.19.13 14:11	
Chloromethane	<5.00	20.0	19.5	98	20.2	101	47-144	4	26	ug/L	09.19.13 14:11	
2-Chlorotoluene	<1.50	20.0	22.7	114	22.1	111	70-130	3	20	ug/L	09.19.13 14:11	
4-Chlorotoluene	<2.00	20.0	22.6	113	23.3	117	70-130	3	28	ug/L	09.19.13 14:11	
p-Cymene (p-Isopropyltoluene)	<1.50	20.0	21.8	109	22.3	112	67-135	2	20	ug/L	09.19.13 14:11	
Dibromochloromethane	<0.500	20.0	19.7	99	19.8	99	70-130	1	20	ug/L	09.19.13 14:11	
1,2-Dibromo-3-Chloropropane	<2.00	20.0	16.7	84	18.3	92	60-128	9	21	ug/L	09.19.13 14:11	
1,2-Dibromoethane	<0.500	20.0	19.0	95	19.3	97	70-130	2	20	ug/L	09.19.13 14:11	
Dibromomethane	<0.500	20.0	19.9	100	20.0	100	70-130	1	23	ug/L	09.19.13 14:11	
1,2-Dichlorobenzene	<1.50	20.0	20.9	105	21.1	106	70-130	1	20	ug/L	09.19.13 14:11	
1,3-Dichlorobenzene	<1.50	20.0	21.2	106	21.8	109	70-130	3	20	ug/L	09.19.13 14:11	
1,4-Dichlorobenzene	<1.50	20.0	19.4	97	19.5	98	70-130	1	20	ug/L	09.19.13 14:11	
Dichlorodifluoromethane	<2.00	20.0	12.4	62	12.4	62	9-134	0	27	ug/L	09.19.13 14:11	
1,1-Dichloroethane	<0.500	20.0	23.2	116	23.0	115	66-132	1	20	ug/L	09.19.13 14:11	
1,2-Dichloroethane	<0.500	20.0	21.3	107	21.2	106	70-130	0	20	ug/L	09.19.13 14:11	
1,1-Dichloroethene	<0.500	20.0	21.1	106	20.8	104	58-144	1	21	ug/L	09.19.13 14:11	
cis-1,2-Dichloroethene	<0.500	20.0	21.1	106	20.3	102	67-129	4	24	ug/L	09.19.13 14:11	
trans-1,2-dichloroethene	<0.500	20.0	21.9	110	21.5	108	63-137	2	21	ug/L	09.19.13 14:11	
1,2-Dichloropropane	<0.500	20.0	20.4	102	20.2	101	70-130	1	20	ug/L	09.19.13 14:11	
1,3-Dichloropropane	<1.00	20.0	20.3	102	21.1	106	70-130	4	20	ug/L	09.19.13 14:11	
2,2-Dichloropropane	<0.500	20.0	21.7	109	21.2	106	60-141	2	24	ug/L	09.19.13 14:11	
1,1-Dichloropropene	<1.00	20.0	20.7	104	21.1	106	64-135	2	20	ug/L	09.19.13 14:11	
cis-1,3-Dichloropropene	<1.00	20.0	20.9	105	21.1	106	70-130	1	20	ug/L	09.19.13 14:11	
trans-1,3-dichloropropene	<0.500	20.0	21.6	108	22.0	110	70-130	2	20	ug/L	09.19.13 14:11	
Ethylbenzene	<2.00	20.0	20.9	105	21.2	106	70-130	1	20	ug/L	09.19.13 14:11	
Hexachlorobutadiene	<5.00	20.0	20.5	103	21.1	106	54-145	3	22	ug/L	09.19.13 14:11	
2-Hexanone	<5.00	40.0	33.7	84	37.9	95	65-129	12	20	ug/L	09.19.13 14:11	
isopropylbenzene	<2.50	20.0	21.1	106	21.6	108	70-130	2	20	ug/L	09.19.13 14:11	
Methylene Chloride	<3.00	20.0	20.4	102	19.9	100	61-127	2	20	ug/L	09.19.13 14:11	
Iodomethane (Methyl Iodide)	<2.00	20.0	19.7	99	18.4	92	68-128	7	22	ug/L	09.19.13 14:11	
4-Methyl-2-Pentanone	<5.00	40.0	37.0	93	40.0	100	67-131	8	21	ug/L	09.19.13 14:11	
Naphthalene	<5.00	20.0	17.8	89	19.8	99	64-133	11	27	ug/L	09.19.13 14:11	
n-Propylbenzene	<2.00	20.0	23.0	115	22.9	115	65-128	0	20	ug/L	09.19.13 14:11	
Styrene	<1.00	20.0	21.3	107	21.9	110	70-130	3	20	ug/L	09.19.13 14:11	
1,1,1,2-Tetrachloroethane	<0.500	20.0	20.3	102	20.8	104	70-130	2	20	ug/L	09.19.13 14:11	
1,1,2,2-Tetrachloroethane	<0.500	20.0	18.9	95	20.1	101	70-130	6	20	ug/L	09.19.13 14:11	

QC Summary 470337

Terranext
WVBA

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Seq Number: 923605 Matrix: Water Date Prep: 09.19.13
MB Sample Id: 644126-1-BLK LCS Sample Id: 644126-1-BKS LCSD Sample Id: 644126-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Tetrachloroethylene	<0.500	20.0	20.1	101	20.5	103	63-127	2	20	ug/L	09.19.13 14:11	
Toluene	<2.00	20.0	19.8	99	20.0	100	70-130	1	20	ug/L	09.19.13 14:11	
1,2,3-Trichlorobenzene	<5.00	20.0	17.7	89	19.9	100	66-131	12	27	ug/L	09.19.13 14:11	
1,2,4-Trichlorobenzene	<5.00	20.0	18.9	95	19.8	99	69-127	5	20	ug/L	09.19.13 14:11	
1,1,1-Trichloroethane	<0.500	20.0	21.8	109	21.2	106	62-133	3	20	ug/L	09.19.13 14:11	
1,1,2-Trichloroethane	<0.500	20.0	19.6	98	20.6	103	70-130	5	20	ug/L	09.19.13 14:11	
Trichloroethene	<0.500	20.0	20.9	105	21.0	105	70-130	0	20	ug/L	09.19.13 14:11	
Trichlorofluoromethane	<2.00	20.0	18.3	92	17.8	89	45-151	3	22	ug/L	09.19.13 14:11	
1,2,3-Trichloropropane	<1.00	20.0	18.5	93	20.2	101	70-130	9	20	ug/L	09.19.13 14:11	
1,2,4-Trimethylbenzene	<2.00	20.0	20.9	105	21.0	105	70-130	0	20	ug/L	09.19.13 14:11	
1,3,5-Trimethylbenzene	<1.50	20.0	20.5	103	20.5	103	70-130	0	20	ug/L	09.19.13 14:11	
o-Xylene	<1.00	20.0	22.1	111	22.4	112	70-130	1	20	ug/L	09.19.13 14:11	
m,p-Xylenes	<2.00	40.0	44.0	110	44.3	111	70-130	1	20	ug/L	09.19.13 14:11	
Vinyl Acetate	<5.00	20.0	16.0	80	16.2	81	52-142	1	22	ug/L	09.19.13 14:11	
Vinyl Chloride	<0.500	20.0	19.1	96	19.0	95	43-120	1	25	ug/L	09.19.13 14:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	101		100		98		69-133	%	09.19.13 14:11
1,2-Dichloroethane-D4	94		95		95		66-139	%	09.19.13 14:11
Toluene-D8	99		100		100		70-130	%	09.19.13 14:11
4-Bromofluorobenzene	97		100		102		70-135	%	09.19.13 14:11

QC Summary 470337

Terranext
WVBA

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Seq Number: 923601 Matrix: Ground Water Date Prep: 09.18.13
Parent Sample Id: 469985-002 MS Sample Id: 469985-002 S MSD Sample Id: 469985-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Acetone	<20.0	40.0	42.4	106	38.2	96	35-160	10	20	ug/L	09.18.13 20:55	
Benzene	<0.500	20.0	21.1	106	20.1	101	69-130	5	20	ug/L	09.18.13 20:55	
Bromobenzene	<1.50	20.0	20.5	103	20.2	101	70-130	1	20	ug/L	09.18.13 20:55	
Bromochloromethane	<0.500	20.0	21.3	107	20.4	102	63-119	4	22	ug/L	09.18.13 20:55	
Bromodichloromethane	<0.500	20.0	22.6	113	21.4	107	70-130	5	20	ug/L	09.18.13 20:55	
Bromoform	<1.00	20.0	18.6	93	17.3	87	57-121	7	20	ug/L	09.18.13 20:55	
Bromomethane	<5.00	20.0	28.7	144	28.1	141	53-141	2	22	ug/L	09.18.13 20:55	M1
2-Butanone	<5.00	40.0	36.4	91	34.7	87	46-136	5	22	ug/L	09.18.13 20:55	
MTBE	<2.00	20.0	19.5	98	18.3	92	65-127	6	20	ug/L	09.18.13 20:55	
n-Butylbenzene	<2.50	20.0	20.4	102	20.9	105	65-127	2	20	ug/L	09.18.13 20:55	
Sec-Butylbenzene	<1.50	20.0	22.5	113	22.7	114	70-130	1	20	ug/L	09.18.13 20:55	
tert-Butylbenzene	<2.50	20.0	22.0	110	22.1	111	70-130	0	20	ug/L	09.18.13 20:55	
Carbon Disulfide	<0.500	20.0	23.0	115	22.5	113	58-145	2	28	ug/L	09.18.13 20:55	
Carbon Tetrachloride	<0.500	20.0	21.3	107	20.7	104	60-152	3	20	ug/L	09.18.13 20:55	
Chlorobenzene	<0.500	20.0	21.8	109	21.1	106	70-130	3	20	ug/L	09.18.13 20:55	
Chloroethane	<4.00	20.0	21.6	108	20.8	104	59-153	4	20	ug/L	09.18.13 20:55	
Chloroform	11.7	20.0	34.9	116	33.8	111	65-123	3	22	ug/L	09.18.13 20:55	
Chloromethane	<5.00	20.0	20.7	104	21.4	107	47-148	3	22	ug/L	09.18.13 20:55	
2-Chlorotoluene	<1.50	20.0	23.0	115	22.3	112	70-130	3	20	ug/L	09.18.13 20:55	
4-Chlorotoluene	<2.00	20.0	23.5	118	23.3	117	70-130	1	20	ug/L	09.18.13 20:55	
p-Cymene (p-Isopropyltoluene)	<1.50	20.0	22.0	110	22.3	112	70-130	1	20	ug/L	09.18.13 20:55	
Dibromochloromethane	<0.500	20.0	19.7	99	18.5	93	70-130	6	20	ug/L	09.18.13 20:55	
1,2-Dibromo-3-Chloropropane	<2.00	20.0	17.5	88	15.9	80	50-117	10	22	ug/L	09.18.13 20:55	
1,2-Dibromoethane	<0.500	20.0	19.2	96	18.0	90	67-117	6	20	ug/L	09.18.13 20:55	
Dibromomethane	<0.500	20.0	20.4	102	19.2	96	66-115	6	20	ug/L	09.18.13 20:55	
1,2-Dichlorobenzene	<1.50	20.0	21.0	105	20.5	103	70-130	2	20	ug/L	09.18.13 20:55	
1,3-Dichlorobenzene	<1.50	20.0	20.7	104	21.6	108	70-130	4	20	ug/L	09.18.13 20:55	
1,4-Dichlorobenzene	<1.50	20.0	19.8	99	18.9	95	70-130	5	20	ug/L	09.18.13 20:55	
Dichlorodifluoromethane	<2.00	20.0	13.5	68	13.1	66	16-151	3	33	ug/L	09.18.13 20:55	
1,1-Dichloroethane	<0.500	20.0	23.7	119	23.0	115	66-129	3	20	ug/L	09.18.13 20:55	
1,2-Dichloroethane	<0.500	20.0	22.3	112	20.8	104	64-126	7	20	ug/L	09.18.13 20:55	
1,1-Dichloroethene	<0.500	20.0	21.6	108	21.0	105	65-152	3	20	ug/L	09.18.13 20:55	
cis-1,2-Dichloroethene	<0.500	20.0	20.8	104	21.1	106	66-126	1	20	ug/L	09.18.13 20:55	
trans-1,2-dichloroethene	<0.500	20.0	22.1	111	21.6	108	66-135	2	20	ug/L	09.18.13 20:55	
1,2-Dichloropropane	<0.500	20.0	20.6	103	20.4	102	70-130	1	20	ug/L	09.18.13 20:55	
1,3-Dichloropropane	<1.00	20.0	21.0	105	19.7	99	67-115	6	20	ug/L	09.18.13 20:55	
2,2-Dichloropropane	<0.500	20.0	21.4	107	20.8	104	62-145	3	20	ug/L	09.18.13 20:55	
1,1-Dichloropropene	<1.00	20.0	20.9	105	20.6	103	72-140	1	20	ug/L	09.18.13 20:55	
cis-1,3-Dichloropropene	<1.00	20.0	21.0	105	20.4	102	67-122	3	20	ug/L	09.18.13 20:55	
trans-1,3-dichloropropene	<0.500	20.0	21.8	109	20.1	101	70-130	8	20	ug/L	09.18.13 20:55	
Ethylbenzene	<2.00	20.0	21.1	106	20.8	104	70-130	1	20	ug/L	09.18.13 20:55	
Hexachlorobutadiene	<5.00	20.0	19.5	98	19.3	97	68-143	1	20	ug/L	09.18.13 20:55	
2-Hexanone	<5.00	40.0	33.8	85	33.2	83	52-122	2	33	ug/L	09.18.13 20:55	
isopropylbenzene	<2.50	20.0	21.1	106	20.9	105	70-130	1	20	ug/L	09.18.13 20:55	
Methylene Chloride	<3.00	20.0	20.2	101	19.7	99	59-121	3	20	ug/L	09.18.13 20:55	
Iodomethane (Methyl Iodide)	<2.00	20.0	21.9	110	20.2	101	66-127	8	20	ug/L	09.18.13 20:55	
4-Methyl-2-Pentanone	<5.00	40.0	36.8	92	34.8	87	53-125	6	20	ug/L	09.18.13 20:55	
Naphthalene	<5.00	20.0	17.3	87	17.8	89	54-129	3	26	ug/L	09.18.13 20:55	
n-Propylbenzene	<2.00	20.0	23.4	117	23.4	117	69-126	0	20	ug/L	09.18.13 20:55	
Styrene	<1.00	20.0	16.1	81	14.5	73	49-142	10	37	ug/L	09.18.13 20:55	
1,1,1,2-Tetrachloroethane	<0.500	20.0	20.3	102	19.6	98	70-130	4	20	ug/L	09.18.13 20:55	
1,1,2,2-Tetrachloroethane	<0.500	20.0	18.8	94	17.7	89	64-122	6	20	ug/L	09.18.13 20:55	

QC Summary 470337

Terranext
WVBA

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Seq Number: 923601 Matrix: Ground Water Date Prep: 09.18.13
Parent Sample Id: 469985-002 MS Sample Id: 469985-002 S MSD Sample Id: 469985-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Tetrachloroethylene	3.17	20.0	23.6	102	23.1	100	69-130	2	20	ug/L	09.18.13 20:55	
Toluene	<2.00	20.0	20.2	101	19.8	99	70-130	2	20	ug/L	09.18.13 20:55	
1,2,3-Trichlorobenzene	<5.00	20.0	16.5	83	18.1	91	61-126	9	24	ug/L	09.18.13 20:55	
1,2,4-Trichlorobenzene	<5.00	20.0	17.1	86	18.3	92	64-123	7	20	ug/L	09.18.13 20:55	
1,1,1-Trichloroethane	<0.500	20.0	21.7	109	21.5	108	68-136	1	20	ug/L	09.18.13 20:55	
1,1,2-Trichloroethane	<0.500	20.0	20.0	100	18.6	93	65-112	7	20	ug/L	09.18.13 20:55	
Trichloroethene	<0.500	20.0	21.5	108	20.8	104	70-130	3	20	ug/L	09.18.13 20:55	
Trichlorofluoromethane	<2.00	20.0	19.3	97	18.6	93	53-171	4	20	ug/L	09.18.13 20:55	
1,2,3-Trichloropropane	<1.00	20.0	19.5	98	17.8	89	58-116	9	20	ug/L	09.18.13 20:55	
1,2,4-Trimethylbenzene	<2.00	20.0	21.2	106	21.0	105	67-128	1	22	ug/L	09.18.13 20:55	
1,3,5-Trimethylbenzene	<1.50	20.0	20.8	104	20.6	103	70-130	1	20	ug/L	09.18.13 20:55	
o-Xylene	<1.00	20.0	22.5	113	21.8	109	70-130	3	20	ug/L	09.18.13 20:55	
m,p-Xylenes	<2.00	40.0	44.3	111	43.2	108	70-130	3	20	ug/L	09.18.13 20:55	
Vinyl Acetate	<5.00	20.0	13.1	66	12.0	60	43-133	9	23	ug/L	09.18.13 20:55	
Vinyl Chloride	<0.500	20.0	20.0	100	20.7	104	46-132	3	21	ug/L	09.18.13 20:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	103		99		69-133	%	09.18.13 20:55
1,2-Dichloroethane-D4	102		96		66-139	%	09.18.13 20:55
Toluene-D8	103		101		70-130	%	09.18.13 20:55
4-Bromofluorobenzene	102		98		70-135	%	09.18.13 20:55

QC Summary 470337

Terranext
WVBA

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Seq Number: 923605 Matrix: Water Date Prep: 09.19.13
Parent Sample Id: 470337-005 MS Sample Id: 470337-005 S MSD Sample Id: 470337-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Acetone	<20.0	40.0	38.8	97	51.0	128	35-160	27	20	ug/L	09.19.13 17:35	R5
Benzene	<0.500	20.0	20.7	104	20.8	104	69-130	0	20	ug/L	09.19.13 17:35	
Bromobenzene	<1.50	20.0	20.1	101	20.7	104	70-130	3	20	ug/L	09.19.13 17:35	
Bromochloromethane	<0.500	20.0	21.4	107	21.1	106	63-119	1	22	ug/L	09.19.13 17:35	
Bromodichloromethane	<0.500	20.0	22.2	111	21.4	107	70-130	4	20	ug/L	09.19.13 17:35	
Bromoform	<1.00	20.0	18.4	92	17.4	87	57-121	6	20	ug/L	09.19.13 17:35	
Bromomethane	<5.00	20.0	25.2	126	25.2	126	53-141	0	22	ug/L	09.19.13 17:35	
2-Butanone	<5.00	40.0	38.1	95	39.4	99	46-136	3	22	ug/L	09.19.13 17:35	
MTBE	<2.00	20.0	20.2	101	20.8	104	65-127	3	20	ug/L	09.19.13 17:35	
n-Butylbenzene	<2.50	20.0	20.3	102	21.2	106	65-127	4	20	ug/L	09.19.13 17:35	
Sec-Butylbenzene	<1.50	20.0	22.2	111	23.1	116	70-130	4	20	ug/L	09.19.13 17:35	
tert-Butylbenzene	<2.50	20.0	21.6	108	22.5	113	70-130	4	20	ug/L	09.19.13 17:35	
Carbon Disulfide	<0.500	20.0	18.5	93	21.3	107	58-145	14	28	ug/L	09.19.13 17:35	
Carbon Tetrachloride	<0.500	20.0	21.2	106	20.5	103	60-152	3	20	ug/L	09.19.13 17:35	
Chlorobenzene	<0.500	20.0	21.5	108	21.2	106	70-130	1	20	ug/L	09.19.13 17:35	
Chloroethane	<4.00	20.0	20.9	105	22.4	112	59-153	7	20	ug/L	09.19.13 17:35	
Chloroform	<0.500	20.0	22.6	113	22.8	114	65-123	1	22	ug/L	09.19.13 17:35	
Chloromethane	<5.00	20.0	18.9	95	20.1	101	47-148	6	22	ug/L	09.19.13 17:35	
2-Chlorotoluene	<1.50	20.0	22.0	110	22.8	114	70-130	4	20	ug/L	09.19.13 17:35	
4-Chlorotoluene	<2.00	20.0	22.8	114	24.1	121	70-130	6	20	ug/L	09.19.13 17:35	
p-Cymene (p-Isopropyltoluene)	<1.50	20.0	21.6	108	22.7	114	70-130	5	20	ug/L	09.19.13 17:35	
Dibromochloromethane	<0.500	20.0	19.6	98	18.5	93	70-130	6	20	ug/L	09.19.13 17:35	
1,2-Dibromo-3-Chloropropane	<2.00	20.0	17.8	89	18.0	90	50-117	1	22	ug/L	09.19.13 17:35	
1,2-Dibromoethane	<0.500	20.0	19.7	99	19.8	99	67-117	1	20	ug/L	09.19.13 17:35	
Dibromomethane	<0.500	20.0	20.7	104	20.4	102	66-115	1	20	ug/L	09.19.13 17:35	
1,2-Dichlorobenzene	<1.50	20.0	20.8	104	21.6	108	70-130	4	20	ug/L	09.19.13 17:35	
1,3-Dichlorobenzene	<1.50	20.0	20.5	103	22.4	112	70-130	9	20	ug/L	09.19.13 17:35	
1,4-Dichlorobenzene	<1.50	20.0	19.7	99	19.5	98	70-130	1	20	ug/L	09.19.13 17:35	
Dichlorodifluoromethane	<2.00	20.0	12.4	62	12.5	63	16-151	1	33	ug/L	09.19.13 17:35	
1,1-Dichloroethane	<0.500	20.0	23.2	116	23.5	118	66-129	1	20	ug/L	09.19.13 17:35	
1,2-Dichloroethane	<0.500	20.0	22.4	112	22.1	111	64-126	1	20	ug/L	09.19.13 17:35	
1,1-Dichloroethene	<0.500	20.0	21.1	106	21.9	110	65-152	4	20	ug/L	09.19.13 17:35	
cis-1,2-Dichloroethene	<0.500	20.0	20.3	102	20.7	104	66-126	2	20	ug/L	09.19.13 17:35	
trans-1,2-dichloroethene	<0.500	20.0	21.5	108	22.1	111	66-135	3	20	ug/L	09.19.13 17:35	
1,2-Dichloropropane	<0.500	20.0	20.7	104	20.5	103	70-130	1	20	ug/L	09.19.13 17:35	
1,3-Dichloropropane	<1.00	20.0	21.0	105	21.0	105	67-115	0	20	ug/L	09.19.13 17:35	
2,2-Dichloropropane	<0.500	20.0	22.3	112	22.3	112	62-145	0	20	ug/L	09.19.13 17:35	
1,1-Dichloropropene	<1.00	20.0	20.9	105	20.9	105	72-140	0	20	ug/L	09.19.13 17:35	
cis-1,3-Dichloropropene	<1.00	20.0	20.4	102	19.4	97	67-122	5	20	ug/L	09.19.13 17:35	
trans-1,3-dichloropropene	<0.500	20.0	21.0	105	20.4	102	70-130	3	20	ug/L	09.19.13 17:35	
Ethylbenzene	<2.00	20.0	21.1	106	20.9	105	70-130	1	20	ug/L	09.19.13 17:35	
Hexachlorobutadiene	<5.00	20.0	19.7	99	21.2	106	68-143	7	20	ug/L	09.19.13 17:35	
2-Hexanone	<5.00	40.0	36.8	92	39.5	99	52-122	7	33	ug/L	09.19.13 17:35	
isopropylbenzene	<2.50	20.0	21.2	106	21.2	106	70-130	0	20	ug/L	09.19.13 17:35	
Methylene Chloride	<3.00	20.0	21.2	106	20.5	103	59-121	3	20	ug/L	09.19.13 17:35	
Iodomethane (Methyl Iodide)	<2.00	20.0	21.5	108	19.6	98	66-127	9	20	ug/L	09.19.13 17:35	
4-Methyl-2-Pentanone	<5.00	40.0	40.5	101	41.3	103	53-125	2	20	ug/L	09.19.13 17:35	
Naphthalene	<5.00	20.0	17.6	88	19.5	98	54-129	10	26	ug/L	09.19.13 17:35	
n-Propylbenzene	<2.00	20.0	22.7	114	23.6	118	69-126	4	20	ug/L	09.19.13 17:35	
Styrene	<1.00	20.0	21.2	106	20.7	104	49-142	2	37	ug/L	09.19.13 17:35	
1,1,1,2-Tetrachloroethane	<0.500	20.0	20.6	103	19.7	99	70-130	4	20	ug/L	09.19.13 17:35	
1,1,2,2-Tetrachloroethane	<0.500	20.0	19.7	99	19.5	98	64-122	1	20	ug/L	09.19.13 17:35	

QC Summary 470337

Terranext
WVBA

Analytical Method: **VOCs by EPA 8260B** Prep Method: SW5030C
Seq Number: 923605 Matrix: Water Date Prep: 09.19.13
Parent Sample Id: 470337-005 MS Sample Id: 470337-005 S MSD Sample Id: 470337-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Tetrachloroethylene	5.28	20.0	25.2	100	24.7	97	69-130	2	20	ug/L	09.19.13 17:35	
Toluene	<2.00	20.0	19.9	100	19.8	99	70-130	1	20	ug/L	09.19.13 17:35	
1,2,3-Trichlorobenzene	<5.00	20.0	17.8	89	18.5	93	61-126	4	24	ug/L	09.19.13 17:35	
1,2,4-Trichlorobenzene	<5.00	20.0	18.5	93	19.7	99	64-123	6	20	ug/L	09.19.13 17:35	
1,1,1-Trichloroethane	<0.500	20.0	21.9	110	22.0	110	68-136	0	20	ug/L	09.19.13 17:35	
1,1,2-Trichloroethane	<0.500	20.0	20.3	102	20.7	104	65-112	2	20	ug/L	09.19.13 17:35	
Trichloroethene	<0.500	20.0	21.1	106	21.0	105	70-130	0	20	ug/L	09.19.13 17:35	
Trichlorofluoromethane	<2.00	20.0	18.3	92	18.6	93	53-171	2	20	ug/L	09.19.13 17:35	
1,2,3-Trichloropropane	<1.00	20.0	19.3	97	20.6	103	58-116	7	20	ug/L	09.19.13 17:35	
1,2,4-Trimethylbenzene	<2.00	20.0	20.6	103	21.3	107	67-128	3	22	ug/L	09.19.13 17:35	
1,3,5-Trimethylbenzene	<1.50	20.0	20.1	101	21.3	107	70-130	6	20	ug/L	09.19.13 17:35	
o-Xylene	<1.00	20.0	22.2	111	21.9	110	70-130	1	20	ug/L	09.19.13 17:35	
m,p-Xylenes	<2.00	40.0	43.0	108	43.2	108	70-130	0	20	ug/L	09.19.13 17:35	
Vinyl Acetate	<5.00	20.0	15.9	80	16.4	82	43-133	3	23	ug/L	09.19.13 17:35	
Vinyl Chloride	<0.500	20.0	19.2	96	20.8	104	46-132	8	21	ug/L	09.19.13 17:35	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
Dibromofluoromethane	99		100		69-133	%	09.19.13 17:35
1,2-Dichloroethane-D4	98		97		66-139	%	09.19.13 17:35
Toluene-D8	100		100		70-130	%	09.19.13 17:35
4-Bromofluorobenzene	101		99		70-135	%	09.19.13 17:35

XENCO Laboratories

Chain of Custody

Committed to Excellence in Service and Quality Since 1990 SDBE

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Trans West Analytical Services 3725 E. Atlanta Ave. • Phoenix, AZ 85040 • Ph: (602) 437-0330 •• 3860 S. Palo Verde Rd., Suite 301 • Tucson, AZ 85714 • Ph: (520)975-2962

Work Order No: 470337

Page 1 of 1

Project Manager:	Chuck Gordon	Bill to: (if different)	
Company Name:	Tetra Tech	Company Name:	
Address:	4050 E Cotton Center Blvd #77	Address:	
City, State ZIP:	PHX AZ 85040	City, State ZIP:	
Phone:	480-496-4100	Email:	c.gordon@tetratech.net

Work Order Comments

Level ~~III~~
PDF & EDD

Project Name:	WWBA
Project Number:	03103154
P.O. Number:	
Sampler's Name:	Roy Ashlock

SAMPLE RECEIPT

Temperature (°C):	1-6	Temp Blank Present:	Y
Received Intact:	Yes No N/A	Wet Ice / Blue Ice	
Cooler Custody Seals:	Yes No N/A	Total Containers:	
Sample Custody Seals:	Yes No N/A		

TAT

- [x] Routine
- [ ] Rush - Prelim
- [ ] Rush - Final

Prelim Due Date:

Final Due Date:

ANALYSIS REQUEST (PLEASE CHECK METHOD NUMBER)

Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID	Number of Containers	Volatile Organics 8260B [x] / 624 [ ] / 524.2 [ ]	Acrolein [ ] / Acrylonitrile [ ] / 2-CEVE [ ] / 8260B [ ] / 624 [ ]	Semi-Volatile Organics 8270C [ ] / 625 [ ]	Organochlorine Pesticides 8081A [ ] / 608 [ ]	Oil & Grease (1664-HEM) [ ] / TPH (1664-HEM-SGT) [ ]	Metals (See Below) Total [x] / Hardness [ ] / Ca Hardness [ ]	Metals (See Below) Dissolved [x] / TCLP [ ]	Total Hexavalent Cr [ ] / Dissolved Hexavalent Cr [ ]	Total Cyanide [ ] / Amenable (Free) Cyanide [ ]	BOD [ ]	pH [ ] / Cond. [ ] / Alk [ ] / TDS [ ] / TSS [ ] / Cl [ ] / SO4 [ ] / F [ ] / Ortho-P [ ]	NO2 [ ] / NO3 (300.0) [ ]	NO2+NO3 (353.2) [ ]	TKN [ ] / COD [ ] / NH3 [ ] / Total-P [ ]	Colilert [ ] / HPC [ ] / E. Coli (CFU/MPN) [ ] / Fecal (CFU/MPN) [ ]	Sample Comments
AVB 106-0102-1000	W	9/17/13	0800	1	1	X					X	X									
AVB 106-0100-26101			0835	2	5	X					X	X									
AVB 12-0100-37105			0925	3	5	X					X	X									
AVB 14-0100-35109			0955	4	5	X					X	X									
AVB 69-0200-0110			1050	5	5	X					X	X									
AVB 88-0100-24116			1130	6	5	X					X	X									
AVB 97-0100-21119			1215	7	5	X					X	X									
AVB 116-0100-14135			1255	8	5	X					X	X									
AVB 126-0104-1000			1400	9	5	X					X	X									

Total	200.7 / 6010B: 8RCRA 13PPM Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Tl Sn V Zn
Circle Method(s) and Metal(s) to be analyzed	200.8 / 6020: Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Other: 245.1 / 7470A: Hg
Dissolved / TCLP	200.7 / 6010B: 8RCRA 13PPM Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Tl Sn V Zn
Circle Method(s) and Metal(s) to be analyzed	200.8 / 6020: Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Other: 245.1 / 7470A: Hg

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Roy Ashlock	Tracy [illegible]	9-17-13 1525
2		
3		

Upon signing this COC, you accept Xenco terms and conditions unless otherwise agreed upon in writing. Reports are intellectual property of Xenco until paid. Samples will be held 30 days after the final report is emailed unless herby requested. Rush charges and collection fees are pre-approved if necessary.

C.O.C. Serial # 16967

TRANS WEST ANALYTICAL

Sample Receipt Checklist

Client Name: Terranext Date and Time Received: 9-17-13 1525

Work Order Number: 470337 Checked by: [illegible]

Checklist completed by: [illegible] Date: 9-17-13 Logged In by: [illegible] Date: 9-17-13

Matrix: Water Courier Name: Client Xenco _____

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	Not Present ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Samples received same day of collection?	Yes ☑	No ☐	Temp: 1.6 Wet Ice Present ☑
Where was the temperature reading taken at?	Sample ☐	Temp Blank ☑	Other:
VOA Water – VOA vials have zero headspace?	Yes ☑	No ☐	N/A ☐
Water – Microbiological bottles have ≤ 2.5 cm headspace?	Yes ☐	No ☐	N/A ☑
Water – All sample pH's acceptable upon receipt?	Yes ☑	No ☐	N/A ☐ Checked by: [illegible]

If **No**, list all samples and bottle types that are not acceptable in Additional Comments section. Also state any correction actions.

Sulfide Water – Bottles have zero headspace?	Yes ☐	No ☐	N/A ☑ (zero headspace ≤ than neck of bottle)
Dissolved Water Analytes – Field Filtered?	Yes ☐	No ☑	N/A ☐
Are samples received deemed acceptable?	Yes ☑	No ☐	If **No** then complete section below

PM Notified Date: _____ Init: _____ PM Init: _____

Client Notified Date: _____ Init: _____ L/M ☐ Date: _____ L/M ☐ Date: _____

Contact Name: _____ Action to take: Analyze ☐ Cancel ☐ Hold ☐ Other:

Changes/Comments made on original COC? Yes ☐ N/A ☐ Init: _____ Date: _____

Changes made in LIMS? Yes ☐ N/A ☐ Init: _____ Date: _____

Additional Comments: _____

Radiological Screening: ____ Yes ____ No

If yes, indicate results greater than 2x background _____

CS-002-SRChecklist RV7

Volatile Organics by SW8260B

Sample Analysis

Method 8260B

Run ID 130918 **Date of Run 9/18/13** **Analyst JM** **Page # 35**

Acquisition Method **SC8260**

Standard ID's			**Syringe IDs:**
CCV Std	Prep Log #	GCMSVOA-6072	V-126
BFB Std	Prep Log #	GCMSVOA-6067	V-024
Internal Std	Prep Log #	GCMSVOA-6068	V-029
Surrogates	Prep Log #	GCMSVOA-6067	V-024
Bench Spike	Prep Log #	NA	NA
Secondary spike	Prep Log #	GCMSVOA-6071	NA
Methanol	RL #	07-22-24	V-141

Soil Blank & Sample Preparation

Name	Extract amount in µl	IS amount in µl
Method Blank	100	10
QC Samples	100	10
Matrix Samples	100	10

Aqueous Blank & Sample Preparation

Name	Surrogate	Secondary Spike	Sample amount in ml	IS amount in µl
Method Blank	10	NA	5.0	10
QC Samples	10	10	5.0	10
Matrix Samples	10	NA	5.0	10

CCV Preparation

Standard Name	Standard amt added in µl	Reagent Water amt in mL	Methanol amt added in µl
CCV #1	10	5	80
Internal Standard	10		
Surrogate Standard	10		

Aqueous Dilutions

Dilution	Sample
1X	5 mL
2X	2.5 mL
5X	1 mL
10X	500 µl
20X	250 µl
50X	100 µl
100 X	50 µl
200 X	25 µl
500 X	10 µl

VOA-003-Inst10RunLog RV1
Create a book by attaching a copy of the Injection Log and number it in consecutive order up to 100.

Injection Log

36

Directory: h:\voa\a228\130918

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	13	13091801.d	1.	BFB	TUNE CHECK	18 Sep 13 10:34
2	14	13091802.d	1.	CCV	CCV	18 Sep 13 10:59
3	13	13091803.d	1.	BFB	TUNE CHECK	18 Sep 13 11:43
4	14	13091804.d	1.	CCV	CCV	18 Sep 13 12:08
5	15	13091805.d	1.	BLK	BLK	18 Sep 13 12:49
6	16	13091806.d	1.	00470338-002	SAMP	18 Sep 13 13:14
7	1	13091807.d	1.	00470339-001	SAMP	18 Sep 13 13:39
8	2	13091808.d	10.	00470338-001	SAMP	18 Sep 13 14:05
9	3	13091809.d	100.	00470339-002	SAMP	18 Sep 13 14:31
10	4	13091810.d	1.	BKS	BKS	18 Sep 13 14:56
11	5	13091811.d	1.	BSD	BSD	18 Sep 13 15:22
12	6	13091812.d	10.	00470338-001 DUP	DUP	18 Sep 13 15:48
13	7	13091813.d	10.	00470339-002	SAMP	18 Sep 13 16:14
14	8	13091814.d	1.	469985-002 pH<2	SMP	18 Sep 13 16:40
15	9	13091815.d	1.	469985-001	SMP	18 Sep 13 17:06
16	10	13091816.d	1.	470334-001	SMP	18 Sep 13 17:33
17	11	13091817.d	1.	470334-002	SMP	18 Sep 13 17:58
18	12	13091818.d	1.	470334-003	SMP	18 Sep 13 18:24
19	13	13091819.d	1.	470334-004	SMP	18 Sep 13 18:49
20	14	13091820.d	1.	470334-005	SMP	18 Sep 13 19:14
21	15	13091821.d	1.	470334-006	SMP	18 Sep 13 19:40
22	16	13091822.d	1.	470334-007	SMP	18 Sep 13 20:05
23	1	13091823.d	1.	470334-008	SMP	18 Sep 13 20:30
24	2	13091824.d	1.	469985-002 S	MS	18 Sep 13 20:55
25	3	13091825.d	1.	469985-002 SD	MSD	18 Sep 13 21:19
26	4	13091826.d	1.	470337-001	SMP	18 Sep 13 21:44
27	5	13091827.d	1.	470337-002	SMP	18 Sep 13 22:09
28	6	13091828.d	1.	470337-003	SMP	18 Sep 13 22:34
29	7	13091829.d	1.	470337-004 —NR	SMP	18 Sep 13 22:58

omega 644123
923601

OM 9/19/13

GC/MS QA-QC Check Report

Tune File : H:\VOA\A228\130918\13091803.D
Tune Time : 18 Sep 2013 11:43

Daily Calibration File : H:\VOA\A228\130918\13091804.D

9/30/2013

						176302	341381	307732	
						142067			
File	Sample	Surrogate Recovery %				Internal Standard Responses			
13091805.D									
	BLK	104	99	105	94	170816	320740	295075	
				133399					
13091806.D									
	00470338-0	99	94	101	95	170179	324389	287751	
				129231					
13091807.D									
	00470339-0	101	97	102	93	174181	323537	287954	
				125458					
13091808.D									
	00470338-0	98	95	104	97	177444	329428	297465	
				131859					
13091809.D									
	00470339-0	99	96	102	94	172220	321716	284340	
				130426					
13091810.D									
	BKS	102	107	106	101	139672	253729	236559	
				107417					
13091811.D									
	BSD	97	95	101	99	163524	302647	277207	
				127324					
13091812.D									
	00470338-0	93	93	101	94	175548	318140	285545	
				131180					
13091813.D									
	00470339-0	97	94	103	98	179031	330442	291798	
				133422					
13091814.D									
	469985-002	100	96	103	94	164408	305715	282891	
				128124					
13091815.D									
	469985-001	100	99	103	96	158718	294453	260963	
				117867					
13091816.D									
	470334-001	101	99	103	95	158137	291078	257298	
				112785					
13091817.D									
	470334-002	98	97	101	93	158170	289953	259019	
				115061					
13091818.D									

	470334-003	101	98	102	93	151524	282821	255841
				115107				
13091819.D								
	470334-004	102	98	103	95	148269	278752	251333
				111846				
13091820.D								
	470334-005	102	99	103	95	146446	272415	247384
				110166				
13091821.D								
	470334-006	103	97	102	95	147489	280243	249591
				110140				
13091822.D								
	470334-007	105	100	102	96	141275	271069	241694
				107543				
13091823.D								
	470334-008	103	99	104	93	148102	276255	249353
				108752				
13091824.D								
	469985-002	103	101	103	102	133277	253258	234351
				104845				
13091825.D								
	469985-002	99	96	101	98	153724	294612	268152
				119209				
13091826.D								
	470337-001	105	96	102	95	140454	270643	240716
				105862				
13091827.D								
	470337-002	107	100	102	96	133996	258259	226774
				98020				
13091828.D								
	470337-003	105	99	101	94	136858	262248	233821
				101042				
13091829.D								
	470337-004	103	93	101	94	147548	287849	255205
				108938				

(fails) - fails 12hr time check * - fails criteria

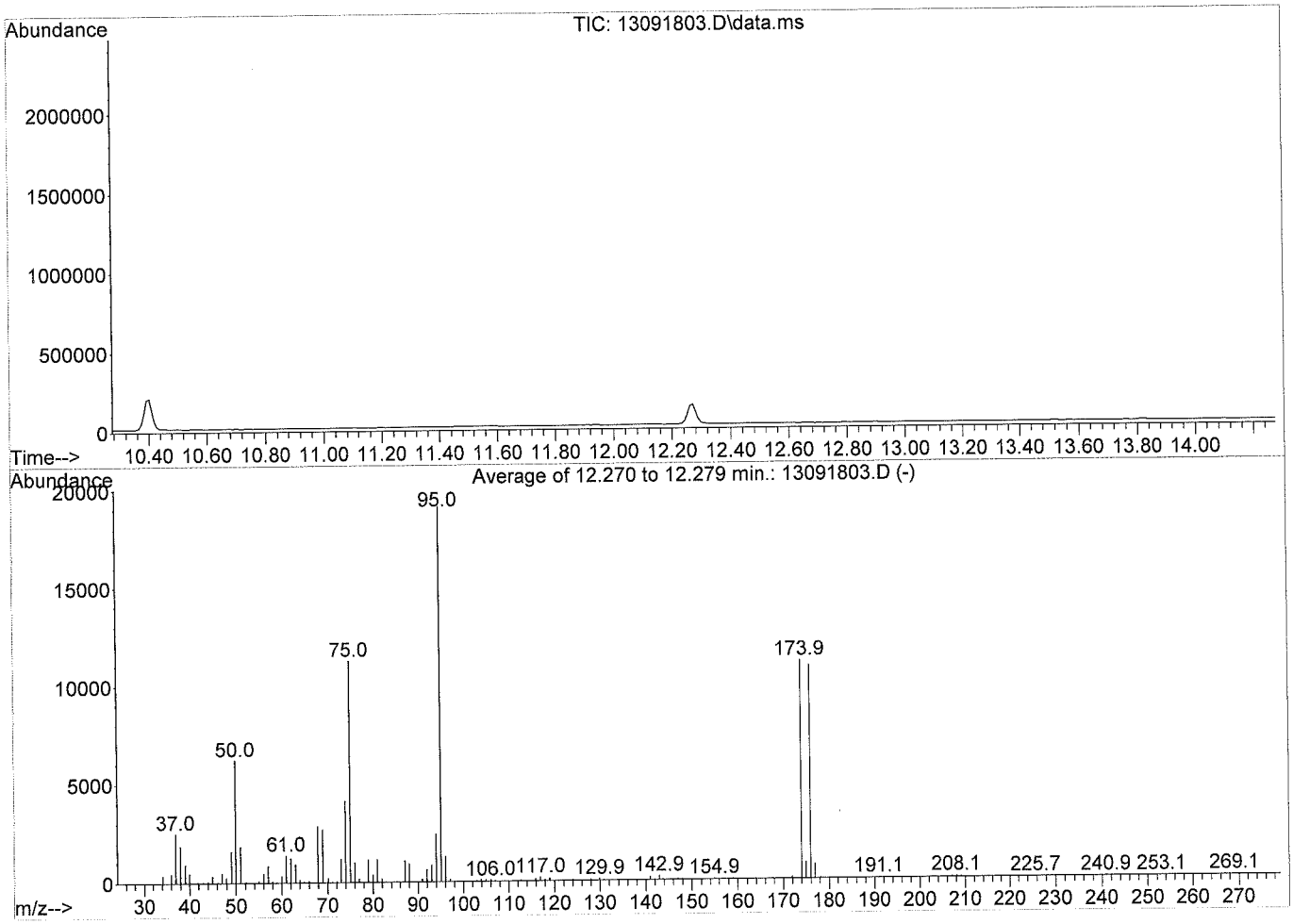
Created: Wed Sep 25 12:25:13 2013 GCMS 10

Data Path : H:\VOA\A228\130918\
Data File : 13091803.D
Acq On : 18 Sep 2013 11:43
Operator : JM
Sample : BFB
Misc : TUNE CHECK
ALS Vial : 13 Sample Multiplier: 1

Integration File: RTEINT.P

Method : H:\VOA\A228\METHODS\130916.M
Title : 8260B_S
Last Update : Tue Sep 24 17:55:32 2013

9/10/13



Spectrum Information: Average of 12.270 to 12.279 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	32.5	6215	PASS
75	95	30	60	59.0	11260	PASS
95	95	100	100	100.0	19095	PASS
96	95	5	9	6.8	1296	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	58.2	11107	PASS
175	174	5	9	7.5	834	PASS
176	174	95	101	97.7	10849	PASS
177	176	5	9	6.9	745	PASS

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091804.D
Acq On : 18 Sep 2013 12:08
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 18 12:25:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.520	168	176302	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.199	114	341381	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.458	117	307732	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	142067	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.556	113	164441	51.91 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 103.82%		
45) 1,2-Dichloroethane-d4	8.864	65	267453	47.84 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 95.68%		
46) Toluene-d8	10.390	98	490418	51.23 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 102.46%		
66) 4-Bromofluorobenzene	12.269	95	218122	49.89 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 99.78%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.075	85	128375	19.74 ug/L	98
3) Chloromethane	4.427	50	127675	19.95 ug/L	99
4) Vinyl chloride	4.613	62	74236	22.22 ug/L	99
5) 1,3-Butadiene	4.674	54	38528	20.94 ug/L	96
6) Bromomethane	5.045	94	34730	20.10 ug/L	98
7) Chloroethane	5.212	64	37425	19.53 ug/L	98
8) Trichlorofluoromethane	5.627	101	149320	20.30 ug/L	99
9) Acrolein	6.165	56	63261	104.25 ug/L	94
10) Trichlorotrifluoroethane	6.297	151	40463	19.42 ug/L	96
11) 1,1-Dichloroethene	6.324	61	157293	20.59 ug/L	96
12) Methylene chloride	6.862	84	82721	20.27 ug/L	99
13) Acrylonitrile	7.100	53	26945	20.43 ug/L	94
14) trans-1,2-Dichloroethene	7.180	61	151586	20.83 ug/L	99
15) n-Hexane	7.444	57	138651	19.96 ug/L	97
16) 1,1-Dichloroethane	7.603	63	169633	20.40 ug/L	99
17) Cyclohexane	8.714	84	104320	20.46 ug/L	88
18) 2,2-Dichloropropane	8.167	77	144156	20.82 ug/L	99
19) cis-1,2-Dichloroethene	8.150	96	73730	20.45 ug/L	98
20) Chloroform	8.406	83	163199	20.59 ug/L	99
21) Bromochloromethane	8.379	128	27407	20.54 ug/L	97
23) 1,1,1-Trichloroethane	8.635	97	127924	20.40 ug/L	100
24) Acetone	6.342	43	64997	40.57 ug/L	98
25) 2-Butanone	8.115	43	78598	37.04 ug/L	100
26) Carbon Disulfide	6.677	76	306441	20.71 ug/L	99
27) Iodomethane	6.544	142	83118	21.67 ug/L	99
28) Vinyl acetate	7.576	43	220870	19.20 ug/L	99
29) Methyl tert-butyl ether	7.144	73	162322	19.24 ug/L	97
31) 1,1-Dichloropropene	8.767	75	119776	19.57 ug/L	99
32) Carbon tetrachloride	8.794	117	92472	18.75 ug/L	100
33) 1,2-Dichloroethane	8.935	62	144148	20.00 ug/L	97
34) Benzene	8.952	78	284863	19.83 ug/L	96
35) 2,2,4-Trimethylpentane	8.979	57	364538	19.86 ug/L	98
36) n-Heptane	9.094	57	81944	19.80 ug/L	97
37) Trichloroethene	9.455	95	75439	19.62 ug/L	96

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091804.D
Acq On : 18 Sep 2013 12:08
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 18 12:25:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

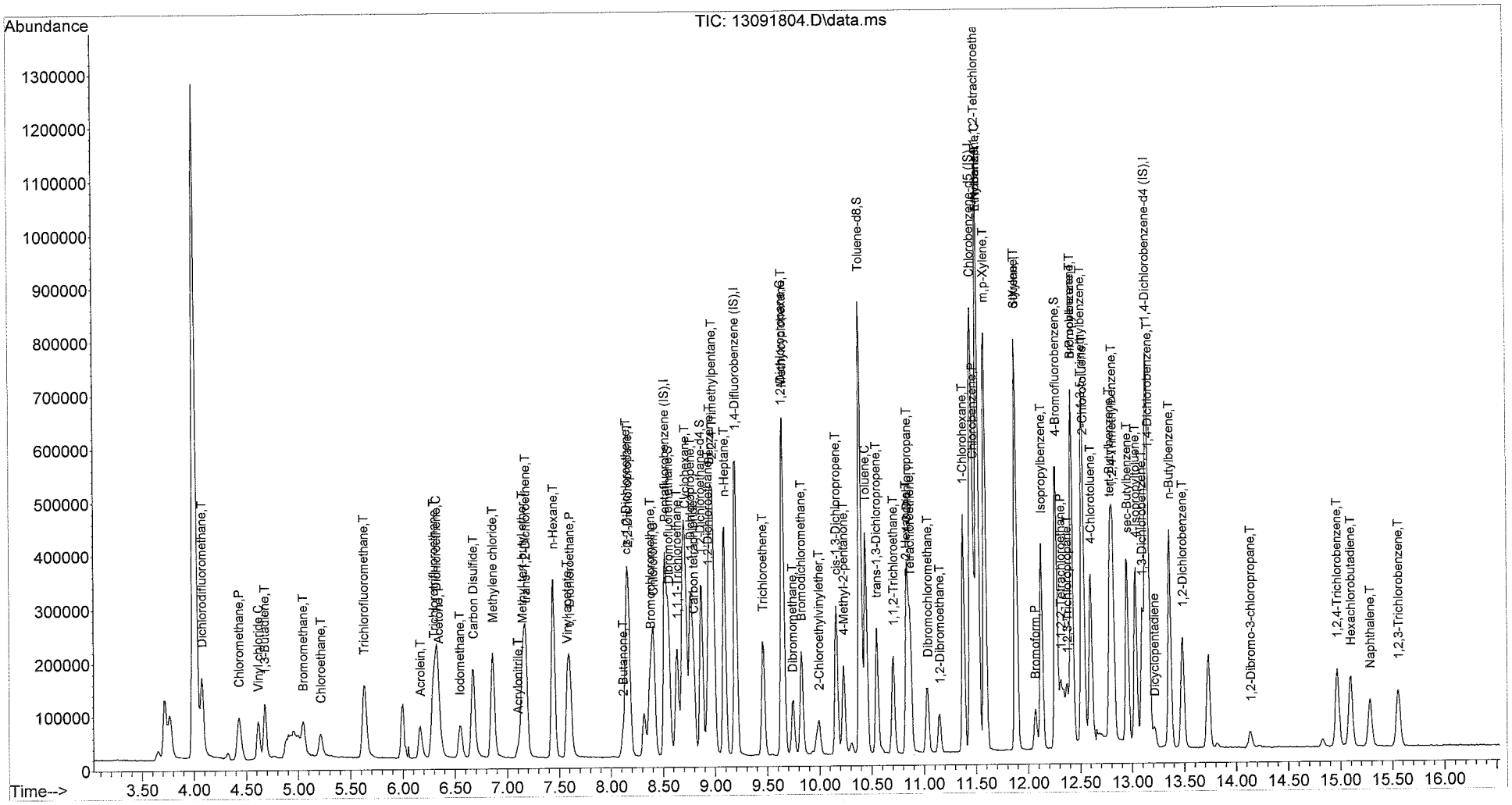
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.641	63	90647	20.21 ug/L	98
39) Bromodichloromethane	9.826	83	119791	19.98 ug/L	100
40) Methylcyclohexane	9.649	56	44196	20.58 ug/L	97
41) Dibromomethane	9.738	93	50189	18.66 ug/L	97
42) cis-1,3-Dichloropropene	10.161	75	131589	19.98 ug/L	94
43) 2-Chloroethylvinylether	9.993	63	20269	25.20 ug/L	90
44) 4-Methyl-2-pentanone	10.232	43	152999	37.41 ug/L	99
48) Toluene	10.443	92	153082	19.22 ug/L	99
49) trans-1,3-Dichloropropene	10.549	75	109505	19.83 ug/L	97
50) 1,1,2-Trichloroethane	10.708	83	49232	18.78 ug/L	99
51) 1,3-Dichloropropane	10.840	76	108144	19.42 ug/L	97
52) Tetrachloroethene	10.867	166	51013	19.14 ug/L	97
53) Dibromochloromethane	11.034	129	54754	18.64 ug/L	99
54) 1,2-Dibromoethane	11.149	107	50239	18.79 ug/L	96
55) 1-Chlorohexane	11.378	91	99736	19.46 ug/L	97
56) Chlorobenzene	11.475	112	130360	19.24 ug/L	98
57) n-Nonane	11.519	57	152435	20.05 ug/L	99
58) 1,1,1,2-Tetrachloroethane	11.511	131	48754	19.42 ug/L	96
59) Ethylbenzene	11.519	91	322617	20.44 ug/L	99
60) m,p-Xylene	11.590	106	179643	41.06 ug/L	99
61) o-Xylene	11.881	106	82726	20.03 ug/L	93
62) Styrene	11.881	104	155306	20.64 ug/L	93
63) Isopropylbenzene	12.128	105	232345	20.46 ug/L	99
64) Bromoform	12.066	173	30540	18.13 ug/L	97
65) 1,1,2,2-Tetrachloroethane	12.313	83	66147	18.39 ug/L	99
67) 2-Hexanone	10.831	43	101335	34.40 ug/L	98
69) 1,2,3-Trichloropropane	12.375	110	14265	17.97 ug/L	95
70) n-Propylbenzene	12.419	91	342085	20.35 ug/L	100
71) Bromobenzene	12.419	156	50946	19.11 ug/L	82
72) 1,3,5-Trimethylbenzene	12.516	105	207618	20.03 ug/L	99
73) 2-Chlorotoluene	12.534	91	236157	20.14 ug/L	99
74) 4-Chlorotoluene	12.604	91	199601	19.91 ug/L	99
75) tert-Butylbenzene	12.790	119	152801	19.67 ug/L	97
76) 1,2,4-Trimethylbenzene	12.816	105	205477	20.02 ug/L	98
77) sec-Butylbenzene	12.957	105	252193	20.27 ug/L	100
78) 4-Isopropyltoluene	13.037	119	169290	20.32 ug/L	99
79) 1,3-Dichlorobenzene	13.098	146	86563	18.68 ug/L	95
80) 1,4-Dichlorobenzene	13.160	146	89844	18.81 ug/L	94
81) Dicyclopentadiene	13.213	66	34743	18.49 ug/L #	93
82) n-Butylbenzene	13.363	92	148332	20.56 ug/L	100
83) 1,2-Dichlorobenzene	13.486	146	75568	19.03 ug/L	98
84) 1,2-Dibromo-3-chloropr...	14.139	157	6313	16.31 ug/L	97
85) 1,2,4-Trichlorobenzene	14.968	180	46624	17.86 ug/L	98
86) Hexachlorobutadiene	15.101	190	13962	19.30 ug/L	95
87) Naphthalene	15.286	128	80010	17.39 ug/L	99
88) 1,2,3-Trichlorobenzene	15.559	180	37580	17.42 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091804.D
Acq On : 18 Sep 2013 12:08
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 18 12:25:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration



Continuing Calibration Evaluation

SM 10/1/13

CCV
9/18/2013 12:08

13091804.D
GCMS 10

Name	Fit	AvgRF/Amt	CCRF/Conc	%Rec	LCL	UCL
Pentafluorobenzene (IS)	IS	176793.000	176302.000	XXXXXX	88397	353586
Dichlorodifluoromethane	A	1.845	1.820	99	31	155
Chloromethane	A	1.815	1.810	100	47	139
Vinyl chloride	L	20.000	22.216	111	80	120
1,3-Butadiene	A	0.522	0.546	105	68	130
Bromomethane	L	20.000	20.095	100	16	180
Chloroethane	L	20.000	19.530	98	43	155
Trichlorofluoromethane	A	2.086	2.117	102	61	135
Acrolein	A	0.172	0.179	104	70	130
Trichlorotrifluoroethane	A	0.591	0.574	97	58	147
1,1-Dichloroethene	A	2.166	2.230	103	80	120
Methylene chloride	A	1.157	1.173	101	64	133
Acrylonitrile	L	20.000	20.430	102	68	130
trans-1,2-Dichloroethene	A	2.063	2.150	104	67	131
n-Hexane	A	1.970	1.966	100	68	130
1,1-Dichloroethane	A	2.359	2.405	102	66	132
Cyclohexane	A	1.446	1.479	102	70	130
2,2-Dichloropropane	A	1.964	2.044	104	67	136
cis-1,2-Dichloroethene	A	1.023	1.046	102	68	129
Chloroform	A	2.248	2.314	103	80	120
Bromochloromethane	A	0.378	0.389	103	68	130
Dibromofluoromethane	A	0.898	0.933	104	70	130
1,1,1-Trichloroethane	A	1.779	1.814	102	70	130
Acetone	L	40.000	40.570	101	51	171
2-Butanone	L	40.000	37.037	93	63	136
Carbon Disulfide	A	4.197	4.345	104	56	138
Iodomethane	L	20.000	21.670	108	44	153
Vinyl acetate	A	3.263	3.132	96	68	130
Methyl tert-butyl ether	A	2.393	2.302	96	71	129
1,4-Difluorobenzene (IS)	IS	331218.000	341381.000	XXXXXX	165609	662436
1,1-Dichloropropene	A	0.896	0.877	98	74	127
Carbon tetrachloride	A	0.722	0.677	94	74	133
1,2-Dichloroethane	A	1.055	1.056	100	68	130
Benzene	A	2.104	2.086	99	68	130
2,2,4-Trimethylpentane	A	2.689	2.670	99	70	130
n-Heptane	A	0.606	0.600	99	70	130
Trichloroethene	A	0.563	0.552	98	78	123
1,2-Dichloropropane	A	0.657	0.664	101	68	130
Bromodichloromethane	A	0.878	0.877	100	76	122
Methylcyclohexane	L	20.000	20.579	103	70	130
Dibromomethane	A	0.394	0.368	93	77	120
cis-1,3-Dichloropropene	A	0.965	0.964	100	79	121
2-Chloroethylvinylether	L	20.000	25.205	126	62	131
4-Methyl-2-pentanone	A	0.599	0.560	94	68	126
1,2-Dichloroethane-d4	A	0.819	0.783	96	70	130

Toluene-d8	A	1.402	1.437	102	70	130	
Chlorobenzene-d5 (IS)	IS	290931.000	307732.000	XXXXXX	145466	581862	
Toluene	A	1.294	1.244	96	80	120	
trans-1,3-Dichloropropene	A	0.897	0.890	99	76	121	
1,1,2-Trichloroethane	A	0.426	0.400	94	71	125	
1,3-Dichloropropane	A	0.905	0.879	97	74	124	
Tetrachloroethene	A	0.433	0.414	96	71	130	
Dibromochloromethane	A	0.477	0.445	93	68	130	
1,2-Dibromoethane	A	0.434	0.408	94	77	121	
1-Chlorohexane	A	0.833	0.810	97	68	130	
Chlorobenzene	A	1.101	1.059	96	47	139	
n-Nonane	A	1.235	1.238	100	70	130	
1,1,1,2-Tetrachloroethane	A	0.408	0.396	97	79	119	
Ethylbenzene	A	2.565	2.621	102	80	120	
m,p-Xylene	A	0.711	0.730	103	79	122	
o-Xylene	A	0.671	0.672	100	79	121	
Styrene	A	1.223	1.262	103	79	121	
Isopropylbenzene	A	1.845	1.888	102	78	122	
Bromoform	A	0.274	0.248	91	75	121	
1,1,2,2-Tetrachloroethane	A	0.584	0.537	92	70	122	
4-Bromofluorobenzene	L	50.000	49.890	100	70	130	
2-Hexanone	A	0.479	0.412	86	67	124	
1,4-Dichlorobenzene-d4 (IS)	IS	133708.000	142067.000	XXXXXX	66854	267416	
1,2,3-Trichloropropane	A	0.279	0.251	90	74	119	
n-Propylbenzene	A	5.917	6.020	102	70	121	
Bromobenzene	A	0.938	0.897	96	80	120	
1,3,5-Trimethylbenzene	A	3.648	3.654	100	80	120	
2-Chlorotoluene	A	4.126	4.156	101	78	122	
4-Chlorotoluene	A	3.528	3.512	100	77	123	
tert-Butylbenzene	A	2.733	2.689	98	80	120	
1,2,4-Trimethylbenzene	A	3.613	3.616	100	79	121	
sec-Butylbenzene	A	4.380	4.438	101	77	124	
4-Isopropyltoluene	A	2.932	2.979	102	79	120	
1,3-Dichlorobenzene	A	1.631	1.523	93	80	120	
1,4-Dichlorobenzene	A	1.681	1.581	94	80	120	
Dicyclopentadiene	A	0.661	0.611	92	80	120	
n-Butylbenzene	A	2.540	2.610	103	76	124	
1,2-Dichlorobenzene	A	1.397	1.330	95	80	120	
1,2-Dibromo-3-chloropropane	L	20.000	16.307	82	70	118	
1,2,4-Trichlorobenzene	A	0.919	0.820	89	75	125	
Hexachlorobutadiene	L	20.000	19.301	97	73	128	
Naphthalene	A	1.619	1.408	87	74	125	
1,2,3-Trichlorobenzene	A	0.759	0.661	87	69	127	

SPCCs out = 0 CCCs out = 0

Evaluate Continuing Calibration Report

Data Path : H:\VOA\A228\130918\
Data File : 13091804.D
Acq On : 18 Sep 2013 12:08
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 18 12:25:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (IS)	1.000	1.000	0.0	99	0.00
2	T	Dichlorodifluoromethane	1.845	1.820	1.4	100	0.00
3	P	Chloromethane	1.815	1.810	0.3	100	0.00
4	C	Vinyl chloride	1.015	1.053	-3.7	104	0.00
5	T	1,3-Butadiene	0.522	0.546	-4.6	104	0.00
6	T	Bromomethane	0.717	0.492	31.4#	97	0.00
7	T	Chloroethane	0.616	0.531	13.8	108	0.00
8	T	Trichlorofluoromethane	2.086	2.117	-1.5	103	0.00
9	T	Acrolein	0.172	0.120	30.2#	68	0.00
10	T	Trichlorotrifluoroethane	0.591	0.574	2.9	100	0.00
11	C	1,1-Dichloroethene	2.166	2.230	-3.0	105	0.00
12	T	Methylene chloride	1.190	1.173	1.4	104	0.00
13	T	Acrylonitrile	0.378	0.382	-1.1	100	0.00
14	T	trans-1,2-Dichloroethene	2.063	2.150	-4.2	105	0.00
15	T	n-Hexane	1.970	1.966	0.2	103	0.00
16	P	1,1-Dichloroethane	2.359	2.405	-1.9	103	0.00
17	T	Cyclohexane	1.446	1.479	-2.3	102	0.00
18	T	2,2-Dichloropropane	1.974	2.044	-3.5	105	0.00
19	T	cis-1,2-Dichloroethene	1.023	1.046	-2.2	102	0.00
20	C	Chloroform	2.248	2.314	-2.9	106	0.00
21	T	Bromochloromethane	0.378	0.389	-2.9	101	0.00
22	S	Dibromofluoromethane	0.898	0.933	-3.9	106	0.00
23	T	1,1,1-Trichloroethane	1.779	1.814	-2.0	103	0.00
24	T	Acetone	0.801	0.461	42.4#	96	0.00
25	T	2-Butanone	0.795	0.557	29.9#	89	0.00
26	T	Carbon Disulfide	4.197	4.345	-3.5	105	0.00
27	T	Iodomethane	0.965	1.179	-22.2#	105	0.00
28	T	Vinyl acetate	3.263	3.132	4.0	95	0.00
29	T	Methyl tert-butyl ether	2.393	2.302	3.8	94	0.00
30	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	104	0.00
31	T	1,1-Dichloropropene	0.896	0.877	2.1	104	0.00
32	T	Carbon tetrachloride	0.722	0.677	6.2	100	0.00
33	T	1,2-Dichloroethane	1.055	1.056	-0.1	106	0.00
34	T	Benzene	2.104	2.086	0.9	103	0.00
35	T	2,2,4-Trimethylpentane	2.689	2.670	0.7	104	0.00
36	T	n-Heptane	0.606	0.600	1.0	104	0.00
37	T	Trichloroethene	0.563	0.552	2.0	103	0.00
38	C	1,2-Dichloropropane	0.673	0.664	1.3	105	0.00
39	T	Bromodichloromethane	0.878	0.877	0.1	104	0.00
40	T	Methylcyclohexane	0.336	0.324	3.6	105	0.00
41	T	Dibromomethane	0.394	0.368	6.6	101	0.00
42	T	cis-1,3-Dichloropropene	0.965	0.964	0.1	103	0.00
43	T	2-Chloroethylvinylether	0.112	0.148	-32.1#	126	0.00
44	T	4-Methyl-2-pentanone	0.599	0.560	6.5	97	0.00
45	S	1,2-Dichloroethane-d4	0.819	0.783	4.4	104	0.00
46	S	Toluene-d8	1.402	1.437	-2.5	105	0.00

Evaluate Continuing Calibration Report

Data Path : H:\VOA\A228\130918\
Data File : 13091804.D
Acq On : 18 Sep 2013 12:08
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 18 12:25:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
47	I	Chlorobenzene-d5 (IS)	1.000	1.000	0.0	106	0.00
48	C	Toluene	1.294	1.244	3.9	103	0.00
49	T	trans-1,3-Dichloropropene	0.897	0.890	0.8	103	0.00
50	T	1,1,2-Trichloroethane	0.426	0.400	6.1	102	0.00
51	T	1,3-Dichloropropane	0.905	0.879	2.9	103	0.00
52	T	Tetrachloroethene	0.433	0.414	4.4	105	0.00
53	T	Dibromochloromethane	0.477	0.445	6.7	102	0.00
54	T	1,2-Dibromoethane	0.434	0.408	6.0	101	0.00
55	T	1-Chlorohexane	0.833	0.810	2.8	103	0.00
56	P	Chlorobenzene	1.101	1.059	3.8	104	0.00
57	T	n-Nonane	1.235	1.238	-0.2	111	0.00
58	T	1,1,1,2-Tetrachloroethane	0.408	0.396	2.9	104	0.00
59	C	Ethylbenzene	2.565	2.621	-2.2	106	0.00
60	T	m,p-Xylene	0.711	0.730	-2.7	106	0.00
61	T	o-Xylene	0.671	0.672	-0.1	105	0.00
62	T	Styrene	1.223	1.262	-3.2	104	0.00
63	T	Isopropylbenzene	1.845	1.888	-2.3	105	0.00
64	P	Bromoform	0.274	0.248	9.5	100	0.00
65	P	1,1,2,2-Tetrachloroethane	0.584	0.537	8.0	94	0.00
66	S	4-Bromofluorobenzene	0.699	0.709	-1.4	108	0.00
67	T	2-Hexanone	0.479	0.412	14.0	95	0.00
68	I	1,4-Dichlorobenzene-d4 (IS)	1.000	1.000	0.0	106	0.00
69	T	1,2,3-Trichloropropane	0.279	0.251	10.0	97	0.00
70	T	n-Propylbenzene	5.917	6.020	-1.7	106	0.00
71	T	Bromobenzene	0.938	0.897	4.4	102	0.00
72	T	1,3,5-Trimethylbenzene	3.648	3.654	-0.2	104	0.00
73	T	2-Chlorotoluene	4.126	4.156	-0.7	107	0.00
74	T	4-Chlorotoluene	3.528	3.512	0.5	105	0.00
75	T	tert-Butylbenzene	2.733	2.689	1.6	103	0.00
76	T	1,2,4-Trimethylbenzene	3.613	3.616	-0.1	104	0.00
77	T	sec-Butylbenzene	4.380	4.438	-1.3	106	0.00
78	T	4-Isopropyltoluene	2.932	2.979	-1.6	105	0.00
79	T	1,3-Dichlorobenzene	1.631	1.523	6.6	105	0.00
80	T	1,4-Dichlorobenzene	1.681	1.581	5.9	104	0.00
81		Dicyclopentadiene	0.661	0.611	7.6	106	0.00
82	T	n-Butylbenzene	2.540	2.610	-2.8	106	0.00
83	T	1,2-Dichlorobenzene	1.397	1.330	4.8	105	0.00
84	T	1,2-Dibromo-3-chloropropane	0.138	0.111	19.6	90	0.00
85	T	1,2,4-Trichlorobenzene	0.919	0.820	10.8	99	0.00
86	T	Hexachlorobutadiene	0.278	0.246	11.5	104	0.00
87	T	Naphthalene	1.719	1.408	18.1	90	0.00
88	T	1,2,3-Trichlorobenzene	0.759	0.661	12.9	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JM 10/1/13

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091805.D
Acq On : 18 Sep 2013 12:49
Operator : JM
Sample : BLK
Misc : BLK
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 13:03:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:55:32 2013
Response via : Initial Calibration

JM 10/1/13

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.524	168	170816	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.194	114	320740	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.453	117	295075	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.146	152	133399	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.550	113	159297	51.91 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 103.82%		
45) 1,2-Dichloroethane-d4	8.868	65	259516	49.41 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 98.82%		
46) Toluene-d8	10.394	98	473857	52.68 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 105.36%		
66) 4-Bromofluorobenzene	12.264	95	193958	47.02 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 94.04%		
Target Compounds					Qvalue
6) Bromomethane	5.049	94	875	Below Cal #	47
24) Acetone	6.345	43	6471	Below Cal	88
27) Iodomethane	6.557	142	142	Below Cal #	58
85) 1,2,4-Trichlorobenzene	14.981	180	1350	0.55 ug/L	91
86) Hexachlorobutadiene	15.113	190	347	Below Cal #	63
87) Naphthalene	15.290	128	4160	0.91 ug/L	95
88) 1,2,3-Trichlorobenzene	15.563	180	1844	0.91 ug/L	96

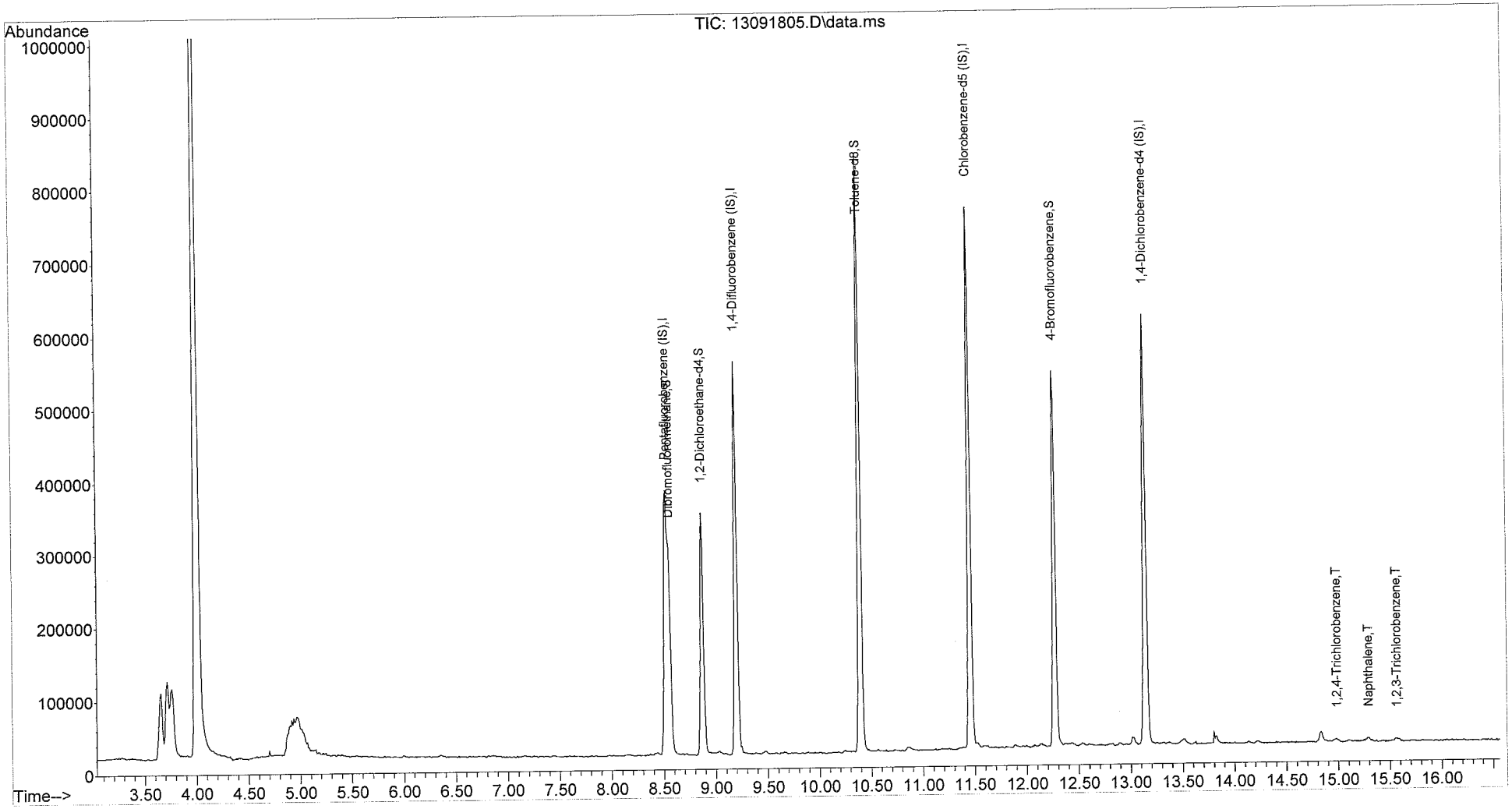
cm

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091805.D
Acq On : 18 Sep 2013 12:49
Operator : JM
Sample : BLK
Misc : BLK
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 13:03:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:55:32 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091810.D
Acq On : 18 Sep 2013 14:56
Operator : JM
Sample : BKS
Misc : BKS
ALS Vial : 4 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 12:22:28 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.535	168	139672	50.00 ug/L	0.02
30) 1,4-Difluorobenzene (IS)	9.206	114	253729	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.455	117	236559	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.149	152	107417	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.562	113	127602	50.85 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 101.70%		
45) 1,2-Dichloroethane-d4	8.879	65	222571	53.57 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 107.14%		
46) Toluene-d8	10.396	98	375373	52.75 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 105.50%		
66) 4-Bromofluorobenzene	12.267	95	167487	50.64 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 101.28%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.081	85	62482	12.13 ug/L	99
3) Chloromethane	4.434	50	87423	17.24 ug/L	99
4) Vinyl chloride	4.619	62	44895	16.59 ug/L	97
5) 1,3-Butadiene	4.689	54	35454	24.32 ug/L	96
6) Bromomethane	5.051	94	30749	22.55 ug/L	97
7) Chloroethane	5.219	64	26585	17.46 ug/L	97
8) Trichlorofluoromethane	5.633	101	97635	16.75 ug/L	98
9) Acrolein	6.171	56	59765	124.32 ug/L	98
10) Trichlorotrifluoroethane	6.304	151	29398	17.81 ug/L	99
11) 1,1-Dichloroethene	6.339	61	119246	19.71 ug/L	98
12) Methylene chloride	6.868	84	65417	19.68 ug/L	97
13) Acrylonitrile	7.115	53	25175	23.87 ug/L	97
14) trans-1,2-Dichloroethene	7.186	61	118998	20.65 ug/L	98
15) n-Hexane	7.450	57	99196	18.03 ug/L	98
16) 1,1-Dichloroethane	7.609	63	143958	21.85 ug/L	99
17) Cyclohexane	8.721	84	72533	17.96 ug/L #	70
18) 2,2-Dichloropropane	8.182	77	115821	21.01 ug/L	99
19) cis-1,2-Dichloroethene	8.156	96	57782	20.23 ug/L	100
20) Chloroform	8.412	83	132564	21.11 ug/L	97
21) Bromochloromethane	8.385	128	22773	21.54 ug/L	98
23) 1,1,1-Trichloroethane	8.641	97	102302	20.59 ug/L	99
24) Acetone	6.348	43	59286	47.59 ug/L	99
25) 2-Butanone	8.121	43	75486	45.32 ug/L	99
26) Carbon Disulfide	6.683	76	211370	18.03 ug/L	97
27) Iodomethane	6.559	142	64889	21.35 ug/L	97
28) Vinyl acetate	7.591	43	170545	18.71 ug/L	99
29) Methyl tert-butyl ether	7.159	73	148863	22.27 ug/L	98
31) 1,1-Dichloropropene	8.773	75	92263	20.29 ug/L	98
32) Carbon tetrachloride	8.800	117	73596	20.07 ug/L	99
33) 1,2-Dichloroethane	8.941	62	121139	22.62 ug/L	98
34) Benzene	8.959	78	221174	20.71 ug/L	95
35) 2,2,4-Trimethylpentane	8.994	57	259674	19.03 ug/L	98
36) n-Heptane	9.100	57	56237	18.28 ug/L	99
37) Trichloroethene	9.470	95	58773	20.57 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091810.D
Acq On : 18 Sep 2013 14:56
Operator : JM
Sample : BKS
Misc : BKS
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 12:22:28 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

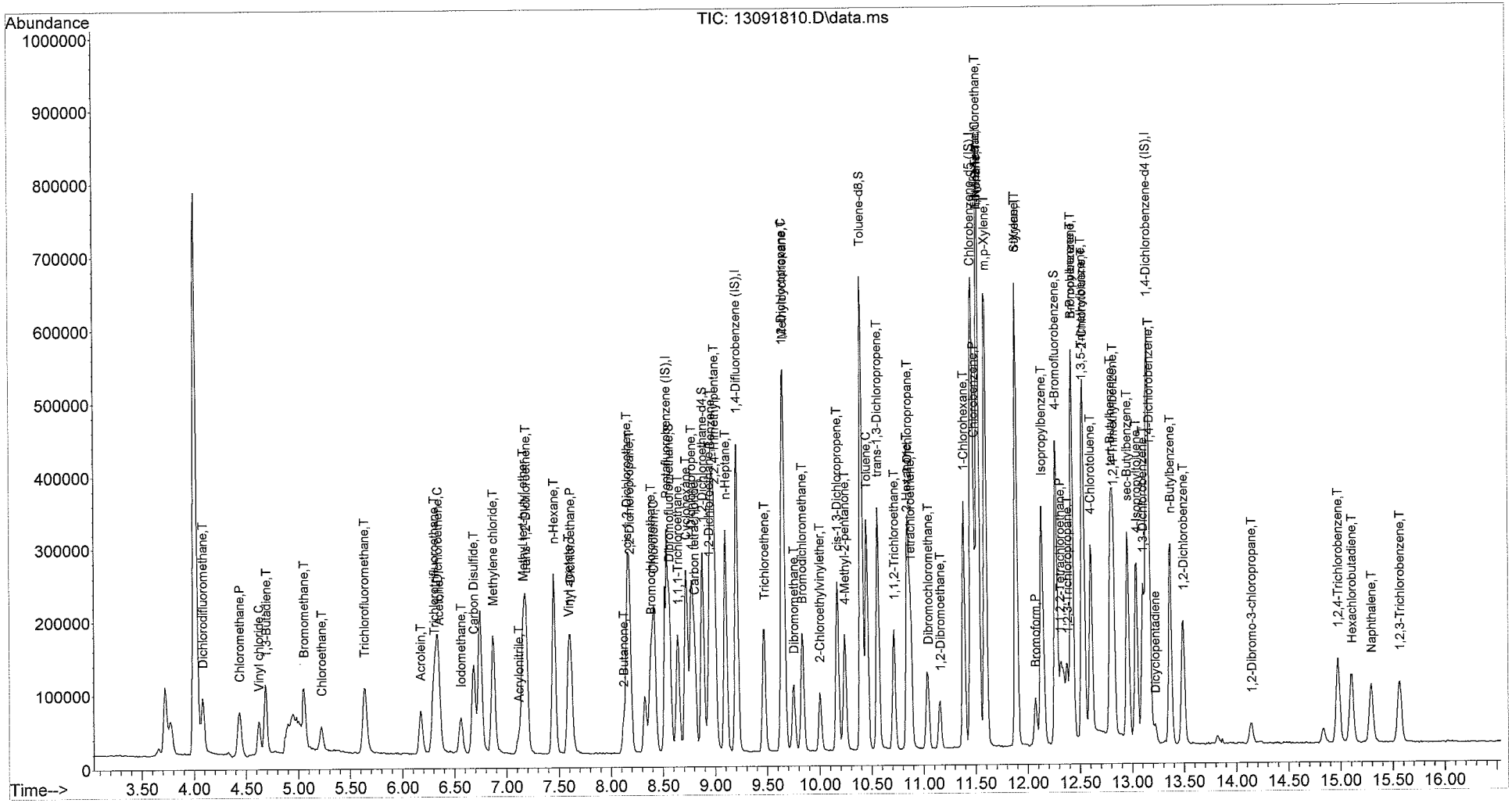
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.647	63	71421	20.92 ug/L	99
39) Bromodichloromethane	9.832	83	100203	22.49 ug/L	98
40) Methylcyclohexane	9.656	56	34092	21.38 ug/L	95
41) Dibromomethane	9.753	93	43849	21.93 ug/L	96
42) cis-1,3-Dichloropropene	10.167	75	109937	22.46 ug/L	94
43) 2-Chloroethylvinylether	10.000	63	30449	50.65 ug/L	87
44) 4-Methyl-2-pentanone	10.238	43	146159	48.09 ug/L	96
48) Toluene	10.449	92	119048	19.45 ug/L	99
49) trans-1,3-Dichloropropene	10.555	75	95930	22.60 ug/L #	62
50) 1,1,2-Trichloroethane	10.714	83	43870	21.77 ug/L	97
51) 1,3-Dichloropropane	10.846	76	94700	22.12 ug/L	98
52) Tetrachloroethene	10.873	166	40417	19.73 ug/L	98
53) Dibromochloromethane	11.040	129	47311	20.96 ug/L	99
54) 1,2-Dibromoethane	11.155	107	44244	21.52 ug/L	100
55) 1-Chlorohexane	11.384	91	75604	19.19 ug/L	99
56) Chlorobenzene	11.481	112	108161	20.77 ug/L	98
57) n-Nonane	11.526	57	105202	18.00 ug/L	99
58) 1,1,1,2-Tetrachloroethane	11.517	131	39132	20.28 ug/L	97
59) Ethylbenzene	11.517	91	242026	19.94 ug/L	97
60) m,p-Xylene	11.596	106	141538	42.08 ug/L	97
61) o-Xylene	11.887	106	68397	21.54 ug/L	98
62) Styrene	11.887	104	121142	20.94 ug/L	92
63) Isopropylbenzene	12.134	105	177838	20.37 ug/L	97
64) Bromoform	12.072	173	27017	20.87 ug/L	95
65) 1,1,2,2-Tetrachloroethane	12.311	83	58272	21.08 ug/L	95
67) 2-Hexanone	10.838	43	99758	44.06 ug/L	96
69) 1,2,3-Trichloropropane	12.381	110	13284	22.14 ug/L	96
70) n-Propylbenzene	12.425	91	277661	21.84 ug/L	99
71) Bromobenzene	12.425	156	41171	20.43 ug/L	86
72) 1,3,5-Trimethylbenzene	12.522	105	152011	19.39 ug/L	99
73) 2-Chlorotoluene	12.531	91	189911	21.42 ug/L	97
74) 4-Chlorotoluene	12.602	91	165633	21.86 ug/L	99
75) tert-Butylbenzene	12.796	119	121323	20.66 ug/L	96
76) 1,2,4-Trimethylbenzene	12.822	105	153085	19.72 ug/L	98
77) sec-Butylbenzene	12.955	105	198958	21.15 ug/L	98
78) 4-Isopropyltoluene	13.043	119	131221	20.83 ug/L	99
79) 1,3-Dichlorobenzene	13.104	146	72591	20.72 ug/L	97
80) 1,4-Dichlorobenzene	13.166	146	68758	19.04 ug/L	94
81) Dicyclopentadiene	13.219	66	24679	17.37 ug/L	95
82) n-Butylbenzene	13.369	92	104132	19.09 ug/L	98
83) 1,2-Dichlorobenzene	13.493	146	61915	20.63 ug/L	99
84) 1,2-Dibromo-3-chloropr...	14.145	157	6069	20.48 ug/L	98
85) 1,2,4-Trichlorobenzene	14.975	180	37127	18.81 ug/L	98
86) Hexachlorobutadiene	15.107	190	9998	18.24 ug/L	92
87) Naphthalene	15.292	128	71984	19.50 ug/L	99
88) 1,2,3-Trichlorobenzene	15.566	180	30125	18.47 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091810.D
Acq On : 18 Sep 2013 14:56
Operator : JM
Sample : BKS
Misc : BKS
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 12:22:28 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091811.D
Acq On : 18 Sep 2013 15:22
Operator : JM
Sample : BSD
Misc : BSD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 12:22:32 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.528	168	163524	50.00 ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.208	114	302647	50.00 ug/L	0.01
47) Chlorobenzene-d5 (IS)	11.457	117	277207	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.151	152	127324	50.00 ug/L	0.01
System Monitoring Compounds					
22) Dibromofluoromethane	8.564	113	143172	48.73 ug/L	0.01
Spiked Amount 50.000	Range 52 - 140		Recovery = 97.46%		
45) 1,2-Dichloroethane-d4	8.881	65	236378	47.69 ug/L	0.01
Spiked Amount 50.000	Range 54 - 133		Recovery = 95.38%		
46) Toluene-d8	10.399	98	429770	50.64 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 101.28%		
66) 4-Bromofluorobenzene	12.269	95	191794	49.49 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 98.98%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.083	85	74142	12.29 ug/L	97
3) Chloromethane	4.436	50	111446	18.77 ug/L	99
4) Vinyl chloride	4.621	62	53797	16.98 ug/L	97
5) 1,3-Butadiene	4.683	54	42267	24.76 ug/L	97
6) Bromomethane	5.053	94	31759	19.80 ug/L	96
7) Chloroethane	5.212	64	32322	18.15 ug/L	99
8) Trichlorofluoromethane	5.635	101	114178	16.74 ug/L	99
9) Acrolein	6.173	56	64795	115.13 ug/L	100
10) Trichlorotrifluoroethane	6.306	151	34661	17.94 ug/L	99
11) 1,1-Dichloroethene	6.332	61	139176	19.65 ug/L	96
12) Methylene chloride	6.870	84	75298	19.35 ug/L	99
13) Acrylonitrile	7.117	53	25723	20.83 ug/L	96
14) trans-1,2-Dichloroethene	7.188	61	137412	20.36 ug/L	97
15) n-Hexane	7.452	57	117131	18.18 ug/L	97
16) 1,1-Dichloroethane	7.611	63	164774	21.36 ug/L	98
17) Cyclohexane	8.723	84	88383	18.69 ug/L #	68
18) 2,2-Dichloropropane	8.176	77	132275	20.49 ug/L	98
19) cis-1,2-Dichloroethene	8.158	96	65203	19.50 ug/L	98
20) Chloroform	8.414	83	150972	20.53 ug/L	98
21) Bromochloromethane	8.387	128	25330	20.46 ug/L	96
23) 1,1,1-Trichloroethane	8.643	97	119226	20.50 ug/L	99
24) Acetone	6.350	43	65325	44.45 ug/L	99
25) 2-Butanone	8.123	43	80354	41.02 ug/L	99
26) Carbon Disulfide	6.685	76	253357	18.46 ug/L	100
27) Iodomethane	6.561	142	72937	20.49 ug/L	99
28) Vinyl acetate	7.585	43	184071	17.25 ug/L	99
29) Methyl tert-butyl ether	7.161	73	161267	20.60 ug/L	98
31) 1,1-Dichloropropene	8.775	75	108024	19.91 ug/L	96
32) Carbon tetrachloride	8.802	117	85653	19.59 ug/L	96
33) 1,2-Dichloroethane	8.943	62	134721	21.09 ug/L	97
34) Benzene	8.961	78	258598	20.30 ug/L	97
35) 2,2,4-Trimethylpentane	8.987	57	323564	19.88 ug/L	99
36) n-Heptane	9.102	57	67134	18.30 ug/L	98
37) Trichloroethene	9.464	95	69410	20.36 ug/L	97

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091811.D
Acq On : 18 Sep 2013 15:22
Operator : JM
Sample : BSD
Misc : BSD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 12:22:32 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

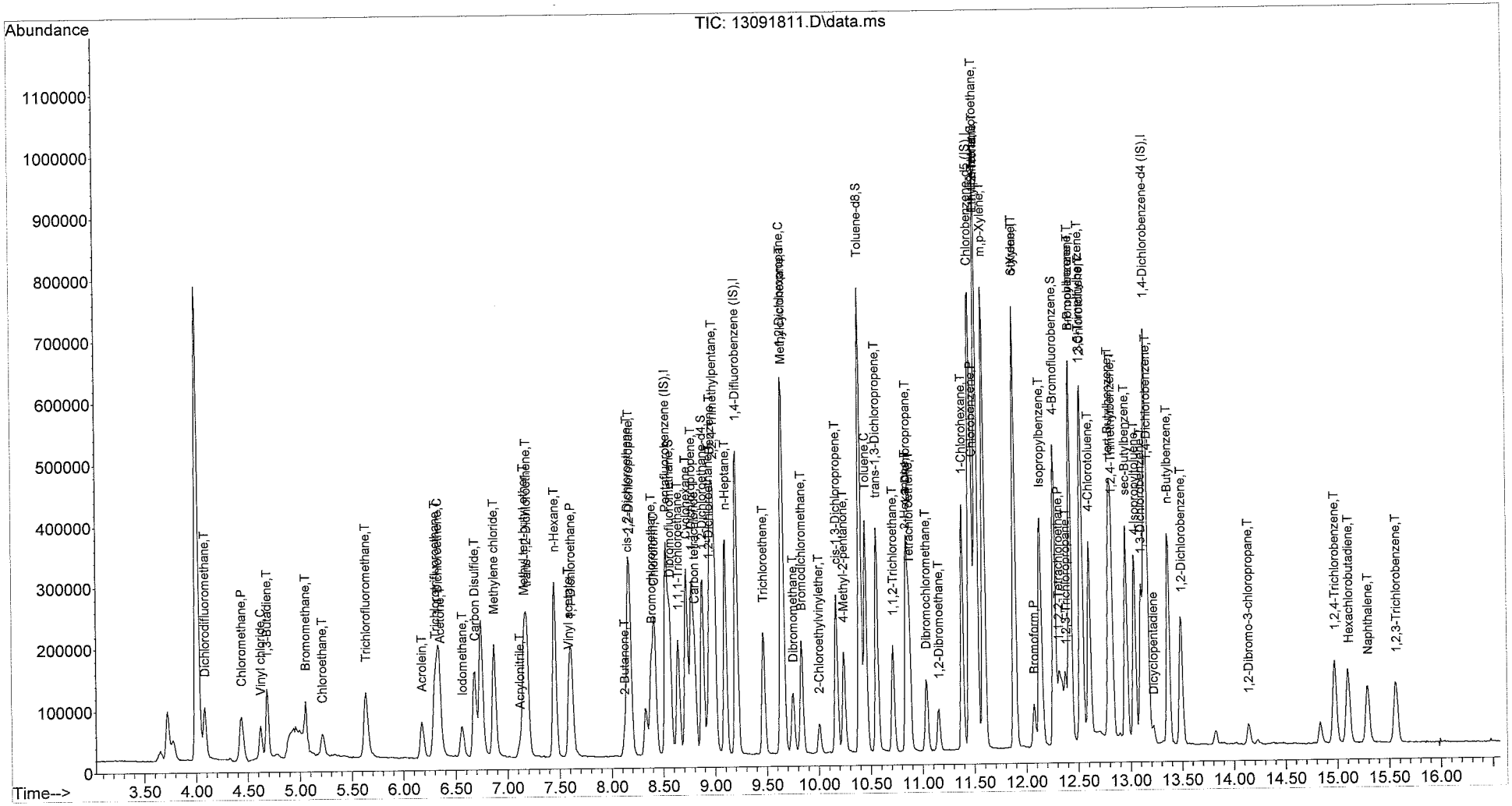
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.649	63	80192	19.69 ug/L	97
39) Bromodichloromethane	9.834	83	112730	21.21 ug/L	100
40) Methylcyclohexane	9.658	56	39396	20.70 ug/L	96
41) Dibromomethane	9.755	93	48121	20.18 ug/L	99
42) cis-1,3-Dichloropropene	10.169	75	121530	20.81 ug/L	93
43) 2-Chloroethylvinylether	10.002	63	18926	26.58 ug/L	92
44) 4-Methyl-2-pentanone	10.240	43	152537	42.07 ug/L	98
48) Toluene	10.451	92	137707	19.19 ug/L	99
49) trans-1,3-Dichloropropene	10.557	75	106114	21.33 ug/L #	65
50) 1,1,2-Trichloroethane	10.716	83	47740	20.22 ug/L	99
51) 1,3-Dichloropropane	10.848	76	103357	20.60 ug/L	97
52) Tetrachloroethene	10.875	166	48506	20.20 ug/L	98
53) Dibromochloromethane	11.034	129	52114	19.70 ug/L	99
54) 1,2-Dibromoethane	11.157	107	47895	19.88 ug/L	96
55) 1-Chlorohexane	11.386	91	92408	20.01 ug/L	96
56) Chlorobenzene	11.483	112	127225	20.85 ug/L	97
57) n-Nonane	11.528	57	118390	17.29 ug/L	99
58) 1,1,1,2-Tetrachloroethane	11.519	131	44069	19.49 ug/L	98
59) Ethylbenzene	11.519	91	285936	20.11 ug/L	98
60) m,p-Xylene	11.589	106	166001	42.12 ug/L	94
61) o-Xylene	11.889	106	79890	21.47 ug/L	99
62) Styrene	11.889	104	141848	20.92 ug/L	94
63) Isopropylbenzene	12.136	105	210825	20.61 ug/L	97
64) Bromoform	12.074	173	29266	19.29 ug/L	99
65) 1,1,2,2-Tetrachloroethane	12.313	83	64910	20.04 ug/L	98
67) 2-Hexanone	10.840	43	107862	40.65 ug/L	98
69) 1,2,3-Trichloropropane	12.383	110	14282	20.08 ug/L	94
70) n-Propylbenzene	12.427	91	335113	22.24 ug/L	98
71) Bromobenzene	12.427	156	46992	19.67 ug/L	87
72) 1,3,5-Trimethylbenzene	12.524	105	183113	19.71 ug/L	99
73) 2-Chlorotoluene	12.533	91	224047	21.32 ug/L	98
74) 4-Chlorotoluene	12.604	91	204238	22.74 ug/L	98
75) tert-Butylbenzene	12.798	119	148430	21.32 ug/L	98
76) 1,2,4-Trimethylbenzene	12.824	105	184896	20.10 ug/L	97
77) sec-Butylbenzene	12.957	105	242887	21.78 ug/L	99
78) 4-Isopropyltoluene	13.045	119	161744	21.66 ug/L	97
79) 1,3-Dichlorobenzene	13.107	146	86842	20.91 ug/L	96
80) 1,4-Dichlorobenzene	13.168	146	81295	18.99 ug/L	95
81) Dicyclopentadiene	13.221	66	30094	17.87 ug/L	96
82) n-Butylbenzene	13.362	92	130092	20.12 ug/L	99
83) 1,2-Dichlorobenzene	13.495	146	74795	21.02 ug/L	97
84) 1,2-Dibromo-3-chloropr...	14.139	157	6742	19.19 ug/L	88
85) 1,2,4-Trichlorobenzene	14.977	180	43283	18.50 ug/L	100
86) Hexachlorobutadiene	15.109	190	12855	19.85 ug/L	97
87) Naphthalene	15.294	128	86691	19.81 ug/L	99
88) 1,2,3-Trichlorobenzene	15.568	180	35364	18.29 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091811.D
Acq On : 18 Sep 2013 15:22
Operator : JM
Sample : BSD
Misc : BSD
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 12:22:32 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091814.D
Acq On : 18 Sep 2013 16:40
Operator : JM
Sample : 469985-002
Misc : SMP
ALS Vial : 8 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:16:44 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.530	168	164408	50.00 ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.209	114	305715	50.00 ug/L	0.01
47) Chlorobenzene-d5 (IS)	11.458	117	282891	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.152	152	128124	50.00 ug/L	0.01
System Monitoring Compounds					
22) Dibromofluoromethane	8.565	113	147541	49.95 ug/L	0.01
Spiked Amount 50.000	Range 52 - 140		Recovery = 99.90%		
45) 1,2-Dichloroethane-d4	8.882	65	241387	48.22 ug/L	0.01
Spiked Amount 50.000	Range 54 - 133		Recovery = 96.44%		
46) Toluene-d8	10.400	98	441980	51.55 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 103.10%		
66) 4-Bromofluorobenzene	12.270	95	185137	46.81 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 93.62%		
Target Compounds					Qvalue
6) Bromomethane	5.054	94	747	Below Cal #	44
7) Chloroethane	5.195	64	257	Below Cal #	3
20) Chloroform	8.415	83	86201	11.66 ug/L	99
24) Acetone	6.360	43	4528	Below Cal	89
25) 2-Butanone	8.141	43	2011	Below Cal #	89
27) Iodomethane	6.554	142	204	Below Cal #	83
37) Trichloroethene	9.465	95	1435	0.42 ug/L	86
52) Tetrachloroethene	10.876	166	7757	3.17 ug/L	93
86) Hexachlorobutadiene	15.101	190	47	Below Cal #	38

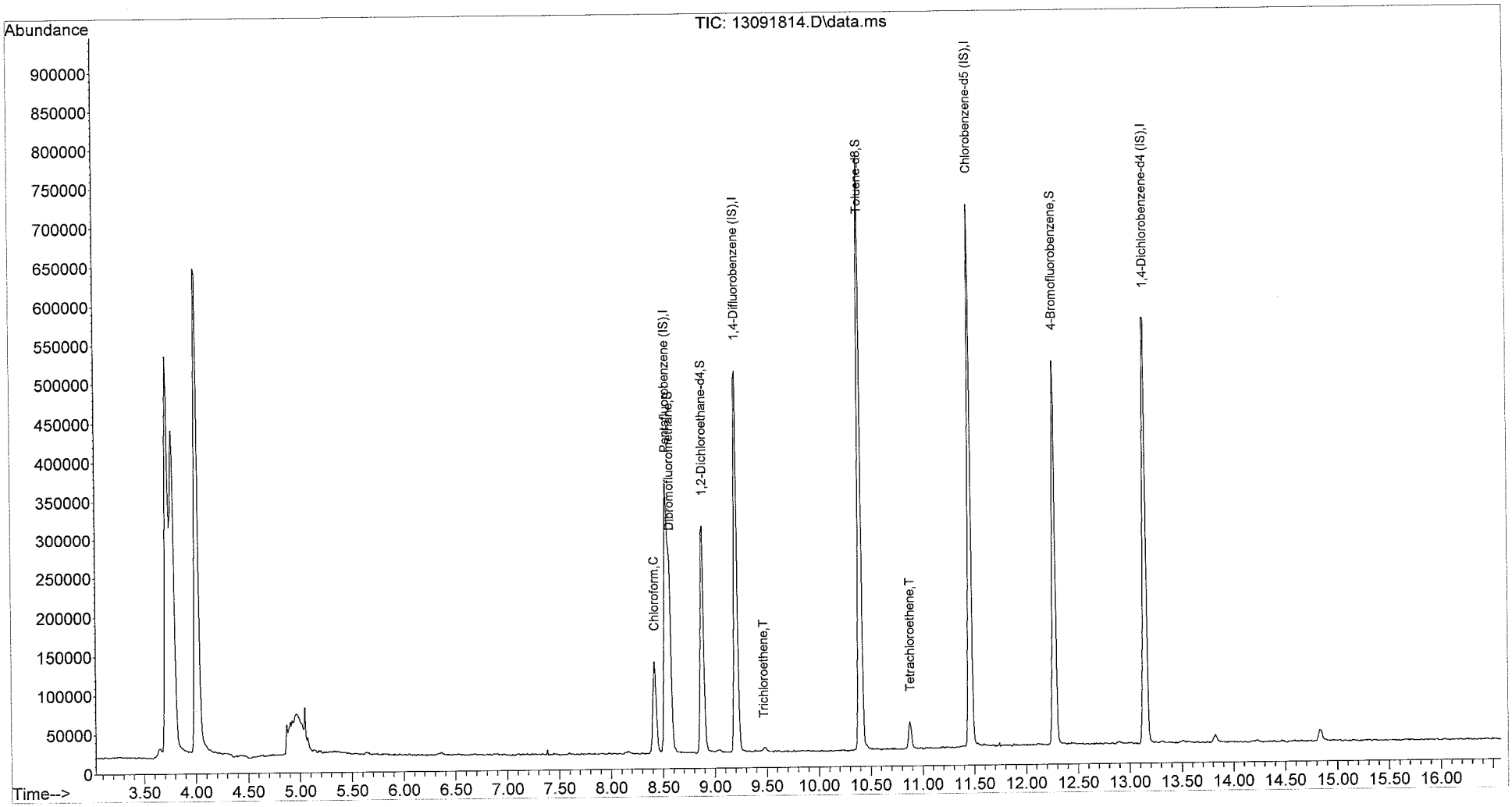
cm

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091814.D
Acq On : 18 Sep 2013 16:40
Operator : JM
Sample : 469985-002
Misc : SMP
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 13:16:44 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091824.D
Acq On : 18 Sep 2013 20:55
Operator : JM
Sample : 469985-002 S
Misc : MS
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 12:23:26 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	8.528	168	133277	50.00	ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.198	114	253258	50.00	ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.456	117	234351	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.141	152	104845	50.00	ug/L	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	8.554	113	123010	51.37	ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 102.74%			
45) 1,2-Dichloroethane-d4	8.872	65	210458	50.75	ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 101.50%			
46) Toluene-d8	10.398	98	365909	51.52	ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 103.04%			
66) 4-Bromofluorobenzene	12.268	95	166409	50.79	ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 101.58%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.091	85	66276	13.48	ug/L	98
3) Chloromethane	4.435	50	99903	20.65	ug/L	98
4) Vinyl chloride	4.629	62	51420	19.96	ug/L	96
5) 1,3-Butadiene	4.691	54	36493	26.23	ug/L	97
6) Bromomethane	5.070	94	36999	28.66	ug/L #	87
7) Chloroethane	5.238	64	31284	21.64	ug/L	97
8) Trichlorofluoromethane	5.652	101	107345	19.30	ug/L	99
9) Acrolein	6.181	56	48533	105.80	ug/L	99
10) Trichlorotrifluoroethane	6.305	151	30208	19.18	ug/L	96
11) 1,1-Dichloroethene	6.340	61	124887	21.63	ug/L	95
12) Methylene chloride	6.870	84	64137	20.22	ug/L	95
13) Acrylonitrile	7.117	53	19873	19.74	ug/L	87
14) trans-1,2-Dichloroethene	7.187	61	121371	22.07	ug/L	98
15) n-Hexane	7.452	57	98830	18.82	ug/L	100
16) 1,1-Dichloroethane	7.610	63	148899	23.68	ug/L	100
17) Cyclohexane	8.722	84	75329	19.54	ug/L #	68
18) 2,2-Dichloropropane	8.175	77	112305	21.35	ug/L	99
19) cis-1,2-Dichloroethene	8.157	96	56569	20.75	ug/L	96
20) Chloroform	8.413	83	209369	34.94	ug/L	97
21) Bromochloromethane	8.378	128	21501	21.31	ug/L	86
23) 1,1,1-Trichloroethane	8.643	97	103041	21.73	ug/L	100
24) Acetone	6.349	43	51065	42.39	ug/L	97
25) 2-Butanone	8.122	43	58478	36.42	ug/L	99
26) Carbon Disulfide	6.684	76	257717	23.04	ug/L	97
27) Iodomethane	6.561	142	63374	21.86	ug/L	98
28) Vinyl acetate	7.584	43	113653	13.07	ug/L	97
29) Methyl tert-butyl ether	7.161	73	124362	19.50	ug/L	97
31) 1,1-Dichloropropene	8.766	75	94883	20.90	ug/L	94
32) Carbon tetrachloride	8.801	117	78020	21.32	ug/L	98
33) 1,2-Dichloroethane	8.942	62	118967	22.25	ug/L	96
34) Benzene	8.960	78	224727	21.08	ug/L	96
35) 2,2,4-Trimethylpentane	8.987	57	263363	19.34	ug/L	97
36) n-Heptane	9.092	57	58041	18.90	ug/L	97
37) Trichloroethene	9.463	95	61419	21.53	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091824.D
Acq On : 18 Sep 2013 20:55
Operator : JM
Sample : 469985-002 S
Misc : MS
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 12:23:26 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

