

ANALYTICAL REPORT

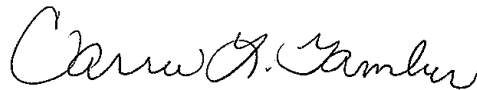
Job Number: 180-43402-1

Job Description: Harley Davidson

For:

Groundwater Sciences Corporation
2601 Market Place Street, Suite 310
Harrisburg, PA 17110-9307

Attention: Allan Miller



Approved for release.
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Senior Project Manager
5/8/2015 7:30 AM

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05/08/2015

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Definitions/Glossary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

HPLC/IC

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Groundwater Sciences Corporation

Project: Harley Davidson

Report Number: 180-43402-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 04/24/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.1 C.

VOLATILES

Several samples was diluted to bring the concentration of target analytes within the calibration range. Elevated reporting limits (RLs) are provided.

METALS

Magnesium and Sodium were detected in method blank MB 180-139894/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

ALKALINITY

Bicarbonate Alkalinity as CaCO₃ and Total Alkalinity as CaCO₃ to pH 4.5 were detected in method blank MB 180-140221/2 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Bicarbonate Alkalinity as CaCO₃ and Total Alkalinity as CaCO₃ to pH 4.5 were detected in method blank MB 180-140221/27 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

IC

Several samples required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Chloride was detected in method blank MB 180-139607/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Client Sample ID: HD-QC5-0/1-2

Lab Sample ID: 180-43402-1

No Detections.

Client Sample ID: HD-MW-114-0/1-0

Lab Sample ID: 180-43402-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	17		10	2.3	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	19		10	3.0	ug/L	10		8260C	Total/NA
Methylene Chloride	6.2	J	10	1.3	ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	63		10	1.7	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	28		10	1.2	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	1600	E	10	2.4	ug/L	10		8260C	Total/NA
1,1,1-Trichloroethane	5.0	J	10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	1400	E	10	1.4	ug/L	10		8260C	Total/NA
Tetrachloroethene	650	E	10	1.5	ug/L	10		8260C	Total/NA
1,1-Dichloroethene - DL	35	J	100	30	ug/L	100		8260C	Total/NA
Methylene Chloride - DL	80	J	100	13	ug/L	100		8260C	Total/NA
1,1-Dichloroethane - DL	28	J	100	12	ug/L	100		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1900		100	24	ug/L	100		8260C	Total/NA
Trichloroethene - DL	1800		100	14	ug/L	100		8260C	Total/NA
Tetrachloroethene - DL	910		100	15	ug/L	100		8260C	Total/NA
Nitrate as N	0.54		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	150	B	10	2.0	mg/L	10		300.0	Total/NA
Sulfate	75		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	120000		500	2.8	ug/L	1		6020A	Total/NA
Potassium	8100		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	20000	B	500	1.2	ug/L	1		6020A	Total/NA
Sodium	35000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	220	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	220	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-132-0/1-0

Lab Sample ID: 180-43402-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	24		5.0	1.5	ug/L	5		8260C	Total/NA
Methylene Chloride	3.4	J	5.0	0.63	ug/L	5		8260C	Total/NA
trans-1,2-Dichloroethene	3.3	J	5.0	0.85	ug/L	5		8260C	Total/NA
1,1-Dichloroethane	15		5.0	0.58	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene	550	E	5.0	1.2	ug/L	5		8260C	Total/NA
Trichloroethene	480	E	5.0	0.72	ug/L	5		8260C	Total/NA
Tetrachloroethene	1.9	J	5.0	0.74	ug/L	5		8260C	Total/NA
1,1-Dichloroethene - DL	28	J	40	12	ug/L	40		8260C	Total/NA
Methylene Chloride - DL	21	J	40	5.0	ug/L	40		8260C	Total/NA
1,1-Dichloroethane - DL	16	J	40	4.7	ug/L	40		8260C	Total/NA
cis-1,2-Dichloroethene - DL	640		40	9.5	ug/L	40		8260C	Total/NA
Trichloroethene - DL	560		40	5.7	ug/L	40		8260C	Total/NA
Nitrate as N	4.2		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	12	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	2.8		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	60000		500	2.8	ug/L	1		6020A	Total/NA
Potassium	1800		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	3700	B	500	1.2	ug/L	1		6020A	Total/NA
Sodium	4500	B	500	3.8	ug/L	1		6020A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pittsburgh

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Client Sample ID: HD-MW-132-0/1-0 (Continued)

Lab Sample ID: 180-43402-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity as CaCO3 to pH 4.5	140	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	140	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-39D-0/1-0

Lab Sample ID: 180-43402-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.4	J	3.0	0.89	ug/L	3		8260C	Total/NA
Methylene Chloride	1.3	J	3.0	0.38	ug/L	3		8260C	Total/NA
1,1-Dichloroethane	1.0	J	3.0	0.35	ug/L	3		8260C	Total/NA
cis-1,2-Dichloroethene	50		3.0	0.71	ug/L	3		8260C	Total/NA
1,1,1-Trichloroethane	3.3		3.0	0.86	ug/L	3		8260C	Total/NA
Trichloroethene	66		3.0	0.43	ug/L	3		8260C	Total/NA
Tetrachloroethene	19		3.0	0.45	ug/L	3		8260C	Total/NA
Nitrate as N	2.8		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	91	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	28		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	110000		500	2.8	ug/L	1		6020A	Total/NA
Potassium	6900		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	12000	B	500	1.2	ug/L	1		6020A	Total/NA
Sodium	27000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	240	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	240	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-74S-0/1-0

Lab Sample ID: 180-43402-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.84	J	1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.77	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	19		1.0	0.24	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	1.5		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	12		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	6.8		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	1.7		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	74	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	14		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	92000		500	2.8	ug/L	1		6020A	Total/NA
Potassium	3200		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	9700	B	500	1.2	ug/L	1		6020A	Total/NA
Sodium	24000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	240	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	240	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-127-0/1-0

Lab Sample ID: 180-43402-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	5.5	J	10	3.0	ug/L	10		8260C	Total/NA
Methylene Chloride	8.3	J	10	1.3	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	2.9	J	10	1.2	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	260		10	2.4	ug/L	10		8260C	Total/NA
1,1,1-Trichloroethane	5.2	J	10	2.9	ug/L	10		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pittsburgh

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Client Sample ID: HD-MW-127-0/1-0 (Continued)

Lab Sample ID: 180-43402-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	130		10	1.4	ug/L	10		8260C	Total/NA
Tetrachloroethene	15		10	1.5	ug/L	10		8260C	Total/NA
Nitrate as N	2.0		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	130	B	10	2.0	mg/L	10		300.0	Total/NA
Sulfate	5.6		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	100000		500	2.8	ug/L	1		6020A	Total/NA
Potassium	4200		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	18000	B	500	1.2	ug/L	1		6020A	Total/NA
Sodium	32000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	280	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	280	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-51D-0/1-0

Lab Sample ID: 180-43402-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	0.60	J	1.0	0.23	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	48		1.0	0.30	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.82	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	21		1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	210	E	1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.39	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	20		1.0	0.29	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	0.28	J	1.0	0.21	ug/L	1		8260C	Total/NA
Trichloroethene	350	E	1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	36		1.0	0.15	ug/L	1		8260C	Total/NA
1,1-Dichloroethene - DL	40		25	7.4	ug/L	25		8260C	Total/NA
Methylene Chloride - DL	15	J	25	3.1	ug/L	25		8260C	Total/NA
1,1-Dichloroethane - DL	20	J	25	2.9	ug/L	25		8260C	Total/NA
cis-1,2-Dichloroethene - DL	230		25	5.9	ug/L	25		8260C	Total/NA
1,1,1-Trichloroethane - DL	16	J	25	7.2	ug/L	25		8260C	Total/NA
Trichloroethene - DL	420		25	3.6	ug/L	25		8260C	Total/NA
Tetrachloroethene - DL	33		25	3.7	ug/L	25		8260C	Total/NA
Nitrate as N	0.98		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	82	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	37		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	66000		500	2.8	ug/L	1		6020A	Total/NA
Potassium	19000		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	16000	B	500	1.2	ug/L	1		6020A	Total/NA
Sodium	34000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	210	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	210	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-50S-0/1-0

Lab Sample ID: 180-43402-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	30	J	50	15	ug/L	50		8260C	Total/NA
Methylene Chloride	39	J	50	6.3	ug/L	50		8260C	Total/NA
1,1-Dichloroethane	9.9	J	50	5.8	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene	720		50	12	ug/L	50		8260C	Total/NA
1,1,1-Trichloroethane	65		50	14	ug/L	50		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pittsburgh

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Client Sample ID: HD-MW-50S-0/1-0 (Continued)

Lab Sample ID: 180-43402-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	620		50	7.2	ug/L	50		8260C	Total/NA
Tetrachloroethene	160		50	7.4	ug/L	50		8260C	Total/NA
Nitrate as N	2.2		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	170	B	10	2.0	mg/L	10		300.0	Total/NA
Sulfate	50		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	130000		500	2.8	ug/L	1		6020A	Total/NA
Potassium	9400		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	14000	B	500	1.2	ug/L	1		6020A	Total/NA
Sodium	46000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	200	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	200	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pittsburgh

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-QC5-0/1-2

Date Collected: 04/23/15 12:00

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			05/05/15 19:26	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			05/05/15 19:26	1
Bromomethane	1.0	U	1.0	0.31	ug/L			05/05/15 19:26	1
Chloroethane	1.0	U	1.0	0.21	ug/L			05/05/15 19:26	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			05/05/15 19:26	1
Acetone	5.0	U	5.0	2.5	ug/L			05/05/15 19:26	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			05/05/15 19:26	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			05/05/15 19:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			05/05/15 19:26	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			05/05/15 19:26	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			05/05/15 19:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/05/15 19:26	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			05/05/15 19:26	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			05/05/15 19:26	1
Chloroform	1.0	U	1.0	0.17	ug/L			05/05/15 19:26	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			05/05/15 19:26	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			05/05/15 19:26	1
Benzene	1.0	U	1.0	0.11	ug/L			05/05/15 19:26	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/05/15 19:26	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			05/05/15 19:26	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			05/05/15 19:26	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			05/05/15 19:26	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/05/15 19:26	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			05/05/15 19:26	1
Toluene	1.0	U	1.0	0.15	ug/L			05/05/15 19:26	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			05/05/15 19:26	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			05/05/15 19:26	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/05/15 19:26	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			05/05/15 19:26	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			05/05/15 19:26	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			05/05/15 19:26	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/05/15 19:26	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			05/05/15 19:26	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			05/05/15 19:26	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			05/05/15 19:26	1
Styrene	1.0	U	1.0	0.097	ug/L			05/05/15 19:26	1
Bromoform	1.0	U	1.0	0.19	ug/L			05/05/15 19:26	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			05/05/15 19:26	1
Acrylonitrile	20	U	20	0.55	ug/L			05/05/15 19:26	1
1,4-Dioxane	200	U	200	34	ug/L			05/05/15 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		64 - 135		05/05/15 19:26	1
Toluene-d8 (Surr)	105		71 - 118		05/05/15 19:26	1
4-Bromofluorobenzene (Surr)	101		70 - 118		05/05/15 19:26	1
Dibromofluoromethane (Surr)	101		70 - 128		05/05/15 19:26	1

TestAmerica Pittsburgh

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-114-0/1-0

Date Collected: 04/23/15 11:11

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	10	U	10	2.8	ug/L			05/06/15 23:14	10
Vinyl chloride	17		10	2.3	ug/L			05/06/15 23:14	10
Bromomethane	10	U	10	3.1	ug/L			05/06/15 23:14	10
Chloroethane	10	U	10	2.1	ug/L			05/06/15 23:14	10
1,1-Dichloroethene	19		10	3.0	ug/L			05/06/15 23:14	10
Acetone	50	U	50	25	ug/L			05/06/15 23:14	10
Carbon disulfide	10	U	10	2.1	ug/L			05/06/15 23:14	10
Methylene Chloride	6.2	J	10	1.3	ug/L			05/06/15 23:14	10
trans-1,2-Dichloroethene	63		10	1.7	ug/L			05/06/15 23:14	10
Methyl tert-butyl ether	10	U	10	1.8	ug/L			05/06/15 23:14	10
1,1-Dichloroethane	28		10	1.2	ug/L			05/06/15 23:14	10
cis-1,2-Dichloroethene	1600	E	10	2.4	ug/L			05/06/15 23:14	10
Bromochloromethane	10	U	10	1.8	ug/L			05/06/15 23:14	10
2-Butanone (MEK)	50	U	50	5.5	ug/L			05/06/15 23:14	10
Chloroform	10	U	10	1.7	ug/L			05/06/15 23:14	10
1,1,1-Trichloroethane	5.0	J	10	2.9	ug/L			05/06/15 23:14	10
Carbon tetrachloride	10	U	10	1.4	ug/L			05/06/15 23:14	10
Benzene	10	U	10	1.1	ug/L			05/06/15 23:14	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			05/06/15 23:14	10
Trichloroethene	1400	E	10	1.4	ug/L			05/06/15 23:14	10
1,2-Dichloropropane	10	U	10	0.95	ug/L			05/06/15 23:14	10
Bromodichloromethane	10	U	10	1.3	ug/L			05/06/15 23:14	10
cis-1,3-Dichloropropene	10	U	10	1.9	ug/L			05/06/15 23:14	10
4-Methyl-2-pentanone (MIBK)	50	U	50	5.3	ug/L			05/06/15 23:14	10
Toluene	10	U	10	1.5	ug/L			05/06/15 23:14	10
trans-1,3-Dichloropropene	10	U	10	1.5	ug/L			05/06/15 23:14	10
1,1,2-Trichloroethane	10	U	10	2.0	ug/L			05/06/15 23:14	10
Tetrachloroethene	650	E	10	1.5	ug/L			05/06/15 23:14	10
2-Hexanone	50	U	50	1.6	ug/L			05/06/15 23:14	10
Dibromochloromethane	10	U	10	1.4	ug/L			05/06/15 23:14	10
1,2-Dibromoethane (EDB)	10	U	10	1.8	ug/L			05/06/15 23:14	10
Chlorobenzene	10	U	10	1.4	ug/L			05/06/15 23:14	10
1,1,1,2-Tetrachloroethane	10	U	10	2.8	ug/L			05/06/15 23:14	10
Ethylbenzene	10	U	10	2.3	ug/L			05/06/15 23:14	10
Xylenes, Total	30	U	30	4.9	ug/L			05/06/15 23:14	10
Styrene	10	U	10	0.97	ug/L			05/06/15 23:14	10
Bromoform	10	U	10	1.9	ug/L			05/06/15 23:14	10
1,1,2,2-Tetrachloroethane	10	U	10	2.0	ug/L			05/06/15 23:14	10
Acrylonitrile	200	U	200	5.5	ug/L			05/06/15 23:14	10
1,4-Dioxane	2000	U	2000	340	ug/L			05/06/15 23:14	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	116		64 - 135		05/06/15 23:14	10
<i>Toluene-d8 (Surr)</i>	109		71 - 118		05/06/15 23:14	10
<i>4-Bromofluorobenzene (Surr)</i>	99		70 - 118		05/06/15 23:14	10
<i>Dibromofluoromethane (Surr)</i>	106		70 - 128		05/06/15 23:14	10

TestAmerica Pittsburgh

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-132-0/1-0

Date Collected: 04/23/15 13:07

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	5.0	U	5.0	1.4	ug/L			05/05/15 17:50	5
Vinyl chloride	5.0	U	5.0	1.1	ug/L			05/05/15 17:50	5
Bromomethane	5.0	U	5.0	1.6	ug/L			05/05/15 17:50	5
Chloroethane	5.0	U	5.0	1.1	ug/L			05/05/15 17:50	5
1,1-Dichloroethene	24		5.0	1.5	ug/L			05/05/15 17:50	5
Acetone	25	U	25	13	ug/L			05/05/15 17:50	5
Carbon disulfide	5.0	U	5.0	1.1	ug/L			05/05/15 17:50	5
Methylene Chloride	3.4	J	5.0	0.63	ug/L			05/05/15 17:50	5
trans-1,2-Dichloroethene	3.3	J	5.0	0.85	ug/L			05/05/15 17:50	5
Methyl tert-butyl ether	5.0	U	5.0	0.92	ug/L			05/05/15 17:50	5
1,1-Dichloroethane	15		5.0	0.58	ug/L			05/05/15 17:50	5
cis-1,2-Dichloroethene	550	E	5.0	1.2	ug/L			05/05/15 17:50	5
Bromochloromethane	5.0	U	5.0	0.90	ug/L			05/05/15 17:50	5
2-Butanone (MEK)	25	U	25	2.7	ug/L			05/05/15 17:50	5
Chloroform	5.0	U	5.0	0.85	ug/L			05/05/15 17:50	5
1,1,1-Trichloroethane	5.0	U	5.0	1.4	ug/L			05/05/15 17:50	5
Carbon tetrachloride	5.0	U	5.0	0.68	ug/L			05/05/15 17:50	5
Benzene	5.0	U	5.0	0.53	ug/L			05/05/15 17:50	5
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/L			05/05/15 17:50	5
Trichloroethene	480	E	5.0	0.72	ug/L			05/05/15 17:50	5
1,2-Dichloropropane	5.0	U	5.0	0.47	ug/L			05/05/15 17:50	5
Bromodichloromethane	5.0	U	5.0	0.65	ug/L			05/05/15 17:50	5
cis-1,3-Dichloropropene	5.0	U	5.0	0.93	ug/L			05/05/15 17:50	5
4-Methyl-2-pentanone (MIBK)	25	U	25	2.6	ug/L			05/05/15 17:50	5
Toluene	5.0	U	5.0	0.75	ug/L			05/05/15 17:50	5
trans-1,3-Dichloropropene	5.0	U	5.0	0.74	ug/L			05/05/15 17:50	5
1,1,2-Trichloroethane	5.0	U	5.0	1.0	ug/L			05/05/15 17:50	5
Tetrachloroethene	1.9	J	5.0	0.74	ug/L			05/05/15 17:50	5
2-Hexanone	25	U	25	0.80	ug/L			05/05/15 17:50	5
Dibromochloromethane	5.0	U	5.0	0.68	ug/L			05/05/15 17:50	5
1,2-Dibromoethane (EDB)	5.0	U	5.0	0.90	ug/L			05/05/15 17:50	5
Chlorobenzene	5.0	U	5.0	0.68	ug/L			05/05/15 17:50	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.4	ug/L			05/05/15 17:50	5
Ethylbenzene	5.0	U	5.0	1.1	ug/L			05/05/15 17:50	5
Xylenes, Total	15	U	15	2.4	ug/L			05/05/15 17:50	5
Styrene	5.0	U	5.0	0.48	ug/L			05/05/15 17:50	5
Bromoform	5.0	U	5.0	0.96	ug/L			05/05/15 17:50	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.0	ug/L			05/05/15 17:50	5
Acrylonitrile	100	U	100	2.7	ug/L			05/05/15 17:50	5
1,4-Dioxane	1000	U	1000	170	ug/L			05/05/15 17:50	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		64 - 135		05/05/15 17:50	5
<i>Toluene-d8 (Surr)</i>	108		71 - 118		05/05/15 17:50	5
<i>4-Bromofluorobenzene (Surr)</i>	102		70 - 118		05/05/15 17:50	5
<i>Dibromofluoromethane (Surr)</i>	104		70 - 128		05/05/15 17:50	5

TestAmerica Pittsburgh

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-39D-0/1-0

Date Collected: 04/23/15 10:15

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	3.0	U	3.0	0.85	ug/L			05/06/15 18:02	3
Vinyl chloride	3.0	U	3.0	0.68	ug/L			05/06/15 18:02	3
Bromomethane	3.0	U	3.0	0.94	ug/L			05/06/15 18:02	3
Chloroethane	3.0	U	3.0	0.64	ug/L			05/06/15 18:02	3
1,1-Dichloroethene	1.4	J	3.0	0.89	ug/L			05/06/15 18:02	3
Acetone	15	U	15	7.5	ug/L			05/06/15 18:02	3
Carbon disulfide	3.0	U	3.0	0.64	ug/L			05/06/15 18:02	3
Methylene Chloride	1.3	J	3.0	0.38	ug/L			05/06/15 18:02	3
trans-1,2-Dichloroethene	3.0	U	3.0	0.51	ug/L			05/06/15 18:02	3
Methyl tert-butyl ether	3.0	U	3.0	0.55	ug/L			05/06/15 18:02	3
1,1-Dichloroethane	1.0	J	3.0	0.35	ug/L			05/06/15 18:02	3
cis-1,2-Dichloroethene	50		3.0	0.71	ug/L			05/06/15 18:02	3
Bromochloromethane	3.0	U	3.0	0.54	ug/L			05/06/15 18:02	3
2-Butanone (MEK)	15	U	15	1.6	ug/L			05/06/15 18:02	3
Chloroform	3.0	U	3.0	0.51	ug/L			05/06/15 18:02	3
1,1,1-Trichloroethane	3.3		3.0	0.86	ug/L			05/06/15 18:02	3
Carbon tetrachloride	3.0	U	3.0	0.41	ug/L			05/06/15 18:02	3
Benzene	3.0	U	3.0	0.32	ug/L			05/06/15 18:02	3
1,2-Dichloroethane	3.0	U	3.0	0.64	ug/L			05/06/15 18:02	3
Trichloroethene	66		3.0	0.43	ug/L			05/06/15 18:02	3
1,2-Dichloropropane	3.0	U	3.0	0.28	ug/L			05/06/15 18:02	3
Bromodichloromethane	3.0	U	3.0	0.39	ug/L			05/06/15 18:02	3
cis-1,3-Dichloropropene	3.0	U	3.0	0.56	ug/L			05/06/15 18:02	3
4-Methyl-2-pentanone (MIBK)	15	U	15	1.6	ug/L			05/06/15 18:02	3
Toluene	3.0	U	3.0	0.45	ug/L			05/06/15 18:02	3
trans-1,3-Dichloropropene	3.0	U	3.0	0.44	ug/L			05/06/15 18:02	3
1,1,2-Trichloroethane	3.0	U	3.0	0.60	ug/L			05/06/15 18:02	3
Tetrachloroethene	19		3.0	0.45	ug/L			05/06/15 18:02	3
2-Hexanone	15	U	15	0.48	ug/L			05/06/15 18:02	3
Dibromochloromethane	3.0	U	3.0	0.41	ug/L			05/06/15 18:02	3
1,2-Dibromoethane (EDB)	3.0	U	3.0	0.54	ug/L			05/06/15 18:02	3
Chlorobenzene	3.0	U	3.0	0.41	ug/L			05/06/15 18:02	3
1,1,1,2-Tetrachloroethane	3.0	U	3.0	0.83	ug/L			05/06/15 18:02	3
Ethylbenzene	3.0	U	3.0	0.68	ug/L			05/06/15 18:02	3
Xylenes, Total	9.0	U	9.0	1.5	ug/L			05/06/15 18:02	3
Styrene	3.0	U	3.0	0.29	ug/L			05/06/15 18:02	3
Bromoform	3.0	U	3.0	0.57	ug/L			05/06/15 18:02	3
1,1,1,2-Tetrachloroethane	3.0	U	3.0	0.60	ug/L			05/06/15 18:02	3
Acrylonitrile	60	U	60	1.6	ug/L			05/06/15 18:02	3
1,4-Dioxane	600	U	600	100	ug/L			05/06/15 18:02	3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		64 - 135		05/06/15 18:02	3
Toluene-d8 (Surr)	108		71 - 118		05/06/15 18:02	3
4-Bromofluorobenzene (Surr)	100		70 - 118		05/06/15 18:02	3
Dibromofluoromethane (Surr)	104		70 - 128		05/06/15 18:02	3

TestAmerica Pittsburgh

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-74S-0/1-0

Date Collected: 04/23/15 09:10

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			05/05/15 19:02	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			05/05/15 19:02	1
Bromomethane	1.0	U	1.0	0.31	ug/L			05/05/15 19:02	1
Chloroethane	1.0	U	1.0	0.21	ug/L			05/05/15 19:02	1
1,1-Dichloroethene	0.84	J	1.0	0.30	ug/L			05/05/15 19:02	1
Acetone	5.0	U	5.0	2.5	ug/L			05/05/15 19:02	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			05/05/15 19:02	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			05/05/15 19:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			05/05/15 19:02	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			05/05/15 19:02	1
1,1-Dichloroethane	0.77	J	1.0	0.12	ug/L			05/05/15 19:02	1
cis-1,2-Dichloroethene	19		1.0	0.24	ug/L			05/05/15 19:02	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			05/05/15 19:02	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			05/05/15 19:02	1
Chloroform	1.0	U	1.0	0.17	ug/L			05/05/15 19:02	1
1,1,1-Trichloroethane	1.5		1.0	0.29	ug/L			05/05/15 19:02	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			05/05/15 19:02	1
Benzene	1.0	U	1.0	0.11	ug/L			05/05/15 19:02	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/05/15 19:02	1
Trichloroethene	12		1.0	0.14	ug/L			05/05/15 19:02	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			05/05/15 19:02	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			05/05/15 19:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/05/15 19:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			05/05/15 19:02	1
Toluene	1.0	U	1.0	0.15	ug/L			05/05/15 19:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			05/05/15 19:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			05/05/15 19:02	1
Tetrachloroethene	6.8		1.0	0.15	ug/L			05/05/15 19:02	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			05/05/15 19:02	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			05/05/15 19:02	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			05/05/15 19:02	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/05/15 19:02	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			05/05/15 19:02	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			05/05/15 19:02	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			05/05/15 19:02	1
Styrene	1.0	U	1.0	0.097	ug/L			05/05/15 19:02	1
Bromoform	1.0	U	1.0	0.19	ug/L			05/05/15 19:02	1
1,1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			05/05/15 19:02	1
Acrylonitrile	20	U	20	0.55	ug/L			05/05/15 19:02	1
1,4-Dioxane	200	U	200	34	ug/L			05/05/15 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		64 - 135		05/05/15 19:02	1
Toluene-d8 (Surr)	110		71 - 118		05/05/15 19:02	1
4-Bromofluorobenzene (Surr)	104		70 - 118		05/05/15 19:02	1
Dibromofluoromethane (Surr)	102		70 - 128		05/05/15 19:02	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-127-0/1-0

Date Collected: 04/23/15 11:40

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	10	U	10	2.8	ug/L			05/05/15 19:50	10
Vinyl chloride	10	U	10	2.3	ug/L			05/05/15 19:50	10
Bromomethane	10	U	10	3.1	ug/L			05/05/15 19:50	10
Chloroethane	10	U	10	2.1	ug/L			05/05/15 19:50	10
1,1-Dichloroethene	5.5	J	10	3.0	ug/L			05/05/15 19:50	10
Acetone	50	U	50	25	ug/L			05/05/15 19:50	10
Carbon disulfide	10	U	10	2.1	ug/L			05/05/15 19:50	10
Methylene Chloride	8.3	J	10	1.3	ug/L			05/05/15 19:50	10
trans-1,2-Dichloroethene	10	U	10	1.7	ug/L			05/05/15 19:50	10
Methyl tert-butyl ether	10	U	10	1.8	ug/L			05/05/15 19:50	10
1,1-Dichloroethane	2.9	J	10	1.2	ug/L			05/05/15 19:50	10
cis-1,2-Dichloroethene	260		10	2.4	ug/L			05/05/15 19:50	10
Bromochloromethane	10	U	10	1.8	ug/L			05/05/15 19:50	10
2-Butanone (MEK)	50	U	50	5.5	ug/L			05/05/15 19:50	10
Chloroform	10	U	10	1.7	ug/L			05/05/15 19:50	10
1,1,1-Trichloroethane	5.2	J	10	2.9	ug/L			05/05/15 19:50	10
Carbon tetrachloride	10	U	10	1.4	ug/L			05/05/15 19:50	10
Benzene	10	U	10	1.1	ug/L			05/05/15 19:50	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			05/05/15 19:50	10
Trichloroethene	130		10	1.4	ug/L			05/05/15 19:50	10
1,2-Dichloropropane	10	U	10	0.95	ug/L			05/05/15 19:50	10
Bromodichloromethane	10	U	10	1.3	ug/L			05/05/15 19:50	10
cis-1,3-Dichloropropene	10	U	10	1.9	ug/L			05/05/15 19:50	10
4-Methyl-2-pentanone (MIBK)	50	U	50	5.3	ug/L			05/05/15 19:50	10
Toluene	10	U	10	1.5	ug/L			05/05/15 19:50	10
trans-1,3-Dichloropropene	10	U	10	1.5	ug/L			05/05/15 19:50	10
1,1,2-Trichloroethane	10	U	10	2.0	ug/L			05/05/15 19:50	10
Tetrachloroethene	15		10	1.5	ug/L			05/05/15 19:50	10
2-Hexanone	50	U	50	1.6	ug/L			05/05/15 19:50	10
Dibromochloromethane	10	U	10	1.4	ug/L			05/05/15 19:50	10
1,2-Dibromoethane (EDB)	10	U	10	1.8	ug/L			05/05/15 19:50	10
Chlorobenzene	10	U	10	1.4	ug/L			05/05/15 19:50	10
1,1,1,2-Tetrachloroethane	10	U	10	2.8	ug/L			05/05/15 19:50	10
Ethylbenzene	10	U	10	2.3	ug/L			05/05/15 19:50	10
Xylenes, Total	30	U	30	4.9	ug/L			05/05/15 19:50	10
Styrene	10	U	10	0.97	ug/L			05/05/15 19:50	10
Bromoform	10	U	10	1.9	ug/L			05/05/15 19:50	10
1,1,2,2-Tetrachloroethane	10	U	10	2.0	ug/L			05/05/15 19:50	10
Acrylonitrile	200	U	200	5.5	ug/L			05/05/15 19:50	10
1,4-Dioxane	2000	U	2000	340	ug/L			05/05/15 19:50	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		64 - 135		05/05/15 19:50	10
Toluene-d8 (Surr)	109		71 - 118		05/05/15 19:50	10
4-Bromofluorobenzene (Surr)	102		70 - 118		05/05/15 19:50	10
Dibromofluoromethane (Surr)	105		70 - 128		05/05/15 19:50	10

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-51D-0/1-0

Date Collected: 04/23/15 12:30

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			05/05/15 20:14	1
Vinyl chloride	0.60	J	1.0	0.23	ug/L			05/05/15 20:14	1
Bromomethane	1.0	U	1.0	0.31	ug/L			05/05/15 20:14	1
Chloroethane	1.0	U	1.0	0.21	ug/L			05/05/15 20:14	1
1,1-Dichloroethene	48		1.0	0.30	ug/L			05/05/15 20:14	1
Acetone	5.0	U	5.0	2.5	ug/L			05/05/15 20:14	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			05/05/15 20:14	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			05/05/15 20:14	1
trans-1,2-Dichloroethene	0.82	J	1.0	0.17	ug/L			05/05/15 20:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			05/05/15 20:14	1
1,1-Dichloroethane	21		1.0	0.12	ug/L			05/05/15 20:14	1
cis-1,2-Dichloroethene	210	E	1.0	0.24	ug/L			05/05/15 20:14	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			05/05/15 20:14	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			05/05/15 20:14	1
Chloroform	0.39	J	1.0	0.17	ug/L			05/05/15 20:14	1
1,1,1-Trichloroethane	20		1.0	0.29	ug/L			05/05/15 20:14	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			05/05/15 20:14	1
Benzene	1.0	U	1.0	0.11	ug/L			05/05/15 20:14	1
1,2-Dichloroethane	0.28	J	1.0	0.21	ug/L			05/05/15 20:14	1
Trichloroethene	350	E	1.0	0.14	ug/L			05/05/15 20:14	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			05/05/15 20:14	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			05/05/15 20:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/05/15 20:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			05/05/15 20:14	1
Toluene	1.0	U	1.0	0.15	ug/L			05/05/15 20:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			05/05/15 20:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			05/05/15 20:14	1
Tetrachloroethene	36		1.0	0.15	ug/L			05/05/15 20:14	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			05/05/15 20:14	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			05/05/15 20:14	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			05/05/15 20:14	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/05/15 20:14	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			05/05/15 20:14	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			05/05/15 20:14	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			05/05/15 20:14	1
Styrene	1.0	U	1.0	0.097	ug/L			05/05/15 20:14	1
Bromoform	1.0	U	1.0	0.19	ug/L			05/05/15 20:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			05/05/15 20:14	1
Acrylonitrile	20	U	20	0.55	ug/L			05/05/15 20:14	1
1,4-Dioxane	200	U	200	34	ug/L			05/05/15 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>1,2-Dichloroethane-d4 (Surr)</i>	108		64 - 135		05/05/15 20:14	1
<i>Toluene-d8 (Surr)</i>	106		71 - 118		05/05/15 20:14	1
<i>4-Bromofluorobenzene (Surr)</i>	102		70 - 118		05/05/15 20:14	1
<i>Dibromofluoromethane (Surr)</i>	106		70 - 128		05/05/15 20:14	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-50S-0/1-0

Date Collected: 04/23/15 11:30

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	50	U	50	14	ug/L			05/05/15 21:02	50
Vinyl chloride	50	U	50	11	ug/L			05/05/15 21:02	50
Bromomethane	50	U	50	16	ug/L			05/05/15 21:02	50
Chloroethane	50	U	50	11	ug/L			05/05/15 21:02	50
1,1-Dichloroethene	30	J	50	15	ug/L			05/05/15 21:02	50
Acetone	250	U	250	130	ug/L			05/05/15 21:02	50
Carbon disulfide	50	U	50	11	ug/L			05/05/15 21:02	50
Methylene Chloride	39	J	50	6.3	ug/L			05/05/15 21:02	50
trans-1,2-Dichloroethene	50	U	50	8.5	ug/L			05/05/15 21:02	50
Methyl tert-butyl ether	50	U	50	9.2	ug/L			05/05/15 21:02	50
1,1-Dichloroethane	9.9	J	50	5.8	ug/L			05/05/15 21:02	50
cis-1,2-Dichloroethene	720		50	12	ug/L			05/05/15 21:02	50
Bromochloromethane	50	U	50	9.0	ug/L			05/05/15 21:02	50
2-Butanone (MEK)	250	U	250	27	ug/L			05/05/15 21:02	50
Chloroform	50	U	50	8.5	ug/L			05/05/15 21:02	50
1,1,1-Trichloroethane	65		50	14	ug/L			05/05/15 21:02	50
Carbon tetrachloride	50	U	50	6.8	ug/L			05/05/15 21:02	50
Benzene	50	U	50	5.3	ug/L			05/05/15 21:02	50
1,2-Dichloroethane	50	U	50	11	ug/L			05/05/15 21:02	50
Trichloroethene	620		50	7.2	ug/L			05/05/15 21:02	50
1,2-Dichloropropane	50	U	50	4.7	ug/L			05/05/15 21:02	50
Bromodichloromethane	50	U	50	6.5	ug/L			05/05/15 21:02	50
cis-1,3-Dichloropropene	50	U	50	9.3	ug/L			05/05/15 21:02	50
4-Methyl-2-pentanone (MIBK)	250	U	250	26	ug/L			05/05/15 21:02	50
Toluene	50	U	50	7.5	ug/L			05/05/15 21:02	50
trans-1,3-Dichloropropene	50	U	50	7.4	ug/L			05/05/15 21:02	50
1,1,2-Trichloroethane	50	U	50	10	ug/L			05/05/15 21:02	50
Tetrachloroethene	160		50	7.4	ug/L			05/05/15 21:02	50
2-Hexanone	250	U	250	8.0	ug/L			05/05/15 21:02	50
Dibromochloromethane	50	U	50	6.8	ug/L			05/05/15 21:02	50
1,2-Dibromoethane (EDB)	50	U	50	9.0	ug/L			05/05/15 21:02	50
Chlorobenzene	50	U	50	6.8	ug/L			05/05/15 21:02	50
1,1,1,2-Tetrachloroethane	50	U	50	14	ug/L			05/05/15 21:02	50
Ethylbenzene	50	U	50	11	ug/L			05/05/15 21:02	50
Xylenes, Total	150	U	150	24	ug/L			05/05/15 21:02	50
Styrene	50	U	50	4.8	ug/L			05/05/15 21:02	50
Bromoform	50	U	50	9.6	ug/L			05/05/15 21:02	50
1,1,1,2,2-Tetrachloroethane	50	U	50	10	ug/L			05/05/15 21:02	50
Acrylonitrile	1000	U	1000	27	ug/L			05/05/15 21:02	50
1,4-Dioxane	10000	U	10000	1700	ug/L			05/05/15 21:02	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		64 - 135		05/05/15 21:02	50
Toluene-d8 (Surr)	108		71 - 118		05/05/15 21:02	50
4-Bromofluorobenzene (Surr)	102		70 - 118		05/05/15 21:02	50
Dibromofluoromethane (Surr)	105		70 - 128		05/05/15 21:02	50

TestAmerica Pittsburgh

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Client Sample ID: HD-MW-114-0/1-0

Date Collected: 04/23/15 11:11

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	100	U	100	28	ug/L			05/05/15 17:26	100
Vinyl chloride	100	U	100	23	ug/L			05/05/15 17:26	100
Bromomethane	100	U	100	31	ug/L			05/05/15 17:26	100
Chloroethane	100	U	100	21	ug/L			05/05/15 17:26	100
1,1-Dichloroethene	35	J	100	30	ug/L			05/05/15 17:26	100
Acetone	500	U	500	250	ug/L			05/05/15 17:26	100
Carbon disulfide	100	U	100	21	ug/L			05/05/15 17:26	100
Methylene Chloride	80	J	100	13	ug/L			05/05/15 17:26	100
trans-1,2-Dichloroethene	100	U	100	17	ug/L			05/05/15 17:26	100
Methyl tert-butyl ether	100	U	100	18	ug/L			05/05/15 17:26	100
1,1-Dichloroethane	28	J	100	12	ug/L			05/05/15 17:26	100
cis-1,2-Dichloroethene	1900		100	24	ug/L			05/05/15 17:26	100
Bromochloromethane	100	U	100	18	ug/L			05/05/15 17:26	100
2-Butanone (MEK)	500	U	500	55	ug/L			05/05/15 17:26	100
Chloroform	100	U	100	17	ug/L			05/05/15 17:26	100
1,1,1-Trichloroethane	100	U	100	29	ug/L			05/05/15 17:26	100
Carbon tetrachloride	100	U	100	14	ug/L			05/05/15 17:26	100
Benzene	100	U	100	11	ug/L			05/05/15 17:26	100
1,2-Dichloroethane	100	U	100	21	ug/L			05/05/15 17:26	100
Trichloroethene	1800		100	14	ug/L			05/05/15 17:26	100
1,2-Dichloropropane	100	U	100	9.5	ug/L			05/05/15 17:26	100
Bromodichloromethane	100	U	100	13	ug/L			05/05/15 17:26	100
cis-1,3-Dichloropropene	100	U	100	19	ug/L			05/05/15 17:26	100
4-Methyl-2-pentanone (MIBK)	500	U	500	53	ug/L			05/05/15 17:26	100
Toluene	100	U	100	15	ug/L			05/05/15 17:26	100
trans-1,3-Dichloropropene	100	U	100	15	ug/L			05/05/15 17:26	100
1,1,2-Trichloroethane	100	U	100	20	ug/L			05/05/15 17:26	100
Tetrachloroethene	910		100	15	ug/L			05/05/15 17:26	100
2-Hexanone	500	U	500	16	ug/L			05/05/15 17:26	100
Dibromochloromethane	100	U	100	14	ug/L			05/05/15 17:26	100
1,2-Dibromoethane (EDB)	100	U	100	18	ug/L			05/05/15 17:26	100
Chlorobenzene	100	U	100	14	ug/L			05/05/15 17:26	100
1,1,1,2-Tetrachloroethane	100	U	100	28	ug/L			05/05/15 17:26	100
Ethylbenzene	100	U	100	23	ug/L			05/05/15 17:26	100
Xylenes, Total	300	U	300	49	ug/L			05/05/15 17:26	100
Styrene	100	U	100	9.7	ug/L			05/05/15 17:26	100
Bromoform	100	U	100	19	ug/L			05/05/15 17:26	100
1,1,2,2-Tetrachloroethane	100	U	100	20	ug/L			05/05/15 17:26	100
Acrylonitrile	2000	U	2000	55	ug/L			05/05/15 17:26	100
1,4-Dioxane	20000	U	20000	3400	ug/L			05/05/15 17:26	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		64 - 135		05/05/15 17:26	100
Toluene-d8 (Surr)	108		71 - 118		05/05/15 17:26	100
4-Bromofluorobenzene (Surr)	101		70 - 118		05/05/15 17:26	100
Dibromofluoromethane (Surr)	103		70 - 128		05/05/15 17:26	100

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Client Sample ID: HD-MW-132-0/1-0

Date Collected: 04/23/15 13:07

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	40	U	40	11	ug/L			05/06/15 17:39	40
Vinyl chloride	40	U	40	9.1	ug/L			05/06/15 17:39	40
Bromomethane	40	U	40	13	ug/L			05/06/15 17:39	40
Chloroethane	40	U	40	8.6	ug/L			05/06/15 17:39	40
1,1-Dichloroethene	28	J	40	12	ug/L			05/06/15 17:39	40
Acetone	200	U	200	100	ug/L			05/06/15 17:39	40
Carbon disulfide	40	U	40	8.5	ug/L			05/06/15 17:39	40
Methylene Chloride	21	J	40	5.0	ug/L			05/06/15 17:39	40
trans-1,2-Dichloroethene	40	U	40	6.8	ug/L			05/06/15 17:39	40
Methyl tert-butyl ether	40	U	40	7.3	ug/L			05/06/15 17:39	40
1,1-Dichloroethane	16	J	40	4.7	ug/L			05/06/15 17:39	40
cis-1,2-Dichloroethene	640		40	9.5	ug/L			05/06/15 17:39	40
Bromochloromethane	40	U	40	7.2	ug/L			05/06/15 17:39	40
2-Butanone (MEK)	200	U	200	22	ug/L			05/06/15 17:39	40
Chloroform	40	U	40	6.8	ug/L			05/06/15 17:39	40
1,1,1-Trichloroethane	40	U	40	11	ug/L			05/06/15 17:39	40
Carbon tetrachloride	40	U	40	5.5	ug/L			05/06/15 17:39	40
Benzene	40	U	40	4.2	ug/L			05/06/15 17:39	40
1,2-Dichloroethane	40	U	40	8.5	ug/L			05/06/15 17:39	40
Trichloroethene	560		40	5.7	ug/L			05/06/15 17:39	40
1,2-Dichloropropane	40	U	40	3.8	ug/L			05/06/15 17:39	40
Bromodichloromethane	40	U	40	5.2	ug/L			05/06/15 17:39	40
cis-1,3-Dichloropropene	40	U	40	7.5	ug/L			05/06/15 17:39	40
4-Methyl-2-pentanone (MIBK)	200	U	200	21	ug/L			05/06/15 17:39	40
Toluene	40	U	40	6.0	ug/L			05/06/15 17:39	40
trans-1,3-Dichloropropene	40	U	40	5.9	ug/L			05/06/15 17:39	40
1,1,2-Trichloroethane	40	U	40	8.1	ug/L			05/06/15 17:39	40
Tetrachloroethene	40	U	40	5.9	ug/L			05/06/15 17:39	40
2-Hexanone	200	U	200	6.4	ug/L			05/06/15 17:39	40
Dibromochloromethane	40	U	40	5.5	ug/L			05/06/15 17:39	40
1,2-Dibromoethane (EDB)	40	U	40	7.2	ug/L			05/06/15 17:39	40
Chlorobenzene	40	U	40	5.4	ug/L			05/06/15 17:39	40
1,1,1,2-Tetrachloroethane	40	U	40	11	ug/L			05/06/15 17:39	40
Ethylbenzene	40	U	40	9.1	ug/L			05/06/15 17:39	40
Xylenes, Total	120	U	120	20	ug/L			05/06/15 17:39	40
Styrene	40	U	40	3.9	ug/L			05/06/15 17:39	40
Bromoform	40	U	40	7.7	ug/L			05/06/15 17:39	40
1,1,1,2-Tetrachloroethane	40	U	40	8.0	ug/L			05/06/15 17:39	40
Acrylonitrile	800	U	800	22	ug/L			05/06/15 17:39	40
1,4-Dioxane	8000	U	8000	1400	ug/L			05/06/15 17:39	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		64 - 135		05/06/15 17:39	40
Toluene-d8 (Surr)	111		71 - 118		05/06/15 17:39	40
4-Bromofluorobenzene (Surr)	106		70 - 118		05/06/15 17:39	40
Dibromofluoromethane (Surr)	102		70 - 128		05/06/15 17:39	40

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Client Sample ID: HD-MW-51D-0/1-0

Date Collected: 04/23/15 12:30

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	25	U	25	7.1	ug/L			05/06/15 18:26	25
Vinyl chloride	25	U	25	5.7	ug/L			05/06/15 18:26	25
Bromomethane	25	U	25	7.8	ug/L			05/06/15 18:26	25
Chloroethane	25	U	25	5.4	ug/L			05/06/15 18:26	25
1,1-Dichloroethene	40		25	7.4	ug/L			05/06/15 18:26	25
Acetone	130	U	130	63	ug/L			05/06/15 18:26	25
Carbon disulfide	25	U	25	5.3	ug/L			05/06/15 18:26	25
Methylene Chloride	15	J	25	3.1	ug/L			05/06/15 18:26	25
trans-1,2-Dichloroethene	25	U	25	4.2	ug/L			05/06/15 18:26	25
Methyl tert-butyl ether	25	U	25	4.6	ug/L			05/06/15 18:26	25
1,1-Dichloroethane	20	J	25	2.9	ug/L			05/06/15 18:26	25
cis-1,2-Dichloroethene	230		25	5.9	ug/L			05/06/15 18:26	25
Bromochloromethane	25	U	25	4.5	ug/L			05/06/15 18:26	25
2-Butanone (MEK)	130	U	130	14	ug/L			05/06/15 18:26	25
Chloroform	25	U	25	4.3	ug/L			05/06/15 18:26	25
1,1,1-Trichloroethane	16	J	25	7.2	ug/L			05/06/15 18:26	25
Carbon tetrachloride	25	U	25	3.4	ug/L			05/06/15 18:26	25
Benzene	25	U	25	2.6	ug/L			05/06/15 18:26	25
1,2-Dichloroethane	25	U	25	5.3	ug/L			05/06/15 18:26	25
Trichloroethene	420		25	3.6	ug/L			05/06/15 18:26	25
1,2-Dichloropropane	25	U	25	2.4	ug/L			05/06/15 18:26	25
Bromodichloromethane	25	U	25	3.3	ug/L			05/06/15 18:26	25
cis-1,3-Dichloropropene	25	U	25	4.7	ug/L			05/06/15 18:26	25
4-Methyl-2-pentanone (MIBK)	130	U	130	13	ug/L			05/06/15 18:26	25
Toluene	25	U	25	3.8	ug/L			05/06/15 18:26	25
trans-1,3-Dichloropropene	25	U	25	3.7	ug/L			05/06/15 18:26	25
1,1,2-Trichloroethane	25	U	25	5.0	ug/L			05/06/15 18:26	25
Tetrachloroethene	33		25	3.7	ug/L			05/06/15 18:26	25
2-Hexanone	130	U	130	4.0	ug/L			05/06/15 18:26	25
Dibromochloromethane	25	U	25	3.4	ug/L			05/06/15 18:26	25
1,2-Dibromoethane (EDB)	25	U	25	4.5	ug/L			05/06/15 18:26	25
Chlorobenzene	25	U	25	3.4	ug/L			05/06/15 18:26	25
1,1,1,2-Tetrachloroethane	25	U	25	6.9	ug/L			05/06/15 18:26	25
Ethylbenzene	25	U	25	5.7	ug/L			05/06/15 18:26	25
Xylenes, Total	75	U	75	12	ug/L			05/06/15 18:26	25
Styrene	25	U	25	2.4	ug/L			05/06/15 18:26	25
Bromoform	25	U	25	4.8	ug/L			05/06/15 18:26	25
1,1,2,2-Tetrachloroethane	25	U	25	5.0	ug/L			05/06/15 18:26	25
Acrylonitrile	500	U	500	14	ug/L			05/06/15 18:26	25
1,4-Dioxane	5000	U	5000	860	ug/L			05/06/15 18:26	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		64 - 135		05/06/15 18:26	25
Toluene-d8 (Surr)	110		71 - 118		05/06/15 18:26	25
4-Bromofluorobenzene (Surr)	105		70 - 118		05/06/15 18:26	25
Dibromofluoromethane (Surr)	108		70 - 128		05/06/15 18:26	25

TestAmerica Pittsburgh

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-114-0/1-0

Date Collected: 04/23/15 11:11

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.54		0.10	0.0062	mg/L			04/24/15 23:17	1
Chloride	150	B	10	2.0	mg/L			04/24/15 23:30	10
Sulfate	75		1.0	0.21	mg/L			04/24/15 23:17	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-132-0/1-0

Date Collected: 04/23/15 13:07

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	4.2		0.10	0.0062	mg/L			04/24/15 23:43	1
Chloride	12	B	1.0	0.20	mg/L			04/24/15 23:43	1
Sulfate	2.8		1.0	0.21	mg/L			04/24/15 23:43	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-39D-0/1-0

Date Collected: 04/23/15 10:15

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2.8		0.10	0.0062	mg/L			04/24/15 23:56	1
Chloride	91	B	1.0	0.20	mg/L			04/24/15 23:56	1
Sulfate	28		1.0	0.21	mg/L			04/24/15 23:56	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-74S-0/1-0

Date Collected: 04/23/15 09:10

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1.7		0.10	0.0062	mg/L			04/25/15 00:49	1
Chloride	74	B	1.0	0.20	mg/L			04/25/15 00:49	1
Sulfate	14		1.0	0.21	mg/L			04/25/15 00:49	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-127-0/1-0

Date Collected: 04/23/15 11:40

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2.0		0.10	0.0062	mg/L			04/25/15 00:22	1
Chloride	130	B	10	2.0	mg/L			04/25/15 00:36	10
Sulfate	5.6		1.0	0.21	mg/L			04/25/15 00:22	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-51D-0/1-0

Date Collected: 04/23/15 12:30

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.98		0.10	0.0062	mg/L			04/25/15 01:41	1
Chloride	82	B	1.0	0.20	mg/L			04/25/15 01:41	1
Sulfate	37		1.0	0.21	mg/L			04/25/15 01:41	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-50S-0/1-0

Date Collected: 04/23/15 11:30

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2.2		0.10	0.0062	mg/L			04/24/15 21:59	1
Chloride	170	B	10	2.0	mg/L			04/24/15 22:12	10
Sulfate	50		1.0	0.21	mg/L			04/24/15 21:59	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-114-0/1-0

Date Collected: 04/23/15 11:11

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000		500	2.8	ug/L		04/28/15 11:24	05/01/15 14:31	1
Potassium	8100		500	5.8	ug/L		04/28/15 11:24	05/01/15 14:31	1
Magnesium	20000	B	500	1.2	ug/L		04/28/15 11:24	05/01/15 14:31	1
Sodium	35000	B	500	3.8	ug/L		04/28/15 11:24	05/01/15 14:31	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-132-0/1-0

Date Collected: 04/23/15 13:07

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	60000		500	2.8	ug/L		04/28/15 11:24	05/01/15 14:50	1
Potassium	1800		500	5.8	ug/L		04/28/15 11:24	05/01/15 14:50	1
Magnesium	3700	B	500	1.2	ug/L		04/28/15 11:24	05/01/15 14:50	1
Sodium	4500	B	500	3.8	ug/L		04/28/15 11:24	05/01/15 14:50	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-39D-0/1-0

Date Collected: 04/23/15 10:15

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000		500	2.8	ug/L		04/28/15 11:24	05/01/15 14:53	1
Potassium	6900		500	5.8	ug/L		04/28/15 11:24	05/01/15 14:53	1
Magnesium	12000	B	500	1.2	ug/L		04/28/15 11:24	05/01/15 14:53	1
Sodium	27000	B	500	3.8	ug/L		04/28/15 11:24	05/01/15 14:53	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-74S-0/1-0

Date Collected: 04/23/15 09:10

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	92000		500	2.8	ug/L		04/28/15 11:24	05/01/15 14:57	1
Potassium	3200		500	5.8	ug/L		04/28/15 11:24	05/01/15 14:57	1
Magnesium	9700	B	500	1.2	ug/L		04/28/15 11:24	05/01/15 14:57	1
Sodium	24000	B	500	3.8	ug/L		04/28/15 11:24	05/01/15 14:57	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-127-0/1-0

Date Collected: 04/23/15 11:40

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	100000		500	2.8	ug/L		04/28/15 11:24	05/01/15 15:01	1
Potassium	4200		500	5.8	ug/L		04/28/15 11:24	05/01/15 15:01	1
Magnesium	18000	B	500	1.2	ug/L		04/28/15 11:24	05/01/15 15:01	1
Sodium	32000	B	500	3.8	ug/L		04/28/15 11:24	05/01/15 15:01	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-51D-0/1-0

Date Collected: 04/23/15 12:30

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	66000		500	2.8	ug/L		04/28/15 11:24	05/01/15 15:05	1
Potassium	19000		500	5.8	ug/L		04/28/15 11:24	05/01/15 15:05	1
Magnesium	16000	B	500	1.2	ug/L		04/28/15 11:24	05/01/15 15:05	1
Sodium	34000	B	500	3.8	ug/L		04/28/15 11:24	05/01/15 15:05	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-50S-0/1-0

Date Collected: 04/23/15 11:30

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000		500	2.8	ug/L		04/28/15 11:24	05/01/15 15:19	1
Potassium	9400		500	5.8	ug/L		04/28/15 11:24	05/01/15 15:19	1
Magnesium	14000	B	500	1.2	ug/L		04/28/15 11:24	05/01/15 15:19	1
Sodium	46000	B	500	3.8	ug/L		04/28/15 11:24	05/01/15 15:19	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

General Chemistry

Client Sample ID: HD-MW-114-0/1-0

Date Collected: 04/23/15 11:11

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.1	220	B	5.0	0.41	mg/L			05/01/15 05:23	1
Bicarbonate Alkalinity as CaCO3	220	B	5.0	0.41	mg/L			05/01/15 05:23	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			05/01/15 05:23	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

General Chemistry

Client Sample ID: HD-MW-132-0/1-0

Date Collected: 04/23/15 13:07

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	140	B	5.0	0.41	mg/L			05/01/15 05:23	1
Bicarbonate Alkalinity as CaCO3	140	B	5.0	0.41	mg/L			05/01/15 05:23	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			05/01/15 05:23	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

General Chemistry

Client Sample ID: HD-MW-39D-0/1-0

Date Collected: 04/23/15 10:15

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.1	240	B	5.0	0.41	mg/L			05/01/15 05:23	1
Bicarbonate Alkalinity as CaCO3	240	B	5.0	0.41	mg/L			05/01/15 05:23	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			05/01/15 05:23	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

General Chemistry

Client Sample ID: HD-MW-74S-0/1-0

Date Collected: 04/23/15 09:10

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	240	B	5.0	0.41	mg/L			05/01/15 05:23	1
Bicarbonate Alkalinity as CaCO3	240	B	5.0	0.41	mg/L			05/01/15 05:23	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			05/01/15 05:23	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

General Chemistry

Client Sample ID: HD-MW-127-0/1-0

Date Collected: 04/23/15 11:40

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	280	B	5.0	0.41	mg/L			05/01/15 05:23	1
Bicarbonate Alkalinity as CaCO3	280	B	5.0	0.41	mg/L			05/01/15 05:23	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			05/01/15 05:23	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

General Chemistry

Client Sample ID: HD-MW-51D-0/1-0

Date Collected: 04/23/15 12:30

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	210	B	5.0	0.41	mg/L			05/01/15 05:23	1
Bicarbonate Alkalinity as CaCO3	210	B	5.0	0.41	mg/L			05/01/15 05:23	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			05/01/15 05:23	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

General Chemistry

Client Sample ID: HD-MW-50S-0/1-0

Date Collected: 04/23/15 11:30

Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	200	B	5.0	0.41	mg/L			05/01/15 05:23	1
Bicarbonate Alkalinity as CaCO3	200	B	5.0	0.41	mg/L			05/01/15 05:23	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			05/01/15 05:23	1

Default Detection Limits

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	1.0	0.28	ug/L	8260C
1,1,1-Trichloroethane	1.0	0.29	ug/L	8260C
1,1,2,2-Tetrachloroethane	1.0	0.20	ug/L	8260C
1,1,2-Trichloroethane	1.0	0.20	ug/L	8260C
1,1-Dichloroethane	1.0	0.12	ug/L	8260C
1,1-Dichloroethene	1.0	0.30	ug/L	8260C
1,2-Dibromoethane (EDB)	1.0	0.18	ug/L	8260C
1,2-Dichloroethane	1.0	0.21	ug/L	8260C
1,2-Dichloropropane	1.0	0.095	ug/L	8260C
1,4-Dioxane	200	34	ug/L	8260C
2-Butanone (MEK)	5.0	0.55	ug/L	8260C
2-Hexanone	5.0	0.16	ug/L	8260C
4-Methyl-2-pentanone (MIBK)	5.0	0.53	ug/L	8260C
Acetone	5.0	2.5	ug/L	8260C
Acrylonitrile	20	0.55	ug/L	8260C
Benzene	1.0	0.11	ug/L	8260C
Bromochloromethane	1.0	0.18	ug/L	8260C
Bromodichloromethane	1.0	0.13	ug/L	8260C
Bromoform	1.0	0.19	ug/L	8260C
Bromomethane	1.0	0.31	ug/L	8260C
Carbon disulfide	1.0	0.21	ug/L	8260C
Carbon tetrachloride	1.0	0.14	ug/L	8260C
Chlorobenzene	1.0	0.14	ug/L	8260C
Chloroethane	1.0	0.21	ug/L	8260C
Chloroform	1.0	0.17	ug/L	8260C
Chloromethane	1.0	0.28	ug/L	8260C
cis-1,2-Dichloroethene	1.0	0.24	ug/L	8260C
cis-1,3-Dichloropropene	1.0	0.19	ug/L	8260C
Dibromochloromethane	1.0	0.14	ug/L	8260C
Ethylbenzene	1.0	0.23	ug/L	8260C
Methyl tert-butyl ether	1.0	0.18	ug/L	8260C
Methylene Chloride	1.0	0.13	ug/L	8260C
Styrene	1.0	0.097	ug/L	8260C
Tetrachloroethene	1.0	0.15	ug/L	8260C
Toluene	1.0	0.15	ug/L	8260C
trans-1,2-Dichloroethene	1.0	0.17	ug/L	8260C
trans-1,3-Dichloropropene	1.0	0.15	ug/L	8260C
Trichloroethene	1.0	0.14	ug/L	8260C
Vinyl chloride	1.0	0.23	ug/L	8260C
Xylenes, Total	3.0	0.49	ug/L	8260C

Method: 300.0 - Anions, Ion Chromatography

Analyte	RL	MDL	Units	Method
Chloride	1.0	0.20	mg/L	300.0
Nitrate as N	0.10	0.0062	mg/L	300.0
Sulfate	1.0	0.21	mg/L	300.0

Method: 6020A - Metals (ICP/MS)

Analyte	RL	MDL	Units	Method
Calcium	500	2.8	ug/L	6020A

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 6020A - Metals (ICP/MS) (Continued)

Analyte	RL	MDL	Units	Method
Magnesium	500	1.2	ug/L	6020A
Potassium	500	5.8	ug/L	6020A
Sodium	500	3.8	ug/L	6020A

General Chemistry

Analyte	RL	MDL	Units	Method
Bicarbonate Alkalinity as CaCO3	5.0	0.41	mg/L	SM 2320B
Carbonate Alkalinity as CaCO3	5.0	0.41	mg/L	SM 2320B
Total Alkalinity as CaCO3 to pH 4.5	5.0	0.41	mg/L	SM 2320B

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (64-135)	TOL (71-118)	BFB (70-118)	DBFM (70-128)
180-43402-1	HD-QC5-0/1-2	114	105	101	101
180-43402-2 - DL	HD-MW-114-0/1-0	108	108	101	103
180-43402-2	HD-MW-114-0/1-0	116	109	99	106
180-43402-3	HD-MW-132-0/1-0	108	108	102	104
180-43402-3 - DL	HD-MW-132-0/1-0	112	111	106	102
180-43402-4	HD-MW-39D-0/1-0	111	108	100	104
180-43402-5	HD-MW-74S-0/1-0	109	110	104	102
180-43402-6	HD-MW-127-0/1-0	113	109	102	105
180-43402-7	HD-MW-51D-0/1-0	108	106	102	106
180-43402-7 - DL	HD-MW-51D-0/1-0	115	110	105	108
180-43402-8	HD-MW-50S-0/1-0	116	108	102	105
LCS 180-140579/9	Lab Control Sample	111	106	108	107
LCS 180-140724/11	Lab Control Sample	112	104	105	103
LCSD 180-140724/12	Lab Control Sample Dup	116	111	111	106
MB 180-140579/6	Method Blank	109	111	105	102
MB 180-140724/10	Method Blank	109	108	102	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-140579/6

Matrix: Water

Analysis Batch: 140579

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			05/05/15 12:48	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			05/05/15 12:48	1
Bromomethane	1.0	U	1.0	0.31	ug/L			05/05/15 12:48	1
Chloroethane	1.0	U	1.0	0.21	ug/L			05/05/15 12:48	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			05/05/15 12:48	1
Acetone	5.0	U	5.0	2.5	ug/L			05/05/15 12:48	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			05/05/15 12:48	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			05/05/15 12:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			05/05/15 12:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			05/05/15 12:48	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			05/05/15 12:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/05/15 12:48	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			05/05/15 12:48	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			05/05/15 12:48	1
Chloroform	1.0	U	1.0	0.17	ug/L			05/05/15 12:48	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			05/05/15 12:48	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			05/05/15 12:48	1
Benzene	1.0	U	1.0	0.11	ug/L			05/05/15 12:48	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/05/15 12:48	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			05/05/15 12:48	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			05/05/15 12:48	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			05/05/15 12:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/05/15 12:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			05/05/15 12:48	1
Toluene	1.0	U	1.0	0.15	ug/L			05/05/15 12:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			05/05/15 12:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			05/05/15 12:48	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/05/15 12:48	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			05/05/15 12:48	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			05/05/15 12:48	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			05/05/15 12:48	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/05/15 12:48	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			05/05/15 12:48	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			05/05/15 12:48	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			05/05/15 12:48	1
Styrene	1.0	U	1.0	0.097	ug/L			05/05/15 12:48	1
Bromoform	1.0	U	1.0	0.19	ug/L			05/05/15 12:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			05/05/15 12:48	1
Acrylonitrile	20	U	20	0.55	ug/L			05/05/15 12:48	1
1,4-Dioxane	200	U	200	34	ug/L			05/05/15 12:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		64 - 135		05/05/15 12:48	1
Toluene-d8 (Surr)	111		71 - 118		05/05/15 12:48	1
4-Bromofluorobenzene (Surr)	105		70 - 118		05/05/15 12:48	1
Dibromofluoromethane (Surr)	102		70 - 128		05/05/15 12:48	1

TestAmerica Pittsburgh

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-140579/9

Matrix: Water

Analysis Batch: 140579

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	10.5		ug/L		105	50 - 139
Vinyl chloride	10.0	11.2		ug/L		112	53 - 138
Bromomethane	10.0	12.3		ug/L		123	33 - 150
Chloroethane	10.0	12.2		ug/L		122	36 - 142
1,1-Dichloroethene	10.0	11.3		ug/L		113	65 - 136
Acetone	20.0	27.5		ug/L		137	22 - 150
Carbon disulfide	10.0	11.7		ug/L		117	54 - 132
Methylene Chloride	10.0	12.2		ug/L		122	63 - 129
trans-1,2-Dichloroethene	10.0	11.5		ug/L		115	73 - 126
Methyl tert-butyl ether	10.0	10.8		ug/L		108	64 - 123
1,1-Dichloroethane	10.0	12.2		ug/L		122	73 - 126
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	70 - 120
Bromochloromethane	10.0	10.0		ug/L		100	70 - 127
2-Butanone (MEK)	20.0	23.5		ug/L		117	39 - 138
Chloroform	10.0	11.6		ug/L		116	72 - 127
1,1,1-Trichloroethane	10.0	11.3		ug/L		113	63 - 133
Carbon tetrachloride	10.0	10.9		ug/L		109	55 - 150
Benzene	10.0	11.8		ug/L		118	80 - 120
1,2-Dichloroethane	10.0	12.0		ug/L		120	68 - 132
Trichloroethene	10.0	11.1		ug/L		111	73 - 120
1,2-Dichloropropane	10.0	10.9		ug/L		109	76 - 124
Bromodichloromethane	10.0	10.1		ug/L		101	66 - 130
cis-1,3-Dichloropropene	10.0	9.78		ug/L		98	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	17.8		ug/L		89	45 - 145
Toluene	10.0	11.9		ug/L		119	80 - 123
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	65 - 125
1,1,2-Trichloroethane	10.0	10.9		ug/L		109	77 - 127
Tetrachloroethene	10.0	11.1		ug/L		111	70 - 135
2-Hexanone	20.0	19.7		ug/L		98	25 - 132
Dibromochloromethane	10.0	9.55		ug/L		96	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.4		ug/L		104	74 - 123
Chlorobenzene	10.0	11.4		ug/L		114	80 - 120
1,1,1,2-Tetrachloroethane	10.0	10.3		ug/L		103	63 - 140
Ethylbenzene	10.0	11.4		ug/L		114	72 - 126
Xylenes, Total	20.0	22.4		ug/L		112	76 - 128
Styrene	10.0	10.9		ug/L		109	71 - 127
Bromoform	10.0	7.96		ug/L		80	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.9		ug/L		109	62 - 125
1,4-Dioxane	200	175	J	ug/L		87	10 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	111		64 - 135
Toluene-d8 (Surr)	106		71 - 118
4-Bromofluorobenzene (Surr)	108		70 - 118
Dibromofluoromethane (Surr)	107		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-140724/10
Matrix: Water
Analysis Batch: 140724

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			05/06/15 14:50	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			05/06/15 14:50	1
Bromomethane	1.0	U	1.0	0.31	ug/L			05/06/15 14:50	1
Chloroethane	1.0	U	1.0	0.21	ug/L			05/06/15 14:50	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			05/06/15 14:50	1
Acetone	5.0	U	5.0	2.5	ug/L			05/06/15 14:50	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			05/06/15 14:50	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			05/06/15 14:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			05/06/15 14:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			05/06/15 14:50	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			05/06/15 14:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/06/15 14:50	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			05/06/15 14:50	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			05/06/15 14:50	1
Chloroform	1.0	U	1.0	0.17	ug/L			05/06/15 14:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			05/06/15 14:50	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			05/06/15 14:50	1
Benzene	1.0	U	1.0	0.11	ug/L			05/06/15 14:50	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			05/06/15 14:50	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			05/06/15 14:50	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			05/06/15 14:50	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			05/06/15 14:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			05/06/15 14:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			05/06/15 14:50	1
Toluene	1.0	U	1.0	0.15	ug/L			05/06/15 14:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			05/06/15 14:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			05/06/15 14:50	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/06/15 14:50	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			05/06/15 14:50	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			05/06/15 14:50	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			05/06/15 14:50	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			05/06/15 14:50	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			05/06/15 14:50	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			05/06/15 14:50	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			05/06/15 14:50	1
Styrene	1.0	U	1.0	0.097	ug/L			05/06/15 14:50	1
Bromoform	1.0	U	1.0	0.19	ug/L			05/06/15 14:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			05/06/15 14:50	1
Acrylonitrile	20	U	20	0.55	ug/L			05/06/15 14:50	1
1,4-Dioxane	200	U	200	34	ug/L			05/06/15 14:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		64 - 135		05/06/15 14:50	1
Toluene-d8 (Surr)	108		71 - 118		05/06/15 14:50	1
4-Bromofluorobenzene (Surr)	102		70 - 118		05/06/15 14:50	1
Dibromofluoromethane (Surr)	100		70 - 128		05/06/15 14:50	1

TestAmerica Pittsburgh

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-140724/11

Matrix: Water

Analysis Batch: 140724

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	10.0	11.0		ug/L		110	50 - 139
Vinyl chloride	10.0	11.0		ug/L		110	53 - 138
Bromomethane	10.0	11.5		ug/L		115	33 - 150
Chloroethane	10.0	11.8		ug/L		118	36 - 142
1,1-Dichloroethene	10.0	8.56		ug/L		86	65 - 136
Acetone	20.0	22.0		ug/L		110	22 - 150
Carbon disulfide	10.0	8.70		ug/L		87	54 - 132
Methylene Chloride	10.0	11.2		ug/L		112	63 - 129
trans-1,2-Dichloroethene	10.0	9.57		ug/L		96	73 - 126
Methyl tert-butyl ether	10.0	10.1		ug/L		101	64 - 123
1,1-Dichloroethane	10.0	10.1		ug/L		101	73 - 126
cis-1,2-Dichloroethene	10.0	9.23		ug/L		92	70 - 120
Bromochloromethane	10.0	9.77		ug/L		98	70 - 127
2-Butanone (MEK)	20.0	21.6		ug/L		108	39 - 138
Chloroform	10.0	10.2		ug/L		102	72 - 127
1,1,1-Trichloroethane	10.0	9.16		ug/L		92	63 - 133
Carbon tetrachloride	10.0	8.61		ug/L		86	55 - 150
Benzene	10.0	10.1		ug/L		101	80 - 120
1,2-Dichloroethane	10.0	11.5		ug/L		115	68 - 132
Trichloroethene	10.0	9.02		ug/L		90	73 - 120
1,2-Dichloropropane	10.0	10.1		ug/L		101	76 - 124
Bromodichloromethane	10.0	9.32		ug/L		93	66 - 130
cis-1,3-Dichloropropene	10.0	8.80		ug/L		88	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	14.5		ug/L		72	45 - 145
Toluene	10.0	10.1		ug/L		101	80 - 123
trans-1,3-Dichloropropene	10.0	8.41		ug/L		84	65 - 125
1,1,2-Trichloroethane	10.0	10.5		ug/L		105	77 - 127
Tetrachloroethene	10.0	8.99		ug/L		90	70 - 135
2-Hexanone	20.0	22.1		ug/L		111	25 - 132
Dibromochloromethane	10.0	8.21		ug/L		82	60 - 140
1,2-Dibromoethane (EDB)	10.0	9.69		ug/L		97	74 - 123
Chlorobenzene	10.0	9.98		ug/L		100	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.18		ug/L		92	63 - 140
Ethylbenzene	10.0	9.70		ug/L		97	72 - 126
Xylenes, Total	20.0	19.2		ug/L		96	76 - 128
Styrene	10.0	9.85		ug/L		98	71 - 127
Bromoform	10.0	7.51		ug/L		75	46 - 150
1,1,2,2-Tetrachloroethane	10.0	9.98		ug/L		100	62 - 125
1,4-Dioxane	200	102	J	ug/L		51	10 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		64 - 135
Toluene-d8 (Surr)	104		71 - 118
4-Bromofluorobenzene (Surr)	105		70 - 118
Dibromofluoromethane (Surr)	103		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-140724/12
Matrix: Water
Analysis Batch: 140724

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	RPD Limit
							Limits	RPD		
Chloromethane	10.0	12.0		ug/L		120	50 - 139	8	35	
Vinyl chloride	10.0	12.4		ug/L		124	53 - 138	12	35	
Bromomethane	10.0	13.3		ug/L		133	33 - 150	15	35	
Chloroethane	10.0	13.1		ug/L		131	36 - 142	11	35	
1,1-Dichloroethene	10.0	10.0		ug/L		100	65 - 136	16	35	
Acetone	20.0	20.9		ug/L		105	22 - 150	5	35	
Carbon disulfide	10.0	9.65		ug/L		97	54 - 132	10	35	
Methylene Chloride	10.0	11.7		ug/L		117	63 - 129	4	35	
trans-1,2-Dichloroethene	10.0	10.5		ug/L		105	73 - 126	9	35	
Methyl tert-butyl ether	10.0	10.6		ug/L		106	64 - 123	5	35	
1,1-Dichloroethane	10.0	11.1		ug/L		111	73 - 126	9	35	
cis-1,2-Dichloroethene	10.0	9.95		ug/L		99	70 - 120	8	35	
Bromochloromethane	10.0	9.88		ug/L		99	70 - 127	1	35	
2-Butanone (MEK)	20.0	21.0		ug/L		105	39 - 138	3	35	
Chloroform	10.0	11.1		ug/L		111	72 - 127	8	35	
1,1,1-Trichloroethane	10.0	10.4		ug/L		104	63 - 133	13	35	
Carbon tetrachloride	10.0	9.59		ug/L		96	55 - 150	11	35	
Benzene	10.0	10.7		ug/L		107	80 - 120	6	32	
1,2-Dichloroethane	10.0	12.1		ug/L		121	68 - 132	5	32	
Trichloroethene	10.0	10.0		ug/L		100	73 - 120	11	35	
1,2-Dichloropropane	10.0	10.2		ug/L		102	76 - 124	1	34	
Bromodichloromethane	10.0	9.80		ug/L		98	66 - 130	5	35	
cis-1,3-Dichloropropene	10.0	9.18		ug/L		92	66 - 120	4	35	
4-Methyl-2-pentanone (MIBK)	20.0	15.9		ug/L		80	45 - 145	9	35	
Toluene	10.0	11.2		ug/L		112	80 - 123	11	35	
trans-1,3-Dichloropropene	10.0	9.46		ug/L		95	65 - 125	12	35	
1,1,2-Trichloroethane	10.0	10.9		ug/L		109	77 - 127	4	35	
Tetrachloroethene	10.0	10.7		ug/L		107	70 - 135	18	35	
2-Hexanone	20.0	24.1		ug/L		120	25 - 132	9	35	
Dibromochloromethane	10.0	9.15		ug/L		91	60 - 140	11	35	
1,2-Dibromoethane (EDB)	10.0	10.4		ug/L		104	74 - 123	7	35	
Chlorobenzene	10.0	11.0		ug/L		110	80 - 120	10	29	
1,1,1,2-Tetrachloroethane	10.0	9.99		ug/L		100	63 - 140	8	34	
Ethylbenzene	10.0	10.8		ug/L		108	72 - 126	11	33	
Xylenes, Total	20.0	21.2		ug/L		106	76 - 128	10	32	
Styrene	10.0	10.5		ug/L		105	71 - 127	6	34	
Bromoform	10.0	7.53		ug/L		75	46 - 150	0	35	
1,1,2,2-Tetrachloroethane	10.0	10.6		ug/L		106	62 - 125	6	35	
1,4-Dioxane	200	113	J	ug/L		56	10 - 160	10	35	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	116		64 - 135
Toluene-d8 (Surr)	111		71 - 118
4-Bromofluorobenzene (Surr)	111		70 - 118
Dibromofluoromethane (Surr)	106		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 180-139607/6
Matrix: Water
Analysis Batch: 139607

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrate as N	0.10	U	0.10	0.0062	mg/L			04/24/15 18:04	1
Chloride	0.232	J	1.0	0.20	mg/L			04/24/15 18:04	1
Sulfate	1.0	U	1.0	0.21	mg/L			04/24/15 18:04	1

Lab Sample ID: LCS 180-139607/5
Matrix: Water
Analysis Batch: 139607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	52.6		mg/L		105	90 - 110
Sulfate	50.0	46.9		mg/L		94	90 - 110

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: 180-43402-2 MS
Matrix: Water
Analysis Batch: 140450

Client Sample ID: HD-MW-114-0/1-0
Prep Type: Total/NA
Prep Batch: 139894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	8100		50000	54000		ug/L		92	75 - 125
Magnesium	20000	B	50000	58500		ug/L		77	75 - 125
Sodium	35000	B	50000	72900		ug/L		77	75 - 125

Lab Sample ID: 180-43402-2 MSD
Matrix: Water
Analysis Batch: 140450

Client Sample ID: HD-MW-114-0/1-0
Prep Type: Total/NA
Prep Batch: 139894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
										RPD	Limit
Calcium	120000		50000	181000		ug/L		117	75 - 125	4	20
Potassium	8100		50000	56300		ug/L		96	75 - 125	4	20
Magnesium	20000	B	50000	60900		ug/L		82	75 - 125	4	20
Sodium	35000	B	50000	74800		ug/L		81	75 - 125	3	20

Lab Sample ID: MB 180-139894/1-A
Matrix: Water
Analysis Batch: 140450

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 139894

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	500	U	500	2.8	ug/L		04/28/15 11:24	05/01/15 14:12	1
Potassium	500	U	500	5.8	ug/L		04/28/15 11:24	05/01/15 14:12	1
Magnesium	3.31	J	500	1.2	ug/L		04/28/15 11:24	05/01/15 14:12	1
Sodium	30.0	J	500	3.8	ug/L		04/28/15 11:24	05/01/15 14:12	1

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-139894/2-A
Matrix: Water
Analysis Batch: 140450

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 139894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	52000		ug/L		104	80 - 120
Potassium	50000	48600		ug/L		97	80 - 120
Magnesium	50000	43000		ug/L		86	80 - 120
Sodium	50000	42600		ug/L		85	80 - 120

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-140221/2
Matrix: Water
Analysis Batch: 140221

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	2.01	J	5.0	0.41	mg/L			05/01/15 05:23	1
Bicarbonate Alkalinity as CaCO3	2.01	J	5.0	0.41	mg/L			05/01/15 05:23	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			05/01/15 05:23	1

Lab Sample ID: MB 180-140221/27
Matrix: Water
Analysis Batch: 140221

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	2.01	J	5.0	0.41	mg/L			05/01/15 05:23	1
Bicarbonate Alkalinity as CaCO3	2.01	J	5.0	0.41	mg/L			05/01/15 05:23	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			05/01/15 05:23	1

Lab Sample ID: LCS 180-140221/1
Matrix: Water
Analysis Batch: 140221

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	250	275		mg/L		110	80 - 120

Lab Sample ID: LCS 180-140221/26
Matrix: Water
Analysis Batch: 140221

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	250	275		mg/L		110	80 - 120

Lab Sample ID: 180-43402-2 DU
Matrix: Water
Analysis Batch: 140221

Client Sample ID: HD-MW-114-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	220	B	215		mg/L		0	20
Bicarbonate Alkalinity as CaCO3	220	B	215		mg/L		0	20
Carbonate Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	20

TestAmerica Pittsburgh

QC Association Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

GC/MS VOA

Analysis Batch: 140579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43402-1	HD-QC5-0/1-2	Total/NA	Water	8260C	
180-43402-2 - DL	HD-MW-114-0/1-0	Total/NA	Water	8260C	
180-43402-3	HD-MW-132-0/1-0	Total/NA	Water	8260C	
180-43402-5	HD-MW-74S-0/1-0	Total/NA	Water	8260C	
180-43402-6	HD-MW-127-0/1-0	Total/NA	Water	8260C	
180-43402-7	HD-MW-51D-0/1-0	Total/NA	Water	8260C	
180-43402-8	HD-MW-50S-0/1-0	Total/NA	Water	8260C	
LCS 180-140579/9	Lab Control Sample	Total/NA	Water	8260C	
MB 180-140579/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 140724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43402-2	HD-MW-114-0/1-0	Total/NA	Water	8260C	
180-43402-3 - DL	HD-MW-132-0/1-0	Total/NA	Water	8260C	
180-43402-4	HD-MW-39D-0/1-0	Total/NA	Water	8260C	
180-43402-7 - DL	HD-MW-51D-0/1-0	Total/NA	Water	8260C	
LCS 180-140724/11	Lab Control Sample	Total/NA	Water	8260C	
LCSD 180-140724/12	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 180-140724/10	Method Blank	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 139607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43402-2	HD-MW-114-0/1-0	Total/NA	Water	300.0	
180-43402-2	HD-MW-114-0/1-0	Total/NA	Water	300.0	
180-43402-3	HD-MW-132-0/1-0	Total/NA	Water	300.0	
180-43402-4	HD-MW-39D-0/1-0	Total/NA	Water	300.0	
180-43402-5	HD-MW-74S-0/1-0	Total/NA	Water	300.0	
180-43402-6	HD-MW-127-0/1-0	Total/NA	Water	300.0	
180-43402-6	HD-MW-127-0/1-0	Total/NA	Water	300.0	
180-43402-7	HD-MW-51D-0/1-0	Total/NA	Water	300.0	
180-43402-8	HD-MW-50S-0/1-0	Total/NA	Water	300.0	
180-43402-8	HD-MW-50S-0/1-0	Total/NA	Water	300.0	
LCS 180-139607/5	Lab Control Sample	Total/NA	Water	300.0	
MB 180-139607/6	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 139894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43402-2	HD-MW-114-0/1-0	Total/NA	Water	3005A	
180-43402-2 MS	HD-MW-114-0/1-0	Total/NA	Water	3005A	
180-43402-2 MSD	HD-MW-114-0/1-0	Total/NA	Water	3005A	
180-43402-2 PDS	HD-MW-114-0/1-0	Total/NA	Water	3005A	
180-43402-2 SD	HD-MW-114-0/1-0	Total/NA	Water	3005A	
180-43402-3	HD-MW-132-0/1-0	Total/NA	Water	3005A	
180-43402-4	HD-MW-39D-0/1-0	Total/NA	Water	3005A	
180-43402-5	HD-MW-74S-0/1-0	Total/NA	Water	3005A	
180-43402-6	HD-MW-127-0/1-0	Total/NA	Water	3005A	

TestAmerica Pittsburgh

QC Association Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Metals (Continued)

Prep Batch: 139894 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43402-7	HD-MW-51D-0/1-0	Total/NA	Water	3005A	
180-43402-8	HD-MW-50S-0/1-0	Total/NA	Water	3005A	
LCS 180-139894/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 180-139894/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 140450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43402-2	HD-MW-114-0/1-0	Total/NA	Water	6020A	139894
180-43402-2 MS	HD-MW-114-0/1-0	Total/NA	Water	6020A	139894
180-43402-2 MSD	HD-MW-114-0/1-0	Total/NA	Water	6020A	139894
180-43402-2 PDS	HD-MW-114-0/1-0	Total/NA	Water	6020A	139894
180-43402-2 SD	HD-MW-114-0/1-0	Total/NA	Water	6020A	139894
180-43402-3	HD-MW-132-0/1-0	Total/NA	Water	6020A	139894
180-43402-4	HD-MW-39D-0/1-0	Total/NA	Water	6020A	139894
180-43402-5	HD-MW-74S-0/1-0	Total/NA	Water	6020A	139894
180-43402-6	HD-MW-127-0/1-0	Total/NA	Water	6020A	139894
180-43402-7	HD-MW-51D-0/1-0	Total/NA	Water	6020A	139894
180-43402-8	HD-MW-50S-0/1-0	Total/NA	Water	6020A	139894
CRI 180-140450/7	DL		Water	6020A	
CRI 180-140450/76	DL		Water	6020A	
ICSA 180-140450/8	ICS		Water	6020A	
ICSAB 180-140450/9	ICS		Water	6020A	
LCS 180-139894/2-A	Lab Control Sample	Total Recoverable	Water	6020A	139894
MB 180-139894/1-A	Method Blank	Total Recoverable	Water	6020A	139894

General Chemistry

Analysis Batch: 140221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43402-2	HD-MW-114-0/1-0	Total/NA	Water	SM 2320B	
180-43402-2 DU	HD-MW-114-0/1-0	Total/NA	Water	SM 2320B	
180-43402-3	HD-MW-132-0/1-0	Total/NA	Water	SM 2320B	
180-43402-4	HD-MW-39D-0/1-0	Total/NA	Water	SM 2320B	
180-43402-5	HD-MW-74S-0/1-0	Total/NA	Water	SM 2320B	
180-43402-6	HD-MW-127-0/1-0	Total/NA	Water	SM 2320B	
180-43402-7	HD-MW-51D-0/1-0	Total/NA	Water	SM 2320B	
180-43402-8	HD-MW-50S-0/1-0	Total/NA	Water	SM 2320B	
LCS 180-140221/1	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 180-140221/26	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 180-140221/2	Method Blank	Total/NA	Water	SM 2320B	
MB 180-140221/27	Method Blank	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Client Sample ID: HD-QC5-0/1-2

Lab Sample ID: 180-43402-1

Date Collected: 04/23/15 12:00

Matrix: Water

Date Received: 04/24/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	140579	05/05/15 19:26	DLF	TAL PIT
Instrument ID: CHHP6										

Client Sample ID: HD-MW-114-0/1-0

Lab Sample ID: 180-43402-2

Date Collected: 04/23/15 11:11

Matrix: Water

Date Received: 04/24/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	100	5 mL	5 mL	140579	05/05/15 17:26	DLF	TAL PIT
Instrument ID: CHHP6										
Total/NA	Analysis	8260C		10	5 mL	5 mL	140724	05/06/15 23:14	DLF	TAL PIT
Instrument ID: CHHP6										
Total/NA	Analysis	300.0		1	1 mL		139607	04/24/15 23:17	MJH	TAL PIT
Instrument ID: CHIC25										
Total/NA	Analysis	300.0		10	1 mL		139607	04/24/15 23:30	MJH	TAL PIT
Instrument ID: CHIC25										
Total/NA	Prep	3005A			50 mL	50 mL	139894	04/28/15 11:24	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	140450	05/01/15 14:31	CNF	TAL PIT
Instrument ID: M										
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	140221	05/01/15 05:23	CLL	TAL PIT
Instrument ID: NOEQUIP										

Client Sample ID: HD-MW-132-0/1-0

Lab Sample ID: 180-43402-3

Date Collected: 04/23/15 13:07

Matrix: Water

Date Received: 04/24/15 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	5 mL	5 mL	140579	05/05/15 17:50	DLF	TAL PIT
Instrument ID: CHHP6										
Total/NA	Analysis	8260C	DL	40	5 mL	5 mL	140724	05/06/15 17:39	DLF	TAL PIT
Instrument ID: CHHP6										
Total/NA	Analysis	300.0		1	1 mL		139607	04/24/15 23:43	MJH	TAL PIT
Instrument ID: CHIC25										
Total/NA	Prep	3005A			50 mL	50 mL	139894	04/28/15 11:24	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	140450	05/01/15 14:50	CNF	TAL PIT
Instrument ID: M										
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	140221	05/01/15 05:23	CLL	TAL PIT
Instrument ID: NOEQUIP										

Lab Chronicle

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Client Sample ID: HD-MW-39D-0/1-0
Date Collected: 04/23/15 10:15
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		3	5 mL	5 mL	140724	05/06/15 18:02	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		139607	04/24/15 23:56	MJH	TAL PIT
	Instrument ID: CHIC25									
Total/NA	Prep	3005A			50 mL	50 mL	139894	04/28/15 11:24	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	140450	05/01/15 14:53	CNF	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	140221	05/01/15 05:23	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-MW-74S-0/1-0
Date Collected: 04/23/15 09:10
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	140579	05/05/15 19:02	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		139607	04/25/15 00:49	MJH	TAL PIT
	Instrument ID: CHIC25									
Total/NA	Prep	3005A			50 mL	50 mL	139894	04/28/15 11:24	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	140450	05/01/15 14:57	CNF	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	140221	05/01/15 05:23	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-MW-127-0/1-0
Date Collected: 04/23/15 11:40
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	5 mL	5 mL	140579	05/05/15 19:50	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		139607	04/25/15 00:22	MJH	TAL PIT
	Instrument ID: CHIC25									
Total/NA	Analysis	300.0		10	1 mL		139607	04/25/15 00:36	MJH	TAL PIT
	Instrument ID: CHIC25									
Total/NA	Prep	3005A			50 mL	50 mL	139894	04/28/15 11:24	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	140450	05/01/15 15:01	CNF	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	140221	05/01/15 05:23	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Client Sample ID: HD-MW-51D-0/1-0
Date Collected: 04/23/15 12:30
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	140579	05/05/15 20:14	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	8260C	DL	25	5 mL	5 mL	140724	05/06/15 18:26	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		139607	04/25/15 01:41	MJH	TAL PIT
	Instrument ID: CHIC25									
Total/NA	Prep	3005A			50 mL	50 mL	139894	04/28/15 11:24	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	140450	05/01/15 15:05	CNF	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	140221	05/01/15 05:23	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-MW-50S-0/1-0
Date Collected: 04/23/15 11:30
Date Received: 04/24/15 08:30

Lab Sample ID: 180-43402-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	5 mL	5 mL	140579	05/05/15 21:02	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		139607	04/24/15 21:59	MJH	TAL PIT
	Instrument ID: CHIC25									
Total/NA	Analysis	300.0		10	1 mL		139607	04/24/15 22:12	MJH	TAL PIT
	Instrument ID: CHIC25									
Total/NA	Prep	3005A			50 mL	50 mL	139894	04/28/15 11:24	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	140450	05/01/15 15:19	CNF	TAL PIT
	Instrument ID: M									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	140221	05/01/15 05:23	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

AB1 = Ashwin Baikadi

Batch Type: Analysis

CLL = Cheryl Loheyde

CNF = Caitlin Ferguson

DLF = Donald Ferguson

MJH = Matthew Hartman

Certification Summary

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-15
California	State Program	9	2891	03-31-16
Connecticut	State Program	1	PH-0688	09-30-16
Florida	NELAP	4	E871008	06-30-15
Illinois	NELAP	5	002602	06-30-15
Kansas	NELAP	7	E-10350	05-31-15 *
Louisiana	NELAP	6	04041	06-30-15
New Hampshire	NELAP	1	203011	04-04-16
New Jersey	NELAP	2	PA005	06-30-15
New York	NELAP	2	11182	03-31-16
North Carolina (WW/SW)	State Program	4	434	12-31-15
Pennsylvania	NELAP	3	02-00416	04-30-16
South Carolina	State Program	4	89014	04-30-15 *
Texas	NELAP	6	T104704528	03-31-16
US Fish & Wildlife	Federal		LE94312A-1	11-30-15
USDA	Federal		P-Soil-01	05-23-16
Utah	NELAP	8	STLP	05-31-15
Virginia	NELAP	3	460189	09-14-15
West Virginia DEP	State Program	3	142	01-31-16
Wisconsin	State Program	5	998027800	08-31-15

* Certification renewal pending - certification considered valid.

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT
300.0	Anions, Ion Chromatography	MCAWW	TAL PIT
6020A	Metals (ICP/MS)	SW846	TAL PIT
SM 2320B	Alkalinity	SM	TAL PIT

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43402-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-43402-1	HD-QC5-0/1-2	Water	04/23/15 12:00	04/24/15 08:30
180-43402-2	HD-MW-114-0/1-0	Water	04/23/15 11:11	04/24/15 08:30
180-43402-3	HD-MW-132-0/1-0	Water	04/23/15 13:07	04/24/15 08:30
180-43402-4	HD-MW-39D-0/1-0	Water	04/23/15 10:15	04/24/15 08:30
180-43402-5	HD-MW-74S-0/1-0	Water	04/23/15 09:10	04/24/15 08:30
180-43402-6	HD-MW-127-0/1-0	Water	04/23/15 11:40	04/24/15 08:30
180-43402-7	HD-MW-51D-0/1-0	Water	04/23/15 12:30	04/24/15 08:30
180-43402-8	HD-MW-50S-0/1-0	Water	04/23/15 11:30	04/24/15 08:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHHP6 Analysis Batch Number: 140280Lab Sample ID: IC 180-140280/3 Client Sample ID: _____Date Analyzed: 05/01/15 13:53 Lab File ID: 60501003.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.24	Baseline	fergusond	05/02/15 10:38
Dichlorofluoromethane	2.66	Baseline	fergusond	05/02/15 10:38

Lab Sample ID: IC 180-140280/6 Client Sample ID: _____Date Analyzed: 05/01/15 14:17 Lab File ID: 60501006.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.05	Peak Tail	fergusond	05/02/15 10:42

Lab Sample ID: ICIS 180-140280/7 Client Sample ID: _____Date Analyzed: 05/01/15 14:41 Lab File ID: 60501007.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.04	Peak Tail	fergusond	05/02/15 10:12

Lab Sample ID: IC 180-140280/8 Client Sample ID: _____Date Analyzed: 05/01/15 15:06 Lab File ID: 60501008.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.04	Peak Tail	fergusond	05/02/15 10:45

Lab Sample ID: IC 180-140280/9 Client Sample ID: _____Date Analyzed: 05/01/15 15:31 Lab File ID: 60501009.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.25	Baseline	fergusond	05/02/15 10:49
1,4-Dioxane	8.03	Peak Tail	fergusond	05/02/15 10:49

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHHP6 Analysis Batch Number: 140280Lab Sample ID: IC 180-140280/10 Client Sample ID: _____Date Analyzed: 05/01/15 15:56 Lab File ID: 60501010.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.23	Peak Tail	fergusond	05/02/15 10:57

Lab Sample ID: IC 180-140280/11 Client Sample ID: _____Date Analyzed: 05/01/15 16:20 Lab File ID: 60501011.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.04	Poor chromatography	fergusond	05/02/15 11:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHHP6 Analysis Batch Number: 140579Lab Sample ID: LCS 180-140579/9 Client Sample ID: _____Date Analyzed: 05/05/15 14:35 Lab File ID: 60505009.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.04	Peak Tail	fergusond	05/05/15 14:53

Lab Sample ID: 180-43402-2 DL Client Sample ID: HD-MW-114-0/1-0 DLDate Analyzed: 05/05/15 17:26 Lab File ID: 60505016.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.20	Peak Not Integrated	fergusond	05/06/15 07:22

Lab Sample ID: 180-43402-6 Client Sample ID: HD-MW-127-0/1-0Date Analyzed: 05/05/15 19:50 Lab File ID: 60505022.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.19	Peak Not Integrated	fergusond	05/06/15 07:45

Lab Sample ID: 180-43402-7 Client Sample ID: HD-MW-51D-0/1-0Date Analyzed: 05/05/15 20:14 Lab File ID: 60505023.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.45	Poor chromatography	fergusond	05/06/15 07:50

Lab Sample ID: 180-43402-8 Client Sample ID: HD-MW-50S-0/1-0Date Analyzed: 05/05/15 21:02 Lab File ID: 60505025.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.21	Peak Not Integrated	fergusond	05/06/15 07:52

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHHP6 Analysis Batch Number: 140724

Lab Sample ID: CCVIS 180-140724/7 Client Sample ID: _____

Date Analyzed: 05/06/15 13:37 Lab File ID: 60506007.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Peak Tail	fergusond	05/06/15 14:06

Lab Sample ID: LCS 180-140724/11 Client Sample ID: _____

Date Analyzed: 05/06/15 15:38 Lab File ID: 60506011.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.03	Peak Tail	fergusond	05/06/15 16:03

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHIC25 Analysis Batch Number: 139491

Lab Sample ID: IC 180-139491/2 Client Sample ID: _____

Date Analyzed: 04/23/15 18:40 Lab File ID: 04-23-1502.0000.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.11	Baseline	hartmanm	04/24/15 15:19
Chloride	2.98	Baseline	hartmanm	04/24/15 15:19
Nitrite as N	3.54	Baseline	hartmanm	04/24/15 15:19
Bromide	4.45	Baseline	hartmanm	04/24/15 15:19
Nitrate as N	5.21	Baseline	hartmanm	04/24/15 15:19
Orthophosphate as P	7.01	Baseline	hartmanm	04/24/15 15:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHIC25 Analysis Batch Number: 139607

Lab Sample ID: CCB 180-139607/4 Client Sample ID: _____

Date Analyzed: 04/24/15 17:38 Lab File ID: 04-24-1504.0000.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.81	Baseline	hartmanm	04/24/15 18:02

Lab Sample ID: MB 180-139607/6 Client Sample ID: _____

Date Analyzed: 04/24/15 18:04 Lab File ID: 04-24-1506.0000.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.78	Baseline	hartmanm	04/24/15 19:29

Lab Sample ID: CCB 180-139607/28 Client Sample ID: _____

Date Analyzed: 04/24/15 22:51 Lab File ID: 04-24-1528.0000.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.92	Baseline	hartmanm	04/25/15 09:04

Lab Sample ID: 180-43402-2 Client Sample ID: HD-MW-114-0/1-0

Date Analyzed: 04/24/15 23:30 Lab File ID: 04-24-1531.0000.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.96	Baseline	hartmanm	04/25/15 09:18

Lab Sample ID: 180-43402-6 Client Sample ID: HD-MW-127-0/1-0

Date Analyzed: 04/25/15 00:36 Lab File ID: 04-24-1536.0000.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.96	Baseline	hartmanm	04/25/15 09:19

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHIC25 Analysis Batch Number: 139607

Lab Sample ID: CCB 180-139607/40 Client Sample ID: _____

Date Analyzed: 04/25/15 01:28 Lab File ID: 04-24-1540.0000.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.94	Baseline	hartmanm	04/25/15 09:06

Lab Sample ID: CCB 180-139607/46 Client Sample ID: _____

Date Analyzed: 04/25/15 02:46 Lab File ID: 04-24-1546.0000.d GC Column: AS-14 ID: _____

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloride	2.93	Baseline	hartmanm	04/25/15 09:07

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
icccv_01220	04/24/15	04/23/15	DI Water, Lot 0	15 mL	ICPRIMARYSTA_00006	0.3 mL	Chloride	50 ug/mL
							Nitrate as N	2.5 ug/mL
							Sulfate	50 ug/mL
.ICPRIMARYSTA_00006	10/08/15		HIGH-PURITY STDS, Lot 1427624		(Purchased Reagent)		Chloride	2500 ug/mL
							Nitrate as N	125 ug/mL
							Sulfate	2500 ug/mL
iciev_01251	04/24/15	04/23/15	DI Water, Lot NA	5 mL	ICSECONDSTD1_00005	0.6 mL	Chloride	60 ug/mL
							Nitrate as N	3 ug/mL
							Sulfate	60 ug/mL
.ICSECONDSTD1_00005	03/01/16		inorganic ventures, Lot J2-MEB568059		(Purchased Reagent)		Chloride	500 ug/mL
							Nitrate as N	25 ug/mL
							Sulfate	500 ug/mL
ICSTDL2_00173	04/25/15	04/23/15	DI Water, Lot SUPER Q	5 mL	ICSTDL6_00215	0.1 mL	Bromide	0.2 ug/mL
							Chloride	1 ug/mL
							Fluoride	0.05 ug/mL
							Nitrate as N	0.05 ug/mL
							Orthophosphate as P	0.05 ug/mL
							Sulfate	1 ug/mL
Nitrite as N	0.05 ug/mL							
.ICSTDL6_00215	04/25/15	04/23/15	DI Water, Lot SUPER Q	5 mL	ICPRIMARYSTA_00006	0.1 mL	Bromide	10 ug/mL
							Chloride	50 ug/mL
							Fluoride	2.5 ug/mL
							Nitrate as N	2.5 ug/mL
							Orthophosphate as P	2.5 ug/mL
							Sulfate	50 ug/mL
..ICPRIMARYSTA_00006	10/08/15		HIGH-PURITY STDS, Lot 1427624		ICPRIMARYSTDB_00008	0.1 mL	Nitrite as N	2.5 ug/mL
							Bromide	500 ug/mL
							Chloride	2500 ug/mL
							Fluoride	125 ug/mL
							Nitrate as N	125 ug/mL
							Orthophosphate as P	125 ug/mL
..ICPRIMARYSTDB_00008	10/08/15		HIGH-PURITY STDS, Lot 1427626		(Purchased Reagent)		Sulfate	2500 ug/mL
							Nitrite as N	125 ug/mL
							Bromide	500 ug/mL
							Chloride	2500 ug/mL
							Fluoride	125 ug/mL
							Nitrate as N	125 ug/mL
ICSTDL3_00211	04/25/15	04/23/15	DI Water, Lot SUPER Q	5 mL	ICSTDL6_00215	0.5 mL	Bromide	1 ug/mL
							Chloride	5 ug/mL
							Fluoride	0.25 ug/mL
							Nitrate as N	0.25 ug/mL
							Orthophosphate as P	0.25 ug/mL
							Sulfate	5 ug/mL
Nitrite as N	0.25 ug/mL							
.ICSTDL6_00215	04/25/15	04/23/15	DI Water, Lot SUPER Q	5 mL	ICPRIMARYSTA_00006	0.1 mL	Bromide	10 ug/mL
							Chloride	50 ug/mL
							Fluoride	2.5 ug/mL
							Nitrate as N	2.5 ug/mL
							Orthophosphate as P	2.5 ug/mL
							Sulfate	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..ICPRIMARYSTA_00006	10/08/15		HIGH-PURITY STDS, Lot 1427624		ICPRIMARYSTDB_00008	0.1 mL	Nitrite as N	2.5 ug/mL
							Bromide	500 ug/mL
							Chloride	2500 ug/mL
							Fluoride	125 ug/mL
							Nitrate as N	125 ug/mL
							Orthophosphate as P	125 ug/mL
..ICPRIMARYSTDB_00008	10/08/15		HIGH-PURITY STDS, Lot 1427626		(Purchased Reagent)		Nitrite as N	125 ug/mL
ICSTDL4_00144	04/25/15	04/23/15	DI Water, Lot na	5 mL	ICSTDL7_00142	0.5 mL	Bromide	2 ug/mL
							Chloride	10 ug/mL
							Fluoride	0.5 ug/mL
							Nitrate as N	0.5 ug/mL
							Orthophosphate as P	0.5 ug/mL
							Sulfate	10 ug/mL
.ICSTDL7_00142	04/25/15	04/23/15	DI Water, Lot SUPER Q	5 mL	ICPRIMARYSTA_00006	0.2 mL	Bromide	20 ug/mL
							Chloride	100 ug/mL
							Fluoride	5 ug/mL
							Nitrate as N	5 ug/mL
							Orthophosphate as P	5 ug/mL
							Sulfate	100 ug/mL
..ICPRIMARYSTA_00006	10/08/15		HIGH-PURITY STDS, Lot 1427624		ICPRIMARYSTDB_00008	0.2 mL	Nitrite as N	5 ug/mL
							Bromide	500 ug/mL
							Chloride	2500 ug/mL
							Fluoride	125 ug/mL
							Nitrate as N	125 ug/mL
							Orthophosphate as P	125 ug/mL
..ICPRIMARYSTDB_00008	10/08/15		HIGH-PURITY STDS, Lot 1427626		(Purchased Reagent)		Nitrite as N	125 ug/mL
ICSTDL5_00146	04/25/15	04/23/15	DI Water, Lot SUPER Q	5 mL	ICSTDL7_00142	1 mL	Bromide	4 ug/mL
							Chloride	20 ug/mL
							Fluoride	1 ug/mL
							Nitrate as N	1 ug/mL
							Orthophosphate as P	1 ug/mL
							Sulfate	20 ug/mL
.ICSTDL7_00142	04/25/15	04/23/15	DI Water, Lot SUPER Q	5 mL	ICPRIMARYSTA_00006	0.2 mL	Bromide	20 ug/mL
							Chloride	100 ug/mL
							Fluoride	5 ug/mL
							Nitrate as N	5 ug/mL
							Orthophosphate as P	5 ug/mL
							Sulfate	100 ug/mL
..ICPRIMARYSTA_00006	10/08/15		HIGH-PURITY STDS, Lot 1427624		ICPRIMARYSTDB_00008	0.2 mL	Nitrite as N	5 ug/mL
							Bromide	500 ug/mL
							Chloride	2500 ug/mL
							Fluoride	125 ug/mL
							Nitrate as N	125 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Orthophosphate as P	125 ug/mL
							Sulfate	2500 ug/mL
..ICPRIMARYSTDB_00008	10/08/15		HIGH-PURITY STDS, Lot 1427626			(Purchased Reagent)	Nitrite as N	125 ug/mL
ICSTDL6_00215	04/25/15	04/23/15	DI Water, Lot SUPER Q	5 mL	ICPRIMARYSTA_00006	0.1 mL	Bromide	10 ug/mL
							Chloride	50 ug/mL
							Fluoride	2.5 ug/mL
							Nitrate as N	2.5 ug/mL
							Orthophosphate as P	2.5 ug/mL
							Sulfate	50 ug/mL
					ICPRIMARYSTDB_00008	0.1 mL	Nitrite as N	2.5 ug/mL
.ICPRIMARYSTA_00006	10/08/15		HIGH-PURITY STDS, Lot 1427624			(Purchased Reagent)	Bromide	500 ug/mL
							Chloride	2500 ug/mL
							Fluoride	125 ug/mL
							Nitrate as N	125 ug/mL
							Orthophosphate as P	125 ug/mL
							Sulfate	2500 ug/mL
.ICPRIMARYSTDB_00008	10/08/15		HIGH-PURITY STDS, Lot 1427626			(Purchased Reagent)	Nitrite as N	125 ug/mL
ICSTDL7_00142	04/25/15	04/23/15	DI Water, Lot SUPER Q	5 mL	ICPRIMARYSTA_00006	0.2 mL	Bromide	20 ug/mL
							Chloride	100 ug/mL
							Fluoride	5 ug/mL
							Nitrate as N	5 ug/mL
							Orthophosphate as P	5 ug/mL
							Sulfate	100 ug/mL
					ICPRIMARYSTDB_00008	0.2 mL	Nitrite as N	5 ug/mL
.ICPRIMARYSTA_00006	10/08/15		HIGH-PURITY STDS, Lot 1427624			(Purchased Reagent)	Bromide	500 ug/mL
							Chloride	2500 ug/mL
							Fluoride	125 ug/mL
							Nitrate as N	125 ug/mL
							Orthophosphate as P	125 ug/mL
							Sulfate	2500 ug/mL
.ICPRIMARYSTDB_00008	10/08/15		HIGH-PURITY STDS, Lot 1427626			(Purchased Reagent)	Nitrite as N	125 ug/mL
MCCV1X_00075	06/01/15	05/01/15	2% Nitric Acid, Lot 1241747	500 mL	MCALSPECAREV_00006	10 mL	Calcium	50 ppm
							Magnesium	50 ppm
							Potassium	50 ppm
							Sodium	50 ppm
.MCALSPECAREV_00006	06/01/16		Inorganic Ventures, Lot J2-MEB575123			(Purchased Reagent)	Calcium	2500 ppm
							Magnesium	2500 ppm
							Potassium	2500 ppm
							Sodium	2500 ppm
MCR1X_00066	05/29/15	04/29/15	HNO3, Lot 1191081	250 mL	MMSCRI-1B_00005	1 mL	Calcium	0.5 ppm
							Magnesium	0.5 ppm
							Potassium	0.5 ppm
							Sodium	0.5 ppm
.MMSCRI-1B_00005	04/01/16		Inorganic Ventures, Lot J2-MEB572092			(Purchased Reagent)	Calcium	125 ppm
							Magnesium	125 ppm
							Potassium	125 ppm

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sodium	125 ppm
MICSABX_00070	06/01/15	05/01/15	2% Nitric Acid, Lot J38N82	100 mL	M6020ICS-0A_00005	10 mL	Al	100 ppm
							Calcium	100 ppm
							Fe	100 ppm
							Magnesium	100 ppm
							Mo	2 ppm
							Potassium	100 ppm
							Sodium	100 ppm
					M6020ICS-0B_00006	1 mL	Ti	2 ppm
							Ag	0.02 ppm
							As	0.02 ppm
							Cd	0.02 ppm
							Co	0.02 ppm
							Cr	0.02 ppm
							Cu	0.02 ppm
					MMSICSAB-1_00008	0.2 mL	Mn	0.0225 ppm
							Ni	0.02 ppm
							Zn	0.025 ppm
							Ba	0.02 ppm
							Be	0.02 ppm
							Pb	0.02 ppm
MMSICSAB-2_00007	0.2 mL	Sr	0.025 ppm					
		Tl	0.02 ppm					
		V	0.02 ppm					
		B	0.05 ppm					
		Sb	0.02 ppm					
.M6020ICS-0A_00005	09/01/15	Inorganic Ventures, Lot G2-MEB476152MCA	(Purchased Reagent)	Se	0.05 ppm			
				Sn	0.1 ppm			
				Al	1000 ppm			
				Calcium	1000 ppm			
				Fe	1000 ppm			
				Magnesium	1000 ppm			
				Mo	20 ppm			
.M6020ICS-0B_00006	09/01/15	Inorganic Ventures, Lot G2-MEB463151	(Purchased Reagent)	Potassium	1000 ppm			
				Sodium	1000 ppm			
				Ti	20 ppm			
				Ag	2 ppm			
				As	2 ppm			
				Cd	2 ppm			
				Co	2 ppm			
.MMSICSAB-1_00008	06/01/16	Inorganic Ventures, Lot J2-MEB575125	(Purchased Reagent)	Cr	2 ppm			
				Cu	2 ppm			
				Mn	2.25 ppm			
				Ni	2 ppm			
				Zn	2.5 ppm			
				Ba	10 ppm			
				Be	10 ppm			

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MMSICSAB-2_00007	06/01/16		Inorganic Ventures, Lot J2-MEB575126			(Purchased Reagent)	Pb	10 ppm
							Sr	12.5 ppm
							Tl	10 ppm
							V	10 ppm
							B	25 ppm
.MICSAX_00065	05/14/15	04/14/15	DI Water, Lot J38N82	100 mL	M6020ICS-0A_00005	10 mL	Al	100 ppm
							Calcium	100 ppm
							Fe	100 ppm
							Magnesium	100 ppm
							Mo	2 ppm
.M6020ICS-0A_00005	09/01/15		Inorganic Ventures, Lot G2-MEB476152MCA			(Purchased Reagent)	Potassium	100 ppm
							Sodium	100 ppm
							Ti	2 ppm
							Al	1000 ppm
							Calcium	1000 ppm
.MICVX_00031	05/09/15	04/09/15	2% Nitric Acid, Lot 25106	250 mg/L	MICPMSICV_00018	10 mg/L	Ca	40 mg/L
							Mg	40 mg/L
							K	40 mg/L
							Na	40 mg/L
							Al	1000 ppm
.MICPMSICV_00018	11/30/15		SPEX CertiPrep, Lot 7-230WL			(Purchased Reagent)	Mg	1000 ppm
							K	1000 ppm
							Na	1000 ppm
							Ca	1000 ppm
							Al	1000 ppm
.MSTD2X_00046	06/01/15	05/01/15	DI Water, Lot 1241717	250 mL	MCALSPECAREV_00006	10 mg/L	Ca	100 ppm
							Mg	100 ppm
							K	100 ppm
							Na	100 ppm
							Al	100 ppm
.MCALSPECAREV_00006	06/01/16		Inorganic Ventures, Lot J2-MEB575123			(Purchased Reagent)	Ca	2500 ppm
							Mg	2500 ppm
							K	2500 ppm
							Na	2500 ppm
							Al	2500 ppm
.MTAPITTICPMS_00020	07/01/15		INORGANIC VENTURES, Lot H2-MEB532047			(Purchased Reagent)	Ag	5 ug/mL
							Al	200 ug/mL
							As	4 ug/mL
							B	100 ug/mL
							Ba	200 ug/mL
							Be	5 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cd	5 ug/mL
							Co	50 ug/mL
							Cr	20 ug/mL
							Cu	25 ug/mL
							Fe	100 ug/mL
							Mn	50 ug/mL
							Ni	50 ug/mL
							Pb	2 ug/mL
							Se	1 ug/mL
							Sr	100 ug/mL
							Tl	5 ug/mL
							V	50 ug/mL
							Zn	50 ug/mL
MTAPITMSA_00023	12/01/15		INORGANIC VENTURES, Lot H2-MEB532044			(Purchased Reagent)	Calcium	5000 ug/mL
							Magnesium	5000 ug/mL
							Potassium	5000 ug/mL
							Sodium	5000 ug/mL
MTAPITMSC_00029	12/01/15		Inorganic Ventures, Lot H2-MEB532046			(Purchased Reagent)	Mo	100 ug/mL
							Sb	50 ug/mL
							Si	1000 ug/mL
							SiO2	2140 ug/mL
							Sn	200 ug/mL
							Ti	100 ug/mL
VOA8260INT_00032	05/15/15	04/15/15	Methanol, Lot 85233	10 mL	VOA8260INTRES_00095	1 mL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Fluorobenzene (IS)	25 ug/mL
							TBA-d9 (IS)	500 ug/mL
.VOA8260INTRES_00095	07/31/19		Restek, Lot A0104742			(Purchased Reagent)	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_00034	04/15/16	04/15/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00084	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.VOA8260SURRES_00084	04/30/19		Restek, Lot A0102817			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260SURR_00035	06/01/15	05/01/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00089	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.VOA8260SURRES_00089	04/30/19		Restek, Lot A0102817			(Purchased Reagent)	1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration		
					Reagent ID	Volume Added				
							Toluene-d8 (Surr)	2500 ug/mL		
VOA8260VOA2ND_00114	05/08/15	05/01/15	Methanol, Lot 85233	10 mL	VOA8260GAS2ND_00096	0.1 mL	Bromomethane	25 ug/mL		
							Chloroethane	25 ug/mL		
							Chloromethane	25 ug/mL		
							Vinyl chloride	25 ug/mL		
							VOA8260VOA2ND_00112	1.25 mL	1,1,1,2-Tetrachloroethane	25 ug/mL
									1,1,1-Trichloroethane	25 ug/mL
									1,1,2,2-Tetrachloroethane	25 ug/mL
									1,1,2-Trichloroethane	25 ug/mL
									1,1-Dichloroethane	25 ug/mL
					1,1-Dichloroethene	25 ug/mL				
					1,2-Dibromoethane (EDB)	25 ug/mL				
					1,2-Dichloroethane	25 ug/mL				
					1,2-Dichloropropane	25 ug/mL				
					1,4-Dioxane	500 ug/mL				
					Acrylonitrile	250 ug/mL				
					Benzene	25 ug/mL				
					Bromochloromethane	25 ug/mL				
					Bromodichloromethane	25 ug/mL				
					Bromoform	25 ug/mL				
					Carbon disulfide	25 ug/mL				
					Carbon tetrachloride	25 ug/mL				
					Chlorobenzene	25 ug/mL				
					Chloroform	25 ug/mL				
					cis-1,2-Dichloroethene	25 ug/mL				
					cis-1,3-Dichloropropene	25 ug/mL				
					Dibromochloromethane	25 ug/mL				
					Ethylbenzene	25 ug/mL				
Methyl tert-butyl ether	25 ug/mL									
Methylene Chloride	25 ug/mL									
Styrene	25 ug/mL									
Tetrachloroethene	25 ug/mL									
Toluene	25 ug/mL									
trans-1,2-Dichloroethene	25 ug/mL									
trans-1,3-Dichloropropene	25 ug/mL									
Trichloroethene	25 ug/mL									
Xylenes, Total	50 ug/mL									
.VOA8260GAS2ND_00096	01/31/18		Restek, Lot A0108226			(Purchased Reagent)	Bromomethane	2500 ug/mL		
							Chloroethane	2500 ug/mL		
							Chloromethane	2500 ug/mL		
							Vinyl chloride	2500 ug/mL		
.VOA8260VOA2ND_00112	05/17/15	04/17/15	Methanol, Lot 85233	10 mL	VOA8260MEGA2_00034	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL		
							1,1,1-Trichloroethane	200 ug/mL		
							1,1,2,2-Tetrachloroethane	200 ug/mL		
							1,1,2-Trichloroethane	200 ug/mL		
							1,1-Dichloroethane	200 ug/mL		
1,1-Dichloroethene	200 ug/mL									

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromochloromethane	200 ug/mL
							Bromodichloromethane	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Dibromochloromethane	200 ug/mL
							Ethylbenzene	200 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylene Chloride	200 ug/mL
							Styrene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							Trichloroethene	200 ug/mL
							Xylenes, Total	400 ug/mL
..VOA8260MEGA2_00034	02/01/16		Restek, Lot A093733			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2-Dibromoethane (EDB)	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	4000 ug/mL
VOA8260VOAPRI_00114	05/08/15	05/01/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00096	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00111	1.25 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
trans-1,2-Dichloroethene	25 ug/mL							
trans-1,3-Dichloropropene	25 ug/mL							
trans-1,4-Dichloro-2-butene	25 ug/mL							
Trichloroethene	25 ug/mL							
.VOA8260GAS1ST_00096	01/31/18		Restek, Lot A0108198			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL

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SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00111	05/17/15	04/17/15	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00042	0.16 mL	2-Butanone (MEK)	200 ug/mL
							2-Hexanone	200 ug/mL
							4-Methyl-2-pentanone (MIBK)	200 ug/mL
							Acetone	200 ug/mL
					VOA8260MEGA1_00031	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropane	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							2,2-Dichloropropane	200 ug/mL
							2-Chlorotoluene	200 ug/mL
							2-Methyl-2-propanol	2000 ug/mL
							3-Chloro-1-propene	200 ug/mL
							4-Chlorotoluene	200 ug/mL
							4-Isopropyltoluene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromobenzene	200 ug/mL
							Bromochloromethane	200 ug/mL
							Bromodichloromethane	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	200 ug/mL
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Cyclohexane	200 ug/mL
							Dibromochloromethane	200 ug/mL
							Dibromomethane	200 ug/mL
							Ethyl ether	200 ug/mL
							Ethyl methacrylate	200 ug/mL
							Ethylbenzene	200 ug/mL
							Hexachlorobutadiene	200 ug/mL
							Hexane	200 ug/mL
							Iodomethane	200 ug/mL
							Isobutyl alcohol	5000 ug/mL
							Isopropylbenzene	200 ug/mL
							m-Xylene & p-Xylene	200 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylcyclohexane	200 ug/mL
							Methylene Chloride	200 ug/mL
							n-Butylbenzene	200 ug/mL
							n-Heptane	200 ug/mL
							N-Propylbenzene	200 ug/mL
							Naphthalene	200 ug/mL
							o-Xylene	200 ug/mL
							sec-Butylbenzene	200 ug/mL
							Styrene	200 ug/mL
							tert-Butylbenzene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Tetrahydrofuran	400 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							trans-1,4-Dichloro-2-butene	200 ug/mL
							Trichloroethene	200 ug/mL
..VOA8260KET1ST_00042	01/31/18		Restek, Lot A0108151			(Purchased Reagent)	2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VOA8260MEGA1_00031	02/28/16		Restek, Lot A093581			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane (EDB)	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							2-Methyl-2-propanol	20000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Acrylonitrile	20000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromochloromethane	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Cyclohexane	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethyl ether	2000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Hexane	2000 ug/mL
							Iodomethane	2000 ug/mL
							Isobutyl alcohol	50000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methyl acetate	10000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Heptane	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Tetrahydrofuran	4000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
VOA8260VOAPRI_00114	05/08/15	05/01/15	Methanol, Lot 85233	10 mL	VOA8260VOAPRI_00111	1.25 mL	Xylenes, Total	50 ug/mL
.VOA8260VOAPRI_00111	05/17/15	04/17/15	Methanol, Lot 85233	10 mL	VOA8260MEGA1_00031	1 mL	Xylenes, Total	400 ug/mL
.VOA8260MEGA1_00031	02/28/16		Restek, Lot A093581		(Purchased Reagent)		Xylenes, Total	4000 ug/mL
VOAACROPRI_00005	05/31/15	05/01/15	Methanol, Lot 85233	100 mL	VOAACRORES_00067	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00067	05/31/15		Restek, Lot A0108734		(Purchased Reagent)		Acrolein	20000 ug/mL
voaWeemixPRI_00002	05/14/15	04/14/15	Methanol, Lot 85233	25 mL	VOARESEE1ST_00019	0.125 mL	1,2-dichloro-4-(trifluoromethyl)benzene	25 ug/mL
							2,3,6-Trichlorotoluene	25 ug/mL
							2,4,5-Trichlorotoluene	25 ug/mL
							2,4-Dichloro-1-(trifluoromethyl)-benzene	25 ug/mL
							2,5-Dichlorobenzotrifluoride	25 ug/mL
							2-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorobenzotrifluoride	25 ug/mL
							3-Chlorotoluene	25 ug/mL
							4-Chlorobenzotrifluoride	25 ug/mL
.VOARESEE1ST_00019	09/30/16		Restek, Lot A0109701		(Purchased Reagent)		1,2-dichloro-4-(trifluoromethyl)benzene	5000 ug/mL
							2,3,6-Trichlorotoluene	5000 ug/mL
							2,4,5-Trichlorotoluene	5000 ug/mL
							2,4-Dichloro-1-(trifluoromethyl)-benzene	5000 ug/mL
							2,5-Dichlorobenzotrifluoride	5000 ug/mL
							2-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorobenzotrifluoride	5000 ug/mL
							3-Chlorotoluene	5000 ug/mL
							4-Chlorobenzotrifluoride	5000 ug/mL
voaWKet2n Res_00001	05/25/15	04/25/15	Methanol, Lot 85233	50 mL	VOA8260KET2ND_00045	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET2ND_00045	01/31/18		Restek, Lot A0108157		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
voaWketPri Re_00005	06/01/15	05/01/15	Methanol, Lot 85233	50 mL	VOA8260KET1ST_00041	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET1ST_00041	01/31/18		Restek, Lot A0108151		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
voaWVA2ndRes_00001	05/25/15	04/25/15	Methanol, Lot 85233	25 mL	VOA8260VARES2_00050	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES2_00050	07/31/15		Restek, Lot A0108224		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
WALK125PPMCCV_00084	10/28/15	04/28/15	DI Water, Lot SUPERQ	1000 mL	WNa2CO3P_00007	0.125 g	Total Alkalinity as CaCO3 to pH 4.5	125 mg/L
.WNa2CO3P_00007	07/09/18		Fisher Scientific, Lot 138124		(Purchased Reagent)		Total Alkalinity as CaCO3 to pH 4.5	1 g/g
WALK250PPMPi_00093	10/28/15	04/28/15	DI Water, Lot Super Q	1000 mL	WNa2CO3P_00007	0.25 g	Total Alkalinity as CaCO3 to pH 4.5	250 mg/L
.WNa2CO3P_00007	07/09/18		Fisher Scientific, Lot 138124		(Purchased Reagent)		Total Alkalinity as CaCO3 to pH 4.5	1 g/g

Reagent

ICPRIMARYSTA_00006

Certificate of Analysis

Product Description:

Name: IC Spike
Part Number: SM-606-005 Solution A
Lot Number: 1427624
Matrix: H₂O
Purity: 99.1+%

Certified Values:

Component	Certified Value (µg/mL)	NIST SRM ID	NIST SRM Lot #
Bromide	500 ± 5	3184	020701
Chloride	2500 ± 25	3182	060925
Fluoride	125.00 ± 1.25	3183	050721
NO ₃ as N	125.00 ± 1.25	3185	050517
PO ₄ as P	125.00 ± 1.25	3186	090723
Sulfate	2500 ± 25	3181	080603

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via ion chromatography (IC) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Preparation Information:

Custom standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials. Highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by IC for conformity prior to use. The matrix is 18 megohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. Standard Weight and Analytical Balance

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. Volumetric Device

The calibration of volumetric vessels is checked annually using the ASTM method E542.