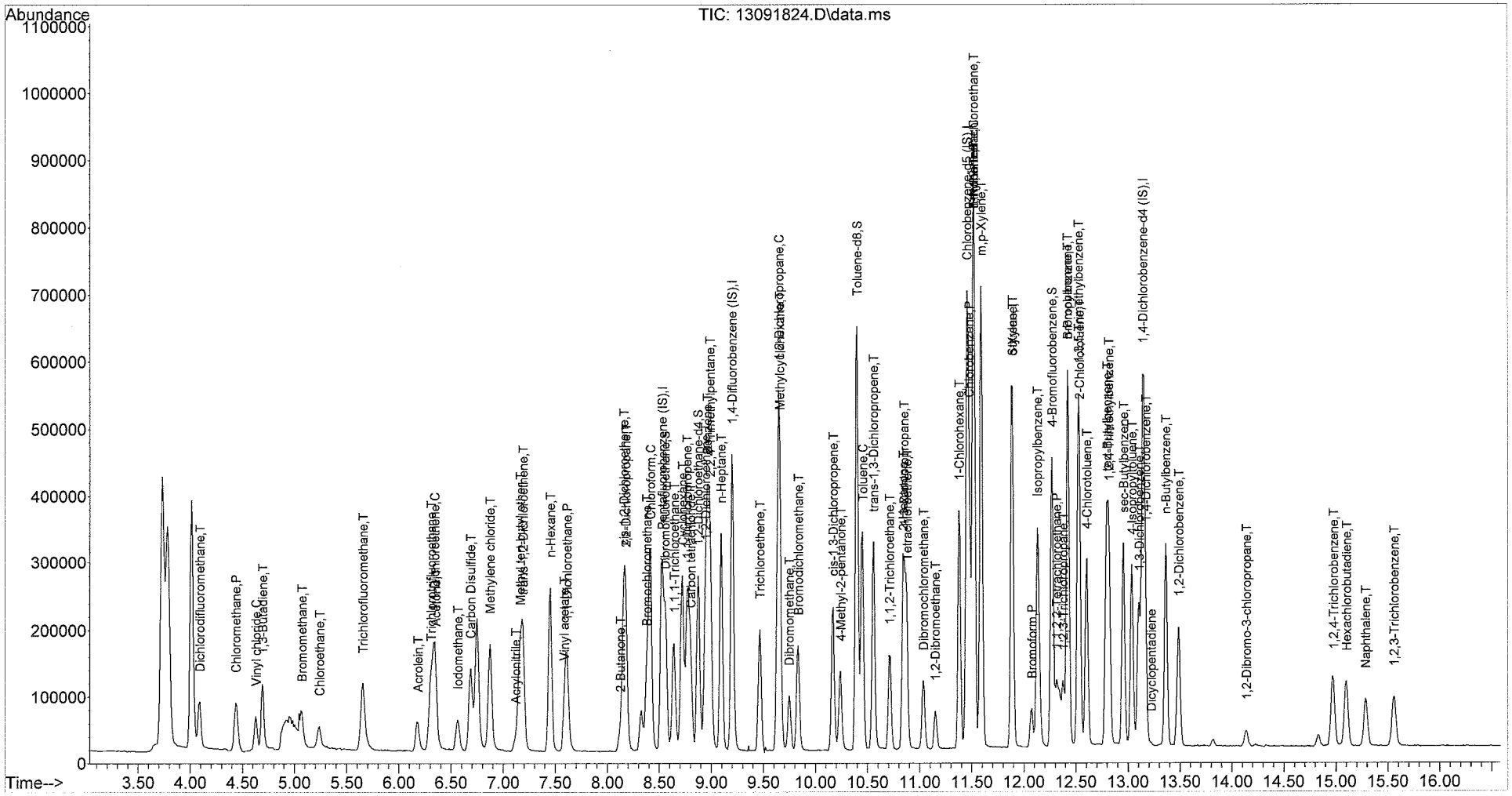
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.648	63	70241	20.61 ug/L	95
39) Bromodichloromethane	9.833	83	100520	22.60 ug/L	99
40) Methylcyclohexane	9.657	56	33565	21.08 ug/L	98
41) Dibromomethane	9.745	93	40710	20.40 ug/L	96
42) cis-1,3-Dichloropropene	10.169	75	102380	20.95 ug/L	92
44) 4-Methyl-2-pentanone	10.239	43	111736	36.83 ug/L	99
48) Toluene	10.451	92	122291	20.16 ug/L	99
49) trans-1,3-Dichloropropene	10.557	75	91690	21.81 ug/L #	63
50) 1,1,2-Trichloroethane	10.707	83	40006	20.04 ug/L	98
51) 1,3-Dichloropropane	10.848	76	88844	20.95 ug/L	93
52) Tetrachloroethene	10.874	166	47835	23.57 ug/L	98
53) Dibromochloromethane	11.033	129	44133	19.73 ug/L	98
54) 1,2-Dibromoethane	11.148	107	39096	19.20 ug/L	98
55) 1-Chlorohexane	11.377	91	79588	20.39 ug/L	95
56) Chlorobenzene	11.474	112	112415	21.79 ug/L	98
57) n-Nonane	11.518	57	104649	18.08 ug/L	97
58) 1,1,1,2-Tetrachloroethane	11.518	131	38855	20.33 ug/L	97
59) Ethylbenzene	11.518	91	253513	21.09 ug/L	98
60) m,p-Xylene	11.589	106	147718	44.34 ug/L	98
61) o-Xylene	11.889	106	70835	22.52 ug/L	90
62) Styrene	11.889	104	92256	16.10 ug/L	84
63) Isopropylbenzene	12.127	105	182530	21.11 ug/L	97
64) Bromoform	12.074	173	23817	18.57 ug/L	97
65) 1,1,2,2-Tetrachloroethane	12.312	83	51512	18.81 ug/L	100
67) 2-Hexanone	10.839	43	75841	33.81 ug/L	97
69) 1,2,3-Trichloropropane	12.374	110	11395	19.45 ug/L	98
70) n-Propylbenzene	12.418	91	290811	23.44 ug/L	99
71) Bromobenzene	12.418	156	40348	20.51 ug/L #	66
72) 1,3,5-Trimethylbenzene	12.524	105	159287	20.82 ug/L	98
73) 2-Chlorotoluene	12.533	91	198783	22.97 ug/L	99
74) 4-Chlorotoluene	12.603	91	173442	23.45 ug/L	98
75) tert-Butylbenzene	12.797	119	125859	21.96 ug/L	98
76) 1,2,4-Trimethylbenzene	12.815	105	160579	21.20 ug/L	97
77) sec-Butylbenzene	12.956	105	207001	22.54 ug/L	98
78) 4-Isopropyltoluene	13.035	119	135219	21.99 ug/L	99
79) 1,3-Dichlorobenzene	13.106	146	70670	20.66 ug/L	95
80) 1,4-Dichlorobenzene	13.168	146	69910	19.83 ug/L	98
81) Dicyclopentadiene	13.221	66	3057	2.20 ug/L #	60
82) n-Butylbenzene	13.362	92	108466	20.37 ug/L	99
83) 1,2-Dichlorobenzene	13.485	146	61597	21.02 ug/L	97
84) 1,2-Dibromo-3-chloropr...	14.138	157	5051	17.46 ug/L	93
85) 1,2,4-Trichlorobenzene	14.976	180	32995	17.13 ug/L	99
86) Hexachlorobutadiene	15.099	190	10412	19.51 ug/L	97
87) Naphthalene	15.285	128	62476	17.34 ug/L	98
88) 1,2,3-Trichlorobenzene	15.558	180	26322	16.53 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091824.D
Acq On : 18 Sep 2013 20:55
Operator : JM
Sample : 469985-002 S
Misc : MS
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 25 12:23:26 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091825.D
Acq On : 18 Sep 2013 21:19
Operator : JM
Sample : 469985-002 SD
Misc : MSD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 25 12:23:30 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

JM 10/1/13

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.525	168	153724	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.205	114	294612	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.454	117	268152	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.148	152	119209	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.561	113	136655	49.48 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 98.96%		
45) 1,2-Dichloroethane-d4	8.869	65	230762	47.83 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 95.66%		
46) Toluene-d8	10.395	98	416893	50.46 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 100.92%		
66) 4-Bromofluorobenzene	12.265	95	184548	49.23 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 98.46%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.088	85	74038	13.05 ug/L	99
3) Chloromethane	4.441	50	119660	21.44 ug/L	99
4) Vinyl chloride	4.627	62	61489	20.71 ug/L	98
5) 1,3-Butadiene	4.697	54	44593	27.79 ug/L	98
6) Bromomethane	5.068	94	41855	28.09 ug/L #	86
7) Chloroethane	5.244	64	34646	20.76 ug/L	99
8) Trichlorofluoromethane	5.650	101	119473	18.63 ug/L	99
9) Acrolein	6.179	56	52978	100.13 ug/L	99
10) Trichlorotrifluoroethane	6.311	151	33678	18.54 ug/L	99
11) 1,1-Dichloroethene	6.338	61	139970	21.02 ug/L	97
12) Methylene chloride	6.867	84	72131	19.72 ug/L	95
13) Acrylonitrile	7.114	53	21725	18.71 ug/L	93
14) trans-1,2-Dichloroethene	7.185	61	137229	21.63 ug/L	98
15) n-Hexane	7.449	57	115498	19.07 ug/L	98
16) 1,1-Dichloroethane	7.608	63	166547	22.97 ug/L	100
17) Cyclohexane	8.719	84	84209	18.94 ug/L #	70
18) 2,2-Dichloropropane	8.173	77	126384	20.83 ug/L	99
19) cis-1,2-Dichloroethene	8.155	96	66256	21.07 ug/L	97
20) Chloroform	8.411	83	233538	33.79 ug/L	98
21) Bromochloromethane	8.384	128	23747	20.41 ug/L	89
23) 1,1,1-Trichloroethane	8.640	97	117405	21.47 ug/L	99
24) Acetone	6.347	43	53817	38.23 ug/L	96
25) 2-Butanone	8.120	43	64351	34.66 ug/L	100
26) Carbon Disulfide	6.682	76	290865	22.54 ug/L	97
27) Iodomethane	6.558	142	67741	20.24 ug/L	96
28) Vinyl acetate	7.590	43	120503	12.01 ug/L	97
29) Methyl tert-butyl ether	7.158	73	134602	18.29 ug/L	96
31) 1,1-Dichloropropene	8.772	75	108698	20.58 ug/L	96
32) Carbon tetrachloride	8.799	117	88150	20.71 ug/L	99
33) 1,2-Dichloroethane	8.940	62	129600	20.84 ug/L	97
34) Benzene	8.958	78	249274	20.10 ug/L	94
35) 2,2,4-Trimethylpentane	8.984	57	300233	18.95 ug/L	98
36) n-Heptane	9.090	57	66146	18.52 ug/L	99
37) Trichloroethene	9.460	95	69163	20.84 ug/L	96

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091825.D
Acq On : 18 Sep 2013 21:19
Operator : JM
Sample : 469985-002 SD
Misc : MSD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 25 12:23:30 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

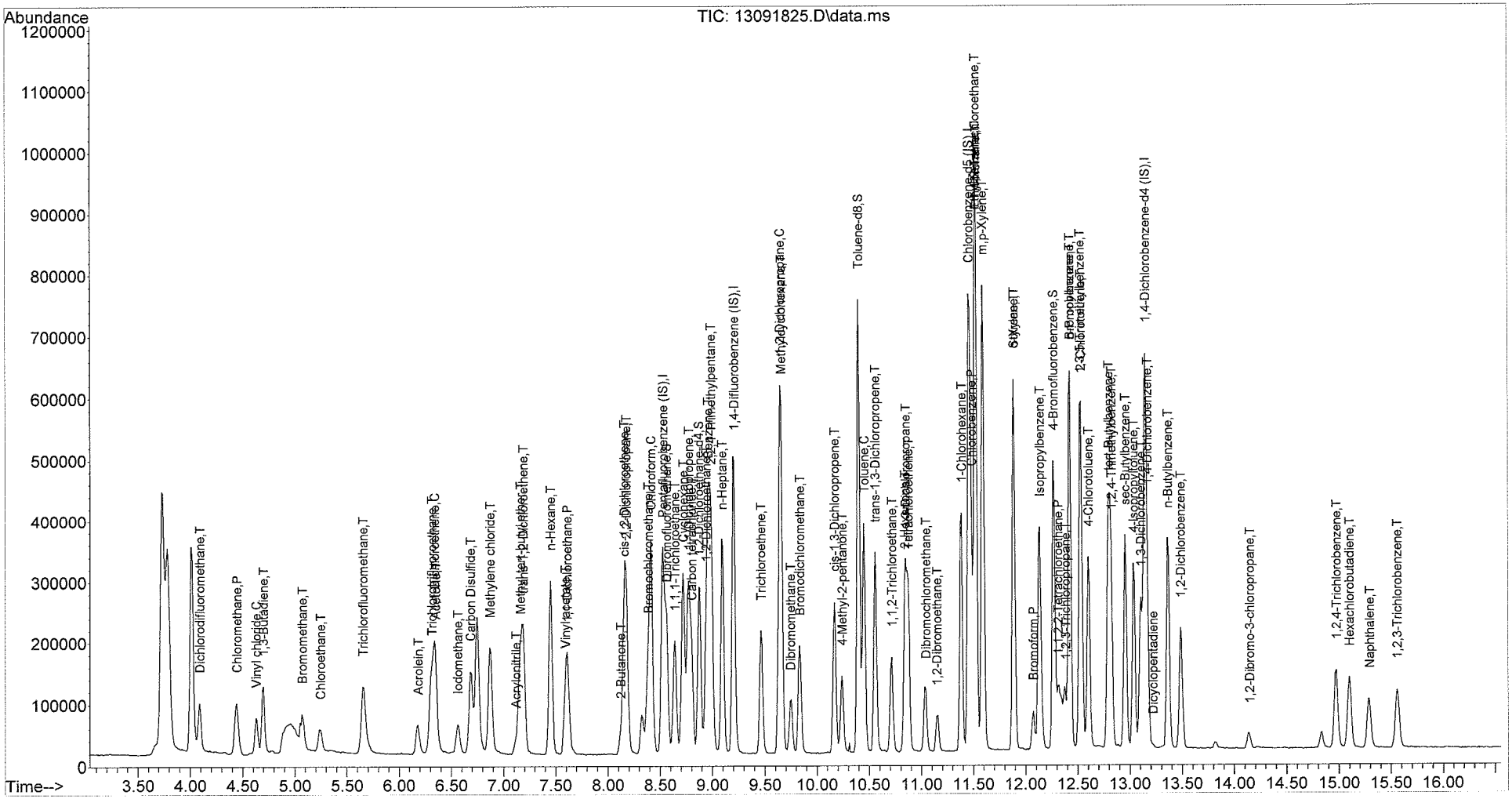
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.646	63	80904	20.41 ug/L	97
39) Bromodichloromethane	9.831	83	110929	21.44 ug/L	99
40) Methylcyclohexane	9.654	56	39353	21.25 ug/L	97
41) Dibromomethane	9.743	93	44533	19.18 ug/L	96
42) cis-1,3-Dichloropropene	10.166	75	116082	20.42 ug/L	93
44) 4-Methyl-2-pentanone	10.237	43	122846	34.81 ug/L	98
48) Toluene	10.448	92	137198	19.77 ug/L	99
49) trans-1,3-Dichloropropene	10.554	75	96606	20.08 ug/L #	66
50) 1,1,2-Trichloroethane	10.713	83	42364	18.55 ug/L	100
51) 1,3-Dichloropropane	10.845	76	95718	19.72 ug/L	95
52) Tetrachloroethene	10.872	166	53531	23.05 ug/L	98
53) Dibromochloromethane	11.039	129	47270	18.47 ug/L	98
54) 1,2-Dibromoethane	11.145	107	41871	17.97 ug/L	99
55) 1-Chlorohexane	11.383	91	90692	20.31 ug/L	97
56) Chlorobenzene	11.480	112	124441	21.08 ug/L	97
57) n-Nonane	11.524	57	115276	17.40 ug/L	99
58) 1,1,1,2-Tetrachloroethane	11.516	131	42774	19.56 ug/L	97
59) Ethylbenzene	11.516	91	286210	20.81 ug/L	98
60) m,p-Xylene	11.586	106	164608	43.18 ug/L	92
61) o-Xylene	11.886	106	78469	21.80 ug/L	89
62) Styrene	11.886	104	94829	14.46 ug/L #	82
63) Isopropylbenzene	12.133	105	207043	20.93 ug/L	97
64) Bromoform	12.071	173	25334	17.26 ug/L	97
65) 1,1,2,2-Tetrachloroethane	12.310	83	55338	17.66 ug/L	99
67) 2-Hexanone	10.836	43	85220	33.20 ug/L	94
69) 1,2,3-Trichloropropane	12.380	110	11845	17.78 ug/L	98
70) n-Propylbenzene	12.424	91	329488	23.35 ug/L	97
71) Bromobenzene	12.424	156	45101	20.16 ug/L	86
72) 1,3,5-Trimethylbenzene	12.521	105	179304	20.61 ug/L	100
73) 2-Chlorotoluene	12.530	91	219513	22.31 ug/L	97
74) 4-Chlorotoluene	12.601	91	195755	23.27 ug/L	98
75) tert-Butylbenzene	12.795	119	143806	22.07 ug/L	97
76) 1,2,4-Trimethylbenzene	12.821	105	180920	21.00 ug/L	97
77) sec-Butylbenzene	12.953	105	237501	22.74 ug/L	98
78) 4-Isopropyltoluene	13.033	119	155685	22.27 ug/L	98
79) 1,3-Dichlorobenzene	13.103	146	84044	21.61 ug/L	97
80) 1,4-Dichlorobenzene	13.165	146	75758	18.90 ug/L	95
81) Dicyclopentadiene	13.218	66	3424	2.17 ug/L #	70
82) n-Butylbenzene	13.359	92	126398	20.87 ug/L	98
83) 1,2-Dichlorobenzene	13.483	146	68293	20.50 ug/L	96
84) 1,2-Dibromo-3-chloropr...	14.144	157	5227	15.89 ug/L	93
85) 1,2,4-Trichlorobenzene	14.973	180	39988	18.26 ug/L	97
86) Hexachlorobutadiene	15.097	190	11731	19.33 ug/L	92
87) Naphthalene	15.291	128	72841	17.78 ug/L	99
88) 1,2,3-Trichlorobenzene	15.556	180	32718	18.08 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091825.D
Acq On : 18 Sep 2013 21:19
Operator : JM
Sample : 469985-002 SD
Misc : MSD
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 25 12:23:30 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091826.D
Acq On : 18 Sep 2013 21:44
Operator : JM
Sample : 470337-001
Misc : SMP
ALS Vial : 4 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:24:12 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.529	168	140454	50.00 ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.199	114	270643	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.457	117	240716	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	105862	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.555	113	132207	52.39 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 104.78%		
45) 1,2-Dichloroethane-d4	8.873	65	213592	48.19 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 96.38%		
46) Toluene-d8	10.399	98	388422	51.18 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 102.36%		
66) 4-Bromofluorobenzene	12.269	95	159069	47.27 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 94.54%		
Target Compounds					Qvalue
6) Bromomethane	5.071	94	333	Below Cal #	53
24) Acetone	6.359	43	5852	Below Cal #	87
25) 2-Butanone	8.140	43	2943	Below Cal	81
27) Iodomethane	6.570	142	183	Below Cal #	64
85) 1,2,4-Trichlorobenzene	14.968	180	1279	0.66 ug/L	92
86) Hexachlorobutadiene	15.091	190	326	Below Cal #	77
87) Naphthalene	15.294	128	4442	1.22 ug/L	96
88) 1,2,3-Trichlorobenzene	15.559	180	1774	1.10 ug/L	93

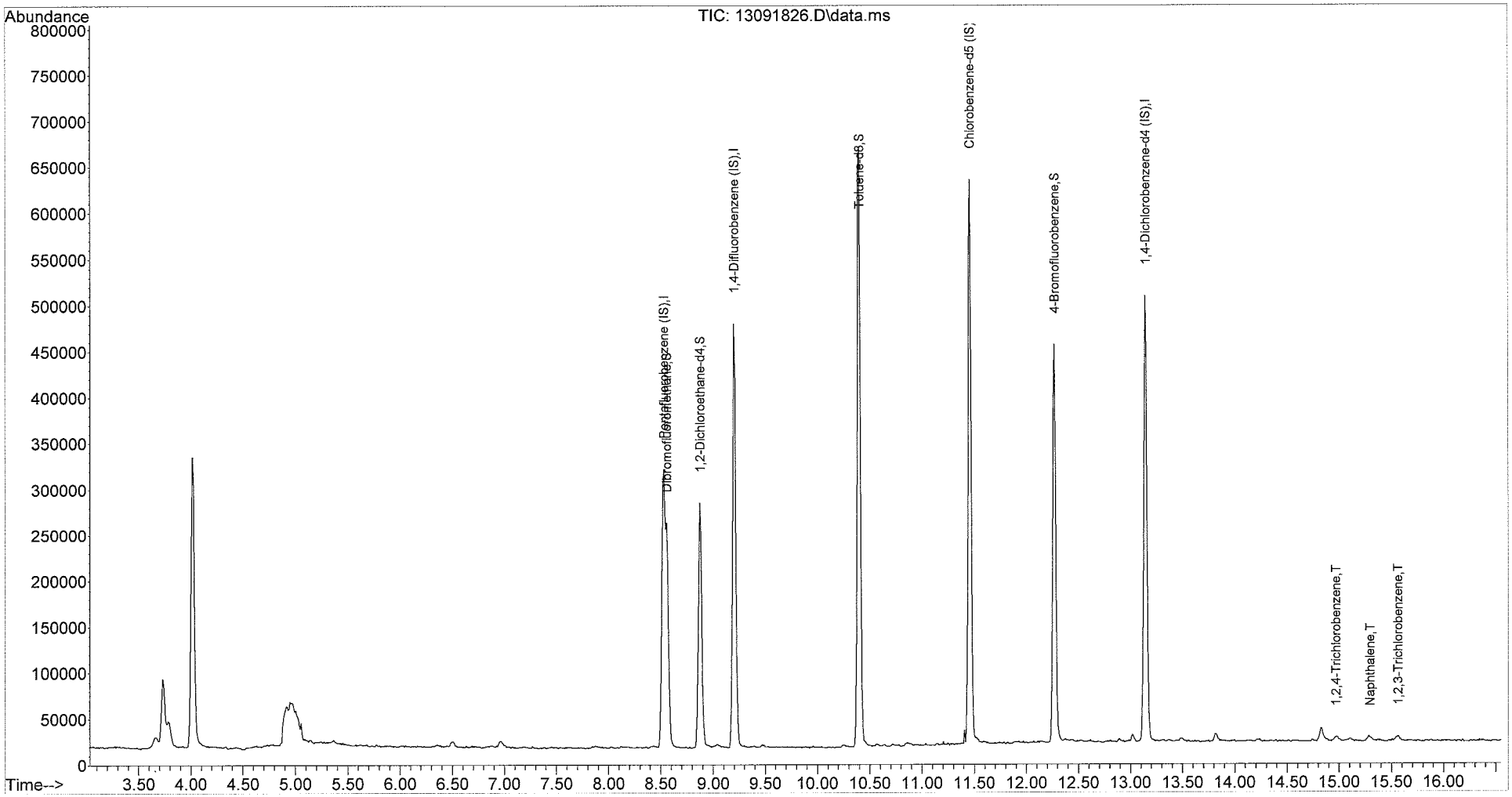
cm

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091826.D
Acq On : 18 Sep 2013 21:44
Operator : JM
Sample : 470337-001
Misc : SMP
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 13:24:12 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091827.D
Acq On : 18 Sep 2013 22:09
Operator : JM
Sample : 470337-002
Misc : SMP
ALS Vial : 5 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:25:03 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

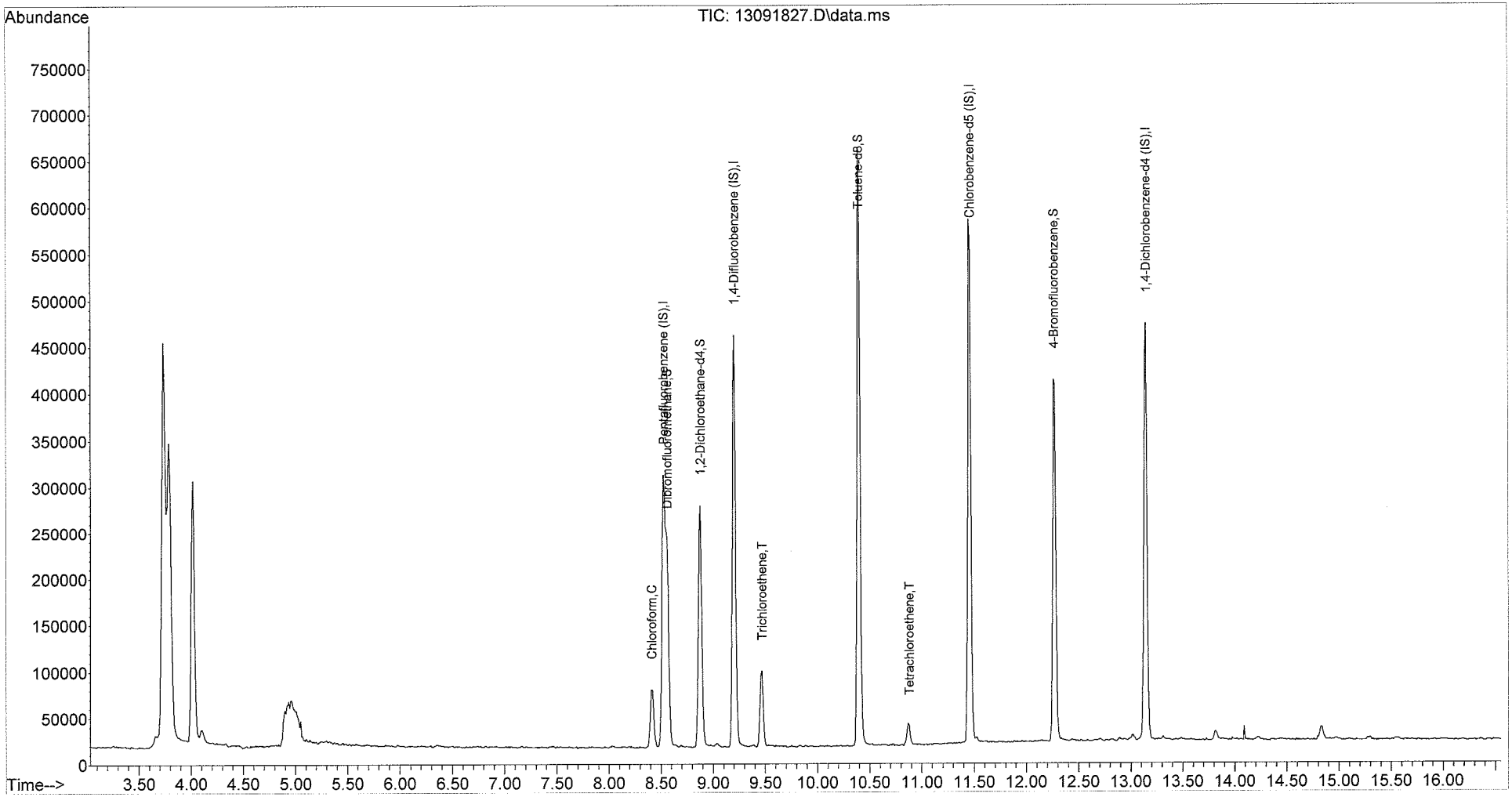
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.523	168	133996	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.202	114	258259	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.460	117	226774	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.145	152	98020	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.558	113	129210	53.67 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 107.34%		
45) 1,2-Dichloroethane-d4	8.876	65	210563	49.79 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 99.58%		
46) Toluene-d8	10.393	98	368103	50.82 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 101.64%		
66) 4-Bromofluorobenzene	12.263	95	151675	47.84 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 95.68%		
Target Compounds					Qvalue
6) Bromomethane	5.021	94	659	Below Cal #	31
7) Chloroethane	5.197	64	385	Below Cal #	1
20) Chloroform	8.408	83	46504	7.72 ug/L	97
24) Acetone	6.353	43	4637	Below Cal	89
25) 2-Butanone	8.152	43	1700	Below Cal #	78
27) Iodomethane	6.582	142	65	Below Cal #	16
37) Trichloroethene	9.467	95	28297	9.73 ug/L	98
52) Tetrachloroethene	10.878	166	5261	2.68 ug/L	95
86) Hexachlorobutadiene	15.095	190	135	Below Cal	78

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091827.D
Acq On : 18 Sep 2013 22:09
Operator : JM
Sample : 470337-002
Misc : SMP
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 25 13:25:03 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091828.D
Acq On : 18 Sep 2013 22:34
Operator : JM
Sample : 470337-003
Misc : SMP
ALS Vial : 6 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:25:44 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

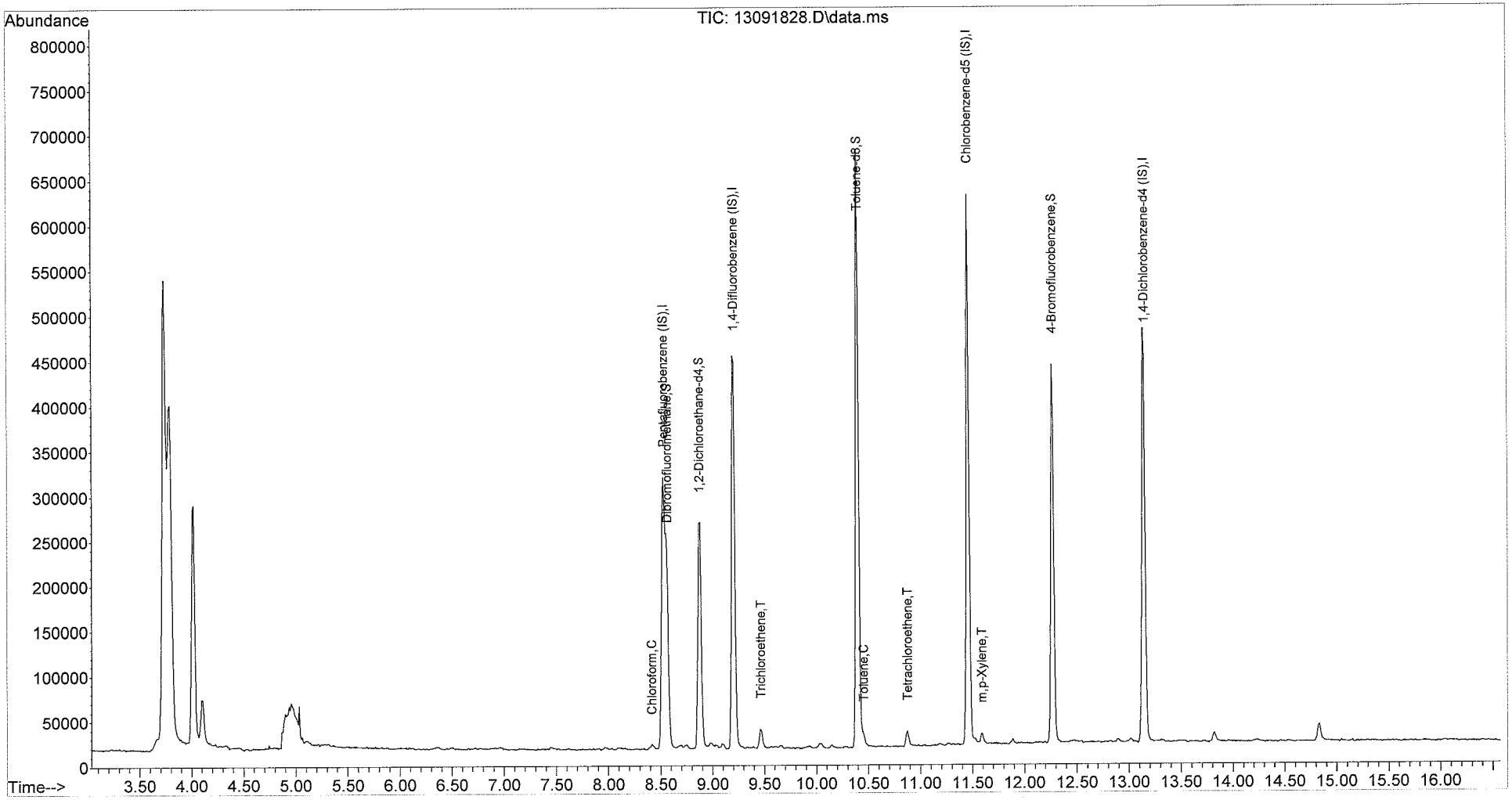
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.526	168	136858	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.205	114	262248	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.454	117	233821	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.148	152	101042	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.561	113	129652	52.73 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 105.46%		
45) 1,2-Dichloroethane-d4	8.870	65	211809	49.32 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 98.64%		
46) Toluene-d8	10.396	98	372436	50.64 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 101.28%		
66) 4-Bromofluorobenzene	12.266	95	154319	47.21 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 94.42%		
Target Compounds					Qvalue
4) Vinyl chloride	4.547	62	263	Below Cal	83
6) Bromomethane	5.015	94	713	Below Cal #	37
20) Chloroform	8.411	83	3276	0.53 ug/L	96
24) Acetone	6.356	43	5089	Below Cal	91
25) 2-Butanone	8.146	43	2330	Below Cal	95
27) Iodomethane	6.567	142	85	Below Cal #	82
37) Trichloroethene	9.461	95	6694	2.27 ug/L	95
40) Methylcyclohexane	9.611	56	374	Below Cal #	1
48) Toluene	10.449	92	3839	0.63 ug/L	81
52) Tetrachloroethene	10.872	166	3732	1.84 ug/L	96
60) m,p-Xylene	11.587	106	2660	0.80 ug/L	97
86) Hexachlorobutadiene	15.080	190	59	Below Cal #	70

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091828.D
Acq On : 18 Sep 2013 22:34
Operator : JM
Sample : 470337-003
Misc : SMP
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 25 13:25:44 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091829.D
Acq On : 18 Sep 2013 22:58
Operator : JM
Sample : 470337-004
Misc : SMP
ALS Vial : 7 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:26:37 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

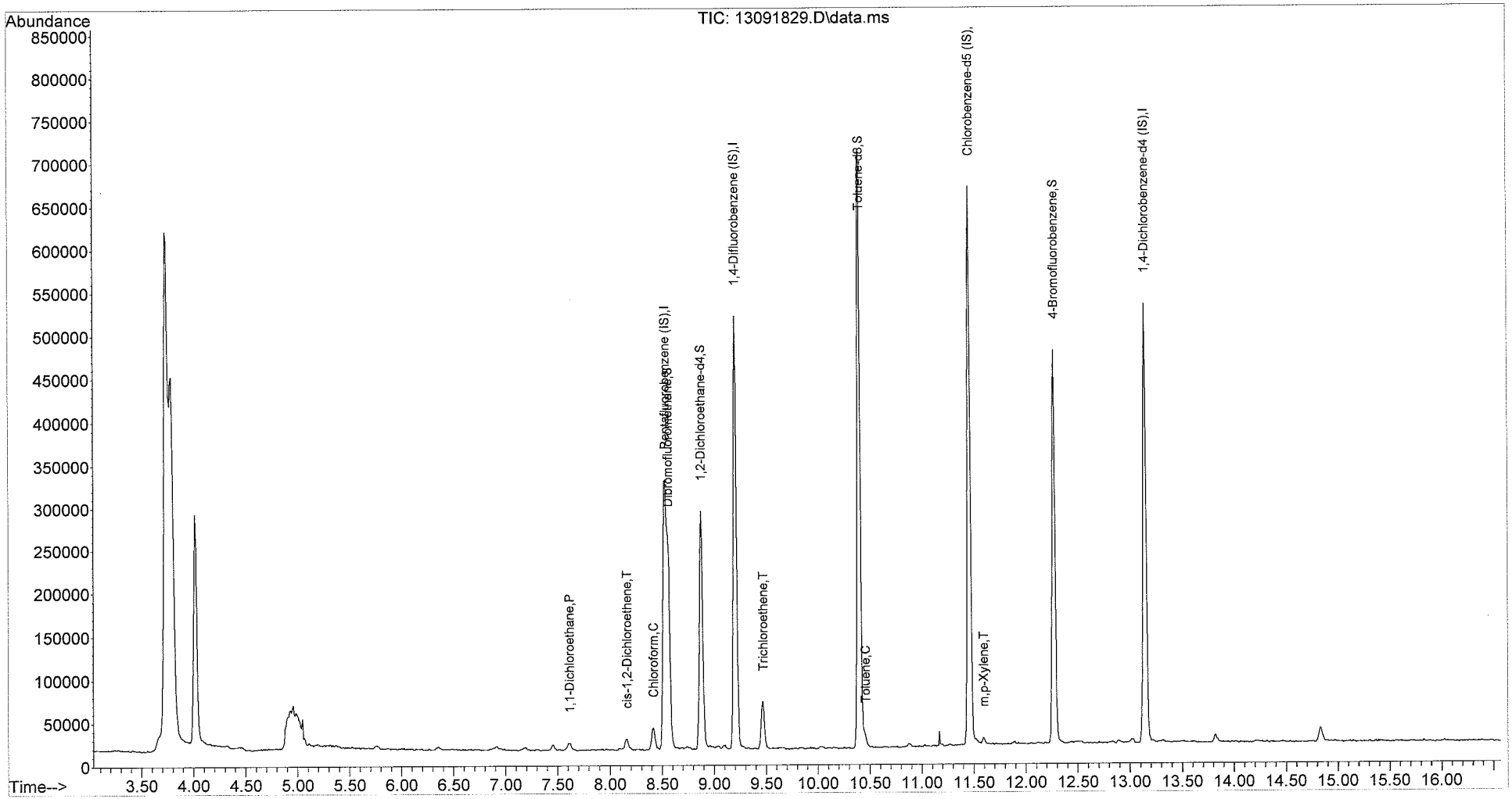
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.529	168	147548	50.00 ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.199	114	287849	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.458	117	255205	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	108938	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.556	113	136758	51.59 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 103.18%		
45) 1,2-Dichloroethane-d4	8.873	65	219120	46.48 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 92.96%		
46) Toluene-d8	10.399	98	407753	50.51 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 101.02%		
66) 4-Bromofluorobenzene	12.269	95	168416	47.20 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 94.40%		
Target Compounds					Qvalue
7) Chloroethane	5.212	64	448	Below Cal #	1
16) 1,1-Dichloroethane	7.612	63	9278	1.33 ug/L	99
19) cis-1,2-Dichloroethene	8.159	96	4631	1.53 ug/L	89
20) Chloroform	8.414	83	18033	2.72 ug/L	98
24) Acetone	6.350	43	3987	Below Cal #	80
25) 2-Butanone	8.141	43	2093	Below Cal #	81
27) Iodomethane	6.562	142	59	Below Cal #	57
37) Trichloroethene	9.464	95	18306	5.65 ug/L	95
48) Toluene	10.452	92	4321	0.65 ug/L	97
60) m,p-Xylene	11.590	106	1480	0.41 ug/L #	77
86) Hexachlorobutadiene	15.092	190	96	Below Cal #	68

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130918\
Data File : 13091829.D
Acq On : 18 Sep 2013 22:58
Operator : JM
Sample : 470337-004
Misc : SMP
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 13:26:37 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Method 8260B

Run ID 130919 **Date of Run 9/19/13** **Analyst JM** **Page # 37**

Acquisition Method **SC8260**

Standard ID's			**Syringe IDs:**
CCV Std	Prep Log #	GCMSVOA-6072	V-126
BFB Std	Prep Log #	GCMSVOA-6067	V-024
Internal Std	Prep Log #	GCMSVOA-6068	V-029
Surrogates	Prep Log #	GCMSVOA-6067	V-024
Bench Spike	Prep Log #	NA	NA
Secondary spike	Prep Log #	GCMSVOA-6071	NA
Methanol	RL #	07-22-24	V-141

Soil Blank & Sample Preparation

Name	Extract amount in µl	IS amount in µl
Method Blank	100	10
QC Samples	100	10
Matrix Samples	100	10

Aqueous Blank & Sample Preparation

Name	Surrogate	Secondary Spike	Sample amount in ml	IS amount in µl
Method Blank	10	NA	5.0	10
QC Samples	10	10	5.0	10
Matrix Samples	10	NA	5.0	10

CCV Preparation

Standard Name	Standard amt added in µl	Reagent Water amt in mL	Methanol amt added in µl
CCV #1	10	5	80
Internal Standard	10		
Surrogate Standard	10		

Aqueous Dilutions

Dilution	Sample
1X	5 mL
2X	2.5 mL
5X	1 mL
10X	500 µl
20X	250 µl
50X	100 µl
100 X	50 µl
200 X	25 µl
500 X	10 µl

VOA-003-Inst10RunLog RV1
Create a book by attaching a copy of the Injection Log and number it in consecutive order up to 100.

Injection Log

Directory: h:\voa\a228\130919

28

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	2	13091901.d	1.	BFB	TUNE CHECK	19 Sep 13 10:52
2	3	13091902.d	1.	CCV	CCV	19 Sep 13 11:17
3	5	13091903.d	1.	BFB	TUNE CHECK	19 Sep 13 12:14
4	6	13091904.d	1.	CCV	CCV	19 Sep 13 12:39
5	4	13091905.d	1.	BLK	BLK	19 Sep 13 13:46
6	7	13091906.d	1.	BKS	BKS	19 Sep 13 14:11
7	8	13091907.d	1.	BSD	BSD	19 Sep 13 14:37
8	9	13091908.d	1.	470337-004	SMP	19 Sep 13 15:02
9	10	13091909.d	1.	470337-005	SMP	19 Sep 13 15:27
10	11	13091910.d	1.	470337-006	SMP	19 Sep 13 15:53
11	12	13091911.d	1.	470337-007	SMP	19 Sep 13 16:19
12	13	13091912.d	1.	470337-008	SMP	19 Sep 13 16:44
13	14	13091913.d	1.	470337-009	SMP	19 Sep 13 17:10
14	15	13091914.d	1.	470337-005 S	MS	19 Sep 13 17:35
15	16	13091915.d	1.	470337-005 SD	MSD	19 Sep 13 18:01
16	1	13091916.d	1.	470482-001	SMP	19 Sep 13 18:26
17	2	13091917.d	1.	470482-002	SMP	19 Sep 13 18:51
18	3	13091918.d	1.	470482-003	SMP	19 Sep 13 19:16
19	4	13091919.d	1.	470482-004	SMP	19 Sep 13 19:41
20	5	13091920.d	1.	470482-005	SMP	19 Sep 13 20:06
21	6	13091921.d	1.	470482-006	SMP	19 Sep 13 20:31
22	7	13091922.d	1.	470482-007	SMP	19 Sep 13 20:55
23	8	13091923.d	1.	470482-008	SMP	19 Sep 13 21:20
24	9	13091924.d	1.	470483-001	SMP	19 Sep 13 21:45
25	10	13091925.d	1.	470483-002	SMP	19 Sep 13 22:09
26	11	13091926.d	10.	470340-002	SMP	19 Sep 13 22:34

PHC2

644126
923605

9/20/13

GC/MS QA-QC Check Report

Tune File : H:\VOA\A228\130919\13091903.D
Tune Time : 19 Sep 2013 12:14

Daily Calibration File : H:\VOA\A228\130919\13091904.D

TM 10/1/13

156100 295501 273894

124420

File	Sample	Surrogate Recovery %				Internal Standard Responses		
13091904.D								
	CCV	97	92	98	94	156100	295501	273894
				124420				
13091905.D								
	BLK	101	94	99	95	153048	291519	260676
				118233				
13091906.D								
	BKS	100	94	100	98	148476	284892	261007
				118998				
13091907.D								
	BSD	98	95	100	101	150367	284829	256700
				120055				
13091908.D								
	470337-004	101	94	99	94	142213	275117	243844
				110733				
13091909.D								
	470337-005	101	97	99	90	165148	313413	273533
				114590				
13091910.D								
	470337-006	98	95	99	93	145840	272120	237526
				105495				
13091911.D								
	470337-007	101	96	99	94	132800	252531	226922
				102987				
13091912.D								
	470337-008	101	97	100	92	132014	248345	227452
				101985				
13091913.D								
	470337-009	101	96	98	91	133464	254710	229606
				101009				
13091914.D								
	470337-005	99	98	100	99	135657	253487	234251
				108834				
13091915.D								
	470337-005	100	97	100	97	139971	266559	244122
				107293				
13091916.D								
	470482-001	102	100	100	92	114941	214776	194985
				84301				
13091917.D								

	470482-002	101	95	98	91	134745	254480	225097
				98776				
13091918.D								
	470482-003	99	95	99	90	137160	258233	227334
				98015				
13091919.D								
	470482-004	101	95	100	92	133656	253517	224434
				98692				
13091920.D								
	470482-005	102	96	99	93	134976	256753	224450
				97374				
13091921.D								
	470482-006	98	94	97	89	143062	268350	233299
				99514				
13091922.D								
	470482-007	94	91	96	88	141486	261940	232218
				99599				
13091923.D								
	470482-008	101	94	99	91	133439	254595	224987
				97581				
13091924.D								
	470483-001	99	94	102	92	136941	255515	227309
				96224				
13091925.D								
	470483-002	98	92	98	89	140503	264302	231199
				93530				
13091926.D								
	470340-002	93	89	97	88	144226	262970	230150
				96418				

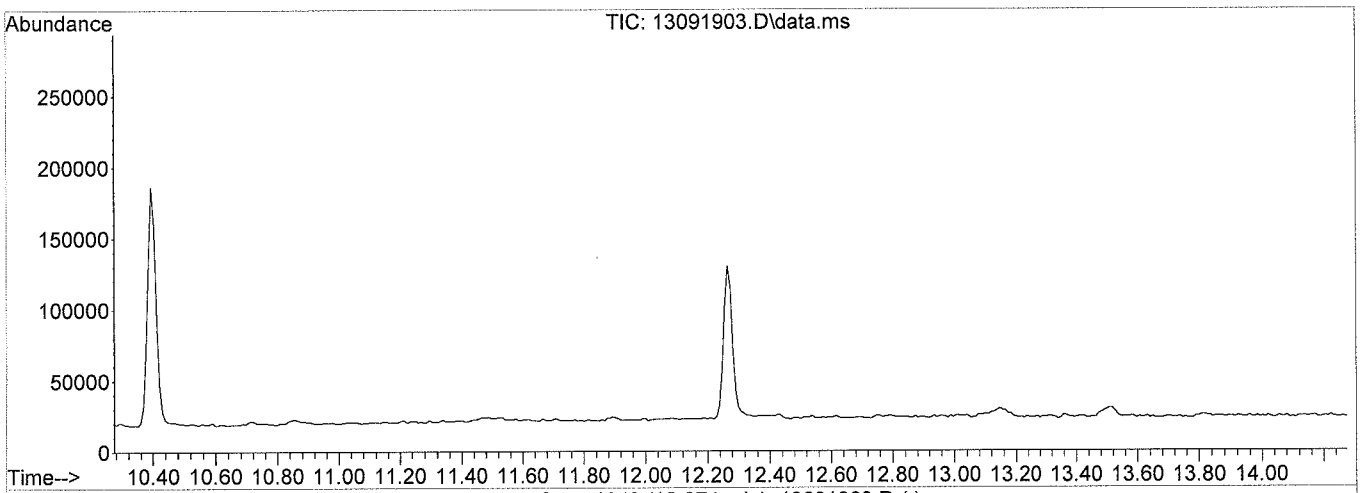
(fails) - fails 12hr time check * - fails criteria

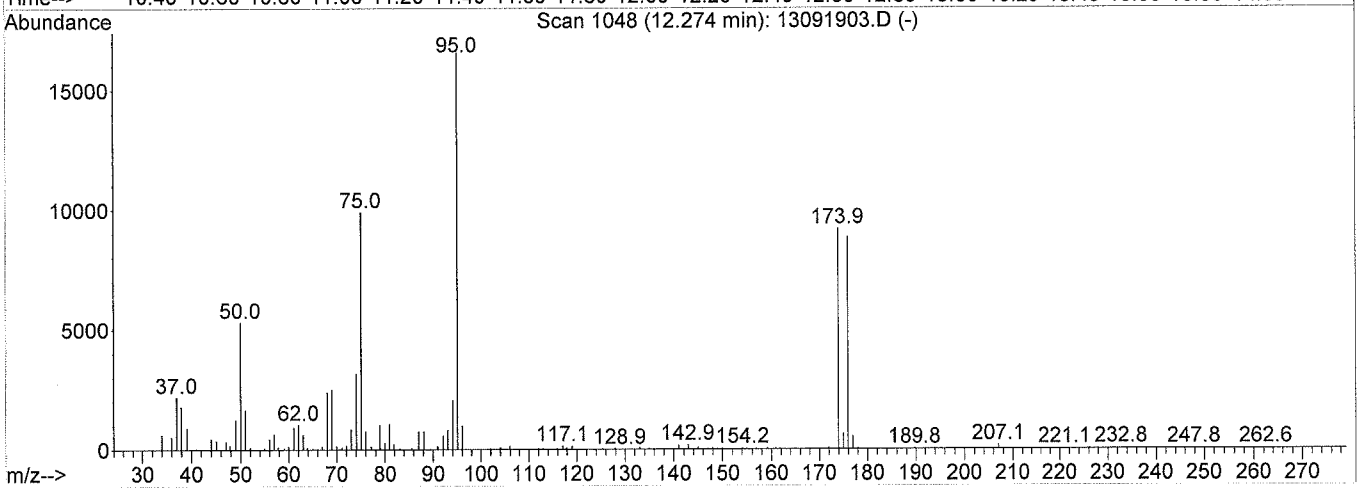
Created: Fri Sep 20 09:28:00 2013 GCMS 10

Data Path : H:\VOA\A228\130919\
Data File : 13091903.D
Acq On : 19 Sep 2013 12:14
Operator : JM
Sample : BFB
Misc : TUNE CHECK
ALS Vial : 5 Sample Multiplier: 1

Integration File: RTEINT.P

Method : H:\VOA\A228\METHODS\130916.M
Title : 8260B_S
Last Update : Tue Sep 24 17:55:32 2013





Spectrum Information: Scan 1048

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	32.0	5302	PASS
75	95	30	60	59.8	9909	PASS
95	95	100	100	100.0	16579	PASS
96	95	5	9	5.9	971	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	55.5	9196	PASS
175	174	5	9	6.9	631	PASS
176	174	95	101	96.1	8839	PASS
177	176	5	9	5.8	516	PASS

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091904.D
Acq On : 19 Sep 2013 12:39
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 13:15:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.522	168	156100	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.201	114	295501	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.450	117	273894	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.144	152	124420	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.548	113	135641	48.36 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 96.72%		
45) 1,2-Dichloroethane-d4	8.866	65	221426	45.76 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 91.52%		
46) Toluene-d8	10.392	98	405752	48.96 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 97.92%		
66) 4-Bromofluorobenzene	12.262	95	183597	47.24 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 94.48%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.085	85	112159	19.48 ug/L	99
3) Chloromethane	4.429	50	114046	20.12 ug/L	99
4) Vinyl chloride	4.623	62	71317	23.69 ug/L	97
5) 1,3-Butadiene	4.685	54	36917	22.66 ug/L	99
6) Bromomethane	5.064	94	42462	28.06 ug/L #	90
7) Chloroethane	5.232	64	36084	21.31 ug/L	98
8) Trichlorofluoromethane	5.646	101	136404	20.94 ug/L	99
9) Acrolein	6.167	56	49962	92.99 ug/L	100
10) Trichlorotrifluoroethane	6.308	151	35141	19.05 ug/L	96
11) 1,1-Dichloroethene	6.334	61	142371	21.05 ug/L	96
12) Methylene chloride	6.864	84	72467	20.05 ug/L	99
13) Acrylonitrile	7.111	53	21381	18.33 ug/L	96
14) trans-1,2-Dichloroethene	7.181	61	135673	21.06 ug/L	98
15) n-Hexane	7.446	57	119882	19.49 ug/L	99
16) 1,1-Dichloroethane	7.605	63	154273	20.95 ug/L	100
17) Cyclohexane	8.716	84	92358	20.46 ug/L	86
18) 2,2-Dichloropropane	8.169	77	128850	21.01 ug/L	99
19) cis-1,2-Dichloroethene	8.151	96	64669	20.26 ug/L	99
20) Chloroform	8.407	83	145856	20.78 ug/L	99
21) Bromochloromethane	8.372	128	23547	19.93 ug/L	97
23) 1,1,1-Trichloroethane	8.637	97	116231	20.93 ug/L	98
24) Acetone	6.343	43	57385	40.44 ug/L	98
25) 2-Butanone	8.116	43	63754	33.77 ug/L	99
26) Carbon Disulfide	6.678	76	269259	20.55 ug/L	98
27) Iodomethane	6.555	142	67563	19.88 ug/L	95
28) Vinyl acetate	7.578	43	182352	17.90 ug/L	99
29) Methyl tert-butyl ether	7.146	73	136809	18.31 ug/L	98
31) 1,1-Dichloropropene	8.760	75	105539	19.92 ug/L	93
32) Carbon tetrachloride	8.795	117	84904	19.88 ug/L	97
33) 1,2-Dichloroethane	8.937	62	126267	20.24 ug/L	97
34) Benzene	8.954	78	249463	20.06 ug/L	96
35) 2,2,4-Trimethylpentane	8.981	57	317883	20.00 ug/L	99
36) n-Heptane	9.086	57	70961	19.81 ug/L	96
37) Trichloroethene	9.457	95	65899	19.80 ug/L	96

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091904.D
Acq On : 19 Sep 2013 12:39
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 13:15:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

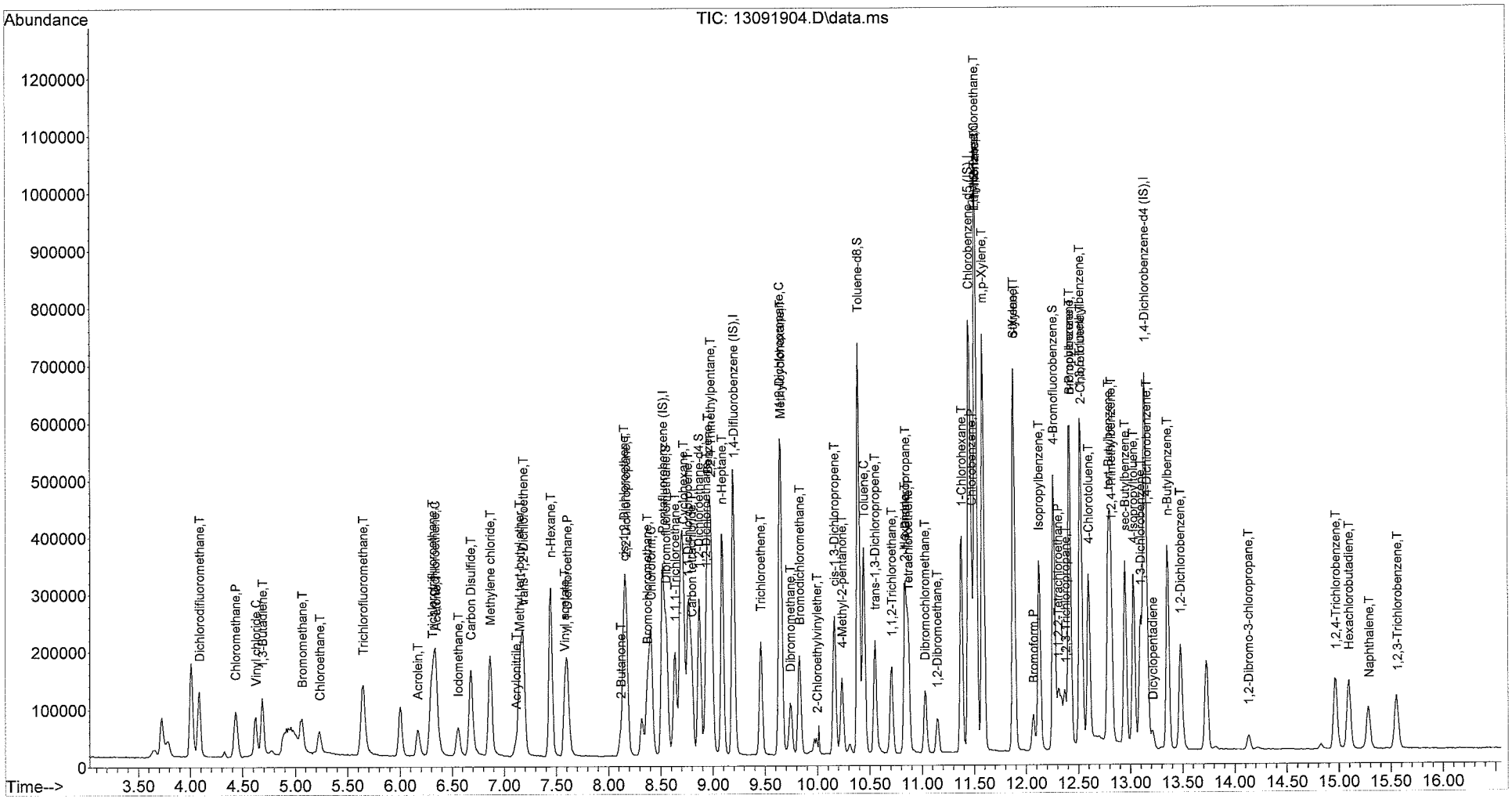
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.642	63	79093	20.38 ug/L	96
39) Bromodichloromethane	9.827	83	107201	20.66 ug/L	99
40) Methylcyclohexane	9.651	56	38619	20.78 ug/L	95
41) Dibromomethane	9.739	93	43875	18.84 ug/L	96
42) cis-1,3-Dichloropropene	10.163	75	113202	19.85 ug/L	94
43) 2-Chloroethylvinylether	9.995	63	3768	5.65 ug/L #	45
44) 4-Methyl-2-pentanone	10.233	43	121660	34.37 ug/L	98
48) Toluene	10.445	92	131670	18.57 ug/L	99
49) trans-1,3-Dichloropropene	10.551	75	92126	18.75 ug/L	94
50) 1,1,2-Trichloroethane	10.710	83	41765	17.90 ug/L	98
51) 1,3-Dichloropropane	10.842	76	91798	18.52 ug/L	95
52) Tetrachloroethene	10.868	166	44159	18.61 ug/L	98
53) Dibromochloromethane	11.027	129	46940	17.96 ug/L	99
54) 1,2-Dibromoethane	11.142	107	42017	17.65 ug/L	98
55) 1-Chlorohexane	11.380	91	87731	19.23 ug/L	94
56) Chlorobenzene	11.477	112	115899	19.22 ug/L	97
57) n-Nonane	11.521	57	138437	20.46 ug/L	99
58) 1,1,1,2-Tetrachloroethane	11.512	131	43003	19.25 ug/L	98
59) Ethylbenzene	11.512	91	279577	19.90 ug/L	97
60) m,p-Xylene	11.583	106	155366	39.90 ug/L	90
61) o-Xylene	11.883	106	73569	20.01 ug/L	97
62) Styrene	11.883	104	136570	20.39 ug/L	94
63) Isopropylbenzene	12.121	105	202071	19.99 ug/L	98
64) Bromoform	12.068	173	25476	16.99 ug/L	99
65) 1,1,2,2-Tetrachloroethane	12.306	83	54338	16.97 ug/L	98
67) 2-Hexanone	10.833	43	83176	31.73 ug/L	97
69) 1,2,3-Trichloropropane	12.377	110	12023	17.30 ug/L	94
70) n-Propylbenzene	12.421	91	299521	20.34 ug/L	99
71) Bromobenzene	12.421	156	43807	18.77 ug/L	85
72) 1,3,5-Trimethylbenzene	12.518	105	182309	20.08 ug/L	99
73) 2-Chlorotoluene	12.527	91	205532	20.02 ug/L	98
74) 4-Chlorotoluene	12.597	91	179464	20.44 ug/L	98
75) tert-Butylbenzene	12.791	119	136645	20.09 ug/L	97
76) 1,2,4-Trimethylbenzene	12.818	105	183984	20.46 ug/L	98
77) sec-Butylbenzene	12.950	105	221467	20.32 ug/L	99
78) 4-Isopropyltoluene	13.029	119	149414	20.48 ug/L	98
79) 1,3-Dichlorobenzene	13.100	146	72560	17.88 ug/L	96
80) 1,4-Dichlorobenzene	13.162	146	80438	19.23 ug/L	95
81) Dicyclopentadiene	13.215	66	30560	18.57 ug/L #	93
82) n-Butylbenzene	13.356	92	130195	20.60 ug/L	99
83) 1,2-Dichlorobenzene	13.479	146	64610	18.58 ug/L	97
84) 1,2-Dibromo-3-chloropr...	14.132	157	5079	14.99 ug/L	88
85) 1,2,4-Trichlorobenzene	14.970	180	39906	17.46 ug/L	98
86) Hexachlorobutadiene	15.094	190	12486	19.72 ug/L	98
87) Naphthalene	15.288	128	64777	16.08 ug/L	98
88) 1,2,3-Trichlorobenzene	15.561	180	31634	16.75 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091904.D
Acq On : 19 Sep 2013 12:39
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 13:15:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration



Continuing Calibration Evaluation 10/1/13

CCV
9/19/2013 12:39

13091904.D
GCMS 10

Name	Fit	AvgRF/Amt	CCRF/Conc	%Rec	LCL	UCL	
Pentafluorobenzene (IS)	IS	176793.000	156100.000	XXXXXX	88397	353586	
Dichlorodifluoromethane	A	1.845	1.796	97	31	155	
Chloromethane	A	1.815	1.826	101	47	139	
Vinyl chloride	Q	20.000	23.689	118	80	120	
1,3-Butadiene	A	0.522	0.591	113	68	130	
Bromomethane	L	20.000	28.061	140	16	180	
Chloroethane	L	20.000	21.308	107	43	155	
Trichlorofluoromethane	A	2.086	2.185	105	61	135	
Acrolein	A	0.172	0.160	93	70	130	
Trichlorotrifluoroethane	A	0.591	0.563	95	58	147	
1,1-Dichloroethene	A	2.166	2.280	105	80	120	
Methylene chloride	A	1.157	1.161	100	64	133	
Acrylonitrile	L	20.000	18.334	92	68	130	
trans-1,2-Dichloroethene	A	2.063	2.173	105	67	131	
n-Hexane	A	1.970	1.920	97	68	130	
1,1-Dichloroethane	A	2.359	2.471	105	66	132	
Cyclohexane	A	1.446	1.479	102	70	130	
2,2-Dichloropropane	A	1.964	2.064	105	67	136	
cis-1,2-Dichloroethene	A	1.023	1.036	101	68	129	
Chloroform	A	2.248	2.336	104	80	120	
Bromochloromethane	A	0.378	0.377	100	68	130	
Dibromofluoromethane	A	0.898	0.869	97	70	130	
1,1,1-Trichloroethane	A	1.779	1.861	105	70	130	
Acetone	L	40.000	40.438	101	51	171	
2-Butanone	L	40.000	33.765	84	63	136	
Carbon Disulfide	A	4.197	4.312	103	56	138	
Iodomethane	L	20.000	19.877	99	44	153	
Vinyl acetate	A	3.263	2.920	89	68	130	
Methyl tert-butyl ether	A	2.393	2.191	92	71	129	
1,4-Difluorobenzene (IS)	IS	331218.000	295501.000	XXXXXX	165609	662436	
1,1-Dichloropropene	A	0.896	0.893	100	74	127	
Carbon tetrachloride	A	0.722	0.718	99	74	133	
1,2-Dichloroethane	A	1.055	1.068	101	68	130	
Benzene	A	2.104	2.111	100	68	130	
2,2,4-Trimethylpentane	A	2.689	2.689	100	70	130	
n-Heptane	A	0.606	0.600	99	70	130	
Trichloroethene	A	0.563	0.558	99	78	123	
1,2-Dichloropropane	A	0.657	0.669	102	68	130	
Bromodichloromethane	A	0.878	0.907	103	76	122	
Methylcyclohexane	L	20.000	20.781	104	70	130	
Dibromomethane	A	0.394	0.371	94	77	120	
cis-1,3-Dichloropropene	A	0.965	0.958	99	79	121	
2-Chloroethylvinylether	L	20.000	5.655	28	62	131	* NR
4-Methyl-2-pentanone	A	0.599	0.515	86	68	126	
1,2-Dichloroethane-d4	A	0.819	0.749	92	70	130	

Toluene-d8	A	1.402	1.373	98	70	130	
Chlorobenzene-d5 (IS)	IS	290931.000	273894.000	XXXXXX	145466	581862	
Toluene	A	1.294	1.202	93	80	120	
trans-1,3-Dichloropropene	A	0.897	0.841	94	76	121	
1,1,2-Trichloroethane	A	0.426	0.381	90	71	125	
1,3-Dichloropropane	A	0.905	0.838	93	74	124	
Tetrachloroethene	A	0.433	0.403	93	71	130	
Dibromochloromethane	A	0.477	0.428	90	68	130	
1,2-Dibromoethane	A	0.434	0.384	88	77	121	
1-Chlorohexane	A	0.833	0.801	96	68	130	
Chlorobenzene	A	1.101	1.058	96	47	139	
n-Nonane	A	1.235	1.264	102	70	130	
1,1,1,2-Tetrachloroethane	A	0.408	0.393	96	79	119	
Ethylbenzene	A	2.565	2.552	99	80	120	
m,p-Xylene	A	0.711	0.709	100	79	122	
o-Xylene	A	0.671	0.672	100	79	121	
Styrene	A	1.223	1.247	102	79	121	
Isopropylbenzene	A	1.845	1.844	100	78	122	
Bromoform	A	0.274	0.233	85	75	121	
1,1,2,2-Tetrachloroethane	A	0.584	0.496	85	70	122	
4-Bromofluorobenzene	L	50.000	47.235	94	70	130	
2-Hexanone	A	0.479	0.380	79	67	124	
1,4-Dichlorobenzene-d4 (IS)	IS	133708.000	124420.000	XXXXXX	66854	267416	
1,2,3-Trichloropropane	A	0.279	0.242	86	74	119	
n-Propylbenzene	A	5.917	6.018	102	70	121	
Bromobenzene	A	0.938	0.880	94	80	120	
1,3,5-Trimethylbenzene	A	3.648	3.663	100	80	120	
2-Chlorotoluene	A	4.126	4.130	100	78	122	
4-Chlorotoluene	A	3.528	3.606	102	77	123	
tert-Butylbenzene	A	2.733	2.746	100	80	120	
1,2,4-Trimethylbenzene	A	3.613	3.697	102	79	121	
sec-Butylbenzene	A	4.380	4.450	102	77	124	
4-Isopropyltoluene	A	2.932	3.002	102	79	120	
1,3-Dichlorobenzene	A	1.631	1.458	89	80	120	
1,4-Dichlorobenzene	A	1.681	1.616	96	80	120	
Dicyclopentadiene	A	0.661	0.614	93	80	120	
n-Butylbenzene	A	2.540	2.616	103	76	124	
1,2-Dichlorobenzene	A	1.397	1.298	93	80	120	
1,2-Dibromo-3-chloropropane	L	20.000	14.989	75	70	118	
1,2,4-Trichlorobenzene	A	0.919	0.802	87	75	125	
Hexachlorobutadiene	L	20.000	19.724	99	73	128	
Naphthalene	A	1.619	1.302	80	74	125	
1,2,3-Trichlorobenzene	A	0.759	0.636	84	69	127	

SPCCs out = 0 CCCs out = 0

Evaluate Continuing Calibration Report

Data Path : H:\VOA\A228\130919\
Data File : 13091904.D
Acq On : 19 Sep 2013 12:39
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 13:15:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene (IS)	1.000	1.000	0.0	88	0.00
2	T	Dichlorodifluoromethane	1.845	1.796	2.7	87	0.01
3	P	Chloromethane	1.815	1.826	-0.6	89	0.00
4	C	Vinyl chloride	1.015	1.142	-12.5	100	0.01
5	T	1,3-Butadiene	0.522	0.591	-13.2	100	0.01
6	T	Bromomethane	0.717	0.680	5.2	119	0.02
7	T	Chloroethane	0.616	0.578	6.2	104	0.02
8	T	Trichlorofluoromethane	2.086	2.185	-4.7	94	0.02
9	T	Acrolein	0.172	0.107	37.8#	54	0.00
10	T	Trichlorotrifluoroethane	0.591	0.563	4.7	87	0.01
11	C	1,1-Dichloroethene	2.166	2.280	-5.3	95	0.00
12	T	Methylene chloride	1.190	1.161	2.4	91	0.00
13	T	Acrylonitrile	0.378	0.342	9.5	79	0.00
14	T	trans-1,2-Dichloroethene	2.063	2.173	-5.3	94	0.00
15	T	n-Hexane	1.970	1.920	2.5	89	0.00
16	P	1,1-Dichloroethane	2.359	2.471	-4.7	93	0.00
17	T	Cyclohexane	1.446	1.479	-2.3	90	0.00
18	T	2,2-Dichloropropane	1.974	2.064	-4.6	94	0.00
19	T	cis-1,2-Dichloroethene	1.023	1.036	-1.3	89	0.00
20	C	Chloroform	2.248	2.336	-3.9	95	0.00
21	T	Bromochloromethane	0.378	0.377	0.3	87	0.00
22	S	Dibromofluoromethane	0.898	0.869	3.2	87	0.00
23	T	1,1,1-Trichloroethane	1.779	1.861	-4.6	93	0.00
24	T	Acetone	0.801	0.460	42.6#	85	0.00
25	T	2-Butanone	0.795	0.511	35.7#	72	0.00
26	T	Carbon Disulfide	4.197	4.312	-2.7	92	0.00
27	T	Iodomethane	0.965	1.082	-12.1	85	0.00
28	T	Vinyl acetate	3.263	2.920	10.5	78	0.00
29	T	Methyl tert-butyl ether	2.393	2.191	8.4	80	0.00
30	I	1,4-Difluorobenzene (IS)	1.000	1.000	0.0	90	0.00
31	T	1,1-Dichloropropene	0.896	0.893	0.3	91	0.00
32	T	Carbon tetrachloride	0.722	0.718	0.6	91	0.00
33	T	1,2-Dichloroethane	1.055	1.068	-1.2	93	0.00
34	T	Benzene	2.104	2.111	-0.3	90	0.00
35	T	2,2,4-Trimethylpentane	2.689	2.689	0.0	91	0.00
36	T	n-Heptane	0.606	0.600	1.0	90	0.00
37	T	Trichloroethene	0.563	0.558	0.9	90	0.00
38	C	1,2-Dichloropropane	0.673	0.669	0.6	92	0.00
39	T	Bromodichloromethane	0.878	0.907	-3.3	93	0.00
40	T	Methylcyclohexane	0.336	0.327	2.7	92	0.00
41	T	Dibromomethane	0.394	0.371	5.8	88	0.00
42	T	cis-1,3-Dichloropropene	0.965	0.958	0.7	89	0.00
43	T	2-Chloroethylvinylether	0.112	0.032#	71.4#	23#	0.00
44	T	4-Methyl-2-pentanone	0.599	0.515	14.0	77	0.00
45	S	1,2-Dichloroethane-d4	0.819	0.749	8.5	86	0.00
46	S	Toluene-d8	1.402	1.373	2.1	87	0.00

Evaluate Continuing Calibration Report

Data Path : H:\VOA\A228\130919\
Data File : 13091904.D
Acq On : 19 Sep 2013 12:39
Operator : JM
Sample : CCV
Misc : CCV
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 19 13:15:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

Min. RRF : 0.100 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
47	I	Chlorobenzene-d5 (IS)	1.000	1.000	0.0	94	0.00
48	C	Toluene	1.294	1.202	7.1	89	0.00
49	T	trans-1,3-Dichloropropene	0.897	0.841	6.2	87	0.00
50	T	1,1,2-Trichloroethane	0.426	0.381	10.6	86	0.00
51	T	1,3-Dichloropropane	0.905	0.838	7.4	88	0.00
52	T	Tetrachloroethene	0.433	0.403	6.9	91	0.00
53	T	Dibromochloromethane	0.477	0.428	10.3	87	0.00
54	T	1,2-Dibromoethane	0.434	0.384	11.5	84	0.00
55	T	1-Chlorohexane	0.833	0.801	3.8	90	0.00
56	P	Chlorobenzene	1.101	1.058	3.9	93	0.00
57	T	n-Nonane	1.235	1.264	-2.3	101	0.00
58	T	1,1,1,2-Tetrachloroethane	0.408	0.393	3.7	91	0.00
59	C	Ethylbenzene	2.565	2.552	0.5	91	0.00
60	T	m,p-Xylene	0.711	0.709	0.3	92	0.00
61	T	o-Xylene	0.671	0.672	-0.1	93	0.00
62	T	Styrene	1.223	1.247	-2.0	92	0.00
63	T	Isopropylbenzene	1.845	1.844	0.1	91	0.00
64	P	Bromoform	0.274	0.233	15.0	83	0.00
65	P	1,1,2,2-Tetrachloroethane	0.584	0.496	15.1	78	0.00
66	S	4-Bromofluorobenzene	0.699	0.670	4.1	91	0.00
67	T	2-Hexanone	0.479	0.380	20.7#	78	0.00
68	I	1,4-Dichlorobenzene-d4 (IS)	1.000	1.000	0.0	93	0.00
69	T	1,2,3-Trichloropropane	0.279	0.242	13.3	82	0.00
70	T	n-Propylbenzene	5.917	6.018	-1.7	93	0.00
71	T	Bromobenzene	0.938	0.880	6.2	87	0.00
72	T	1,3,5-Trimethylbenzene	3.648	3.663	-0.4	92	0.00
73	T	2-Chlorotoluene	4.126	4.130	-0.1	93	0.00
74	T	4-Chlorotoluene	3.528	3.606	-2.2	94	0.00
75	T	tert-Butylbenzene	2.733	2.746	-0.5	92	0.00
76	T	1,2,4-Trimethylbenzene	3.613	3.697	-2.3	93	0.00
77	T	sec-Butylbenzene	4.380	4.450	-1.6	93	0.00
78	T	4-Isopropyltoluene	2.932	3.002	-2.4	92	0.00
79	T	1,3-Dichlorobenzene	1.631	1.458	10.6	88	0.00
80	T	1,4-Dichlorobenzene	1.681	1.616	3.9	93	0.00
81		Dicyclopentadiene	0.661	0.614	7.1	93	0.00
82	T	n-Butylbenzene	2.540	2.616	-3.0	93	0.00
83	T	1,2-Dichlorobenzene	1.397	1.298	7.1	90	0.00
84	T	1,2-Dibromo-3-chloropropane	0.138	0.102	26.1#	73	0.00
85	T	1,2,4-Trichlorobenzene	0.919	0.802	12.7	85	0.00
86	T	Hexachlorobutadiene	0.278	0.251	9.7	93	0.00
87	T	Naphthalene	1.719	1.302	24.3#	72	0.00
88	T	1,2,3-Trichlorobenzene	0.759	0.636	16.2	81	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

10/1/13

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091905.D
Acq On : 19 Sep 2013 13:46
Operator : JM
Sample : BLK
Misc : BLK
ALS Vial : 4 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:29:57 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.525	168	153048	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.195	114	291519	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.453	117	260676	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.147	152	118233	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.551	113	138676	50.43 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 100.86%		
45) 1,2-Dichloroethane-d4	8.869	65	225230	47.18 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 94.36%		
46) Toluene-d8	10.395	98	404195	49.44 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 98.88%		
66) 4-Bromofluorobenzene	12.265	95	176537	48.44 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 96.88%		
Target Compounds					Qvalue
24) Acetone	6.364	43	5342	Below Cal #	79
25) 2-Butanone	8.137	43	3189	Below Cal	84
27) Iodomethane	6.540	142	171	Below Cal	96
85) 1,2,4-Trichlorobenzene	14.973	180	1232	0.57 ug/L	83
86) Hexachlorobutadiene	15.105	190	380	Below Cal	85
87) Naphthalene	15.290	128	3078	0.76 ug/L	94
88) 1,2,3-Trichlorobenzene	15.564	180	1403	0.78 ug/L	93

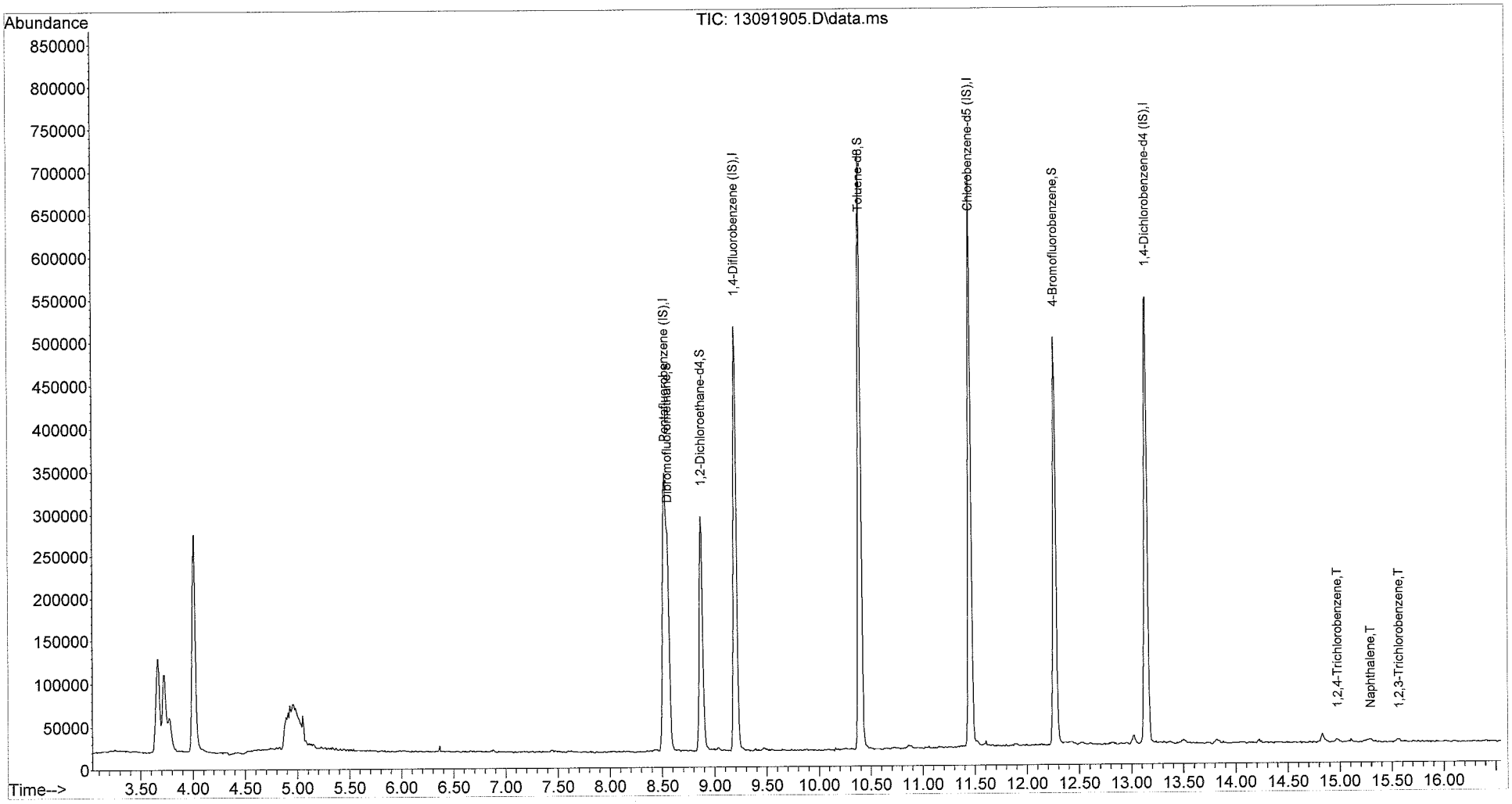
CM

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091905.D
Acq On : 19 Sep 2013 13:46
Operator : JM
Sample : BLK
Misc : BLK
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 25 13:29:57 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091906.D
Acq On : 19 Sep 2013 14:11
Operator : JM
Sample : BKS
Misc : BKS
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 12:26:20 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.522	168	148476	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.201	114	284892	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.459	117	261007	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.144	152	118998	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.557	113	132818	49.79 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 99.58%		
45) 1,2-Dichloroethane-d4	8.874	65	220423	47.25 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 94.50%		
46) Toluene-d8	10.392	98	397818	49.79 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 99.58%		
66) 4-Bromofluorobenzene	12.262	95	181742	49.80 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 99.60%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.085	85	68163	12.44 ug/L	97
3) Chloromethane	4.438	50	105219	19.52 ug/L	99
4) Vinyl chloride	4.623	62	54799	19.09 ug/L	98
5) 1,3-Butadiene	4.685	54	41086	26.51 ug/L	99
6) Bromomethane	5.055	94	39378	27.34 ug/L	96
7) Chloroethane	5.223	64	32885	20.40 ug/L	98
8) Trichlorofluoromethane	5.646	101	113220	18.28 ug/L	98
9) Acrolein	6.175	56	53913	105.50 ug/L	99
10) Trichlorotrifluoroethane	6.299	151	33242	18.95 ug/L	97
11) 1,1-Dichloroethene	6.334	61	135437	21.06 ug/L	96
12) Methylene chloride	6.863	84	72208	20.43 ug/L	93
13) Acrylonitrile	7.110	53	22505	20.07 ug/L	98
14) trans-1,2-Dichloroethene	7.181	61	134256	21.91 ug/L	97
15) n-Hexane	7.445	57	109363	18.70 ug/L	98
16) 1,1-Dichloroethane	7.604	63	162570	23.21 ug/L	99
17) Cyclohexane	8.716	84	81609	19.01 ug/L #	70
18) 2,2-Dichloropropane	8.169	77	127073	21.68 ug/L	98
19) cis-1,2-Dichloroethene	8.151	96	63970	21.07 ug/L	99
20) Chloroform	8.407	83	148563	22.26 ug/L	98
21) Bromochloromethane	8.380	128	23141	20.59 ug/L	89
23) 1,1,1-Trichloroethane	8.636	97	115102	21.79 ug/L	99
24) Acetone	6.352	43	50355	36.85 ug/L	98
25) 2-Butanone	8.116	43	65517	36.64 ug/L	98
26) Carbon Disulfide	6.678	76	285750	22.93 ug/L	97
27) Iodomethane	6.555	142	63670	19.69 ug/L	98
28) Vinyl acetate	7.587	43	155389	16.04 ug/L	100
29) Methyl tert-butyl ether	7.154	73	136236	19.17 ug/L	97
31) 1,1-Dichloropropene	8.769	75	105804	20.72 ug/L	96
32) Carbon tetrachloride	8.795	117	86728	21.07 ug/L	98
33) 1,2-Dichloroethane	8.936	62	128199	21.32 ug/L	98
34) Benzene	8.954	78	247550	20.65 ug/L	96
35) 2,2,4-Trimethylpentane	8.980	57	285286	18.62 ug/L	97
36) n-Heptane	9.095	57	64880	18.78 ug/L	96
37) Trichloroethene	9.457	95	66997	20.88 ug/L	95

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091906.D
Acq On : 19 Sep 2013 14:11
Operator : JM
Sample : BKS
Misc : BKS
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 12:26:20 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

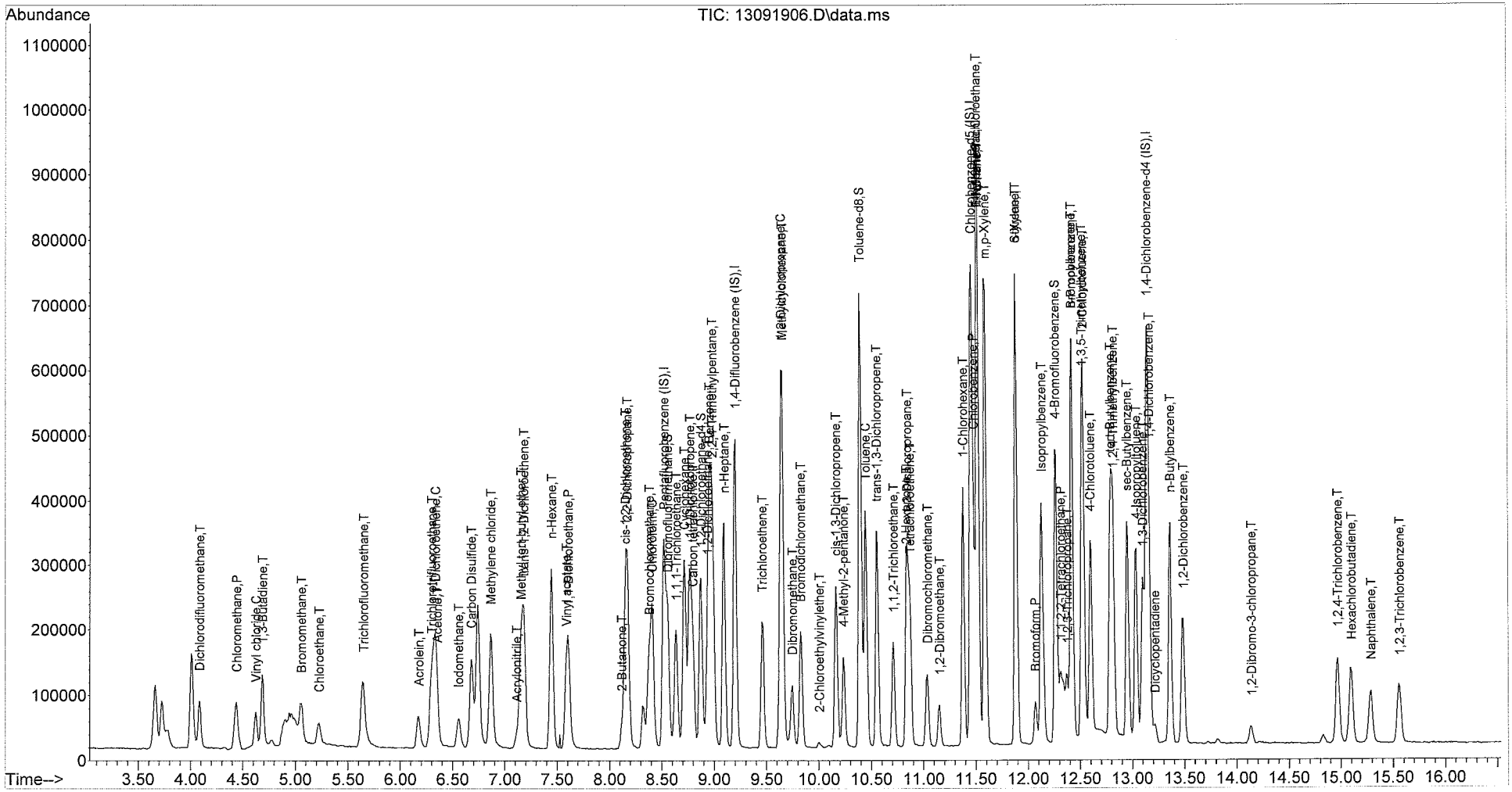
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.642	63	78022	20.35 ug/L	97
39) Bromodichloromethane	9.827	83	111095	22.20 ug/L	98
40) Methylcyclohexane	9.651	56	37927	21.18 ug/L	95
41) Dibromomethane	9.748	93	44569	19.85 ug/L	97
42) cis-1,3-Dichloropropene	10.162	75	114788	20.88 ug/L	93
43) 2-Chloroethylvinylether	10.004	63	3381	5.35 ug/L #	34
44) 4-Methyl-2-pentanone	10.233	43	126404	37.04 ug/L	99
48) Toluene	10.445	92	133443	19.75 ug/L	99
49) trans-1,3-Dichloropropene	10.550	75	100948	21.56 ug/L #	65
50) 1,1,2-Trichloroethane	10.709	83	43546	19.59 ug/L	99
51) 1,3-Dichloropropane	10.842	76	95853	20.29 ug/L	96
52) Tetrachloroethene	10.868	166	45531	20.14 ug/L	97
53) Dibromochloromethane	11.036	129	49088	19.71 ug/L	99
54) 1,2-Dibromoethane	11.150	107	43172	19.04 ug/L	99
55) 1-Chlorohexane	11.380	91	88526	20.36 ug/L	100
56) Chlorobenzene	11.477	112	123569	21.50 ug/L	98
57) n-Nonane	11.521	57	114514	17.76 ug/L	98
58) 1,1,1,2-Tetrachloroethane	11.512	131	43304	20.34 ug/L	96
59) Ethylbenzene	11.512	91	279628	20.89 ug/L	96
60) m,p-Xylene	11.591	106	163387	44.03 ug/L	99
61) o-Xylene	11.882	106	77327	22.07 ug/L	98
62) Styrene	11.882	104	135942	21.30 ug/L	91
63) Isopropylbenzene	12.129	105	203530	21.13 ug/L	96
64) Bromoform	12.068	173	26692	18.68 ug/L	99
65) 1,1,2,2-Tetrachloroethane	12.315	83	57517	18.86 ug/L	98
67) 2-Hexanone	10.833	43	84142	33.68 ug/L	97
69) 1,2,3-Trichloropropane	12.376	110	12278	18.47 ug/L	96
70) n-Propylbenzene	12.420	91	323810	22.99 ug/L	98
71) Bromobenzene	12.420	156	44779	20.06 ug/L	81
72) 1,3,5-Trimethylbenzene	12.517	105	177834	20.48 ug/L	100
73) 2-Chlorotoluene	12.526	91	222720	22.68 ug/L	96
74) 4-Chlorotoluene	12.597	91	189913	22.62 ug/L	98
75) tert-Butylbenzene	12.791	119	143893	22.12 ug/L	96
76) 1,2,4-Trimethylbenzene	12.817	105	180084	20.94 ug/L	98
77) sec-Butylbenzene	12.950	105	233430	22.39 ug/L	98
78) 4-Isopropyltoluene	13.038	119	152291	21.82 ug/L	99
79) 1,3-Dichlorobenzene	13.100	146	82303	21.20 ug/L	96
80) 1,4-Dichlorobenzene	13.161	146	77773	19.44 ug/L	93
81) Dicyclopentadiene	13.214	66	28467	18.09 ug/L #	91
82) n-Butylbenzene	13.364	92	124368	20.58 ug/L	99
83) 1,2-Dichlorobenzene	13.488	146	69511	20.90 ug/L	98
84) 1,2-Dibromo-3-chloropr...	14.141	157	5475	16.67 ug/L	87
85) 1,2,4-Trichlorobenzene	14.970	180	41380	18.93 ug/L	98
86) Hexachlorobutadiene	15.102	190	12414	20.53 ug/L	98
87) Naphthalene	15.287	128	72821	17.80 ug/L	99
88) 1,2,3-Trichlorobenzene	15.561	180	32025	17.72 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091906.D
Acq On : 19 Sep 2013 14:11
Operator : JM
Sample : BKS
Misc : BKS
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 25 12:26:20 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091907.D
Acq On : 19 Sep 2013 14:37
Operator : JM
Sample : BSD
Misc : BSD
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 12:26:24 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.523	168	150367	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.202	114	284829	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.452	117	256700	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.145	152	120055	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.558	113	131756	48.77 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 97.54%		
45) 1,2-Dichloroethane-d4	8.876	65	222065	47.61 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 95.22%		
46) Toluene-d8	10.393	98	398119	49.84 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 99.68%		
66) 4-Bromofluorobenzene	12.263	95	183364	51.09 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 102.18%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.086	85	68676	12.38 ug/L	98
3) Chloromethane	4.439	50	110065	20.16 ug/L	99
4) Vinyl chloride	4.624	62	55253	19.00 ug/L	99
5) 1,3-Butadiene	4.686	54	43549	27.75 ug/L	97
6) Bromomethane	5.057	94	38041	26.04 ug/L	98
7) Chloroethane	5.224	64	33834	20.73 ug/L	97
8) Trichlorofluoromethane	5.648	101	111598	17.79 ug/L	98
9) Acrolein	6.177	56	54251	104.83 ug/L	99
10) Trichlorotrifluoroethane	6.309	151	32885	18.51 ug/L	99
11) 1,1-Dichloroethene	6.336	61	135301	20.77 ug/L	96
12) Methylene chloride	6.874	84	71117	19.87 ug/L	98
13) Acrylonitrile	7.112	53	22118	19.48 ug/L	100
14) trans-1,2-Dichloroethene	7.182	61	133528	21.52 ug/L	96
15) n-Hexane	7.447	57	110750	18.69 ug/L	95
16) 1,1-Dichloroethane	7.615	63	162841	22.96 ug/L	100
17) Cyclohexane	8.717	84	82109	18.88 ug/L #	70
18) 2,2-Dichloropropane	8.179	77	125841	21.20 ug/L	99
19) cis-1,2-Dichloroethene	8.153	96	62388	20.29 ug/L	95
20) Chloroform	8.409	83	146841	21.72 ug/L	96
21) Bromochloromethane	8.382	128	22964	20.18 ug/L	96
23) 1,1,1-Trichloroethane	8.638	97	113484	21.22 ug/L	98
24) Acetone	6.353	43	58833	43.41 ug/L	100
25) 2-Butanone	8.117	43	70303	38.94 ug/L	99
26) Carbon Disulfide	6.680	76	243335	19.28 ug/L	97
27) Iodomethane	6.565	142	60288	18.40 ug/L	97
28) Vinyl acetate	7.588	43	159187	16.22 ug/L	99
29) Methyl tert-butyl ether	7.156	73	142228	19.76 ug/L	96
31) 1,1-Dichloropropene	8.770	75	107869	21.13 ug/L	97
32) Carbon tetrachloride	8.797	117	85410	20.75 ug/L	98
33) 1,2-Dichloroethane	8.938	62	127501	21.21 ug/L	98
34) Benzene	8.964	78	244088	20.36 ug/L	97
35) 2,2,4-Trimethylpentane	8.991	57	296427	19.35 ug/L	98
36) n-Heptane	9.097	57	65073	18.84 ug/L	99
37) Trichloroethene	9.467	95	67332	20.99 ug/L	98

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091907.D
Acq On : 19 Sep 2013 14:37
Operator : JM
Sample : BSD
Misc : BSD
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 12:26:24 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

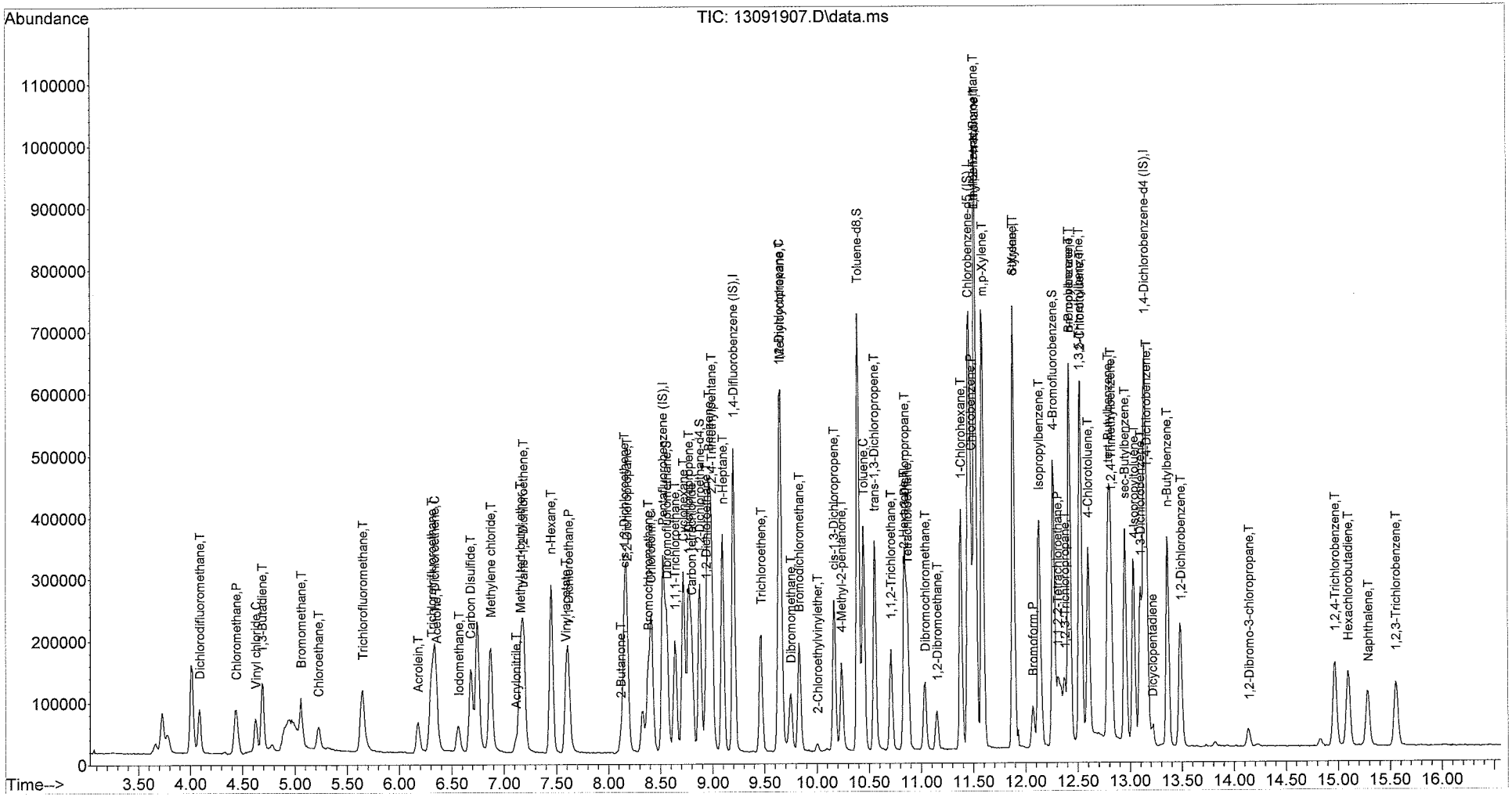
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.643	63	77474	20.21 ug/L	98
39) Bromodichloromethane	9.829	83	110472	22.08 ug/L	99
40) Methylcyclohexane	9.652	56	38245	21.37 ug/L	97
41) Dibromomethane	9.749	93	44784	19.95 ug/L	96
42) cis-1,3-Dichloropropene	10.164	75	115810	21.07 ug/L	93
43) 2-Chloroethylvinylether	10.005	63	4531	7.05 ug/L #	56
44) 4-Methyl-2-pentanone	10.234	43	136378	39.97 ug/L	98
48) Toluene	10.446	92	133084	20.03 ug/L	98
49) trans-1,3-Dichloropropene	10.552	75	101484	22.03 ug/L #	66
50) 1,1,2-Trichloroethane	10.711	83	44989	20.57 ug/L	98
51) 1,3-Dichloropropane	10.843	76	97905	21.07 ug/L	97
52) Tetrachloroethene	10.870	166	45577	20.50 ug/L	96
53) Dibromochloromethane	11.037	129	48590	19.84 ug/L	98
54) 1,2-Dibromoethane	11.152	107	43025	19.29 ug/L	95
55) 1-Chlorohexane	11.381	91	89364	20.90 ug/L	99
56) Chlorobenzene	11.478	112	121881	21.57 ug/L	100
57) n-Nonane	11.522	57	120591	19.02 ug/L	98
58) 1,1,1,2-Tetrachloroethane	11.513	131	43570	20.81 ug/L	97
59) Ethylbenzene	11.513	91	279656	21.24 ug/L	97
60) m,p-Xylene	11.593	106	161733	44.32 ug/L	100
61) o-Xylene	11.884	106	77267	22.43 ug/L	94
62) Styrene	11.884	104	137149	21.85 ug/L	92
63) Isopropylbenzene	12.131	105	204201	21.56 ug/L	97
64) Bromoform	12.069	173	27698	19.71 ug/L	99
65) 1,1,2,2-Tetrachloroethane	12.307	83	60336	20.11 ug/L	99
67) 2-Hexanone	10.834	43	93093	37.89 ug/L	98
69) 1,2,3-Trichloropropane	12.378	110	13552	20.20 ug/L	90
70) n-Propylbenzene	12.422	91	325856	22.93 ug/L	98
71) Bromobenzene	12.422	156	45460	20.18 ug/L	81
72) 1,3,5-Trimethylbenzene	12.519	105	179340	20.47 ug/L	99
73) 2-Chlorotoluene	12.528	91	219123	22.12 ug/L	96
74) 4-Chlorotoluene	12.598	91	196930	23.25 ug/L	98
75) tert-Butylbenzene	12.793	119	145031	22.10 ug/L	95
76) 1,2,4-Trimethylbenzene	12.819	105	182078	20.99 ug/L	98
77) sec-Butylbenzene	12.951	105	236296	22.47 ug/L	98
78) 4-Isopropyltoluene	13.039	119	156939	22.29 ug/L	98
79) 1,3-Dichlorobenzene	13.101	146	85356	21.80 ug/L	96
80) 1,4-Dichlorobenzene	13.163	146	78771	19.51 ug/L	95
81) Dicyclopentadiene	13.216	66	30013	18.90 ug/L #	94
82) n-Butylbenzene	13.357	92	126671	20.77 ug/L	99
83) 1,2-Dichlorobenzene	13.489	146	70829	21.11 ug/L	99
84) 1,2-Dibromo-3-chloropr...	14.142	157	6055	18.28 ug/L	96
85) 1,2,4-Trichlorobenzene	14.971	180	43578	19.76 ug/L	97
86) Hexachlorobutadiene	15.095	190	12859	21.10 ug/L	95
87) Naphthalene	15.289	128	81826	19.83 ug/L	98
88) 1,2,3-Trichlorobenzene	15.553	180	36262	19.89 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091907.D
Acq On : 19 Sep 2013 14:37
Operator : JM
Sample : BSD
Misc : BSD
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 25 12:26:24 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091908.D
Acq On : 19 Sep 2013 15:02
Operator : JM
Sample : 470337-004
Misc : SMP
ALS Vial : 9 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:31:35 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

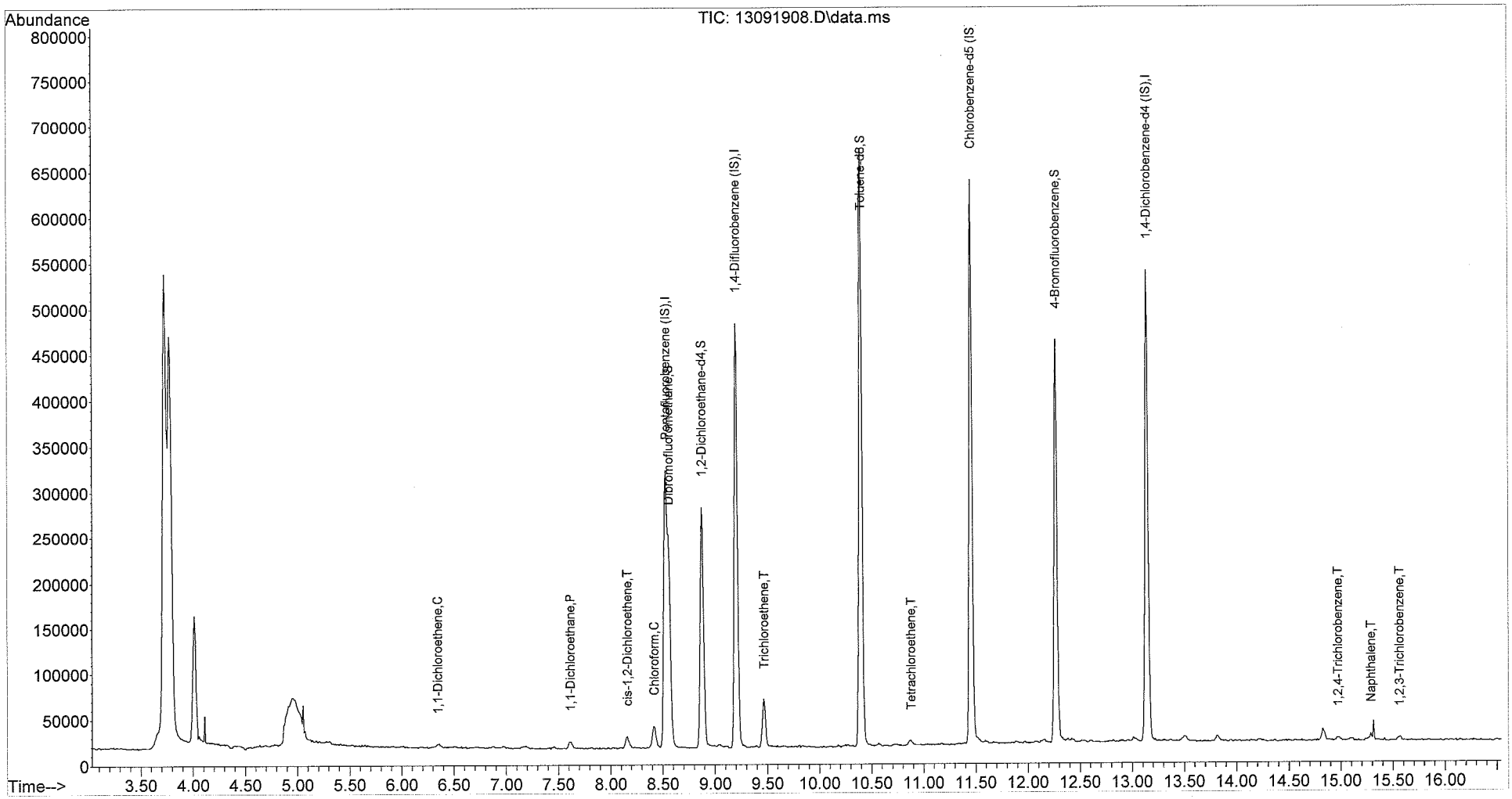
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.528	168	142213	50.00 ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.198	114	275117	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.457	117	243844	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.141	152	110733	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.555	113	128964	50.47 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 100.94%		
45) 1,2-Dichloroethane-d4	8.872	65	211852	47.02 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 94.04%		
46) Toluene-d8	10.398	98	381255	49.41 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 98.82%		
66) 4-Bromofluorobenzene	12.268	95	163110	47.84 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 95.68%		
Target Compounds					Qvalue
4) Vinyl chloride	4.620	62	277	Below Cal #	73
7) Chloroethane	5.203	64	256	Below Cal #	1
11) 1,1-Dichloroethene	6.340	61	2622	0.43 ug/L	98 cm
16) 1,1-Dichloroethane	7.611	63	9172	1.37 ug/L	97
19) cis-1,2-Dichloroethene	8.158	96	4696	1.61 ug/L	97
20) Chloroform	8.413	83	18066	2.83 ug/L	98
24) Acetone	6.358	43	5371	Below Cal #	88
27) Iodomethane	6.579	142	83	Below Cal #	85
37) Trichloroethene	9.463	95	18111	5.84 ug/L	95 gm
52) Tetrachloroethene	10.874	166	936	0.44 ug/L	83 cm
85) 1,2,4-Trichlorobenzene	14.967	180	1103	0.54 ug/L	94 cm
86) Hexachlorobutadiene	15.082	190	298	Below Cal	79
87) Naphthalene	15.285	128	3286	0.86 ug/L	96
88) 1,2,3-Trichlorobenzene	15.558	180	1468	0.87 ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091908.D
Acq On : 19 Sep 2013 15:02
Operator : JM
Sample : 470337-004
Misc : SMP
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 25 13:31:35 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091909.D
Acq On : 19 Sep 2013 15:27
Operator : JM
Sample : 470337-005
Misc : SMP
ALS Vial : 10 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:32:10 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

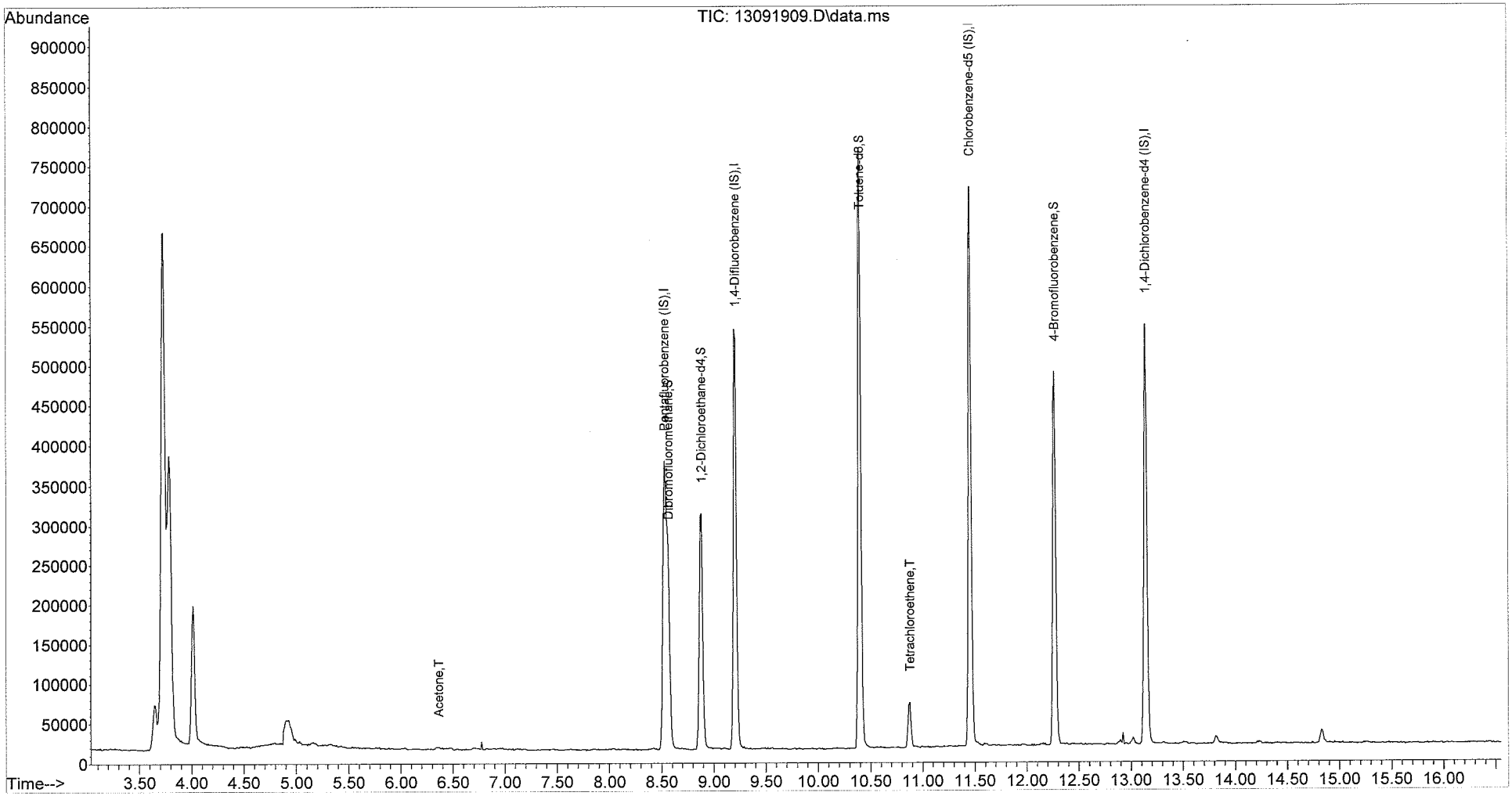
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.529	168	165148	50.00 ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.208	114	313413	50.00 ug/L	0.01
47) Chlorobenzene-d5 (IS)	11.457	117	273533	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	114590	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.564	113	149530	50.39 ug/L	0.01
Spiked Amount 50.000	Range 52 - 140		Recovery = 100.78%		
45) 1,2-Dichloroethane-d4	8.882	65	248821	48.48 ug/L	0.01
Spiked Amount 50.000	Range 54 - 133		Recovery = 96.96%		
46) Toluene-d8	10.399	98	434790	49.47 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 98.94%		
66) 4-Bromofluorobenzene	12.269	95	174807	45.71 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 91.42%		
Target Compounds					Qvalue
4) Vinyl chloride	4.559	62	266	Below Cal #	20
24) Acetone	6.359	43	8546	0.68 ug/L	91
25) 2-Butanone	8.141	43	2421	Below Cal #	83
27) Iodomethane	6.588	142	200	Below Cal #	87
40) Methylcyclohexane	9.473	56	473	Below Cal #	1
52) Tetrachloroethene	10.875	166	12507	5.28 ug/L	95
86) Hexachlorobutadiene	15.109	190	143	Below Cal #	67