Lot No.: 1427624
Rev. No.: 3.2.1
Page 1 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

c. **Thermometer**

The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**

The Calibration Standards are traceable to SRM 3100 Series Spectrometric Standard Solutions.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided.

Preparation Date: October 3, 2014

Shipped Date: October 8, 2014

Expiration Date: October 8, 2015

Certificate Issue Date: October 8, 2014

Quality Information:



ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

A handwritten signature in cursive script, appearing to read "Angel Sellers".

Angel Sellers,
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Lot No.: 1427624
Rev. No.: 3.2.1
Page 2 of 2

High-Purity Standards is certified to ISO 9001:2008 and accredited to ISO/IEC 17025:2005 and ISO Guide 34:2009.

Reagent

ICPRIMARYSTDB_00008

Certificate of Analysis

Product Description:

Name:	IC Spike	Source Material:	Sodium Nitrite
Part Number:	SM-606-005 Solution B	Material Purity:	100%
Lot Number:	1427626	Matrix:	H ₂ O

Certified Value:

NO₂ as N 125.00 µg/mL ± 1.25 µg/mL

The Certified value is based on gravimetric preparation and verified against a second source or independent lot via ion chromatography (IC) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

Preparation Information:

The highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by analytical methods for conformity prior to use. This standard was prepared using methods developed at NIST for the preparation of SRM Spectrometric Standard Solutions. The matrix is 18 megohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**

The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**

The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**

The Calibration Standard is traceable to a second source or independent lot.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Refer to Material Safety Datasheet (MSDS) for hazardous information.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided.

Preparation Date: October 3, 2014
Shipped Date: October 8, 2014
Expiration Date: October 8, 2015
Certificate Issue Date: October 8, 2014

Quality Information:



ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

A handwritten signature in cursive script that reads "Angel Sellers".

Angel Sellers,
Quality Manager

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Lot No.: 1427626
Rev. No.: 3.2.1
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Reagent

ICSECONDSTD1_00005

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105)).


2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Ion Chromatography Solution
 Catalog Number: TA-17
 Lot Number: J2-MEB568059
 Matrix: H₂O
 Value / Analyte(s):
 500 mg/L ea: Chloride, Sulfate,
 100 mg/L ea: Bromide,
 25 mg/L ea: Fluoride, Nitrate_as_N, oPhosphate_as_P

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Bromide	100.0 ± 0.6 mg/L	Chloride	500.1 ± 2.9 mg/L		
Fluoride	25.01 ± 0.13 mg/L	Nitrate as N	25.00 ± 0.14 mg/L		
o-Phosphate as P	25.00 ± 0.12 mg/L	Sulfate	500.1 ± 2.6 mg/L		

Certified Density: 0.999 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Bromide	IC Assay	3184	020701
Bromide	Volhard	999b	999b
Chloride	IC Assay	194	392607
Chloride	Volhard	999b	999b
Fluoride	Calculated		See Sec. 4.2
Fluoride	IC Assay	3183	050721
Nitrate_as_N	IC Assay	3185	050517
oPhosphate_as_P	IC Assay	3186	090723
Sulfate	Calculated		See Sec. 4.2
Sulfate	IC Assay	3181	080603

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ $(\bar{x}) = \text{mean}$

$x_i = \text{individual results}$
 $n = \text{number of measurements}$

Uncertainty $(\pm) = 2 [\sum (s_i)^2]^{1/2}$

$2 = \text{the coverage factor.}$

$[\sum (s_i)^2]^{1/2} = \text{The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.}$

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 18, 2015

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date

EXPIRES
1st 2016

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

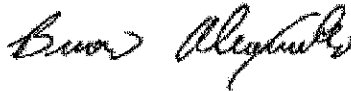
Certificate Prepared By:

Christy Shortridge
Product Documentation Technician



* Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

M6020ICS-0A_00005

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."



2.0 **DESCRIPTION OF CRM** **Stock Solution**

Catalog No.: 6020ICS-0A

Lot Number: **G2-MEB476152MCA**

Matrix: 1.4% HNO₃(v/v)

10,000 µg/mL ea:

Chloride,

2,000 µg/mL ea:

C,

1,000 µg/mL ea:

Al, Ca, Fe, K, Mg, Na, P, S,

20 µg/mL ea:

Mo, Ti

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	1,002 ± 6 µg/mL	Calcium, Ca	1,002 ± 6 µg/mL	Carbon, C	2,004 ± 13 µg/mL
Chloride, Chloride	10,020.0 ± 50.0 µg/mL	Iron, Fe	1,002 ± 7 µg/mL	Magnesium, Mg	1,002 ± 4 µg/mL
Molybdenum, Mo	20.04 ± 0.14 µg/mL	Phosphorus, P	1,002 ± 7 µg/mL	Potassium, K	1,002 ± 4 µg/mL
Sodium, Na	1,002 ± 7 µg/mL	Sulfur, S	1,002 ± 5 µg/mL	Titanium, Ti	20.04 ± 0.13 µg/mL

Certified Density: 1.034 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

- "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
- This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.
- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
C	Gravimetric		See Sec. 4.2
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Chloride	Acidimetric	84L	84L
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	010728
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84k	84k
Ti	ICP Assay	3162a	060808

- 4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).
- 4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.
- 4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL

Custom-Grade solutions are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

<u>s</u> Al	<u>M</u> Dy < 0.000100	<u>O</u> Li 0.002000	<u>M</u> Pr < 0.000100	<u>M</u> Te < 0.012007
<u>M</u> Sb < 0.000600	<u>M</u> Er < 0.000100	<u>M</u> Lu < 0.000100	<u>M</u> Re < 0.000100	<u>M</u> Tb < 0.000100
<u>O</u> As < 0.020000	<u>M</u> Eu < 0.000100	<u>s</u> Mg	<u>M</u> Rh < 0.000100	<u>M</u> Tl < 0.000100
<u>O</u> Ba < 0.000200	<u>M</u> Gd < 0.000100	<u>O</u> Mn 0.003000	<u>M</u> Rb < 0.020012	<u>M</u> Th < 0.000100
<u>O</u> Be < 0.000090	<u>M</u> Ga < 0.001001	<u>O</u> Hg < 0.005000	<u>M</u> Ru < 0.000100	<u>M</u> Tm < 0.000100
<u>M</u> Bi < 0.005003	<u>O</u> Ge < 0.015000	<u>s</u> Mo	<u>M</u> Sm < 0.000100	<u>M</u> Sn < 0.003002
<u>O</u> B < 0.005000	<u>M</u> Au < 0.001001	<u>M</u> Nd < 0.000100	<u>O</u> Sc < 0.000700	<u>s</u> Tl
<u>O</u> Cd 0.003400	<u>M</u> Hf < 0.002001	<u>O</u> Ni < 0.002000	<u>M</u> Se < 0.050029	<u>O</u> W < 0.007000
<u>s</u> Ca	<u>M</u> Ho < 0.000100	<u>M</u> Nb < 0.002001	<u>n</u> Si	<u>M</u> U < 0.000100
<u>M</u> Ce < 0.000500	<u>M</u> In < 0.001001	<u>n</u> Os	<u>M</u> Ag < 0.001001	<u>O</u> V < 0.004000
<u>M</u> Cs < 0.001001	<u>M</u> Ir < 0.000100	<u>M</u> Pd < 0.003002	<u>s</u> Na	<u>M</u> Yb < 0.000100
<u>O</u> Cr < 0.010000	<u>s</u> Fe	<u>s</u> P	<u>O</u> Sr 0.005000	<u>M</u> Y < 0.000100
<u>M</u> Co < 0.001001	<u>M</u> La < 0.000200	<u>M</u> Pt < 0.000100	<u>s</u> S	<u>M</u> Zn 0.016610
<u>O</u> Cu < 0.020000	<u>M</u> Pb 0.002001	<u>s</u> K	<u>M</u> Ta < 0.001001	<u>M</u> Zr < 0.004002

M - Checked by ICP-MS

O - Checked by ICP-OES

i - Spectral Interference

n - Not Checked For

s - Solution Standard Element

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
 HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
 For the validation of analytical methods
 For the preparation of "working reference samples"
 For interference studies and the determination of correction coefficients
 For detection limit and linearity studies
 For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

- 10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105
- 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01
- 10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02
- 10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities
- 10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

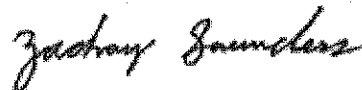
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: July 12, 2013

Expiration Date: **EXPIRES**
01st 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician



Certificate Approved By: Allyson Guilliams
Quality Control Supervisor



Certifying Officer: Paul Gaines
PhD., Senior Technical Director



Reagent

M6020ICS-0B_00006

1.0 INORGANIC VENTURES is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."



2.0 DESCRIPTION OF CRM Stock Solution

Catalog No.: 6020ICS-0B

Lot Number: **G2-MEB463151**

Matrix: 3% HNO₃(v/v)

2 µg/mL ea:

Ag, As, Cd, Co, Cr₃, Cu, Mn, Ni, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Arsenic, As	2.000 ± 0.013 µg/mL	Gadmiun, Cd	2.000 ± 0.013 µg/mL	Chromium+3, Cr3	2.000 ± 0.013 µg/mL
Cobalt, Co	2.000 ± 0.013 µg/mL	Copper, Cu	2.000 ± 0.013 µg/mL	Manganese, Mn	2.000 ± 0.013 µg/mL
Nickel, Ni	2.000 ± 0.013 µg/mL	Silver, Ag	2.000 ± 0.013 µg/mL	Zinc, Zn	2.000 ± 0.013 µg/mL

Certified Density: 1.012 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 [\sum (s_i)^2]^{1/2}$$

2 = the coverage factor.

$[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a NIST SRM/RM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Zn	ICP Assay	3168a	080123
Zn	EDTA	928	928

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

- 10.1 **ISO 9001 Quality Management System Registration**
- SAI Global File Number 010105
- 10.2 **ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"**
- Chemical Testing - Accredited A2LA Certificate Number 883.01
- 10.3 **ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"**
- Reference Materials Production - Accredited A2LA Certificate Number 883.02
- 10.4 **10CFR50 Appendix B - Nuclear Regulatory Commission**
- Domestic Licensing of Production and Utilization Facilities
- 10.5 **10CFR21 - Nuclear Regulatory Commission**
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 **Shelf Life** - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 **Expiration Date** - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

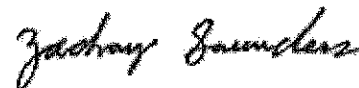
11.3 **Chemical Stability** - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: March 25, 2013

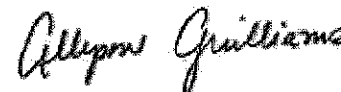
Expiration Date: EXPIRES
01st 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician



Certificate Approved By: Allyson Guilliams
Quality Control Supervisor



Certifying Officer: Paul Gaines
PhD., Senior Technical Director

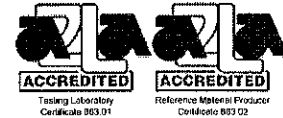


Reagent

MCALSPECAREV_00006

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).


2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TAPITT-CAL-SPECA-REV

Lot Number: J2-MEB575123

Matrix: 3% (v/v) HNO₃

Value / Analyte(s): 2 500 µg/mL ea:
 Ca, K, Mg,
 Na,
 1 250 µg/mL ea:
 Fe,
 25 µg/mL ea:
 Al, Mn,
 5 µg/mL ea:
 Ag, As, Ba,
 Be, Cd, Co,
 Cr₃, Cu, Ni,
 Pb, Se, Sr,
 Tl, V, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	25.01 ± 0.13 µg/mL	Arsenic, As	5.000 ± 0.032 µg/mL
Barium, Ba	4.997 ± 0.028 µg/mL	Beryllium, Be	5.003 ± 0.032 µg/mL
Cadmium, Cd	4.998 ± 0.032 µg/mL	Calcium, Ca	2 500 ± 11 µg/mL
Chromium+3, Cr ₃	4.999 ± 0.028 µg/mL	Cobalt, Co	4.999 ± 0.025 µg/mL
Copper, Cu	4.998 ± 0.032 µg/mL	Iron, Fe	1 260 ± 6 µg/mL
Lead, Pb	4.999 ± 0.025 µg/mL	Magnesium, Mg	2 500 ± 12 µg/mL
Manganese, Mn	24.99 ± 0.12 µg/mL	Nickel, Ni	4.998 ± 0.028 µg/mL
Potassium, K	2 500 ± 11 µg/mL	Selenium, Se	4.998 ± 0.028 µg/mL
Silver, Ag	4.998 ± 0.036 µg/mL	Sodium, Na	2 500 ± 11 µg/mL
Strontium, Sr	5.002 ± 0.032 µg/mL	Thallium, Tl	4.999 ± 0.040 µg/mL
Vanadium, V	5.002 ± 0.032 µg/mL	Zinc, Zn	5.001 ± 0.028 µg/mL

Certified Density: 1.048 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	060502
As	EDTA		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean
 x_i = individual results
 n = number of measurements

$$\text{Uncertainty } (\pm) = 2 [\sum (s_i)^2]^{1/2}$$

2 = the coverage factor.
 $[\sum (s_i)^2]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at $20 \pm 4^\circ \text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 27, 2015

11.2 Expiration Date

EXPIRES
1 #2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

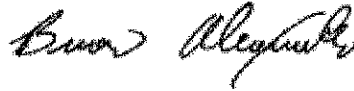
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MICPMSICV_00018



Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material



Chemical Testing
Cert #2495.02

Catalog Number: ZCAL-60-250 **Lot No.** 7-230WL
Description: Custom Claritas Standard
Matrix: 5% HNO₃ / Tr. Tart. Acid / Tr. HF

This CLARITAS PPT® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Uncertainty	SRM	Analyte	Labeled	Uncertainty	SRM
Ca	1000 µg/mL	±5 µg/mL	3109a*	Co	2 µg/mL	±0.01 µg/mL	3113*
K	1000 µg/mL	±5 µg/mL	3141a*	Cr	2 µg/mL	±0.01 µg/mL	3112a*
Mg	1000 µg/mL	±5 µg/mL	3131a*	Cu	2 µg/mL	±0.01 µg/mL	3114*
Na	1000 µg/mL	±5 µg/mL	3152a*	Mo	2 µg/mL	±0.01 µg/mL	3134*
Fe	500 µg/mL	±3 µg/mL	3126a*	Ni	2 µg/mL	±0.01 µg/mL	3136*
Si	100 µg/mL	±0.5 µg/mL	3150*	Pb	2 µg/mL	±0.01 µg/mL	3128*
Al	10 µg/mL	±0.05 µg/mL	3101a*	Sb	2 µg/mL	±0.01 µg/mL	3102a*
Mn	10 µg/mL	±0.05 µg/mL	3132*	Se	2 µg/mL	±0.01 µg/mL	3149*
Ag	2 µg/mL	±0.01 µg/mL	3151*	Sn	2 µg/mL	±0.01 µg/mL	3161a*
As	2 µg/mL	±0.01 µg/mL	3103a*	Sr	2 µg/mL	±0.01 µg/mL	3153a*
B	2 µg/mL	±0.01 µg/mL	3107*	Ti	2 µg/mL	±0.01 µg/mL	3162a*
Ba	2 µg/mL	±0.01 µg/mL	3104a*	Tl	2 µg/mL	±0.01 µg/mL	3158*
Be	2 µg/mL	±0.01 µg/mL	3105a*	V	2 µg/mL	±0.01 µg/mL	3165*
Cd	2 µg/mL	±0.01 µg/mL	3108*	Zn	2 µg/mL	±0.01 µg/mL	3168a*

* - indicates NIST SRM † - Indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# ALL 8

Trace Metallic Impurities in the Actual Solution via ICP-MS Analysis:

Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L
Au	<0.4	Ga	<2	Ir	<0.1	Pd	<1	Sc	30	Tm	5
Bi	<1	Gd	4	La	5	Pr	5	Sm	<4	U	0.08
Ce	6	Ge	<8	Li	<4	Pt	<0.1	Ta	7	W	10
Cs	<0.08	Hf	0.7	Lu	4	Rb	30	Tb	5	Y	5
Dy	4	Hg	<0.6	Nb	5	Re	4	Te	<4	Yb	4
Er	<0.4	Ho	5	Nd	<3	Rh	<0.2	Th	4	Zr	7
Eu	<0.5	In	<0.2	P	<300	Ru	<2				

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the labeled value. This includes uncertainty components due to preparation, measurement, homogeneity, short-term and long-term stability, as well as transpiration loss. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification: NOV 2014

Certifying Officer: [Signature]

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements – certified by UL-DQS
- ISO 17025: General requirements for the competence of testing and calibration laboratories – accredited by A2LA
- ISO Guide 34: General requirements for the competence of reference material producers – accredited by A2LA
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- ISO Guide 35: Reference Materials – General & Statistical Principles for Certification
- Guide To The Expression Of Uncertainty In Measurement 1997
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference materials producers
- ISO/REMCO N280

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = k u_c$ where k = 2 is the coverage factor at the 95% confidence level
- u_c is obtained by combining the individual element standard uncertainty components u_i , and $u_c = \sqrt{\sum u_i^2}$

Certification Traveler Report:

All certified values reported were derived from the Traveler Report (SPEX CertiPrep's traceability documentation) identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Legal Notice:

SPEX CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep, Inc. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep, Inc. be liable for any loss of profits or any incidental, special, or consequential damages.

SPEX CertiPrep 

Your Science is Our Passion.®

203 Norcross Ave, Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Page 109 of 715
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647



Reagent

MMSCRI-1B_00005

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).


2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution			
Catalog Number:	TAPITT-MSCRI-1B-REV1			
Lot Number:	J2-MEB572092			
Matrix:	3% (v/v) HNO ₃			
Value / Analyte(s):	125 µg/mL ea:			
	Ca,	K,	Mg,	Na,
	12.5 µg/mL ea:			
	Fe,			
	7.5 µg/mL ea:			
	Al,			
	2.5 µg/mL ea:			
	Ba,			
	1.25 µg/mL ea:			
	Mn,	Se,	Sr,	Zn,
	0.5 µg/mL ea:			
	Cr ₃ ,	Cu,		
	0.25 µg/mL ea:			
	Ag,	As,	Be,	Cd,
	Ni,	Pb,	Tl,	V,
	0.125 µg/mL ea:			
	Co			

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	7.49 ± 0.05 µg/mL	Arsenic, As	0.2501 ± 0.0021 µg/mL
Barium, Ba	2.500 ± 0.019 µg/mL	Beryllium, Be	0.2500 ± 0.0021 µg/mL
Cadmium, Cd	0.2501 ± 0.0019 µg/mL	Calcium, Ca	125.0 ± 0.6 µg/mL
Chromium+3, Cr3	0.5000 ± 0.0041 µg/mL	Cobalt, Co	0.1250 ± 0.0011 µg/mL
Copper, Cu	0.5003 ± 0.0035 µg/mL	Iron, Fe	12.50 ± 0.07 µg/mL
Lead, Pb	0.2501 ± 0.0017 µg/mL	Magnesium, Mg	125.0 ± 0.6 µg/mL
Manganese, Mn	1.250 ± 0.010 µg/mL	Nickel, Ni	0.2500 ± 0.0020 µg/mL
Potassium, K	125.0 ± 0.6 µg/mL	Selenium, Se	1.250 ± 0.010 µg/mL
Silver, Ag	0.2500 ± 0.0023 µg/mL	Sodium, Na	125.0 ± 0.6 µg/mL
Strontium, Sr	1.250 ± 0.008 µg/mL	Thallium, Tl	0.2501 ± 0.0021 µg/mL
Vanadium, V	0.2499 ± 0.0018 µg/mL	Zinc, Zn	1.250 ± 0.010 µg/mL

Certified Density: 1.019 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	892707
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	000612
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	080123
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at $20 \pm 4^\circ \text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 20, 2015

11.2 Expiration Date

EXPIRES

01st 2016

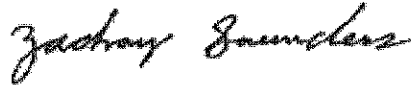
11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

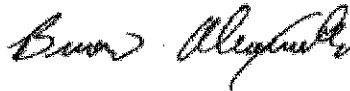
Certificate Prepared By:

Zach Saunders
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

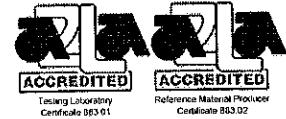


Reagent

MMSICSAB-1_00008

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: TAPITT-MSICSAB-1
Lot Number: J2-MEB575125
Matrix: 3% (v/v) HNO₃
Value / Analyte(s): 10 µg/mL ea:
Ba, Be, Pb,
Sr, Tl, V

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Barium, Ba	10.00 ± 0.06 µg/mL	Beryllium, Be	10.00 ± 0.06 µg/mL
Lead, Pb	10.00 ± 0.05 µg/mL	Strontium, Sr	10.00 ± 0.06 µg/mL
Thallium, Tl	10.00 ± 0.08 µg/mL	Vanadium, V	10.00 ± 0.06 µg/mL

Certified Density: 1.013 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	ICP Assay	3105a	090514
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706
V	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean
 x_i = individual results
 n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.
[$\sum (s_i)^2$]^{1/2} = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at $20 \pm 4^\circ \text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 27, 2015

11.2 Expiration Date

EXPIRES
1#2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

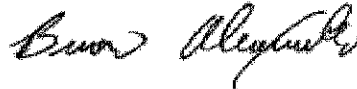
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

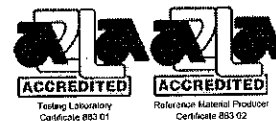


Reagent

MMSICSAB-2_00007

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).


2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
 Catalog Number: TAPITT-MSICSAB-2
 Lot Number: J2-MEB575126
 Matrix: 3% (v/v) HNO₃
 tr. HF
 Value / Analyte(s): 250 µg/mL ea:
 Si,
 50 µg/mL ea:
 Sn,
 25 µg/mL ea:
 B, Se,
 10 µg/mL ea:
 Sb

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.07 µg/mL	Boron, B	25.01 ± 0.17 µg/mL
Selenium, Se	25.00 ± 0.17 µg/mL	Silicon, Si	250.0 ± 1.9 µg/mL
Tin, Sn	50.01 ± 0.23 µg/mL		

Certified Density: 1.016 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at $20 \pm 4^\circ \text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 27, 2015

11.2 Expiration Date

EXPIRES
1 #2016

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

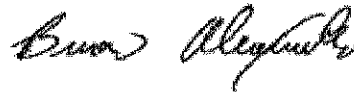
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

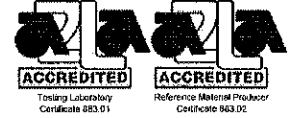


Reagent

MTAPITTTICPMS_00020

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105)).


2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution

Catalog Number: TAPITT-MS-ICPMS

Lot Number: H2-MEB532047

Matrix: 0.7% (v/v) HNO₃

Value / Analyte(s):

- 200 µg/mL ea: Al, Ba,
- 100 µg/mL ea: B, Fe, Sr,
- 50 µg/mL ea: Co, Mn, Ni, V, Zn,
- 25 µg/mL ea: Cu,
- 20 µg/mL ea: Cr₃,
- 5 µg/mL ea: Ag, Be, Cd, Tl,
- 4 µg/mL ea: As,
- 2 µg/mL ea: Pb,
- 1 µg/mL ea: Se

*Rec'd
6/17/19
EJR*

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	200.0 ± 1.0 µg/mL	Arsenic, As	4.002 ± 0.028 µg/mL	Barium, Ba	200.0 ± 1.0 µg/mL
Beryllium, Be	5.000 ± 0.029 µg/mL	Boron, B	100.0 ± 0.7 µg/mL	Cadmium, Cd	5.000 ± 0.024 µg/mL
Chromium+3, Cr ₃	20.00 ± 0.10 µg/mL	Cobalt, Co	50.02 ± 0.25 µg/mL	Copper, Cu	25.00 ± 0.17 µg/mL
Iron, Fe	100.0 ± 0.5 µg/mL	Lead, Pb	2.000 ± 0.010 µg/mL	Manganese, Mn	49.99 ± 0.22 µg/mL
Nickel, Ni	50.02 ± 0.24 µg/mL	Selenium, Se	1.001 ± 0.006 µg/mL	Silver, Ag	5.002 ± 0.032 µg/mL
Strontium, Sr	100.0 ± 0.6 µg/mL	Thallium, Tl	5.002 ± 0.033 µg/mL	Vanadium, V	50.00 ± 0.24 µg/mL
Zinc, Zn	50.02 ± 0.28 µg/mL				

Certified Density: 1.003 g/mL (measured at 20 ± 1 °C)

Assay Information:

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999b	999b
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	Calculated		See Sec. 4.2
As	ICP Assay	3103a	100818
B	ICP Assay	3107	070514
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	Calculated		See Sec. 4.2
Cr3	ICP Assay	3112a	030730
Cu	ICP Assay	3114	011017
Cu	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Sr	ICP Assay	3153a	990906
Sr	EDTA	928	928
Tl	Calculated		See Sec. 4.2
Tl	ICP Assay	3168	993012
V	ICP Assay	3165	992706
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean
 x_i = individual results
 n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.
 $\left[\sum (s_i)^2 \right]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2014

11.2 Expiration Date

EXPIRES
01/2015

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

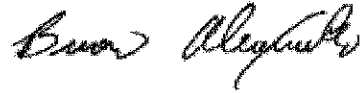
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTAPIT'TMSA_00023

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number (010105)).


2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
 Catalog Number: TAPITT-MS-A
 Lot Number: H2-MEB532044
 Matrix: 3% (v/v) HNO₃
 Value / Analyte(s): 5 000 µg/mL ea:
 Ca, K, Mg,
 Na

REC. 11/13/14 SLB

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Calcium	5 000 ± 22 µg/mL	Magnesium	5 000 ± 23 µg/mL
Potassium	5 000 ± 22 µg/mL	Sodium	5 000 ± 22 µg/mL

Certified Density: 1.071 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
K	Gravimetric		See Sec. 4.2
K	ICP Assay	3141a	051220
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Na	Gravimetric		See Sec. 4.2
Na	ICP Assay	3152a	120715

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean
 x_i = individual results
 n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.
 $\left[\sum (s_i)^2 \right]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

- 4.1 Thermometer Calibration**
- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.
- 4.2 Balance Calibration**
- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.
- 4.3 Glassware Calibration**
- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.
- 5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)**
- N/A
- 6.0 INTENDED USE**
- For the calibration of analytical instruments and validation of analytical methods as appropriate.
- 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL**
- 7.1 Storage and Handling Recommendations**
- Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.
- 8.0 HAZARDOUS INFORMATION**
- Please refer to the Safety Data Sheet for information regarding this CRM/RM.
- 9.0 HOMOGENEITY**
- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.
- 10.0 QUALITY STANDARD DOCUMENTATION**
- 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission**
- Domestic Licensing of Production and Utilization Facilities
- 10.2 10CFR21 - Nuclear Regulatory Commission**
- Reporting defects and Non-Compliance
- 10.3 ISO 9001 Quality Management System Registration**
- SAI Global File Number 010105
- 10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"**
- Chemical Testing - Accredited / A2LA Certificate Number 883.01
- 10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"**
- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 05, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date **EXPIRES**

01~~2~~2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

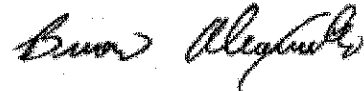
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTAPITTMSC_00029



300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1407263
1407261
1407262

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution
Catalog Number: TAPITT-MS-C
Lot Number: H2-MEB532046
Matrix: 3% (v/v) HNO3
tr. HF
Value / Analyte(s): 1 000 µg/mL ea:
Si,
200 µg/mL ea:
Sn,
100 µg/mL ea:
Mo, Ti,
50 µg/mL ea:
Sb

rec'd 11/13/14 SLB

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony	49.98 ± 0.38 µg/mL	Molybdenum	100.0 ± 0.5 µg/mL
Silicon	1 000 ± 7 µg/mL	Tin	200.0 ± 1.4 µg/mL
Titanium	100.0 ± 0.7 µg/mL		

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Ti	ICP Assay	3162a	060808

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

(\bar{x}) = mean

x_i = individual results

n = number of measurements

$$\text{Uncertainty } (\pm) = 2 \left[\sum (s_i)^2 \right]^{1/2}$$

2 = the coverage factor.

$\left[\sum (s_i)^2 \right]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES ($\mu\text{g/mL}$)

- N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. Do not pipette from the container. Do not return removed aliquots to container.

- HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 05, 2014

11.2 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.3. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

11.3 Expiration Date

EXPIRES

01 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

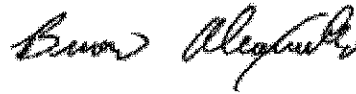
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

VOA8260GAS1ST_00096



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722 Lot No.: A0108198
 Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,000 ug/ml, P&T Methanol, 1 ml/ampul
 Container Size : 2 mL Pkg Amt: > 1 mL
 Expiration Date : January 31, 2018 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot Q167-08) Purity 99%	2,504.8 µg/mL	+/- 21.9788 µg/mL +/- 32.6918 µg/mL +/- 36.4326 µg/mL	Gravimetric Unstressed Stressed	
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBC8470V) Purity 99%	2,509.8 µg/mL	+/- 19.6377 µg/mL +/- 31.2039 µg/mL +/- 35.1185 µg/mL	Gravimetric Unstressed Stressed	
3	Vinyl chloride CAS # 75-01-4 (Lot 17542) Purity 99%	2,515.3 µg/mL	+/- 22.1368 µg/mL +/- 32.8734 µg/mL +/- 36.6254 µg/mL	Gravimetric Unstressed Stressed	
4	1,3-Butadiene CAS # 106-99-0 (Lot SHBD5808V) Purity 99%	2,498.0 µg/mL	+/- 23.6713 µg/mL +/- 33.8065 µg/mL +/- 37.4176 µg/mL	Gravimetric Unstressed Stressed	
5	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	2,503.7 µg/mL	+/- 30.8470 µg/mL +/- 39.2011 µg/mL +/- 42.3685 µg/mL	Gravimetric Unstressed Stressed	
6	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot SHBD1717V) Purity 99%	2,507.7 µg/mL	+/- 21.9404 µg/mL +/- 32.6873 µg/mL +/- 36.4370 µg/mL	Gravimetric Unstressed Stressed	
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4 (Lot Q9B-58) Purity 99%	2,500.7 µg/mL	+/- 26.0039 µg/mL +/- 35.4965 µg/mL +/- 38.9583 µg/mL	Gravimetric Unstressed Stressed	

8	Trichlorofluoromethane (CFC-11)	2,501.9 µg/mL	+/- 21.5914	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot SHBD5121V)		+/- 32.4119	µg/mL	Unstressed
	Purity 99%		+/- 36.1734	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

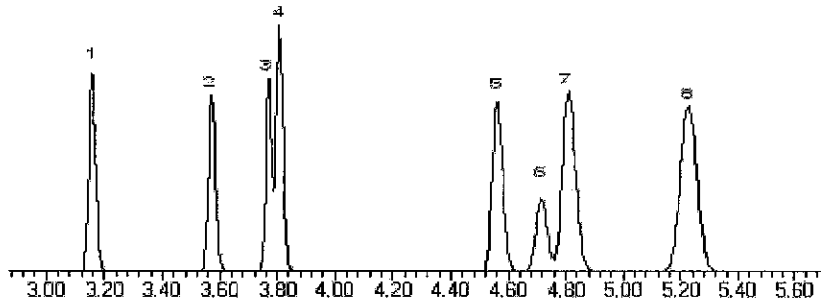
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope
Kendra Swope - Mix Technician

Date Mixed: 08-Jan-2015 Balance: 1125113331

Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

<p>Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397</p>
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Reagent

VOA8260GAS2ND_00096

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569722.sec **Lot No.:** A0108226
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,000 ug/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8.SEC (Lot 19630) Purity 99%	2,494.8 µg/mL	+/- 23.5521 µg/mL +/- 33.7009 µg/mL +/- 37.3133 µg/mL	Gravimetric Unstressed Stressed	
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,505.6 µg/mL	+/- 26.4745 µg/mL +/- 35.8743 µg/mL +/- 39.3156 µg/mL	Gravimetric Unstressed Stressed	
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,499.8 µg/mL	+/- 25.3054 µg/mL +/- 34.9816 µg/mL +/- 38.4872 µg/mL	Gravimetric Unstressed Stressed	
4	1,3-Butadiene CAS # 106-99-0.SEC (Lot 18349) Purity 99%	2,505.4 µg/mL	+/- 23.1450 µg/mL +/- 33.4914 µg/mL +/- 37.1536 µg/mL	Gravimetric Unstressed Stressed	
5	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,495.4 µg/mL	+/- 25.3762 µg/mL +/- 35.0038 µg/mL +/- 38.4957 µg/mL	Gravimetric Unstressed Stressed	
6	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot Q18B-13) Purity 99%	2,499.5 µg/mL	+/- 21.8687 µg/mL +/- 32.5806 µg/mL +/- 36.3180 µg/mL	Gravimetric Unstressed Stressed	
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4.SEC (Lot SHBC0858V) Purity 99%	2,511.0 µg/mL	+/- 21.9690 µg/mL +/- 32.7299 µg/mL +/- 36.4846 µg/mL	Gravimetric Unstressed Stressed	

8	Trichlorofluoromethane (CFC-11)	2,504.4	µg/mL	+/-	25.2390	µg/mL	Gravimetric
	CAS # 75-69-4,SEC (Lot Q158-102)			+/-	34.9647	µg/mL	Unstressed
	Purity 99%			+/-	38.4843	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 ml/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
 @ 6°C/min.

Inj. Temp:

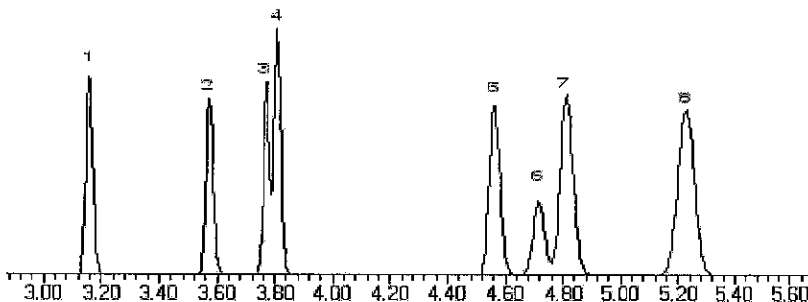
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maje

Date Mixed: 12-Jan-2015 **Balance:** 1127510105

Jennifer L. Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

Manufactured under Restek's ISO 9001:2008
 Registered Quality System
 Certificate #FM 80397

Reagent

VOA8260INTRES_00095



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
 Bellefonte, PA 16823-8812
 Tel: (800)356-1688
 Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567649 **Lot No.:** A0104742
Description : 8260 Internal Standard
8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul
Container Size : 5 mL **Pkg Amt:** > 5 mL
Expiration Date : July 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol CAS # 25725-11-5 Purity 99% (Lot I201P5)	5,003.0 µg/mL	+/- 29.0879 µg/mL +/- 106.1005 µg/mL +/- 106.5713 µg/mL	Gravimetric Unstressed Stressed	
2	Fluorobenzene CAS # 462-06-6 Purity 99% (Lot 1380033)	250.8 µg/mL	+/- 1.4795 µg/mL +/- 5.3247 µg/mL +/- 5.3483 µg/mL	Gravimetric Unstressed Stressed	
3	1,4-Dioxane-d8 CAS # 17647-74-4 Purity 99% (Lot 11C-596)	5,009.6 µg/mL	+/- 29.1262 µg/mL +/- 106.2405 µg/mL +/- 106.7119 µg/mL	Gravimetric Unstressed Stressed	
4	Chlorobenzene-d5 CAS # 3114-55-4 Purity 99% (Lot PR-22736)	250.8 µg/mL	+/- 1.4795 µg/mL +/- 5.3247 µg/mL +/- 5.3483 µg/mL	Gravimetric Unstressed Stressed	
5	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99% (Lot PR-18488)	250.8 µg/mL	+/- 1.4795 µg/mL +/- 5.3247 µg/mL +/- 5.3483 µg/mL	Gravimetric Unstressed Stressed	

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

Reagent

VOA8260KET1ST_00041



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 **Lot No.:** A0108151

Description : 8260 List 1/ Std #2 Ketones (2015)
8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,537.0 µg/mL	+/-	73.4069	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot 07196AK)		+/-	667.2480	µg/mL	Unstressed
	Purity 99%		+/-	667.9837	µg/mL	Stressed
2	2-Butanone (MEK)	12,537.0 µg/mL	+/-	73.4069	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot BCBH7802V)		+/-	667.2480	µg/mL	Unstressed
	Purity 99%		+/-	667.9837	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,537.0 µg/mL	+/-	73.4069	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBF5332V)		+/-	667.2480	µg/mL	Unstressed
	Purity 99%		+/-	667.9837	µg/mL	Stressed
4	2-Hexanone	12,537.0 µg/mL	+/-	73.4069	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKBK8325V)		+/-	667.2480	µg/mL	Unstressed
	Purity 99%		+/-	667.9837	µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VOA8260KET2ND_00045



CERTIFIED REFERENCE MATERIAL

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.SEC **Lot No.:** A0108157

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone	12,504.0 µg/mL	+/-	73.2137 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot 0902033)		+/-	665.4917 µg/mL	Unstressed
	Purity 99%		+/-	666.2255 µg/mL	Stressed
2	2-Butanone (MEK)	12,506.0 µg/mL	+/-	73.2254 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot VEGGI)		+/-	665.5981 µg/mL	Unstressed
	Purity 99%		+/-	666.3320 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,537.3 µg/mL	+/-	73.4088 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/-	667.2658 µg/mL	Unstressed
	Purity 99%		+/-	668.0015 µg/mL	Stressed
4	2-Hexanone	12,508.7 µg/mL	+/-	73.2410 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot ZSVCD-FF)		+/-	665.7401 µg/mL	Unstressed
	Purity 99%		+/-	666.4741 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)

CAS # 67-56-1/7732-18-5

Purity 99%

Reagent

VOA8260SURRES_00084



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0102817

Description : 8260 Surrogate Standard
8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane	2,503.8 µg/mL	+/-	14.5573	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 022012)		+/-	28.2339	µg/mL	Unstressed
	Purity 99%		+/-	32.4891	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,502.4 µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 13J-483)		+/-	28.2182	µg/mL	Unstressed
	Purity 99%		+/-	32.4709	µg/mL	Stressed
3	Toluene-d8	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot 13I-050)		+/-	28.1911	µg/mL	Unstressed
	Purity 99%		+/-	32.4398	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,503.6 µg/mL	+/-	14.5561	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 01127COV)		+/-	28.2317	µg/mL	Unstressed
	Purity 99%		+/-	32.4865	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VOA8260SURRES_00089

RESTEK® CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0102817
Description : 8260 Surrogate Standard
8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul
Container Size : 5 mL **Pkg Amt:** > 5 mL
Expiration Date : April 30, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dibromofluoromethane	2,503.8 µg/mL	+/-	14.5573	µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 022012)		+/-	28.2339	µg/mL	Unstressed
	Purity 99%		+/-	32.4891	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,502.4 µg/mL	+/-	14.5492	µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 13J-483)		+/-	28.2182	µg/mL	Unstressed
	Purity 99%		+/-	32.4709	µg/mL	Stressed
3	Toluene-d8	2,500.0 µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot 13I-050)		+/-	28.1911	µg/mL	Unstressed
	Purity 99%		+/-	32.4398	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,503.6 µg/mL	+/-	14.5561	µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 01127COV)		+/-	28.2317	µg/mL	Unstressed
	Purity 99%		+/-	32.4865	µg/mL	Stressed

Solvent: P&T Methanol
 CAS # 67-56-1
 Purity 99%

Reagent

VOA8260VARES2_00050



CERTIFIED REFERENCE MATERIAL

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Tel: (800)356-1688
Fax: (814)353-1309

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724.sec **Lot No.:** A0108224

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2015 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate CAS # 108-05-4.SEC (Lot F3Z5C) Purity 99%	5,003.0 µg/mL	+/- 29.3604 µg/mL +/- 266.2785 µg/mL +/- 266.5721 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VOAACRORES_00067

Reagent

VOARESEE1ST_00019



CERTIFIED REFERENCE MATERIAL



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Certificate of Analysis



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568363-FL Lot No.: A0109701

Description : Custom EE Standard
Custom EE Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : September 30, 2016 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
			µg/mL	µg/mL	µg/mL	
1	3-Chlorobenzotrifluoride	5,000.0 µg/mL	---	+/- 29.3428	µg/mL	Gravimetric
	CAS # 98-15-7 (Lot 21324DO)		+/- 56.5231	µg/mL	Unstressed	
	Purity 99%		+/- 65.0021	µg/mL	Stressed	
2	4-Chlorobenzotrifluoride	5,003.0 µg/mL	+/- 29.3604	µg/mL	Gravimetric	
	CAS # 98-56-6 (Lot 08507BO)		+/- 56.5570	µg/mL	Unstressed	
	Purity 99%		+/- 65.0411	µg/mL	Stressed	
3	2-Chlorobenzotrifluoride	5,009.0 µg/mL	+/- 29.3956	µg/mL	Gravimetric	
	CAS # 88-16-4 (Lot I0316DQ)		+/- 56.6248	µg/mL	Unstressed	
	Purity 99%		+/- 65.1191	µg/mL	Stressed	
4	3-Chlorotoluene	5,012.0 µg/mL	+/- 29.4132	µg/mL	Gravimetric	
	CAS # 108-41-8 (Lot 13528LX)		+/- 56.6587	µg/mL	Unstressed	
	Purity 99%		+/- 65.1581	µg/mL	Stressed	
5	2,4-Dichlorobenzotrifluoride	5,013.0 µg/mL	+/- 29.4191	µg/mL	Gravimetric	
	CAS # 320-60-5 (Lot MKBL3552V)		+/- 56.6701	µg/mL	Unstressed	
	Purity 99%		+/- 65.1711	µg/mL	Stressed	
6	3,4-Dichlorobenzotrifluoride	5,018.0 µg/mL	+/- 29.4484	µg/mL	Gravimetric	
	CAS # 328-84-7 (Lot 11105EJV)		+/- 56.7266	µg/mL	Unstressed	
	Purity 99%		+/- 65.2361	µg/mL	Stressed	
7	2,5-Dichlorobenzotrifluoride	5,015.0 µg/mL	+/- 29.4308	µg/mL	Gravimetric	
	CAS # 320-50-3 (Lot 04415DSV)		+/- 56.6927	µg/mL	Unstressed	
	Purity 99%		+/- 65.1971	µg/mL	Stressed	

8	2,4-Dichlorotoluene CAS # 95-73-8 Purity 99%	(Lot 07715JS)	5,021.0 µg/mL	+/- 29.4660 +/- 56.7605 +/- 65.2751	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	2,5-Dichlorotoluene CAS # 19398-61-9 Purity 99%	(Lot 1381346V)	5,005.0 µg/mL	+/- 29.3721 +/- 56.5796 +/- 65.0671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	2,6-Dichlorotoluene CAS # 118-69-4 Purity 99%	(Lot 16921JS)	5,014.0 µg/mL	+/- 29.4250 +/- 56.6814 +/- 65.1841	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	3,4-Dichlorotoluene CAS # 95-75-0 Purity 99%	(Lot 09419AS)	5,011.0 µg/mL	+/- 29.4074 +/- 56.6474 +/- 65.1451	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	2,3-Dichlorotoluene CAS # 32768-54-0 Purity 99%	(Lot 00317)	5,016.0 µg/mL	+/- 29.4367 +/- 56.7040 +/- 65.2101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2,4,5-Trichlorotoluene CAS # 6639-30-1 Purity 99%	(Lot 2490300)	5,000.0 µg/mL	+/- 29.3428 +/- 56.5231 +/- 65.0021	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,3,6-Trichlorotoluene CAS # 2077-46-5 Purity 99%	(Lot NT050444)	5,005.0 µg/mL	+/- 29.3721 +/- 56.5796 +/- 65.0671	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

WNa2CO3P_00007



1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

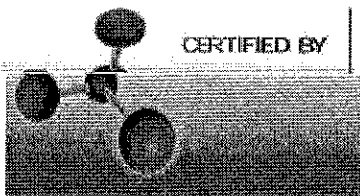
Certificate of Analysis

Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0064970

This is to certify that units of the above mentioned lot number were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. Fisher does not claim regulatory coverage under 21 CFR nor maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	S263	Quality Test / Release Date 4/8/2014	
Lot Number	138124		
Description	SODIUM CARBONATE, ANHYDROUS, CERTIFIED A.C.S.		
Country of Origin	China	* Suggested Retest Date	Apr-2019
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

Result name	Units	Specifications	Test Value
APPEARANCE		REPORT	White granular powder
ASSAY	%	>= 99.5	100.3
CALCIUM	%	<= 0.03	0.010
CHLORIDE	%	<= 0.001	<0.0010
HEAVY METALS (as Pb)	ppm	<= 5	<5.0
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.01	<0.010
IRON (Fe)	ppm	<= 5	<5.0
LOSS ON HEATING @ 285 DEG C	%	<= 1.0	0.1
MAGNESIUM	%	<= 0.005	<0.001
PHOSPHATE (PO4)	%	<= 0.001	0.0010
POTASSIUM (K)	%	<= 0.005	0.001
SILICA (SiO2)	%	<= 0.005	0.005
SULFUR COMPOUNDS	%	<= 0.003	<0.0030



Edgar E. Hare
Lab Manager Fair Lawn



1243950
ID: WNa2CO3P_00007
Exp:07/09/18 Prpd:IRA Opn:07/09/14
Sodium Carbonate



1243948
ID: WNa2CO3P_00007
Exp:07/09/18 Prpd:IRA Opn:07/09/14
Sodium Carbonate



1243949
ID: WNa2CO3P_00007
Exp:07/09/18 Prpd:IRA Opn:07/09/14
Sodium Carbonate



1243947
ID: WNa2CO3P_00007
Exp:07/09/18 Prpd:IRA Opn:07/09/14
Sodium Carbonate

Note: The data listed is valid for all package sizes of this lot of this product, expressed as a extension of this catalog number listed above. If there are any questions with this certificate, please call Chemical Services at (800) 227-6701.
*Based on suggested storage condition.

Method 8260C Low Level

Volatile Organic Compounds (GC/MS)
by Method 8260C Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Matrix: Water

Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-QC5-0/1-2	180-43402-1	101	114	105	101
HD-MW-114-0/1-0	180-43402-2	106	116	109	99
HD-MW-114-0/1-0 DL	180-43402-2 DL	103	108	108	101
HD-MW-132-0/1-0	180-43402-3	104	108	108	102
HD-MW-132-0/1-0 DL	180-43402-3 DL	102	112	111	106
HD-MW-39D-0/1-0	180-43402-4	104	111	108	100
HD-MW-74S-0/1-0	180-43402-5	102	109	110	104
HD-MW-127-0/1-0	180-43402-6	105	113	109	102
HD-MW-51D-0/1-0	180-43402-7	106	108	106	102
HD-MW-51D-0/1-0 DL	180-43402-7 DL	108	115	110	105
HD-MW-50S-0/1-0	180-43402-8	105	116	108	102
	MB 180-140579/6	102	109	111	105
	MB 180-140724/10	100	109	108	102
	LCS 180-140579/9	107	111	106	108
	LCS 180-140724/11	103	112	104	105
	LCSD 180-140724/12	106	116	111	111

DBFM = Dibromofluoromethane (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

QC LIMITS
70-128
64-135
71-118
70-118

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 60505009.D

Lab ID: LCS 180-140579/9

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	10.5	105	50-139	
Vinyl chloride	10.0	11.2	112	53-138	
Bromomethane	10.0	12.3	123	33-150	
Chloroethane	10.0	12.2	122	36-142	
1,1-Dichloroethene	10.0	11.3	113	65-136	
Acetone	20.0	27.5	137	22-150	
Carbon disulfide	10.0	11.7	117	54-132	
Methylene Chloride	10.0	12.2	122	63-129	
trans-1,2-Dichloroethene	10.0	11.5	115	73-126	
Methyl tert-butyl ether	10.0	10.8	108	64-123	
1,1-Dichloroethane	10.0	12.2	122	73-126	
cis-1,2-Dichloroethene	10.0	10.5	105	70-120	
Bromochloromethane	10.0	10.0	100	70-127	
2-Butanone (MEK)	20.0	23.5	117	39-138	
Chloroform	10.0	11.6	116	72-127	
1,1,1-Trichloroethane	10.0	11.3	113	63-133	
Carbon tetrachloride	10.0	10.9	109	55-150	
Benzene	10.0	11.8	118	80-120	
1,2-Dichloroethane	10.0	12.0	120	68-132	
Trichloroethene	10.0	11.1	111	73-120	
1,2-Dichloropropane	10.0	10.9	109	76-124	
Bromodichloromethane	10.0	10.1	101	66-130	
cis-1,3-Dichloropropene	10.0	9.78	98	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	17.8	89	45-145	
Toluene	10.0	11.9	119	80-123	
trans-1,3-Dichloropropene	10.0	10.3	103	65-125	
1,1,2-Trichloroethane	10.0	10.9	109	77-127	
Tetrachloroethene	10.0	11.1	111	70-135	
2-Hexanone	20.0	19.7	98	25-132	
Dibromochloromethane	10.0	9.55	96	60-140	
1,2-Dibromoethane (EDB)	10.0	10.4	104	74-123	
Chlorobenzene	10.0	11.4	114	80-120	
1,1,1,2-Tetrachloroethane	10.0	10.3	103	63-140	
Ethylbenzene	10.0	11.4	114	72-126	
Xylenes, Total	20.0	22.4	112	76-128	
Styrene	10.0	10.9	109	71-127	
Bromoform	10.0	7.96	80	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.9	109	62-125	
1,4-Dioxane	200	175 J	87	10-160	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 60506011.D

Lab ID: LCS 180-140724/11

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	11.0	110	50-139	
Vinyl chloride	10.0	11.0	110	53-138	
Bromomethane	10.0	11.5	115	33-150	
Chloroethane	10.0	11.8	118	36-142	
1,1-Dichloroethene	10.0	8.56	86	65-136	
Acetone	20.0	22.0	110	22-150	
Carbon disulfide	10.0	8.70	87	54-132	
Methylene Chloride	10.0	11.2	112	63-129	
trans-1,2-Dichloroethene	10.0	9.57	96	73-126	
Methyl tert-butyl ether	10.0	10.1	101	64-123	
1,1-Dichloroethane	10.0	10.1	101	73-126	
cis-1,2-Dichloroethene	10.0	9.23	92	70-120	
Bromochloromethane	10.0	9.77	98	70-127	
2-Butanone (MEK)	20.0	21.6	108	39-138	
Chloroform	10.0	10.2	102	72-127	
1,1,1-Trichloroethane	10.0	9.16	92	63-133	
Carbon tetrachloride	10.0	8.61	86	55-150	
Benzene	10.0	10.1	101	80-120	
1,2-Dichloroethane	10.0	11.5	115	68-132	
Trichloroethene	10.0	9.02	90	73-120	
1,2-Dichloropropane	10.0	10.1	101	76-124	
Bromodichloromethane	10.0	9.32	93	66-130	
cis-1,3-Dichloropropene	10.0	8.80	88	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	14.5	72	45-145	
Toluene	10.0	10.1	101	80-123	
trans-1,3-Dichloropropene	10.0	8.41	84	65-125	
1,1,2-Trichloroethane	10.0	10.5	105	77-127	
Tetrachloroethene	10.0	8.99	90	70-135	
2-Hexanone	20.0	22.1	111	25-132	
Dibromochloromethane	10.0	8.21	82	60-140	
1,2-Dibromoethane (EDB)	10.0	9.69	97	74-123	
Chlorobenzene	10.0	9.98	100	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.18	92	63-140	
Ethylbenzene	10.0	9.70	97	72-126	
Xylenes, Total	20.0	19.2	96	76-128	
Styrene	10.0	9.85	98	71-127	
Bromoform	10.0	7.51	75	46-150	
1,1,2,2-Tetrachloroethane	10.0	9.98	100	62-125	
1,4-Dioxane	200	102 J	51	10-160	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 60506012.D

Lab ID: LCSD 180-140724/12

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chloromethane	10.0	12.0	120	8	35	50-139	
Vinyl chloride	10.0	12.4	124	12	35	53-138	
Bromomethane	10.0	13.3	133	15	35	33-150	
Chloroethane	10.0	13.1	131	11	35	36-142	
1,1-Dichloroethene	10.0	10.0	100	16	35	65-136	
Acetone	20.0	20.9	105	5	35	22-150	
Carbon disulfide	10.0	9.65	97	10	35	54-132	
Methylene Chloride	10.0	11.7	117	4	35	63-129	
trans-1,2-Dichloroethene	10.0	10.5	105	9	35	73-126	
Methyl tert-butyl ether	10.0	10.6	106	5	35	64-123	
1,1-Dichloroethane	10.0	11.1	111	9	35	73-126	
cis-1,2-Dichloroethene	10.0	9.95	99	8	35	70-120	
Bromochloromethane	10.0	9.88	99	1	35	70-127	
2-Butanone (MEK)	20.0	21.0	105	3	35	39-138	
Chloroform	10.0	11.1	111	8	35	72-127	
1,1,1-Trichloroethane	10.0	10.4	104	13	35	63-133	
Carbon tetrachloride	10.0	9.59	96	11	35	55-150	
Benzene	10.0	10.7	107	6	32	80-120	
1,2-Dichloroethane	10.0	12.1	121	5	32	68-132	
Trichloroethene	10.0	10.0	100	11	35	73-120	
1,2-Dichloropropane	10.0	10.2	102	1	34	76-124	
Bromodichloromethane	10.0	9.80	98	5	35	66-130	
cis-1,3-Dichloropropene	10.0	9.18	92	4	35	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	15.9	80	9	35	45-145	
Toluene	10.0	11.2	112	11	35	80-123	
trans-1,3-Dichloropropene	10.0	9.46	95	12	35	65-125	
1,1,2-Trichloroethane	10.0	10.9	109	4	35	77-127	
Tetrachloroethene	10.0	10.7	107	18	35	70-135	
2-Hexanone	20.0	24.1	120	9	35	25-132	
Dibromochloromethane	10.0	9.15	91	11	35	60-140	
1,2-Dibromoethane (EDB)	10.0	10.4	104	7	35	74-123	
Chlorobenzene	10.0	11.0	110	10	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.99	100	8	34	63-140	
Ethylbenzene	10.0	10.8	108	11	33	72-126	
Xylenes, Total	20.0	21.2	106	10	32	76-128	
Styrene	10.0	10.5	105	6	34	71-127	
Bromoform	10.0	7.53	75	0	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.6	106	6	35	62-125	
1,4-Dioxane	200	113 J	56	10	35	10-160	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab File ID: 60505006.D Lab Sample ID: MB 180-140579/6
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CHHP6 Date Analyzed: 05/05/2015 12:48
 GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-140579/9	60505009.D	05/05/2015 14:35
HD-MW-114-0/1-0 DL	180-43402-2 DL	60505016.D	05/05/2015 17:26
HD-MW-132-0/1-0	180-43402-3	60505017.D	05/05/2015 17:50
HD-MW-74S-0/1-0	180-43402-5	60505020.D	05/05/2015 19:02
HD-QC5-0/1-2	180-43402-1	60505021.D	05/05/2015 19:26
HD-MW-127-0/1-0	180-43402-6	60505022.D	05/05/2015 19:50
HD-MW-51D-0/1-0	180-43402-7	60505023.D	05/05/2015 20:14
HD-MW-50S-0/1-0	180-43402-8	60505025.D	05/05/2015 21:02

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab File ID: 60506010.D Lab Sample ID: MB 180-140724/10
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CHHP6 Date Analyzed: 05/06/2015 14:50
 GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-140724/11	60506011.D	05/06/2015 15:38
	LCSD 180-140724/12	60506012.D	05/06/2015 16:02
HD-MW-132-0/1-0 DL	180-43402-3 DL	60506016.D	05/06/2015 17:39
HD-MW-39D-0/1-0	180-43402-4	60506017.D	05/06/2015 18:02
HD-MW-51D-0/1-0 DL	180-43402-7 DL	60506018.D	05/06/2015 18:26
HD-MW-114-0/1-0	180-43402-2	60506030.D	05/06/2015 23:14

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab File ID: 60501005.D BFB Injection Date: 05/01/2015
 Instrument ID: CHHP6 BFB Injection Time: 11:31
 Analysis Batch No.: 140280

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.2
75	30.0 - 60.0 % of mass 95	54.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	5.9
173	Less than 2.0 % of mass 174	0.3 (0.4)1
174	50.0 - 120.00 % of mass 95	67.2
175	5.0 - 9.0 % of mass 174	4.7 (7.1)1
176	95.0 - 101.0 % of mass 174	66.3 (98.7)1
177	5.0 - 9.0 % of mass 176	4.5 (6.8)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-140280/3	60501003.D	05/01/2015	13:53
	IC 180-140280/6	60501006.D	05/01/2015	14:17
	ICIS 180-140280/7	60501007.D	05/01/2015	14:41
	IC 180-140280/8	60501008.D	05/01/2015	15:06
	IC 180-140280/9	60501009.D	05/01/2015	15:31
	IC 180-140280/10	60501010.D	05/01/2015	15:56
	IC 180-140280/11	60501011.D	05/01/2015	16:20
	IC 180-140280/12	60501012.D	05/01/2015	16:46

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab File ID: 60505004.D BFB Injection Date: 05/05/2015
 Instrument ID: CHHP6 BFB Injection Time: 10:45
 Analysis Batch No.: 140579

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.4
75	30.0 - 60.0 % of mass 95	59.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.1
173	Less than 2.0 % of mass 174	0.2 (0.3)1
174	50.0 - 120.00 % of mass 95	62.9
175	5.0 - 9.0 % of mass 174	4.6 (7.3)1
176	95.0 - 101.0 % of mass 174	61.7 (98.0)1
177	5.0 - 9.0 % of mass 176	4.4 (7.1)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-140579/2	60505002.D	05/05/2015	11:28
	CCV 180-140579/3	60505003.D	05/05/2015	11:52
	MB 180-140579/6	60505006.D	05/05/2015	12:48
	LCS 180-140579/9	60505009.D	05/05/2015	14:35
HD-MW-114-0/1-0 DL	180-43402-2 DL	60505016.D	05/05/2015	17:26
HD-MW-132-0/1-0	180-43402-3	60505017.D	05/05/2015	17:50
HD-MW-74S-0/1-0	180-43402-5	60505020.D	05/05/2015	19:02
HD-QC5-0/1-2	180-43402-1	60505021.D	05/05/2015	19:26
HD-MW-127-0/1-0	180-43402-6	60505022.D	05/05/2015	19:50
HD-MW-51D-0/1-0	180-43402-7	60505023.D	05/05/2015	20:14
HD-MW-50S-0/1-0	180-43402-8	60505025.D	05/05/2015	21:02

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab File ID: 60506004.D BFB Injection Date: 05/06/2015
 Instrument ID: CHHP6 BFB Injection Time: 11:19
 Analysis Batch No.: 140724

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.3
75	30.0 - 60.0 % of mass 95	58.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.4 (0.6)1
174	50.0 - 120.00 % of mass 95	60.5
175	5.0 - 9.0 % of mass 174	3.9 (6.4)1
176	95.0 - 101.0 % of mass 174	58.0 (95.8)1
177	5.0 - 9.0 % of mass 176	3.6 (6.1)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 180-140724/3	60506003.D	05/06/2015	12:25
	CCVIS 180-140724/7	60506007.D	05/06/2015	13:37
	CCV 180-140724/9	60506009.D	05/06/2015	14:25
	MB 180-140724/10	60506010.D	05/06/2015	14:50
	LCS 180-140724/11	60506011.D	05/06/2015	15:38
	LCSD 180-140724/12	60506012.D	05/06/2015	16:02
HD-MW-132-0/1-0 DL	180-43402-3 DL	60506016.D	05/06/2015	17:39
HD-MW-39D-0/1-0	180-43402-4	60506017.D	05/06/2015	18:02
HD-MW-51D-0/1-0 DL	180-43402-7 DL	60506018.D	05/06/2015	18:26
HD-MW-114-0/1-0	180-43402-2	60506030.D	05/06/2015	23:14

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Sample No.: CCVIS 180-140579/2 Date Analyzed: 05/05/2015 11:28
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 60505002.D Heated Purge: (Y/N) N
 Calibration ID: 23671

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	180942	4.24	345760	7.29	74520	10.39	
UPPER LIMIT	361884	4.74	691520	7.79	149040	10.89	
LOWER LIMIT	90471	3.74	172880	6.79	37260	9.89	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-140579/3		175127	4.24	330618	7.29	67492	10.40
MB 180-140579/6		144525	4.23	382815	7.29	76665	10.40
LCS 180-140579/9		155828	4.24	320979	7.29	66925	10.39
180-43402-2 DL	HD-MW-114-0/1-0 DL	188700	4.23	377623	7.29	77564	10.40
180-43402-3	HD-MW-132-0/1-0	186277	4.24	377025	7.29	76445	10.40
180-43402-5	HD-MW-74S-0/1-0	191661	4.23	374642	7.29	74017	10.40
180-43402-1	HD-QC5-0/1-2	173571	4.23	356084	7.29	74837	10.39
180-43402-6	HD-MW-127-0/1-0	175452	4.23	355668	7.29	72324	10.40
180-43402-7	HD-MW-51D-0/1-0	187667	4.23	371081	7.29	79221	10.40
180-43402-8	HD-MW-50S-0/1-0	183129	4.24	356204	7.29	72515	10.40

TBA = TBA-d9 (IS)

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Sample No.: CCVIS 180-140579/2 Date Analyzed: 05/05/2015 11:28
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 60505002.D Heated Purge: (Y/N) N
 Calibration ID: 23671

	DCB		AREA #	RT #	AREA #	RT #	AREA #	RT #
	AREA #	RT #						
12/24 HOUR STD	110772	12.75						
UPPER LIMIT	221544	13.25						
LOWER LIMIT	55386	12.25						
LAB SAMPLE ID	CLIENT SAMPLE ID							
CCV 180-140579/3		99830	12.74					
MB 180-140579/6		113768	12.75					
LCS 180-140579/9		101010	12.75					
180-43402-2 DL	HD-MW-114-0/1-0 DL	115778	12.74					
180-43402-3	HD-MW-132-0/1-0	113190	12.75					
180-43402-5	HD-MW-74S-0/1-0	110082	12.75					
180-43402-1	HD-QC5-0/1-2	107373	12.75					
180-43402-6	HD-MW-127-0/1-0	108523	12.75					
180-43402-7	HD-MW-51D-0/1-0	114042	12.75					
180-43402-8	HD-MW-50S-0/1-0	110070	12.75					

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Sample No.: CCVIS 180-140724/7 Date Analyzed: 05/06/2015 13:37
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 60506007.D Heated Purge: (Y/N) N
 Calibration ID: 23671

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	188592	4.25	422720	7.28	85680	10.40	
UPPER LIMIT	377184	4.75	845440	7.78	171360	10.90	
LOWER LIMIT	94296	3.75	211360	6.78	42840	9.90	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-140724/9		187952	4.22	408004	7.29	79262	10.40
MB 180-140724/10		210754	4.23	468766	7.29	96400	10.40
LCS 180-140724/11		152542	4.24	396320	7.29	84972	10.40
LCSD 180-140724/12		165229	4.24	398453	7.29	81396	10.40
180-43402-3 DL	HD-MW-132-0/1-0 DL	182136	4.24	451318	7.29	90523	10.40
180-43402-4	HD-MW-39D-0/1-0	189005	4.23	451816	7.29	93498	10.39
180-43402-7 DL	HD-MW-51D-0/1-0 DL	188832	4.23	443986	7.29	90923	10.40
180-43402-2	HD-MW-114-0/1-0	180271	4.23	432761	7.29	91289	10.40

TBA = TBA-d9 (IS)

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Sample No.: CCVIS 180-140724/7 Date Analyzed: 05/06/2015 13:37
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 60506007.D Heated Purge: (Y/N) N
 Calibration ID: 23671

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		129325	12.74				
UPPER LIMIT		258650	13.24				
LOWER LIMIT		64663	12.24				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 180-140724/9		118174	12.75				
MB 180-140724/10		142139	12.75				
LCS 180-140724/11		131052	12.75				
LCSD 180-140724/12		130248	12.75				
180-43402-3 DL	HD-MW-132-0/1-0 DL	138815	12.75				
180-43402-4	HD-MW-39D-0/1-0	140979	12.75				
180-43402-7 DL	HD-MW-51D-0/1-0 DL	138474	12.75				
180-43402-2	HD-MW-114-0/1-0	130289	12.75				

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
 RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-QC5-0/1-2 Lab Sample ID: 180-43402-1
 Matrix: Water Lab File ID: 60505021.D
 Analysis Method: 8260C Date Collected: 04/23/2015 12:00
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 19:26
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	1.0	U	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	1.0	U	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-QC5-0/1-2 Lab Sample ID: 180-43402-1
 Matrix: Water Lab File ID: 60505021.D
 Analysis Method: 8260C Date Collected: 04/23/2015 12:00
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 19:26
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20
107-13-1	Acrylonitrile	20	U	20	0.55
123-91-1	1,4-Dioxane	200	U	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	114		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	101		70-118
1868-53-7	Dibromofluoromethane (Surr)	101		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505021.D
 Lims ID: 180-43402-A-1 Lab Sample ID: 180-43402-1
 Client ID: HD-QC5-0/1-2
 Sample Type: Client
 Inject. Date: 05-May-2015 19:26:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43402-A-1
 Misc. Info.: 180-0006773-021
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 07:43:44 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond

Date: 06-May-2015 07:43:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.225	4.239	-0.014	96	173571	1000.0	
* 2 Fluorobenzene (IS)	96	7.291	7.286	0.005	98	356084	50.0	
* 3 Chlorobenzene-d5	119	10.394	10.401	-0.007	92	74837	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.748	12.743	0.005	97	107373	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.555	6.547	0.008	91	74748	50.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.932	6.931	0.001	71	140630	57.1	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.938	0.002	95	332312	52.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.586	11.585	0.002	80	130181	50.4	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.894				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96		3.341				ND	
24 Acetone	43	3.441	3.427	0.014	70	3201	6.77	
26 Carbon disulfide	76		3.633				ND	
31 Methylene Chloride	84		4.132				ND	
33 Acrylonitrile	53		4.497				ND	
34 trans-1,2-Dichloroethene	96		4.558				ND	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63		5.197				ND	
43 cis-1,2-Dichloroethene	96		5.945				ND	
44 2-Butanone (MEK)	43		5.951				ND	
48 Chlorobromomethane	128		6.231				ND	
50 Chloroform	83		6.371				ND	
51 1,1,1-Trichloroethane	97		6.541				ND	
53 Carbon tetrachloride	117		6.718				ND	
56 Benzene	78		6.943				ND	
57 1,2-Dichloroethane	62		7.016				ND	
61 Trichloroethene	130		7.679				ND	
64 1,2-Dichloropropane	63		7.953				ND	
65 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.233				ND	
71 cis-1,3-Dichloropropene	75		8.677				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
73 Toluene	91		9.011				ND	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164		9.522				ND	
79 2-Hexanone	43		9.662				ND	
81 Chlorodibromomethane	129		9.826				ND	
82 Ethylene Dibromide	107		9.942				ND	
84 Chlorobenzene	112		10.429				ND	
86 1,1,1,2-Tetrachloroethane	131		10.520				ND	
87 Ethylbenzene	106		10.526				ND	
88 m-Xylene & p-Xylene	106		10.660				ND	
89 o-Xylene	106		11.043				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.244				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505021.D

Injection Date: 05-May-2015 19:26:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-A-1

Lab Sample ID: 180-43402-1

Worklist Smp#: 21

Client ID: HD-QC5-0/1-2

Purge Vol: 5.000 mL

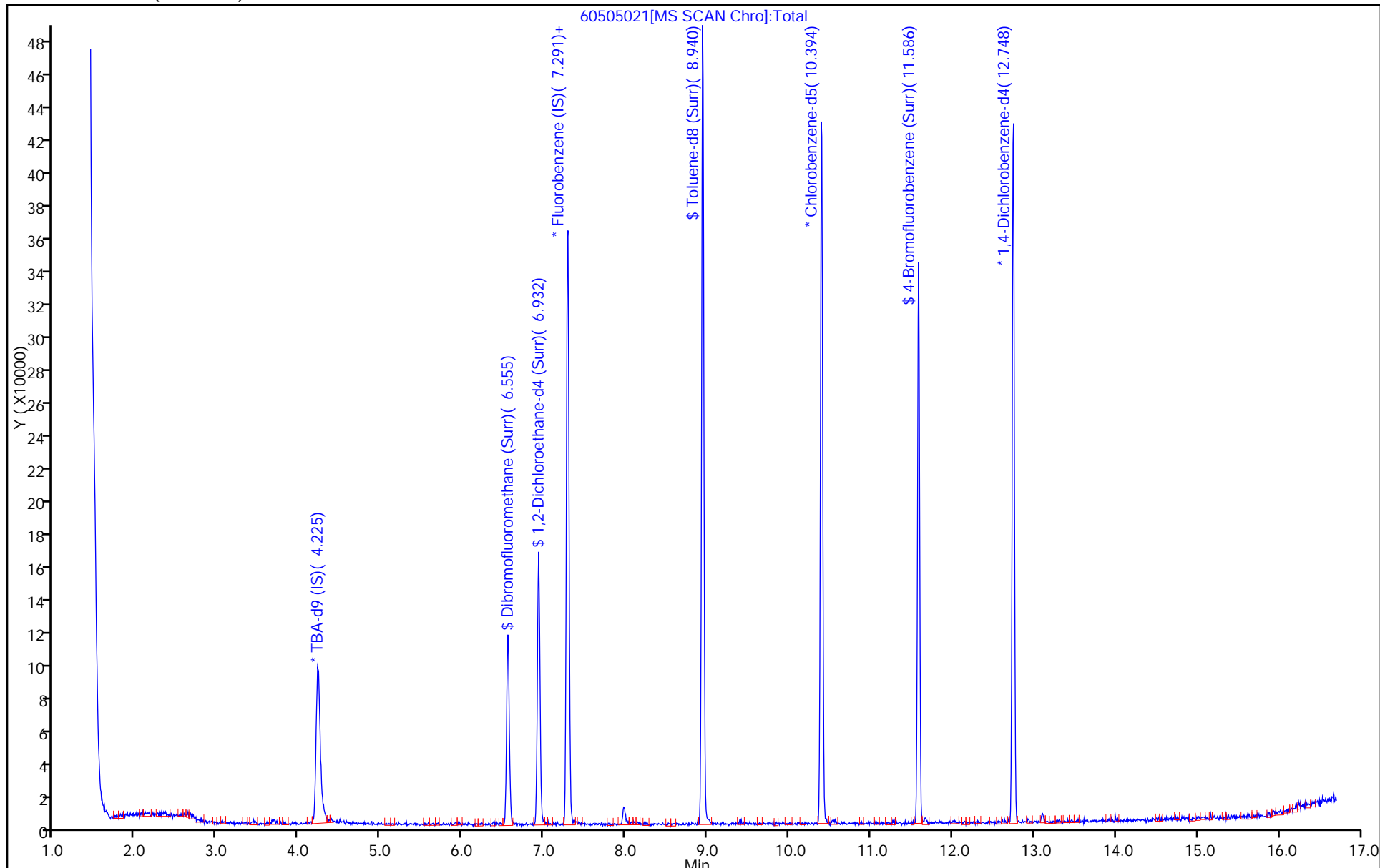
Dil. Factor: 1.0000

ALS Bottle#: 20

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-114-0/1-0 Lab Sample ID: 180-43402-2
 Matrix: Water Lab File ID: 60506030.D
 Analysis Method: 8260C Date Collected: 04/23/2015 11:11
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 23:14
 Soil Aliquot Vol: _____ Dilution Factor: 10
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10	U	10	2.8
75-01-4	Vinyl chloride	17		10	2.3
74-83-9	Bromomethane	10	U	10	3.1
75-00-3	Chloroethane	10	U	10	2.1
75-35-4	1,1-Dichloroethene	19		10	3.0
67-64-1	Acetone	50	U	50	25
75-15-0	Carbon disulfide	10	U	10	2.1
75-09-2	Methylene Chloride	6.2	J	10	1.3
156-60-5	trans-1,2-Dichloroethene	63		10	1.7
1634-04-4	Methyl tert-butyl ether	10	U	10	1.8
75-34-3	1,1-Dichloroethane	28		10	1.2
156-59-2	cis-1,2-Dichloroethene	1600	E	10	2.4
74-97-5	Bromochloromethane	10	U	10	1.8
78-93-3	2-Butanone (MEK)	50	U	50	5.5
67-66-3	Chloroform	10	U	10	1.7
71-55-6	1,1,1-Trichloroethane	5.0	J	10	2.9
56-23-5	Carbon tetrachloride	10	U	10	1.4
71-43-2	Benzene	10	U	10	1.1
107-06-2	1,2-Dichloroethane	10	U	10	2.1
79-01-6	Trichloroethene	1400	E	10	1.4
78-87-5	1,2-Dichloropropane	10	U	10	0.95
75-27-4	Bromodichloromethane	10	U	10	1.3
10061-01-5	cis-1,3-Dichloropropene	10	U	10	1.9
108-10-1	4-Methyl-2-pentanone (MIBK)	50	U	50	5.3
108-88-3	Toluene	10	U	10	1.5
10061-02-6	trans-1,3-Dichloropropene	10	U	10	1.5
79-00-5	1,1,2-Trichloroethane	10	U	10	2.0
127-18-4	Tetrachloroethene	650	E	10	1.5
591-78-6	2-Hexanone	50	U	50	1.6
124-48-1	Dibromochloromethane	10	U	10	1.4
106-93-4	1,2-Dibromoethane (EDB)	10	U	10	1.8
108-90-7	Chlorobenzene	10	U	10	1.4
630-20-6	1,1,1,2-Tetrachloroethane	10	U	10	2.8
100-41-4	Ethylbenzene	10	U	10	2.3
1330-20-7	Xylenes, Total	30	U	30	4.9
100-42-5	Styrene	10	U	10	0.97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-114-0/1-0 Lab Sample ID: 180-43402-2
 Matrix: Water Lab File ID: 60506030.D
 Analysis Method: 8260C Date Collected: 04/23/2015 11:11
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 23:14
 Soil Aliquot Vol: _____ Dilution Factor: 10
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10	U	10	1.9
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	2.0
107-13-1	Acrylonitrile	200	U	200	5.5
123-91-1	1,4-Dioxane	2000	U	2000	340

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		64-135
2037-26-5	Toluene-d8 (Surr)	109		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	106		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D
 Lims ID: 180-43402-D-2 Lab Sample ID: 180-43402-2
 Client ID: HD-MW-114-0/1-0
 Sample Type: Client
 Inject. Date: 06-May-2015 23:14:30 ALS Bottle#: 29 Worklist Smp#: 30
 Purge Vol: 5.000 mL Dil. Factor: 10.0000
 Sample Info: 180-43402-D-2, 10x
 Misc. Info.: 180-0006797-030
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-May-2015 09:23:51 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: fergusond

Date: 07-May-2015 09:23:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.230	4.224	0.006	98	180271	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	97	432761	50.0	
* 3 Chlorobenzene-d5	119	10.399	10.399	0.000	93	91289	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.747	12.747	0.000	97	130289	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.560	6.554	0.006	91	95143	53.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.932	-0.001	71	174192	58.2	
\$ 7 Toluene-d8 (Surr)	98	8.945	8.939	0.006	95	420401	54.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.000	78	156609	49.7	
12 Chloromethane	50		1.761				ND	
13 Vinyl chloride	62	1.888	1.888	0.000	98	19707	8.43	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.393				ND	
22 1,1-Dichloroethene	96	3.360	3.336	0.024	95	19003	9.48	
24 Acetone	43	3.433	3.428	0.005	68	3363	5.86	
26 Carbon disulfide	76		3.628				ND	
31 Methylene Chloride	84	4.139	4.127	0.012	47	7589	3.12	
33 Acrylonitrile	53		4.510				ND	
34 trans-1,2-Dichloroethene	96	4.565	4.559	0.006	94	70142	31.4	
35 Methyl tert-butyl ether	73		4.577				ND	
37 1,1-Dichloroethane	63	5.203	5.198	0.005	97	59826	14.2	
43 cis-1,2-Dichloroethene	96	5.946	5.940	0.006	80	2093721	824.7	E
44 2-Butanone (MEK)	43		5.946				ND	
48 Chlorobromomethane	128		6.232				ND	
50 Chloroform	83		6.372				ND	
51 1,1,1-Trichloroethane	97	6.542	6.542	0.000	38	8296	2.49	
53 Carbon tetrachloride	117		6.719				ND	
56 Benzene	78		6.944				ND	
57 1,2-Dichloroethane	62		7.017				ND	
61 Trichloroethene	130	7.679	7.674	0.005	89	1475473	716.5	E
64 1,2-Dichloropropane	63		7.954				ND	
65 1,4-Dioxane	88		8.033				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.227				ND	
71 cis-1,3-Dichloropropene	75		8.678				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.824				ND	
73 Toluene	91		9.012				ND	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97		9.450				ND	
77 Tetrachloroethene	164	9.529	9.529	0.000	90	503551	323.2	E
79 2-Hexanone	43		9.663				ND	
81 Chlorodibromomethane	129		9.821				ND	
82 Ethylene Dibromide	107		9.943				ND	
84 Chlorobenzene	112		10.430				ND	
86 1,1,1,2-Tetrachloroethane	131		10.521				ND	
87 Ethylbenzene	106		10.527				ND	
88 m-Xylene & p-Xylene	106		10.661				ND	
89 o-Xylene	106		11.044				ND	
90 Styrene	104		11.062				ND	
91 Bromoform	173		11.245				ND	
96 1,1,2,2-Tetrachloroethane	83		11.713				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Worklist Smp#: 30

Client ID: HD-MW-114-0/1-0

Purge Vol: 5.000 mL

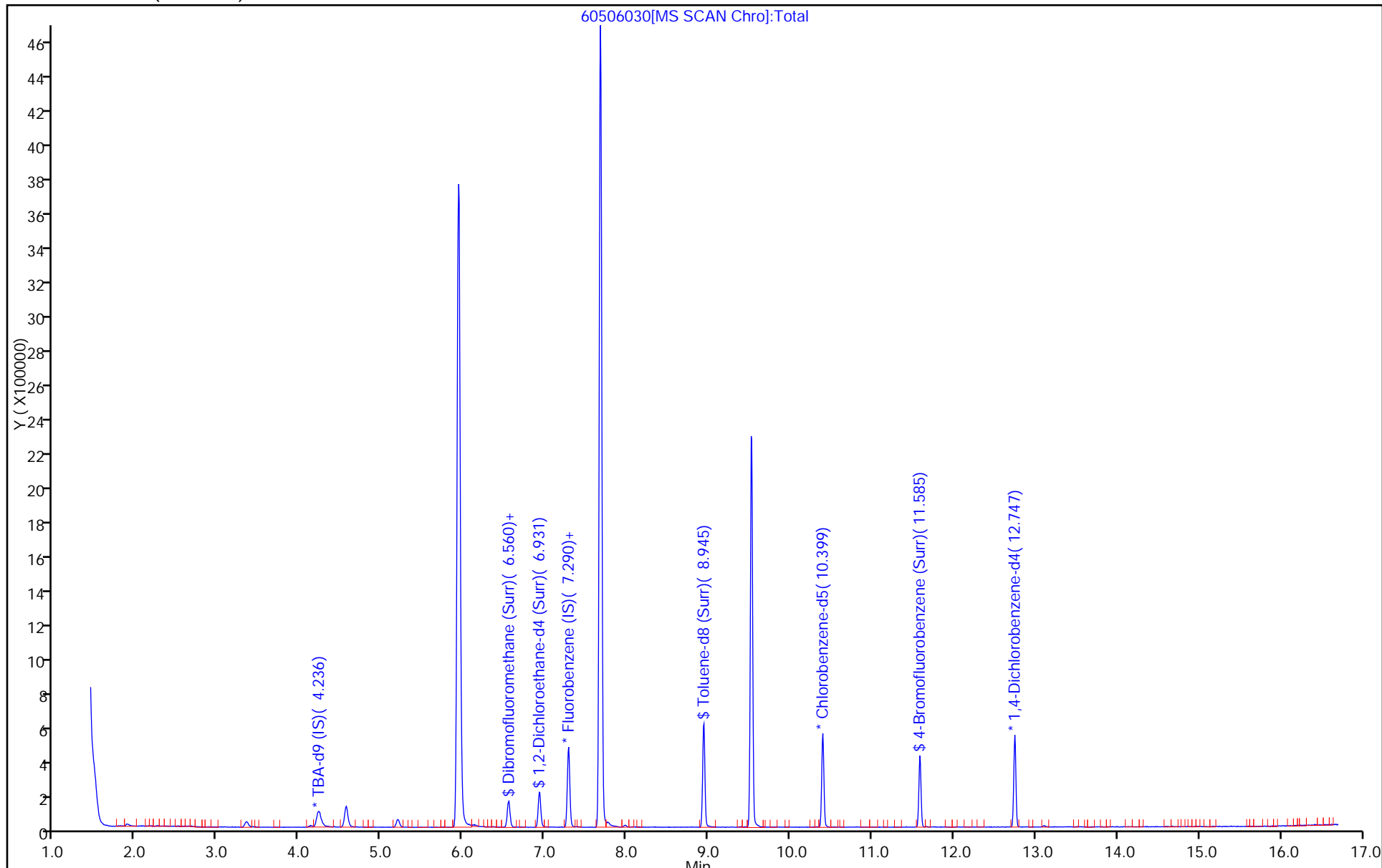
Dil. Factor: 10.0000

ALS Bottle#: 29

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

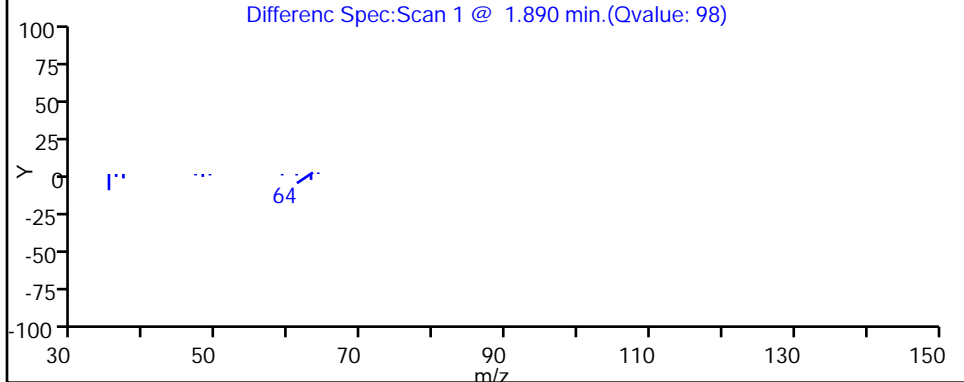
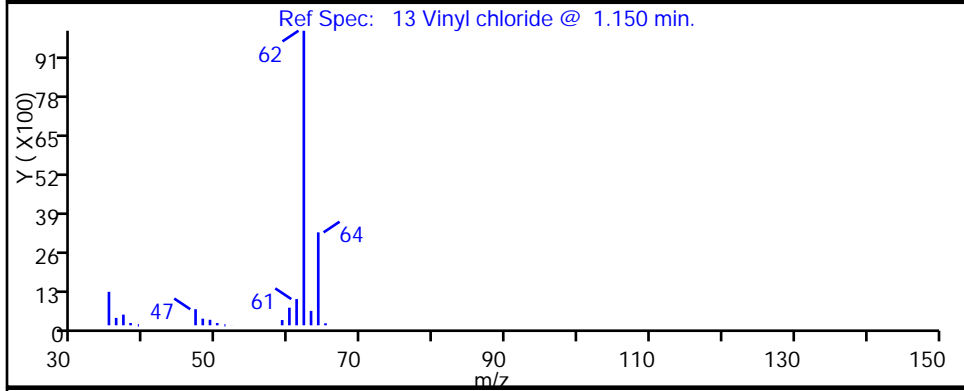
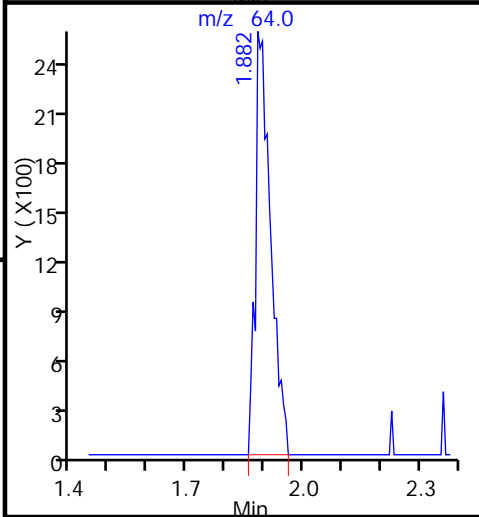
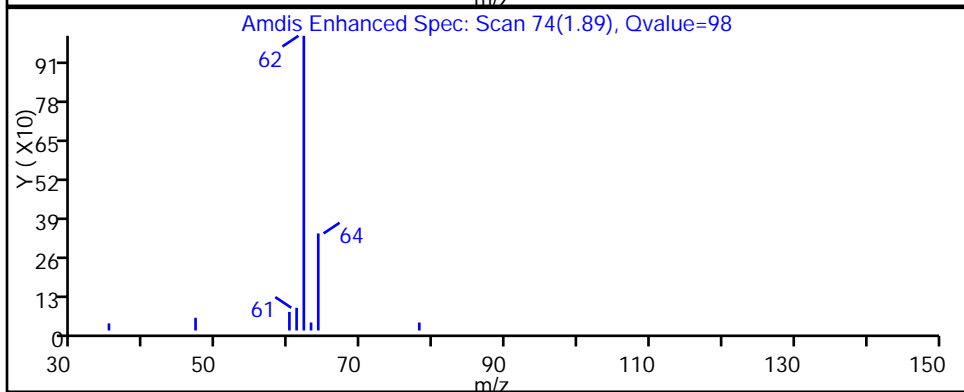
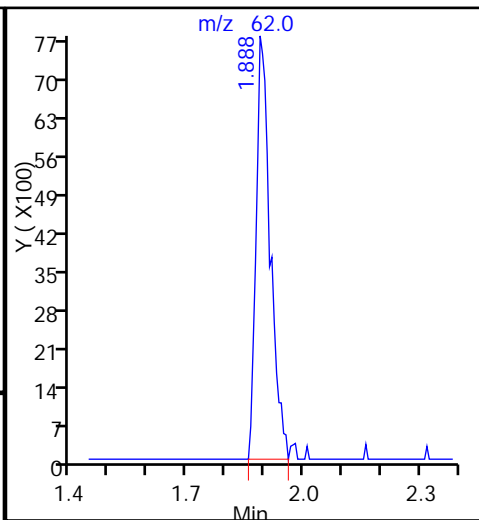
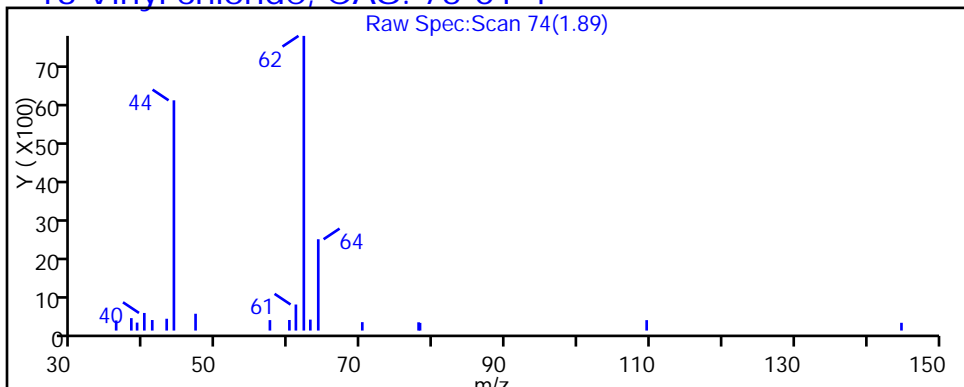
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

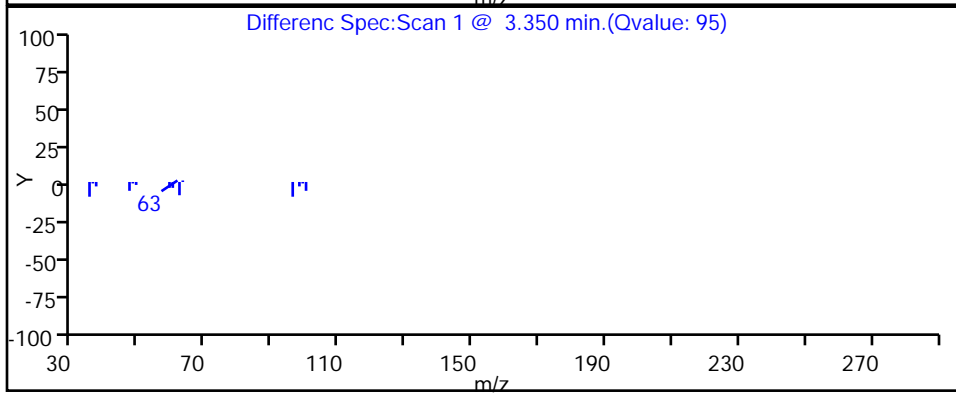
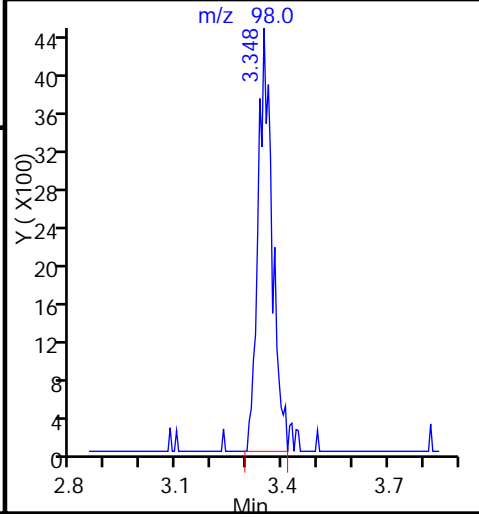
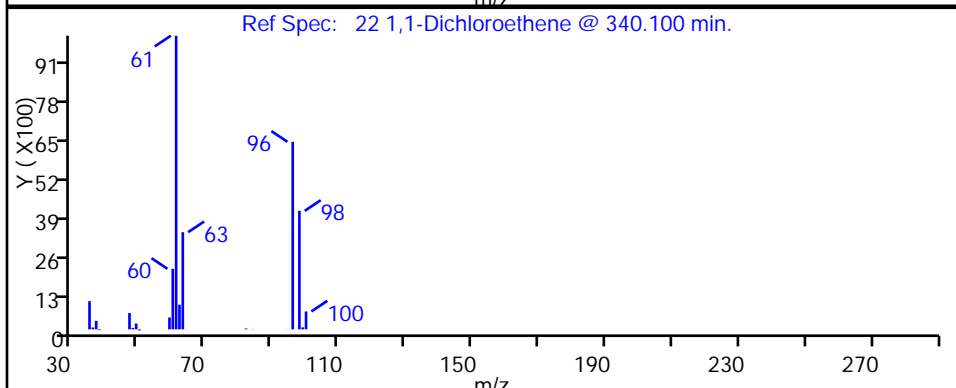
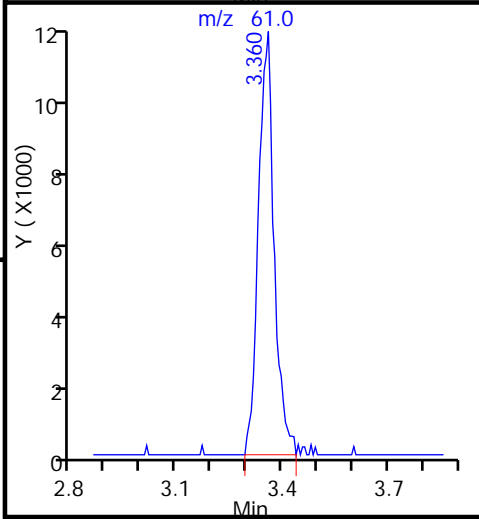
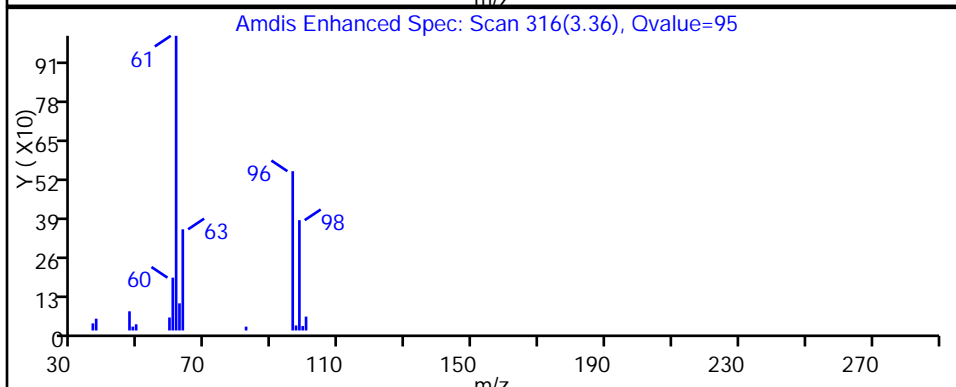
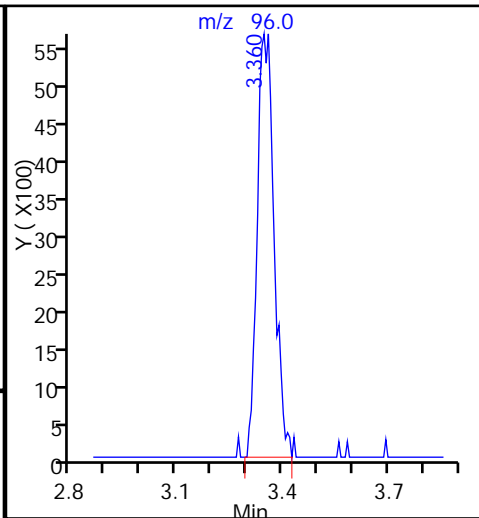
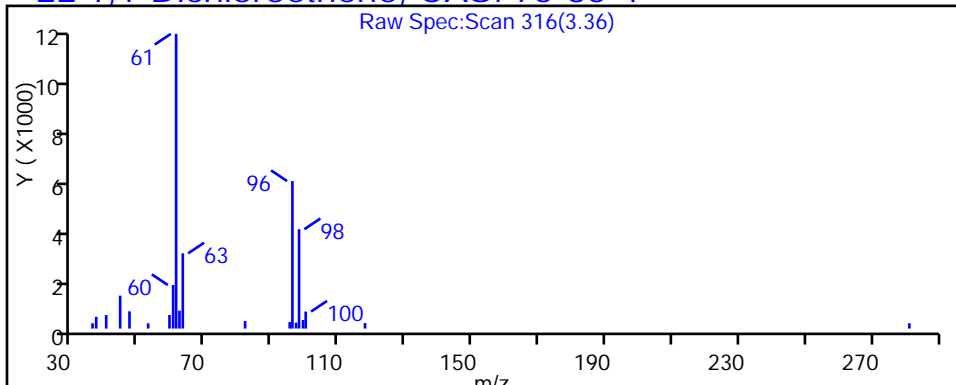
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