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091909.D
Acq On : 19 Sep 2013 15:27
Operator : JM
Sample : 470337-005
Misc : SMP
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 25 13:32:10 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091910.D
Acq On : 19 Sep 2013 15:53
Operator : JM
Sample : 470337-006
Misc : SMP
ALS Vial : 11 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:32:38 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

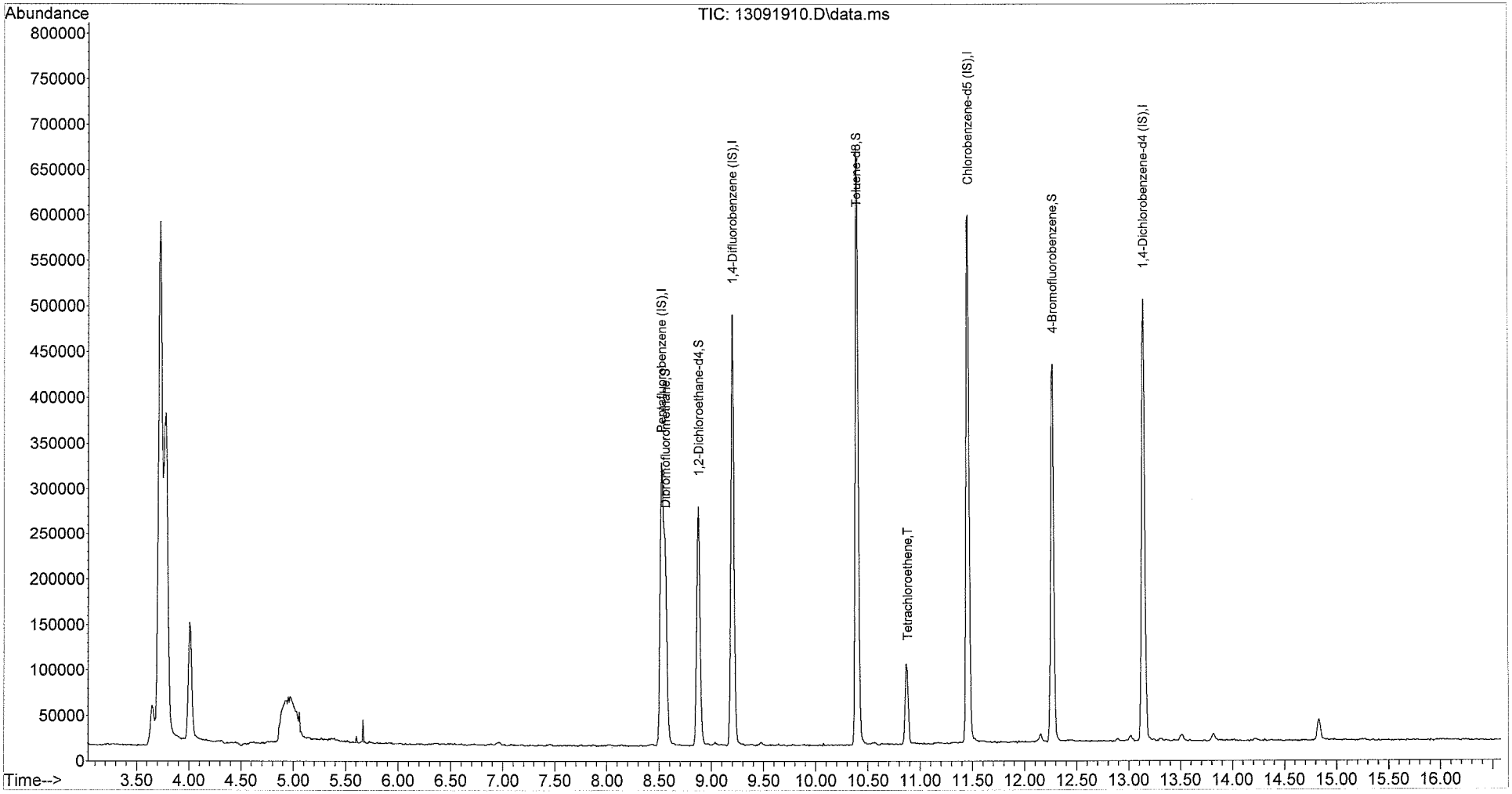
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.522	168	145840	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.202	114	272120	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.460	117	237526	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.144	152	105495	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.558	113	128231	48.94 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 97.88%		
45) 1,2-Dichloroethane-d4	8.875	65	211645	47.49 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 94.98%		
46) Toluene-d8	10.392	98	377951	49.53 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 99.06%		
66) 4-Bromofluorobenzene	12.271	95	156798	47.22 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 94.44%		
Target Compounds					Qvalue
6) Bromomethane	5.056	94	670	Below Cal #	50
24) Acetone	6.361	43	4275	Below Cal	88
25) 2-Butanone	8.143	43	1952	Below Cal	90
27) Iodomethane	6.573	142	224	Below Cal #	58
52) Tetrachloroethene	10.878	166	19086	9.28 ug/L	95
86) Hexachlorobutadiene	15.103	190	69	Below Cal #	66

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091910.D
Acq On : 19 Sep 2013 15:53
Operator : JM
Sample : 470337-006
Misc : SMP
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 25 13:32:38 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091911.D
Acq On : 19 Sep 2013 16:19
Operator : JM
Sample : 470337-007
Misc : SMP
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 25 13:33:19 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

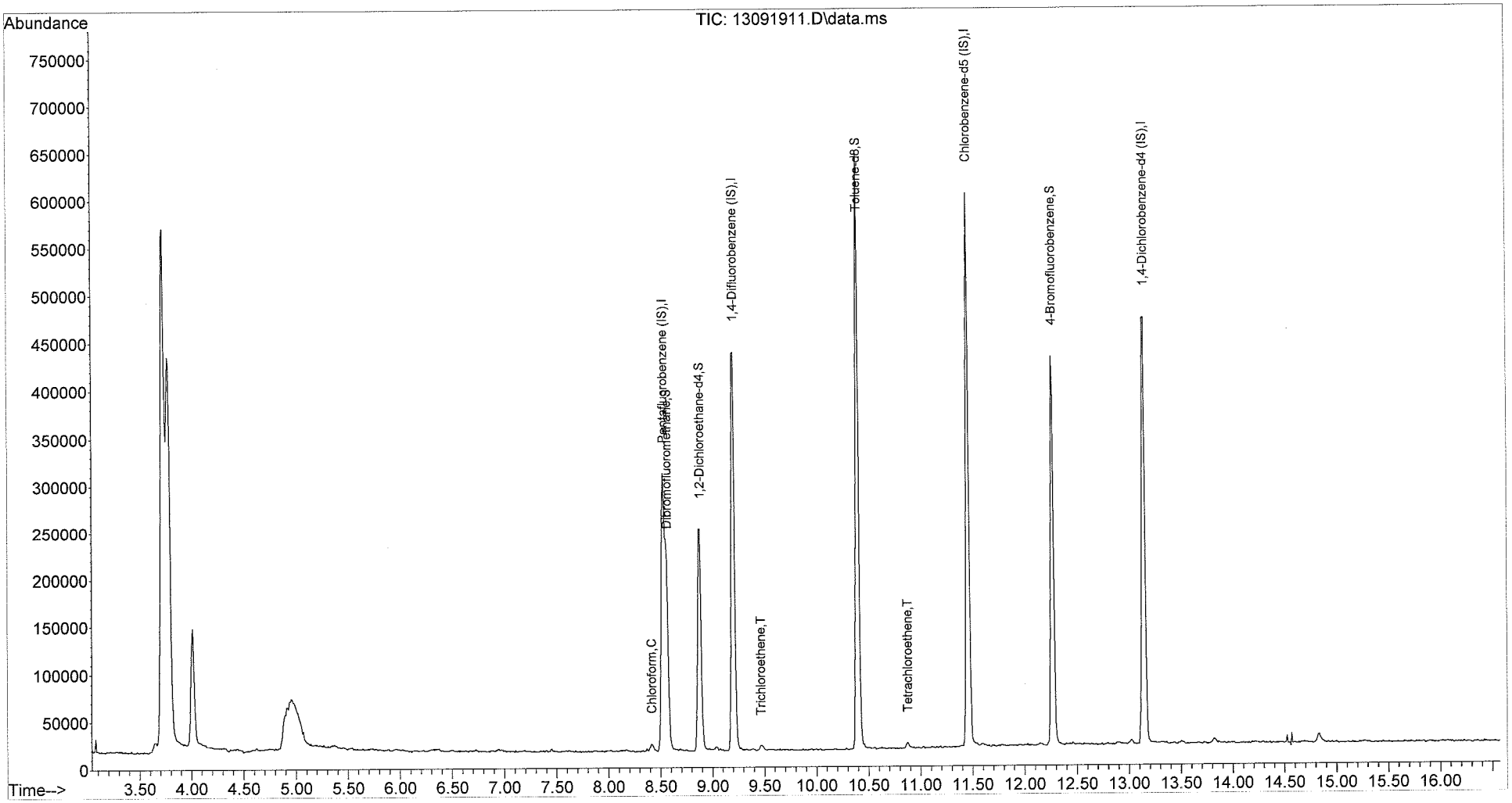
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.525	168	132800	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.205	114	252531	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.454	117	226922	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.148	152	102987	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.561	113	120972	50.70 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 101.40%		
45) 1,2-Dichloroethane-d4	8.878	65	199320	48.20 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 96.40%		
46) Toluene-d8	10.395	98	351650	49.65 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 99.30%		
66) 4-Bromofluorobenzene	12.265	95	150866	47.55 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 95.10%		
Target Compounds					Qvalue
6) Bromomethane	5.050	94	856	Below Cal #	79
20) Chloroform	8.411	83	5354	0.90 ug/L	98
24) Acetone	6.355	43	5104	Below Cal #	89
25) 2-Butanone	8.137	43	2477	Below Cal #	84
27) Iodomethane	6.558	142	237	Below Cal #	69
37) Trichloroethene	9.460	95	1395	0.49 ug/L	91
52) Tetrachloroethene	10.872	166	1332	0.68 ug/L	95
86) Hexachlorobutadiene	15.097	190	26	Below Cal #	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091911.D
Acq On : 19 Sep 2013 16:19
Operator : JM
Sample : 470337-007
Misc : SMP
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 25 13:33:19 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091912.D
Acq On : 19 Sep 2013 16:44
Operator : JM
Sample : 470337-008
Misc : SMP
ALS Vial : 13 Sample Multiplier: 1

JM 10/11/13

Quant Time: Sep 25 13:33:58 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

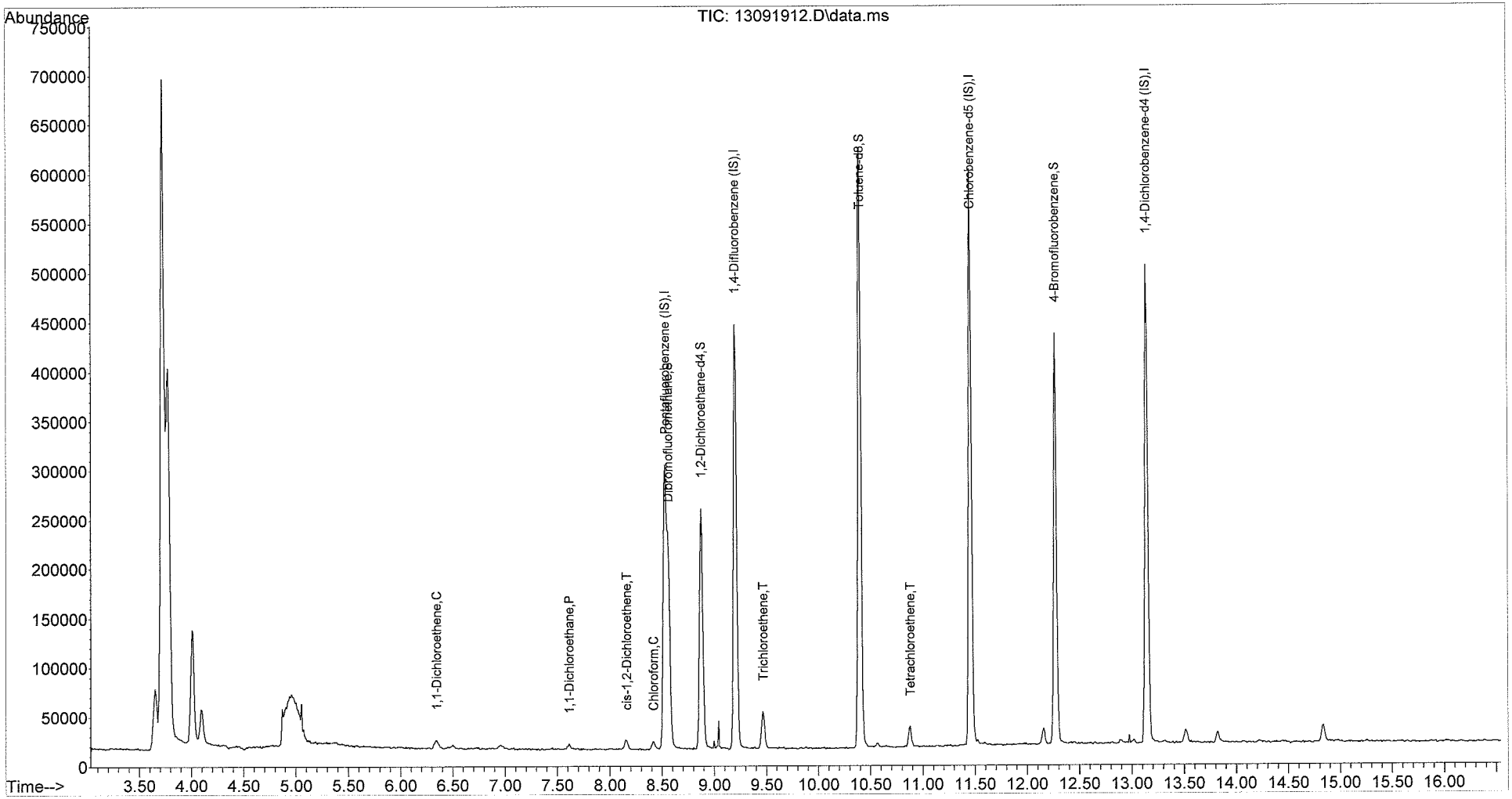
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.528	168	132014	50.00 ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.199	114	248345	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.457	117	227452	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	101985	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.555	113	119772	50.50 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 101.00%		
45) 1,2-Dichloroethane-d4	8.872	65	197649	48.60 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 97.20%		
46) Toluene-d8	10.398	98	349363	50.16 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 100.32%		
66) 4-Bromofluorobenzene	12.269	95	148433	46.68 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 93.36%		
Target Compounds					Qvalue
7) Chloroethane	5.229	64	337	Below Cal #	1
11) 1,1-Dichloroethene	6.341	61	6915	1.21 ug/L	91
16) 1,1-Dichloroethane	7.611	63	5224	0.84 ug/L	97
19) cis-1,2-Dichloroethene	8.158	96	3273	1.21 ug/L	94
20) Chloroform	8.414	83	5009	0.84 ug/L	95
24) Acetone	6.350	43	5094	Below Cal	89
25) 2-Butanone	8.140	43	2599	Below Cal	94
27) Iodomethane	6.597	142	113	Below Cal #	80
37) Trichloroethene	9.463	95	12182	4.36 ug/L	96
52) Tetrachloroethene	10.875	166	4794	2.43 ug/L	96
86) Hexachlorobutadiene	15.091	190	153	Below Cal #	64

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091912.D
Acq On : 19 Sep 2013 16:44
Operator : JM
Sample : 470337-008
Misc : SMP
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 25 13:33:58 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091913.D
Acq On : 19 Sep 2013 17:10
Operator : JM
Sample : 470337-009
Misc : SMP
ALS Vial : 14 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 13:34:24 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

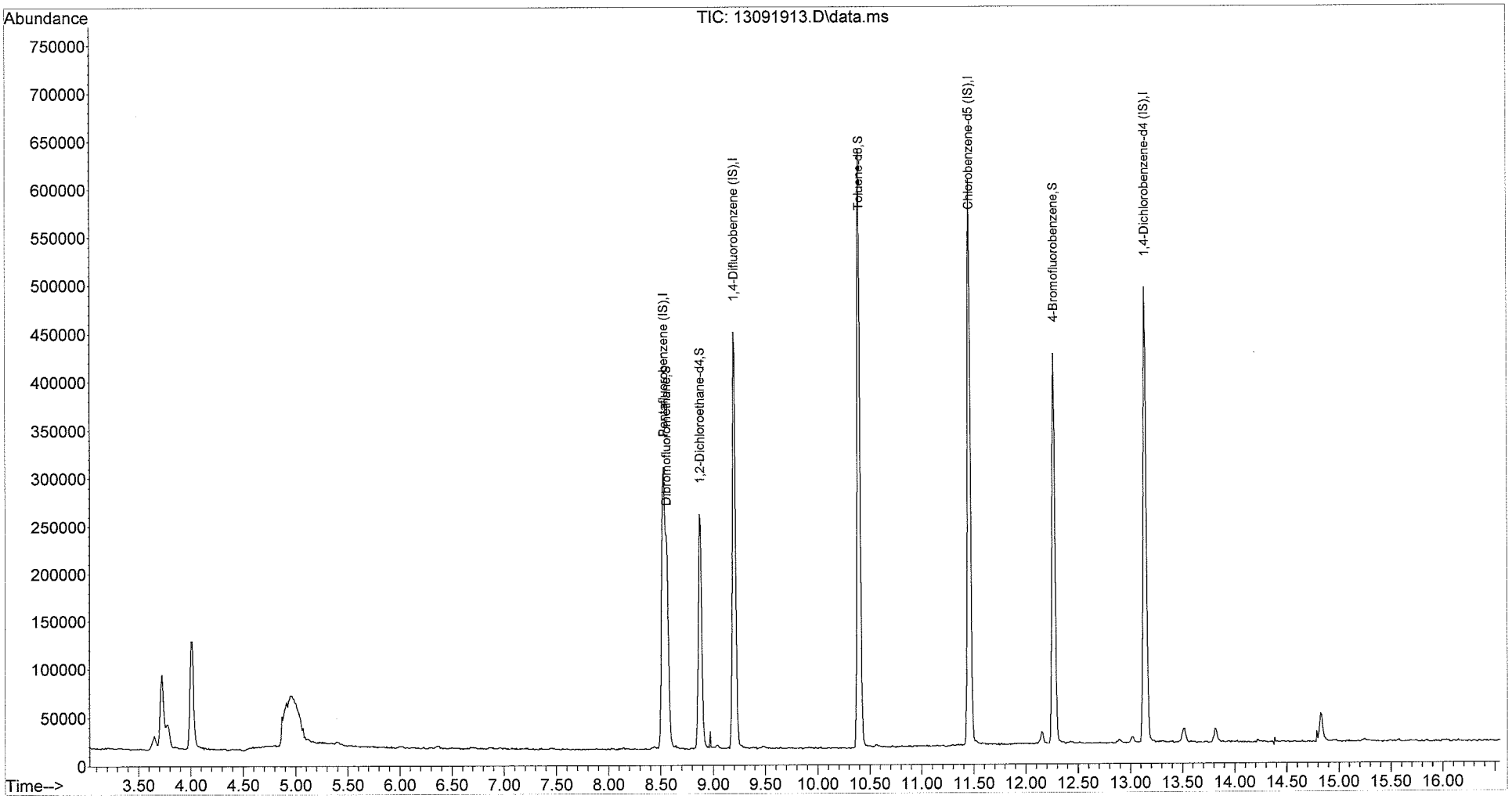
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.528	168	133464	50.00 ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.198	114	254710	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.456	117	229606	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.141	152	101009	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.554	113	120796	50.38 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 100.76%		
45) 1,2-Dichloroethane-d4	8.872	65	200705	48.12 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 96.24%		
46) Toluene-d8	10.398	98	348601	48.80 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 97.60%		
66) 4-Bromofluorobenzene	12.268	95	147444	45.93 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 91.86%		
Target Compounds					Qvalue
6) Bromomethane	5.044	94	701	Below Cal #	63
24) Acetone	6.358	43	5053	Below Cal	91
27) Iodomethane	6.570	142	192	Below Cal #	35
86) Hexachlorobutadiene	15.082	190	81	Below Cal #	69

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091913.D
Acq On : 19 Sep 2013 17:10
Operator : JM
Sample : 470337-009
Misc : SMP
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 25 13:34:24 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091914.D
Acq On : 19 Sep 2013 17:35
Operator : JM
Sample : 470337-005 S
Misc : MS
ALS Vial : 15 Sample Multiplier: 1

jm 10/1/13

Quant Time: Sep 25 12:26:58 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	8.529	168	135657	50.00	ug/L	0.01
30) 1,4-Difluorobenzene (IS)	9.199	114	253487	50.00	ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.457	117	234251	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	108834	50.00	ug/L	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	8.555	113	120045	49.25	ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 98.50%			
45) 1,2-Dichloroethane-d4	8.873	65	202727	48.84	ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 97.68%			
46) Toluene-d8	10.399	98	355986	50.08	ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 100.16%			
66) 4-Bromofluorobenzene	12.269	95	164577	50.25	ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 100.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.083	85	62037	12.40	ug/L	99
3) Chloromethane	4.436	50	93144	18.91	ug/L	99
4) Vinyl chloride	4.621	62	50232	19.15	ug/L	98
5) 1,3-Butadiene	4.692	54	40556	28.64	ug/L	97
6) Bromomethane	5.053	94	33269	25.22	ug/L	99
7) Chloroethane	5.221	64	30796	20.92	ug/L	97
8) Trichlorofluoromethane	5.644	101	103353	18.26	ug/L	97
9) Acrolein	6.174	56	47110	100.90	ug/L	97
10) Trichlorotrifluoroethane	6.306	151	29736	18.55	ug/L	92
11) 1,1-Dichloroethene	6.332	61	123885	21.08	ug/L	95
12) Methylene chloride	6.862	84	68443	21.20	ug/L	92
13) Acrylonitrile	7.118	53	20643	20.15	ug/L	95
14) trans-1,2-Dichloroethene	7.188	61	120576	21.54	ug/L	97
15) n-Hexane	7.453	57	97076	18.16	ug/L	99
16) 1,1-Dichloroethane	7.611	63	148493	23.20	ug/L	99
17) Cyclohexane	8.723	84	73674	18.78	ug/L #	68
18) 2,2-Dichloropropane	8.176	77	119207	22.26	ug/L	98
19) cis-1,2-Dichloroethene	8.158	96	56415	20.33	ug/L	94
20) Chloroform	8.414	83	137769	22.59	ug/L	97
21) Bromochloromethane	8.379	128	21979	21.40	ug/L	94
23) 1,1,1-Trichloroethane	8.644	97	105788	21.92	ug/L	100
24) Acetone	6.350	43	48074	38.77	ug/L	97
25) 2-Butanone	8.123	43	62050	38.05	ug/L	100
26) Carbon Disulfide	6.685	76	210510	18.49	ug/L	96
27) Iodomethane	6.562	142	63570	21.54	ug/L	95
28) Vinyl acetate	7.585	43	141110	15.94	ug/L	97
29) Methyl tert-butyl ether	7.162	73	131249	20.21	ug/L	97
31) 1,1-Dichloropropene	8.767	75	94949	20.90	ug/L	93
32) Carbon tetrachloride	8.802	117	77628	21.19	ug/L	98
33) 1,2-Dichloroethane	8.943	62	119946	22.42	ug/L	97
34) Benzene	8.961	78	220504	20.67	ug/L	96
35) 2,2,4-Trimethylpentane	8.988	57	257200	18.87	ug/L	98
36) n-Heptane	9.093	57	56671	18.44	ug/L	98
37) Trichloroethene	9.464	95	60345	21.14	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091914.D
Acq On : 19 Sep 2013 17:35
Operator : JM
Sample : 470337-005 S
Misc : MS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 12:26:58 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

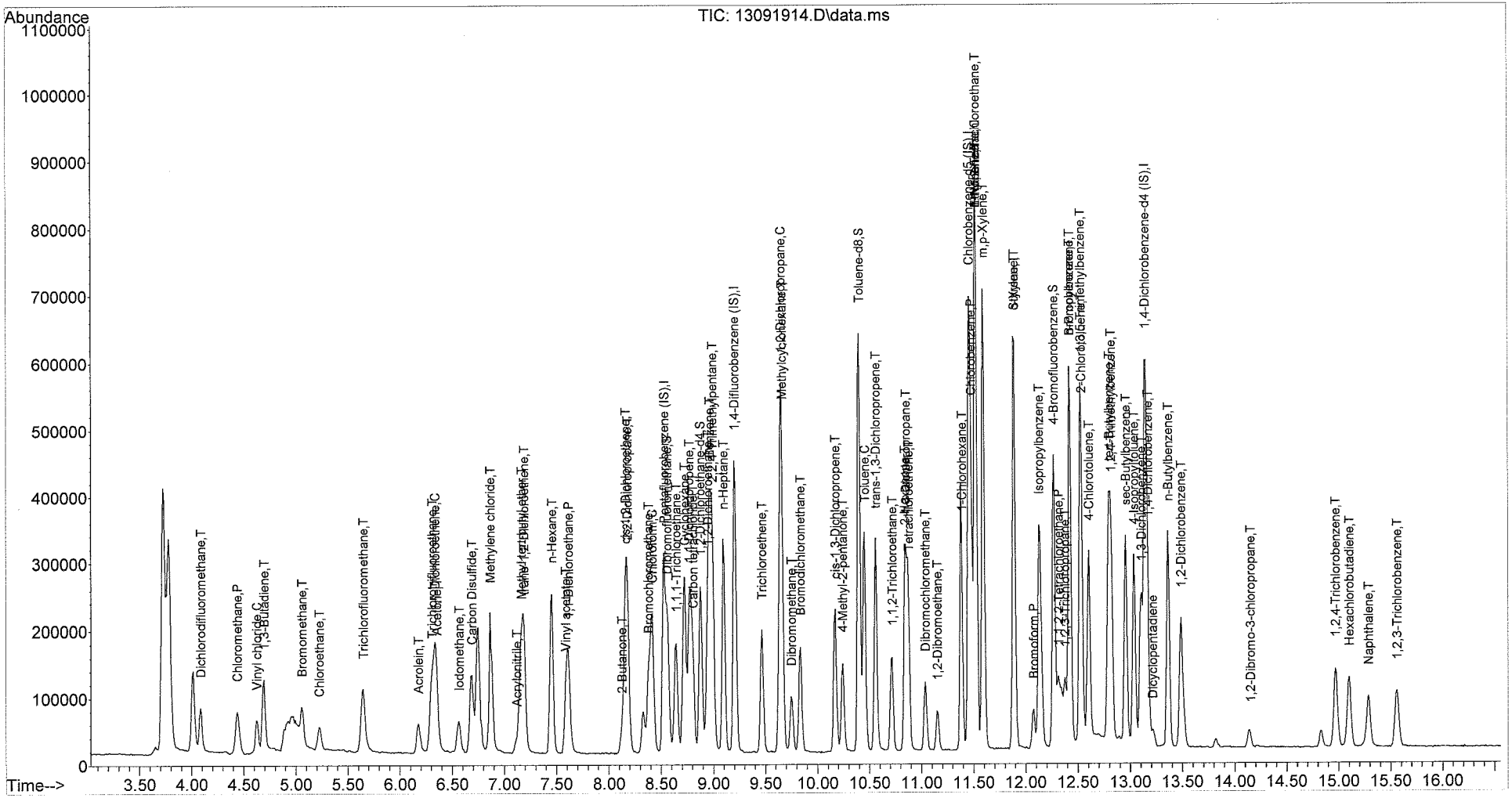
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.649	63	70451	20.65 ug/L	96
39) Bromodichloromethane	9.834	83	98933	22.22 ug/L	97
40) Methylcyclohexane	9.658	56	34394	21.60 ug/L	97
41) Dibromomethane	9.746	93	41341	20.70 ug/L	96
42) cis-1,3-Dichloropropene	10.170	75	99717	20.39 ug/L	92
44) 4-Methyl-2-pentanone	10.240	43	122880	40.47 ug/L	98
48) Toluene	10.452	92	120626	19.90 ug/L	99
49) trans-1,3-Dichloropropene	10.558	75	88356	21.02 ug/L #	60
50) 1,1,2-Trichloroethane	10.716	83	40588	20.34 ug/L	95
51) 1,3-Dichloropropane	10.849	76	89044	21.00 ug/L	97
52) Tetrachloroethene	10.875	166	51197	25.23 ug/L	99
53) Dibromochloromethane	11.034	129	43883	19.63 ug/L	99
54) 1,2-Dibromoethane	11.149	107	40154	19.73 ug/L	97
55) 1-Chlorohexane	11.387	91	74867	19.19 ug/L	97
56) Chlorobenzene	11.475	112	110951	21.51 ug/L	95
57) n-Nonane	11.519	57	102262	17.67 ug/L	94
58) 1,1,1,2-Tetrachloroethane	11.519	131	39322	20.58 ug/L	98
59) Ethylbenzene	11.519	91	253483	21.09 ug/L	98
60) m,p-Xylene	11.590	106	143034	42.95 ug/L	93
61) o-Xylene	11.890	106	69790	22.20 ug/L	99
62) Styrene	11.890	104	121373	21.19 ug/L	93
63) Isopropylbenzene	12.128	105	183112	21.18 ug/L	97
64) Bromoform	12.075	173	23563	18.38 ug/L	97
65) 1,1,2,2-Tetrachloroethane	12.313	83	53947	19.71 ug/L	100
67) 2-Hexanone	10.840	43	82396	36.75 ug/L	97
69) 1,2,3-Trichloropropane	12.375	110	11724	19.28 ug/L	99
70) n-Propylbenzene	12.419	91	292845	22.74 ug/L	98
71) Bromobenzene	12.419	156	41103	20.13 ug/L #	70
72) 1,3,5-Trimethylbenzene	12.525	105	159411	20.07 ug/L	100
73) 2-Chlorotoluene	12.534	91	197115	21.95 ug/L	98
74) 4-Chlorotoluene	12.604	91	175335	22.83 ug/L	97
75) tert-Butylbenzene	12.798	119	128629	21.62 ug/L	97
76) 1,2,4-Trimethylbenzene	12.816	105	161940	20.59 ug/L	98
77) sec-Butylbenzene	12.957	105	211146	22.15 ug/L	98
78) 4-Isopropyltoluene	13.036	119	137632	21.57 ug/L	98
79) 1,3-Dichlorobenzene	13.107	146	72869	20.53 ug/L	97
80) 1,4-Dichlorobenzene	13.169	146	71921	19.65 ug/L	99
81) Dicyclopentadiene	13.213	66	24100	16.74 ug/L #	92
82) n-Butylbenzene	13.363	92	112067	20.27 ug/L	99
83) 1,2-Dichlorobenzene	13.486	146	63182	20.77 ug/L	98
84) 1,2-Dibromo-3-chloropr...	14.148	157	5334	17.76 ug/L	88
85) 1,2,4-Trichlorobenzene	14.968	180	37045	18.53 ug/L	94
86) Hexachlorobutadiene	15.100	190	10903	19.69 ug/L	91
87) Naphthalene	15.286	128	65959	17.63 ug/L	99
88) 1,2,3-Trichlorobenzene	15.559	180	29409	17.80 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091914.D
Acq On : 19 Sep 2013 17:35
Operator : JM
Sample : 470337-005 S
Misc : MS
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 25 12:26:58 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091915.D
Acq On : 19 Sep 2013 18:01
Operator : JM
Sample : 470337-005 SD
Misc : MSD
ALS Vial : 16 Sample Multiplier: 1

JM 10/1/13

Quant Time: Sep 25 12:27:02 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	8.526	168	139971	50.00	ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.205	114	266559	50.00	ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.455	117	244122	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.148	152	107293	50.00	ug/L	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	8.561	113	125297	49.82	ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 99.64%			
45) 1,2-Dichloroethane-d4	8.879	65	212059	48.58	ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 97.16%			
46) Toluene-d8	10.396	98	372035	49.77	ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 99.54%			
66) 4-Bromofluorobenzene	12.266	95	168119	49.26	ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 98.52%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.080	85	64675	12.52	ug/L	98
3) Chloromethane	4.442	50	102206	20.11	ug/L	98
4) Vinyl chloride	4.627	62	56141	20.77	ug/L	95
5) 1,3-Butadiene	4.689	54	46859	32.07	ug/L	100
6) Bromomethane	5.059	94	34243	25.15	ug/L	96
7) Chloroethane	5.227	64	33915	22.36	ug/L	98
8) Trichlorofluoromethane	5.642	101	108409	18.56	ug/L	97
9) Acrolein	6.180	56	47744	99.11	ug/L	98
10) Trichlorotrifluoroethane	6.312	151	31440	19.01	ug/L	97
11) 1,1-Dichloroethene	6.338	61	132869	21.91	ug/L	95
12) Methylene chloride	6.877	84	68408	20.54	ug/L	99
13) Acrylonitrile	7.115	53	21291	20.14	ug/L	97
14) trans-1,2-Dichloroethene	7.185	61	127358	22.05	ug/L	97
15) n-Hexane	7.450	57	104103	18.88	ug/L	99
16) 1,1-Dichloroethane	7.609	63	155203	23.50	ug/L	99
17) Cyclohexane	8.720	84	77254	19.08	ug/L #	73
18) 2,2-Dichloropropane	8.173	77	123315	22.32	ug/L	99
19) cis-1,2-Dichloroethene	8.156	96	59260	20.70	ug/L	93
20) Chloroform	8.411	83	143586	22.82	ug/L	97
21) Bromochloromethane	8.385	128	22359	21.10	ug/L	98
23) 1,1,1-Trichloroethane	8.641	97	109507	21.99	ug/L	99
24) Acetone	6.347	43	63229	51.03	ug/L	99
25) 2-Butanone	8.120	43	66151	39.38	ug/L	99
26) Carbon Disulfide	6.682	76	250623	21.33	ug/L	94
27) Iodomethane	6.559	142	59756	19.60	ug/L	95
28) Vinyl acetate	7.591	43	150223	16.44	ug/L	99
29) Methyl tert-butyl ether	7.159	73	139181	20.77	ug/L	95
31) 1,1-Dichloropropene	8.773	75	100051	20.94	ug/L	95
32) Carbon tetrachloride	8.799	117	79051	20.52	ug/L	99
33) 1,2-Dichloroethane	8.941	62	124325	22.10	ug/L	97
34) Benzene	8.958	78	233859	20.84	ug/L	94
35) 2,2,4-Trimethylpentane	8.985	57	273816	19.10	ug/L	96
36) n-Heptane	9.099	57	61687	19.09	ug/L	99
37) Trichloroethene	9.461	95	63168	21.04	ug/L	92

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091915.D
Acq On : 19 Sep 2013 18:01
Operator : JM
Sample : 470337-005 SD
Misc : MSD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 25 12:27:02 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

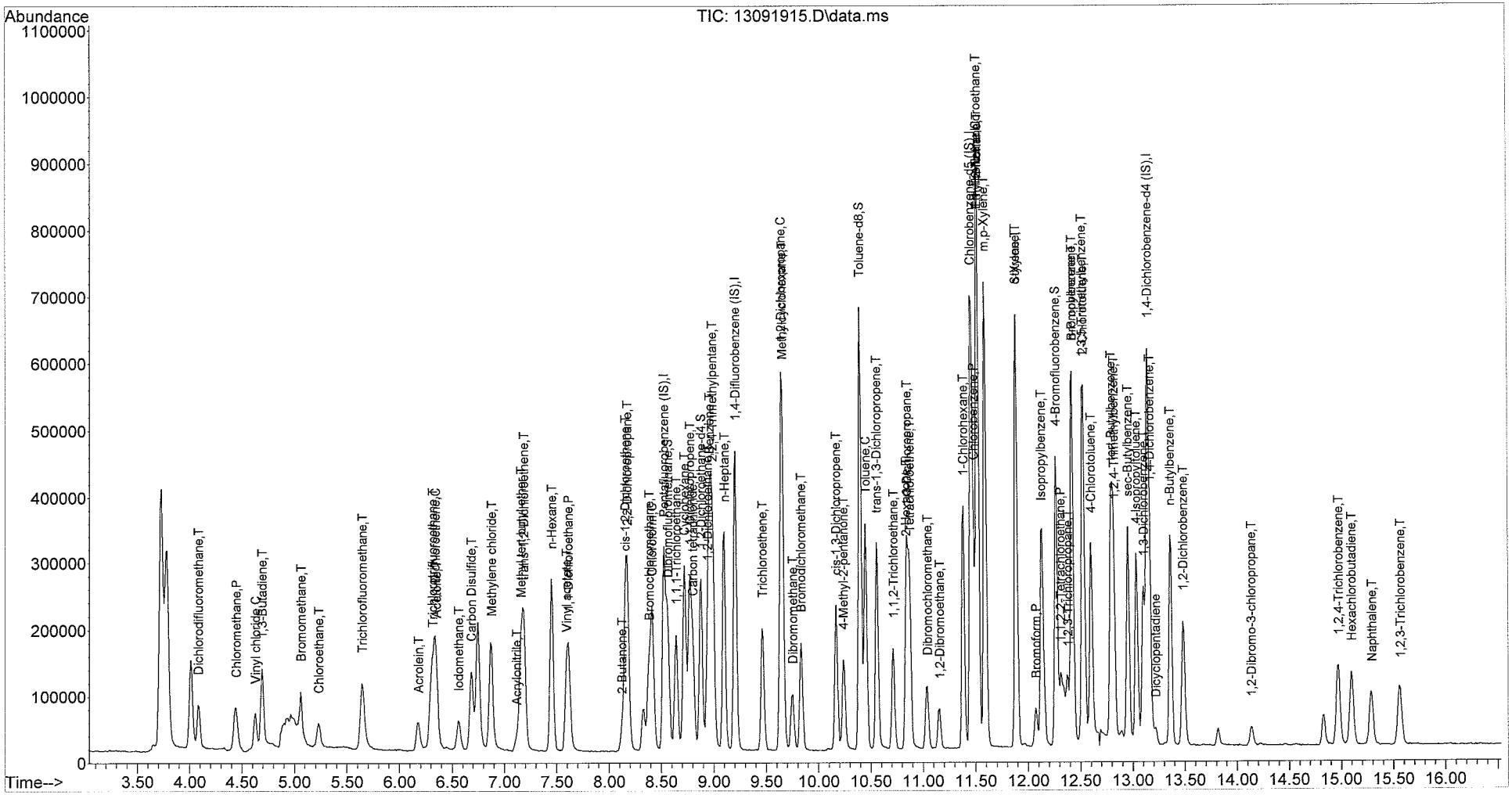
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.646	63	73631	20.53 ug/L	98
39) Bromodichloromethane	9.832	83	100151	21.39 ug/L	99
40) Methylcyclohexane	9.655	56	35933	21.46 ug/L	96
41) Dibromomethane	9.752	93	42758	20.36 ug/L	98
42) cis-1,3-Dichloropropene	10.167	75	99701	19.38 ug/L	91
44) 4-Methyl-2-pentanone	10.237	43	131863	41.30 ug/L	96
48) Toluene	10.449	92	125074	19.80 ug/L	99
49) trans-1,3-Dichloropropene	10.555	75	89176	20.36 ug/L #	59
50) 1,1,2-Trichloroethane	10.714	83	43065	20.71 ug/L	95
51) 1,3-Dichloropropane	10.846	76	92599	20.96 ug/L	97
52) Tetrachloroethene	10.872	166	52191	24.68 ug/L	98
53) Dibromochloromethane	11.040	129	42979	18.45 ug/L	99
54) 1,2-Dibromoethane	11.155	107	41953	19.78 ug/L	98
55) 1-Chlorohexane	11.384	91	82757	20.35 ug/L	99
56) Chlorobenzene	11.481	112	114174	21.24 ug/L	100
57) n-Nonane	11.525	57	107762	17.87 ug/L	99
58) 1,1,1,2-Tetrachloroethane	11.516	131	39278	19.73 ug/L	94
59) Ethylbenzene	11.516	91	261985	20.92 ug/L	97
60) m,p-Xylene	11.587	106	150075	43.24 ug/L	93
61) o-Xylene	11.887	106	71769	21.90 ug/L	95
62) Styrene	11.887	104	123766	20.73 ug/L	90
63) Isopropylbenzene	12.125	105	191329	21.24 ug/L	96
64) Bromoform	12.072	173	23240	17.39 ug/L	99
65) 1,1,2,2-Tetrachloroethane	12.310	83	55608	19.49 ug/L	96
67) 2-Hexanone	10.837	43	92235	39.47 ug/L	96
69) 1,2,3-Trichloropropane	12.381	110	12337	20.58 ug/L	95
70) n-Propylbenzene	12.425	91	299852	23.61 ug/L	98
71) Bromobenzene	12.425	156	41591	20.66 ug/L	84
72) 1,3,5-Trimethylbenzene	12.522	105	166532	21.27 ug/L	99
73) 2-Chlorotoluene	12.531	91	202125	22.83 ug/L	97
74) 4-Chlorotoluene	12.601	91	182513	24.11 ug/L	98
75) tert-Butylbenzene	12.795	119	131844	22.48 ug/L	97
76) 1,2,4-Trimethylbenzene	12.822	105	165328	21.32 ug/L	97
77) sec-Butylbenzene	12.954	105	216914	23.08 ug/L	99
78) 4-Isopropyltoluene	13.033	119	142693	22.68 ug/L	97
79) 1,3-Dichlorobenzene	13.104	146	78282	22.37 ug/L	96
80) 1,4-Dichlorobenzene	13.166	146	70204	19.46 ug/L	95
81) Dicyclopentadiene	13.219	66	24974	17.60 ug/L #	94
82) n-Butylbenzene	13.360	92	115702	21.23 ug/L	98
83) 1,2-Dichlorobenzene	13.483	146	64670	21.57 ug/L	96
84) 1,2-Dibromo-3-chloropr...	14.136	157	5319	17.97 ug/L #	84
85) 1,2,4-Trichlorobenzene	14.974	180	38778	19.67 ug/L	96
86) Hexachlorobutadiene	15.098	190	11517	21.15 ug/L	92
87) Naphthalene	15.292	128	71891	19.49 ug/L	100
88) 1,2,3-Trichlorobenzene	15.565	180	30059	18.45 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130919\
Data File : 13091915.D
Acq On : 19 Sep 2013 18:01
Operator : JM
Sample : 470337-005 SD
Misc : MSD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 25 12:27:02 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Volatile Organics by SW8260B

Initial Calibration

Method 8260B

Run ID 130916 **Date of Run 9/16/13** **Analyst JM** **Page # 30**

Acquisition Method **SC8260**

Standard IDs			**Syringe IDs:**
Primary Std.	Std Prep Log ID	**GCMSVOA-6072**	**V-126**
Internal Std.	Std Prep Log ID	**GCMSVOA-6068**	V-029
Surrogate Std.	Std Prep Log ID	**GCMSVOA-6067**	V-024
BFB Std.	Std Prep Log ID	**GCMSVOA-6067**	V-024
Secondary Spike	Std Prep Log ID	**GCMSVOA-6071**	V-126

Standards Preparation

Name	**Secondary Standard (Working)** (µL)	**Surrogate (Working)** (µL)	**Acrolein** (µL)	**Internal Standard** (µL)	**Final Volume** (mL)
BFB	--	2	--	10	5
ICV	10	10	1	10	

Curve Dilutions

Primary Standard (Working)	**Surrogate (Working)**	**Methanol**	**Acrolein (500ppm)**	**Internal Standard**	**Conc µg/L**
0.25 µL	0.5 µL	99 µL	0.5 µL	10 µL	0.5
0.50 µL	1 µL	98.5 µL	0.75 µL	10 µL	1
2.5 µL	4 µL	93.5 µL	1.0 µL	10 µL	5
5 µL	6 µL	89 µL	1.25 µL	10 µL	10
10µL	10 µL	80 µL	1.5 µL	10 µL	20
20µL	14 µL	66 µL	1.75 µL	10 µL	40
40 µL	18 µL	42 µL	2.25 µL	10 µL	80
50 µL	--	50 µL	5.0 µL	10 µL	100

VOA-004-Inst10Curve RV1
Create a book by attaching a copy of the injection Log and number it in consecutive order up to 100

Injection Log

31

Directory: h:\voa\a228\130916

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	16	13091601.d	1.	BFB	TUNE CHECK	16 Sep 13 08:25
2	1	13091602.d	1.	CCV	CCV	16 Sep 13 08:49
3	1	13091603.d	1.	CCV	CCV	16 Sep 13 09:26
4	1	13091604.d	1.	BFB	TUNE CHECK	16 Sep 13 12:40
5	2	13091605.d	1.	IB	BLANK	16 Sep 13 13:05
6	3	13091606.d	1.	0.5 PPB	ICAL	16 Sep 13 13:31
7	4	13091607.d	1.	1.0 PPB } Not used - KR	ICAL	16 Sep 13 13:57
8	5	13091608.d	1.	5.0 PPB	ICAL	16 Sep 13 14:24
9	6	13091609.d	1.	10 PPB	ICAL	16 Sep 13 14:50
10	7	13091610.d	1.	20 PPB	ICAL	16 Sep 13 15:17
11	8	13091611.d	1.	40 PPB	ICAL	16 Sep 13 15:43
12	9	13091612.d	1.	80 PPB	ICAL	16 Sep 13 16:10
13	10	13091613.d	1.	100 PPB	ICAL	16 Sep 13 16:37
14	11	13091614.d	1.	IB	BLANK	16 Sep 13 17:03
15	12	13091615.d	1.	1.0 PPB	ICAL	16 Sep 13 17:30
16	13	13091616.d	1.	IB	BLANK	16 Sep 13 17:56
17	14	13091617.d	1.	5.0 PPB	ICAL	16 Sep 13 18:22
18	15	13091618.d	1.	ICV	SECOND SOURCE	16 Sep 13 18:48
19	16	13091619.d	1.	LCSV	TERTIARY STD	16 Sep 13 19:14
20	5	13091620.d	1.	BAKE		16 Sep 13 19:40
21	9	13091621.d	1.	BAKE		16 Sep 13 20:05
22	10	13091622.d	1.	BAKE		16 Sep 13 20:30

9/17/13

GC/MS QA-QC Check Report

Tune File : H:\VOA\A228\130916\13091604.D
Tune Time : 16 Sep 2013 12:40

Daily Calibration File : H:\VOA\A228\130916\13091610.D

MA 9/24/13

						178076	328593	291686	
						133491			
File	Sample	Surrogate Recovery %				Internal Standard Responses			
13091605.D	IB	101	92	105	94	154463	285958	262529	
				118576					
13091606.D	0.5 PPB	5*	6*	5*	7*	178002	327579	283292	
				129782					
13091607.D	1.0 PPB	12*	10*	10*	11*	107258	223958	207665	
				94631					
13091608.D	5.0 PPB	38*	37*	38*	37*	171621	315791	283972	
				128033					
13091609.D	10 PPB	59	56	59*	58*	176793	331218	290931	
				133708					
13091610.D	20 PPB	97	95	102	97	178076	328593	291686	
				133491					
13091611.D	40 PPB	136	136*	146*	143*	176632	323222	287903	
				132515					
13091612.D	80 PPB	124	118	132*	143*	180757	331230	292222	
				136490					
13091613.D	100 PPB	1*	1*	0*	24*	189036	351403	305073	
				136745					
13091614.D	IB	99	94	105	101	192573	353054	311711	
				139224					
13091615.D	1.0 PPB	11*	11*	10*	6*	184306	342008	295380	
				129264					
13091616.D	IB	101	95	104	94	170195	317276	279131	
				122020					
13091617.D	5.0 PPB	38*	38*	39*	38*	172499	316714	289575	
				127093					
13091618.D									

SURR = ICAL

- SURR = ICAL

- SURR = ICAL

	ICV	98	95	102	102	172156	318031	278824
				130824				
13091619.D								
	LCSV	99	99	104	103	173965	317440	289748
				132559				

(fails) - fails 12hr time check * - fails criteria

Created: Tue Sep 24 18:08:06 2013 GCMS 10

Calibration Status Report GCMS 10

Method Path : H:\VOA\A228\METHODS\
Method File : 130916.M
Title : 8260B_S
Last Update : Tue Sep 24 17:55:32 2013
Response Via : Initial Calibration

9/24/13

#	ID	Conc	ISTD Conc	Path\File
1	20	20	50	H:\VOA\A228\130916\13091610.D
2	0.5	1	50	H:\VOA\A228\130916\13091606.D
3	1.0	1	50	H:\VOA\A228\130916\13091615.D
4	5.0	5	50	H:\VOA\A228\130916\13091617.D
5	10	10	50	H:\VOA\A228\130916\13091609.D
6	40	40	50	H:\VOA\A228\130916\13091611.D
7	80	80	50	H:\VOA\A228\130916\13091612.D
8	100	100	50	H:\VOA\A228\130916\13091613.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	Sep 24 17:32 2013	Sep 24 17:31 2013	16 Sep 2013 15:17
2	0.5	Sep 24 17:46 2013	Sep 19 13:13 2013	16 Sep 2013 13:31
3	1.0	Sep 24 17:41 2013	Sep 24 17:41 2013	16 Sep 2013 17:30
4	5.0	Sep 24 17:46 2013	Sep 24 17:45 2013	16 Sep 2013 18:22
5	10	Sep 24 17:27 2013	Sep 24 17:25 2013	16 Sep 2013 14:50
6	40	Sep 24 17:33 2013	Sep 24 17:32 2013	16 Sep 2013 15:43
7	80	Sep 24 17:34 2013	Sep 24 17:33 2013	16 Sep 2013 16:10
8	100	Sep 24 17:36 2013	Sep 24 17:34 2013	16 Sep 2013 16:37

130916.M Tue Sep 24 18:02:58 2013

Calibration Table Report
Method: 130916.M
Title: 8260B_S
Last Calibration: Tue Sep 24 17:55:32 2013

9/24/13

Calibration Files

Compound	20 13091610.D	0.5 13091606.D	1 13091615.D	5 13091617.D	10 13091609.D	40 13091611.D	80 13091612.D	100 13091613.D	Avg	%RSD	
Pentafluorobenzene (IS)	ISTD										
Dichlorodifluoromethane	1.802	2.079	1.953	1.849	1.773	1.805	1.776	1.721	1.845	6.318	
Chloromethane	1.791	2.129	1.917	1.802	1.656	1.787	1.725	1.714	1.815	8.177	
Vinyl chloride	1.005	1.150	1.248	1.018	0.893	0.946	0.936	0.924	1.015	12.158	Q=1.000
1,3-Butadiene	0.520	0.515	0.603	0.550	0.491	0.505	0.501	0.490	0.522	7.294	
Bromomethane	0.501	1.361	1.059	0.718	0.453	0.445	0.484	—	0.717	50.132	L=0.997
Chloroethane	0.486	0.671	0.808	0.550	0.744	0.511	0.541	—	0.616	20.331	L=0.996
Trichlorofluoromethane	2.037	2.329	2.308	2.068	2.019	2.031	1.966	1.931	2.086	7.172	
Acrolein	0.174	0.164	0.166	0.172	0.173	0.174	0.180	0.173	0.172	2.974	
Trichlorotrifluoroethane	0.569	0.698	0.657	0.579	0.565	0.564	0.550	0.544	0.591	9.444	
1,1-Dichloroethene	2.105	2.388	2.413	2.102	2.090	2.122	2.070	2.040	2.166	6.780	
Methylene chloride	1.115	1.417	1.369	1.207	1.123	1.129	1.083	1.078	1.190	11.099	
Acrylonitrile	0.378	—	0.389	0.378	0.360	0.381	0.386	0.371	0.378	2.606	
trans-1,2-Dichloroethene	2.032	2.182	2.177	2.096	2.013	2.062	1.987	1.958	2.063	4.031	
n-Hexane	1.884	2.245	2.116	1.846	1.840	1.965	1.936	1.926	1.970	7.179	
1,1-Dichloroethane	2.322	2.704	2.502	2.374	2.328	2.299	2.192	2.148	2.359	7.480	
Cyclohexane	1.441	1.535	1.459	1.430	1.399	1.486	1.419	1.399	1.446	3.206	
2,2-Dichloropropane	1.922	2.392	1.890	1.949	1.929	1.929	1.901	1.879	1.974	8.642	
cis-1,2-Dichloroethene	1.018	0.983	1.121	0.985	1.019	1.032	1.014	1.009	1.023	4.223	
Chloroform	2.152	2.693	2.385	2.239	2.161	2.170	2.109	2.076	2.248	9.030	
Bromochloromethane	0.382	0.471	0.356	0.380	0.370	0.375	0.353	0.341	0.378	10.549	
Dibromofluoromethane	0.872	0.985	0.919	0.861	0.878	0.875	—	—	0.898	5.197	
1,1,1-Trichloroethane	1.752	1.881	1.847	1.813	1.735	1.775	1.719	1.707	1.779	3.545	
Acetone	0.476	2.153	1.481	0.531	0.499	0.447	0.419	0.401	0.801	81.631	L=0.999
2-Butanone	0.619	1.695	1.098	0.599	0.598	0.592	0.594	0.566	0.795	50.852	L=0.999
Carbon Disulfide	4.116	4.667	4.332	4.147	4.068	4.180	4.036	4.027	4.197	5.098	
Iodomethane	1.115	0.776	0.616	0.845	1.047	1.155	1.124	1.040	0.965	20.278	L=0.997
Vinyl acetate	3.264	3.520	3.135	3.124	3.165	3.317	3.317	3.266	3.263	3.961	
Methyl tert-butyl ether	2.413	2.434	2.270	2.305	2.311	2.482	2.491	2.440	2.393	3.586	
1,4-Difluorobenzene (IS)	ISTD										
1,1-Dichloropropene	0.880	0.916	0.949	0.885	0.867	0.912	0.887	0.874	0.896	3.059	
Carbon tetrachloride	0.706	0.836	0.724	0.726	0.678	0.718	0.701	0.691	0.722	6.760	
1,2-Dichloroethane	1.034	1.253	1.068	1.052	1.001	1.042	1.012	0.980	1.055	8.040	
Benzene	2.108	2.359	2.198	2.116	2.015	2.122	1.986	1.931	2.104	6.386	
2,2,4-Trimethylpentane	2.662	2.907	2.842	2.667	2.548	2.767	2.600	2.516	2.689	5.190	
n-Heptane	0.601	0.617	0.662	0.568	0.579	0.627	0.609	0.585	0.606	4.980	
Trichloroethene	0.560	0.597	0.585	0.547	0.539	0.573	0.558	0.546	0.563	3.635	
1,2-Dichloropropane	0.656	0.785	0.682	0.667	0.652	0.670	0.634	0.637	0.673	7.178	
Bromodichloromethane	0.875	0.968	0.837	0.875	0.852	0.896	0.869	0.854	0.878	4.598	

Methylcyclohexane		0.321	0.488	0.329	0.300	0.303	0.332	0.311	0.301	0.336	18.727 r=0.999
Dibromomethane		0.378	0.486	0.418	0.378	0.387	0.381	0.368	0.356	0.394	10.501
cis-1,3-Dichloropropene		0.967	0.988	0.95	0.922	0.927	0.994	0.99	0.98	0.96476	2.96481
2-Chloroethylvinylether		0.123	—	—	0.078	0.115	0.126	0.111	0.122	0.112491	15.8456 r=0.994
4-Methyl-2-pentanone		0.602	0.655	0.585	0.538	0.565	0.62	0.625	0.603	0.598951	6.09203
1,2-Dichloroethane-d4		0.779	0.955	0.843	0.778	0.762	0.796	—	—	0.818801	8.82748
Toluene-d8		1.425	1.411	1.391	1.357	1.367	1.462	—	—	1.40221	2.76565
Chlorobenzene-d5 (IS)	ISTD										
Toluene		1.27	1.509	1.396	1.192	1.253	1.23	1.253	1.248	1.29402	8.12213
trans-1,3-Dichloropropene		0.907	0.922	0.851	0.844	0.862	0.927	0.934	0.93	0.897125	4.28222
1,1,2-Trichloroethane		0.414	0.479	0.463	0.406	0.41	0.418	0.41	0.407	0.425918	6.69873
1,3-Dichloropropane		0.899	1.04	0.918	0.85	0.876	0.902	0.884	0.871	0.904974	6.45757
Tetrachloroethene		0.417	0.492	0.452	0.41	0.413	0.434	0.422	0.424	0.433071	6.30329
Dibromochloromethane		0.461	0.616	0.453	0.436	0.447	0.47	0.464	0.47	0.477131	12.0123
1,2-Dibromoethane		0.427	0.48	0.468	0.397	0.407	0.434	0.435	0.427	0.434455	6.41603
1-Chlorohexane		0.834	0.834	0.867	0.742	0.78	0.879	0.867	0.86	0.832779	5.77555
Chlorobenzene		1.07	1.284	1.173	1.038	1.056	1.089	1.057	1.04	1.10084	7.78978
n-Nonane		1.175	1.543	1.395	1.246	1.146	1.218	1.092	1.066	1.23501	13.0322
1,1,1,2-Tetrachloroethane		0.403	0.471	0.432	0.386	0.394	0.407	0.388	0.381	0.40779	7.43371
Ethylbenzene		2.619	2.793	2.701	2.449	2.497	2.585	2.474	2.4	2.56485	5.25846
m,p-Xylene		0.725	0.74	0.734	0.671	0.71	0.739	0.692	0.675	0.71085	3.98678
o-Xylene		0.677	0.743	0.698	0.627	0.644	0.693	0.649	0.637	0.671092	5.85342
Styrene		1.278	1.252	1.142	1.15	1.203	1.305	1.235	1.216	1.22275	4.67836
Isopropylbenzene		1.899	1.802	1.746	1.691	1.8	1.987	1.944	1.891	1.84492	5.5073
Bromoform		0.262	0.313	0.272	0.248	0.262	0.276	0.28	0.276	0.273659	7.00514
1,1,2,2-Tetrachloroethane		0.601	0.639	0.637	0.544	0.565	0.562	0.57	0.555	0.584344	6.31822
4-Bromofluorobenzene		0.691	0.763	0.681	0.656	0.672	0.731	—	—	0.699043	5.73449
2-Hexanone		0.455	0.545	0.516	0.435	0.449	0.47	0.488	0.47	0.478578	7.64399
1,4-Dichlorobenzene-d4 (IS)	ISTD										
1,2,3-Trichloropropane		0.275		0.313	0.275	0.264	0.278	0.271	0.28	0.279347	5.64446
n-Propylbenzene		6.039	5.964	5.934	5.76	5.743	6.297	5.714	5.889	5.91749	3.24733
Bromobenzene		0.939	1.013	1.056	0.908	0.883	0.937	0.875	0.894	0.938152	6.91002
1,3,5-Trimethylbenzene		3.722	3.684	3.706	3.459	3.503	3.834	3.589	3.692	3.64849	3.38169
2-Chlorotoluene		4.13	4.149	4.5	4.032	3.998	4.221	3.958	4.022	4.12621	4.23659
4-Chlorotoluene		3.566	3.352	3.761	3.395	3.312	3.644	3.564	3.626	3.52771	4.49391
tert-Butylbenzene		2.767	2.876	2.665	2.59	2.616	2.879	2.696	2.778	2.73333	4.02986
1,2,4-Trimethylbenzene		3.699	3.618	3.675	3.474	3.475	3.818	3.53	3.616	3.61306	3.28572
sec-Butylbenzene		4.46	4.26	4.326	4.162	4.204	4.651	4.441	4.535	4.37974	3.89465
4-Isopropyltoluene		3.028	2.696	2.785	2.797	2.823	3.181	3.05	3.095	2.93193	6.02809
1,3-Dichlorobenzene		1.55	1.895	1.837	1.508	1.512	1.616	1.544	1.586	1.631	9.21119
1,4-Dichlorobenzene		1.621	1.882	1.98	1.649	1.507	1.636	1.579	1.595	1.68116	9.65377
Dicyclopentadiene		0.613	0.795	0.73	0.603	0.564	0.663	0.641	0.682	0.661379	11.2188
n-Butylbenzene		2.62	2.423	2.473	2.347	2.441	2.774	2.601	2.637	2.53966	5.56316
1,2-Dichlorobenzene		1.349	1.474	1.623	1.334	1.305	1.392	1.343	1.357	1.39723	7.46045
1,2-Dibromo-3-chloropropane		0.131	—	0.168	0.121	0.135	0.136	0.138	0.137	0.137967	10.4461
1,2,4-Trichlorobenzene		0.881	0.989	1.16	0.822	0.806	0.954	0.903	0.834	0.918666	12.7026 r=0.998
Hexachlorobutadiene		0.25	0.371	0.342	0.257	0.24	0.269	0.254	0.241	0.277996	17.9536
Naphthalene		1.674	1.974	2.062	1.418	1.565	1.802	1.689	1.565	1.71859	12.6377
1,2,3-Trichlorobenzene		0.736	0.79	0.936	0.67	0.662	0.796	0.725	—	0.759182	12.3477

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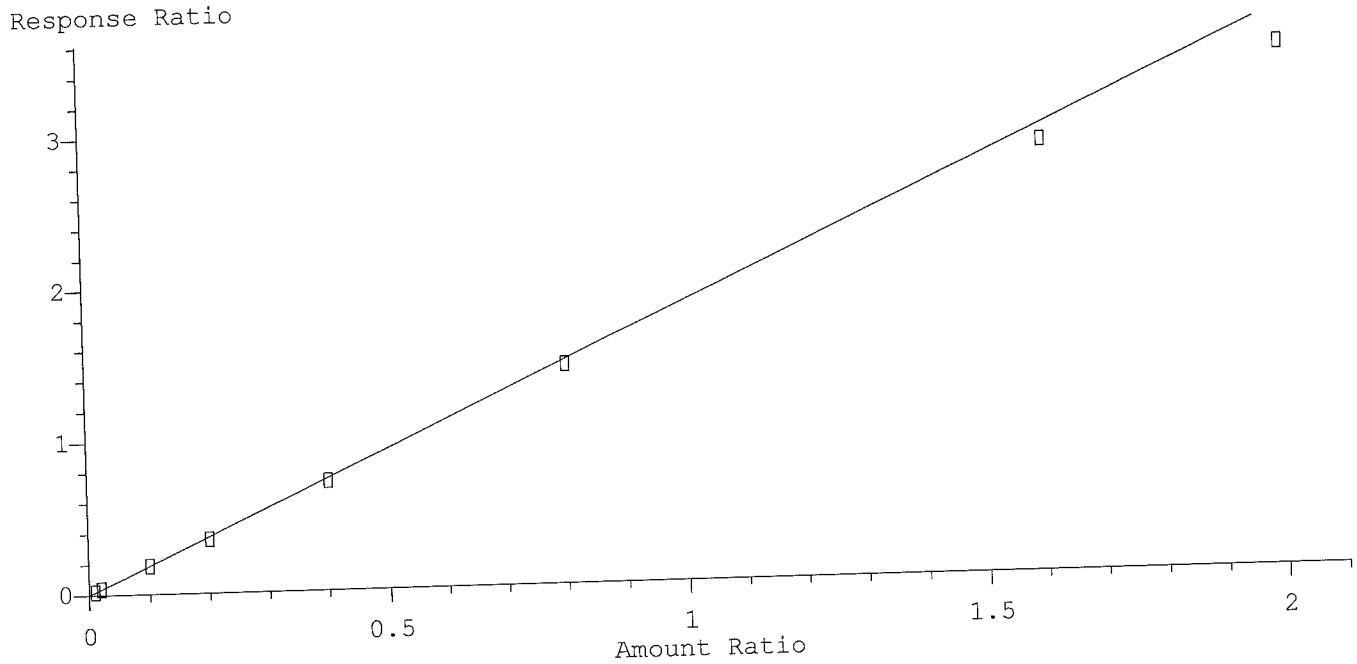
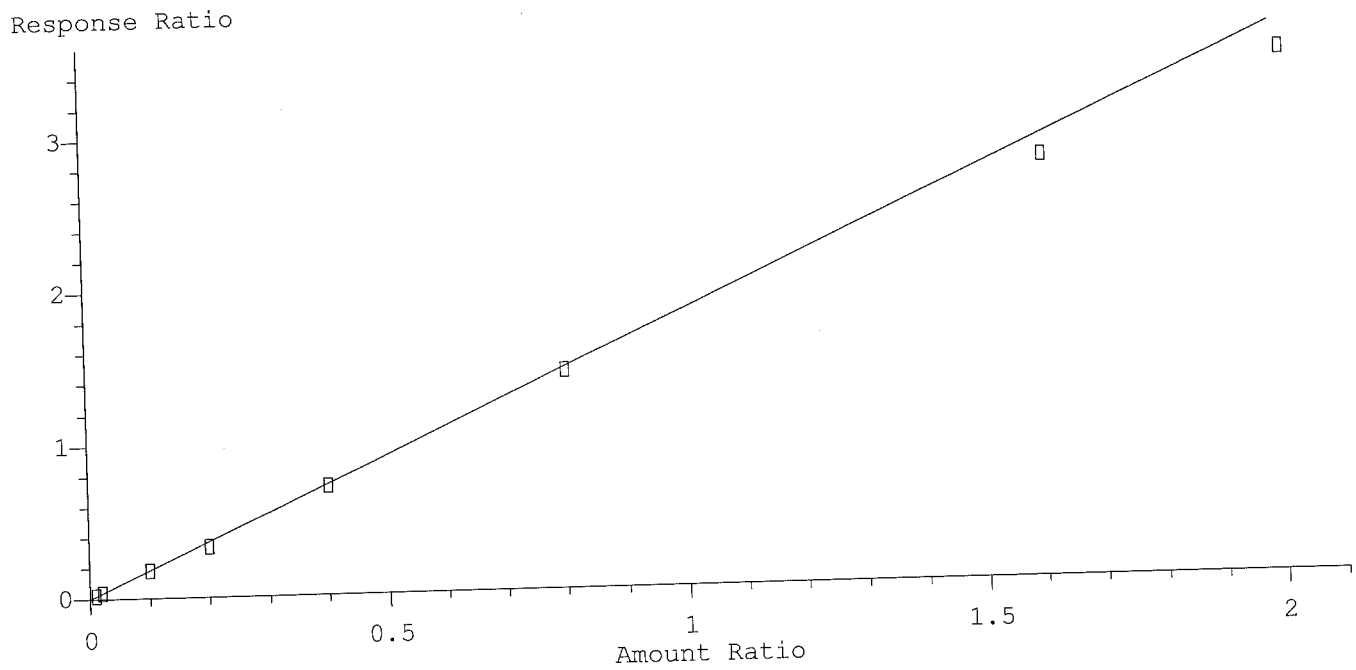
Calibration Plot Report 9/24/13

Dichlorodifluoromethane



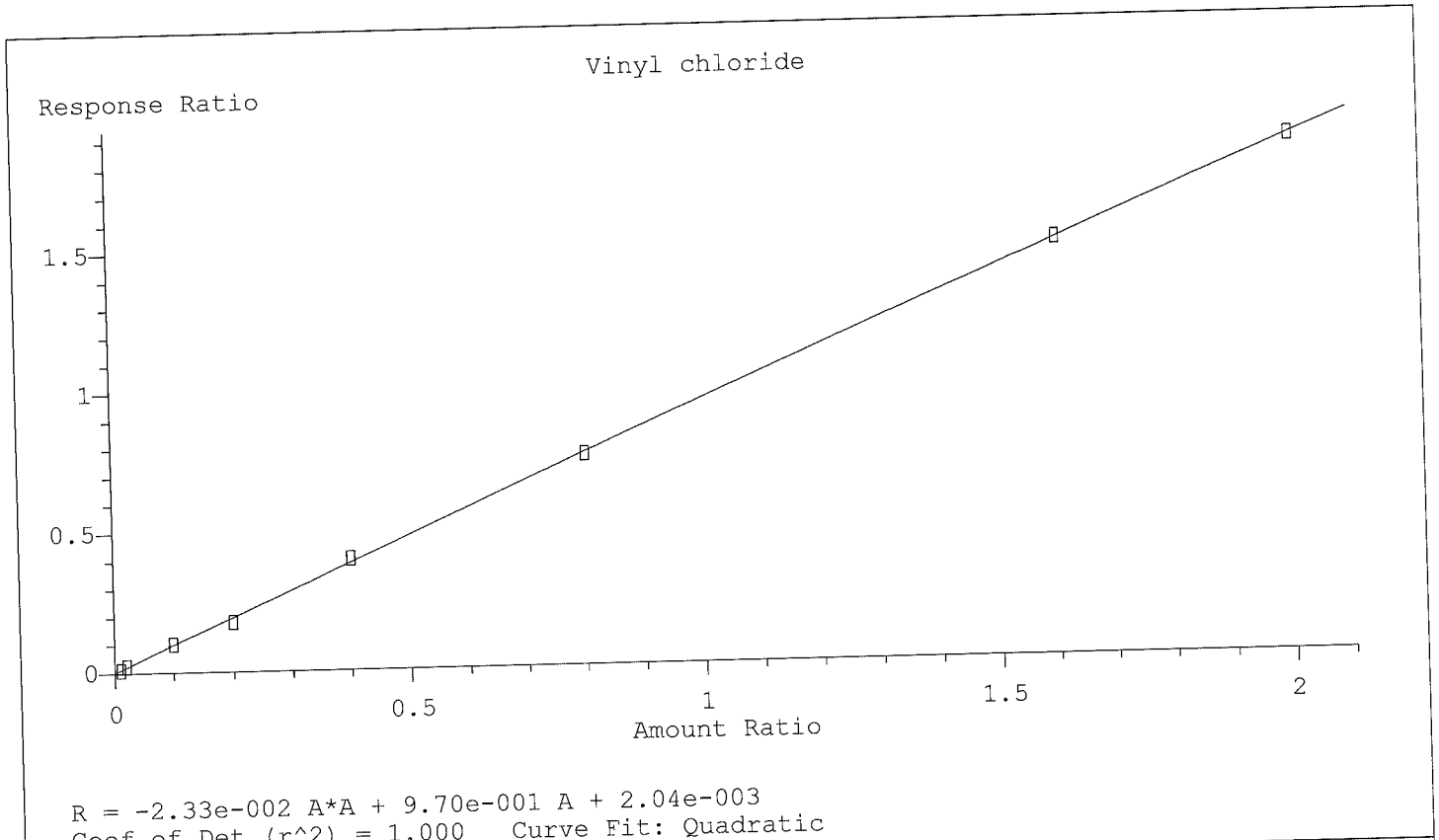
Resp Ratio = 1.84e+000 * Amt
RF Rel Std Dev = 6.3% Curve Fit: Avg RF

Chloromethane

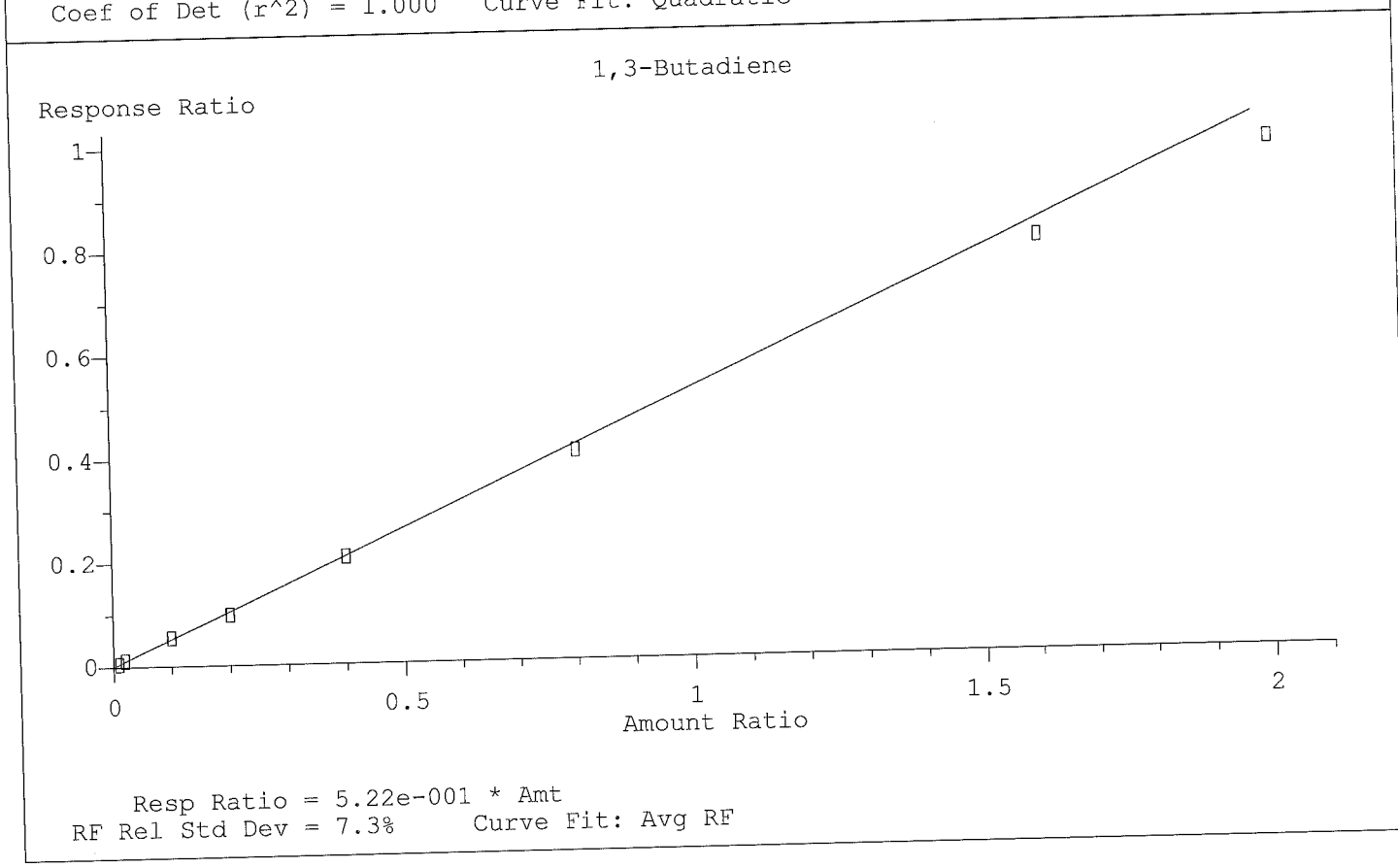


Resp Ratio = 1.82e+000 * Amt
RF Rel Std Dev = 8.2% Curve Fit: Avg RF

Calibration Plot Report

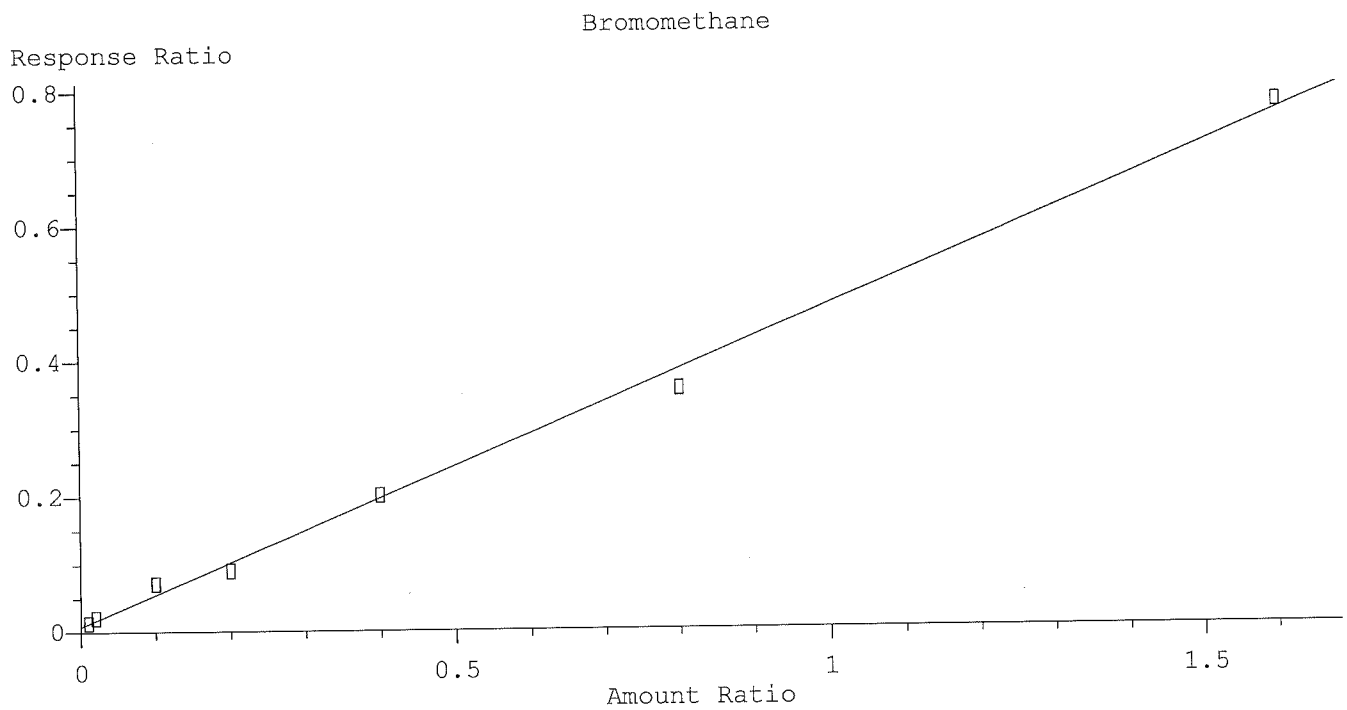


R = -2.33e-002 A*A + 9.70e-001 A + 2.04e-003
Coef of Det (r^2) = 1.000 Curve Fit: Quadratic

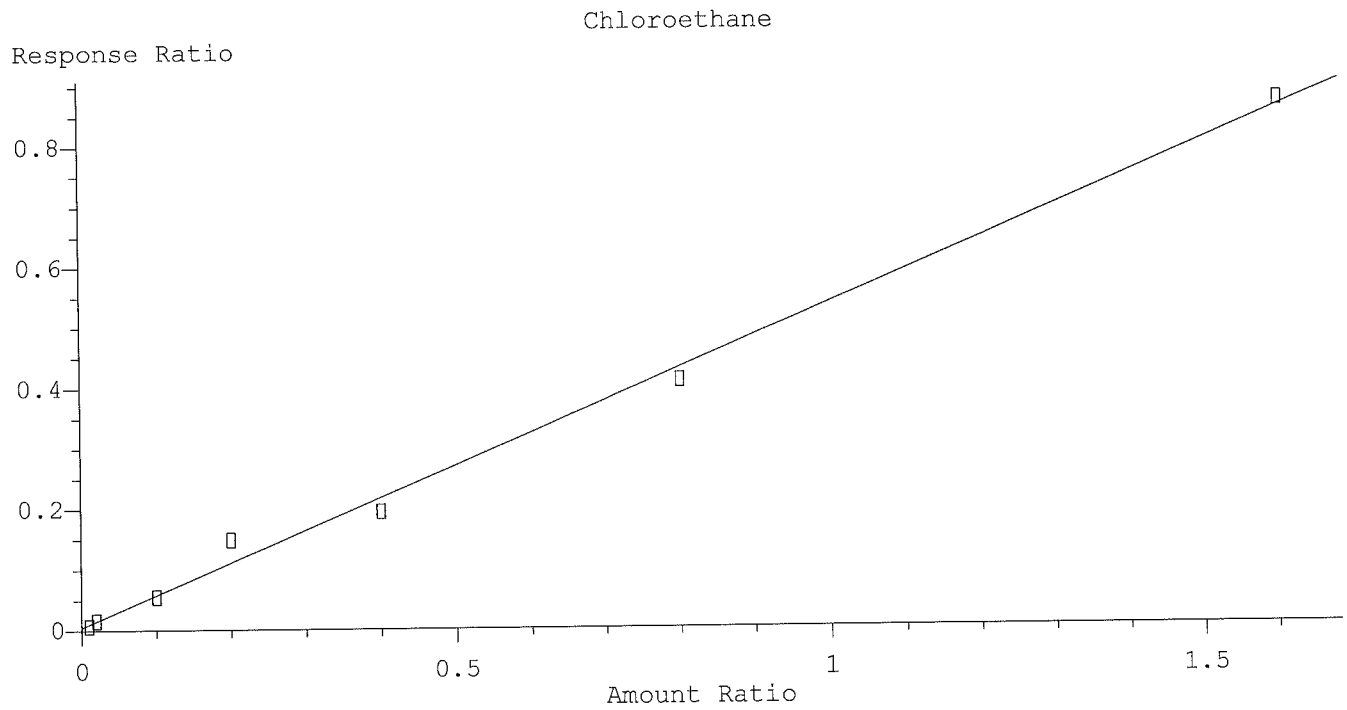


Resp Ratio = 5.22e-001 * Amt
RF Rel Std Dev = 7.3% Curve Fit: Avg RF

Calibration Plot Report

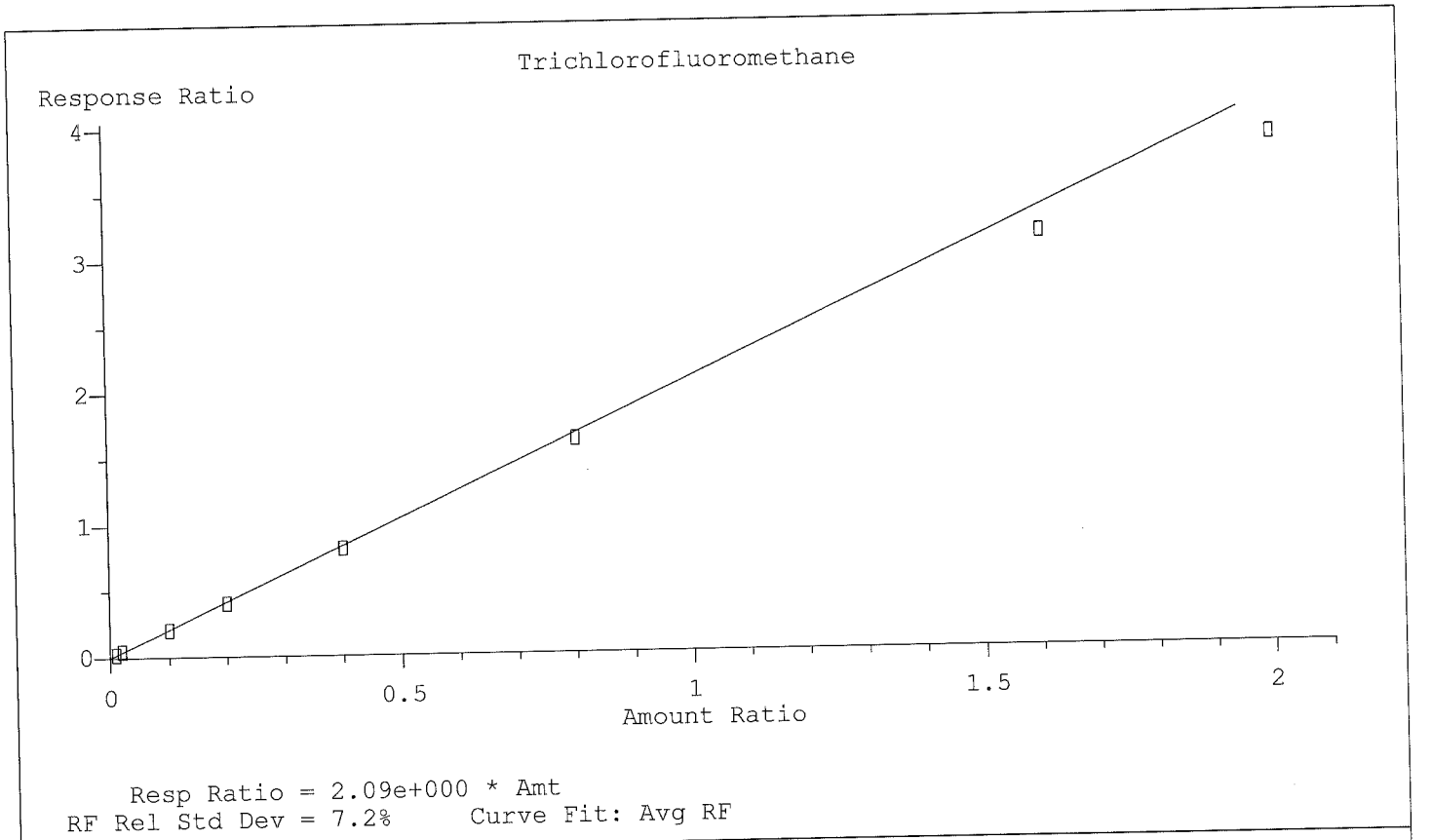


Resp Ratio = 4.71e-001 * Amt + 7.73e-003
Coef of Det (r^2) = 0.997 Curve Fit: Linear

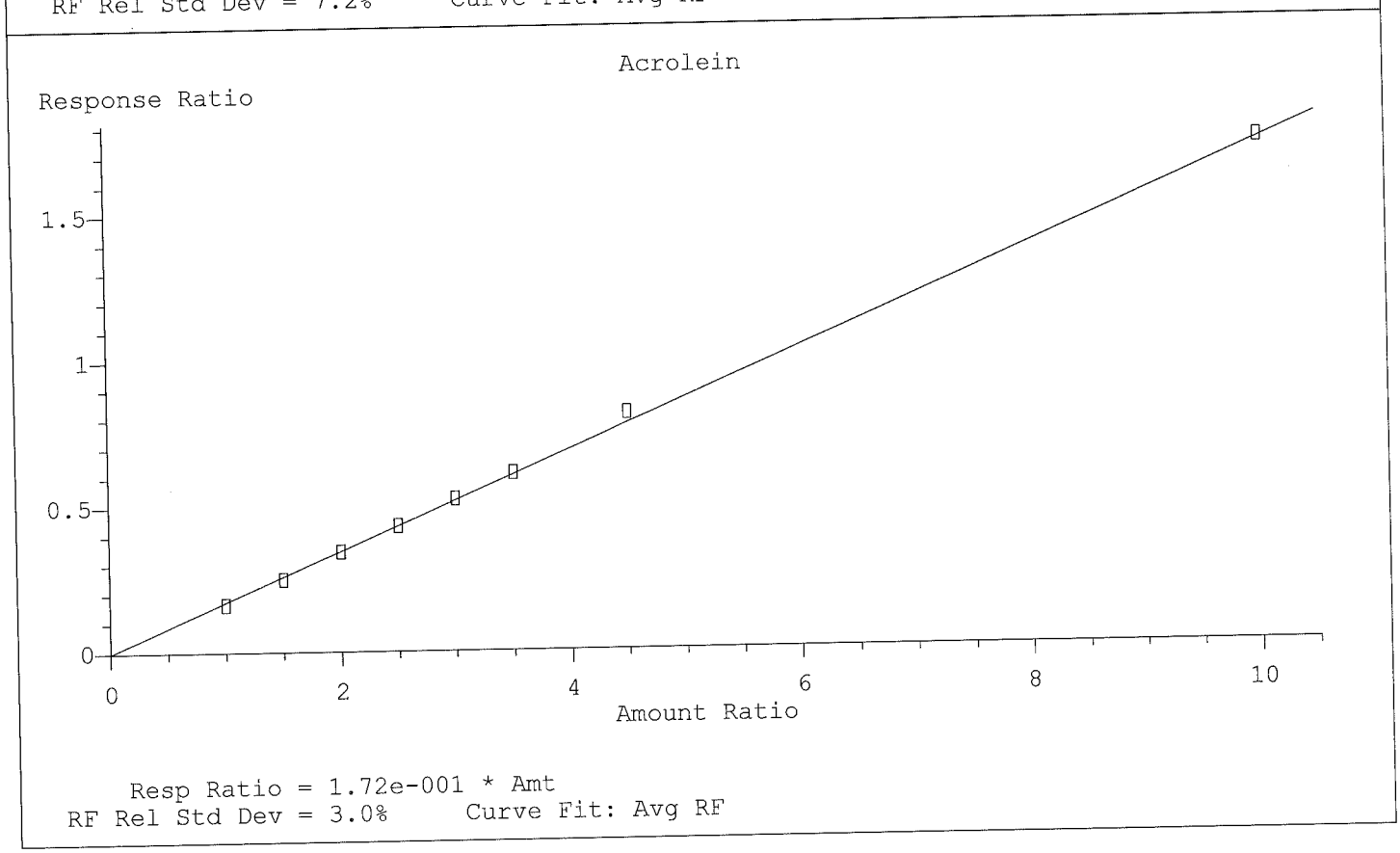


Resp Ratio = 5.31e-001 * Amt + 4.86e-003
Coef of Det (r^2) = 0.996 Curve Fit: Linear

Calibration Plot Report

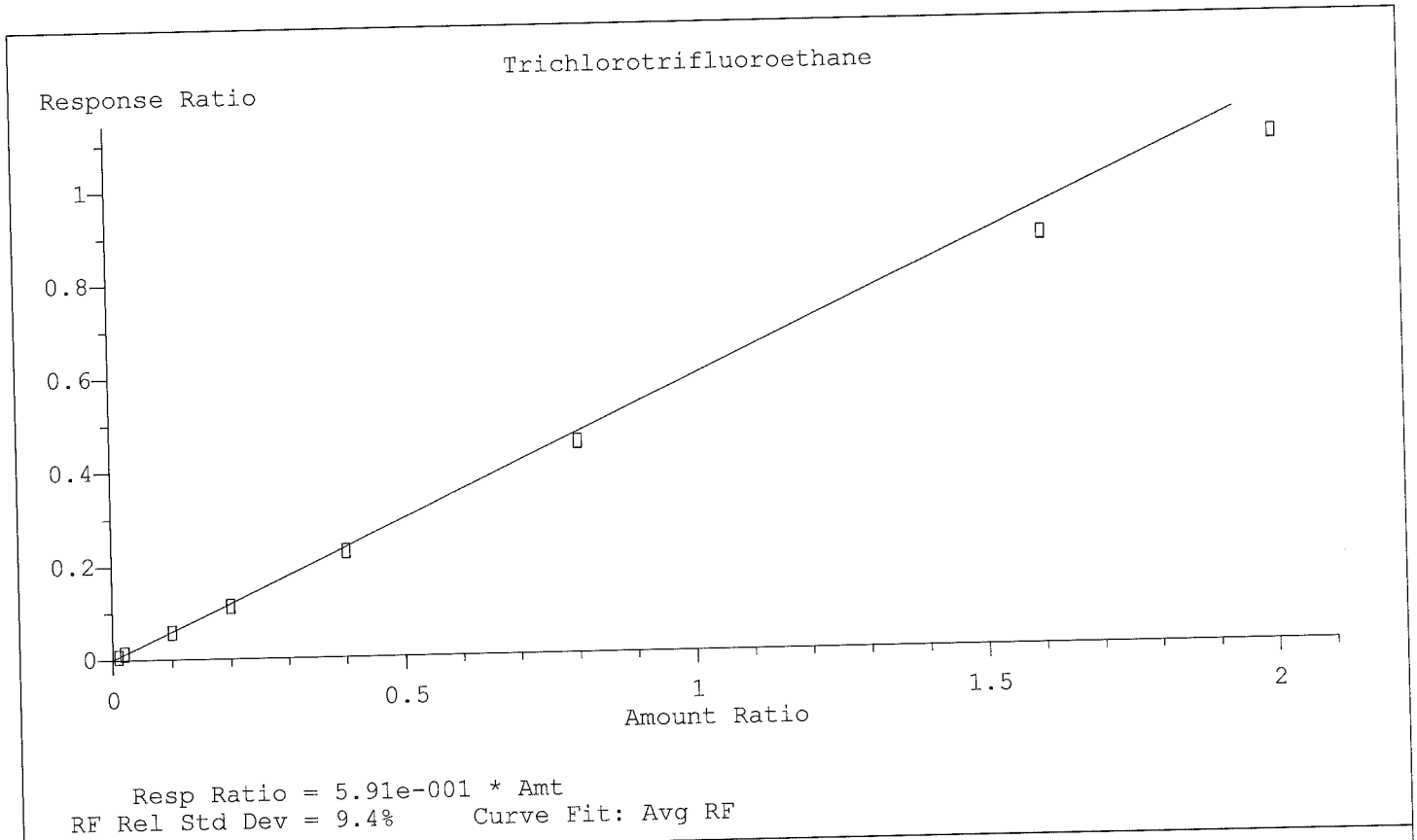


Resp Ratio = 2.09e+000 * Amt
RF Rel Std Dev = 7.2% Curve Fit: Avg RF

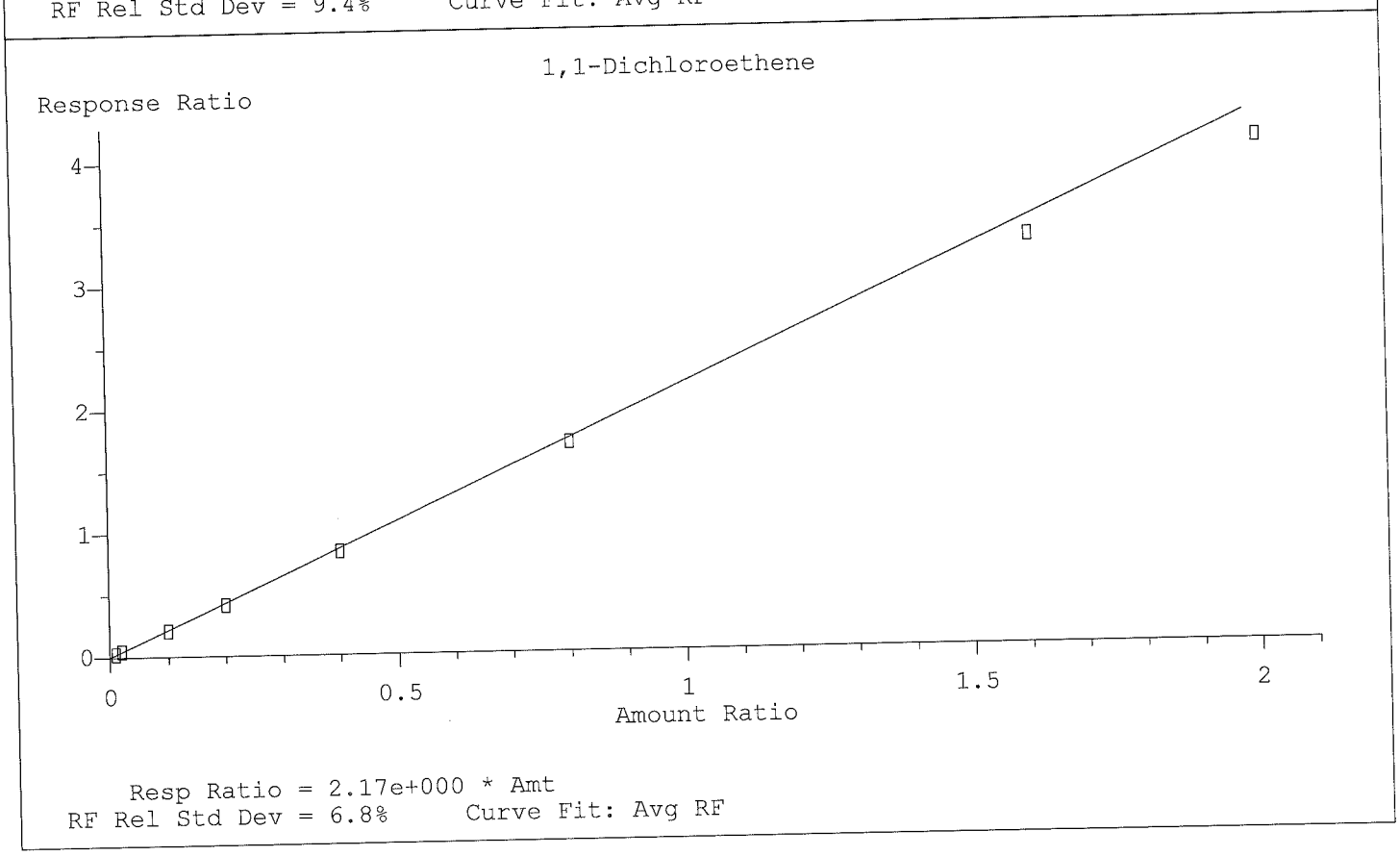


Resp Ratio = 1.72e-001 * Amt
RF Rel Std Dev = 3.0% Curve Fit: Avg RF

Calibration Plot Report

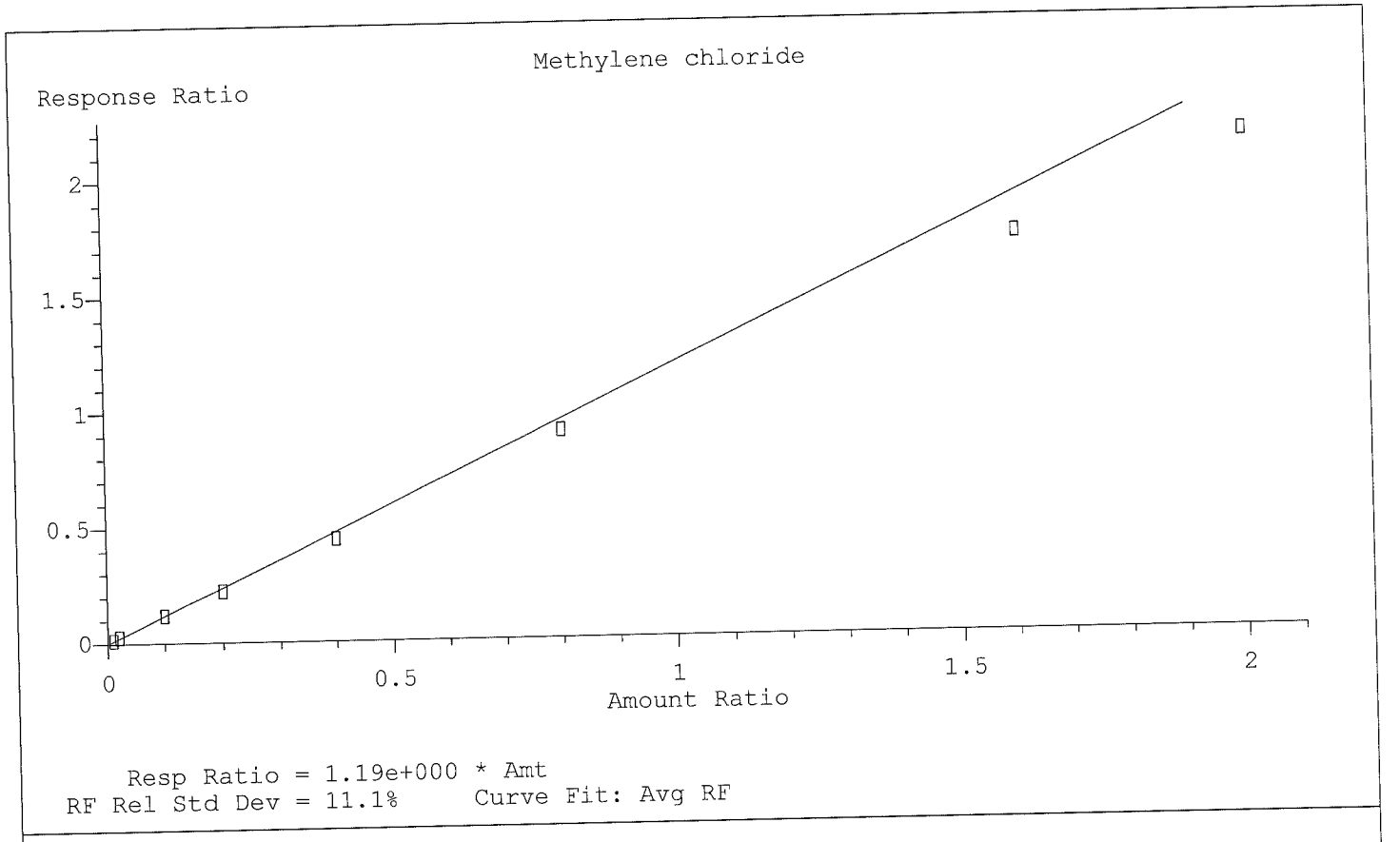


Resp Ratio = 5.91e-001 * Amt
RF Rel Std Dev = 9.4% Curve Fit: Avg RF

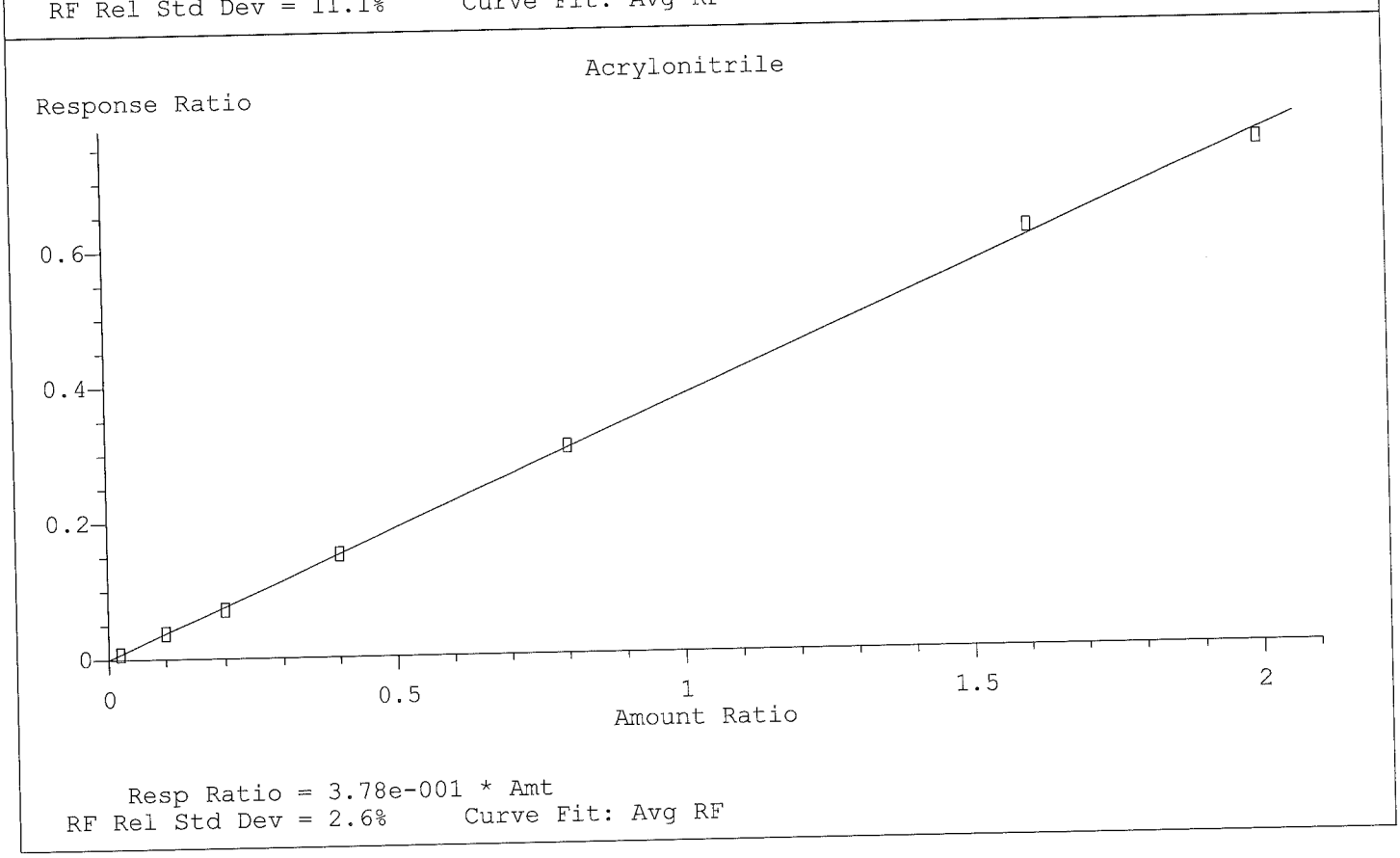


Resp Ratio = 2.17e+000 * Amt
RF Rel Std Dev = 6.8% Curve Fit: Avg RF

Calibration Plot Report

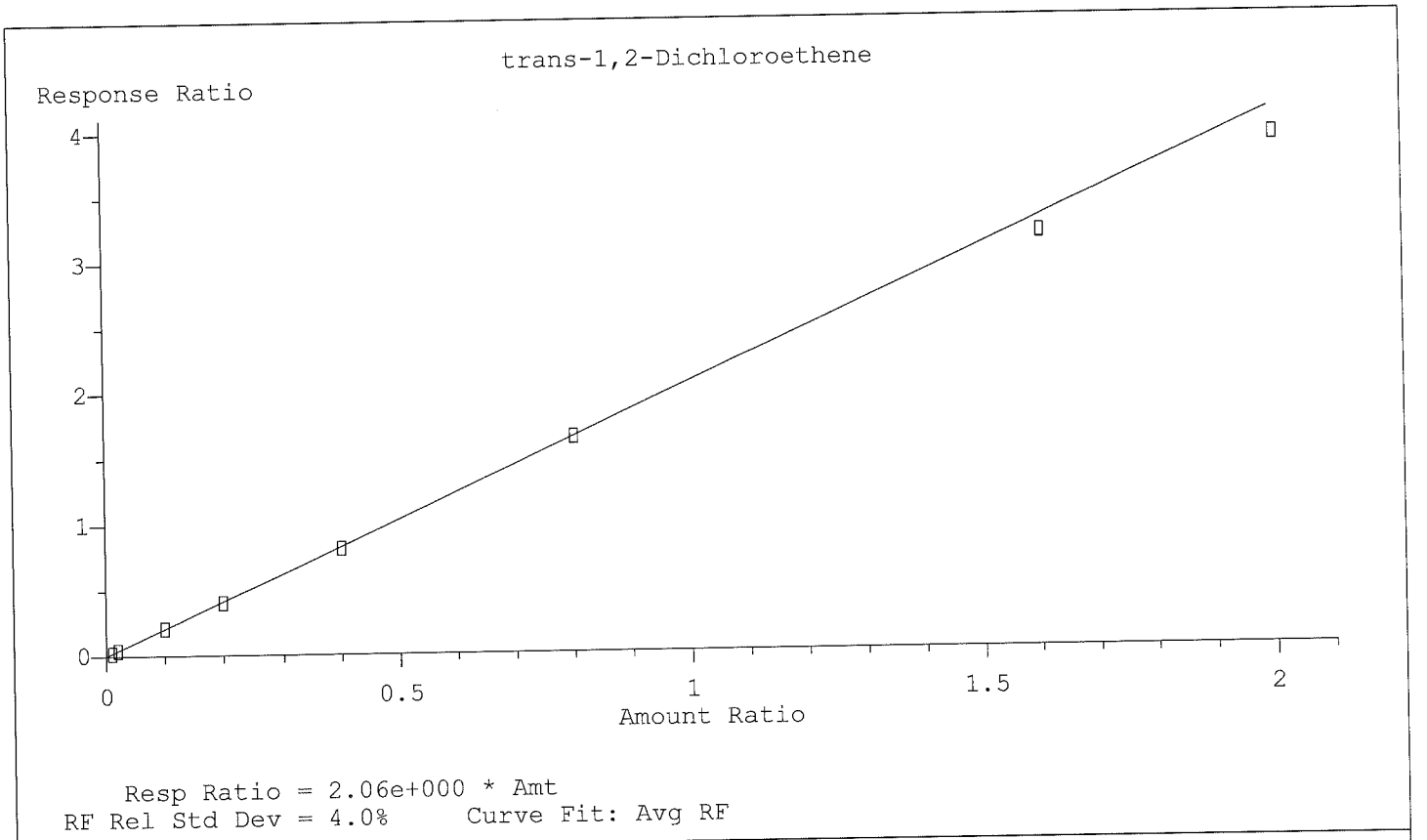


Resp Ratio = 1.19e+000 * Amt
RF Rel Std Dev = 11.1% Curve Fit: Avg RF

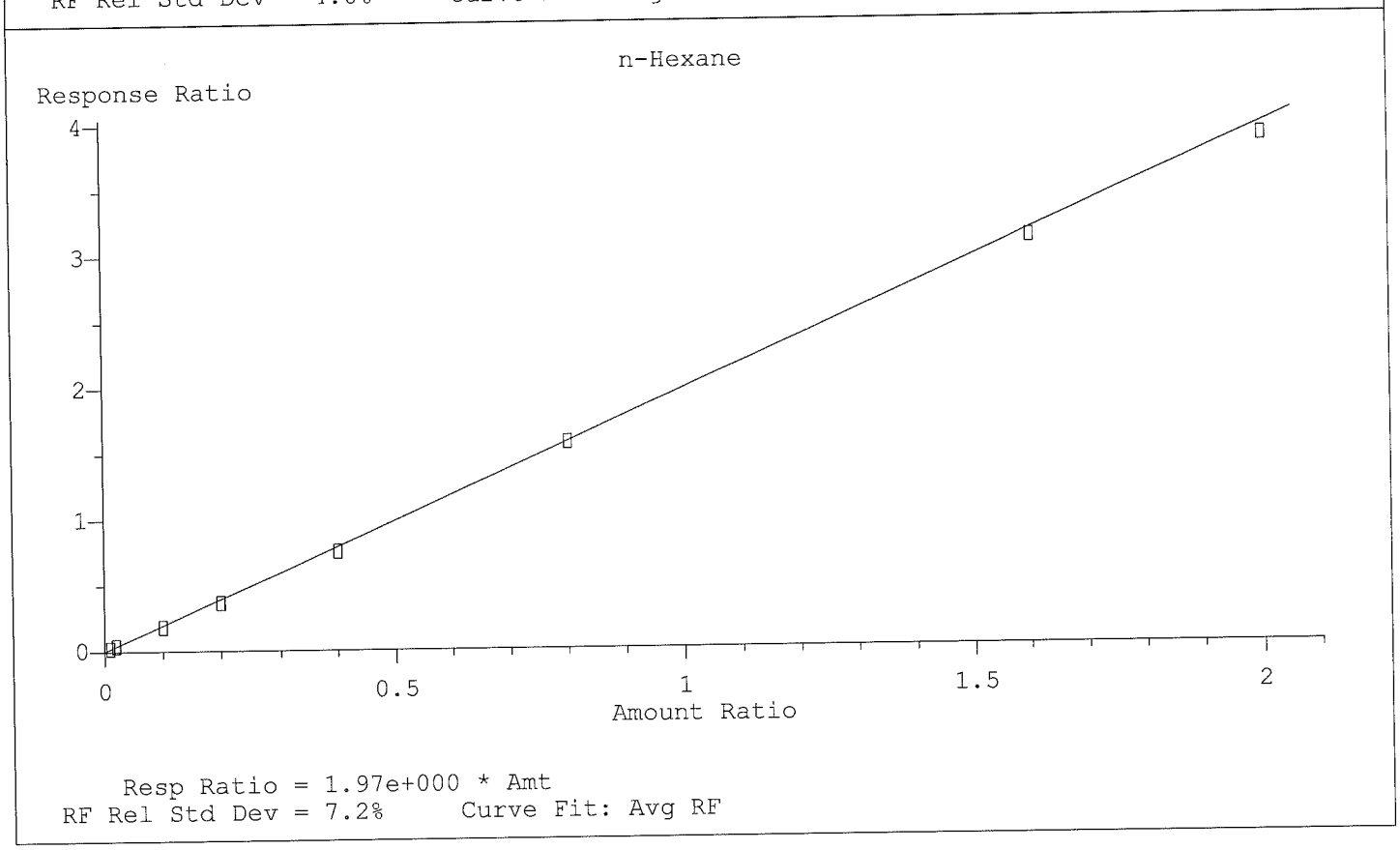


Resp Ratio = 3.78e-001 * Amt
RF Rel Std Dev = 2.6% Curve Fit: Avg RF

Calibration Plot Report

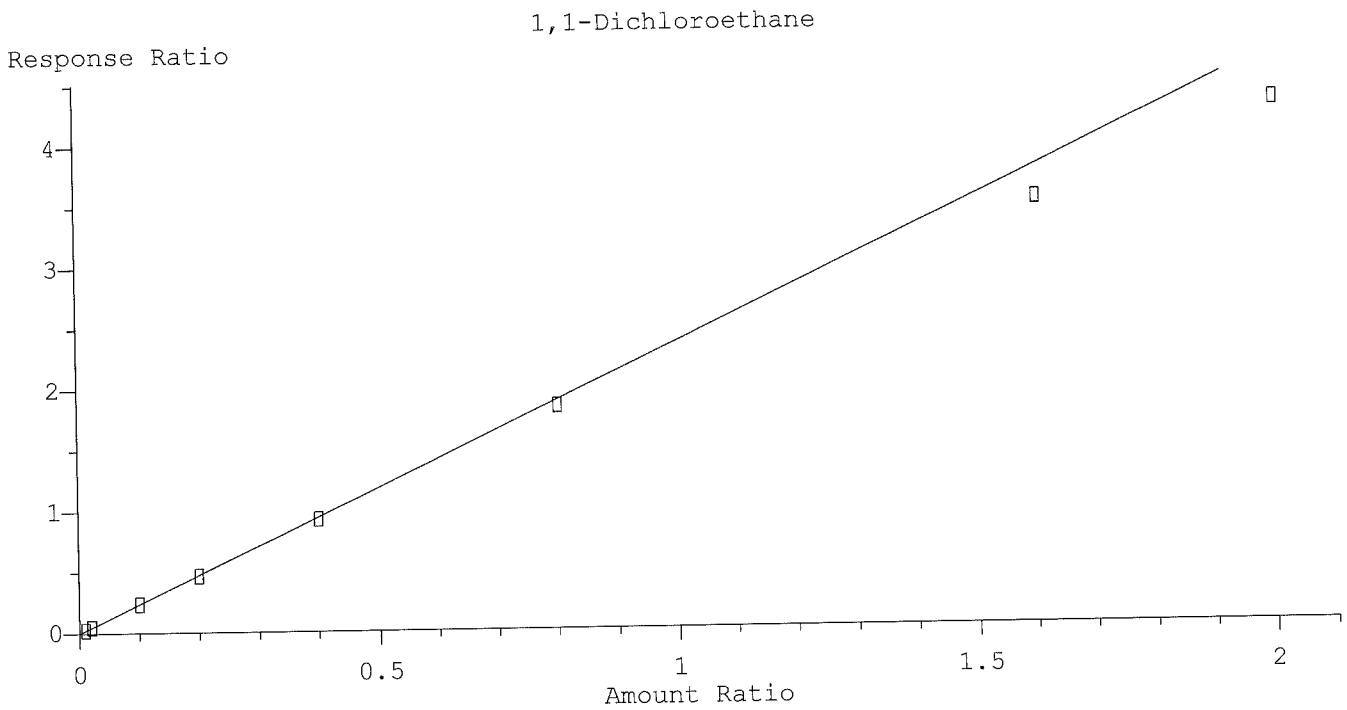


Resp Ratio = 2.06e+000 * Amt
RF Rel Std Dev = 4.0% Curve Fit: Avg RF

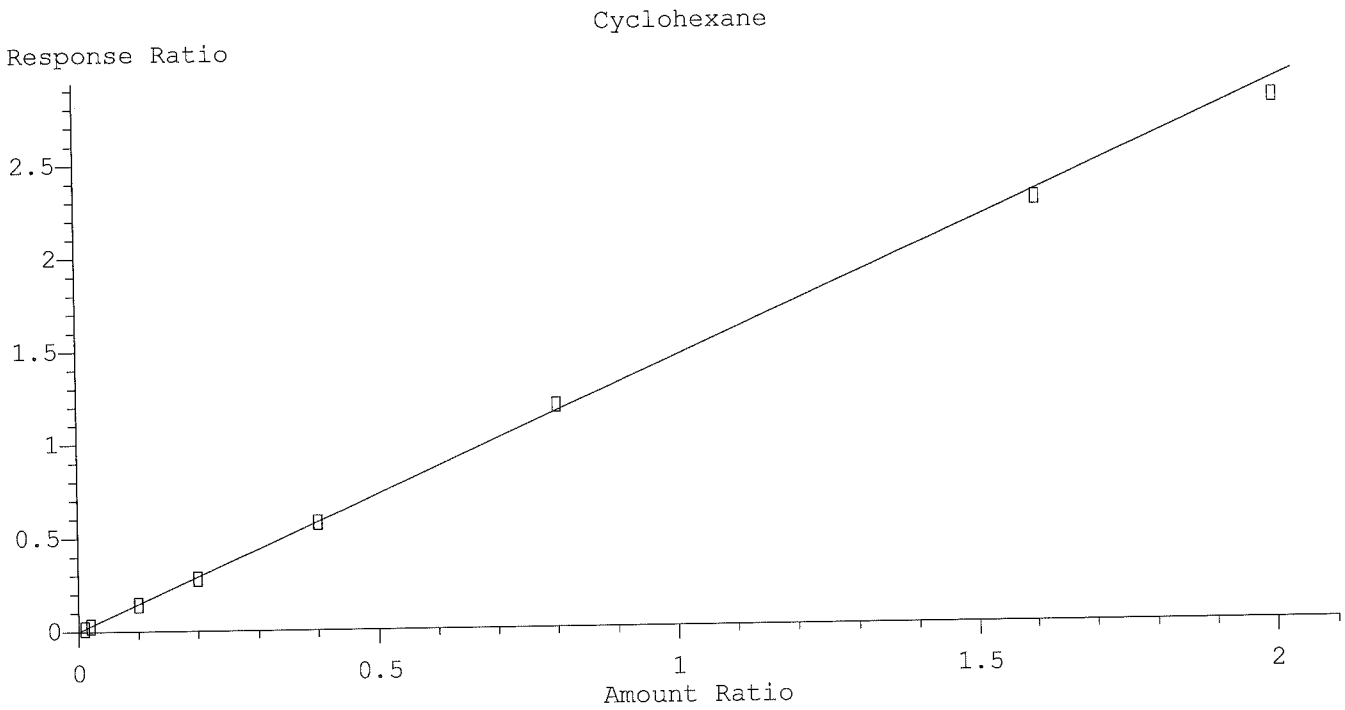


Resp Ratio = 1.97e+000 * Amt
RF Rel Std Dev = 7.2% Curve Fit: Avg RF

Calibration Plot Report

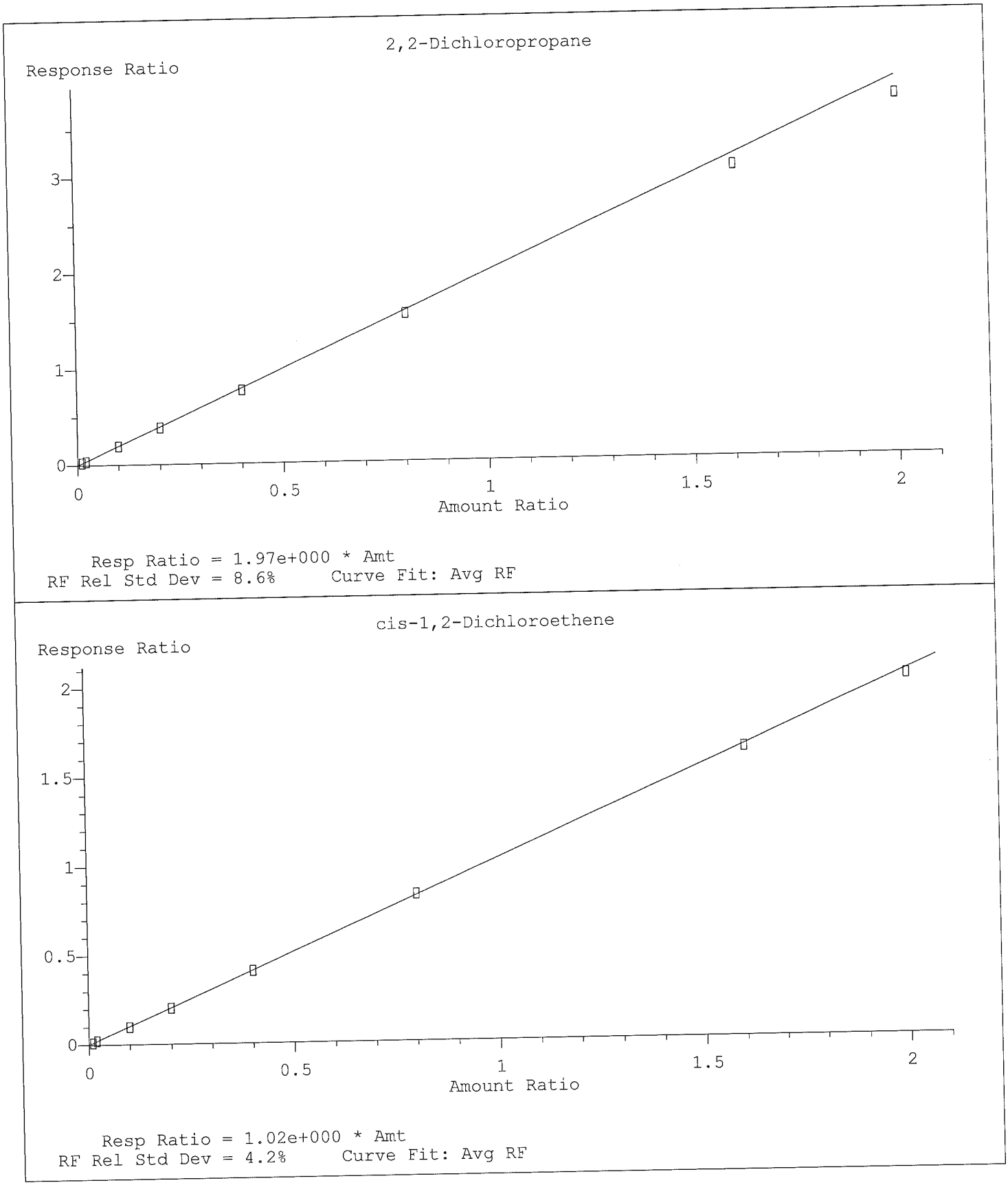


Resp Ratio = 2.36e+000 * Amt
RF Rel Std Dev = 7.5% Curve Fit: Avg RF

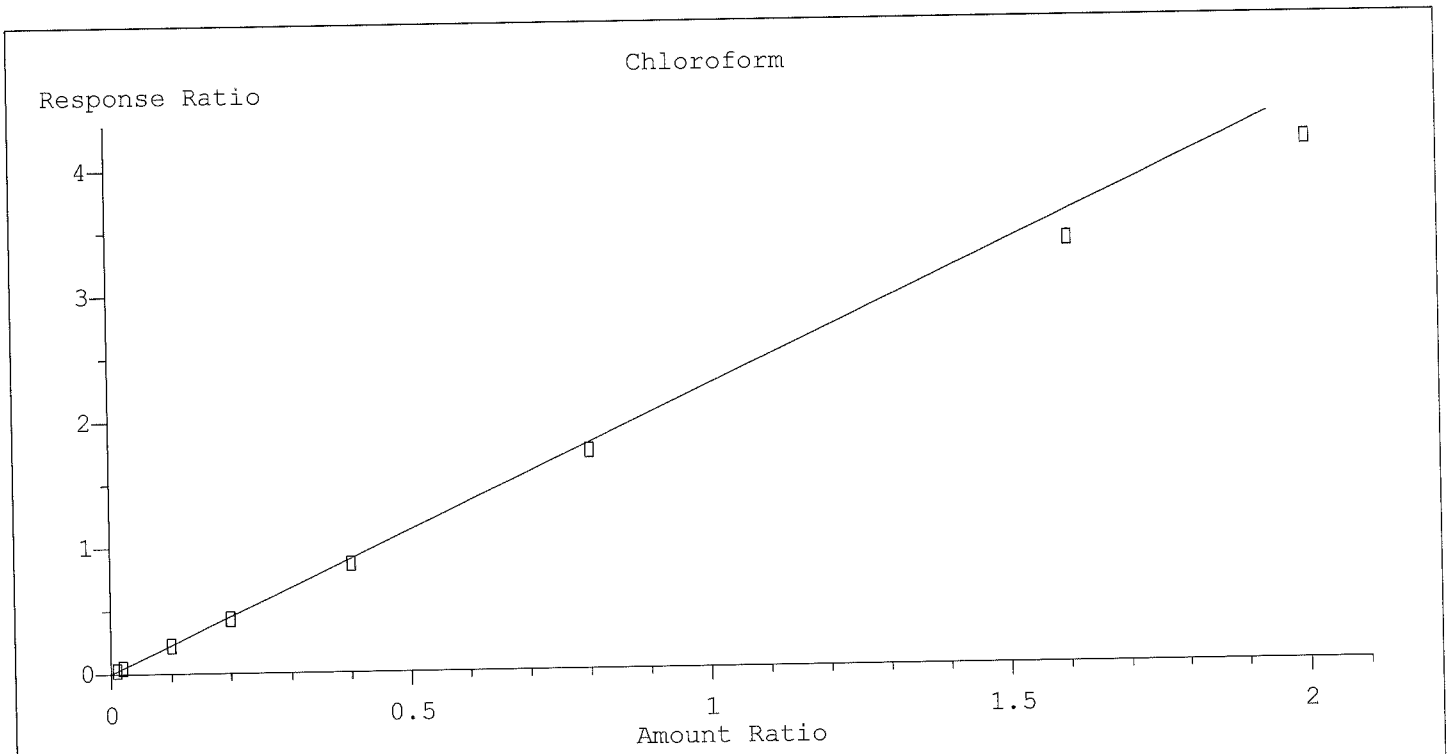


Resp Ratio = 1.45e+000 * Amt
RF Rel Std Dev = 3.2% Curve Fit: Avg RF

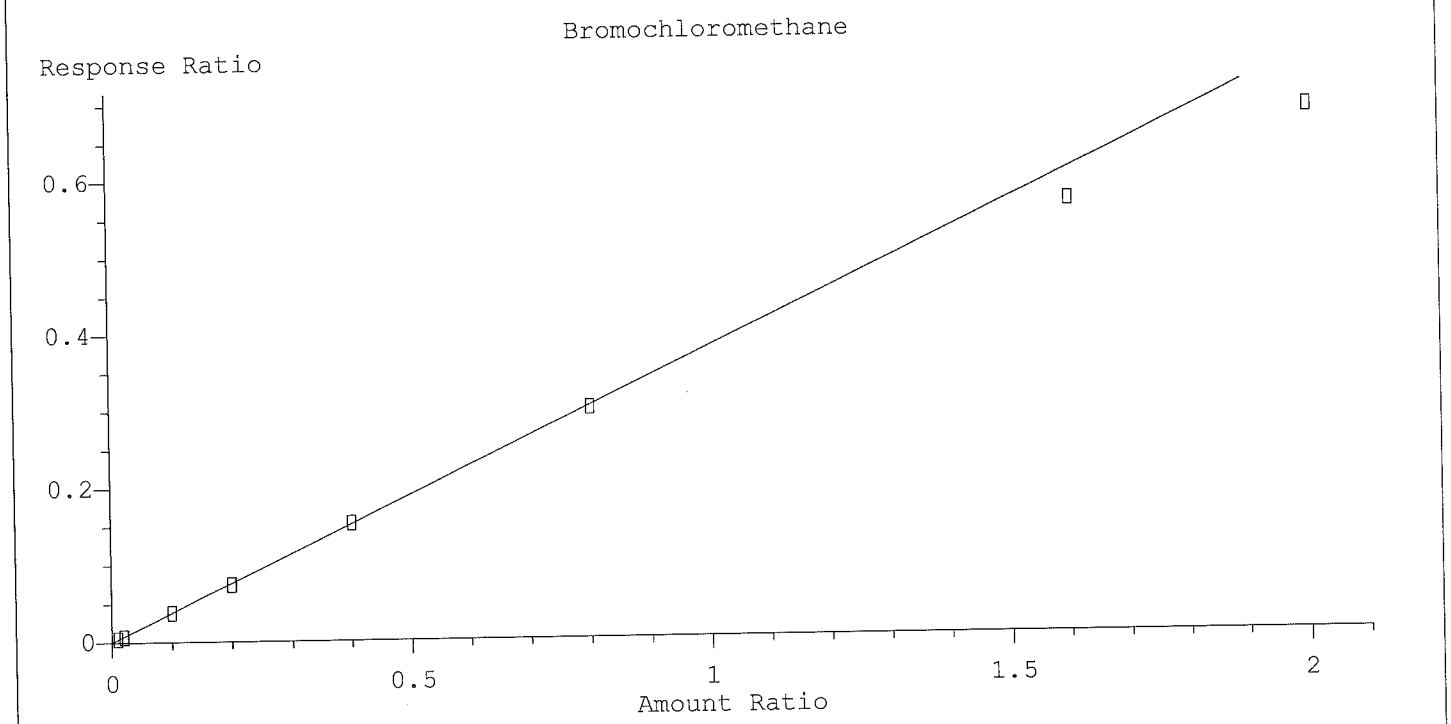
Calibration Plot Report



Calibration Plot Report

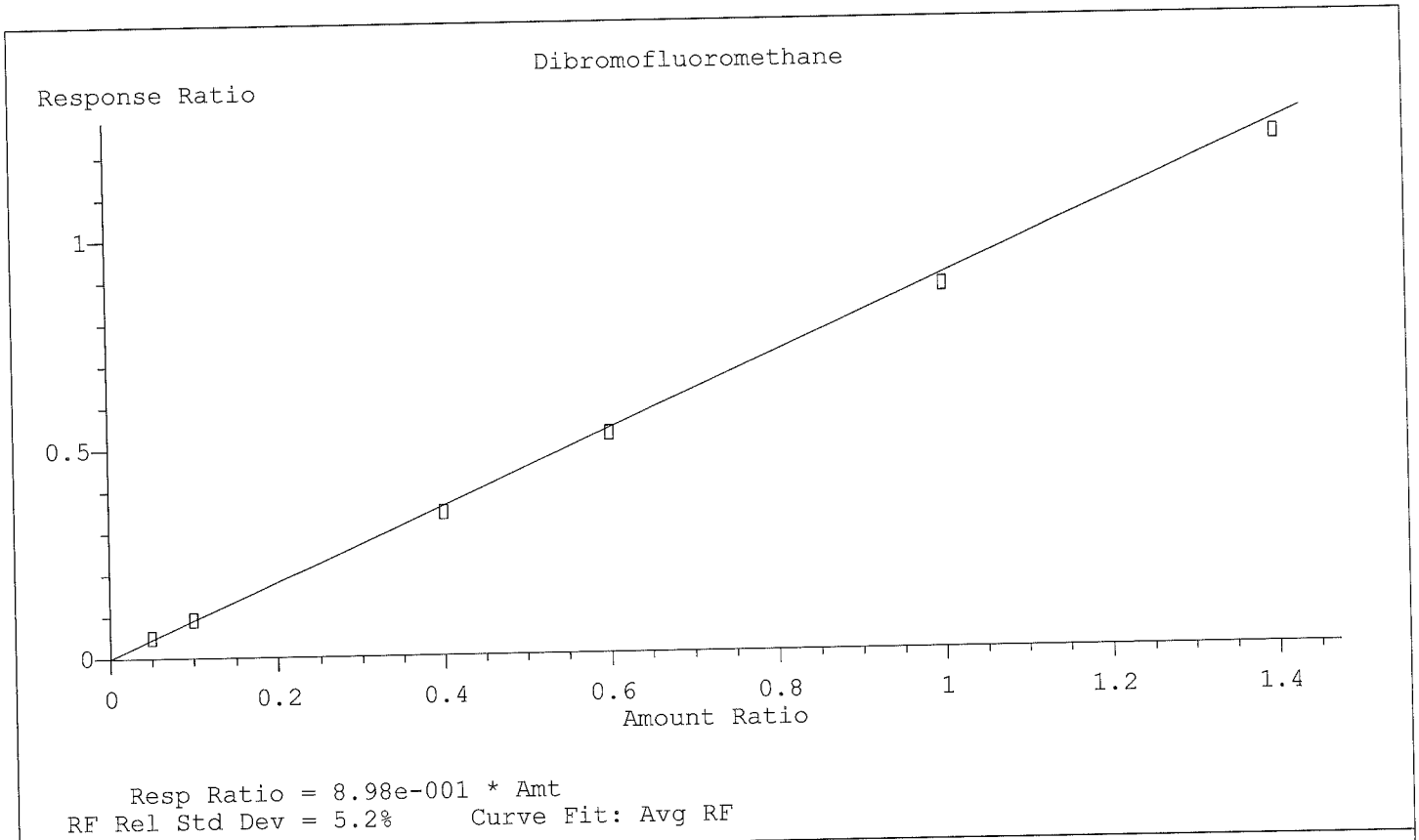


Resp Ratio = 2.25e+000 * Amt
RF Rel Std Dev = 9.0% Curve Fit: Avg RF

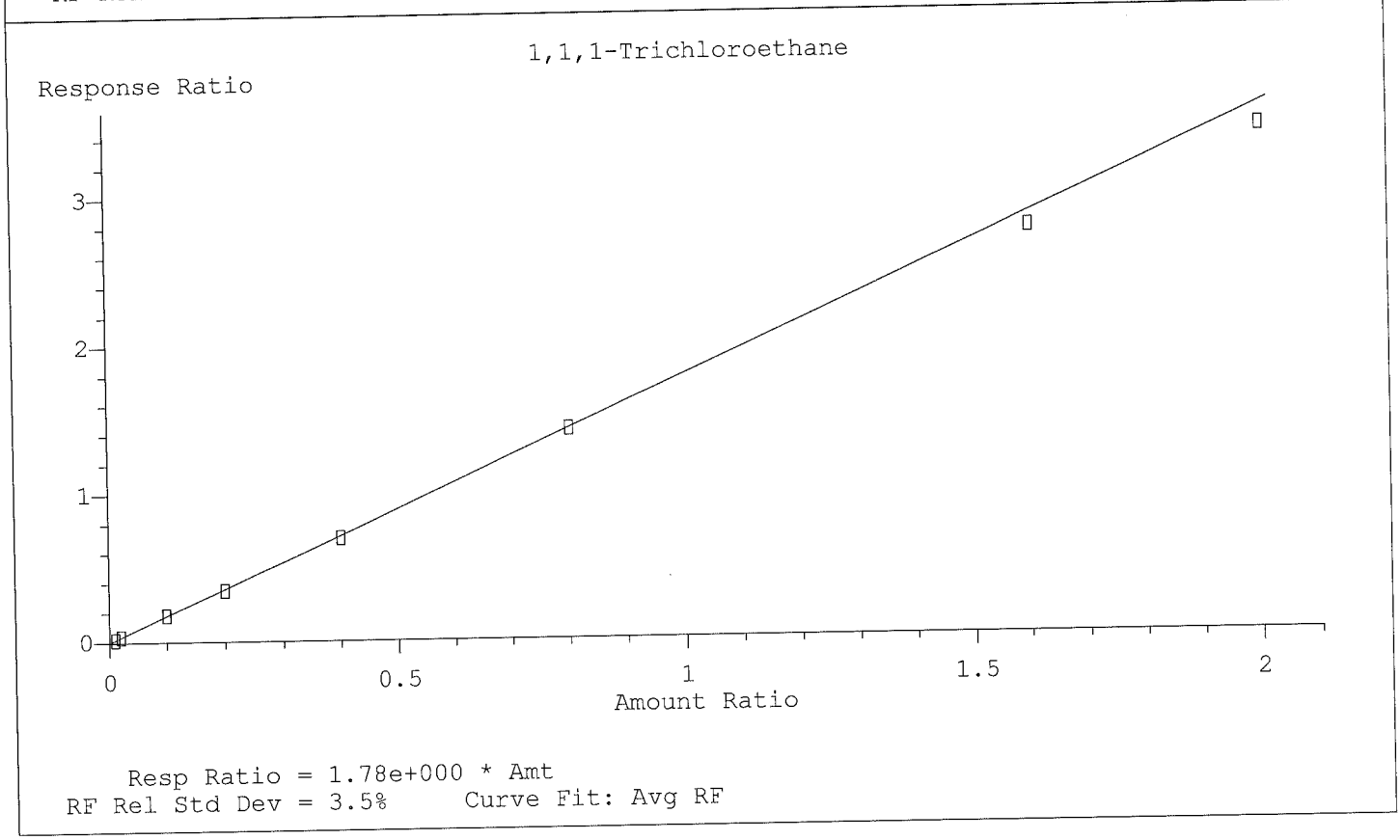


Resp Ratio = 3.78e-001 * Amt
RF Rel Std Dev = 10.5% Curve Fit: Avg RF

Calibration Plot Report

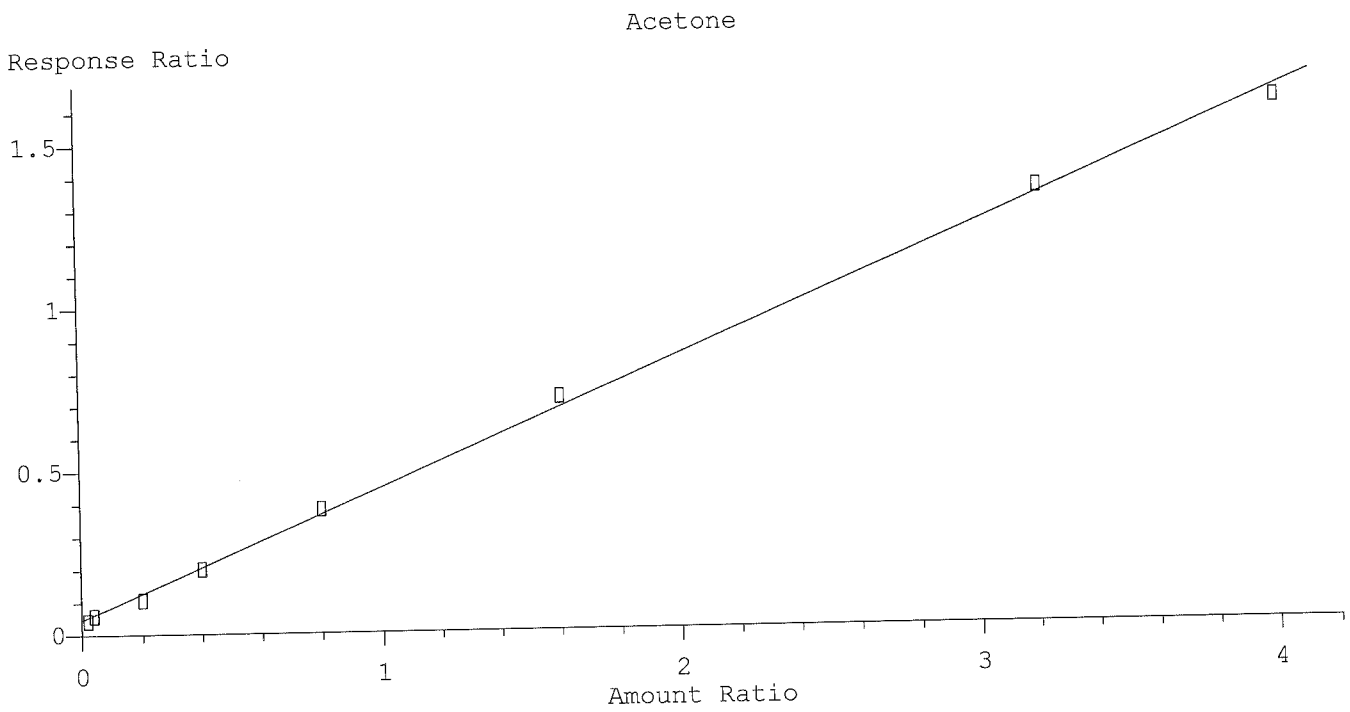


Resp Ratio = 8.98e-001 * Amt
RF Rel Std Dev = 5.2% Curve Fit: Avg RF

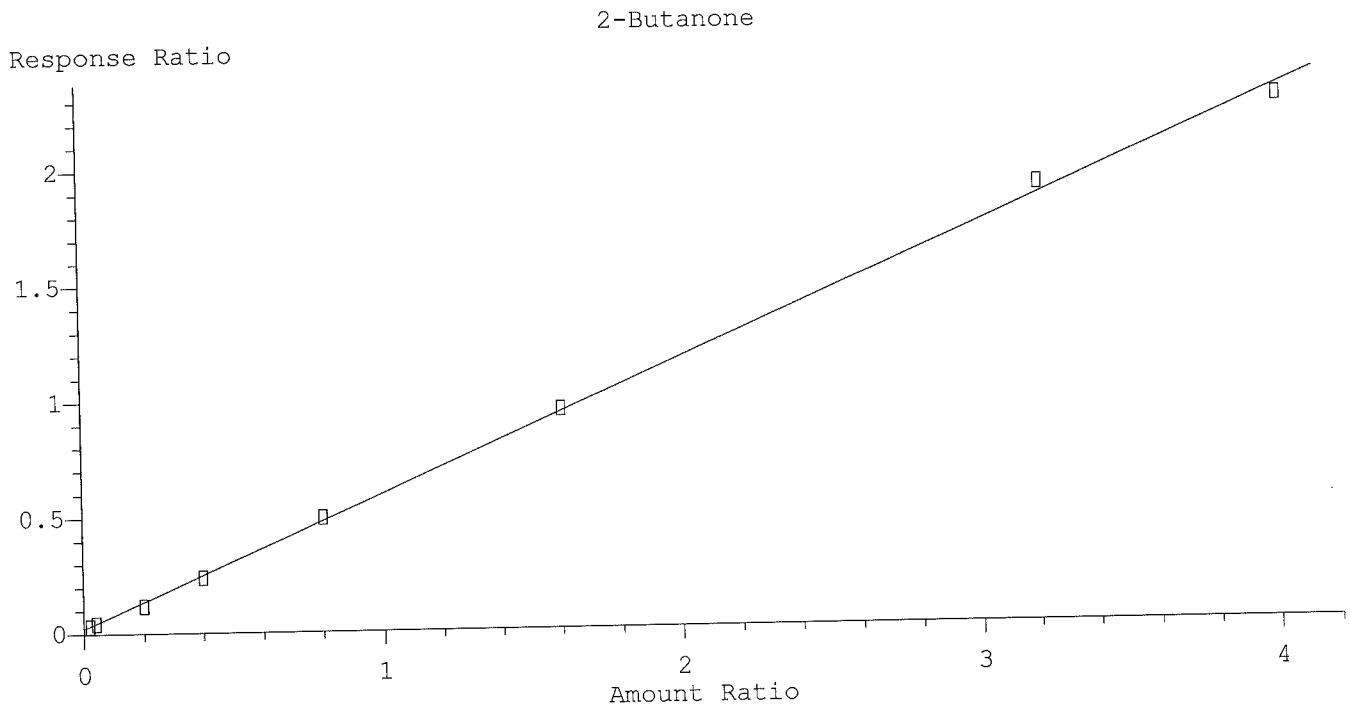


Resp Ratio = 1.78e+000 * Amt
RF Rel Std Dev = 3.5% Curve Fit: Avg RF

Calibration Plot Report

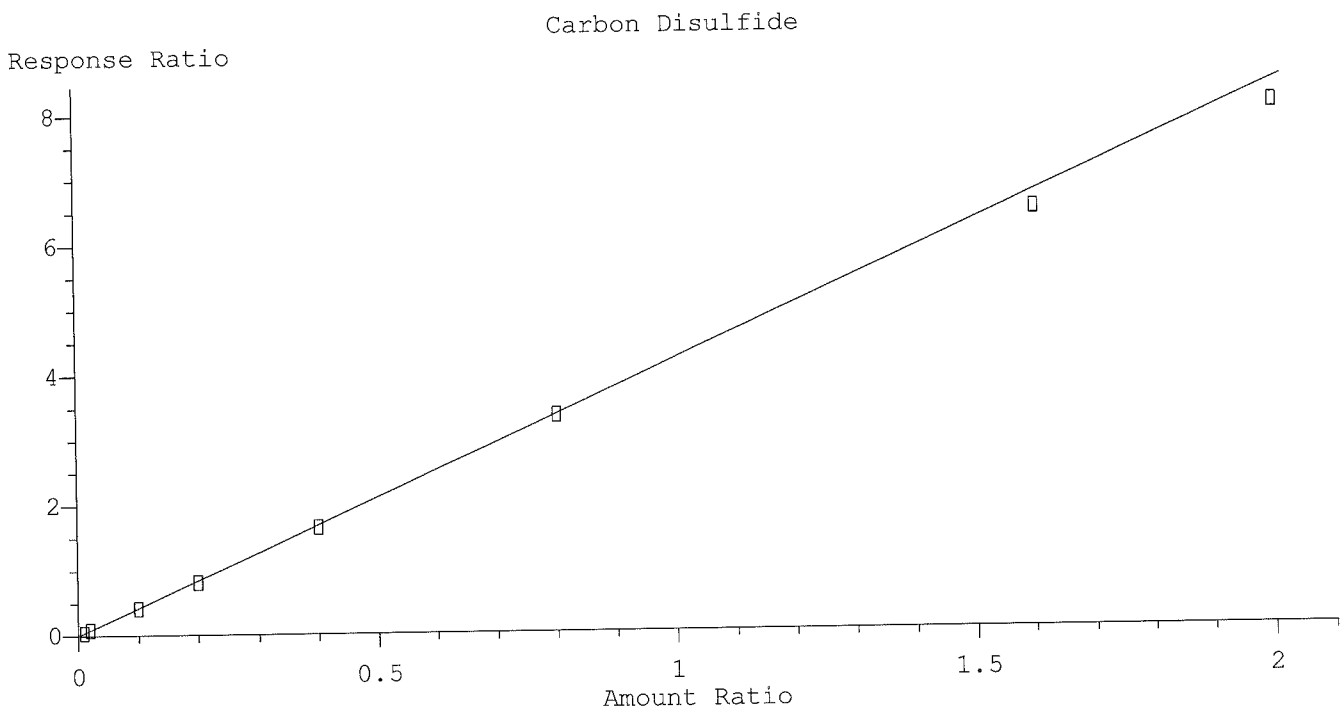


Resp Ratio = 3.97e-001 * Amt + 4.64e-002
Coef of Det (r^2) = 0.999 Curve Fit: Linear

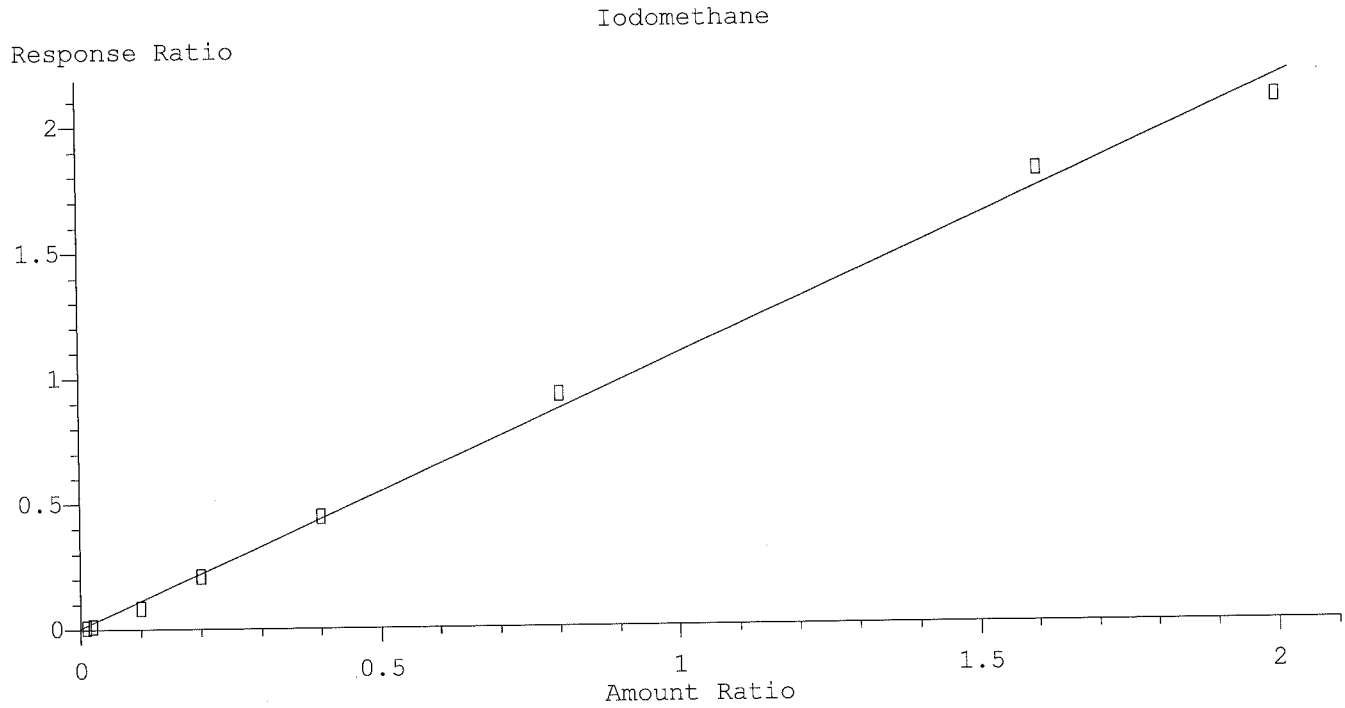


Resp Ratio = 5.71e-001 * Amt + 2.25e-002
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Calibration Plot Report

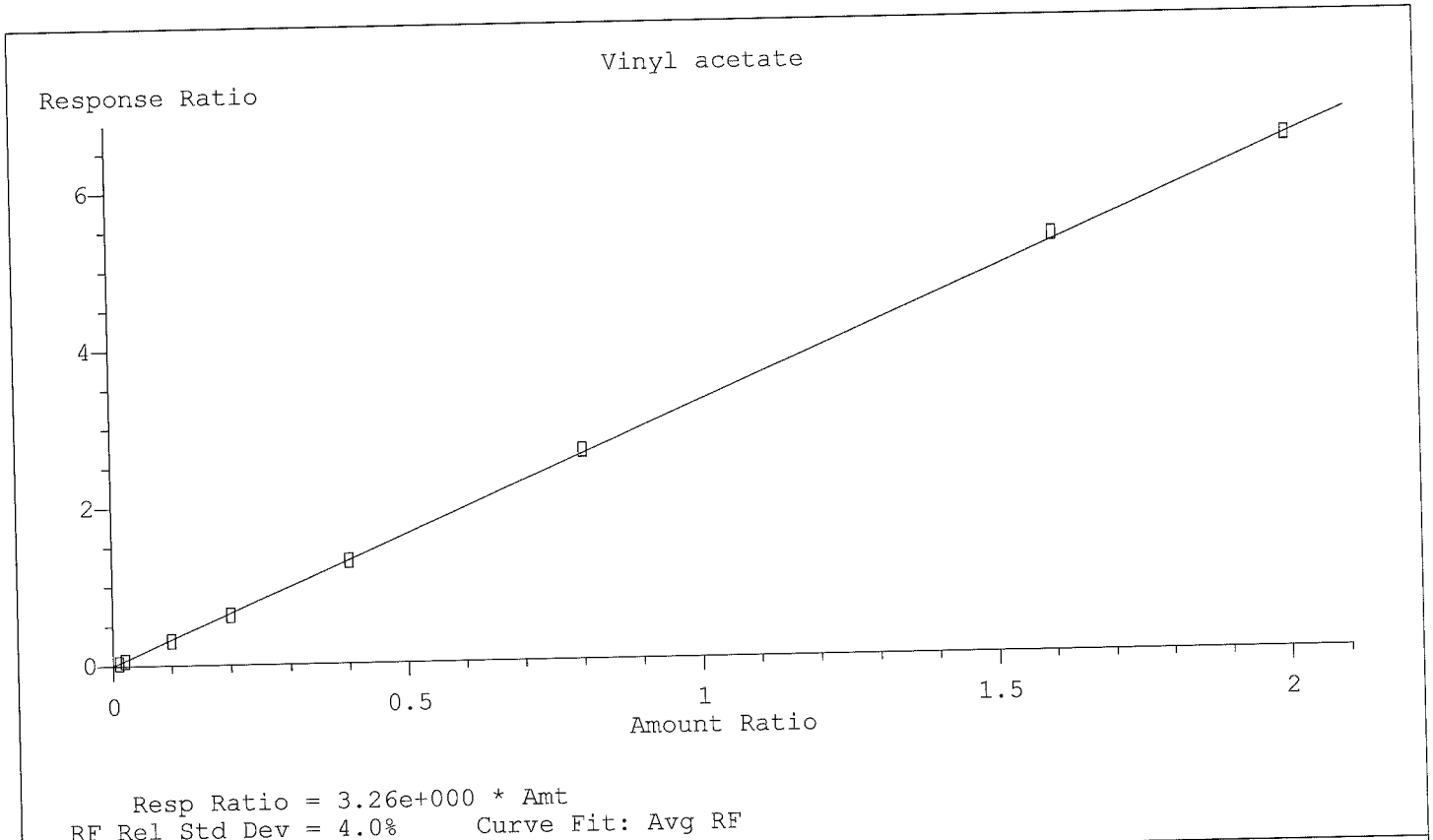


Resp Ratio = 4.20e+000 * Amt
RF Rel Std Dev = 5.1% Curve Fit: Avg RF

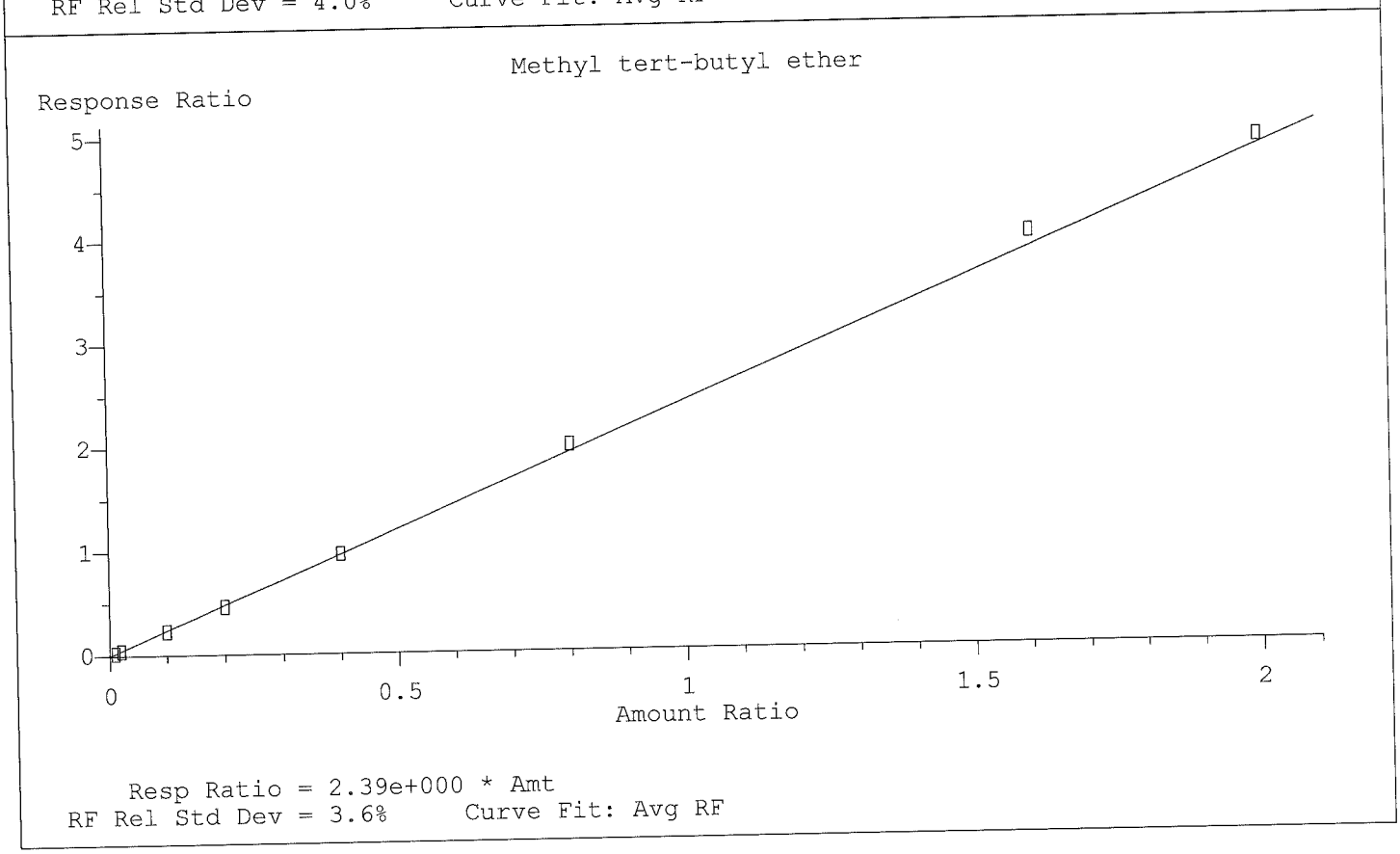


Resp Ratio = 1.08e+000 * Amt + 4.64e-003
Coef of Det (r^2) = 0.997 Curve Fit: Linear

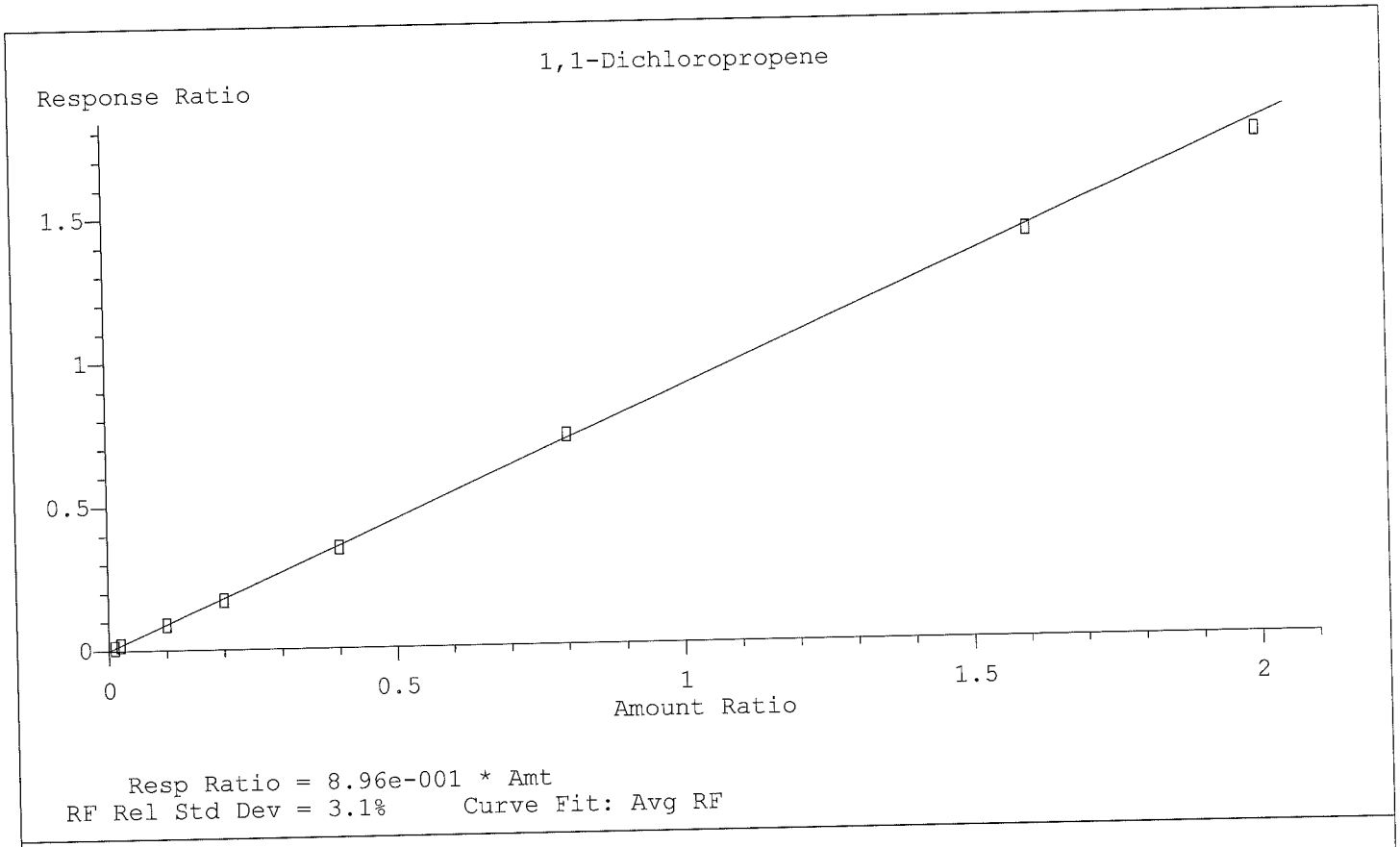
Calibration Plot Report



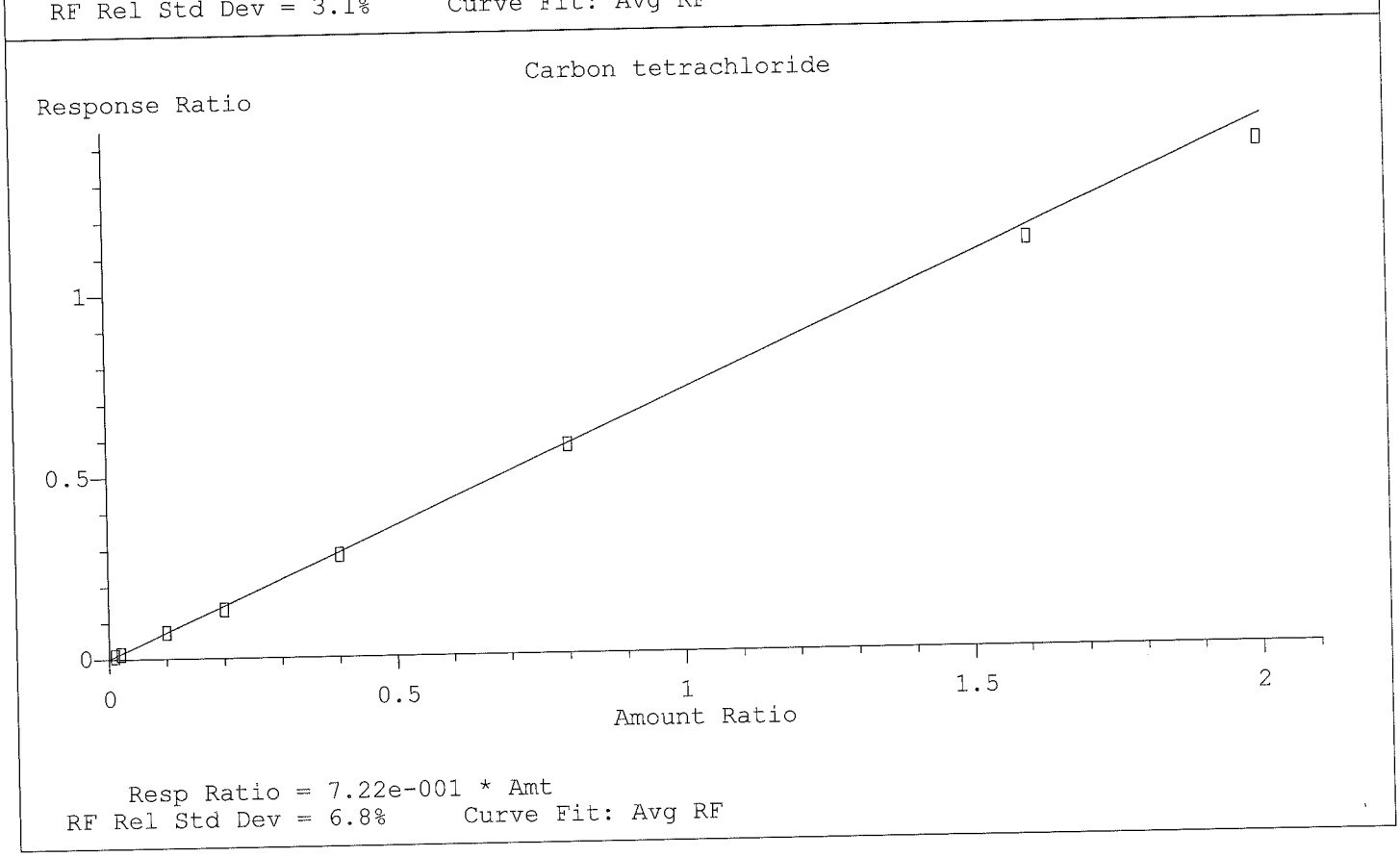
Resp Ratio = 3.26e+000 * Amt
RF Rel Std Dev = 4.0% Curve Fit: Avg RF



Resp Ratio = 2.39e+000 * Amt
RF Rel Std Dev = 3.6% Curve Fit: Avg RF

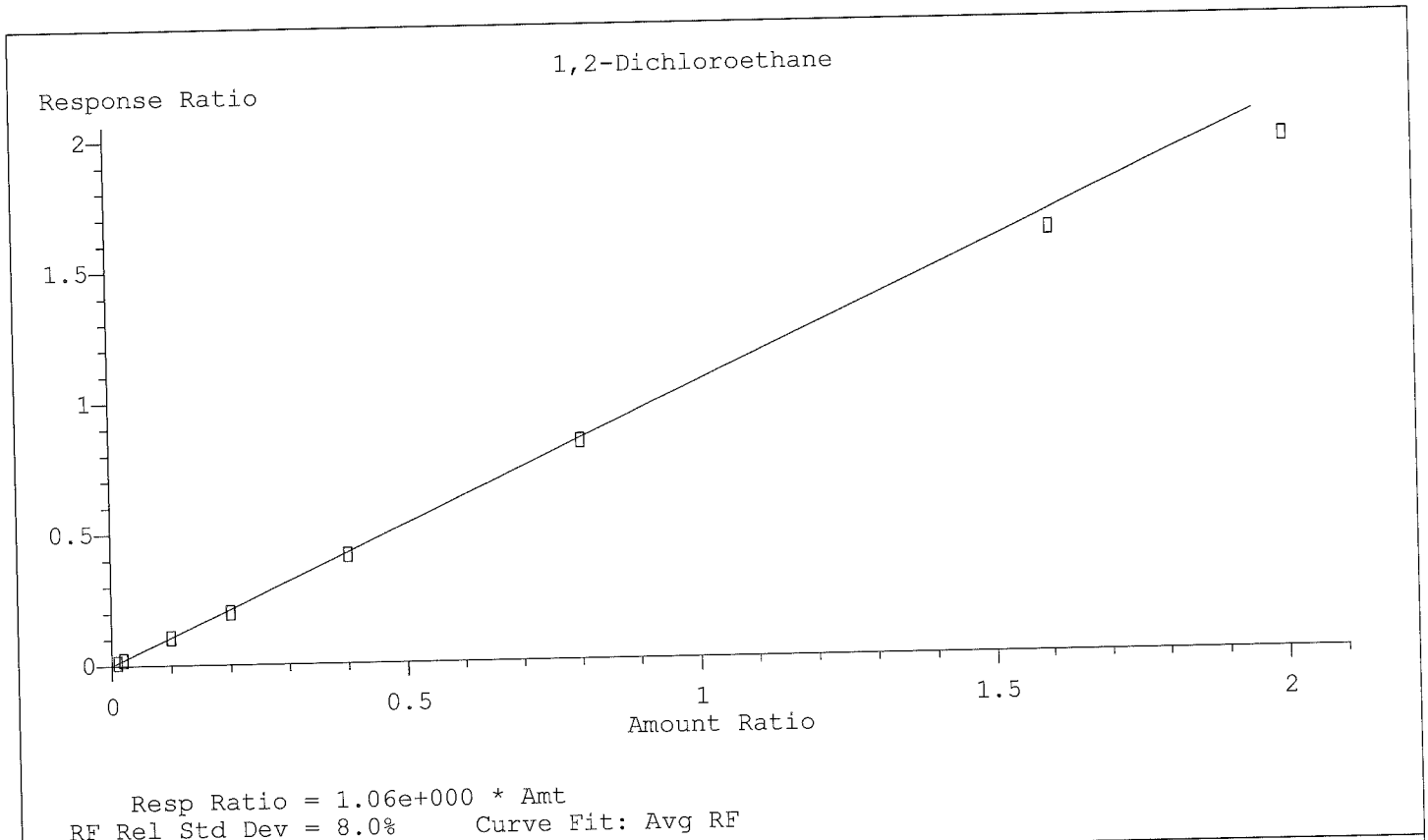


Resp Ratio = 8.96e-001 * Amt
RF Rel Std Dev = 3.1% Curve Fit: Avg RF

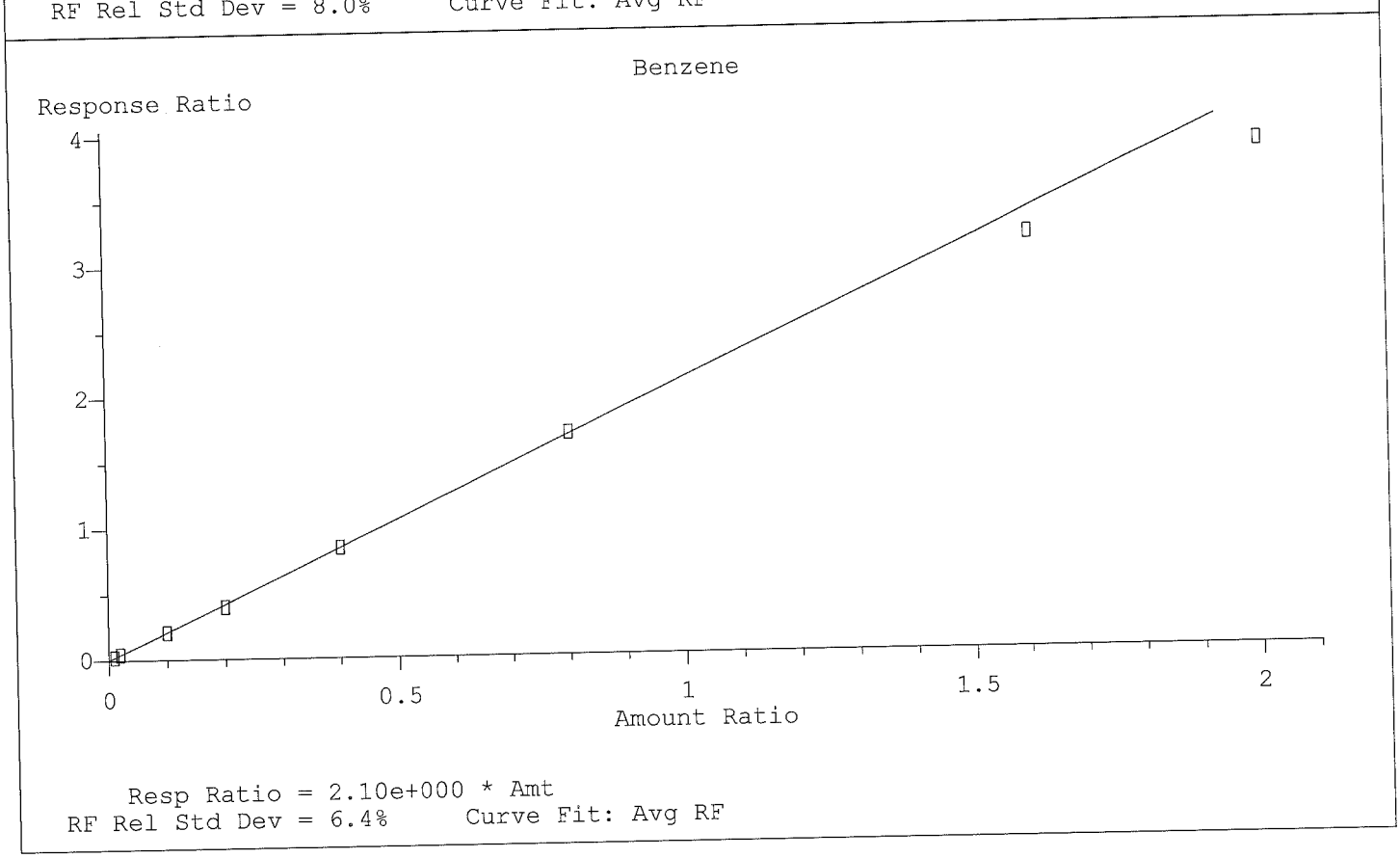


Resp Ratio = 7.22e-001 * Amt
RF Rel Std Dev = 6.8% Curve Fit: Avg RF

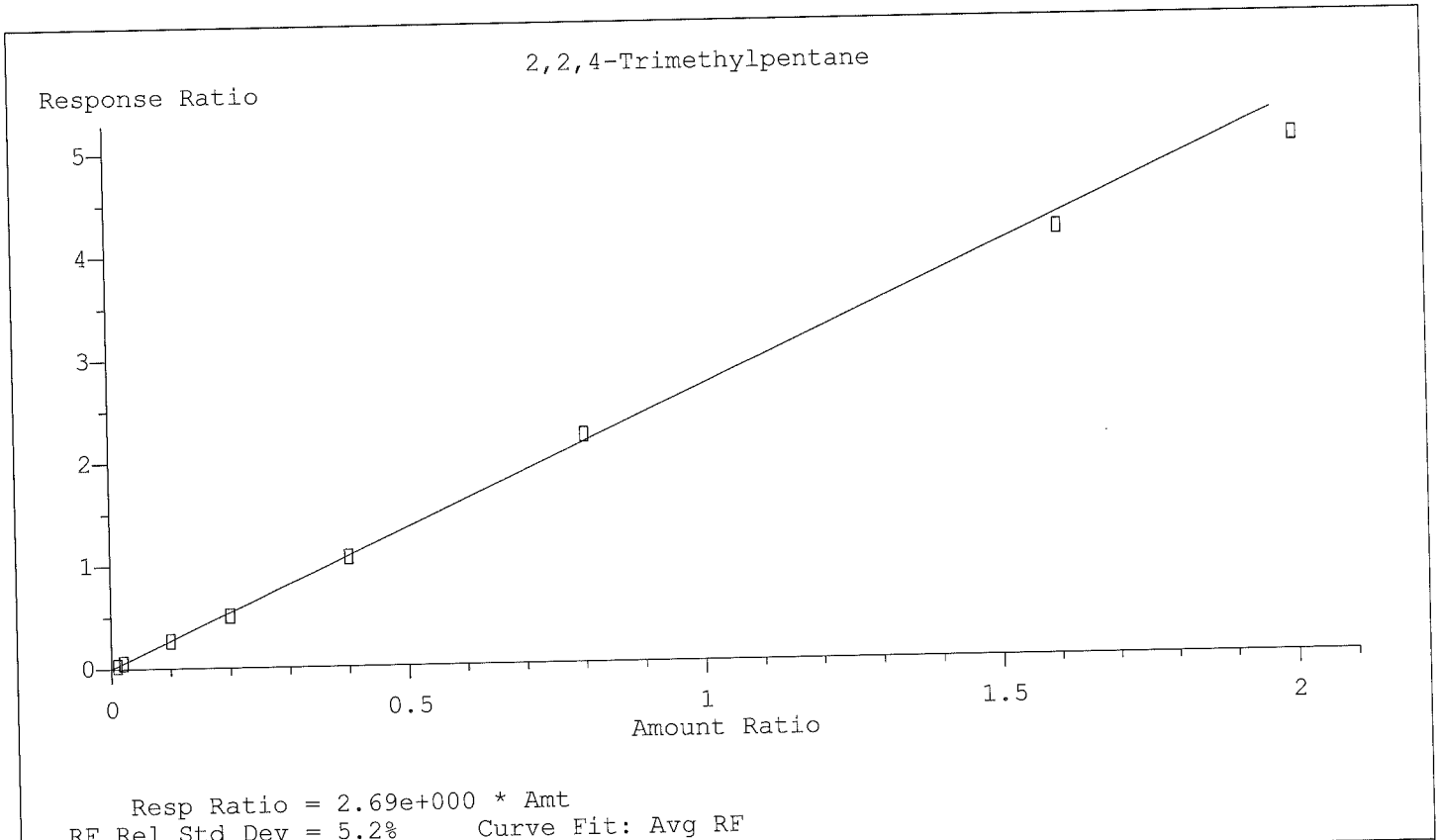
Calibration Plot Report



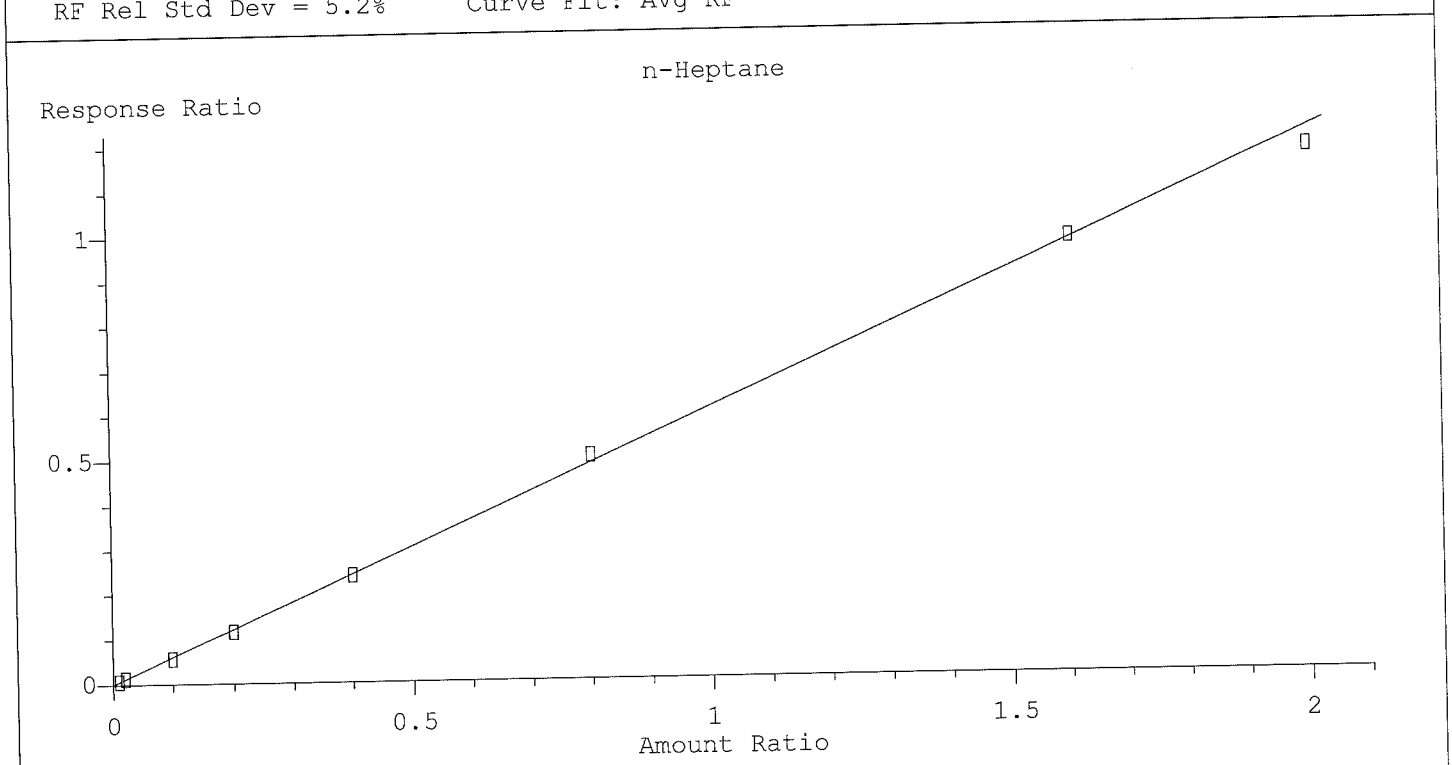
Resp Ratio = 1.06e+000 * Amt
RF Rel Std Dev = 8.0% Curve Fit: Avg RF



Resp Ratio = 2.10e+000 * Amt
RF Rel Std Dev = 6.4% Curve Fit: Avg RF

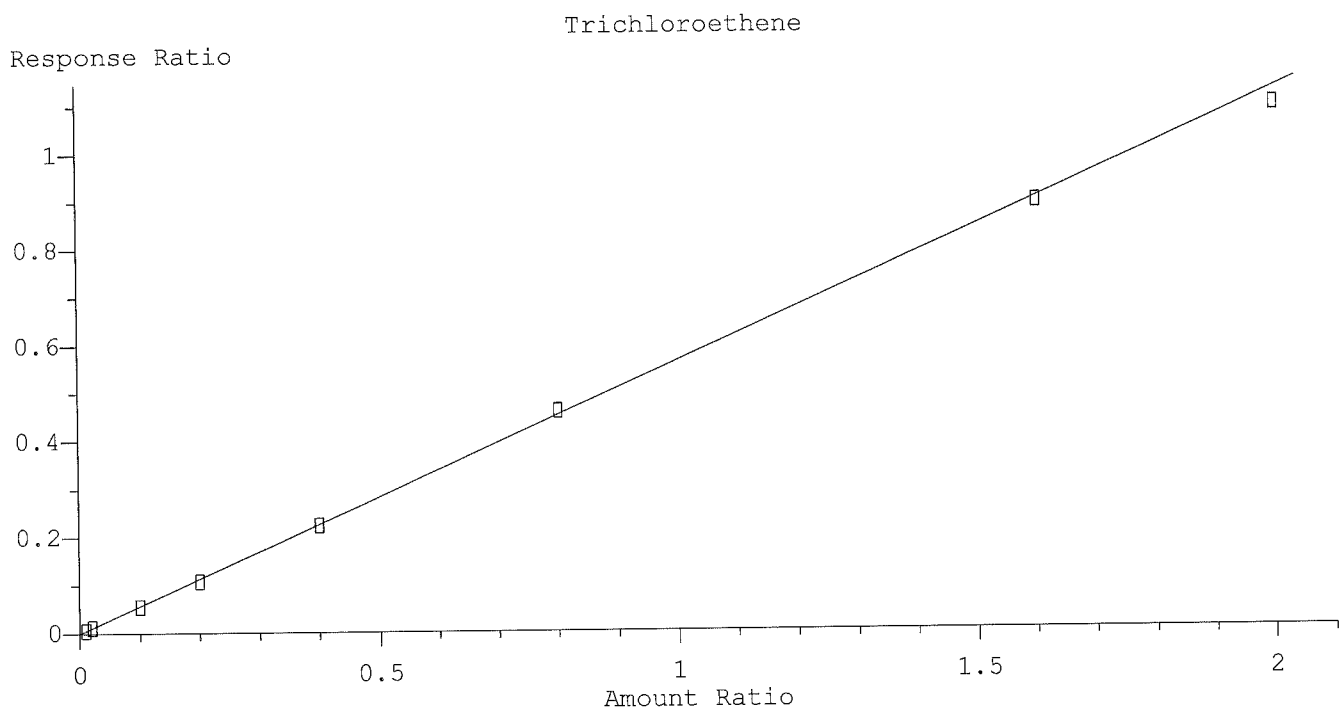


Resp Ratio = 2.69e+000 * Amt
RF Rel Std Dev = 5.2% Curve Fit: Avg RF

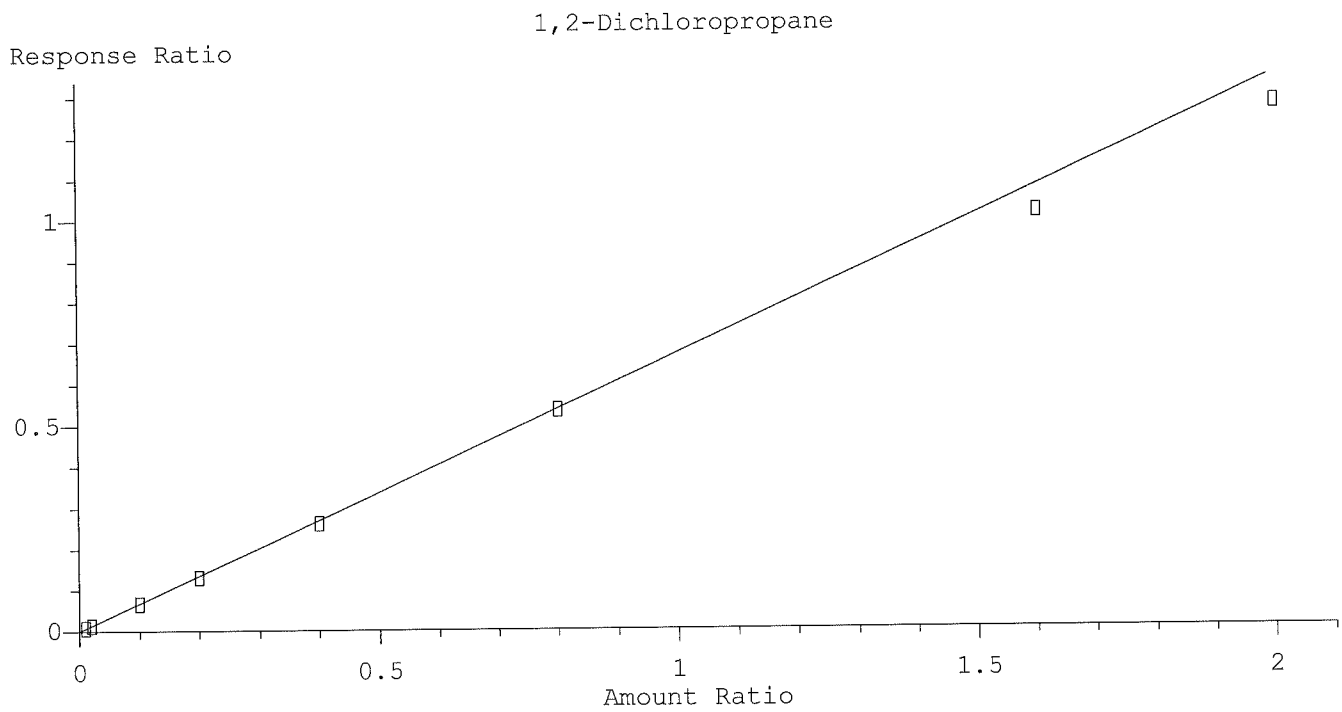


Resp Ratio = 6.06e-001 * Amt
RF Rel Std Dev = 5.0% Curve Fit: Avg RF

Calibration Plot Report

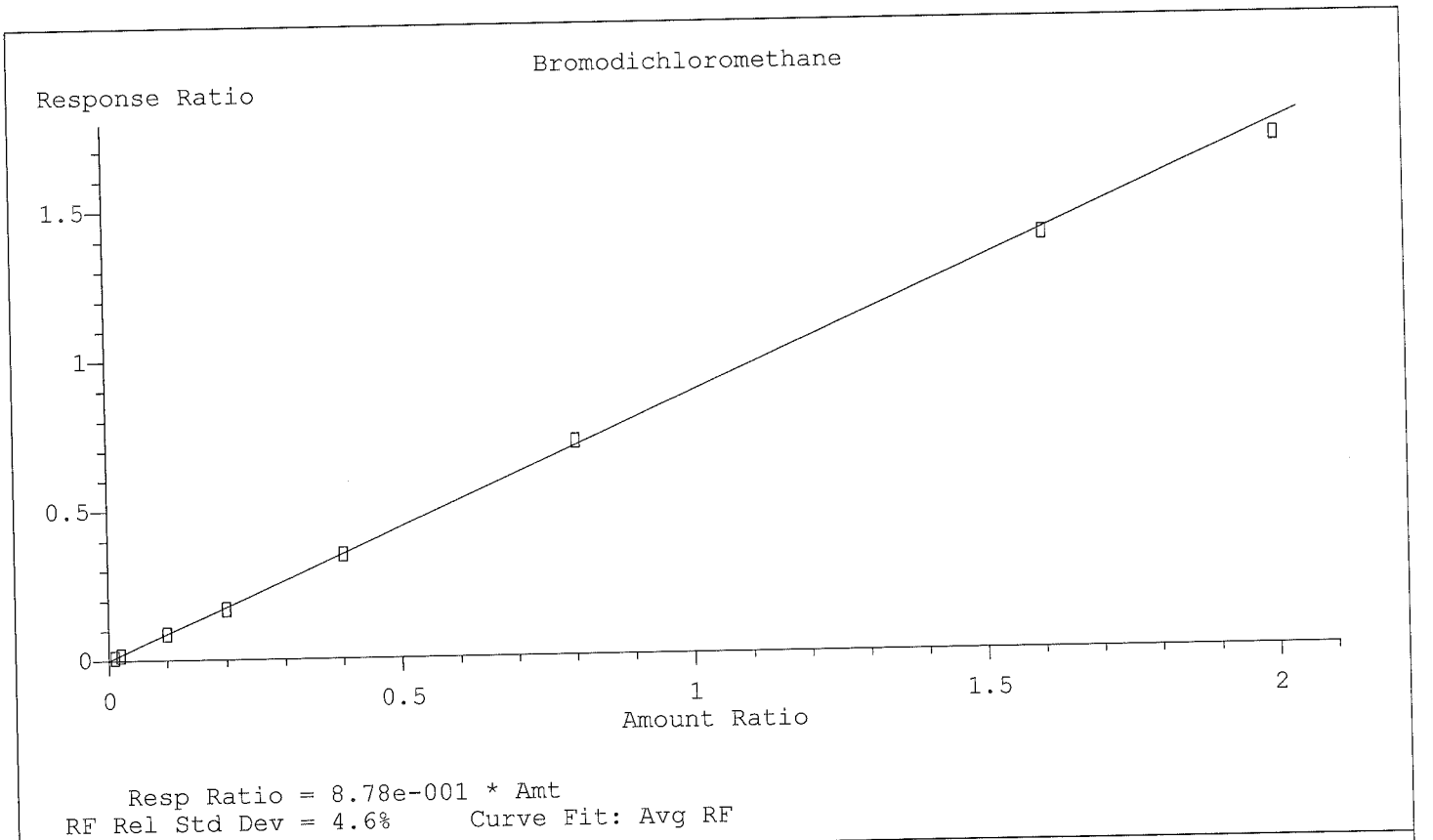


Resp Ratio = 5.63e-001 * Amt
RF Rel Std Dev = 3.6% Curve Fit: Avg RF

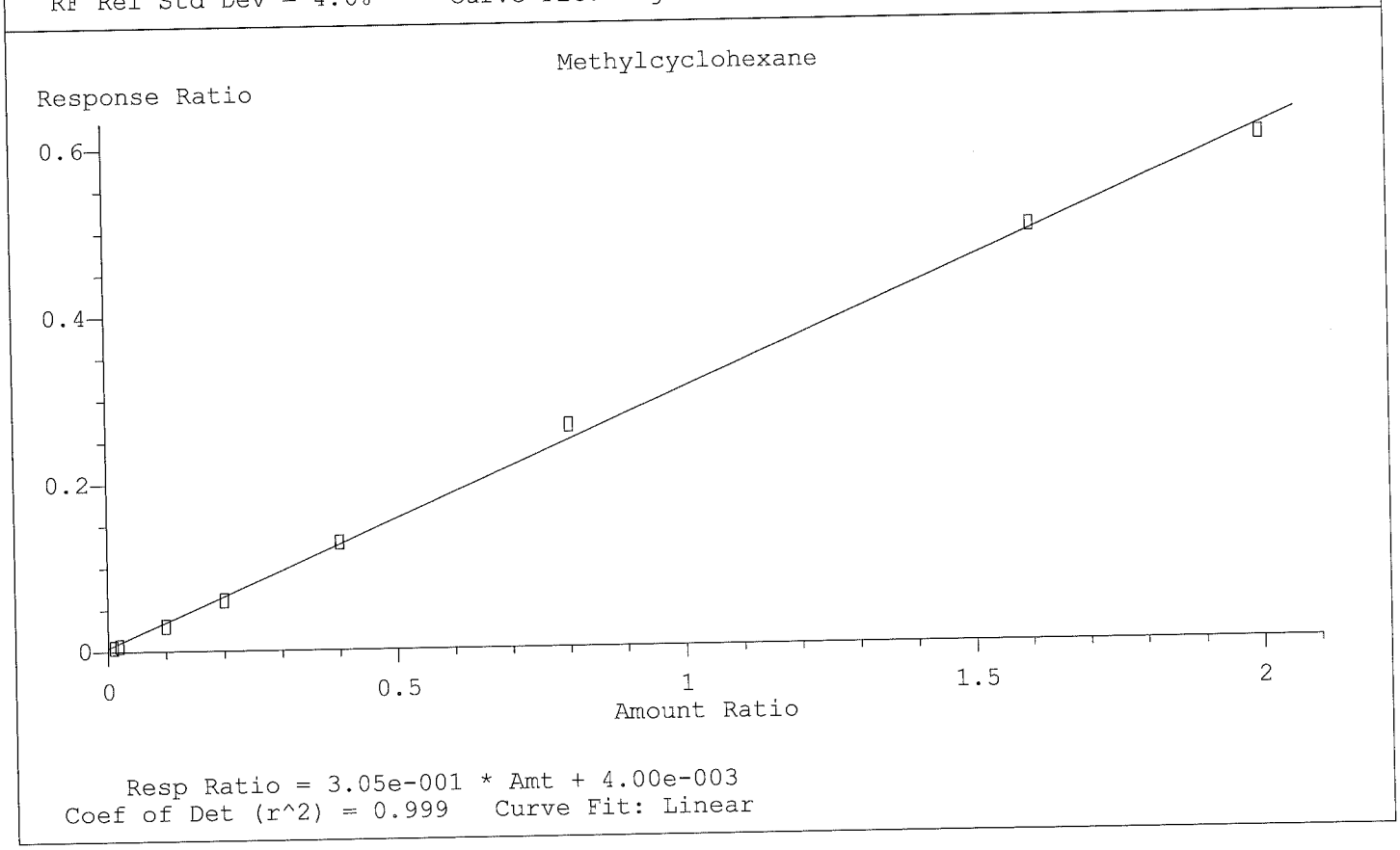


Resp Ratio = 6.73e-001 * Amt
RF Rel Std Dev = 7.2% Curve Fit: Avg RF

Calibration Plot Report

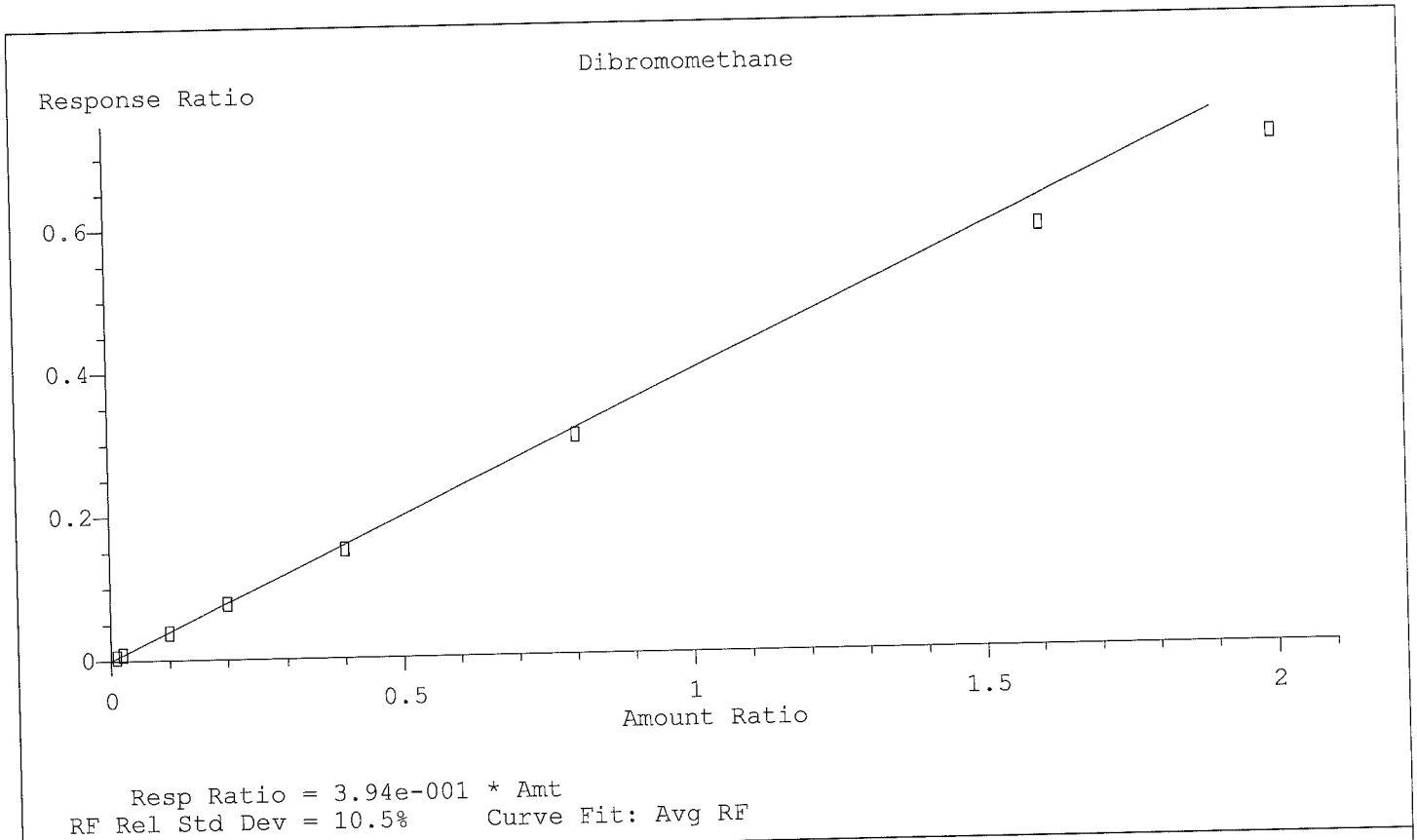


Resp Ratio = 8.78e-001 * Amt
RF Rel Std Dev = 4.6% Curve Fit: Avg RF

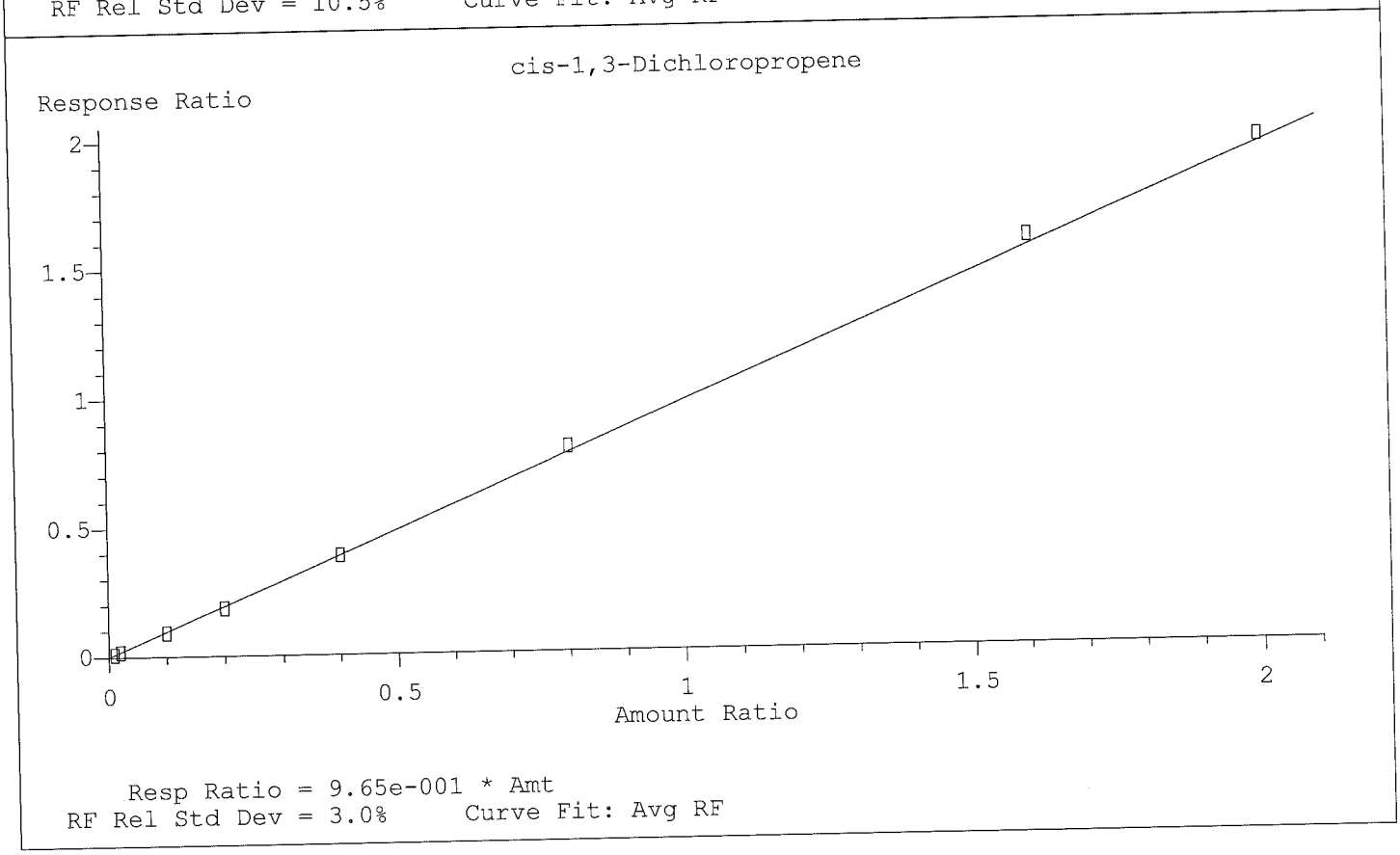


Resp Ratio = 3.05e-001 * Amt + 4.00e-003
Coef of Det (r^2) = 0.999 Curve Fit: Linear

Calibration Plot Report

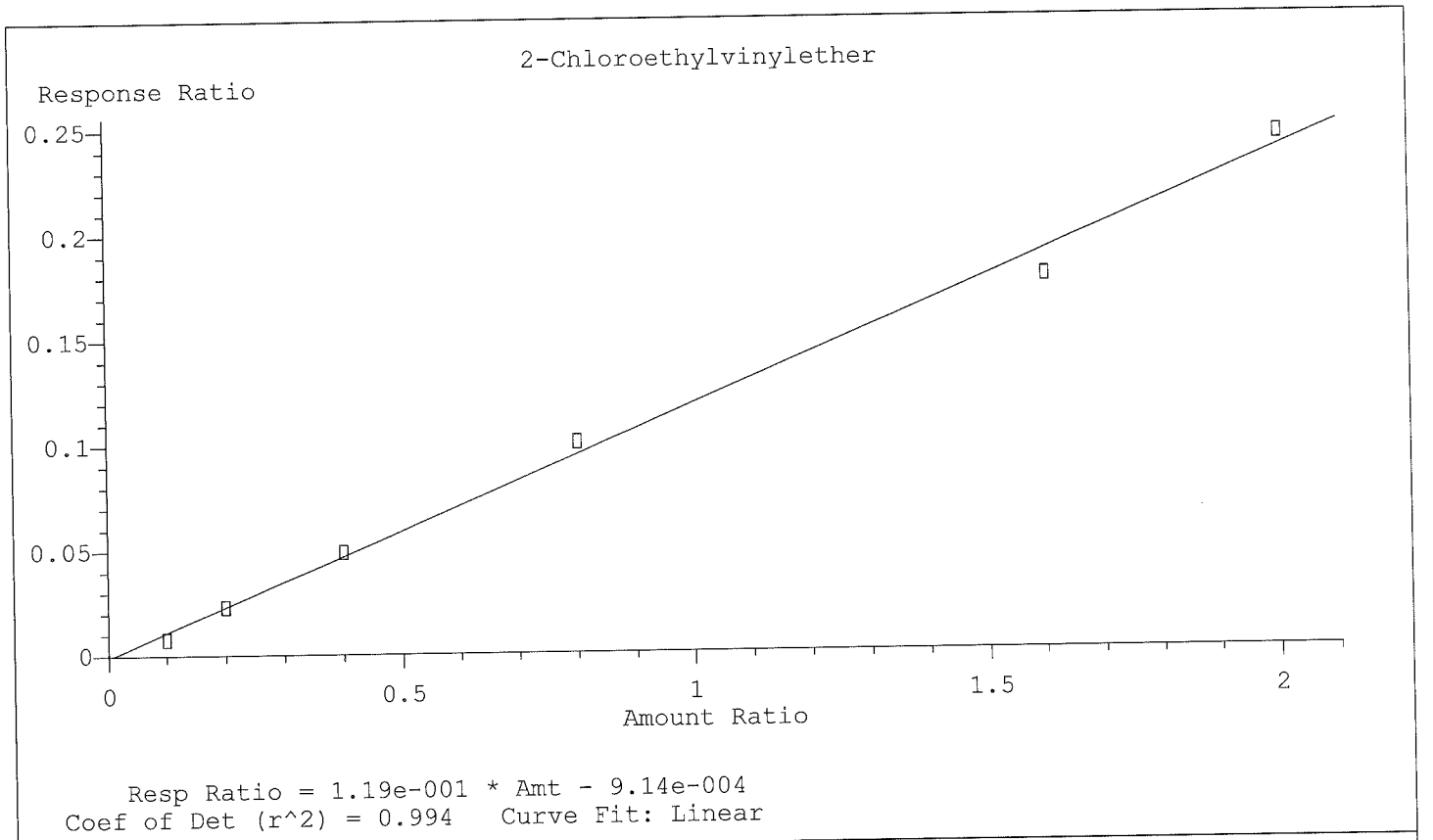


Resp Ratio = 3.94e-001 * Amt
RF Rel Std Dev = 10.5% Curve Fit: Avg RF

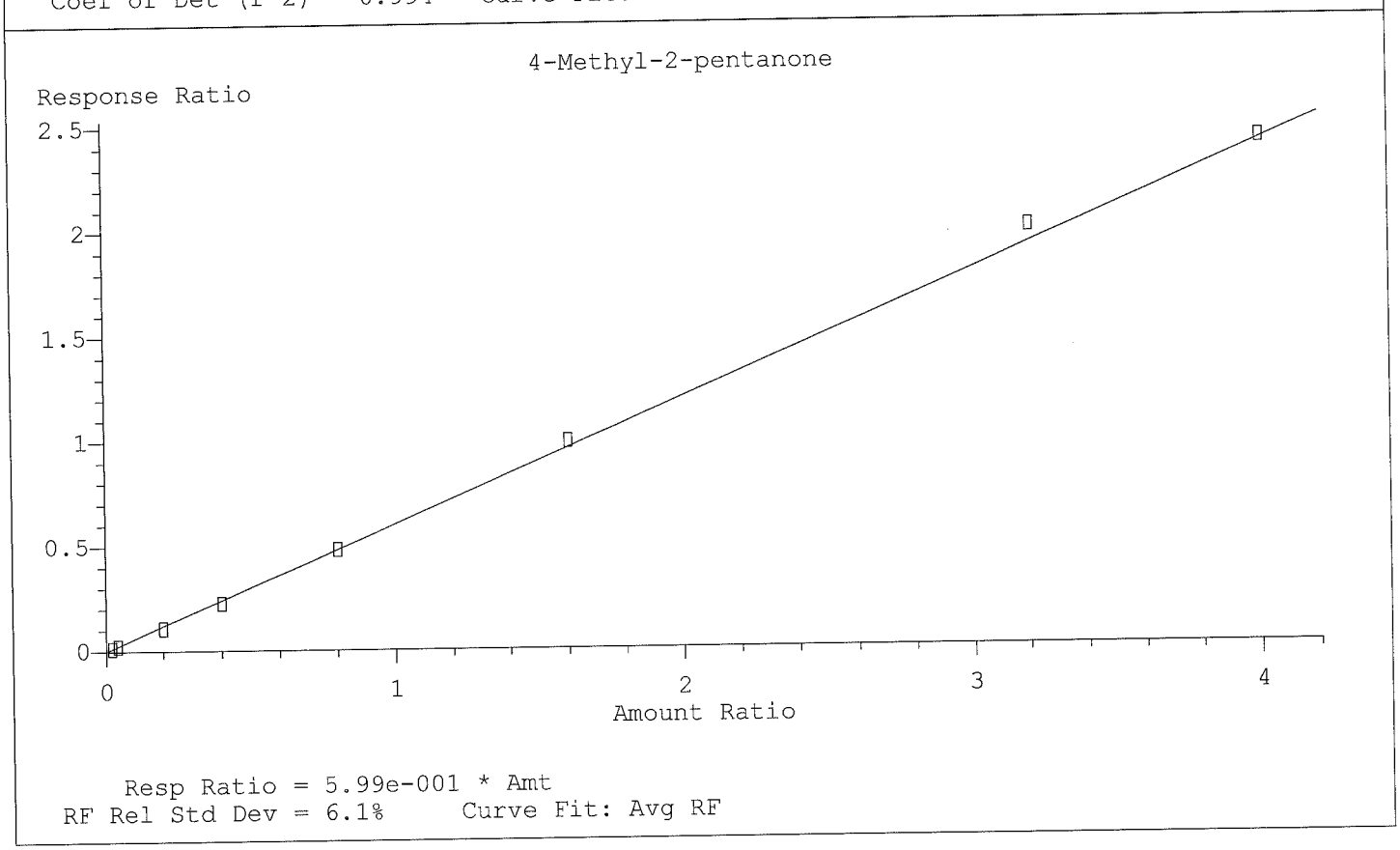


Resp Ratio = 9.65e-001 * Amt
RF Rel Std Dev = 3.0% Curve Fit: Avg RF

Calibration Plot Report

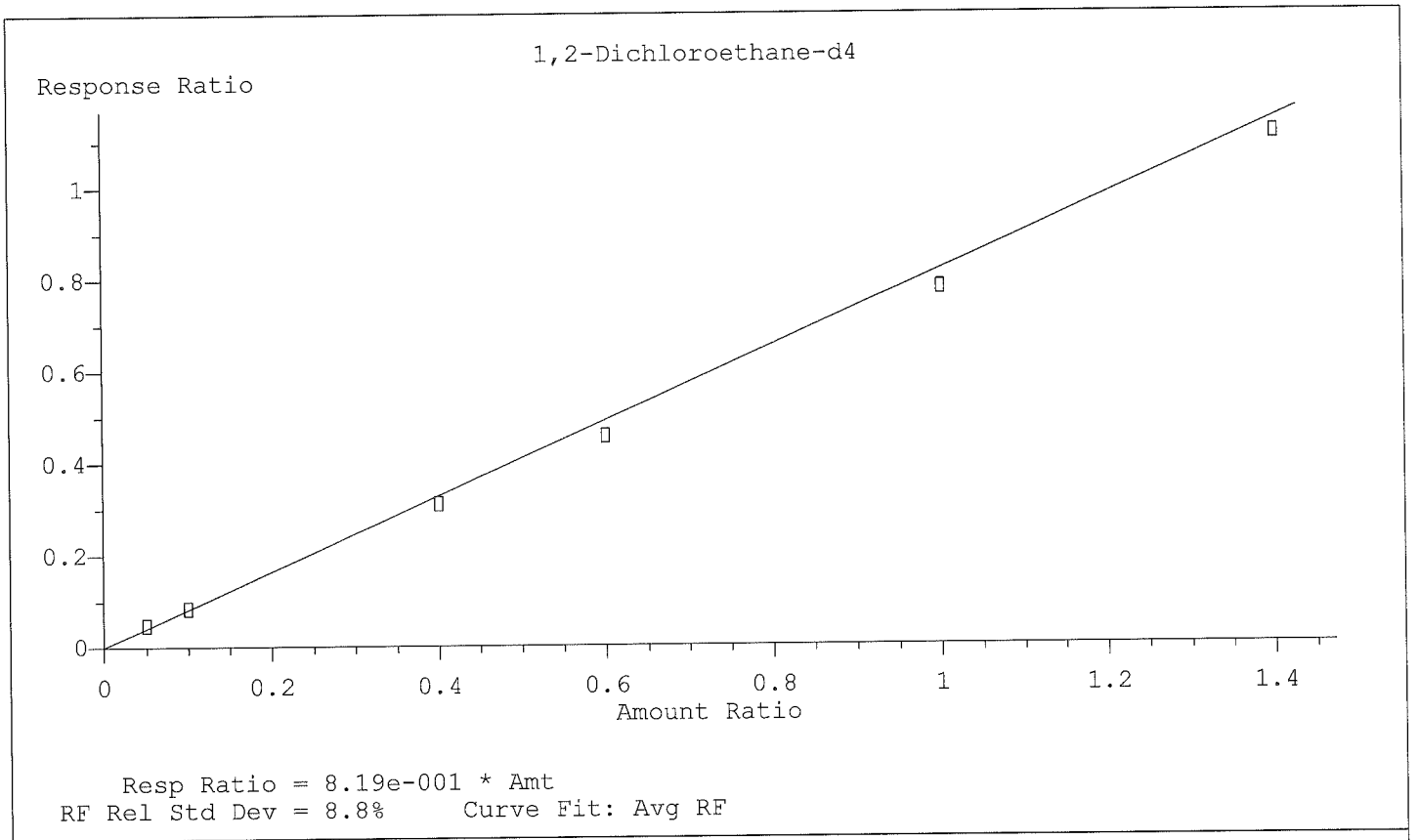


Resp Ratio = 1.19e-001 * Amt - 9.14e-004
Coef of Det (r^2) = 0.994 Curve Fit: Linear