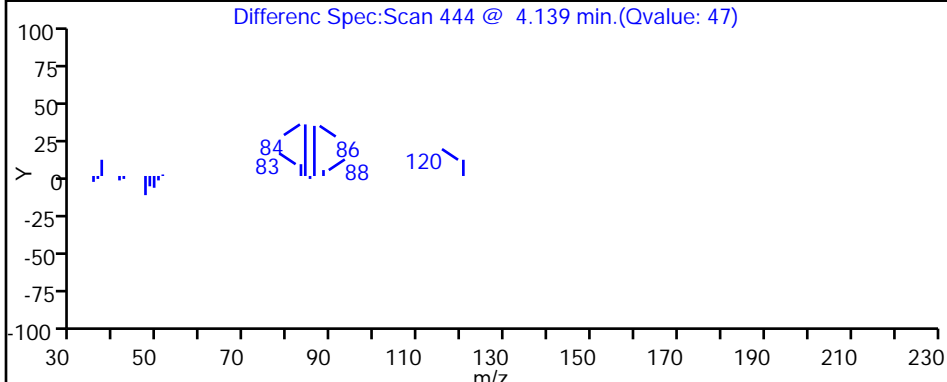
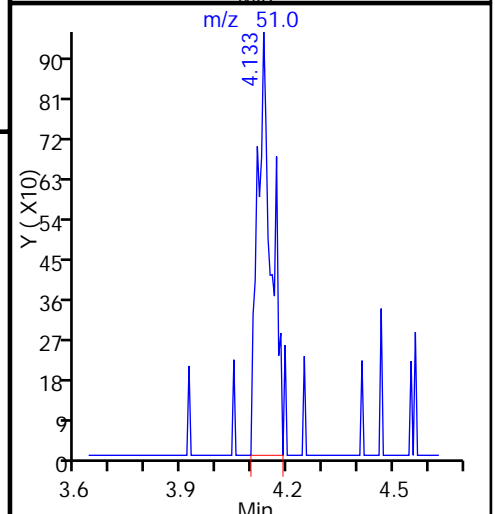
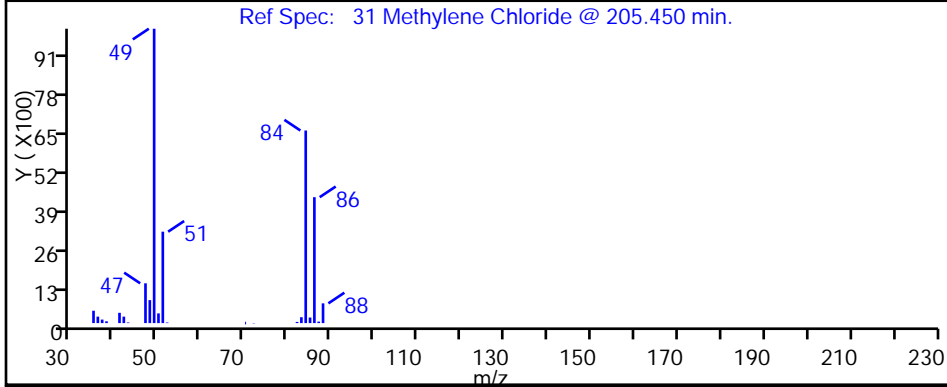
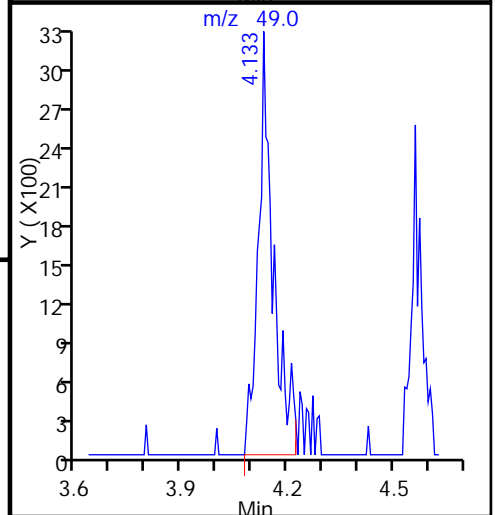
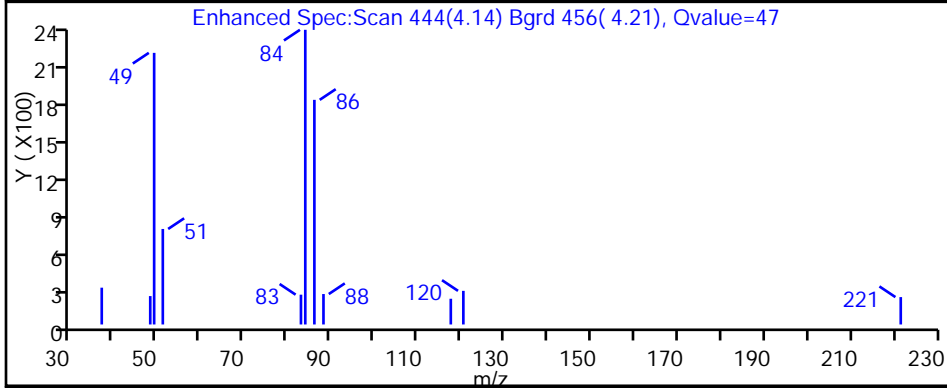
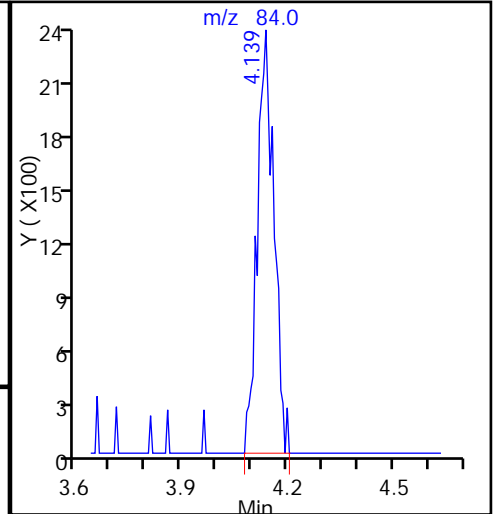
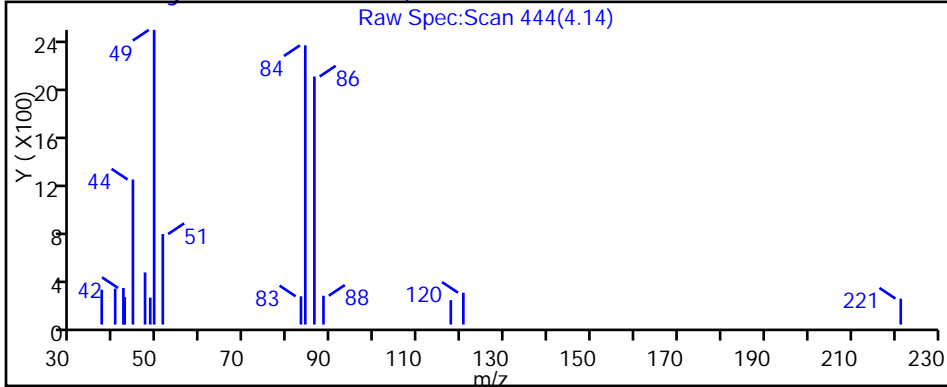
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

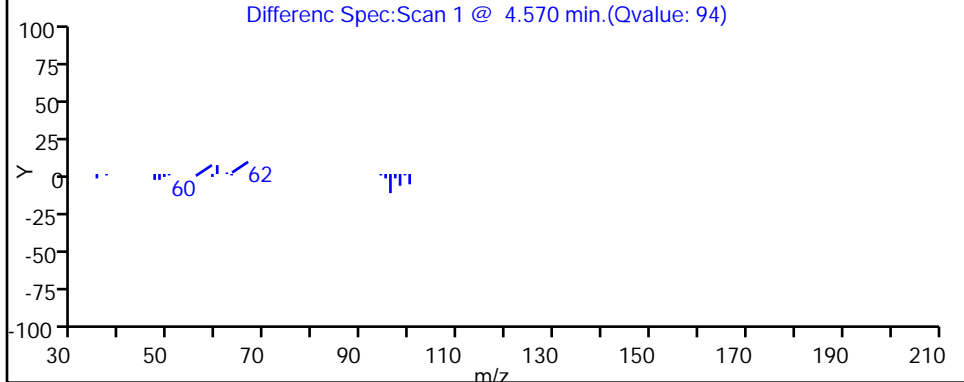
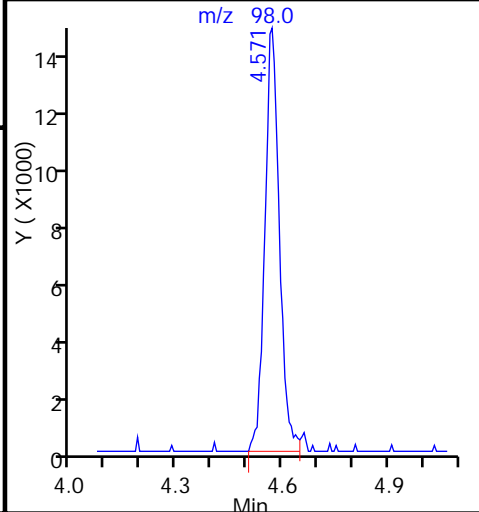
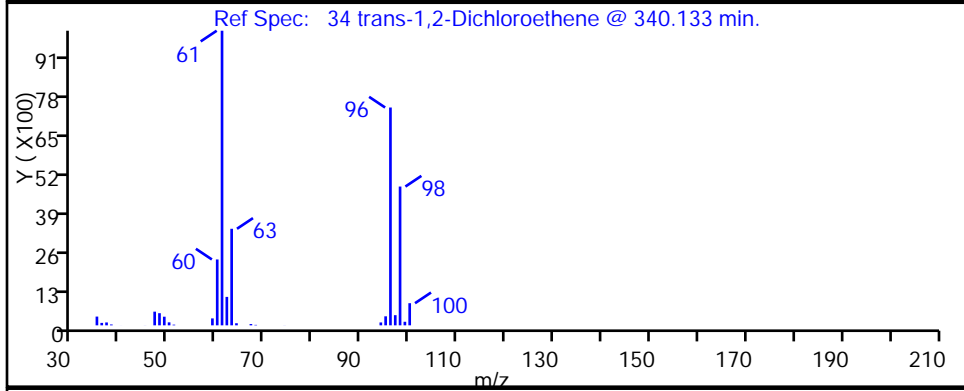
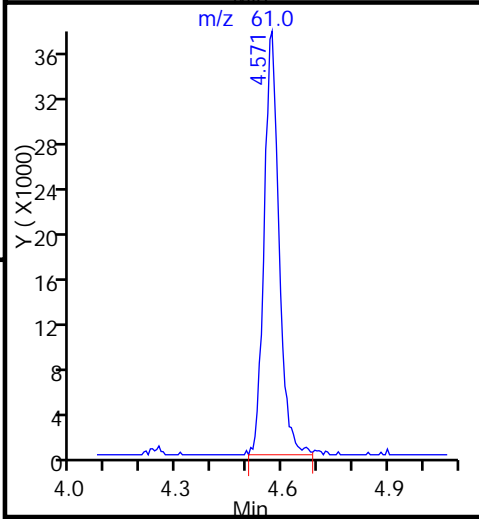
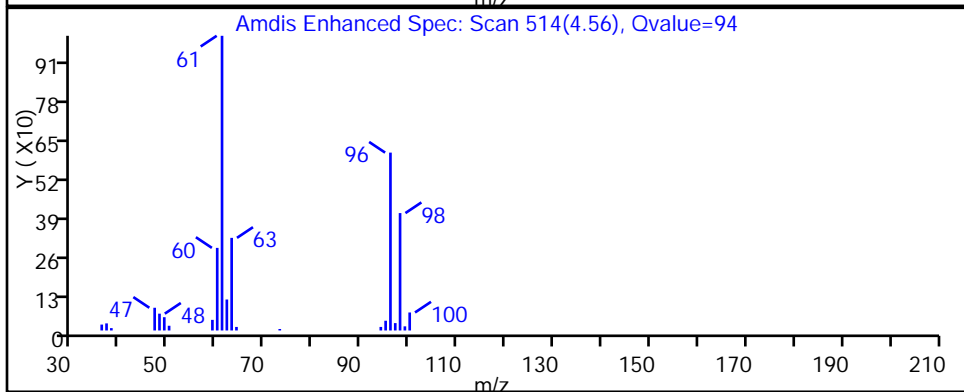
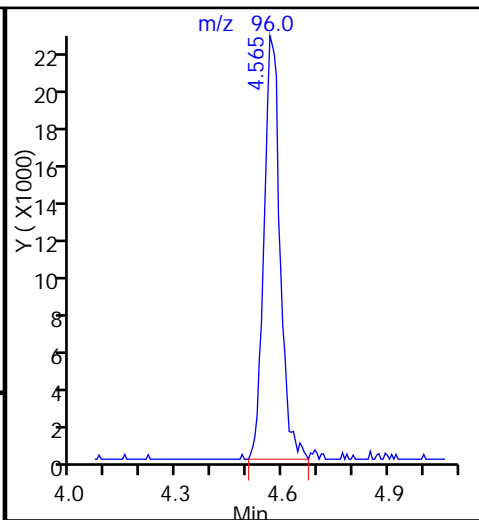
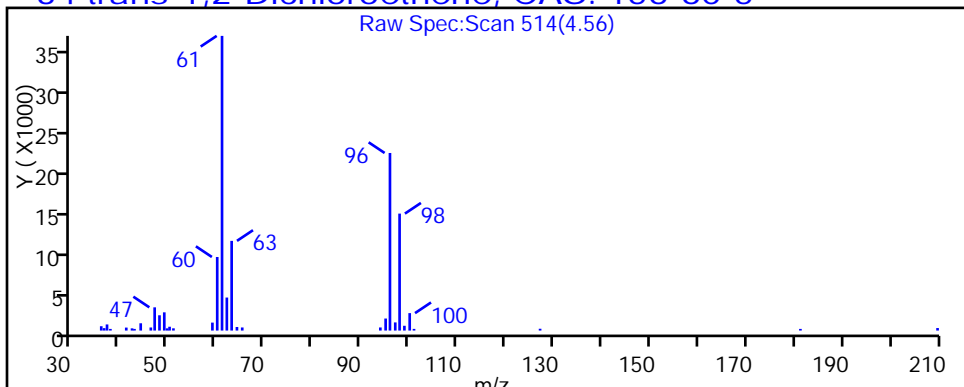
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

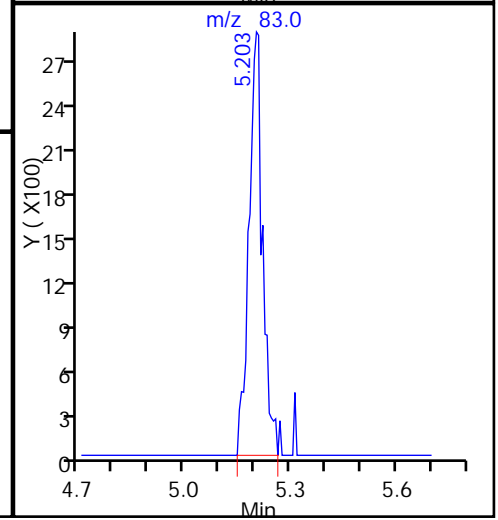
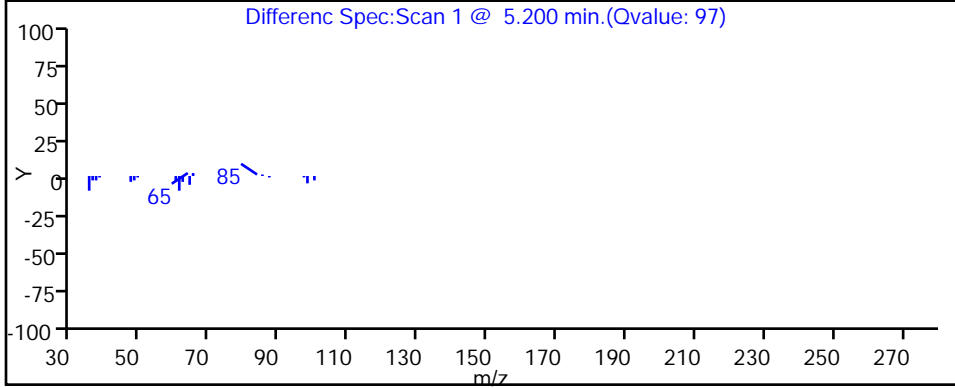
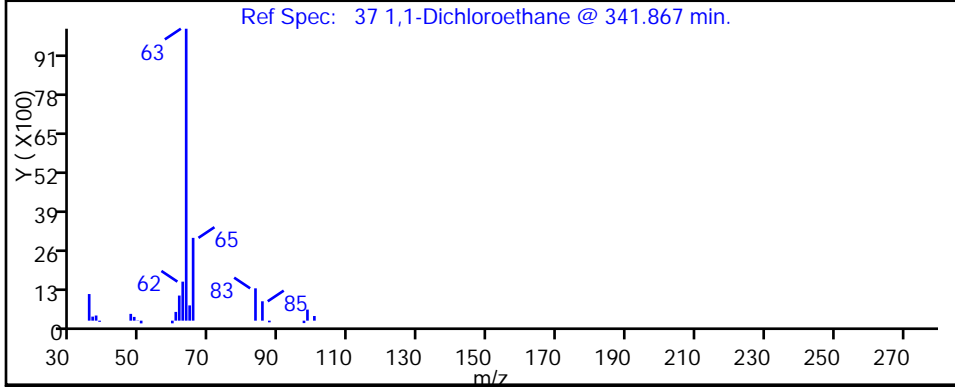
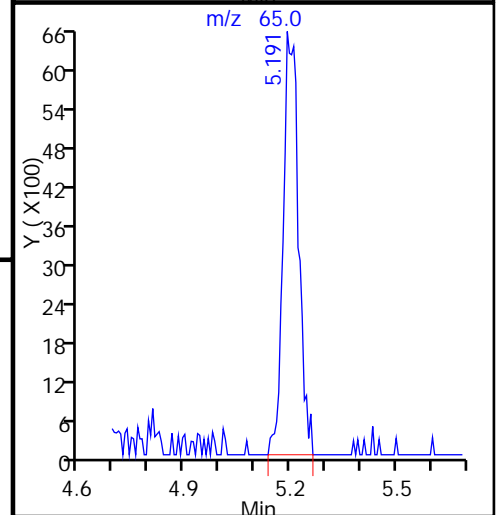
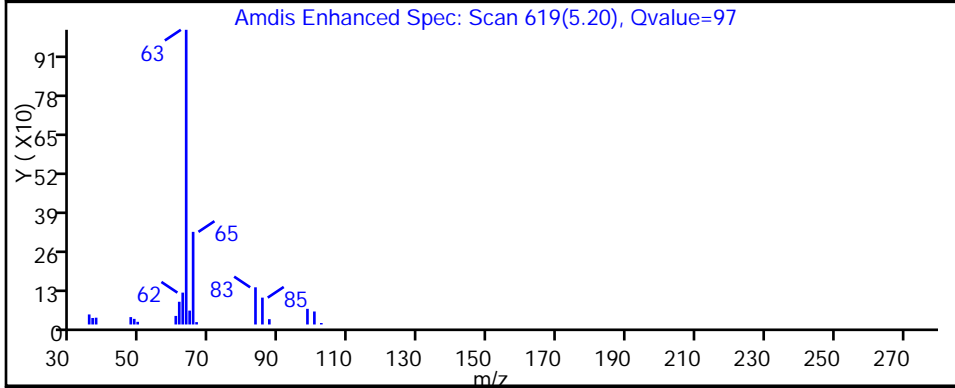
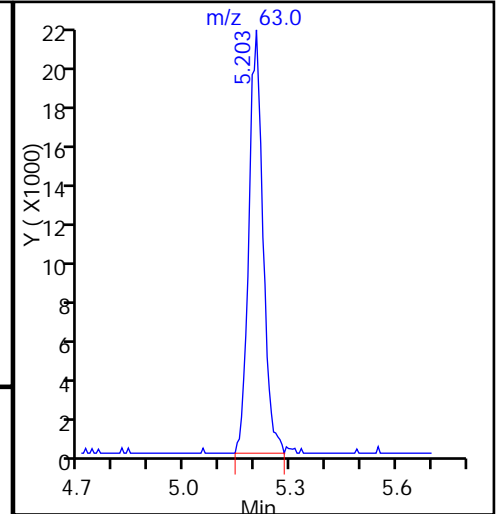
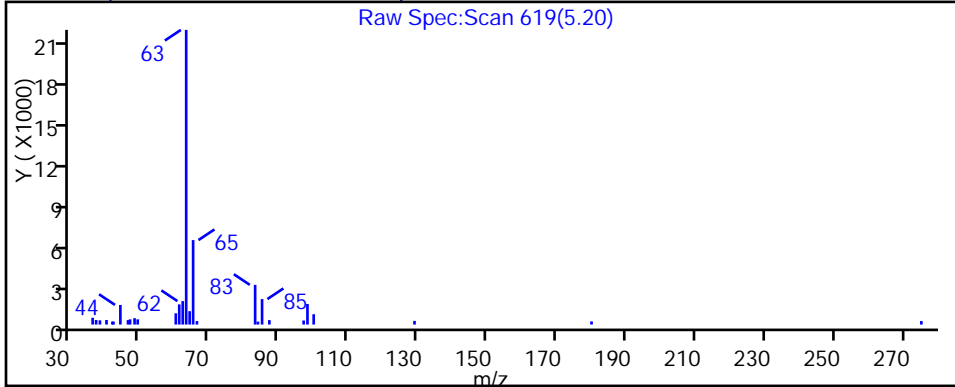
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

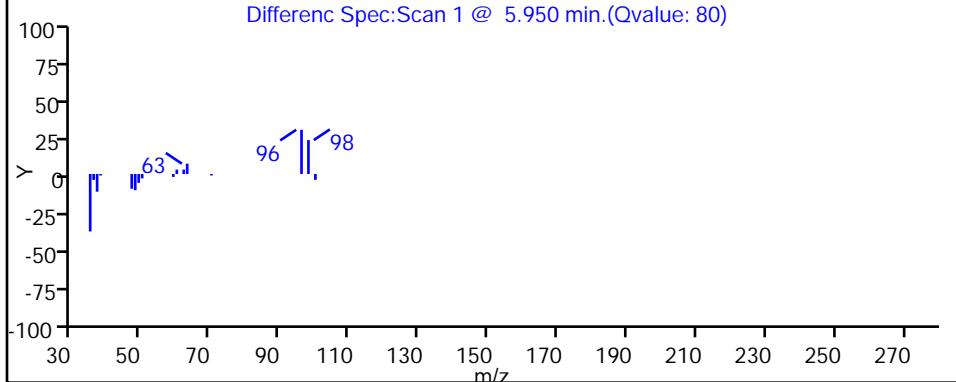
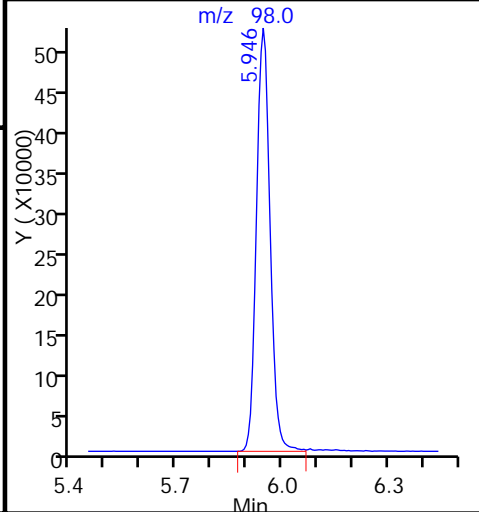
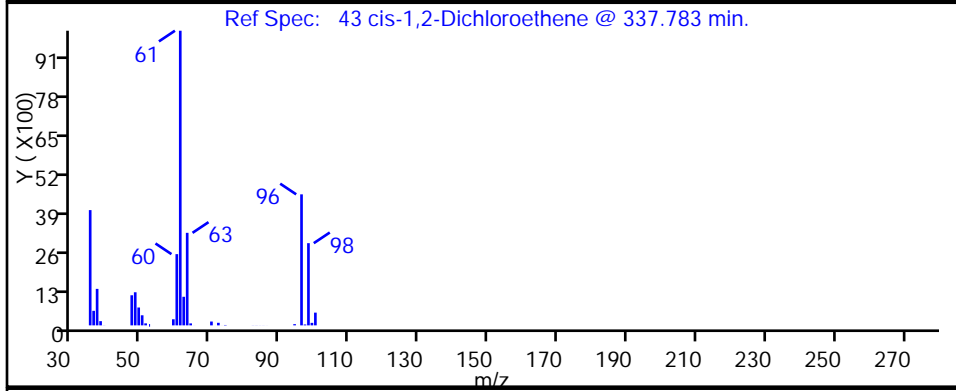
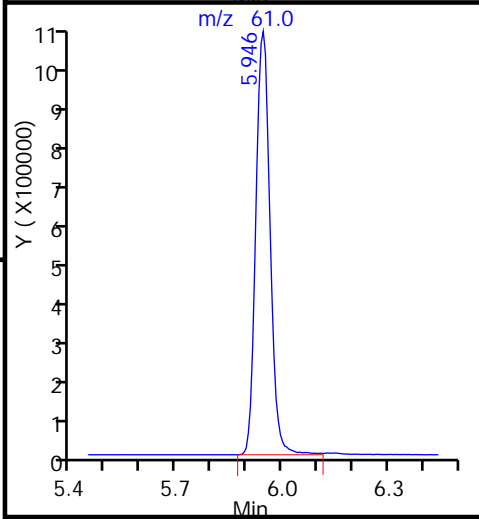
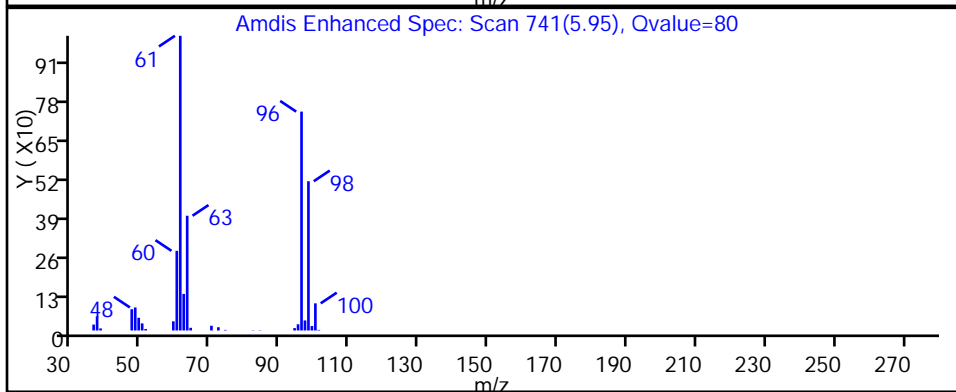
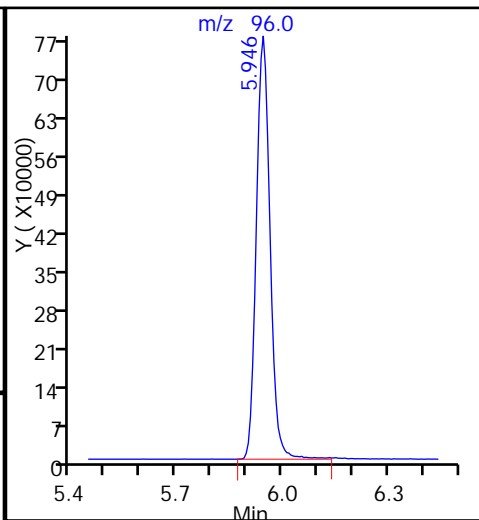
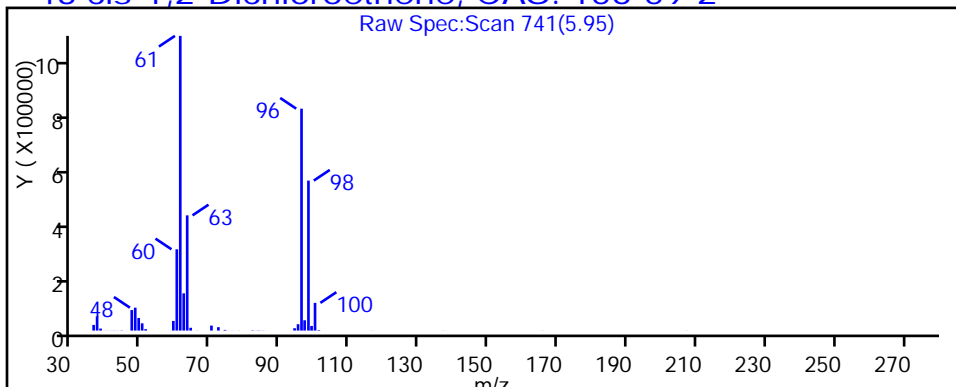
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

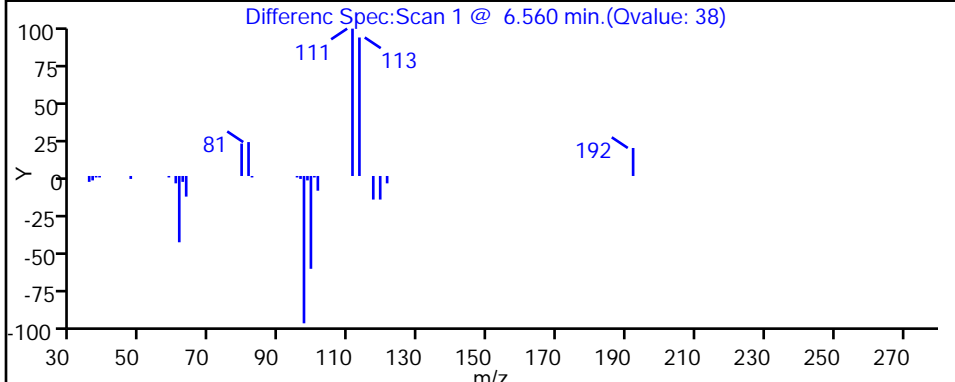
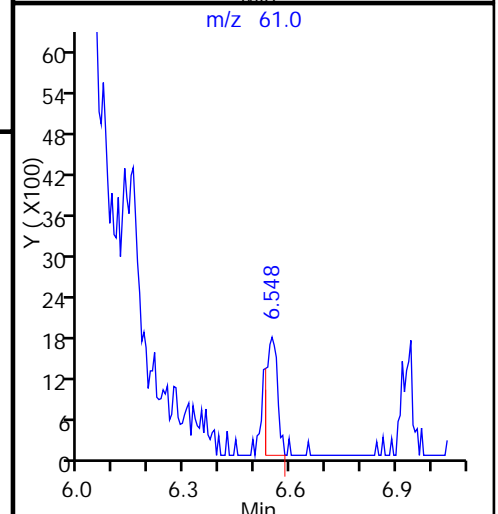
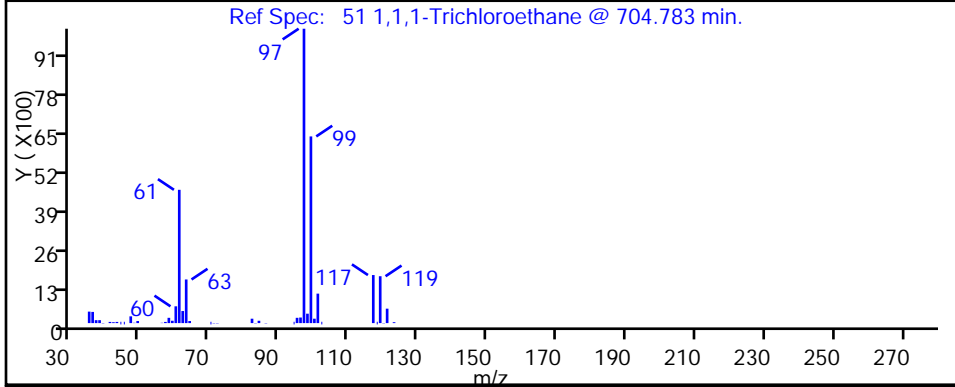
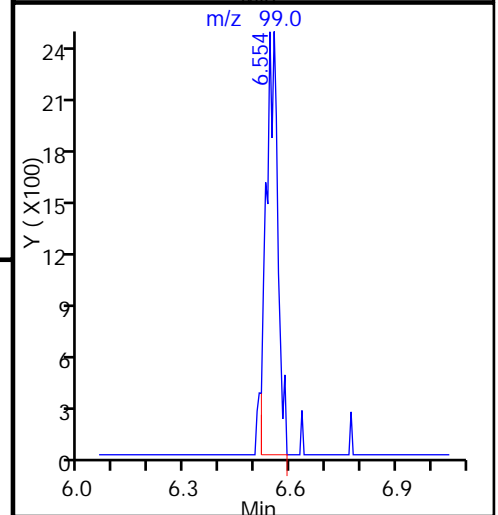
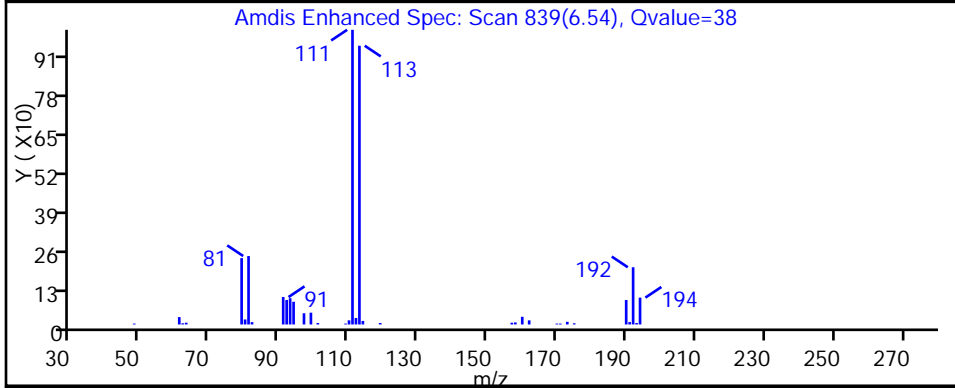
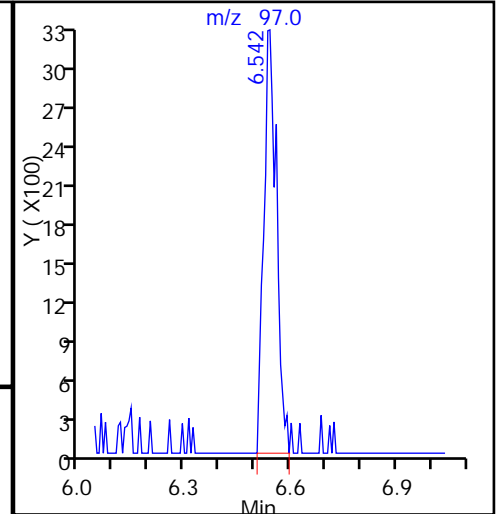
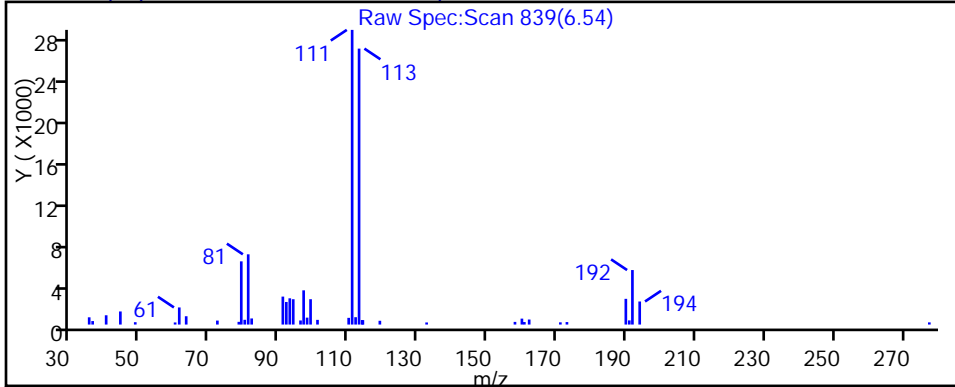
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

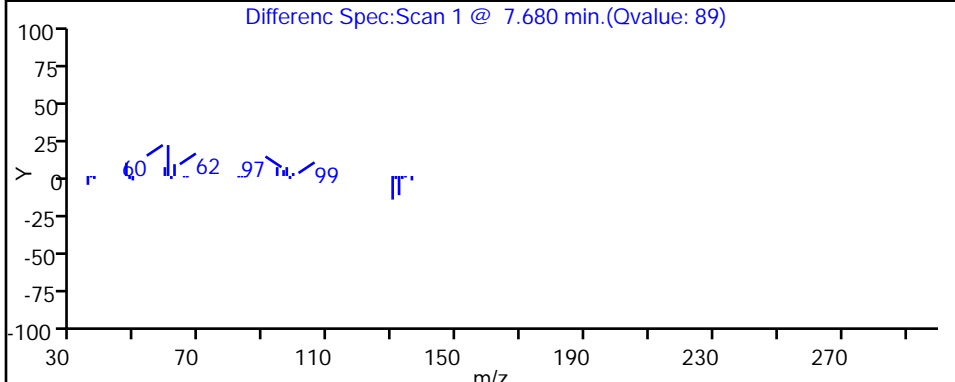
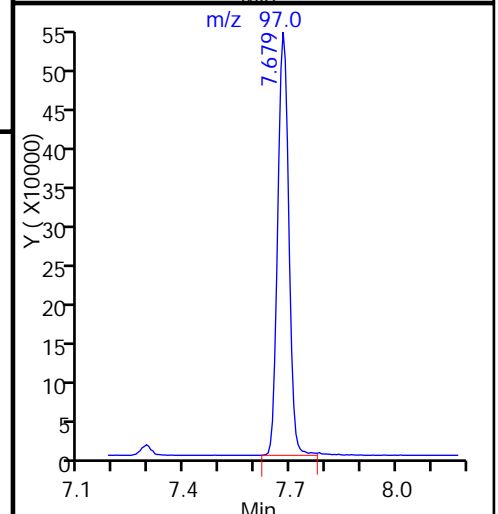
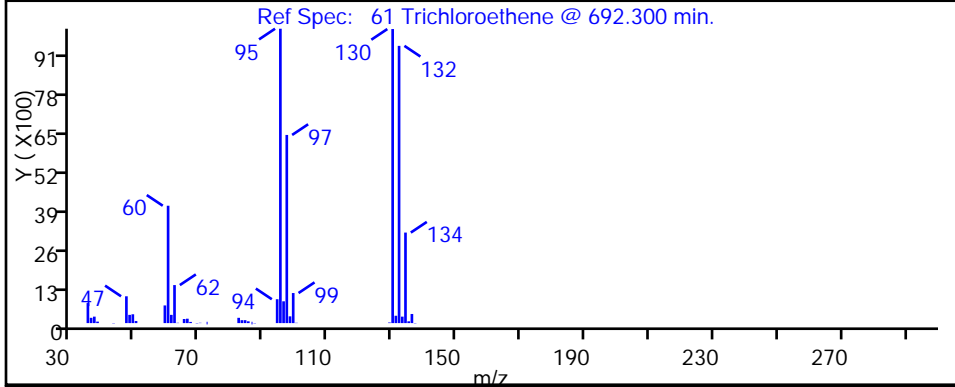
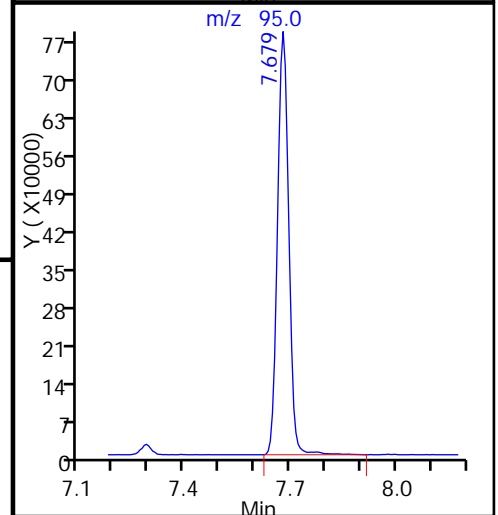
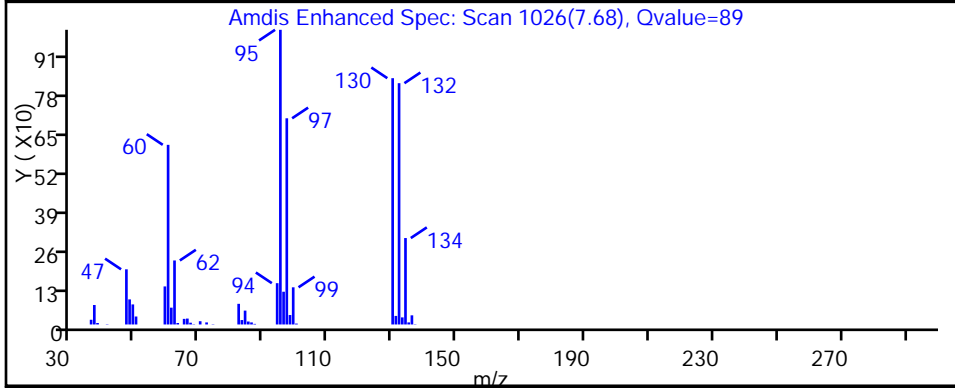
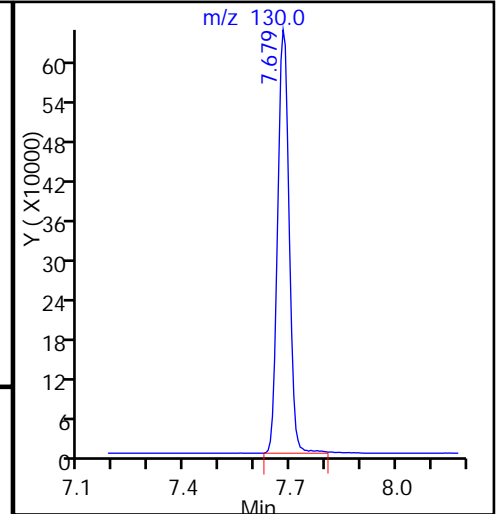
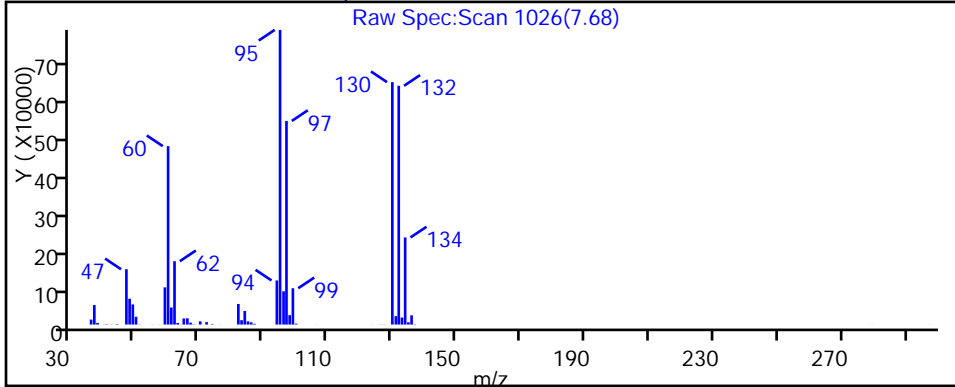
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506030.D

Injection Date: 06-May-2015 23:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 29

Worklist Smp#: 30

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

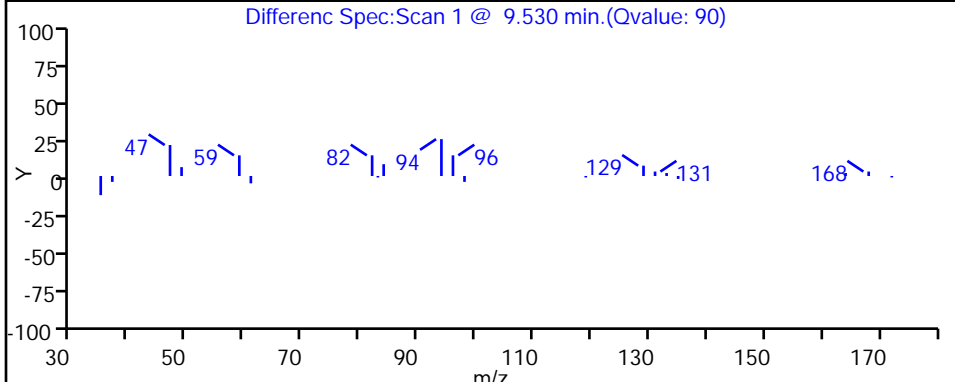
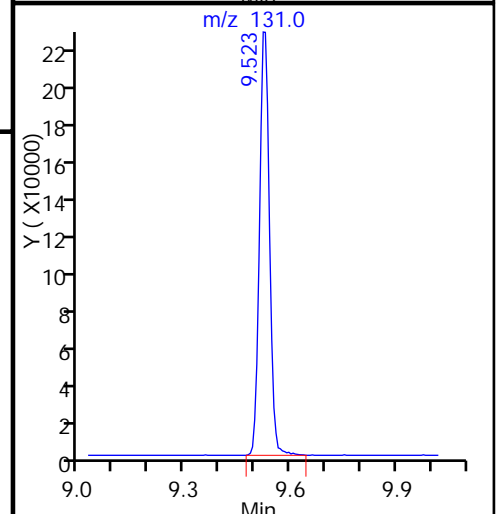
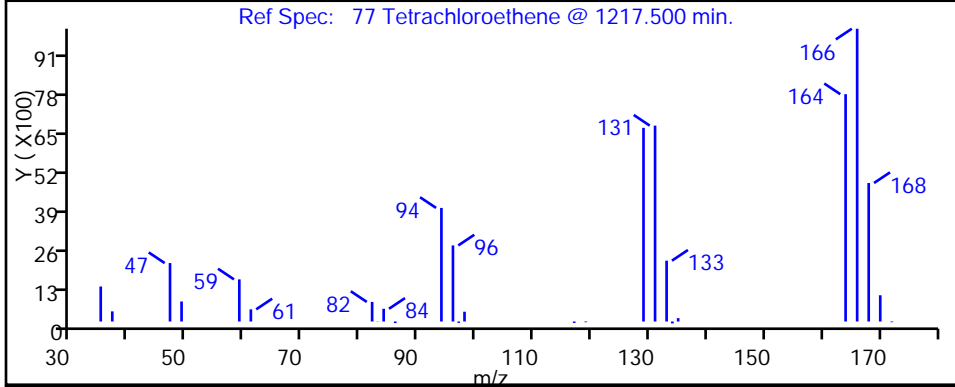
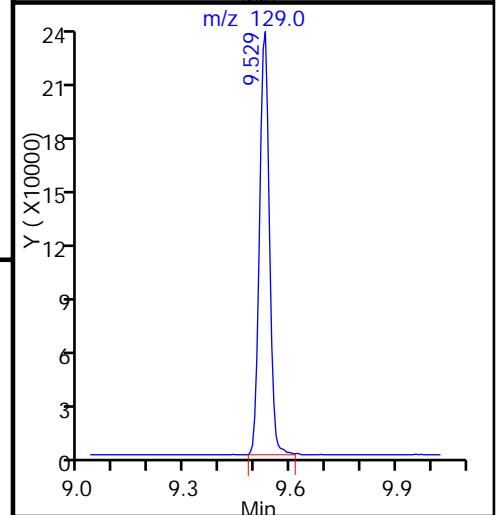
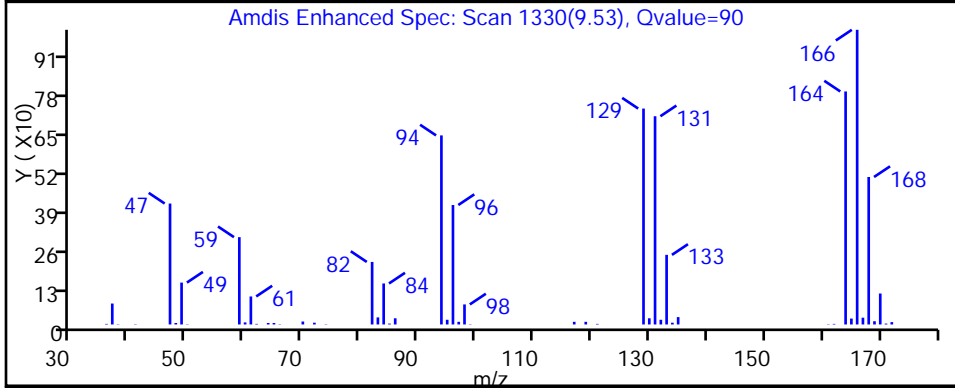
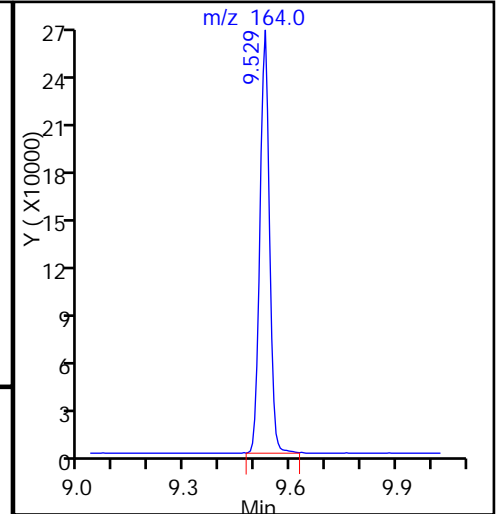
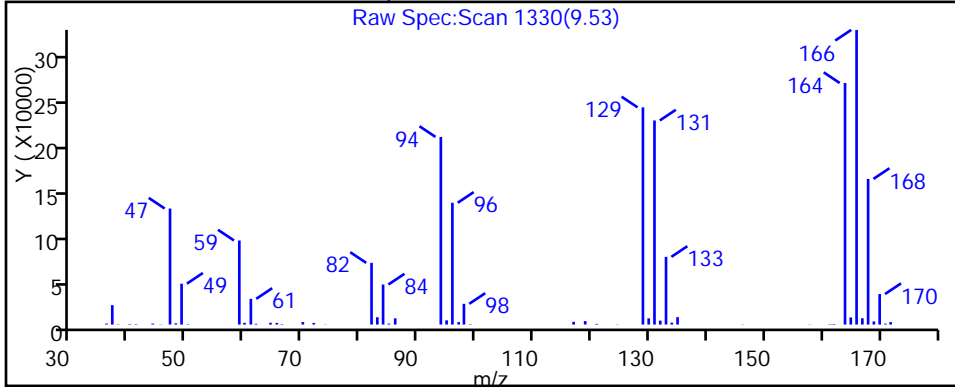
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-114-0/1-0 DL Lab Sample ID: 180-43402-2 DL
 Matrix: Water Lab File ID: 60505016.D
 Analysis Method: 8260C Date Collected: 04/23/2015 11:11
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 17:26
 Soil Aliquot Vol: _____ Dilution Factor: 100
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	100	U	100	28
75-01-4	Vinyl chloride	100	U	100	23
74-83-9	Bromomethane	100	U	100	31
75-00-3	Chloroethane	100	U	100	21
75-35-4	1,1-Dichloroethene	35	J	100	30
67-64-1	Acetone	500	U	500	250
75-15-0	Carbon disulfide	100	U	100	21
75-09-2	Methylene Chloride	80	J	100	13
156-60-5	trans-1,2-Dichloroethene	100	U	100	17
1634-04-4	Methyl tert-butyl ether	100	U	100	18
75-34-3	1,1-Dichloroethane	28	J	100	12
156-59-2	cis-1,2-Dichloroethene	1900		100	24
74-97-5	Bromochloromethane	100	U	100	18
78-93-3	2-Butanone (MEK)	500	U	500	55
67-66-3	Chloroform	100	U	100	17
71-55-6	1,1,1-Trichloroethane	100	U	100	29
56-23-5	Carbon tetrachloride	100	U	100	14
71-43-2	Benzene	100	U	100	11
107-06-2	1,2-Dichloroethane	100	U	100	21
79-01-6	Trichloroethene	1800		100	14
78-87-5	1,2-Dichloropropane	100	U	100	9.5
75-27-4	Bromodichloromethane	100	U	100	13
10061-01-5	cis-1,3-Dichloropropene	100	U	100	19
108-10-1	4-Methyl-2-pentanone (MIBK)	500	U	500	53
108-88-3	Toluene	100	U	100	15
10061-02-6	trans-1,3-Dichloropropene	100	U	100	15
79-00-5	1,1,2-Trichloroethane	100	U	100	20
127-18-4	Tetrachloroethene	910		100	15
591-78-6	2-Hexanone	500	U	500	16
124-48-1	Dibromochloromethane	100	U	100	14
106-93-4	1,2-Dibromoethane (EDB)	100	U	100	18
108-90-7	Chlorobenzene	100	U	100	14
630-20-6	1,1,1,2-Tetrachloroethane	100	U	100	28
100-41-4	Ethylbenzene	100	U	100	23
1330-20-7	Xylenes, Total	300	U	300	49
100-42-5	Styrene	100	U	100	9.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-114-0/1-0 DL Lab Sample ID: 180-43402-2 DL
 Matrix: Water Lab File ID: 60505016.D
 Analysis Method: 8260C Date Collected: 04/23/2015 11:11
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 17:26
 Soil Aliquot Vol: _____ Dilution Factor: 100
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	100	U	100	19
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	20
107-13-1	Acrylonitrile	2000	U	2000	55
123-91-1	1,4-Dioxane	20000	U	20000	3400

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	101		70-118
1868-53-7	Dibromofluoromethane (Surr)	103		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505016.D
 Lims ID: 180-43402-E-2 Lab Sample ID: 180-43402-2
 Client ID: HD-MW-114-0/1-0
 Sample Type: Client
 Inject. Date: 05-May-2015 17:26:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 100.0000
 Sample Info: 180-43402-E-2, 100x
 Misc. Info.: 180-0006773-016
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 07:22:47 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond

Date: 06-May-2015 07:22:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.233	4.239	-0.006	96	188700	1000.0	
* 2 Fluorobenzene (IS)	96	7.293	7.286	0.007	98	377623	50.0	
* 3 Chlorobenzene-d5	119	10.395	10.401	-0.006	92	77564	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.744	12.743	0.001	96	115778	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.557	6.547	0.010	90	80506	51.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.934	6.931	0.003	71	141344	54.1	
\$ 7 Toluene-d8 (Surr)	98	8.941	8.938	0.003	94	353662	53.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.588	11.585	0.004	78	135380	50.6	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62	1.891	1.894	-0.003	39	1876	0.9191	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96	3.339	3.341	-0.002	93	3070	1.76	
24 Acetone	43		3.427				ND	
26 Carbon disulfide	76		3.633				ND	
31 Methylene Chloride	84	4.148	4.132	0.016	92	8480	4.00	
33 Acrylonitrile	53		4.497				ND	
34 trans-1,2-Dichloroethene	96		4.558				ND	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63	5.200	5.197	0.003	1	5186	1.42	M
43 cis-1,2-Dichloroethene	96	5.942	5.945	-0.003	83	209743	94.7	
44 2-Butanone (MEK)	43		5.951				ND	
48 Chlorobromomethane	128		6.231				ND	
50 Chloroform	83		6.371				ND	
51 1,1,1-Trichloroethane	97		6.541				ND	
53 Carbon tetrachloride	117		6.718				ND	
56 Benzene	78		6.943				ND	
57 1,2-Dichloroethane	62		7.016				ND	
61 Trichloroethene	130	7.682	7.679	0.003	90	162759	90.6	
64 1,2-Dichloropropane	63		7.953				ND	
65 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.233				ND	
71 cis-1,3-Dichloropropene	75		8.677				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
73 Toluene	91		9.011				ND	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164	9.532	9.522	0.010	93	60490	45.7	
79 2-Hexanone	43		9.662				ND	
81 Chlorodibromomethane	129		9.826				ND	
82 Ethylene Dibromide	107		9.942				ND	
84 Chlorobenzene	112		10.429				ND	
86 1,1,1,2-Tetrachloroethane	131		10.520				ND	
87 Ethylbenzene	106		10.526				ND	
88 m-Xylene & p-Xylene	106		10.660				ND	
89 o-Xylene	106		11.043				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.244				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505016.D

Injection Date: 05-May-2015 17:26:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-E-2

Lab Sample ID: 180-43402-2

Worklist Smp#: 16

Client ID: HD-MW-114-0/1-0

Purge Vol: 5.000 mL

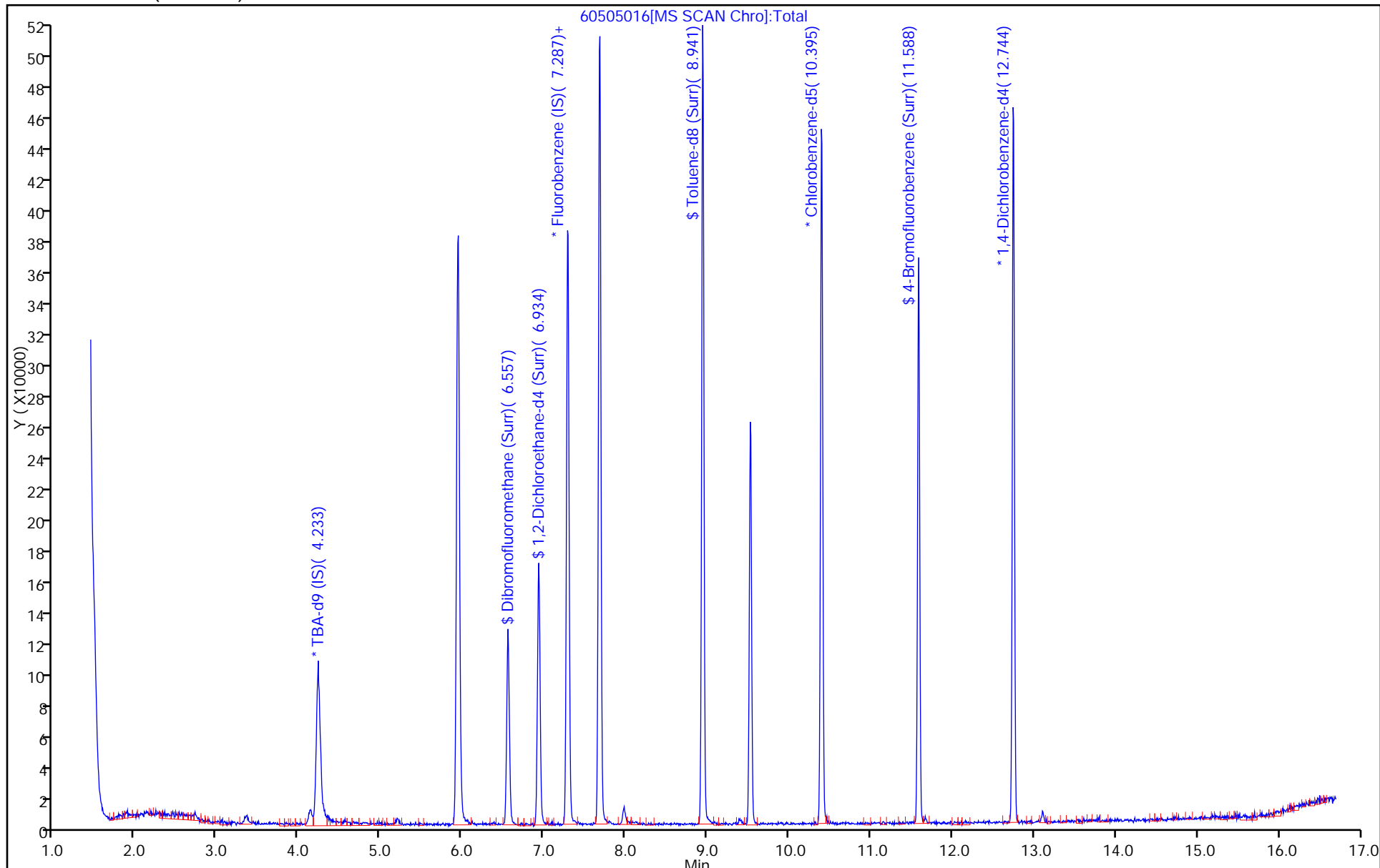
Dil. Factor: 100.0000

ALS Bottle#: 15

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505016.D

Injection Date: 05-May-2015 17:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 100.0000

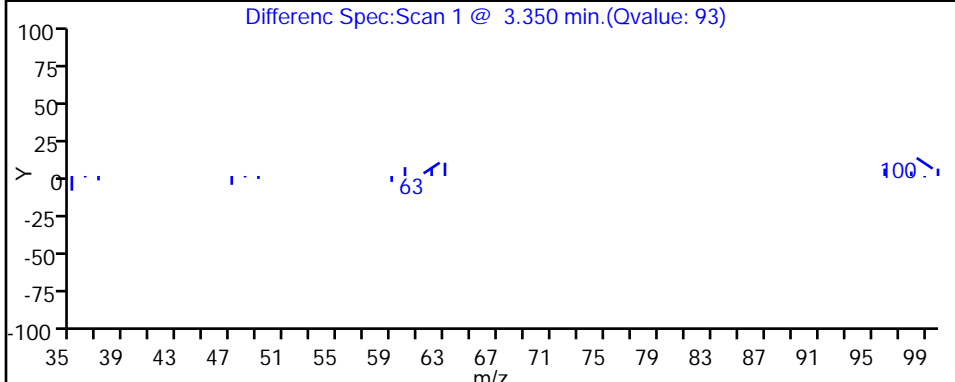
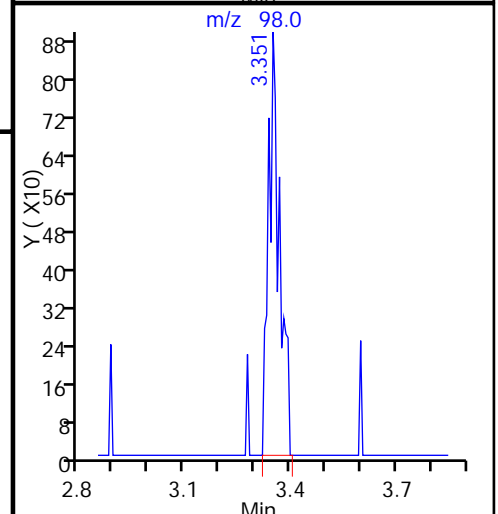
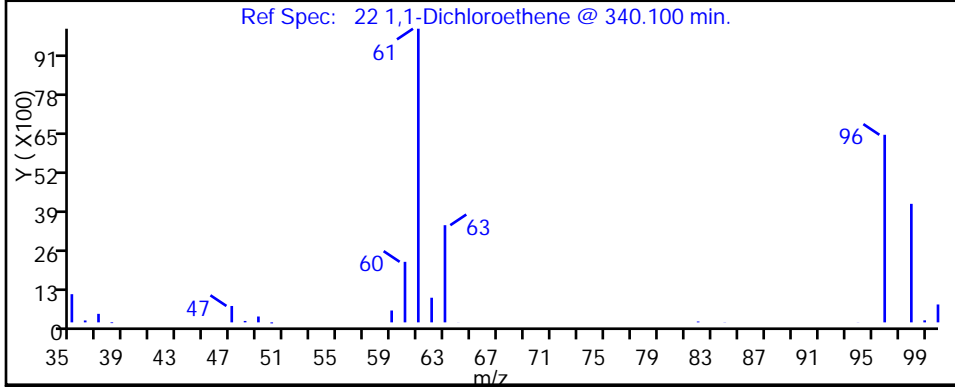
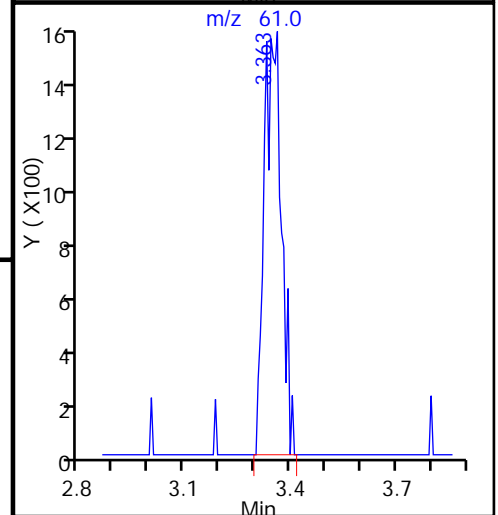
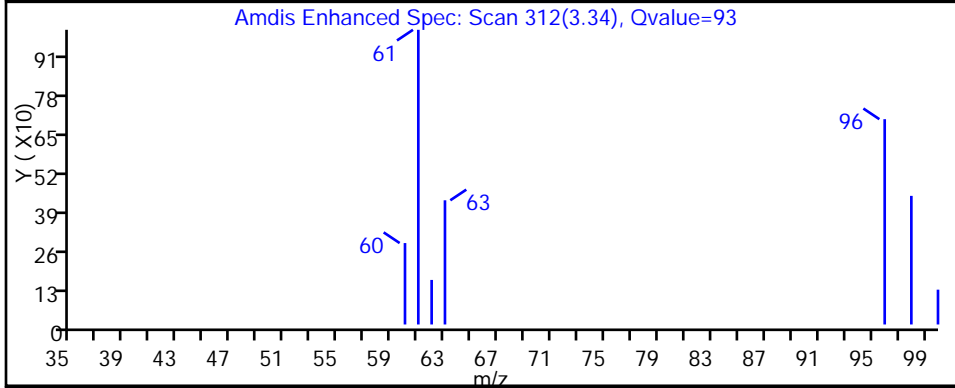
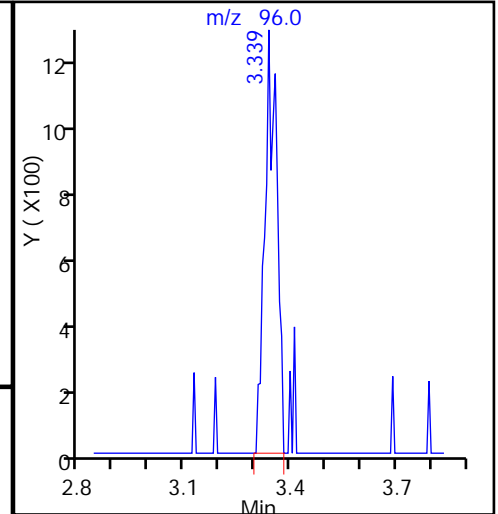
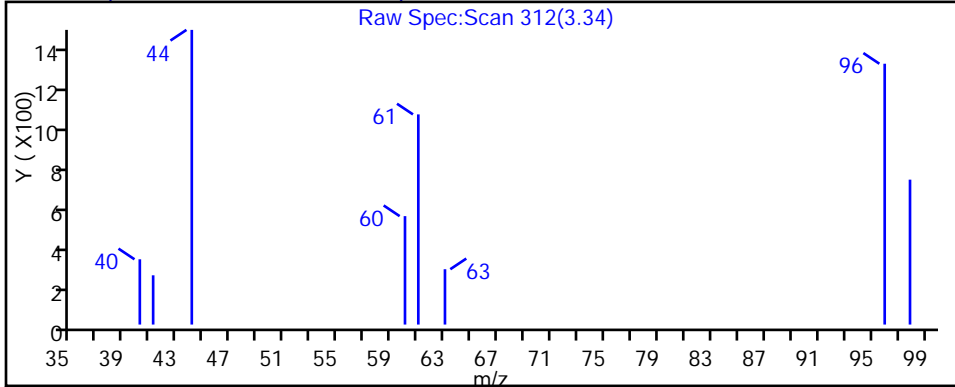
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505016.D

Injection Date: 05-May-2015 17:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 100.0000

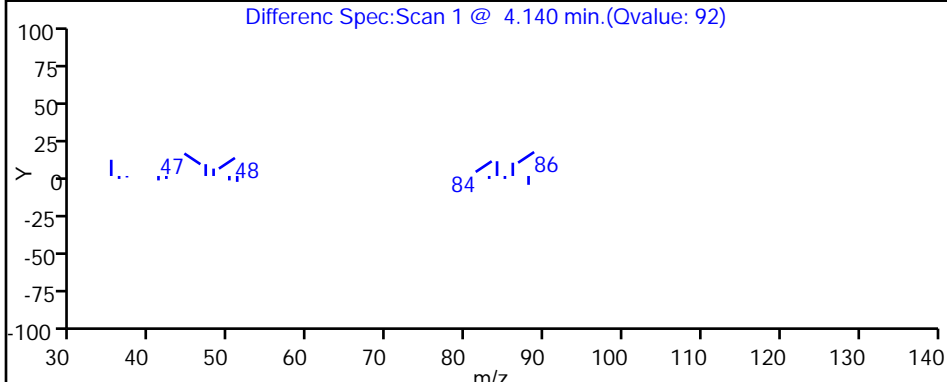
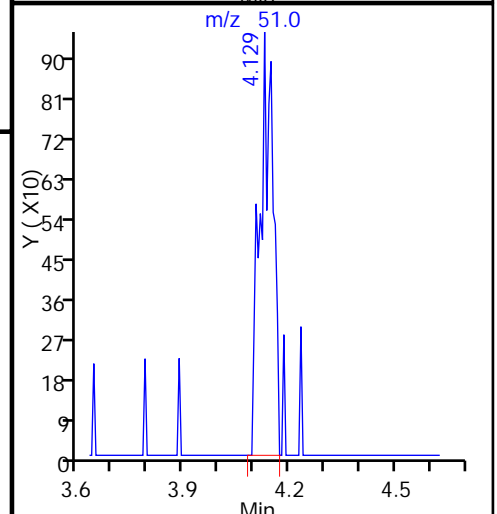
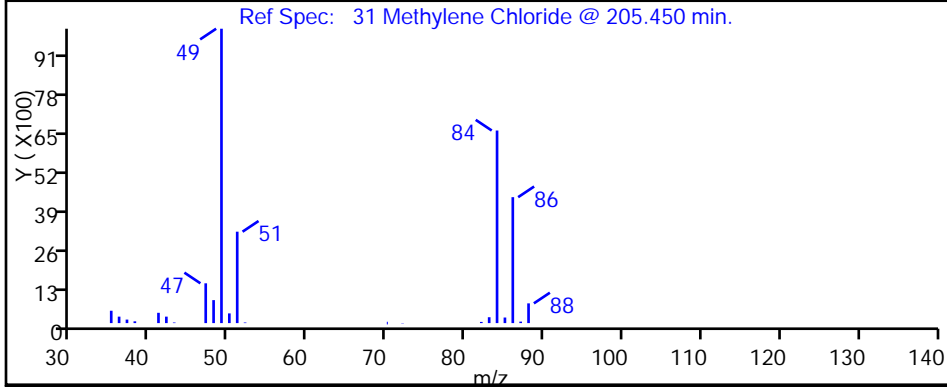
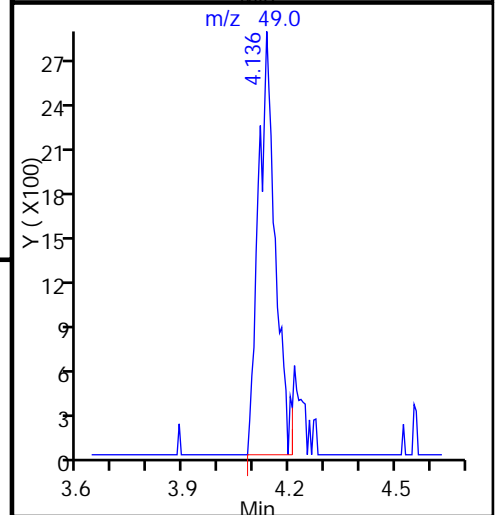
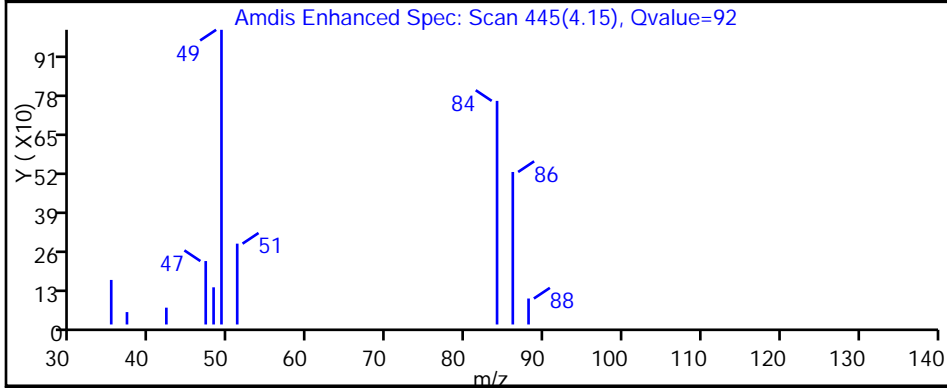
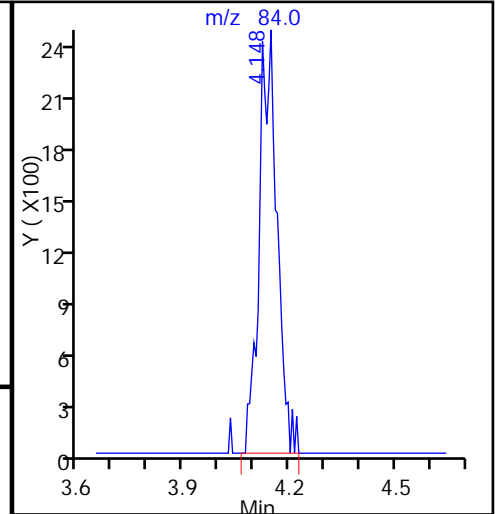
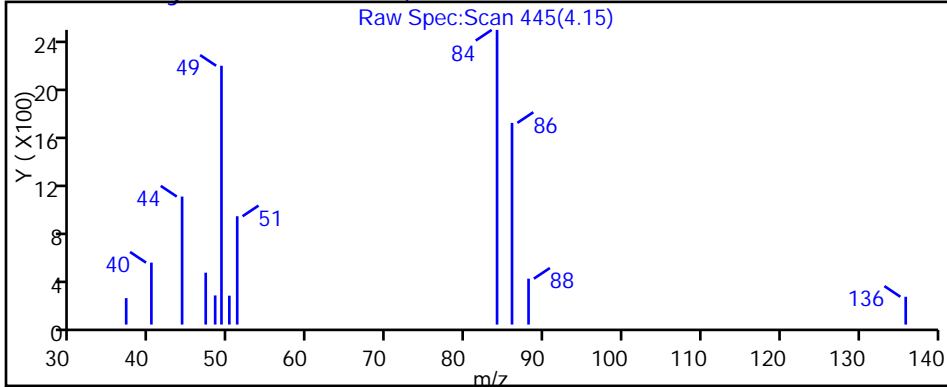
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505016.D

Injection Date: 05-May-2015 17:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 100.0000

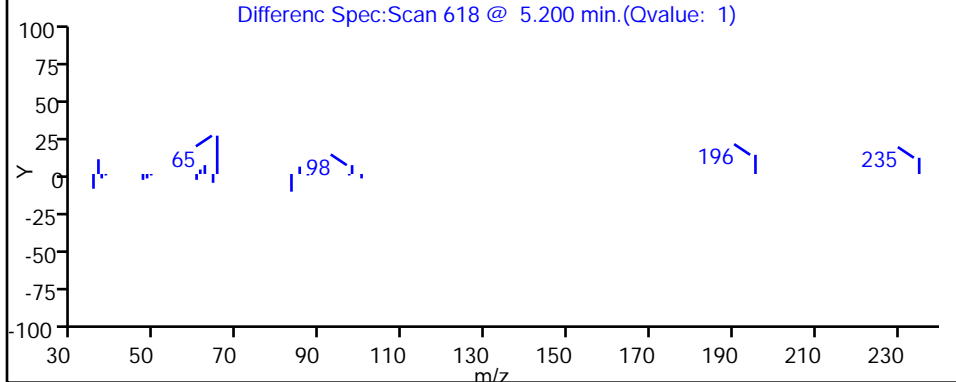
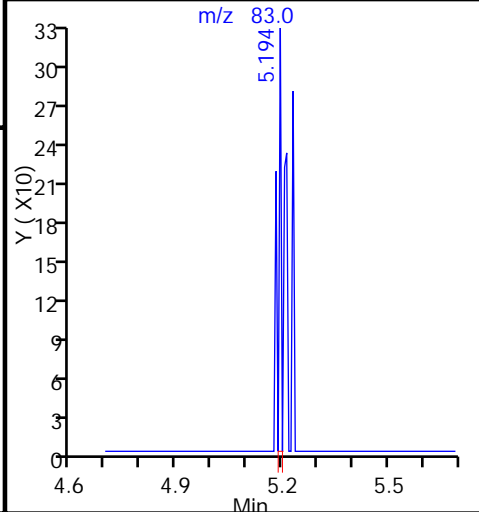
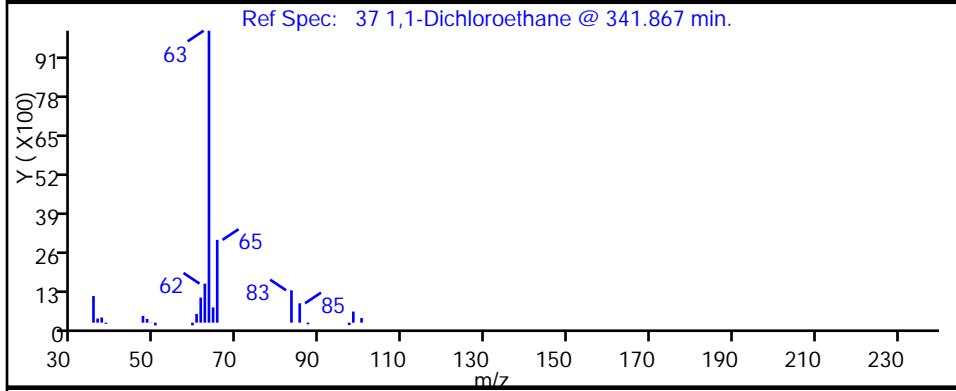
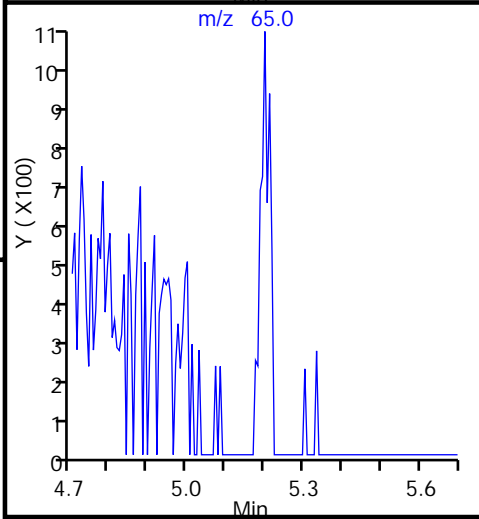
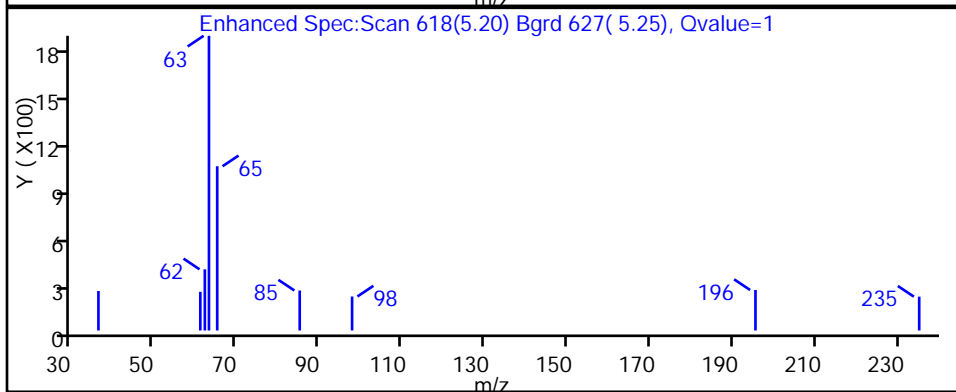
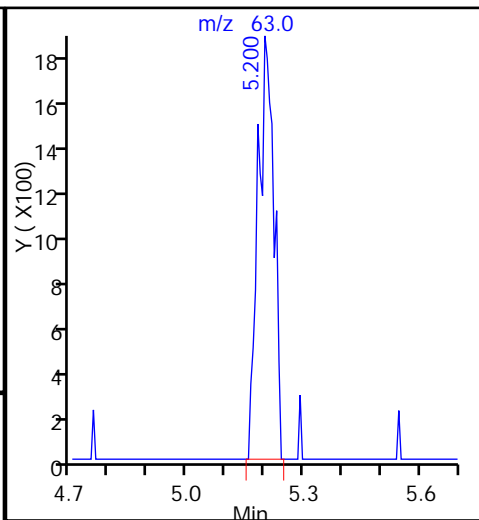
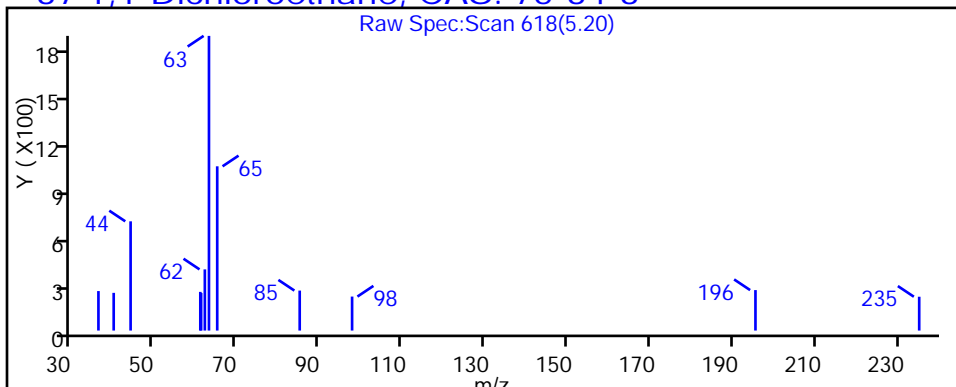
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505016.D

Injection Date: 05-May-2015 17:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 100.0000

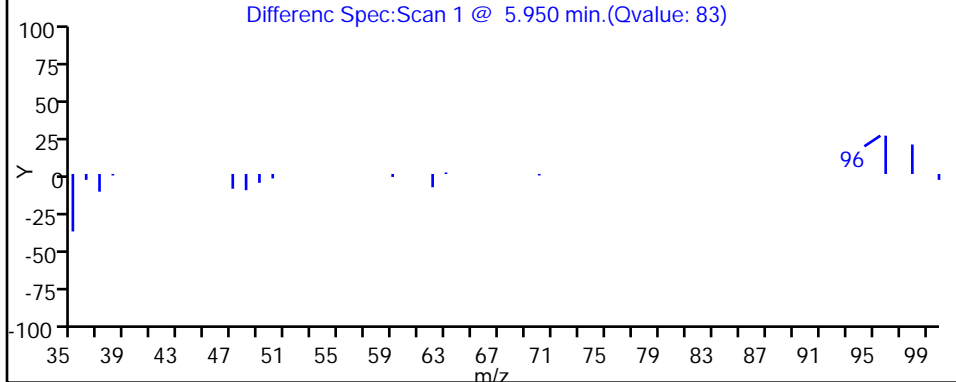
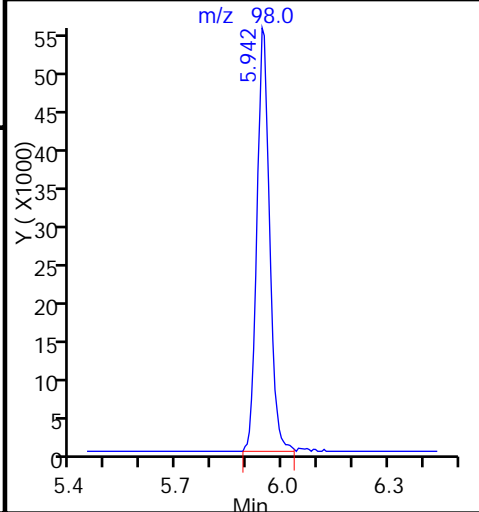
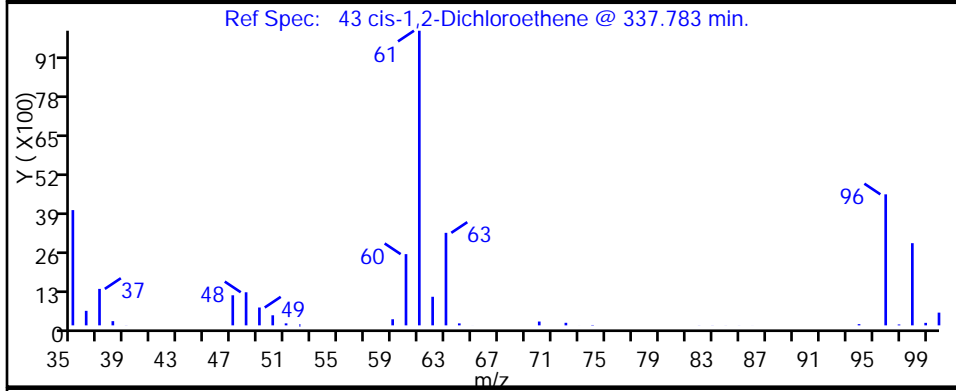
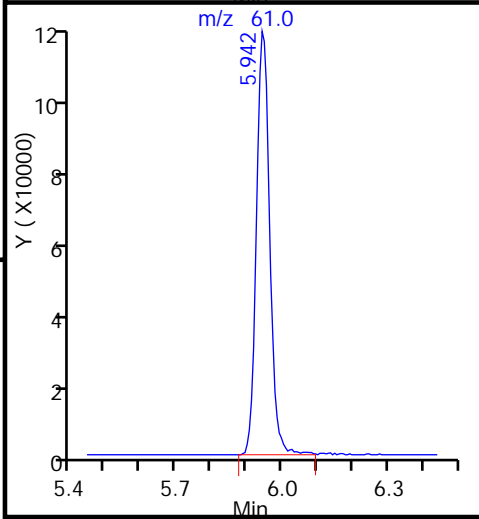
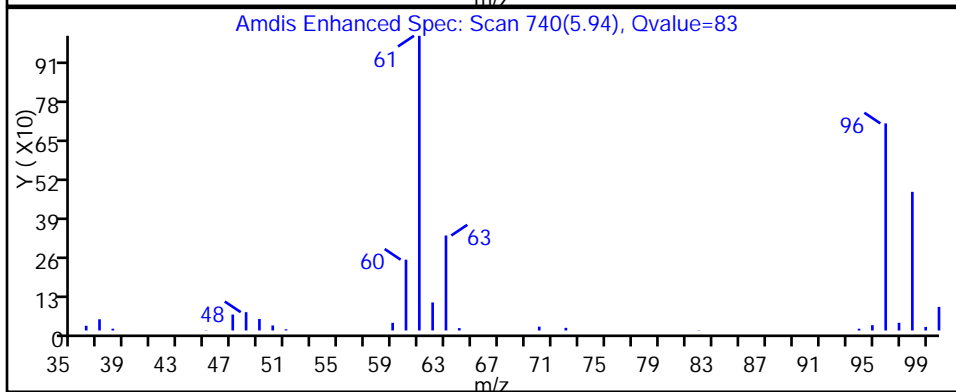
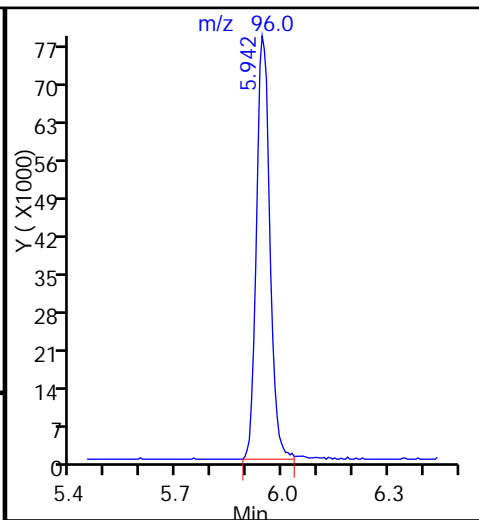
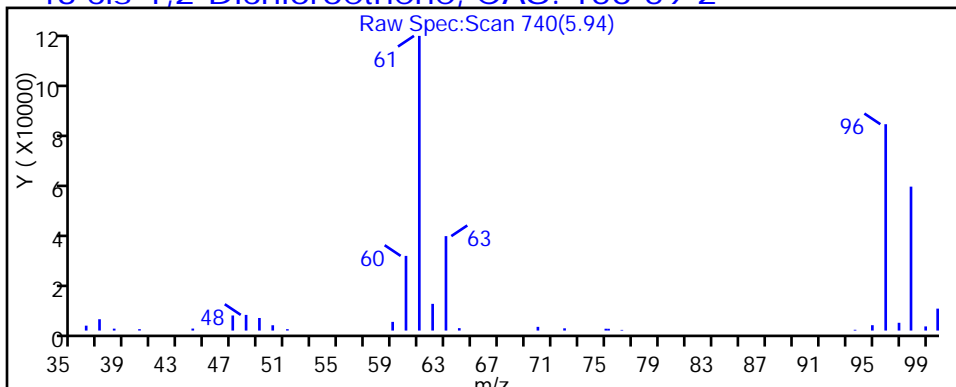
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505016.D

Injection Date: 05-May-2015 17:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 100.0000

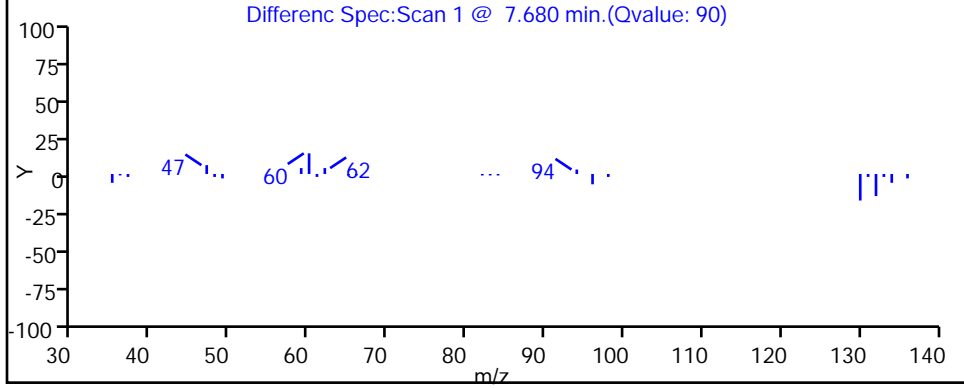
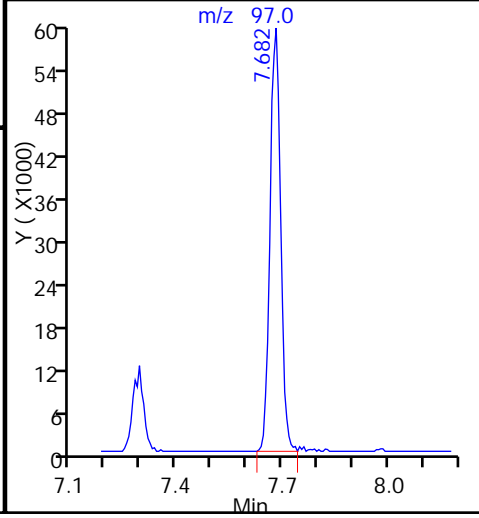
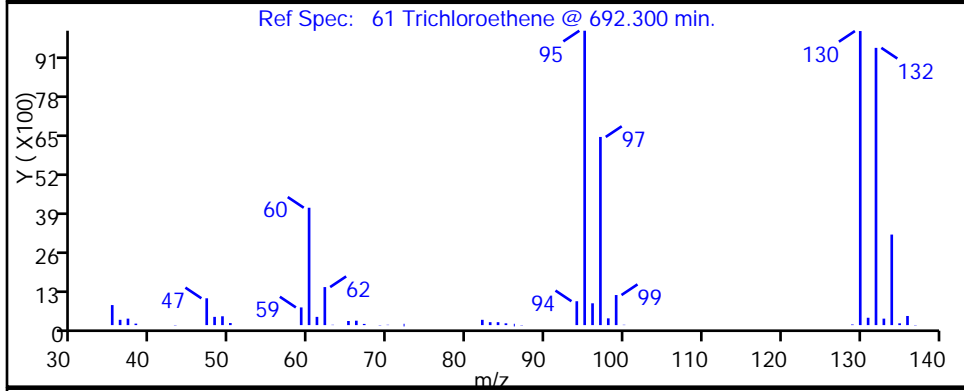
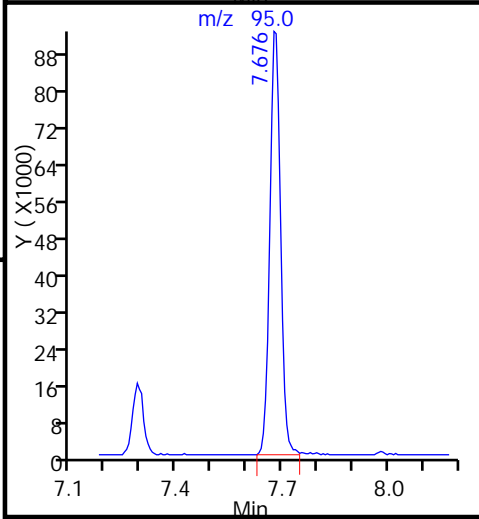
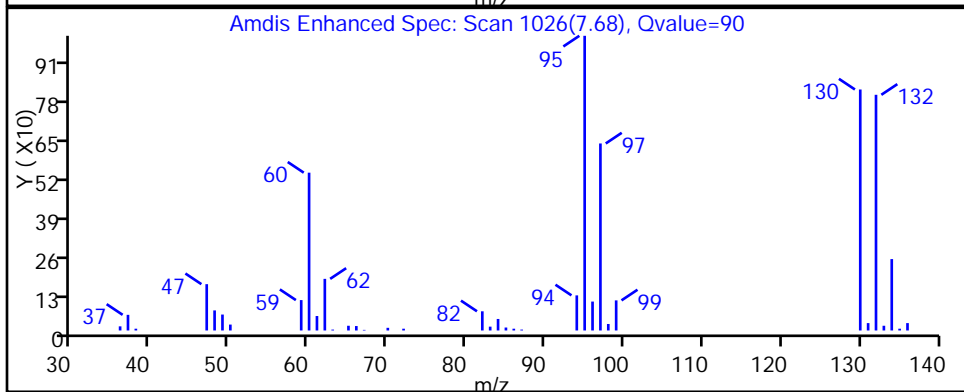
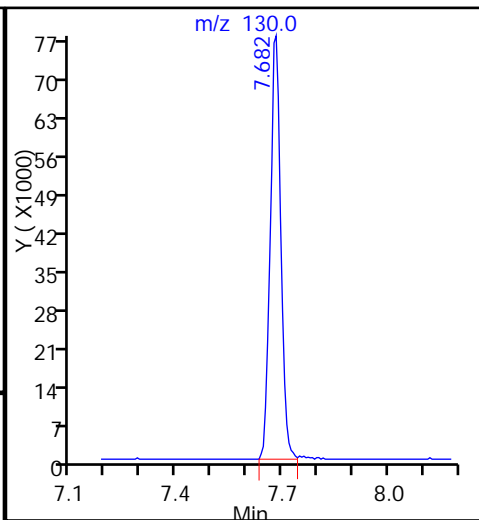
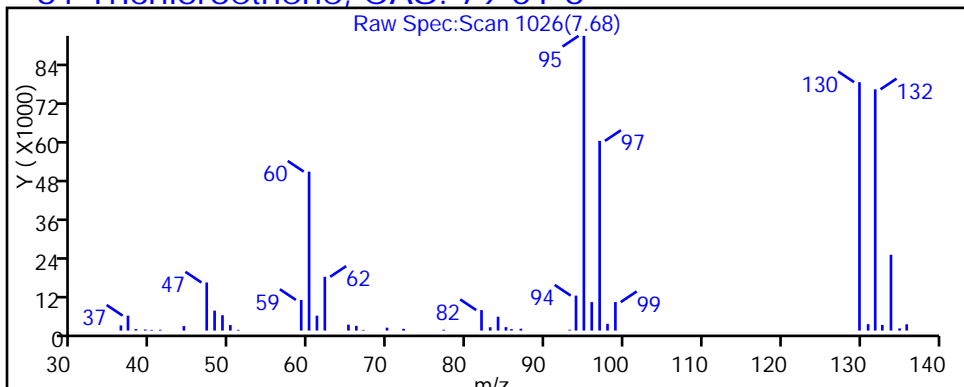
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505016.D

Injection Date: 05-May-2015 17:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-2

Lab Sample ID: 180-43402-2

Client ID: HD-MW-114-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 100.0000

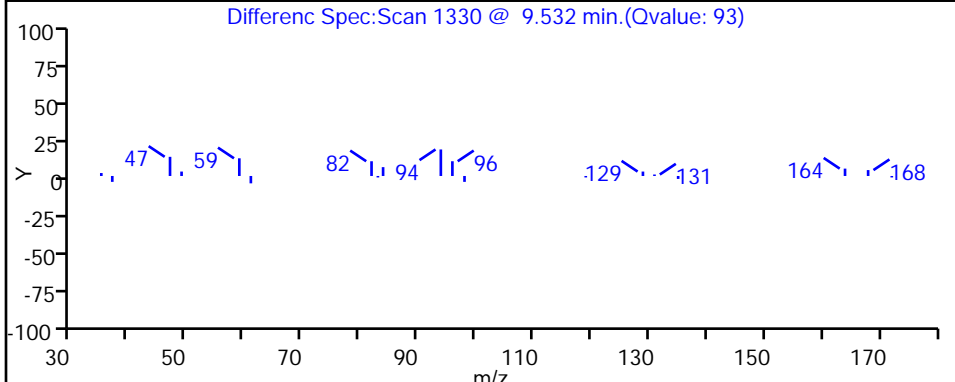
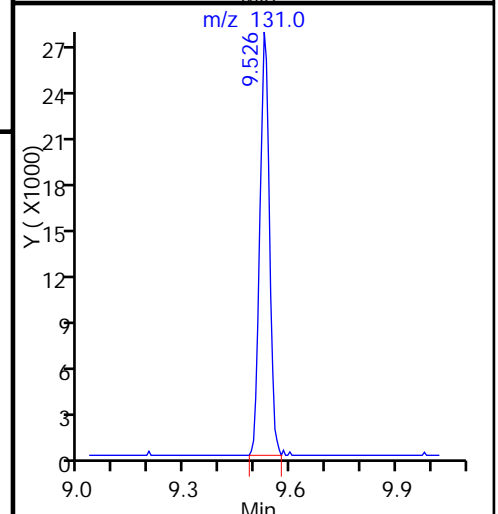
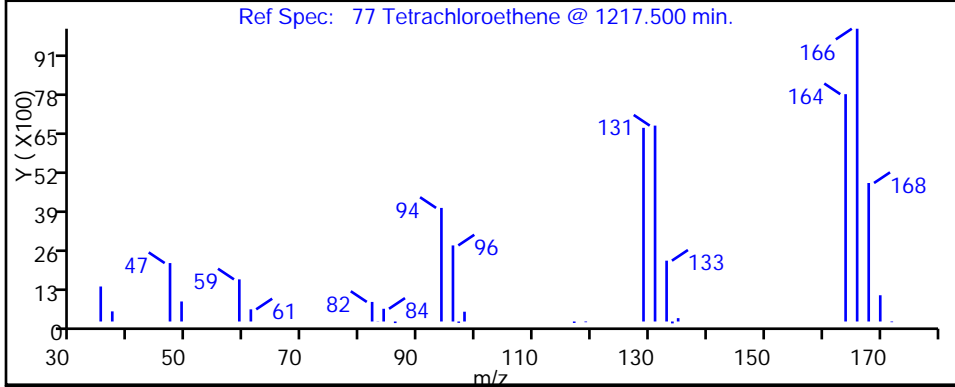
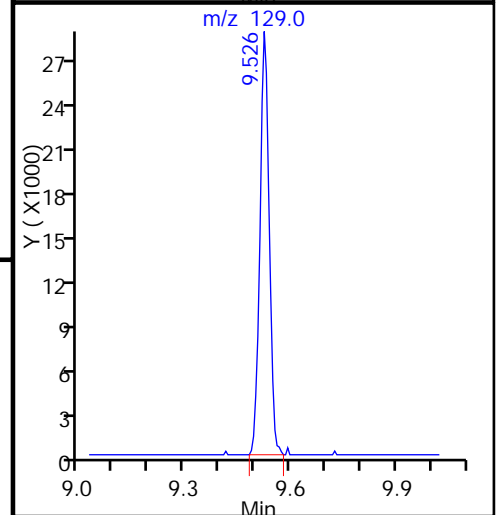
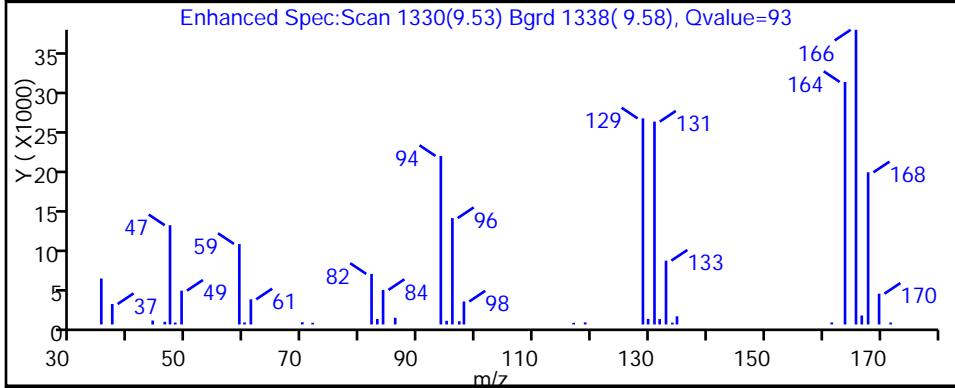
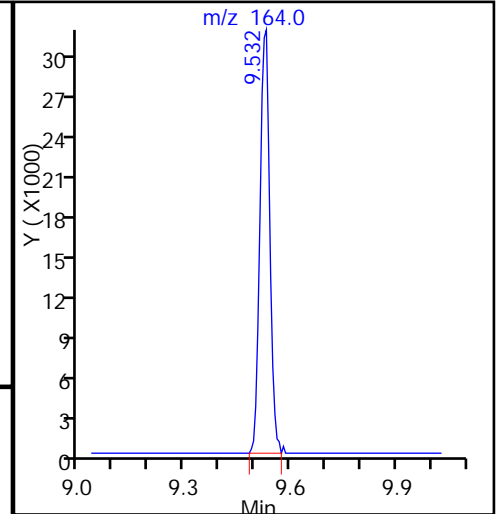
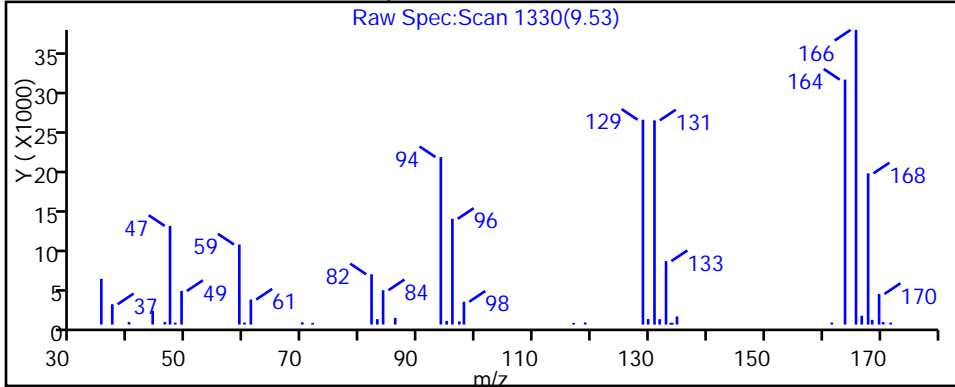
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



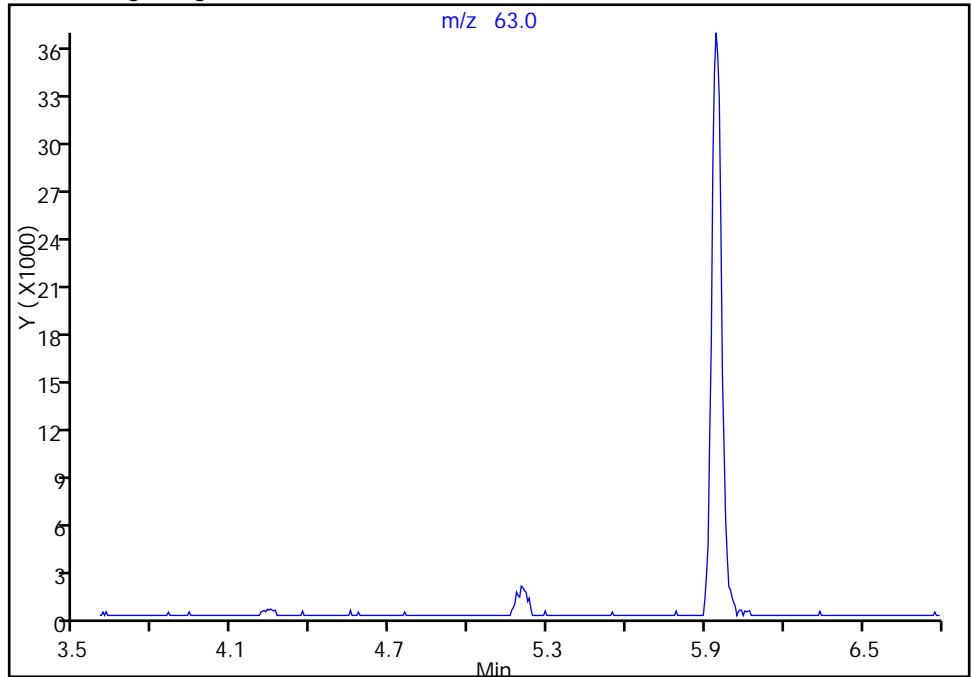
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505016.D
Injection Date: 05-May-2015 17:26:30 Instrument ID: CHHP6
Lims ID: 180-43402-E-2 Lab Sample ID: 180-43402-2
Client ID: HD-MW-114-0/1-0
Operator ID: 001562 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 100.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

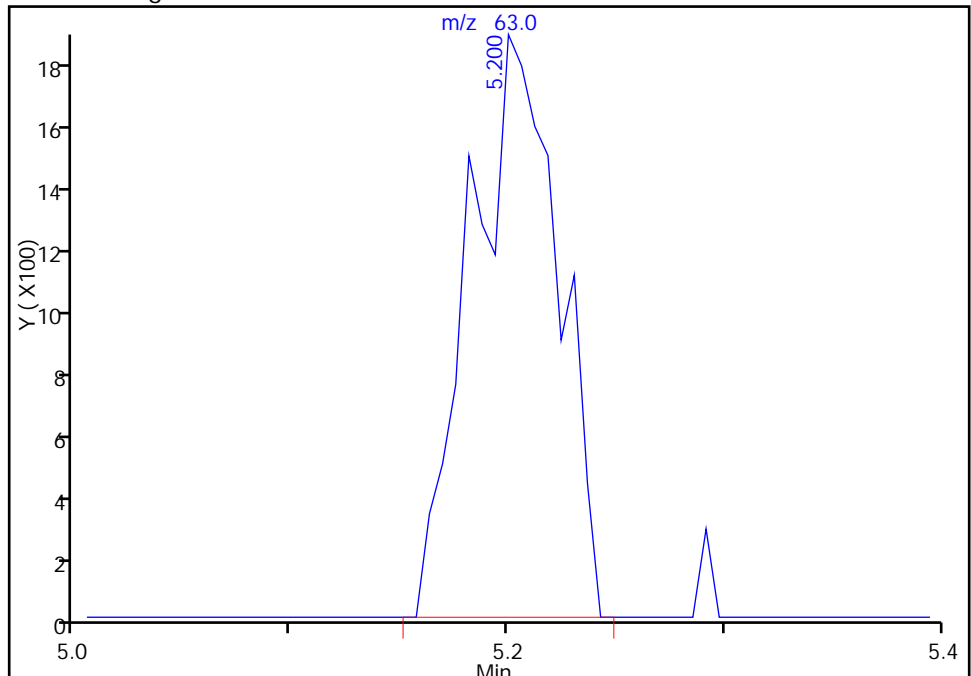
Not Detected
Expected RT: 5.20

Processing Integration Results



Manual Integration Results

RT: 5.20
Area: 5186
Amount: 1.415535
Amount Units: ng



Reviewer: fergusond, 06-May-2015 07:22:47
Audit Action: Manually Integrated
Audit Reason: Peak Not Integrated

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-132-0/1-0 Lab Sample ID: 180-43402-3
 Matrix: Water Lab File ID: 60505017.D
 Analysis Method: 8260C Date Collected: 04/23/2015 13:07
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 17:50
 Soil Aliquot Vol: _____ Dilution Factor: 5
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.0	U	5.0	1.4
75-01-4	Vinyl chloride	5.0	U	5.0	1.1
74-83-9	Bromomethane	5.0	U	5.0	1.6
75-00-3	Chloroethane	5.0	U	5.0	1.1
75-35-4	1,1-Dichloroethene	24		5.0	1.5
67-64-1	Acetone	25	U	25	13
75-15-0	Carbon disulfide	5.0	U	5.0	1.1
75-09-2	Methylene Chloride	3.4	J	5.0	0.63
156-60-5	trans-1,2-Dichloroethene	3.3	J	5.0	0.85
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.92
75-34-3	1,1-Dichloroethane	15		5.0	0.58
156-59-2	cis-1,2-Dichloroethene	550	E	5.0	1.2
74-97-5	Bromochloromethane	5.0	U	5.0	0.90
78-93-3	2-Butanone (MEK)	25	U	25	2.7
67-66-3	Chloroform	5.0	U	5.0	0.85
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.4
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.68
71-43-2	Benzene	5.0	U	5.0	0.53
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
79-01-6	Trichloroethene	480	E	5.0	0.72
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.47
75-27-4	Bromodichloromethane	5.0	U	5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.93
108-10-1	4-Methyl-2-pentanone (MIBK)	25	U	25	2.6
108-88-3	Toluene	5.0	U	5.0	0.75
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.74
79-00-5	1,1,2-Trichloroethane	5.0	U	5.0	1.0
127-18-4	Tetrachloroethene	1.9	J	5.0	0.74
591-78-6	2-Hexanone	25	U	25	0.80
124-48-1	Dibromochloromethane	5.0	U	5.0	0.68
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	5.0	0.90
108-90-7	Chlorobenzene	5.0	U	5.0	0.68
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.4
100-41-4	Ethylbenzene	5.0	U	5.0	1.1
1330-20-7	Xylenes, Total	15	U	15	2.4
100-42-5	Styrene	5.0	U	5.0	0.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-132-0/1-0 Lab Sample ID: 180-43402-3
 Matrix: Water Lab File ID: 60505017.D
 Analysis Method: 8260C Date Collected: 04/23/2015 13:07
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 17:50
 Soil Aliquot Vol: _____ Dilution Factor: 5
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	5.0	U	5.0	0.96
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.0
107-13-1	Acrylonitrile	100	U	100	2.7
123-91-1	1,4-Dioxane	1000	U	1000	170

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	102		70-118
1868-53-7	Dibromofluoromethane (Surr)	104		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505017.D
 Lims ID: 180-43402-C-3 Lab Sample ID: 180-43402-3
 Client ID: HD-MW-132-0/1-0
 Sample Type: Client
 Inject. Date: 05-May-2015 17:50:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 5.0000
 Sample Info: 180-43402-C-3, 5x
 Misc. Info.: 180-0006773-017
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 07:28:33 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond

Date: 06-May-2015 07:28:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.236	4.239	-0.003	95	186277	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.286	0.004	97	377025	50.0	
* 3 Chlorobenzene-d5	119	10.399	10.401	-0.002	92	76445	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.747	12.743	0.004	96	113190	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.554	6.547	0.007	90	80778	51.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	71	141305	54.2	
\$ 7 Toluene-d8 (Surr)	98	8.945	8.938	0.007	94	350066	54.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.001	77	134415	51.0	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.894				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96	3.342	3.341	0.001	95	41696	23.9	
24 Acetone	43		3.427				ND	
26 Carbon disulfide	76		3.633				ND	
31 Methylene Chloride	84	4.151	4.132	0.019	95	7309	3.45	
33 Acrylonitrile	53		4.497				ND	
34 trans-1,2-Dichloroethene	96	4.559	4.558	0.001	89	6375	3.28	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63	5.198	5.197	0.001	96	55541	15.2	
43 cis-1,2-Dichloroethene	96	5.946	5.945	0.001	81	1221749	552.4	E
44 2-Butanone (MEK)	43		5.951				ND	
48 Chlorobromomethane	128		6.231				ND	
50 Chloroform	83	6.378	6.371	0.007	12	1683	0.4765	
51 1,1,1-Trichloroethane	97		6.541				ND	
53 Carbon tetrachloride	117		6.718				ND	
56 Benzene	78		6.943				ND	
57 1,2-Dichloroethane	62		7.016				ND	
61 Trichloroethene	130	7.680	7.679	0.001	90	863180	481.2	E
64 1,2-Dichloropropane	63		7.953				ND	
65 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.233					ND
71 cis-1,3-Dichloropropene	75		8.677					ND
72 4-Methyl-2-pentanone (MIBK)	43		8.823					ND
73 Toluene	91		9.011					ND
74 trans-1,3-Dichloropropene	75		9.255					ND
76 1,1,2-Trichloroethane	97		9.449					ND
77 Tetrachloroethene	164	9.523	9.522	0.001	90	2507	1.92	
79 2-Hexanone	43		9.662					ND
81 Chlorodibromomethane	129		9.826					ND
82 Ethylene Dibromide	107		9.942					ND
84 Chlorobenzene	112		10.429					ND
86 1,1,1,2-Tetrachloroethane	131		10.520					ND
87 Ethylbenzene	106		10.526					ND
88 m-Xylene & p-Xylene	106		10.660					ND
89 o-Xylene	106		11.043					ND
90 Styrene	104		11.061					ND
91 Bromoform	173		11.244					ND
96 1,1,2,2-Tetrachloroethane	83		11.712					ND
S 131 Xylenes, Total	106		1.000					ND

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505017.D

Injection Date: 05-May-2015 17:50:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-C-3

Lab Sample ID: 180-43402-3

Worklist Smp#: 17

Client ID: HD-MW-132-0/1-0

Purge Vol: 5.000 mL

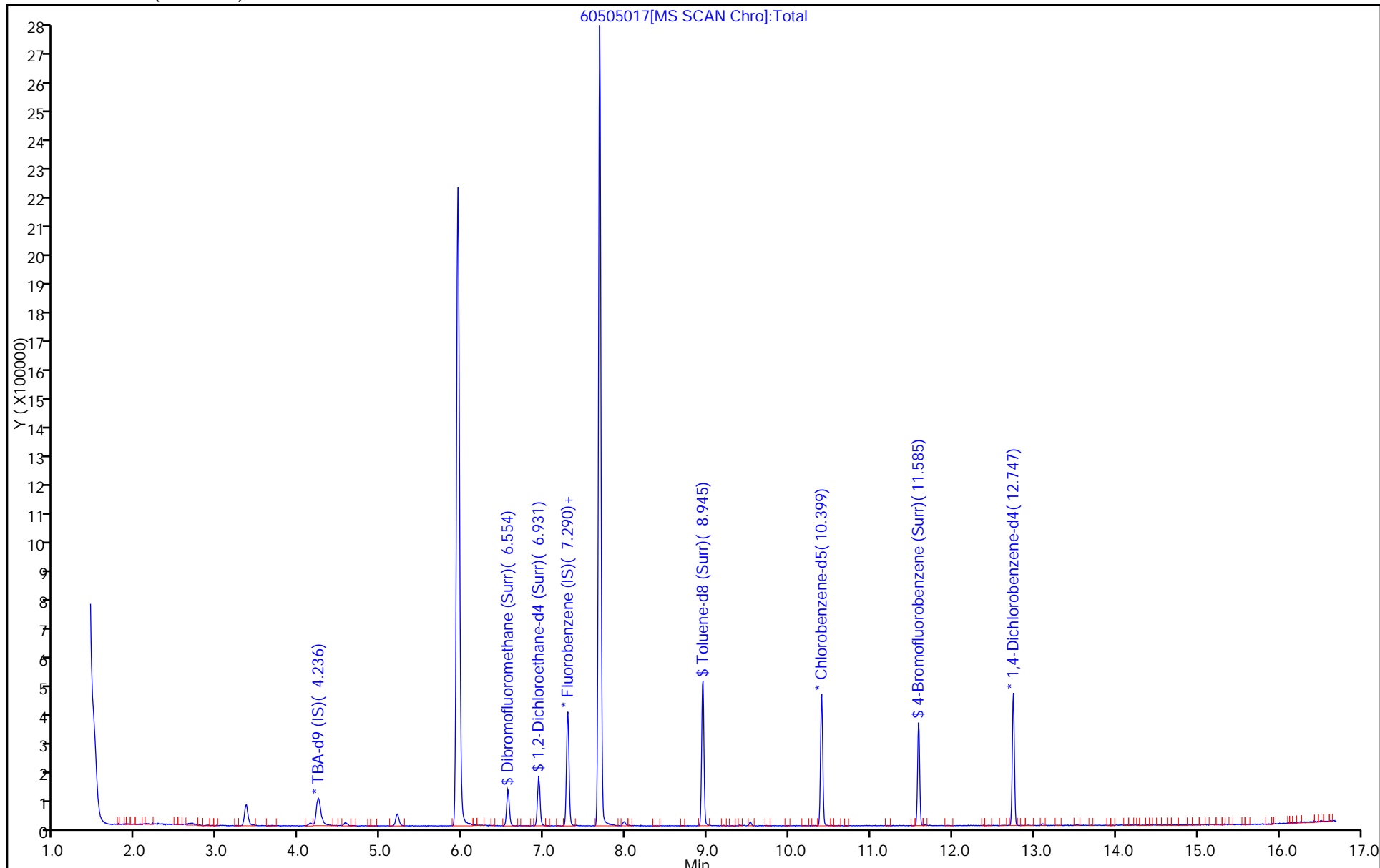
Dil. Factor: 5.0000

ALS Bottle#: 16

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505017.D

Injection Date: 05-May-2015 17:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

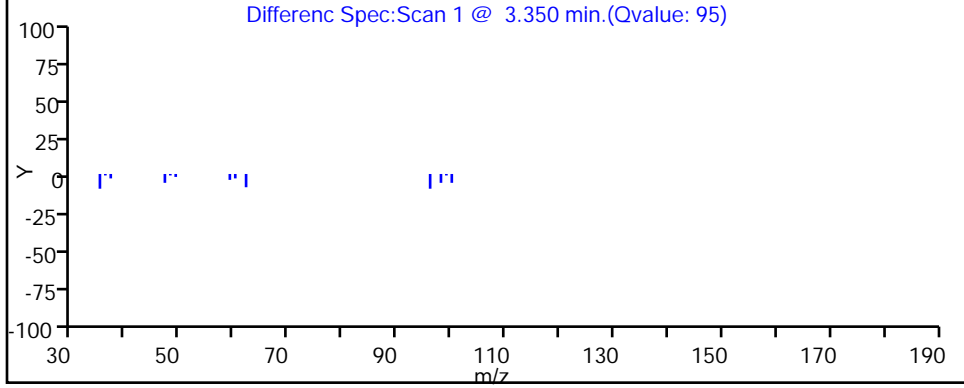
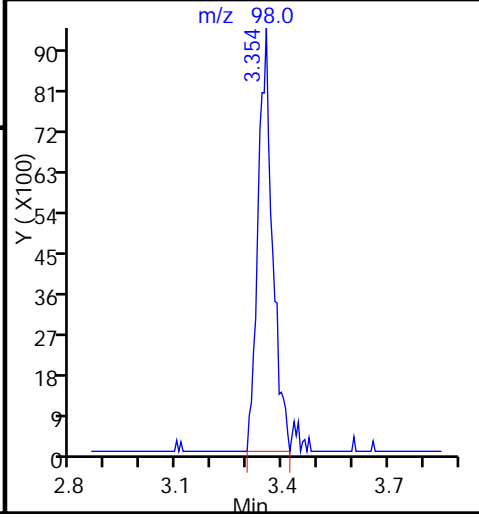
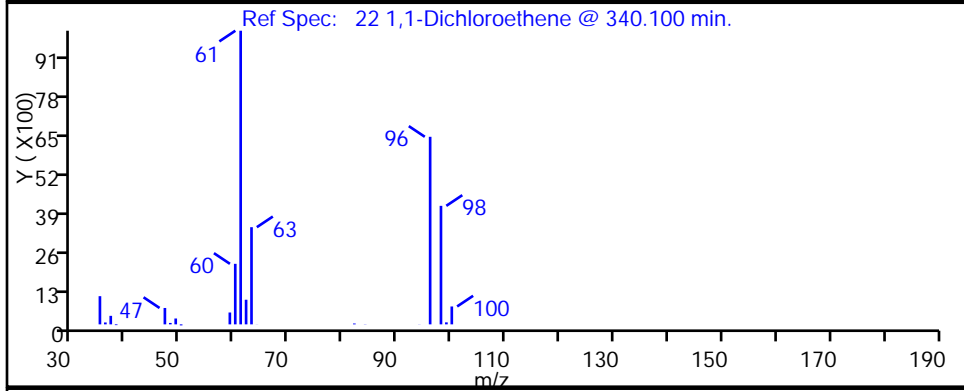
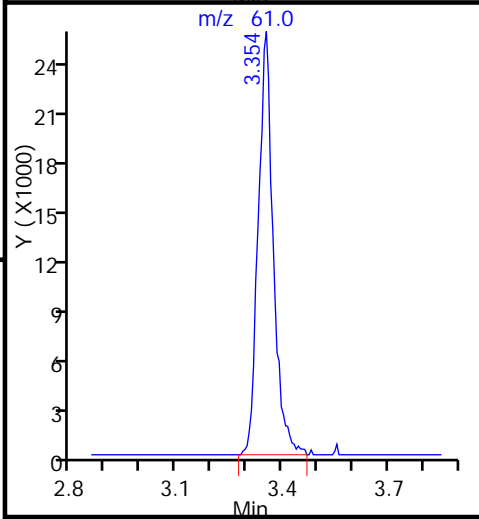
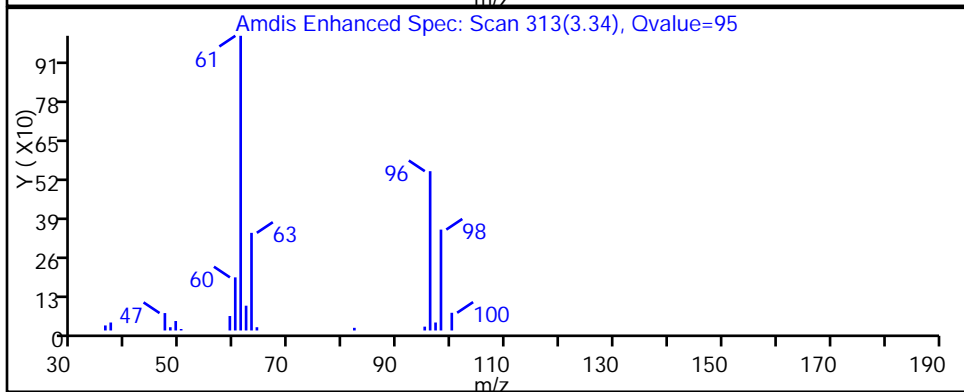
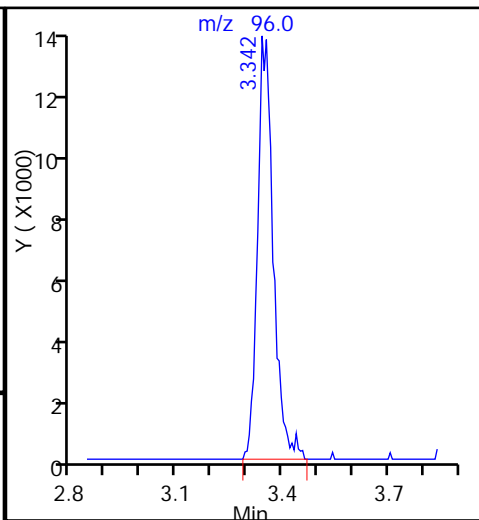
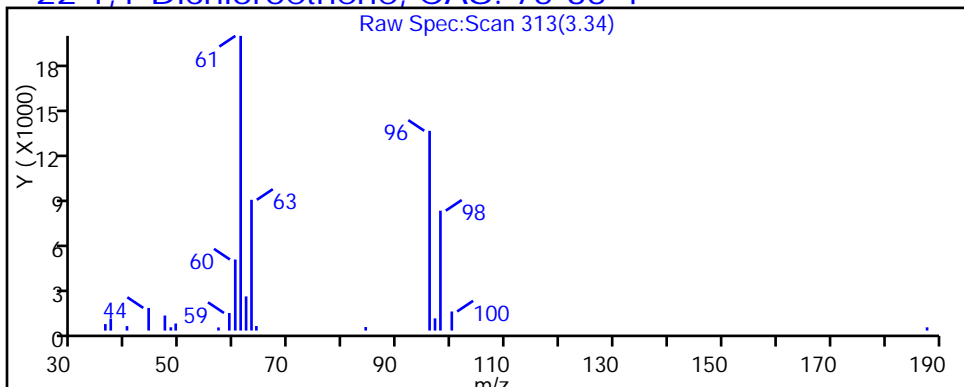
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505017.D

Injection Date: 05-May-2015 17:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

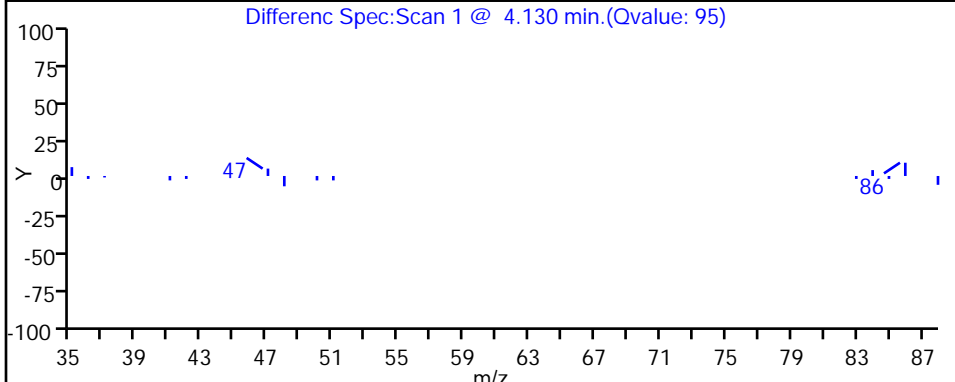
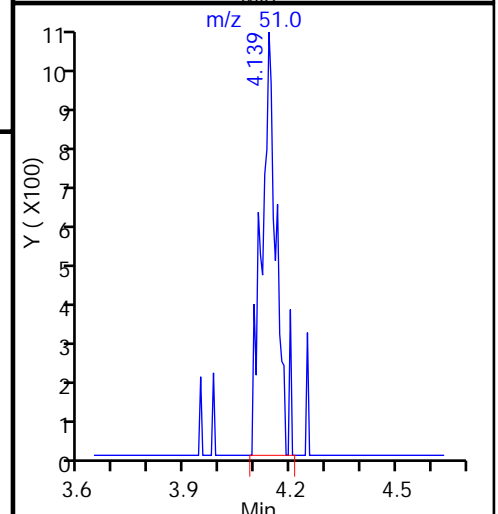
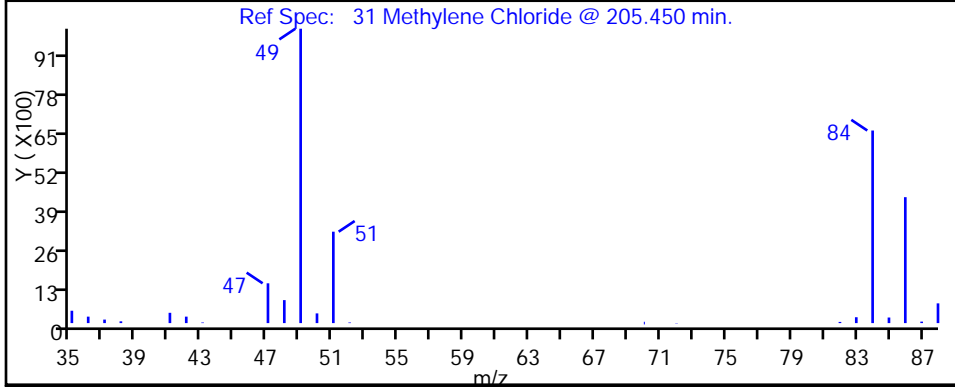
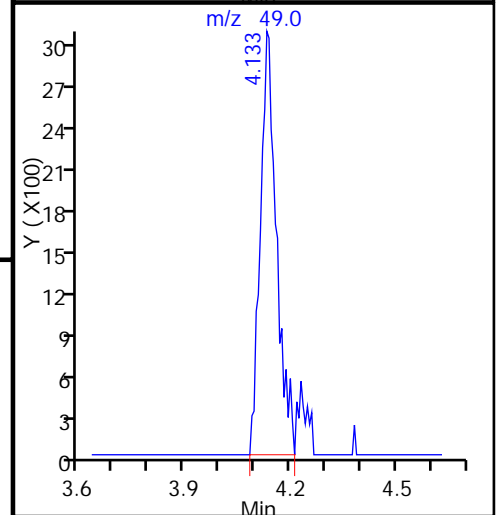
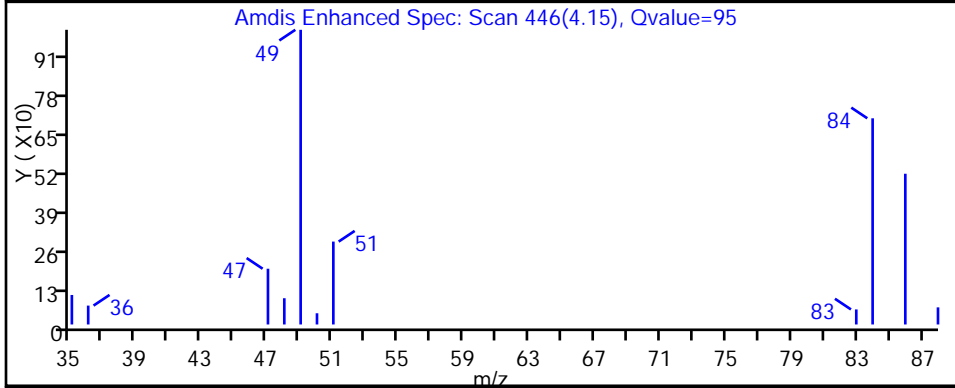
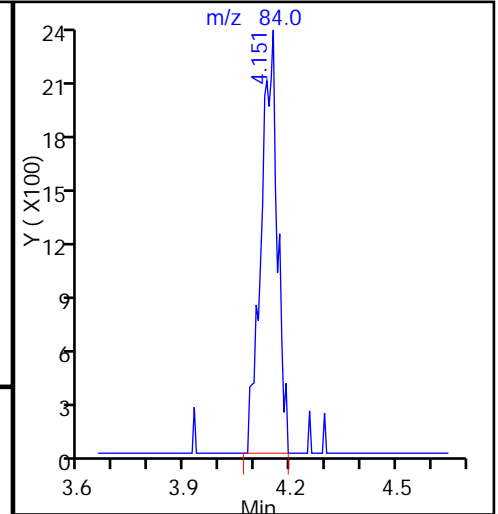
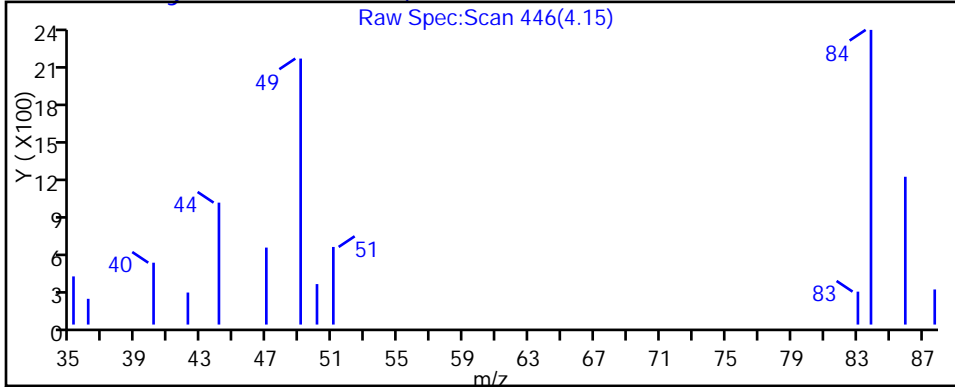
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505017.D

Injection Date: 05-May-2015 17:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

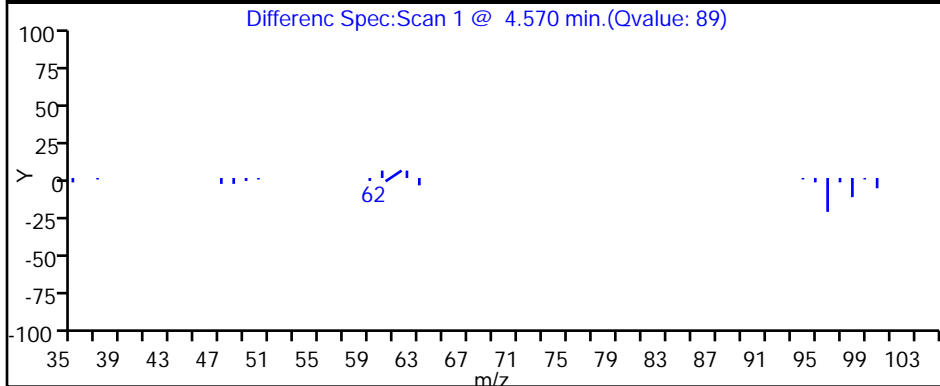
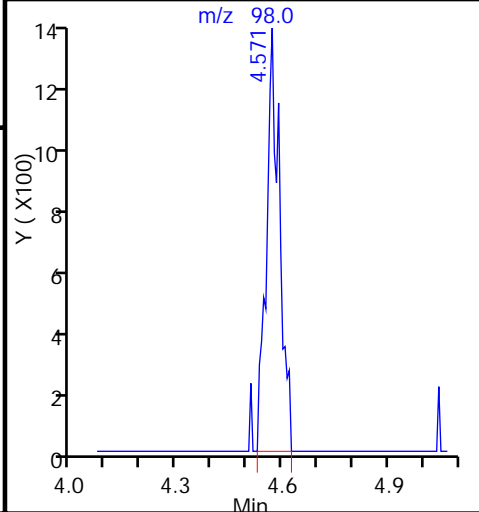
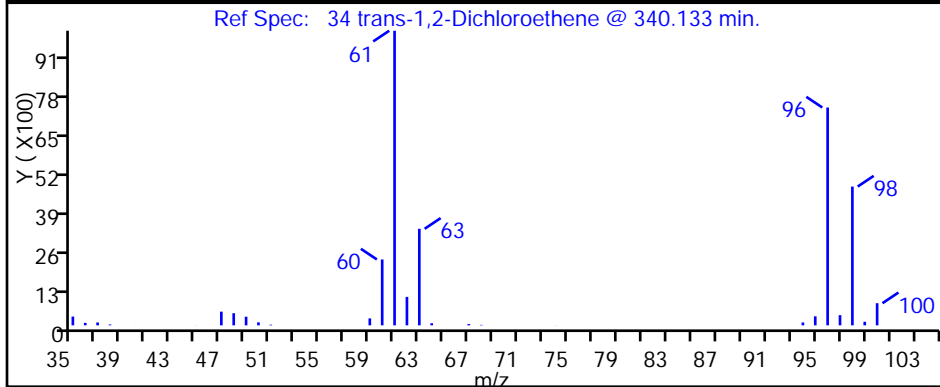
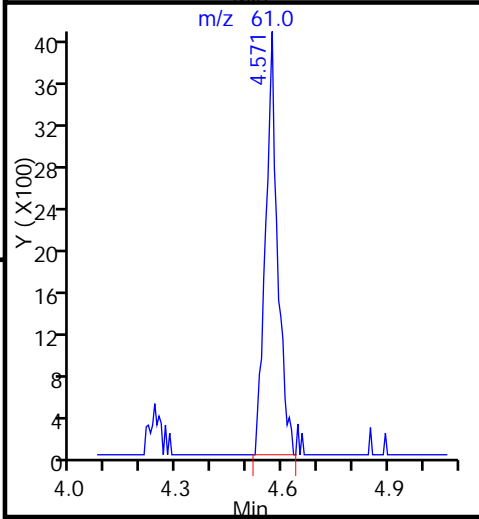
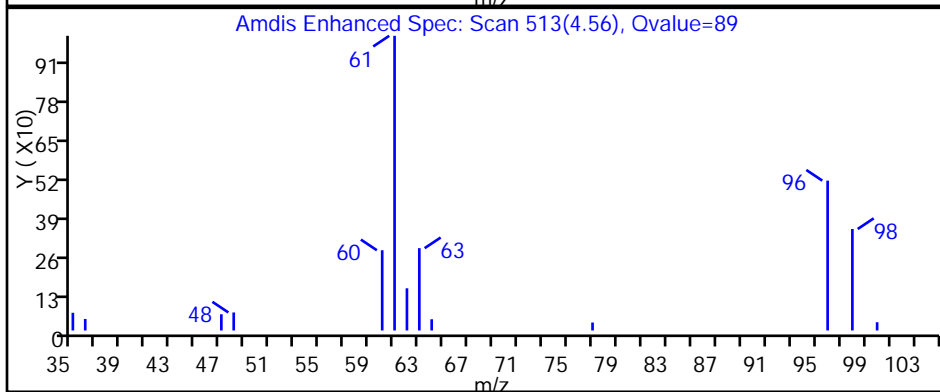
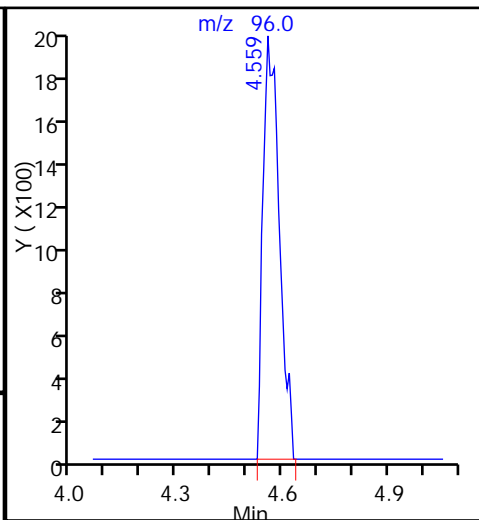
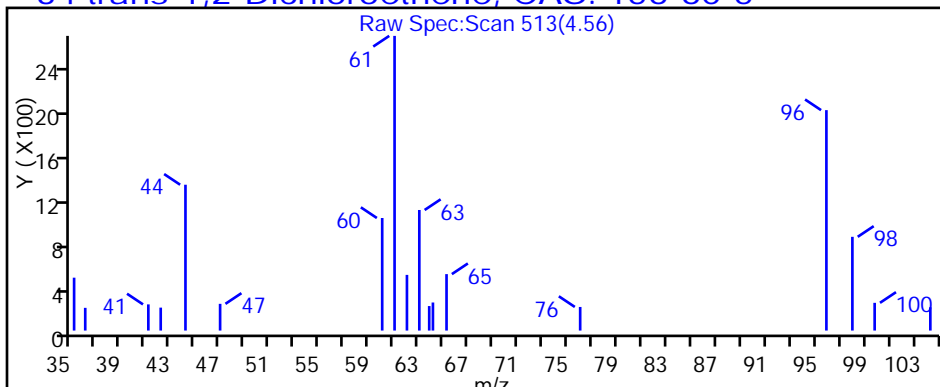
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505017.D

Injection Date: 05-May-2015 17:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

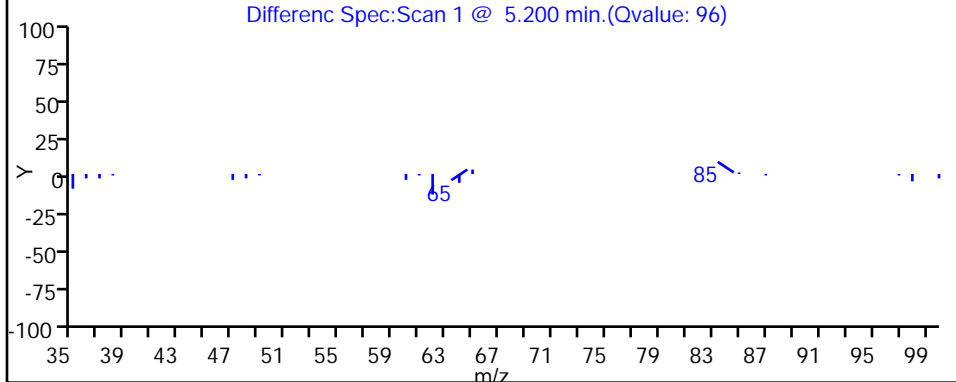
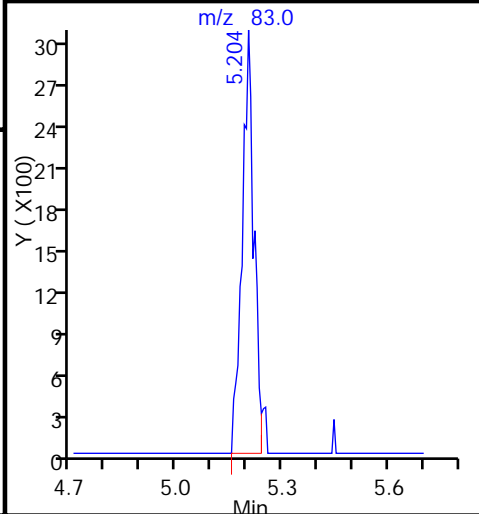
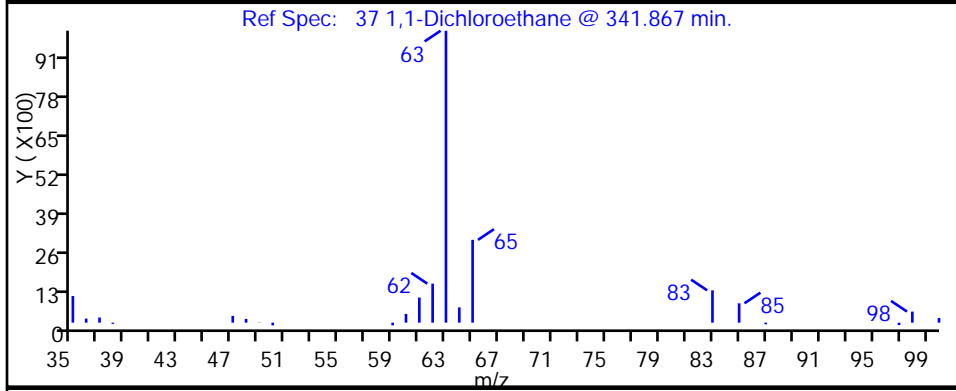
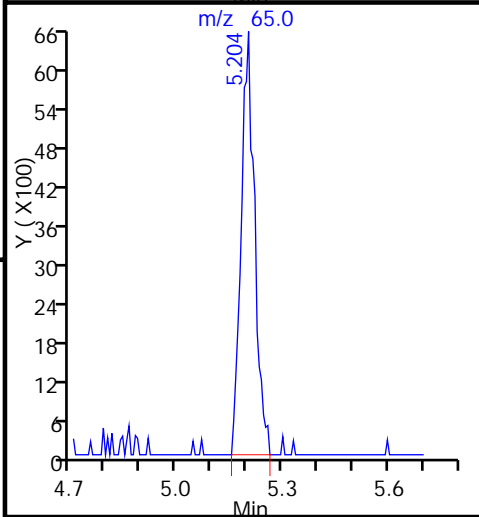
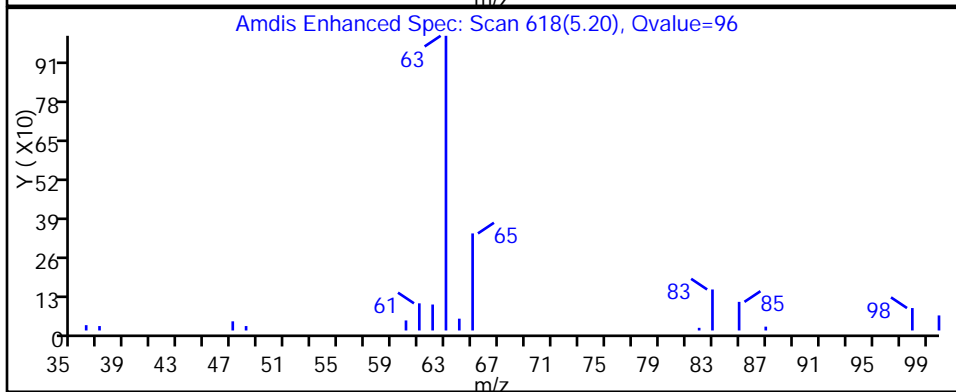
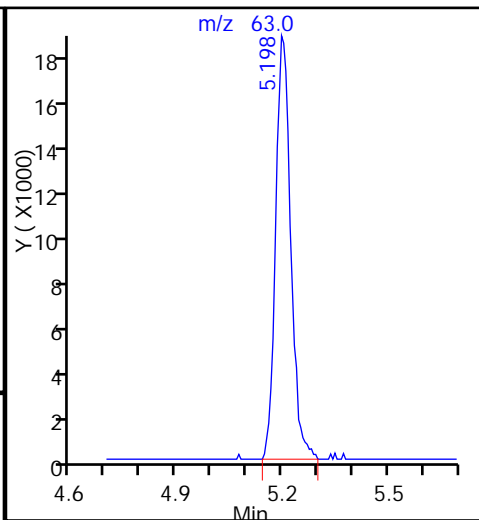
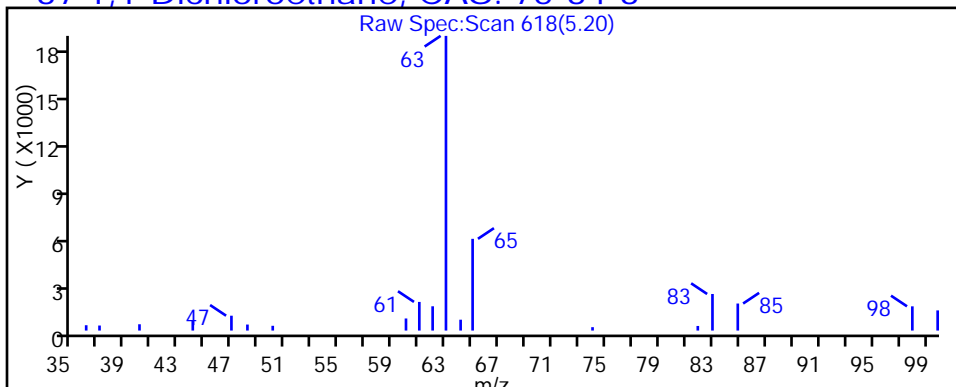
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505017.D

Injection Date: 05-May-2015 17:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

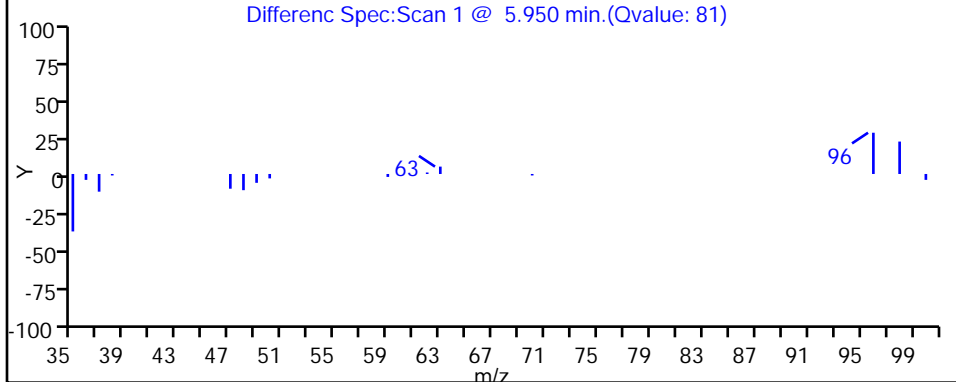
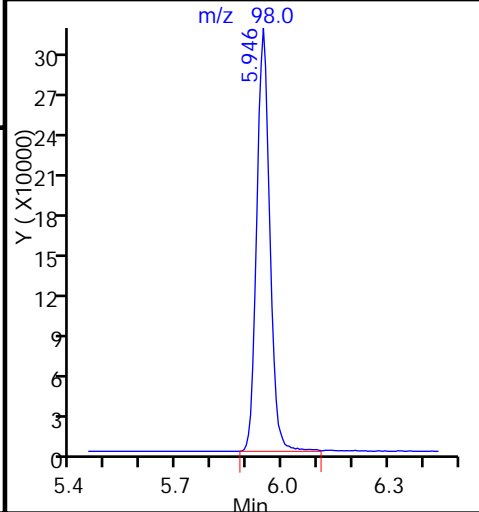
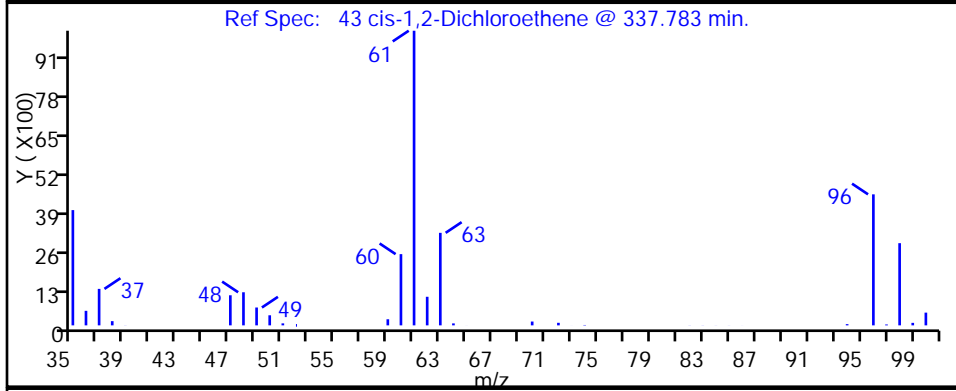
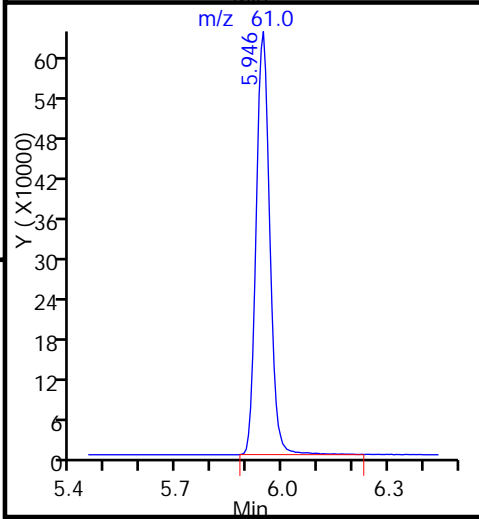
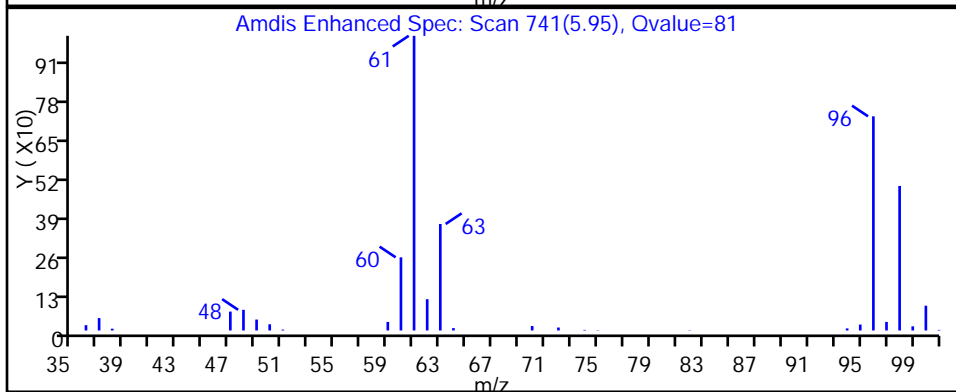
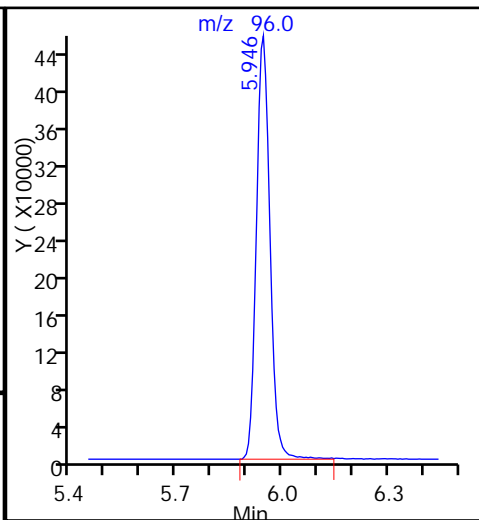
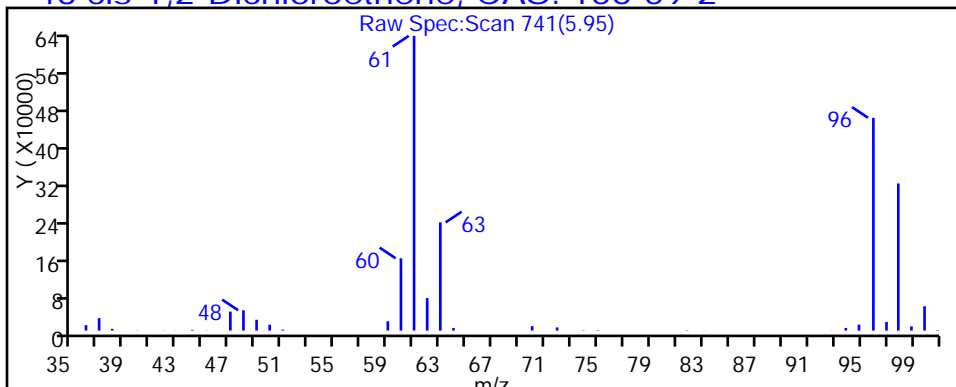
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505017.D

Injection Date: 05-May-2015 17:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

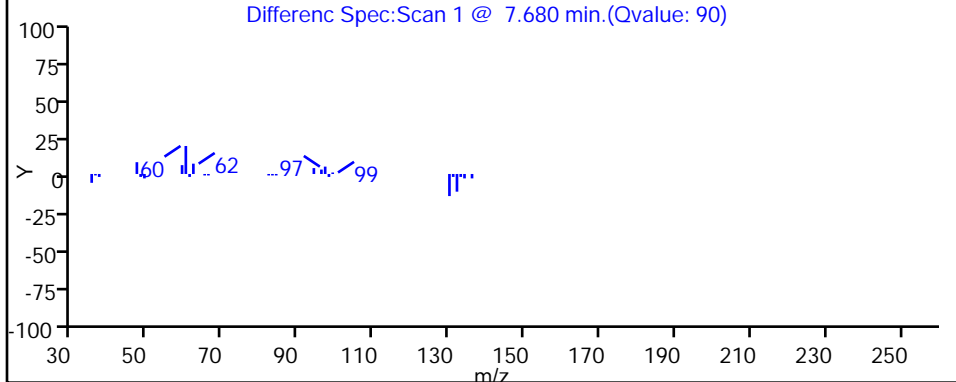
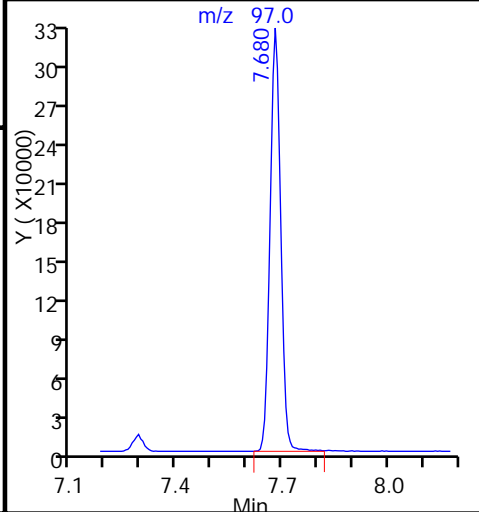
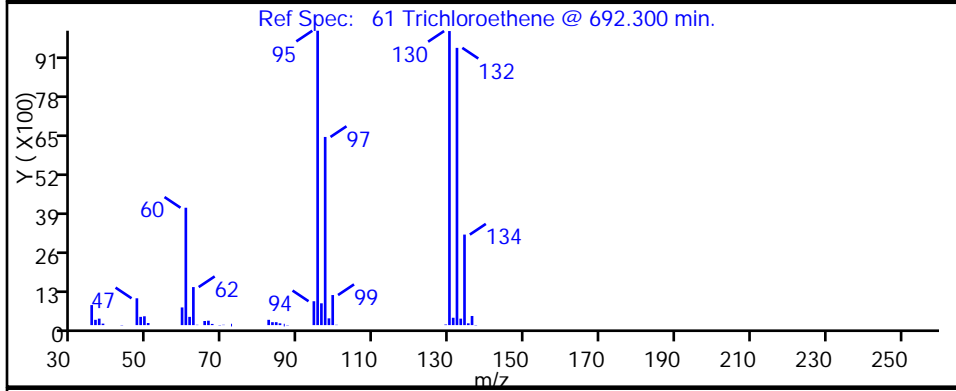
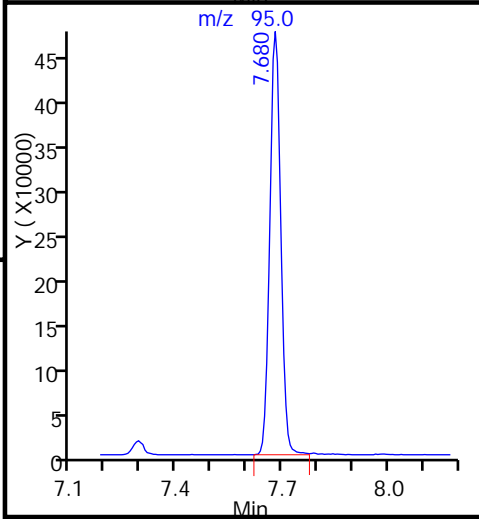
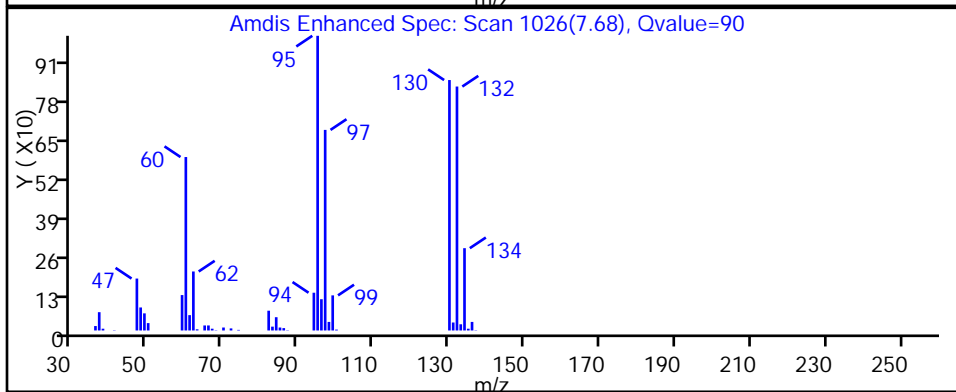
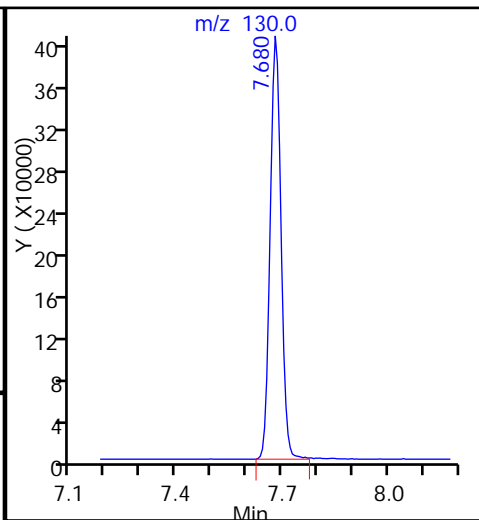
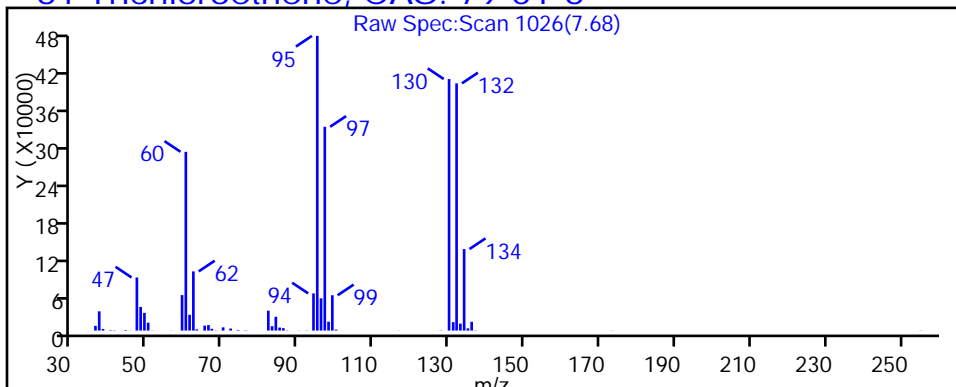
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505017.D

Injection Date: 05-May-2015 17:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

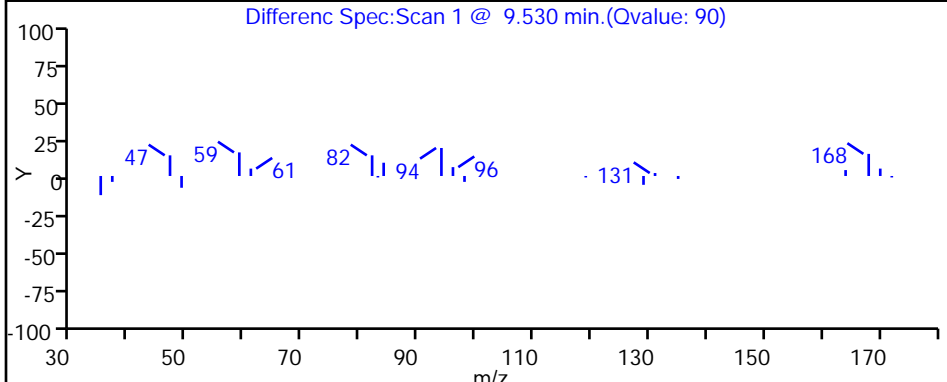
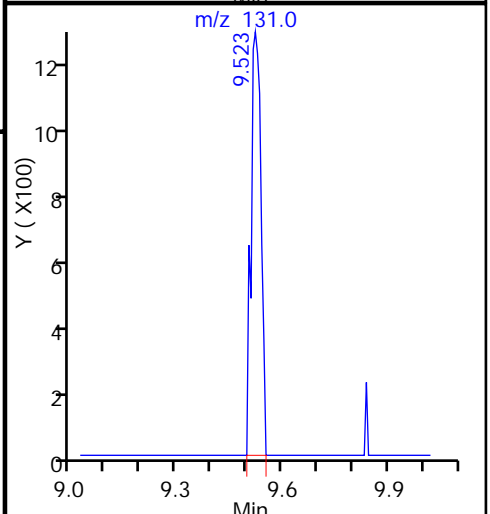
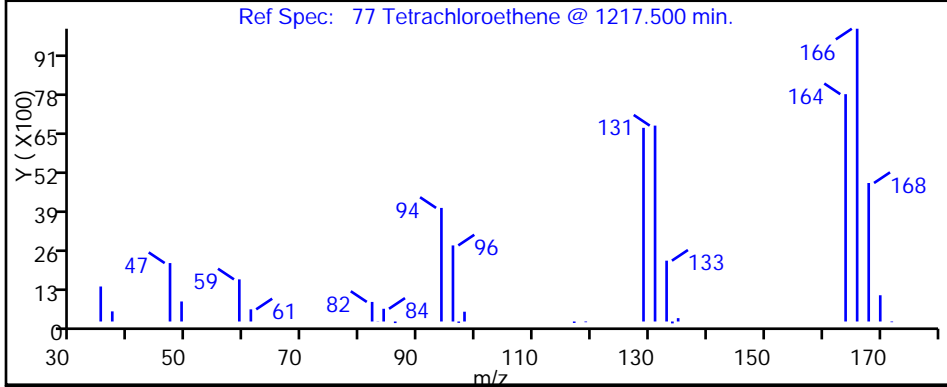
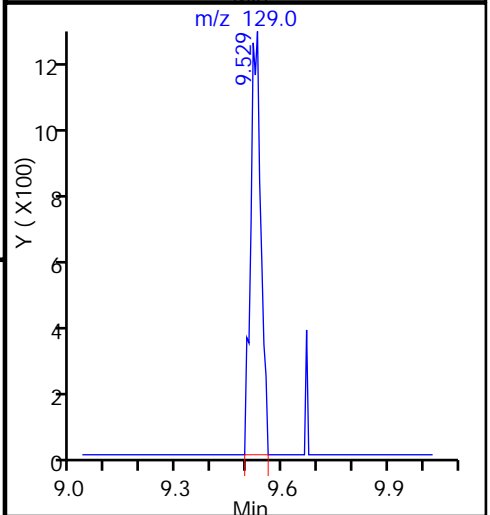
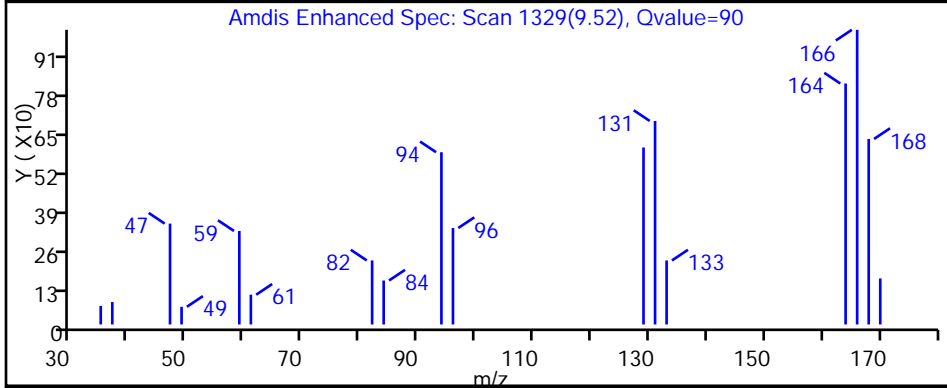
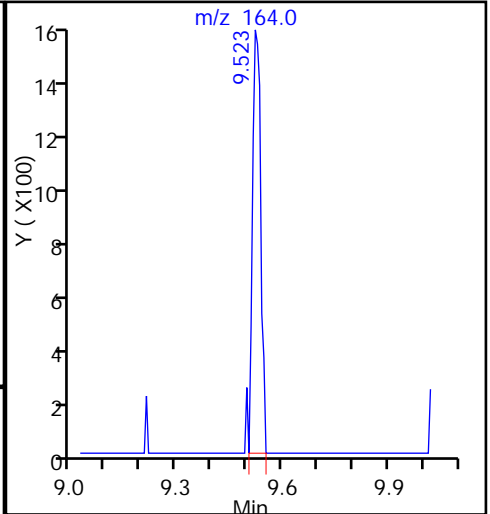
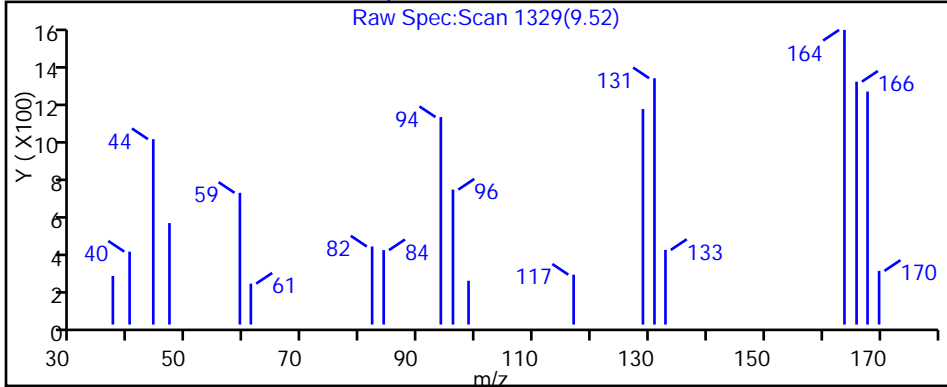
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-132-0/1-0 DL Lab Sample ID: 180-43402-3 DL
 Matrix: Water Lab File ID: 60506016.D
 Analysis Method: 8260C Date Collected: 04/23/2015 13:07
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 17:39
 Soil Aliquot Vol: _____ Dilution Factor: 40
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	40	U	40	11
75-01-4	Vinyl chloride	40	U	40	9.1
74-83-9	Bromomethane	40	U	40	13
75-00-3	Chloroethane	40	U	40	8.6
75-35-4	1,1-Dichloroethene	28	J	40	12
67-64-1	Acetone	200	U	200	100
75-15-0	Carbon disulfide	40	U	40	8.5
75-09-2	Methylene Chloride	21	J	40	5.0
156-60-5	trans-1,2-Dichloroethene	40	U	40	6.8
1634-04-4	Methyl tert-butyl ether	40	U	40	7.3
75-34-3	1,1-Dichloroethane	16	J	40	4.7
156-59-2	cis-1,2-Dichloroethene	640		40	9.5
74-97-5	Bromochloromethane	40	U	40	7.2
78-93-3	2-Butanone (MEK)	200	U	200	22
67-66-3	Chloroform	40	U	40	6.8
71-55-6	1,1,1-Trichloroethane	40	U	40	11
56-23-5	Carbon tetrachloride	40	U	40	5.5
71-43-2	Benzene	40	U	40	4.2
107-06-2	1,2-Dichloroethane	40	U	40	8.5
79-01-6	Trichloroethene	560		40	5.7
78-87-5	1,2-Dichloropropane	40	U	40	3.8
75-27-4	Bromodichloromethane	40	U	40	5.2
10061-01-5	cis-1,3-Dichloropropene	40	U	40	7.5
108-10-1	4-Methyl-2-pentanone (MIBK)	200	U	200	21
108-88-3	Toluene	40	U	40	6.0
10061-02-6	trans-1,3-Dichloropropene	40	U	40	5.9
79-00-5	1,1,2-Trichloroethane	40	U	40	8.1
127-18-4	Tetrachloroethene	40	U	40	5.9
591-78-6	2-Hexanone	200	U	200	6.4
124-48-1	Dibromochloromethane	40	U	40	5.5
106-93-4	1,2-Dibromoethane (EDB)	40	U	40	7.2
108-90-7	Chlorobenzene	40	U	40	5.4
630-20-6	1,1,1,2-Tetrachloroethane	40	U	40	11
100-41-4	Ethylbenzene	40	U	40	9.1
1330-20-7	Xylenes, Total	120	U	120	20
100-42-5	Styrene	40	U	40	3.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-132-0/1-0 DL Lab Sample ID: 180-43402-3 DL
 Matrix: Water Lab File ID: 60506016.D
 Analysis Method: 8260C Date Collected: 04/23/2015 13:07
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 17:39
 Soil Aliquot Vol: _____ Dilution Factor: 40
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	<i>Bromoform</i>	40	U	40	7.7
79-34-5	<i>1,1,2,2-Tetrachloroethane</i>	40	U	40	8.0
107-13-1	<i>Acrylonitrile</i>	800	U	800	22
123-91-1	<i>1,4-Dioxane</i>	8000	U	8000	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		64-135
2037-26-5	Toluene-d8 (Surr)	111		71-118
460-00-4	4-Bromofluorobenzene (Surr)	106		70-118
1868-53-7	Dibromofluoromethane (Surr)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506016.D
 Lims ID: 180-43402-D-3 Lab Sample ID: 180-43402-3
 Client ID: HD-MW-132-0/1-0
 Sample Type: Client
 Inject. Date: 06-May-2015 17:39:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 5.000 mL Dil. Factor: 40.0000
 Sample Info: 180-43402-D-3, 40x
 Misc. Info.: 180-0006797-016
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-May-2015 09:12:28 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: fergusond

Date: 07-May-2015 09:12:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.237	4.224	0.013	96	182136	1000.0	
* 2 Fluorobenzene (IS)	96	7.285	7.290	-0.005	98	451318	50.0	
* 3 Chlorobenzene-d5	119	10.400	10.399	0.001	92	90523	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.748	12.747	0.001	96	138815	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.555	6.554	0.001	91	94908	50.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.932	6.932	0.000	71	174647	56.0	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.939	0.001	95	425396	55.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.586	11.585	0.001	78	164919	52.8	
12 Chloromethane	50		1.761				ND	
13 Vinyl chloride	62		1.888				ND	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.393				ND	
22 1,1-Dichloroethene	96	3.343	3.336	0.007	93	7442	3.56	
24 Acetone	43		3.428				ND	
26 Carbon disulfide	76		3.628				ND	
31 Methylene Chloride	84	4.140	4.127	0.013	80	6628	2.61	
33 Acrylonitrile	53		4.510				ND	
34 trans-1,2-Dichloroethene	96	4.584	4.559	0.025	11	893	0.3835	
35 Methyl tert-butyl ether	73		4.577				ND	
37 1,1-Dichloroethane	63	5.205	5.198	0.007	47	8842	2.02	
43 cis-1,2-Dichloroethene	96	5.941	5.940	0.001	83	210982	79.7	
44 2-Butanone (MEK)	43		5.946				ND	
48 Chlorobromomethane	128		6.232				ND	
50 Chloroform	83	6.367	6.372	-0.005	10	1012	0.2394	
51 1,1,1-Trichloroethane	97		6.542				ND	
53 Carbon tetrachloride	117		6.719				ND	
56 Benzene	78		6.944				ND	
57 1,2-Dichloroethane	62		7.017				ND	
61 Trichloroethene	130	7.675	7.674	0.001	91	149491	69.6	
64 1,2-Dichloropropane	63		7.954				ND	
65 1,4-Dioxane	88		8.033				ND	

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506016.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.227				ND	
71 cis-1,3-Dichloropropene	75		8.678				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.824				ND	
73 Toluene	91		9.012				ND	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97		9.450				ND	
77 Tetrachloroethene	164		9.529				ND	
79 2-Hexanone	43		9.663				ND	
81 Chlorodibromomethane	129		9.821				ND	
82 Ethylene Dibromide	107		9.943				ND	
84 Chlorobenzene	112		10.430				ND	
86 1,1,1,2-Tetrachloroethane	131		10.521				ND	
87 Ethylbenzene	106		10.527				ND	
88 m-Xylene & p-Xylene	106		10.661				ND	
89 o-Xylene	106		11.044				ND	
90 Styrene	104		11.062				ND	
91 Bromoform	173		11.245				ND	
96 1,1,2,2-Tetrachloroethane	83		11.713				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506016.D

Injection Date: 06-May-2015 17:39:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-D-3

Lab Sample ID: 180-43402-3

Worklist Smp#: 16

Client ID: HD-MW-132-0/1-0

Purge Vol: 5.000 mL

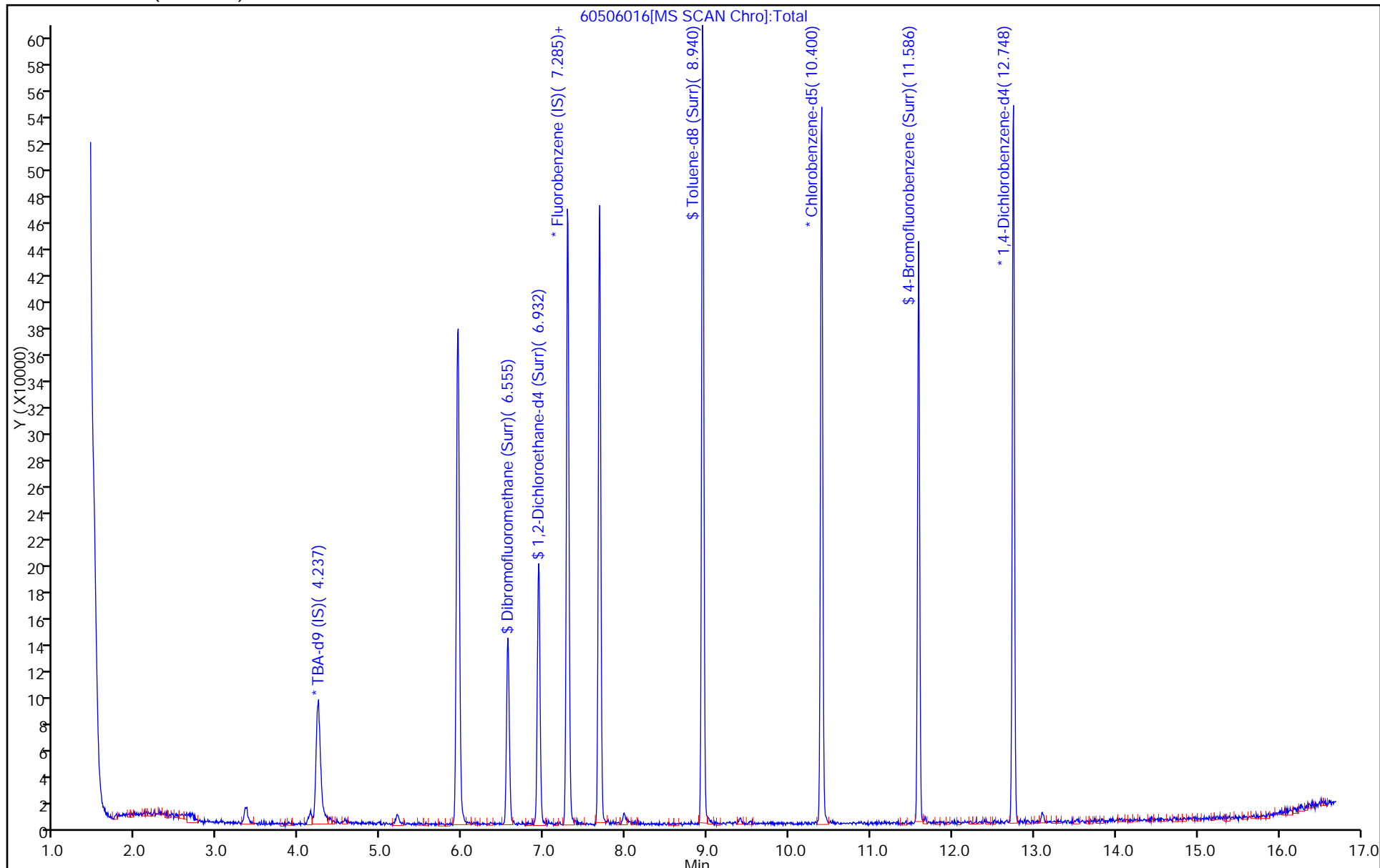
Dil. Factor: 40.0000

ALS Bottle#: 15

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506016.D

Injection Date: 06-May-2015 17:39:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

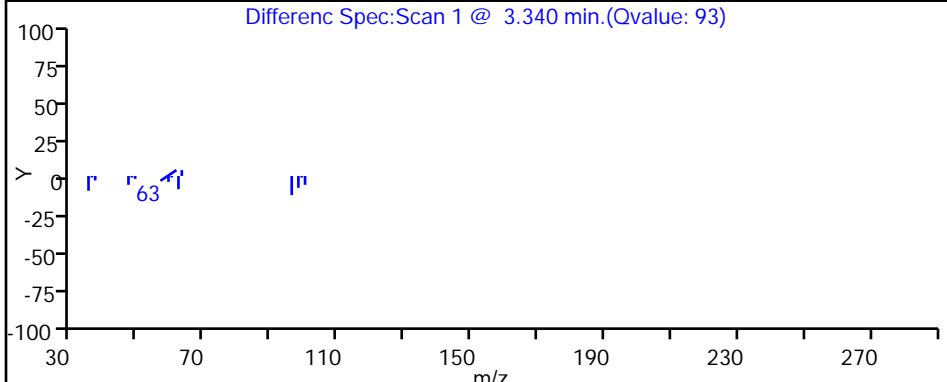
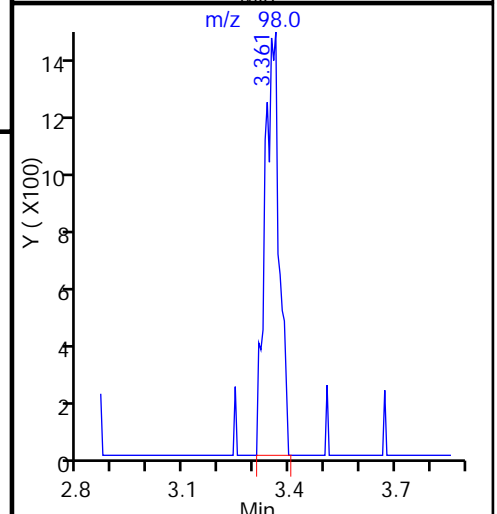
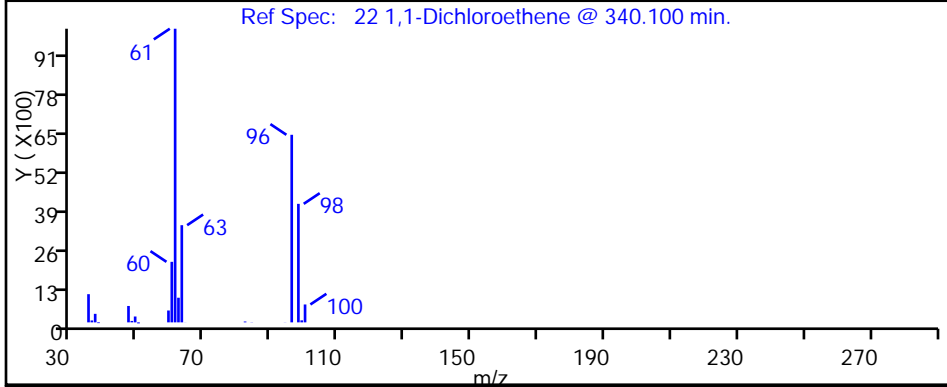
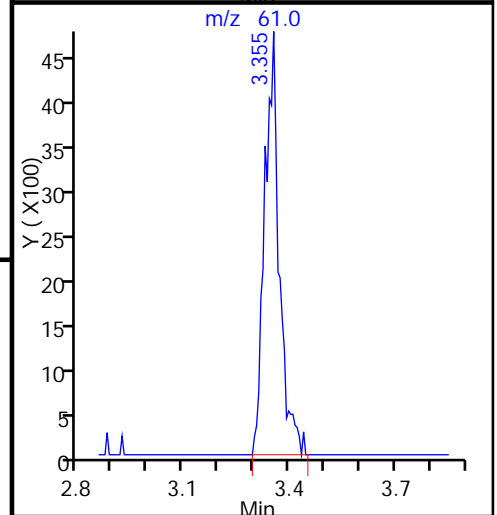
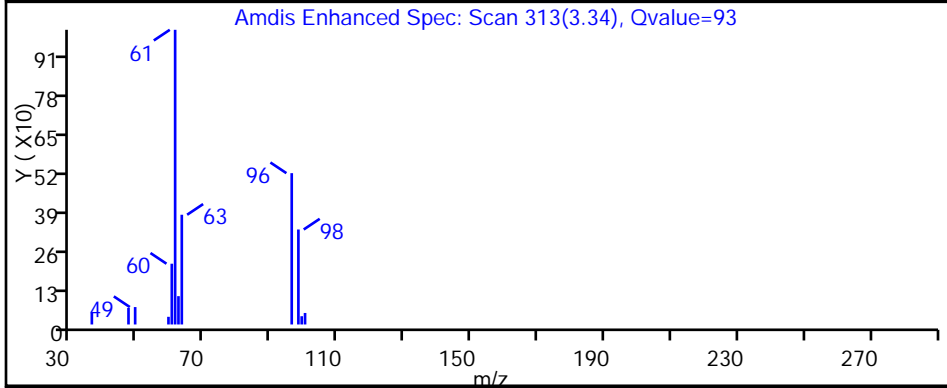
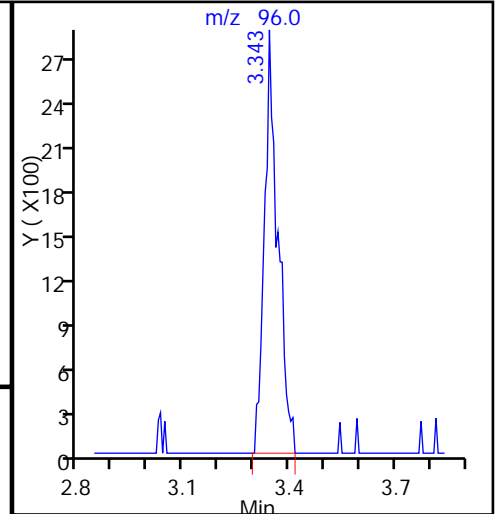
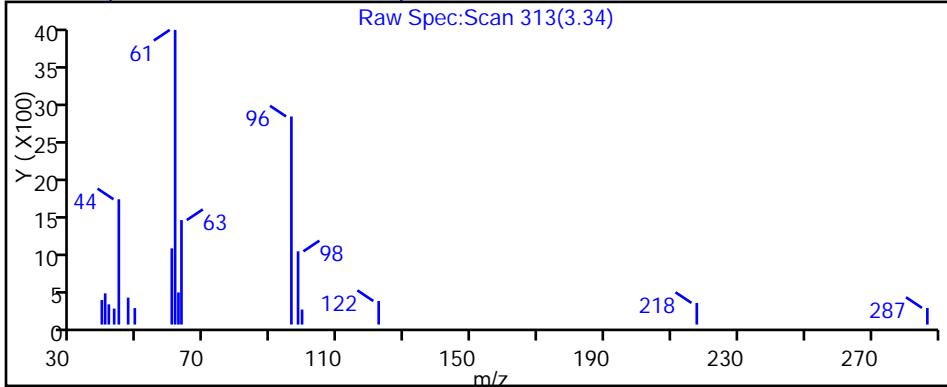
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506016.D

Injection Date: 06-May-2015 17:39:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

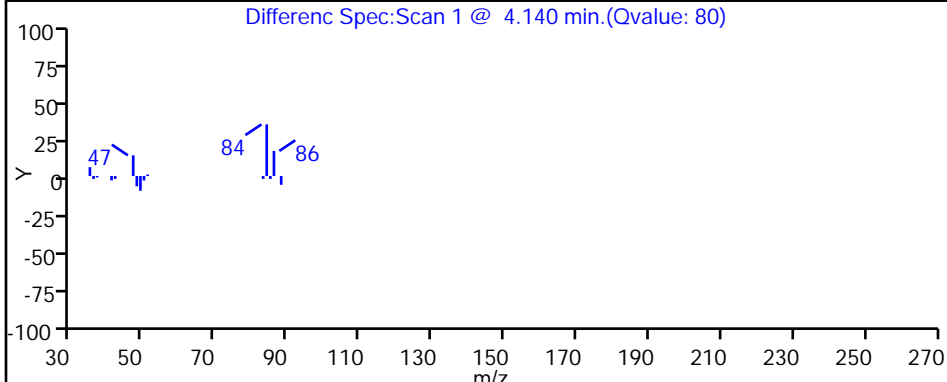
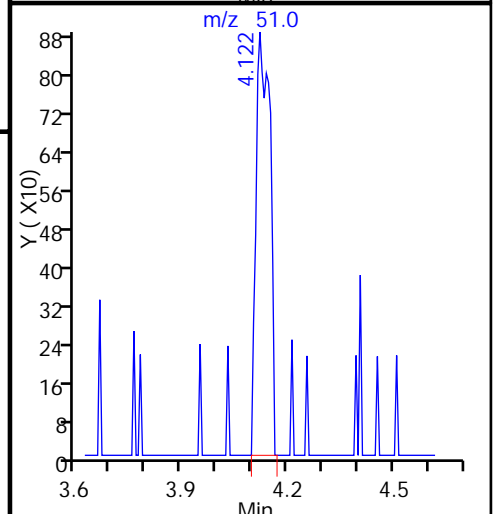
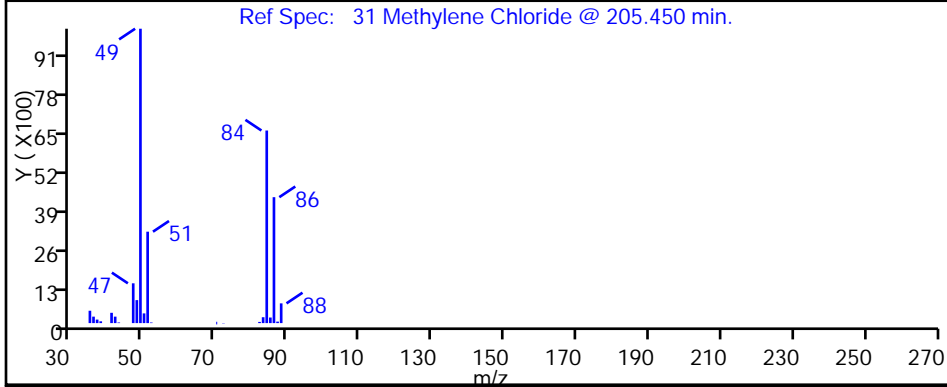
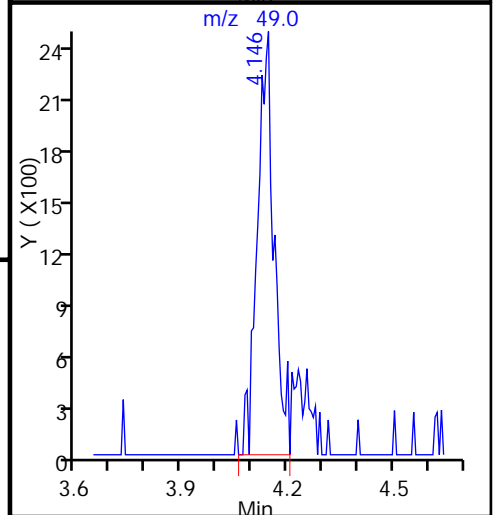
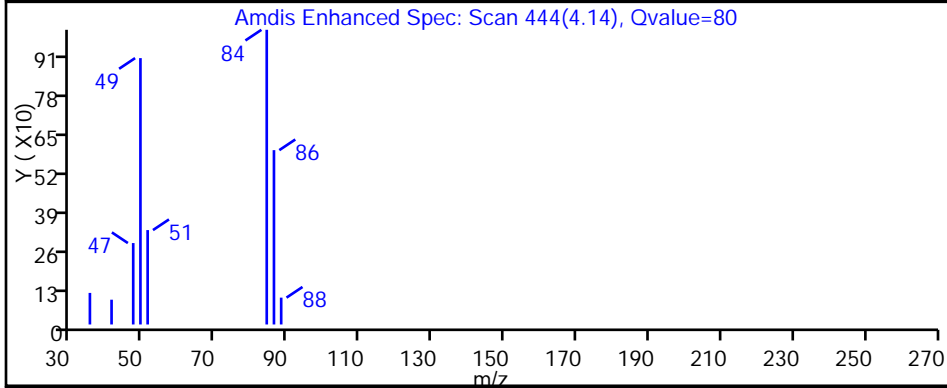
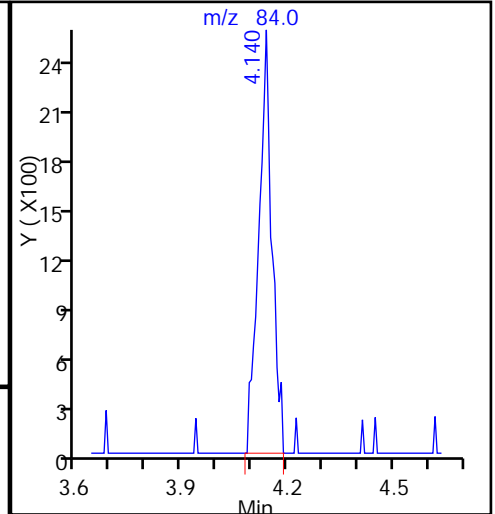
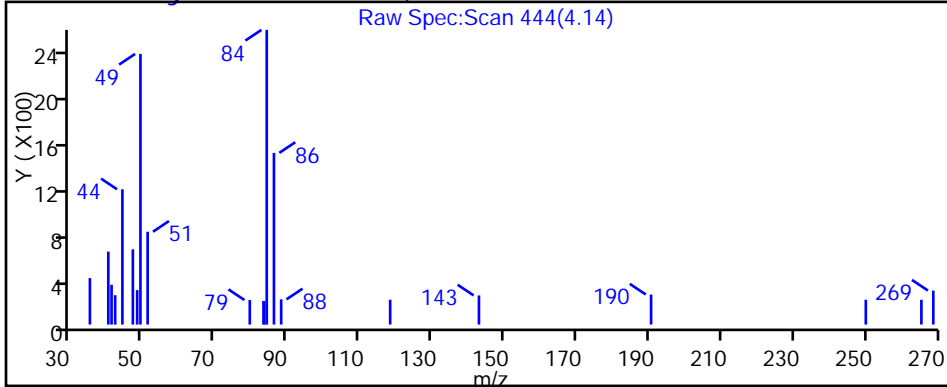
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506016.D

Injection Date: 06-May-2015 17:39:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

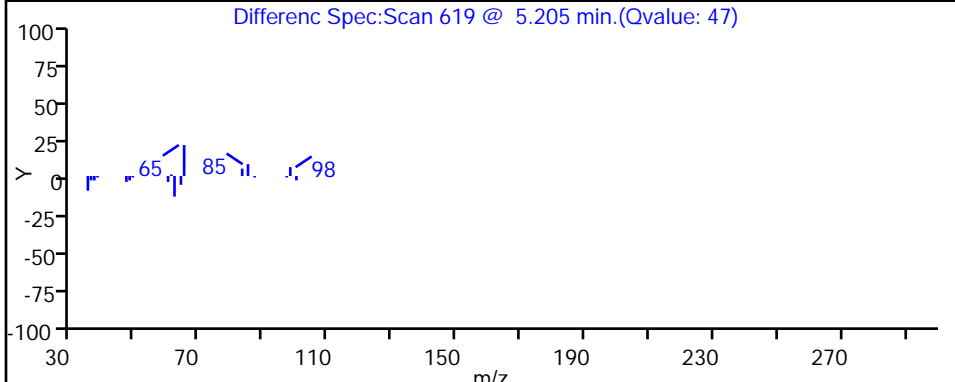
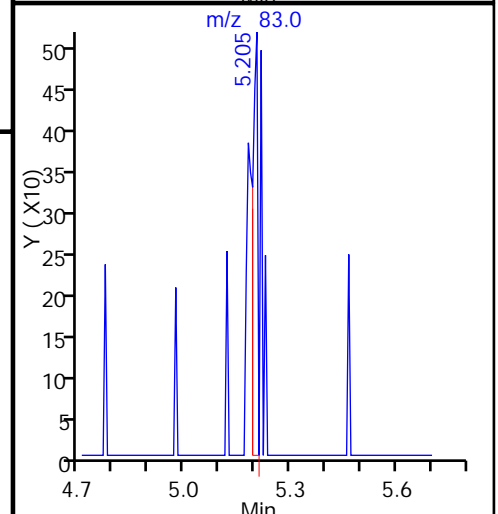
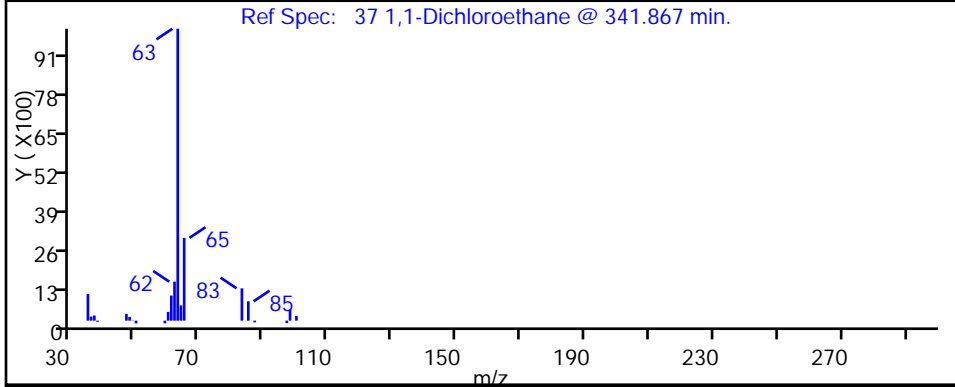
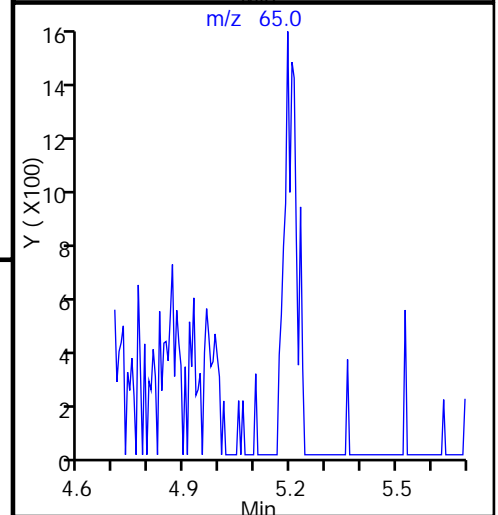
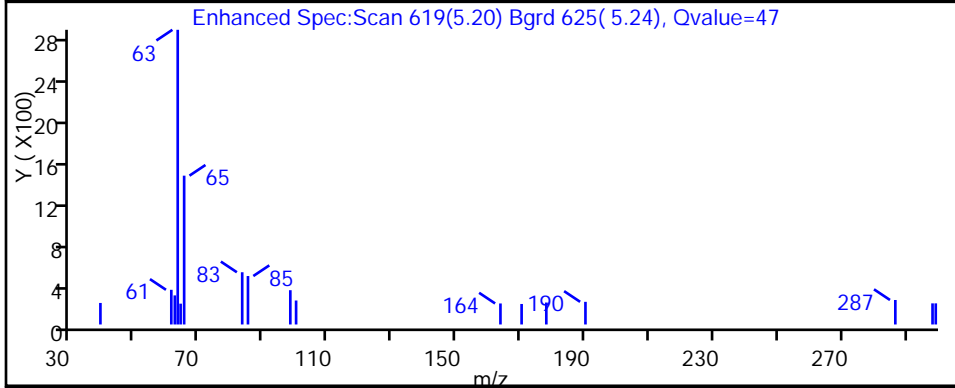
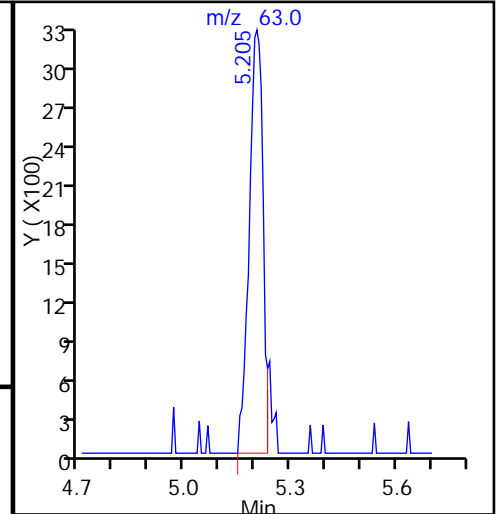
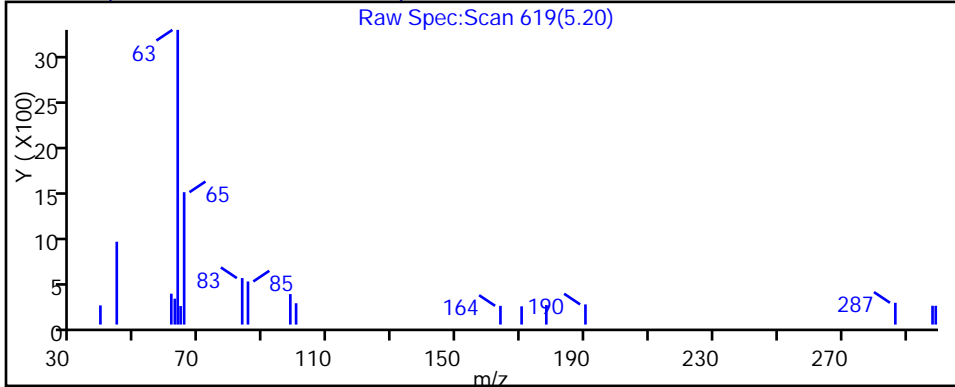
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506016.D

Injection Date: 06-May-2015 17:39:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

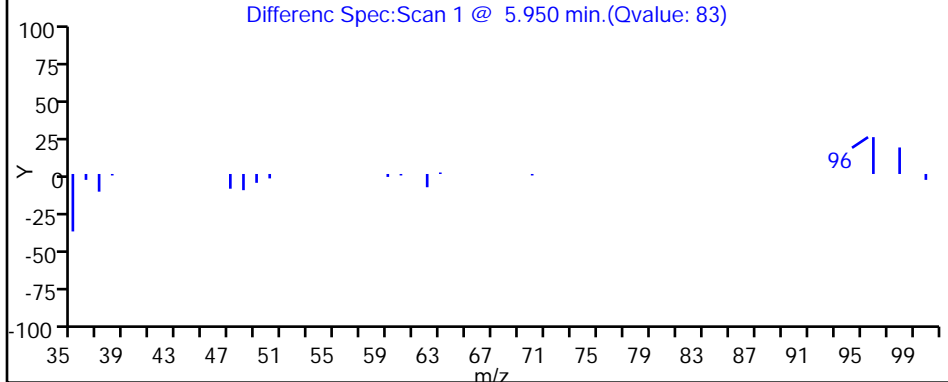
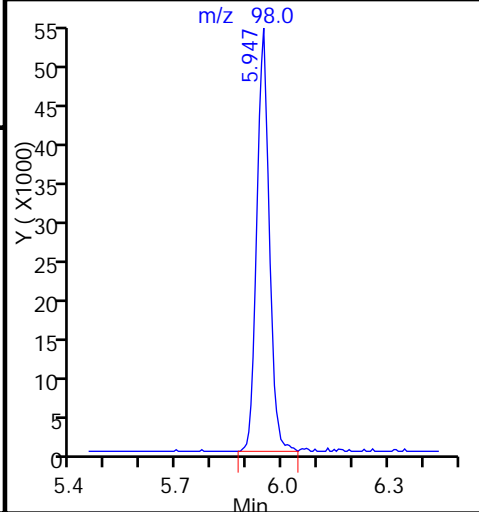
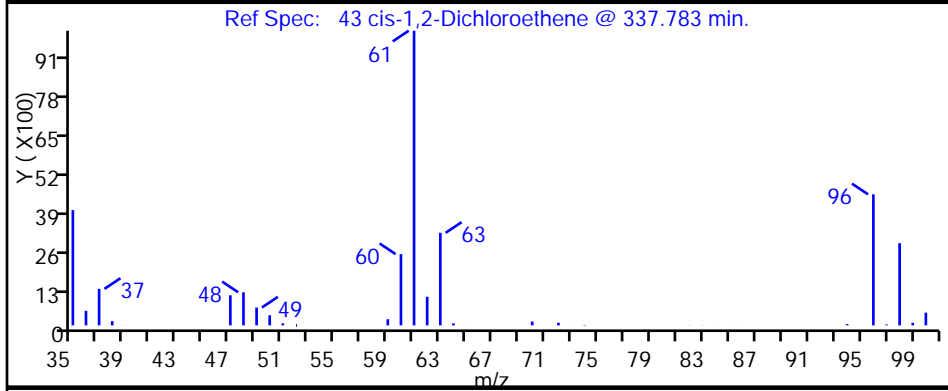
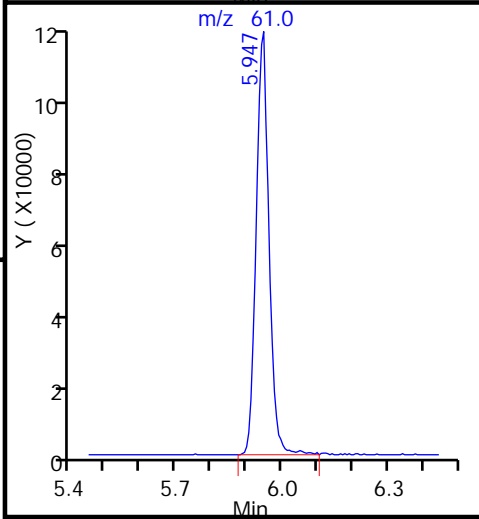
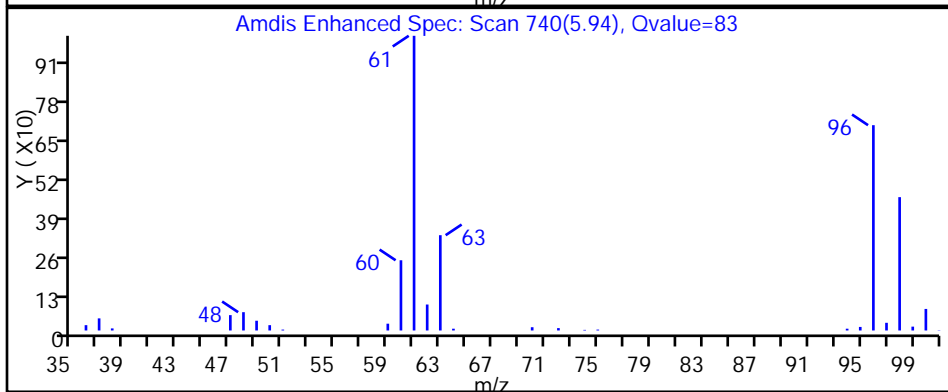
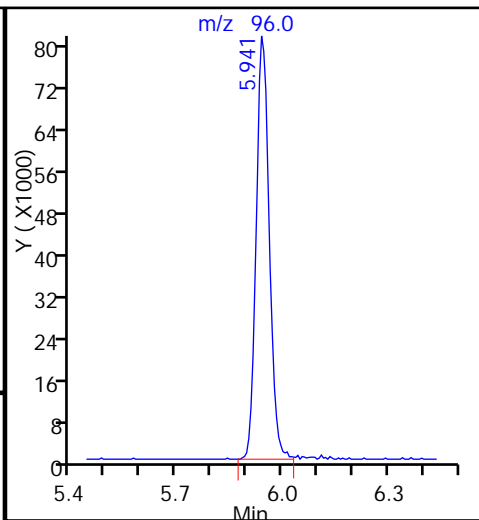
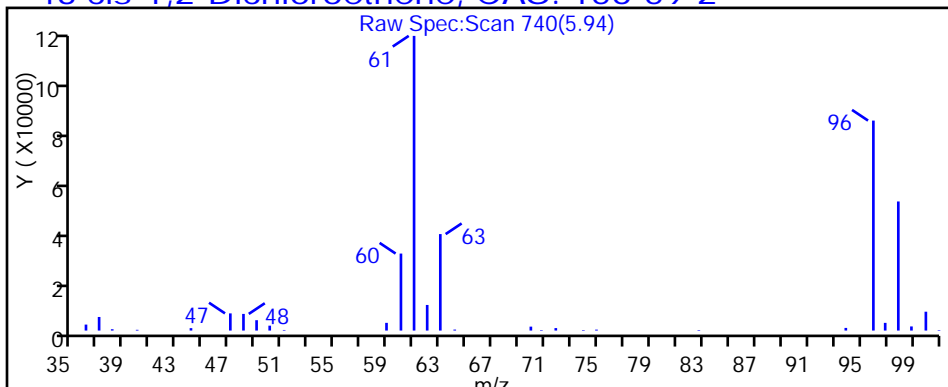
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506016.D

Injection Date: 06-May-2015 17:39:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-3

Lab Sample ID: 180-43402-3

Client ID: HD-MW-132-0/1-0

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 16

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

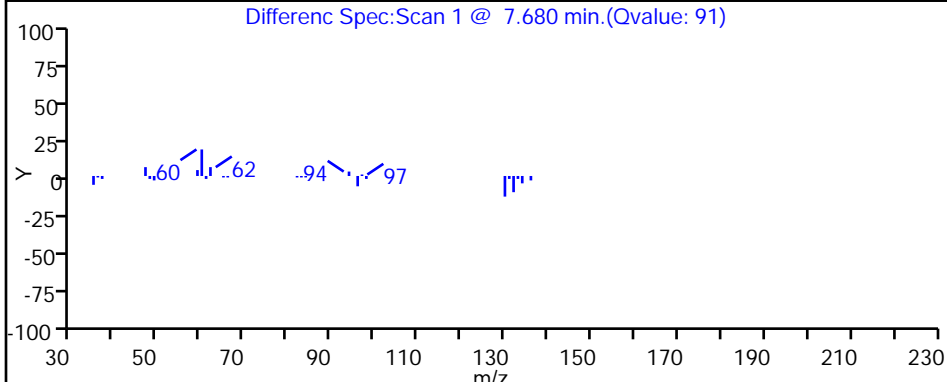
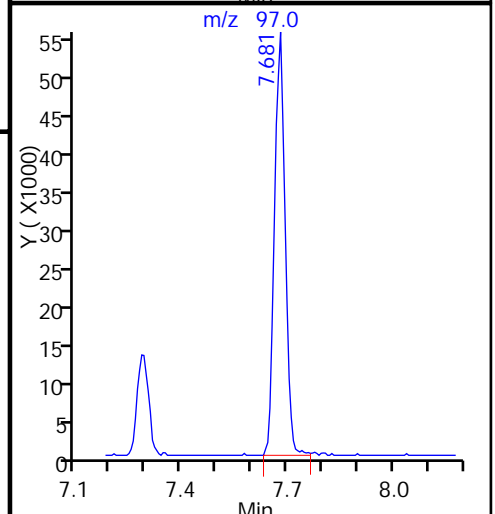
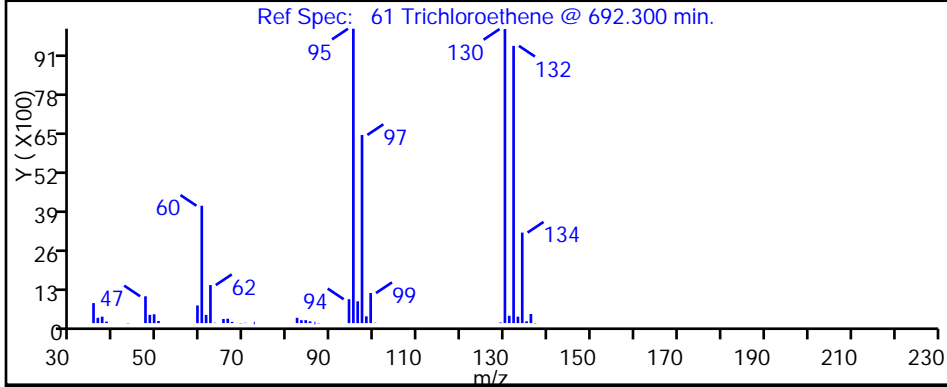
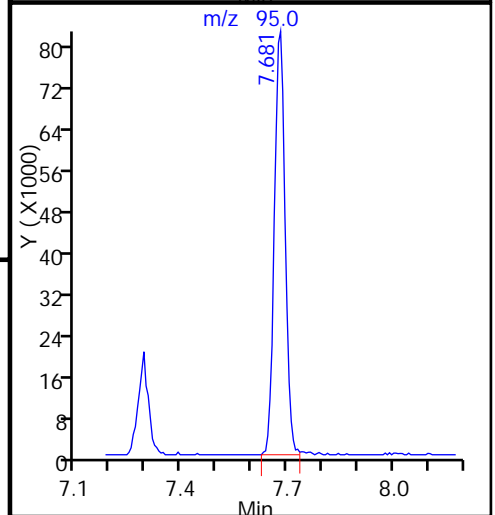
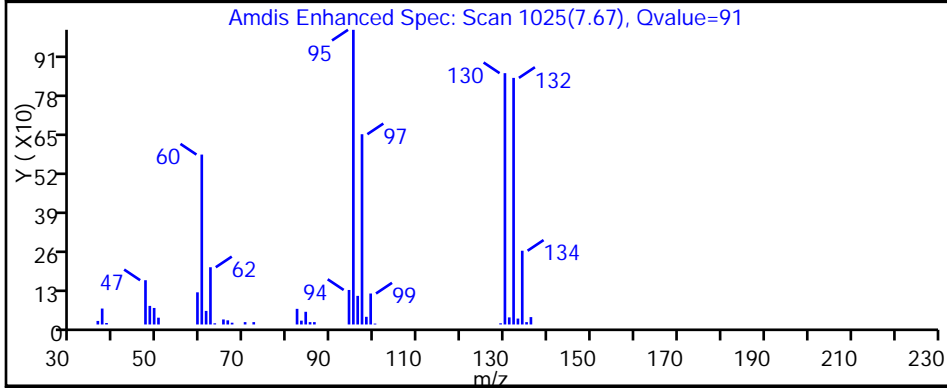
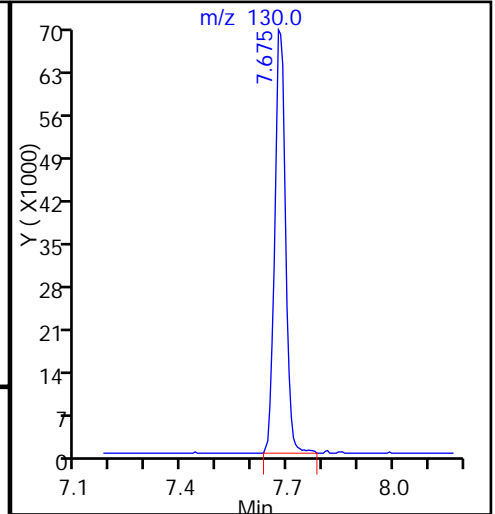
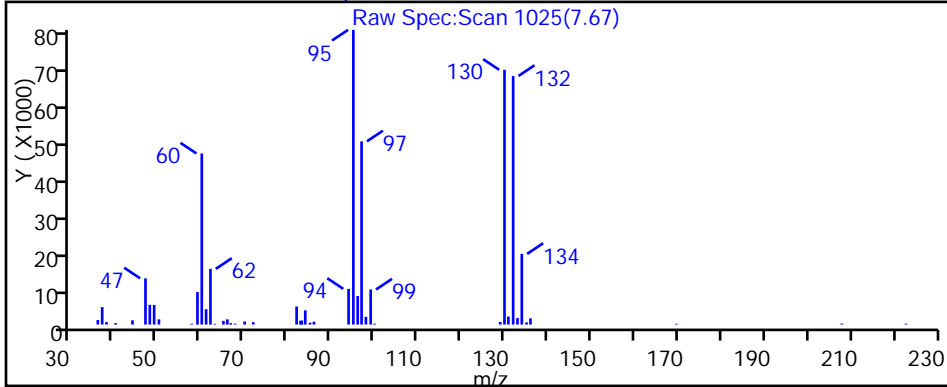
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-39D-0/1-0 Lab Sample ID: 180-43402-4
 Matrix: Water Lab File ID: 60506017.D
 Analysis Method: 8260C Date Collected: 04/23/2015 10:15
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 18:02
 Soil Aliquot Vol: _____ Dilution Factor: 3
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	3.0	U	3.0	0.85
75-01-4	Vinyl chloride	3.0	U	3.0	0.68
74-83-9	Bromomethane	3.0	U	3.0	0.94
75-00-3	Chloroethane	3.0	U	3.0	0.64
75-35-4	1,1-Dichloroethene	1.4	J	3.0	0.89
67-64-1	Acetone	15	U	15	7.5
75-15-0	Carbon disulfide	3.0	U	3.0	0.64
75-09-2	Methylene Chloride	1.3	J	3.0	0.38
156-60-5	trans-1,2-Dichloroethene	3.0	U	3.0	0.51
1634-04-4	Methyl tert-butyl ether	3.0	U	3.0	0.55
75-34-3	1,1-Dichloroethane	1.0	J	3.0	0.35
156-59-2	cis-1,2-Dichloroethene	50		3.0	0.71
74-97-5	Bromochloromethane	3.0	U	3.0	0.54
78-93-3	2-Butanone (MEK)	15	U	15	1.6
67-66-3	Chloroform	3.0	U	3.0	0.51
71-55-6	1,1,1-Trichloroethane	3.3		3.0	0.86
56-23-5	Carbon tetrachloride	3.0	U	3.0	0.41
71-43-2	Benzene	3.0	U	3.0	0.32
107-06-2	1,2-Dichloroethane	3.0	U	3.0	0.64
79-01-6	Trichloroethene	66		3.0	0.43
78-87-5	1,2-Dichloropropane	3.0	U	3.0	0.28
75-27-4	Bromodichloromethane	3.0	U	3.0	0.39
10061-01-5	cis-1,3-Dichloropropene	3.0	U	3.0	0.56
108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	15	1.6
108-88-3	Toluene	3.0	U	3.0	0.45
10061-02-6	trans-1,3-Dichloropropene	3.0	U	3.0	0.44
79-00-5	1,1,2-Trichloroethane	3.0	U	3.0	0.60
127-18-4	Tetrachloroethene	19		3.0	0.45
591-78-6	2-Hexanone	15	U	15	0.48
124-48-1	Dibromochloromethane	3.0	U	3.0	0.41
106-93-4	1,2-Dibromoethane (EDB)	3.0	U	3.0	0.54
108-90-7	Chlorobenzene	3.0	U	3.0	0.41
630-20-6	1,1,1,2-Tetrachloroethane	3.0	U	3.0	0.83
100-41-4	Ethylbenzene	3.0	U	3.0	0.68
1330-20-7	Xylenes, Total	9.0	U	9.0	1.5
100-42-5	Styrene	3.0	U	3.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-39D-0/1-0 Lab Sample ID: 180-43402-4
 Matrix: Water Lab File ID: 60506017.D
 Analysis Method: 8260C Date Collected: 04/23/2015 10:15
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 18:02
 Soil Aliquot Vol: _____ Dilution Factor: 3
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	3.0	U	3.0	0.57
79-34-5	1,1,2,2-Tetrachloroethane	3.0	U	3.0	0.60
107-13-1	Acrylonitrile	60	U	60	1.6
123-91-1	1,4-Dioxane	600	U	600	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	100		70-118
1868-53-7	Dibromofluoromethane (Surr)	104		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506017.D
 Lims ID: 180-43402-D-4 Lab Sample ID: 180-43402-4
 Client ID: HD-MW-39D-0/1-0
 Sample Type: Client
 Inject. Date: 06-May-2015 18:02:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 5.000 mL Dil. Factor: 3.0000
 Sample Info: 180-43402-D-4, 3x
 Misc. Info.: 180-0006797-017
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-May-2015 09:13:42 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: fergusond