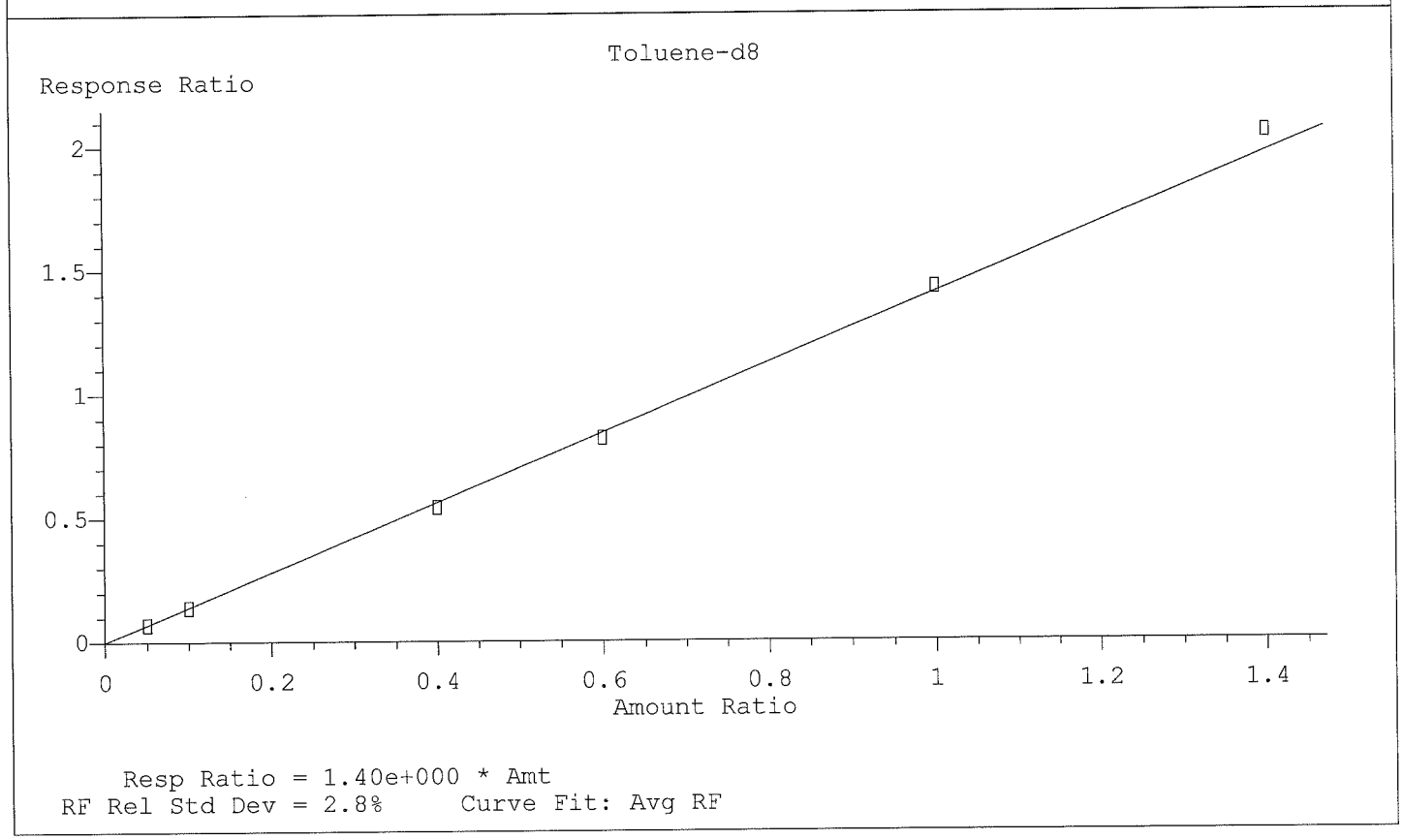


Resp Ratio = 5.99e-001 * Amt
RF Rel Std Dev = 6.1% Curve Fit: Avg RF

Calibration Plot Report

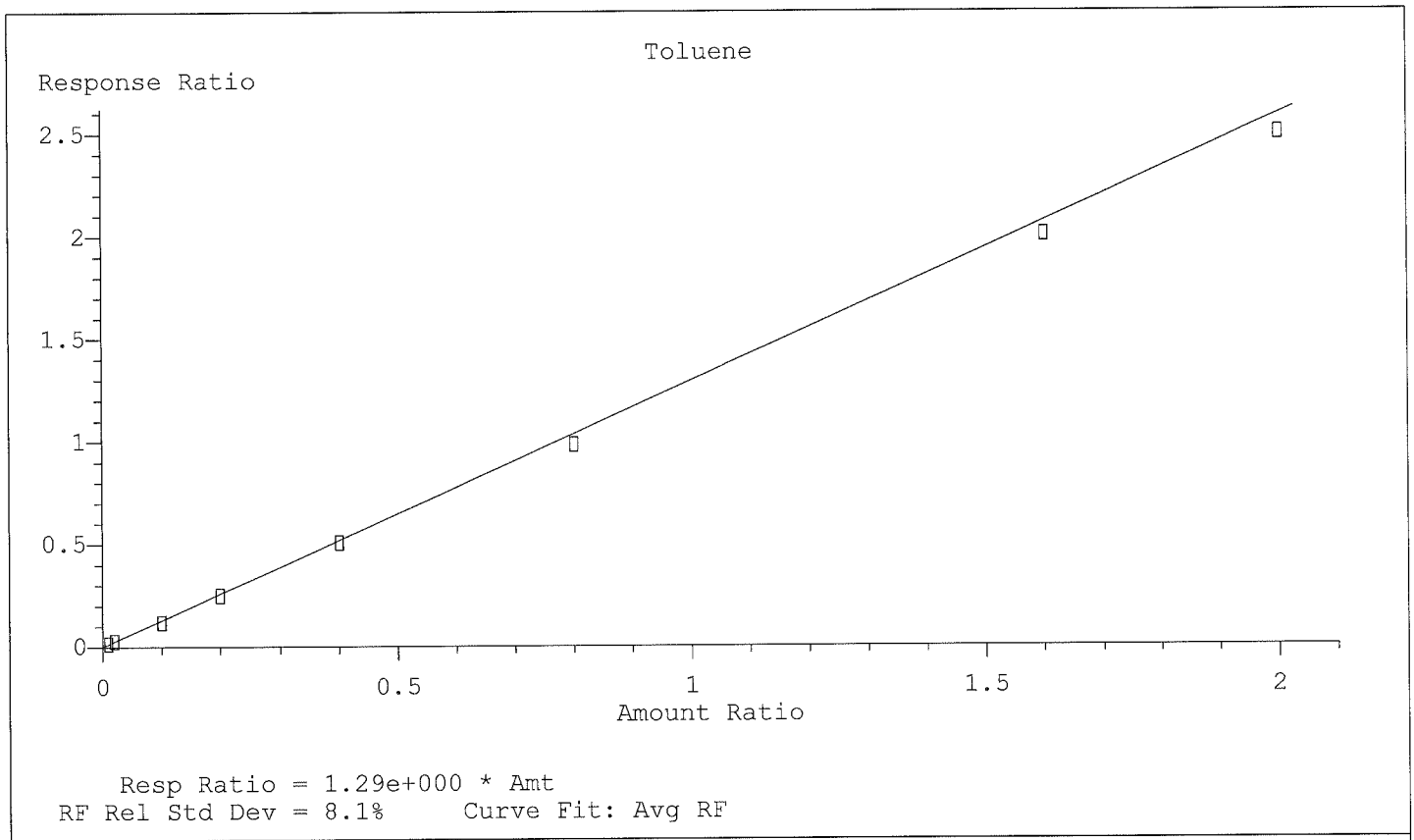


Resp Ratio = 8.19e-001 * Amt
RF Rel Std Dev = 8.8% Curve Fit: Avg RF

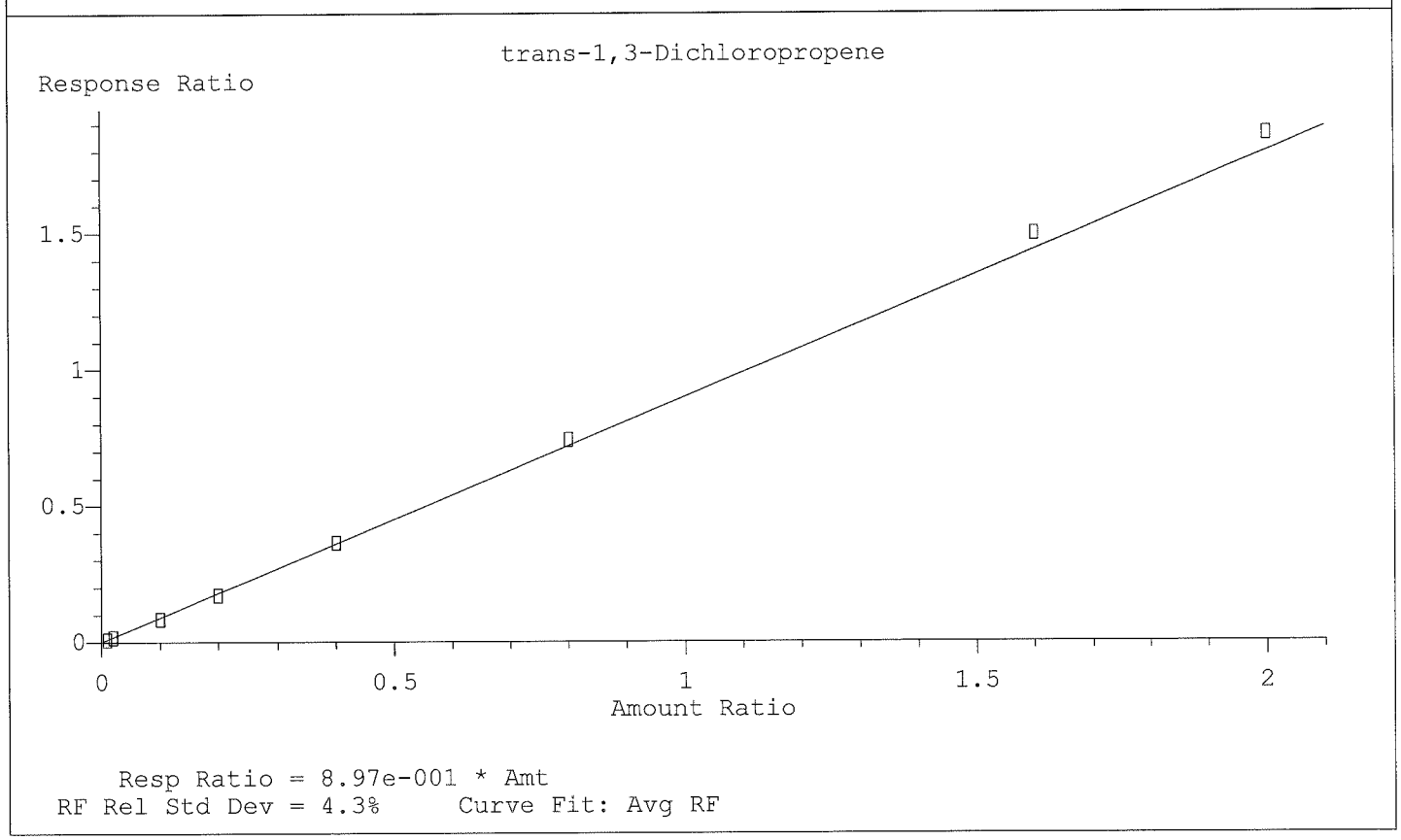


Resp Ratio = 1.40e+000 * Amt
RF Rel Std Dev = 2.8% Curve Fit: Avg RF

Calibration Plot Report

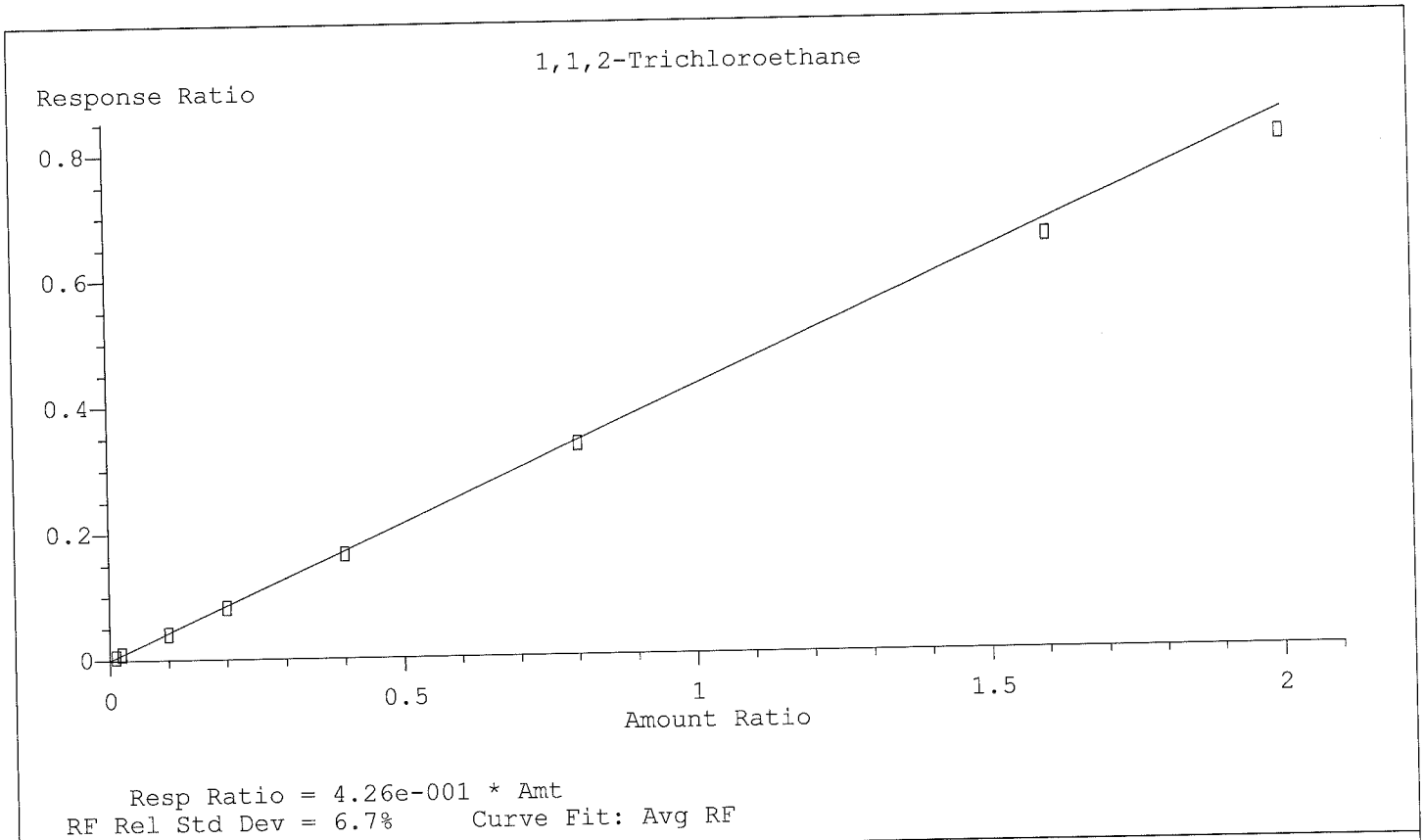


Resp Ratio = 1.29e+000 * Amt
RF Rel Std Dev = 8.1% Curve Fit: Avg RF

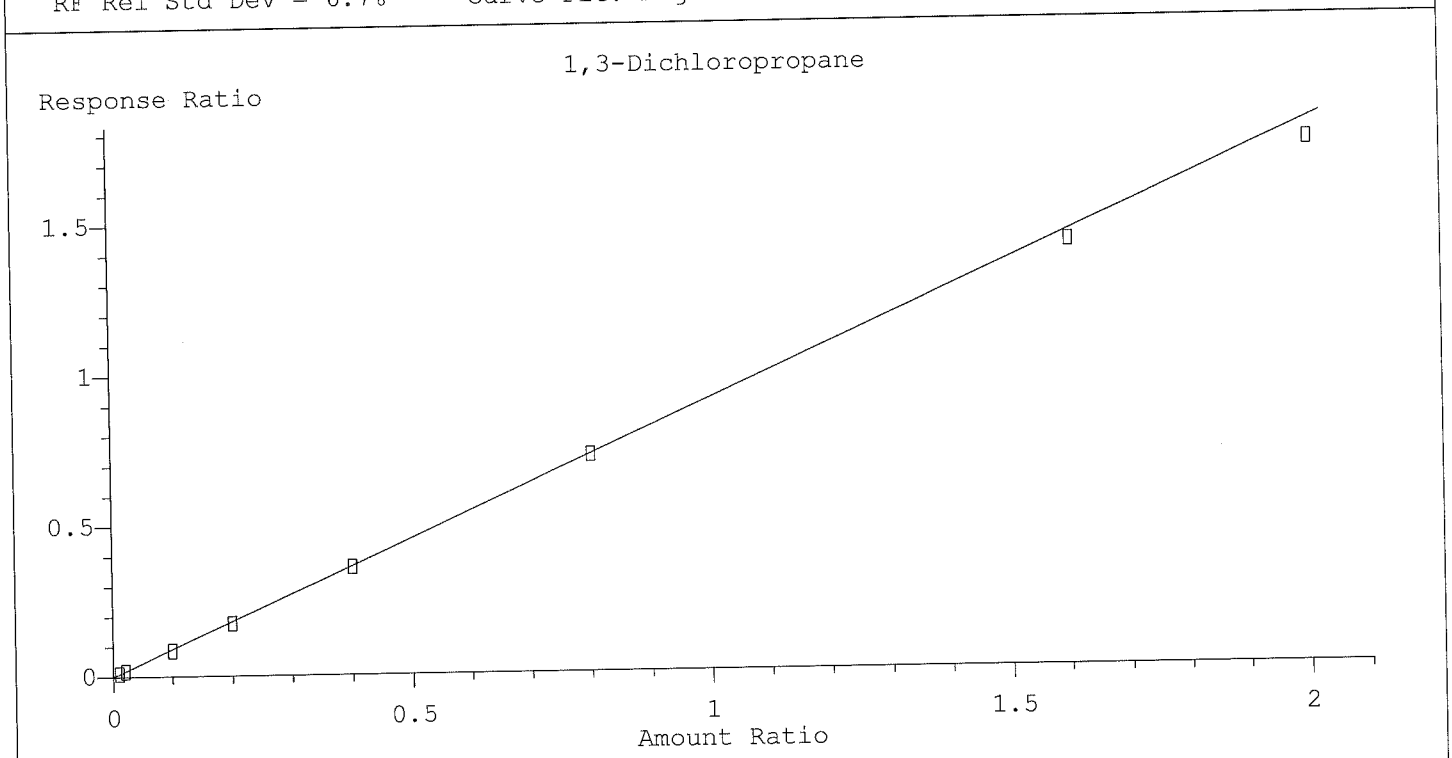


Resp Ratio = 8.97e-001 * Amt
RF Rel Std Dev = 4.3% Curve Fit: Avg RF

Calibration Plot Report

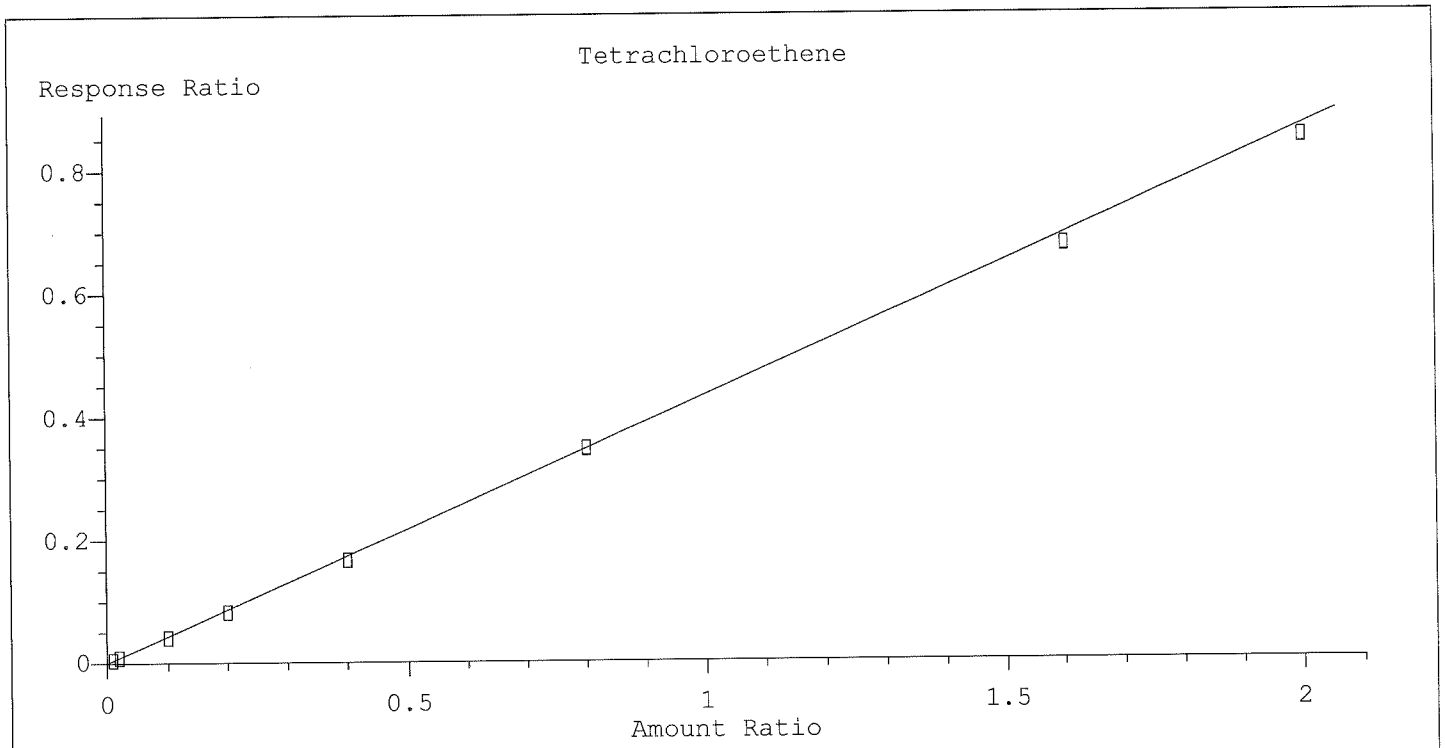


Resp Ratio = 4.26e-001 * Amt
RF Rel Std Dev = 6.7% Curve Fit: Avg RF

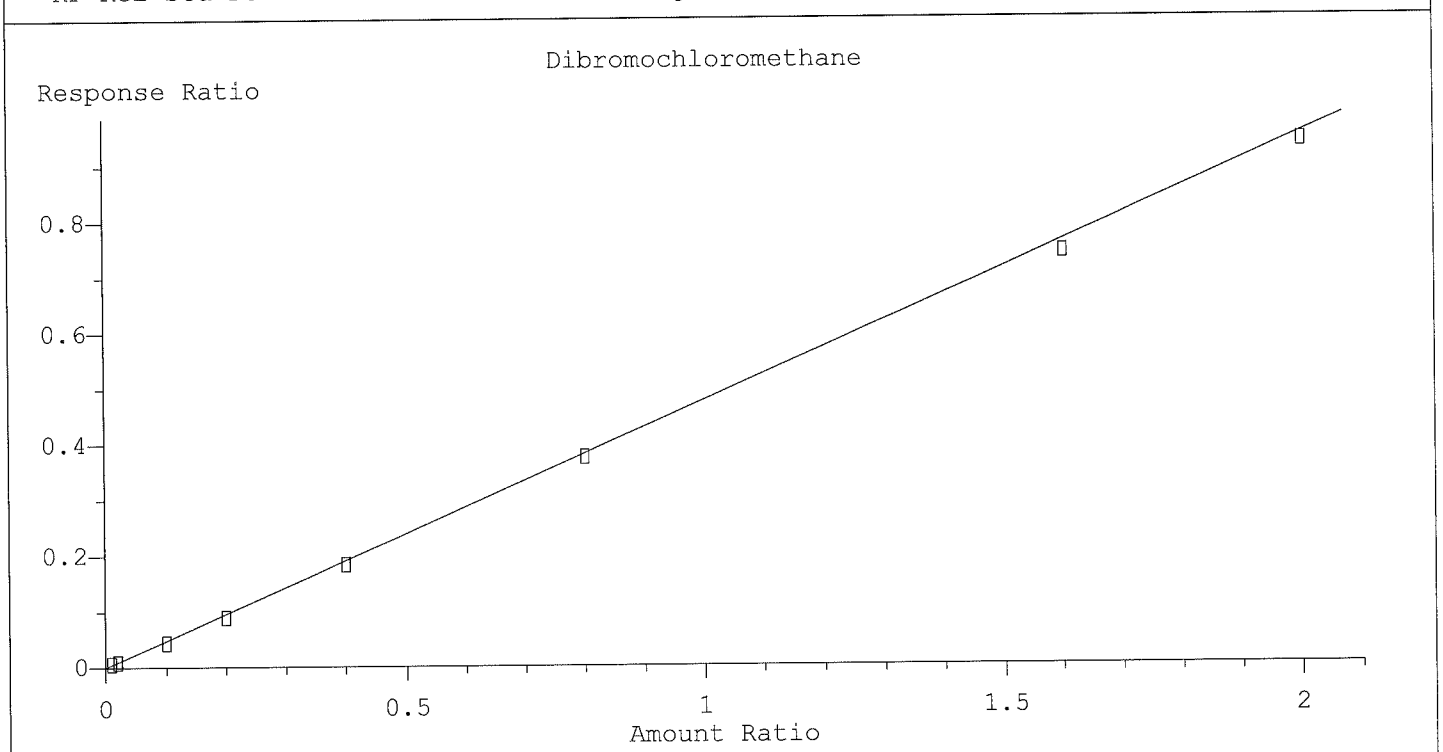


Resp Ratio = 9.05e-001 * Amt
RF Rel Std Dev = 6.5% Curve Fit: Avg RF

Calibration Plot Report

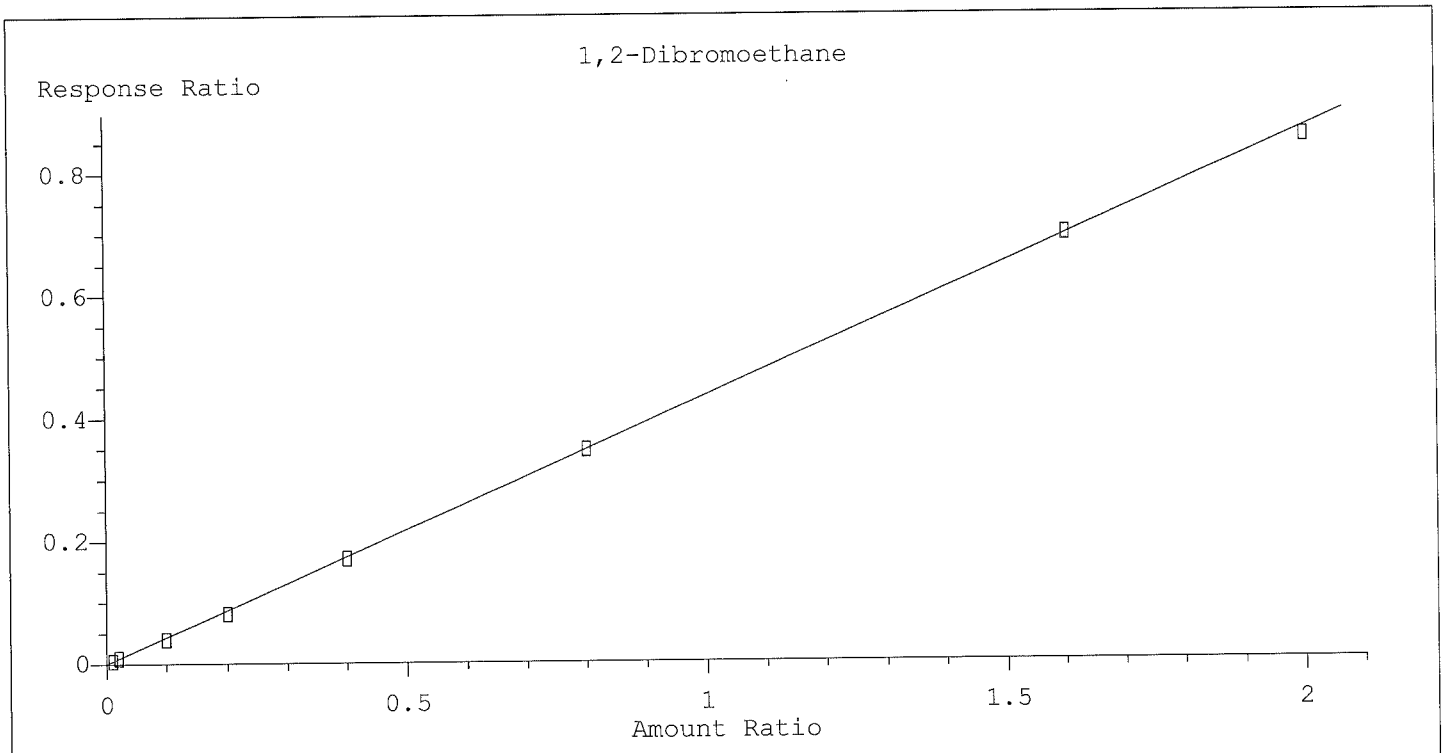


Resp Ratio = 4.33e-001 * Amt
RF Rel Std Dev = 6.3% Curve Fit: Avg RF

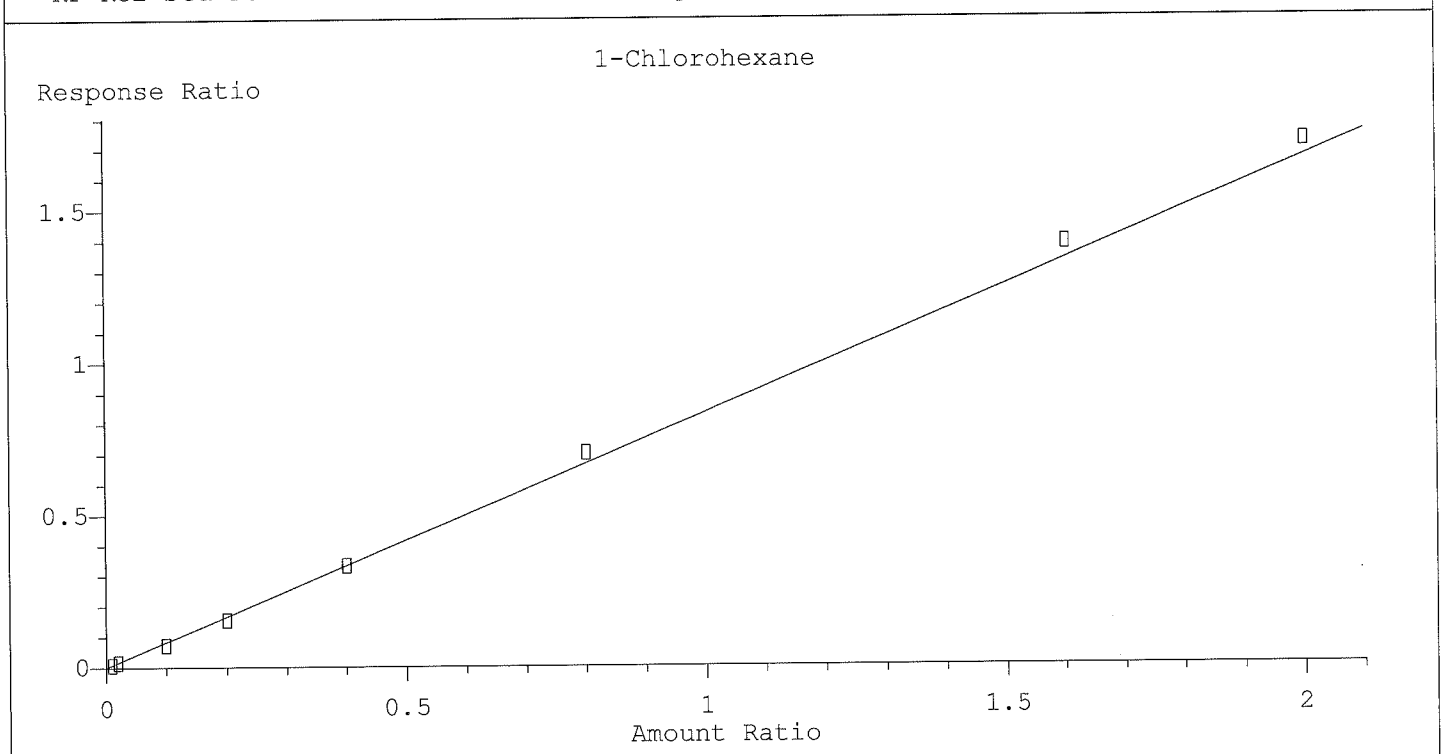


Resp Ratio = 4.77e-001 * Amt
RF Rel Std Dev = 12.0% Curve Fit: Avg RF

Calibration Plot Report

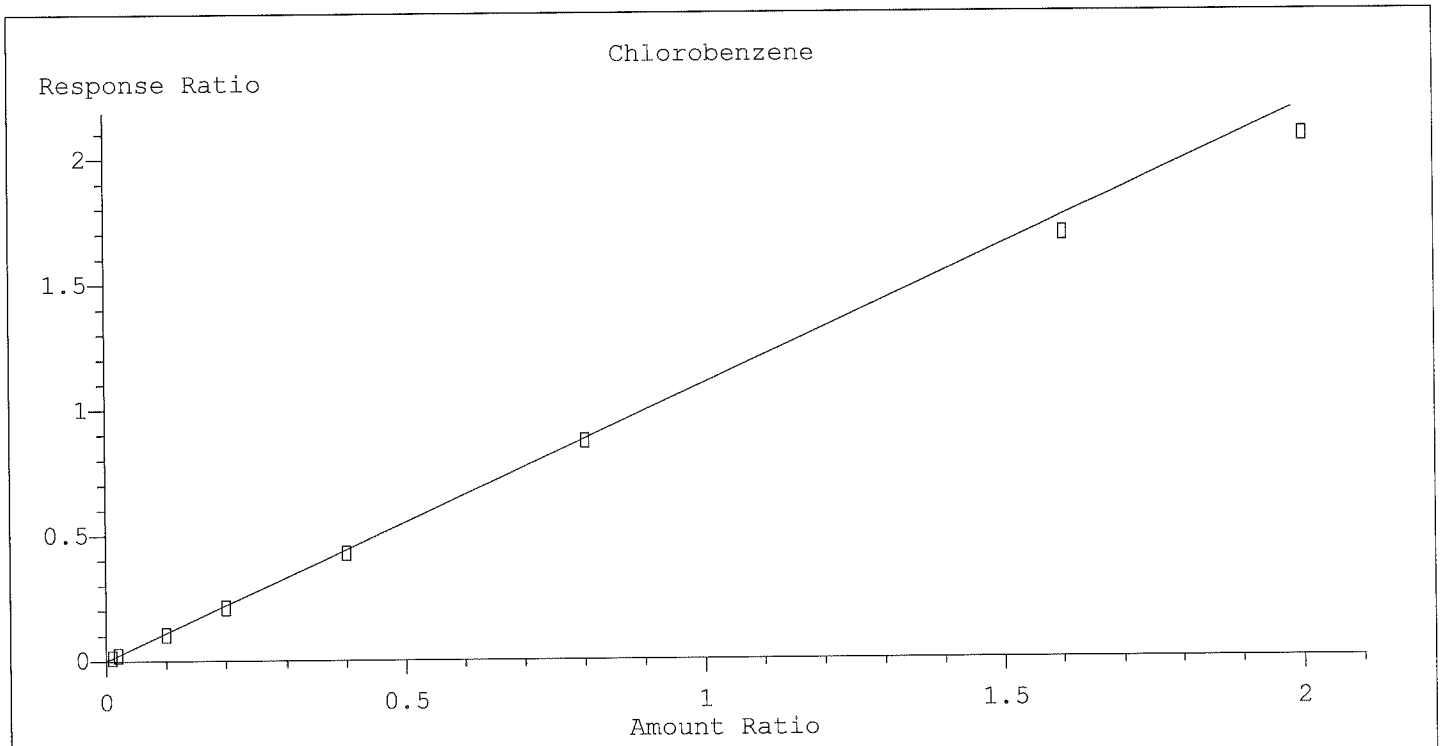


Resp Ratio = 4.34e-001 * Amt
RF Rel Std Dev = 6.4% Curve Fit: Avg RF

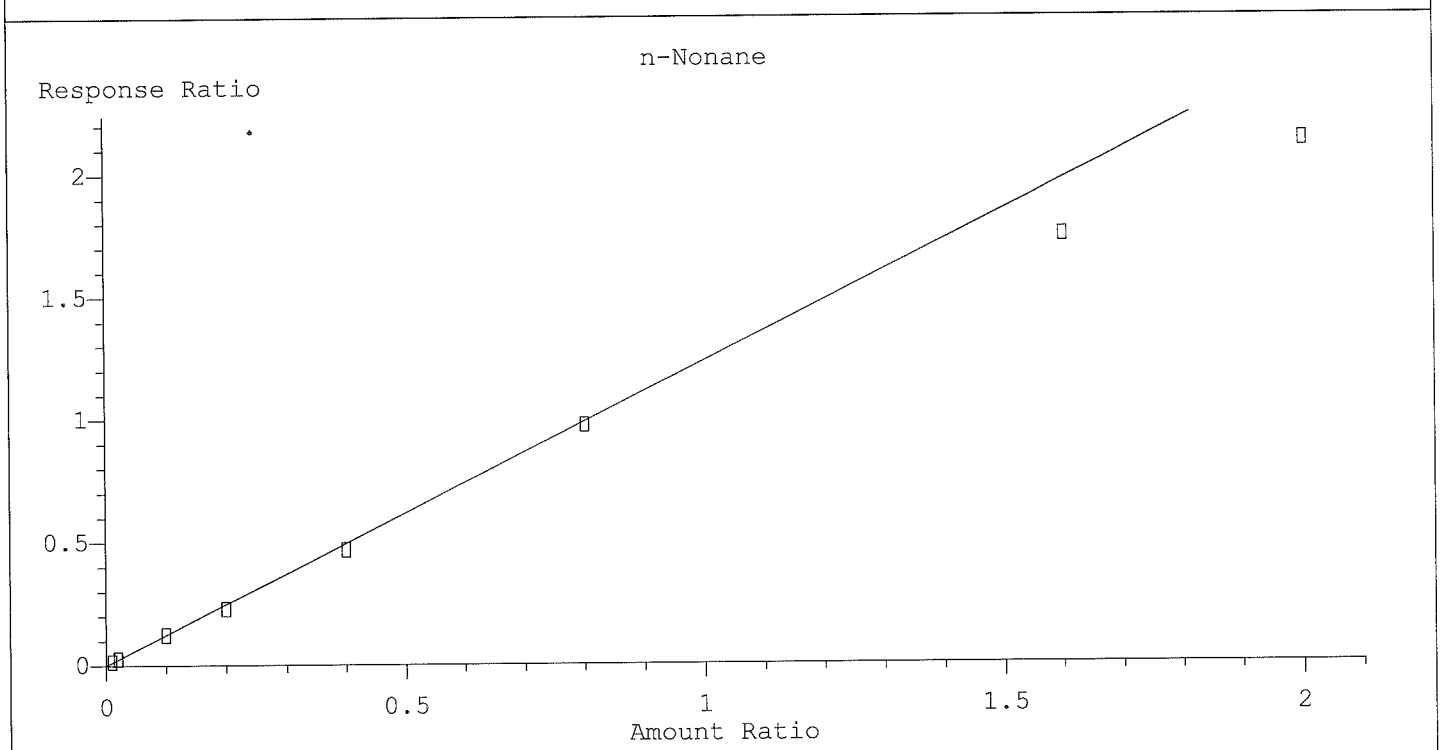


Resp Ratio = 8.33e-001 * Amt
RF Rel Std Dev = 5.8% Curve Fit: Avg RF

Calibration Plot Report

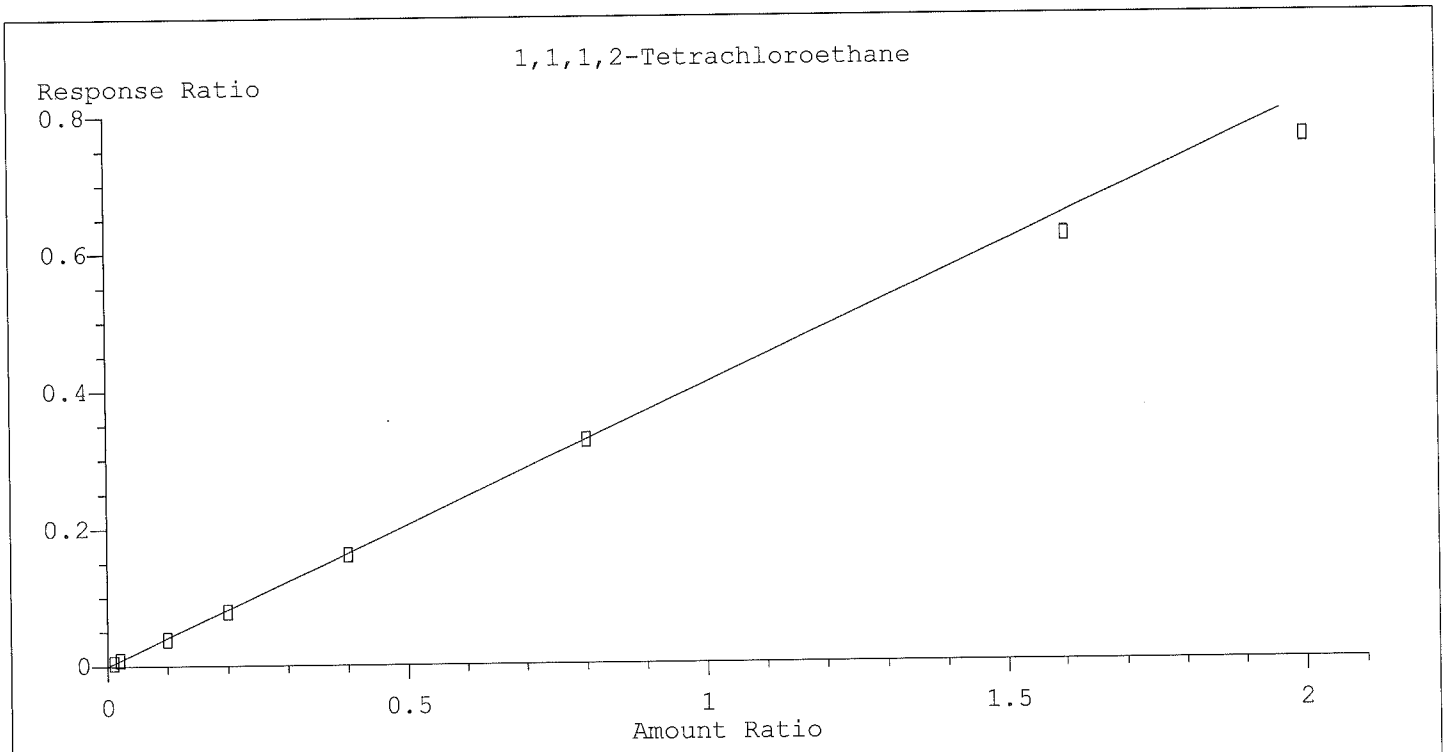


Resp Ratio = 1.10e+000 * Amt
RF Rel Std Dev = 7.8% Curve Fit: Avg RF

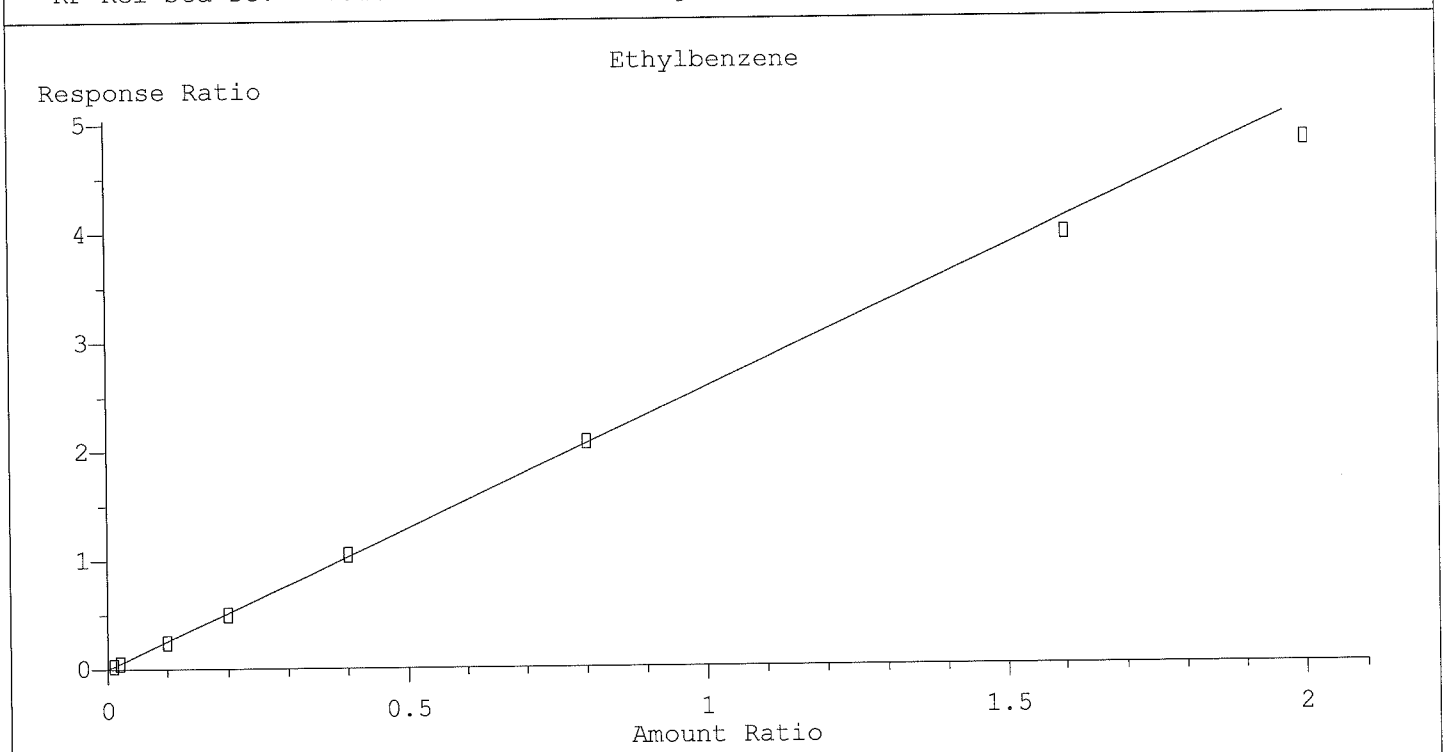


Resp Ratio = 1.24e+000 * Amt
RF Rel Std Dev = 13.0% Curve Fit: Avg RF

Calibration Plot Report

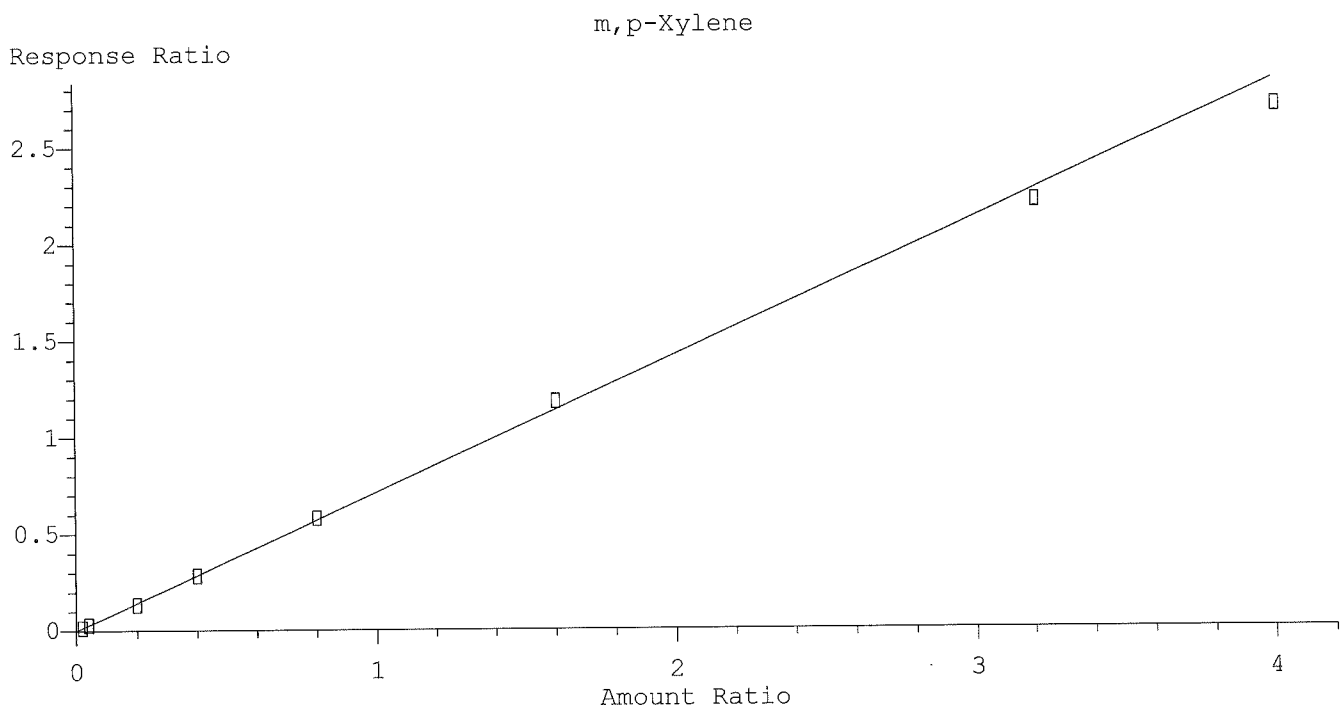


Resp Ratio = 4.08e-001 * Amt
RF Rel Std Dev = 7.4% Curve Fit: Avg RF

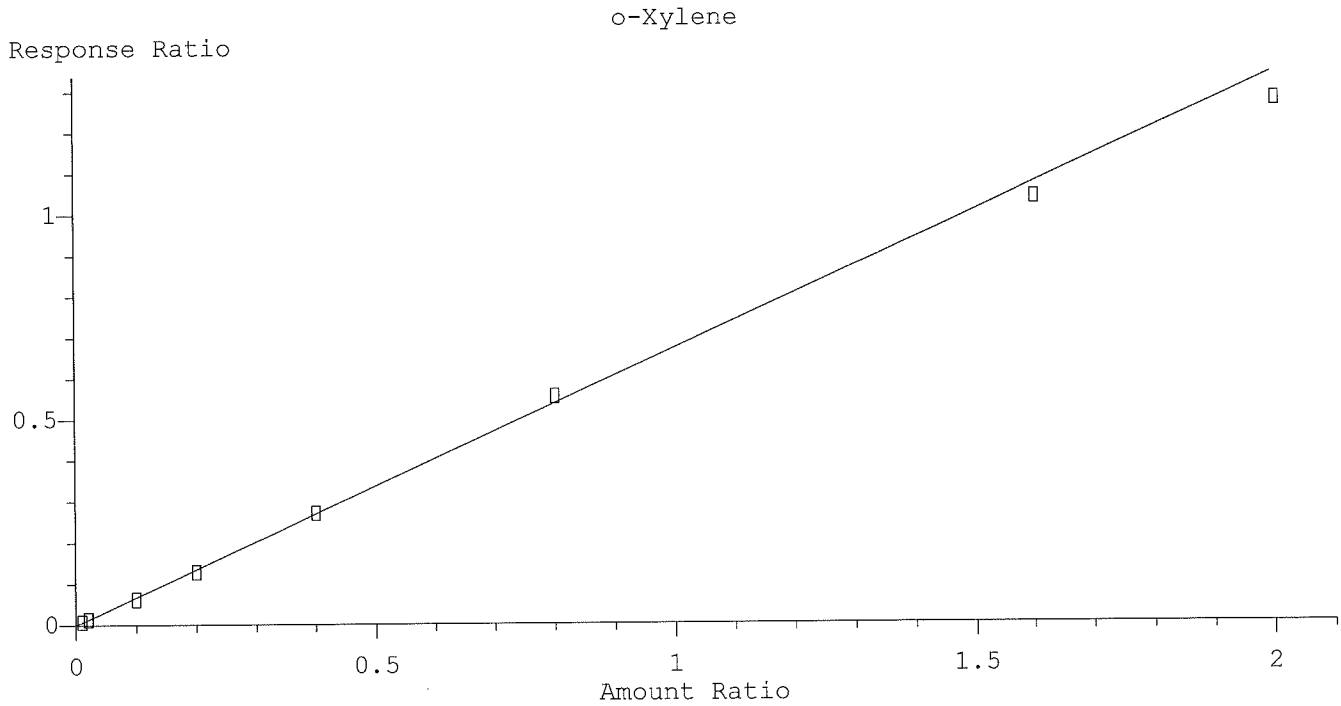


Resp Ratio = 2.56e+000 * Amt
RF Rel Std Dev = 5.3% Curve Fit: Avg RF

Calibration Plot Report

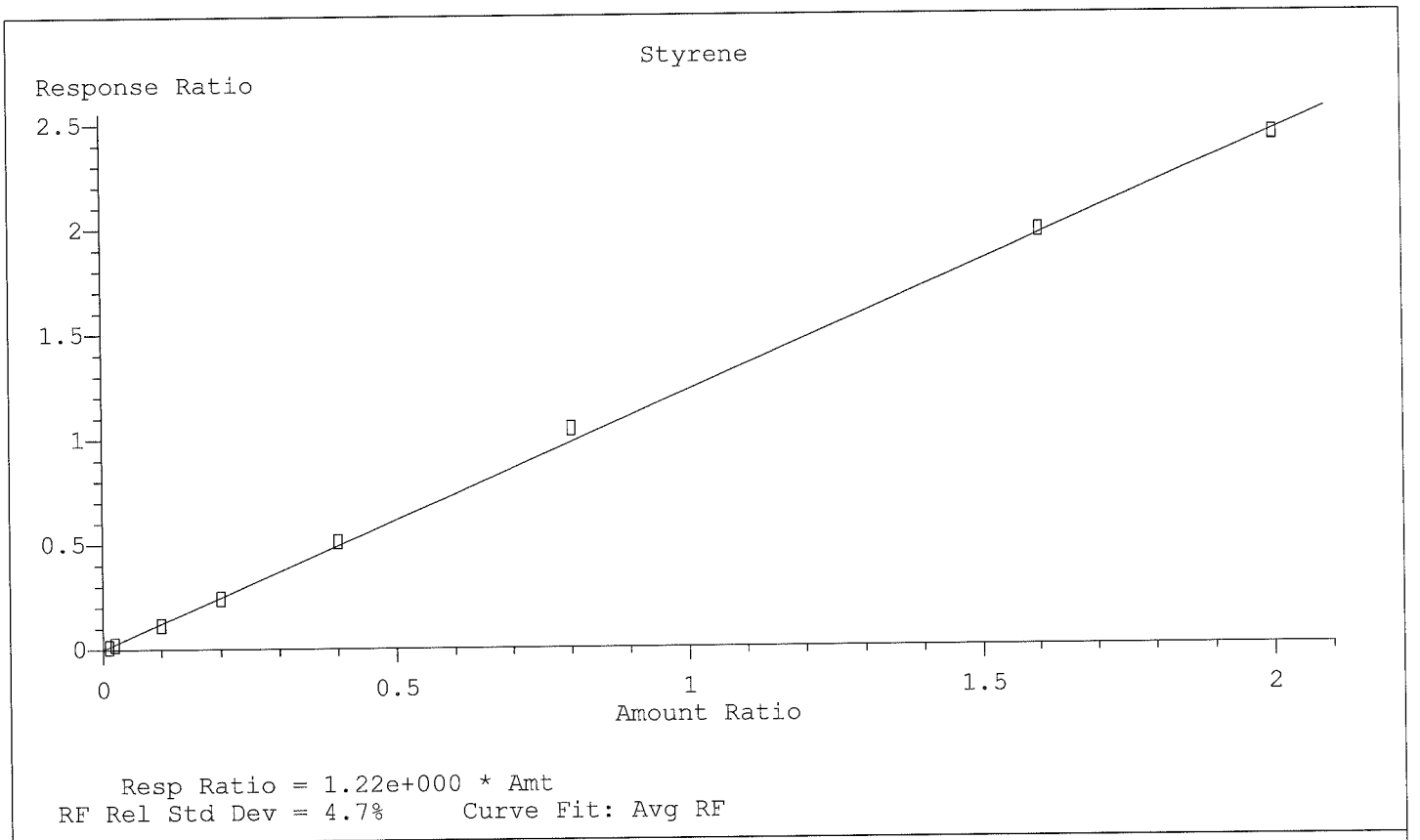


Resp Ratio = 7.11e-001 * Amt
RF Rel Std Dev = 4.0% Curve Fit: Avg RF

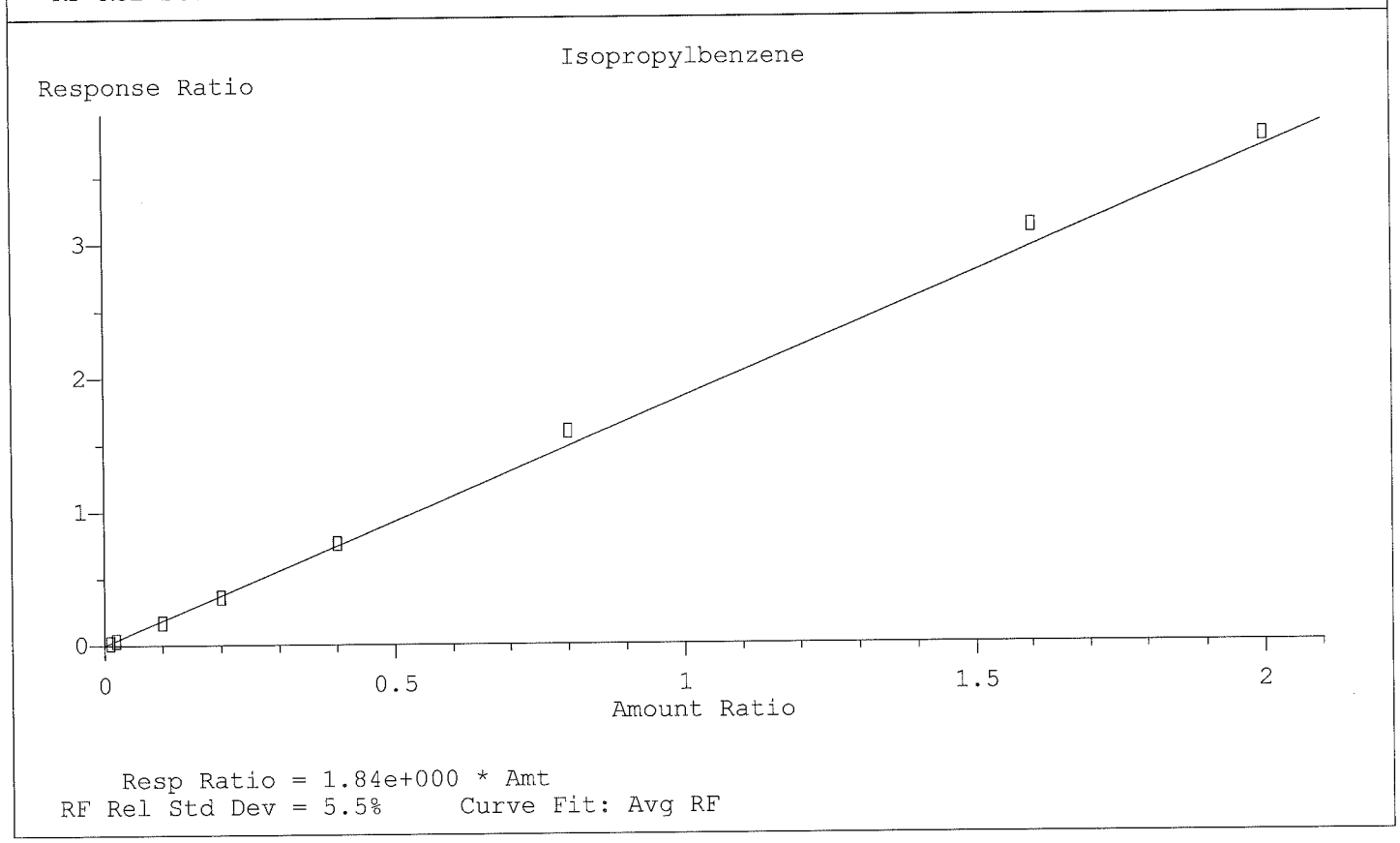


Resp Ratio = 6.71e-001 * Amt
RF Rel Std Dev = 5.9% Curve Fit: Avg RF

Calibration Plot Report

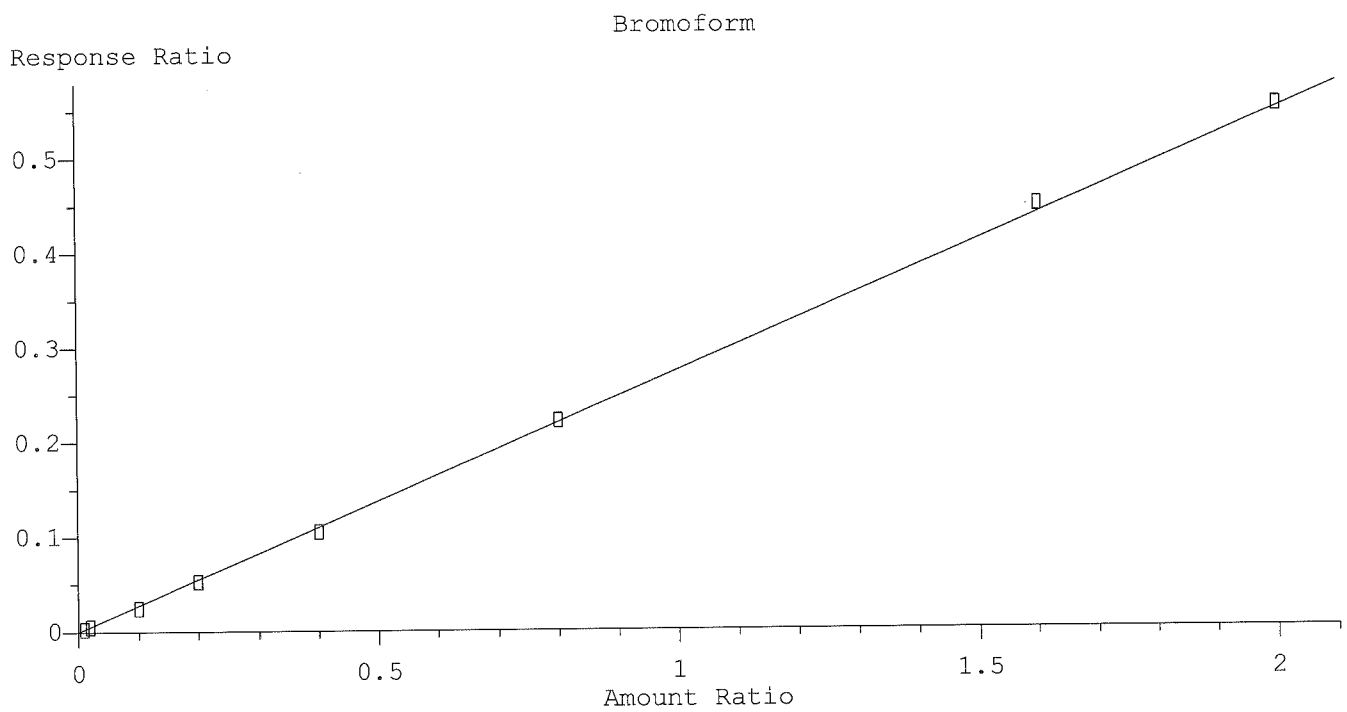


Resp Ratio = 1.22e+000 * Amt
RF Rel Std Dev = 4.7% Curve Fit: Avg RF

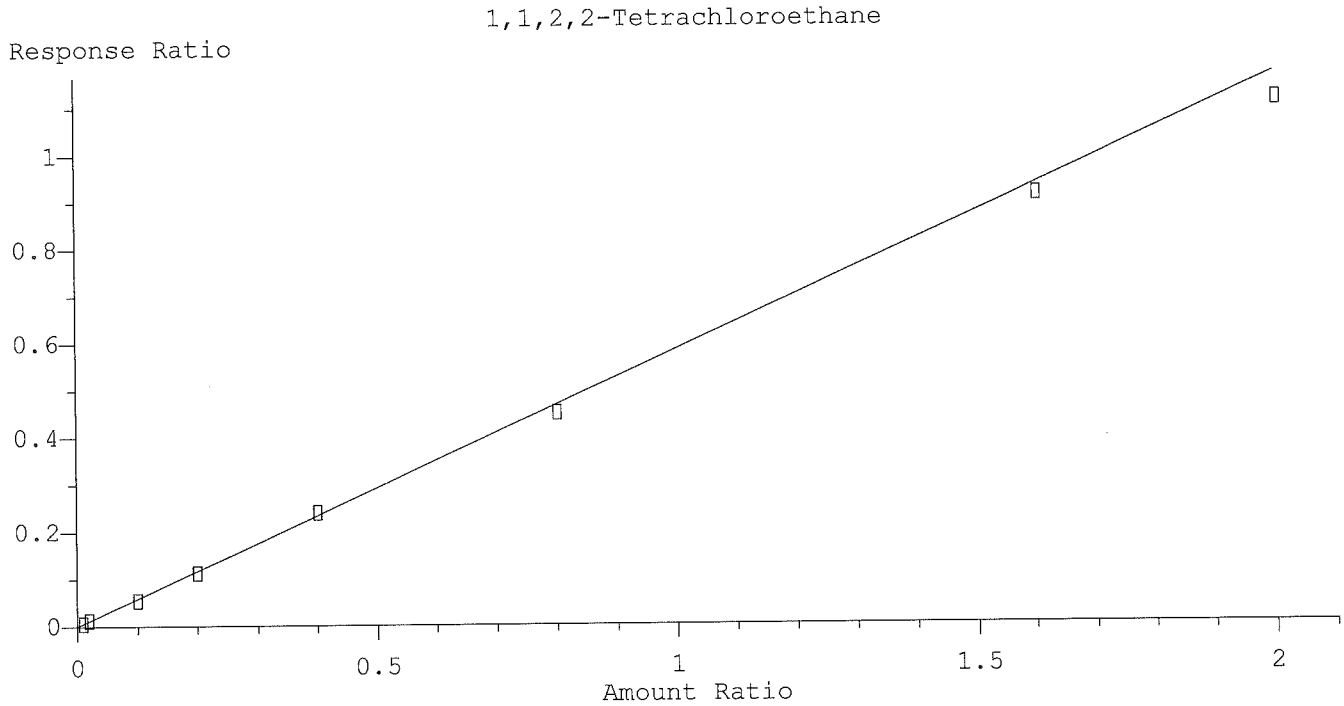


Resp Ratio = 1.84e+000 * Amt
RF Rel Std Dev = 5.5% Curve Fit: Avg RF

Calibration Plot Report

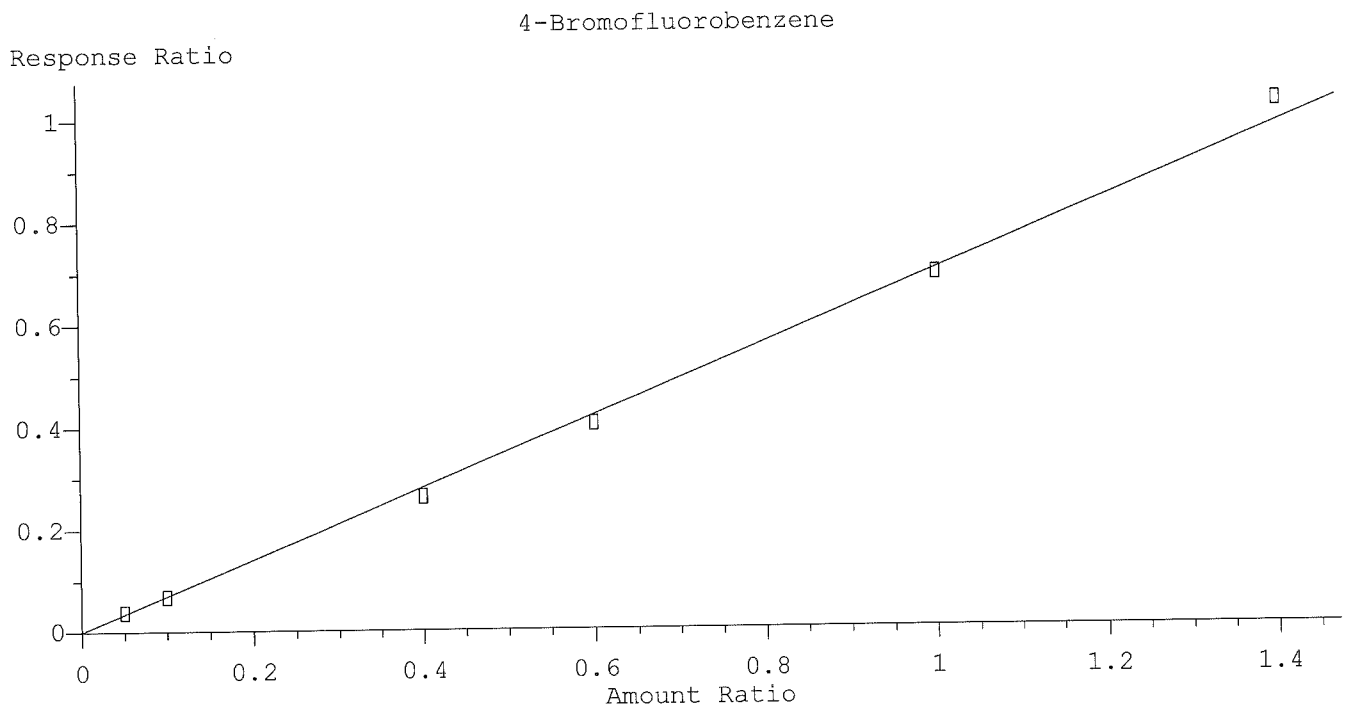


Resp Ratio = 2.74e-001 * Amt
RF Rel Std Dev = 7.0% Curve Fit: Avg RF

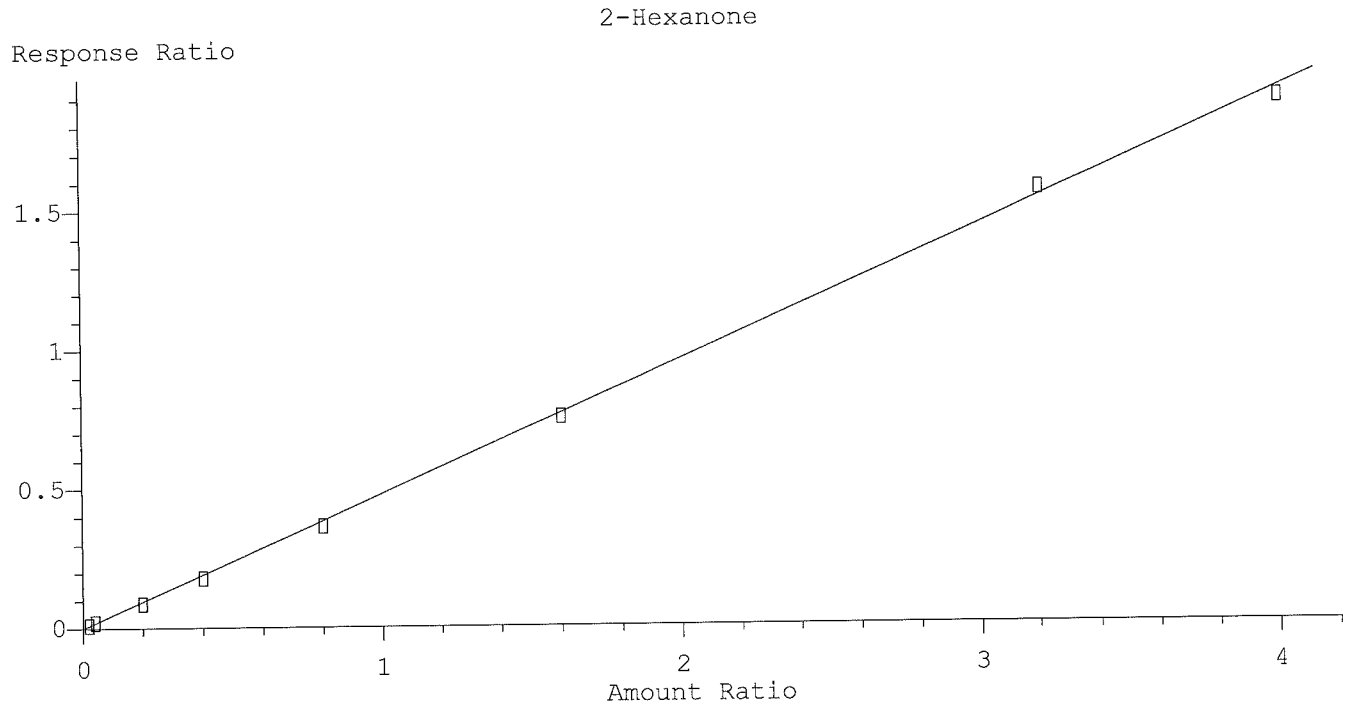


Resp Ratio = 5.84e-001 * Amt
RF Rel Std Dev = 6.3% Curve Fit: Avg RF

Calibration Plot Report

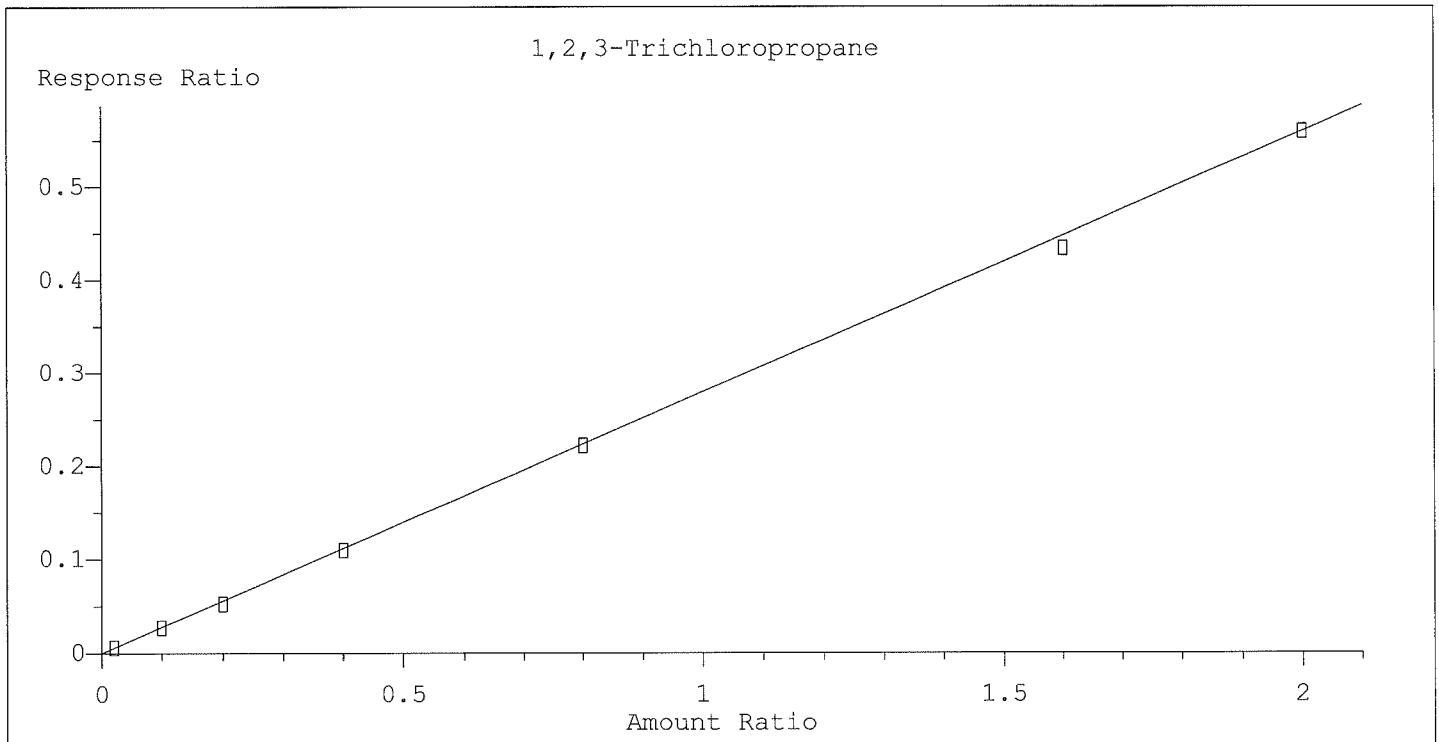


Resp Ratio = 6.99e-001 * Amt
RF Rel Std Dev = 5.7% Curve Fit: Avg RF

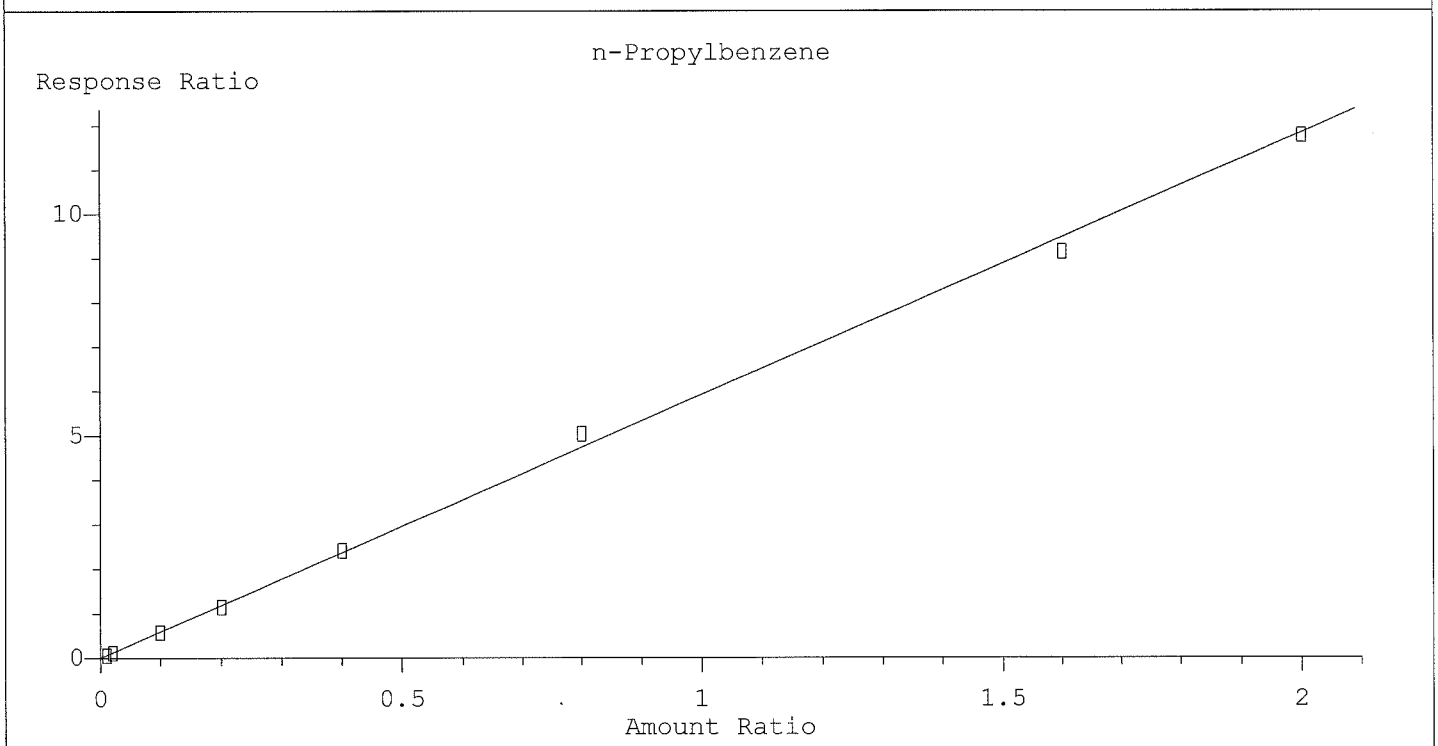


Resp Ratio = 4.79e-001 * Amt
RF Rel Std Dev = 7.6% Curve Fit: Avg RF

Calibration Plot Report

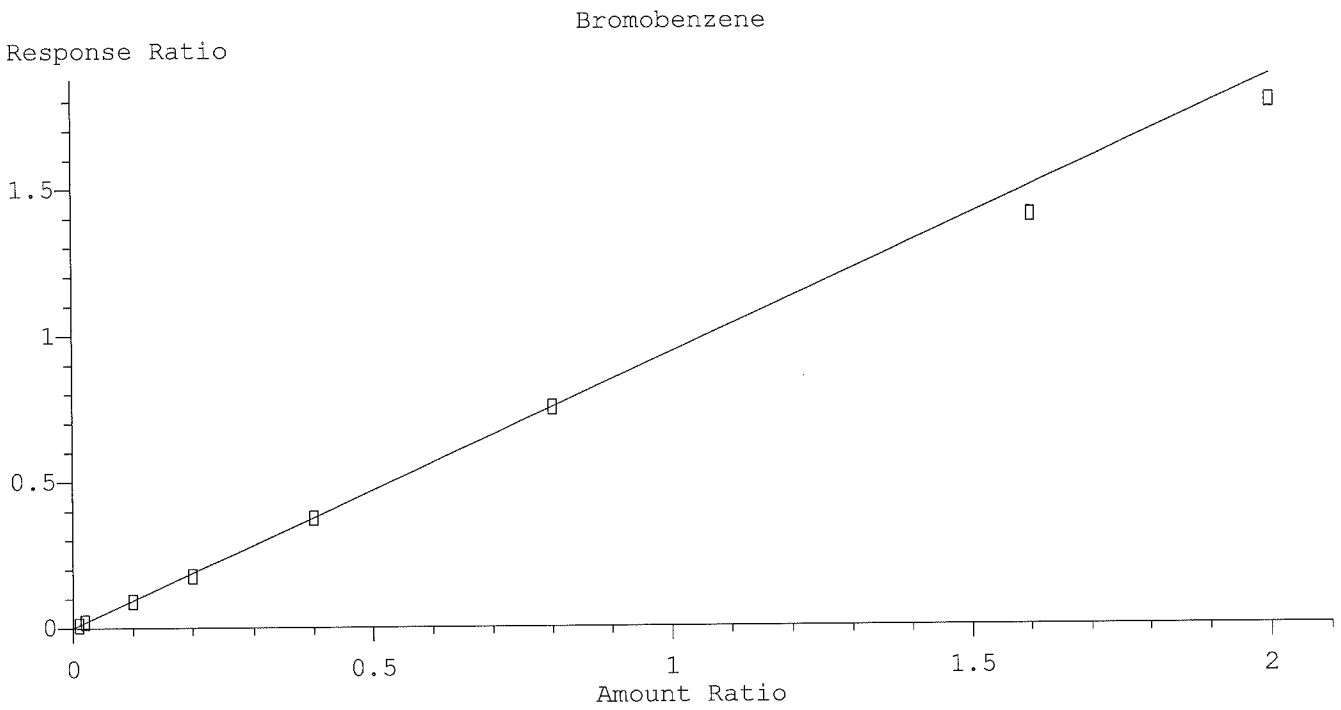


Resp Ratio = 2.79e-001 * Amt
RF Rel Std Dev = 5.6% Curve Fit: Avg RF

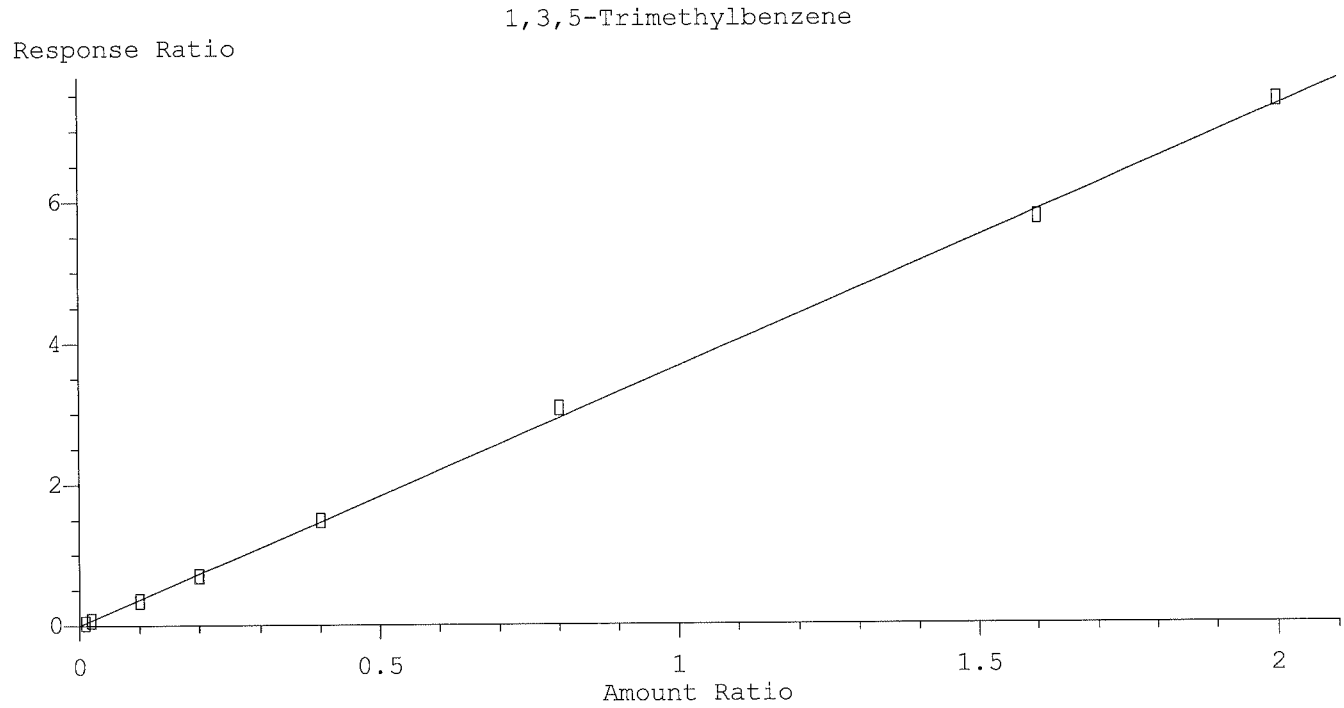


Resp Ratio = 5.92e+000 * Amt
RF Rel Std Dev = 3.2% Curve Fit: Avg RF

Calibration Plot Report

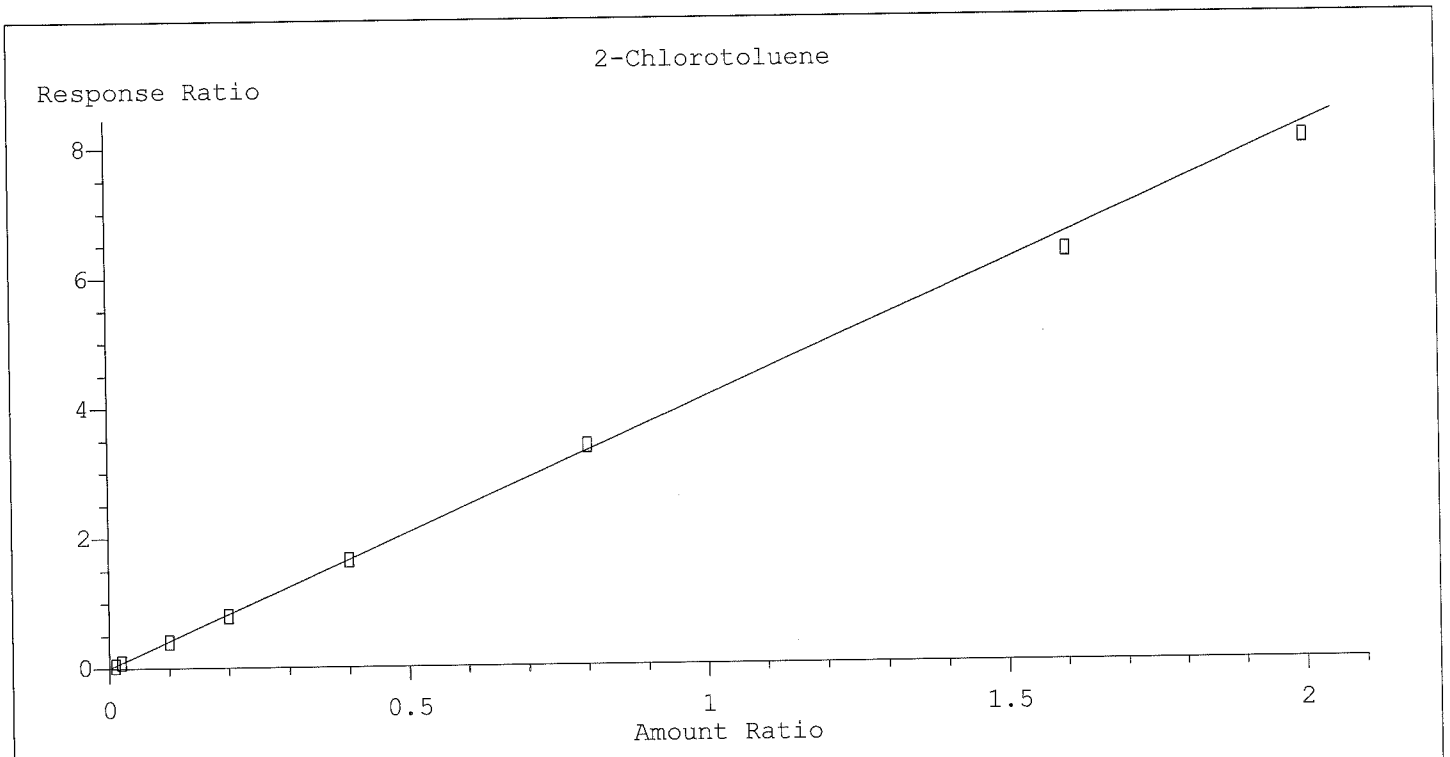


Resp Ratio = 9.38e-001 * Amt
RF Rel Std Dev = 6.9% Curve Fit: Avg RF

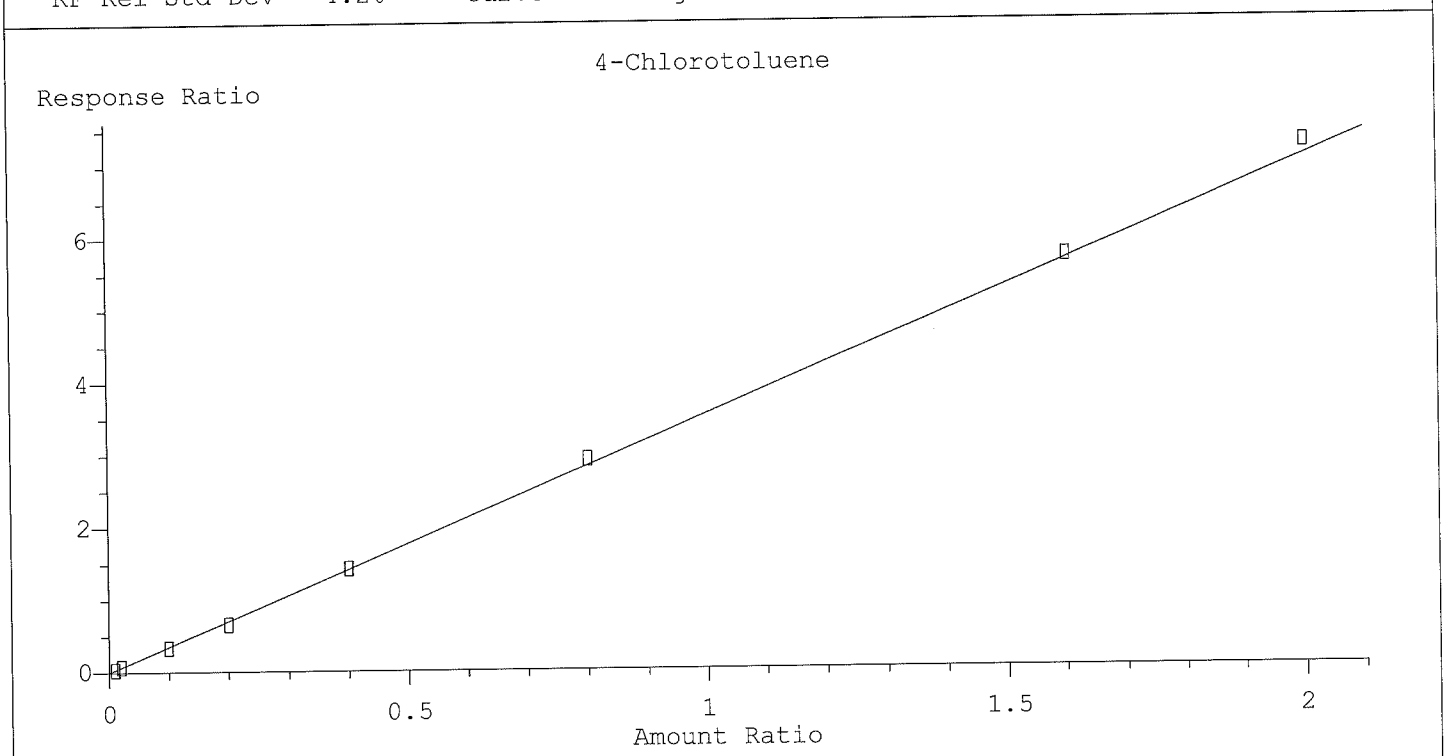


Resp Ratio = 3.65e+000 * Amt
RF Rel Std Dev = 3.4% Curve Fit: Avg RF

Calibration Plot Report

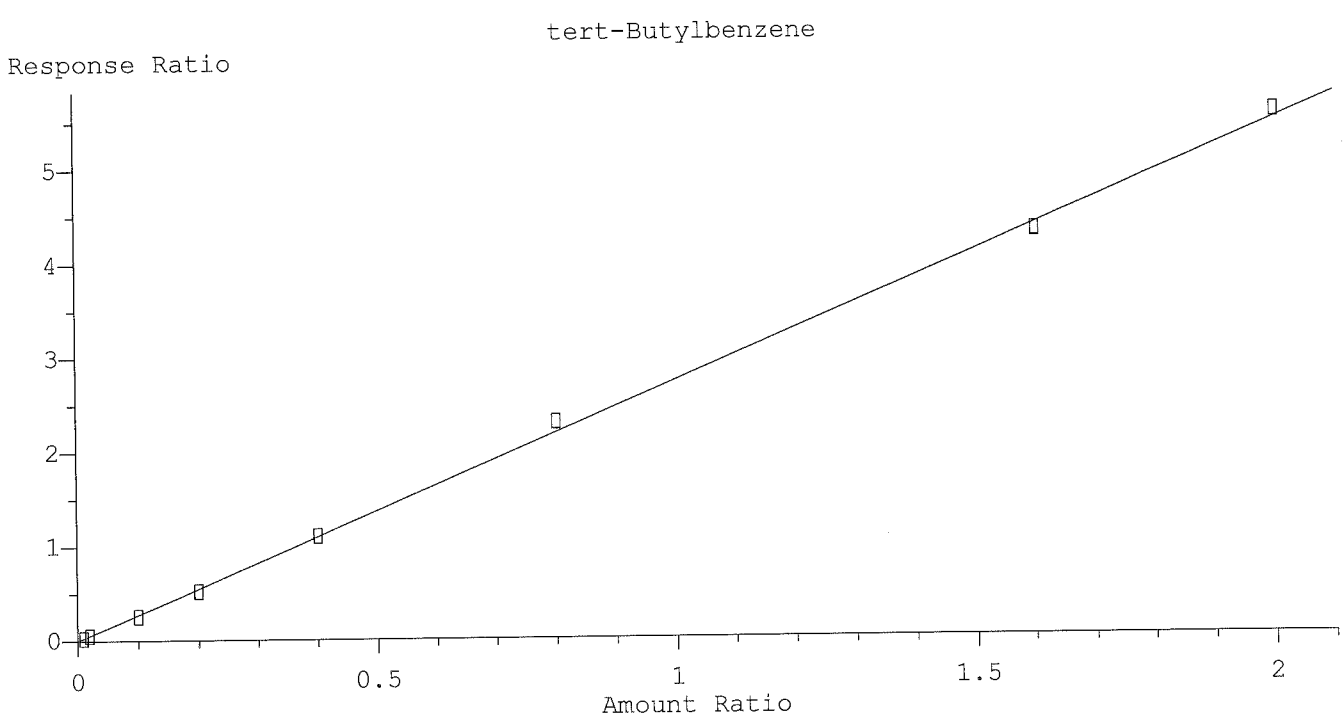


Resp Ratio = 4.13e+000 * Amt
RF Rel Std Dev = 4.2% Curve Fit: Avg RF

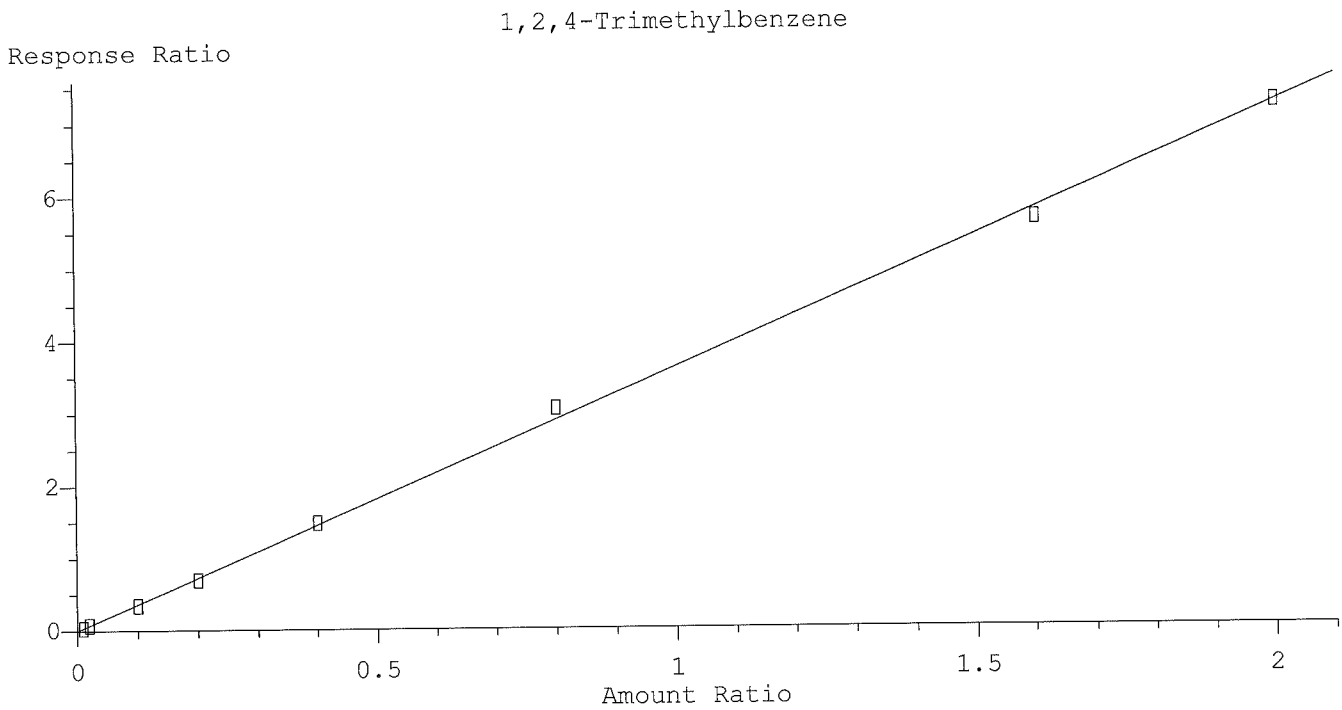


Resp Ratio = 3.53e+000 * Amt
RF Rel Std Dev = 4.5% Curve Fit: Avg RF

Calibration Plot Report

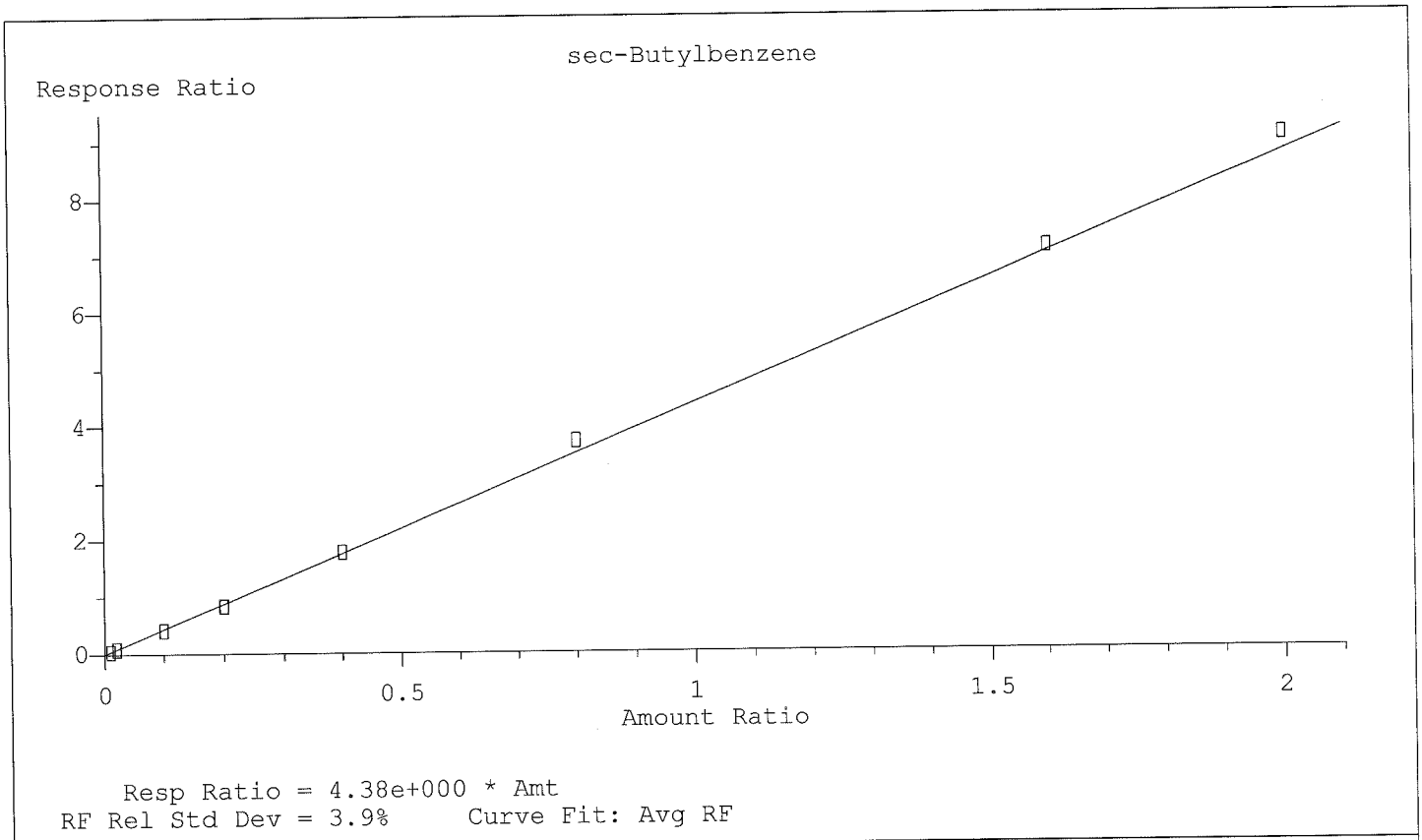


Resp Ratio = 2.73e+000 * Amt
RF Rel Std Dev = 4.0% Curve Fit: Avg RF

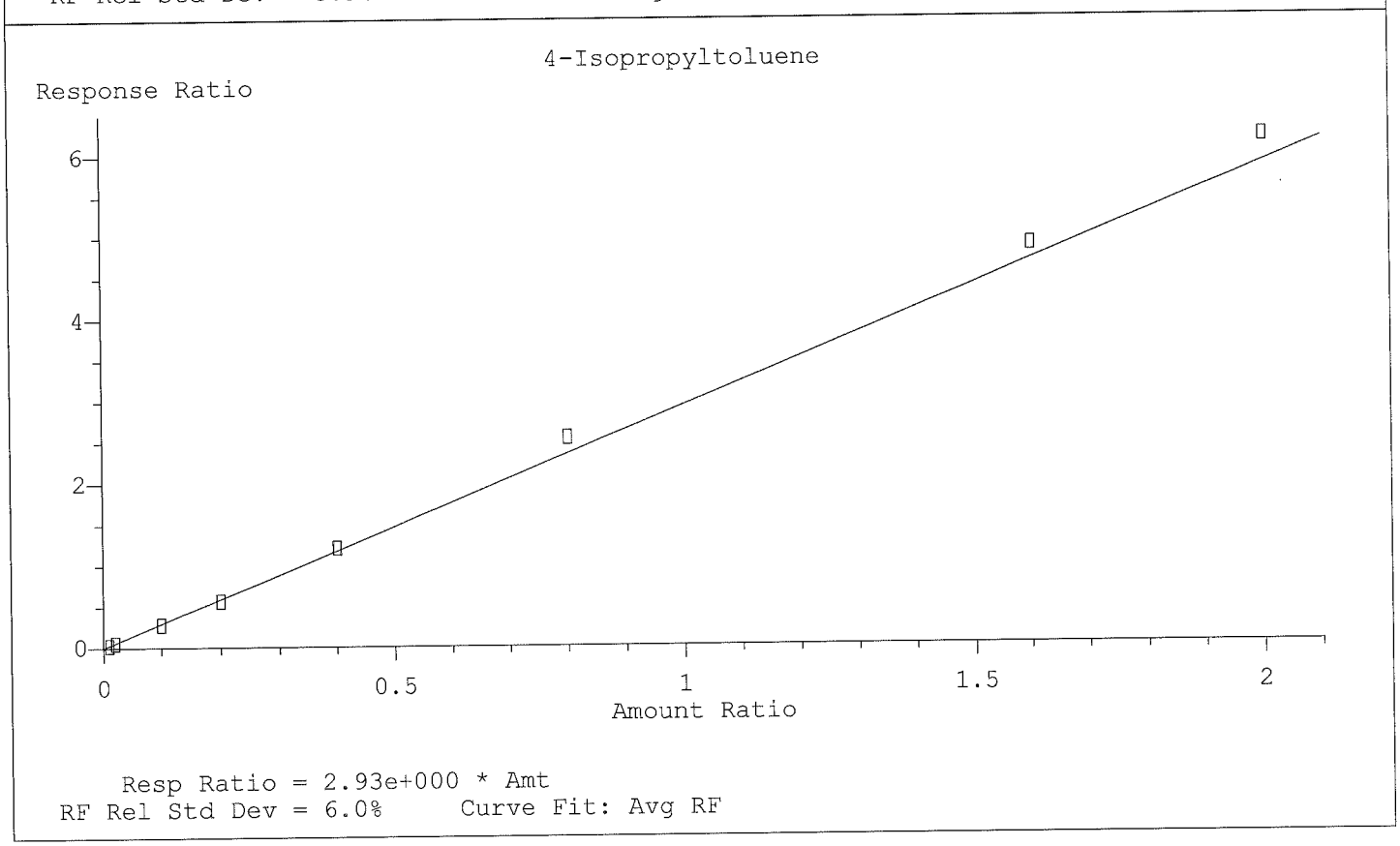


Resp Ratio = 3.61e+000 * Amt
RF Rel Std Dev = 3.3% Curve Fit: Avg RF

Calibration Plot Report

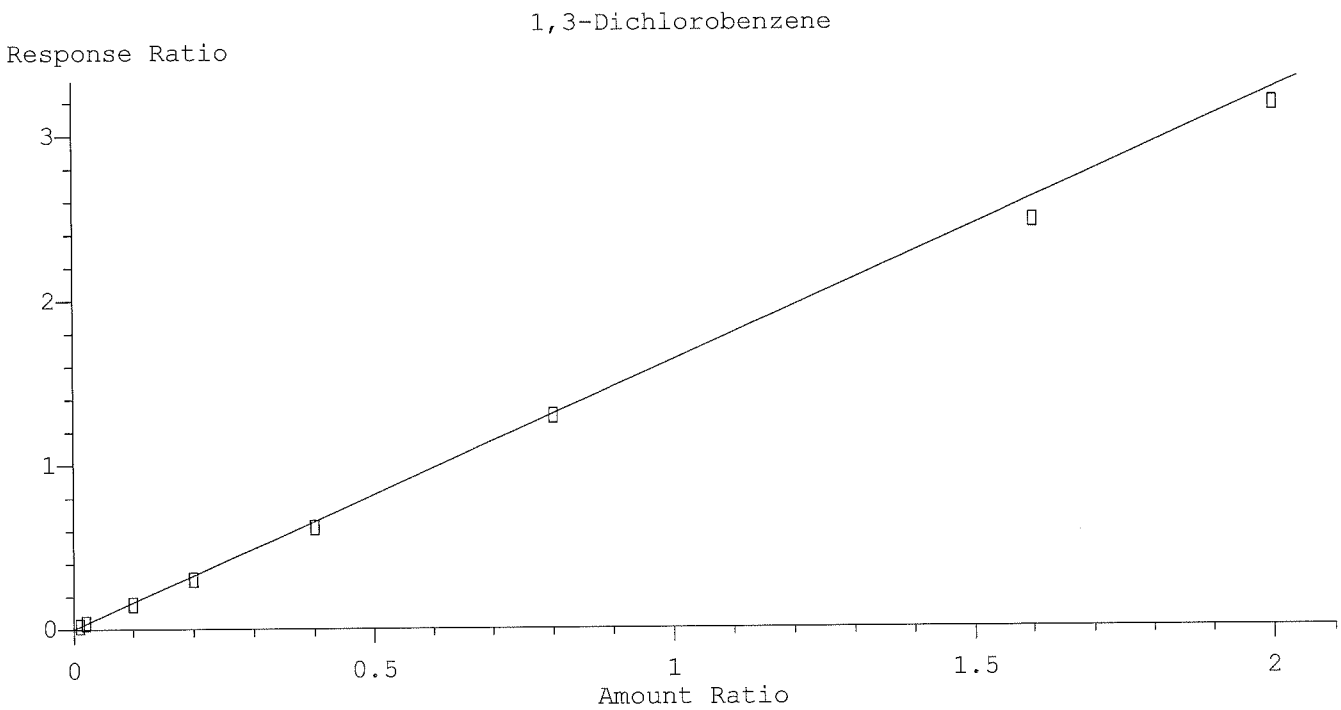


Resp Ratio = 4.38e+000 * Amt
RF Rel Std Dev = 3.9% Curve Fit: Avg RF

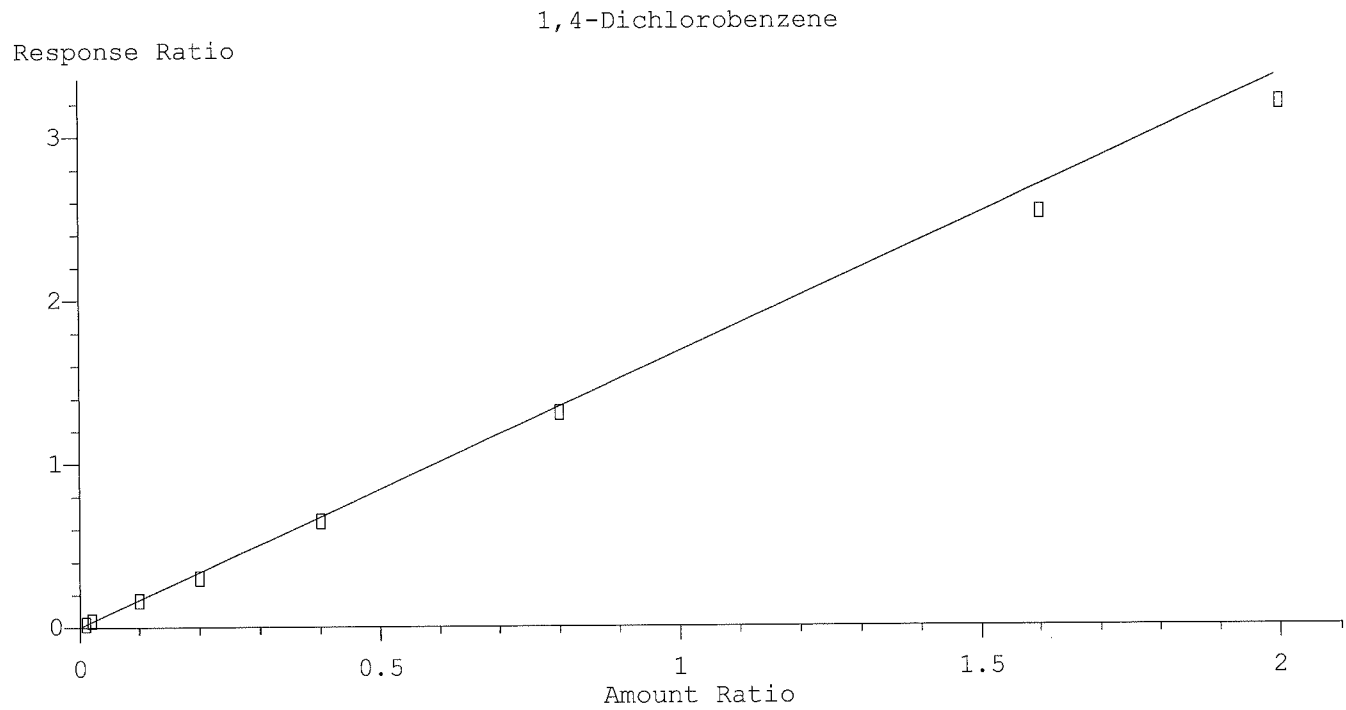


Resp Ratio = 2.93e+000 * Amt
RF Rel Std Dev = 6.0% Curve Fit: Avg RF

Calibration Plot Report

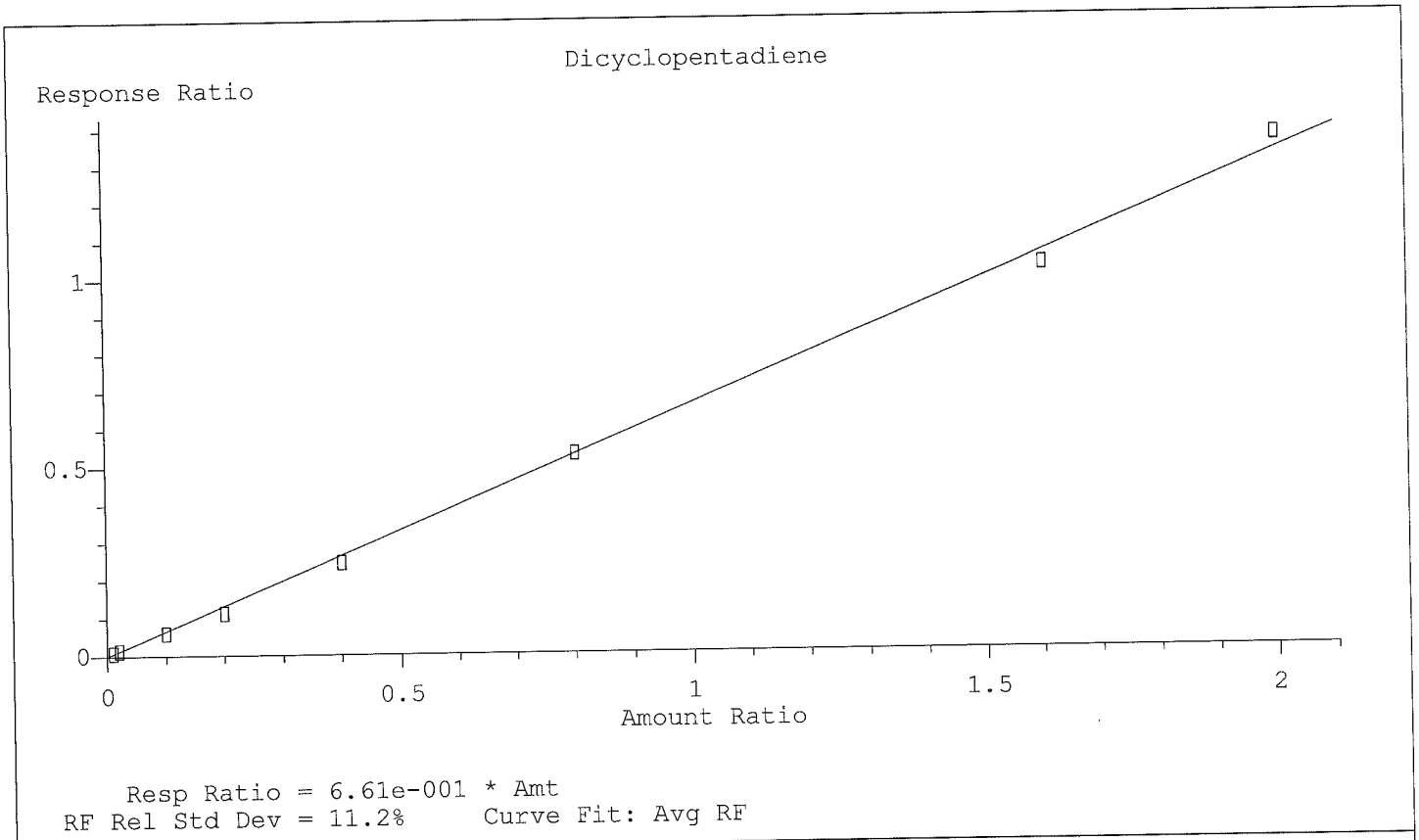


Resp Ratio = 1.63e+000 * Amt
RF Rel Std Dev = 9.2% Curve Fit: Avg RF

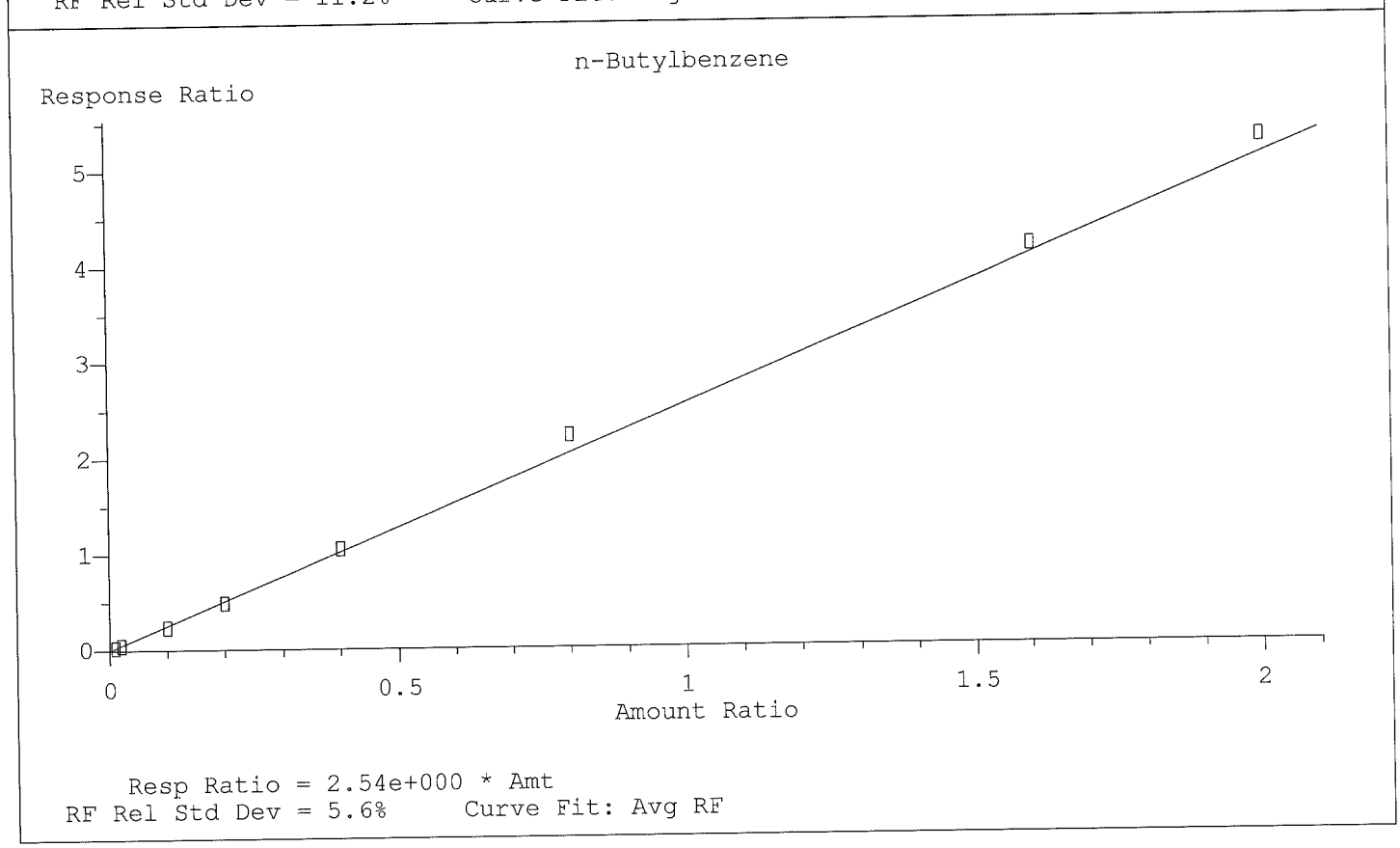


Resp Ratio = 1.68e+000 * Amt
RF Rel Std Dev = 9.7% Curve Fit: Avg RF

Calibration Plot Report

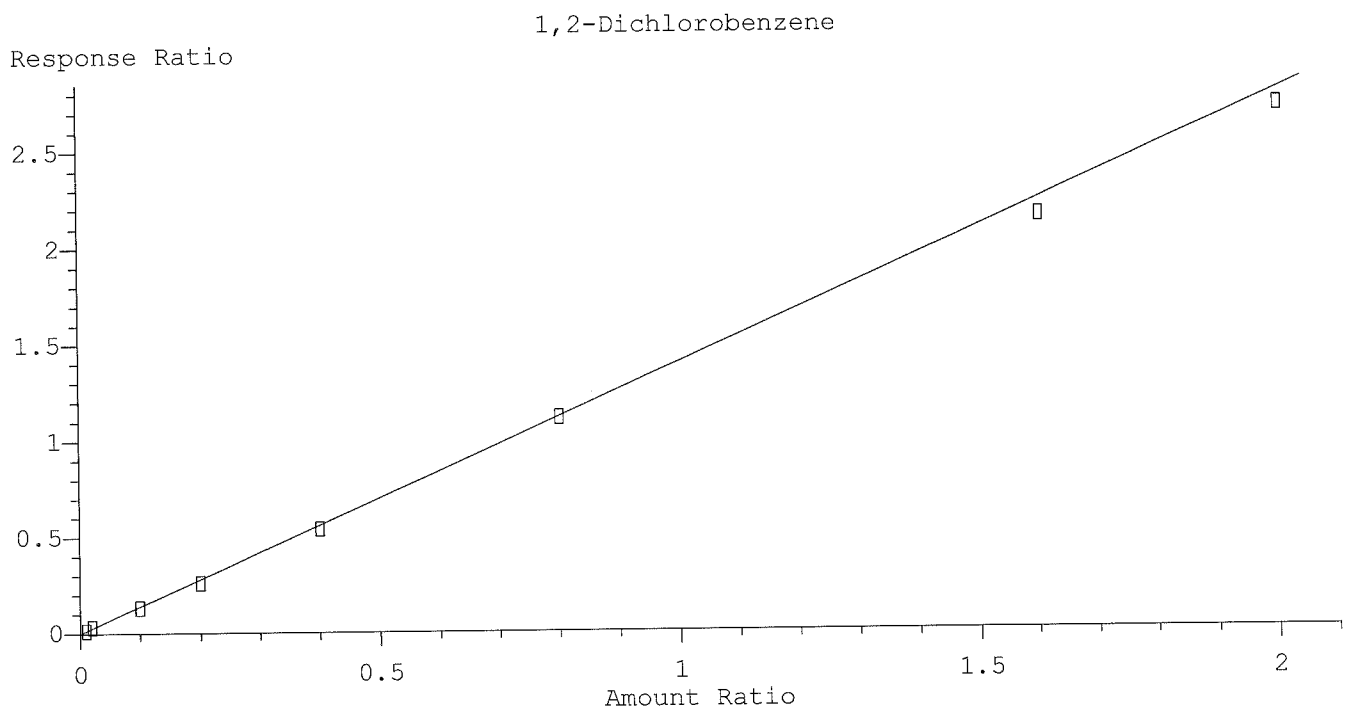


Resp Ratio = 6.61e-001 * Amt
RF Rel Std Dev = 11.2% Curve Fit: Avg RF

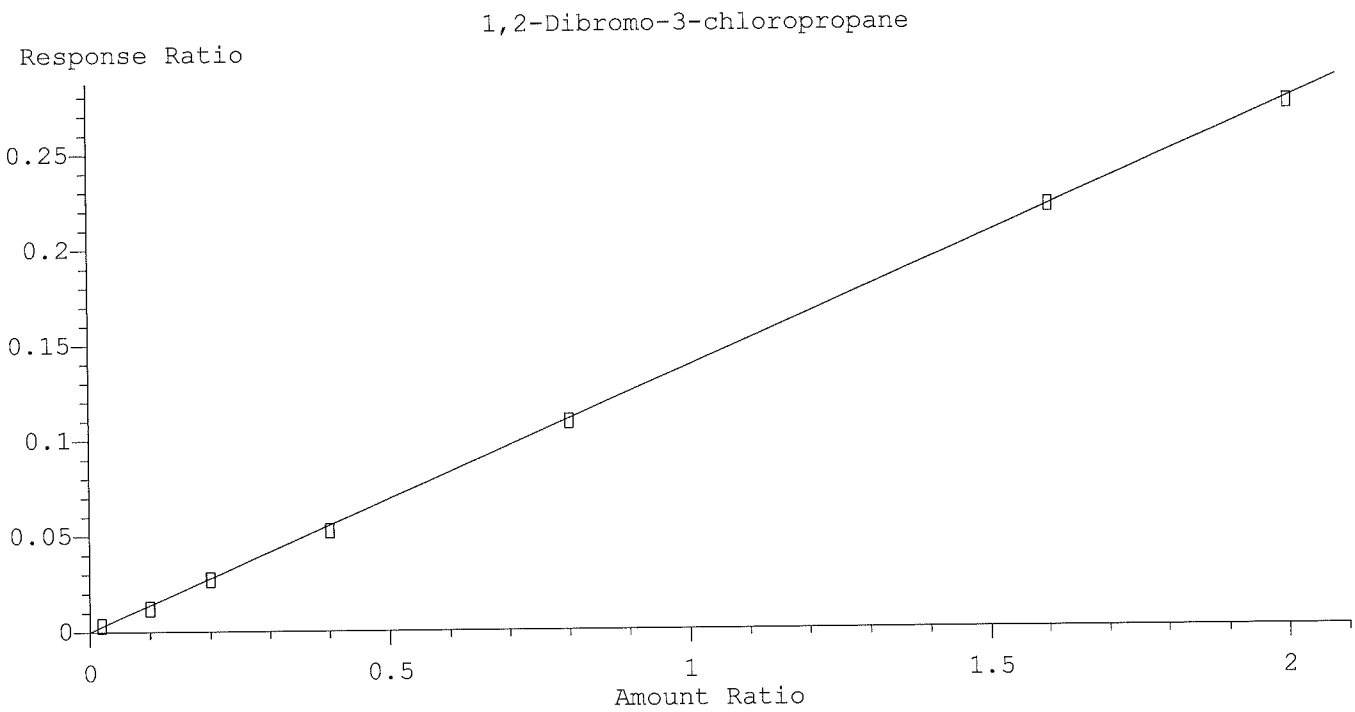


Resp Ratio = 2.54e+000 * Amt
RF Rel Std Dev = 5.6% Curve Fit: Avg RF

Calibration Plot Report

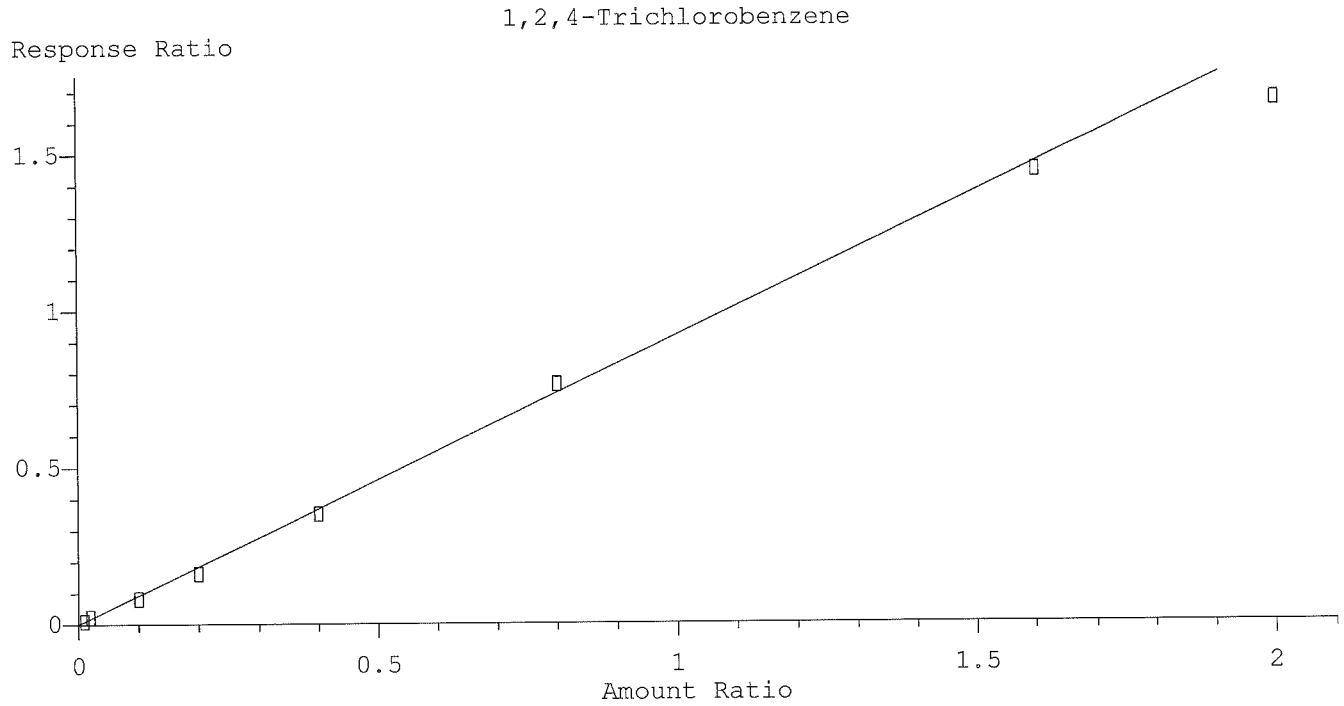


Resp Ratio = 1.40e+000 * Amt
RF Rel Std Dev = 7.5% Curve Fit: Avg RF

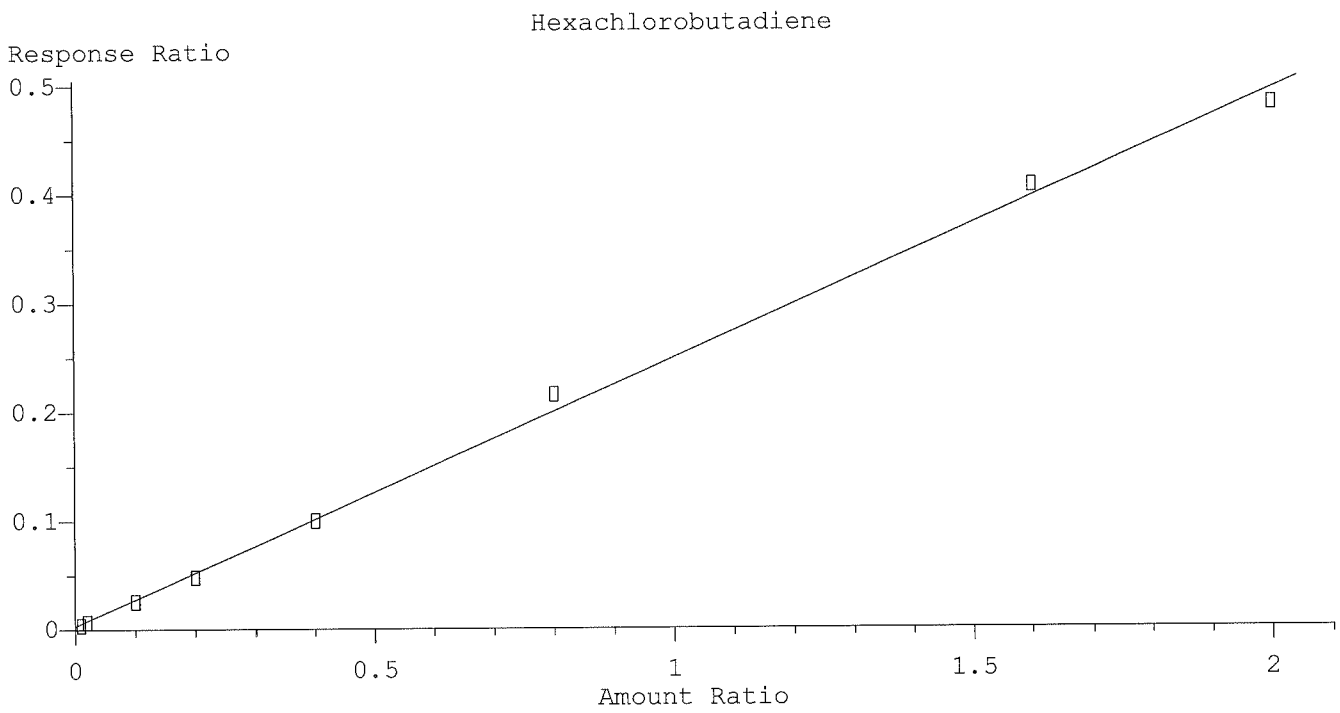


Resp Ratio = 1.38e-001 * Amt
RF Rel Std Dev = 10.4% Curve Fit: Avg RF

Calibration Plot Report

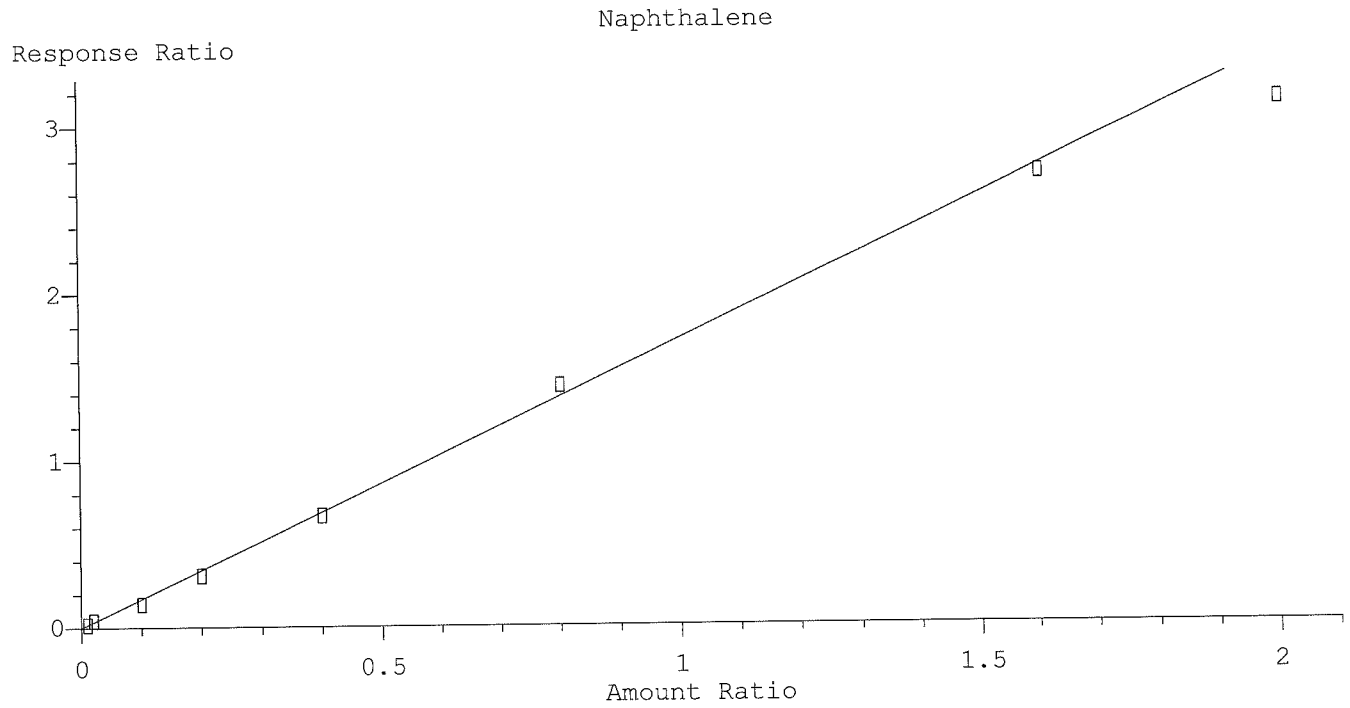


Resp Ratio = 9.19e-001 * Amt
RF Rel Std Dev = 12.7% Curve Fit: Avg RF



Resp Ratio = 2.46e-001 * Amt + 3.44e-003
Coef of Det (r^2) = 0.998 Curve Fit: Linear

Calibration Plot Report



Resp Ratio = 1.72e+000 * Amt
RF Rel Std Dev = 12.6% Curve Fit: Avg RF

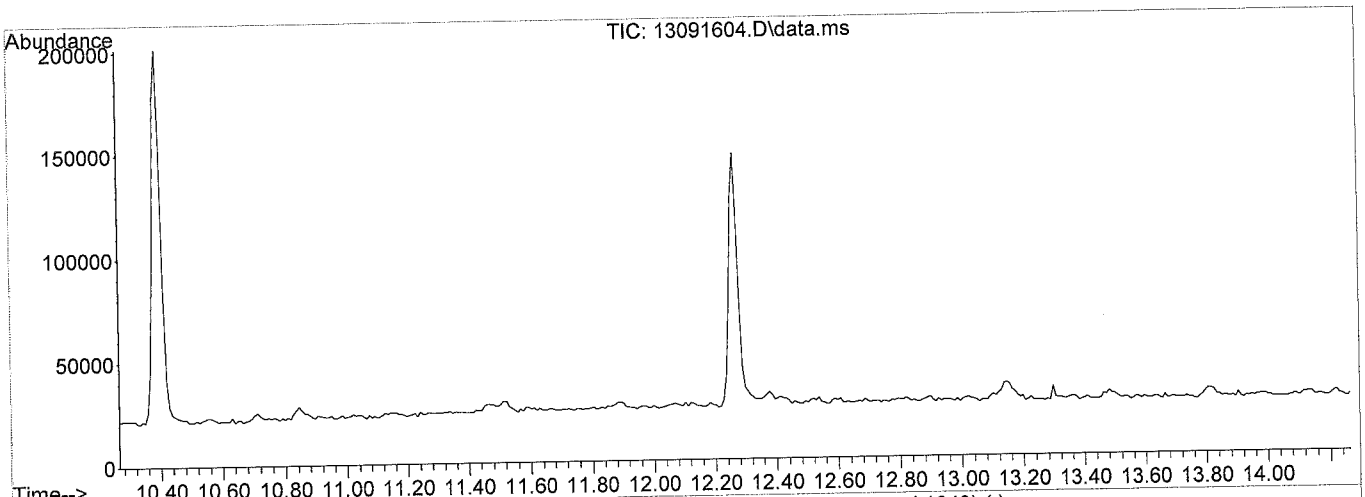
Resp Ratio = 7.59e-001 * Amt
RF Rel Std Dev = 12.3% Curve Fit: Avg RF

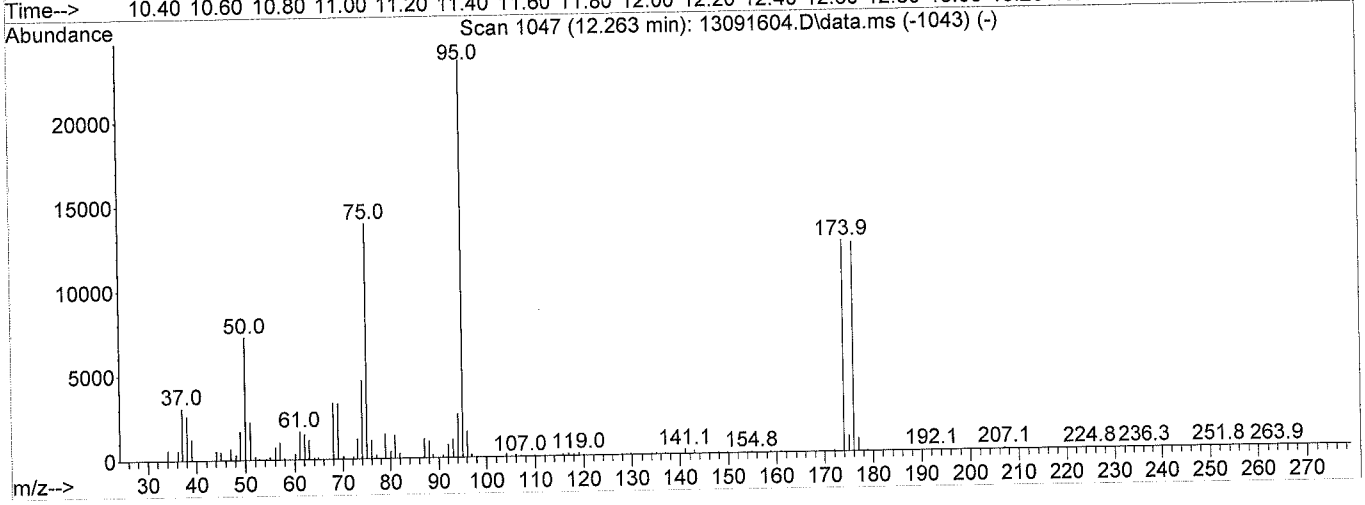
Calibration Plot Report

Data Path : H:\VOA\A228\130916\
Data File : 13091604.D
Acq On : 16 Sep 2013 12:40
Operator : JM
Sample : BFB
Misc : TUNE CHECK
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : H:\VOA\A228\METHODS\130916.M
Title : 8260B_S
Last Update : Tue Sep 24 17:55:32 2013





Spectrum Information: Scan 1047

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	30.8	7225	PASS
75	95	30	60	59.2	13899	PASS
95	95	100	100	100.0	23469	PASS
96	95	5	9	6.6	1538	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	53.2	12477	PASS
175	174	5	9	7.6	944	PASS
176	174	95	101	99.2	12372	PASS
177	176	5	9	6.1	756	PASS

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091605.D
Acq On : 16 Sep 2013 13:05
Operator : JM
Sample : IB
Misc : BLANK
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 24 18:02:41 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

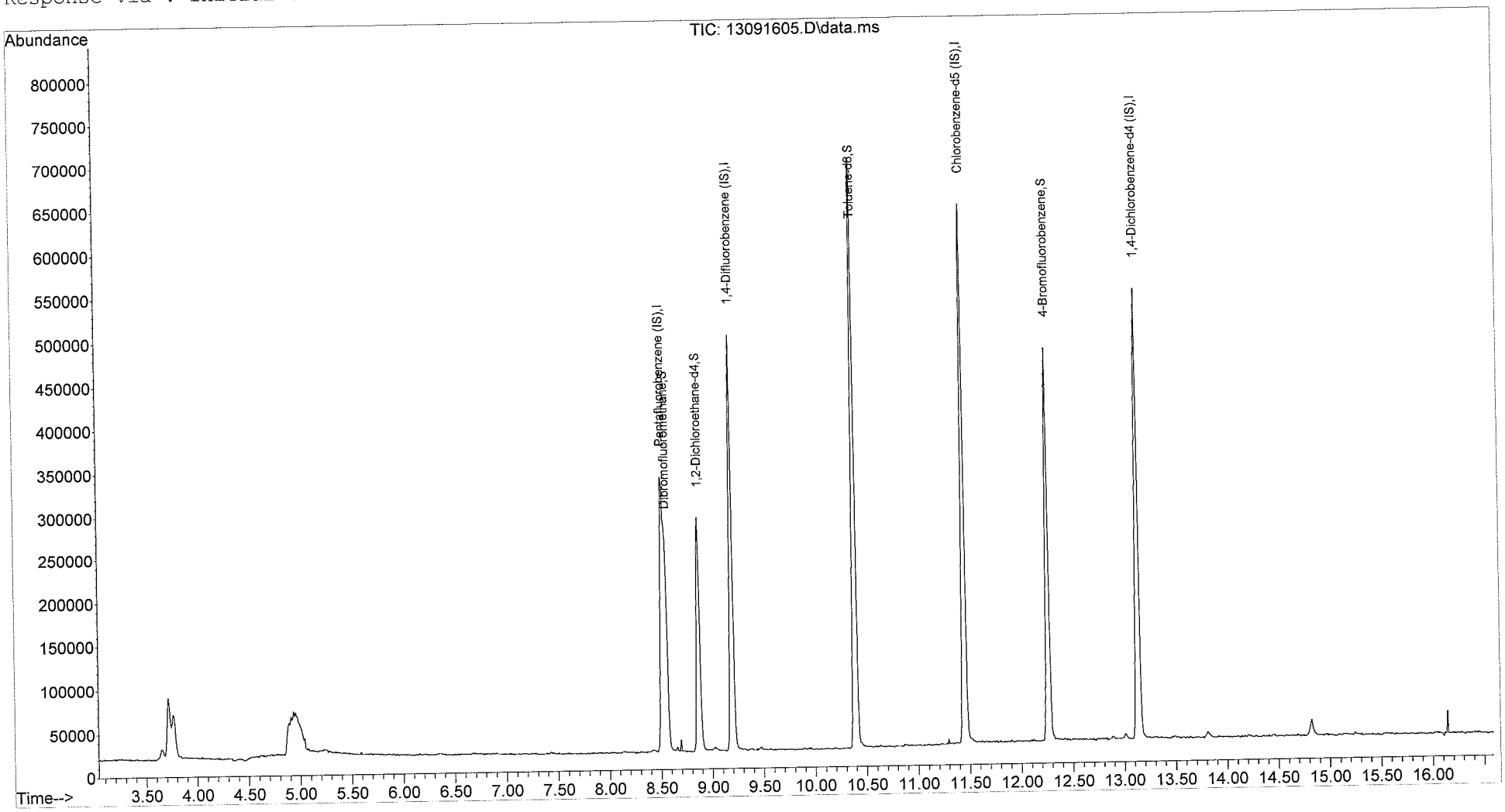
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.514	168	154463	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.193	114	285958	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.452	117	262529	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.136	152	118576	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.550	113	139978	50.44 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 100.88%		
45) 1,2-Dichloroethane-d4	8.867	65	215889	46.10 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 92.20%		
46) Toluene-d8	10.393	98	419023	52.25 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 104.50%		
66) 4-Bromofluorobenzene	12.263	95	172003	46.86 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 93.72%		
Target Compounds					Qvalue
4) Vinyl chloride	4.615	62	270	Below Cal #	53
6) Bromomethane	5.030	94	951	Below Cal #	41
7) Chloroethane	5.198	64	612	Below Cal #	4
24) Acetone	6.344	43	5403	Below Cal #	85
27) Iodomethane	6.547	142	141	Below Cal #	67
86) Hexachlorobutadiene	15.095	190	140	Below Cal #	66

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091605.D
Acq On : 16 Sep 2013 13:05
Operator : JM
Sample : IB
Misc : BLANK
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 24 18:02:41 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091606.D
Acq On : 16 Sep 2013 13:31
Operator : JM
Sample : 0.5 PPB
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 13:13:42 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.514	168	178002	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.193	114	327579	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.451	117	283292	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.136	152	129782	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.549	113	8763	2.74 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery	= 5.48%#	
45) 1,2-Dichloroethane-d4	8.867	65	15643	2.92 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery	= 5.84%#	
46) Toluene-d8	10.393	98	23111	2.52 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery	= 5.04%#	
66) 4-Bromofluorobenzene	12.263	95	10801	3.61 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery	= 7.22%#	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.068	85	3700	0.56 ug/L	96
3) Chloromethane	4.412	50	3790	0.59 ug/L	93
4) Vinyl chloride	4.606	62	2047	0.08 ug/L	95
5) 1,3-Butadiene	4.668	54	917	0.49 ug/L #	77
6) Bromomethane	5.039	94	2422	0.62 ug/L #	80
7) Chloroethane	5.197	64	1195	0.17 ug/L #	64
8) Trichlorofluoromethane	5.630	101	4145	0.56 ug/L	89
9) Acrolein	6.159	56	29157	47.59 ug/L	97
10) Trichlorotrifluoroethane	6.282	151	1243	0.59 ug/L	87
11) 1,1-Dichloroethene	6.326	61	4250	0.55 ug/L	98
12) Methylene chloride	6.864	84	2523m	0.61 ug/L	
13) Acrylonitrile	0.000		0	N.D. d	
14) trans-1,2-Dichloroethene	7.173	61	3884	0.53 ug/L	97
15) n-Hexane	7.438	57	3997	0.57 ug/L	91
16) 1,1-Dichloroethane	7.597	63	4813	0.57 ug/L	94
17) Cyclohexane	8.708	84	2732	0.53 ug/L	88
18) 2,2-Dichloropropane	8.170	77	4258	0.61 ug/L	98
19) cis-1,2-Dichloroethene	8.152	96	1750	0.48 ug/L	89
20) Chloroform	8.408	83	4793	0.60 ug/L	97
21) Bromochloromethane	8.373	128	838	0.62 ug/L	80
23) 1,1,1-Trichloroethane	8.629	97	3349	0.53 ug/L #	77
24) Acetone	6.344	43	7664	Below Cal	92
25) 2-Butanone	8.126	43	6035	1.00 ug/L	92
26) Carbon Disulfide	6.662	76	8308	0.56 ug/L #	1
27) Iodomethane	6.538	142	1382	0.14 ug/L	90
28) Vinyl acetate	7.597	43	6265	0.54 ug/L #	1
29) Methyl tert-butyl ether	7.147	73	4333	0.51 ug/L	90
31) 1,1-Dichloropropene	8.761	75	3001	0.51 ug/L	86
32) Carbon tetrachloride	8.787	117	2739	0.58 ug/L	97
33) 1,2-Dichloroethane	8.929	62	4105	0.59 ug/L	99
34) Benzene	8.955	78	7729	0.56 ug/L	93
35) 2,2,4-Trimethylpentane	8.982	57	9524	0.54 ug/L #	89
36) n-Heptane	9.087	57	2022	0.51 ug/L #	61
37) Trichloroethene	9.458	95	1956	0.53 ug/L	94

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091606.D
Acq On : 16 Sep 2013 13:31
Operator : JM
Sample : 0.5 PPB
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 13:13:42 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

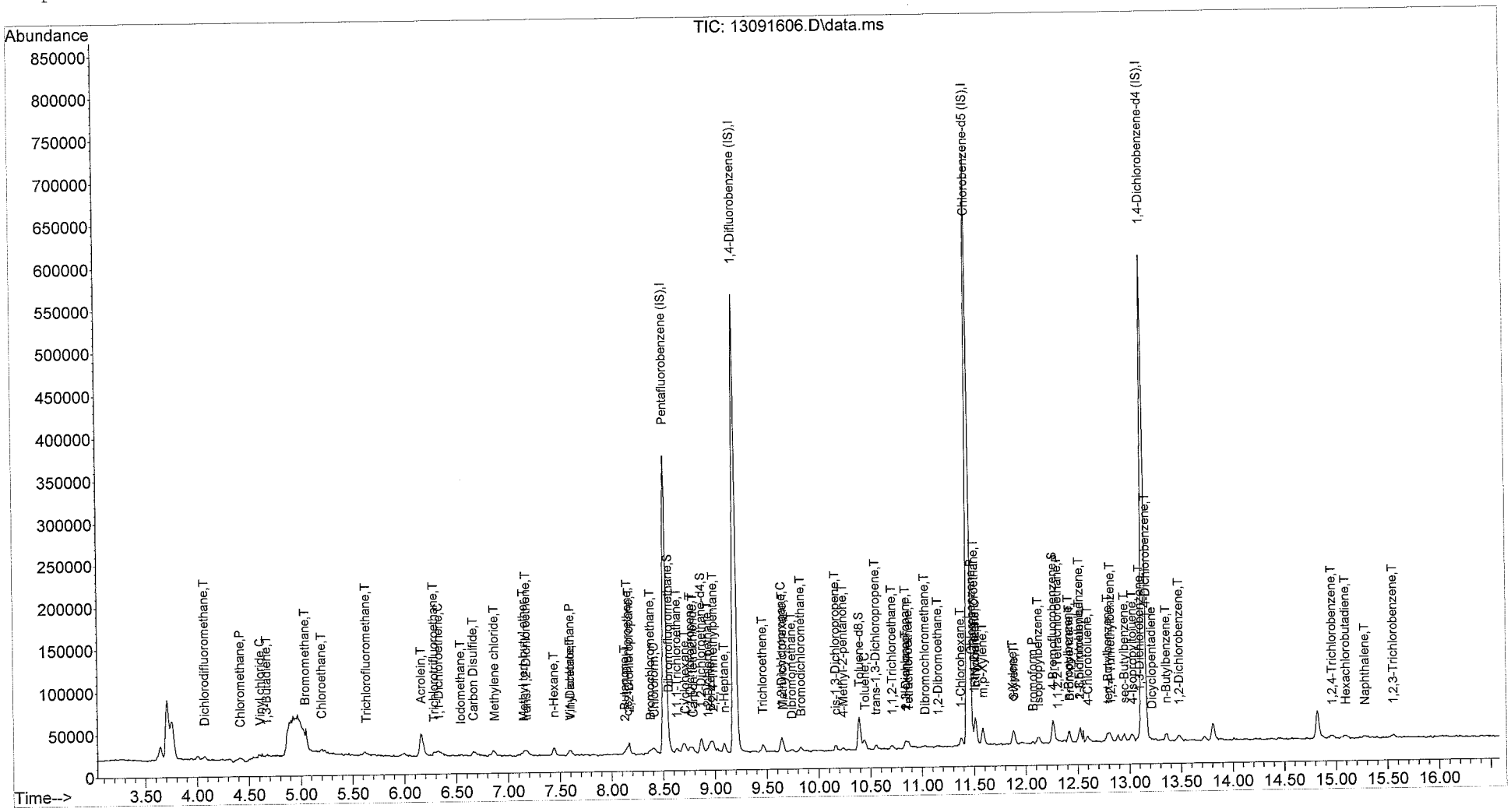
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.643	63	2573m	0.60 ug/L	
39) Bromodichloromethane	9.828	83	3170	0.55 ug/L	91
40) Methylcyclohexane	9.652	56	1600	0.15 ug/L	92
41) Dibromomethane	9.740	93	1593	0.62 ug/L #	76
42) cis-1,3-Dichloropropene	10.164	75	3237	0.51 ug/L	88
43) 2-Chloroethylvinylether	0.000		0	N.D. d	
44) 4-Methyl-2-pentanone	10.234	43	4289	1.09 ug/L	96
48) Toluene	10.446	92	4276	0.58 ug/L #	96
49) trans-1,3-Dichloropropene	10.552	75	2611	0.51 ug/L #	78
50) 1,1,2-Trichloroethane	10.710	83	1358	0.56 ug/L	87
51) 1,3-Dichloropropane	10.843	76	2946	0.57 ug/L	97
52) Tetrachloroethene	10.869	166	1393	0.57 ug/L	98
53) Dibromochloromethane	11.028	129	1745	0.65 ug/L	92
54) 1,2-Dibromoethane	11.151	107	1359	0.55 ug/L	88
55) 1-Chlorohexane	11.372	91	2362	0.50 ug/L	93
56) Chlorobenzene	11.478	112	3638	0.58 ug/L #	91
57) n-Nonane	11.513	57	4370	0.62 ug/L #	89
58) 1,1,1,2-Tetrachloroethane	11.504	131	1335	0.58 ug/L #	56
59) Ethylbenzene	11.513	91	7912	0.54 ug/L	95
60) m,p-Xylene	11.584	106	4194	1.04 ug/L	94
61) o-Xylene	11.875	106	2106	0.55 ug/L	97
62) Styrene	11.884	104	3548	0.51 ug/L	87
63) Isopropylbenzene	12.122	105	5105	0.49 ug/L	97
64) Bromoform	12.069	173	888	0.57 ug/L	94
65) 1,1,2,2-Tetrachloroethane	12.307	83	1810	0.55 ug/L	92
67) 2-Hexanone	10.843	43	3087	1.14 ug/L #	86
69) 1,2,3-Trichloropropane	0.000		0	N.D.	
70) n-Propylbenzene	12.413	91	7740	0.50 ug/L	93
71) Bromobenzene	12.422	156	1315	0.54 ug/L	90
72) 1,3,5-Trimethylbenzene	12.519	105	4781	0.50 ug/L	96
73) 2-Chlorotoluene	12.519	91	5385	0.50 ug/L	91
74) 4-Chlorotoluene	12.598	91	4350	0.48 ug/L	99
75) tert-Butylbenzene	12.792	119	3732	0.53 ug/L	88
76) 1,2,4-Trimethylbenzene	12.819	105	4695	0.50 ug/L	93
77) sec-Butylbenzene	12.951	105	5529	0.49 ug/L	87
78) 4-Isopropyltoluene	13.030	119	3499	0.46 ug/L	97
79) 1,3-Dichlorobenzene	13.101	146	2460	0.58 ug/L #	76
80) 1,4-Dichlorobenzene	13.163	146	2443	0.56 ug/L #	1
81) Dicyclopentadiene	13.216	66	1032	0.60 ug/L #	71
82) n-Butylbenzene	13.357	92	3145	0.48 ug/L	95
83) 1,2-Dichlorobenzene	13.480	146	1913	0.53 ug/L	92
84) 1,2-Dibromo-3-chloropr...	0.000		0	N.D. d	
85) 1,2,4-Trichlorobenzene	14.962	180	1283	0.54 ug/L	92
86) Hexachlorobutadiene	15.094	190	481	0.05 ug/L	88
87) Naphthalene	15.280	128	2562m	0.61 ug/L	
88) 1,2,3-Trichlorobenzene	15.553	180	1025	0.52 ug/L	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091606.D
Acq On : 16 Sep 2013 13:31
Operator : JM
Sample : 0.5 PPB
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

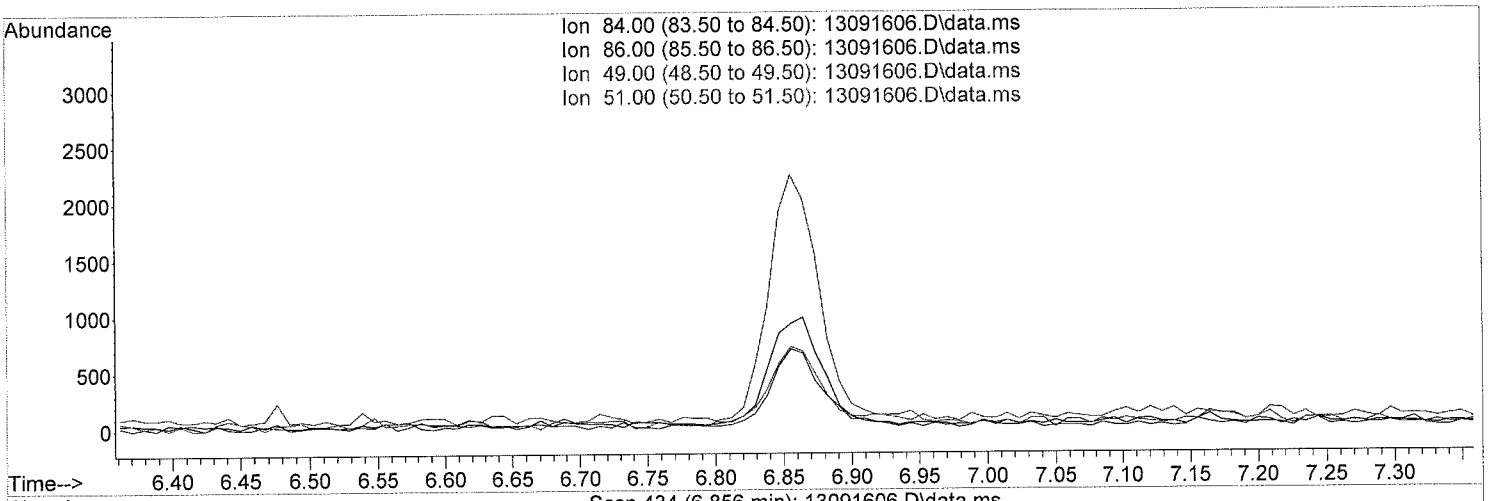
Quant Time: Sep 19 13:13:42 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

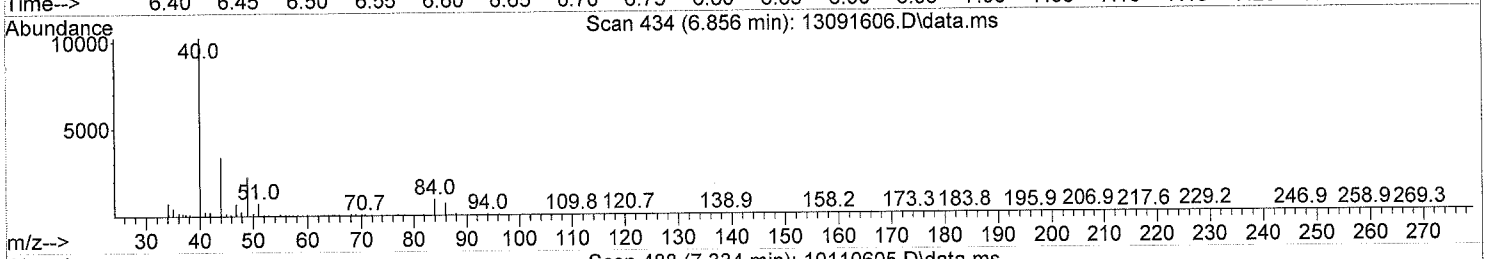


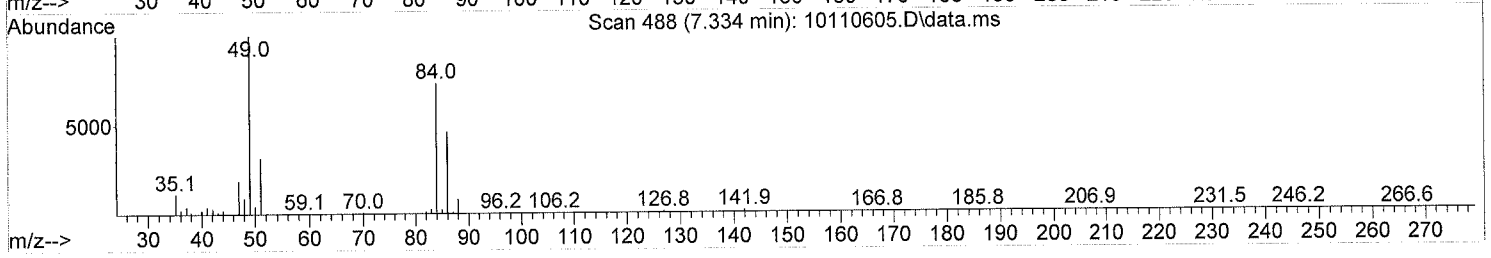
Quantitation Report (Qedit)

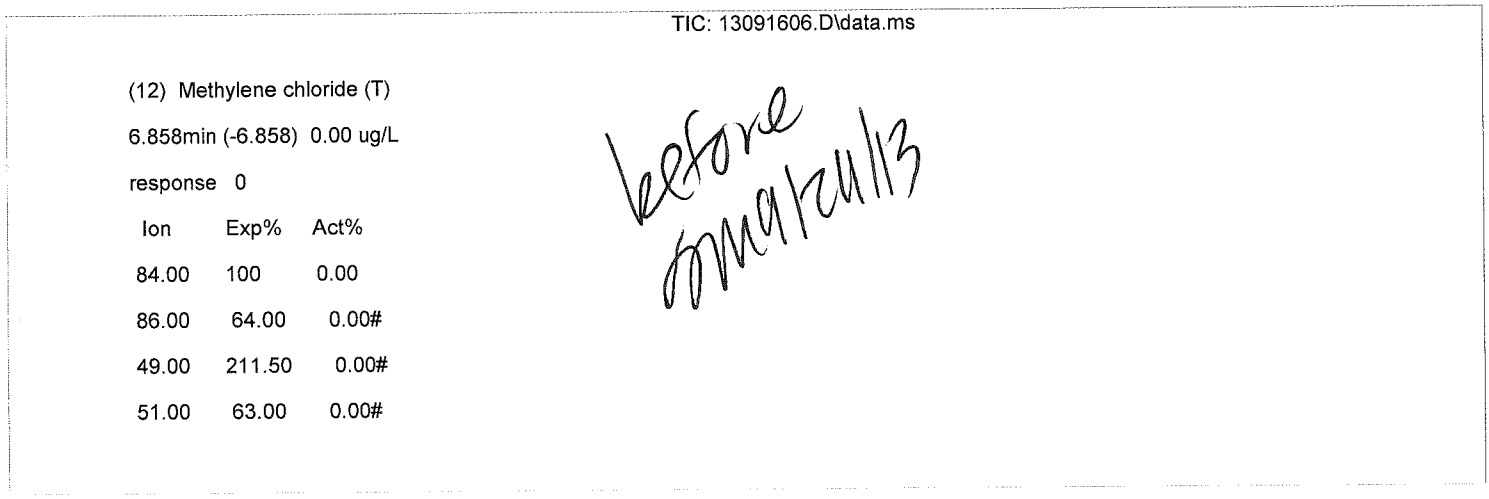
Data Path : H:\VOA\A228\130916\
Data File : 13091606.D
Acq On : 16 Sep 2013 13:31
Operator : JM
Sample : 0.5 PPB
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 12:59:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration









(12) Methylene chloride (T)

6.858min (-6.858) 0.00 ug/L

response 0

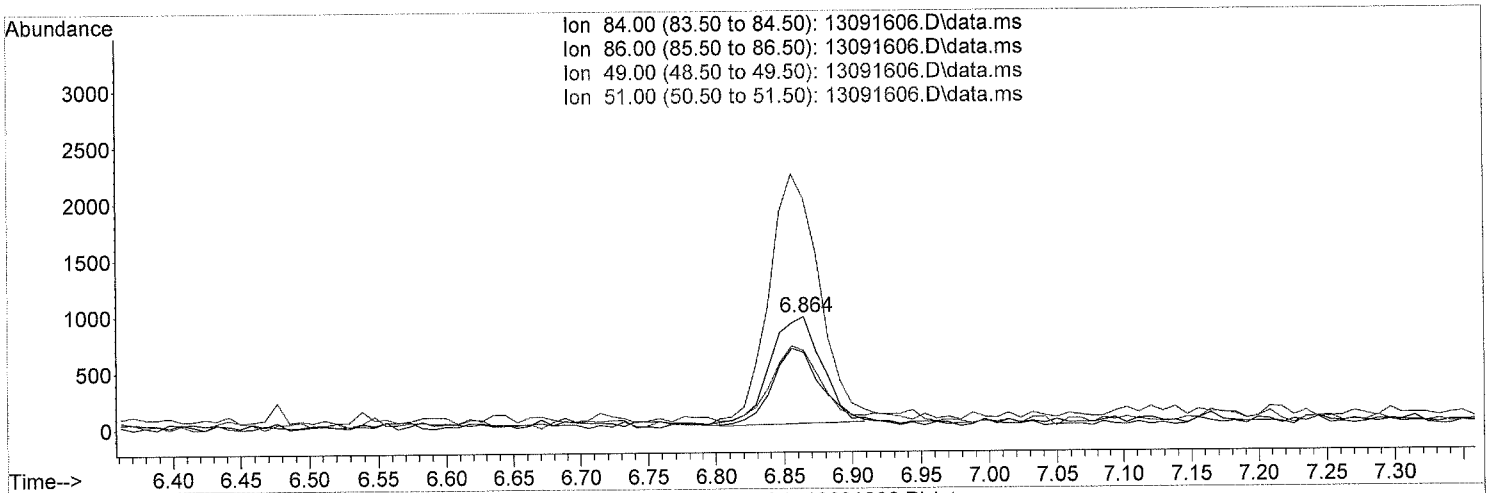
Ion	Exp%	Act%
84.00	100	0.00
86.00	64.00	0.00#
49.00	211.50	0.00#
51.00	63.00	0.00#

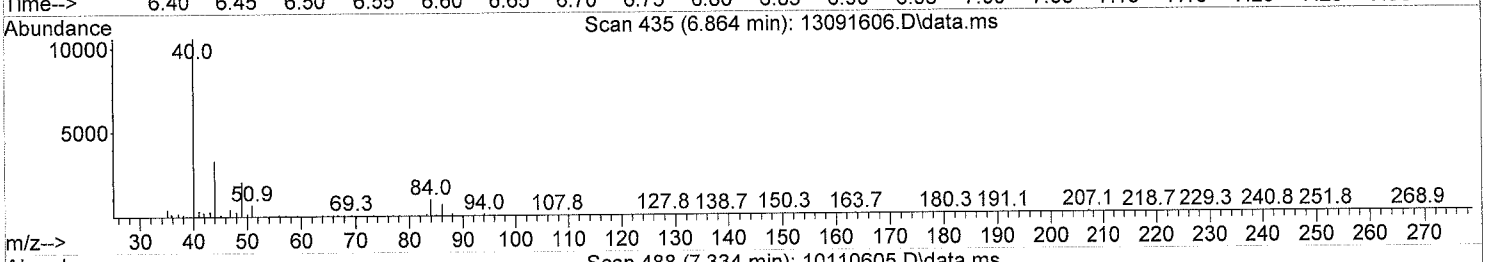
before
JM 9/24/13

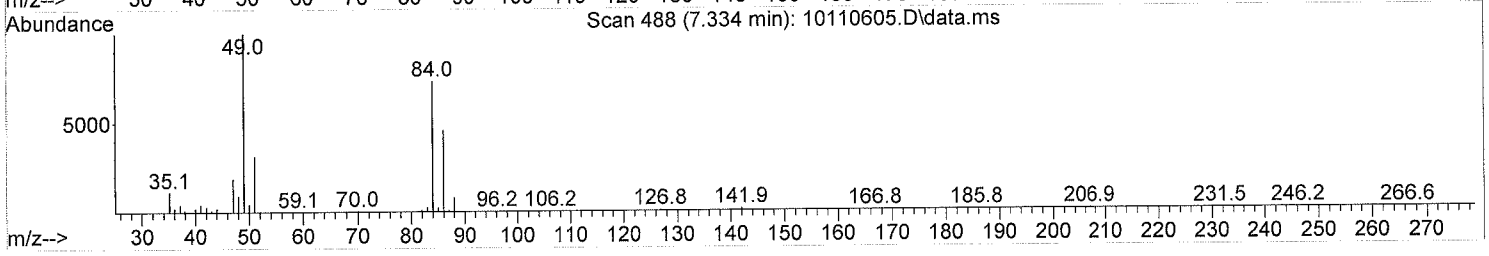
Quantitation Report (Qedit)

Data Path : H:\VOA\A228\130916\
Data File : 13091606.D
Acq On : 16 Sep 2013 13:31
Operator : JM
Sample : 0.5 PPB
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 12:59:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration







TIC: 13091606.D\data.ms

(12) Methylene chloride (T)

6.864min (+0.006) 0.61 ug/L m

response 2523

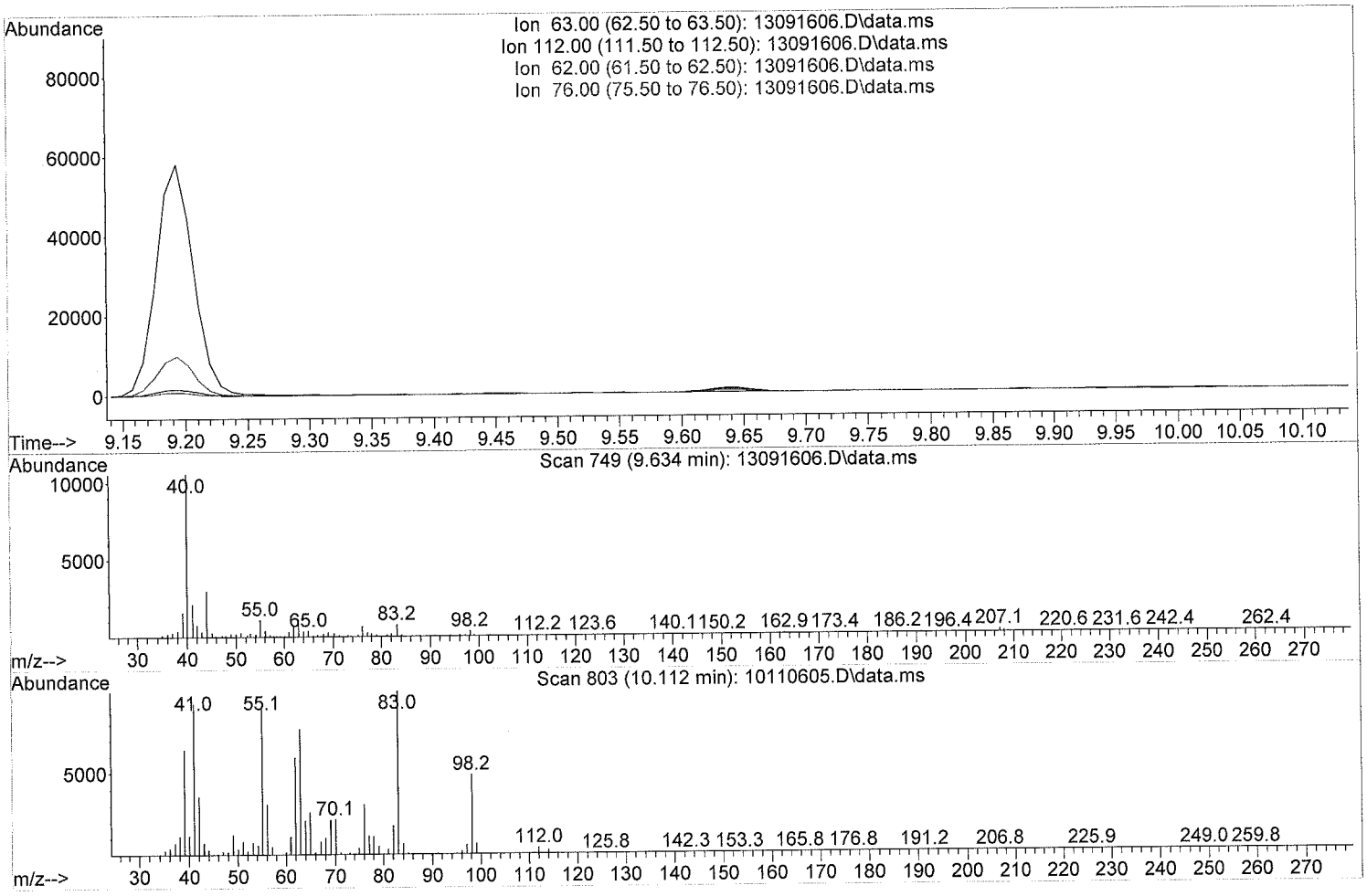
Ion	Exp%	Act%
84.00	100	100
86.00	64.00	67.59
49.00	211.50	207.49
51.00	63.00	69.44

ASHV
IC
09/24/13

Quantitation Report (Qedit)

Data Path : H:\VOA\A228\130916\
Data File : 13091606.D
Acq On : 16 Sep 2013 13:31
Operator : JM
Sample : 0.5 PPB
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 12:59:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration



TIC: 13091606.D\data.ms

(38) 1,2-Dichloropropane (C)

9.637min (-9.637) 0.00 ug/L

response 0

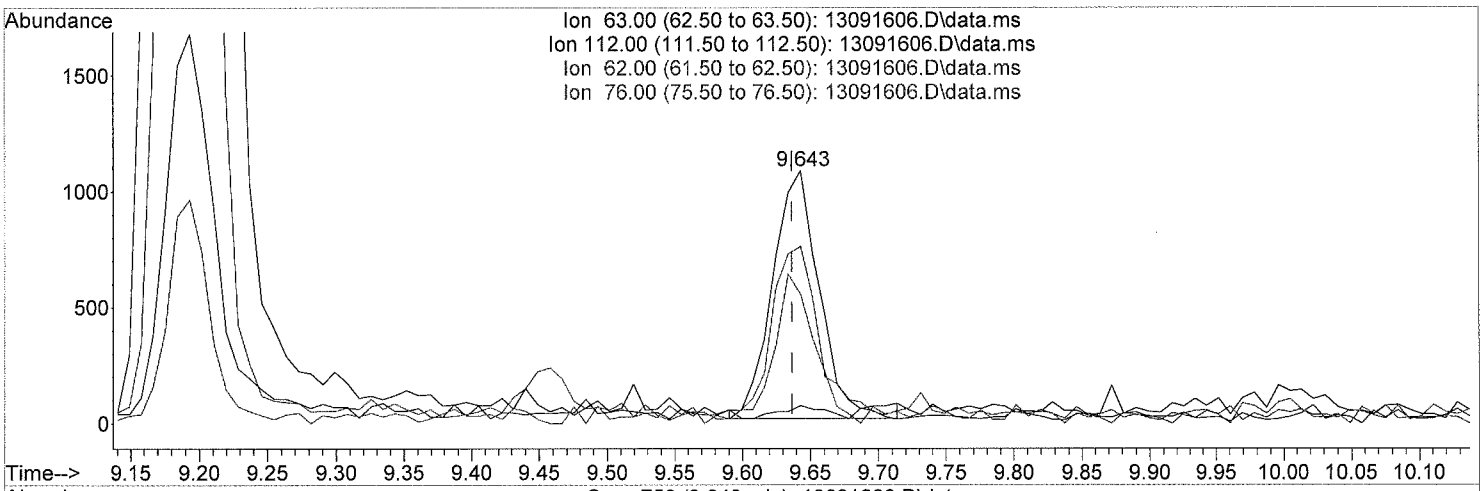
Ion	Exp%	Act%
63.00	100	0.00
112.00	2.70	0.00
62.00	79.30	0.00#
76.00	47.70	0.00#

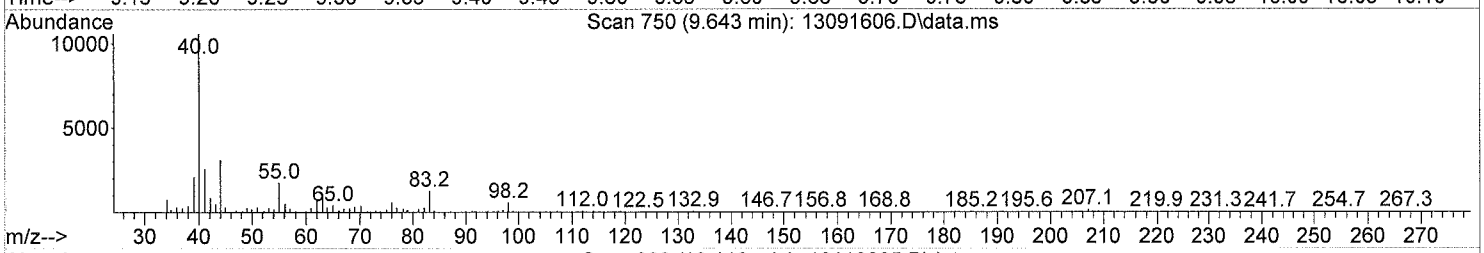
before 8/19/24/13

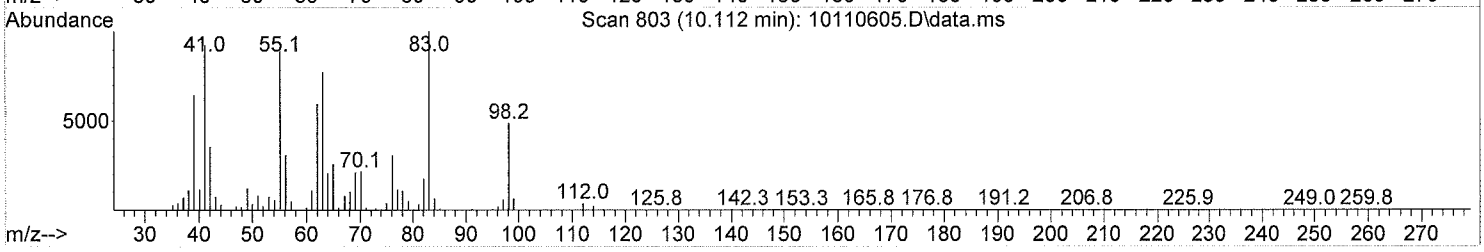
Quantitation Report (Qedit)

Data Path : H:\VOA\A228\130916\
Data File : 13091606.D
Acq On : 16 Sep 2013 13:31
Operator : JM
Sample : 0.5 PPB
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 12:59:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration







TIC: 13091606.D\data.ms

(38) 1,2-Dichloropropane (C)