Date: 07-May-2015 09:13:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.232	4.224	0.008	96	189005	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.290	0.002	98	451816	50.0	
* 3 Chlorobenzene-d5	119	10.394	10.399	-0.005	93	93498	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.749	12.747	0.002	97	140979	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.556	6.554	0.002	90	97242	52.0	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.933	6.932	0.001	71	173011	55.4	
\$ 7 Toluene-d8 (Surr)	98	8.947	8.939	0.008	94	425876	53.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.587	11.585	0.002	92	161941	50.2	
12 Chloromethane	50		1.761				ND	
13 Vinyl chloride	62		1.888				ND	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.393				ND	
22 1,1-Dichloroethene	96	3.356	3.336	0.020	91	4750	2.27	
24 Acetone	43		3.428				ND	
26 Carbon disulfide	76		3.628				ND	
31 Methylene Chloride	84	4.128	4.127	0.001	77	5565	2.19	
33 Acrylonitrile	53		4.510				ND	
34 trans-1,2-Dichloroethene	96		4.559				ND	
35 Methyl tert-butyl ether	73		4.577				ND	
37 1,1-Dichloroethane	63	5.193	5.198	-0.005	20	7290	1.66	
43 cis-1,2-Dichloroethene	96	5.947	5.940	0.007	85	222237	83.8	
44 2-Butanone (MEK)	43		5.946				ND	
48 Chlorobromomethane	128		6.232				ND	
50 Chloroform	83	6.373	6.372	0.001	28	1338	0.3161	
51 1,1,1-Trichloroethane	97	6.544	6.542	0.002	94	19194	5.52	
53 Carbon tetrachloride	117		6.719				ND	
56 Benzene	78		6.944				ND	
57 1,2-Dichloroethane	62		7.017				ND	
61 Trichloroethene	130	7.681	7.674	0.007	90	236469	110.0	
64 1,2-Dichloropropane	63		7.954				ND	
65 1,4-Dioxane	88		8.033				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.227				ND	
71 cis-1,3-Dichloropropene	75		8.678				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.824				ND	
73 Toluene	91		9.012				ND	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97		9.450				ND	
77 Tetrachloroethene	164	9.524	9.529	-0.005	91	51831	32.5	
79 2-Hexanone	43		9.663				ND	
81 Chlorodibromomethane	129		9.821				ND	
82 Ethylene Dibromide	107		9.943				ND	
84 Chlorobenzene	112		10.430				ND	
86 1,1,1,2-Tetrachloroethane	131		10.521				ND	
87 Ethylbenzene	106		10.527				ND	
88 m-Xylene & p-Xylene	106		10.661				ND	
89 o-Xylene	106		11.044				ND	
90 Styrene	104		11.062				ND	
91 Bromoform	173		11.245				ND	
96 1,1,2,2-Tetrachloroethane	83		11.713				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506017.D

Injection Date: 06-May-2015 18:02:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-D-4

Lab Sample ID: 180-43402-4

Worklist Smp#: 17

Client ID: HD-MW-39D-0/1-0

Purge Vol: 5.000 mL

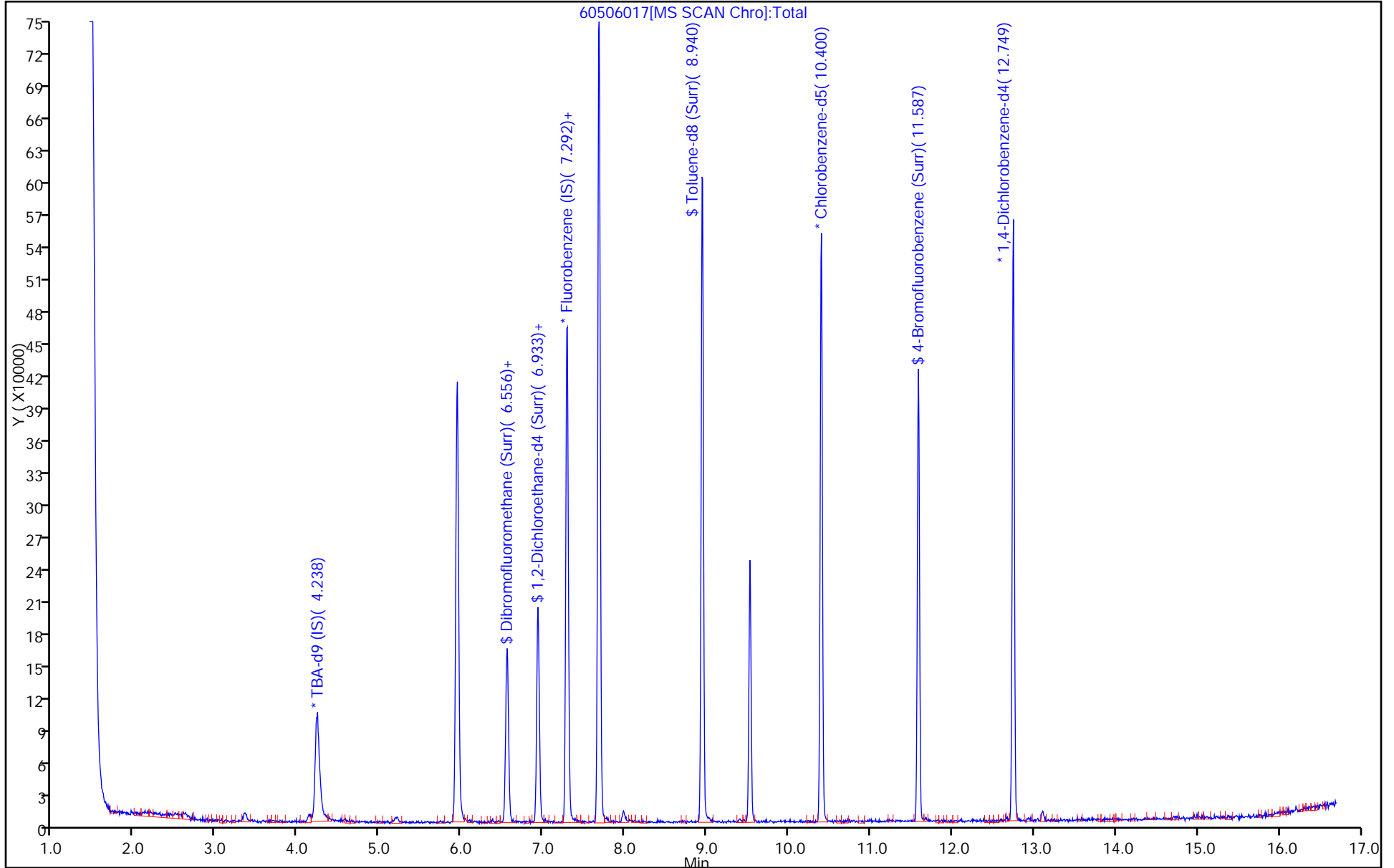
Dil. Factor: 3.0000

ALS Bottle#: 16

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506017.D

Injection Date: 06-May-2015 18:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-4

Lab Sample ID: 180-43402-4

Client ID: HD-MW-39D-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 3.0000

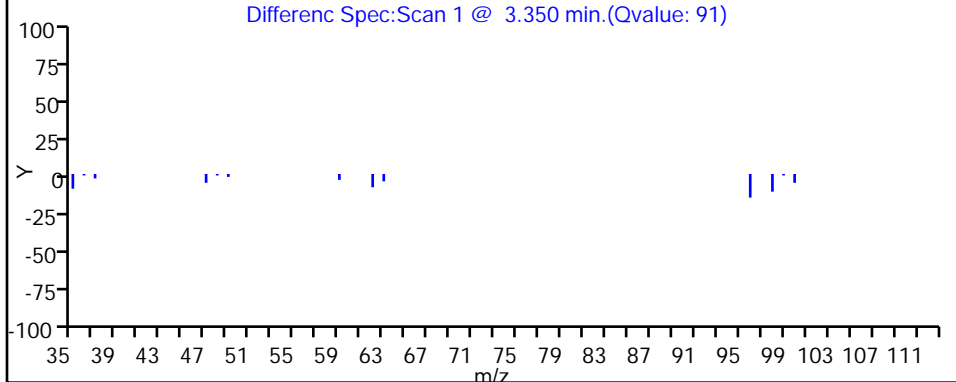
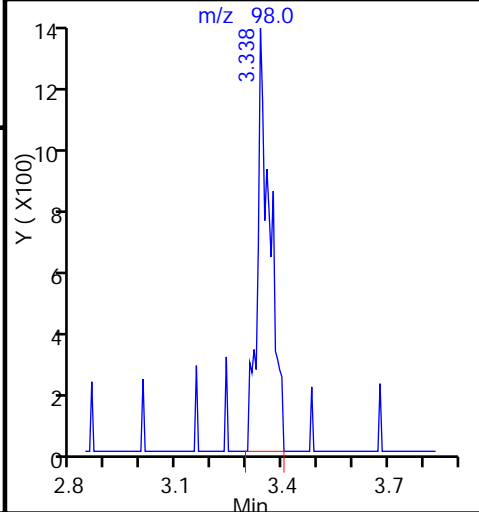
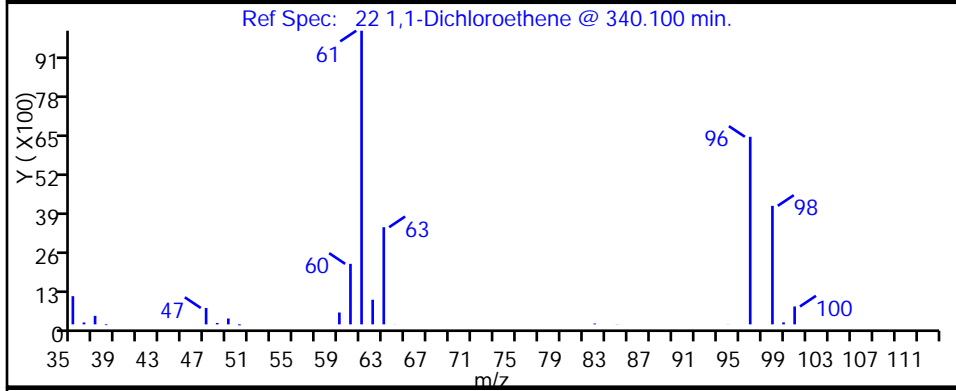
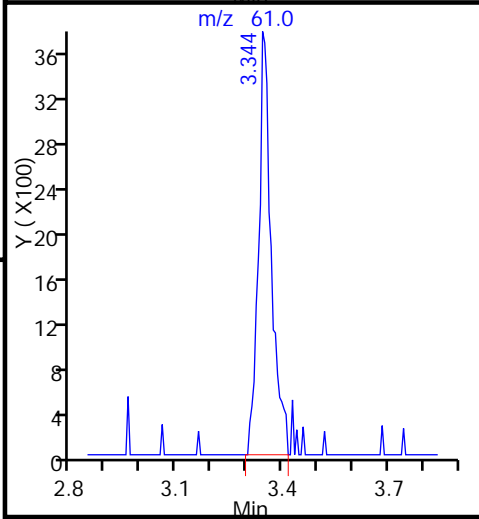
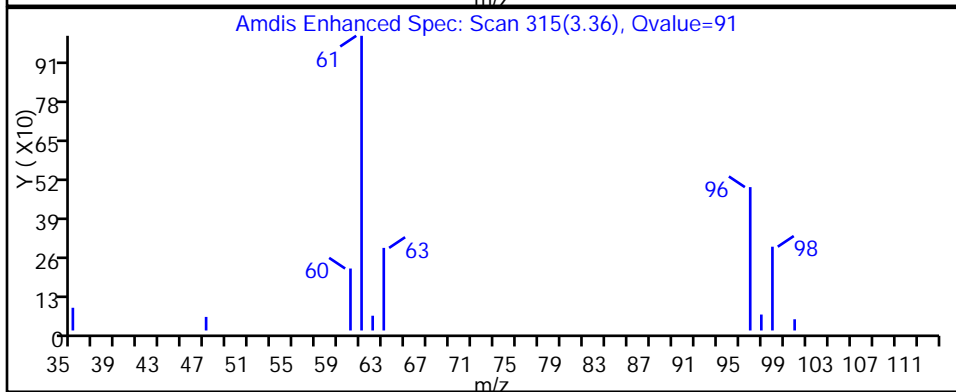
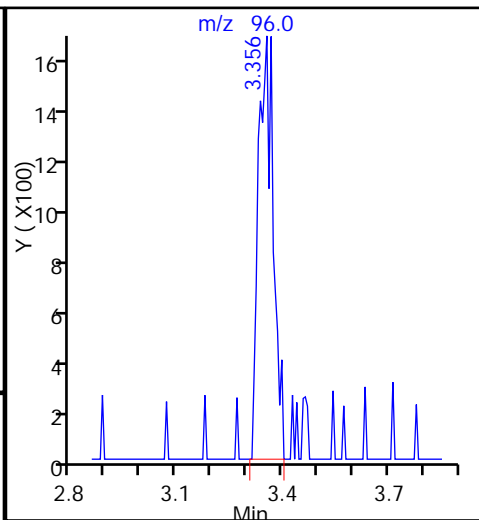
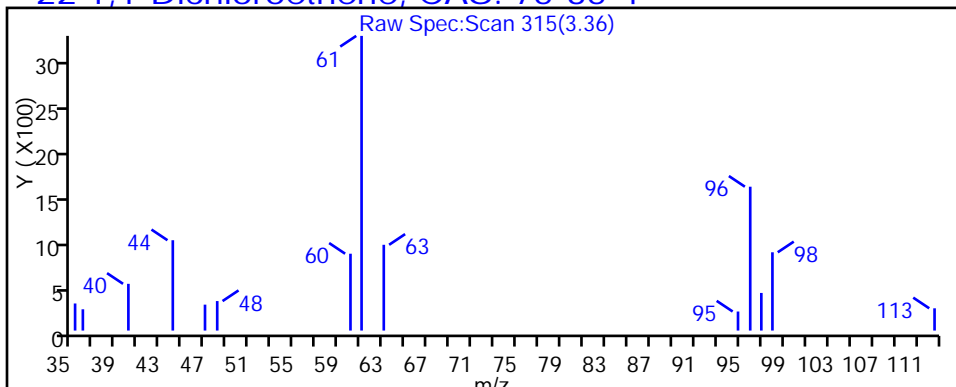
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506017.D

Injection Date: 06-May-2015 18:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-4

Lab Sample ID: 180-43402-4

Client ID: HD-MW-39D-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 3.0000

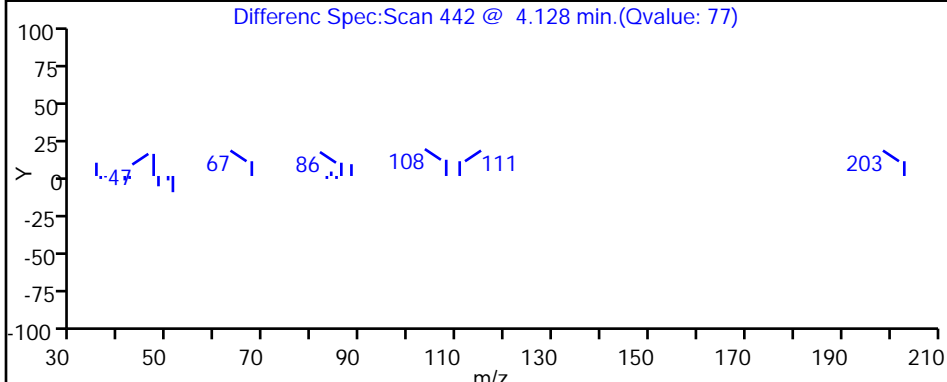
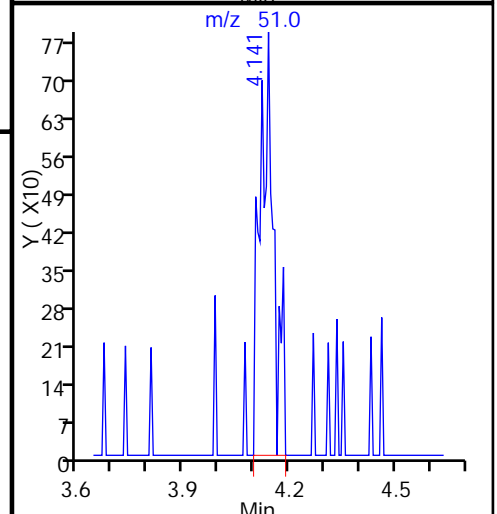
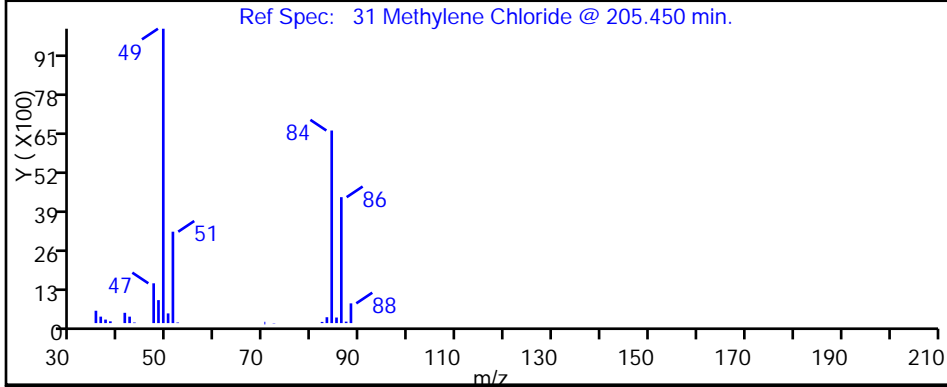
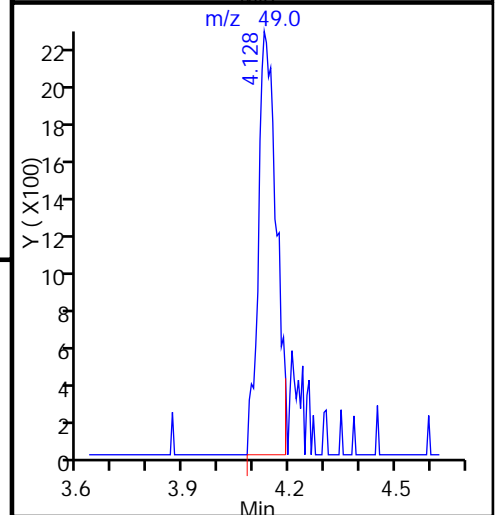
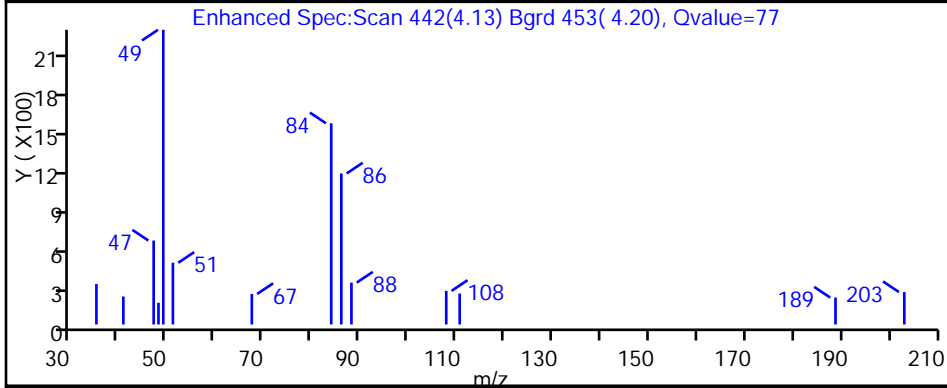
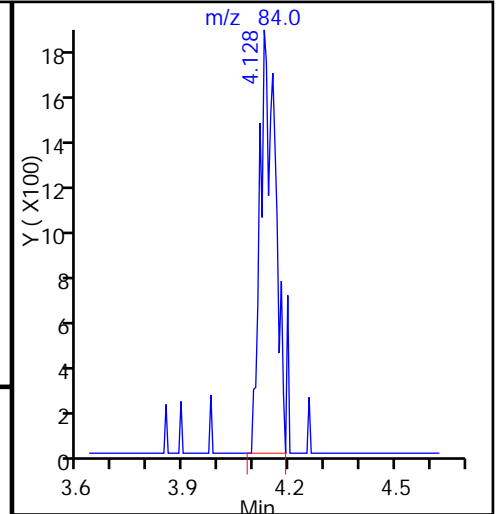
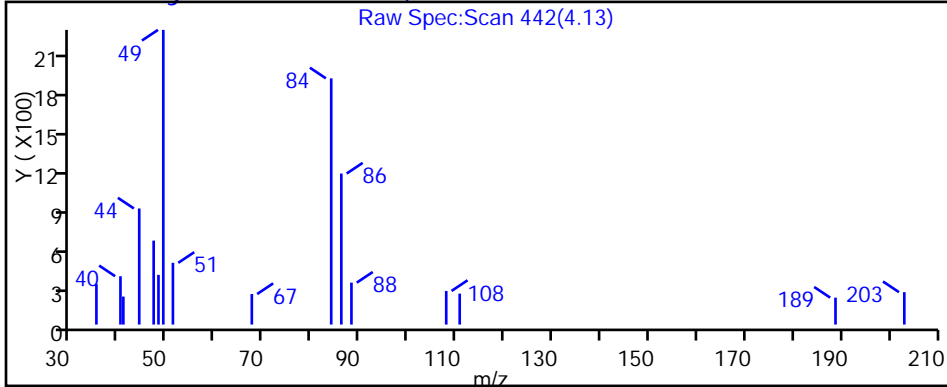
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506017.D

Injection Date: 06-May-2015 18:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-4

Lab Sample ID: 180-43402-4

Client ID: HD-MW-39D-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 3.0000

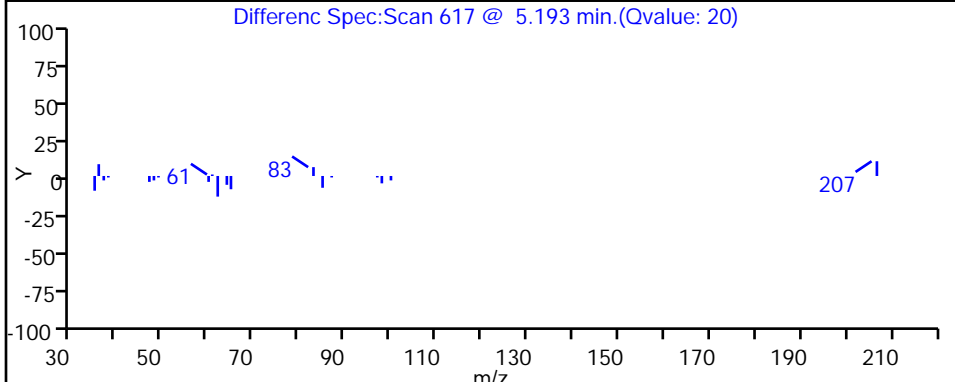
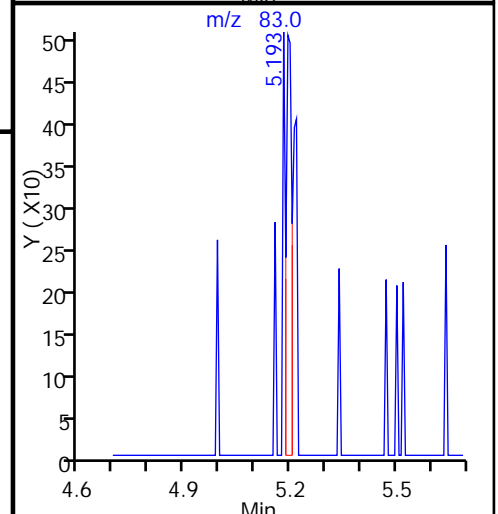
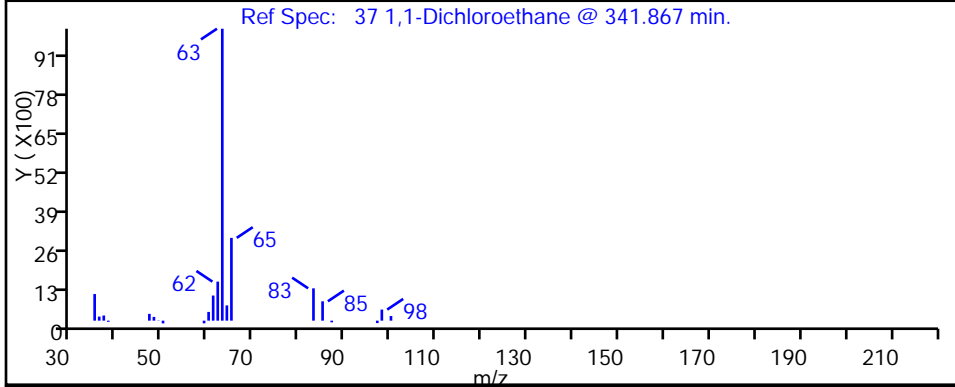
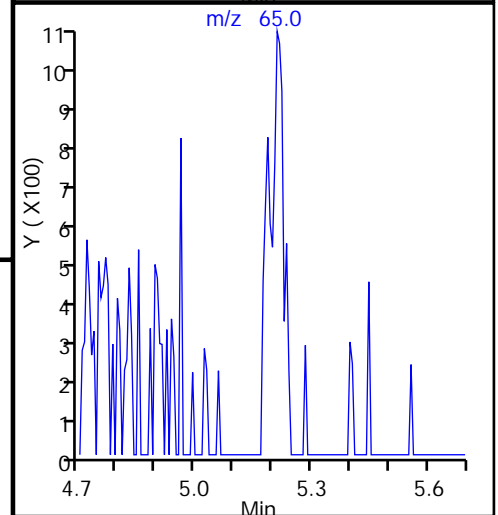
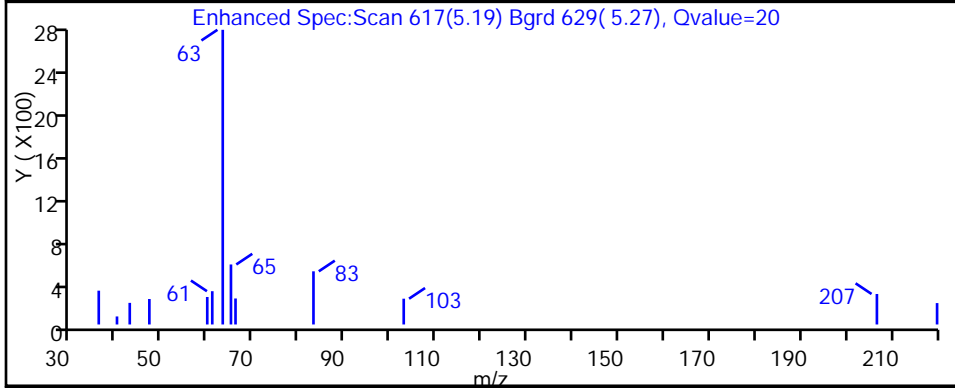
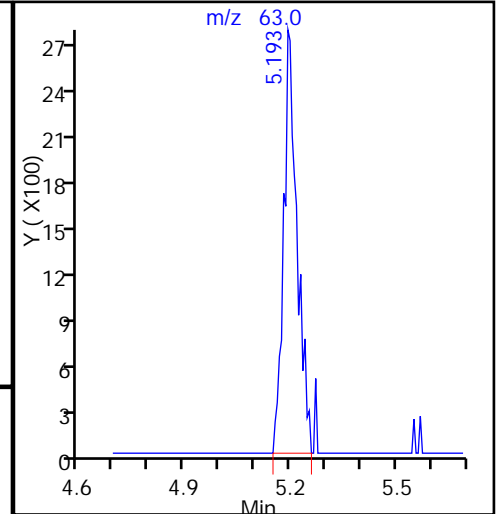
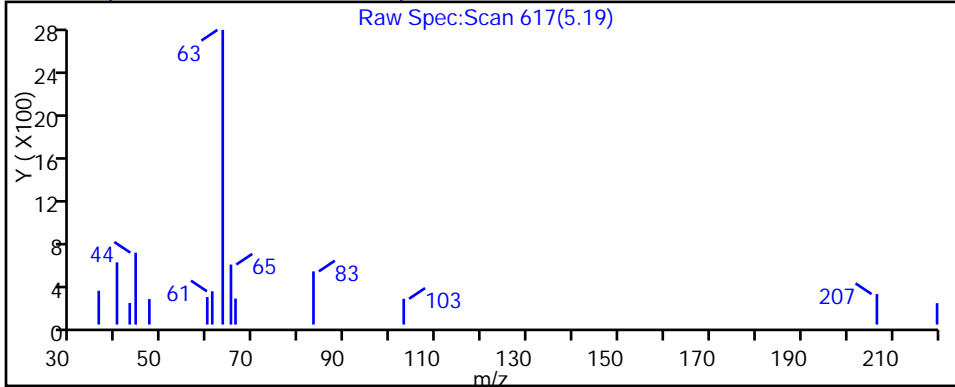
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506017.D

Injection Date: 06-May-2015 18:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-4

Lab Sample ID: 180-43402-4

Client ID: HD-MW-39D-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 3.0000

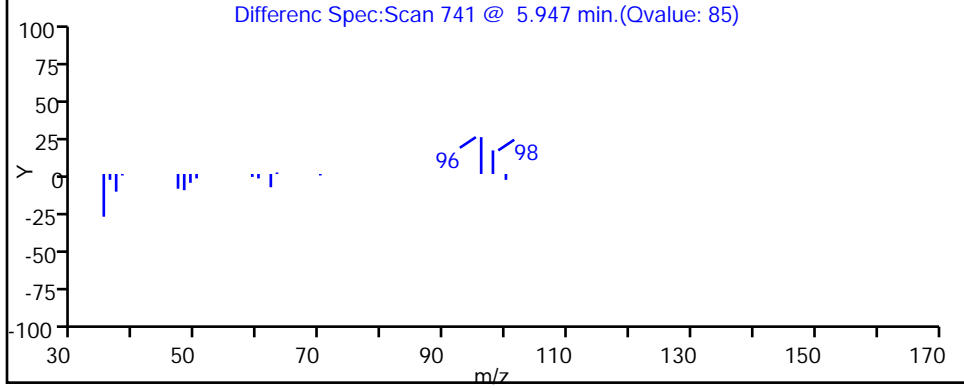
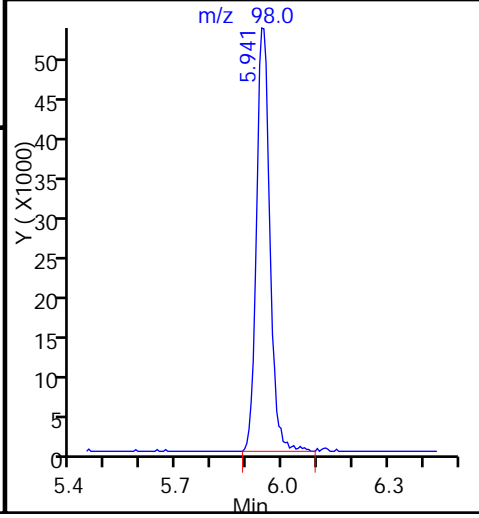
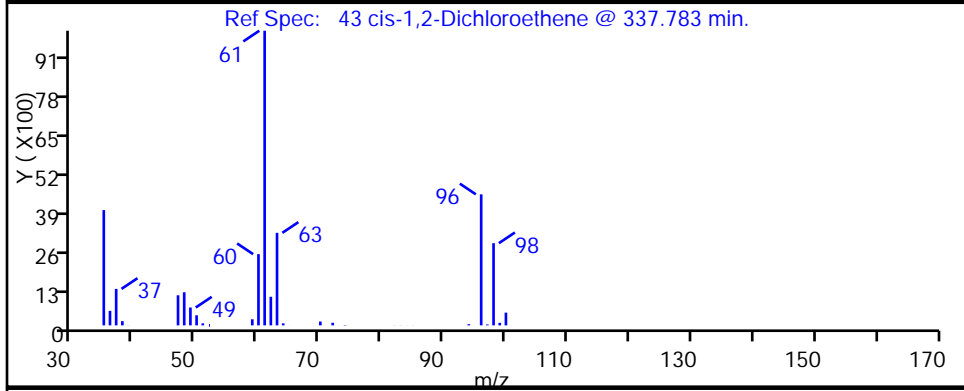
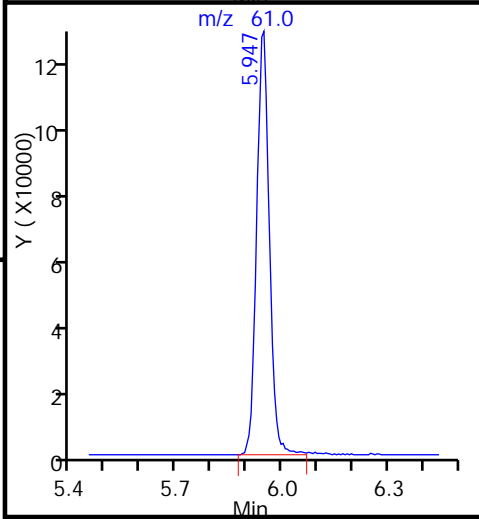
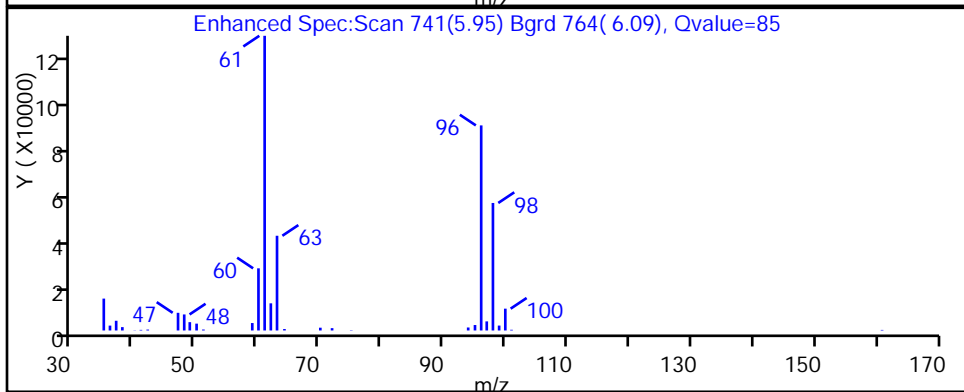
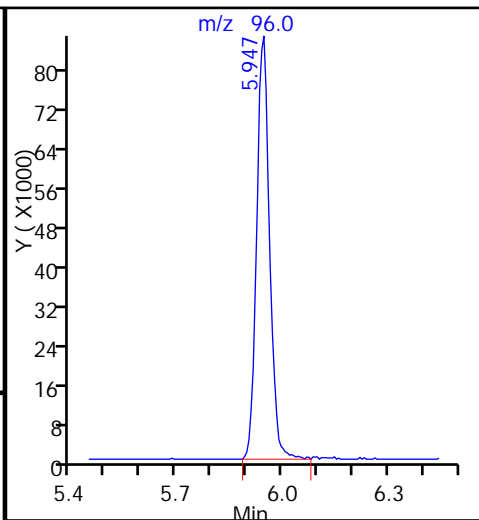
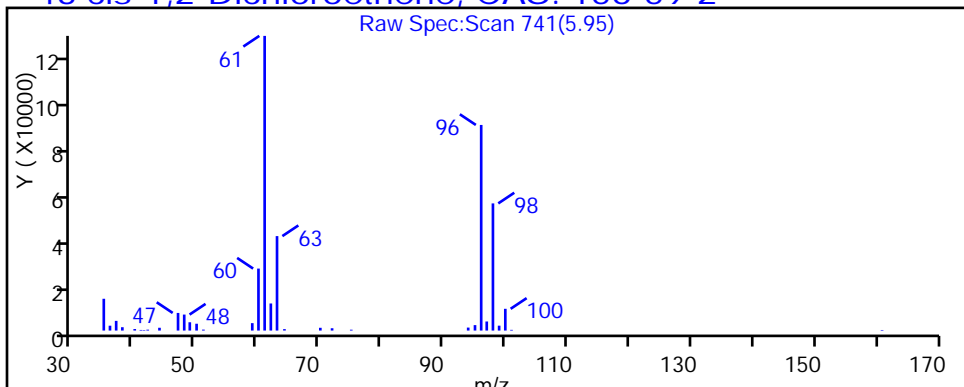
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506017.D

Injection Date: 06-May-2015 18:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-4

Lab Sample ID: 180-43402-4

Client ID: HD-MW-39D-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 3.0000

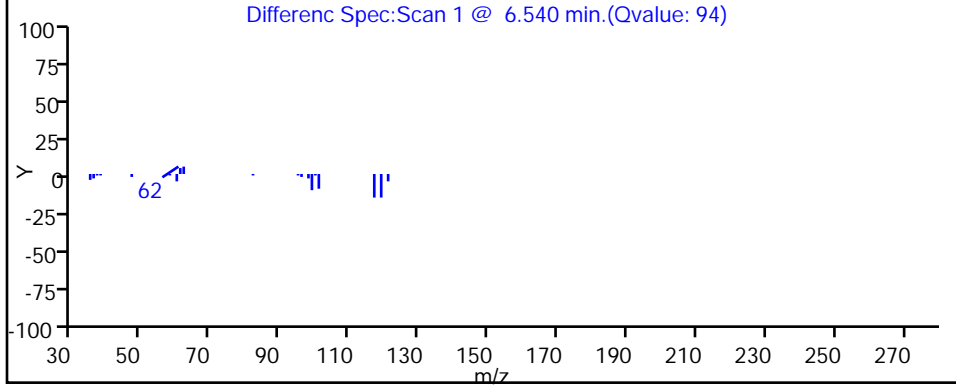
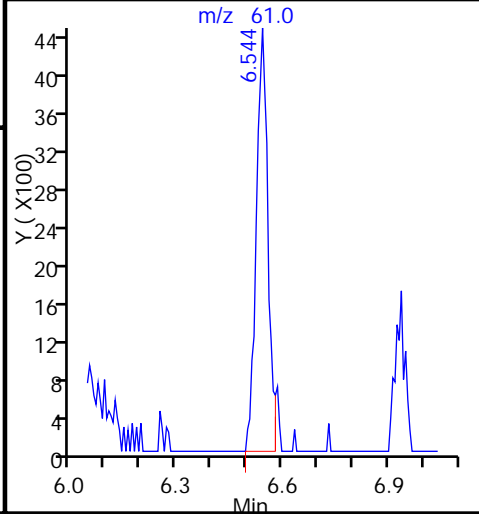
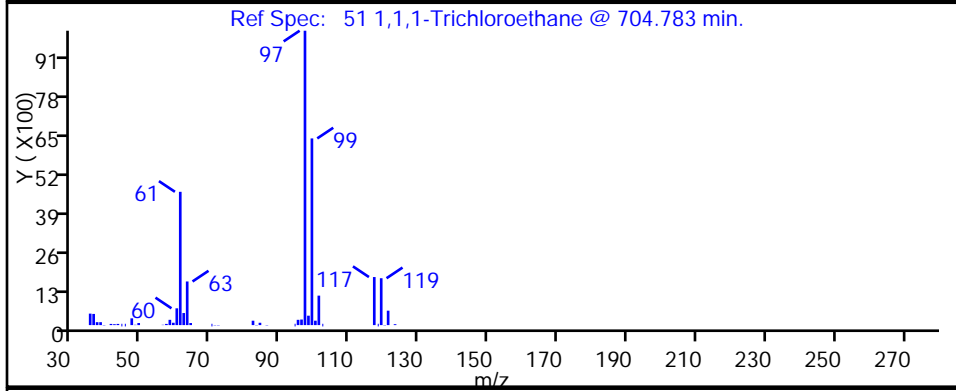
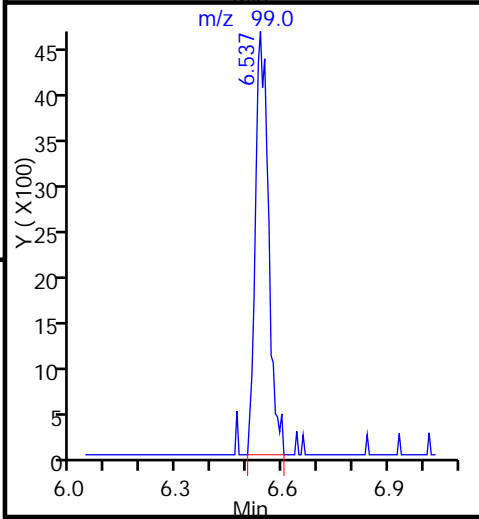
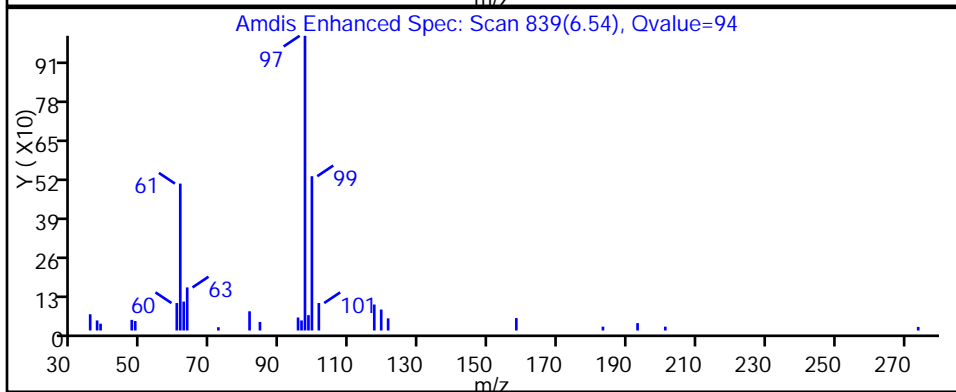
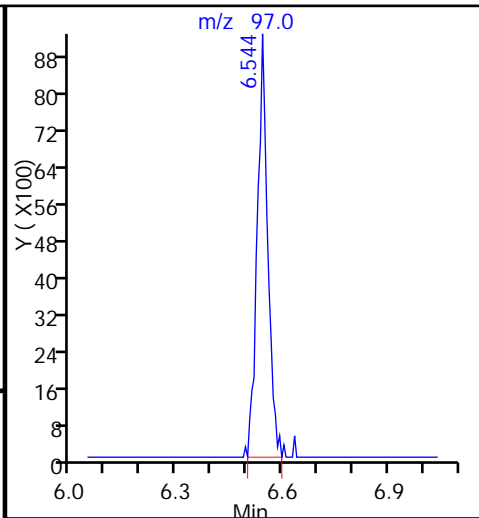
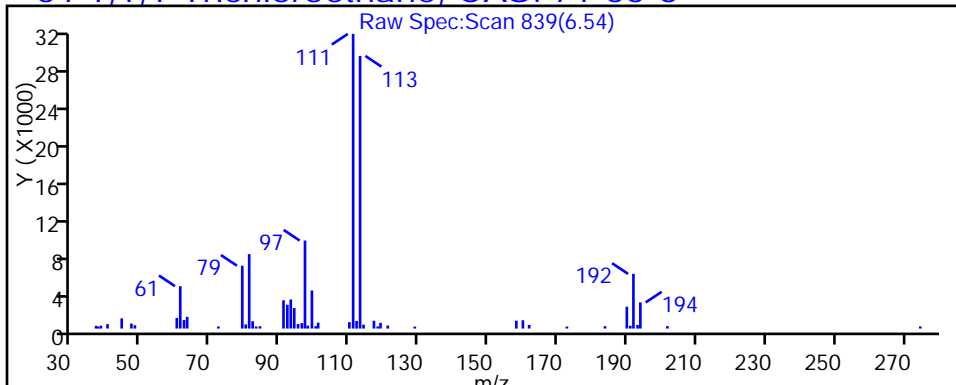
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506017.D

Injection Date: 06-May-2015 18:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-4

Lab Sample ID: 180-43402-4

Client ID: HD-MW-39D-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 3.0000

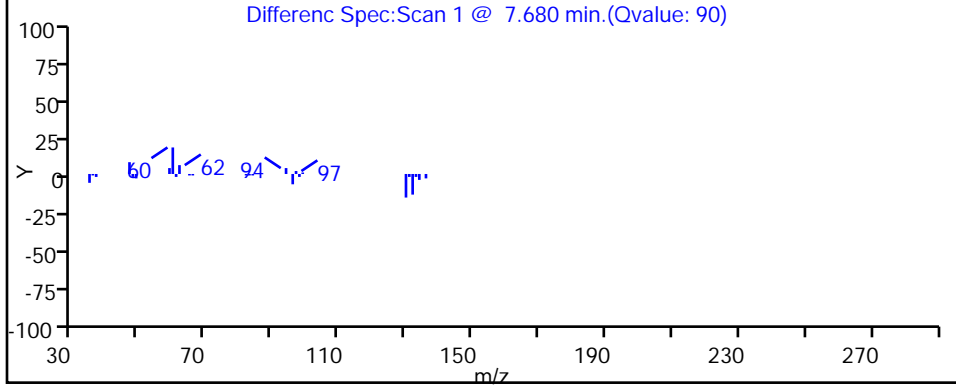
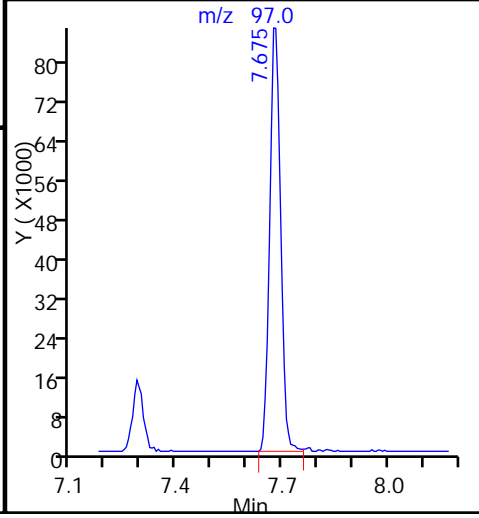
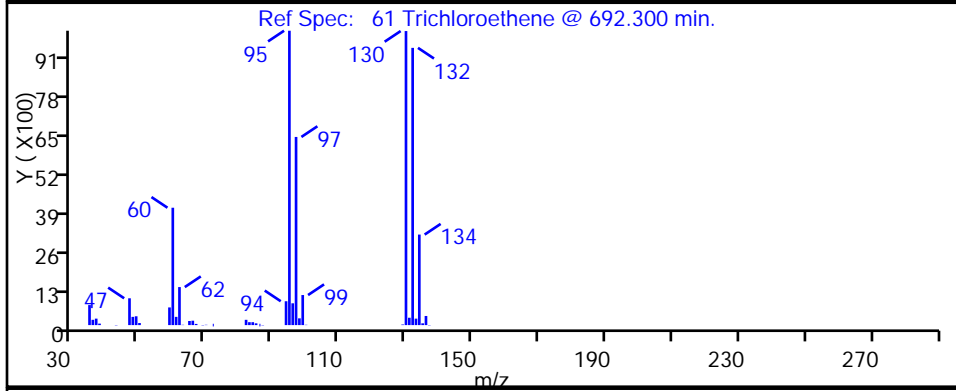
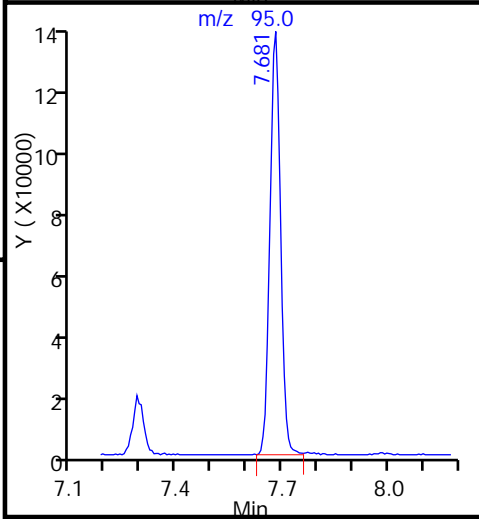
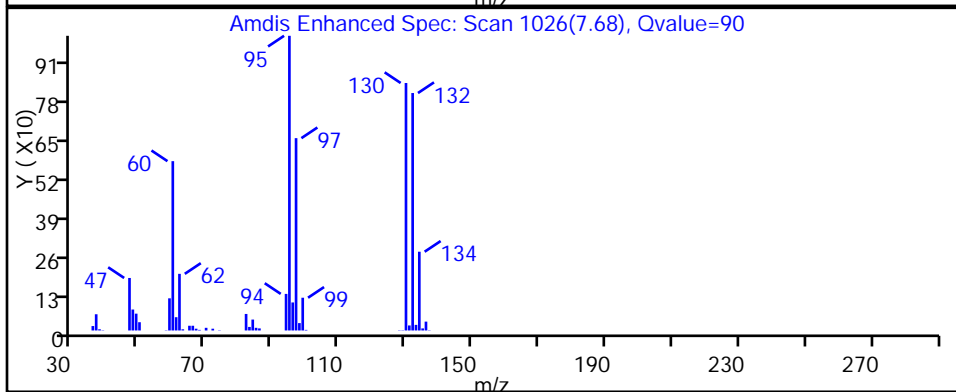
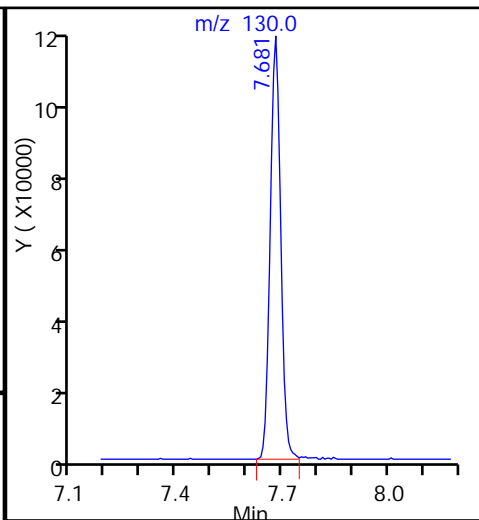
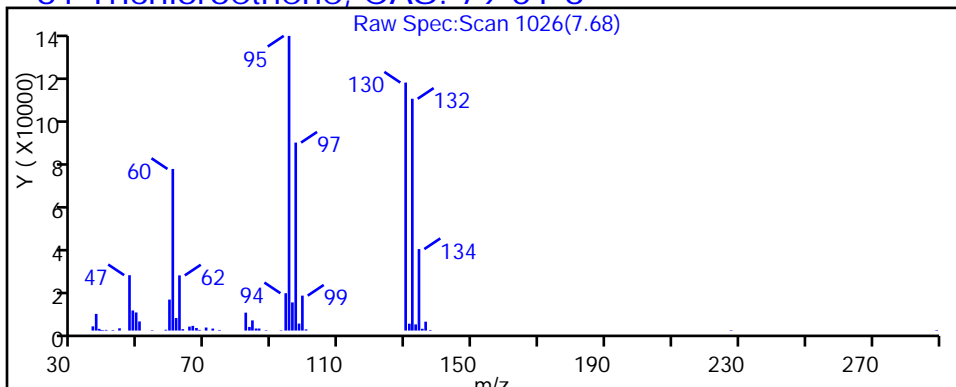
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506017.D

Injection Date: 06-May-2015 18:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-4

Lab Sample ID: 180-43402-4

Client ID: HD-MW-39D-0/1-0

Operator ID: 001562

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 5.000 mL

Dil. Factor: 3.0000

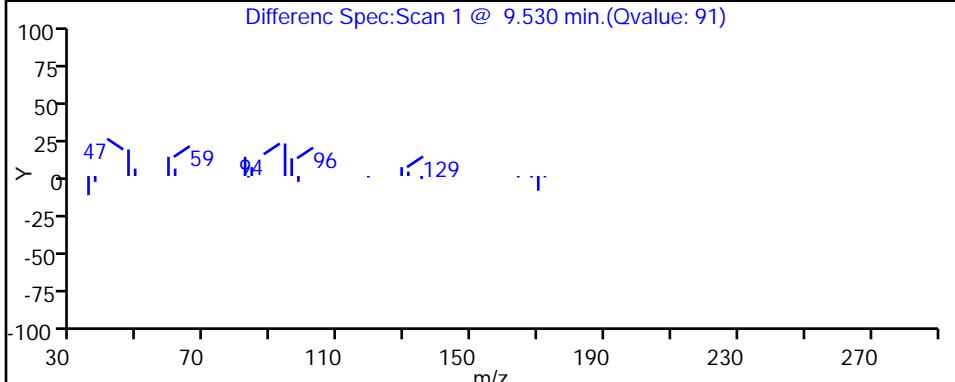
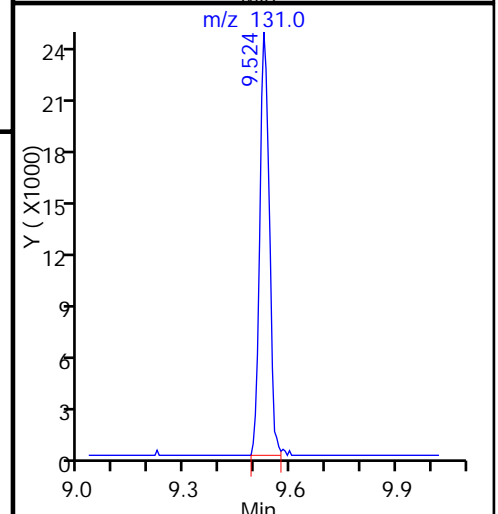
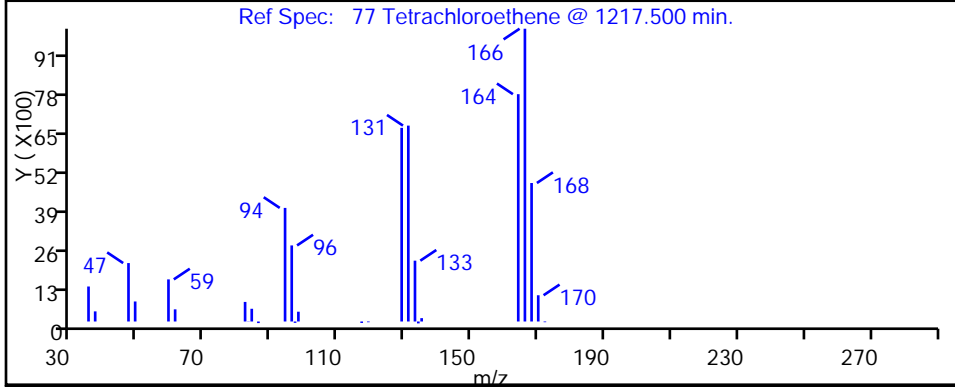
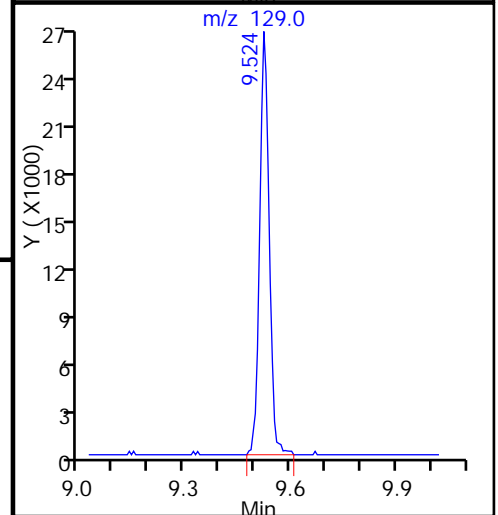
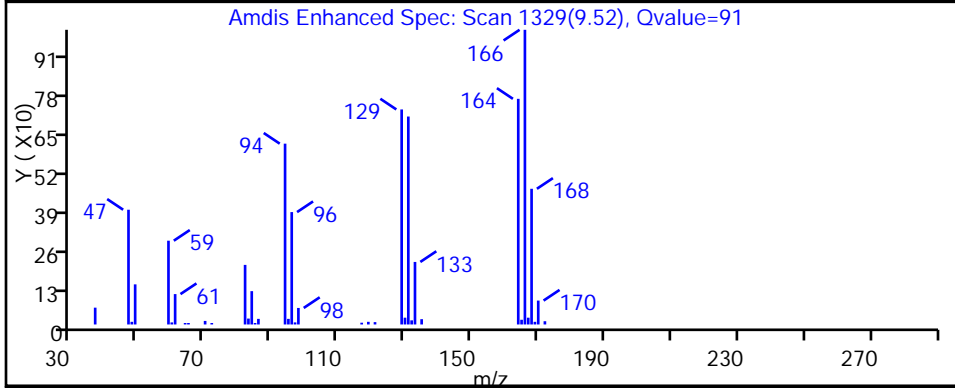
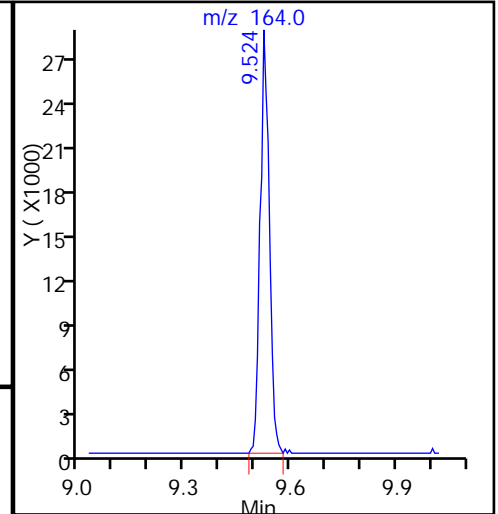
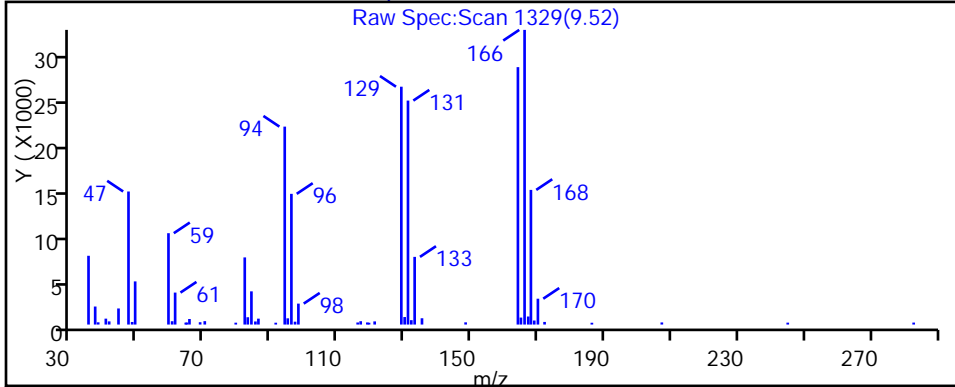
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-74S-0/1-0 Lab Sample ID: 180-43402-5
 Matrix: Water Lab File ID: 60505020.D
 Analysis Method: 8260C Date Collected: 04/23/2015 09:10
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 19:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	0.84	J	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	0.77	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	19		1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	1.0	U	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.5		1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	12		1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	6.8		1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-74S-0/1-0 Lab Sample ID: 180-43402-5
 Matrix: Water Lab File ID: 60505020.D
 Analysis Method: 8260C Date Collected: 04/23/2015 09:10
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 19:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20
107-13-1	Acrylonitrile	20	U	20	0.55
123-91-1	1,4-Dioxane	200	U	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		64-135
2037-26-5	Toluene-d8 (Surr)	110		71-118
460-00-4	4-Bromofluorobenzene (Surr)	104		70-118
1868-53-7	Dibromofluoromethane (Surr)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505020.D
 Lims ID: 180-43402-D-5 Lab Sample ID: 180-43402-5
 Client ID: HD-MW-74S-0/1-0
 Sample Type: Client
 Inject. Date: 05-May-2015 19:02:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43402-D-5
 Misc. Info.: 180-0006773-020
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 07:32:28 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond

Date: 06-May-2015 07:32:28

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.230	4.239	-0.009	96	191661	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.286	0.004	98	374642	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.401	-0.003	92	74017	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.743	0.003	96	110082	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.553	6.547	0.006	92	79388	51.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	71	141258	54.5	
\$ 7 Toluene-d8 (Surr)	98	8.944	8.938	0.006	95	343481	54.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.591	11.585	0.007	80	133116	52.1	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.894				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96	3.354	3.341	0.013	93	7266	4.19	
24 Acetone	43	3.445	3.427	0.018	75	5691	11.4	
26 Carbon disulfide	76		3.633				ND	
31 Methylene Chloride	84		4.132				ND	
33 Acrylonitrile	53		4.497				ND	
34 trans-1,2-Dichloroethene	96		4.558				ND	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63	5.203	5.197	0.006	66	14010	3.85	
43 cis-1,2-Dichloroethene	96	5.939	5.945	-0.006	85	206046	93.8	
44 2-Butanone (MEK)	43		5.951				ND	
48 Chlorobromomethane	128		6.231				ND	
50 Chloroform	83	6.377	6.371	0.006	21	2225	0.6340	
51 1,1,1-Trichloroethane	97	6.547	6.541	0.006	45	21016	7.28	
53 Carbon tetrachloride	117		6.718				ND	
56 Benzene	78		6.943				ND	
57 1,2-Dichloroethane	62		7.016				ND	
61 Trichloroethene	130	7.679	7.679	0.000	91	107190	60.1	
64 1,2-Dichloropropane	63		7.953				ND	
65 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.233				ND	
71 cis-1,3-Dichloropropene	75		8.677				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
73 Toluene	91		9.011				ND	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164	9.522	9.522	0.000	91	42875	33.9	
79 2-Hexanone	43		9.662				ND	
81 Chlorodibromomethane	129		9.826				ND	
82 Ethylene Dibromide	107		9.942				ND	
84 Chlorobenzene	112		10.429				ND	
86 1,1,1,2-Tetrachloroethane	131		10.520				ND	
87 Ethylbenzene	106		10.526				ND	
88 m-Xylene & p-Xylene	106		10.660				ND	
89 o-Xylene	106		11.043				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.244				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505020.D

Injection Date: 05-May-2015 19:02:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-D-5

Lab Sample ID: 180-43402-5

Worklist Smp#: 20

Client ID: HD-MW-74S-0/1-0

Purge Vol: 5.000 mL

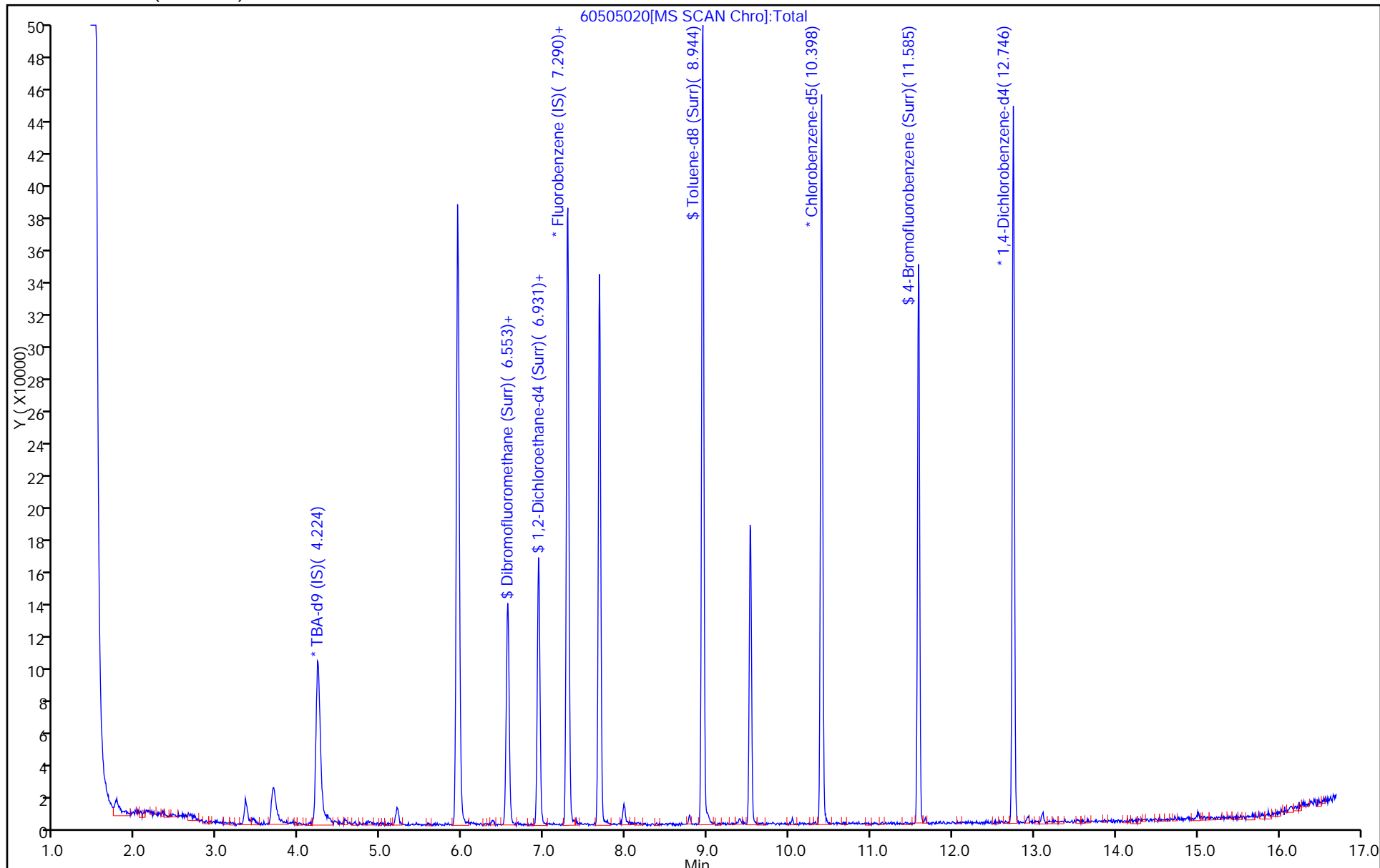
Dil. Factor: 1.0000

ALS Bottle#: 19

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505020.D

Injection Date: 05-May-2015 19:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-5

Lab Sample ID: 180-43402-5

Client ID: HD-MW-74S-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

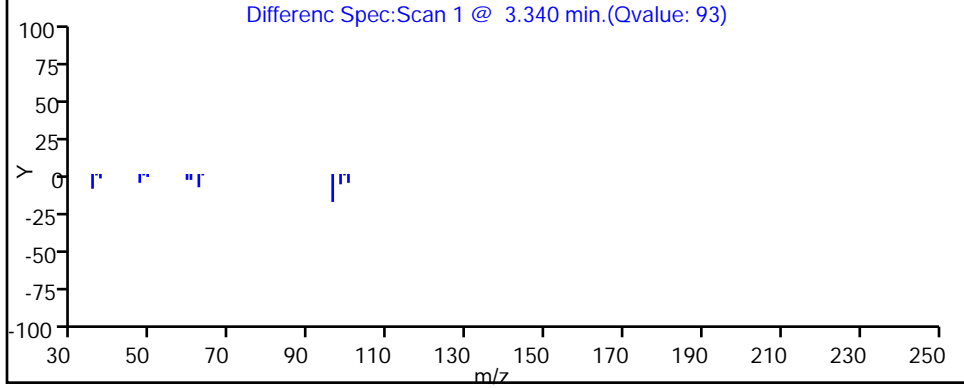
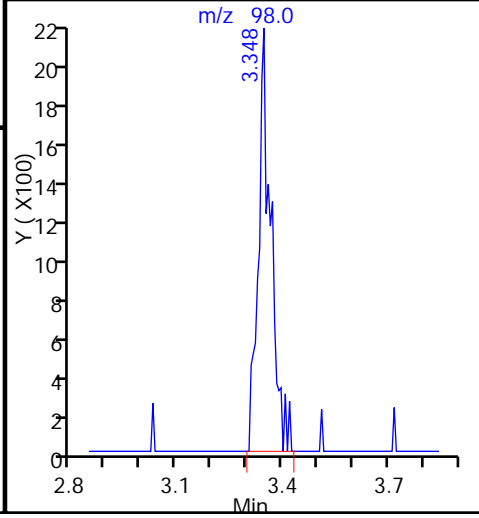
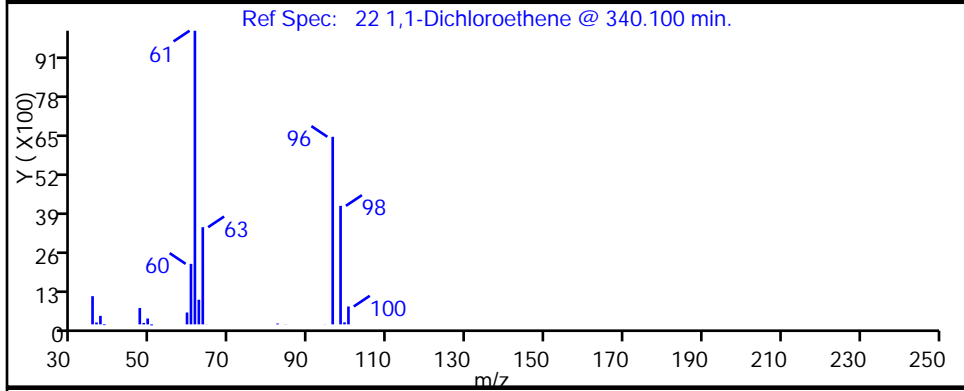
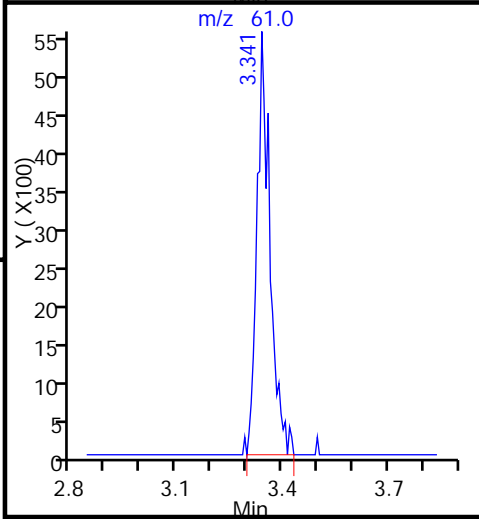
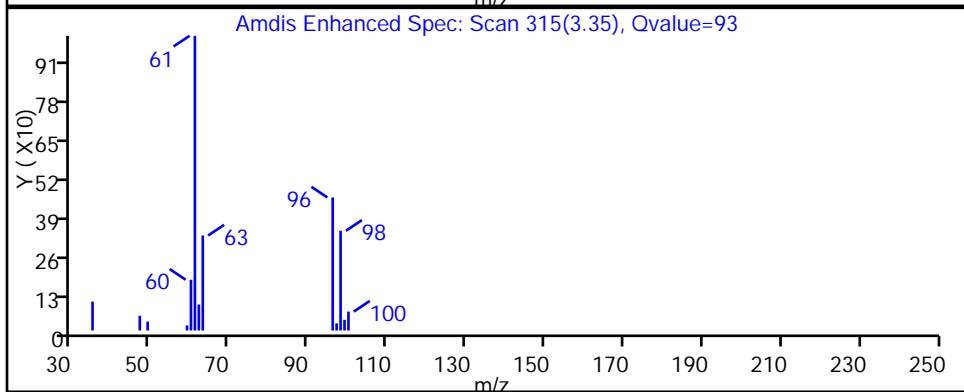
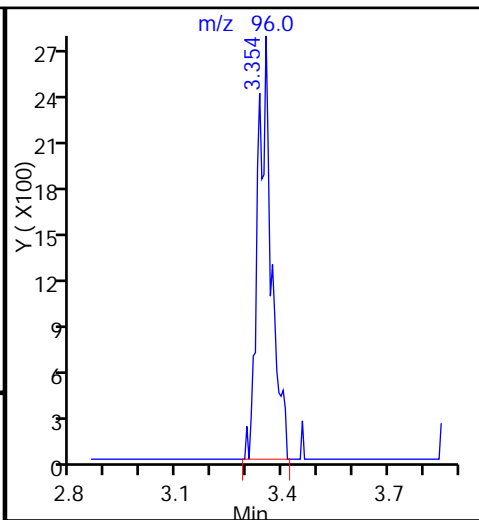
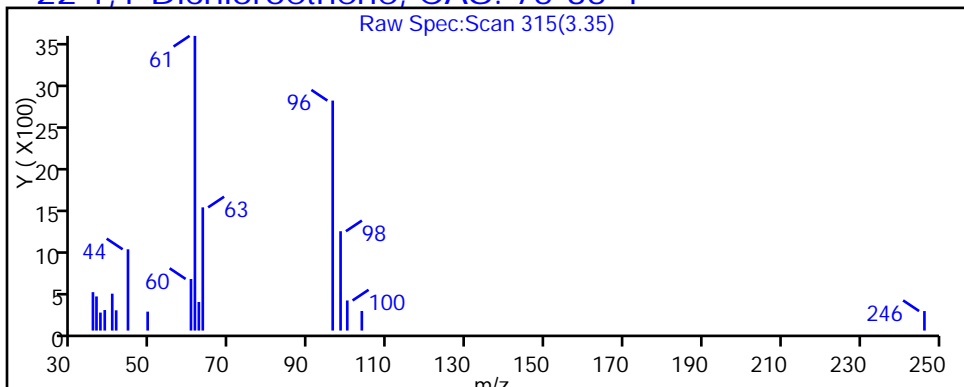
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505020.D

Injection Date: 05-May-2015 19:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-5

Lab Sample ID: 180-43402-5

Client ID: HD-MW-74S-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

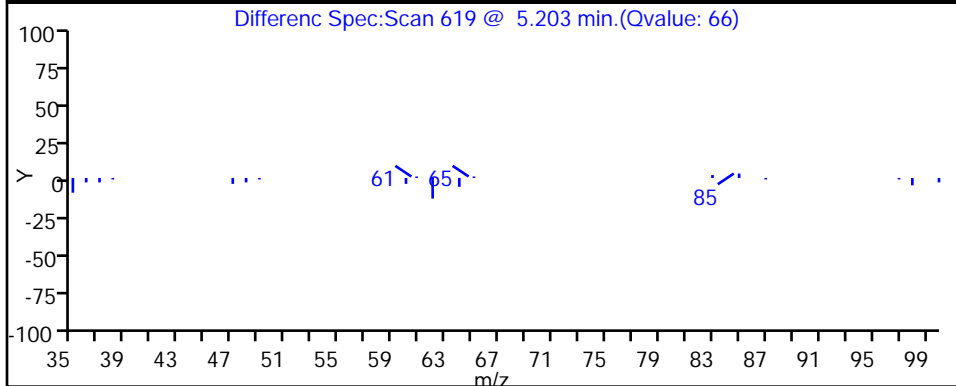
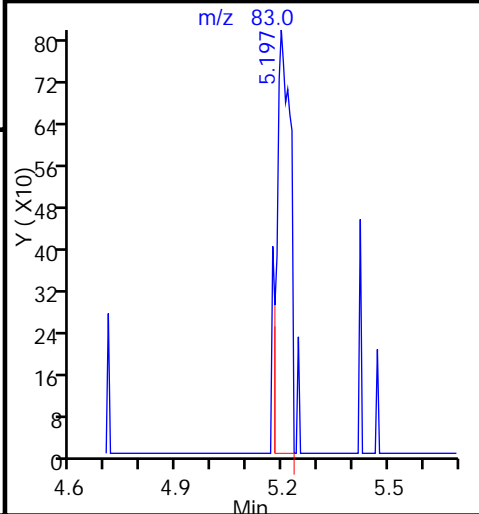
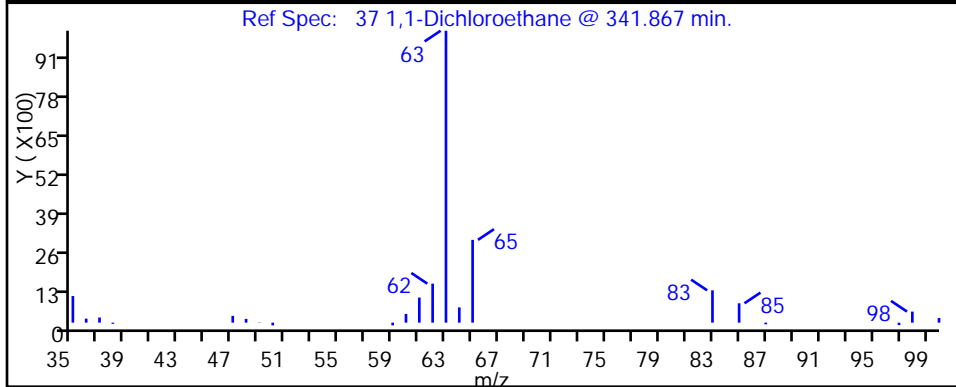
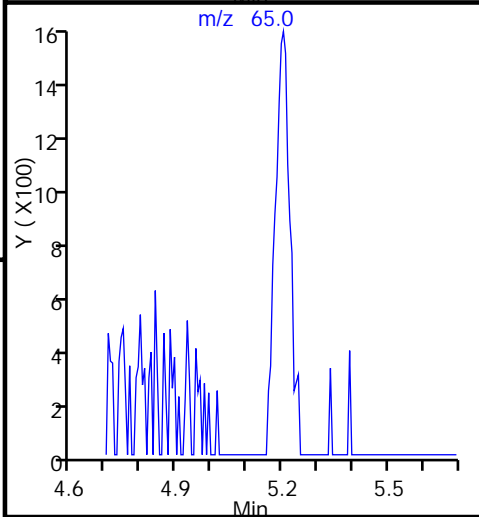
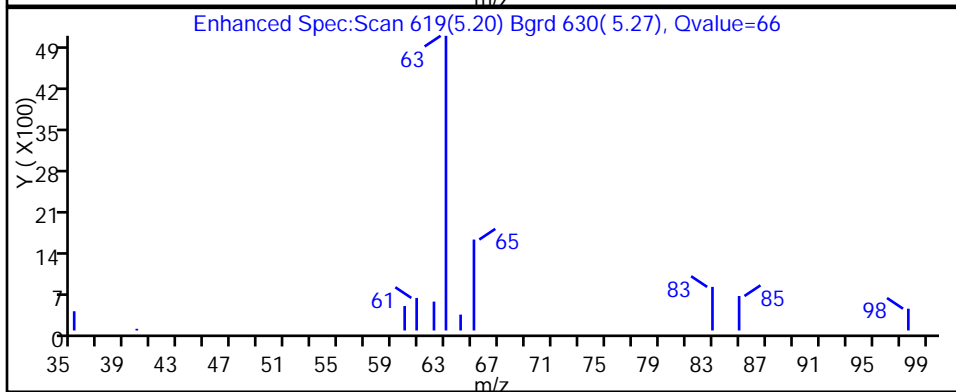
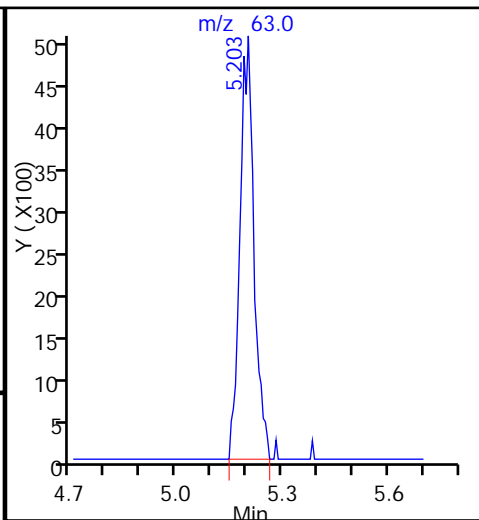
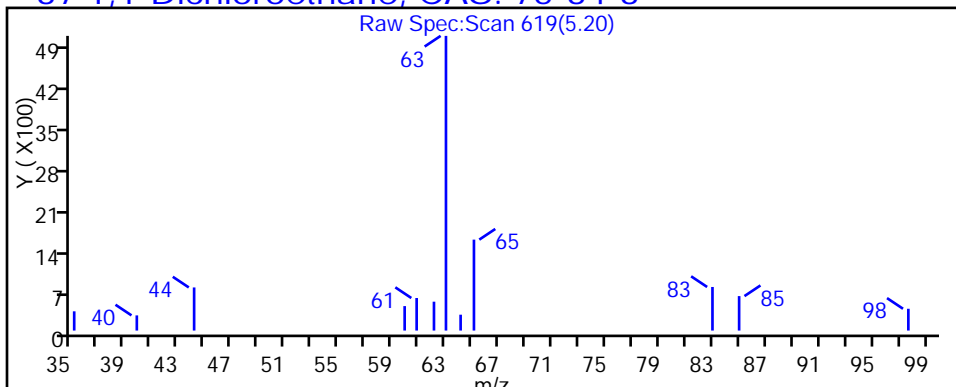
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505020.D

Injection Date: 05-May-2015 19:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-5

Lab Sample ID: 180-43402-5

Client ID: HD-MW-74S-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

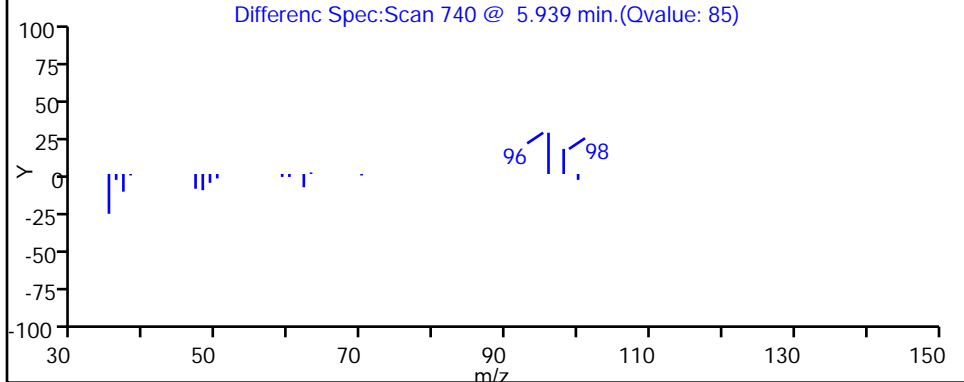
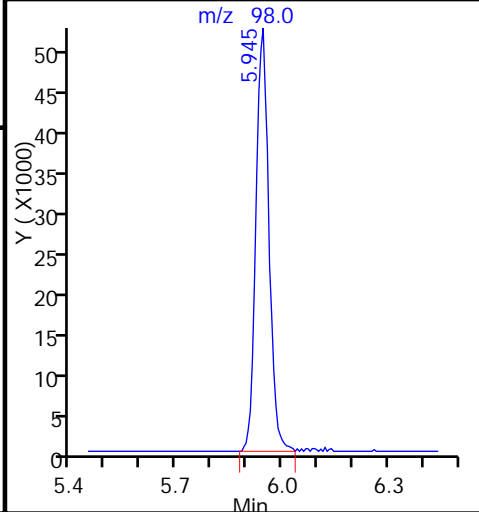
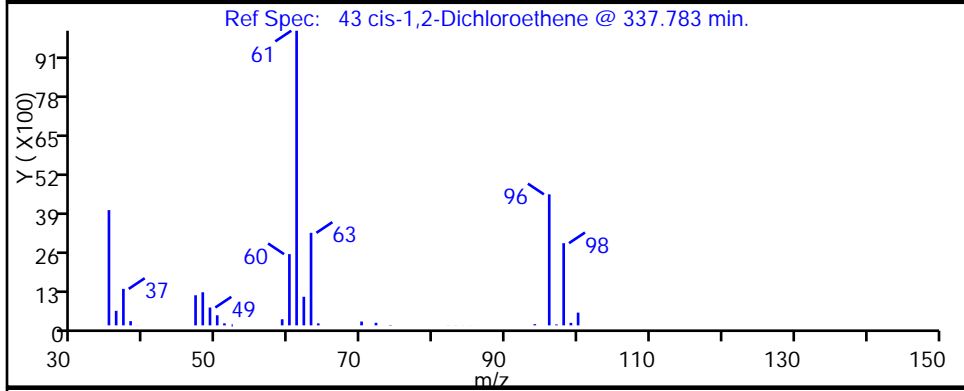
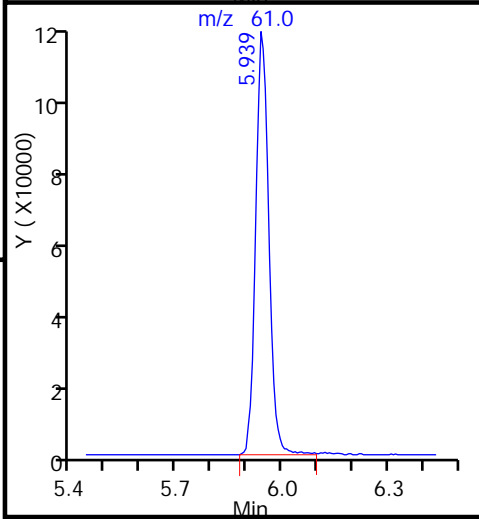
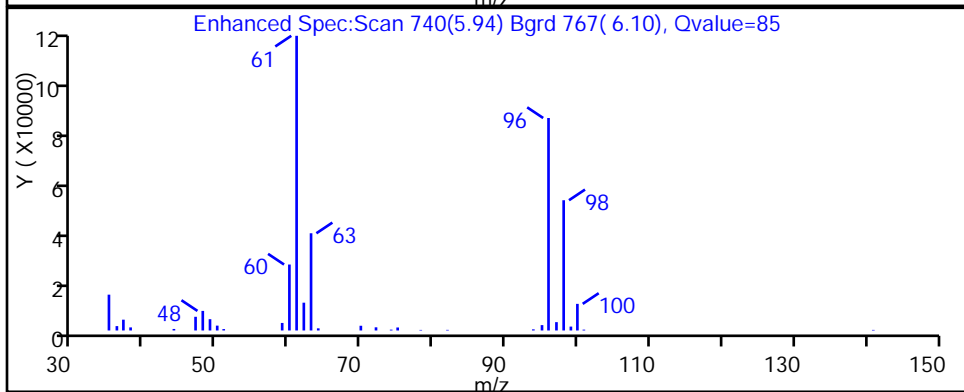
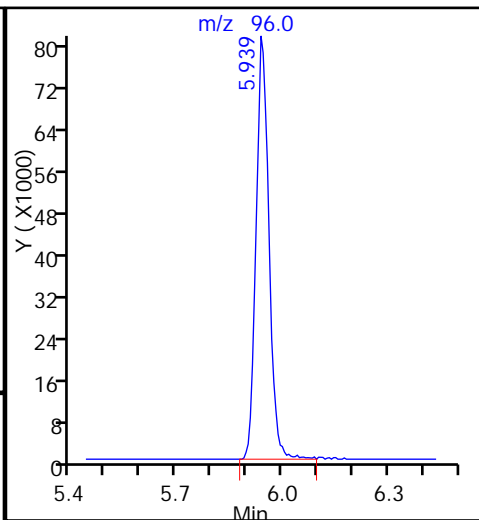
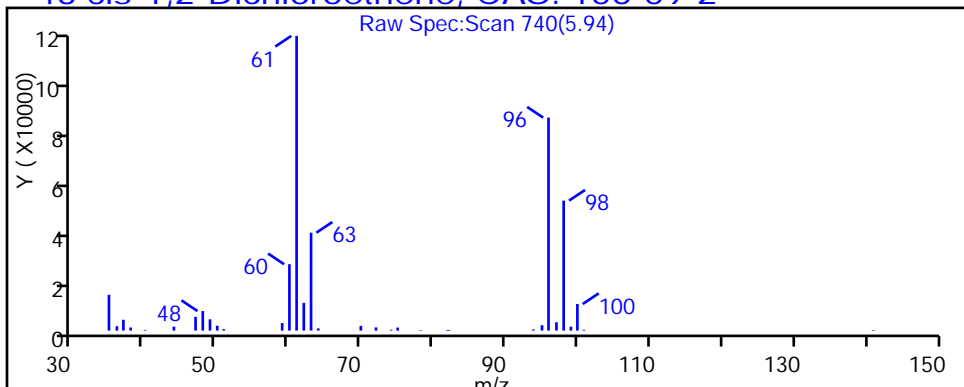
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505020.D

Injection Date: 05-May-2015 19:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-5

Lab Sample ID: 180-43402-5

Client ID: HD-MW-74S-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

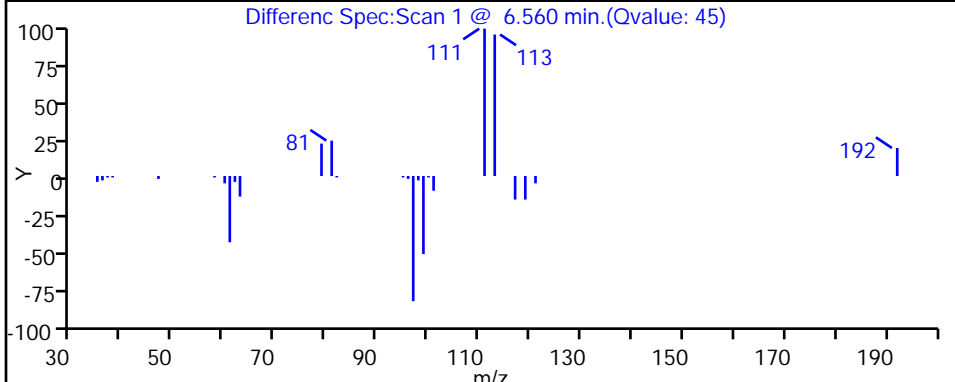
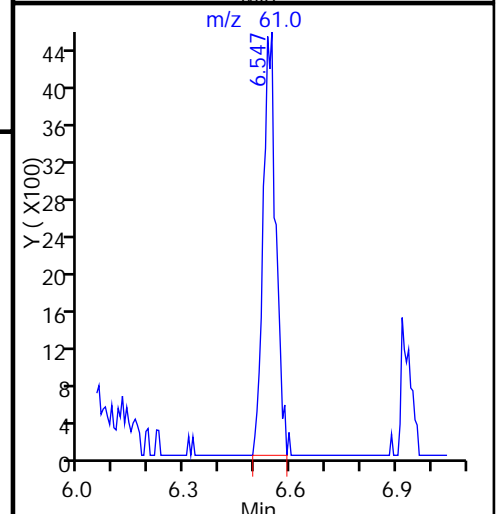
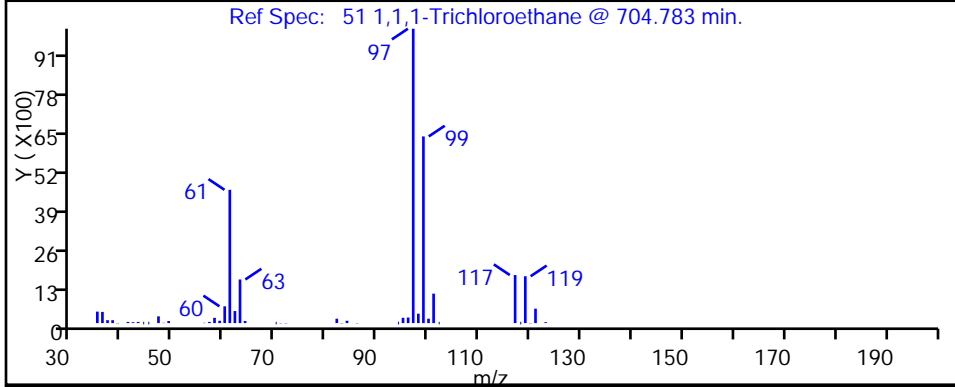
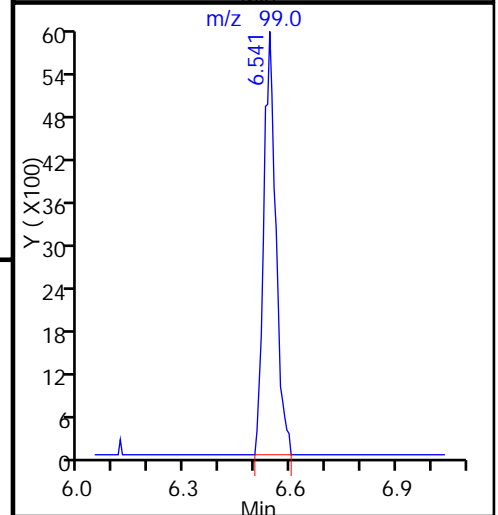
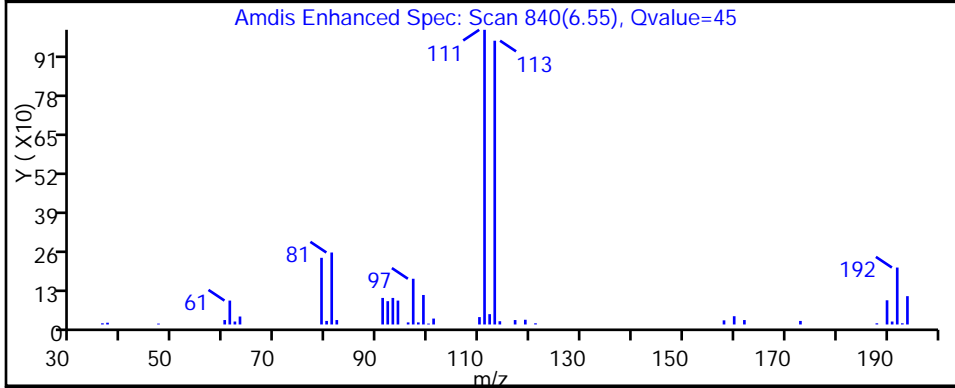
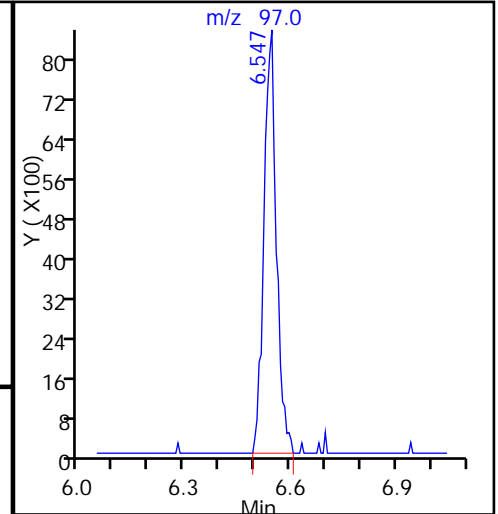
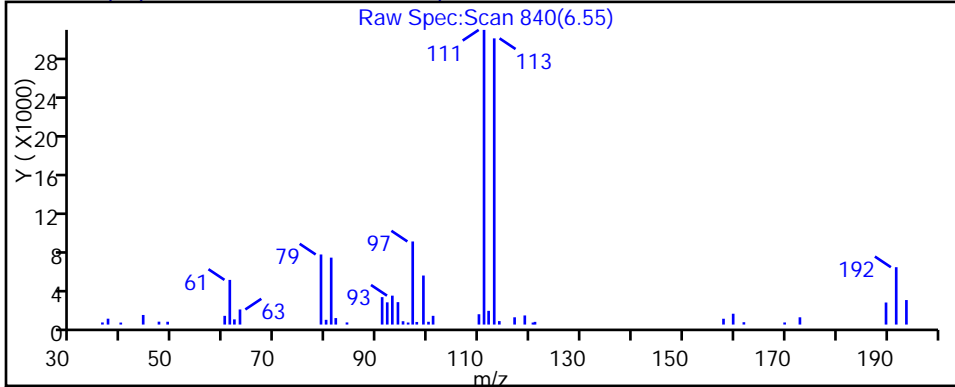
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505020.D

Injection Date: 05-May-2015 19:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-5

Lab Sample ID: 180-43402-5

Client ID: HD-MW-74S-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

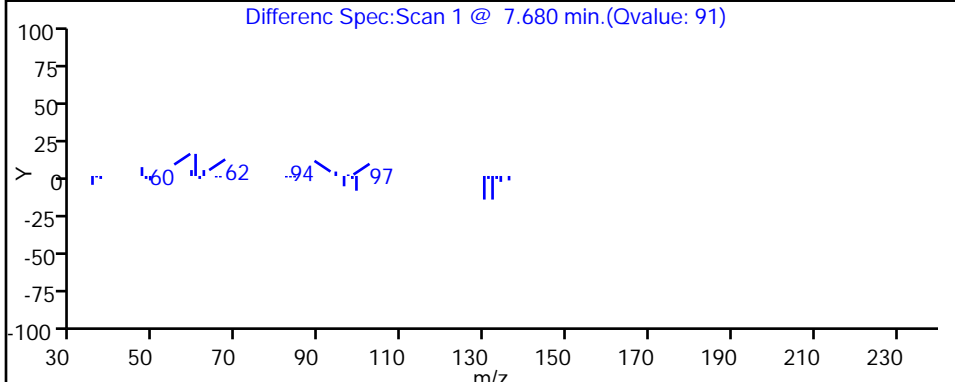
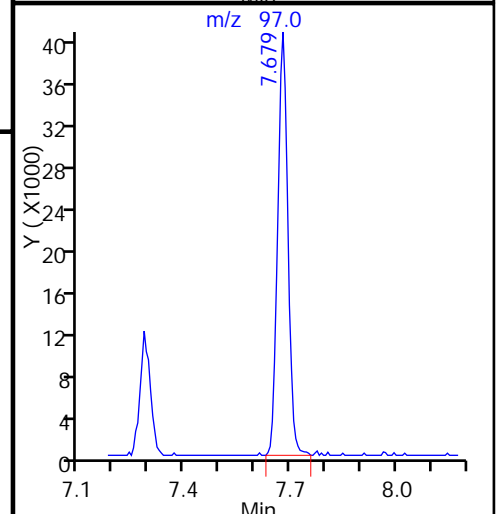
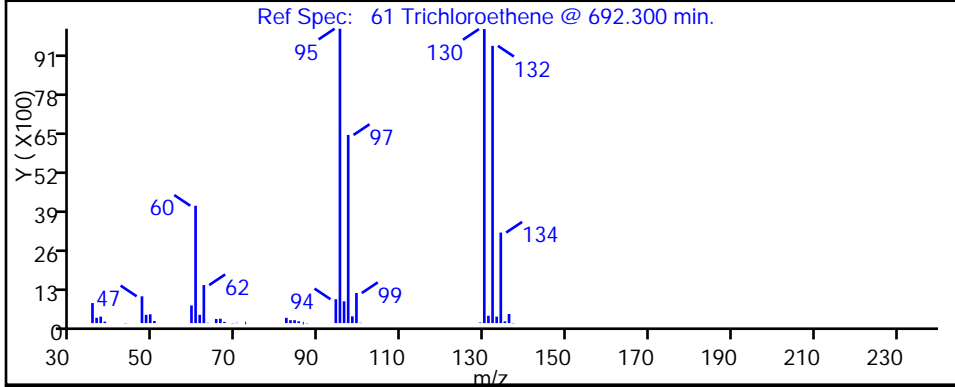
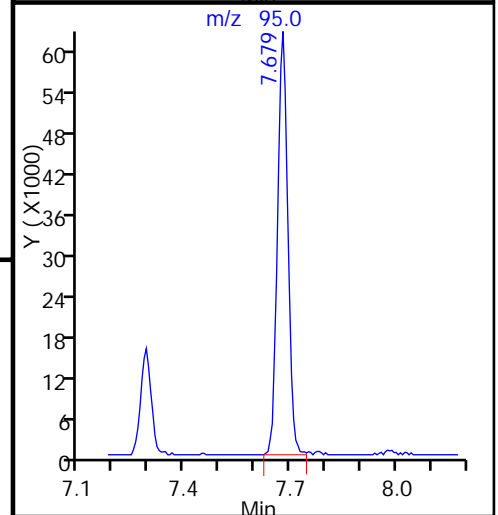
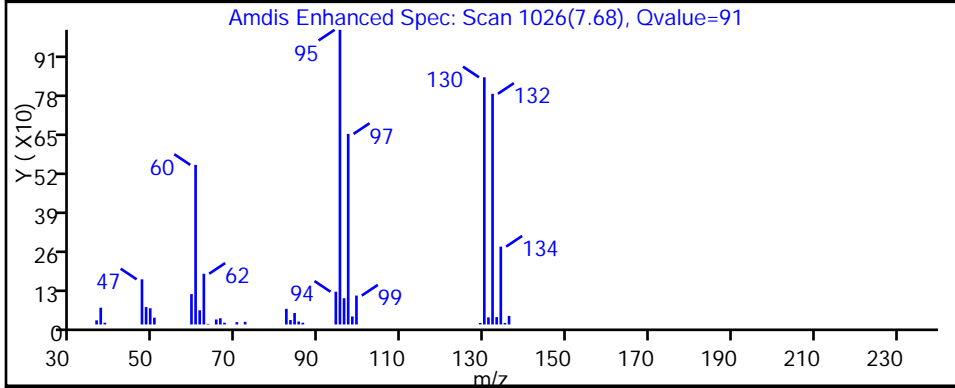
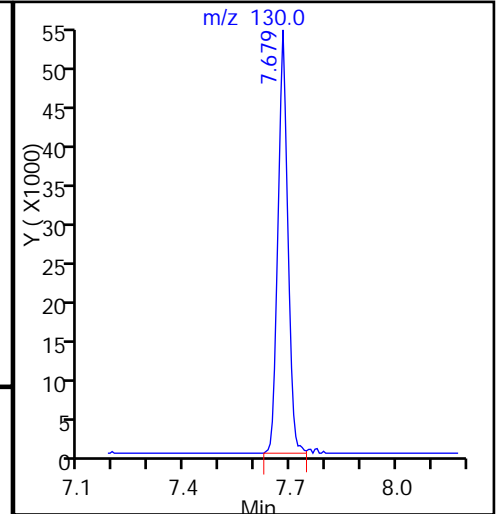
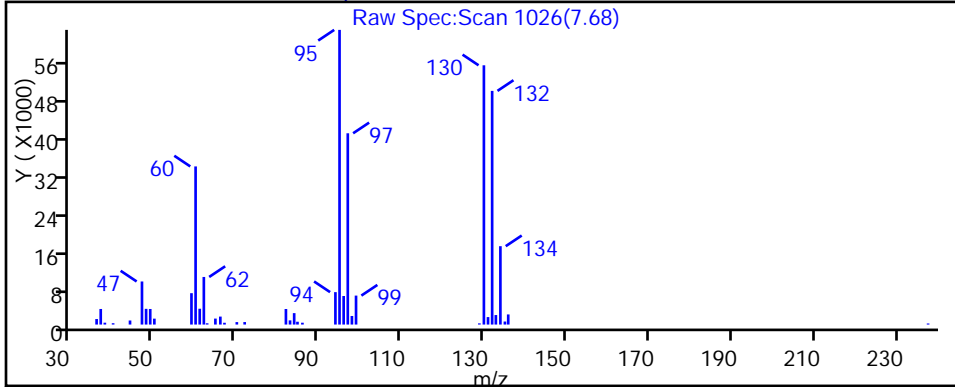
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505020.D

Injection Date: 05-May-2015 19:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-D-5

Lab Sample ID: 180-43402-5

Client ID: HD-MW-74S-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

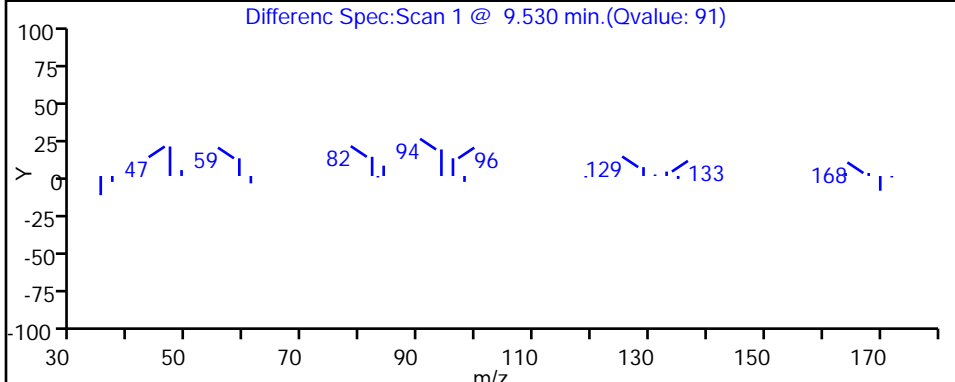
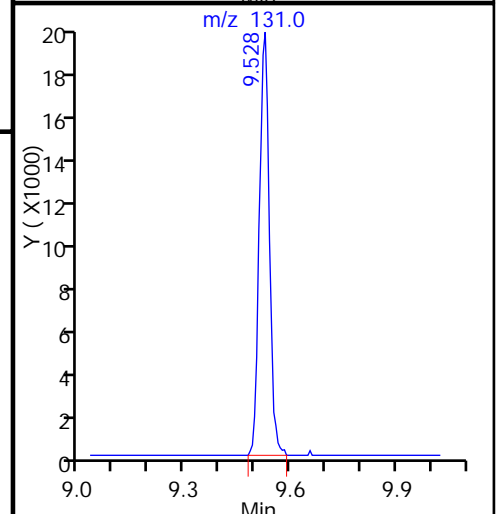
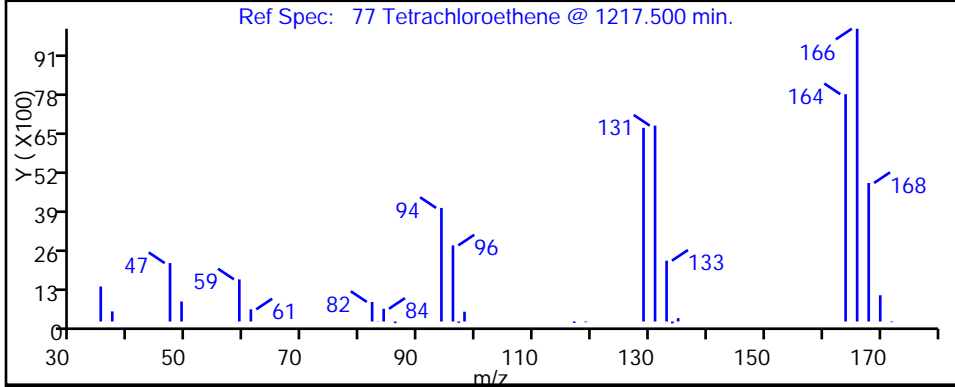
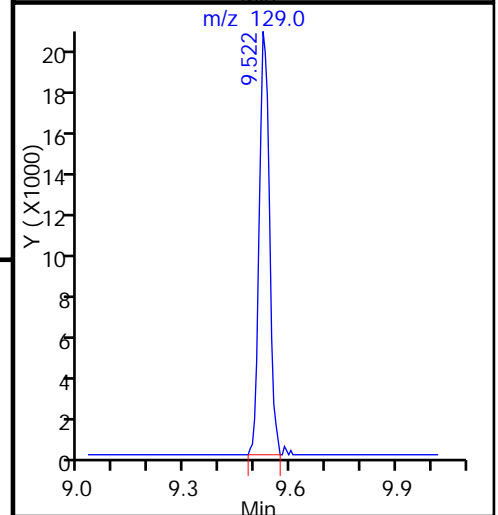
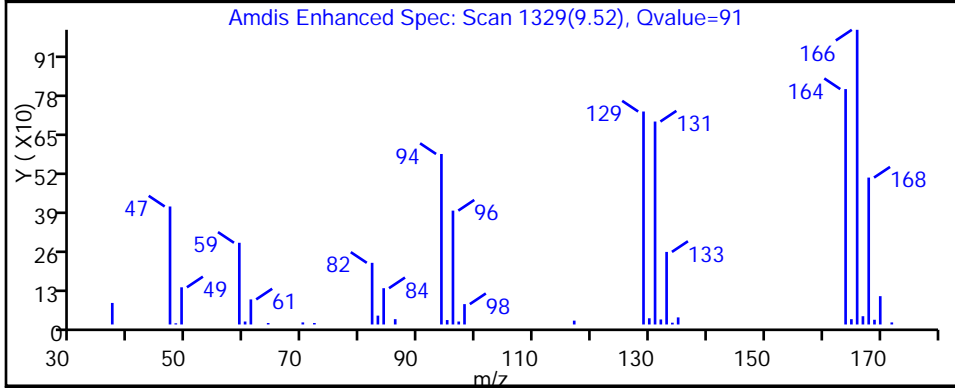
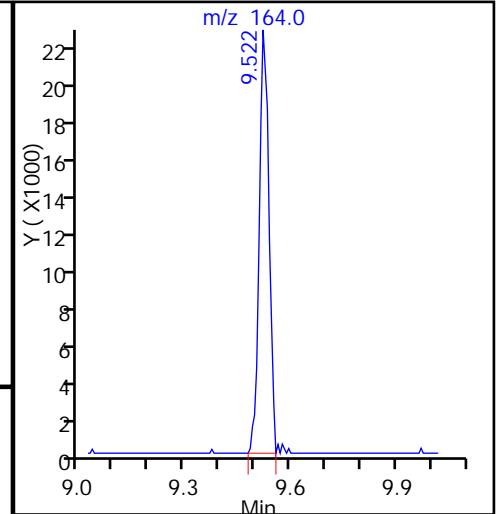
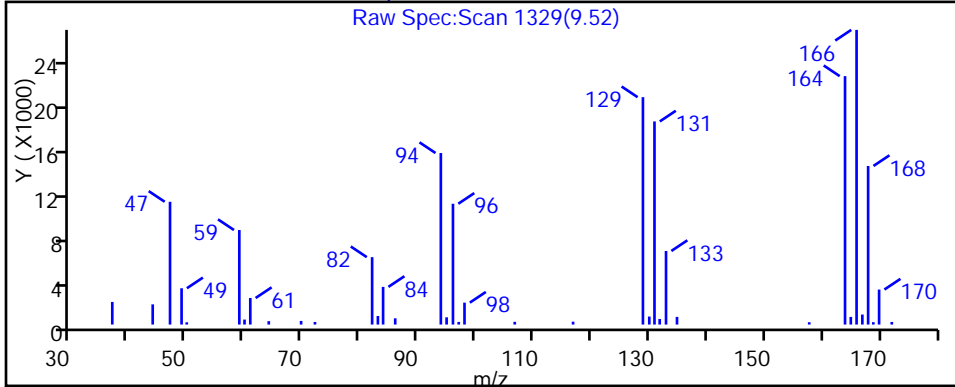
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-127-0/1-0 Lab Sample ID: 180-43402-6
 Matrix: Water Lab File ID: 60505022.D
 Analysis Method: 8260C Date Collected: 04/23/2015 11:40
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 19:50
 Soil Aliquot Vol: _____ Dilution Factor: 10
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10	U	10	2.8
75-01-4	Vinyl chloride	10	U	10	2.3
74-83-9	Bromomethane	10	U	10	3.1
75-00-3	Chloroethane	10	U	10	2.1
75-35-4	1,1-Dichloroethene	5.5	J	10	3.0
67-64-1	Acetone	50	U	50	25
75-15-0	Carbon disulfide	10	U	10	2.1
75-09-2	Methylene Chloride	8.3	J	10	1.3
156-60-5	trans-1,2-Dichloroethene	10	U	10	1.7
1634-04-4	Methyl tert-butyl ether	10	U	10	1.8
75-34-3	1,1-Dichloroethane	2.9	J	10	1.2
156-59-2	cis-1,2-Dichloroethene	260		10	2.4
74-97-5	Bromochloromethane	10	U	10	1.8
78-93-3	2-Butanone (MEK)	50	U	50	5.5
67-66-3	Chloroform	10	U	10	1.7
71-55-6	1,1,1-Trichloroethane	5.2	J	10	2.9
56-23-5	Carbon tetrachloride	10	U	10	1.4
71-43-2	Benzene	10	U	10	1.1
107-06-2	1,2-Dichloroethane	10	U	10	2.1
79-01-6	Trichloroethene	130		10	1.4
78-87-5	1,2-Dichloropropane	10	U	10	0.95
75-27-4	Bromodichloromethane	10	U	10	1.3
10061-01-5	cis-1,3-Dichloropropene	10	U	10	1.9
108-10-1	4-Methyl-2-pentanone (MIBK)	50	U	50	5.3
108-88-3	Toluene	10	U	10	1.5
10061-02-6	trans-1,3-Dichloropropene	10	U	10	1.5
79-00-5	1,1,2-Trichloroethane	10	U	10	2.0
127-18-4	Tetrachloroethene	15		10	1.5
591-78-6	2-Hexanone	50	U	50	1.6
124-48-1	Dibromochloromethane	10	U	10	1.4
106-93-4	1,2-Dibromoethane (EDB)	10	U	10	1.8
108-90-7	Chlorobenzene	10	U	10	1.4
630-20-6	1,1,1,2-Tetrachloroethane	10	U	10	2.8
100-41-4	Ethylbenzene	10	U	10	2.3
1330-20-7	Xylenes, Total	30	U	30	4.9
100-42-5	Styrene	10	U	10	0.97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-127-0/1-0 Lab Sample ID: 180-43402-6
 Matrix: Water Lab File ID: 60505022.D
 Analysis Method: 8260C Date Collected: 04/23/2015 11:40
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 19:50
 Soil Aliquot Vol: _____ Dilution Factor: 10
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10	U	10	1.9
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	2.0
107-13-1	Acrylonitrile	200	U	200	5.5
123-91-1	1,4-Dioxane	2000	U	2000	340

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		64-135
2037-26-5	Toluene-d8 (Surr)	109		71-118
460-00-4	4-Bromofluorobenzene (Surr)	102		70-118
1868-53-7	Dibromofluoromethane (Surr)	105		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D
 Lims ID: 180-43402-E-6 Lab Sample ID: 180-43402-6
 Client ID: HD-MW-127-0/1-0
 Sample Type: Client
 Inject. Date: 05-May-2015 19:50:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 10.0000
 Sample Info: 180-43402-E-6, 10x
 Misc. Info.: 180-0006773-022
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 07:45:24 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond

Date: 06-May-2015 07:45:24

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.229	4.239	-0.010	96	175452	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.286	0.003	98	355668	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.401	-0.003	92	72324	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.743	0.003	95	108523	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.559	6.547	0.012	91	77019	52.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.931	-0.001	71	138492	56.3	
\$ 7 Toluene-d8 (Surr)	98	8.944	8.938	0.006	94	334261	54.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.585	0.000	78	127169	51.0	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.894				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96	3.359	3.341	0.018	95	4508	2.74	
24 Acetone	43		3.427				ND	
26 Carbon disulfide	76		3.633				ND	
31 Methylene Chloride	84	4.132	4.132	0.000	91	8289	4.15	
33 Acrylonitrile	53		4.497				ND	
34 trans-1,2-Dichloroethene	96	4.570	4.558	0.012	40	1209	0.6588	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63	5.190	5.197	-0.007	1	4979	1.44	M
43 cis-1,2-Dichloroethene	96	5.945	5.945	0.000	85	271989	130.4	
44 2-Butanone (MEK)	43		5.951				ND	
48 Chlorobromomethane	128		6.231				ND	
50 Chloroform	83	6.370	6.371	-0.001	13	1659	0.4979	
51 1,1,1-Trichloroethane	97	6.535	6.541	-0.006	38	7167	2.62	
53 Carbon tetrachloride	117	6.717	6.718	-0.001	9	860	0.4113	
56 Benzene	78		6.943				ND	
57 1,2-Dichloroethane	62		7.016				ND	
61 Trichloroethene	130	7.678	7.679	-0.001	91	105976	62.6	
64 1,2-Dichloropropane	63		7.953				ND	
65 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.233				ND	
71 cis-1,3-Dichloropropene	75		8.677				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
73 Toluene	91		9.011				ND	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164	9.528	9.522	0.006	93	9496	7.69	
79 2-Hexanone	43		9.662				ND	
81 Chlorodibromomethane	129		9.826				ND	
82 Ethylene Dibromide	107		9.942				ND	
84 Chlorobenzene	112		10.429				ND	
86 1,1,1,2-Tetrachloroethane	131		10.520				ND	
87 Ethylbenzene	106		10.526				ND	
88 m-Xylene & p-Xylene	106		10.660				ND	
89 o-Xylene	106		11.043				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.244				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D

Injection Date: 05-May-2015 19:50:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-E-6

Lab Sample ID: 180-43402-6

Worklist Smp#: 22

Client ID: HD-MW-127-0/1-0

Purge Vol: 5.000 mL

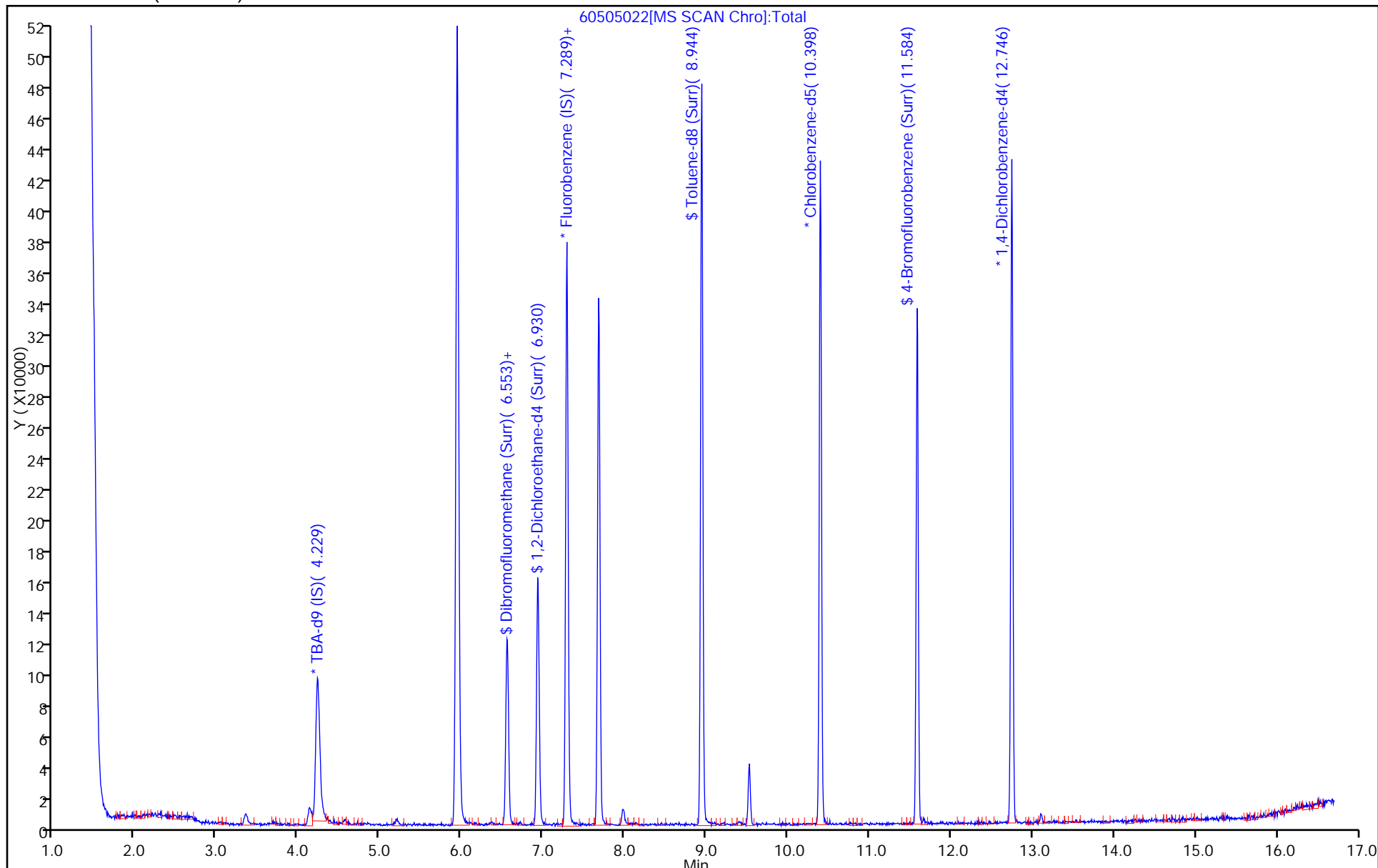
Dil. Factor: 10.0000

ALS Bottle#: 21

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D

Injection Date: 05-May-2015 19:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-6

Lab Sample ID: 180-43402-6

Client ID: HD-MW-127-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

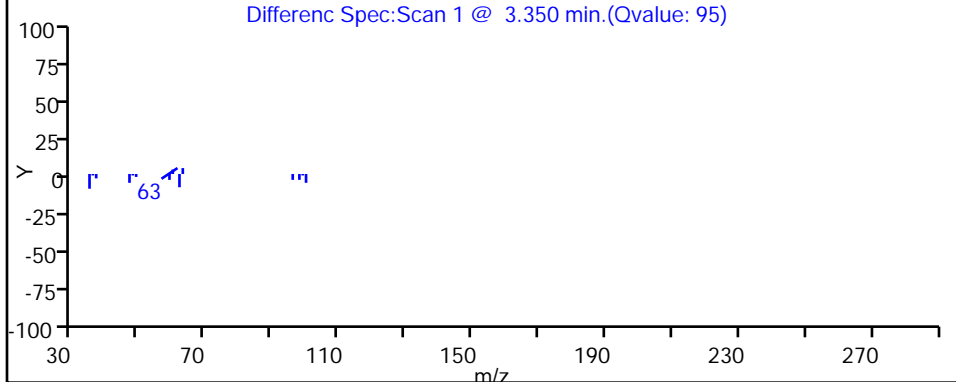
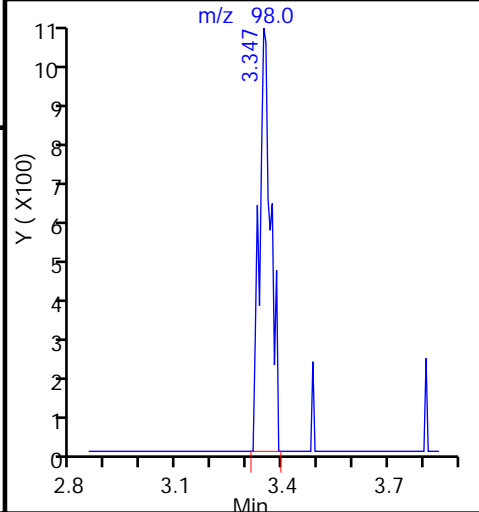
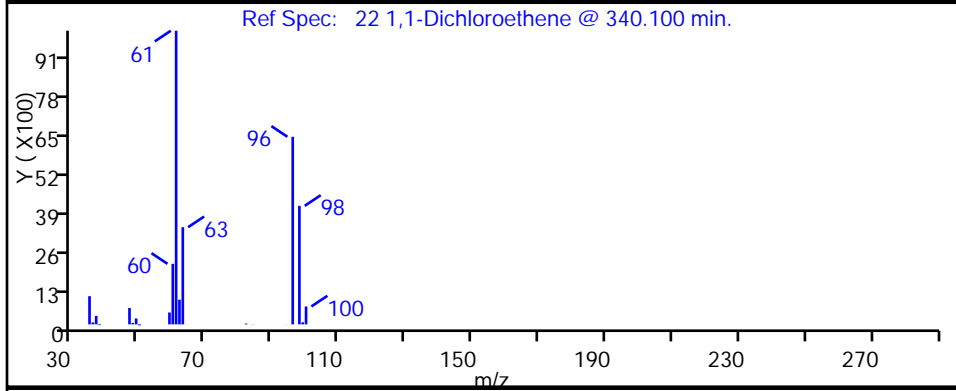
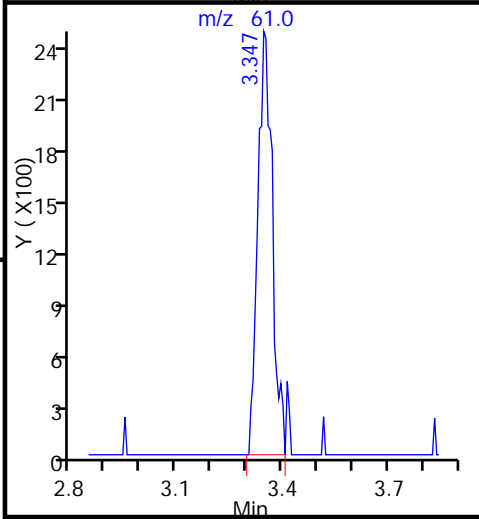
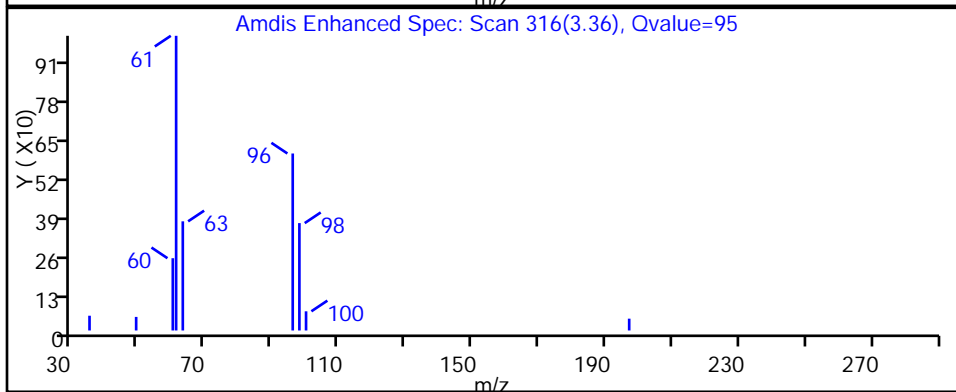
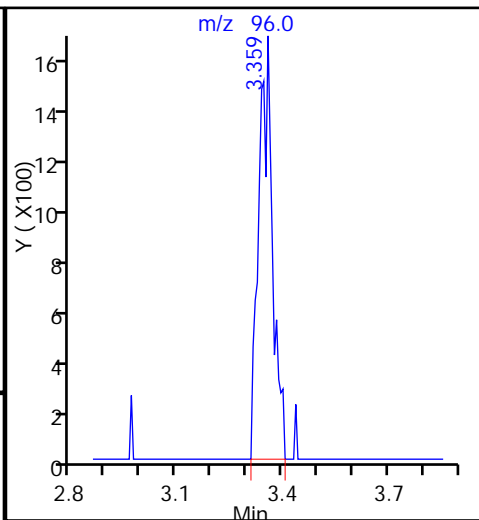
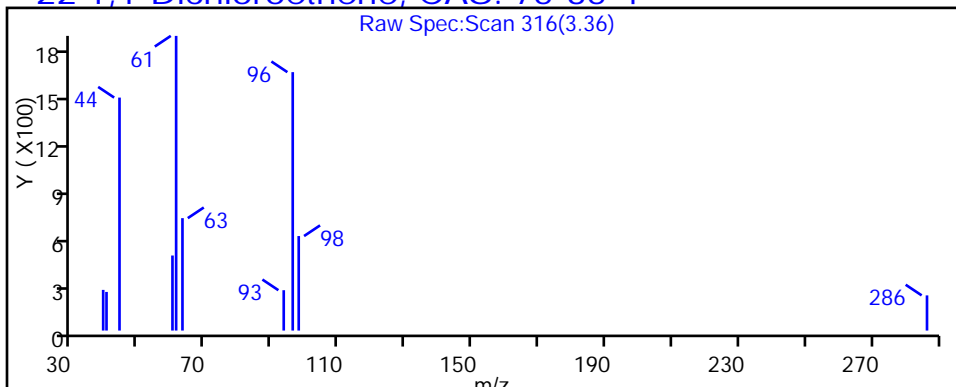
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D

Injection Date: 05-May-2015 19:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-6

Lab Sample ID: 180-43402-6

Client ID: HD-MW-127-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

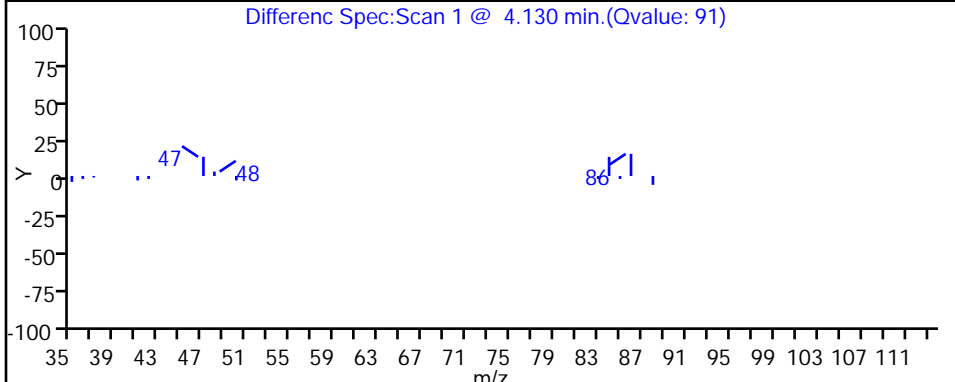
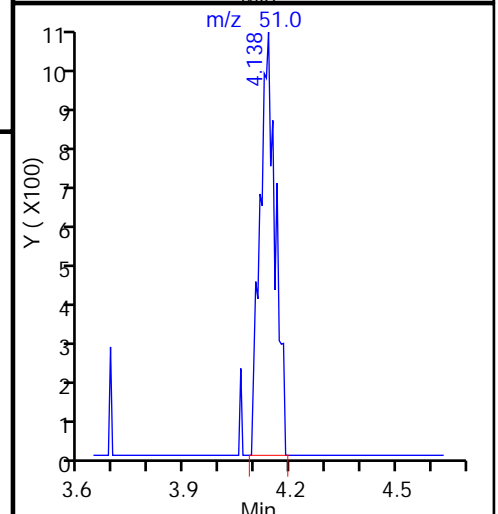
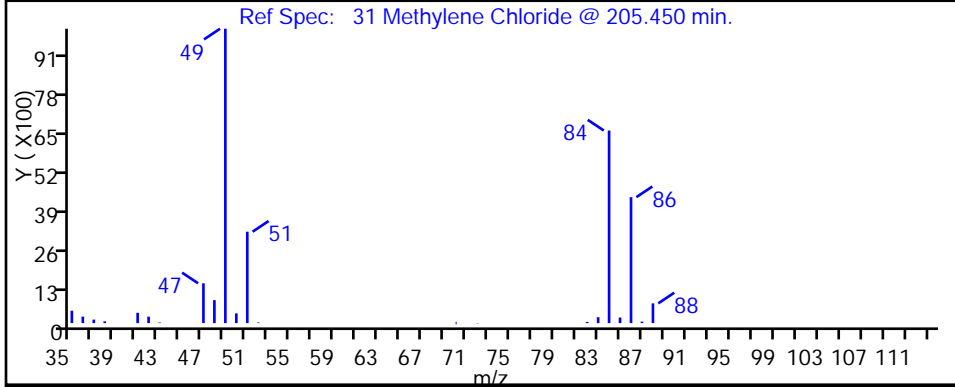
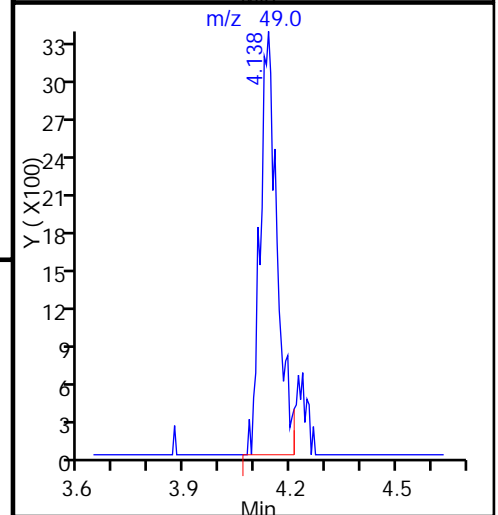
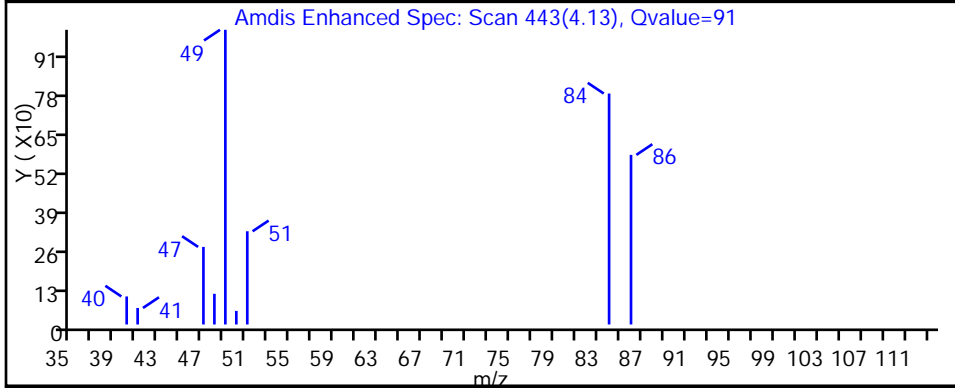
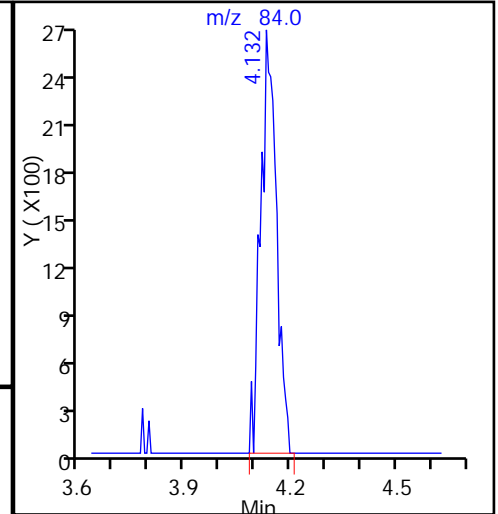
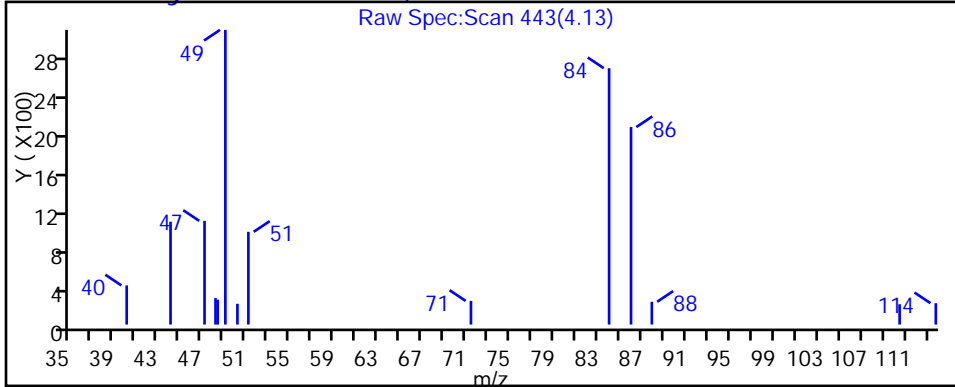
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D

Injection Date: 05-May-2015 19:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-6

Lab Sample ID: 180-43402-6

Client ID: HD-MW-127-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

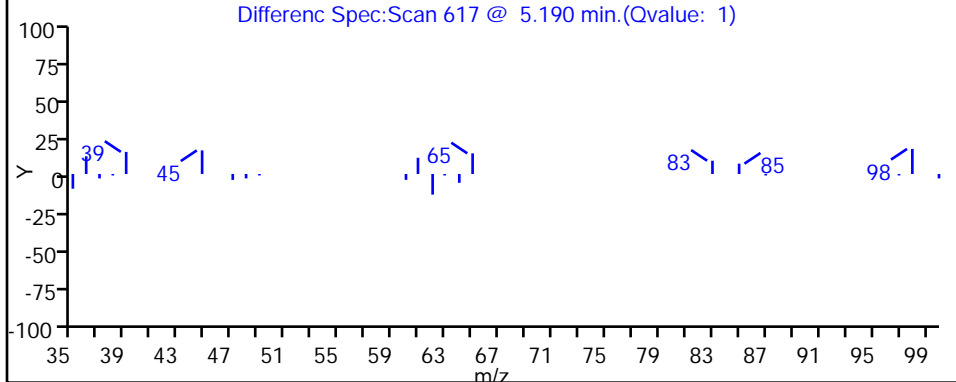
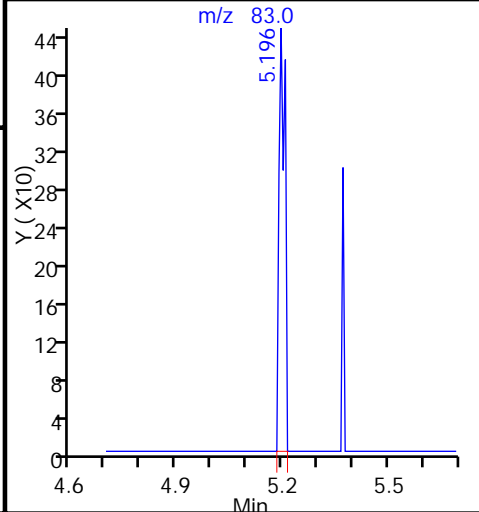
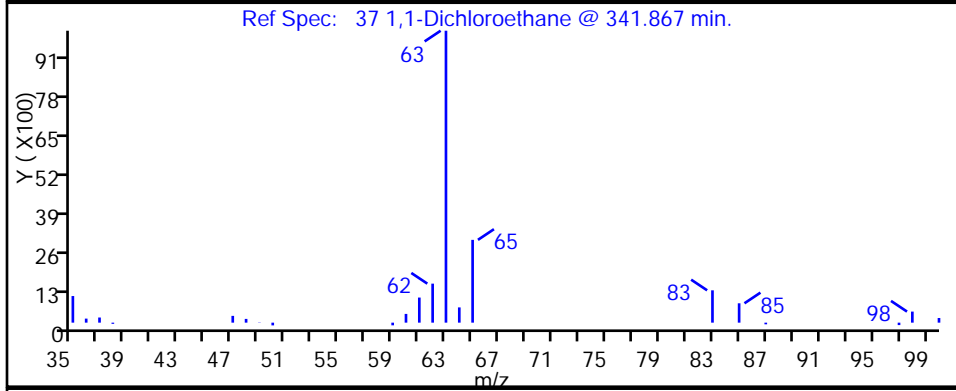
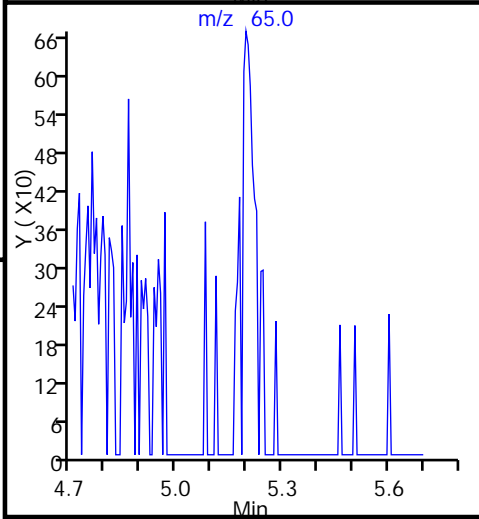
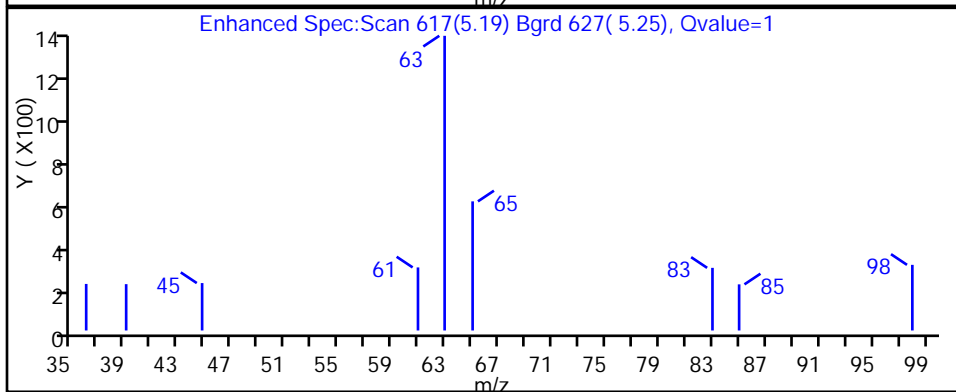
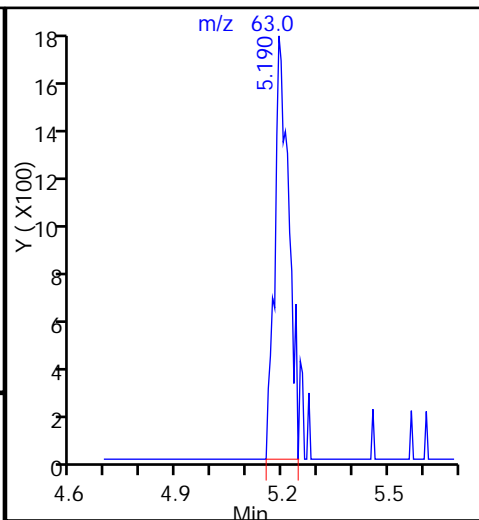
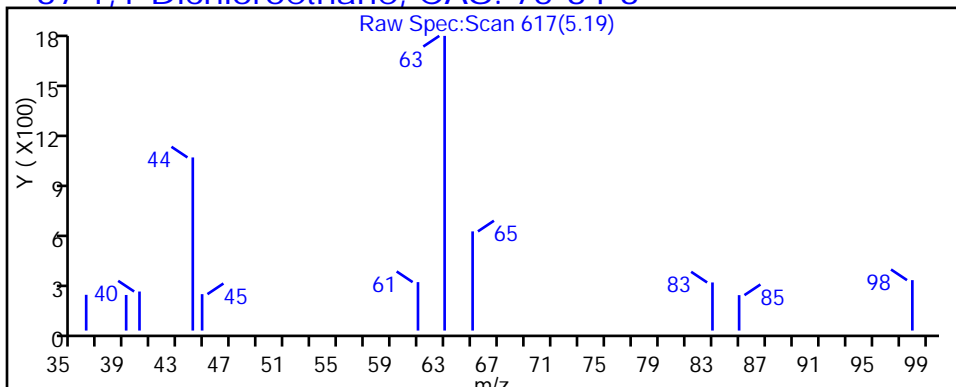
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D

Injection Date: 05-May-2015 19:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-6

Lab Sample ID: 180-43402-6

Client ID: HD-MW-127-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

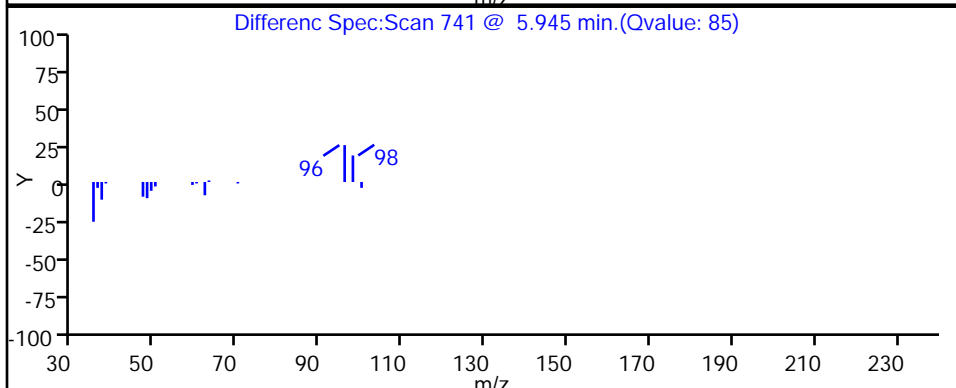
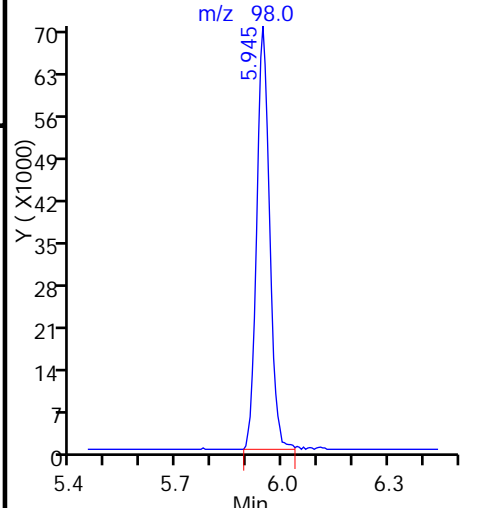
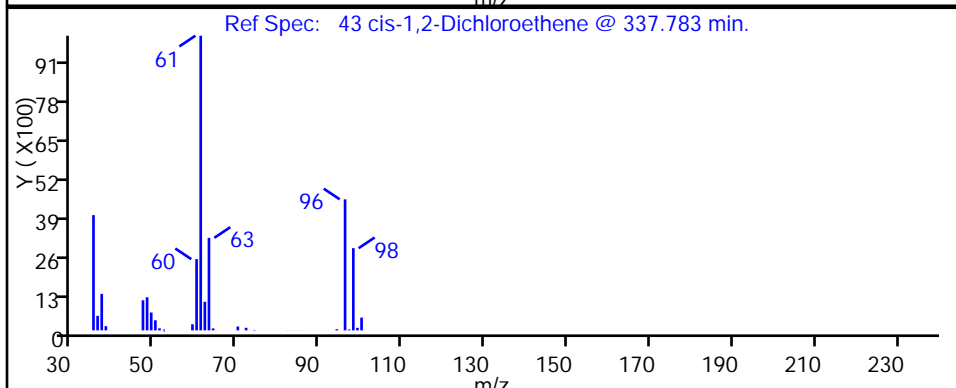
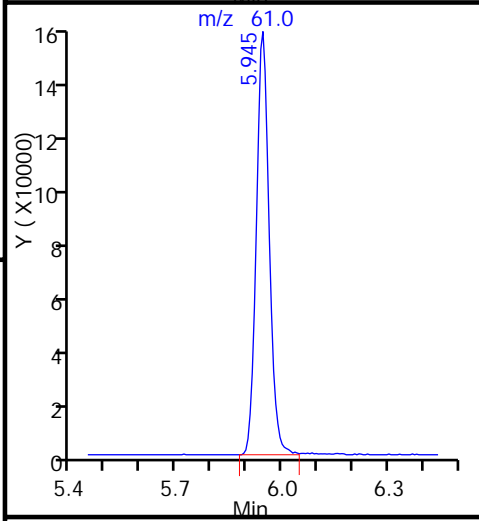
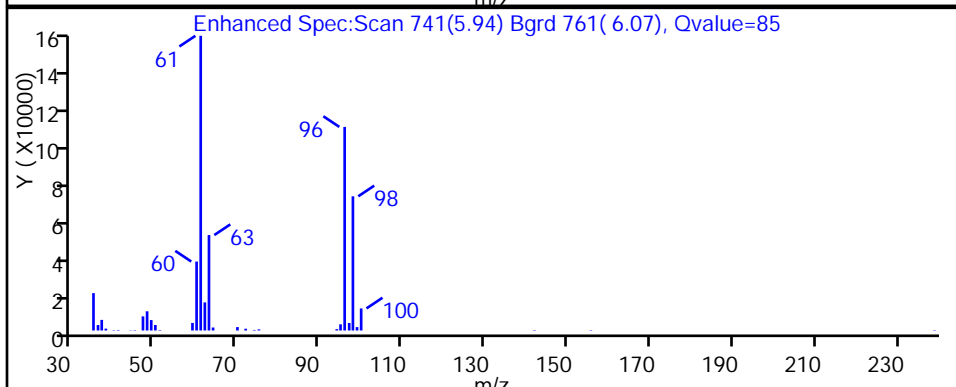
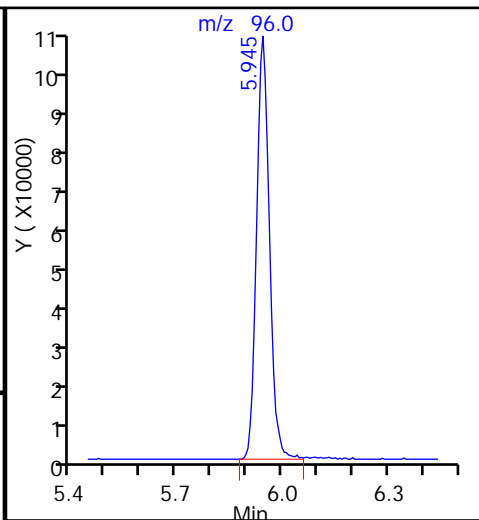
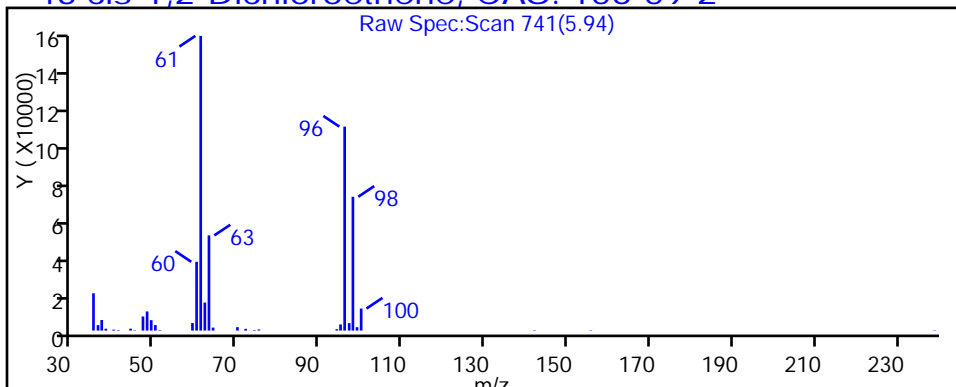
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D

Injection Date: 05-May-2015 19:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-6

Lab Sample ID: 180-43402-6

Client ID: HD-MW-127-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

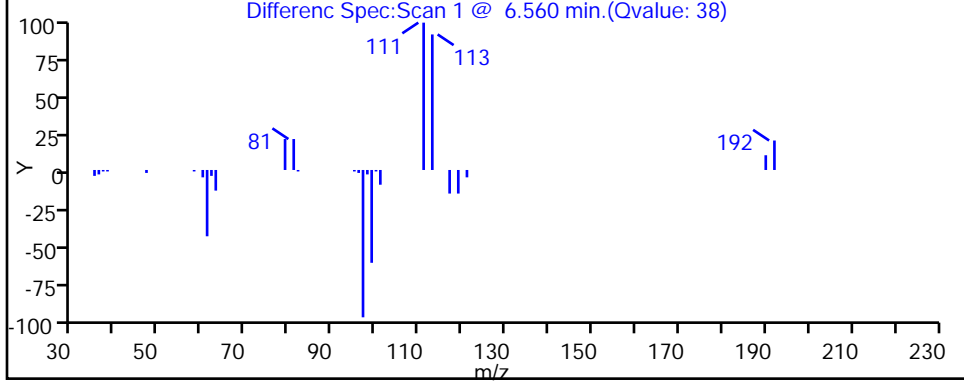
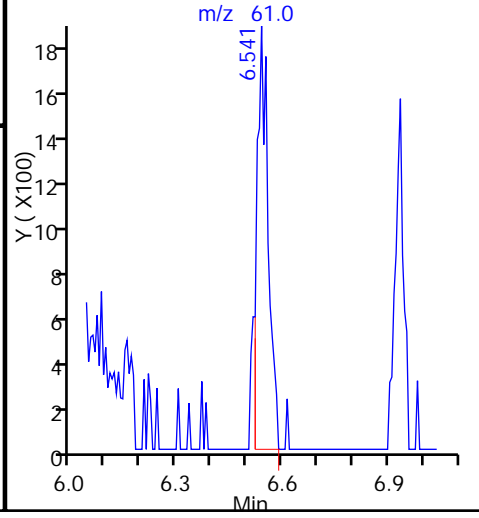
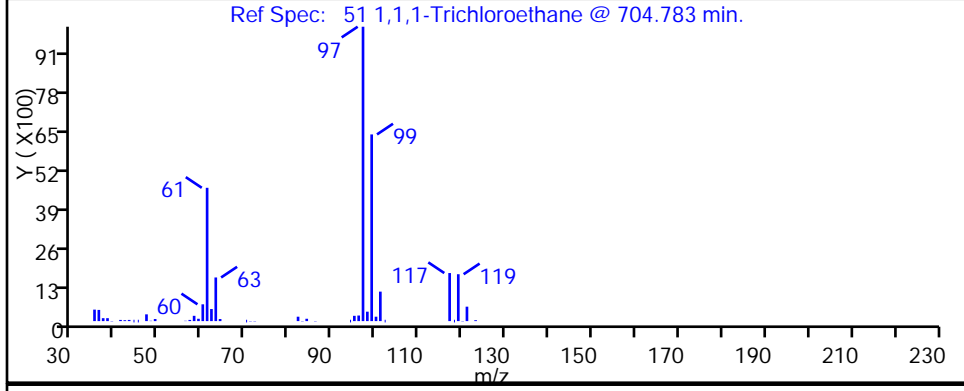
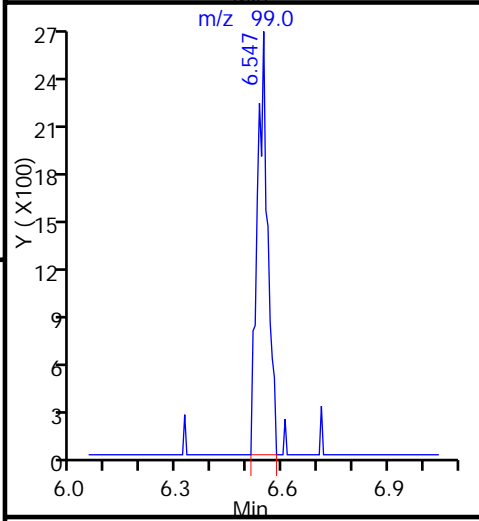
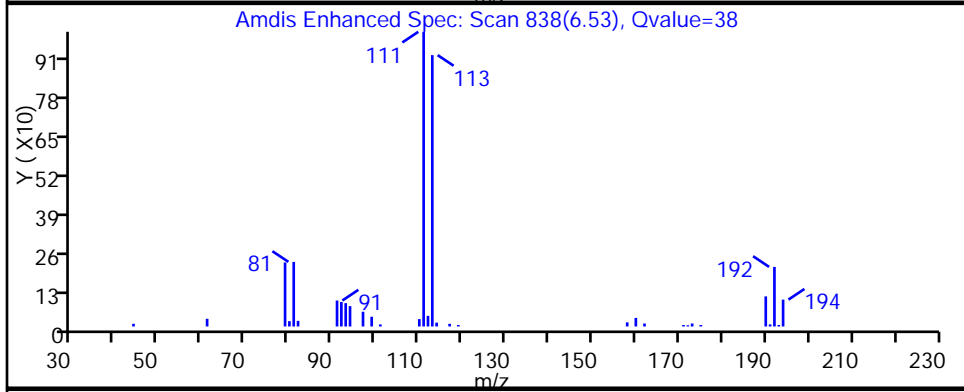
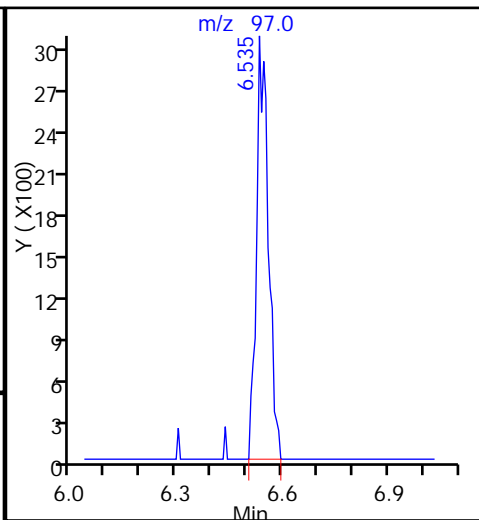
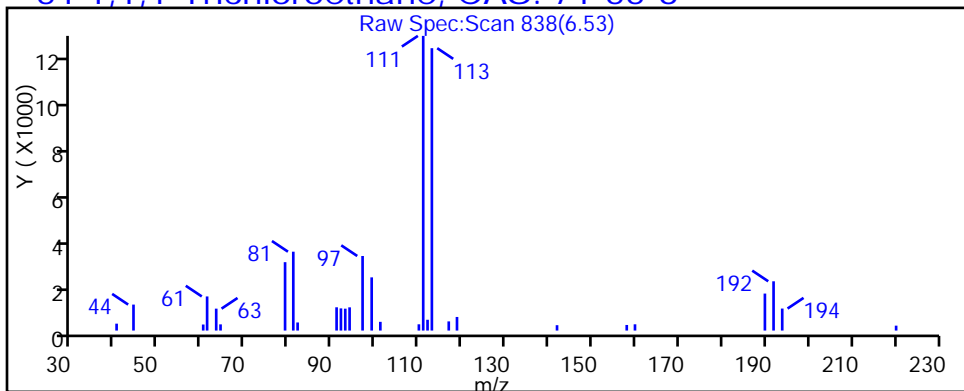
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D

Injection Date: 05-May-2015 19:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-6

Lab Sample ID: 180-43402-6

Client ID: HD-MW-127-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

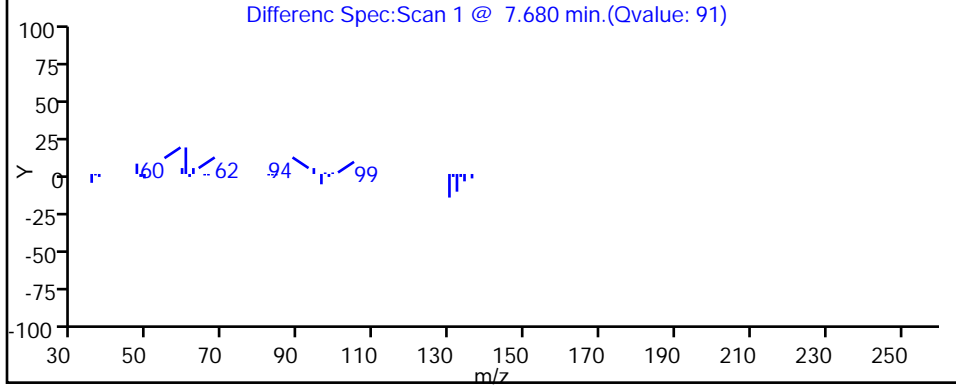
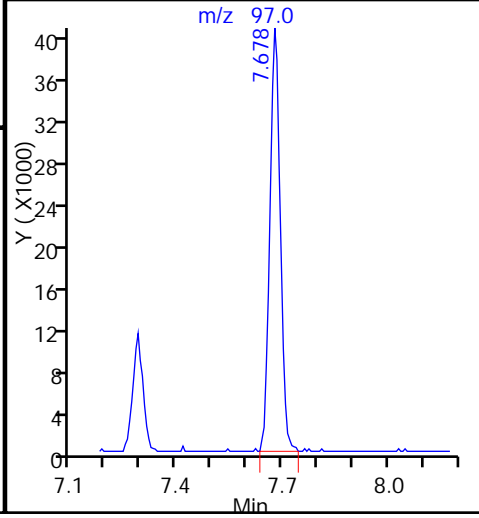
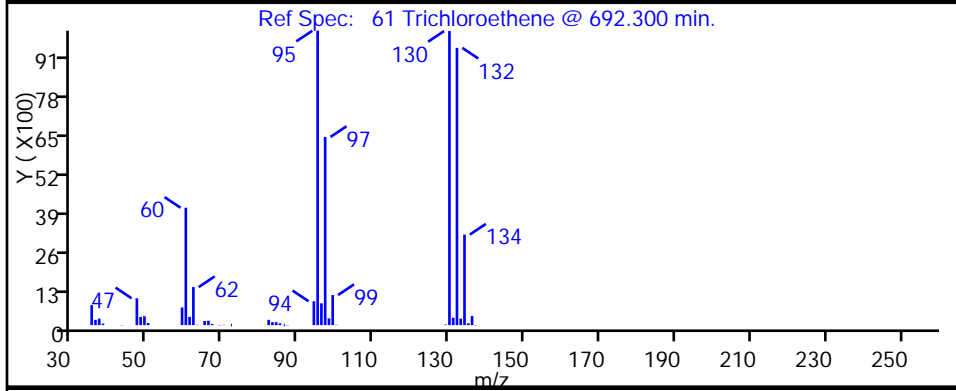
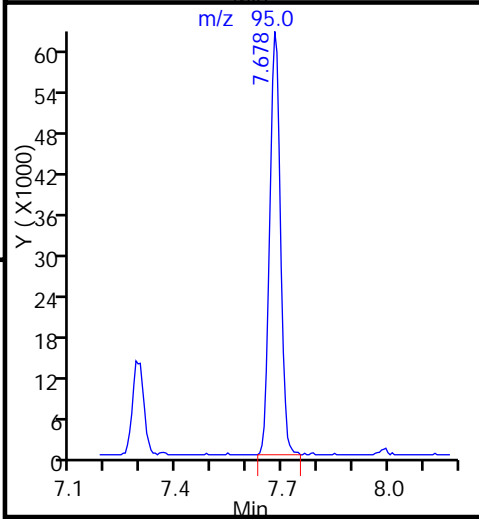
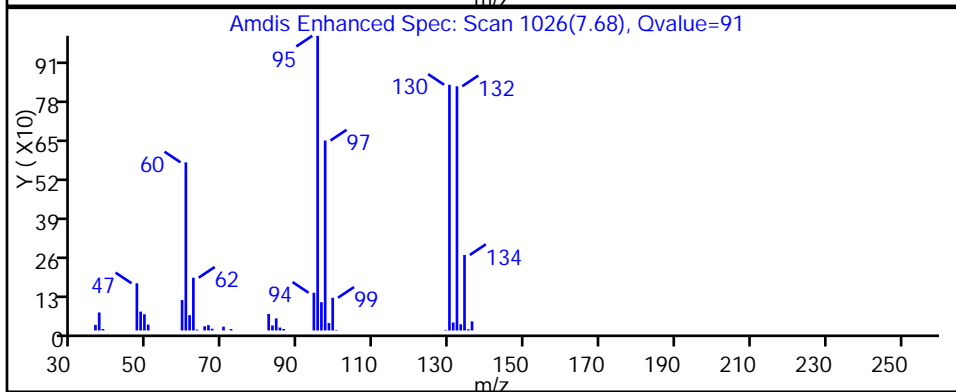
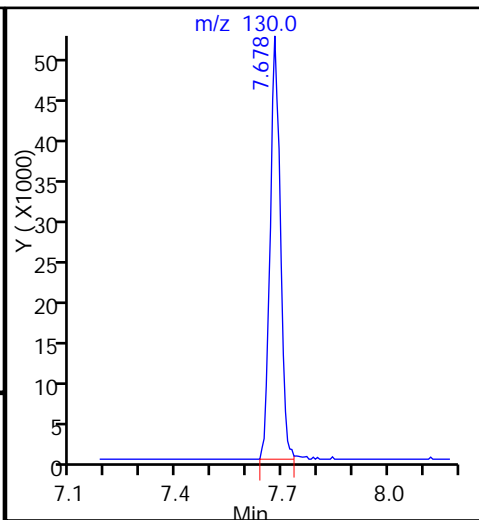
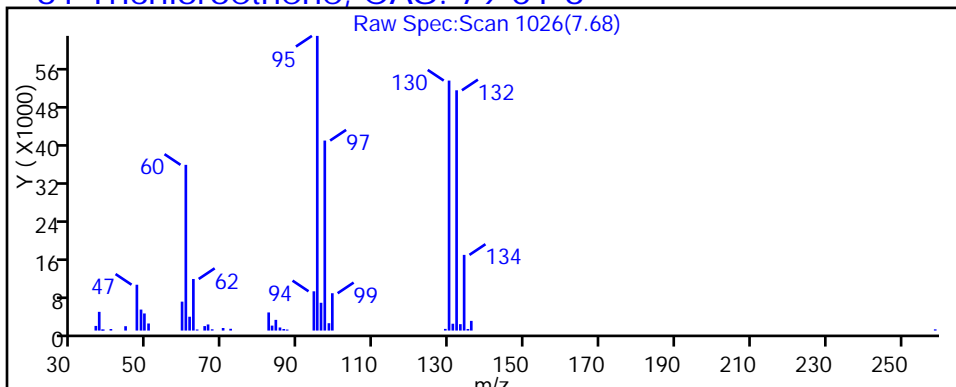
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D

Injection Date: 05-May-2015 19:50:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-6

Lab Sample ID: 180-43402-6

Client ID: HD-MW-127-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

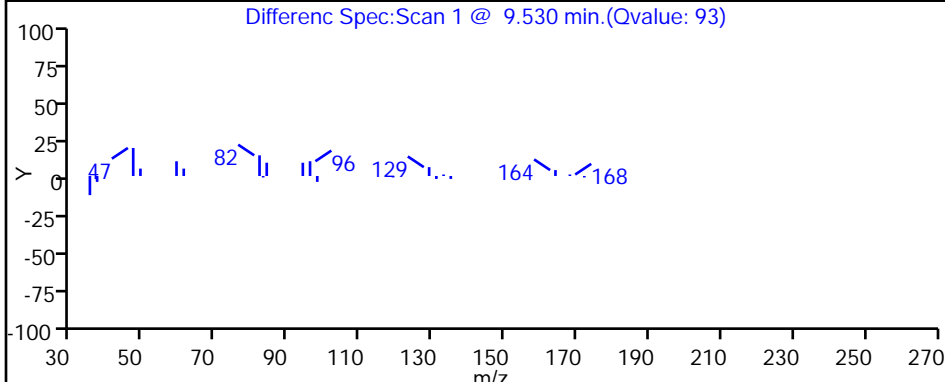
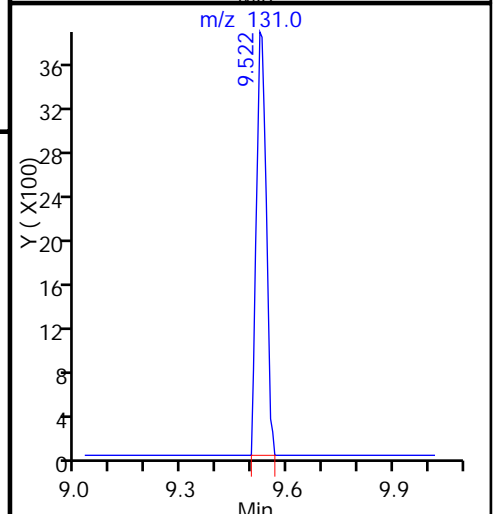
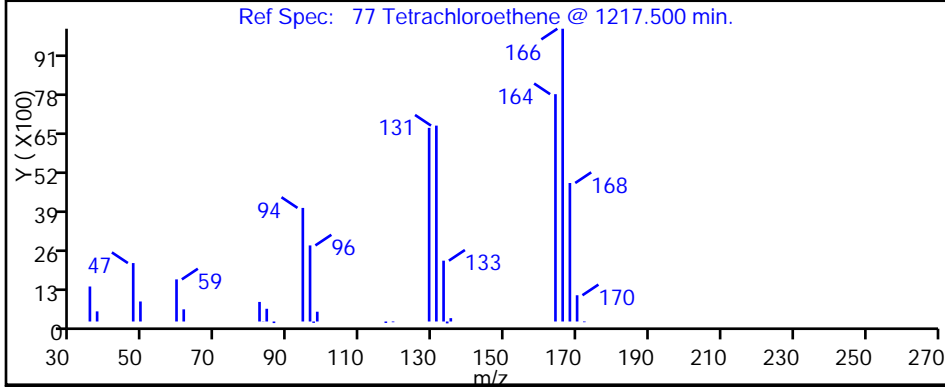
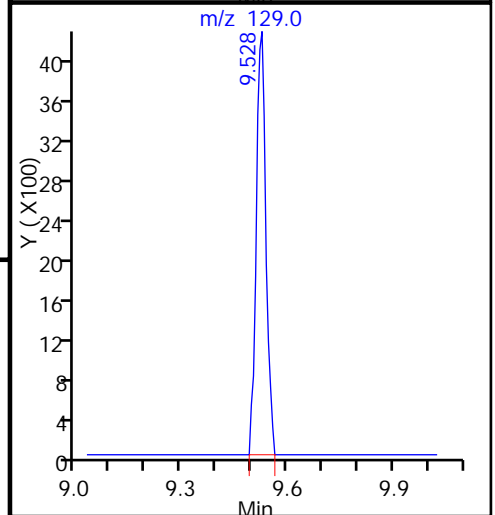
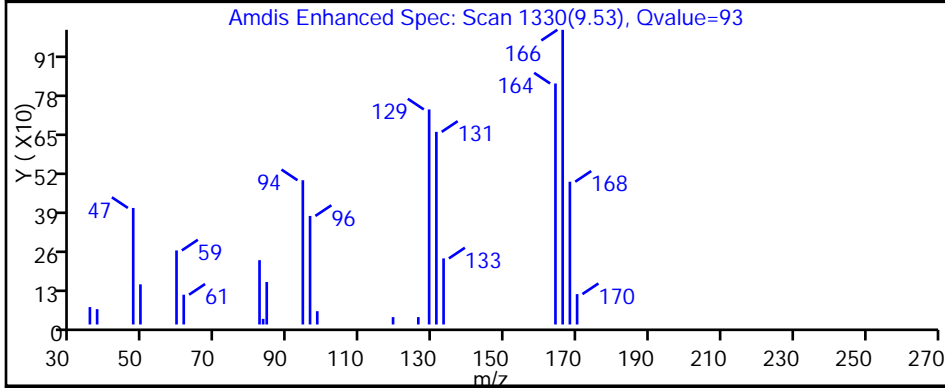
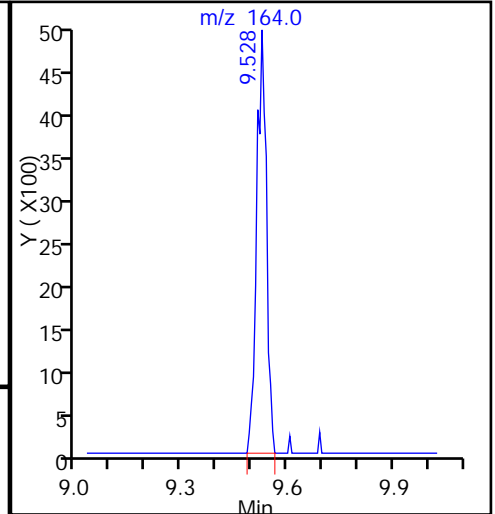
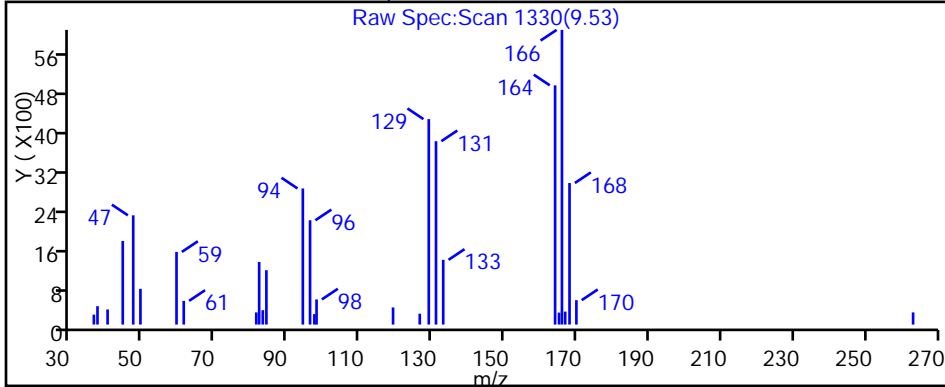
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



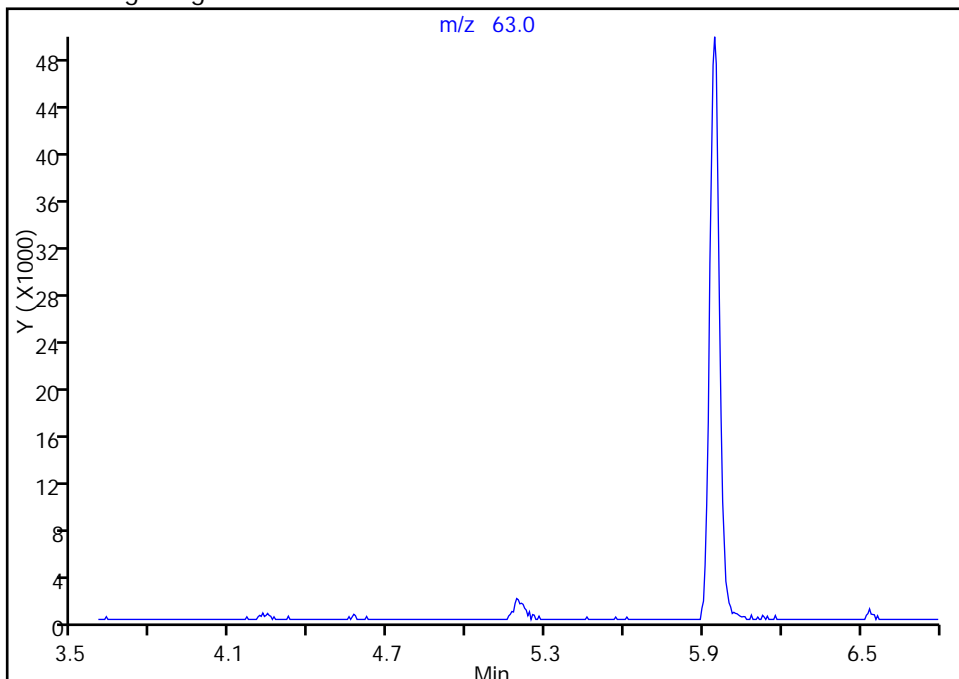
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505022.D
Injection Date: 05-May-2015 19:50:30 Instrument ID: CHHP6
Lims ID: 180-43402-E-6 Lab Sample ID: 180-43402-6
Client ID: HD-MW-127-0/1-0
Operator ID: 001562 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

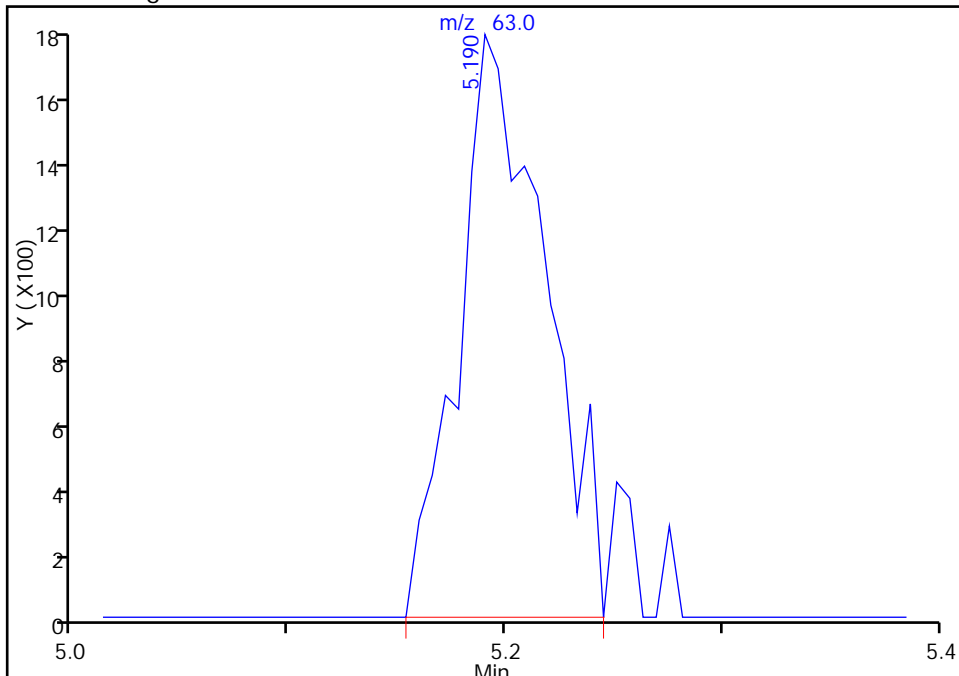
Not Detected
Expected RT: 5.20

Processing Integration Results



RT: 5.19
Area: 4979
Amount: 1.442925
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 06-May-2015 07:45:24
Audit Action: Manually Integrated
Audit Reason: Peak Not Integrated

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-51D-0/1-0 Lab Sample ID: 180-43402-7
 Matrix: Water Lab File ID: 60505023.D
 Analysis Method: 8260C Date Collected: 04/23/2015 12:30
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 20:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	0.60	J	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	48		1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	0.82	J	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	21		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	210	E	1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	0.39	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	20		1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	0.28	J	1.0	0.21
79-01-6	Trichloroethene	350	E	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	36		1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-51D-0/1-0 Lab Sample ID: 180-43402-7
 Matrix: Water Lab File ID: 60505023.D
 Analysis Method: 8260C Date Collected: 04/23/2015 12:30
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 20:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20
107-13-1	Acrylonitrile	20	U	20	0.55
123-91-1	1,4-Dioxane	200	U	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		64-135
2037-26-5	Toluene-d8 (Surr)	106		71-118
460-00-4	4-Bromofluorobenzene (Surr)	102		70-118
1868-53-7	Dibromofluoromethane (Surr)	106		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D
 Lims ID: 180-43402-C-7 Lab Sample ID: 180-43402-7
 Client ID: HD-MW-51D-0/1-0
 Sample Type: Client
 Inject. Date: 05-May-2015 20:14:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43402-C-7
 Misc. Info.: 180-0006773-023
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 07:50:25 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond

Date: 06-May-2015 07:50:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.230	4.239	-0.009	95	187667	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.286	0.004	97	371081	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.401	-0.003	91	79221	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.743	0.003	96	114042	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.553	6.547	0.006	85	81375	53.0	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	70	139019	54.2	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	94	354347	52.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.000	77	139080	50.9	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62	1.887	1.894	-0.007	98	5983	2.98	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96	3.347	3.341	0.006	96	412885	240.3	
24 Acetone	43	3.451	3.427	0.024	52	4220	8.57	M
26 Carbon disulfide	76		3.633				ND	
31 Methylene Chloride	84		4.132				ND	
33 Acrylonitrile	53		4.497				ND	
34 trans-1,2-Dichloroethene	96	4.576	4.558	0.018	93	7859	4.10	
35 Methyl tert-butyl ether	73	4.582	4.570	0.012	50	3257	0.4738	
37 1,1-Dichloroethane	63	5.203	5.197	0.006	97	373347	103.7	
43 cis-1,2-Dichloroethene	96	5.945	5.945	0.000	79	2338885	1074.4	E
44 2-Butanone (MEK)	43		5.951				ND	
48 Chlorobromomethane	128		6.231				ND	
50 Chloroform	83	6.371	6.371	0.000	92	6787	1.95	
51 1,1,1-Trichloroethane	97	6.541	6.541	0.000	95	280731	98.2	
53 Carbon tetrachloride	117		6.718				ND	
56 Benzene	78	6.949	6.943	0.006	42	2305	0.2824	
57 1,2-Dichloroethane	62	7.022	7.016	0.006	94	4323	1.39	
61 Trichloroethene	130	7.679	7.679	0.000	87	3063220	1734.9	E
64 1,2-Dichloropropane	63		7.953				ND	
65 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.233				ND	
71 cis-1,3-Dichloropropene	75		8.677				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
73 Toluene	91	9.005	9.011	-0.006	43	2527	0.3076	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97	9.455	9.449	0.006	11	953	0.5330	
77 Tetrachloroethene	164	9.528	9.522	0.006	91	246261	182.1	
79 2-Hexanone	43		9.662				ND	
81 Chlorodibromomethane	129		9.826				ND	
82 Ethylene Dibromide	107		9.942				ND	
84 Chlorobenzene	112		10.429				ND	
86 1,1,1,2-Tetrachloroethane	131		10.520				ND	
87 Ethylbenzene	106		10.526				ND	
88 m-Xylene & p-Xylene	106		10.660				ND	
89 o-Xylene	106		11.043				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.244				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Worklist Smp#: 23

Client ID: HD-MW-51D-0/1-0

Purge Vol: 5.000 mL

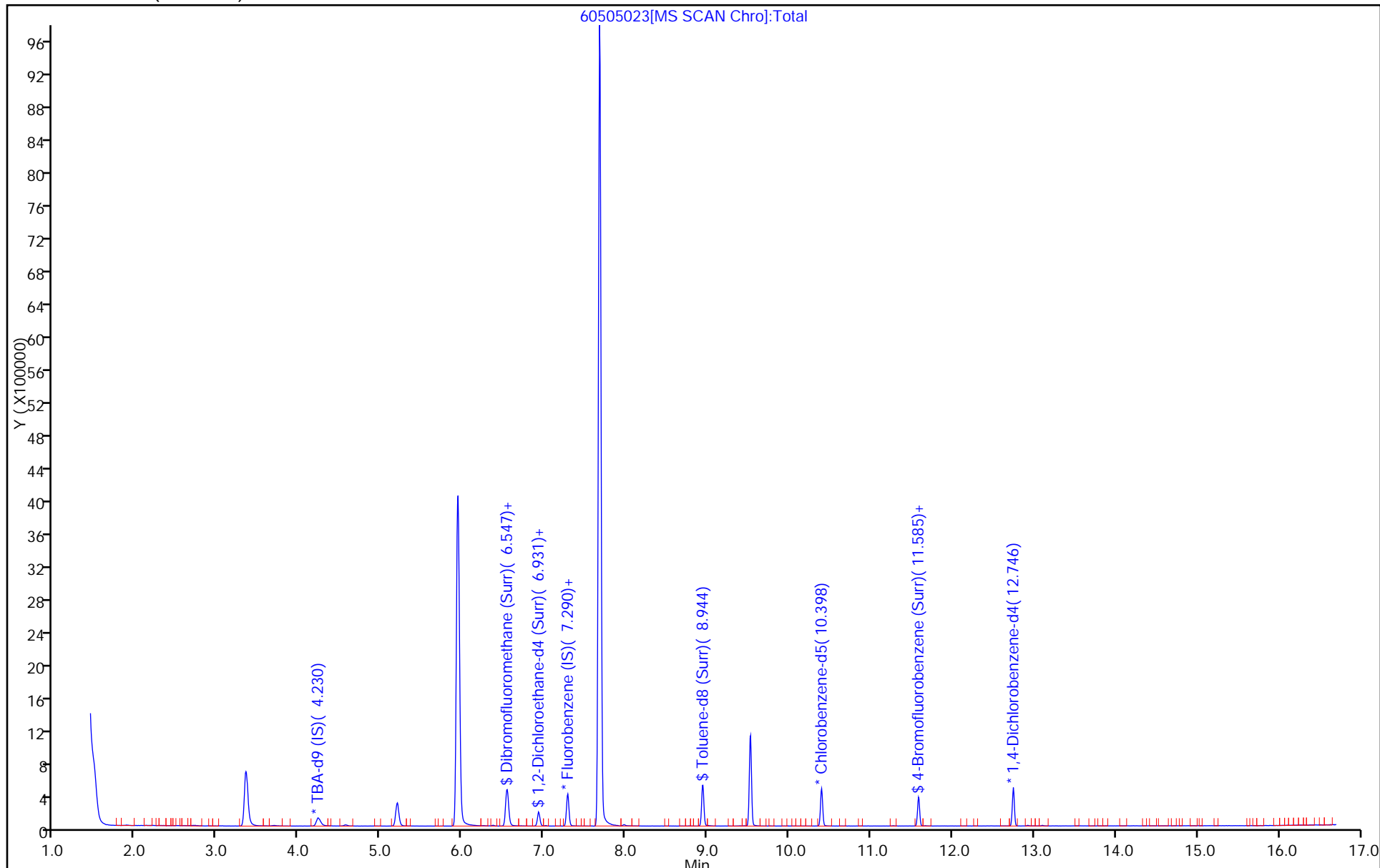
Dil. Factor: 1.0000

ALS Bottle#: 22

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

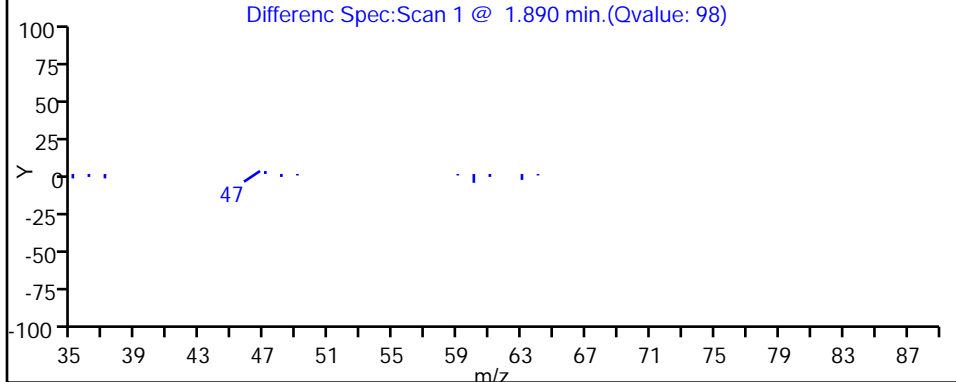
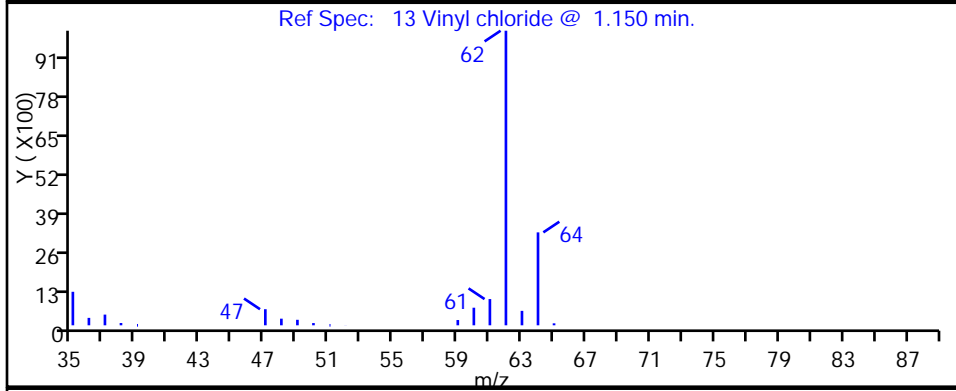
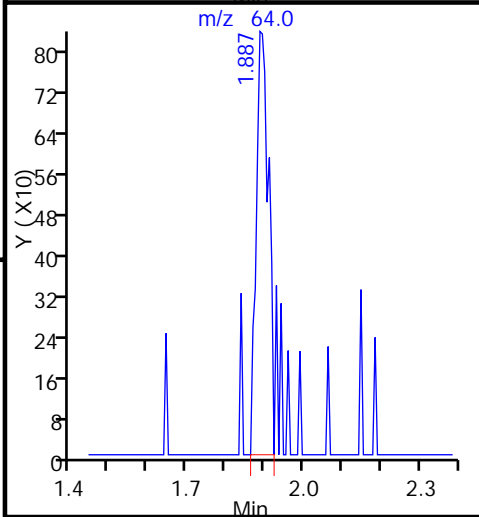
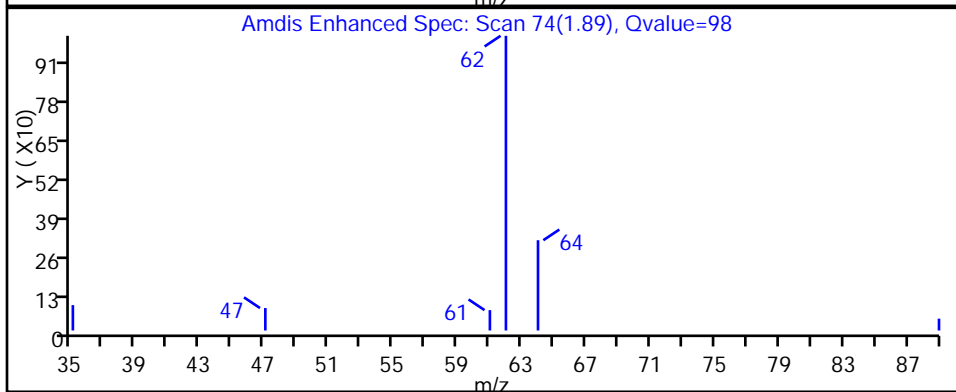
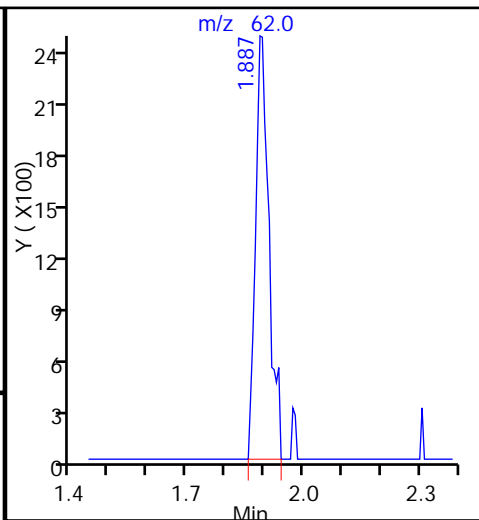
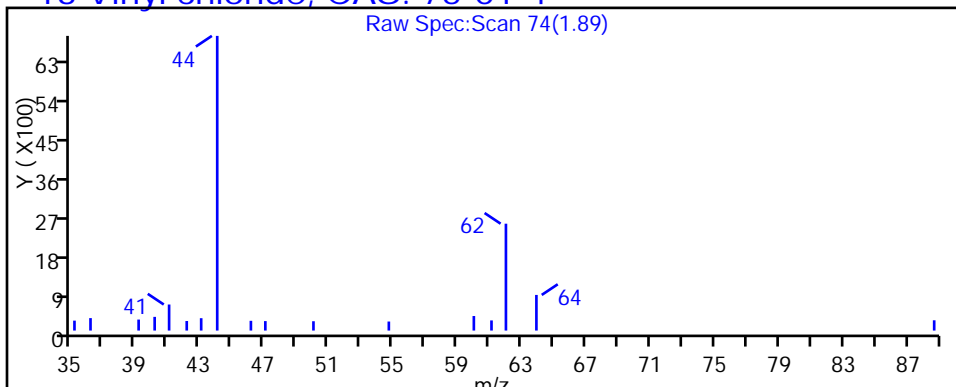
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

13 Vinyl chloride, CAS: 75-01-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

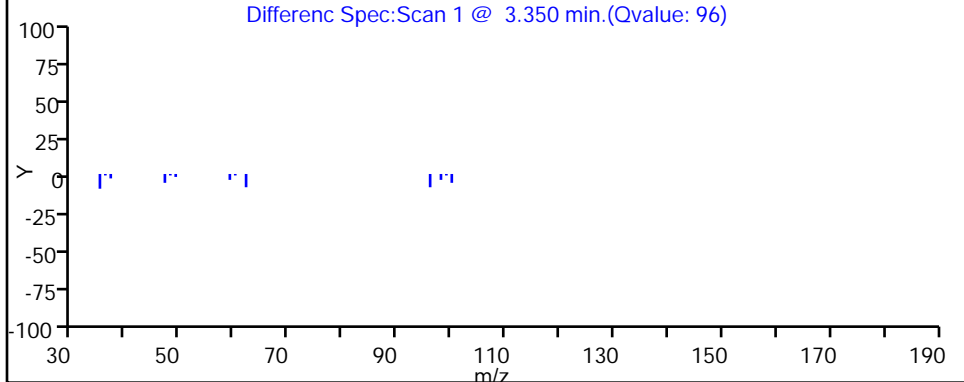
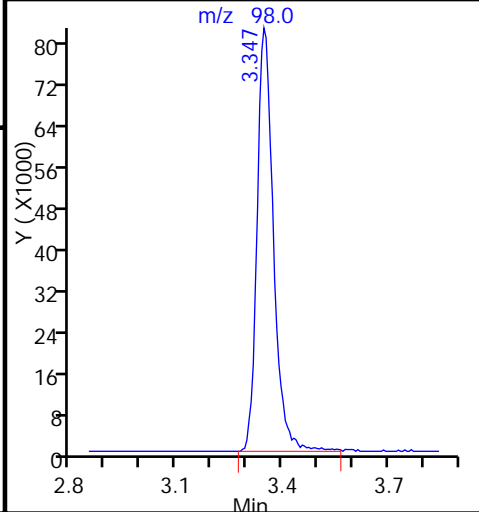
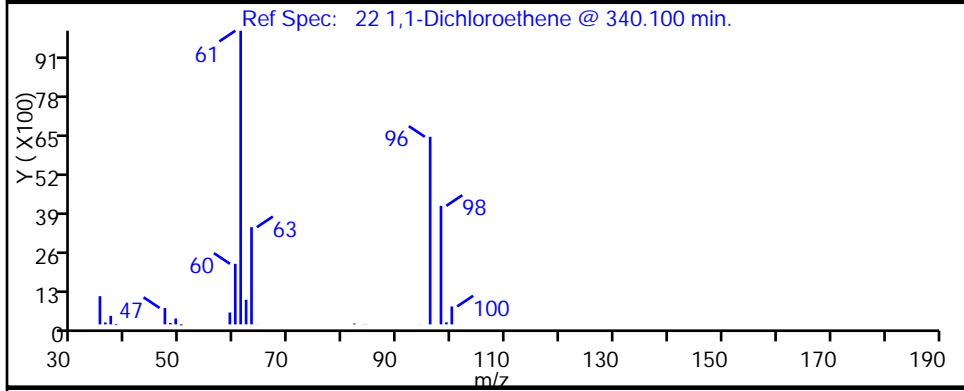
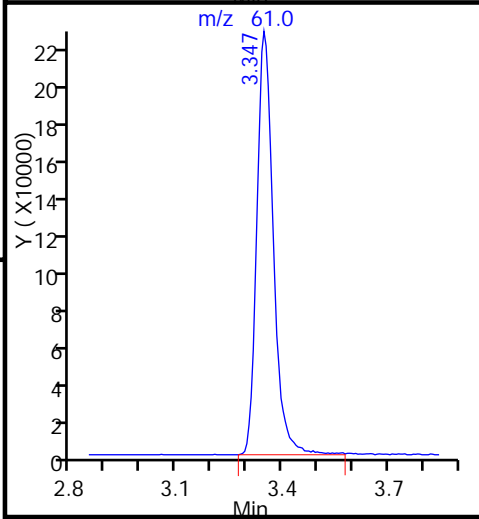
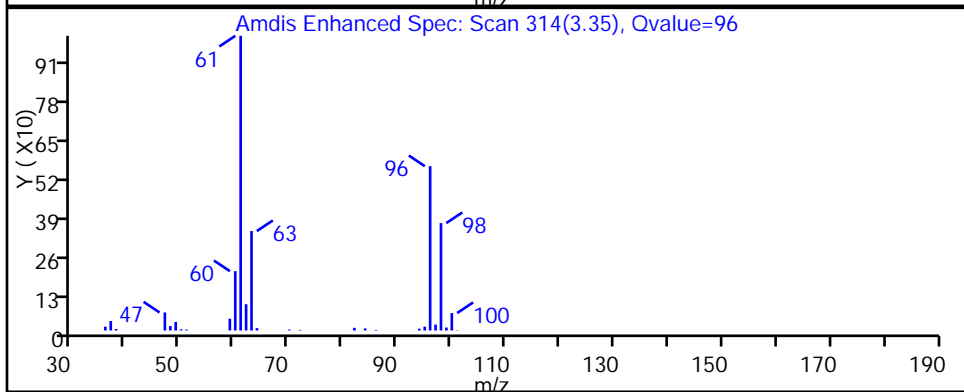
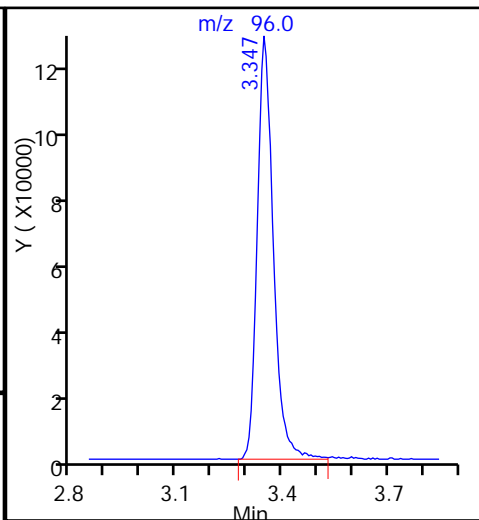
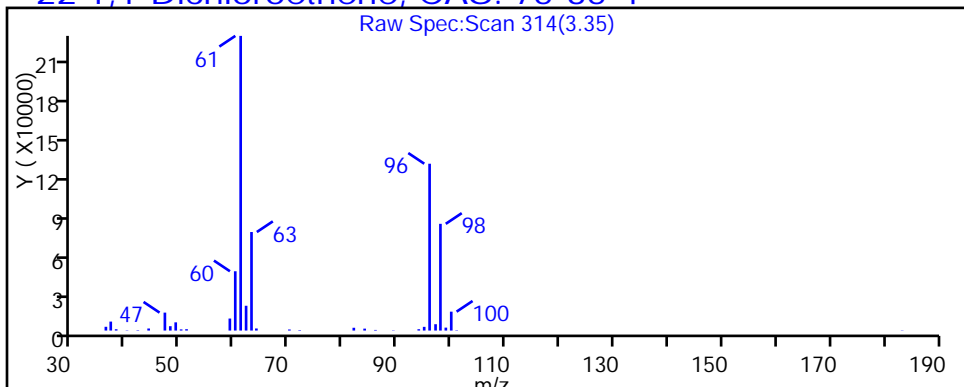
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

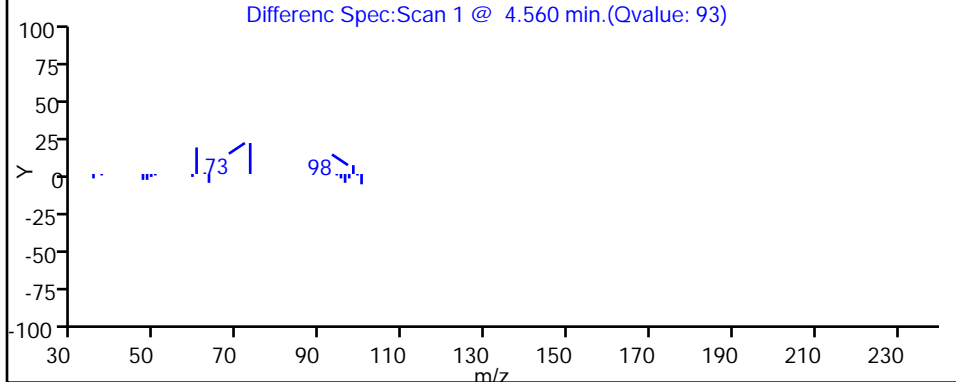
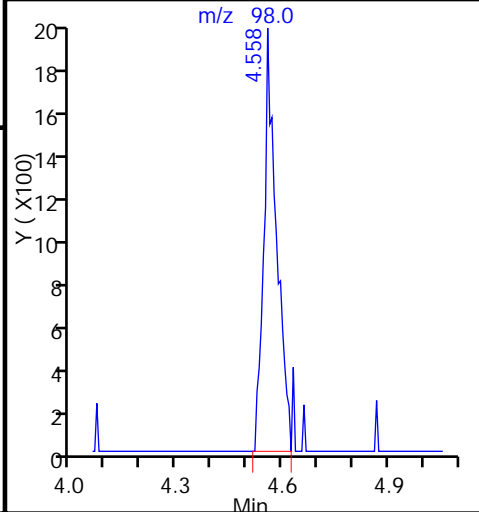
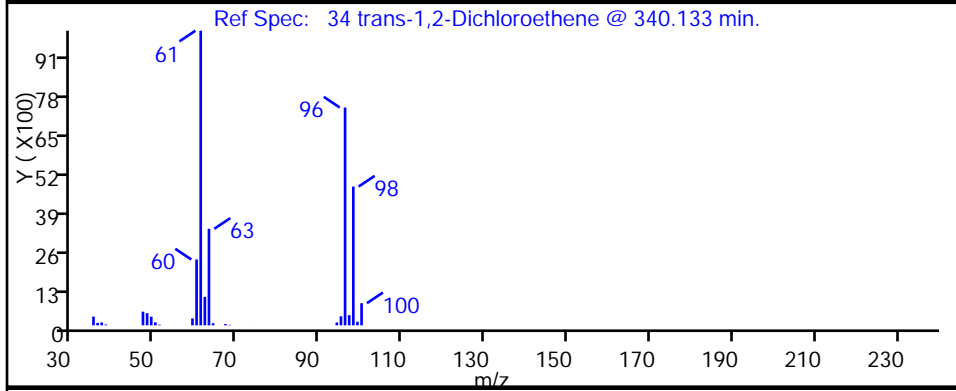
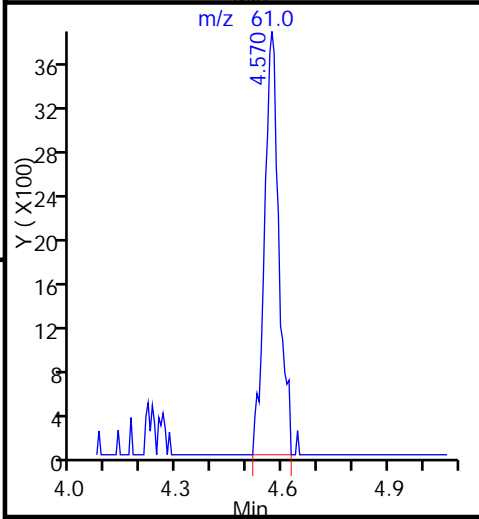
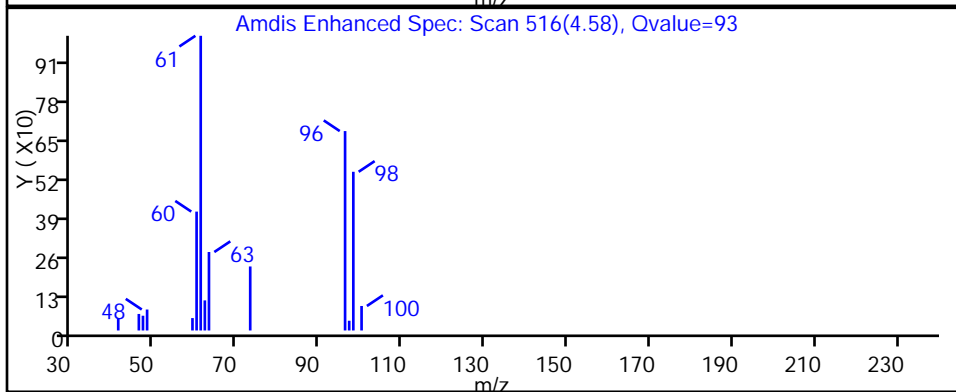
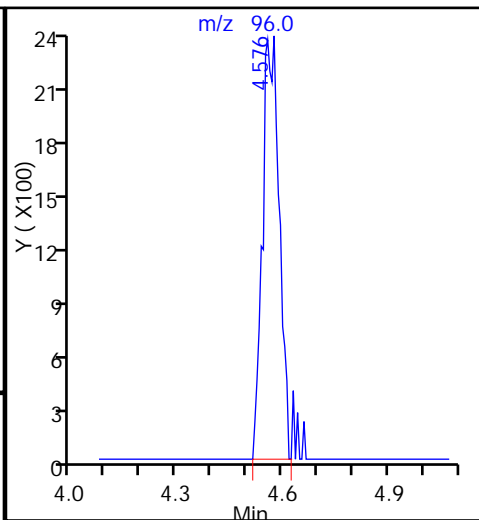
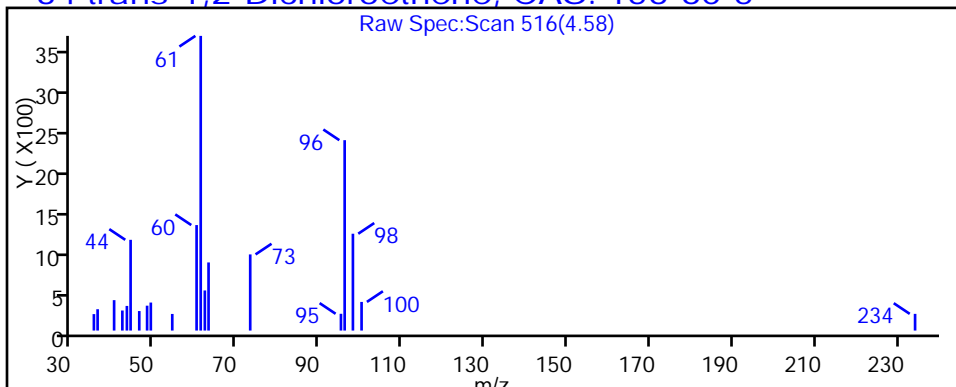
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

34 trans-1,2-Dichloroethene, CAS: 156-60-5



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

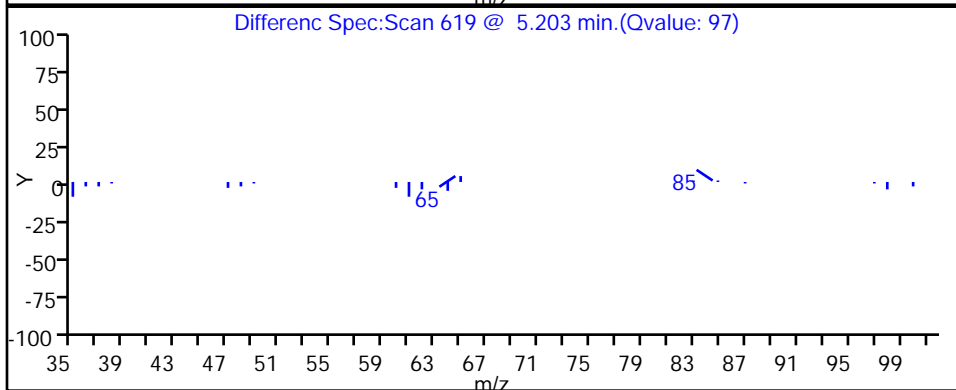
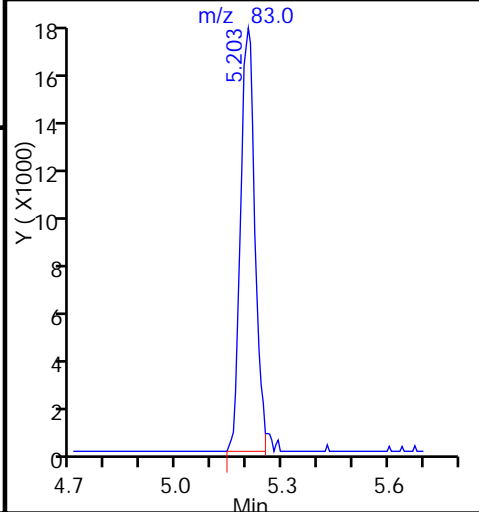
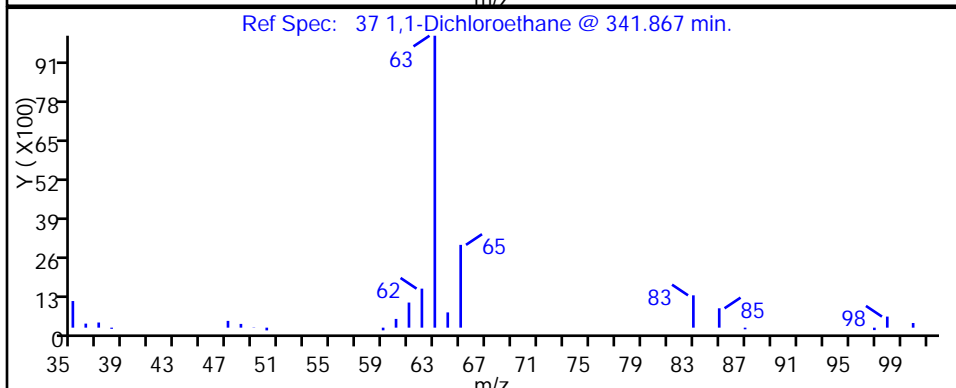
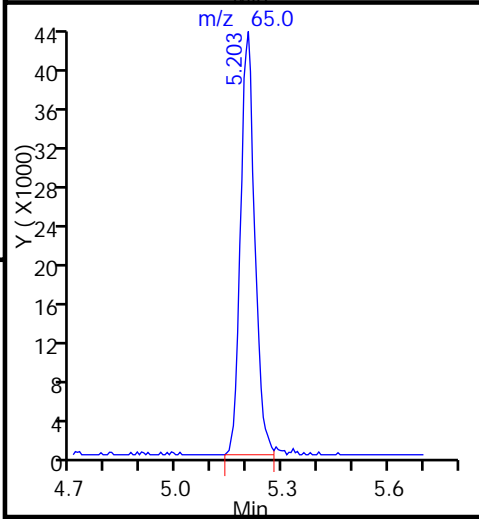
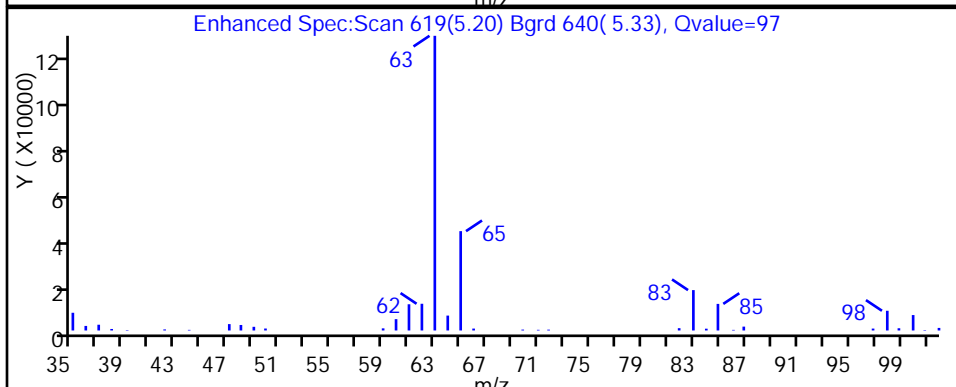
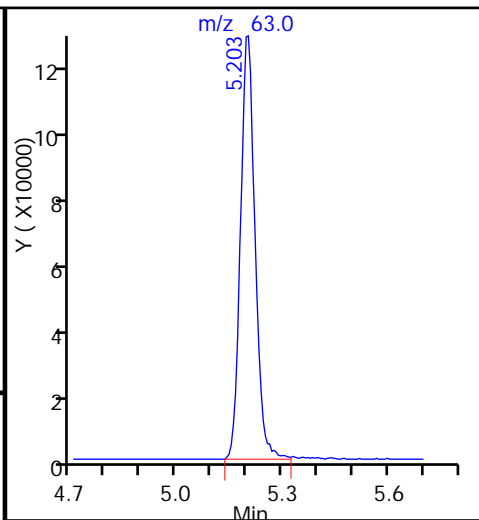
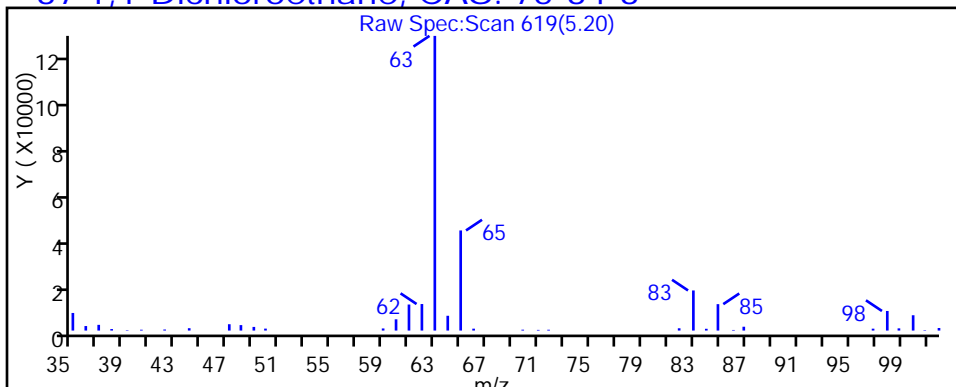
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