9.643min (+0.006) 0.60 ug/L m

response 2573

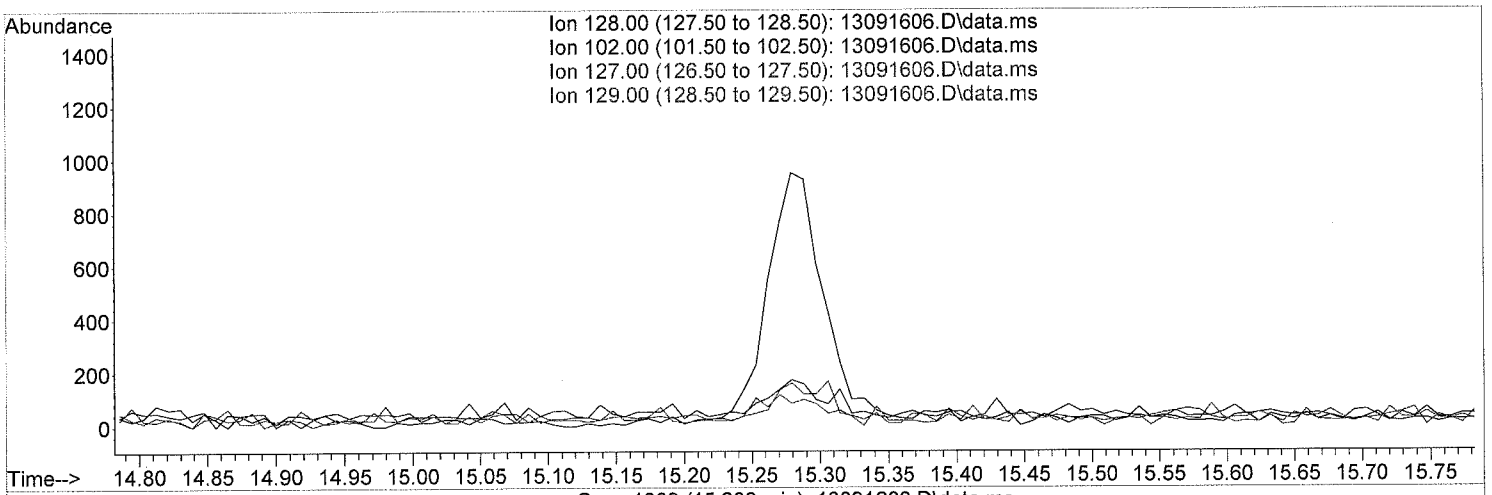
Ion	Exp%	Act%
63.00	100	100
112.00	2.70	6.98#
62.00	79.30	70.16
76.00	47.70	50.96

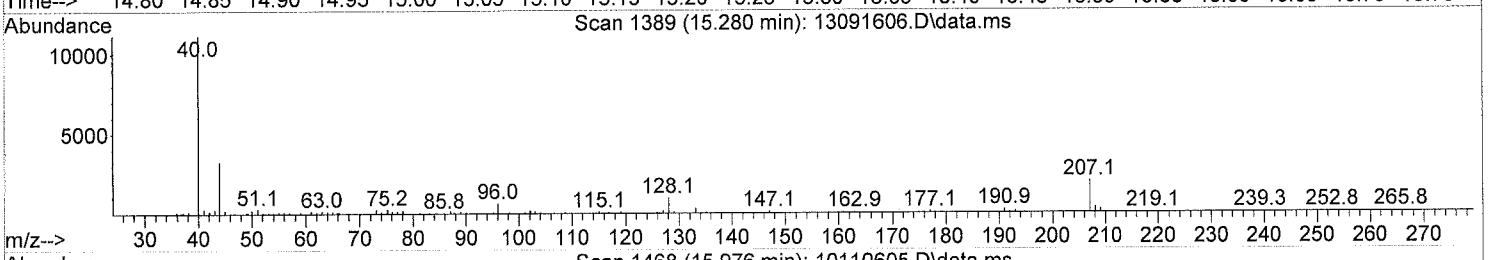
assev
IC
09/24/13

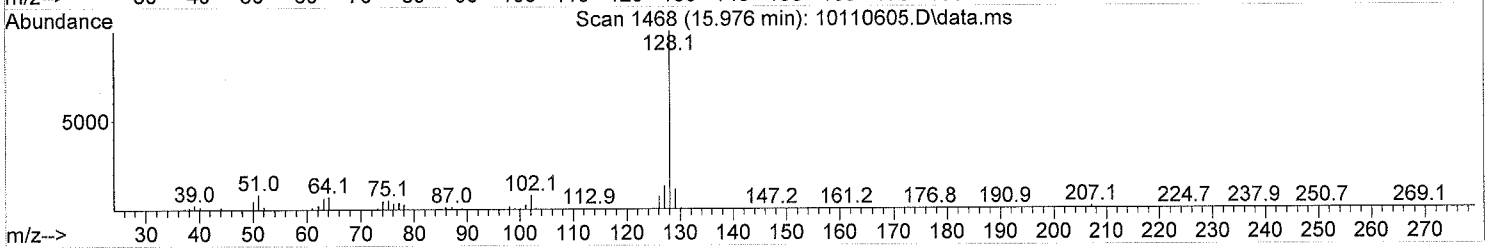
Quantitation Report (Qedit)

Data Path : H:\VOA\A228\130916\
Data File : 13091606.D
Acq On : 16 Sep 2013 13:31
Operator : JM
Sample : 0.5 PPB
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 12:59:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration







TIC: 13091606.D\data.ms

(87) Naphthalene (T)

15.282min (-15.282) 0.00 ug/L

response 0

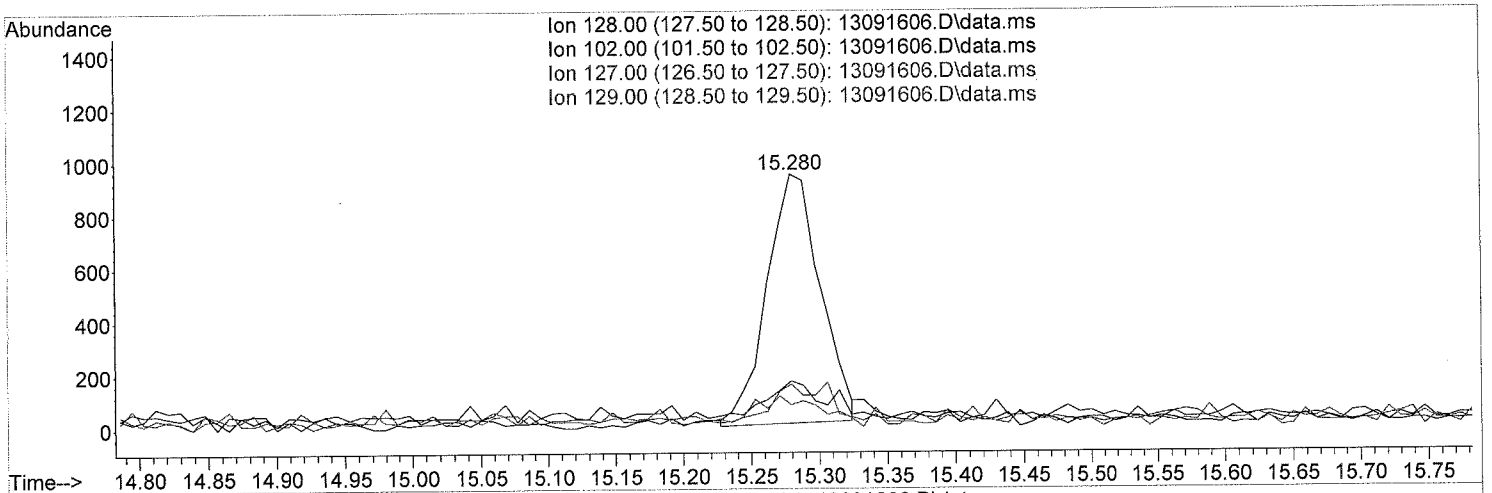
Ion	Exp%	Act%
128.00	100	0.00
102.00	12.50	0.00
127.00	13.20	0.00
129.00	10.60	0.00

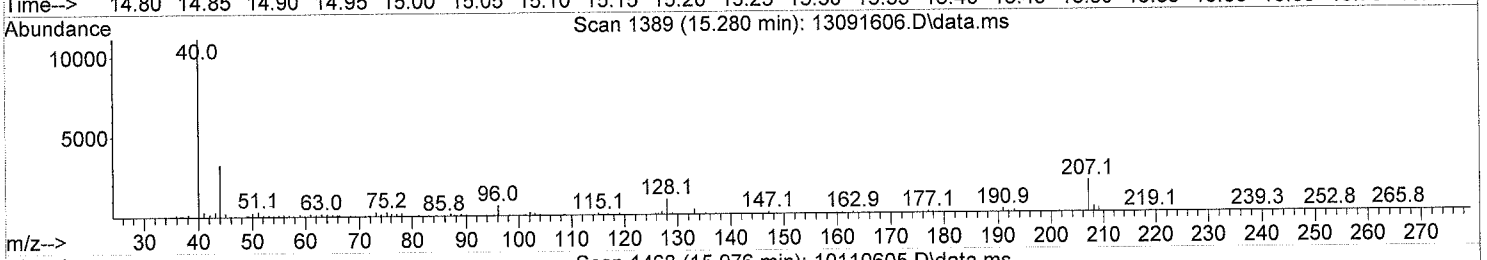
~~Int~~ before
9/19/13

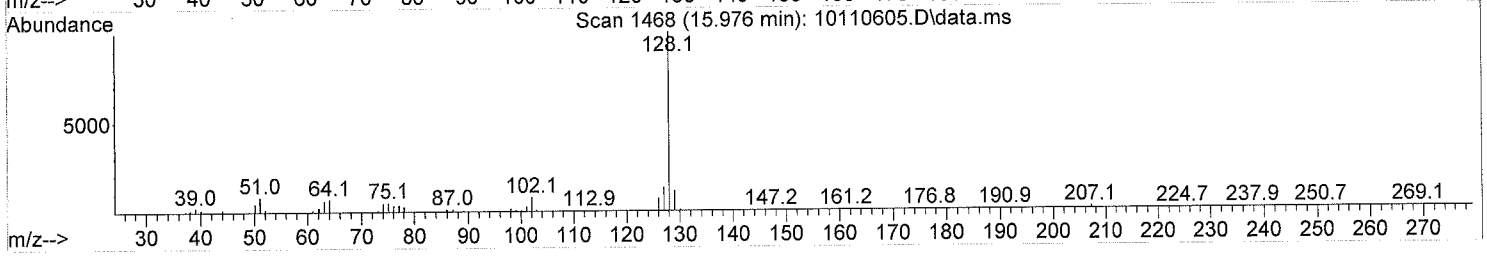
Quantitation Report (Qedit)

Data Path : H:\VOA\A228\130916\
Data File : 13091606.D
Acq On : 16 Sep 2013 13:31
Operator : JM
Sample : 0.5 PPB
Misc : ICAL
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 12:59:33 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration







TIC: 13091606.D\data.ms

(87) Naphthalene (T)

15.280min (-0.002) 0.61 ug/L m

response 2562

Ion	Exp%	Act%
128.00	100	100
102.00	12.50	18.23
127.00	13.20	16.86
129.00	10.60	8.85

after IC 9/19/13

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091607.D
Acq On : 16 Sep 2013 13:57
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Not used.
JM 9/24/13

Quant Time: Sep 24 17:25:23 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.519	168	107258	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.198	114	223958	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.448	117	207665	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.141	152	94631	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.554	113	11721	6.08 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery	= 12.16%#	
45) 1,2-Dichloroethane-d4	8.872	65	18697	5.10 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery	= 10.20%#	
46) Toluene-d8	10.389	98	31152	4.96 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery	= 9.92%#	
66) 4-Bromofluorobenzene	12.259	95	14116	5.67 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery	= 11.34%#	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.073	85	4674	1.18 ug/L	92
3) Chloromethane	4.409	50	4672	1.20 ug/L	97
4) Vinyl chloride	4.603	62	2467	1.03 ug/L	89
5) 1,3-Butadiene	4.664	54	1342	1.20 ug/L	81
6) Bromomethane	5.035	94	1879	1.04 ug/L #	70
7) Chloroethane	5.202	64	2322	1.58 ug/L #	79
8) Trichlorofluoromethane	5.626	101	5398	1.21 ug/L	93
9) Acrolein	6.164	56	35368	95.81 ug/L	98
10) Trichlorotrifluoroethane	6.296	151	1259	0.99 ug/L	96
11) 1,1-Dichloroethene	6.323	61	5910	1.27 ug/L	96
12) Methylene chloride	6.861	84	3585	1.44 ug/L	93
13) Acrylonitrile	7.117	53	660	1.06 ug/L	96
14) trans-1,2-Dichloroethene	7.178	61	5035	1.14 ug/L #	91
15) n-Hexane	7.443	57	3797	0.90 ug/L	89
16) 1,1-Dichloroethane	7.602	63	6297	1.24 ug/L	99
17) Cyclohexane	8.713	84	3078	0.99 ug/L	86
18) 2,2-Dichloropropane	8.166	77	4964	1.18 ug/L	99
19) cis-1,2-Dichloroethene	8.149	96	2759	1.26 ug/L	88
20) Chloroform	8.404	83	5680	1.18 ug/L	95
21) Bromochloromethane	8.369	128	1229	1.51 ug/L	82
23) 1,1,1-Trichloroethane	8.634	97	4284	1.12 ug/L	93
24) Acetone	6.349	43	7283	2.71 ug/L	92
25) 2-Butanone	8.122	43	5074	2.17 ug/L #	95
26) Carbon Disulfide	6.667	76	10863	1.21 ug/L #	1
27) Iodomethane	6.543	142	2276	0.77 ug/L	94
28) Vinyl acetate	7.584	43	8069	1.15 ug/L #	1
29) Methyl tert-butyl ether	7.152	73	5502	1.07 ug/L	90
31) 1,1-Dichloropropene	8.766	75	3870	0.96 ug/L	96
32) Carbon tetrachloride	8.793	117	3089	0.95 ug/L	96
33) 1,2-Dichloroethane	8.934	62	5153	1.09 ug/L	97
34) Benzene	8.951	78	9764	1.04 ug/L	97
35) 2,2,4-Trimethylpentane	8.987	57	10659	0.89 ug/L #	92
36) n-Heptane	9.092	57	2181	0.80 ug/L #	77
37) Trichloroethene	9.463	95	2924	1.16 ug/L	82

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091607.D
Acq On : 16 Sep 2013 13:57
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 24 17:25:23 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

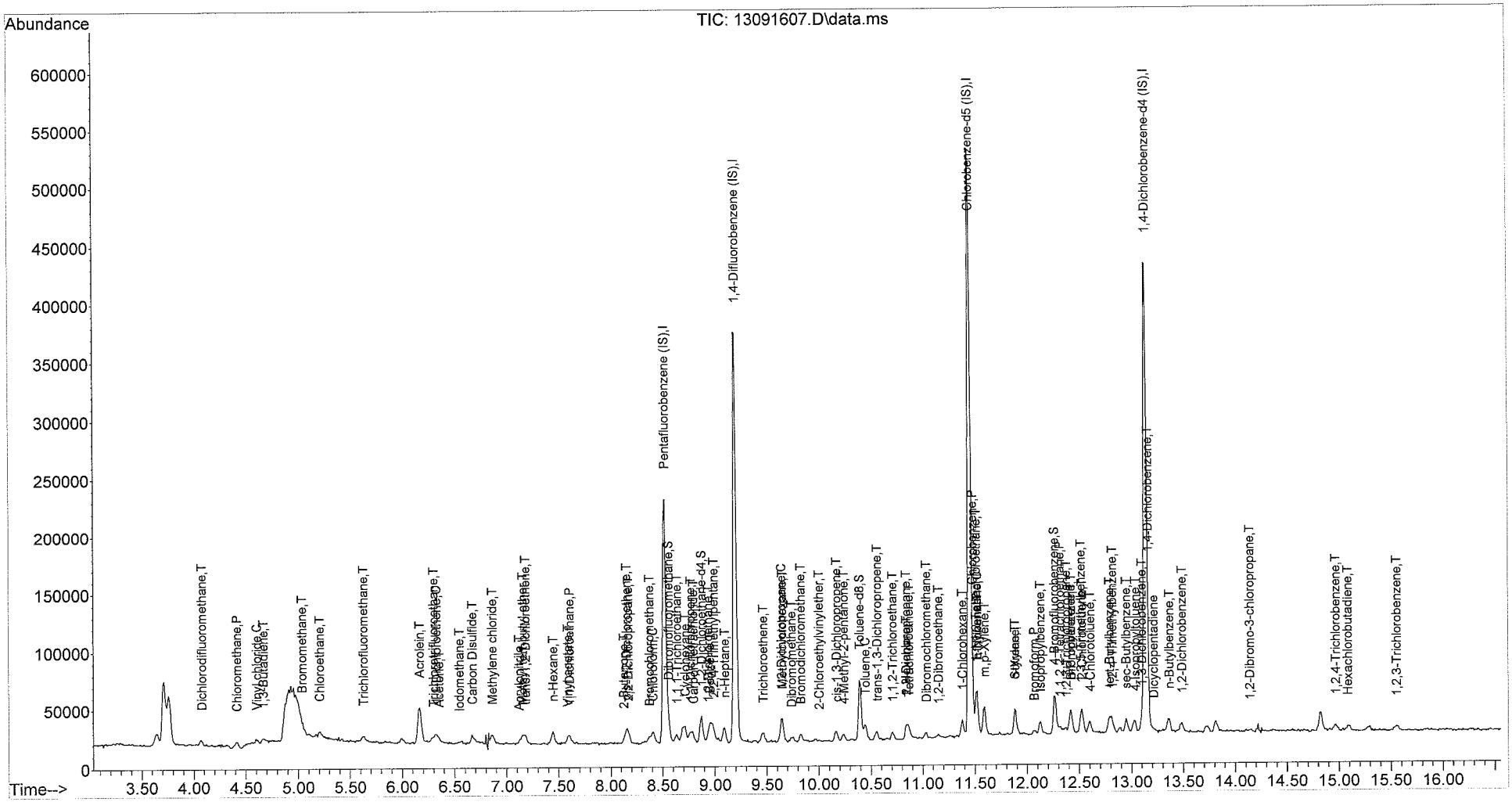
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.639	63	3147	1.07 ug/L	91
39) Bromodichloromethane	9.825	83	4241	1.08 ug/L	96
40) Methylcyclohexane	9.648	56	1453	0.41 ug/L	88
41) Dibromomethane	9.736	93	1995	1.13 ug/L	92
42) cis-1,3-Dichloropropene	10.169	75	4412	1.02 ug/L	98
43) 2-Chloroethylvinylether	10.001	63	244	0.76 ug/L #	1
44) 4-Methyl-2-pentanone	10.239	43	6328	2.36 ug/L	95
48) Toluene	10.442	92	4798	0.89 ug/L	85
49) trans-1,3-Dichloropropene	10.557	75	3721	1.00 ug/L	94
50) 1,1,2-Trichloroethane	10.707	83	2180	1.23 ug/L	93
51) 1,3-Dichloropropane	10.839	76	4099	1.09 ug/L	98
52) Tetrachloroethene	10.865	166	1789	0.99 ug/L	92
53) Dibromochloromethane	11.033	129	2214	1.12 ug/L	95
54) 1,2-Dibromoethane	11.148	107	2098	1.16 ug/L	92
55) 1-Chlorohexane	11.377	91	2998	0.87 ug/L	83
56) Chlorobenzene	11.474	112	4874	1.07 ug/L	90
57) n-Nonane	11.518	57	5350	1.04 ug/L	95
58) 1,1,1,2-Tetrachloroethane	11.509	131	1899	1.12 ug/L #	67
59) Ethylbenzene	11.518	91	10016	0.94 ug/L	98
60) m,p-Xylene	11.589	106	5523	1.87 ug/L	90
61) o-Xylene	11.880	106	2767	0.99 ug/L	96
62) Styrene	11.880	104	4462	0.88 ug/L #	82
63) Isopropylbenzene	12.127	105	6774	0.88 ug/L	97
64) Bromoform	12.065	173	1243	1.09 ug/L	96
65) 1,1,2,2-Tetrachloroethane	12.312	83	2954	1.22 ug/L	94
67) 2-Hexanone	10.839	43	5784	2.91 ug/L #	83
69) 1,2,3-Trichloropropane	12.374	110	738	1.40 ug/L	77
70) n-Propylbenzene	12.418	91	10129	0.90 ug/L	98
71) Bromobenzene	12.418	156	1829	1.03 ug/L	89
72) 1,3,5-Trimethylbenzene	12.515	105	6200	0.90 ug/L	93
73) 2-Chlorotoluene	12.524	91	7586	0.97 ug/L	97
74) 4-Chlorotoluene	12.603	91	6273	0.94 ug/L	96
75) tert-Butylbenzene	12.788	119	4932	0.95 ug/L	98
76) 1,2,4-Trimethylbenzene	12.815	105	6128	0.90 ug/L	98
77) sec-Butylbenzene	12.947	105	7105	0.86 ug/L	91
78) 4-Isopropyltoluene	13.035	119	4698	0.85 ug/L	93
79) 1,3-Dichlorobenzene	13.097	146	2799	0.91 ug/L #	90
80) 1,4-Dichlorobenzene	13.159	146	3540	1.11 ug/L #	7
81) Dicyclopentadiene	13.212	66	1114	0.89 ug/L #	61
82) n-Butylbenzene	13.362	92	4391	0.91 ug/L	95
83) 1,2-Dichlorobenzene	13.485	146	2600	0.98 ug/L	95
84) 1,2-Dibromo-3-chloropr...	14.138	157	578	2.33 ug/L #	66
85) 1,2,4-Trichlorobenzene	14.967	180	1780	1.02 ug/L	92
86) Hexachlorobutadiene	15.082	190	578	0.54 ug/L	92
88) 1,2,3-Trichlorobenzene	15.549	180	1351	0.94 ug/L	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091607.D
Acq On : 16 Sep 2013 13:57
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 24 17:25:23 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091608.D
Acq On : 16 Sep 2013 14:24
Operator : JM
Sample : 5.0 PPB
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 24 17:25:36 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

Not used - see chromatogram for contamination. JM 9/24/13

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.517	168	171621	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.197	114	315791	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.455	117	283972	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.139	152	128033	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.553	113	59345	19.25 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 38.50%#		
45) 1,2-Dichloroethane-d4	8.870	65	96531	18.67 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 37.34%#		
46) Toluene-d8	10.387	98	168999	19.08 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 38.16%#		
66) 4-Bromofluorobenzene	12.266	95	71727	18.41 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 36.82%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.072	85	30325	4.79 ug/L	98
3) Chloromethane	4.424	50	28435	4.56 ug/L	98
4) Vinyl chloride	4.610	62	16474	4.81 ug/L	98
5) 1,3-Butadiene	4.671	54	8127	4.54 ug/L	92
6) Bromomethane	5.033	94	10078	5.41 ug/L	95
7) Chloroethane	5.201	64	9236	4.61 ug/L	93
8) Trichlorofluoromethane	5.624	101	34090	4.76 ug/L	98
9) Acrolein	6.162	56	59314	100.42 ug/L	99
10) Trichlorotrifluoroethane	6.294	151	9499	4.68 ug/L	97
11) 1,1-Dichloroethene	6.321	61	35220	4.74 ug/L	97
12) Methylene chloride	6.859	84	19417	4.89 ug/L	99
13) Acrylonitrile	7.115	53	6080	4.92 ug/L	91
14) trans-1,2-Dichloroethene	7.177	61	34376	4.85 ug/L	98
15) n-Hexane	7.441	57	29930	4.43 ug/L	93
16) 1,1-Dichloroethane	7.600	63	39023	4.82 ug/L	99
17) Cyclohexane	8.711	84	22808	4.60 ug/L	92
18) 2,2-Dichloropropane	8.164	77	32520	4.82 ug/L	99
19) cis-1,2-Dichloroethene	8.147	96	16597	4.73 ug/L	94
20) Chloroform	8.403	83	37085	4.81 ug/L	97
21) Bromochloromethane	8.376	128	6176	4.75 ug/L	93
23) 1,1,1-Trichloroethane	8.632	97	29658	4.86 ug/L	99
24) Acetone	6.347	43	19676	8.60 ug/L	95
25) 2-Butanone	8.120	43	23824	10.18 ug/L	97
26) Carbon Disulfide	6.665	76	70258	4.88 ug/L	88
27) Iodomethane	6.550	142	15967	4.10 ug/L	99
28) Vinyl acetate	7.582	43	48720	4.35 ug/L #	82
29) Methyl tert-butyl ether	7.150	73	37401	4.55 ug/L	96
31) 1,1-Dichloropropene	8.764	75	26994	4.77 ug/L	99
32) Carbon tetrachloride	8.791	117	22162	4.86 ug/L	96
33) 1,2-Dichloroethane	8.932	62	31382	4.71 ug/L	96
34) Benzene	8.950	78	63243	4.76 ug/L	96
35) 2,2,4-Trimethylpentane	8.976	57	79463	4.68 ug/L	98
36) n-Heptane	9.091	57	16989	4.44 ug/L #	97
37) Trichloroethene	9.452	95	16792	4.72 ug/L	96

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091608.D
Acq On : 16 Sep 2013 14:24
Operator : JM
Sample : 5.0 PPB
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 24 17:25:36 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

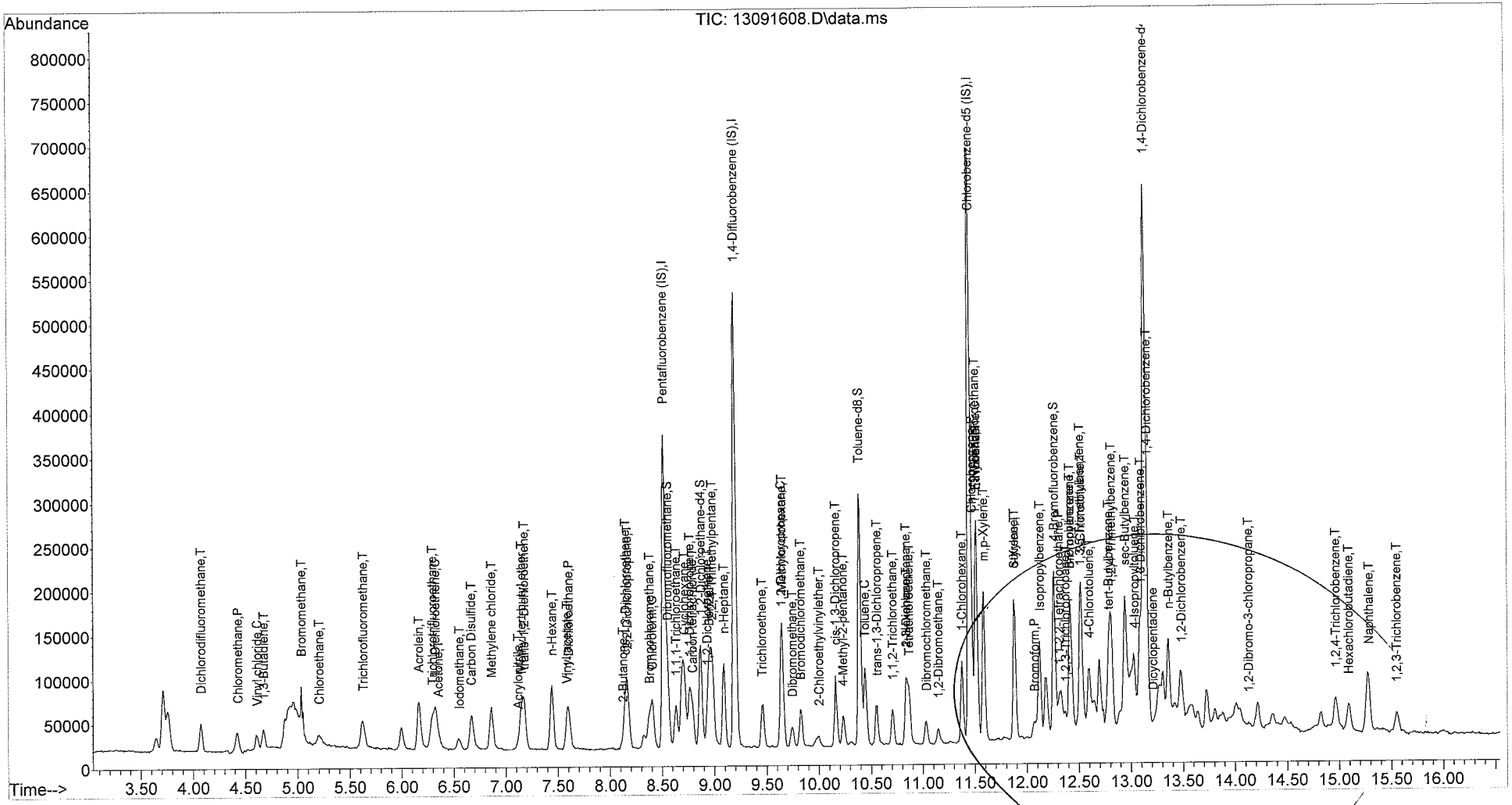
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.638	63	20066	4.84 ug/L	97
39) Bromodichloromethane	9.823	83	26923	4.85 ug/L	99
40) Methylcyclohexane	9.646	56	9371	4.21 ug/L	90
41) Dibromomethane	9.743	93	11478	4.61 ug/L	96
42) cis-1,3-Dichloropropene	10.158	75	29222	4.80 ug/L #	92
43) 2-Chloroethylvinylether	9.999	63	3729	5.26 ug/L #	18
44) 4-Methyl-2-pentanone	10.229	43	33909	8.96 ug/L	98
48) Toluene	10.440	92	33538	4.56 ug/L	99
49) trans-1,3-Dichloropropene	10.555	75	23053	4.52 ug/L	96
50) 1,1,2-Trichloroethane	10.705	83	11122	4.60 ug/L	96
51) 1,3-Dichloropropane	10.837	76	23230	4.52 ug/L	98
52) Tetrachloroethene	10.864	166	11496	4.67 ug/L	99
53) Dibromochloromethane	11.031	129	11871	4.38 ug/L	97
54) 1,2-Dibromoethane	11.146	107	11557	4.68 ug/L	98
55) 1-Chlorohexane	11.375	91	20830	4.40 ug/L	96
56) Chlorobenzene	11.472	112	28933	4.63 ug/L	99
57) n-Nonane	11.516	57	32951	4.70 ug/L	96
58) 1,1,1,2-Tetrachloroethane	11.508	131	10652	4.60 ug/L	93
59) Ethylbenzene	11.516	91	67069	4.60 ug/L	98
60) m,p-Xylene	11.587	106	37047	9.18 ug/L	98
61) o-Xylene	11.878	106	17273	4.53 ug/L	96
62) Styrene	11.878	104	31261	4.50 ug/L	90
63) Isopropylbenzene	12.125	105	48570	4.64 ug/L	99
64) Bromoform	12.072	173	6789	4.37 ug/L	97
65) 1,1,2,2-Tetrachloroethane	12.310	83	15083	4.54 ug/L	88
67) 2-Hexanone	10.837	43	23741	8.73 ug/L	95
69) 1,2,3-Trichloropropane	12.372	110	3227	4.51 ug/L	90
70) n-Propylbenzene	12.416	91	70131	4.63 ug/L	99
71) Bromobenzene	12.416	156	11106	4.62 ug/L	84
72) 1,3,5-Trimethylbenzene	12.513	105	47777	5.11 ug/L	99
73) 2-Chlorotoluene	12.522	91	50028	4.73 ug/L	95
74) 4-Chlorotoluene	12.601	91	41556	4.60 ug/L	99
75) tert-Butylbenzene	12.787	119	33288	4.76 ug/L	99
76) 1,2,4-Trimethylbenzene	12.813	105	52831	5.71 ug/L	99
77) sec-Butylbenzene	12.945	105	53564	4.78 ug/L	95
78) 4-Isopropyltoluene	13.034	119	35634	4.75 ug/L	96
79) 1,3-Dichlorobenzene	13.095	146	19130	4.58 ug/L	93
80) 1,4-Dichlorobenzene	13.157	146	19650	4.56 ug/L #	77
81) Dicyclopentadiene	13.210	66	7115	4.20 ug/L #	67
82) n-Butylbenzene	13.360	92	32170	4.95 ug/L	98
83) 1,2-Dichlorobenzene	13.483	146	16744	4.68 ug/L	97
84) 1,2-Dibromo-3-chloropr...	14.127	157	1703	4.95 ug/L #	95
85) 1,2,4-Trichlorobenzene	14.965	180	10797	4.59 ug/L	98
86) Hexachlorobutadiene	15.089	190	3261	4.48 ug/L	99
87) Naphthalene	15.283	128	58560	14.13 ug/L	99
88) 1,2,3-Trichlorobenzene	15.548	180	8608	4.43 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091608.D
Acq On : 16 Sep 2013 14:24
Operator : JM
Sample : 5.0 PPB
Misc : ICAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 24 17:25:36 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091609.D
Acq On : 16 Sep 2013 14:50
Operator : JM
Sample : 10 PPB
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 24 17:25:52 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

9/24/13

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.520	168	176793	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.199	114	331218	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.457	117	290931	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	133708	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.555	113	93132	29.32 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 58.64%		
45) 1,2-Dichloroethane-d4	8.873	65	151522	27.94 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 55.88%		
46) Toluene-d8	10.390	98	271731	29.25 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 58.50%#		
66) 4-Bromofluorobenzene	12.260	95	117348	28.81 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 57.62%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.074	85	62676	9.61 ug/L	98
3) Chloromethane	4.418	50	58560	9.12 ug/L	98
4) Vinyl chloride	4.604	62	31583	9.10 ug/L	96
5) 1,3-Butadiene	4.674	54	17347	9.40 ug/L	93
6) Bromomethane	5.036	94	16034	8.81 ug/L	98
7) Chloroethane	5.195	64	26307	13.55 ug/L	93
8) Trichlorofluoromethane	5.618	101	71392	9.68 ug/L	97
9) Acrolein	6.165	56	76262	125.33 ug/L	97
10) Trichlorotrifluoroethane	6.288	151	19967	9.56 ug/L	95
11) 1,1-Dichloroethene	6.324	61	73908	9.65 ug/L	99
12) Methylene chloride	6.862	84	39695	9.70 ug/L	98
13) Acrylonitrile	7.109	53	12716	9.74 ug/L	94
14) trans-1,2-Dichloroethene	7.179	61	71194	9.76 ug/L	99
15) n-Hexane	7.444	57	65069	9.34 ug/L	98
16) 1,1-Dichloroethane	7.603	63	82318	9.87 ug/L	99
17) Cyclohexane	8.714	84	49473	9.68 ug/L	88
18) 2,2-Dichloropropane	8.167	77	68205	9.82 ug/L	97
19) cis-1,2-Dichloroethene	8.150	96	36044	9.97 ug/L	99
20) Chloroform	8.405	83	76397	9.61 ug/L	97
21) Bromochloromethane	8.379	128	13071	9.77 ug/L	98
23) 1,1,1-Trichloroethane	8.635	97	61362	9.76 ug/L	98
24) Acetone	6.341	43	35319	19.31 ug/L	96
25) 2-Butanone	8.114	43	42276	18.95 ug/L	96
26) Carbon Disulfide	6.668	76	143852	9.69 ug/L	95
27) Iodomethane	6.544	142	37022	9.51 ug/L	98
28) Vinyl acetate	7.585	43	111909	9.70 ug/L	95
29) Methyl tert-butyl ether	7.153	73	81700	9.65 ug/L	98
31) 1,1-Dichloropropene	8.767	75	57440	9.67 ug/L	99
32) Carbon tetrachloride	8.793	117	44890	9.38 ug/L	96
33) 1,2-Dichloroethane	8.935	62	66335	9.49 ug/L	97
34) Benzene	8.952	78	133475	9.57 ug/L	98
35) 2,2,4-Trimethylpentane	8.979	57	168771	9.48 ug/L	99
36) n-Heptane	9.093	57	38379	9.56 ug/L	96
37) Trichloroethene	9.455	95	35704	9.57 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091609.D
Acq On : 16 Sep 2013 14:50
Operator : JM
Sample : 10 PPB
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 24 17:25:52 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration