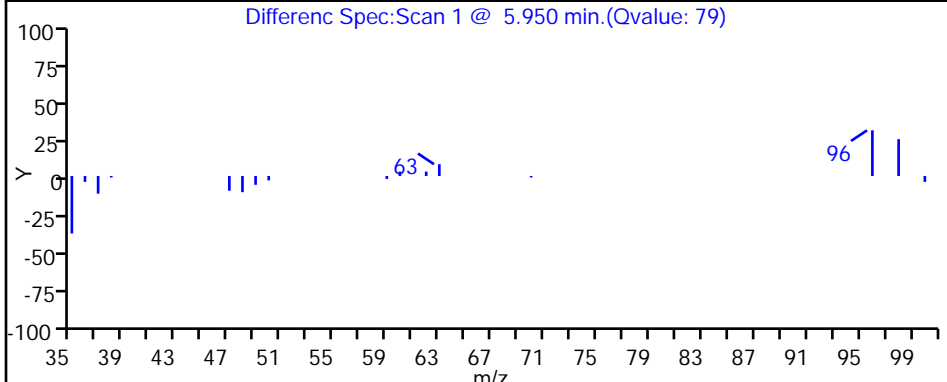
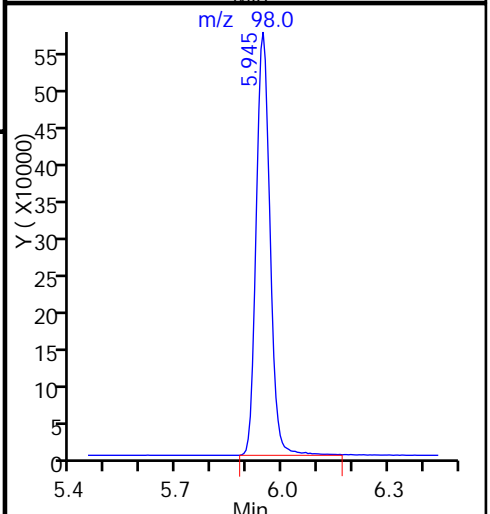
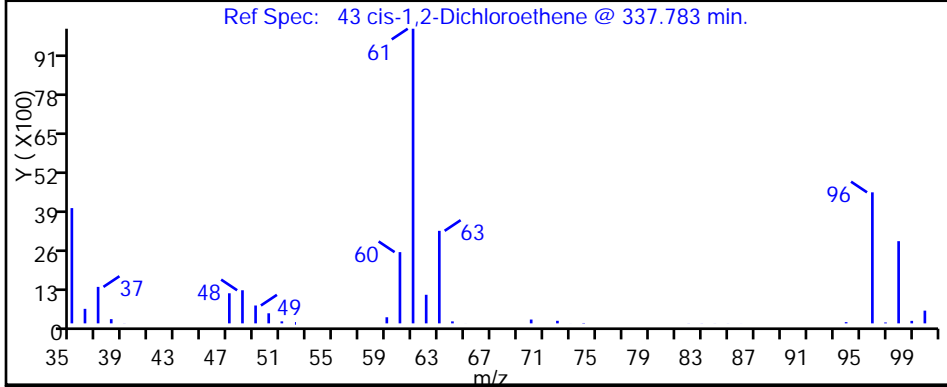
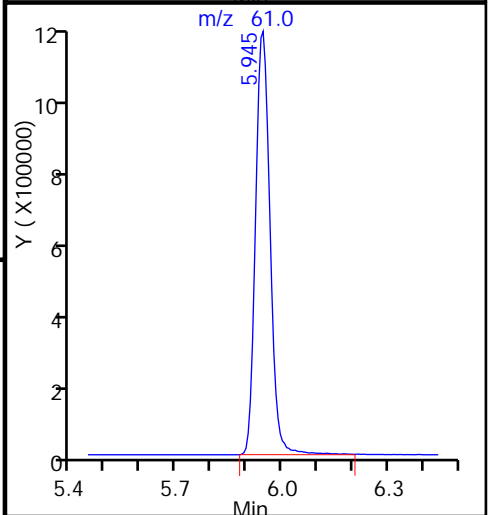
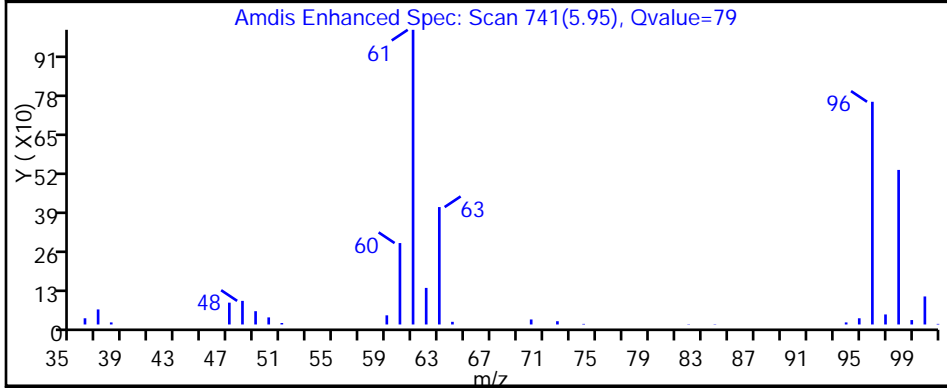
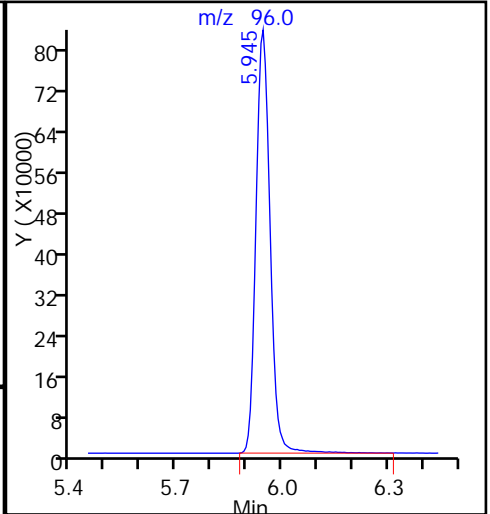
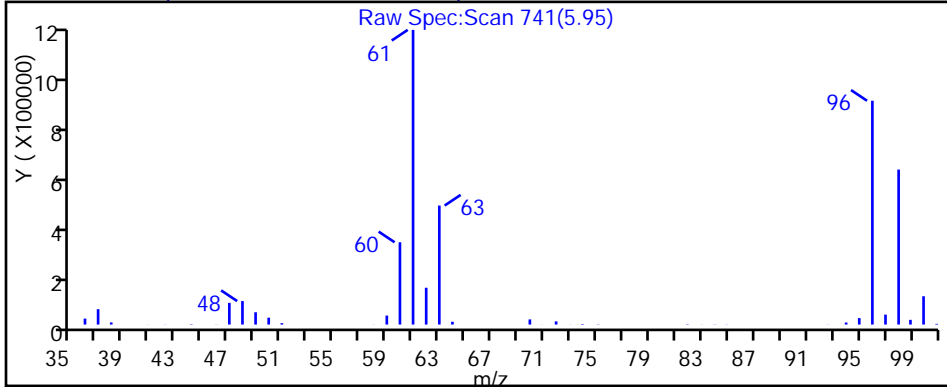
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

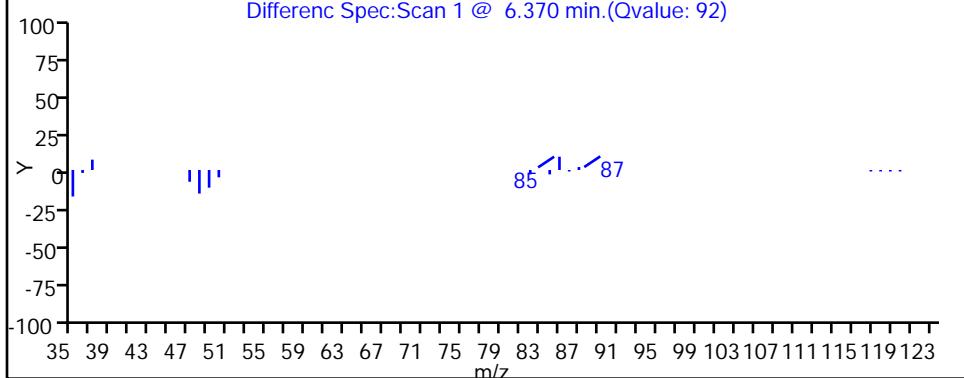
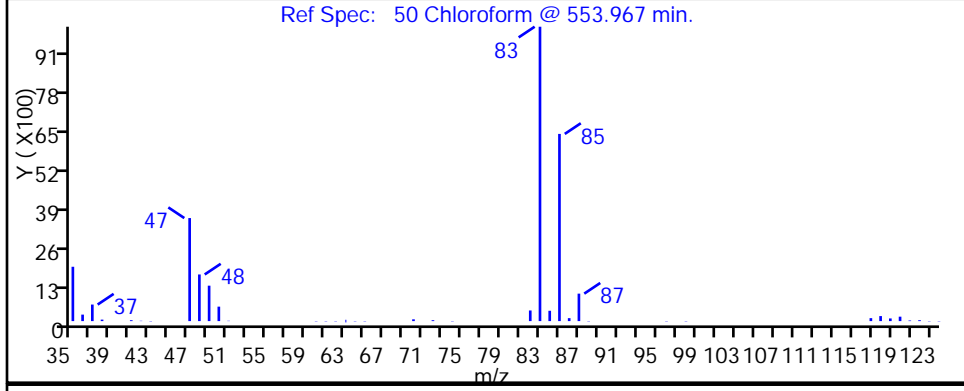
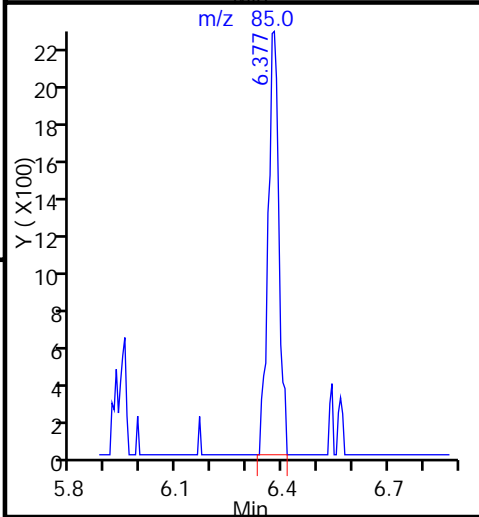
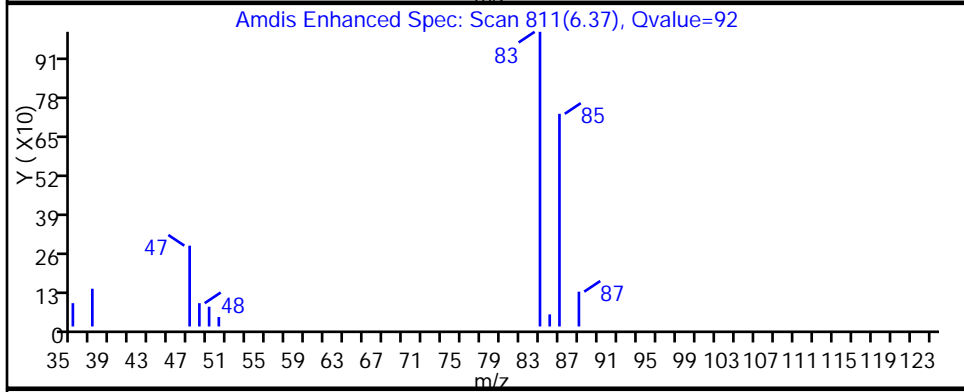
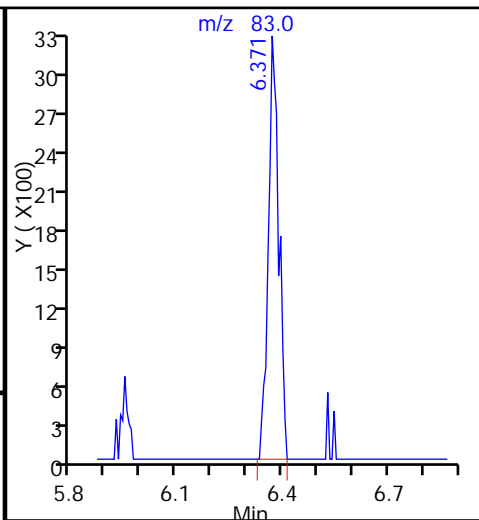
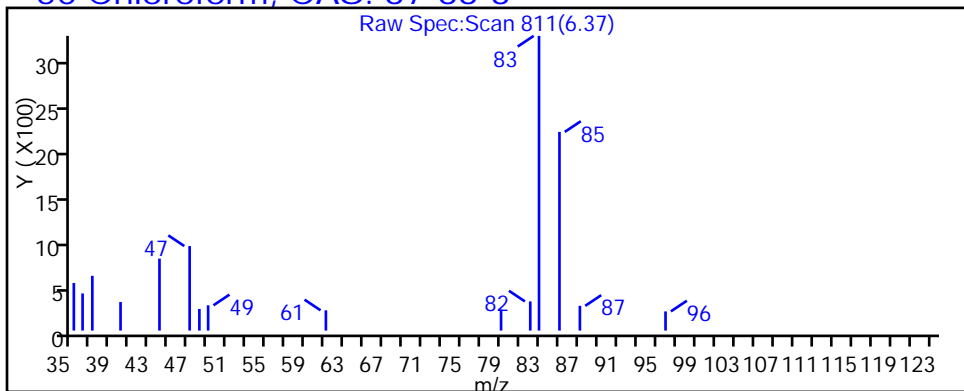
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

50 Chloroform, CAS: 67-66-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

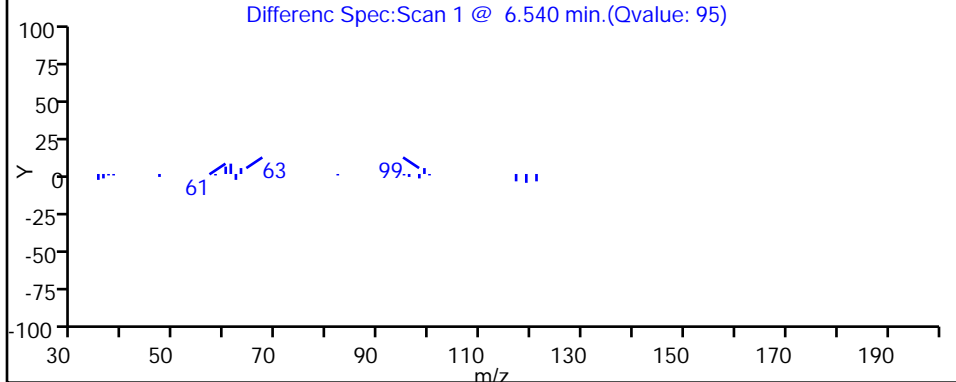
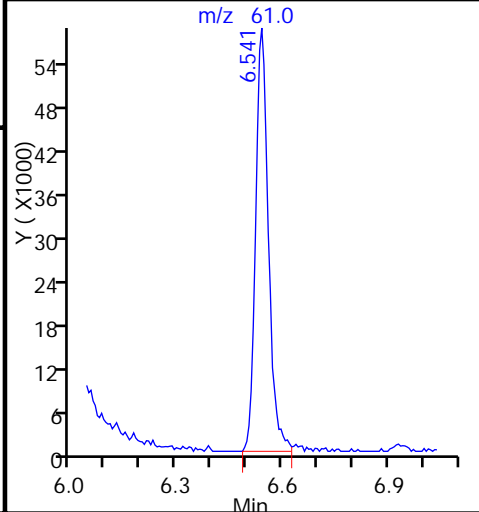
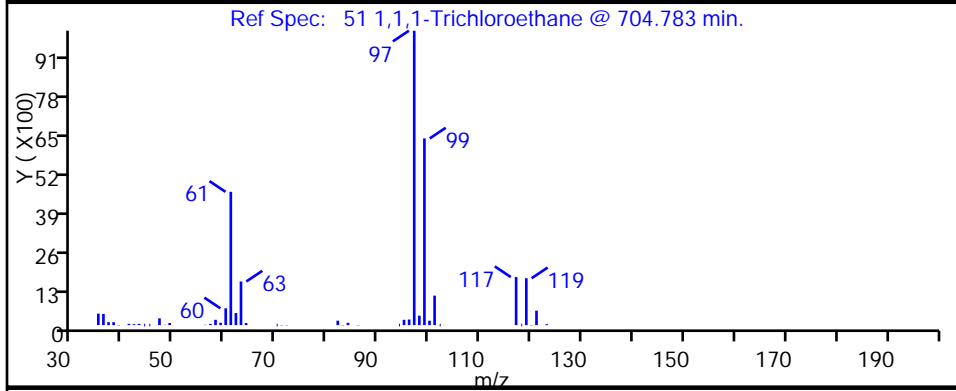
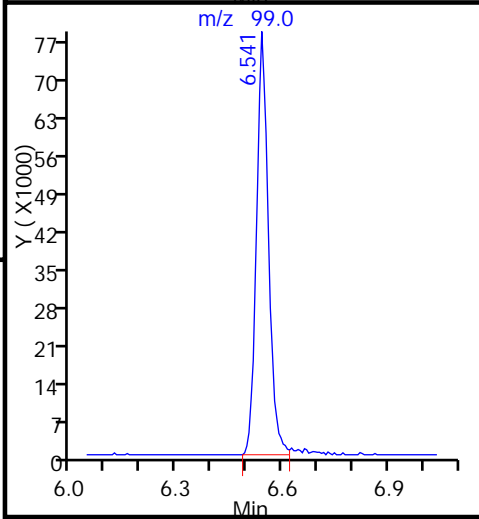
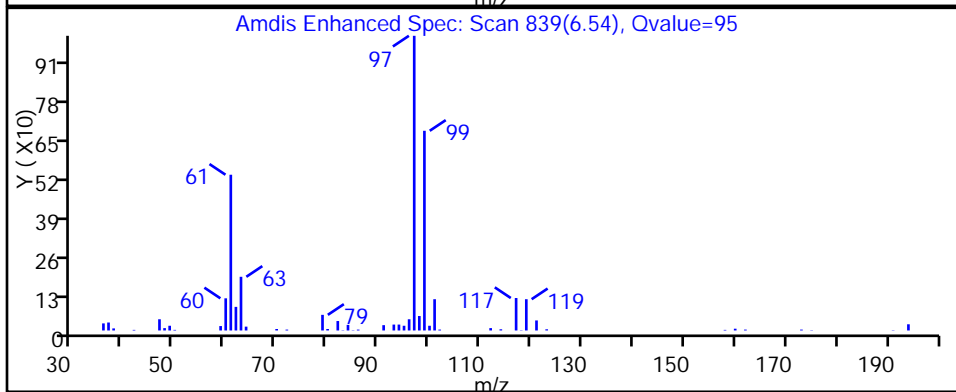
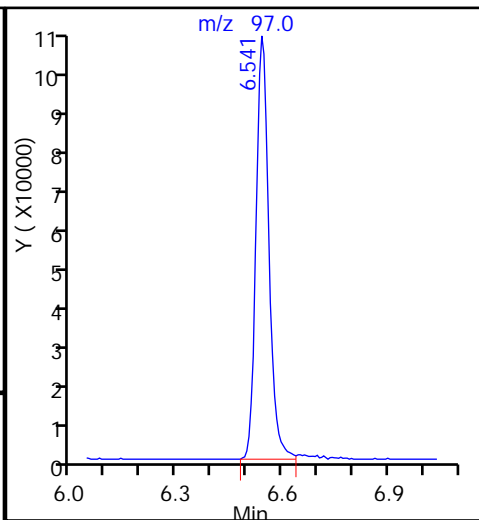
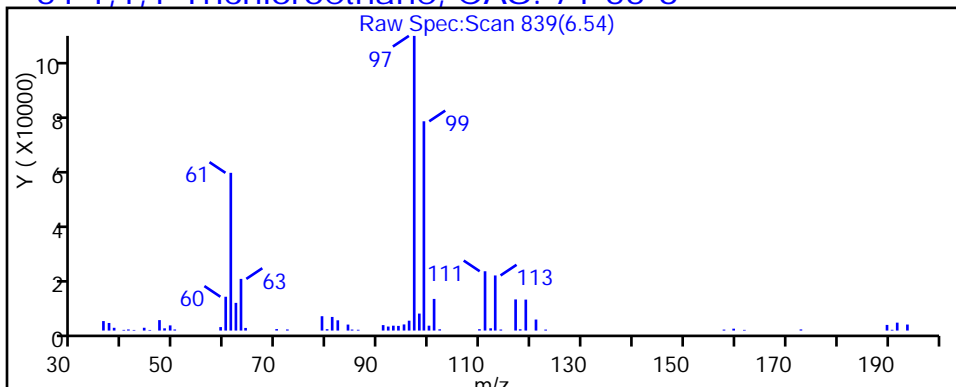
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

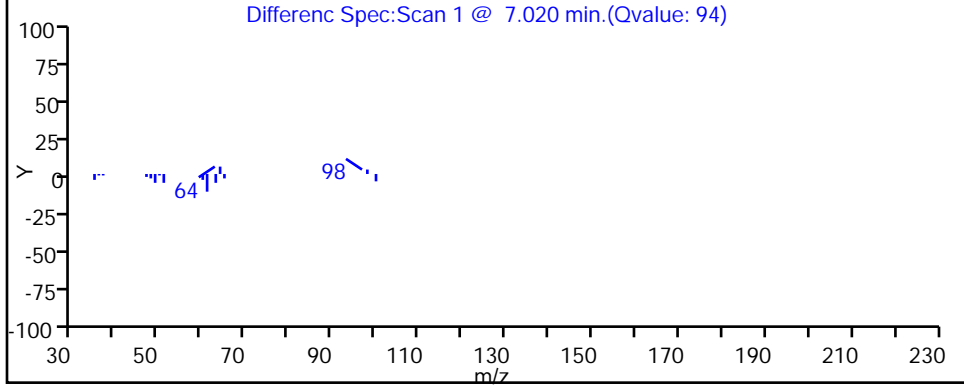
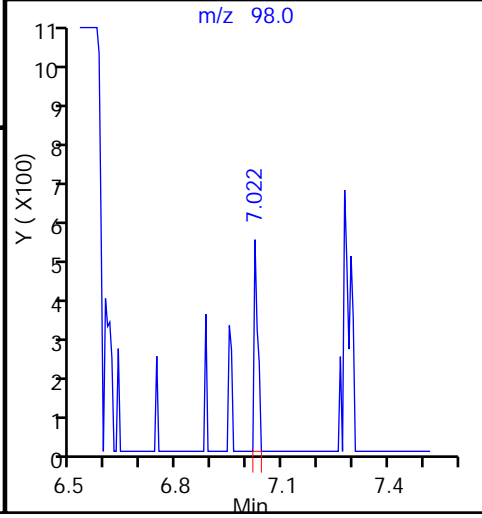
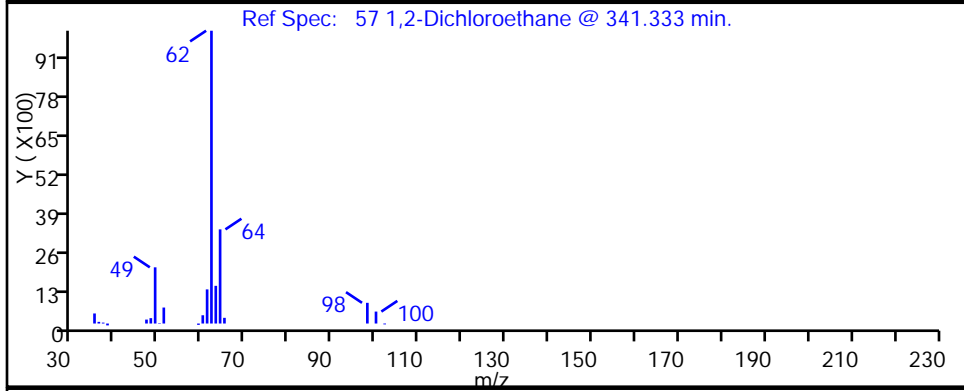
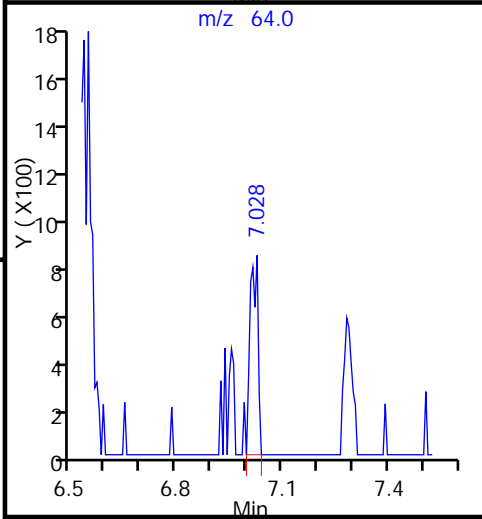
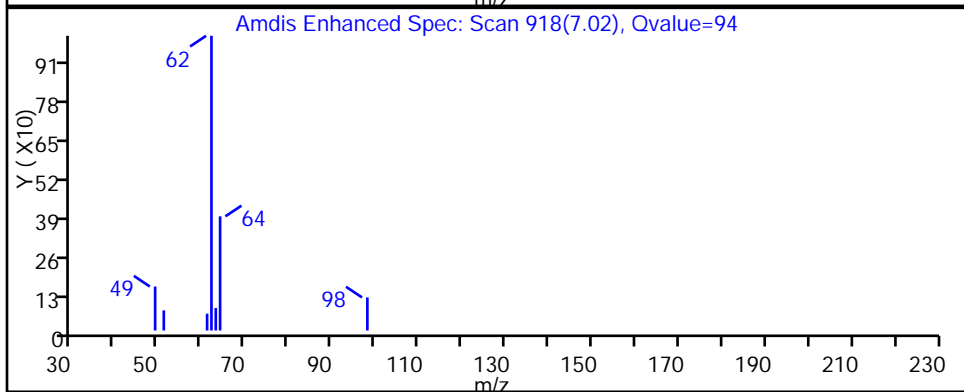
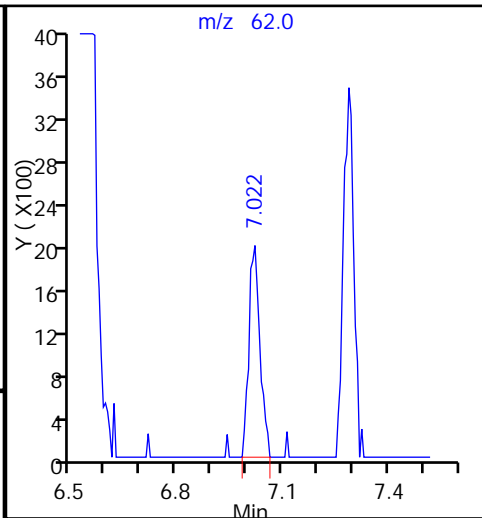
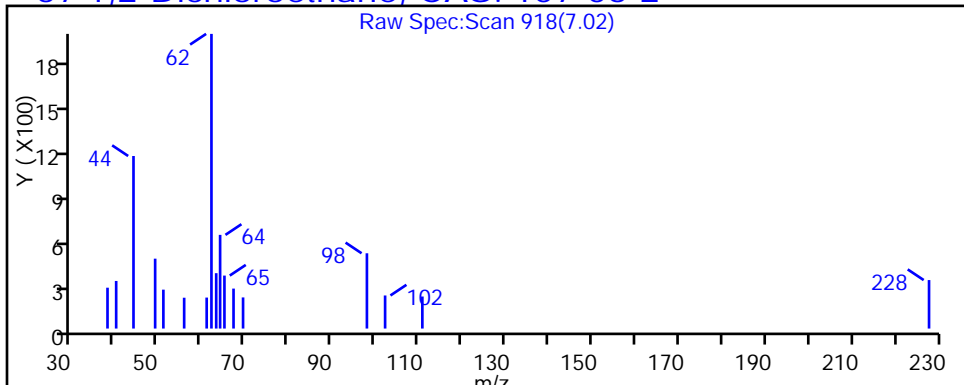
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

57 1,2-Dichloroethane, CAS: 107-06-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

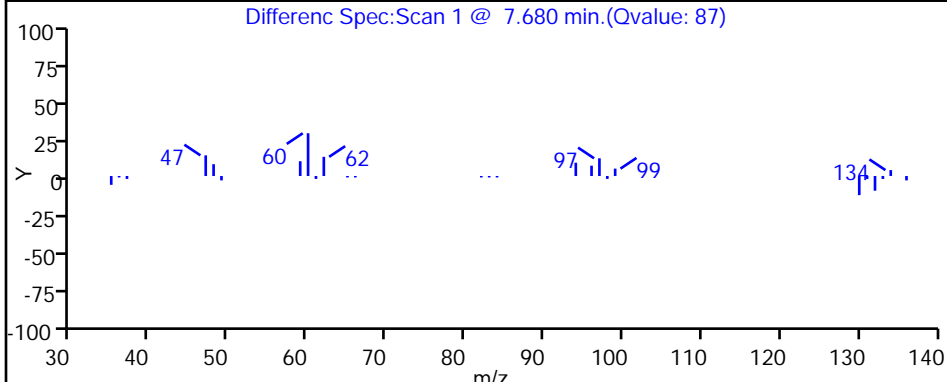
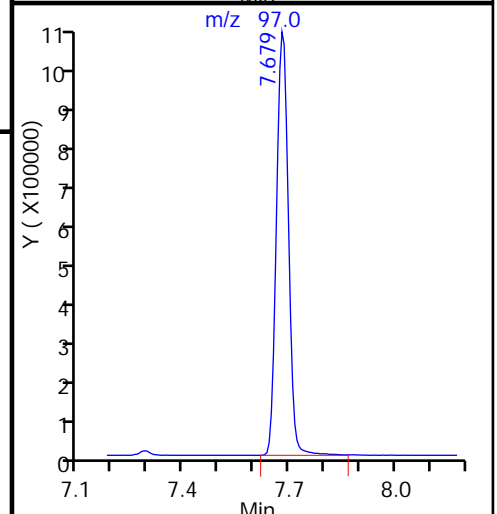
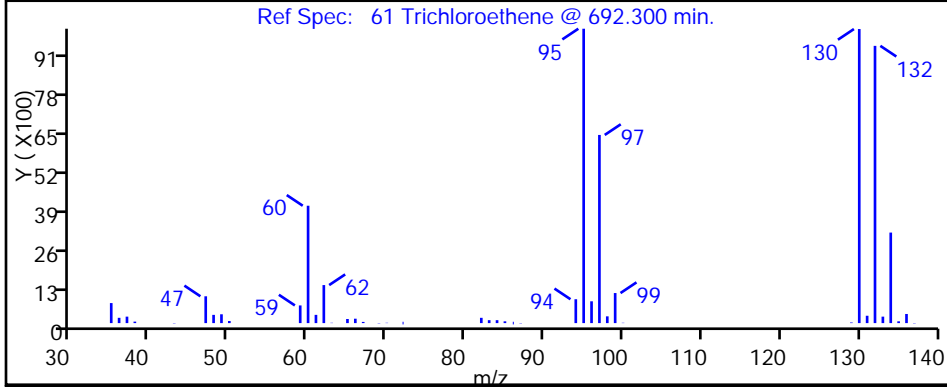
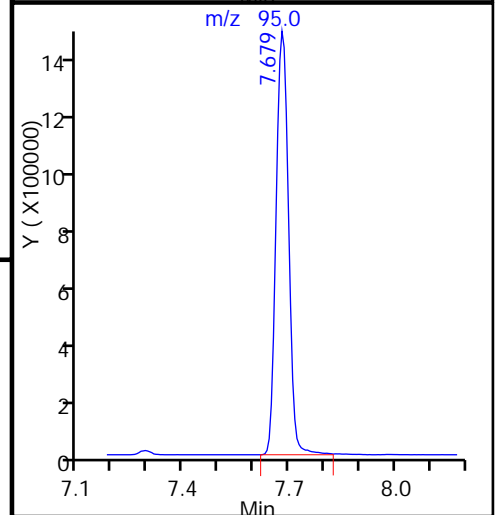
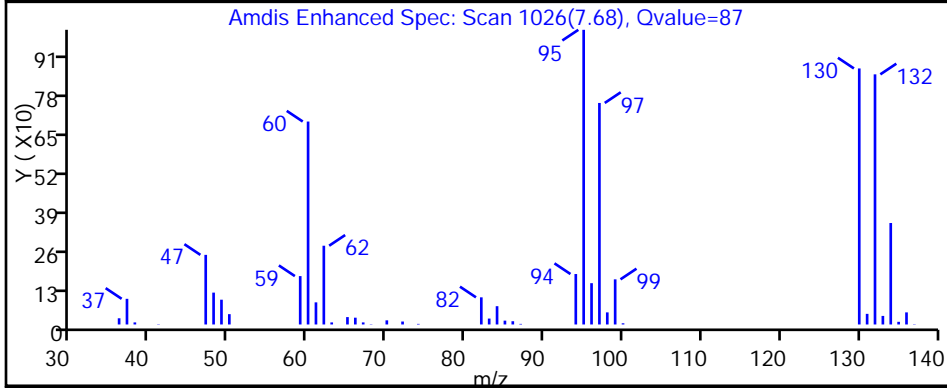
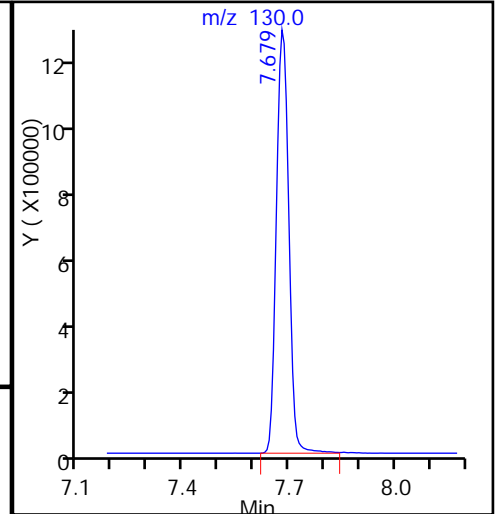
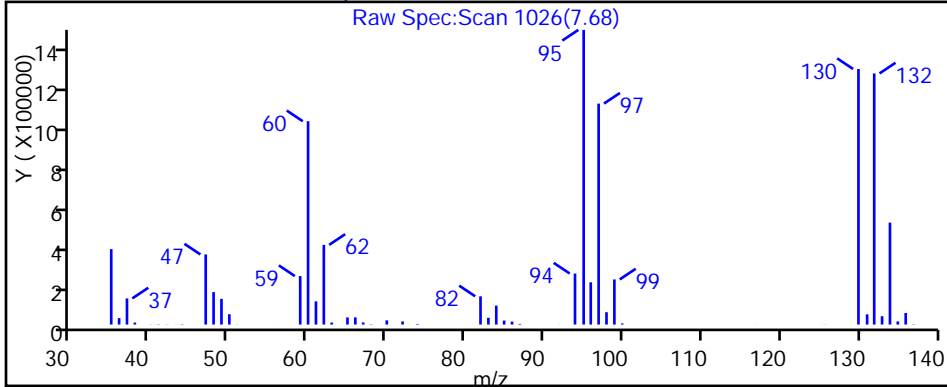
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D

Injection Date: 05-May-2015 20:14:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

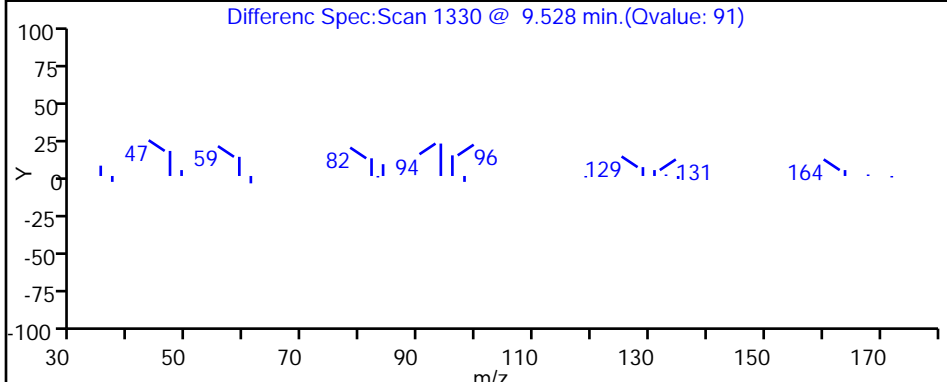
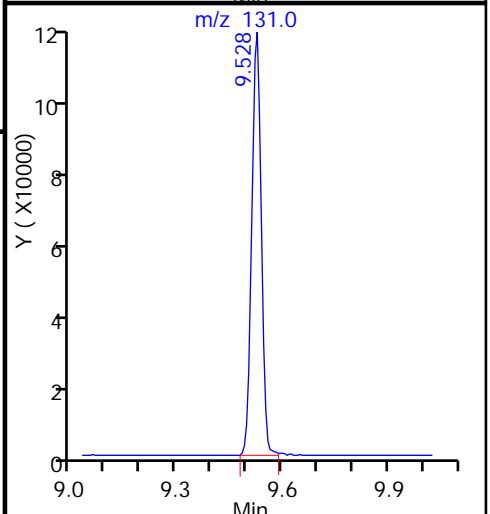
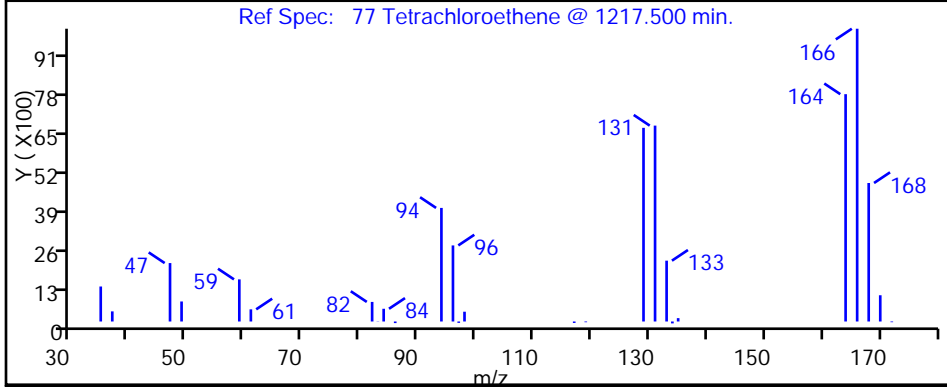
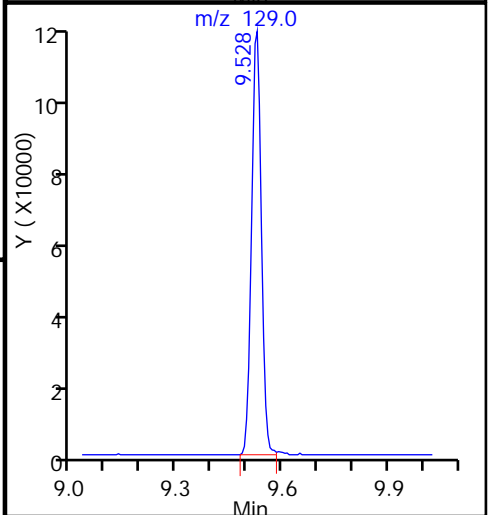
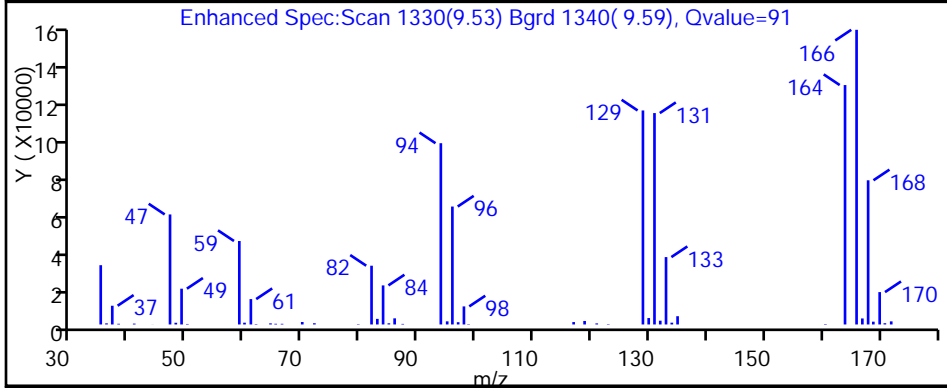
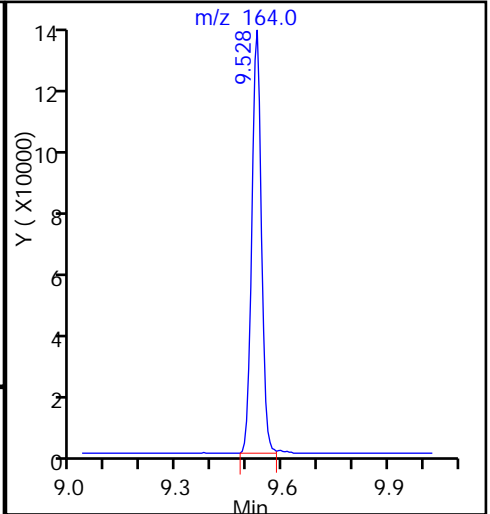
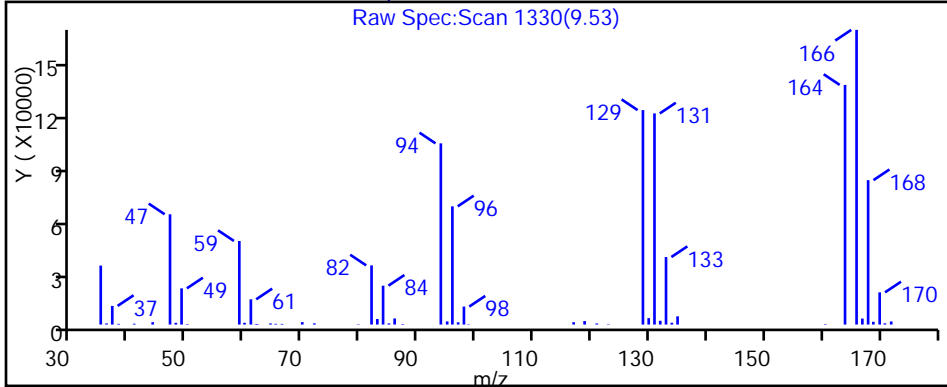
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



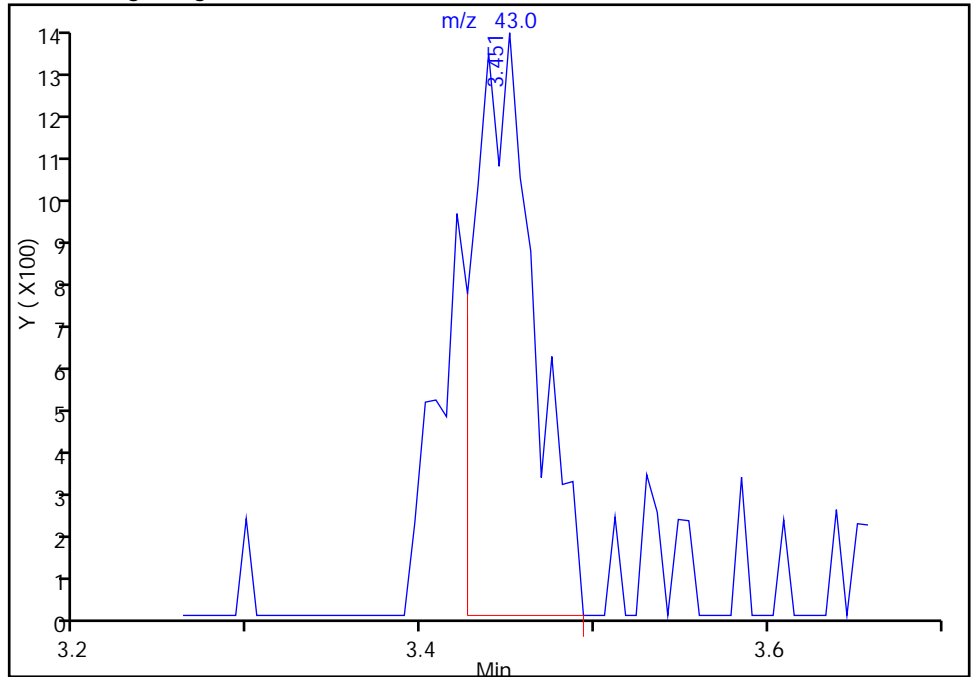
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505023.D
Injection Date: 05-May-2015 20:14:30 Instrument ID: CHHP6
Lims ID: 180-43402-C-7 Lab Sample ID: 180-43402-7
Client ID: HD-MW-51D-0/1-0
Operator ID: 001562 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

24 Acetone, CAS: 67-64-1

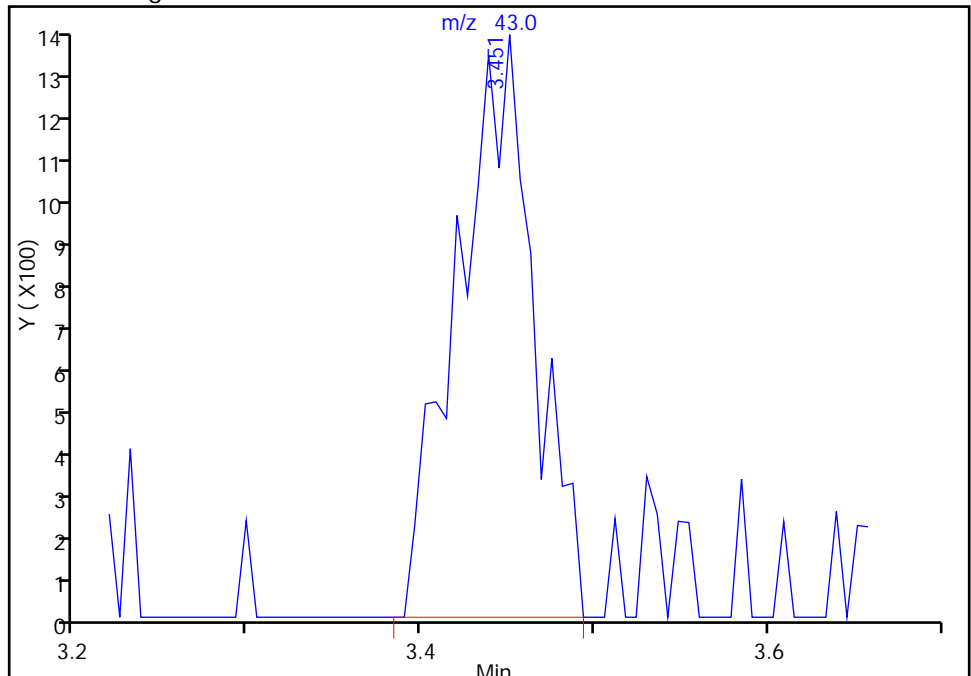
RT: 3.45
Area: 3259
Amount: 6.617635
Amount Units: ng

Processing Integration Results



RT: 3.45
Area: 4220
Amount: 8.569015
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 06-May-2015 07:50:25
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-51D-0/1-0 DL Lab Sample ID: 180-43402-7 DL
 Matrix: Water Lab File ID: 60506018.D
 Analysis Method: 8260C Date Collected: 04/23/2015 12:30
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 18:26
 Soil Aliquot Vol: _____ Dilution Factor: 25
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	25	U	25	7.1
75-01-4	Vinyl chloride	25	U	25	5.7
74-83-9	Bromomethane	25	U	25	7.8
75-00-3	Chloroethane	25	U	25	5.4
75-35-4	1,1-Dichloroethene	40		25	7.4
67-64-1	Acetone	130	U	130	63
75-15-0	Carbon disulfide	25	U	25	5.3
75-09-2	Methylene Chloride	15	J	25	3.1
156-60-5	trans-1,2-Dichloroethene	25	U	25	4.2
1634-04-4	Methyl tert-butyl ether	25	U	25	4.6
75-34-3	1,1-Dichloroethane	20	J	25	2.9
156-59-2	cis-1,2-Dichloroethene	230		25	5.9
74-97-5	Bromochloromethane	25	U	25	4.5
78-93-3	2-Butanone (MEK)	130	U	130	14
67-66-3	Chloroform	25	U	25	4.3
71-55-6	1,1,1-Trichloroethane	16	J	25	7.2
56-23-5	Carbon tetrachloride	25	U	25	3.4
71-43-2	Benzene	25	U	25	2.6
107-06-2	1,2-Dichloroethane	25	U	25	5.3
79-01-6	Trichloroethene	420		25	3.6
78-87-5	1,2-Dichloropropane	25	U	25	2.4
75-27-4	Bromodichloromethane	25	U	25	3.3
10061-01-5	cis-1,3-Dichloropropene	25	U	25	4.7
108-10-1	4-Methyl-2-pentanone (MIBK)	130	U	130	13
108-88-3	Toluene	25	U	25	3.8
10061-02-6	trans-1,3-Dichloropropene	25	U	25	3.7
79-00-5	1,1,2-Trichloroethane	25	U	25	5.0
127-18-4	Tetrachloroethene	33		25	3.7
591-78-6	2-Hexanone	130	U	130	4.0
124-48-1	Dibromochloromethane	25	U	25	3.4
106-93-4	1,2-Dibromoethane (EDB)	25	U	25	4.5
108-90-7	Chlorobenzene	25	U	25	3.4
630-20-6	1,1,1,2-Tetrachloroethane	25	U	25	6.9
100-41-4	Ethylbenzene	25	U	25	5.7
1330-20-7	Xylenes, Total	75	U	75	12
100-42-5	Styrene	25	U	25	2.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-51D-0/1-0 DL Lab Sample ID: 180-43402-7 DL
 Matrix: Water Lab File ID: 60506018.D
 Analysis Method: 8260C Date Collected: 04/23/2015 12:30
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 18:26
 Soil Aliquot Vol: _____ Dilution Factor: 25
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	<i>Bromoform</i>	25	U	25	4.8
79-34-5	<i>1,1,2,2-Tetrachloroethane</i>	25	U	25	5.0
107-13-1	<i>Acrylonitrile</i>	500	U	500	14
123-91-1	<i>1,4-Dioxane</i>	5000	U	5000	860

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		64-135
2037-26-5	Toluene-d8 (Surr)	110		71-118
460-00-4	4-Bromofluorobenzene (Surr)	105		70-118
1868-53-7	Dibromofluoromethane (Surr)	108		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506018.D
 Lims ID: 180-43402-E-7 Lab Sample ID: 180-43402-7
 Client ID: HD-MW-51D-0/1-0
 Sample Type: Client
 Inject. Date: 06-May-2015 18:26:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 25.0000
 Sample Info: 180-43402-E-7, 25x
 Misc. Info.: 180-0006797-018
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-May-2015 09:15:32 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: fergusond

Date: 07-May-2015 09:15:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.229	4.224	0.005	94	188832	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.290	-0.001	97	443986	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.399	-0.001	92	90923	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.747	-0.001	96	138474	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.553	6.554	-0.001	91	99637	54.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.932	-0.002	71	175849	57.3	
\$ 7 Toluene-d8 (Surr)	98	8.944	8.939	0.005	94	422438	54.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.585	-0.001	77	164016	52.3	
12 Chloromethane	50		1.761				ND	
13 Vinyl chloride	62		1.888				ND	
15 Bromomethane	94		2.259				ND	
16 Chloroethane	64		2.393				ND	
22 1,1-Dichloroethene	96	3.353	3.336	0.017	94	16471	8.01	
24 Acetone	43		3.428				ND	
26 Carbon disulfide	76		3.628				ND	
31 Methylene Chloride	84	4.138	4.127	0.011	59	7489	3.00	
33 Acrylonitrile	53		4.510				ND	
34 trans-1,2-Dichloroethene	96		4.559				ND	
35 Methyl tert-butyl ether	73		4.577				ND	
37 1,1-Dichloroethane	63	5.203	5.198	0.005	70	17152	3.98	
43 cis-1,2-Dichloroethene	96	5.945	5.940	0.005	85	119167	45.8	
44 2-Butanone (MEK)	43		5.946				ND	
48 Chlorobromomethane	128		6.232				ND	
50 Chloroform	83		6.372				ND	
51 1,1,1-Trichloroethane	97	6.541	6.542	-0.001	39	10838	3.17	
53 Carbon tetrachloride	117		6.719				ND	
56 Benzene	78		6.944				ND	
57 1,2-Dichloroethane	62		7.017				ND	
61 Trichloroethene	130	7.679	7.674	0.005	91	178204	84.4	
64 1,2-Dichloropropane	63		7.954				ND	
65 1,4-Dioxane	88		8.033				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.227				ND	
71 cis-1,3-Dichloropropene	75		8.678				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.824				ND	
73 Toluene	91		9.012				ND	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97		9.450				ND	
77 Tetrachloroethene	164	9.528	9.529	-0.001	89	10169	6.55	
79 2-Hexanone	43		9.663				ND	
81 Chlorodibromomethane	129		9.821				ND	
82 Ethylene Dibromide	107		9.943				ND	
84 Chlorobenzene	112		10.430				ND	
86 1,1,1,2-Tetrachloroethane	131		10.521				ND	
87 Ethylbenzene	106		10.527				ND	
88 m-Xylene & p-Xylene	106		10.661				ND	
89 o-Xylene	106		11.044				ND	
90 Styrene	104		11.062				ND	
91 Bromoform	173		11.245				ND	
96 1,1,2,2-Tetrachloroethane	83		11.713				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506018.D

Injection Date: 06-May-2015 18:26:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-E-7

Lab Sample ID: 180-43402-7

Worklist Smp#: 18

Client ID: HD-MW-51D-0/1-0

Purge Vol: 5.000 mL

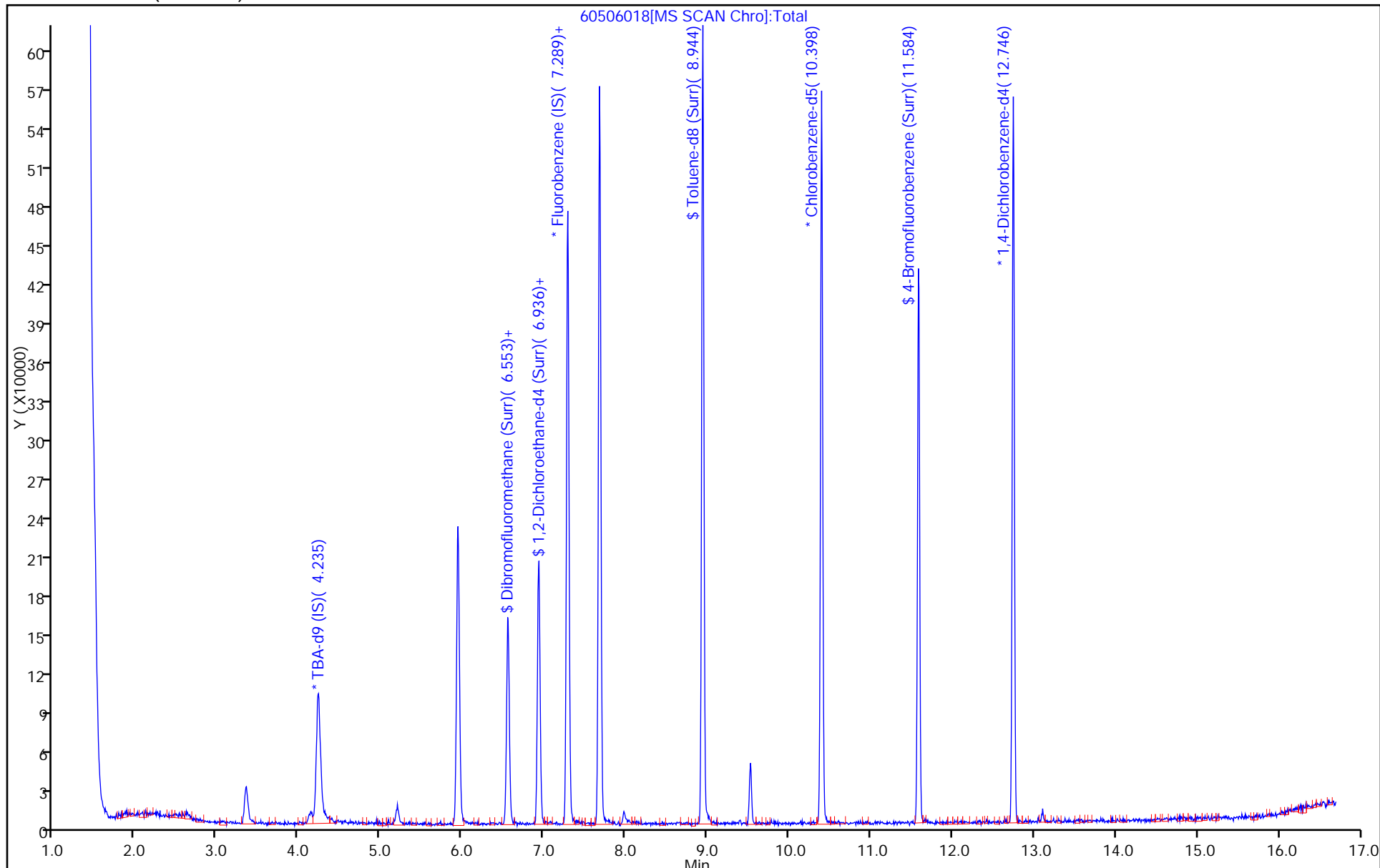
Dil. Factor: 25.0000

ALS Bottle#: 17

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506018.D

Injection Date: 06-May-2015 18:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 25.0000

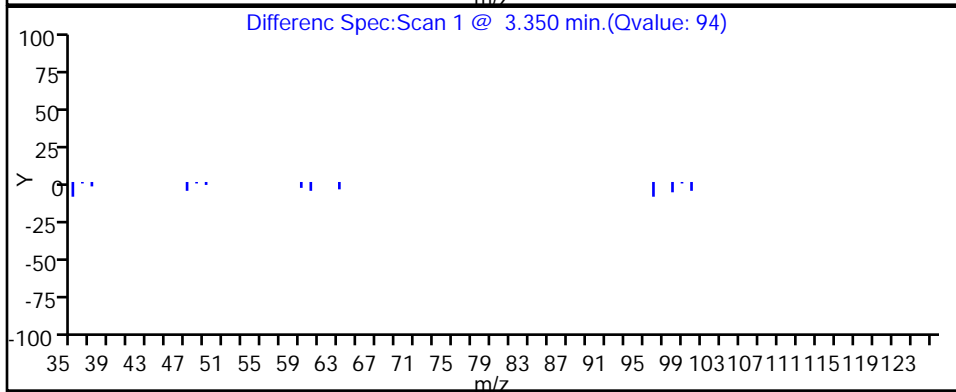
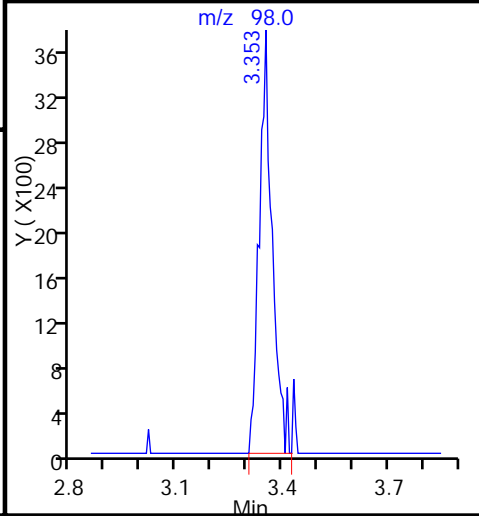
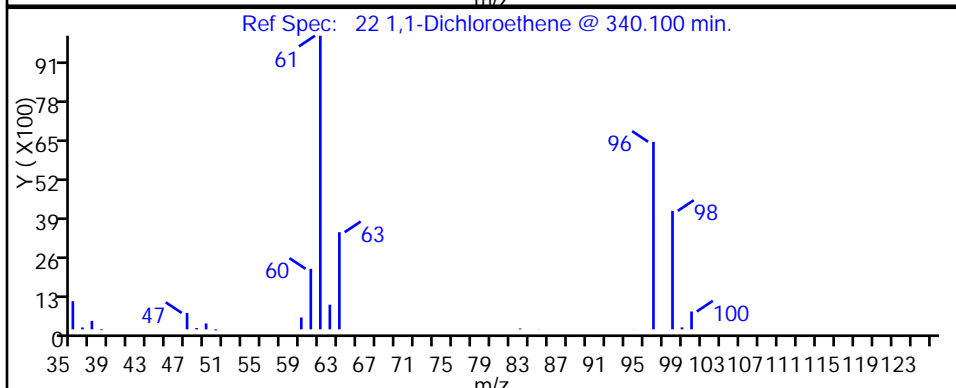
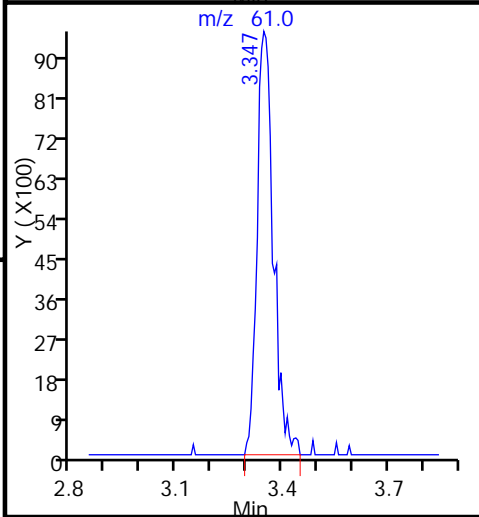
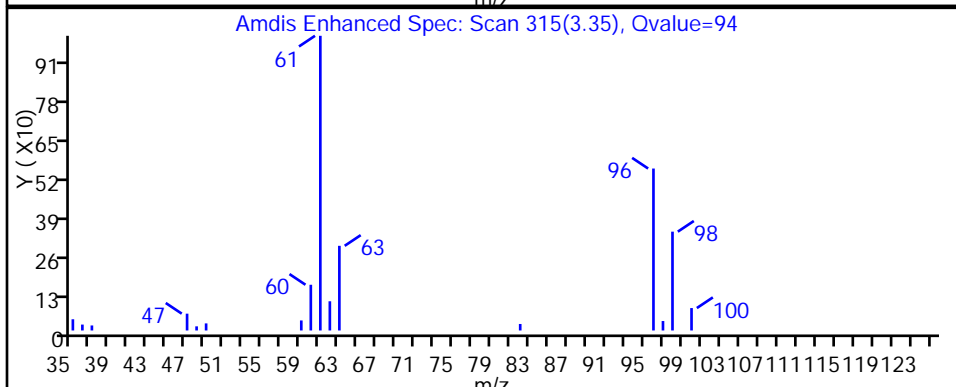
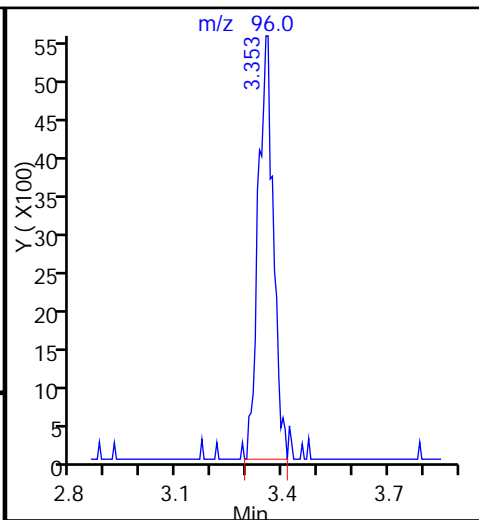
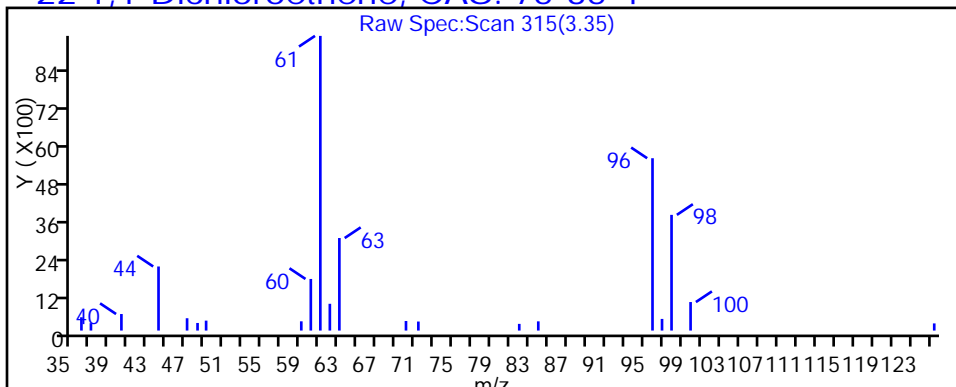
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506018.D

Injection Date: 06-May-2015 18:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 25.0000

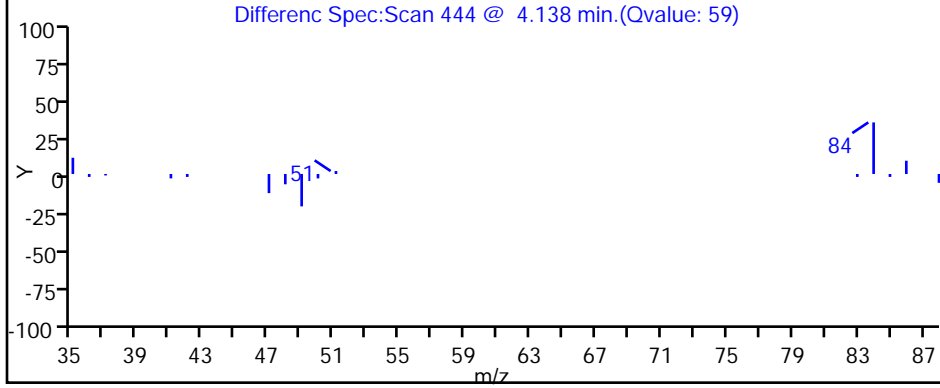
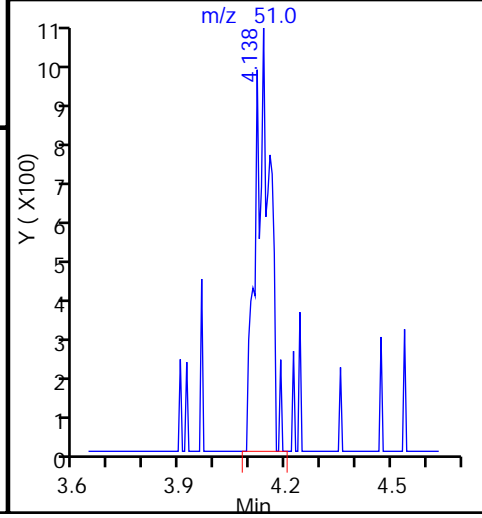
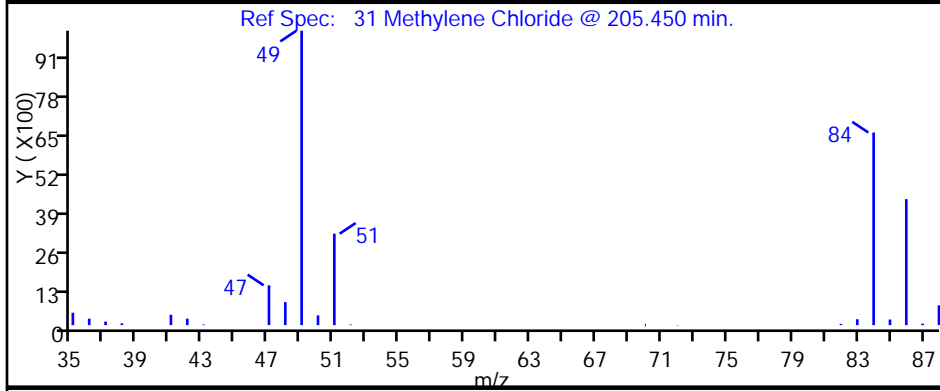
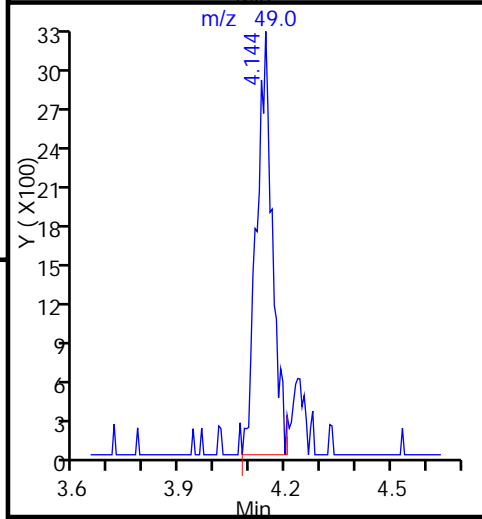
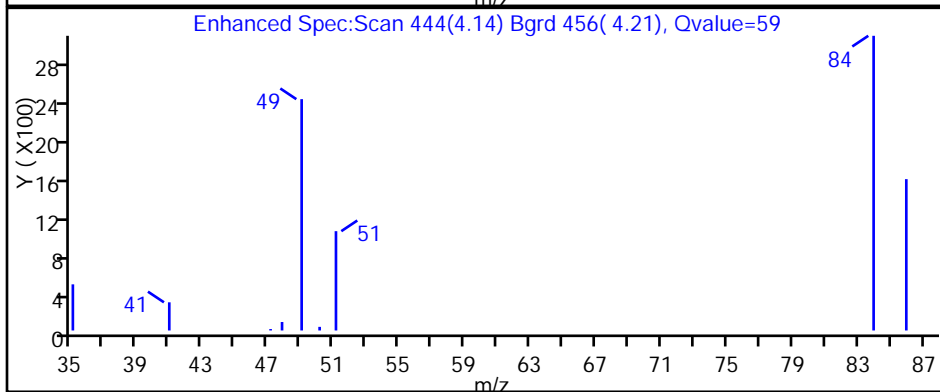
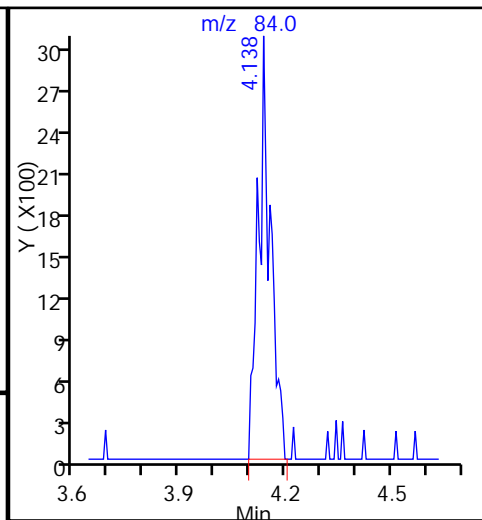
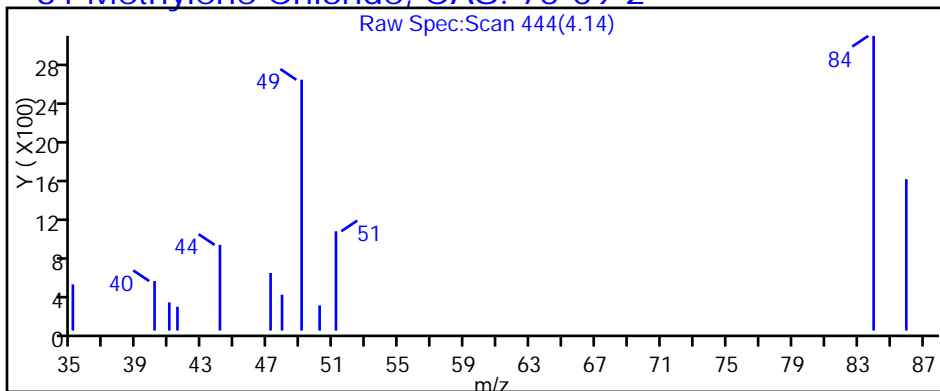
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506018.D

Injection Date: 06-May-2015 18:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 25.0000

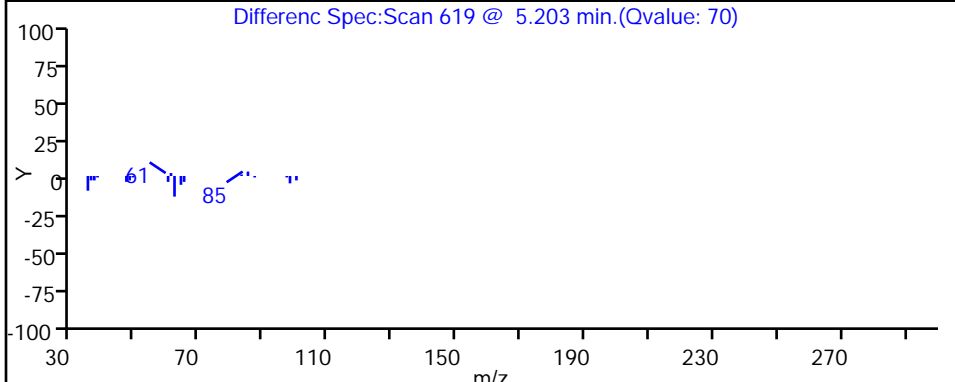
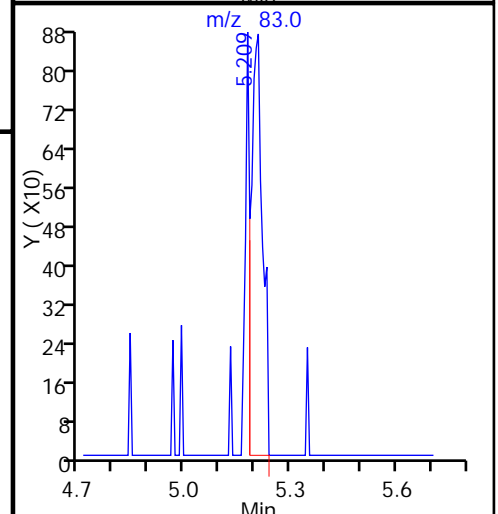
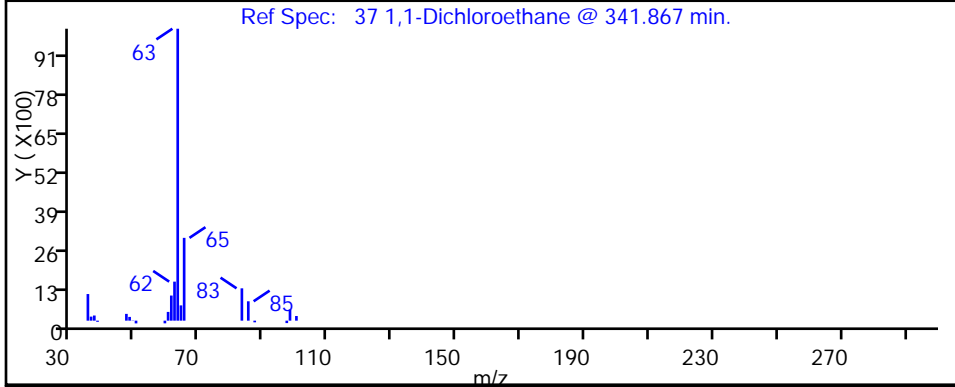
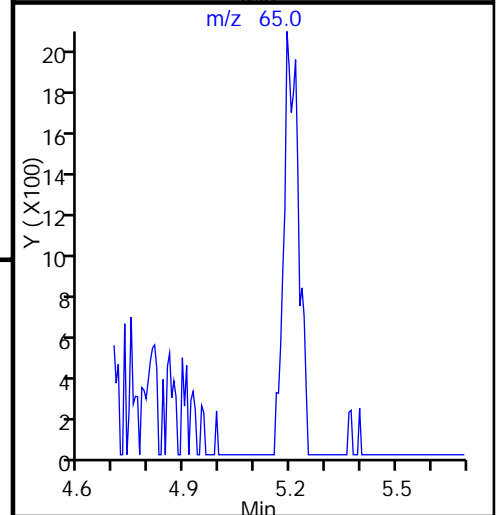
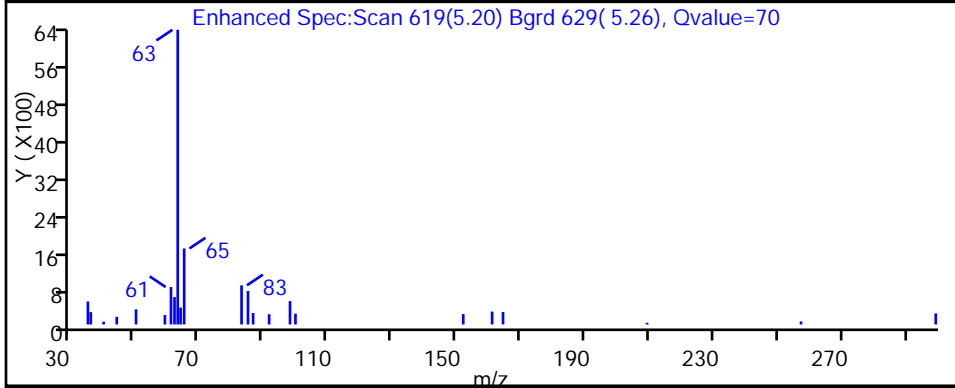
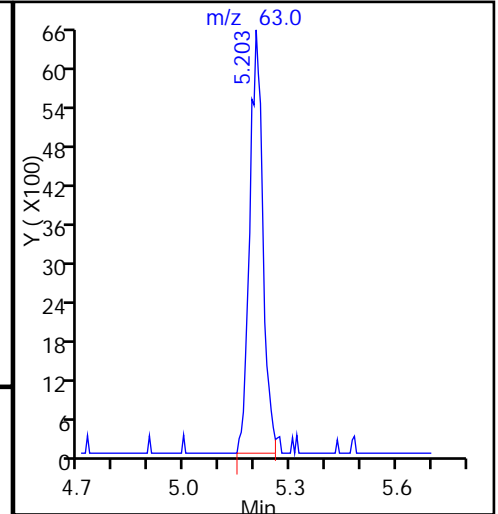
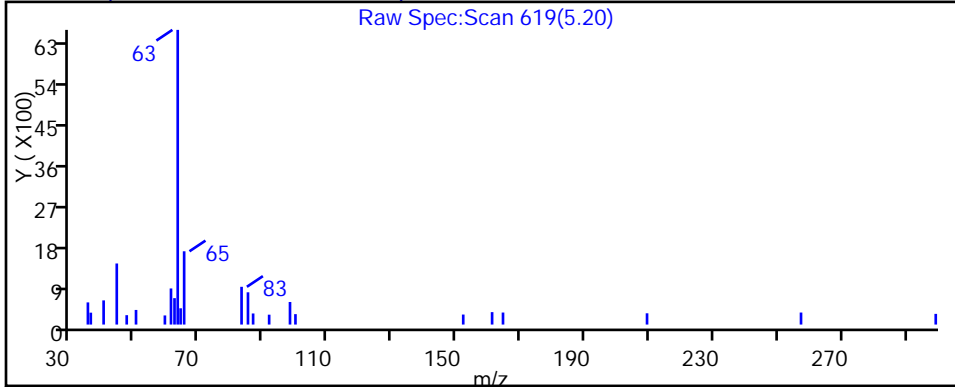
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506018.D

Injection Date: 06-May-2015 18:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 25.0000

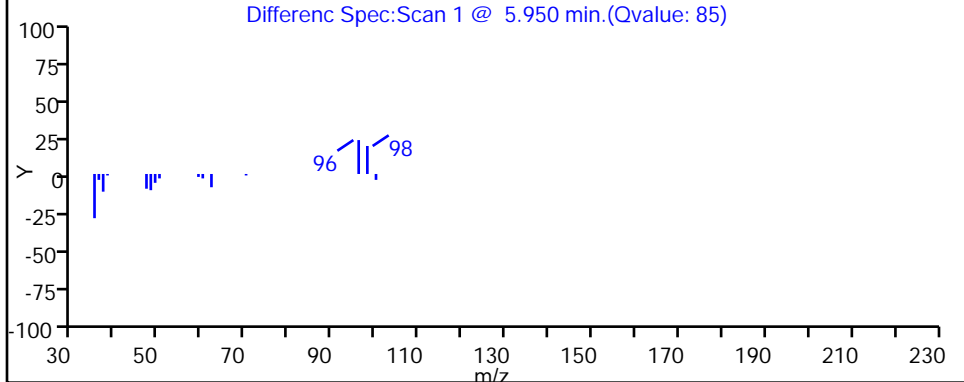
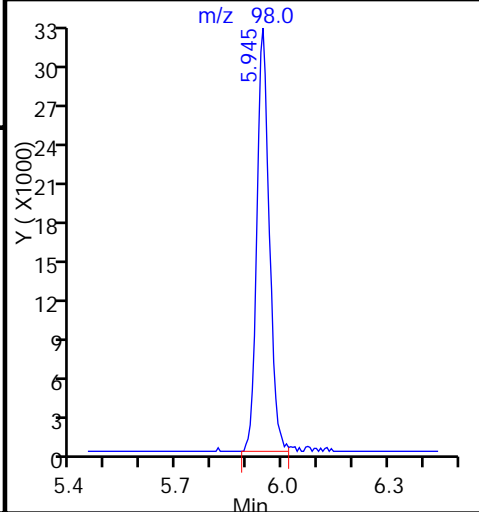
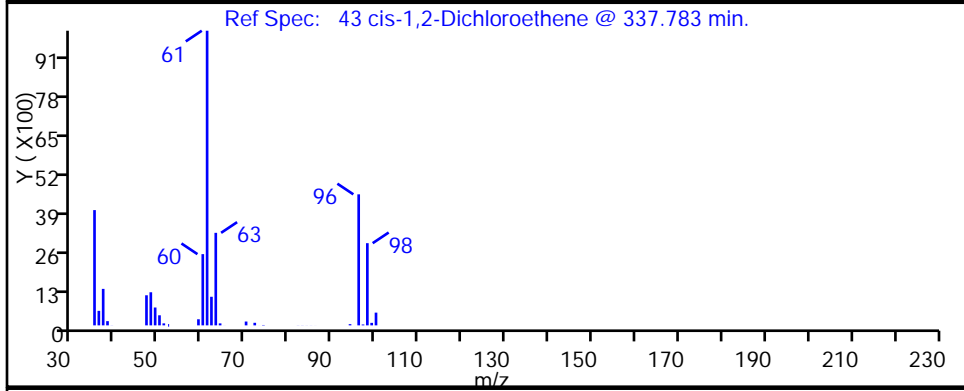
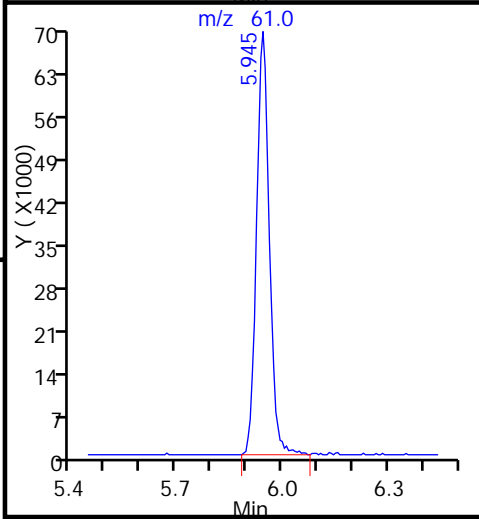
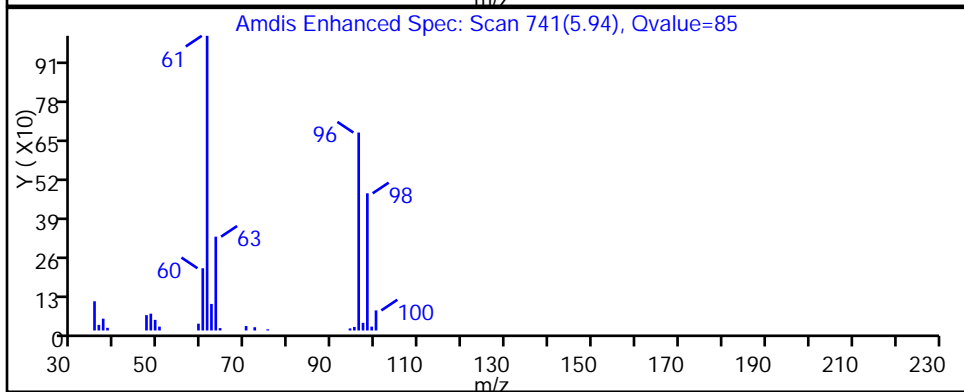
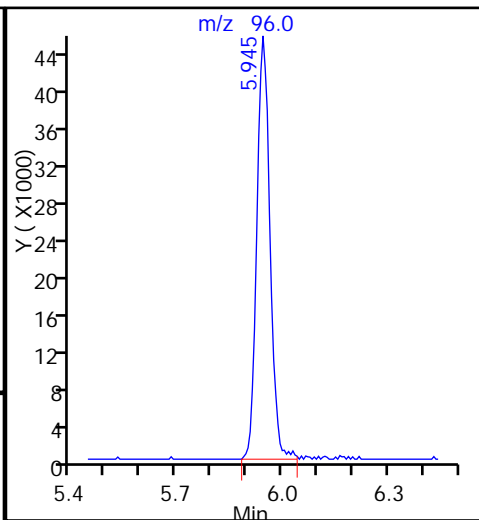
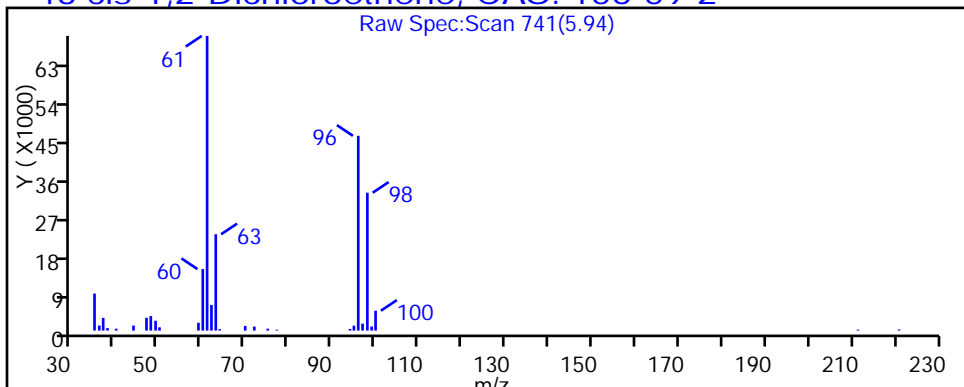
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506018.D

Injection Date: 06-May-2015 18:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 25.0000

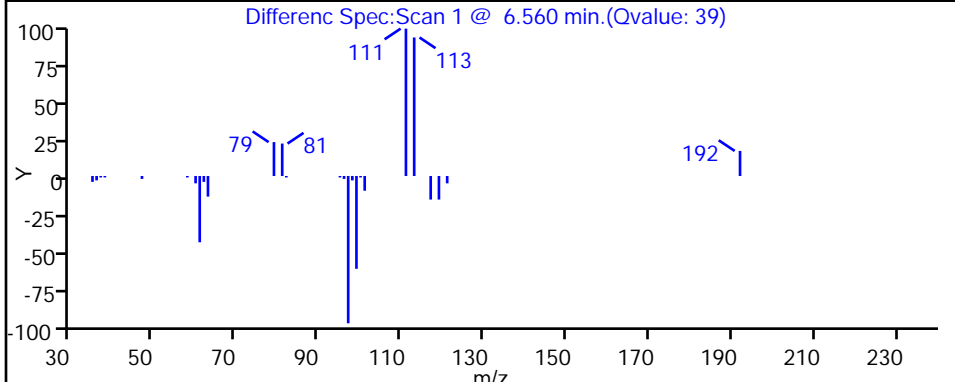
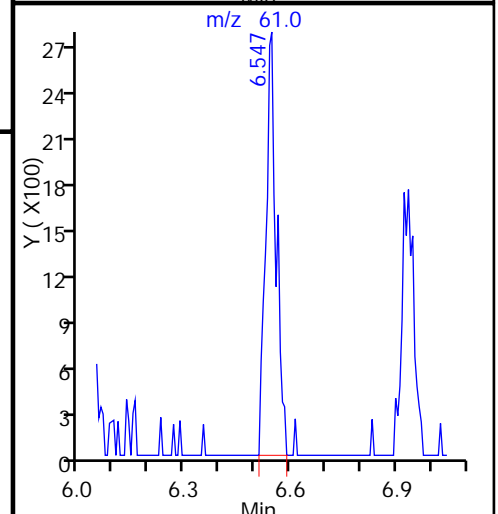
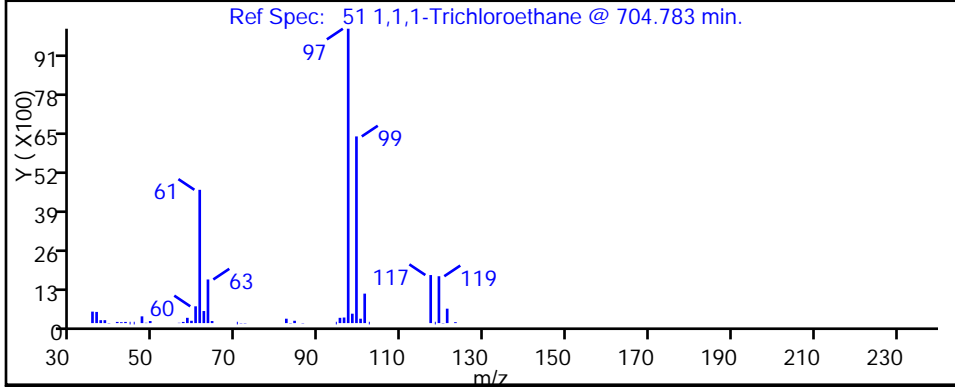
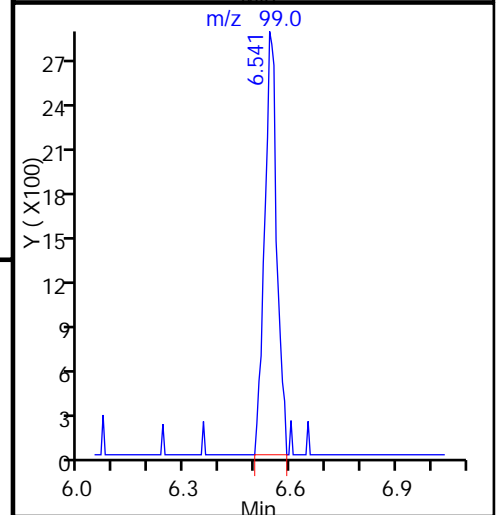
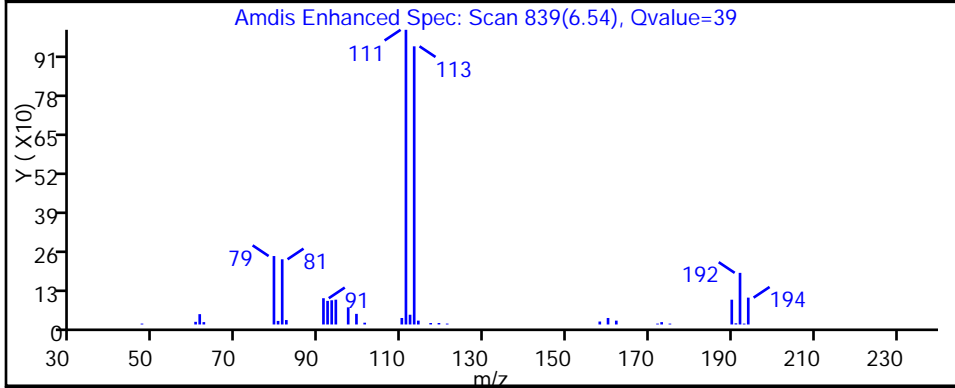
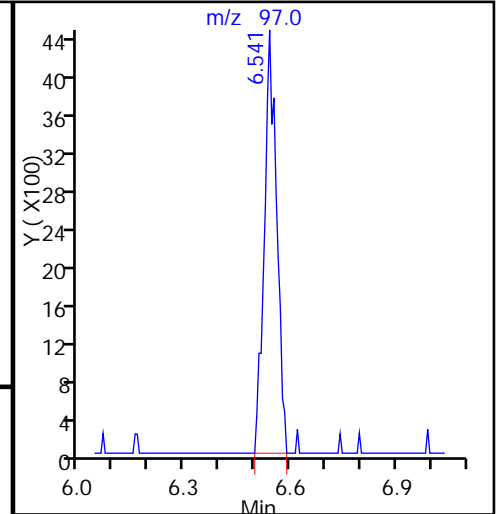
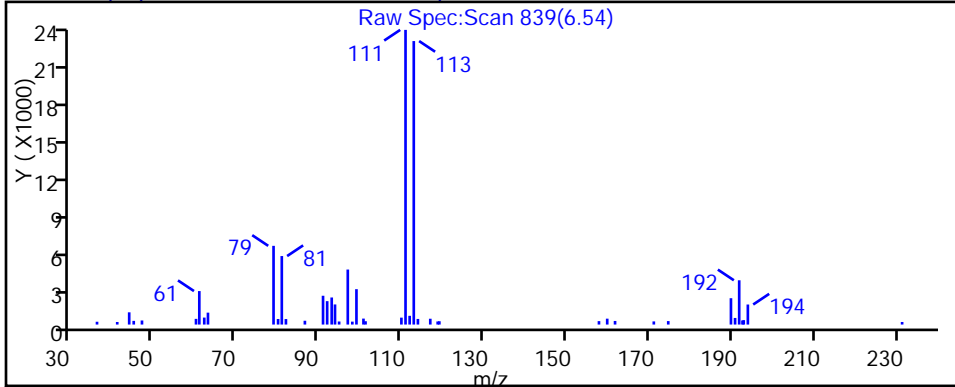
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506018.D

Injection Date: 06-May-2015 18:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 25.0000

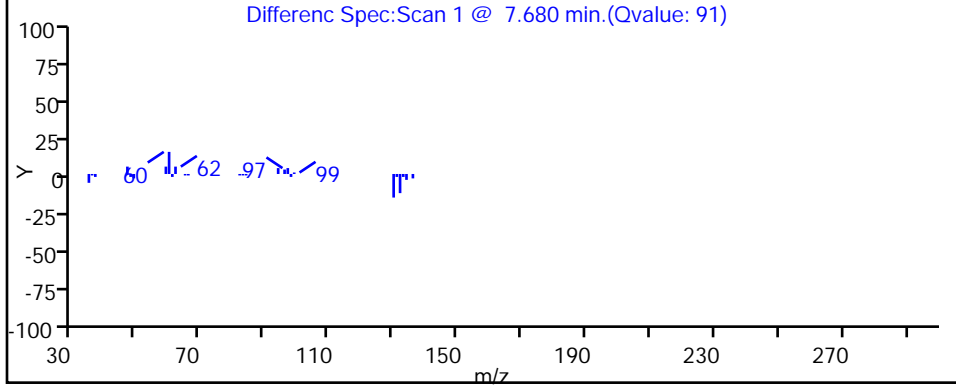
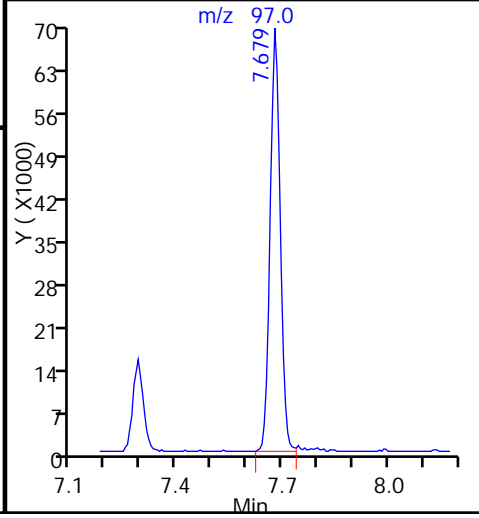
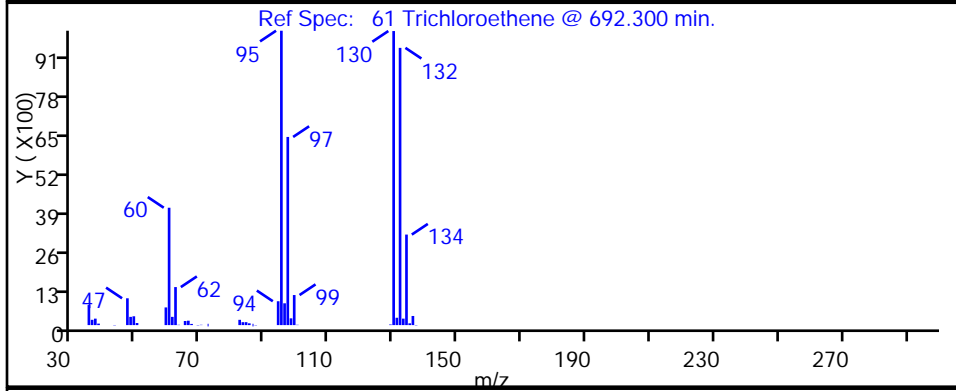
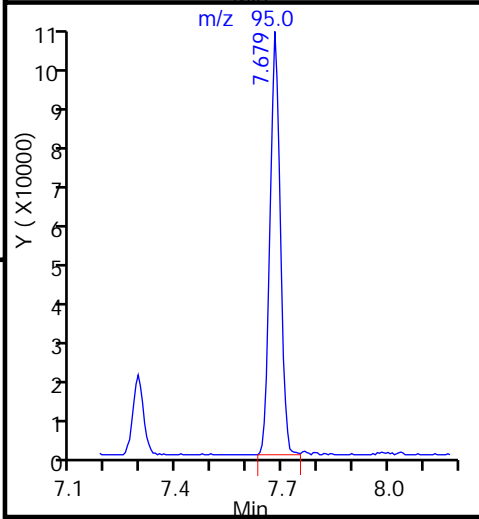
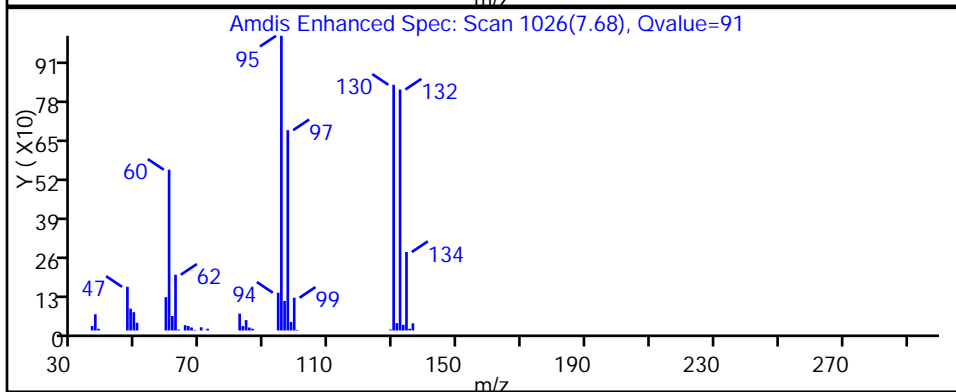
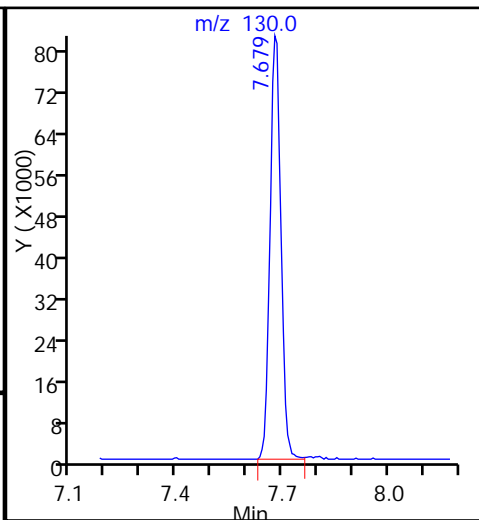
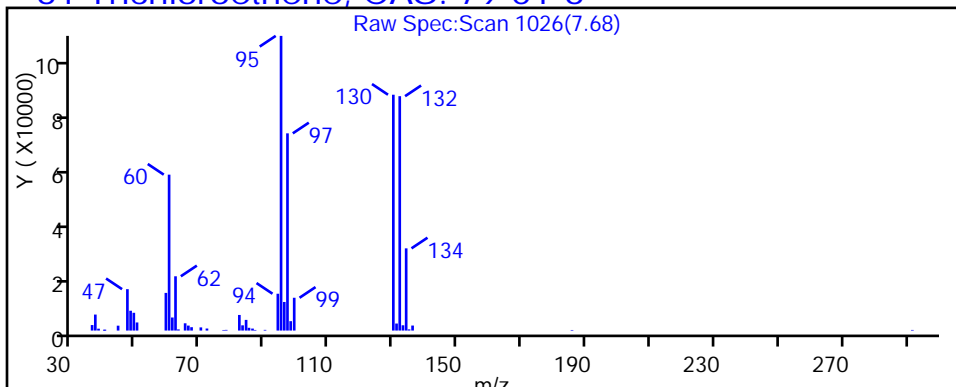
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506018.D

Injection Date: 06-May-2015 18:26:30

Instrument ID: CHHP6

Lims ID: 180-43402-E-7

Lab Sample ID: 180-43402-7

Client ID: HD-MW-51D-0/1-0

Operator ID: 001562

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 5.000 mL

Dil. Factor: 25.0000

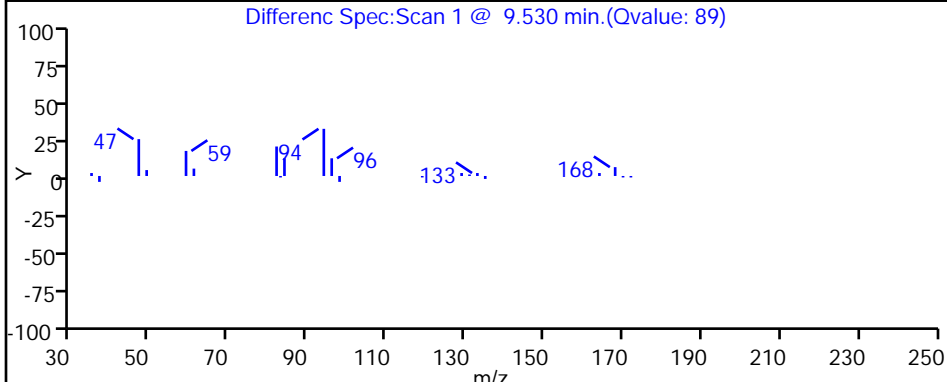
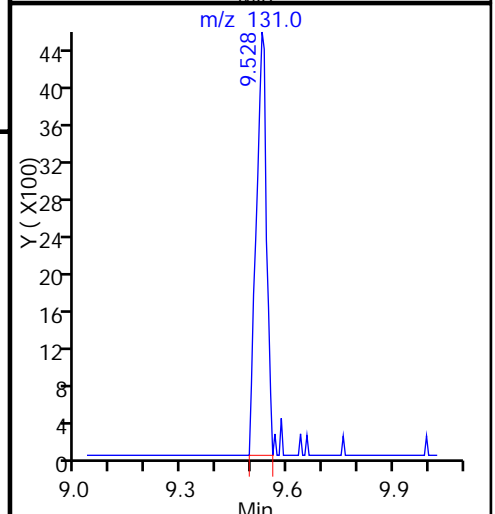
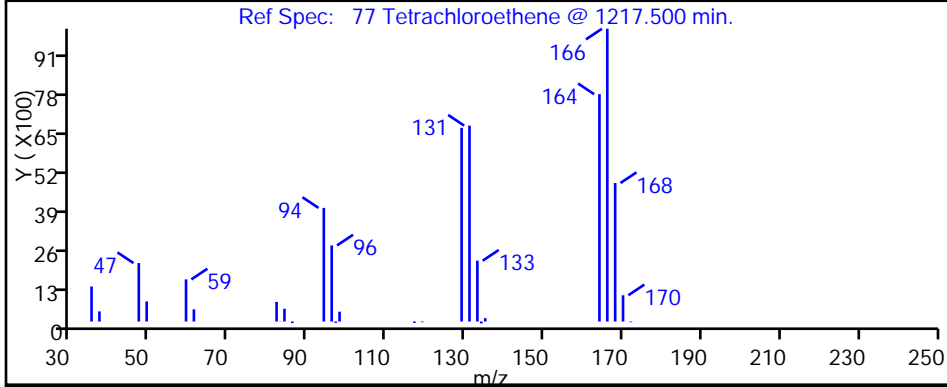
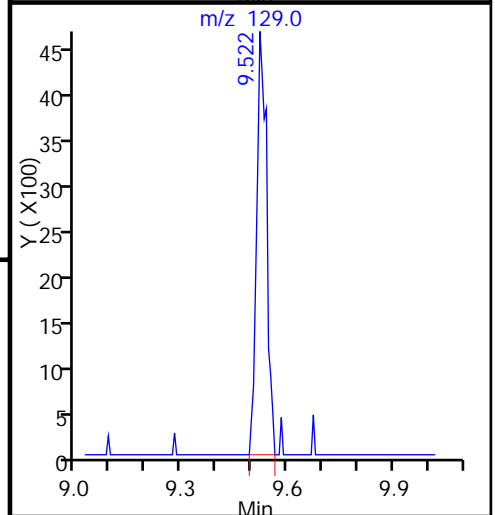
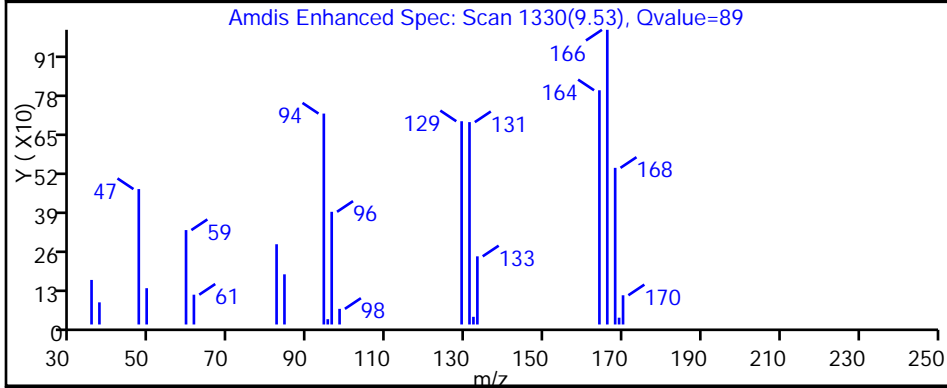
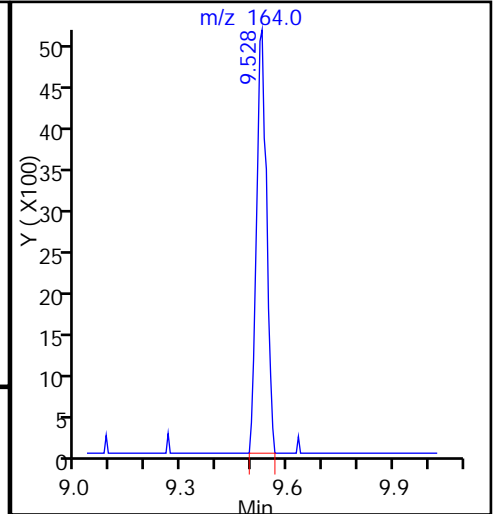
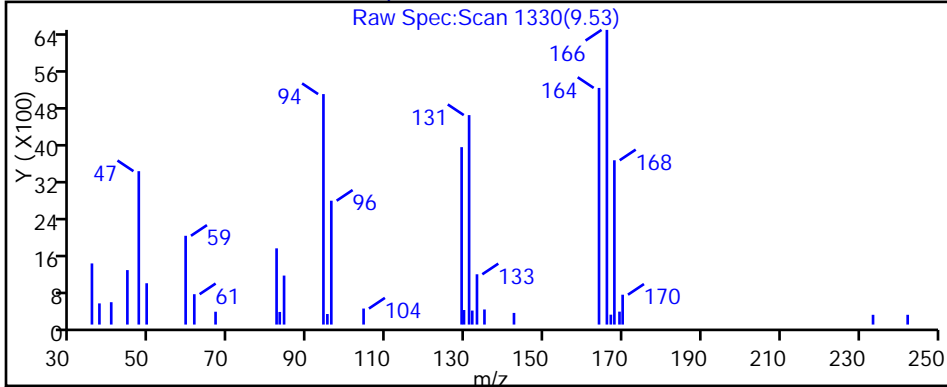
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-50S-0/1-0 Lab Sample ID: 180-43402-8
 Matrix: Water Lab File ID: 60505025.D
 Analysis Method: 8260C Date Collected: 04/23/2015 11:30
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 21:02
 Soil Aliquot Vol: _____ Dilution Factor: 50
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50	U	50	14
75-01-4	Vinyl chloride	50	U	50	11
74-83-9	Bromomethane	50	U	50	16
75-00-3	Chloroethane	50	U	50	11
75-35-4	1,1-Dichloroethene	30	J	50	15
67-64-1	Acetone	250	U	250	130
75-15-0	Carbon disulfide	50	U	50	11
75-09-2	Methylene Chloride	39	J	50	6.3
156-60-5	trans-1,2-Dichloroethene	50	U	50	8.5
1634-04-4	Methyl tert-butyl ether	50	U	50	9.2
75-34-3	1,1-Dichloroethane	9.9	J	50	5.8
156-59-2	cis-1,2-Dichloroethene	720		50	12
74-97-5	Bromochloromethane	50	U	50	9.0
78-93-3	2-Butanone (MEK)	250	U	250	27
67-66-3	Chloroform	50	U	50	8.5
71-55-6	1,1,1-Trichloroethane	65		50	14
56-23-5	Carbon tetrachloride	50	U	50	6.8
71-43-2	Benzene	50	U	50	5.3
107-06-2	1,2-Dichloroethane	50	U	50	11
79-01-6	Trichloroethene	620		50	7.2
78-87-5	1,2-Dichloropropane	50	U	50	4.7
75-27-4	Bromodichloromethane	50	U	50	6.5
10061-01-5	cis-1,3-Dichloropropene	50	U	50	9.3
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	26
108-88-3	Toluene	50	U	50	7.5
10061-02-6	trans-1,3-Dichloropropene	50	U	50	7.4
79-00-5	1,1,2-Trichloroethane	50	U	50	10
127-18-4	Tetrachloroethene	160		50	7.4
591-78-6	2-Hexanone	250	U	250	8.0
124-48-1	Dibromochloromethane	50	U	50	6.8
106-93-4	1,2-Dibromoethane (EDB)	50	U	50	9.0
108-90-7	Chlorobenzene	50	U	50	6.8
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	14
100-41-4	Ethylbenzene	50	U	50	11
1330-20-7	Xylenes, Total	150	U	150	24
100-42-5	Styrene	50	U	50	4.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-50S-0/1-0 Lab Sample ID: 180-43402-8
 Matrix: Water Lab File ID: 60505025.D
 Analysis Method: 8260C Date Collected: 04/23/2015 11:30
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 21:02
 Soil Aliquot Vol: _____ Dilution Factor: 50
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	50	U	50	9.6
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	10
107-13-1	Acrylonitrile	1000	U	1000	27
123-91-1	1,4-Dioxane	10000	U	10000	1700