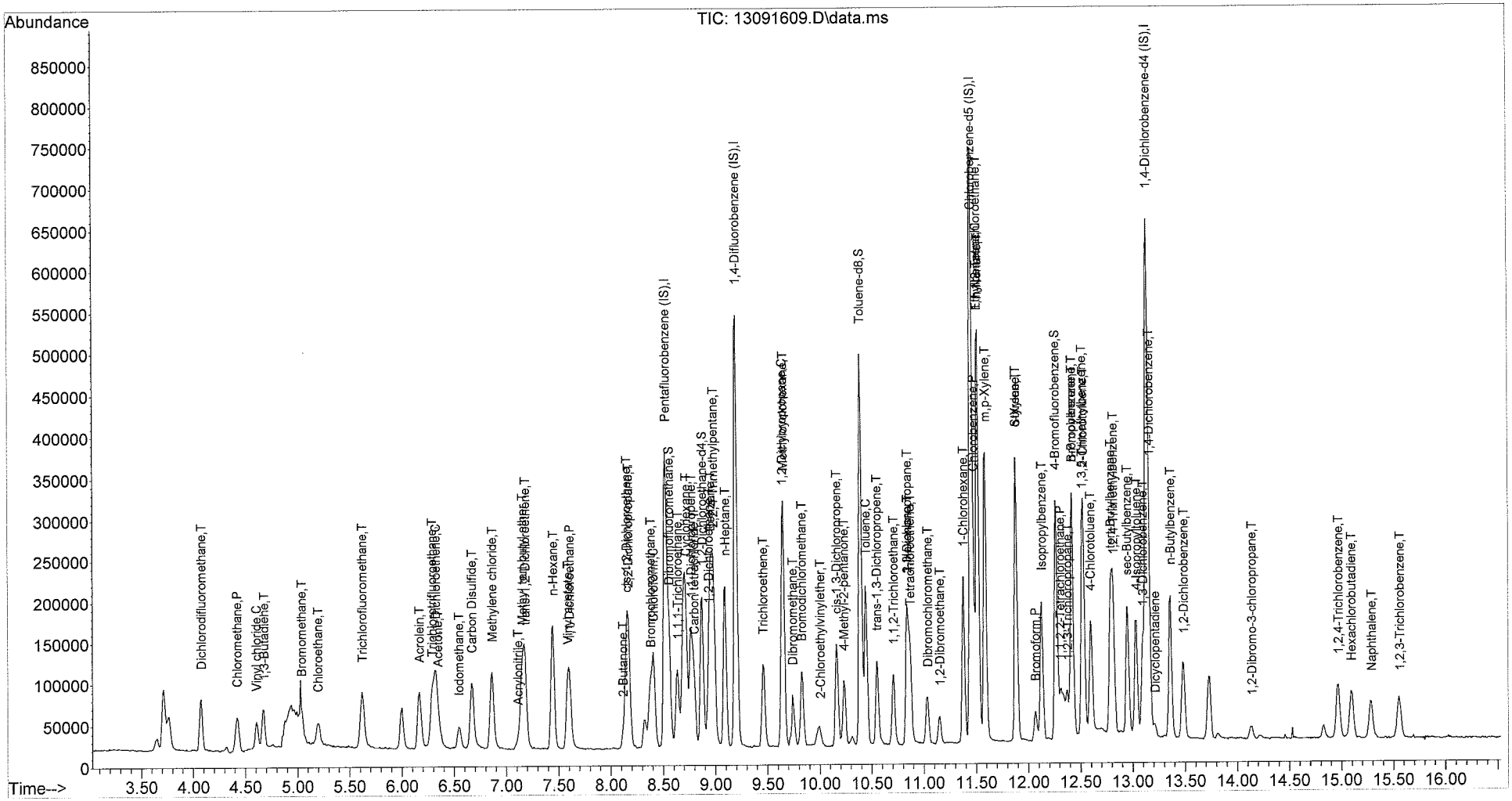
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.640	63	43183	9.93 ug/L	98
39) Bromodichloromethane	9.826	83	56419	9.70 ug/L	99
40) Methylcyclohexane	9.649	56	20104	9.30 ug/L	98
41) Dibromomethane	9.737	93	25652	9.83 ug/L	93
42) cis-1,3-Dichloropropene	10.161	75	61401	9.61 ug/L	96
43) 2-Chloroethylvinylether	10.002	63	7613	9.95 ug/L #	72
44) 4-Methyl-2-pentanone	10.231	43	74831	18.86 ug/L	98
48) Toluene	10.443	92	72895	9.68 ug/L	99
49) trans-1,3-Dichloropropene	10.549	75	50138	9.60 ug/L	96
50) 1,1,2-Trichloroethane	10.708	83	23846	9.62 ug/L	99
51) 1,3-Dichloropropane	10.840	76	50973	9.68 ug/L	95
52) Tetrachloroethene	10.866	166	24014	9.53 ug/L	97
53) Dibromochloromethane	11.034	129	26025	9.37 ug/L	96
54) 1,2-Dibromoethane	11.149	107	23690	9.37 ug/L	97
55) 1-Chlorohexane	11.378	91	45407	9.37 ug/L	97
56) Chlorobenzene	11.475	112	61463	9.60 ug/L	95
57) n-Nonane	11.519	57	66660	9.28 ug/L	99
58) 1,1,1,2-Tetrachloroethane	11.510	131	22924	9.66 ug/L	98
59) Ethylbenzene	11.510	91	145272	9.73 ug/L	97
60) m,p-Xylene	11.590	106	82654	19.98 ug/L	98
61) o-Xylene	11.881	106	37479	9.60 ug/L	97
62) Styrene	11.881	104	70000	9.84 ug/L	95
63) Isopropylbenzene	12.128	105	104719	9.75 ug/L	99
64) Bromoform	12.066	173	15251	9.58 ug/L	97
65) 1,1,2,2-Tetrachloroethane	12.304	83	32903	9.68 ug/L	98
67) 2-Hexanone	10.840	43	52252	18.76 ug/L	96
69) 1,2,3-Trichloropropane	12.375	110	7070	9.46 ug/L	98
70) n-Propylbenzene	12.419	91	153578	9.71 ug/L	98
71) Bromobenzene	12.419	156	23623	9.42 ug/L	88
72) 1,3,5-Trimethylbenzene	12.516	105	93668	9.60 ug/L	98
73) 2-Chlorotoluene	12.525	91	106919	9.69 ug/L	97
74) 4-Chlorotoluene	12.595	91	88557	9.39 ug/L	98
75) tert-Butylbenzene	12.789	119	69967	9.57 ug/L	98
76) 1,2,4-Trimethylbenzene	12.816	105	92932	9.62 ug/L	98
77) sec-Butylbenzene	12.948	105	112410	9.60 ug/L	98
78) 4-Isopropyltoluene	13.036	119	75498	9.63 ug/L	98
79) 1,3-Dichlorobenzene	13.098	146	40426	9.27 ug/L	96
80) 1,4-Dichlorobenzene	13.160	146	40311	8.97 ug/L #	89
81) Dicyclopentadiene	13.213	66	15089	8.53 ug/L #	91
82) n-Butylbenzene	13.363	92	65273	9.61 ug/L	99
83) 1,2-Dichlorobenzene	13.486	146	34893	9.34 ug/L	96
84) 1,2-Dibromo-3-chloropr...	14.139	157	3615	9.96 ug/L	89
85) 1,2,4-Trichlorobenzene	14.968	180	21551	8.77 ug/L	99
86) Hexachlorobutadiene	15.092	190	6408	9.05 ug/L	97
87) Naphthalene	15.286	128	41842	9.67 ug/L	98
88) 1,2,3-Trichlorobenzene	15.559	180	17692	8.71 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091609.D
Acq On : 16 Sep 2013 14:50
Operator : JM
Sample : 10 PPB
Misc : ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 24 17:25:52 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 17 09:51:24 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091610.D
Acq On : 16 Sep 2013 15:17
Operator : JM
Sample : 20 PPB
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

JM 9/24/13

Quant Time: Sep 24 17:31:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:27:53 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	8.517	168	178076	50.00	ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.196	114	328593	50.00	ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.454	117	291686	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.139	152	133491	50.00	ug/L	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	8.552	113	155350	48.56	ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 97.12%			
45) 1,2-Dichloroethane-d4	8.870	65	256082	47.59	ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 95.18%			
46) Toluene-d8	10.396	98	468097	50.80	ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 101.60%			
66) 4-Bromofluorobenzene	12.266	95	201682	48.69	ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 97.38%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.071	85	128326	19.53	ug/L	100
3) Chloromethane	4.424	50	127609	19.74	ug/L	100
4) Vinyl chloride	4.609	62	71553	20.81	ug/L	100
5) 1,3-Butadiene	4.671	54	37010	19.91	ug/L	100
6) Bromomethane	5.041	94	35680	20.45	ug/L	100
7) Chloroethane	5.209	64	34646	17.86	ug/L	100
8) Trichlorofluoromethane	5.623	101	145115	19.53	ug/L	100
9) Acrolein	6.162	56	93193	152.05	ug/L	100
10) Trichlorotrifluoroethane	6.294	151	40516	19.26	ug/L	100
11) 1,1-Dichloroethene	6.329	61	149926	19.43	ug/L	100
12) Methylene chloride	6.858	84	79410	18.74	ug/L	100
13) Acrylonitrile	7.105	53	26941	20.19	ug/L	100
14) trans-1,2-Dichloroethene	7.176	61	144725	19.69	ug/L	100
15) n-Hexane	7.441	57	134199	19.13	ug/L	100
16) 1,1-Dichloroethane	7.599	63	165432	19.69	ug/L	100
17) Cyclohexane	8.711	84	102647	19.93	ug/L	100
18) 2,2-Dichloropropane	8.173	77	136879	19.57	ug/L	100
19) cis-1,2-Dichloroethene	8.146	96	72514	19.91	ug/L	100
20) Chloroform	8.411	83	153264	19.14	ug/L	100
21) Bromochloromethane	8.376	128	27210	20.19	ug/L	100
23) 1,1,1-Trichloroethane	8.631	97	124772	19.70	ug/L	100
24) Acetone	6.338	43	67785	42.08	ug/L	100
25) 2-Butanone	8.120	43	88159	41.35	ug/L	100
26) Carbon Disulfide	6.673	76	293201	19.62	ug/L	100
27) Iodomethane	6.550	142	79448	20.50	ug/L	100
28) Vinyl acetate	7.582	43	232490	20.00	ug/L	100
29) Methyl tert-butyl ether	7.149	73	171874	20.17	ug/L	100
31) 1,1-Dichloropropene	8.764	75	115644	19.63	ug/L	100
32) Carbon tetrachloride	8.790	117	92836	19.55	ug/L	100
33) 1,2-Dichloroethane	8.931	62	135928	19.60	ug/L	100
34) Benzene	8.958	78	277066	20.03	ug/L	100
35) 2,2,4-Trimethylpentane	8.984	57	349937	19.80	ug/L	100
36) n-Heptane	9.090	57	78963	19.82	ug/L	100
37) Trichloroethene	9.460	95	73540	19.87	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091610.D
Acq On : 16 Sep 2013 15:17
Operator : JM
Sample : 20 PPB
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 17:31:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:27:53 2013
Response via : Initial Calibration

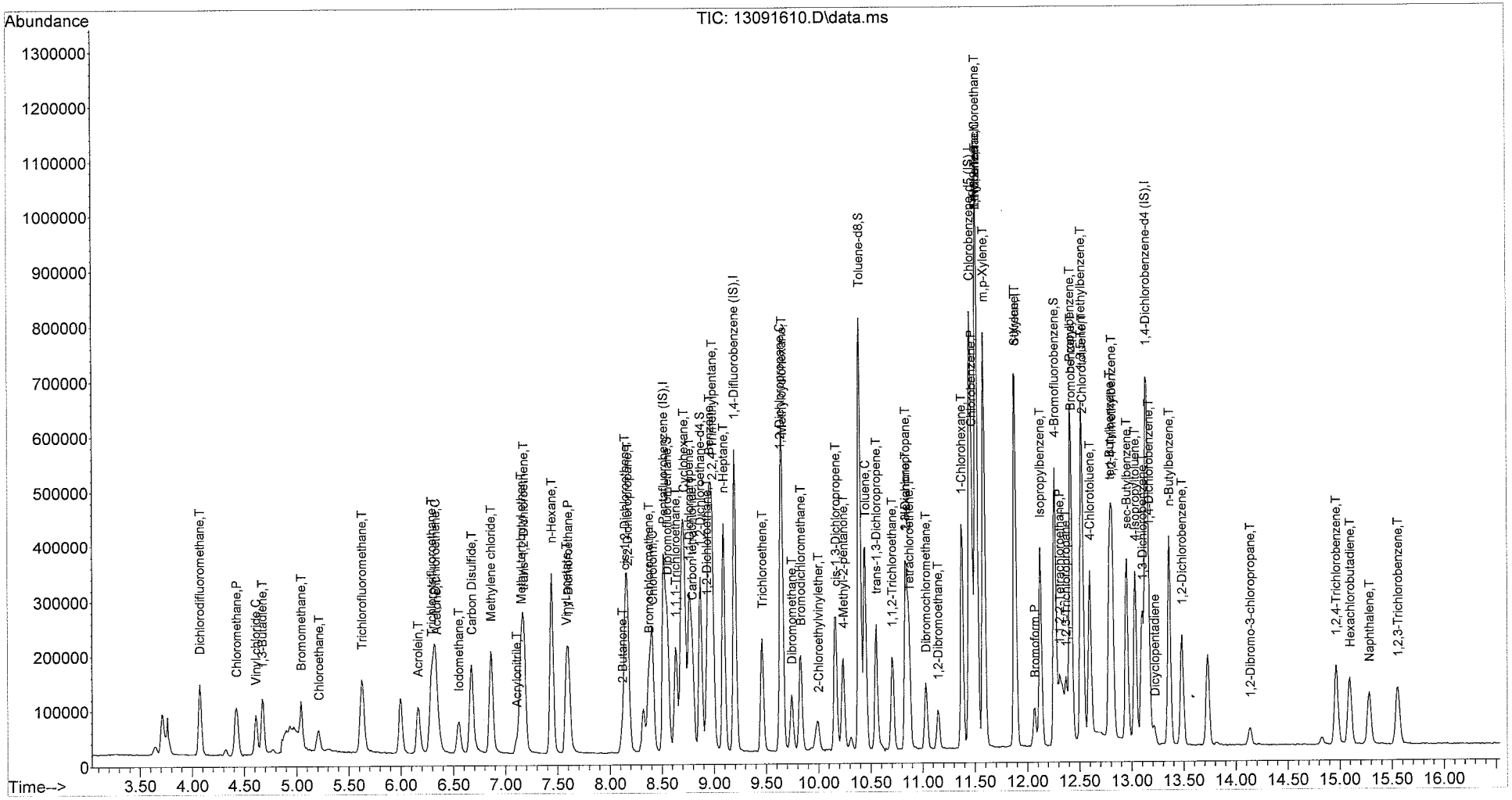
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.637	63	86162	19.48 ug/L	100
39) Bromodichloromethane	9.831	83	114992	19.93 ug/L	100
40) Methylcyclohexane	9.655	56	42204	20.41 ug/L	100
41) Dibromomethane	9.743	93	49624	19.17 ug/L	100
42) cis-1,3-Dichloropropene	10.166	75	127143	20.05 ug/L	100
43) 2-Chloroethylvinylether	9.999	63	16135	20.93 ug/L	100
44) 4-Methyl-2-pentanone	10.237	43	158213	40.19 ug/L	100
48) Toluene	10.448	92	148126	19.62 ug/L	100
49) trans-1,3-Dichloropropene	10.554	75	105840	20.22 ug/L	100
50) 1,1,2-Trichloroethane	10.704	83	48306	19.44 ug/L	100
51) 1,3-Dichloropropane	10.837	76	104870	19.86 ug/L	100
52) Tetrachloroethene	10.872	166	48607	19.24 ug/L	100
53) Dibromochloromethane	11.031	129	53744	19.31 ug/L	100
54) 1,2-Dibromoethane	11.145	107	49876	19.68 ug/L	100
55) 1-Chlorohexane	11.375	91	97281	20.02 ug/L	100
56) Chlorobenzene	11.472	112	124831	19.44 ug/L	100
57) n-Nonane	11.516	57	137045	19.02 ug/L	100
58) 1,1,1,2-Tetrachloroethane	11.516	131	47067	19.78 ug/L	100
59) Ethylbenzene	11.516	91	305564	20.42 ug/L	100
60) m,p-Xylene	11.586	106	169241	40.81 ug/L	100
61) o-Xylene	11.886	106	78968	20.17 ug/L	100
62) Styrene	11.886	104	149127	20.91 ug/L	100
63) Isopropylbenzene	12.124	105	221543	20.58 ug/L	100
64) Bromoform	12.072	173	30586	19.16 ug/L	100
65) 1,1,2,2-Tetrachloroethane	12.310	83	70112	20.57 ug/L	100
67) 2-Hexanone	10.837	43	106285	38.84 ug/L	100
69) 1,2,3-Trichloropropane	12.371	110	14666	19.66 ug/L	100
70) n-Propylbenzene	12.416	91	322466	20.41 ug/L	100
71) Bromobenzene	12.424	156	50140	20.02 ug/L	100
72) 1,3,5-Trimethylbenzene	12.521	105	198719	20.40 ug/L	100
73) 2-Chlorotoluene	12.530	91	220517	20.02 ug/L	100
74) 4-Chlorotoluene	12.601	91	190437	20.22 ug/L	100
75) tert-Butylbenzene	12.795	119	147730	20.24 ug/L	100
76) 1,2,4-Trimethylbenzene	12.812	105	197507	20.48 ug/L	100
77) sec-Butylbenzene	12.954	105	238168	20.37 ug/L	100
78) 4-Isopropyltoluene	13.033	119	161680	20.65 ug/L	100
79) 1,3-Dichlorobenzene	13.104	146	82759	19.01 ug/L	100
80) 1,4-Dichlorobenzene	13.165	146	86549	19.28 ug/L	100
81) Dicyclopentadiene	13.218	66	32727	18.53 ug/L	100
82) n-Butylbenzene	13.359	92	139922	20.64 ug/L	100
83) 1,2-Dichlorobenzene	13.483	146	72050	19.31 ug/L	100
84) 1,2-Dibromo-3-chloropr...	14.136	157	7003	19.56 ug/L	100
85) 1,2,4-Trichlorobenzene	14.965	180	47065	19.19 ug/L	100
86) Hexachlorobutadiene	15.097	190	13363	19.67 ug/L	100
87) Naphthalene	15.282	128	89395	20.06 ug/L	100
88) 1,2,3-Trichlorobenzene	15.556	180	39282	19.38 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091610.D
Acq On : 16 Sep 2013 15:17
Operator : JM
Sample : 20 PPB
Misc : ICAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 24 17:31:51 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:27:53 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091611.D
Acq On : 16 Sep 2013 15:43
Operator : JM
Sample : 40 PPB
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 24 17:32:46 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:32:30 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	8.520	168	176632	50.00	ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.199	114	323222	50.00	ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.458	117	287903	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	132515	50.00	ug/L	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	8.555	113	216476	68.21	ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 136.42%			
45) 1,2-Dichloroethane-d4	8.873	65	360000	68.01	ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 136.02%#			
46) Toluene-d8	10.390	98	661631	72.99	ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 145.98%#			
66) 4-Bromofluorobenzene	12.269	95	294717	71.62	ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 143.24%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.074	85	255098	39.15	ug/L	98
3) Chloromethane	4.418	50	252457	39.37	ug/L	100
4) Vinyl chloride	4.604	62	133686	39.65	ug/L	98
5) 1,3-Butadiene	4.674	54	71401	38.73	ug/L	95
6) Bromomethane	5.036	94	62819	36.94	ug/L	96
7) Chloroethane	5.204	64	72188	38.02	ug/L	98
8) Trichlorofluoromethane	5.618	101	286929	38.94	ug/L	100
9) Acrolein	6.165	56	107750	177.24	ug/L	95
10) Trichlorotrifluoroethane	6.288	151	79718	38.20	ug/L	99
11) 1,1-Dichloroethene	6.324	61	299821	39.18	ug/L	98
12) Methylene chloride	6.862	84	159480	37.94	ug/L	99
13) Acrylonitrile	7.100	53	53829	40.47	ug/L	98
14) trans-1,2-Dichloroethene	7.179	61	291403	39.98	ug/L	99
15) n-Hexane	7.444	57	277713	39.91	ug/L	96
16) 1,1-Dichloroethane	7.603	63	324909	38.99	ug/L	99
17) Cyclohexane	8.714	84	210016	41.11	ug/L	86
18) 2,2-Dichloropropane	8.167	77	272614	39.29	ug/L	98
19) cis-1,2-Dichloroethene	8.150	96	145789	40.36	ug/L	99
20) Chloroform	8.406	83	306645	38.61	ug/L	98
21) Bromochloromethane	8.370	128	53053	39.68	ug/L	97
23) 1,1,1-Trichloroethane	8.635	97	250820	39.92	ug/L	98
24) Acetone	6.341	43	126364	84.22	ug/L	98
25) 2-Butanone	8.114	43	167364	80.93	ug/L	99
26) Carbon Disulfide	6.668	76	590622	39.84	ug/L	99
27) Iodomethane	6.544	142	163262	42.69	ug/L	100
28) Vinyl acetate	7.576	43	468680	40.66	ug/L	97
29) Methyl tert-butyl ether	7.153	73	350749	41.49	ug/L	97
31) 1,1-Dichloropropene	8.767	75	235769	40.69	ug/L	99
32) Carbon tetrachloride	8.794	117	185563	39.73	ug/L	98
33) 1,2-Dichloroethane	8.935	62	269465	39.50	ug/L	98
34) Benzene	8.952	78	548790	40.34	ug/L	97
35) 2,2,4-Trimethylpentane	8.979	57	715445	41.16	ug/L	99
36) n-Heptane	9.094	57	162146	41.38	ug/L	98
37) Trichloroethene	9.455	95	148287	40.73	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091611.D
Acq On : 16 Sep 2013 15:43
Operator : JM
Sample : 40 PPB
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 24 17:32:46 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:32:30 2013
Response via : Initial Calibration

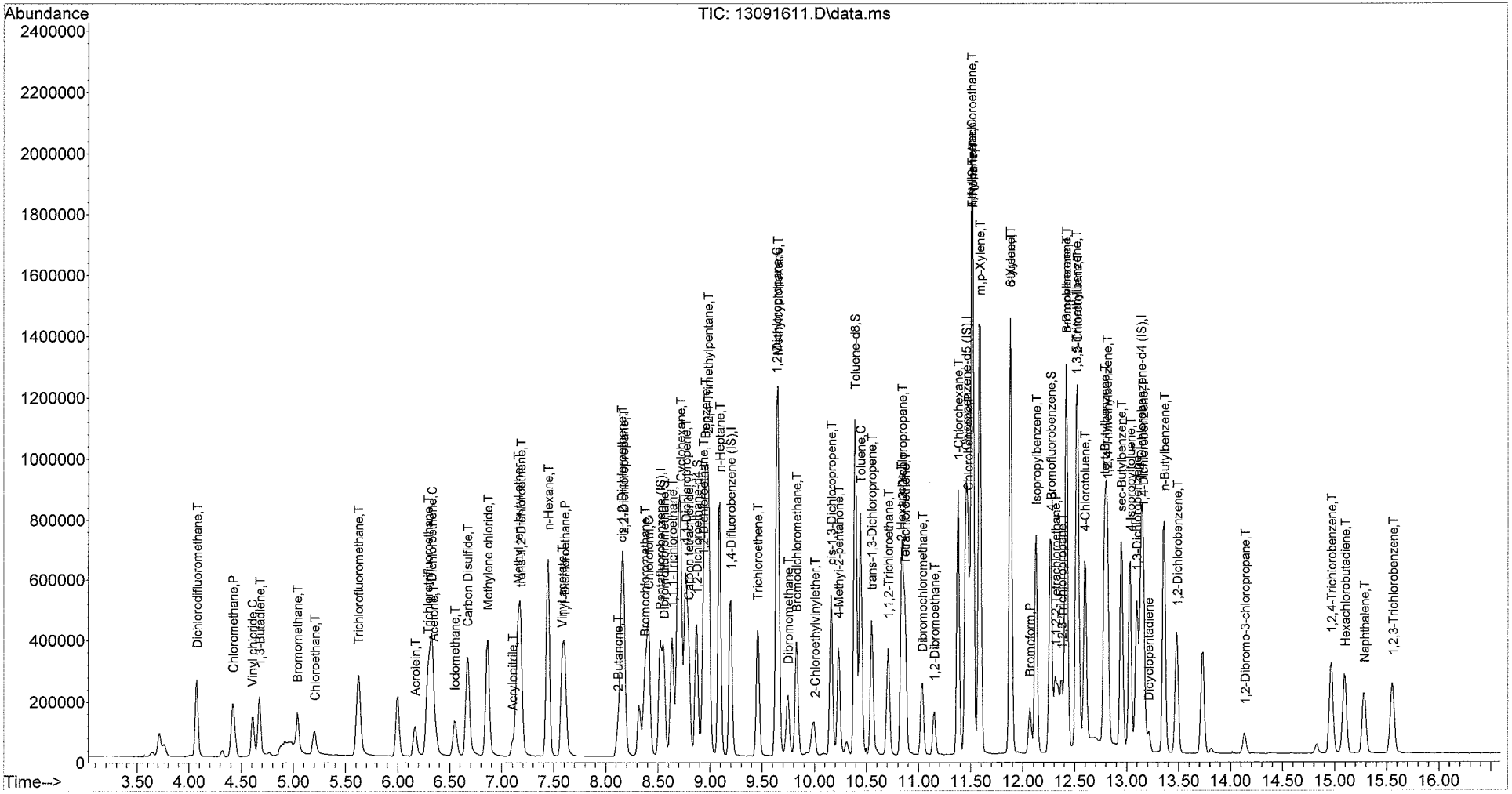
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.640	63	173274	39.84 ug/L	99
39) Bromodichloromethane	9.826	83	231670	40.81 ug/L	99
40) Methylcyclohexane	9.649	56	85803	42.89 ug/L	98
41) Dibromomethane	9.746	93	98405	38.64 ug/L	94
42) cis-1,3-Dichloropropene	10.161	75	257042	41.21 ug/L	97
43) 2-Chloroethylvinylether	10.002	63	32530	42.53 ug/L	86
44) 4-Methyl-2-pentanone	10.231	43	320489	82.77 ug/L	99
48) Toluene	10.443	92	283295	38.02 ug/L	99
49) trans-1,3-Dichloropropene	10.549	75	213522	41.33 ug/L	97
50) 1,1,2-Trichloroethane	10.708	83	96304	39.27 ug/L	99
51) 1,3-Dichloropropane	10.840	76	207724	39.86 ug/L	97
52) Tetrachloroethene	10.867	166	99991	40.10 ug/L	98
53) Dibromochloromethane	11.034	129	108222	39.39 ug/L	100
54) 1,2-Dibromoethane	11.149	107	100034	39.99 ug/L	97
55) 1-Chlorohexane	11.378	91	202514	42.23 ug/L	98
56) Chlorobenzene	11.475	112	250918	39.58 ug/L	97
57) n-Nonane	11.519	57	280468	39.44 ug/L	100
58) 1,1,1,2-Tetrachloroethane	11.510	131	93727	39.92 ug/L	98
59) Ethylbenzene	11.510	91	595438	40.32 ug/L	98
60) m,p-Xylene	11.590	106	340242	83.12 ug/L	99
61) o-Xylene	11.881	106	159614	41.30 ug/L	97
62) Styrene	11.881	104	300498	42.68 ug/L	97
63) Isopropylbenzene	12.128	105	457715	43.09 ug/L	99
64) Bromoform	12.066	173	63648	40.39 ug/L	97
65) 1,1,2,2-Tetrachloroethane	12.313	83	129509	38.49 ug/L	97
67) 2-Hexanone	10.831	43	216491	80.15 ug/L	99
69) 1,2,3-Trichloropropane	12.375	110	29419	39.74 ug/L	96
70) n-Propylbenzene	12.419	91	667524	42.56 ug/L	98
71) Bromobenzene	12.419	156	99348	39.96 ug/L	89
72) 1,3,5-Trimethylbenzene	12.516	105	406405	42.03 ug/L	100
73) 2-Chlorotoluene	12.525	91	447483	40.92 ug/L	97
74) 4-Chlorotoluene	12.595	91	386348	41.32 ug/L	99
75) tert-Butylbenzene	12.789	119	305238	42.14 ug/L	98
76) 1,2,4-Trimethylbenzene	12.816	105	404791	42.27 ug/L	98
77) sec-Butylbenzene	12.948	105	493062	42.48 ug/L	99
78) 4-Isopropyltoluene	13.036	119	337233	43.40 ug/L	97
79) 1,3-Dichlorobenzene	13.098	146	171362	39.64 ug/L	97
80) 1,4-Dichlorobenzene	13.160	146	173459	38.93 ug/L	98
81) Dicyclopentadiene	13.213	66	70301	40.11 ug/L	99
82) n-Butylbenzene	13.363	92	294119	43.70 ug/L	99
83) 1,2-Dichlorobenzene	13.486	146	147610	39.86 ug/L	97
84) 1,2-Dibromo-3-chloropr...	14.139	157	14429	40.01 ug/L	93
85) 1,2,4-Trichlorobenzene	14.968	180	101115	41.53 ug/L	99
86) Hexachlorobutadiene	15.101	190	28554	43.15 ug/L	94
87) Naphthalene	15.286	128	191031	43.17 ug/L	99
88) 1,2,3-Trichlorobenzene	15.559	180	84377	41.94 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091611.D
Acq On : 16 Sep 2013 15:43
Operator : JM
Sample : 40 PPB
Misc : ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 24 17:32:46 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:32:30 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091612.D
Acq On : 16 Sep 2013 16:10
Operator : JM
Sample : 80 PPB
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 24 17:33:43 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:33:29 2013
Response via : Initial Calibration

9/24/13

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.520	168	180757	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.199	114	331230	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.457	117	292222	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	136490	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.555	113	200869	61.85 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 123.70%		
45) 1,2-Dichloroethane-d4	8.872	65	321359	59.25 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 118.50%		
46) Toluene-d8	10.390	98	614231	66.12 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 132.24%#		
66) 4-Bromofluorobenzene	12.269	95	298359	71.43 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 142.86%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.074	85	513496	77.00 ug/L	99
3) Chloromethane	4.418	50	498940	76.03 ug/L	99
4) Vinyl chloride	4.612	62	270771	80.17 ug/L	99
5) 1,3-Butadiene	4.674	54	144814	76.75 ug/L	94
6) Bromomethane	5.044	94	140053	81.45 ug/L	99
7) Chloroethane	5.203	64	156562	81.10 ug/L	96
8) Trichlorofluoromethane	5.626	101	568561	75.39 ug/L	99
9) Acrolein	6.164	56	146712	235.82 ug/L	98
10) Trichlorotrifluoroethane	6.297	151	159135	74.51 ug/L	97
11) 1,1-Dichloroethene	6.323	61	598646	76.45 ug/L	98
12) Methylene chloride	6.861	84	313136	72.79 ug/L	99
13) Acrylonitrile	7.099	53	111763	81.91 ug/L	94
14) trans-1,2-Dichloroethene	7.179	61	574776	77.05 ug/L	98
15) n-Hexane	7.444	57	560013	78.64 ug/L	95
16) 1,1-Dichloroethane	7.602	63	633916	74.34 ug/L	99
17) Cyclohexane	8.714	84	410466	78.52 ug/L	91
18) 2,2-Dichloropropane	8.167	77	549884	77.45 ug/L	99
19) cis-1,2-Dichloroethene	8.149	96	293247	79.32 ug/L	98
20) Chloroform	8.405	83	609816	75.04 ug/L	98
21) Bromochloromethane	8.379	128	102054	74.59 ug/L	92
23) 1,1,1-Trichloroethane	8.634	97	497116	77.31 ug/L	98
24) Acetone	6.341	43	242217	162.84 ug/L	98
25) 2-Butanone	8.114	43	343298	164.20 ug/L	99
26) Carbon Disulfide	6.676	76	1167213	76.93 ug/L	97
27) Iodomethane	6.553	142	325032	83.26 ug/L	98
28) Vinyl acetate	7.576	43	959193	81.31 ug/L	96
29) Methyl tert-butyl ether	7.152	73	720437	83.27 ug/L	98
31) 1,1-Dichloropropene	8.767	75	469868	79.14 ug/L	99
32) Carbon tetrachloride	8.793	117	371628	77.65 ug/L	99
33) 1,2-Dichloroethane	8.934	62	536199	76.69 ug/L	98
34) Benzene	8.952	78	1052693	75.51 ug/L	97
35) 2,2,4-Trimethylpentane	8.987	57	1378157	77.37 ug/L	100
36) n-Heptane	9.093	57	323000	80.43 ug/L	97
37) Trichloroethene	9.455	95	295777	79.28 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091612.D
Acq On : 16 Sep 2013 16:10
Operator : JM
Sample : 80 PPB
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 24 17:33:43 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:33:29 2013
Response via : Initial Calibration

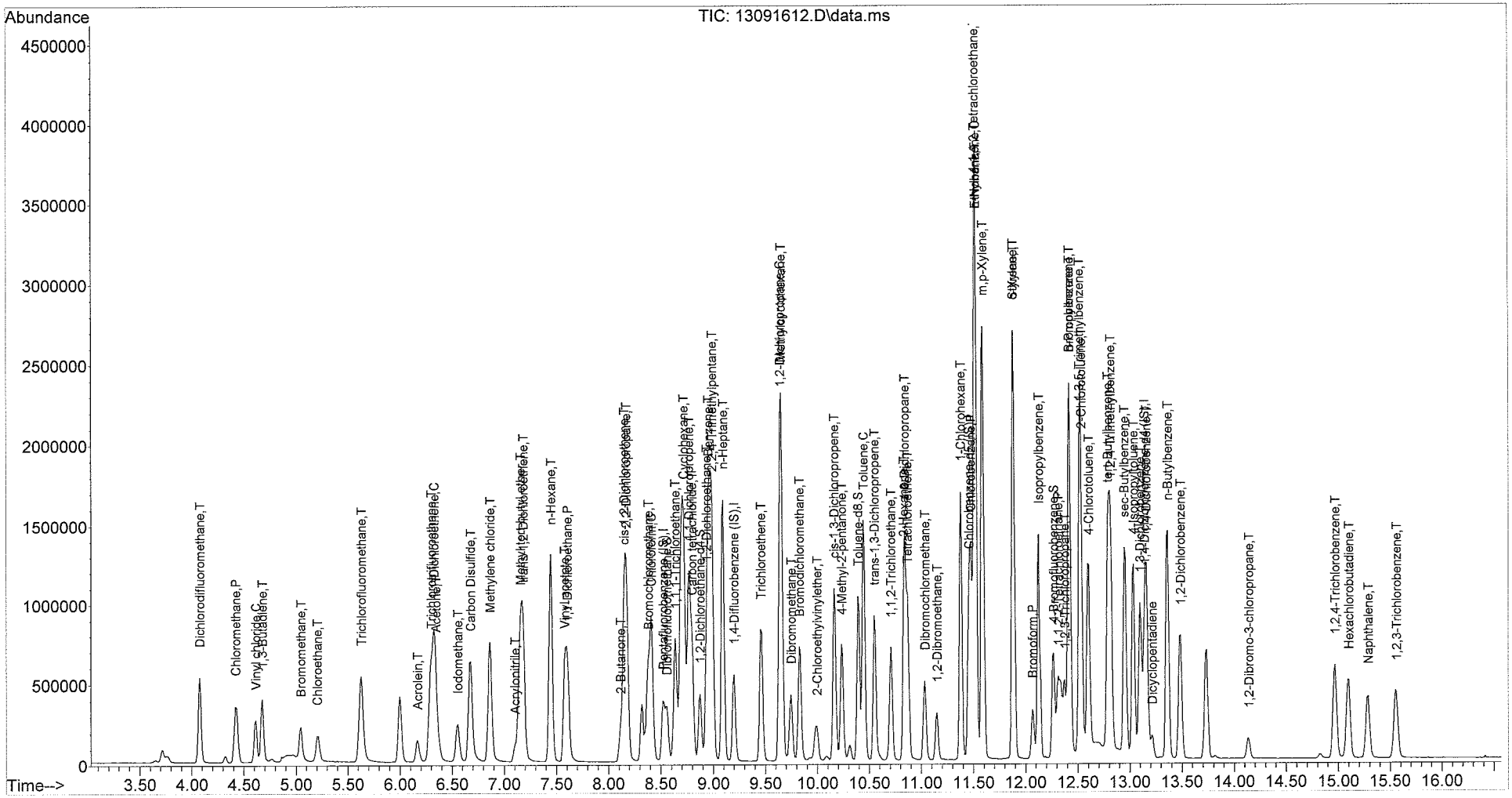
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.640	63	335872	75.35 ug/L	98
39) Bromodichloromethane	9.825	83	460304	79.13 ug/L	100
40) Methylcyclohexane	9.649	56	164708	80.91 ug/L	96
41) Dibromomethane	9.746	93	195144	74.77 ug/L	95
42) cis-1,3-Dichloropropene	10.160	75	524494	82.07 ug/L	97
43) 2-Chloroethylvinylether	9.993	63	58974	74.97 ug/L	83
44) 4-Methyl-2-pentanone	10.231	43	662366	166.93 ug/L	100
48) Toluene	10.443	92	586005	77.48 ug/L	99
49) trans-1,3-Dichloropropene	10.548	75	436883	83.32 ug/L	98
50) 1,1,2-Trichloroethane	10.707	83	191831	77.06 ug/L	99
51) 1,3-Dichloropropane	10.840	76	413342	78.15 ug/L	98
52) Tetrachloroethene	10.866	166	197516	78.03 ug/L	98
53) Dibromochloromethane	11.034	129	217077	77.84 ug/L	99
54) 1,2-Dibromoethane	11.148	107	203555	80.16 ug/L	98
55) 1-Chlorohexane	11.378	91	405339	83.28 ug/L	95
56) Chlorobenzene	11.475	112	494108	76.80 ug/L	96
57) n-Nonane	11.519	57	510540	70.73 ug/L	98
58) 1,1,1,2-Tetrachloroethane	11.510	131	181409	76.11 ug/L	98
59) Ethylbenzene	11.519	91	1156877	77.17 ug/L	99
60) m,p-Xylene	11.589	106	647009	155.73 ug/L	98
61) o-Xylene	11.880	106	303317	77.33 ug/L	94
62) Styrene	11.880	104	577209	80.77 ug/L	96
63) Isopropylbenzene	12.127	105	908741	84.28 ug/L	99
64) Bromoform	12.066	173	130786	81.77 ug/L	99
65) 1,1,2,2-Tetrachloroethane	12.313	83	266542	78.04 ug/L	97
67) 2-Hexanone	10.831	43	456300	166.43 ug/L	99
69) 1,2,3-Trichloropropane	12.374	110	59219	77.66 ug/L	95
70) n-Propylbenzene	12.419	91	1247873	77.25 ug/L	99
71) Bromobenzene	12.419	156	191054	74.60 ug/L	88
72) 1,3,5-Trimethylbenzene	12.516	105	783858	78.70 ug/L	99
73) 2-Chlorotoluene	12.533	91	864342	76.74 ug/L	98
74) 4-Chlorotoluene	12.604	91	778421	80.83 ug/L	99
75) tert-Butylbenzene	12.789	119	588699	78.90 ug/L	98
76) 1,2,4-Trimethylbenzene	12.815	105	770861	78.16 ug/L	99
77) sec-Butylbenzene	12.948	105	969792	81.11 ug/L	99
78) 4-Isopropyltoluene	13.036	119	666006	83.21 ug/L	97
79) 1,3-Dichlorobenzene	13.098	146	337187	75.73 ug/L	98
80) 1,4-Dichlorobenzene	13.159	146	344810	75.13 ug/L	98
81) Dicyclopentadiene	13.212	66	139892	77.48 ug/L	99
82) n-Butylbenzene	13.362	92	567976	81.93 ug/L	99
83) 1,2-Dichlorobenzene	13.486	146	293373	76.92 ug/L	97
84) 1,2-Dibromo-3-chloropr...	14.139	157	30095	80.45 ug/L	93
85) 1,2,4-Trichlorobenzene	14.968	180	197099	78.60 ug/L	98
86) Hexachlorobutadiene	15.100	190	55519	82.08 ug/L	97
87) Naphthalene	15.285	128	368757	80.91 ug/L	99
88) 1,2,3-Trichlorobenzene	15.559	180	158316	76.39 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091612.D
Acq On : 16 Sep 2013 16:10
Operator : JM
Sample : 80 PPB
Misc : ICAL
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 24 17:33:43 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:33:29 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091613.D
Acq On : 16 Sep 2013 16:37
Operator : JM
Sample : 100 PPB
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 24 17:34:37 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:34:27 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.520	168	189036	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.199	114	351403	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.458	117	305073	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	136745	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.511	113	910	0.28 ug/L	-0.04
Spiked Amount 50.000	Range 52 - 140		Recovery = 0.56%#		
45) 1,2-Dichloroethane-d4	8.882	65	1793	0.33 ug/L	0.01
Spiked Amount 50.000	Range 54 - 133		Recovery = 0.66%#		
46) Toluene-d8	10.390	98	2068	0.22 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 0.44%#		
66) 4-Bromofluorobenzene	12.313	95	54688	12.22 ug/L	0.05
Spiked Amount 50.000	Range 62 - 123		Recovery = 24.44%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.074	85	650823	93.32 ug/L	99
3) Chloromethane	4.418	50	648009	94.42 ug/L	99
4) Vinyl chloride	4.612	62	349432	99.92 ug/L	99
5) 1,3-Butadiene	4.674	54	185430	93.97 ug/L	97
6) Bromomethane	5.045	94	159453	88.74 ug/L	97
7) Chloroethane	5.204	64	174198	86.31 ug/L	96
8) Trichlorofluoromethane	5.618	101	730176	92.58 ug/L	99
9) Acrolein	6.165	56	326802	502.29 ug/L	98
10) Trichlorotrifluoroethane	6.297	151	205724	92.11 ug/L	97
11) 1,1-Dichloroethene	6.324	61	771312	94.18 ug/L	98
12) Methylene chloride	6.862	84	407427	90.56 ug/L	98
13) Acrylonitrile	7.100	53	140274	98.27 ug/L	99
14) trans-1,2-Dichloroethene	7.179	61	740141	94.88 ug/L	99
15) n-Hexane	7.444	57	728056	97.75 ug/L	95
16) 1,1-Dichloroethane	7.603	63	812207	91.08 ug/L	99
17) Cyclohexane	8.714	84	529052	96.77 ug/L	87
18) 2,2-Dichloropropane	8.167	77	710393	95.67 ug/L	99
19) cis-1,2-Dichloroethene	8.150	96	381489	98.67 ug/L	97
20) Chloroform	8.405	83	784921	92.36 ug/L	99
21) Bromochloromethane	8.379	128	129015	90.16 ug/L	90
23) 1,1,1-Trichloroethane	8.635	97	645246	95.95 ug/L	98
24) Acetone	6.341	43	302861	195.83 ug/L	99
25) 2-Butanone	8.114	43	428121	196.18 ug/L	99
26) Carbon Disulfide	6.668	76	1522400	95.95 ug/L	96
27) Iodomethane	6.553	142	393177	96.34 ug/L	97
28) Vinyl acetate	7.576	43	1234742	100.08 ug/L	95
29) Methyl tert-butyl ether	7.153	73	922344	101.94 ug/L	97
31) 1,1-Dichloropropene	8.767	75	614567	97.57 ug/L	98
32) Carbon tetrachloride	8.794	117	485321	95.58 ug/L	98
33) 1,2-Dichloroethane	8.935	62	688767	92.86 ug/L	97
34) Benzene	8.952	78	1356891	91.74 ug/L	97
35) 2,2,4-Trimethylpentane	8.988	57	1768050	93.56 ug/L	99
36) n-Heptane	9.094	57	411475	96.58 ug/L	98
37) Trichloroethene	9.455	95	383767	96.96 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091613.D
Acq On : 16 Sep 2013 16:37
Operator : JM
Sample : 100 PPB
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 24 17:34:37 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:34:27 2013
Response via : Initial Calibration

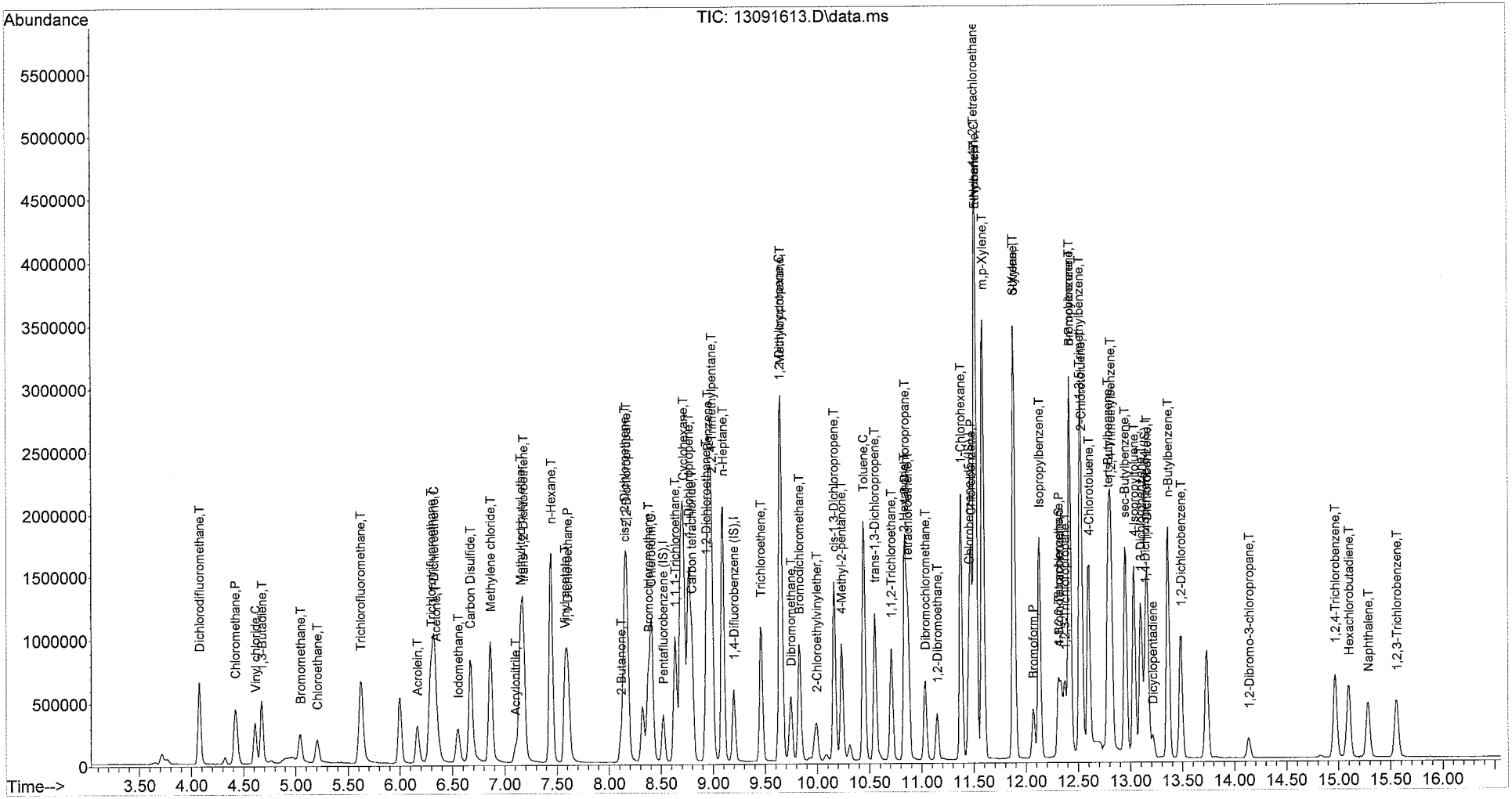
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.640	63	447992	94.73 ug/L	98
39) Bromodichloromethane	9.826	83	599889	97.20 ug/L	100
40) Methylcyclohexane	9.649	56	211685	98.15 ug/L	95
41) Dibromomethane	9.746	93	250215	90.37 ug/L	95
42) cis-1,3-Dichloropropene	10.161	75	688477	101.54 ug/L	97
43) 2-Chloroethylvinylether	9.993	63	85990	102.90 ug/L	81
44) 4-Methyl-2-pentanone	10.231	43	847267	201.28 ug/L	99
48) Toluene	10.443	92	761689	96.47 ug/L	98
49) trans-1,3-Dichloropropene	10.549	75	567678	103.71 ug/L	98
50) 1,1,2-Trichloroethane	10.708	83	248048	95.45 ug/L	99
51) 1,3-Dichloropropane	10.840	76	531359	96.23 ug/L	97
52) Tetrachloroethene	10.867	166	258887	97.97 ug/L	98
53) Dibromochloromethane	11.034	129	286890	98.54 ug/L	99
54) 1,2-Dibromoethane	11.149	107	260777	98.37 ug/L	99
55) 1-Chlorohexane	11.378	91	524534	103.23 ug/L	94
56) Chlorobenzene	11.475	112	634338	94.44 ug/L	96
57) n-Nonane	11.519	57	650526	86.33 ug/L	98
58) 1,1,1,2-Tetrachloroethane	11.510	131	232488	93.44 ug/L	97
59) Ethylbenzene	11.519	91	1464572	93.58 ug/L	99
60) m,p-Xylene	11.590	106	824166	190.02 ug/L	97
61) o-Xylene	11.881	106	388644	94.91 ug/L	95
62) Styrene	11.881	104	742100	99.47 ug/L	96
63) Isopropylbenzene	12.128	105	1153519	102.47 ug/L	98
64) Bromoform	12.066	173	168234	100.75 ug/L	99
65) 1,1,2,2-Tetrachloroethane	12.313	83	338877	95.04 ug/L	97
67) 2-Hexanone	10.831	43	573377	200.32 ug/L	100
69) 1,2,3-Trichloropropane	12.375	110	76499	100.13 ug/L	94
70) n-Propylbenzene	12.419	91	1610584	99.52 ug/L	98
71) Bromobenzene	12.419	156	244439	95.27 ug/L	89
72) 1,3,5-Trimethylbenzene	12.516	105	1009598	101.18 ug/L	98
73) 2-Chlorotoluene	12.534	91	1099891	97.47 ug/L	98
74) 4-Chlorotoluene	12.604	91	991765	102.80 ug/L	99
75) tert-Butylbenzene	12.789	119	759699	101.63 ug/L	98
76) 1,2,4-Trimethylbenzene	12.816	105	988837	100.07 ug/L	98
77) sec-Butylbenzene	12.948	105	1240208	103.54 ug/L	99
78) 4-Isopropyltoluene	13.036	119	846353	105.55 ug/L	98
79) 1,3-Dichlorobenzene	13.098	146	433810	97.25 ug/L	98
80) 1,4-Dichlorobenzene	13.160	146	436184	94.87 ug/L	99
81) Dicyclopentadiene	13.213	66	186510	103.11 ug/L	99
82) n-Butylbenzene	13.363	92	721304	103.85 ug/L	99
83) 1,2-Dichlorobenzene	13.486	146	371167	97.13 ug/L	97
84) 1,2-Dibromo-3-chloropr...	14.139	157	37410	99.69 ug/L	89
85) 1,2,4-Trichlorobenzene	14.968	180	228210	90.83 ug/L	98
86) Hexachlorobutadiene	15.101	190	65820	97.26 ug/L	95
87) Naphthalene	15.286	128	428130	93.76 ug/L	99
88) 1,2,3-Trichlorobenzene	15.559	180	172941	83.29 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091613.D
Acq On : 16 Sep 2013 16:37
Operator : JM
Sample : 100 PPB
Misc : ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 24 17:34:37 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:34:27 2013
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091615.D
Acq On : 16 Sep 2013 17:30
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

JM 9/24/13

Quant Time: Sep 24 17:41:13 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:36:50 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.521	168	184306	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.200	114	342008	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.458	117	295380	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.143	152	129264	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.556	113	16937	5.35 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 10.70%#		
45) 1,2-Dichloroethane-d4	8.873	65	28826	5.41 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 10.82%#		
46) Toluene-d8	10.391	98	47567	5.15 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 10.30%#		
66) 4-Bromofluorobenzene	12.269	95	20117	3.25 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 6.50%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.075	85	7199	1.06 ug/L	97
3) Chloromethane	4.419	50	7068	1.06 ug/L	97
4) Vinyl chloride	4.604	62	4600	1.15 ug/L	94
5) 1,3-Butadiene	4.675	54	2223	1.16 ug/L	86
6) Bromomethane	5.045	94	3902	0.49 ug/L	90
7) Chloroethane	5.204	64	2979	1.06 ug/L #	74
8) Trichlorofluoromethane	5.627	101	8507	1.11 ug/L	98
9) Acrolein	6.165	56	45943	72.43 ug/L	99
10) Trichlorotrifluoroethane	6.307	151	2422	1.11 ug/L	79
11) 1,1-Dichloroethene	6.324	61	8896	1.11 ug/L	96
12) Methylene chloride	6.862	84	5046	1.15 ug/L	95
13) Acrylonitrile	7.118	53	1433m	1.22 ug/L	
14) trans-1,2-Dichloroethene	7.180	61	8024	1.05 ug/L	97
15) n-Hexane	7.444	57	7801	1.07 ug/L	83
16) 1,1-Dichloroethane	7.603	63	9224	1.06 ug/L	96
17) Cyclohexane	8.715	84	5377	1.01 ug/L	99
18) 2,2-Dichloropropane	8.177	77	6965	0.96 ug/L	93
19) cis-1,2-Dichloroethene	8.150	96	4132	1.10 ug/L	97
20) Chloroform	8.406	83	8790	1.06 ug/L	97
21) Bromochloromethane	8.371	128	1313	0.94 ug/L	95
23) 1,1,1-Trichloroethane	8.635	97	6809	1.04 ug/L	90
24) Acetone	6.351	43	10915	1.62 ug/L	92
25) 2-Butanone	8.132	43	8092	1.87 ug/L	91
26) Carbon Disulfide	6.668	76	15970	1.03 ug/L #	23
27) Iodomethane	6.545	142	2272	0.36 ug/L	94
28) Vinyl acetate	7.594	43	11556	0.96 ug/L #	1
29) Methyl tert-butyl ether	7.153	73	8367	0.95 ug/L	89
31) 1,1-Dichloropropene	8.768	75	6493	1.06 ug/L	95
32) Carbon tetrachloride	8.794	117	4954	1.00 ug/L	91
33) 1,2-Dichloroethane	8.935	62	7307	1.01 ug/L	96
34) Benzene	8.962	78	15036	1.04 ug/L	97
35) 2,2,4-Trimethylpentane	8.988	57	19443	1.06 ug/L #	97
36) n-Heptane	9.094	57	4531	1.09 ug/L	99
37) Trichloroethene	9.464	95	4003	1.04 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091615.D
Acq On : 16 Sep 2013 17:30
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 24 17:41:13 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:36:50 2013
Response via : Initial Calibration

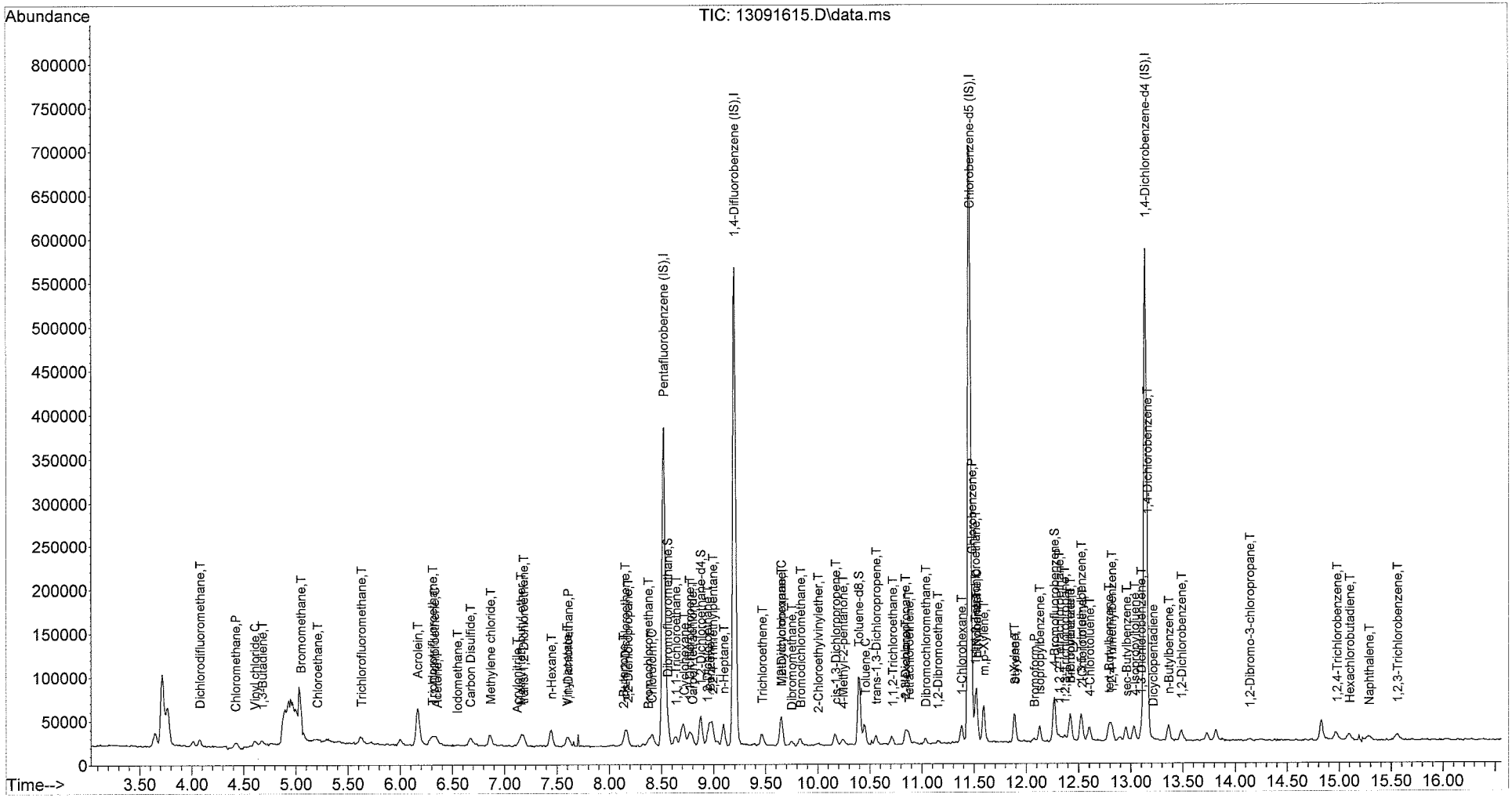
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.650	63	4665	1.01 ug/L	90
39) Bromodichloromethane	9.835	83	5728	0.95 ug/L	95
40) Methylcyclohexane	9.650	56	2252	0.42 ug/L	90
41) Dibromomethane	9.747	93	2861	1.06 ug/L	93
42) cis-1,3-Dichloropropene	10.170	75	6501	0.99 ug/L	95
43) 2-Chloroethylvinylether	10.002	63	574	1.06 ug/L #	1
44) 4-Methyl-2-pentanone	10.241	43	8003	1.95 ug/L	97
48) Toluene	10.452	92	8249	1.08 ug/L	97
49) trans-1,3-Dichloropropene	10.558	75	5025	0.95 ug/L	88
50) 1,1,2-Trichloroethane	10.717	83	2735	1.09 ug/L	88
51) 1,3-Dichloropropane	10.840	76	5425	1.01 ug/L	97
52) Tetrachloroethene	10.876	166	2673	1.04 ug/L	95
53) Dibromochloromethane	11.035	129	2676	0.95 ug/L	96
54) 1,2-Dibromoethane	11.149	107	2763	1.08 ug/L #	91
55) 1-Chlorohexane	11.379	91	5119	1.04 ug/L	92
56) Chlorobenzene	11.476	112	6927	1.07 ug/L #	79
57) n-Nonane	11.520	57	8243	1.13 ug/L	98
58) 1,1,1,2-Tetrachloroethane	11.511	131	2553	1.06 ug/L #	86
59) Ethylbenzene	11.520	91	15959	1.05 ug/L	98
60) m,p-Xylene	11.590	106	8677	2.07 ug/L	98
61) o-Xylene	11.881	106	4126	1.04 ug/L	88
62) Styrene	11.890	104	6749	0.93 ug/L	98
63) Isopropylbenzene	12.128	105	10316	0.95 ug/L	96
64) Bromoform	12.075	173	1607	0.99 ug/L	96
65) 1,1,2,2-Tetrachloroethane	12.314	83	3765	1.09 ug/L	97
67) 2-Hexanone	10.840	43	6102	2.20 ug/L	96
69) 1,2,3-Trichloropropane	12.366	110	810	1.12 ug/L #	91
70) n-Propylbenzene	12.419	91	15342	1.00 ug/L	97
71) Bromobenzene	12.419	156	2730	1.13 ug/L	78
72) 1,3,5-Trimethylbenzene	12.525	105	9581	1.02 ug/L	97
73) 2-Chlorotoluene	12.534	91	11634	1.09 ug/L	99
74) 4-Chlorotoluene	12.605	91	9724	1.07 ug/L	92
75) tert-Butylbenzene	12.790	119	6891	0.98 ug/L	88
76) 1,2,4-Trimethylbenzene	12.816	105	9501	1.02 ug/L	98
77) sec-Butylbenzene	12.957	105	11183	0.99 ug/L	97
78) 4-Isopropyltoluene	13.037	119	7201	0.95 ug/L	91
79) 1,3-Dichlorobenzene	13.099	146	4748	1.13 ug/L	91
80) 1,4-Dichlorobenzene	13.160	146	5118	1.18 ug/L #	1
81) Dicyclopentadiene	13.213	66	1886	1.10 ug/L #	67
82) n-Butylbenzene	13.363	92	6393	0.97 ug/L	92
83) 1,2-Dichlorobenzene	13.487	146	4195	1.16 ug/L	97
84) 1,2-Dibromo-3-chloropr...	14.139	157	434m	1.77 ug/L	
85) 1,2,4-Trichlorobenzene	14.977	180	3000	1.26 ug/L	96
86) Hexachlorobutadiene	15.101	190	885	0.69 ug/L	93
87) Naphthalene	15.286	128	5330	1.23 ug/L	97
88) 1,2,3-Trichlorobenzene	15.560	180	2420	1.23 ug/L #	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091615.D
Acq On : 16 Sep 2013 17:30
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

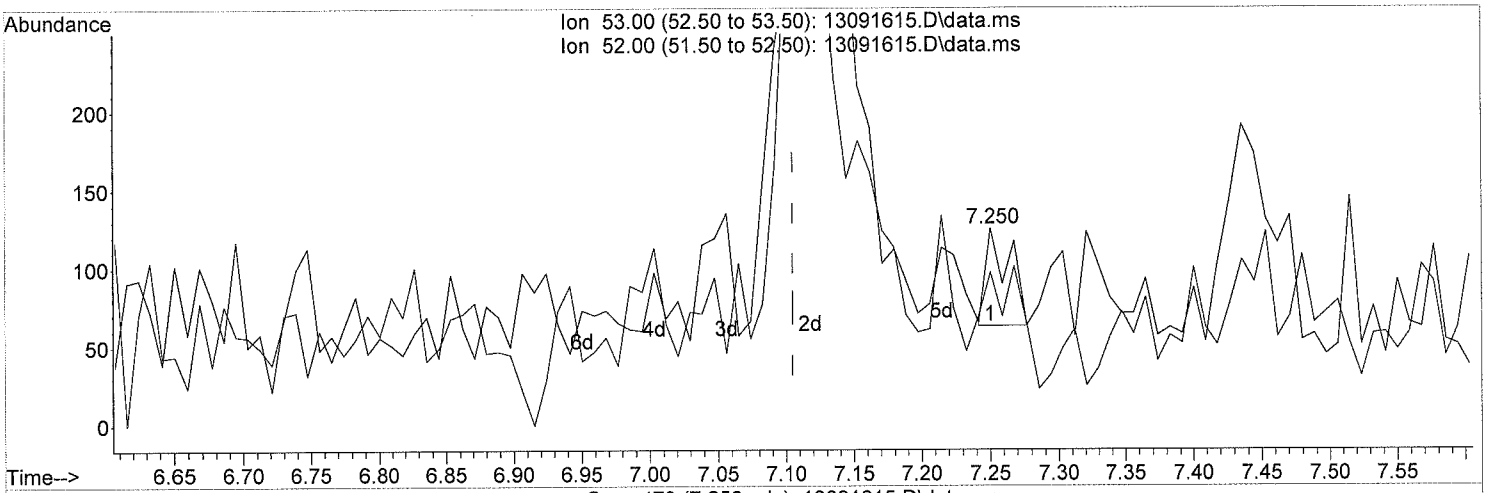
Quant Time: Sep 24 17:41:13 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:36:50 2013
Response via : Initial Calibration

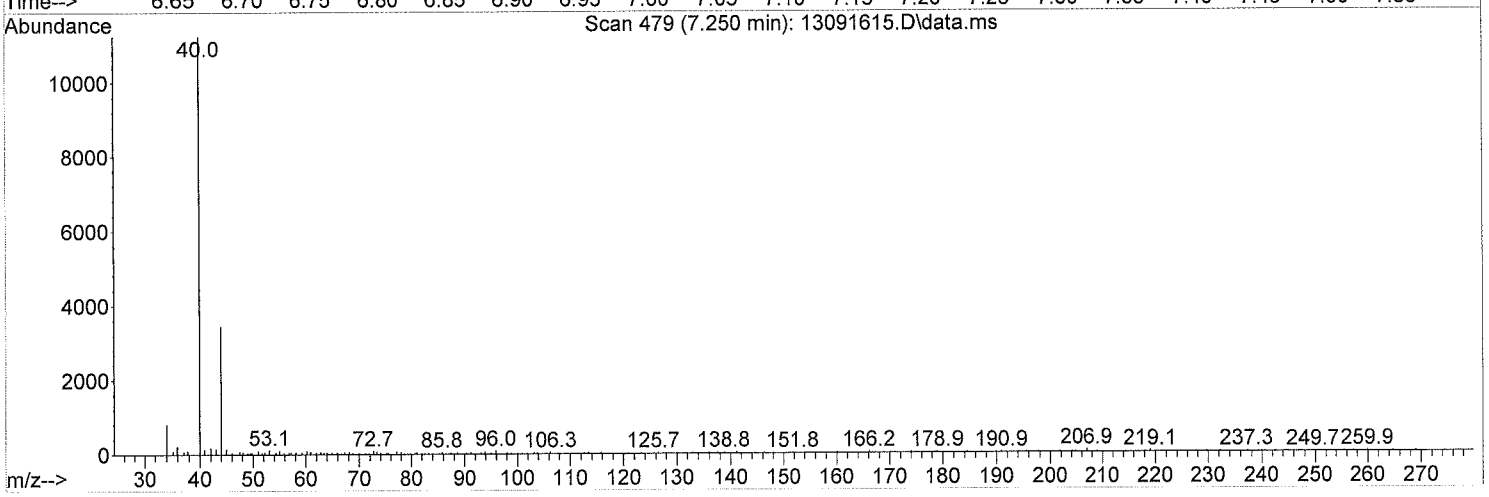


Quantitation Report (Qedit)

Data Path : H:\VOA\A228\130916\
Data File : 13091615.D
Acq On : 16 Sep 2013 17:30
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 24 17:38:58 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:36:50 2013
Response via : Initial Calibration





TIC: 13091615.D\data.ms

(13) Acrylonitrile (T)

7.250min (+0.145) 0.25 ug/L

response 76

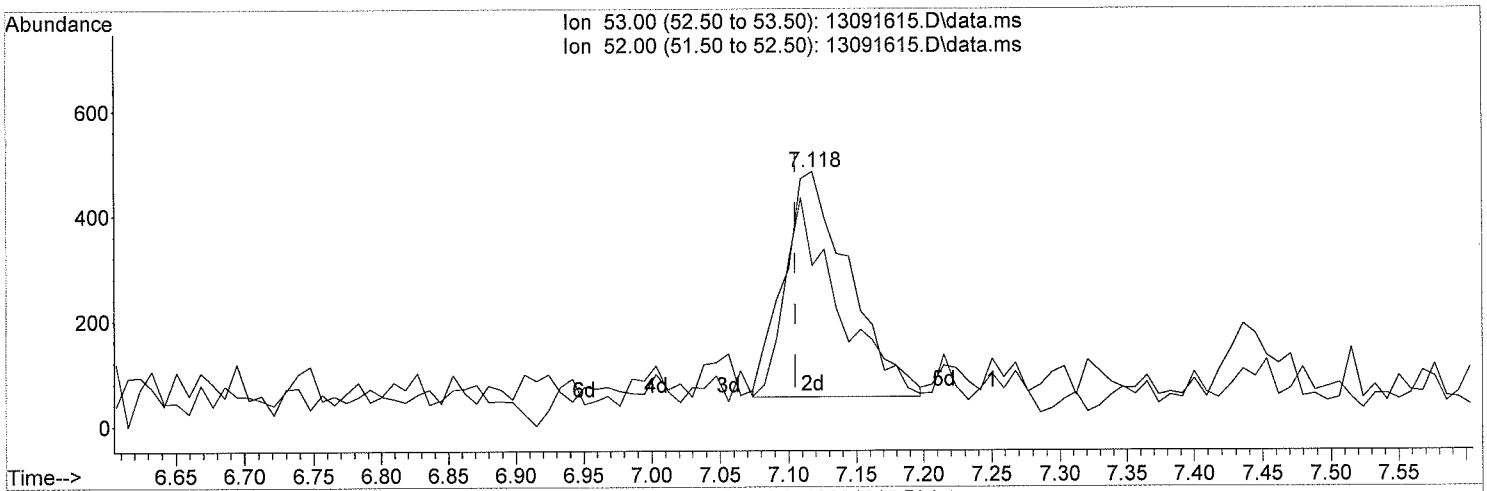
Ion	Exp%	Act%
53.00	100	100
52.00	89.00	77.60
0.00	0.00	0.00
0.00	0.00	0.00

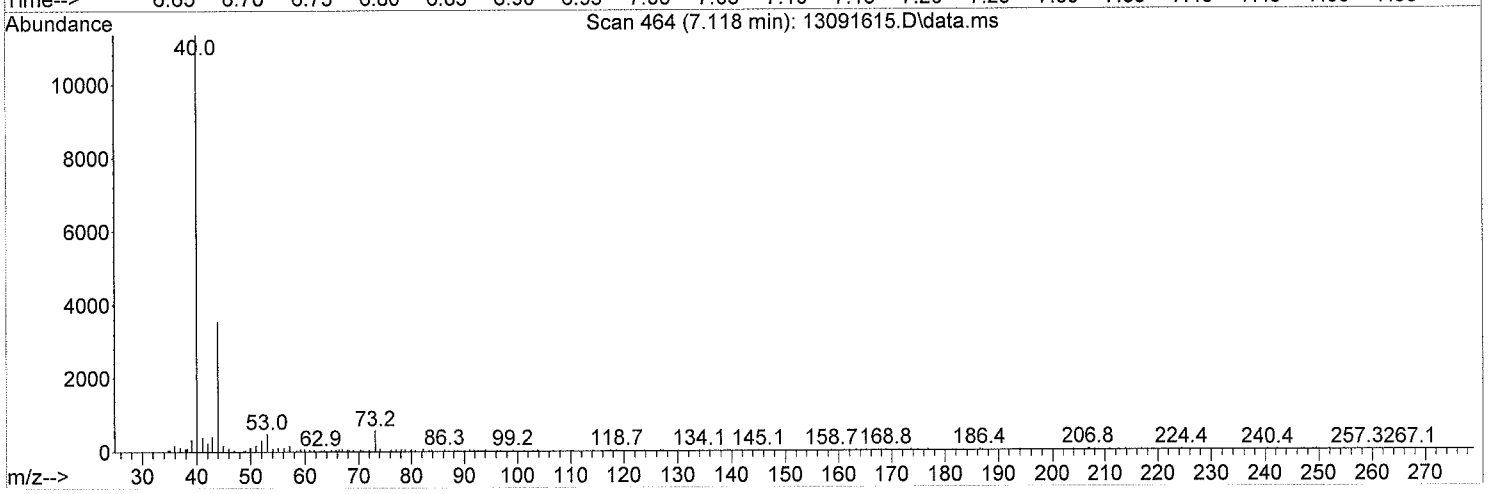
before
omakulB

Quantitation Report (Qedit)

Data Path : H:\VOA\A228\130916\
Data File : 13091615.D
Acq On : 16 Sep 2013 17:30
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 24 17:38:58 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:36:50 2013
Response via : Initial Calibration





TIC: 13091615.D\data.ms

(13) Acrylonitrile (T)

7.118min (+0.013) 1.22 ug/L m

response 1433

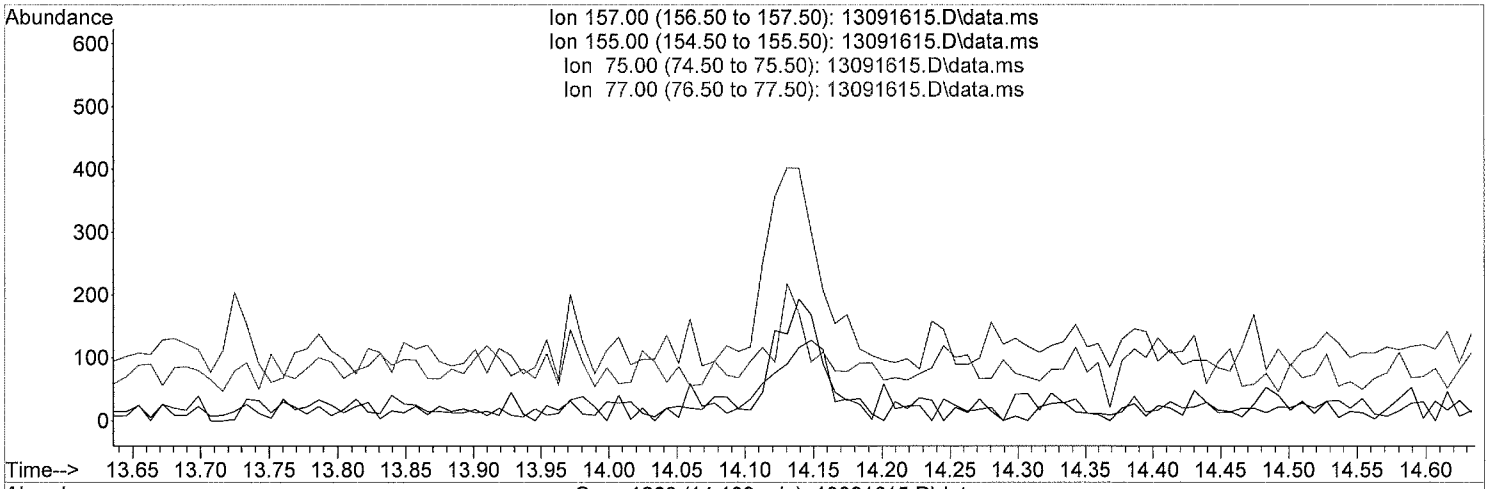
Ion	Exp%	Act%
53.00	100	100
52.00	89.00	62.86#
0.00	0.00	0.00
0.00	0.00	0.00

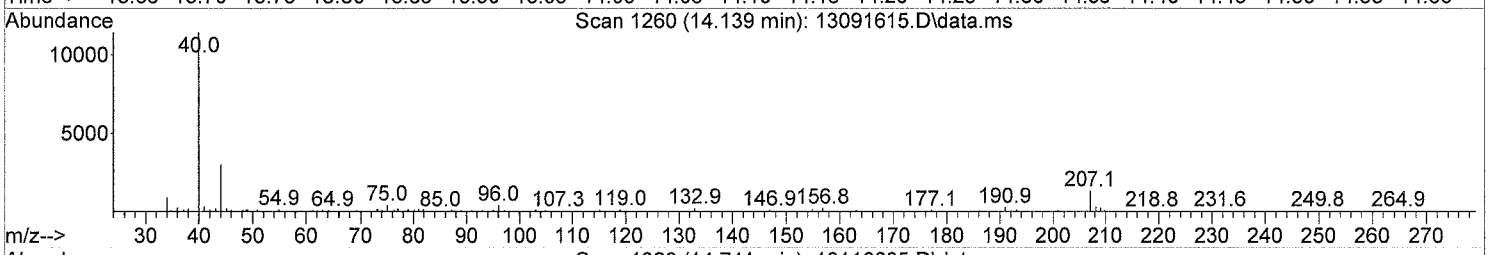
after I-C
DMakulB

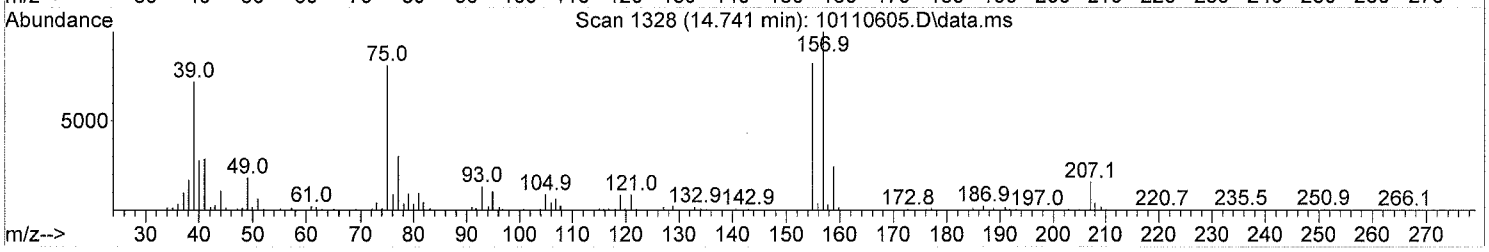
Quantitation Report (Qedit)

Data Path : H:\VOA\A228\130916\
Data File : 13091615.D
Acq On : 16 Sep 2013 17:30
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 24 17:38:58 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:36:50 2013
Response via : Initial Calibration







TIC: 13091615.D\data.ms

(84) 1,2-Dibromo-3-chloropropane (T)

14.136min (-14.136) 0.00 ug/L

response 0

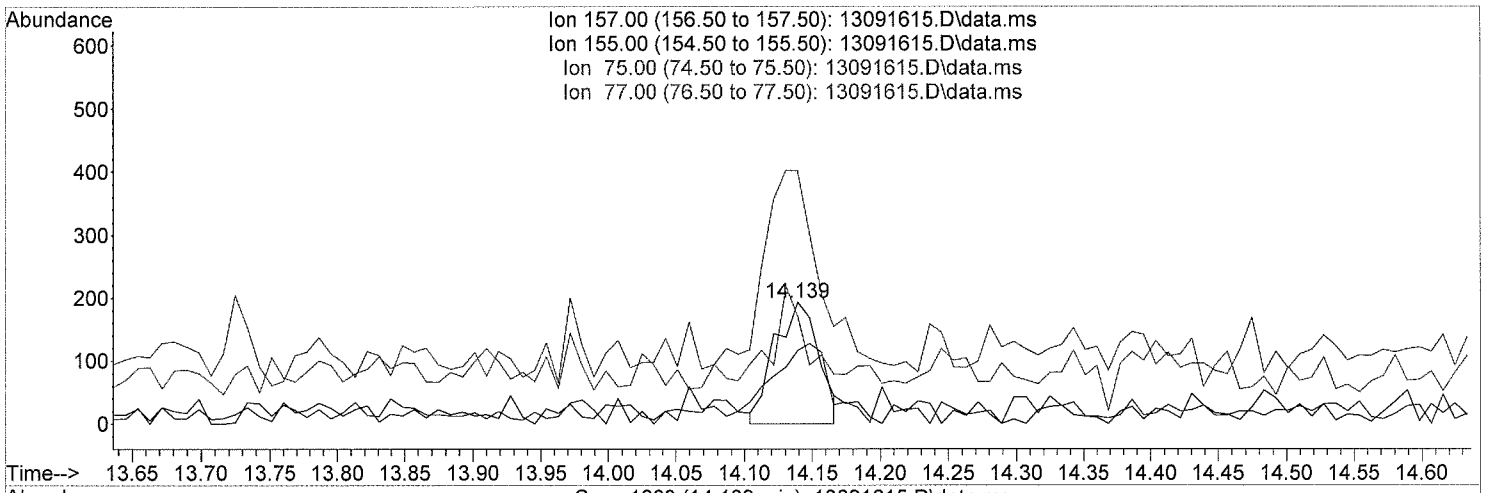
Ion	Exp%	Act%
157.00	100	0.00
155.00	75.70	0.00#
75.00	164.40	0.00#
77.00	51.10	0.00#

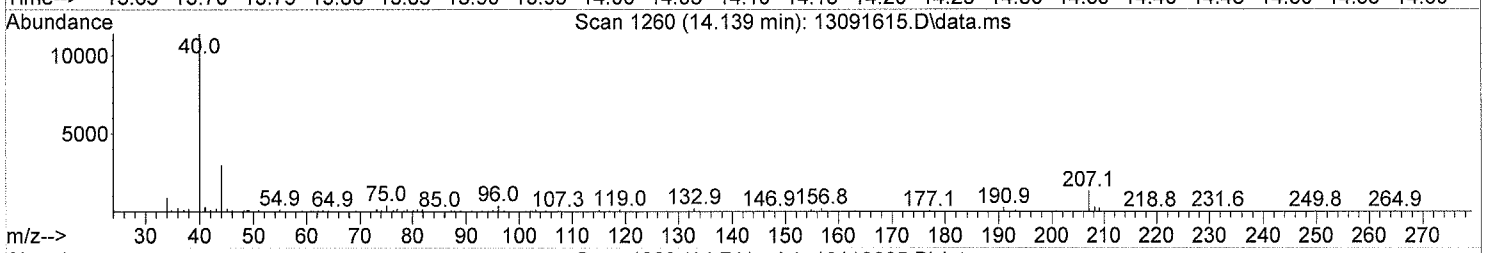
before Smakulis

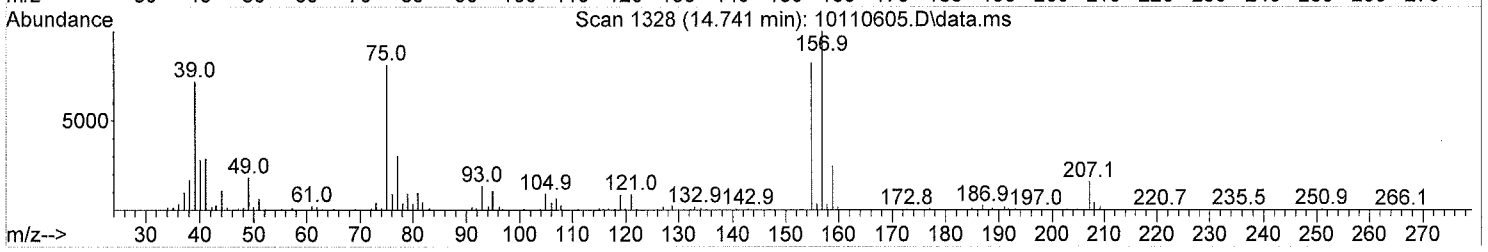
Quantitation Report (Qedit)

Data Path : H:\VOA\A228\130916\
Data File : 13091615.D
Acq On : 16 Sep 2013 17:30
Operator : JM
Sample : 1.0 PPB
Misc : ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 24 17:38:58 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:36:50 2013
Response via : Initial Calibration







TIC: 13091615.D\data.ms

(84) 1,2-Dibromo-3-chloropropane (T)

14.139min (+0.003) 1.77 ug/L m

response 434

Ion	Exp%	Act%
157.00	100	100
155.00	75.70	60.10
75.00	164.40	207.77
77.00	51.10	88.08#

after IC
Smapulk

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091617.D
Acq On : 16 Sep 2013 18:22
Operator : JM
Sample : 5.0 PPB
Misc : ICAL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 24 17:45:45 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:41:44 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.525	168	172499	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.196	114	316714	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.454	117	289575	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.139	152	127093	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.552	113	59387	19.16 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 38.32%#		
45) 1,2-Dichloroethane-d4	8.869	65	98505	18.99 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 37.98%#		
46) Toluene-d8	10.396	98	171966	19.36 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 38.72%#		
66) 4-Bromofluorobenzene	12.266	95	75960	19.08 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 38.16%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.080	85	31894	5.01 ug/L	99
3) Chloromethane	4.424	50	31089	4.96 ug/L	98
4) Vinyl chloride	4.618	62	17562	5.13 ug/L	98
5) 1,3-Butadiene	4.680	54	9494	5.27 ug/L	96
6) Bromomethane	5.050	94	12377	6.29 ug/L	92
7) Chloroethane	5.209	64	9492	4.72 ug/L	97
8) Trichlorofluoromethane	5.632	101	35676	4.96 ug/L	98
9) Acrolein	6.170	56	59408	100.06 ug/L	98
10) Trichlorotrifluoroethane	6.303	151	9985	4.90 ug/L	86
11) 1,1-Dichloroethene	6.329	61	36251	4.85 ug/L	98
12) Methylene chloride	6.867	84	20818	5.07 ug/L	97
13) Acrylonitrile	7.105	53	6527	4.94 ug/L	92
14) trans-1,2-Dichloroethene	7.185	61	36153	5.08 ug/L	99
15) n-Hexane	7.441	57	31844	4.69 ug/L	96
16) 1,1-Dichloroethane	7.608	63	40952	5.03 ug/L	99
17) Cyclohexane	8.720	84	24662	4.94 ug/L	88
18) 2,2-Dichloropropane	8.173	77	33619	4.96 ug/L	99
19) cis-1,2-Dichloroethene	8.155	96	16983	4.81 ug/L	97
20) Chloroform	8.411	83	38630	4.98 ug/L	100
21) Bromochloromethane	8.376	128	6549	5.02 ug/L	95
23) 1,1,1-Trichloroethane	8.640	97	31279	5.10 ug/L	99
24) Acetone	6.356	43	18308	7.52 ug/L	94
25) 2-Butanone	8.129	43	20673	8.52 ug/L	95
26) Carbon Disulfide	6.673	76	71528	4.94 ug/L	85
27) Iodomethane	6.550	142	14574	3.71 ug/L	98
28) Vinyl acetate	7.590	43	53886	4.79 ug/L #	84
29) Methyl tert-butyl ether	7.149	73	39760	4.82 ug/L	96
31) 1,1-Dichloropropene	8.764	75	28024	4.94 ug/L	93
32) Carbon tetrachloride	8.799	117	22995	5.02 ug/L	99
33) 1,2-Dichloroethane	8.940	62	33325	4.98 ug/L	97
34) Benzene	8.958	78	67005	5.03 ug/L	97
35) 2,2,4-Trimethylpentane	8.984	57	84474	4.96 ug/L	99
36) n-Heptane	9.090	57	17984	4.68 ug/L	92
37) Trichloroethene	9.460	95	17315	4.85 ug/L	94

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091617.D
Acq On : 16 Sep 2013 18:22
Operator : JM
Sample : 5.0 PPB
Misc : ICAL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 24 17:45:45 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:41:44 2013
Response via : Initial Calibration

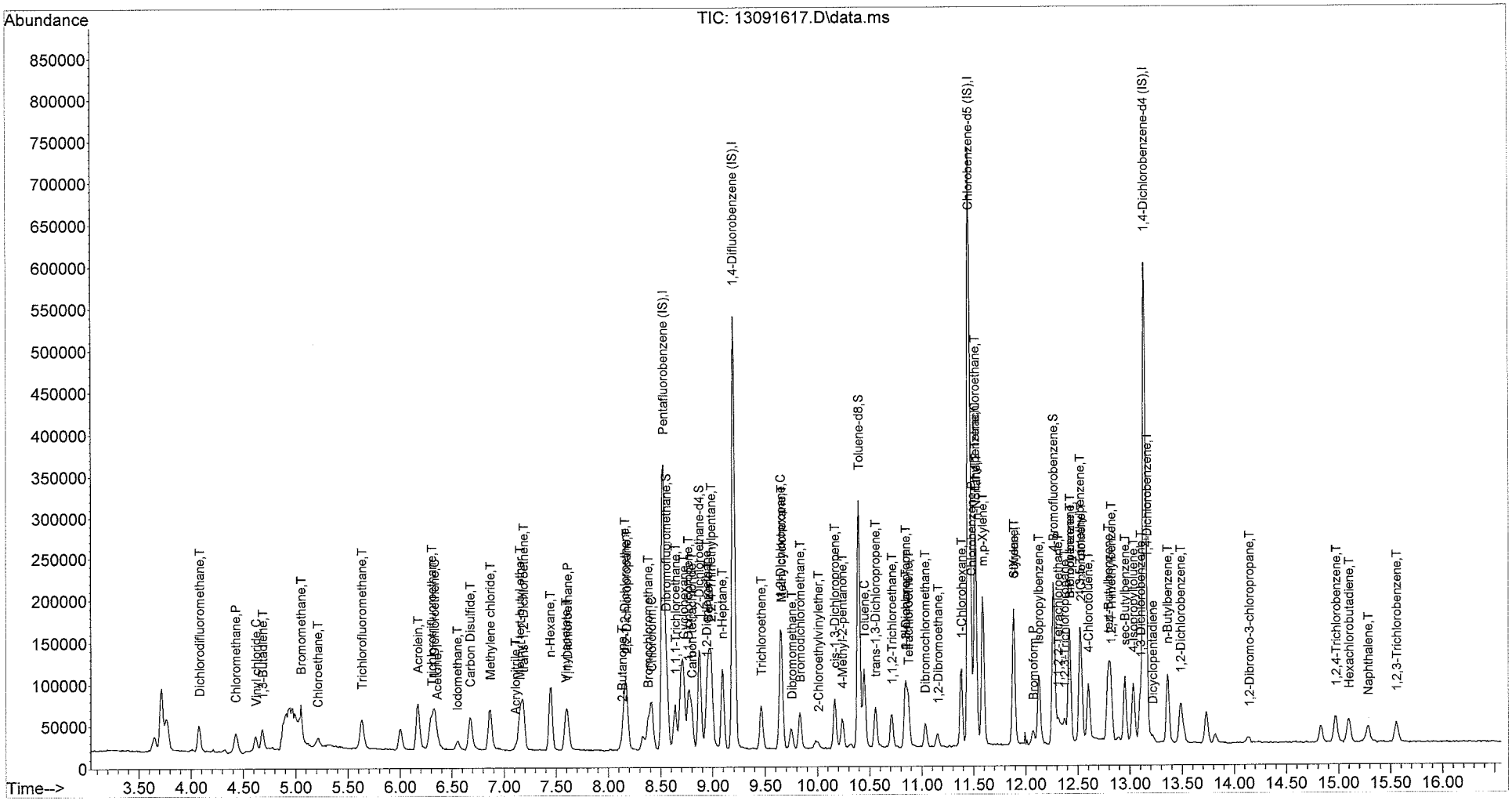
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.646	63	21118	4.95 ug/L	98
39) Bromodichloromethane	9.831	83	27725	4.98 ug/L	99
40) Methylcyclohexane	9.655	56	9517	4.27 ug/L	99
41) Dibromomethane	9.752	93	11959	4.79 ug/L	92
42) cis-1,3-Dichloropropene	10.166	75	29199	4.78 ug/L	92
43) 2-Chloroethylvinylether	10.007	63	2465	3.64 ug/L #	1
44) 4-Methyl-2-pentanone	10.237	43	34071	8.98 ug/L	98
48) Toluene	10.448	92	34528	4.61 ug/L	96
49) trans-1,3-Dichloropropene	10.554	75	24442	4.70 ug/L #	93
50) 1,1,2-Trichloroethane	10.713	83	11763	4.77 ug/L	96
51) 1,3-Dichloropropane	10.845	76	24611	4.70 ug/L	95
52) Tetrachloroethene	10.872	166	11878	4.74 ug/L	97
53) Dibromochloromethane	11.031	129	12621	4.57 ug/L	96
54) 1,2-Dibromoethane	11.154	107	11482	4.56 ug/L	100
55) 1-Chlorohexane	11.383	91	21484	4.45 ug/L	100
56) Chlorobenzene	11.480	112	30055	4.71 ug/L	97
57) n-Nonane	11.525	57	36085	5.04 ug/L	97
58) 1,1,1,2-Tetrachloroethane	11.516	131	11165	4.73 ug/L	91
59) Ethylbenzene	11.516	91	70915	4.77 ug/L	97
60) m,p-Xylene	11.586	106	38846	9.44 ug/L	96
61) o-Xylene	11.886	106	18164	4.67 ug/L	96
62) Styrene	11.886	104	33315	4.70 ug/L	95
63) Isopropylbenzene	12.124	105	48971	4.58 ug/L	97
64) Bromoform	12.071	173	7174	4.53 ug/L	95
65) 1,1,2,2-Tetrachloroethane	12.310	83	15763	4.66 ug/L	98
67) 2-Hexanone	10.845	43	25195	9.27 ug/L	97
69) 1,2,3-Trichloropropane	12.371	110	3491	4.92 ug/L	95
70) n-Propylbenzene	12.424	91	73203	4.87 ug/L	99
71) Bromobenzene	12.424	156	11538	4.84 ug/L	90
72) 1,3,5-Trimethylbenzene	12.521	105	43965	4.74 ug/L	99
73) 2-Chlorotoluene	12.530	91	51239	4.89 ug/L	99
74) 4-Chlorotoluene	12.601	91	43153	4.81 ug/L	98
75) tert-Butylbenzene	12.795	119	32914	4.74 ug/L	97
76) 1,2,4-Trimethylbenzene	12.821	105	44152	4.81 ug/L	95
77) sec-Butylbenzene	12.954	105	52891	4.75 ug/L	99
78) 4-Isopropyltoluene	13.033	119	35553	4.77 ug/L	99
79) 1,3-Dichlorobenzene	13.104	146	19162	4.62 ug/L	94
80) 1,4-Dichlorobenzene	13.165	146	20956	4.90 ug/L #	88
81) Dicyclopentadiene	13.218	66	7670	4.56 ug/L #	86
82) n-Butylbenzene	13.359	92	29831	4.62 ug/L	99
83) 1,2-Dichlorobenzene	13.483	146	16955	4.77 ug/L	97
84) 1,2-Dibromo-3-chloropr...	14.144	157	1536	4.73 ug/L	89
85) 1,2,4-Trichlorobenzene	14.974	180	10450	4.48 ug/L	93
86) Hexachlorobutadiene	15.097	190	3265	4.53 ug/L	97
87) Naphthalene	15.282	128	18024	4.13 ug/L	98
88) 1,2,3-Trichlorobenzene	15.556	180	8519	4.41 ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091617.D
Acq On : 16 Sep 2013 18:22
Operator : JM
Sample : 5.0 PPB
Misc : ICAL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 24 17:45:45 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:41:44 2013
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091618.D
Acq On : 16 Sep 2013 18:48
Operator : JM
Sample : ICV
Misc : SECOND SOURCE
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 24 17:56:16 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Pentafluorobenzene (IS)	8.519	168	172156	50.00 ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.199	114	318031	50.00 ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.457	117	278824	50.00 ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	130824	50.00 ug/L	0.00
System Monitoring Compounds					
22) Dibromofluoromethane	8.555	113	151982	49.14 ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 98.28%		
45) 1,2-Dichloroethane-d4	8.872	65	248443	47.70 ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 95.40%		
46) Toluene-d8	10.398	98	455106	51.03 ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 102.06%		
66) 4-Bromofluorobenzene	12.268	95	198639	50.96 ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 101.92%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.074	85	82775	13.03 ug/L	99
3) Chloromethane	4.427	50	112885	18.06 ug/L	98
4) Vinyl chloride	4.612	62	55332	16.59 ug/L	99
5) 1,3-Butadiene	4.674	54	42084	23.42 ug/L	96
6) Bromomethane	5.044	94	39796	23.72 ug/L	96
7) Chloroethane	5.212	64	41460	22.22 ug/L	96
8) Trichlorofluoromethane	5.635	101	122585	17.07 ug/L	99
9) Acrolein	6.173	56	59259	100.01 ug/L	99
10) Trichlorotrifluoroethane	6.297	151	37876	18.62 ug/L	98
11) 1,1-Dichloroethene	6.332	61	147644	19.80 ug/L	96
12) Methylene chloride	6.861	84	80706	19.70 ug/L	97
13) Acrylonitrile	7.108	53	24344	18.72 ug/L	96
14) trans-1,2-Dichloroethene	7.179	61	146163	20.57 ug/L	96
15) n-Hexane	7.443	57	124171	18.31 ug/L	98
16) 1,1-Dichloroethane	7.602	63	174629	21.50 ug/L	98
17) Cyclohexane	8.713	84	93662	18.81 ug/L #	69
18) 2,2-Dichloropropane	8.175	77	139028	20.46 ug/L	99
19) cis-1,2-Dichloroethene	8.149	96	70870	20.13 ug/L	99
20) Chloroform	8.414	83	157250	20.32 ug/L	99
21) Bromochloromethane	8.378	128	26798	20.56 ug/L	95
23) 1,1,1-Trichloroethane	8.634	97	125968	20.57 ug/L	99
24) Acetone	6.349	43	65886	42.34 ug/L	98
25) 2-Butanone	8.122	43	79644	38.51 ug/L	99
26) Carbon Disulfide	6.676	76	268212	18.56 ug/L	99
27) Iodomethane	6.552	142	80365	21.46 ug/L	100
28) Vinyl acetate	7.584	43	179945	16.02 ug/L	99
29) Methyl tert-butyl ether	7.152	73	167004	20.27 ug/L	99
31) 1,1-Dichloropropene	8.766	75	116206	20.38 ug/L	97
32) Carbon tetrachloride	8.793	117	94489	20.56 ug/L	99
33) 1,2-Dichloroethane	8.934	62	136646	20.36 ug/L	98
34) Benzene	8.960	78	270871	20.24 ug/L	98
35) 2,2,4-Trimethylpentane	8.987	57	322487	18.86 ug/L	100
36) n-Heptane	9.093	57	71813	18.62 ug/L	98
37) Trichloroethene	9.463	95	74279	20.74 ug/L	97

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091618.D
Acq On : 16 Sep 2013 18:48
Operator : JM
Sample : ICV
Misc : SECOND SOURCE
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 24 17:56:16 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

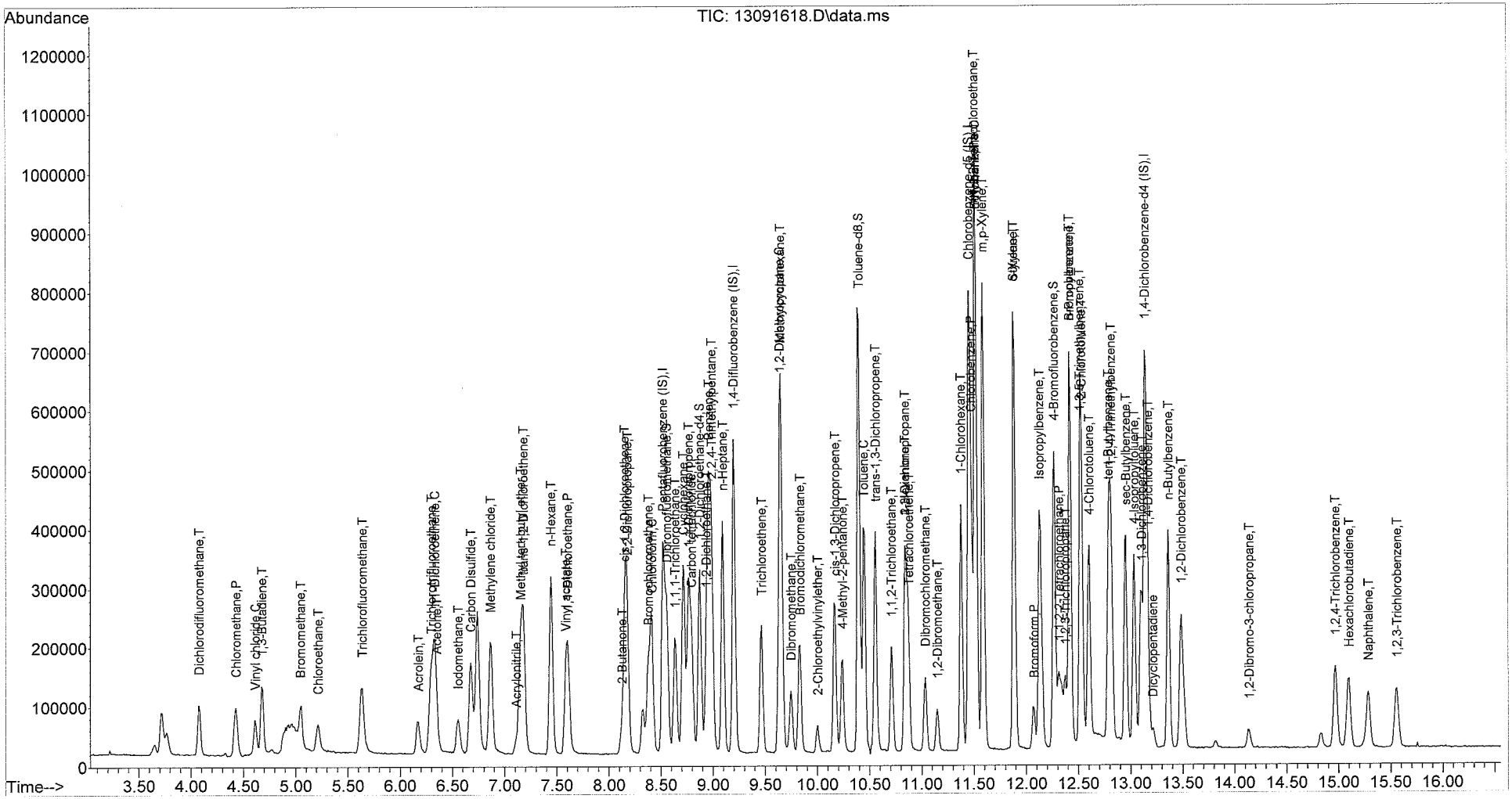
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
38) 1,2-Dichloropropane	9.640	63	85515	19.98 ug/L	98
39) Bromodichloromethane	9.834	83	118524	21.22 ug/L	99
40) Methylcyclohexane	9.649	56	41553	20.78 ug/L	96
41) Dibromomethane	9.746	93	49104	19.60 ug/L	98
42) cis-1,3-Dichloropropene	10.169	75	127086	20.71 ug/L	99
43) 2-Chloroethylvinylether	10.001	63	17444	23.36 ug/L	94
44) 4-Methyl-2-pentanone	10.240	43	152423	40.01 ug/L	99
48) Toluene	10.442	92	146303	20.27 ug/L	99
49) trans-1,3-Dichloropropene	10.557	75	110425	22.07 ug/L #	68
50) 1,1,2-Trichloroethane	10.707	83	48840	20.56 ug/L	99
51) 1,3-Dichloropropane	10.839	76	105727	20.95 ug/L	97
52) Tetrachloroethene	10.875	166	50422	20.88 ug/L	99
53) Dibromochloromethane	11.033	129	54536	20.50 ug/L	98
54) 1,2-Dibromoethane	11.148	107	49267	20.34 ug/L	98
55) 1-Chlorohexane	11.377	91	96416	20.76 ug/L	99
56) Chlorobenzene	11.474	112	133908	21.81 ug/L	100
57) n-Nonane	11.519	57	119491	17.35 ug/L	99
58) 1,1,1,2-Tetrachloroethane	11.510	131	47238	20.77 ug/L	95
59) Ethylbenzene	11.519	91	302058	21.12 ug/L	99
60) m,p-Xylene	11.589	106	176058	44.41 ug/L	100
61) o-Xylene	11.880	106	84728	22.64 ug/L	95
62) Styrene	11.880	104	149558	21.93 ug/L	90
63) Isopropylbenzene	12.127	105	223170	21.69 ug/L	99
64) Bromoform	12.074	173	30664	20.09 ug/L	98
65) 1,1,2,2-Tetrachloroethane	12.312	83	65690	20.16 ug/L	99
67) 2-Hexanone	10.839	43	100544	37.67 ug/L	98
69) 1,2,3-Trichloropropane	12.374	110	13891	19.01 ug/L	95
70) n-Propylbenzene	12.418	91	349474	22.57 ug/L	99
71) Bromobenzene	12.418	156	49489	20.16 ug/L	81
72) 1,3,5-Trimethylbenzene	12.515	105	192255	20.14 ug/L	99
73) 2-Chlorotoluene	12.533	91	234510	21.72 ug/L	98
74) 4-Chlorotoluene	12.604	91	211562	22.92 ug/L	99
75) tert-Butylbenzene	12.789	119	156995	21.95 ug/L	97
76) 1,2,4-Trimethylbenzene	12.815	105	194730	20.60 ug/L	99
77) sec-Butylbenzene	12.956	105	255896	22.33 ug/L	99
78) 4-Isopropyltoluene	13.036	119	167428	21.83 ug/L	98
79) 1,3-Dichlorobenzene	13.106	146	90686	21.25 ug/L	98
80) 1,4-Dichlorobenzene	13.168	146	86765	19.73 ug/L	98
81) Dicyclopentadiene	13.212	66	29952	17.31 ug/L	96
82) n-Butylbenzene	13.362	92	134678	20.27 ug/L	99
83) 1,2-Dichlorobenzene	13.486	146	77176	21.11 ug/L	98
84) 1,2-Dibromo-3-chloropr...	14.138	157	6840	18.95 ug/L	97
85) 1,2,4-Trichlorobenzene	14.967	180	45727	19.02 ug/L	95
86) Hexachlorobutadiene	15.100	190	13233	19.89 ug/L	94
87) Naphthalene	15.285	128	85619	19.04 ug/L	99
88) 1,2,3-Trichlorobenzene	15.558	180	36654	18.45 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091618.D
Acq On : 16 Sep 2013 18:48
Operator : JM
Sample : ICV
Misc : SECOND SOURCE
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 24 17:56:16 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



9/24/13

Initial Calibration Verification

ICV
9/16/2013 18:48

13091618.D
GCMS 10

Name	Spike	Conc.	%Rec	LCL	UCL	
Pentafluorobenzene (IS)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	
Dichlorodifluoromethane	20	13.03	65	37	170	
Chloromethane	20	18.06	90	61	149	
Vinyl chloride	20	16.59	83	53	150	
1,3-Butadiene	20	23.42	117	70	130	
Bromomethane	20	23.72	119	41	170	
Chloroethane	20	22.22	111	57	150	
Trichlorofluoromethane	20	17.07	85	64	125	
Acrolein	100	100.01	100	70	130	
Trichlorotrifluoroethane	20	18.62	93	69	131	
1,1-Dichloroethene	20	19.80	99	70	130	
Methylene chloride	20	19.70	98	70	130	
Acrylonitrile	20	18.72	94	70	130	
trans-1,2-Dichloroethene	20	20.57	103	70	130	
n-Hexane	20	18.31	92	70	130	
1,1-Dichloroethane	20	21.50	108	70	130	
Cyclohexane	20	18.81	94	70	130	
2,2-Dichloropropane	20	20.46	102	70	130	
cis-1,2-Dichloroethene	20	20.13	101	70	130	
Chloroform	20	20.32	102	70	130	
Bromochloromethane	20	20.56	103	65	116	
Dibromofluoromethane	50	49.14	98	70	130	
1,1,1-Trichloroethane	20	20.57	103	67	112	
Acetone	40	42.34	106	69	139	
2-Butanone	40	38.51	96	70	130	
Carbon Disulfide	20	18.56	93	59	170	
Iodomethane	20	21.46	107	61	139	
Vinyl acetate	20	16.02	80	61	151	
Methyl tert-butyl ether	20	20.27	101	70	130	
1,4-Difluorobenzene (IS)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	
1,1-Dichloropropene	20	20.38	102	70	130	
Carbon tetrachloride	20	20.56	103	70	130	
1,2-Dichloroethane	20	20.36	102	70	130	
Benzene	20	20.24	101	70	130	
2,2,4-Trimethylpentane	20	18.86	94	70	130	
n-Heptane	20	18.62	93	70	130	
Trichloroethene	20	20.74	104	70	130	
1,2-Dichloropropane	20	19.98	100	70	130	
Bromodichloromethane	20	21.22	106	70	130	
Methylcyclohexane	20	20.78	104	70	130	
Dibromomethane	20	19.60	98	69	111	
cis-1,3-Dichloropropene	20	20.71	104	70	130	
2-Chloroethylvinylether	20	23.36	117	48	165	
4-Methyl-2-pentanone	40	40.01	100	70	130	
1,2-Dichloroethane-d4	50	47.70	95	70	130	

Toluene-d8	50	51.03	102	70	130	
Chlorobenzene-d5 (IS)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	
Toluene	20	22.07	110	70	130	
trans-1,3-Dichloropropene	20	22.07	110	70	130	
1,1,2-Trichloroethane	20	20.56	103	69	114	
1,3-Dichloropropane	20	20.95	105	70	130	
Tetrachloroethene	20	20.88	104	67	116	
Dibromochloromethane	20	20.50	102	70	130	
1,2-Dibromoethane	20	20.34	102	70	130	
1-Chlorohexane	20	20.76	104	70	130	
Chlorobenzene	20	21.81	109	70	130	
n-Nonane	20	17.35	87	70	130	
1,1,1,2-Tetrachloroethane	20	20.77	104	70	130	
Ethylbenzene	20	21.12	106	70	130	
m,p-Xylene	40	44.41	111	70	130	
o-Xylene	20	22.64	113	70	130	
Styrene	20	21.93	110	70	130	
Isopropylbenzene	20	21.69	108	70	130	
Bromoform	20	20.09	100	70	130	
1,1,2,2-Tetrachloroethane	20	20.16	101	70	130	
4-Bromofluorobenzene	50	50.96	102	70	130	
2-Hexanone	40	37.67	94	70	130	
1,4-Dichlorobenzene-d4 (IS)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	
1,2,3-Trichloropropane	20	19.01	95	70	130	
n-Propylbenzene	20	22.57	113	70	130	
Bromobenzene	20	20.16	101	70	130	
1,3,5-Trimethylbenzene	20	20.14	101	70	130	
2-Chlorotoluene	20	21.72	109	70	130	
4-Chlorotoluene	20	22.92	115	70	130	
tert-Butylbenzene	20	21.95	110	70	130	
1,2,4-Trimethylbenzene	20	20.60	103	70	130	
sec-Butylbenzene	20	22.33	112	70	130	
4-Isopropyltoluene	20	21.83	109	70	130	
1,3-Dichlorobenzene	20	21.25	106	70	130	
1,4-Dichlorobenzene	20	19.73	99	70	130	
Dicyclopentadiene	20	17.31	87	70	130	
n-Butylbenzene	20	20.27	101	70	130	
1,2-Dichlorobenzene	20	21.11	106	70	130	
1,2-Dibromo-3-chloropropane	20	18.95	95	66	114	
1,2,4-Trichlorobenzene	20	19.02	95	70	130	
Hexachlorobutadiene	20	19.89	99	70	130	

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091619.D
Acq On : 16 Sep 2013 19:14
Operator : JM
Sample : LCSV
Misc : TERTIARY STD
ALS Vial : 16 Sample Multiplier: 1

JM 9/24/13

Quant Time: Sep 24 18:01:18 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene (IS)	8.520	168	173965	50.00	ug/L	0.00
30) 1,4-Difluorobenzene (IS)	9.199	114	317440	50.00	ug/L	0.00
47) Chlorobenzene-d5 (IS)	11.457	117	289748	50.00	ug/L	0.00
68) 1,4-Dichlorobenzene-d4...	13.142	152	132559	50.00	ug/L	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	8.555	113	154111	49.31	ug/L	0.00
Spiked Amount 50.000	Range 52 - 140		Recovery = 98.62%			
45) 1,2-Dichloroethane-d4	8.873	65	257126	49.46	ug/L	0.00
Spiked Amount 50.000	Range 54 - 133		Recovery = 98.92%			
46) Toluene-d8	10.390	98	463978	52.12	ug/L	0.00
Spiked Amount 50.000	Range 63 - 126		Recovery = 104.24%			
66) 4-Bromofluorobenzene	12.269	95	208775	51.54	ug/L	0.00
Spiked Amount 50.000	Range 62 - 123		Recovery = 103.08%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.074	85	140544	21.90	ug/L	98
3) Chloromethane	4.427	50	159295	25.22	ug/L	99
4) Vinyl chloride	4.612	62	95443	28.55	ug/L	98
6) Bromomethane	5.045	94	56260	33.52	ug/L	94
7) Chloroethane	5.212	64	58017	30.94	ug/L	99
8) Trichlorofluoromethane	5.636	101	228500	31.48	ug/L	99
9) Acrolein	6.174	56	923	1.54	ug/L	85
10) Trichlorotrifluoroethane	6.297	151	68187	33.17	ug/L	99
11) 1,1-Dichloroethene	6.332	61	252879	33.55	ug/L	98
12) Methylene chloride	6.862	84	144122	34.81	ug/L	97
13) Acrylonitrile	7.100	53	49001	37.29	ug/L	92
14) trans-1,2-Dichloroethene	7.179	61	259007	36.08	ug/L	99
16) 1,1-Dichloroethane	7.603	63	299263	36.46	ug/L	99
17) Cyclohexane	8.793	84	47507	9.44	ug/L #	1
18) 2,2-Dichloropropane	8.167	77	257109	37.44	ug/L	98
19) cis-1,2-Dichloroethene	8.150	96	132692	37.29	ug/L	99
20) Chloroform	8.405	83	291373	37.25	ug/L	98
21) Bromochloromethane	8.379	128	47949	36.41	ug/L	96
23) 1,1,1-Trichloroethane	8.635	97	232071	37.50	ug/L	99
24) Acetone	6.341	43	119369	80.53	ug/L	99
25) 2-Butanone	8.114	43	148199	72.57	ug/L	99
26) Carbon Disulfide	6.676	76	468264	32.07	ug/L	98
27) Iodomethane	6.553	142	135501	35.94	ug/L	100
28) Vinyl acetate	7.576	43	434564	38.27	ug/L	98
29) Methyl tert-butyl ether	7.153	73	322177	38.69	ug/L	98
31) 1,1-Dichloropropene	8.767	75	212944	37.42	ug/L	99
32) Carbon tetrachloride	8.793	117	172113	37.52	ug/L	100
33) 1,2-Dichloroethane	8.935	62	255475	38.13	ug/L	97
34) Benzene	8.952	78	503020	37.65	ug/L	97
36) n-Heptane	9.199	57	61925	16.09	ug/L #	1
37) Trichloroethene	9.464	95	134623	37.65	ug/L	99
38) 1,2-Dichloropropane	9.640	63	158308	37.06	ug/L	99
39) Bromodichloromethane	9.825	83	216243	38.79	ug/L	100
40) Methylcyclohexane	9.473	56	2413	0.59	ug/L #	1

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091619.D
Acq On : 16 Sep 2013 19:14
Operator : JM
Sample : LCSV
Misc : TERTIARY STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 24 18:01:18 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration

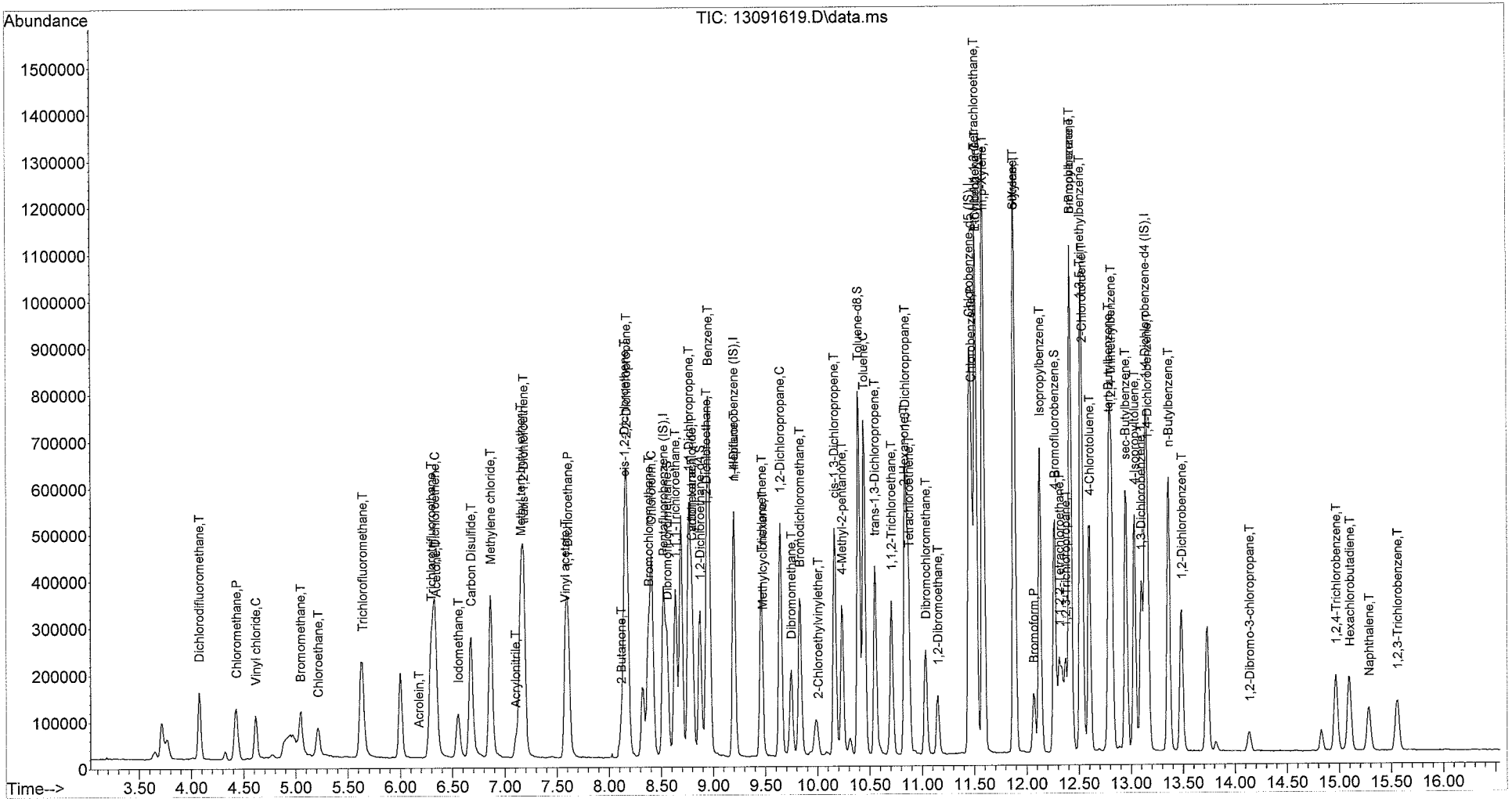
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) Dibromomethane	9.746	93	90445	36.16 ug/L	95
42) cis-1,3-Dichloropropene	10.161	75	237983	38.85 ug/L	95
43) 2-Chloroethylvinylether	10.002	63	17327	23.25 ug/L	96
44) 4-Methyl-2-pentanone	10.231	43	292942	77.04 ug/L	99
48) Toluene	10.443	92	272499	36.34 ug/L	98
49) trans-1,3-Dichloropropene	10.549	75	196063	37.71 ug/L	96
50) 1,1,2-Trichloroethane	10.708	83	89499	36.26 ug/L	97
51) 1,3-Dichloropropane	10.840	76	189031	36.05 ug/L	99
52) Tetrachloroethene	10.875	166	88400	35.22 ug/L	98
53) Dibromochloromethane	11.034	129	100161	36.23 ug/L	99
54) 1,2-Dibromoethane	11.149	107	89440	35.53 ug/L	100
55) 1-Chlorohexane	11.519	91	553125	114.62 ug/L #	2
56) Chlorobenzene	11.475	112	226147	35.45 ug/L	98
58) 1,1,1,2-Tetrachloroethane	11.510	131	87439	37.00 ug/L	97
59) Ethylbenzene	11.519	91	553125	37.21 ug/L	99
60) m,p-Xylene	11.590	106	301935	73.30 ug/L	99
61) o-Xylene	11.881	106	140871	36.22 ug/L	95
62) Styrene	11.881	104	261807	36.95 ug/L	94
63) Isopropylbenzene	12.128	105	400724	37.48 ug/L	99
64) Bromoform	12.066	173	53983	34.04 ug/L	98
65) 1,1,2,2-Tetrachloroethane	12.313	83	108042	31.91 ug/L	98
67) 2-Hexanone	10.831	43	185675	66.95 ug/L	97
69) 1,2,3-Trichloropropane	12.375	110	24186	32.66 ug/L	99
70) n-Propylbenzene	12.419	91	563055	35.89 ug/L	98
71) Bromobenzene	12.419	156	84877	34.13 ug/L	87
72) 1,3,5-Trimethylbenzene	12.516	105	338744	35.02 ug/L	99
73) 2-Chlorotoluene	12.533	91	383475	35.05 ug/L	98
74) 4-Chlorotoluene	12.604	91	323606	34.60 ug/L	99
75) tert-Butylbenzene	12.789	119	259071	35.75 ug/L	97
76) 1,2,4-Trimethylbenzene	12.816	105	329613	34.41 ug/L	98
77) sec-Butylbenzene	12.948	105	408833	35.21 ug/L	99
78) 4-Isopropyltoluene	13.036	119	272458	35.05 ug/L	98
79) 1,3-Dichlorobenzene	13.098	146	131043	30.31 ug/L	96
80) 1,4-Dichlorobenzene	13.160	146	135738	30.45 ug/L	96
82) n-Butylbenzene	13.363	92	224167	33.29 ug/L	100
83) 1,2-Dichlorobenzene	13.486	146	111212	30.02 ug/L	98
84) 1,2-Dibromo-3-chloropr...	14.139	157	9534	26.07 ug/L	91
85) 1,2,4-Trichlorobenzene	14.968	180	54890	22.54 ug/L	96
86) Hexachlorobutadiene	15.100	190	17099	25.55 ug/L	97
87) Naphthalene	15.286	128	87220	19.14 ug/L	100
88) 1,2,3-Trichlorobenzene	15.559	180	40305	20.03 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : H:\VOA\A228\130916\
Data File : 13091619.D
Acq On : 16 Sep 2013 19:14
Operator : JM
Sample : LCSV
Misc : TERTIARY STD
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 24 18:01:18 2013
Quant Method : H:\VOA\A228\METHODS\130916.M
Quant Title : 8260B_S
QLast Update : Tue Sep 24 17:46:58 2013
Response via : Initial Calibration



Tertiary Standard- Air

9/24/13

LCSV
9/16/2013 19:14

13091619.D
GCMS 10

Name	Spike	Conc.	%Rec	LCL	UCL	
Pentafluorobenzene (IS)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	
Dichlorodifluoromethane	40	21.90	55	16	147	
Chloromethane	40	25.22	63	42	128	
Vinyl chloride	40	28.55	71	40	150	
1,3-Butadiene	0	0.11				
Bromomethane	40	33.52	84	43	133	
Chloroethane	40	30.94	77	48	150	
Trichlorofluoromethane	40	31.48	79	50	140	
Acrolein	0	1.54				
Trichlorotrifluoroethane	40	33.17	83	44	130	
1,1-Dichloroethene	40	33.55	84	38	117	
Methylene chloride	40	34.81	87	46	132	
Acrylonitrile	40	37.29	93	50	140	
trans-1,2-Dichloroethene	40	36.08	90	50	140	
n-Hexane	0	0.00				
1,1-Dichloroethane	40	36.46	91	50	140	
Cyclohexane	0	9.44				
2,2-Dichloropropane	40	37.44	94	50	140	
cis-1,2-Dichloroethene	40	37.29	93	50	140	
Chloroform	40	37.25	93	50	140	
Bromochloromethane	40	36.41	91	50	140	
Dibromofluoromethane	50	49.31	99	50	140	
1,1,1-Trichloroethane	40	37.50	94	50	140	
Acetone	80	80.53	101	50	140	
2-Butanone	80	72.57	91	50	140	
Carbon Disulfide	40	32.07	80	50	140	
Iodomethane	40	35.94	90	50	140	
Vinyl acetate	40	38.27	96	50	140	
Methyl tert-butyl ether	40	38.69	97	50	140	
1,4-Difluorobenzene (IS)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	
1,1-Dichloropropene	40	37.42	94	50	140	
Carbon tetrachloride	40	37.52	94	50	140	
1,2-Dichloroethane	40	38.13	95	50	140	
Benzene	40	37.65	94	50	140	
2,2,4-Trimethylpentane	0	0.11				
n-Heptane	0	16.09				
Trichloroethene	40	37.65	94	50	140	
1,2-Dichloropropane	40	37.06	93	50	140	
Bromodichloromethane	40	38.79	97	50	140	
Methylcyclohexane	0	0.59				
Dibromomethane	40	36.16	90	50	140	
cis-1,3-Dichloropropene	40	38.85	97	50	140	
2-Chloroethylvinylether	40	23.25	58	50	140	
4-Methyl-2-pentanone	80	77.04	96	50	140	
1,2-Dichloroethane-d4	50	49.46	99	50	140	

Toluene-d8	50	52.12	104	50	140	
Chlorobenzene-d5 (IS)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	
Toluene	40	37.71	94	50	140	
trans-1,3-Dichloropropene	40	37.71	94	50	140	
1,1,2-Trichloroethane	40	36.26	91	50	140	
1,3-Dichloropropane	40	36.05	90	50	140	
Tetrachloroethene	40	35.22	88	50	140	
Dibromochloromethane	40	36.23	91	50	140	
1,2-Dibromoethane	40	35.53	89	50	140	
1-Chlorohexane	0	114.62				
Chlorobenzene	40	35.45	89	50	140	
n-Nonane	0	0.32				
1,1,1,2-Tetrachloroethane	40	37.00	93	50	140	
Ethylbenzene	40	37.21	93	50	140	
m,p-Xylene	80	73.30	92	50	140	
o-Xylene	40	36.22	91	50	140	
Styrene	40	36.95	92	50	140	
Isopropylbenzene	40	37.48	94	50	140	
Bromoform	40	34.04	85	50	140	
1,1,2,2-Tetrachloroethane	40	31.91	80	50	140	
4-Bromofluorobenzene	50	51.54	103	50	140	
2-Hexanone	80	66.95	84	50	140	
1,4-Dichlorobenzene-d4 (IS)	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	
1,2,3-Trichloropropane	40	32.66	82	50	140	
n-Propylbenzene	40	35.89	90	50	140	
Bromobenzene	40	34.13	85	50	140	
1,3,5-Trimethylbenzene	40	35.02	88	50	140	
2-Chlorotoluene	40	35.05	88	50	140	
4-Chlorotoluene	40	34.60	87	50	140	
tert-Butylbenzene	40	35.75	89	50	140	
1,2,4-Trimethylbenzene	40	34.41	86	50	140	
sec-Butylbenzene	40	35.21	88	50	140	
4-Isopropyltoluene	40	35.05	88	50	140	
1,3-Dichlorobenzene	40	30.31	76	50	140	
1,4-Dichlorobenzene	40	30.45	76	50	140	
Dicyclopentadiene	0	0.20				
n-Butylbenzene	40	33.29	83	50	140	
1,2-Dichlorobenzene	40	30.02	75	50	140	
1,2-Dibromo-3-chloropropane	40	26.07	65	50	140	
1,2,4-Trichlorobenzene	40	22.54	56	50	140	
Hexachlorobutadiene	40	25.55	64	50	140	

Chromium by EPA200.7

Sample Name: IRIS BLANK Acquired: 09/19/2013 15:48:23 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0006**	**.0000**	**.0000**	**.0039**	**.0009**	**.0005**	**-.0006**	**.0035**	**.0001**
Stddev	.0001	.000	.000	.0012	.0012	.0001	.0000	.0010	.0000
%RSD	17.75	36.13	71.27	30.93	131.4	19.47	5.113	28.15	43.72
#1	.0005	.0000	.0000	.0048	-.0004	.0006	-.0006	.0046	.0001
#2	.0006	.0000	.0000	.0025	.0011	.0004	-.0006	.0026	.0001
#3	.0007	.0000	.0000	.0043	.0021	.0005	-.0006	.0033	.0001

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0004**	**-.0002**	**.0003**	**.0005**	**-.0049**	**.0018**	**-.0018**	**.0002**	**.0000**
Stddev	.0001	.0001	.0003	.0000	.0019	.0013	.0378	.0001	.000
%RSD	19.39	23.07	103.3	6.734	37.87	74.94	2058.	27.95	313.8
#1	.0003	-.0002	-.0001	.0004	-.0069	.0015	.0278	.0002	.0000
#2	.0004	-.0002	.0005	.0005	-.0032	.0032	-.0444	.0002	.0000
#3	.0003	-.0002	.0004	.0004	-.0046	.0006	.0111	.0003	.0000

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0068**	**.0000**	**-.0083**	**-.3329**	**-.0568**	**-.0004**	**.0005**	**-.0006**	**.0000**
Stddev	.0029	.000	.0192	.0723	.0041	.0011	.0001	.0001	.0000
%RSD	42.19	433.3	231.0	21.73	7.148	255.8	10.15	9.376	45.59
#1	.0100	.0000	.0028	-.2499	-.0523	-.0005	.0005	-.0007	.0000
#2	.0060	.0000	.0028	-.3827	-.0582	-.0014	.0006	-.0006	.0000
#3	.0044	-.0001	-.0305	-.3661	-.0601	.0007	.0006	-.0005	.0000

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0019**	**.0239**	**.2782**	**.1925**	**.0000**
Stddev	.0224	.0144	.0392	.0437	.0000
%RSD	1210.	60.17	14.08	22.72	3669.
#1	.0056	.0115	.2719	.2296	.0000
#2	-.0222	.0397	.3201	.2037	.0000
#3	.0222	.0205	.2425	.1443	.0000

Sample Name: IRIS BLANK Acquired: 09/19/2013 15:48:23 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**765.62**	**1377.6**	**75.348**
Stddev	1.44	4.0	.359
%RSD	.18786	.28877	.47677
#1	765.51	1373.1	75.271
#2	764.24	1380.4	75.034
#3	767.11	1379.5	75.739

Sample Name: IRIS STD 1 Acquired: 09/19/2013 15:54:16 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0029**	**.0006**	**.0001**	**.0168**	**.0053**	**.0047**	**-.0004**	**.0101**	**.0034**
Stddev	.0001	.0000	.0000	.0018	.0009	.0000	.0000	.0008	.0000
%RSD	2.456	6.776	52.22	10.75	17.51	.1696	3.876	7.460	.2674
#1	.0028	.0006	.0000	.0184	.0053	.0047	-.0004	.0108	.0034
#2	.0029	.0006	.0001	.0172	.0062	.0047	-.0004	.0093	.0034
#3	.0028	.0007	.0000	.0148	.0044	.0047	-.0004	.0101	.0034

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0041**	**.0004**	**.0063**	**.0008**	**.0186**	**.0026**	**.0278**	**.0033**	**.0009**
Stddev	.0001	.0001	.0009	.0000	.0029	.0016	.0169	.0000	.0001
%RSD	1.697	15.71	14.59	2.734	15.44	61.34	60.83	1.148	7.543
#1	.0041	.0003	.0064	.0008	.0199	.0026	.0361	.0032	.0009
#2	.0040	.0005	.0071	.0008	.0153	.0010	.0083	.0033	.0010
#3	.0041	.0004	.0053	.0008	.0207	.0042	.0389	.0033	.0008

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0218**	**.0007**	**.2359**	**-.1332**	**.0005**	**.0008**	**.0016**	**.0000**	**.0010**
Stddev	.0004	.0001	.0265	.0333	.0032	.0012	.0001	.0001	.0000
%RSD	1.939	6.844	11.24	25.02	654.4	160.6	4.045	370.8	4.892
#1	.0214	.0007	.2081	-.1332	-.0021	-.0006	.0015	.0000	.0009
#2	.0218	.0007	.2386	-.0999	-.0005	.0013	.0016	.0001	.0010
#3	.0223	.0008	.2609	-.1665	.0041	.0016	.0016	.0000	.0010

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0444**	**.0179**	**1.242**	**.3345**	**.0003**
Stddev	.0529	.0616	.017	.0374	.0000
%RSD	119.2	343.3	1.350	11.19	10.29
#1	-.0111	.0448	1.261	.3407	.0002
#2	.0943	-.0525	1.232	.3684	.0003
#3	.0500	.0615	1.232	.2944	.0003

Sample Name: IRIS STD 1 Acquired: 09/19/2013 15:54:16 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**764.74**	**1380.1**	**76.260**
Stddev	1.16	2.2	.480
%RSD	.15186	.15897	.62994
#1	764.39	1382.1	76.808
#2	766.03	1377.8	76.061
#3	763.79	1380.5	75.911

Sample Name: IRIS STD 2 Acquired: 09/19/2013 16:00:07 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0093**	**.0025**	**.0003**	**.0534**	**.0196**	**.0168**	**.0001**	**.0350**	**.0132**
Stddev	.0000	.0000	.0000	.0014	.0002	.0001	.0001	.0013	.0000
%RSD	.5030	.7086	11.68	2.696	1.253	.6812	47.93	3.768	.1857
#1	.0093	.0025	.0003	.0517	.0193	.0168	.0001	.0340	.0132
#2	.0092	.0025	.0004	.0540	.0198	.0168	.0001	.0365	.0132
#3	.0093	.0025	.0003	.0544	.0196	.0170	.0002	.0345	.0132

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0149**	**.0024**	**.0213**	**.0016**	**.0763**	**.0033**	**.0925**	**.0124**	**.0036**
Stddev	.0001	.0000	.0014	.0000	.0031	.0015	.0129	.0000	.0001
%RSD	.3709	1.376	6.784	.5383	4.121	44.32	13.91	.2747	1.521
#1	.0149	.0024	.0218	.0016	.0733	.0035	.1000	.0124	.0036
#2	.0150	.0024	.0197	.0016	.0760	.0048	.0999	.0124	.0035
#3	.0150	.0025	.0225	.0016	.0795	.0018	.0777	.0124	.0036

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0581**	**.0029**	**.9270**	**.1055**	**.1911**	**.0040**	**.0053**	**.0022**	**.0035**
Stddev	.0062	.0000	.0129	.0420	.0047	.0007	.0000	.0001	.0000
%RSD	10.76	1.438	1.392	39.80	2.445	17.34	.8228	2.408	.3800
#1	.0522	.0029	.9249	.1500	.1865	.0041	.0053	.0021	.0036
#2	.0574	.0029	.9408	.0666	.1908	.0047	.0053	.0021	.0035
#3	.0646	.0030	.9152	.0998	.1959	.0033	.0052	.0022	.0035

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2794**	**.2015**	**4.309**	**.7178**	**.0009**
Stddev	.0032	.0449	.028	.0465	.0000
%RSD	1.144	22.26	.6546	6.476	1.128
#1	.2777	.2282	4.332	.7128	.0009
#2	.2831	.2267	4.317	.6740	.0009
#3	.2773	.1498	4.278	.7666	.0009

Sample Name: IRIS STD 2 Acquired: 09/19/2013 16:00:07 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**773.74**	**1404.7**	**76.375**
Stddev	.88	3.1	.457
%RSD	.11397	.22390	.59842
#1	772.87	1404.3	76.169
#2	773.73	1401.7	76.898
#3	774.63	1408.0	76.056

Sample Name: IRIS STD 3 Acquired: 09/19/2013 16:06:00 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0857**	**.0242**	**.0029**	**.4822**	**.1753**	**.1599**	**.0063**	**.3131**	**.1232**
Stddev	.0001	.0001	.0001	.0022	.0020	.0007	.0001	.0032	.0004
%RSD	.0991	.3101	2.055	.4662	1.131	.4450	1.488	1.021	.3452
#1	.0858	.0241	.0029	.4820	.1773	.1593	.0064	.3113	.1231
#2	.0856	.0242	.0029	.4801	.1733	.1607	.0062	.3112	.1237
#3	.0856	.0243	.0030	.4846	.1752	.1598	.0062	.3168	.1229

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1391**	**.0246**	**.1879**	**.0111**	**.7776**	**.0414**	**1.152**	**.1176**	**.0340**
Stddev	.0012	.0001	.0029	.0002	.0032	.0011	.034	.0008	.0002
%RSD	.8270	.4532	1.541	1.627	.4172	2.766	2.971	.7118	.7118
#1	.1379	.0244	.1875	.0109	.7779	.0408	1.173	.1168	.0337
#2	.1402	.0246	.1852	.0112	.7743	.0408	1.113	.1184	.0340
#3	.1392	.0246	.1910	.0112	.7808	.0428	1.171	.1176	.0342

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.5225**	**.0283**	**8.608**	**4.144**	**2.458**	**.0397**	**.0506**	**.0244**	**.0342**
Stddev	.0008	.0002	.043	.052	.005	.0003	.0003	.0002	.0002
%RSD	.1445	.6999	.4989	1.263	.2157	.7079	.5993	.6591	.7009
#1	.5223	.0281	8.621	4.092	2.452	.0398	.0502	.0243	.0339
#2	.5220	.0284	8.560	4.145	2.460	.0394	.0506	.0246	.0344
#3	.5234	.0284	8.642	4.196	2.462	.0400	.0508	.0243	.0342

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.743**	**1.920**	**40.52**	**4.849**	**.0083**
Stddev	.040	.075	.45	.036	.0001
%RSD	1.474	3.919	1.112	.7497	.9880
#1	2.789	1.923	40.00	4.854	.0082
#2	2.714	1.843	40.76	4.882	.0084
#3	2.725	1.993	40.80	4.810	.0083

Sample Name: IRIS STD 3 Acquired: 09/19/2013 16:06:00 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**790.41**	**1435.9**	**76.326**
Stddev	3.17	14.8	.130
%RSD	.40149	1.0275	.16987
#1	787.77	1418.9	76.474
#2	789.55	1442.8	76.230
#3	793.93	1445.9	76.274

Sample Name: IRIS STD 4 Acquired: 09/19/2013 16:11:48 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.8446**	**.2384**	**.0300**	**4.670**	**1.613**	**1.511**	**.0665**	**2.999**	**1.154**
Stddev	.0049	.0004	.0001	.015	.008	.007	.0006	.022	.002
%RSD	.5813	.1700	.3972	.3096	.5028	.4807	.8485	.7359	.1854
#1	.8402	.2384	.0298	4.657	1.604	1.518	.0658	2.975	1.156
#2	.8499	.2379	.0300	4.668	1.617	1.504	.0668	3.002	1.153
#3	.8438	.2387	.0301	4.686	1.619	1.511	.0668	3.019	1.152

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.302**	**.2376**	**1.743**	**.1000**	**7.672**	**.3892**	**10.19**	**1.096**	**.3191**
Stddev	.005	.0013	.019	.0005	.034	.0037	.15	.004	.0014
%RSD	.4162	.5291	1.109	.4933	.4363	.9433	1.512	.3797	.4264
#1	1.296	.2384	1.727	.0996	7.641	.3854	10.01	1.092	.3176
#2	1.303	.2382	1.737	.0998	7.707	.3894	10.28	1.099	.3197
#3	1.307	.2361	1.764	.1006	7.669	.3927	10.27	1.098	.3201

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.336**	**.2823**	**78.85**	**37.75**	**24.13**	**.3930**	**.5219**	**.2294**	**.3242**
Stddev	.018	.0015	1.30	.51	.05	.0009	.0010	.0001	.0012
%RSD	.3302	.5471	1.653	1.349	.2161	.2305	.1919	.0348	.3621
#1	5.316	.2809	77.36	37.18	24.07	.3922	.5211	.2293	.3229
#2	5.346	.2819	79.41	38.16	24.16	.3927	.5216	.2295	.3249
#3	5.346	.2840	79.77	37.91	24.16	.3940	.5231	.2293	.3249

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**25.55**	**18.15**	**370.7**	**44.91**	**.0788**
Stddev	.41	.29	3.0	.82	.0004
%RSD	1.606	1.598	.8020	1.821	.4986
#1	25.08	17.82	367.3	44.17	.0793
#2	25.78	18.28	372.8	44.77	.0785
#3	25.79	18.36	372.1	45.79	.0787

Sample Name: IRIS STD 4 Acquired: 09/19/2013 16:11:48 Type: Cal
Method: IRIS 2011 Mode: IR Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**757.93**	**1475.0**	**72.112**
Stddev	11.02	5.4	.582
%RSD	1.4538	.36291	.80719
#1	748.17	1468.9	71.568
#2	755.74	1478.3	72.726
#3	769.88	1478.0	72.042

Sample Name: RINSE Acquired: 09/19/2013 16:17:30 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**34.21**	**7.834**	**-2.145**	**1.281**	**.0557**	**35.51**	**.9781**	**8.658**	**.8877**
Stddev	8.70	1.760	3.381	.772	.3910	5.25	.7458	67.75	.1669
%RSD	25.42	22.47	157.6	60.28	702.5	14.79	76.24	782.6	18.80

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.498**	**1.341**	**41.59**	**1.783**	**7.197**	**-386.0**	**-24.43**	**2.896**	**1.820**
Stddev	.215	2.292	36.43	.608	1.043	492.8	6.46	.921	.354
%RSD	14.35	170.9	87.60	34.11	14.49	127.7	26.45	31.79	19.48

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**18.60**	**7.014**	**206.4**	**91.76**	**-82.58**	**4.980**	**-42.84**	**4.671**	**1.140**
Stddev	128.7	1.235	41.9	75.97	27.54	39.69	6.36	2.412	2.324
%RSD	692.1	17.60	20.33	82.79	33.35	796.8	14.83	51.64	203.8

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-10.35**	**-13.71**	**-.8253**	**1.416**	**-1.320**
Stddev	41.31	13.23	.8635	.663	2.535
%RSD	399.0	96.51	104.6	46.82	192.1

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**748.75**	**1364.1**	**74.173**
Stddev	3.80	6.4	.844
%RSD	.50740	.46918	1.1372

Sample Name: ICV Acquired: 09/19/2013 16:23:23 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9318.**	W **936.6**	W **1838.**	**1912.**	**1011.**	**2015.**	**966.6**	**9621.**	**1988.**
Stddev	31.	2.0	3.	3.	3.	5.	2.7	58.	2.
%RSD	.3346	.2135	.1445	.1500	.3277	.2486	.2743	.6047	.1155
Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	10000.	1000.	2000.						
Range	-5.000%	-5.000%	-5.000%						

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**968.9**	**1922.**	**10030.**	**992.6**	W **1900.**	W **9299.**	**1025.**	**984.5**	**987.2**
Stddev	4.8	5.	40.	2.9	6.	158.	24.	1.1	1.9
%RSD	.4947	.2755	.4029	.2908	.3104	1.699	2.367	.1152	.1923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value					2000.	10000.			
Range					-5.000%	-5.000%			

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9075.**	W **932.2**	**5105.**	W **930.5**	**9798.**	**4910.**	F **4475.**	**984.5**	**965.4**
Stddev	111.	3.4	10.	14.1	99.	80.	8.	6.0	.6
%RSD	1.219	.3610	.1883	1.520	1.010	1.620	.1731	.6109	.0651
Check ?	Chk Warn	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value	10000.	1000.		1000.			5000.		
Range	-5.000%	-5.000%		-5.000%			-10.00%		

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**1959.**	**980.6**	**1987.**	**973.4**	**989.3**
Stddev	17.	21.8	22.	19.1	2.0
%RSD	.8432	2.223	1.120	1.959	.1972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ICV Acquired: 09/19/2013 16:23:23 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**777.85**	**1420.5**	**75.637**
Stddev	12.08	11.7	.250
%RSD	1.5528	.82657	.33062

Sample Name: ICB Acquired: 09/19/2013 16:29:07 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**21.38**	**-.4534**	**2.151**	**1.368**	**-1.517**	**12.95**	**1.501**	**-24.02**	**.6331**
Stddev	8.73	.8587	2.519	.572	.670	1.42	1.126	20.48	.2669
%RSD	40.84	189.4	117.1	41.80	44.18	10.94	75.01	85.24	42.16

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.5775**	**-1.647**	**-3.054**	**.9282**	**4.215**	**-309.0**	**1.421**	**1.287**	**.3600**
Stddev	.0857	3.642	43.31	2.349	4.894	227.3	7.462	.310	.6626
%RSD	14.83	221.1	1418.	253.1	116.1	73.54	525.3	24.07	184.0

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-92.23**	**1.018**	**-35.07**	**8.756**	**-167.5**	**-14.66**	**-62.73**	**.4384**	**.1465**
Stddev	182.5	1.191	50.23	7.773	25.7	20.25	5.89	4.801	.4741
%RSD	197.9	116.9	143.2	88.77	15.34	138.1	9.388	1095.	323.7

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-8.627**	**-48.51**	**-3.615**	**.4879**	**.1494**
Stddev	16.18	16.86	.577	2.089	.6795
%RSD	187.5	34.76	15.97	428.3	454.9

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**774.47**	**1394.6**	**75.077**
Stddev	.98	3.0	.139
%RSD	.12658	.21187	.18527

Sample Name: PQL Acquired: 09/19/2013 16:34:58 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**216.8**	**21.51**	**11.25**	**10.28**	F **2.771**	**61.68**	**5.875**	**167.5**	**11.72**
Stddev	7.6	1.56	4.05	1.61	.133	.32	1.071	73.5	.05
%RSD	3.485	7.254	36.03	15.64	4.790	.5222	18.23	43.88	.4491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					4.000				
Range					-30.00%				

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**11.87**	**21.76**	F **267.5**	**10.61**	**23.48**	F **-176.5**	**25.10**	**11.86**	**11.65**
Stddev	.20	1.75	34.4	1.22	1.15	386.7	18.76	.04	.24
%RSD	1.682	8.032	12.85	11.47	4.903	219.1	74.76	.3593	2.075
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value			200.0			200.0			
Range			30.00%			-30.00%			

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**495.2**	**34.28**	**591.4**	F **28.30**	**365.6**	F **31.62**	F **34.23**	**23.51**	**22.78**
Stddev	70.3	1.71	20.8	13.84	24.9	15.87	5.62	1.52	1.06
%RSD	14.19	4.986	3.512	48.90	6.797	50.20	16.42	6.485	4.671
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
Value				20.00		20.00	100.0		
Range				30.00%		30.00%	-30.00%		

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**25.88**	**15.62**	**30.66**	F **18.06**	**11.02**
Stddev	22.31	16.72	1.11	3.02	.36
%RSD	86.21	107.1	3.620	16.71	3.249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value				10.00	
Range				30.00%	

Sample Name: PQL Acquired: 09/19/2013 16:34:58 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**770.64**	**1387.0**	**74.695**
Stddev	1.37	1.3	.141
%RSD	.17817	.09110	.18881

Sample Name: ICSA Acquired: 09/19/2013 16:40:51 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**467400.**	**9.434**	**-8.469**	**-1.707**	**-.6861**	**1.809**	**1.405**	**464000.**
Stddev	814.	1.678	8.929	1.717	1.589	2.131	.895	2119.
%RSD	.1741	17.79	105.4	100.6	231.7	117.8	63.71	.4568

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.8130**	**2.822**	**-.7467**	**187100.**	**-53.03**	**10.03**	**472400.**	**12.20**
Stddev	.2140	.182	2.088	694.	.88	1.94	2889.	28.51
%RSD	26.33	6.460	279.6	.3711	1.656	19.30	.6117	233.7

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.4009**	**-4.085**	**-175.9**	**31.61**	**20.64**	**12.65**	**-21.95**	**-72.55**
Stddev	.2572	.296	251.6	2.36	27.87	10.27	80.17	21.87
%RSD	64.17	7.249	143.0	7.477	135.0	81.24	365.2	30.15

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-119.3**	**-.9150**	**3.647**	**-25.90**	**2.852**	**-13.36**	**-20.74**	**-11.89**
Stddev	4.0	3.793	.888	12.25	9.345	1.05	4.09	6.03
%RSD	3.318	414.6	24.34	47.28	327.7	7.873	19.74	50.73

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**680.29**	**1361.4**	**71.198**
Stddev	1.05	1.6	.525
%RSD	.15396	.11752	.73687

Sample Name: ICSAB Acquired: 09/19/2013 16:46:54 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**459900.**	**487.3**	**462.9**	**470.9**	**499.4**	**976.9**	**964.9**	**461400.**
Stddev	3167.	4.3	3.9	1.7	2.5	5.7	1.5	1333.
%RSD	.6885	.8744	.8473	.3606	.4972	.5850	.1530	.2889

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**477.1**	**453.5**	**480.3**	**187000.**	**853.6**	**1003.**	**469300.**	**475.3**
Stddev	3.4	2.0	5.2	835.	2.0	2.	529.	24.0
%RSD	.7143	.4344	1.086	.4464	.2391	.2275	.1128	5.045

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**482.4**	**881.2**	**4957.**	**503.8**	**963.1**	**880.7**	**5149.**	**446.3**
Stddev	1.7	3.8	76.	6.1	42.6	11.8	17.	13.1
%RSD	.3515	.4319	1.531	1.209	4.426	1.339	.3206	2.931

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4708.**	**447.3**	**459.9**	**451.5**	**428.9**	**933.6**	**745.2**	**979.8**
Stddev	19.	8.2	1.0	3.9	11.4	4.0	1.4	5.7
%RSD	.4037	1.837	.2138	.8745	2.649	.4276	.1854	.5772

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**694.89**	**1367.7**	**70.662**
Stddev	3.31	4.0	.175
%RSD	.47644	.29426	.24707

Sample Name: RINSE Acquired: 09/19/2013 16:52:53 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**131.4**	**-1.196**	**1.657**	**-.6687**	**-1.124**	**3.380**	**.2725**	**98.33**	**.0967**
Stddev	31.1	1.215	6.405	2.023	.678	1.312	.9698	26.18	.2004
%RSD	23.66	101.6	386.5	302.5	60.38	38.83	355.8	26.62	207.4

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.3476**	**.1086**	**111.2**	**1.192**	**3.833**	**89.59**	**-19.41**	**.2167**	**.5381**
Stddev	.4747	1.469	9.3	1.667	3.167	340.5	35.42	.2331	.7031
%RSD	136.6	1353.	8.390	139.9	82.64	380.0	182.5	107.5	130.7

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-65.52**	**1.071**	**-30.44**	**10.71**	**-150.0**	**-5.251**	**-71.29**	**-.3831**	**.8538**
Stddev	156.3	1.804	80.72	4.47	79.8	34.64	7.15	.9439	.7115
%RSD	238.5	168.4	265.2	41.76	53.18	659.7	10.03	246.4	83.33

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-25.03**	**-47.94**	**-2.759**	**2.582**	**1.338**
Stddev	13.04	36.86	.500	1.096	.811
%RSD	52.09	76.89	18.11	42.46	60.63

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**772.52**	**1392.6**	**74.965**
Stddev	2.13	2.8	.792
%RSD	.27633	.19898	1.0563

Sample Name: CCV1 Acquired: 09/19/2013 16:58:45 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9262.**	W **933.7**	W **1833.**	**1913.**	**1010.**	**1979.**	**956.2**	**9526.**	**1982.**
Stddev	29.	1.8	2.	3.	3.	6.	2.2	33.	1.
%RSD	.3138	.1966	.1101	.1759	.2505	.3002	.2304	.3435	.0664
Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	10000.	1000.	2000.						
Range	-5.000%	-5.000%	-5.000%						

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**966.7**	**1918.**	**10020.**	**988.6**	W **1891.**	**9760.**	**1006.**	**982.9**	**991.0**
Stddev	4.2	4.	81.	2.7	5.	544.	22.	6.1	2.5
%RSD	.4376	.1977	.8122	.2690	.2574	5.575	2.175	.6177	.2553
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					2000.				
Range					-5.000%				

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9174.**	W **930.7**	**5062.**	W **920.2**	**9696.**	**4845.**	F **4411.**	**976.2**	**961.6**
Stddev	126.	6.8	79.	10.5	71.	81.	7.	10.0	3.3
%RSD	1.376	.7334	1.551	1.137	.7305	1.664	.1613	1.029	.3440
Check ?	Chk Warn	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value	10000.	1000.		1000.			5000.		
Range	-5.000%	-5.000%		-5.000%			-10.00%		

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**1953.**	**996.1**	**2004.**	**997.1**	**981.4**
Stddev	30.	21.1	16.	12.2	3.0
%RSD	1.551	2.117	.7749	1.224	.3096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV1 Acquired: 09/19/2013 16:58:45 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**794.17**	**1445.0**	**75.364**
Stddev	3.47	8.1	.442
%RSD	.43754	.55908	.58624

Sample Name: CCB1 Acquired: 09/19/2013 17:04:30 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**32.79**	**.9763**	**.1493**	**-.2797**	**-1.058**	**5.156**	**-1.177**	**-35.74**	**.6231**
Stddev	4.05	1.044	2.009	.7109	.798	1.079	.319	36.82	.2129
%RSD	12.35	107.0	1346.	254.2	75.42	20.93	27.13	103.0	34.17

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.4748**	**-.4319**	**14.81**	**.0695**	**4.955**	**-89.39**	**7.167**	**.7781**	**.2814**
Stddev	.2911	3.019	57.45	2.708	2.786	653.2	15.59	.1816	.5076
%RSD	61.32	699.0	388.0	3895.	56.23	730.7	217.5	23.35	180.4

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-27.64**	**1.663**	**76.40**	**7.756**	**-138.4**	**8.490**	**-70.36**	**3.866**	**.4056**
Stddev	112.0	1.881	30.39	11.09	23.9	32.97	3.06	3.397	.5013
%RSD	405.3	113.1	39.78	143.0	17.27	388.4	4.355	87.87	123.6

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-9.493**	**-3.166**	**-4.092**	**2.198**	**-1.088**
Stddev	15.83	10.21	1.083	2.627	1.848
%RSD	166.7	322.6	26.48	119.5	169.9

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**787.40**	**1420.5**	**75.668**
Stddev	2.27	3.8	.278
%RSD	.28864	.26517	.36715

Sample Name: 644051-1-BLK Acquired: 09/19/2013 17:22:04 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**22.08**	**-.0903**	**-2.152**	**-.8361**	**-.9075**	**.5301**	**-.9379**	**-17.46**	**-.0217**
Stddev	9.04	.5396	4.836	.6872	.5587	.9214	1.165	11.89	.1423
%RSD	40.94	597.6	224.7	82.20	61.56	173.8	124.2	68.07	655.0

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.0494**	**-.7292**	**-6.225**	**1.425**	**1.391**	**-117.5**	**22.24**	**.0667**	**-.1808**
Stddev	.1432	.5192	37.17	2.143	5.243	464.9	30.49	.2288	.4961
%RSD	289.7	71.21	597.1	150.4	377.0	395.7	137.1	343.0	274.5

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-78.03**	**.7557**	**-21.13**	**-.9961**	**-158.0**	**29.18**	**-67.78**	**-.9490**	**.2806**
Stddev	166.2	4.463	18.42	4.479	42.7	35.74	3.38	1.096	.6919
%RSD	213.0	590.6	87.17	449.6	27.00	122.5	4.987	115.5	246.6

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-1.722**	**-73.32**	**-3.056**	**3.074**	**2.378**
Stddev	1.495	25.42	.540	2.058	3.239
%RSD	86.84	34.66	17.68	66.94	136.2

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**799.90**	**1449.0**	**76.449**
Stddev	3.42	3.8	.352
%RSD	.42776	.26393	.45995

Sample Name: 644051-1-BKS Acquired: 09/19/2013 17:27:57 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4982.**	**1038.**	**994.5**	**1006.**	**1069.**	**1127.**	**1000.**	**24950.**	**1019.**
Stddev	21.	7.	9.6	.	2.	8.	4.	253.	6.
%RSD	.4258	.6611	.9638	.0487	.1962	.7301	.4119	1.014	.5584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1002.**	**1022.**	**5350.**	**1032.**	**987.1**	**25480.**	**1072.**	**1058.**	**1026.**
Stddev	2.	7.	103.	6.	6.8	462.	26.	8.	4.
%RSD	.2034	.7248	1.922	.5332	.6919	1.811	2.450	.7400	.3766
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9788.**	**1020.**	**10800.**	**491.9**	**25780.**	**1020.**	**4908.**	**1033.**	**1031.**
Stddev	95.	10.	89.	6.0	83.	12.	38.	20.	6.
%RSD	.9658	.9942	.8221	1.216	.3219	1.204	.7719	1.905	.5559
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**1070.**	**1050.**	**1059.**	**1009.**	**1036.**
Stddev	10.	14.	3.	7.	4.
%RSD	.9587	1.376	.2820	.6476	.4259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: 644051-1-BKS Acquired: 09/19/2013 17:27:57 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**793.92**	**1466.3**	**76.361**
Stddev	.62	2.2	.262
%RSD	.07754	.14907	.34303

Sample Name: 644051-1-BSD Acquired: 09/19/2013 17:33:43 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4939.**	**1028.**	**983.8**	**990.4**	**1055.**	**1115.**	**985.0**	**24580.**	**1006.**
Stddev	29.	9.	10.1	.9	2.	10.	1.1	75.	7.
%RSD	.5775	.8932	1.022	.0897	.1676	.8666	.1148	.3046	.7313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**988.7**	**1005.**	**5210.**	**1011.**	**971.3**	**24950.**	**1070.**	**1038.**	**1008.**
Stddev	6.2	8.	63.	5.	7.9	168.	12.	10.	6.
%RSD	.6293	.8366	1.215	.4589	.8094	.6748	1.116	.9716	.6380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9587.**	**1009.**	**10890.**	**476.1**	**25390.**	**1021.**	**4838.**	**1025.**	**1010.**
Stddev	60.	5.	45.	6.1	183.	6.	37.	11.	6.
%RSD	.6295	.5313	.4170	1.287	.7224	.6269	.7687	1.094	.5526
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**1050.**	**1048.**	**1076.**	**1009.**	**1027.**
Stddev	9.	18.	4.	8.	9.
%RSD	.8724	1.761	.3389	.7873	.8547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: 644051-1-BSD Acquired: 09/19/2013 17:33:43 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**806.69**	**1472.6**	**77.185**
Stddev	4.03	4.7	.663
%RSD	.50008	.32172	.85863

Sample Name: 470164-002 Acquired: 09/19/2013 17:39:28 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1300.**	**.1265**	**2.466**	**81.17**	**-.6179**	**517.5**	**-.0058**	**63900.**
Stddev	15.	1.003	9.519	.92	.9494	3.4	.7474	132.
%RSD	1.124	793.2	386.0	1.139	153.6	.6658	12850.	.2066

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**60.65**	**1.276**	**8.506**	**466.8**	**5.596**	**142.8**	**24000.**	**50.21**
Stddev	.93	.167	3.310	83.9	1.217	2.6	221.	17.92
%RSD	1.535	13.11	38.92	17.98	21.74	1.821	.9202	35.68

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3.164**	**32.19**	**5346.**	**4.348**	**13630.**	**8.787**	**198800.**	**669.1**
Stddev	.388	.77	64.	1.991	177.	15.50	525.	64.2
%RSD	12.27	2.389	1.193	45.78	1.302	176.4	.2644	9.597

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**35060.**	**6.213**	**1.440**	**9.495**	**13.37**	**614.9**	**53.54**	**-2.523**
Stddev	280.	2.798	.926	25.88	13.54	4.8	3.81	1.640
%RSD	.7992	45.03	64.32	272.6	101.3	.7856	7.115	65.02

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**789.41**	**1515.9**	**75.827**
Stddev	2.84	6.5	.501
%RSD	.35972	.42929	.66030

Sample Name: 470164-002 S Acquired: 09/19/2013 17:45:18 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**6916.**	**1048.**	**1037.**	**1072.**	**1081.**	**1646.**	**989.7**	**89320.**
Stddev	11.	4.	3.	5.	2.	9.	1.4	196.
%RSD	.1560	.3559	.3018	.4703	.2201	.5691	.1462	.2191

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1047.**	**1005.**	**1031.**	**5639.**	**1008.**	**1153.**	**48830.**	**1110.**
Stddev	4.	3.	1.	110.	7.	15.	296.	25.
%RSD	.4205	.2854	.1305	1.947	.6604	1.277	.6071	2.231

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1049.**	**1046.**	**15840.**	**1049.**	**25520.**	**495.1**	s **223600.**	**1648.**
Stddev	7.	4.	153.	5.	381.	13.8	778.	2.
%RSD	.6403	.3547	.9647	.5180	1.491	2.786	.3479	.1193

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**40880.**	**993.1**	**1036.**	**1094.**	**1051.**	**1740.**	**1112.**	**1017.**
Stddev	158.	12.6	2.	17.	21.	8.	6.	5.
%RSD	.3863	1.273	.1737	1.595	2.031	.4406	.5487	.4659

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**801.61**	**1536.9**	**75.726**
Stddev	3.68	8.1	.798
%RSD	.45933	.52770	1.0535

Sample Name: 470164-002 SD Acquired: 09/19/2013 17:51:03 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**6687.**	**1012.**	**1003.**	**1043.**	**1054.**	**1607.**	**968.2**	**85210.**
Stddev	37.	6.	5.	6.	5.	16.	5.7	700.
%RSD	.5521	.5528	.4618	.5503	.4897	1.000	.5913	.8209

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1030.**	**975.3**	**999.2**	**5619.**	**982.4**	**1122.**	**47330.**	**1099.**
Stddev	6.	2.8	6.3	108.	2.6	3.	285.	11.
%RSD	.5539	.2863	.6258	1.930	.2692	.2412	.6013	1.004

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1019.**	**1026.**	**15140.**	**1020.**	**24520.**	**476.4**	**212800.**	**1597.**
Stddev	7.	5.	112.	9.	261.	13.9	327.	19.
%RSD	.6951	.4891	.7382	.8850	1.064	2.921	.1538	1.185

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**38710.**	**972.3**	**997.8**	**1088.**	**1026.**	**1667.**	**1082.**	**984.2**
Stddev	244.	16.2	4.0	20.	6.	6.	7.	3.1
%RSD	.6315	1.669	.4041	1.804	.5718	.3489	.6618	.3101

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**801.52**	**1534.6**	**76.138**
Stddev	4.10	3.9	.550
%RSD	.51100	.25101	.72290

Sample Name: 470164-002 P Acquired: 09/19/2013 17:56:48 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**6438.**	**1004.**	**1017.**	**1055.**	**1063.**	**1607.**	**974.1**	**87660.**
Stddev	37.	11.	7.	6.	7.	15.	.7	918.
%RSD	.5682	1.143	.7309	.5734	.6817	.9148	.0758	1.047

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1042.**	**984.1**	**1009.**	**5601.**	**987.5**	**1128.**	**48240.**	**1084.**
Stddev	10.	7.7	9.	116.	6.9	7.	509.	19.
%RSD	.9160	.7802	.9266	2.065	.7007	.6158	1.056	1.710

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1018.**	**1031.**	**15330.**	**1025.**	**24300.**	**470.5**	**218400.**	**1601.**
Stddev	11.	7.	220.	6.	45.	12.2	1831.	36.
%RSD	1.035	.6840	1.437	.5731	.1854	2.586	.8385	2.276

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**39660.**	**985.8**	**1005.**	**1066.**	**1034.**	**1700.**	**1092.**	**989.9**
Stddev	322.	8.5	5.	27.	10.	11.	10.	9.9
%RSD	.8114	.8600	.4907	2.562	.9762	.6388	.9484	1.001

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**803.26**	**1536.8**	**75.595**
Stddev	3.25	6.5	.459
%RSD	.40518	.42125	.60745

Sample Name: 470164-002 SDL Acquired: 09/19/2013 18:02:34 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**269.8**	**.9979**	**.3686**	**17.60**	**-.8062**	**108.4**	**1.324**	**13130.**	**13.52**
Stddev	11.8	.7291	3.290	1.03	.9734	.5	1.699	64.	.56
%RSD	4.384	73.06	892.7	5.861	120.7	.4931	128.3	.4862	4.168

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.9965**	**1.756**	**80.88**	**-2.921**	**30.82**	**4795.**	**-7.196**	**1.578**	**6.886**
Stddev	.1236	.893	39.62	2.474	1.27	603.	19.39	.304	.741
%RSD	12.40	50.87	48.99	84.69	4.112	12.57	269.4	19.26	10.76

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1022.**	**1.154**	**2862.**	**5.827**	**42370.**	**145.4**	**6782.**	**2.287**	**.8430**
Stddev	126.	3.081	92.	7.755	86.	26.7	27.	2.164	.8556
%RSD	12.34	267.1	3.219	133.1	.2024	18.39	.3992	94.63	101.5

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-3.449**	**-10.70**	**124.4**	**15.11**	**.0955**
Stddev	18.67	13.73	.4	3.01	1.567
%RSD	541.5	128.4	.3346	19.95	1641.

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**826.81**	**1497.9**	**77.726**
Stddev	4.87	5.6	.433
%RSD	.58886	.37129	.55744

Sample Name: CCV2 Acquired: 09/19/2013 18:08:25 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9265.**	W **936.9**	W **1844.**	**1906.**	**1013.**	**1955.**	**956.9**	**9659.**	**1962.**
Stddev	32.	8.3	12.	7.	7.	4.	2.0	128.	5.
%RSD	.3459	.8841	.6589	.3758	.7155	.2109	.2093	1.323	.2442
Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	10000.	1000.	2000.						
Range	-5.000%	-5.000%	-5.000%						

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**966.9**	**1908.**	**10400.**	**997.5**	W **1877.**	**9640.**	W **1080.**	**980.5**	**1007.**
Stddev	5.7	8.	136.	5.7	16.	57.	45.	6.7	5.
%RSD	.5866	.4249	1.310	.5679	.8331	.5869	4.208	.6803	.4562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass
Value					2000.		1000.		
Range					-5.000%		5.000%		

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9066.**	W **943.1**	W **5303.**	W **936.9**	**9721.**	**4932.**	F **4418.**	**972.7**	**968.2**
Stddev	31.	5.8	52.	15.3	38.	52.	12.	7.2	7.5
%RSD	.3442	.6128	.9736	1.633	.3933	1.063	.2772	.7426	.7792
Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value	10000.	1000.	5000.	1000.			5000.		
Range	-5.000%	-5.000%	5.000%	-5.000%			-10.00%		

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**2053.**	**1017.**	W **2133.**	W **1080.**	**972.6**
Stddev	13.	20.	33.	6.	8.5
%RSD	.6321	1.921	1.543	.5285	.8700
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass
Value			2000.	1000.	
Range			5.000%	5.000%	

Sample Name: CCV2 Acquired: 09/19/2013 18:08:25 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**849.79**	**1532.9**	**78.536**
Stddev	10.45	24.2	1.129
%RSD	1.2301	1.5796	1.4370

Sample Name: CCB2 Acquired: 09/19/2013 18:14:11 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**8.995**	**-.2956**	**3.346**	**-.3800**	**-1.043**	**4.473**	**.6822**	**21.37**	**.5147**
Stddev	5.780	.3517	3.400	1.527	1.391	.810	.8150	27.71	.3297
%RSD	64.25	119.0	101.6	401.8	133.4	18.11	119.5	129.6	64.06

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.7707**	**-1.690**	**32.72**	**-.0432**	**4.086**	**-446.7**	**-3.603**	**.8727**	**.9910**
Stddev	.0732	1.089	39.32	2.152	3.841	292.8	6.215	.3356	.8313
%RSD	9.500	64.46	120.2	4978.	94.02	65.54	172.5	38.45	83.89

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-101.5**	**1.776**	**29.95**	**2.931**	**-164.7**	**-14.68**	**-61.38**	**6.447**	**.0932**
Stddev	117.7	1.501	78.23	23.97	33.7	20.42	.55	1.363	1.347
%RSD	116.0	84.50	261.2	817.9	20.45	139.1	.8906	21.15	1445.

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-2.588**	**-6.370**	**-2.848**	**5.433**	**.0981**
Stddev	15.81	7.052	.321	4.204	2.049
%RSD	611.0	110.7	11.27	77.38	2088.

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**856.38**	**1533.3**	**78.869**
Stddev	2.08	5.1	.436
%RSD	.24262	.33542	.55299

Sample Name: 470337-002 Acquired: 09/19/2013 19:12:35 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2147.**	**.1311**	**4.536**	**79.52**	**-1.371**	**264.7**	**.1109**	**55930.**
Stddev	15.	2.832	5.809	.55	1.456	1.8	1.014	353.
%RSD	.7147	2160.	128.1	.6899	106.2	.6897	914.2	.6312

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**18.76**	**1.386**	**3.160**	**2011.**	**1.394**	**122.6**	**22400.**	**61.74**
Stddev	.23	.167	2.716	57.	1.089	2.1	168.	41.25
%RSD	1.231	12.02	85.94	2.820	78.13	1.730	.7511	66.82

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.035**	**6.852**	**5407.**	**1.847**	**18170.**	**-6.881**	**163700.**	**622.8**
Stddev	.255	.776	132.	1.167	230.	11.87	923.	32.6
%RSD	24.66	11.32	2.440	63.18	1.265	172.5	.5636	5.228

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**27720.**	**-.8516**	**-.6541**	**63.90**	**-31.77**	**18.42**	**157.2**	**-2.700**
Stddev	334.	2.702	.5096	12.97	14.83	1.11	3.3	1.644
%RSD	1.204	317.2	77.91	20.30	46.67	6.050	2.098	60.89

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**845.00**	**1587.4**	**76.700**
Stddev	11.57	20.3	.940
%RSD	1.3696	1.2811	1.2254

Sample Name: CCV3 Acquired: 09/19/2013 19:18:26 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9406.**	W **903.5**	W **1848.**	W **1864.**	**990.6**	**1951.**	**965.8**	**9804.**	**1955.**
Stddev	36.	1.3	12.	3.	7.3	4.	4.5	70.	7.
%RSD	.3857	.1401	.6598	.1721	.7412	.2201	.4623	.7171	.3401
Check ?	Chk Warn	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	10000.	1000.	2000.	2000.					
Range	-5.000%	-5.000%	-5.000%	-5.000%					

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**965.6**	W **1883.**	**10270.**	**1021.**	**1923.**	**10000.**	**1018.**	**962.7**	**988.4**
Stddev	2.8	3.	80.	3.	10.	431.	21.	3.6	.6
%RSD	.2929	.1612	.7772	.2450	.5154	4.312	2.080	.3774	.0591
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		2000.							
Range		-5.000%							

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9200.**	W **943.6**	**5027.**	F **891.3**	**9898.**	**4889.**	W **4507.**	**994.1**	**983.2**
Stddev	144.	3.5	15.	15.6	103.	45.	11.	7.6	4.6
%RSD	1.565	.3673	.2946	1.753	1.036	.9286	.2339	.7654	.4669
Check ?	Chk Warn	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
Value	10000.	1000.		1000.			5000.		
Range	-5.000%	-5.000%		-10.00%			-5.000%		

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**1929.**	**991.5**	W **2167.**	W **1095.**	**957.4**
Stddev	20.	13.9	7.	3.	5.4
%RSD	1.035	1.400	.3035	.2663	.5650
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass
Value			2000.	1000.	
Range			5.000%	5.000%	

Sample Name: CCV3 Acquired: 09/19/2013 19:18:26 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**876.29**	**1552.3**	**75.354**
Stddev	1.08	6.1	.352
%RSD	.12339	.39361	.46659

Sample Name: CCB3 Acquired: 09/19/2013 19:24:12 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**12.76**	**-.4291**	**2.346**	**-.0269**	**-.0790**	**2.519**	**.4206**	**-29.83**	**.6603**
Stddev	13.31	2.094	3.458	.9751	1.125	1.672	.9610	24.11	.3091
%RSD	104.3	488.0	147.4	3625.	1424.	66.36	228.5	80.81	46.82

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.9025**	**-1.862**	**-19.57**	**.4604**	**4.481**	**-301.9**	**11.47**	**.8612**	**-.0252**
Stddev	.2994	.953	53.80	1.100	4.489	359.8	8.70	.2057	.3082
%RSD	33.18	51.17	274.9	238.9	100.2	119.2	75.82	23.89	1224.

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**26.18**	**2.452**	**104.2**	**13.64**	**-170.0**	**-23.62**	**-68.96**	**3.086**	**-.3312**
Stddev	161.4	.697	27.9	11.11	11.3	19.44	2.90	.609	.2378
%RSD	616.4	28.41	26.79	81.41	6.633	82.29	4.206	19.73	71.82

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-12.94**	**-16.53**	**-2.586**	**-2.030**	**2.392**
Stddev	2.99	19.88	.783	3.667	3.458
%RSD	23.09	120.2	30.27	180.7	144.6

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**880.34**	**1548.8**	**76.966**
Stddev	10.79	9.3	.870
%RSD	1.2251	.60298	1.1301

Sample Name: 470337-003 Acquired: 09/19/2013 19:30:04 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**48650.**	**.0228**	**35.93**	**302.7**	**1.116**	**336.3**	**.1957**	**75230.**
Stddev	214.	1.423	6.55	2.5	.182	1.3	.6660	479.
%RSD	.4399	6245.	18.24	.8318	16.35	.3813	340.3	.6367

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**193.3**	**26.06**	**73.00**	**65060.**	**31.76**	**184.7**	**42310.**	**1095.**
Stddev	.5	.42	1.77	701.	1.92	5.7	256.	32.
%RSD	.2794	1.624	2.431	1.078	6.052	3.071	.6051	2.900

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.6566**	**80.31**	**10670.**	**17.49**	**110700.**	**10.70**	s **174300.**	**758.6**
Stddev	.2030	.33	66.	.68	1030.	11.81	1468.	14.0
%RSD	30.92	.4069	.6199	3.863	.9308	110.4	.8423	1.851

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**28380.**	**2.932**	**2.998**	**349.8**	**94.31**	**187.9**	**3050.**	**-12.22**
Stddev	184.	4.210	.967	15.4	13.06	1.7	27.	.71
%RSD	.6478	143.6	32.27	4.400	13.85	.9267	.8948	5.829

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**863.81**	**1607.6**	**75.944**
Stddev	5.56	10.4	.422
%RSD	.64338	.64779	.55531

Sample Name: 470337-004 Acquired: 09/19/2013 19:35:53 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**95200.**	**-.1840**	**93.09**	**1815.**	**5.853**	**640.6**	**1.884**	**127300.**
Stddev	449.	.8893	3.94	15.	.324	6.9	.293	967.
%RSD	.4711	483.4	4.227	.8400	5.541	1.080	15.56	.7595

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**204.5**	**85.88**	**153.3**	**84480.**	**78.43**	**264.0**	**75710.**	**3903.**
Stddev	1.8	1.24	3.6	829.	2.85	2.9	476.	23.
%RSD	.8777	1.443	2.376	.9813	3.635	1.117	.6291	.5768

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.2838**	**214.7**	**15470.**	**19.09**	**133200.**	**9.701**	**194400.**	**1346.**
Stddev	.4950	3.3	152.	3.54	433.	11.83	1603.	23.
%RSD	174.4	1.553	.9855	18.53	.3253	122.0	.8247	1.672

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**36120.**	**9.289**	**1.182**	**306.7**	**126.7**	**490.5**	**7021.**	**-23.71**
Stddev	245.	2.015	.664	18.1	17.6	1.1	41.	.72
%RSD	.6770	21.70	56.17	5.909	13.93	.2328	.5828	3.021

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**878.59**	**1631.7**	**76.426**
Stddev	5.45	6.7	.554
%RSD	.61995	.41123	.72432

Sample Name: 470337-005 Acquired: 09/19/2013 19:41:41 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**69210.**	**-.4615**	**109.6**	**1197.**	**3.285**	**326.5**	**2.118**	**118500.**
Stddev	383.	2.638	3.5	7.	1.065	3.0	1.813	1241.
%RSD	.5530	571.6	3.202	.6199	32.42	.9084	85.60	1.047

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**156.7**	**72.86**	**206.7**	**82020.**	**66.62**	**200.8**	**58610.**	**13870.**
Stddev	1.0	.72	3.8	666.	4.22	3.0	352.	285.
%RSD	.6151	.9905	1.841	.8117	6.328	1.492	.6000	2.057

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5.331**	**259.8**	**12750.**	**30.59**	**130800.**	**7.813**	**165900.**	**1163.**
Stddev	.189	1.2	72.	1.67	2088.	4.489	946.	38.
%RSD	3.550	.4699	.5648	5.473	1.596	57.45	.5703	3.304

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**35590.**	**34.38**	**2.541**	**361.5**	**135.9**	**305.1**	**8538.**	**-20.90**
Stddev	311.	1.90	1.637	9.4	15.0	6.4	161.	1.16
%RSD	.8747	5.537	64.41	2.614	11.03	2.103	1.885	5.563

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**893.61**	**1641.8**	**77.132**
Stddev	8.97	18.8	1.082
%RSD	1.0039	1.1479	1.4033

Sample Name: 470337-006 Acquired: 09/19/2013 19:47:28 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**40740.**	**.6158**	**59.72**	**1136.**	**-.2411**	**352.7**	**42.88**	**87110.**
Stddev	94.	1.282	3.35	6.	.5228	4.4	1.62	294.
%RSD	.2297	208.1	5.602	.5472	216.9	1.252	3.774	.3378

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**246.7**	**33.96**	**144.4**	**49090.**	**31.68**	**194.0**	**45400.**	**5991.**
Stddev	1.7	.27	2.7	273.	1.61	2.6	113.	46.
%RSD	.6967	.8083	1.901	.5563	5.066	1.352	.2480	.7710

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.049**	**189.0**	**10230.**	**16.95**	**100900.**	**11.71**	**169100.**	**845.8**
Stddev	.334	1.7	73.	1.29	866.	2.94	605.	18.1
%RSD	31.81	.8919	.7130	7.585	.8580	25.13	.3577	2.144

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**33000.**	**12.68**	**-.3666**	**500.4**	**100.2**	**214.0**	**4825.**	**-13.24**
Stddev	418.	4.64	1.010	17.8	18.1	2.2	46.	3.26
%RSD	1.267	36.63	275.7	3.553	18.02	1.046	.9632	24.63

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**898.06**	**1650.9**	**75.337**
Stddev	2.41	11.2	.567
%RSD	.26824	.67610	.75237

Sample Name: 470337-007 Acquired: 09/19/2013 19:53:16 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**38250.**	**.3510**	**42.35**	**669.9**	**1.451**	**367.6**	**11.03**	**90990.**
Stddev	79.	1.428	3.84	2.8	1.194	1.9	.33	738.
%RSD	.2060	406.9	9.057	.4190	82.31	.5166	3.032	.8111

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**103.8**	**36.31**	**106.1**	**40760.**	**55.30**	**186.0**	**44050.**	**3701.**
Stddev	.5	.30	.8	33.	2.20	8.5	388.	29.
%RSD	.4655	.8130	.7662	.0805	3.984	4.543	.8805	.7895

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.454**	**126.1**	**11700.**	**12.55**	**101600.**	**4.828**	**193400.**	**915.0**
Stddev	.057	.3	56.	3.48	772.	4.469	666.	14.3
%RSD	3.890	.2356	.4783	27.70	.7594	92.57	.3446	1.565

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**30220.**	**5.493**	**2.409**	**600.2**	**64.02**	**392.5**	**4559.**	**-13.23**
Stddev	174.	3.509	.786	22.9	22.98	.2	61.	2.10
%RSD	.5771	63.88	32.63	3.824	35.90	.0564	1.328	15.89

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**903.13**	**1643.0**	**74.122**
Stddev	5.10	3.4	.463
%RSD	.56444	.20959	.62439

Sample Name: 470337-008 Acquired: 09/19/2013 19:59:05 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4638.**	**-.2971**	**10.79**	**119.4**	**-1.781**	**448.3**	**.1917**	**57910.**
Stddev	.	1.878	4.44	.9	.936	4.3	.8549	319.
%RSD	.0106	632.1	41.16	.7758	52.56	.9623	446.1	.5511

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**15.56**	**3.108**	**.4954**	**3457.**	**4.426**	**143.6**	**24600.**	**163.7**
Stddev	.37	.416	3.038	53.	.470	4.5	290.	8.8
%RSD	2.350	13.39	613.3	1.534	10.63	3.120	1.179	5.406

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.053**	**11.83**	**6203.**	**4.548**	**24600.**	**15.58**	s **177200.**	**647.7**
Stddev	.288	.95	18.	4.838	48.	10.31	1935.	51.1
%RSD	27.36	8.003	.2866	106.4	.1948	66.16	1.092	7.887

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**31240.**	**1.949**	**-1.003**	**119.1**	**-6.926**	**12.05**	**438.2**	**-3.998**
Stddev	230.	2.123	.957	38.9	12.73	.55	1.8	4.984
%RSD	.7362	109.0	95.43	32.65	183.8	4.580	.4068	124.7

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**903.72**	**1647.1**	**73.004**
Stddev	1.38	1.6	.377
%RSD	.15266	.09671	.51627

Sample Name: 470337-009 Acquired: 09/19/2013 20:04:56 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644051 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**41.67**	**2.293**	**.0409**	**.3520**	**-1.487**	**10.53**	**.6482**	**287.7**	**1.687**
Stddev	14.63	2.720	3.323	2.271	.653	.34	.8056	23.1	.158
%RSD	35.11	118.6	8128.	645.1	43.94	3.197	124.3	8.010	9.349

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.3399**	**.8839**	**47.55**	**.2463**	**1.940**	**-182.0**	**11.47**	**.0384**	**.6045**
Stddev	.3775	1.267	33.96	.6504	3.521	228.2	18.81	.2900	.2073
%RSD	111.1	143.4	71.42	264.1	181.5	125.4	164.0	754.8	34.30

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-18.16**	**2.112**	**457.0**	**25.36**	**153.5**	**-1.995**	**-48.08**	**-.8114**	**-.1479**
Stddev	83.39	2.977	90.4	13.53	88.2	36.14	14.61	.9608	1.058
%RSD	459.2	141.0	19.78	53.37	57.46	1811.	30.38	118.4	715.3

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-24.16**	**-29.88**	**10.54**	**18.36**	**.5745**
Stddev	10.35	8.81	.41	1.91	.5984
%RSD	42.83	29.50	3.907	10.39	104.2

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**945.85**	**1624.0**	**74.795**
Stddev	3.55	5.6	.361
%RSD	.37518	.34745	.48237

Sample Name: CCB4 Acquired: 09/19/2013 20:16:36 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**25.48**	**-.0194**	**2.641**	**-.1578**	**.6140**	**2.051**	**.0495**	**54.74**	**.6776**
Stddev	1.43	2.368	1.165	.8760	1.029	.869	.6951	41.73	.4226
%RSD	5.605	12190.	44.12	555.1	167.7	42.35	1403.	76.23	62.37

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.159**	**-5.353**	**11.96**	**2.059**	**.6456**	**-271.8**	**-4.323**	**.8514**	**-.3330**
Stddev	.594	1.537	84.51	1.528	1.558	124.3	16.16	.3982	.7408
%RSD	51.20	28.71	706.7	74.22	241.3	45.74	373.9	46.76	222.5

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**65.88**	**1.906**	**32.25**	**10.72**	**-344.6**	**9.492**	**-80.51**	**5.754**	**-.2717**
Stddev	88.98	1.957	32.90	16.65	64.0	12.66	2.88	2.026	.7121
%RSD	135.1	102.7	102.0	155.4	18.57	133.4	3.571	35.21	262.0

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-23.30**	**-3.735**	**-2.126**	**1.578**	**1.141**
Stddev	3.96	5.174	1.218	.420	.398
%RSD	17.00	138.5	57.31	26.60	34.86

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**941.35**	**1609.7**	**73.424**
Stddev	6.58	5.1	.340
%RSD	.69882	.31540	.46252

Sample Name: CCB4 Acquired: 09/19/2013 20:16:36 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**25.48**	**-.0194**	**2.641**	**-.1578**	**.6140**	**2.051**	**.0495**	**54.74**	**.6776**
Stddev	1.43	2.368	1.165	.8760	1.029	.869	.6951	41.73	.4226
%RSD	5.605	12190.	44.12	555.1	167.7	42.35	1403.	76.23	62.37

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.159**	**-5.353**	**11.96**	**2.059**	**.6456**	**-271.8**	**-4.323**	**.8514**	**-.3330**
Stddev	.594	1.537	84.51	1.528	1.558	124.3	16.16	.3982	.7408
%RSD	51.20	28.71	706.7	74.22	241.3	45.74	373.9	46.76	222.5

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**65.88**	**1.906**	**32.25**	**10.72**	**-344.6**	**9.492**	**-80.51**	**5.754**	**-.2717**
Stddev	88.98	1.957	32.90	16.65	64.0	12.66	2.88	2.026	.7121
%RSD	135.1	102.7	102.0	155.4	18.57	133.4	3.571	35.21	262.0

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-23.30**	**-3.735**	**-2.126**	**1.578**	**1.141**
Stddev	3.96	5.174	1.218	.420	.398
%RSD	17.00	138.5	57.31	26.60	34.86

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**941.35**	**1609.7**	**73.424**
Stddev	6.58	5.1	.340
%RSD	.69882	.31540	.46252

Sample Name: 644053-1-BLK Acquired: 09/19/2013 20:22:28 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5.132**	**.1646**	**.8135**	**-1.186**	**-.4572**	**.0865**	**.0414**	**-6.764**	**-.0323**
Stddev	2.004	.4781	1.813	.385	.6788	.2767	1.467	26.44	.2010
%RSD	39.04	290.4	222.9	32.49	148.5	320.0	3544.	390.9	621.8

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.6677**	**-5.084**	**-11.78**	**4.095**	**4.296**	**-389.3**	**-16.53**	**.3986**	**.4049**
Stddev	.4220	1.541	3.01	2.280	1.837	470.3	9.95	.0816	.4523
%RSD	63.21	30.31	25.57	55.67	42.77	120.8	60.19	20.46	111.7

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-41.62**	**2.938**	**-18.83**	**10.71**	**-383.3**	**-11.04**	**-77.82**	**-.7835**	**.7572**
Stddev	146.5	2.941	74.48	9.41	53.6	18.27	2.40	2.408	.3501
%RSD	352.1	100.1	395.6	87.91	13.99	165.5	3.088	307.4	46.23

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-3.449**	**-14.46**	**-2.499**	**3.225**	**.9397**
Stddev	11.29	9.08	1.190	5.722	.1882
%RSD	327.3	62.82	47.61	177.4	20.02

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**940.65**	**1612.2**	**73.499**
Stddev	3.60	1.7	.238
%RSD	.38239	.10700	.32329

Sample Name: 644053-1-BKS Acquired: 09/19/2013 20:28:21 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5028.**	**952.1**	**972.4**	**930.7**	**997.9**	**1066.**	**993.1**	**24870.**	**979.5**
Stddev	31.	9.0	13.0	2.3	2.4	13.	4.1	124.	6.7
%RSD	.6159	.9473	1.341	.2511	.2361	1.213	.4164	.5000	.6839
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**973.0**	**957.1**	**5267.**	**1071.**	**1014.**	**26940.**	**1009.**	**981.7**	**994.6**
Stddev	8.7	10.5	91.	11.	4.	112.	35.	4.3	5.8
%RSD	.8930	1.097	1.726	1.035	.4121	.4165	3.467	.4345	.5841
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9755.**	**1019.**	**10010.**	**432.8**	**25370.**	**1002.**	**4847.**	**1040.**	**1041.**
Stddev	142.	13.	114.	6.2	70.	25.	53.	16.	9.
%RSD	1.460	1.251	1.135	1.426	.2772	2.488	1.092	1.582	.8385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**947.5**	**960.5**	W **1169.**	W **1193.**	**966.3**
Stddev	11.7	15.2	5.	12.	6.2
%RSD	1.236	1.583	.4598	1.041	.6460
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass
Value			1000.	1000.	
Range			15.00%	15.00%	

Sample Name: 644053-1-BKS Acquired: 09/19/2013 20:28:21 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**941.84**	**1640.4**	**73.096**
Stddev	2.61	1.6	.199
%RSD	.27721	.09733	.27287

Sample Name: 644053-1-BSD Acquired: 09/19/2013 20:34:07 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5046.**	**952.0**	**980.2**	**930.5**	**999.5**	**1073.**	**996.6**	**25080.**	**978.6**
Stddev	31.	6.0	5.8	6.3	10.6	4.	4.7	152.	2.2
%RSD	.6102	.6264	.5957	.6792	1.058	.3916	.4740	.6074	.2200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**979.4**	**960.4**	**5360.**	**1074.**	**1014.**	**26870.**	**1033.**	**977.7**	**997.9**
Stddev	.7	4.2	37.	2.	3.	588.	8.	1.9	1.5
%RSD	.0734	.4342	.6922	.1642	.2730	2.186	.7613	.1913	.1464
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9655.**	**1023.**	**10060.**	**453.9**	**25310.**	**991.5**	**4846.**	**1049.**	**1040.**
Stddev	67.	5.	17.	5.8	73.	37.9	56.	10.	2.
%RSD	.6909	.4519	.1739	1.282	.2893	3.818	1.152	.9677	.2288
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**986.2**	**1011.**	W **1183.**	F **1217.**	**966.0**
Stddev	1.6	15.	4.	13.	3.8
%RSD	.1609	1.487	.3519	1.103	.3898
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass
Value			1000.	1000.	
Range			15.00%	20.00%	

Sample Name: 644053-1-BSD Acquired: 09/19/2013 20:34:07 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**955.20**	**1658.7**	**74.205**
Stddev	2.27	1.5	.492
%RSD	.23751	.09296	.66369

Sample Name: 470164-002 Acquired: 09/19/2013 20:39:55 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**132.9**	**-1.128**	**7.934**	**72.30**	**-.7225**	**449.2**	**.7800**	**63280.**
Stddev	5.8	1.571	4.013	2.44	.9675	1.2	.7027	336.
%RSD	4.327	139.2	50.58	3.368	133.9	.2613	90.09	.5303

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4.075**	**.9788**	**-3.706**	**-229.3**	**6.319**	**142.3**	**25240.**	**-11.51**
Stddev	.137	.2930	1.573	60.8	3.014	3.2	271.	15.54
%RSD	3.372	29.94	42.44	26.53	47.70	2.269	1.072	135.0

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2.192**	**1.430**	**5333.**	**3.679**	**11680.**	**25.35**	**199900.**	**590.1**
Stddev	.318	1.136	110.	.158	102.	7.37	1088.	40.0
%RSD	14.51	79.46	2.067	4.297	.8699	29.06	.5444	6.773

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**36100.**	**7.568**	**.9728**	**.0063**	**-31.96**	**121.4**	**134.0**	**.0357**
Stddev	206.	3.685	.9316	12.24	16.25	.2	1.6	2.061
%RSD	.5708	48.69	95.76	193000.	50.85	.1939	1.166	5777.

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**922.27**	**1671.8**	**72.302**
Stddev	5.37	3.7	.655
%RSD	.58199	.21975	.90551

Sample Name: 470164-002 S Acquired: 09/19/2013 20:45:47 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5260.**	**975.6**	**1033.**	**994.5**	**1017.**	**1511.**	**996.0**	**87580.**
Stddev	22.	6.5	9.	5.5	8.	12.	5.6	459.
%RSD	.4116	.6671	.8306	.5517	.7877	.8230	.5661	.5241

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**973.1**	**982.1**	**970.7**	**4975.**	**1049.**	**1152.**	**51220.**	**1009.**
Stddev	8.3	7.3	8.6	49.	5.	6.	199.	39.
%RSD	.8552	.7411	.8836	.9917	.4721	.5189	.3876	3.856

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**990.9**	**992.2**	**15650.**	**1054.**	**21330.**	**439.3**	**219200.**	**1627.**
Stddev	7.8	5.3	123.	11.	126.	22.1	1360.	36.
%RSD	.7904	.5365	.7872	1.045	.5901	5.021	.6206	2.211

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**40570.**	**1004.**	**1046.**	**990.7**	**994.4**	**1330.**	**1370.**	**957.7**
Stddev	474.	15.	6.	29.6	4.7	5.	11.	9.2
%RSD	1.168	1.504	.5908	2.988	.4773	.4061	.7663	.9595

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**925.98**	**1680.8**	**72.134**
Stddev	4.47	11.1	.842
%RSD	.48298	.66180	1.1666

Sample Name: 470164-002 SD Acquired: 09/19/2013 20:51:33 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5193.**	**955.7**	**1016.**	**975.6**	**999.6**	**1477.**	**985.8**	**83890.**
Stddev	18.	8.0	6.	3.6	4.9	14.	3.5	576.
%RSD	.3413	.8322	.6117	.3740	.4938	.9460	.3549	.6863

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**964.1**	**966.3**	**959.8**	**4805.**	**1036.**	**1134.**	**49630.**	**1005.**
Stddev	5.0	9.3	3.8	86.	7.	5.	717.	4.
%RSD	.5183	.9610	.3917	1.786	.6734	.4555	1.444	.4307

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**974.2**	**978.3**	**15370.**	**1041.**	**20390.**	**430.8**	**210000.**	**1582.**
Stddev	8.0	8.2	100.	10.	241.	10.7	1204.	53.
%RSD	.8225	.8414	.6509	.9757	1.180	2.476	.5734	3.322

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**38820.**	**991.7**	**1032.**	**944.9**	**984.0**	**1291.**	**1336.**	**939.3**
Stddev	329.	17.4	8.	7.0	5.8	7.	10.	11.6
%RSD	.8480	1.755	.7537	.7435	.5877	.5747	.7280	1.235

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**919.34**	**1661.5**	**71.499**
Stddev	2.63	6.9	.865
%RSD	.28600	.41563	1.2098

Sample Name: 470164-002 P Acquired: 09/19/2013 20:57:20 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5381.**	**948.6**	**1022.**	**989.1**	**998.5**	**1503.**	**997.2**	**86450.**
Stddev	5.	6.3	2.	6.4	7.8	7.	2.4	628.
%RSD	.0942	.6672	.1497	.6490	.7800	.4743	.2365	.7260

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**974.7**	**977.7**	**968.5**	**4949.**	**1044.**	**1142.**	**50360.**	**1010.**
Stddev	2.0	2.4	2.9	65.	5.	6.	898.	16.
%RSD	.2029	.2440	.2997	1.316	.5055	.5435	1.783	1.628

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**969.2**	**985.6**	**15580.**	**1046.**	**21060.**	**433.5**	**216700.**	**1565.**
Stddev	3.5	3.8	166.	6.	140.	10.2	1536.	28.
%RSD	.3646	.3855	1.067	.5594	.6653	2.340	.7088	1.769

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**40560.**	**1022.**	**1032.**	**935.7**	**1002.**	**1306.**	**1339.**	**953.1**
Stddev	214.	5.	2.	3.9	20.	2.	5.	5.4
%RSD	.5273	.4796	.2062	.4168	2.024	.1387	.3867	.5696

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**914.85**	**1654.2**	**71.686**
Stddev	4.86	4.5	.261
%RSD	.53081	.27480	.36366

Sample Name: 470164-002 SDL Acquired: 09/19/2013 21:03:07 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**18.67**	**1.420**	**3.488**	**12.66**	**-1.178**	**82.33**	**.4460**	**12390.**	**1.662**
Stddev	20.24	2.272	5.554	1.86	.993	8.14	.3557	829.	.243
%RSD	108.4	160.0	159.2	14.71	84.35	9.889	79.75	6.693	14.64

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.9274**	**-4.455**	**-6.489**	**4.042**	**30.13**	**4424.**	**10.04**	**2.023**	**.1568**
Stddev	.2927	1.439	106.4	1.210	1.19	271.	7.77	.496	.5239
%RSD	31.56	32.30	1639.	29.93	3.941	6.134	77.37	24.51	334.1

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**878.2**	**2.224**	**2217.**	**8.751**	**41100.**	**109.9**	**6223.**	**6.549**	**1.445**
Stddev	103.8	3.861	116.	15.48	2429.	17.3	659.	.960	.712
%RSD	11.82	173.6	5.245	177.0	5.910	15.79	10.59	14.65	49.24

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-12.08**	**-21.80**	**22.65**	**32.21**	**-.7545**
Stddev	11.68	11.52	2.13	2.14	4.220
%RSD	96.64	52.87	9.381	6.633	559.3

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**949.25**	**1639.9**	**72.225**
Stddev	3.61	4.9	.110
%RSD	.38001	.29928	.15161

Sample Name: CCV5 Acquired: 09/19/2013 21:20:42 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9610.**	F **885.5**	W **1865.**	W **1806.**	W **946.1**	**1919.**	**977.4**	**9851.**	**1928.**
Stddev	18.	3.5	11.	8.	.4	7.	6.5	32.	11.
%RSD	.1886	.3964	.5674	.4408	.0402	.3835	.6636	.3207	.5903
Check ?	Chk Pass	Chk Fail	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		1000.	2000.	2000.	1000.				
Range		-10.00%	-5.000%	-5.000%	-5.000%				

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**963.9**	W **1850.**	**10340.**	W **1063.**	**1992.**	**10420.**	**952.9**	W **939.8**	**982.9**
Stddev	5.3	12.	78.	6.	10.	116.	36.1	5.1	1.9
%RSD	.5498	.6552	.7518	.5913	.5137	1.108	3.784	.5420	.1967
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value		2000.		1000.				1000.	
Range		-5.000%		5.000%				-5.000%	

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9411.**	**965.1**	**4785.**	F **841.8**	**9854.**	**4908.**	W **4553.**	**1010.**	**1003.**
Stddev	79.	6.3	53.	9.1	43.	33.	5.	12.	4.
%RSD	.8447	.6579	1.110	1.081	.4344	.6654	.1001	1.158	.4353
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
Value	10000.			1000.			5000.		
Range	-5.000%			-10.00%			-5.000%		

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	F **1773.**	W **923.8**	F **2295.**	F **1217.**	W **939.3**
Stddev	6.	18.3	8.	10.	3.9
%RSD	.3473	1.978	.3296	.7984	.4139
Check ?	Chk Fail	Chk Warn	Chk Fail	Chk Fail	Chk Warn
Value	2000.	1000.	2000.	1000.	1000.
Range	-10.00%	-5.000%	10.00%	10.00%	-5.000%

Sample Name: CCV5 Acquired: 09/19/2013 21:20:42 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**959.15**	**1636.1**	**72.539**
Stddev	6.18	1.6	.503
%RSD	.64465	.09880	.69330

Sample Name: CCB5 Acquired: 09/19/2013 21:26:30 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**13.43**	**.4772**	**1.895**	**-.6572**	**.1420**	**2.292**	**.4024**	**43.18**	**.8660**
Stddev	16.33	1.828	2.249	1.112	1.302	.368	1.308	16.03	.3275
%RSD	121.6	383.0	118.7	169.2	917.2	16.07	325.0	37.13	37.81

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.124**	**-3.795**	**-14.02**	**4.457**	**5.404**	**-264.2**	**-14.38**	**.9969**	**.8899**
Stddev	.119	2.653	93.12	.808	2.688	72.6	23.64	.2311	.3051
%RSD	10.63	69.91	664.1	18.14	49.73	27.48	164.4	23.18	34.29

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-54.07**	**1.507**	**71.77**	**26.32**	**-276.8**	**12.61**	**-72.57**	**3.999**	**.6591**
Stddev	62.35	.501	80.78	38.43	17.5	7.04	3.25	1.239	.7098
%RSD	115.3	33.27	112.5	146.0	6.319	55.81	4.484	30.99	107.7

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**22.46**	**-18.98**	**-1.195**	**9.641**	**1.684**
Stddev	.01	18.88	.501	2.194	2.262
%RSD	.0621	99.44	41.88	22.76	134.3

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**971.13**	**1650.1**	**73.119**
Stddev	4.51	2.7	.469
%RSD	.46417	.16560	.64093

Sample Name: 470337-002 Acquired: 09/19/2013 22:13:13 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**509.0**	**.9388**	**3.657**	**64.37**	**-2.486**	**262.5**	**.6999**	**54860.**
Stddev	9.1	1.310	5.324	.91	1.418	1.6	.6537	243.
%RSD	1.791	139.5	145.6	1.412	57.05	.6283	93.40	.4422

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4.597**	**.6183**	**-2.333**	**54.29**	**6.084**	**126.4**	**22640.**	**12.19**
Stddev	.108	.1078	1.363	11.18	2.239	2.7	153.	9.87
%RSD	2.355	17.43	58.42	20.60	36.81	2.152	.6756	80.95

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.123**	**1.516**	**5275.**	**2.232**	**12320.**	**36.10**	**163200.**	**597.2**
Stddev	.127	1.009	92.	1.936	138.	22.38	475.	28.0
%RSD	11.34	66.53	1.739	86.70	1.118	62.01	.2912	4.692

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**28120.**	**2.319**	**.2819**	**-1.718**	**-12.77**	**7.993**	**160.9**	**-1.866**
Stddev	189.	.613	1.272	17.24	1.96	.898	7.1	5.387
%RSD	.6706	26.43	451.3	1004.	15.32	11.23	4.399	288.7

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**927.10**	**1649.8**	**69.162**
Stddev	2.25	3.9	.879
%RSD	.24266	.23438	1.2703

Sample Name: 470337-003 Acquired: 09/19/2013 22:19:04 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**8296.**	**1.578**	**7.615**	**64.94**	**-.9416**	**331.9**	**.3808**	**55330.**
Stddev	27.	1.413	3.552	1.43	1.408	1.2	.3264	126.
%RSD	.3230	89.55	46.64	2.199	149.5	.3493	85.72	.2278

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**22.14**	**3.954**	**3.678**	**6673.**	**13.75**	**141.4**	**24710.**	**112.8**
Stddev	.14	.226	3.516	34.	2.13	5.3	494.	20.5
%RSD	.6132	5.703	95.59	.5095	15.52	3.766	1.999	18.15

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.7788**	**9.453**	**7276.**	**6.405**	**29990.**	**13.62**	**176000.**	**552.6**
Stddev	.1129	.402	171.	.799	172.	11.85	922.	11.9
%RSD	14.50	4.251	2.353	12.47	.5730	86.99	.5241	2.150

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**30040.**	**-.8861**	**-.6897**	**84.63**	**6.995**	**24.80**	**730.5**	**-4.994**
Stddev	173.	.1010	.8386	19.54	20.66	.79	8.3	2.625
%RSD	.5753	11.40	121.6	23.09	295.4	3.184	1.131	52.56

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**942.31**	**1668.4**	**69.258**
Stddev	1.80	12.4	.183
%RSD	.19149	.74597	.26372

Sample Name: 470337-004 Acquired: 09/19/2013 22:24:55 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**6477.**	**.7362**	**7.888**	**70.68**	**-.9516**	**625.5**	**-.4151**	**69240.**
Stddev	58.	2.158	2.131	1.38	1.776	5.0	2.092	286.
%RSD	.8939	293.1	27.02	1.950	186.6	.8058	503.9	.4136

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**10.20**	**4.586**	**.6390**	**4844.**	**13.05**	**154.4**	**29300.**	**142.1**
Stddev	.22	.128	3.722	63.	2.00	3.1	467.	27.1
%RSD	2.147	2.783	582.4	1.307	15.30	2.004	1.595	19.05

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.6530**	**9.428**	**6798.**	**5.700**	**26890.**	**14.64**	s **189600.**	**679.7**
Stddev	.0456	.260	180.	1.875	226.	18.25	2295.	23.5
%RSD	6.981	2.760	2.644	32.90	.8392	124.7	1.210	3.452

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**38710.**	**.7302**	**-1.591**	**91.47**	**-5.813**	**27.10**	**660.1**	**-4.767**
Stddev	380.	.7161	1.243	18.11	13.46	1.85	12.4	2.088
%RSD	.9822	98.06	78.13	19.79	231.5	6.842	1.876	43.79

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**941.58**	**1680.8**	**69.467**
Stddev	2.15	7.0	.225
%RSD	.22839	.41859	.32353

Sample Name: CCV6 Acquired: 09/19/2013 22:30:44 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9698.**	F **881.2**	W **1868.**	F **1770.**	W **920.0**	W **1893.**	**971.4**	**9745.**	**1922.**
Stddev	46.	4.0	10.	6.	4.6	6.	5.2	17.	3.
%RSD	.4723	.4571	.5189	.3331	.4961	.3300	.5367	.1754	.1553
Check ?	Chk Pass	Chk Fail	Chk Warn	Chk Fail	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value		1000.	2000.	2000.	1000.	2000.			
Range		-10.00%	-5.000%	-10.00%	-5.000%	-5.000%			

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**961.6**	W **1839.**	**10290.**	W **1076.**	**2044.**	**10220.**	W **906.3**	W **929.3**	**991.4**
Stddev	3.9	9.	82.	1.	14.	515.	20.0	4.6	1.9
%RSD	.4060	.4747	.7970	.1192	.7002	5.044	2.211	.4933	.1935
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass
Value		2000.		1000.			1000.	1000.	
Range		-5.000%		5.000%			-5.000%	-5.000%	

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **9362.**	**968.7**	F **4493.**	F **794.0**	**9899.**	**4895.**	W **4561.**	**1011.**	**1015.**
Stddev	38.	3.8	89.	9.8	59.	22.	8.	8.	6.
%RSD	.4038	.3920	1.981	1.235	.5956	.4543	.1820	.7447	.5587
Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
Value	10000.		5000.	1000.			5000.		
Range	-5.000%		-10.00%	-10.00%			-5.000%		

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	F **1700.**	F **879.8**	F **2302.**	F **1240.**	W **930.4**
Stddev	6.	18.8	14.	3.	4.3
%RSD	.3629	2.133	.5904	.2355	.4640
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Warn
Value	2000.	1000.	2000.	1000.	1000.
Range	-10.00%	-10.00%	10.00%	10.00%	-5.000%

Sample Name: CCV6 Acquired: 09/19/2013 22:30:44 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**970.50**	**1642.3**	**68.642**
Stddev	3.71	10.6	.424
%RSD	.38211	.64594	.61759

Sample Name: CCB6 Acquired: 09/19/2013 22:36:31 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9.454**	**2.126**	**2.107**	**-1.513**	**-2.225**	**1.128**	**-.5471**	**24.82**	**.7796**
Stddev	14.20	2.907	.205	.725	2.589	1.153	1.705	29.11	.3872
%RSD	150.2	136.8	9.714	47.90	116.3	102.2	311.7	117.3	49.67

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.121**	**-6.079**	**14.17**	**5.914**	**4.614**	**-149.4**	**-20.83**	**.9858**	**1.086**
Stddev	.423	2.613	30.10	.428	1.197	153.3	29.09	.3298	.671
%RSD	37.77	42.99	212.4	7.241	25.95	102.6	139.6	33.46	61.78

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-75.70**	**.8581**	**20.64**	**10.70**	**-282.1**	**16.31**	**-76.86**	**2.440**	**.2661**
Stddev	66.15	.2613	25.11	11.84	33.7	43.13	7.05	2.350	1.059
%RSD	87.39	30.45	121.7	110.6	11.94	264.4	9.168	96.27	397.9

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**1.723**	**-29.70**	**-1.496**	**7.446**	**2.782**
Stddev	22.44	6.50	1.899	8.232	.937
%RSD	1302.	21.89	126.9	110.6	33.68

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**991.73**	**1663.8**	**71.438**
Stddev	10.81	8.8	.346
%RSD	1.0895	.52684	.48467

Sample Name: 470337-005 Acquired: 09/19/2013 22:42:22 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-6.285**	**-.2266**	**1.195**	**.0232**	**-.9499**	**5.159**	**.1826**	**67.38**	**.3858**
Stddev	7.997	.8849	4.997	.8313	.7936	.339	1.295	30.70	.1744
%RSD	127.2	390.5	418.0	3584.	83.54	6.565	709.4	45.56	45.21

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.9601**	**-5.775**	**17.28**	**4.572**	**4.009**	**-415.0**	**1.411**	**.2850**	**.4645**
Stddev	.3150	2.790	37.15	1.167	4.268	109.6	31.72	.2623	.1933
%RSD	32.81	48.30	215.0	25.52	106.5	26.40	2248.	92.05	41.62

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**45.26**	**.7408**	**134.4**	**2.900**	**174.8**	**26.11**	**-31.50**	**2.791**	**-.5819**
Stddev	164.6	2.819	28.2	5.067	39.7	21.37	1.70	2.083	1.042
%RSD	363.8	380.5	20.98	174.7	22.70	81.83	5.397	74.65	179.0

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-10.35**	**-25.94**	**7.918**	**99.56**	**-.3010**
Stddev	6.51	5.49	.424	4.42	2.924
%RSD	62.92	21.18	5.359	4.435	971.2

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**1005.1**	**1683.0**	**73.529**
Stddev	.5	1.3	.146
%RSD	.04563	.07553	.19862

Sample Name: 470337-006 Acquired: 09/19/2013 22:48:14 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5217.**	**2.138**	**2.899**	**108.9**	**-1.514**	**324.5**	**.9005**	**59670.**
Stddev	29.	1.856	1.007	2.8	.934	1.8	1.123	345.
%RSD	.5564	86.82	34.74	2.563	61.68	.5620	124.8	.5788

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**8.448**	**6.758**	**6.568**	**4136.**	**9.096**	**128.6**	**25670.**	**1242.**
Stddev	.198	.288	2.541	25.	2.443	6.2	188.	27.
%RSD	2.344	4.267	38.69	.6088	26.86	4.835	.7314	2.136

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3.789**	**29.95**	**5963.**	**7.873**	**21420.**	**13.64**	**152800.**	**617.2**
Stddev	.132	.33	169.	1.410	323.	20.77	847.	34.1
%RSD	3.496	1.118	2.841	17.91	1.506	152.3	.5545	5.522

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**33790.**	**4.740**	**.4455**	**55.26**	**-20.48**	**24.46**	**805.8**	**-.3083**
Stddev	233.	.592	.3370	11.66	11.00	1.05	11.5	2.593
%RSD	.6885	12.48	75.63	21.10	53.74	4.294	1.429	841.0

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**963.53**	**1709.4**	**71.058**
Stddev	4.18	8.3	.453
%RSD	.43433	.48304	.63691

Sample Name: 470337-007 Acquired: 09/19/2013 22:54:05 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**120.3**	**.4990**	**4.460**	**61.85**	**-.4096**	**324.7**	**1.522**	**55210.**
Stddev	2.2	.5245	4.152	.53	1.505	3.1	.530	322.
%RSD	1.808	105.1	93.08	.8560	367.4	.9662	34.80	.5829

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**31.15**	**.9417**	**-6.522**	**-115.2**	**7.230**	**136.6**	**23280.**	**50.92**
Stddev	.14	.1574	4.032	28.5	3.175	3.7	278.	3.72
%RSD	.4541	16.71	61.82	24.76	43.91	2.684	1.195	7.302

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.9023**	**1.791**	**5516.**	**1.863**	**11910.**	**3.922**	**155400.**	**575.9**
Stddev	.2504	.796	120.	2.449	130.	11.07	482.	10.7
%RSD	27.75	44.46	2.170	131.4	1.090	282.2	.3098	1.849

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**32220.**	**.9812**	**-.4321**	**2.588**	**-28.74**	**7.122**	**191.0**	**-2.171**
Stddev	199.	.4505	.4613	14.25	12.43	.620	4.5	3.999
%RSD	.6165	45.91	106.8	550.6	43.25	8.699	2.377	184.2

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**969.61**	**1721.7**	**70.816**
Stddev	1.29	6.8	.514
%RSD	.13273	.39221	.72519

Sample Name: 470337-008 Acquired: 09/19/2013 22:59:57 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST: MKO
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**4420.**	**.5329**	**11.10**	**110.9**	**.1290**	**364.4**	**2.369**	**65500.**
Stddev	11.	2.063	.84	.9	.8547	3.9	.641	393.
%RSD	.2484	387.1	7.562	.8359	662.5	1.057	27.07	.6005

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**13.62**	**4.606**	**1.932**	**3587.**	**9.640**	**148.7**	**27700.**	**296.6**
Stddev	.47	.136	.789	100.	1.975	3.5	507.	31.8
%RSD	3.427	2.944	40.86	2.789	20.49	2.330	1.831	10.71

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.269**	**13.39**	**6451.**	**3.016**	**21440.**	**11.68**	s **187000.**	**634.9**
Stddev	.390	.63	139.	2.186	209.	5.87	1401.	19.7
%RSD	30.72	4.737	2.158	72.48	.9748	50.27	.7494	3.094

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**31650.**	**3.231**	**-.1834**	**45.76**	**-16.53**	**43.56**	**564.6**	**.0966**
Stddev	276.	.537	.0538	47.53	.33	.69	4.8	2.437
%RSD	.8709	16.63	29.35	103.9	1.967	1.593	.8527	2522.

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**972.65**	**1726.4**	**70.369**
Stddev	2.11	7.8	.668
%RSD	.21684	.45236	.94903

Sample Name: 470337-009 Acquired: 09/19/2013 23:05:46 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: 644053 METHOD: 6010 ANALYST:
Comment: DISS

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**506.2**	**.5489**	**2.105**	**69.35**	**-.8484**	**424.8**	**.3447**	**53610.**
Stddev	13.4	2.216	.505	1.14	1.118	3.5	1.723	311.
%RSD	2.638	403.8	24.01	1.648	131.8	.8324	499.9	.5791

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5.132**	**.9253**	**-6.246**	**131.4**	**5.515**	**138.5**	**22550.**	**33.73**
Stddev	.119	.4005	3.099	133.4	2.317	6.5	602.	14.12
%RSD	2.315	43.29	49.61	101.5	42.01	4.673	2.672	41.85

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.034**	**4.475**	**5468.**	**5.457**	**13170.**	**5.828**	s **169600.**	**609.5**
Stddev	.140	1.087	174.	2.999	80.	10.55	1013.	6.2
%RSD	13.53	24.29	3.179	54.96	.6068	181.0	.5971	1.012

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**30750.**	**.4800**	**-1.018**	**-19.85**	**-19.92**	**8.233**	**282.5**	**-2.174**
Stddev	380.	3.090	.913	11.68	29.90	1.311	4.7	4.279
%RSD	1.236	643.8	89.67	58.83	150.1	15.92	1.660	196.8

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**980.32**	**1742.5**	**70.845**
Stddev	2.25	7.1	.798
%RSD	.22947	.40551	1.1267

Sample Name: CCV7 Acquired: 09/19/2013 23:11:37 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9845.**	F **888.0**	W **1890.**	F **1784.**	W **929.1**	**1906.**	**980.4**	**9844.**
Stddev	22.	2.9	6.	5.	2.3	4.	4.1	43.
%RSD	.2262	.3315	.3029	.2916	.2457	.2063	.4132	.4334
Check ?	Chk Pass	Chk Fail	Chk Warn	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value		1000.	2000.	2000.	1000.			
Range		-10.00%	-5.000%	-10.00%	-5.000%			

Elem	Cr2061	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1925.**	**971.3**	W **1847.**	**10410.**	W **1092.**	**2094.**	W **10630.**	W **942.6**
Stddev	2.	2.7	3.	70.	2.	15.	101.	27.4
%RSD	.1150	.2829	.1493	.6706	.1970	.7162	.9502	2.904
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Warn
Value			2000.		1000.		10000.	1000.
Range			-5.000%		5.000%		5.000%	-5.000%

Elem	Mo2020A	Ni2192	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **926.7**	**995.8**	**9591.**	**989.8**	W **4608.**	F **807.0**	**9981.**	**4990.**
Stddev	2.5	7.6	152.	4.2	38.	13.7	43.	32.
%RSD	.2739	.7640	1.585	.4212	.8288	1.700	.4351	.6343
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass
Value	1000.				5000.	1000.		
Range	-5.000%				-5.000%	-10.00%		

Elem	S_1820A	Tl1908	Sn1899	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	W **4628.**	**1026.**	**1025.**	F **1758.**	F **896.9**	F **2404.**	F **1320.**	W **933.8**
Stddev	6.	7.	2.	21.	9.4	8.	6.	4.8
%RSD	.1343	.7011	.1760	1.213	1.045	.3235	.4434	.5191
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Warn
Value	5000.			2000.	1000.	2000.	1000.	1000.
Range	-5.000%			-10.00%	-10.00%	10.00%	10.00%	-5.000%

Sample Name: CCV7 Acquired: 09/19/2013 23:11:37 Type: QC
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**1013.9**	**1703.4**	**70.590**
Stddev	.6	3.6	1.014
%RSD	.06107	.20970	1.4362

Sample Name: CCB7 Acquired: 09/19/2013 23:17:23 Type: Unk
Method: IRIS 2011 Mode: CONC Corr. Factor: 1.000000
User: admin BATCH ID: METHOD: ANALYST:
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554R	Be3131R	B_2089	Cd2288	Ca3179	Cr2061
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2.162**	**.9903**	**-1.009**	**-.5957**	**-.5169**	**1.726**	**-.1364**	**8.427**	**.7703**
Stddev	17.23	1.361	4.697	.7270	.9912	.660	.6855	42.71	.4543
%RSD	797.0	137.5	465.6	122.0	191.7	38.21	502.4	506.8	58.97

Elem	Co2286A	Cu2230	Fe2599R	Pb2203A	Li6707R	Mg2790R	Mn2933	Mo2020A	Ni2192
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.425**	**-7.394**	**29.44**	**4.465**	**5.088**	**-254.1**	**-.0172**	**1.158**	**.9185**
Stddev	.431	.166	26.42	3.410	4.365	522.9	6.586	.417	.8743
%RSD	30.23	2.250	89.76	76.36	85.80	205.8	38230.	36.04	95.18

Elem	K_7664R	Se1960A	Si2516	Ag3280	Na5895R	Sr3464	S_1820A	Tl1908	Sn1899
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.497**	**3.491**	**27.63**	**-3.953**	**-364.9**	**1.887**	**-79.96**	**6.457**	**-.6391**
Stddev	159.5	1.924	45.70	1.653	22.9	26.80	2.80	1.144	.6717
%RSD	10650.	55.11	165.4	41.82	6.286	1420.	3.499	17.72	105.1

Elem	Ti3329	V_3276	Zn2138	P_2149	Bi2230
Units	ppb	ppb	ppb	ppb	ppb
Avg	**-9.501**	**-.9094**	**-2.727**	**6.297**	**1.516**
Stddev	17.26	8.769	.133	12.94	2.697
%RSD	181.7	964.3	4.883	205.5	177.9

Int. Std.	Y_2243A	Y_3600R	Y_3774R
Units	Cts/S	Cts/S	Cts/S
Avg	**1022.2**	**1704.0**	**71.745**
Stddev	3.5	3.9	1.017
%RSD	.34032	.22845	1.4174