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	102		70-118
1868-53-7	Dibromofluoromethane (Surr)	105		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D
 Lims ID: 180-43402-C-8 Lab Sample ID: 180-43402-8
 Client ID: HD-MW-50S-0/1-0
 Sample Type: Client
 Inject. Date: 05-May-2015 21:02:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 50.0000
 Sample Info: 180-43402-C-8, 50x
 Misc. Info.: 180-0006773-025
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 07:52:55 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond

Date: 06-May-2015 07:53:11

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.236	4.239	-0.003	97	183129	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.286	0.004	97	356204	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.401	-0.003	93	72515	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.743	0.003	96	110070	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.560	6.547	0.013	91	77125	52.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	71	142503	57.9	
\$ 7 Toluene-d8 (Surr)	98	8.944	8.938	0.006	94	330237	53.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.585	0.000	78	127770	51.1	
12 Chloromethane	50		1.766				ND	
13 Vinyl chloride	62		1.894				ND	
15 Bromomethane	94		2.246				ND	
16 Chloroethane	64		2.392				ND	
22 1,1-Dichloroethene	96	3.347	3.341	0.006	96	5027	3.05	
24 Acetone	43		3.427				ND	
26 Carbon disulfide	76		3.633				ND	
31 Methylene Chloride	84	4.132	4.132	0.000	46	7752	3.87	
33 Acrylonitrile	53		4.497				ND	
34 trans-1,2-Dichloroethene	96		4.558				ND	
35 Methyl tert-butyl ether	73		4.570				ND	
37 1,1-Dichloroethane	63	5.209	5.197	0.012	1	3435	0.99	M
43 cis-1,2-Dichloroethene	96	5.945	5.945	0.000	83	150077	71.8	
44 2-Butanone (MEK)	43		5.951				ND	
48 Chlorobromomethane	128		6.231				ND	
50 Chloroform	83	6.365	6.371	-0.006	1	1502	0.4501	
51 1,1,1-Trichloroethane	97	6.541	6.541	0.000	93	17785	6.48	
53 Carbon tetrachloride	117		6.718				ND	
56 Benzene	78		6.943				ND	
57 1,2-Dichloroethane	62		7.016				ND	
61 Trichloroethene	130	7.679	7.679	0.000	91	105569	62.3	
64 1,2-Dichloropropane	63		7.953				ND	
65 1,4-Dioxane	88		8.032				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.233				ND	
71 cis-1,3-Dichloropropene	75		8.677				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.823				ND	
73 Toluene	91		9.011				ND	
74 trans-1,3-Dichloropropene	75		9.255				ND	
76 1,1,2-Trichloroethane	97		9.449				ND	
77 Tetrachloroethene	164	9.528	9.522	0.006	91	20376	16.5	
79 2-Hexanone	43		9.662				ND	
81 Chlorodibromomethane	129		9.826				ND	
82 Ethylene Dibromide	107		9.942				ND	
84 Chlorobenzene	112		10.429				ND	
86 1,1,1,2-Tetrachloroethane	131		10.520				ND	
87 Ethylbenzene	106		10.526				ND	
88 m-Xylene & p-Xylene	106		10.660				ND	
89 o-Xylene	106		11.043				ND	
90 Styrene	104		11.061				ND	
91 Bromoform	173		11.244				ND	
96 1,1,2,2-Tetrachloroethane	83		11.712				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D

Injection Date: 05-May-2015 21:02:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43402-C-8

Lab Sample ID: 180-43402-8

Worklist Smp#: 25

Client ID: HD-MW-50S-0/1-0

Purge Vol: 5.000 mL

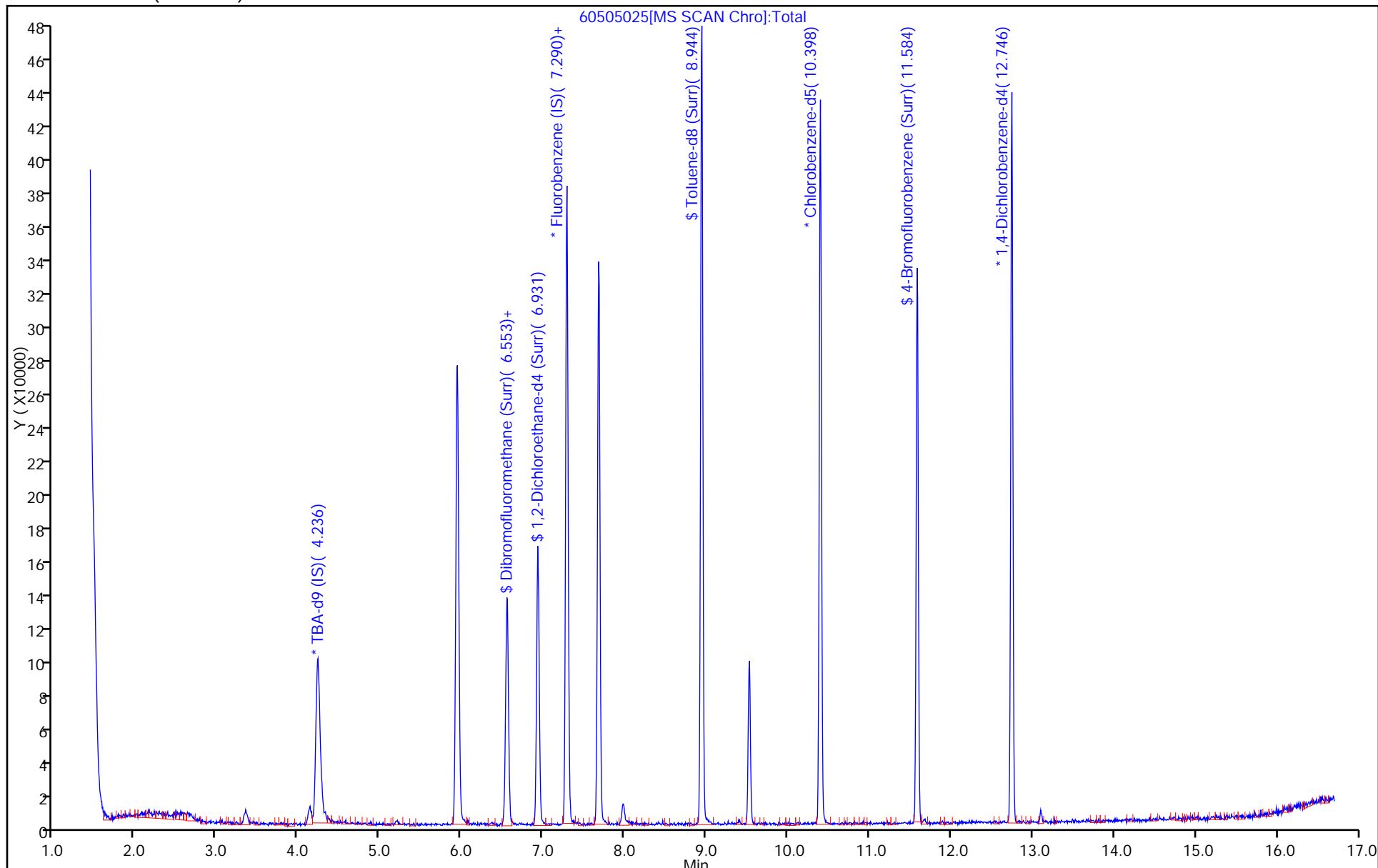
Dil. Factor: 50.0000

ALS Bottle#: 24

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D

Injection Date: 05-May-2015 21:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-8

Lab Sample ID: 180-43402-8

Client ID: HD-MW-50S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

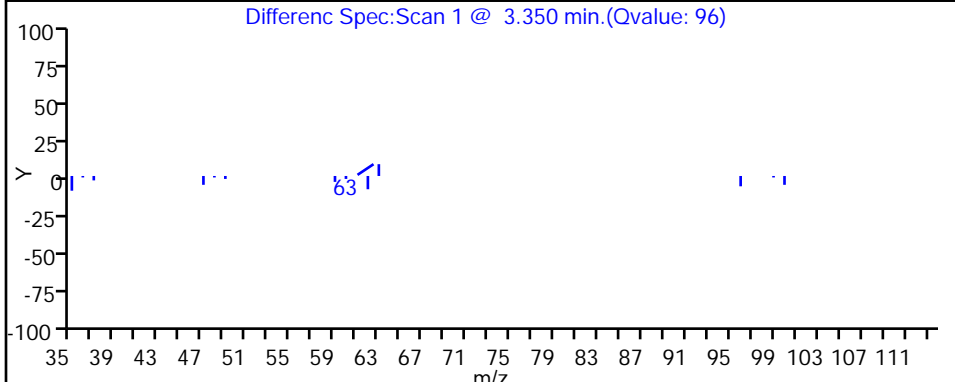
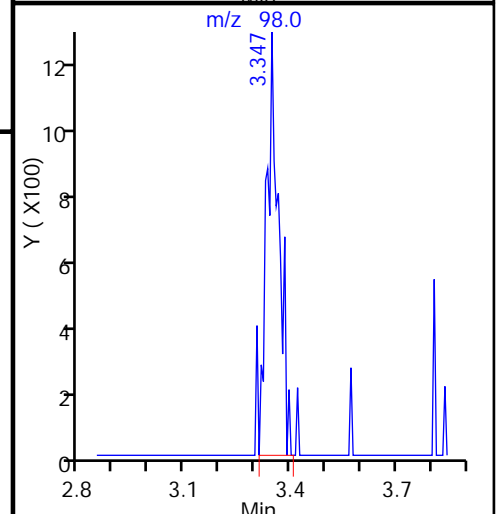
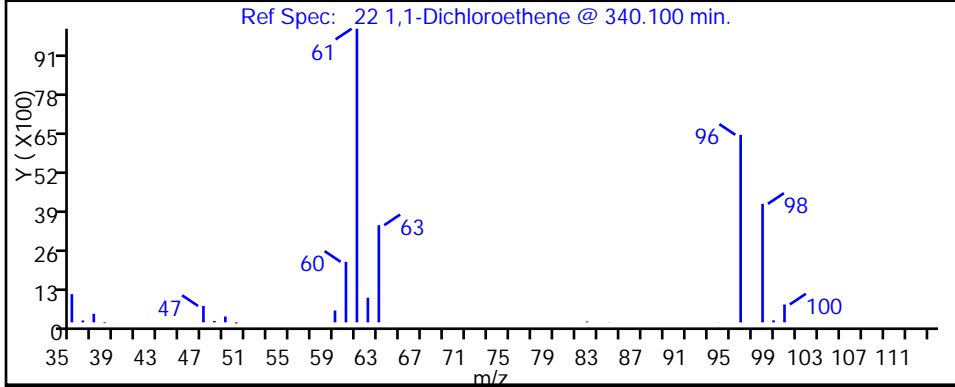
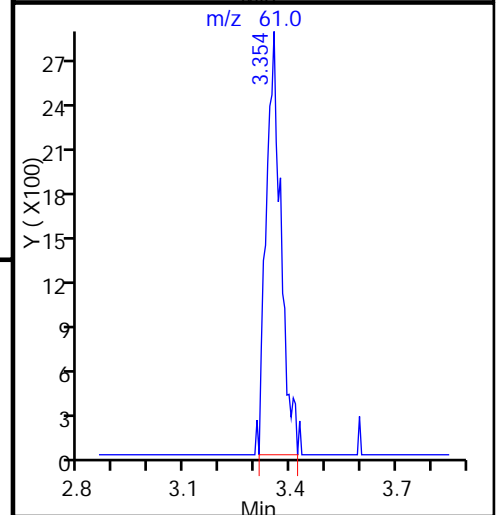
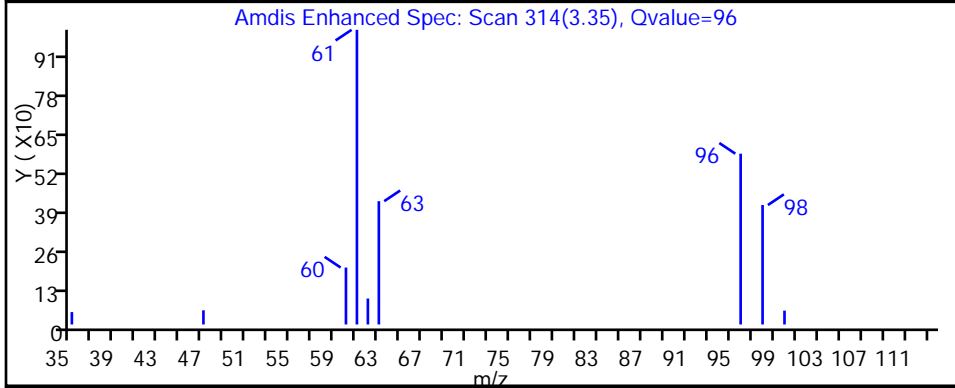
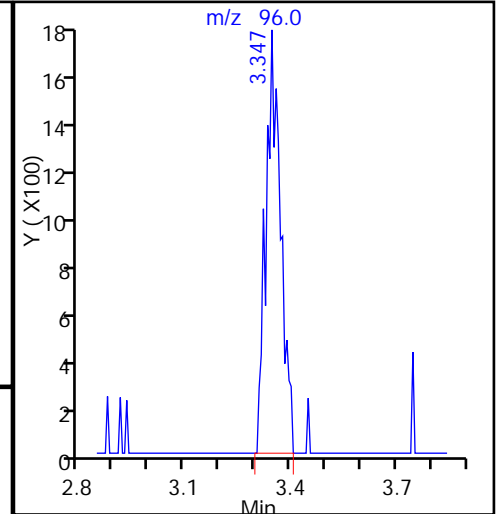
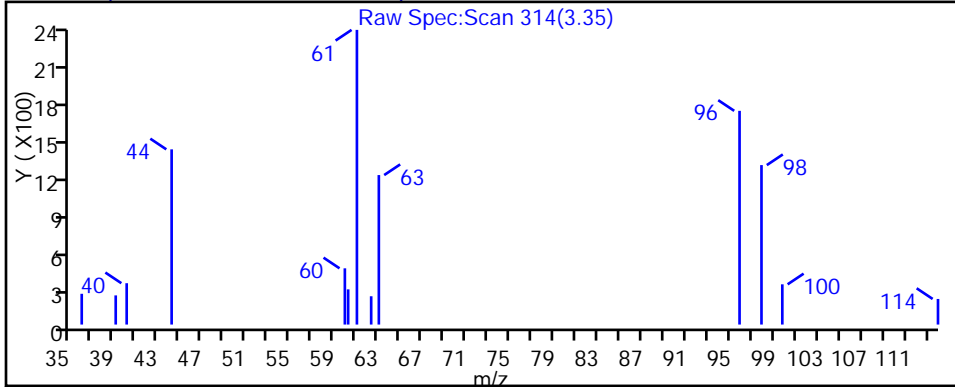
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

22 1,1-Dichloroethene, CAS: 75-35-4



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D

Injection Date: 05-May-2015 21:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-8

Lab Sample ID: 180-43402-8

Client ID: HD-MW-50S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

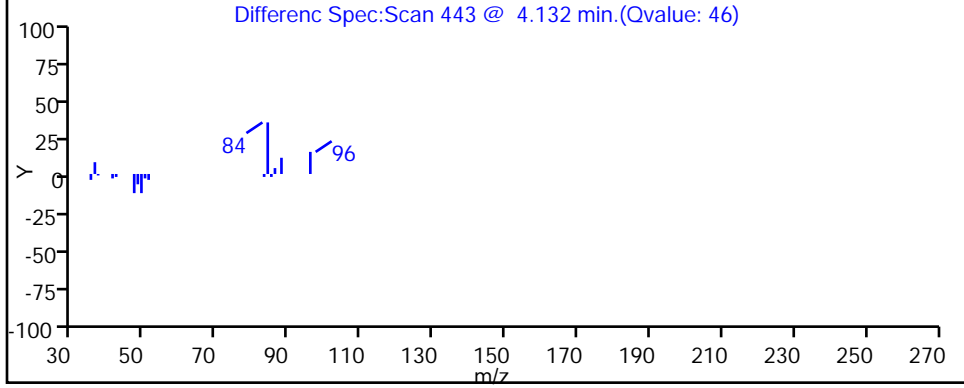
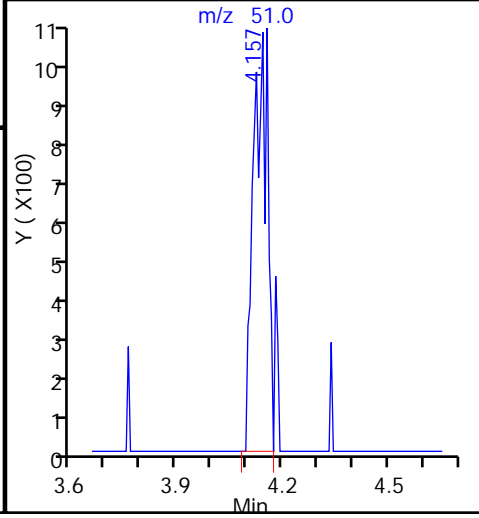
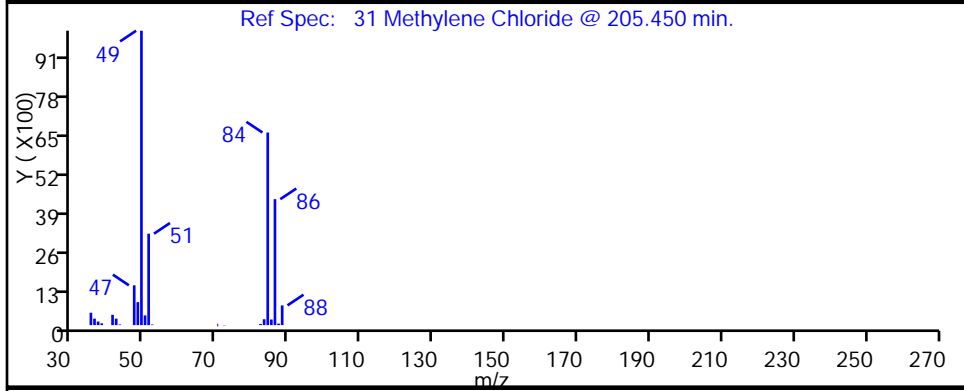
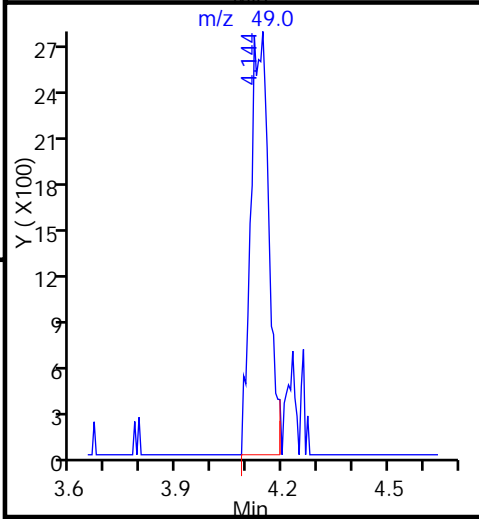
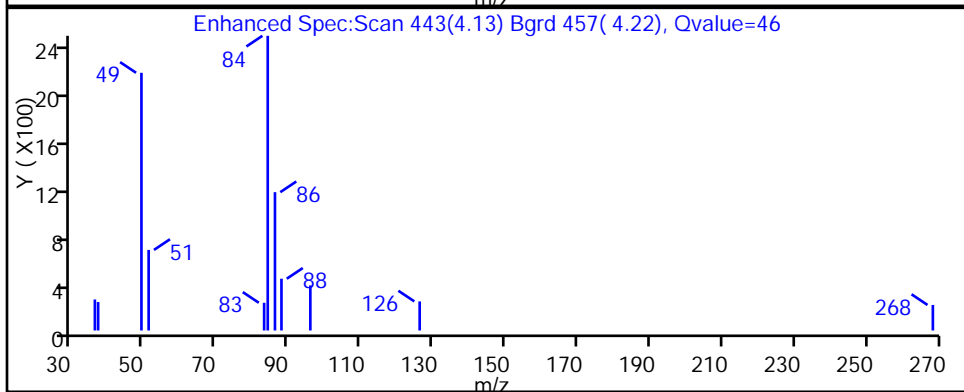
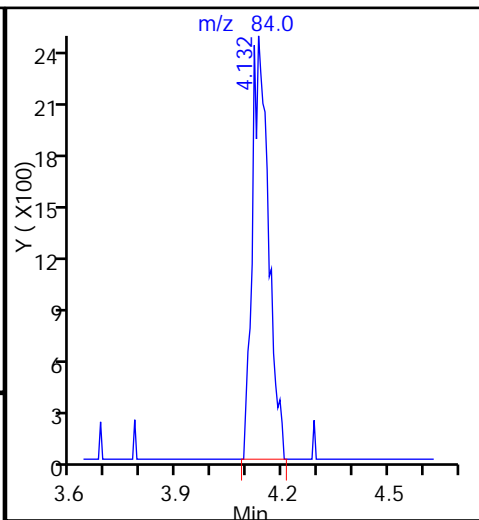
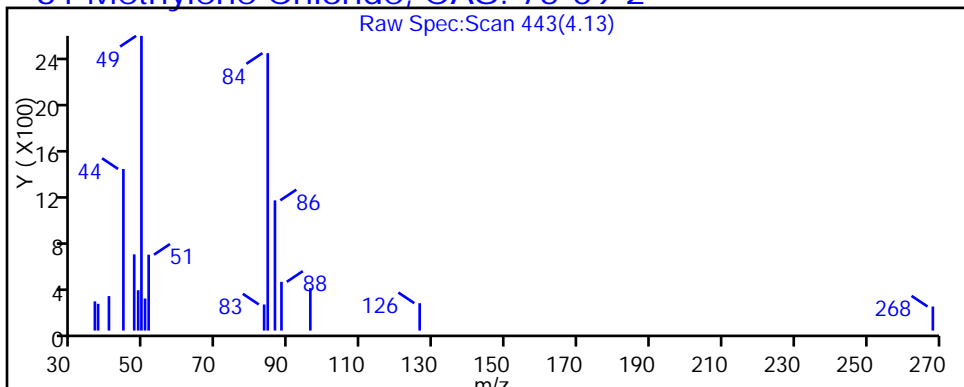
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D

Injection Date: 05-May-2015 21:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-8

Lab Sample ID: 180-43402-8

Client ID: HD-MW-50S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

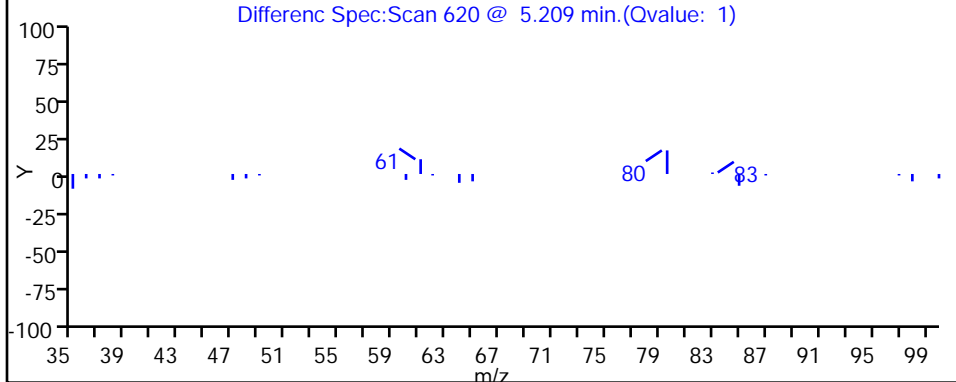
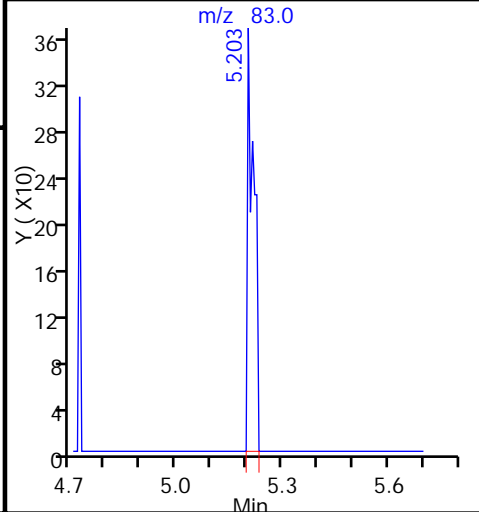
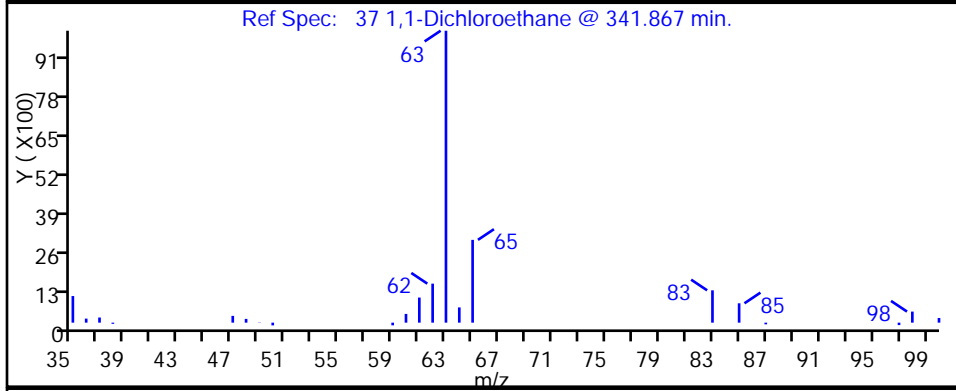
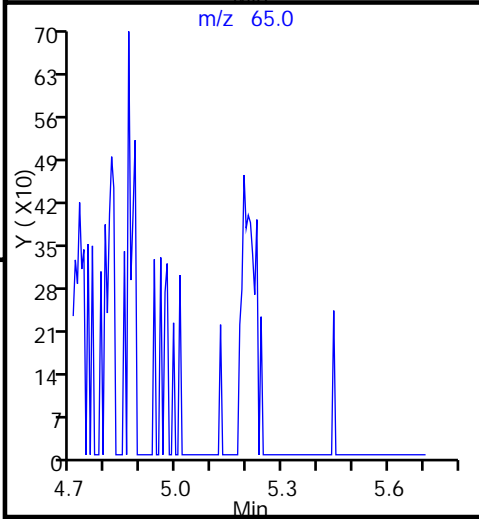
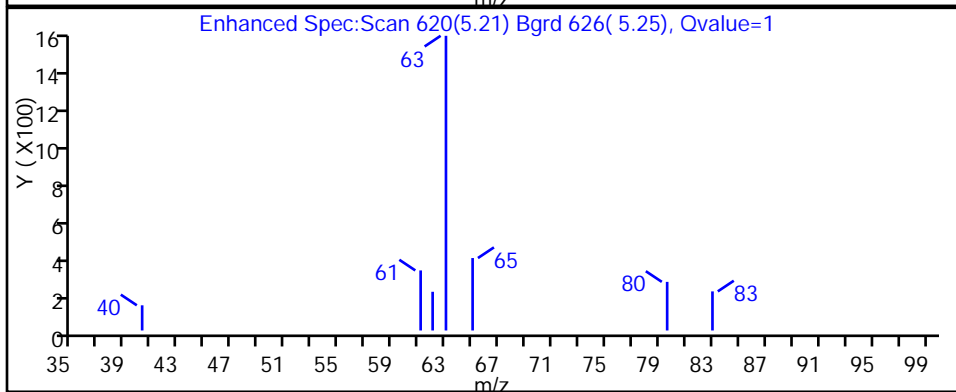
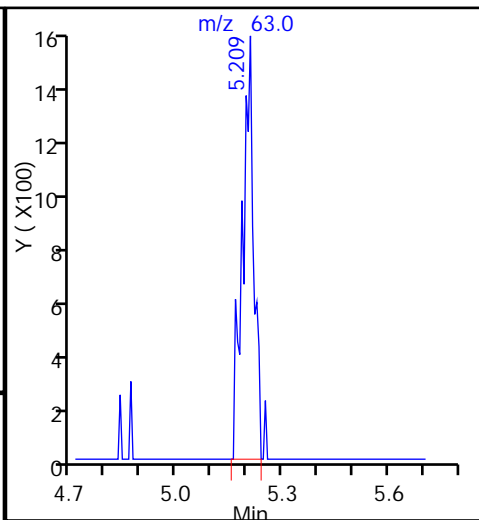
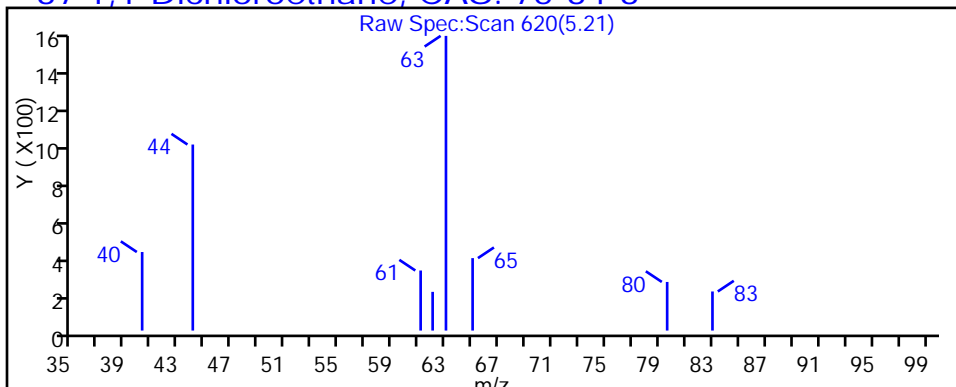
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D

Injection Date: 05-May-2015 21:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-8

Lab Sample ID: 180-43402-8

Client ID: HD-MW-50S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

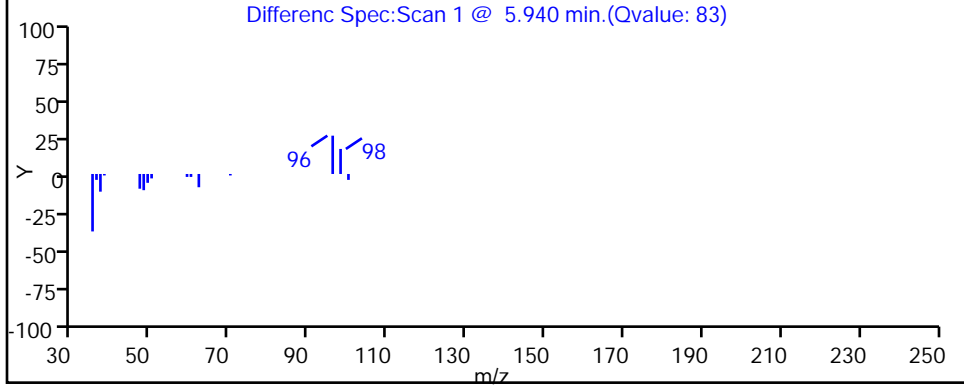
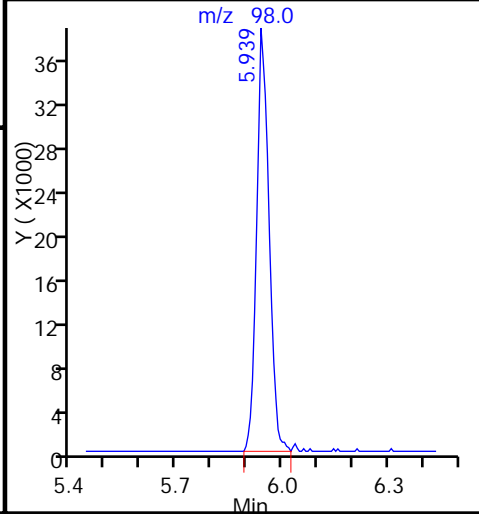
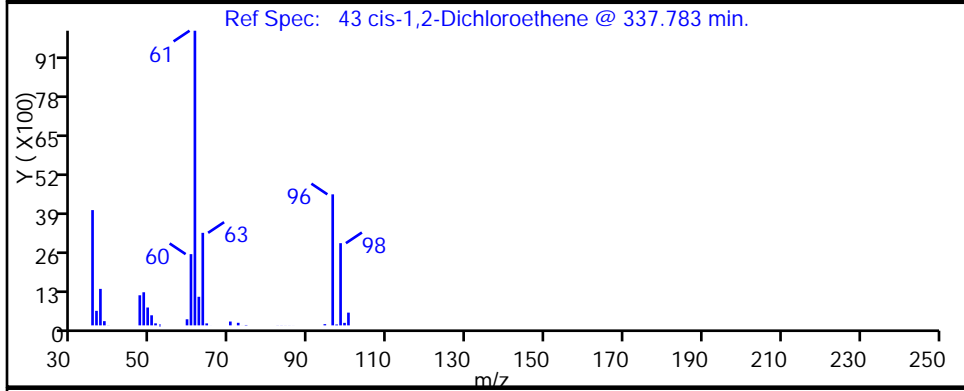
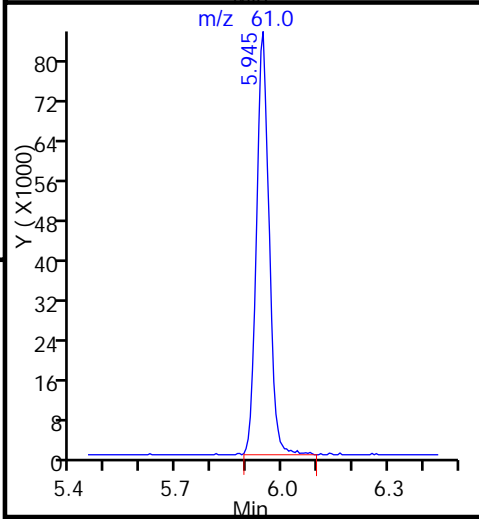
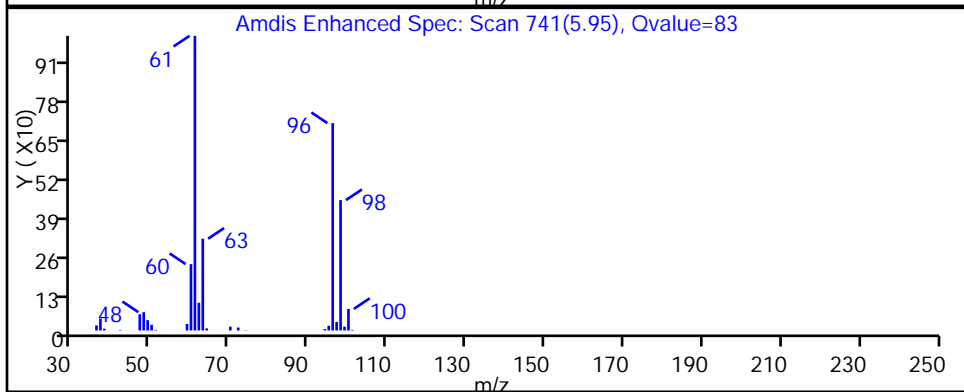
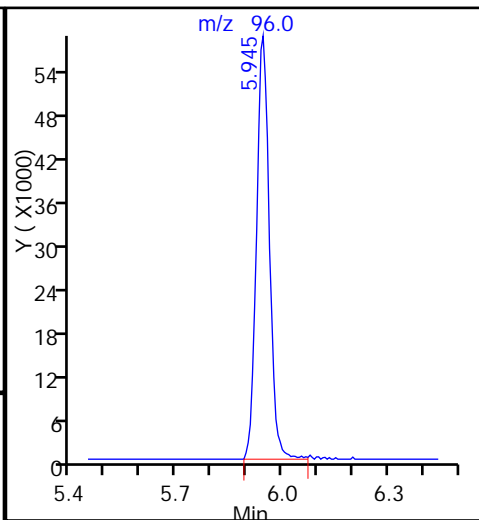
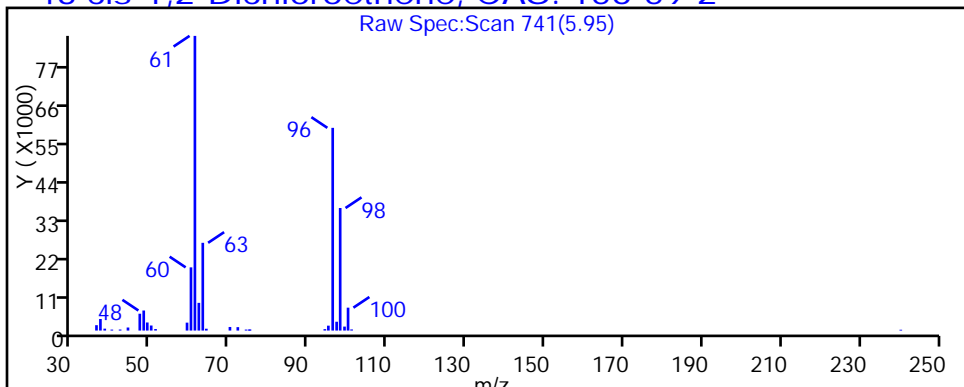
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

43 cis-1,2-Dichloroethene, CAS: 156-59-2



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D

Injection Date: 05-May-2015 21:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-8

Lab Sample ID: 180-43402-8

Client ID: HD-MW-50S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

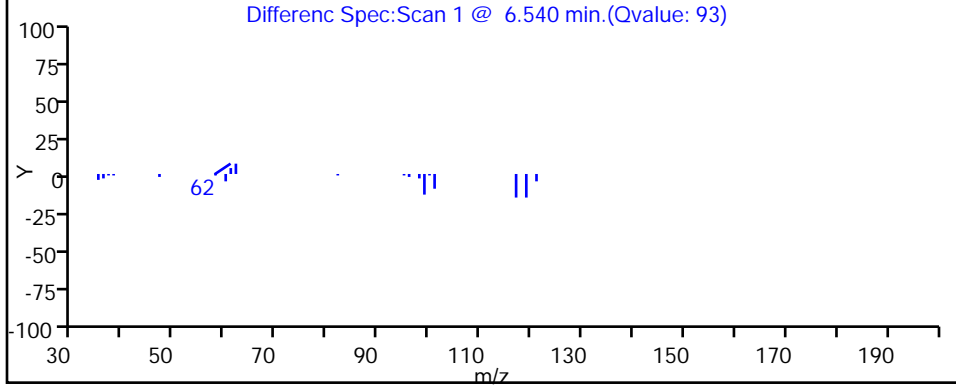
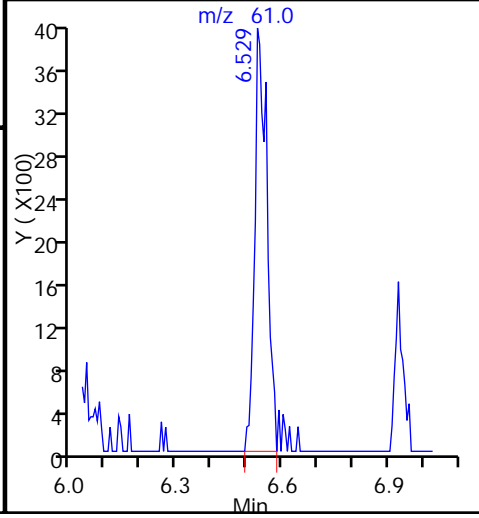
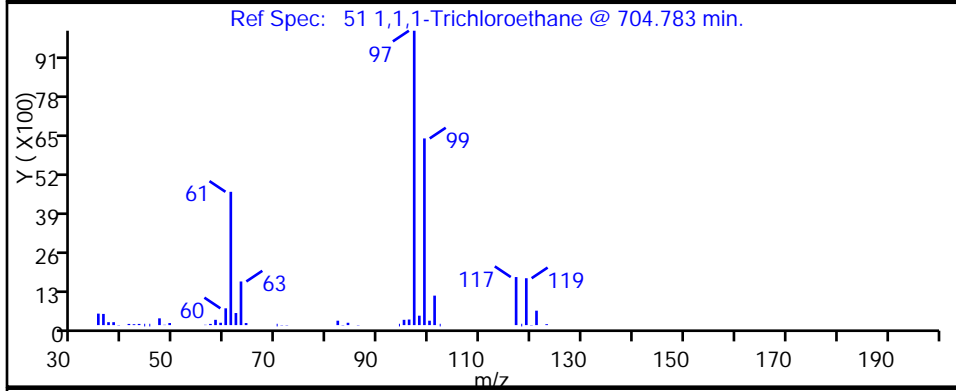
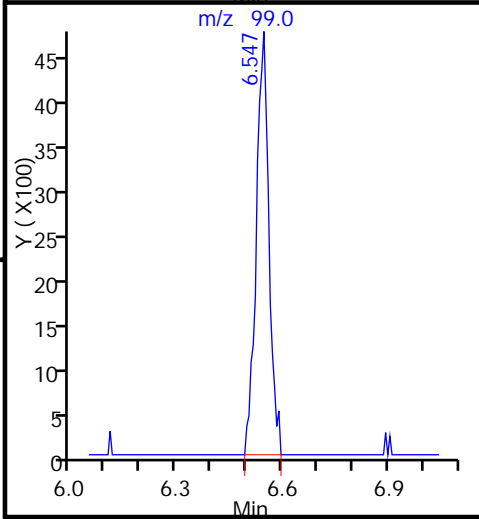
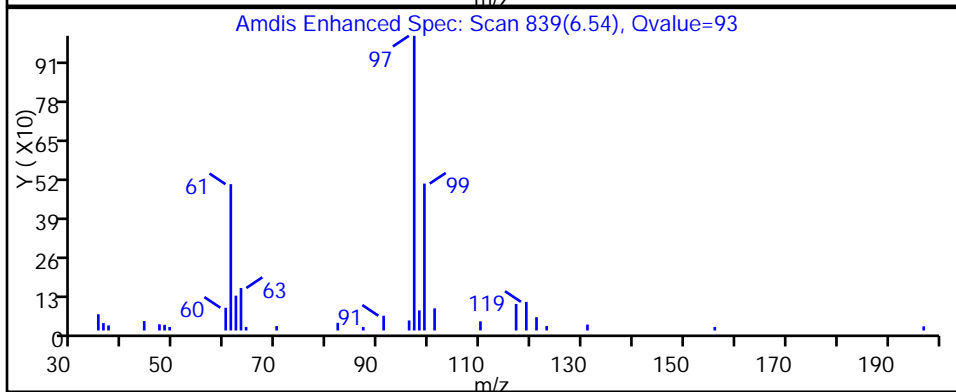
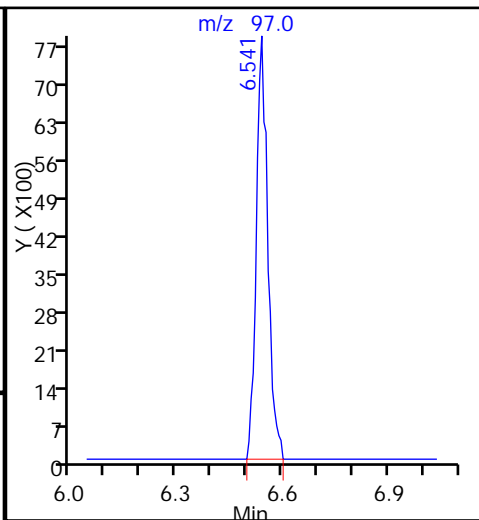
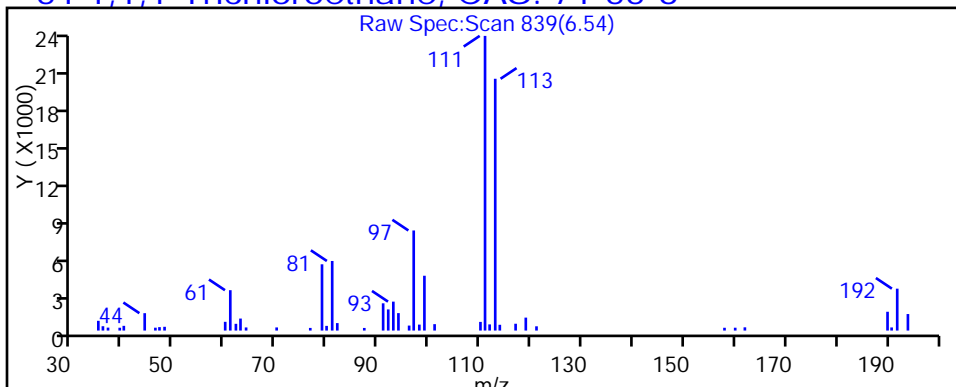
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

51 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D

Injection Date: 05-May-2015 21:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-8

Lab Sample ID: 180-43402-8

Client ID: HD-MW-50S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

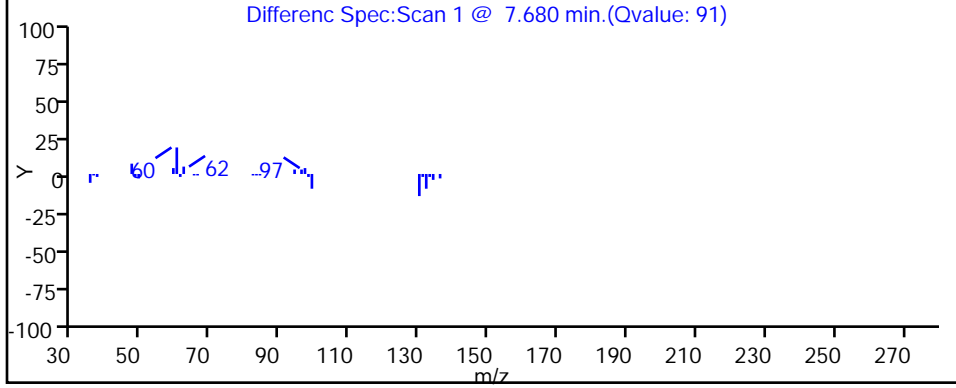
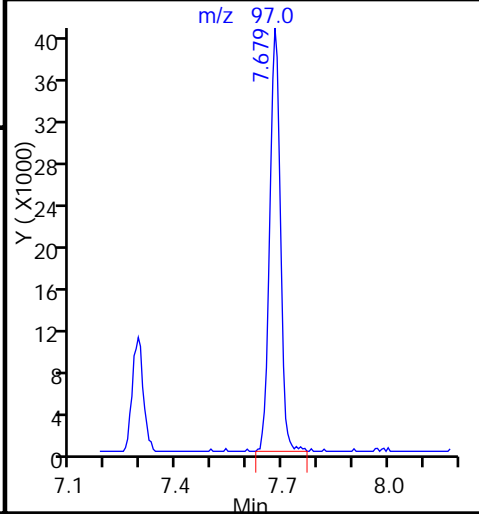
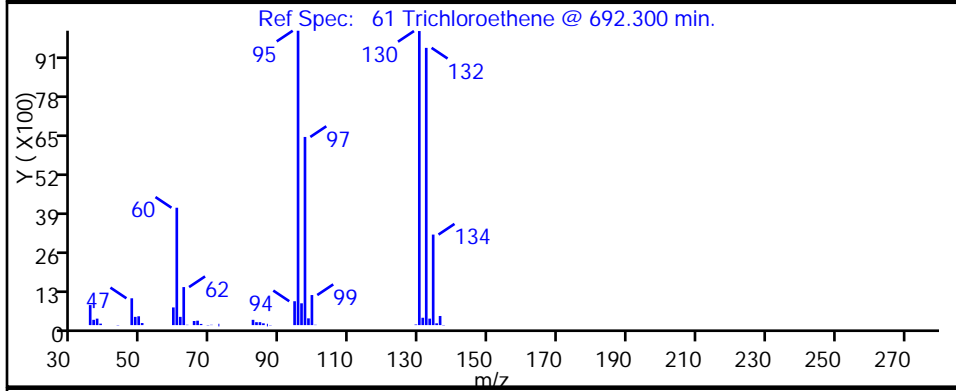
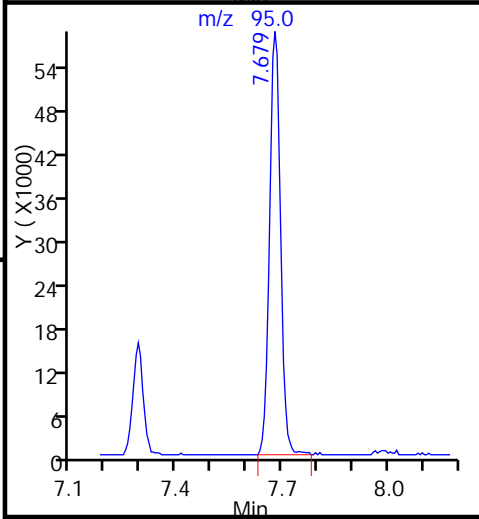
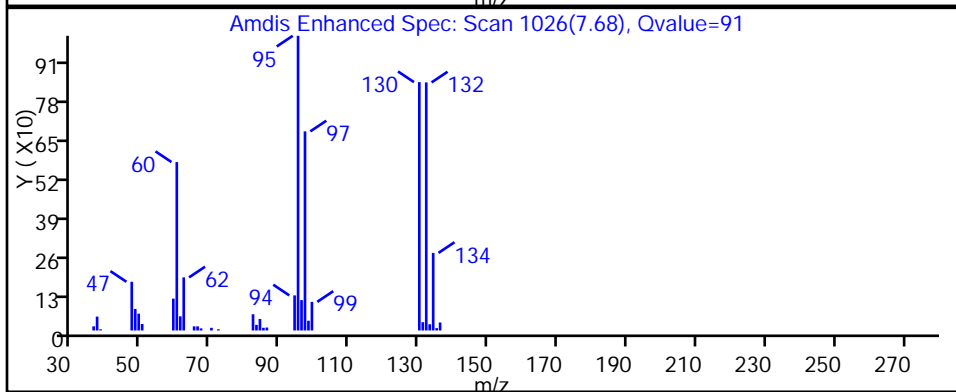
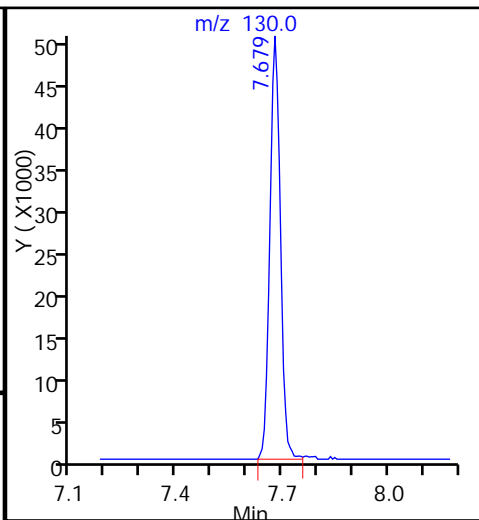
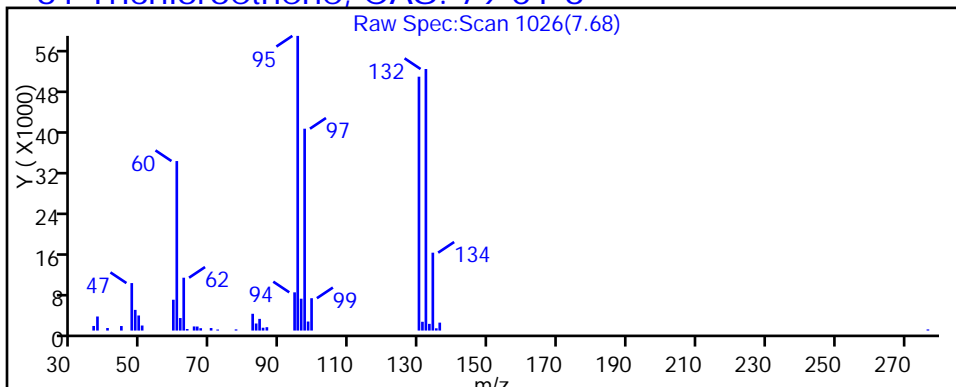
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D

Injection Date: 05-May-2015 21:02:30

Instrument ID: CHHP6

Lims ID: 180-43402-C-8

Lab Sample ID: 180-43402-8

Client ID: HD-MW-50S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 50.0000

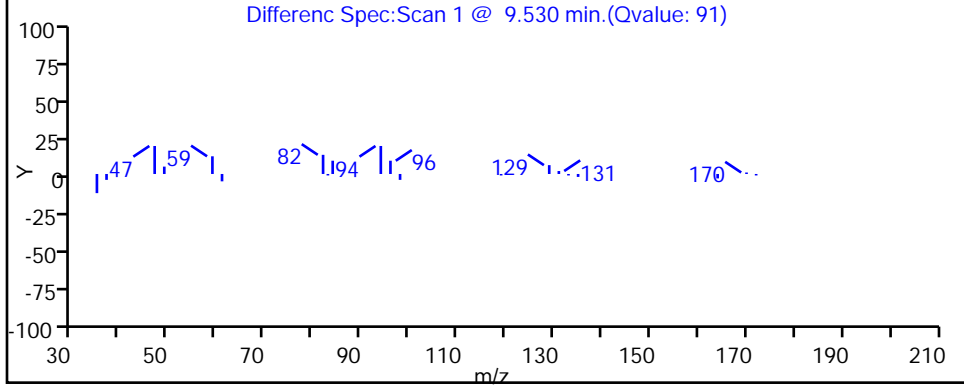
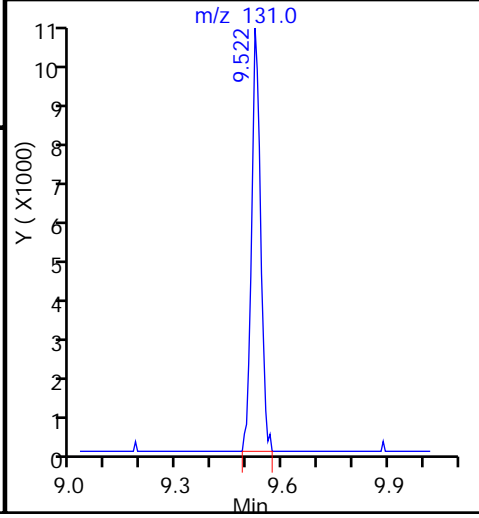
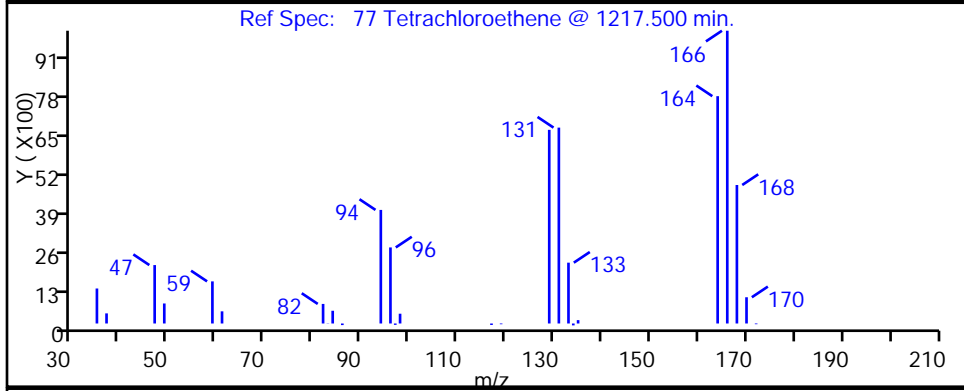
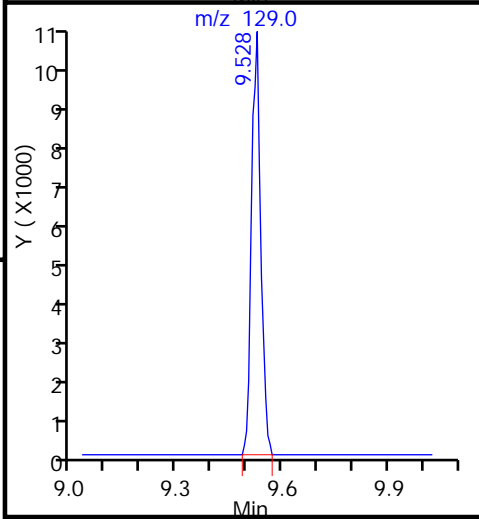
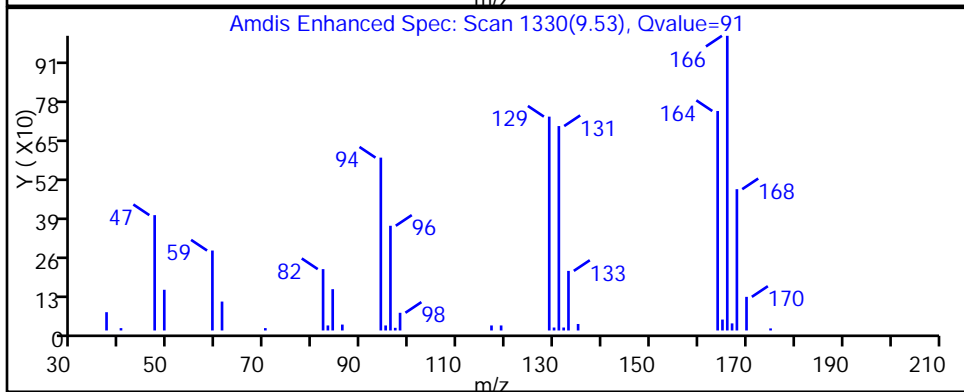
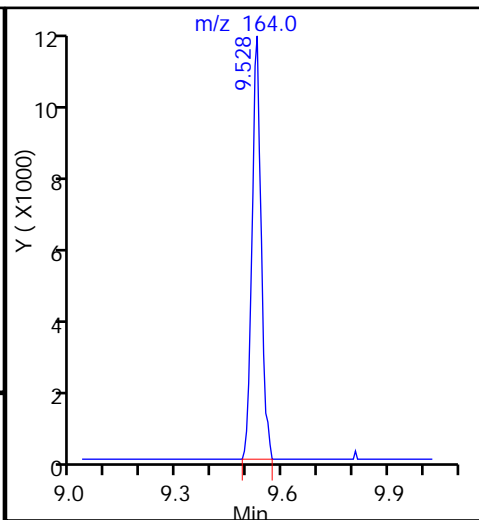
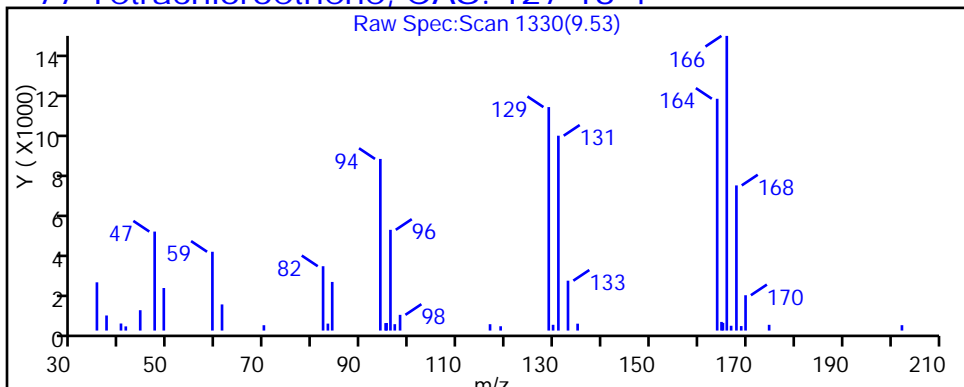
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



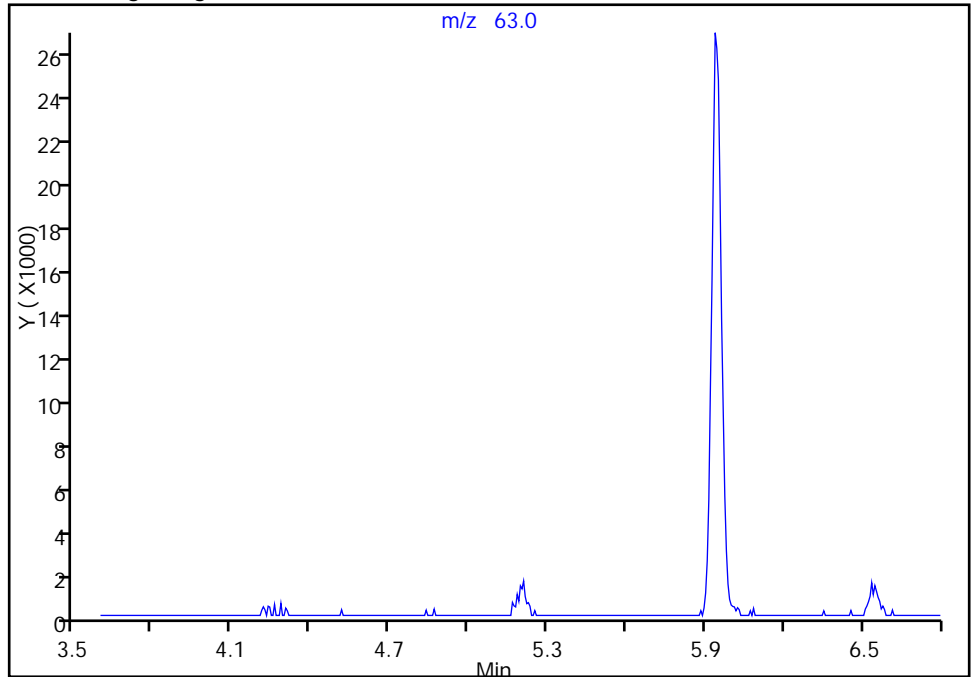
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505025.D
Injection Date: 05-May-2015 21:02:30 Instrument ID: CHHP6
Lims ID: 180-43402-C-8 Lab Sample ID: 180-43402-8
Client ID: HD-MW-50S-0/1-0
Operator ID: 001562 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 50.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

37 1,1-Dichloroethane, CAS: 75-34-3

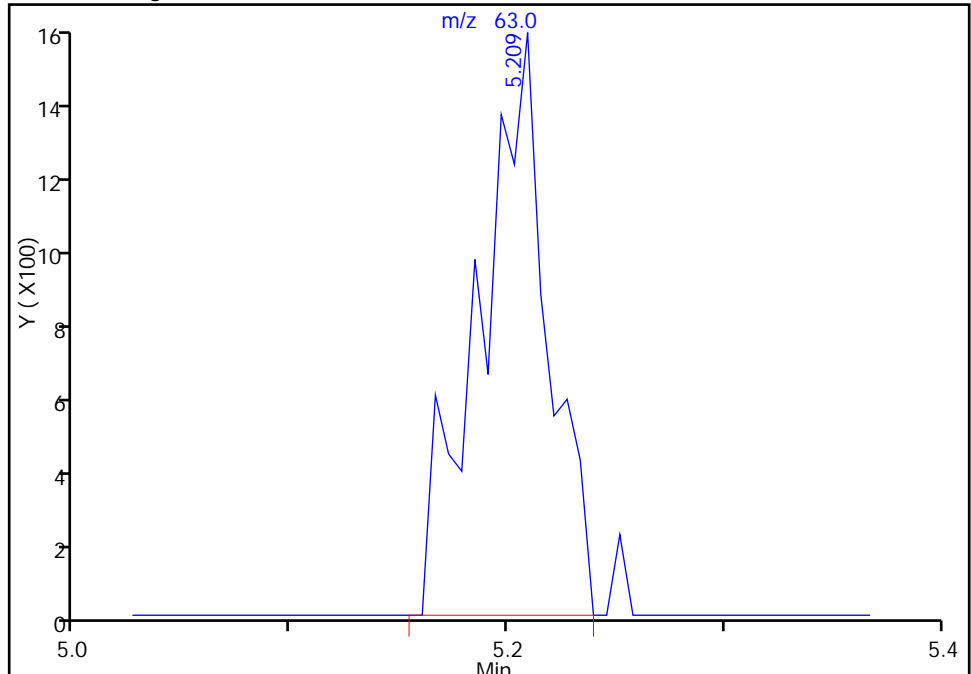
Not Detected
Expected RT: 5.20

Processing Integration Results



RT: 5.21
Area: 3435
Amount: 0.993973
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 06-May-2015 07:52:55
Audit Action: Manually Integrated
Audit Reason: Peak Not Integrated

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1 Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53 Calibration End Date: 05/01/2015 16:46 Calibration ID: 23671

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-140280/3	60501003.D
Level 2	IC 180-140280/6	60501006.D
Level 3	ICIS 180-140280/7	60501007.D
Level 4	IC 180-140280/8	60501008.D
Level 5	IC 180-140280/9	60501009.D
Level 6	IC 180-140280/10	60501010.D
Level 7	IC 180-140280/11	60501011.D
Level 8	IC 180-140280/12	60501012.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Dichlorodifluoromethane	0.3486 0.2827	0.3150 0.3020	0.2923 0.2839	0.3161	0.3026	Ave		0.3054			0.1000	7.0	20.0				
Chloromethane	0.3209 0.2323	0.2691 0.2406	0.2341 0.2361	0.2581	0.2392	Ave		0.2538			0.1000	11.8	20.0				
Vinyl chloride	0.3151 0.2504	0.2847 0.2684	0.2565 0.2554	0.2689	0.2627	Ave		0.2703			0.1000	7.8	20.0				
1,3-Butadiene	0.3651 0.2243	0.2740 0.2442	0.2482 0.2289	0.2429	0.2364	Ave		0.2580			0.0100	17.7	20.0				
Bromomethane	0.1854 0.1321	0.1463 0.1393	0.1244 0.1347	0.1314	0.1324	Ave		0.1407			0.0500	13.6	20.0				
Chloroethane	0.2262 0.1611	0.1679 0.1699	0.1466 0.1556	0.1724	0.1629	Ave		0.1703			0.0500	14.1	20.0				
Dichlorofluoromethane	0.4776 0.3760	0.4560 0.4012	0.3952 0.3718	0.4114	0.4013	Ave		0.4113			0.0100	9.0	20.0				
Trichlorofluoromethane	0.3562 0.2923	0.3407 0.3023	0.2925 0.2849	0.3167	0.3141	Ave		0.3125			0.1000	8.0	20.0				
Ethyl ether	0.2739 0.2311	0.2559 0.2065	0.2121 0.2229	0.2294	0.2336	Ave		0.2332			0.0100	9.5	20.0				
Acrolein	0.0432 0.0419	0.0430 0.0383	0.0393 0.0414	0.0427	0.0413	Ave		0.0414			0.0100	4.2	20.0				
1,1-Dichloroethene	0.2755 0.2147	0.2404 0.2225	0.2260 0.2192	0.2289	0.2251	Ave		0.2315			0.1000	8.3	20.0				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2750 0.2169	0.2451 0.2269	0.2250 0.2192	0.2368	0.2253	Ave		0.2338			0.1000	8.1	20.0				
Acetone	0.0696 0.0652	0.0723 0.0566	0.0628 0.0704	0.0692	0.0646	Ave		0.0664			0.0500	7.7	20.0				
Iodomethane	0.3175 0.2842	0.3128 0.2903	0.2868 0.2809	0.3057	0.2900	Ave		0.2960			0.0100	4.7	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53

Calibration End Date: 05/01/2015 16:46

Calibration ID: 23671

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 5													
Carbon disulfide	0.7842 0.6293	0.7272 0.6654	0.6482 0.6230	0.6894	0.6593	Ave	0.6782			0.1000	8.0		20.0				
Allyl chloride	0.1764 0.1567	0.1753 0.1592	0.1527 0.1584	0.1601	0.1609	Ave	0.1625			0.0100	5.3		20.0				
Methyl acetate	0.2266 0.2203	0.2385 0.2030	0.2068 0.2104	0.2282	0.2188	Ave	0.2191			0.1000	5.5		20.0				
Methylene Chloride	0.3350 0.2730	0.2894 0.2662	0.2624 0.2655	0.2918	0.2650	Ave	0.2810			0.1000	8.7		20.0				
tert-Butyl alcohol	1.0636 1.1642	1.1377 1.0891	1.1066 0.9445	1.1091	1.1001	Ave	1.0894			0.0100	6.0		20.0				
Acrylonitrile	0.1084 0.1159	0.1191 0.1028	0.1087 0.1081	0.1183	0.1131	Ave	0.1118			0.0100	5.1		20.0				
trans-1,2-Dichloroethene	0.2932 0.2453	0.2739 0.2498	0.2450 0.2417	0.2606	0.2544	Ave	0.2580			0.1000	6.8		20.0				
Methyl tert-butyl ether	0.9007 0.9321	0.9593 0.8926	0.9006 0.9017	0.9967	0.9265	Ave	0.9263			0.1000	3.9		20.0				
Hexane	0.4228 0.3233	0.3595 0.3408	0.3262 0.3236	0.3435	0.3289	Ave	0.3461			0.0100	9.7		20.0				
1,1-Dichloroethane	0.5170 0.4679	0.5250 0.4696	0.4714 0.4599	0.5018	0.4681	Ave	0.4851			0.2000	5.2		20.0				
Vinyl acetate	0.5970 0.5479	0.6352 0.5382	0.5814 0.5748	0.6089	0.5821	Ave	0.5832			0.0100	5.4		20.0				
2,2-Dichloropropane	0.3319 0.2831	0.3322 0.2906	0.2897 0.2681	0.3122	0.2953	Ave	0.3004			0.0100	7.7		20.0				
cis-1,2-Dichloroethene	0.3501 0.2788	0.3072 0.2782	0.2765 0.2726	0.3026	0.2806	Ave	0.2933			0.1000	8.9		20.0				
2-Butanone (MEK)	0.1170 0.1123	0.1159 0.0988	0.0988 0.1169	0.1148	0.1091	Ave	0.1105			0.0500	6.9		20.0				
Bromochloromethane	0.1429 0.1178	0.1271 0.1104	0.1121 0.1138	0.1203	0.1181	Ave	0.1203			0.0100	8.7		20.0				
Tetrahydrofuran	0.1295 0.0997	0.1074 0.0917	0.0947 0.0981	0.1056	0.0940	Ave	0.1026			0.0100	11.9		20.0				
Chloroform	0.5191 0.4540	0.5102 0.4498	0.4363 0.4431	0.4752	0.4592	Ave	0.4684			0.2000	6.6		20.0				
1,1,1-Trichloroethane	0.4309 0.3699	0.3959 0.3824	0.3652 0.3690	0.3960	0.3712	Ave	0.3851			0.1000	5.7		20.0				
Cyclohexane	0.5558 0.4313	0.4731 0.4508	0.4433 0.4227	0.4663	0.4530	Ave	0.4620			0.1000	9.0		20.0				
Carbon tetrachloride	0.3359 0.2788	0.3048 0.2954	0.2697 0.2878	0.2910	0.2882	Ave	0.2940			0.1000	6.8		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53

Calibration End Date: 05/01/2015 16:46

Calibration ID: 23671

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
1,1-Dichloropropene	0.4216 0.3511	0.3875 0.3690	0.3523 0.3568	0.3782	0.3641	Ave		0.3726			0.0100	6.3	20.0				
Isobutyl alcohol	0.0101 0.0100	0.0113 0.0082	0.0099 0.0102	0.0106	0.0103	Ave		0.0101			0.0100	8.7	20.0				
Benzene	1.3012 1.0375	1.1968 1.0199	1.0488 0.9834	1.1390	1.0729	Ave		1.0999			0.5000	9.6	20.0				
1,2-Dichloroethane	0.4169 0.4242	0.4457 0.4048	0.3924 0.4107	0.4376	0.4110	Ave		0.4179			0.1000	4.2	20.0				
n-Heptane	0.3696 0.2414	0.2670 0.2581	0.2417 0.2395	0.2574	0.2528	Ave		0.2659			0.0100	16.2	20.0				
Trichloroethene	0.2659 0.2283	0.2513 0.2298	0.2253 0.2221	0.2450	0.2355	Ave		0.2379			0.2000	6.3	20.0				
Methylcyclohexane	0.5216 0.4200	0.4663 0.4421	0.4303 0.4134	0.4526	0.4392	Ave		0.4482			0.1000	7.6	20.0				
1,2-Dichloropropane	0.3569 0.2779	0.3034 0.2753	0.2639 0.2716	0.2942	0.2769	Ave		0.2900			0.1000	10.3	20.0				
1,4-Dioxane	0.0031 0.0027	0.0029 0.0026	0.0027 0.0028	0.0029	0.0027	Ave		0.0028		*	0.0100	6.2	20.0				
Dibromomethane	0.1960 0.1754	0.1756 0.1684	0.1679 0.1713	0.1797	0.1712	Ave		0.1757			0.0100	5.2	20.0				
Bromodichloromethane	0.3546 0.3552	0.3667 0.3488	0.3250 0.3519	0.3593	0.3460	Ave		0.3510			0.2000	3.5	20.0				
cis-1,3-Dichloropropene	0.4778 0.4674	0.4837 0.4564	0.4280 0.4560	0.4861	0.4600	Ave		0.4644			0.2000	4.1	20.0				
4-Methyl-2-pentanone (MIBK)	1.2844 1.3453	1.4737 1.2221	1.3609 1.2275	1.4462	1.3607	Ave		1.3401			0.1000	6.9	20.0				
Toluene	6.9520 4.6351	5.9471 4.3736	5.1756 4.1162	5.3908	4.8886	Ave		5.1849			0.4000	17.8	20.0				
trans-1,3-Dichloropropene	2.0804 1.8574	2.0888 1.7255	1.8056 1.7170	1.9804	1.8472	Ave		1.8878			0.1000	7.8	20.0				
Ethyl methacrylate	1.9430 1.9170	2.0477 1.7286	1.8819 1.7451	2.0170	1.8481	Ave		1.8910			0.0100	6.1	20.0				
1,1,2-Trichloroethane	1.3090 1.0972	1.1937 1.0111	1.1015 1.0164	1.2035	1.0964	Ave		1.1286			0.1000	9.0	20.0				
Tetrachloroethene	1.0559 0.7799	0.9436 0.7743	0.8447 0.7287	0.8773	0.8221	Ave		0.8533			0.2000	12.4	20.0				
1,3-Dichloropropane	2.3851 2.0739	2.3736 1.8996	2.1124 1.8879	2.2638	2.0862	Ave		2.1353			0.0100	9.0	20.0				
2-Hexanone	0.8137 0.8180	0.8895 0.7426	0.8132 0.7959	0.8713	0.7922	Ave		0.8171			0.1000	5.6	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53

Calibration End Date: 05/01/2015 16:46

Calibration ID: 23671

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Dibromochloromethane	0.9167 0.9114	0.9437 0.8460	0.8397 0.8533	0.9210	0.8760	Ave		0.8885			0.1000	4.5	20.0				
1,2-Dibromoethane (EDB)	1.2139 1.0591	1.1581 0.9625	1.0311 0.9525	1.1248	1.0337	Ave		1.0670			0.1000	8.7	20.0				
3-Chlorobenzotrifluoride	1.9805 1.4626	1.6674 1.4754	1.6219 1.3101	1.6115	1.5409	Ave		1.5838			0.0100	12.4	20.0				
Chlorobenzene	4.1572 3.0173	3.6944 2.8262	3.2363 2.6981	3.4110	3.1473	Ave		3.2735			0.5000	14.6	20.0				
4-Chlorobenzotrifluoride	1.7944 1.3844	1.5995 1.4056	1.5949 1.2457	1.5342	1.4650	Ave		1.5030			0.0100	11.1	20.0				
1,1,1,2-Tetrachloroethane	1.0462 0.9323	1.0556 0.8891	0.9455 0.8654	1.0123	0.9304	Ave		0.9596			0.0100	7.4	20.0				
Ethylbenzene	2.1434 1.7309	2.0220 1.6580	1.8071 1.5780	1.9438	1.7518	Ave		1.8294			0.1000	10.5	20.0				
m-Xylene & p-Xylene	2.7561 2.1427	2.5607 2.0419	2.2355 1.9778	2.3726	2.2356	Ave		2.2904			0.1000	11.5	20.0				
o-Xylene	2.5889 2.0760	2.4881 1.9690	2.2413 1.8727	2.3686	2.1678	Ave		2.2215			0.3000	11.3	20.0				
Styrene	4.2036 3.4635	4.1366 3.2025	3.6392 3.0610	3.9430	3.5757	Ave		3.6531			0.3000	11.4	20.0				
Bromoform	0.5584 0.5947	0.5952 0.5417	0.5243 0.5638	0.6035	0.5628	Ave		0.5680			0.1000	4.9	20.0				
2-Chlorobenzotrifluoride	1.9675 1.4709	1.6890 1.4639	1.6132 1.3327	1.6729	1.5786	Ave		1.5986			0.0100	12.0	20.0				
Isopropylbenzene	6.7613 4.7610	6.2753 4.5877	5.5543 4.2667	5.7405	5.2468	Ave		5.3992			0.1000	15.9	20.0				
1,1,2,2-Tetrachloroethane	1.7406 1.4945	1.7556 1.3542	1.5202 1.3660	1.6481	1.5198	Ave		1.5499			0.3000	9.9	20.0				
Bromobenzene	0.8541 0.8053	0.8436 0.7956	0.7867 0.7784	0.8441	0.7802	Ave		0.8110			0.0100	3.9	20.0				
trans-1,4-Dichloro-2-butene	0.3636 0.3906	0.3775 0.3896	0.3354 0.3834	0.3759	0.3637	Ave		0.3725			0.0100	4.9	20.0				
1,2,3-Trichloropropane	0.3519 0.3764	0.3580 0.3604	0.3344 0.3601	0.3631	0.3476	Ave		0.3565			0.0100	3.4	20.0				
N-Propylbenzene	1.0677 0.9565	1.0033 0.9784	0.9374 0.9298	1.0131	0.9370	Ave		0.9779			0.0100	4.9	20.0				
2-Chlorotoluene	0.8628 0.7831	0.8481 0.7932	0.7692 0.7626	0.8214	0.7902	Ave		0.8038			0.0100	4.5	20.0				
3-Chlorotoluene	0.9393 0.8788	0.8948 0.8891	0.8480 0.8035	0.9060	0.8425	Ave		0.8753			0.0100	4.8	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53

Calibration End Date: 05/01/2015 16:46

Calibration ID: 23671

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
1,3,5-Trimethylbenzene	3.4045 2.9658	3.3453 3.0076	3.0340 2.7998	3.2793	3.0536	Ave		3.1112			0.0100	6.7	20.0				
4-Chlorotoluene	0.9042 0.8212	0.8863 0.8300	0.8235 0.8181	0.8794	0.8188	Ave		0.8477			0.0100	4.2	20.0				
tert-Butylbenzene	2.5515 2.2638	2.5374 2.3472	2.3376 2.1899	2.4758	2.3734	Ave		2.3846			0.0100	5.4	20.0				
1,2,4-Trimethylbenzene	3.5873 3.1129	3.5167 3.0959	3.1889 2.9089	3.4241	3.2298	Ave		3.2580			0.0100	7.1	20.0				
3,4-Dichlorobenzotrifluoride	0.9327 0.7872	0.8183 0.8349	0.8149 0.7441	0.8385	0.7934	Ave		0.8205			0.0100	6.6	20.0				
sec-Butylbenzene	4.0858 3.4212	3.8506 3.4857	3.6000 3.1968	3.8098	3.5861	Ave		3.6295			0.0100	7.7	20.0				
1,3-Dichlorobenzene	1.6565 1.5022	1.6535 1.5010	1.4791 1.4375	1.6349	1.5185	Ave		1.5479			0.6000	5.6	20.0				
4-Isopropyltoluene	3.1670 2.7206	3.0629 2.7728	2.8091 2.5586	3.0162	2.8478	Ave		2.8694			0.0100	7.0	20.0				
1,4-Dichlorobenzene	1.7468 1.5253	1.7372 1.5273	1.5452 1.4750	1.6893	1.5519	Ave		1.5997			0.5000	6.7	20.0				
2,4-Dichlorobenzotrifluoride	0.9158 0.7446	0.8383 0.8321	0.8043 0.7049	0.8446	0.8128	Ave		0.8122			0.0100	7.9	20.0				
2,5-Dichlorobenzotrifluoride	0.9825 0.8895	0.8751 0.8714	0.8798 0.8144	0.9199	0.8750	Ave		0.8885			0.0100	5.4	20.0				
n-Butylbenzene	3.2634 2.6981	3.0747 2.7532	2.8311 2.5522	3.0336	2.8801	Ave		2.8858			0.0100	7.9	20.0				
1,2-Dichlorobenzene	1.6790 1.4921	1.6306 1.4418	1.4765 1.3972	1.6122	1.5146	Ave		1.5305			0.4000	6.5	20.0				
1,2-Dibromo-3-Chloropropane	0.2183 0.2510	0.2425 0.2258	0.2143 0.2414	0.2408	0.2338	Ave		0.2335			0.0500	5.5	20.0				
1,2,4-Trichlorobenzene	1.1835 1.0025	1.2046 0.9061	1.0578 0.9365	1.2090	1.0778	Ave		1.0722			0.2000	11.1	20.0				
Hexachlorobutadiene	0.4789 0.3274	0.3961 0.3177	0.3567 0.3053	0.3905	0.3508	Ave		0.3654			0.0100	15.4	20.0				
Naphthalene	2.9245 2.7208	3.1203 2.3816	2.8947 2.5219	3.2380	2.9038	Ave		2.8382			0.0100	10.1	20.0				
1,2,3-Trichlorobenzene	1.1359 0.9221	1.1475 0.8130	0.9868 0.8910	1.1440	1.0070	Ave		1.0059			0.0100	12.7	20.0				
2,4,5-Trichlorotoluene	0.7426 0.5474	0.6592 0.5993	0.6129 0.6293	0.7138	0.5831	Ave		0.6359			0.0100	10.4	20.0				
2,3,6-Trichlorotoluene	0.6980 0.4946	0.5983 0.5342	0.5392 0.5788	0.6361	0.5370	Ave		0.5770			0.0100	11.4	20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1 Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53 Calibration End Date: 05/01/2015 16:46 Calibration ID: 23671

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8														
Dibromofluoromethane (Surr)	0.2166 0.2058	0.2131 0.1988	0.2115 0.2011	0.2161	0.1920	Ave		0.2069			4.3		20.0				
1,2-Dichloroethane-d4 (Surr)	0.3840 0.3371	0.3499 0.3249	0.3449 0.3345	0.3681	0.3218	Ave		0.3457			6.2		20.0				
Toluene-d8 (Surr)	5.4309 3.7758	4.7338 3.5724	4.6852 3.4669	4.4758	3.7046	Ave		4.2307			16.6		20.0				
4-Bromofluorobenzene (Surr)	2.0654 1.5977	1.9677 1.4921	1.8550 1.4803	1.7933	1.5449	Ave		1.7245			13.1		20.0				

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1 Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53 Calibration End Date: 05/01/2015 16:46 Calibration ID: 23671

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-140280/3	60501003.D
Level 2	IC 180-140280/6	60501006.D
Level 3	ICIS 180-140280/7	60501007.D
Level 4	IC 180-140280/8	60501008.D
Level 5	IC 180-140280/9	60501009.D
Level 6	IC 180-140280/10	60501010.D
Level 7	IC 180-140280/11	60501011.D
Level 8	IC 180-140280/12	60501012.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	14620 393068	62218 499728	126679 575476	187095	250149	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	13456 322970	53152 398212	101459 478453	152788	197707	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	13213 348129	56220 444140	111175 517720	159170	217145	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	15310 311831	54119 404201	107576 464004	143792	195445	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	7774 183599	28897 230594	53923 272991	77761	109446	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	9487 224025	33151 281244	63525 315384	102015	134678	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	20031 522769	90056 664016	171304 753551	243522	331737	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	14937 406408	67290 500291	126784 577522	187475	259631	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	11485 321282	50543 341678	91939 451701	135802	193102	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	36220 74857	42429 79297	51168 92403	59022	68259	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	11555 298478	47470 368258	97947 444270	135482	186100	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	11531 301559	48408 375445	97512 444261	140183	186259	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	14591 181333	28568 187221	54459 285567	81971	106890	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	13317 395139	61771 480425	124319 569324	180970	239779	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	32888 874906	143618 1101219	280976 1262586	408054	545025	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53

Calibration End Date: 05/01/2015 16:46

Calibration ID: 23671

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	7399 217864	34624 263380	66194 320994	94749	133021	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	47506 1531708	235556 1680076	448132 2131842	675270	904615	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	14048 379527	57152 440482	113752 538163	172741	219046	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	12674 437766	75192 423693	148632 561100	211317	284065	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	45474 1611348	235229 1701239	471254 2190199	700311	935388	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	12297 341011	54099 413336	106188 489846	154219	210289	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	37775 1295877	189455 1477234	390371 1827456	589934	765940	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	17731 449492	70993 563934	141416 655934	203332	271882	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	21682 650535	103692 777143	204336 932123	297015	386941	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	25035 761767	125444 890652	252021 1164902	360384	481236	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	13921 393550	65618 480936	125582 543470	184800	244089	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	14682 387653	60662 460452	119864 552410	179083	231955	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	24544 312233	45773 327104	85635 473847	135914	180453	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	5991 163837	25094 182772	48600 230583	71233	97630	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	10864 277320	42422 303387	82088 397850	124988	155359	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	21772 631187	100773 744366	189114 898092	281261	379639	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	18072 514270	78188 632812	158279 747775	234417	306831	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	23311 599552	93429 746051	192149 856768	275975	374513	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	14088 387561	60197 488872	116915 583377	172271	238253	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	17681 488097	76537 610679	152706 723072	223842	301032	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	10633 348172	55741 339375	106831 518160	157057	212107	125 4375	625 5000	1250 6250	1875	2500

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53

Calibration End Date: 05/01/2015 16:46

Calibration ID: 23671

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	54569 1442452	236377 1687761	454609 1993212	674168	886979	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	17485 589729	88016 669830	170097 832399	259031	339774	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	15500 335663	52724 427101	104766 485433	152333	209022	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	11152 317378	49633 380219	97663 450242	145038	194700	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	21875 583932	92085 731561	186510 837825	267913	363050	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	14968 386326	59925 455627	114408 550561	174135	228950	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	2630 75662	11389 85036	23730 113034	33881	43846	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	8221 243858	34683 278635	72777 347141	106380	141515	5.00 175	25.0 200	50.0 250	75.0	100
Bromodichloromethane	FB	Ave	14873 493846	72416 577215	140878 713291	212684	286051	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	20037 649830	95523 755309	185519 924184	287718	380296	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	54251 852834	122138 957320	248428 1201067	371586	506634	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	58730 1469166	246446 1712971	472389 2013806	692573	910104	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	17575 588746	86561 675791	164800 840048	254423	343888	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	16414 607621	84855 677036	171769 853762	259135	344058	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	11058 347762	49466 396004	100537 497273	154621	204111	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	8920 247215	39101 303279	77095 356494	112710	153046	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	20149 657365	98360 744014	192805 923637	290836	388394	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	34369 518554	73724 581725	148448 778828	223875	294952	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	7744 288883	39108 331360	76638 417451	118323	163091	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	10255 335705	47993 376974	94113 466009	144503	192453	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	16731 463604	69099 577854	148039 640982	207040	286874	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53

Calibration End Date: 05/01/2015 16:46

Calibration ID: 23671

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBZ	Ave	35120 956397	153098 1106916	295391 1320047	438228	585932	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	15159 438815	66283 550514	145575 609472	197098	272731	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	8838 295523	43746 348221	86295 423407	130058	173217	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	18107 548629	83792 649357	164938 772048	249733	326136	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	23283 679172	106116 799744	204038 967652	304814	416204	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	21871 658013	103108 771182	204569 916218	304301	403574	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	35512 1097806	171422 1254290	332158 1497570	506573	665694	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	4717 188498	24665 212157	47850 275852	77540	104771	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	16621 466230	69992 573355	147246 652016	214923	293892	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	57119 1509094	260050 1796814	506955 2087440	737501	976791	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	14704 473696	72752 530388	138753 668303	211742	282941	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	11822 351137	54793 402872	108631 493553	160950	209662	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	5033 170289	24523 197280	46308 243093	71679	97726	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	4871 164103	23251 182497	46172 228328	69230	93411	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	14778 417057	65168 495397	129444 589561	193168	251809	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	11942 341443	55085 401659	106218 483577	156618	212346	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	13001 383186	58118 450187	117101 509493	172757	226403	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	47124 1293117	217291 1522884	418940 1775313	625299	820602	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	12516 358037	57566 420291	113709 518735	167686	220038	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	35316 987056	164817 1188495	322788 1388596	472090	637815	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	49653 1357258	228421 1567584	440328 1844484	652905	867967	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

Analy Batch No.: 140280

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2015 13:53

Calibration End Date: 05/01/2015 16:46

Calibration ID: 23671

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3,4-Dichlorobenzotrifluoride	DCB	Ave	12910 343227	53155 422746	112527 471815	159882	213219	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCB	Ave	56554 1491702	250114 1764994	497104 2027020	726443	963722	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCB	Ave	22929 654979	107399 760032	204242 911485	311742	408084	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCB	Ave	43836 1186196	198948 1403979	387889 1622356	575133	765296	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCB	Ave	24178 665067	112838 773327	213363 935299	322104	417041	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCB	Ave	12676 324649	54452 421311	111058 446968	161041	218417	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCB	Ave	13599 387822	56843 441248	121492 516380	175409	235142	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCB	Ave	45170 1176426	199711 1394081	390925 1618275	578451	773974	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCB	Ave	23240 650565	105916 730064	203881 885916	307417	407040	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCB	Ave	3021 109457	15751 114309	29597 153064	45915	62834	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trichlorobenzene	DCB	Ave	16381 437105	78246 458809	146069 593825	230538	289639	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCB	Ave	6629 142741	25727 160877	49256 193594	74455	94269	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCB	Ave	40480 1186321	202675 1205925	399712 1599080	617410	780358	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCB	Ave	15722 402043	74534 411642	136259 564994	218128	270622	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCB	Ave	10279 238660	42820 303439	84630 398998	136106	156693	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCB	Ave	9662 215650	38864 270492	74459 367031	121283	144312	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	9082 286117	42078 328982	91685 407664	127929	158749	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	16103 468642	69113 537741	149513 677859	217902	266001	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBZ	Ave	45880 1196797	196169 1399177	427631 1696172	575027	689691	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBZ	Ave	17448 506432	81543 584398	169309 724215	230387	287611	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1 Analy Batch No.: 140280
SDG No.: _____
Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 05/01/2015 13:53 Calibration End Date: 05/01/2015 16:46 Calibration ID: 23671

Curve Type Legend:

Ave = Average ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501003.D
 Lims ID: IC VSTD1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 01-May-2015 13:53:30 ALS Bottle#: 3 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD1
 Misc. Info.: 180-0006721-003
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 02-May-2015 10:49:23 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: fergusond

Date: 02-May-2015 10:38:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.256	4.255	0.001	100	238315	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.285	7.291	-0.006	98	419378	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.400	10.405	-0.005	90	84479	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.754	12.748	0.006	98	138415	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.555	6.555	0.000	90	9082	5.00	5.23	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.926	6.938	-0.012	61	16103	5.00	5.55	
\$ 7 Toluene-d8 (Surr)	98	8.946	8.945	0.001	92	45880	5.00	6.42	
\$ 8 4-Bromofluorobenzene (Surr	95	11.586	11.592	-0.006	79	17448	5.00	5.99	
11 Dichlorodifluoromethane	85	1.603	1.603	0.000	93	14620	5.00	5.71	
12 Chloromethane	50	1.762	1.755	0.007	98	13456	5.00	6.32	
13 Vinyl chloride	62	1.883	1.889	-0.006	96	13213	5.00	5.83	
14 Butadiene	39	1.938	1.931	0.007	87	15310	5.00	7.07	
15 Bromomethane	94	2.236	2.229	0.007	81	7774	5.00	6.59	M
16 Chloroethane	64	2.376	2.381	-0.005	94	9487	5.00	6.64	
17 Dichlorofluoromethane	67	2.656	2.655	0.001	1	20031	5.00	5.81	M
18 Trichlorofluoromethane	101	2.650	2.692	-0.042	67	14937	5.00	5.70	
20 Ethyl ether	59	3.045	3.051	-0.006	90	11485	5.00	5.87	
21 Acrolein	56	3.228	3.227	0.001	96	36220	100.0	104.0	
22 1,1-Dichloroethene	96	3.337	3.343	-0.006	97	11555	5.00	5.95	
23 1,1,2-Trichloro-1,2,2-trif	101	3.404	3.403	0.001	92	11531	5.00	5.88	
24 Acetone	43	3.435	3.440	-0.005	99	14591	25.0	26.2	
25 Iodomethane	142	3.526	3.543	-0.017	97	13317	5.00	5.36	
26 Carbon disulfide	76	3.623	3.641	-0.018	99	32888	5.00	5.78	
29 3-Chloro-1-propene	76	3.897	3.914	-0.017	91	7399	5.00	5.43	
30 Methyl acetate	43	3.933	3.939	-0.006	96	47506	25.0	25.9	
31 Methylene Chloride	84	4.122	4.133	-0.011	91	14048	5.00	5.96	
32 2-Methyl-2-propanol	59	4.384	4.389	-0.005	96	12674	50.0	48.8	
33 Acrylonitrile	53	4.499	4.511	-0.012	97	45474	50.0	48.5	
34 trans-1,2-Dichloroethene	96	4.548	4.565	-0.017	95	12297	5.00	5.68	
35 Methyl tert-butyl ether	73	4.578	4.584	-0.006	95	37775	5.00	4.86	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.986	4.991	-0.005	88	17731	5.00	6.11	
37 1,1-Dichloroethane	63	5.187	5.198	-0.011	65	21682	5.00	5.33	
38 Vinyl acetate	43	5.229	5.247	-0.018	98	25035	5.00	5.12	
42 2,2-Dichloropropane	77	5.941	5.946	-0.005	65	13921	5.00	5.52	
43 cis-1,2-Dichloroethene	96	5.935	5.946	-0.011	83	14682	5.00	5.97	
44 2-Butanone (MEK)	43	5.953	5.952	0.001	98	24544	25.0	26.5	
48 Chlorobromomethane	128	6.233	6.238	-0.005	96	5991	5.00	5.94	
49 Tetrahydrofuran	42	6.257	6.257	0.000	87	10864	10.0	12.6	
50 Chloroform	83	6.373	6.372	0.001	95	21772	5.00	5.54	
51 1,1,1-Trichloroethane	97	6.543	6.542	0.001	98	18072	5.00	5.60	
52 Cyclohexane	56	6.616	6.622	-0.006	88	23311	5.00	6.02	
53 Carbon tetrachloride	117	6.714	6.719	-0.005	73	14088	5.00	5.71	
54 1,1-Dichloropropene	75	6.726	6.731	-0.005	94	17681	5.00	5.66	
55 Isobutyl alcohol	41	6.908	6.908	0.000	93	10633	125.0	125.8	
56 Benzene	78	6.939	6.944	-0.005	97	54569	5.00	5.91	
57 1,2-Dichloroethane	62	7.024	7.023	0.001	98	17485	5.00	4.99	
59 n-Heptane	43	7.304	7.315	-0.011	91	15500	5.00	6.95	
61 Trichloroethene	130	7.681	7.680	0.001	94	11152	5.00	5.59	
63 Methylcyclohexane	83	7.924	7.923	0.001	90	21875	5.00	5.82	
64 1,2-Dichloropropane	63	7.955	7.954	0.001	81	14968	5.00	8.07	
65 1,4-Dioxane	88	8.028	8.039	-0.011	38	2630	100.0	121.4	
67 Dibromomethane	93	8.046	8.039	0.007	86	8221	5.00	5.58	
68 Dichlorobromomethane	83	8.234	8.234	0.000	97	14873	5.00	5.05	
71 cis-1,3-Dichloropropene	75	8.679	8.678	0.000	91	20037	5.00	5.14	
72 4-Methyl-2-pentanone (MIBK)	43	8.825	8.830	-0.006	95	54251	25.0	24.0	
73 Toluene	91	9.013	9.012	0.001	98	58730	5.00	6.70	
74 trans-1,3-Dichloropropene	75	9.250	9.256	-0.006	96	17575	5.00	5.51	
75 Ethyl methacrylate	69	9.317	9.317	0.000	87	16414	5.00	5.14	
76 1,1,2-Trichloroethane	97	9.451	9.456	-0.005	90	11058	5.00	5.80	
77 Tetrachloroethene	164	9.530	9.529	0.001	91	8920	5.00	6.19	
78 1,3-Dichloropropane	76	9.615	9.615	0.000	91	20149	5.00	5.58	
79 2-Hexanone	43	9.664	9.663	0.001	97	34369	25.0	24.9	
81 Chlorodibromomethane	129	9.828	9.828	0.000	87	7744	5.00	5.16	
82 Ethylene Dibromide	107	9.938	9.943	-0.005	97	10255	5.00	5.69	
83 3-Chlorobenzotrifluoride	180	10.400	10.399	0.001	56	16731	5.00	6.25	
84 Chlorobenzene	112	10.431	10.430	0.001	93	35120	5.00	6.35	
85 4-Chlorobenzotrifluoride	180	10.485	10.491	-0.006	97	15159	5.00	5.97	
86 1,1,1,2-Tetrachloroethane	131	10.528	10.527	0.001	41	8838	5.00	5.45	
87 Ethylbenzene	106	10.534	10.533	0.001	99	18107	5.00	5.86	
88 m-Xylene & p-Xylene	106	10.662	10.661	0.001	99	23283	5.00	6.02	
89 o-Xylene	106	11.045	11.044	0.001	96	21871	5.00	5.83	
90 Styrene	104	11.063	11.063	0.001	91	35512	5.00	5.75	
91 Bromoform	173	11.252	11.251	0.001	92	4717	5.00	4.91	
92 2-Chlorobenzotrifluoride	180	11.313	11.306	0.007	93	16621	5.00	6.15	
93 Isopropylbenzene	105	11.410	11.409	0.001	96	57119	5.00	6.26	
96 1,1,2,2-Tetrachloroethane	83	11.720	11.720	0.000	73	14704	5.00	5.62	
95 Bromobenzene	156	11.726	11.726	0.000	92	11822	5.00	5.27	
97 trans-1,4-Dichloro-2-buten	53	11.757	11.756	0.001	81	5033	5.00	4.88	
98 1,2,3-Trichloropropane	110	11.775	11.774	0.001	80	4871	5.00	4.94	
99 N-Propylbenzene	120	11.830	11.829	0.001	99	14778	5.00	5.46	
100 2-Chlorotoluene	126	11.915	11.914	0.001	94	11942	5.00	5.37	
101 3-Chlorotoluene	126	11.982	11.981	0.001	99	13001	5.00	5.37	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.012	12.012	0.000	92	47124	5.00	5.47	
103 4-Chlorotoluene	126	12.043	12.042	0.001	98	12516	5.00	5.33	
104 tert-Butylbenzene	119	12.329	12.328	0.001	91	35316	5.00	5.35	
106 1,2,4-Trimethylbenzene	105	12.389	12.389	0.000	98	49653	5.00	5.51	
107 1,2-dichloro-4-(trifluorom	214	12.420	12.425	-0.005	96	12910	5.00	5.68	
108 sec-Butylbenzene	105	12.554	12.553	0.001	95	56554	5.00	5.63	
109 1,3-Dichlorobenzene	146	12.669	12.669	0.000	94	22929	5.00	5.35	
110 4-Isopropyltoluene	119	12.706	12.711	-0.005	96	43836	5.00	5.52	
111 1,4-Dichlorobenzene	146	12.779	12.772	0.007	88	24178	5.00	5.46	
113 2,4-Dichloro-1-(trifluorom	214	12.791	12.796	-0.005	93	12676	5.00	5.64	
114 2,5-Dichlorobenzotrifluori	214	12.834	12.833	0.001	96	13599	5.00	5.77	
116 n-Butylbenzene	91	13.119	13.119	0.000	98	45170	5.00	5.65	
117 1,2-Dichlorobenzene	146	13.126	13.125	0.001	92	23240	5.00	5.49	
118 1,2-Dibromo-3-Chloropropan	75	13.916	13.922	-0.006	74	3021	5.00	4.67	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.062	14.062	0.000	98	60061	15.0	16.8	
121 2,3- & 3,4- Dichlorotoluen	125	14.476	14.481	-0.005	99	44007	10.0	11.2	
122 1,2,4-Trichlorobenzene	180	14.744	14.743	0.001	92	16381	5.00	5.52	
123 Hexachlorobutadiene	225	14.896	14.895	0.001	93	6629	5.00	6.55	
124 Naphthalene	128	15.011	15.011	0.000	97	40480	5.00	5.15	
125 1,2,3-Trichlorobenzene	180	15.230	15.236	-0.006	92	15722	5.00	5.65	
126 2,4,5-Trichlorotoluene	159	16.015	16.008	0.007	0	10279	5.00	5.84	
127 2,3,6-Trichlorotoluene	159	16.119	16.112	0.007	91	9662	5.00	6.05	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		10.0	11.7	
S 131 Xylenes, Total	106				0		10.0	11.8	
S 132 1,3-Dichloropropene, Total	1				0		10.0	10.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWeemixPRI_00002	Amount Added: 0.20	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 0.20	Units: uL	
voaWketPri Re_00005	Amount Added: 0.80	Units: uL	
voaWVA2ndRes_00001	Amount Added: 0.20	Units: uL	
VOA8260SURRE_00034	Amount Added: 0.20	Units: uL	
VOAACROPRI_00005	Amount Added: 4.00	Units: uL	
VOA8260INT_00032	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501003.D

Injection Date: 01-May-2015 13:53:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD1

Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL

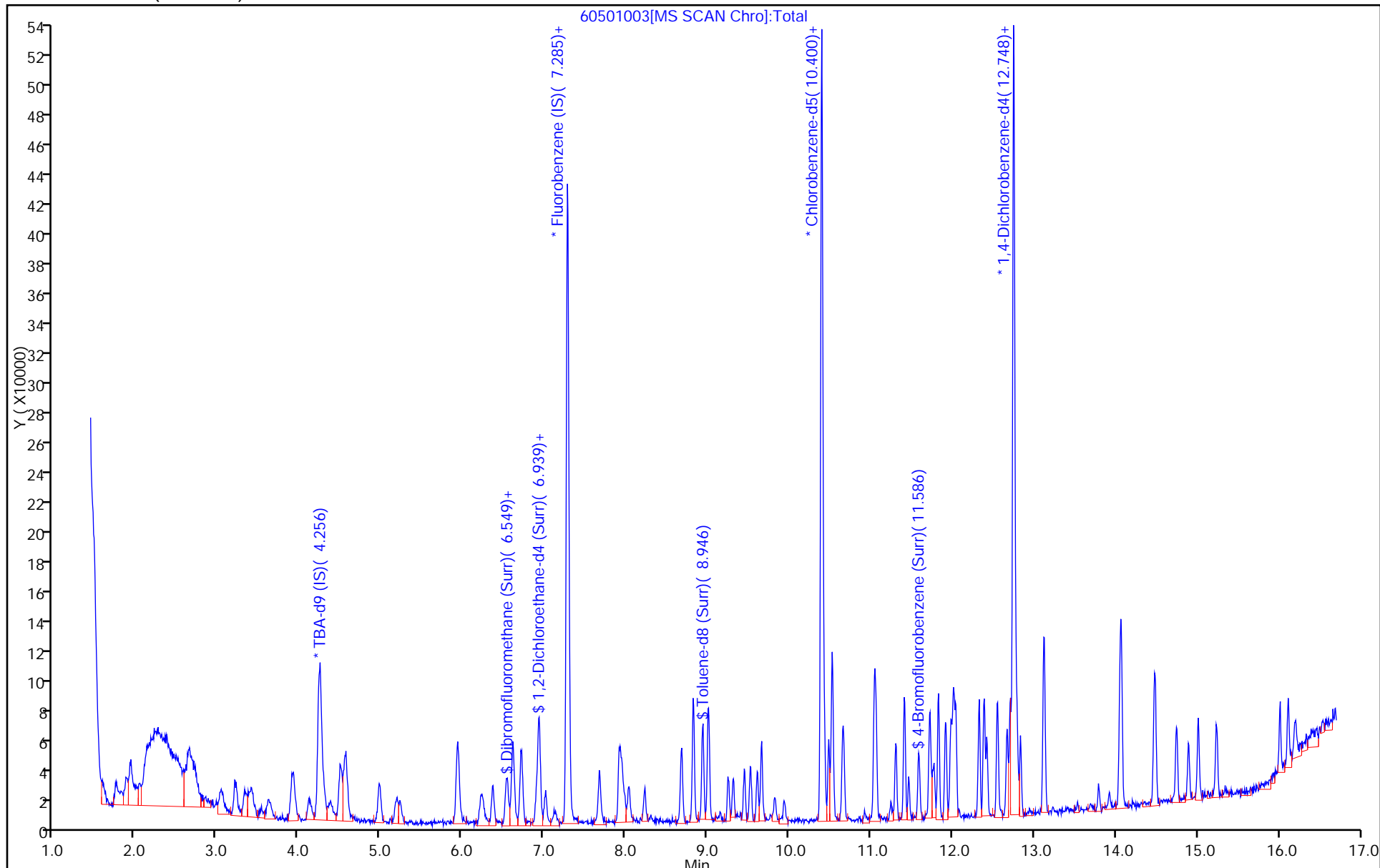
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



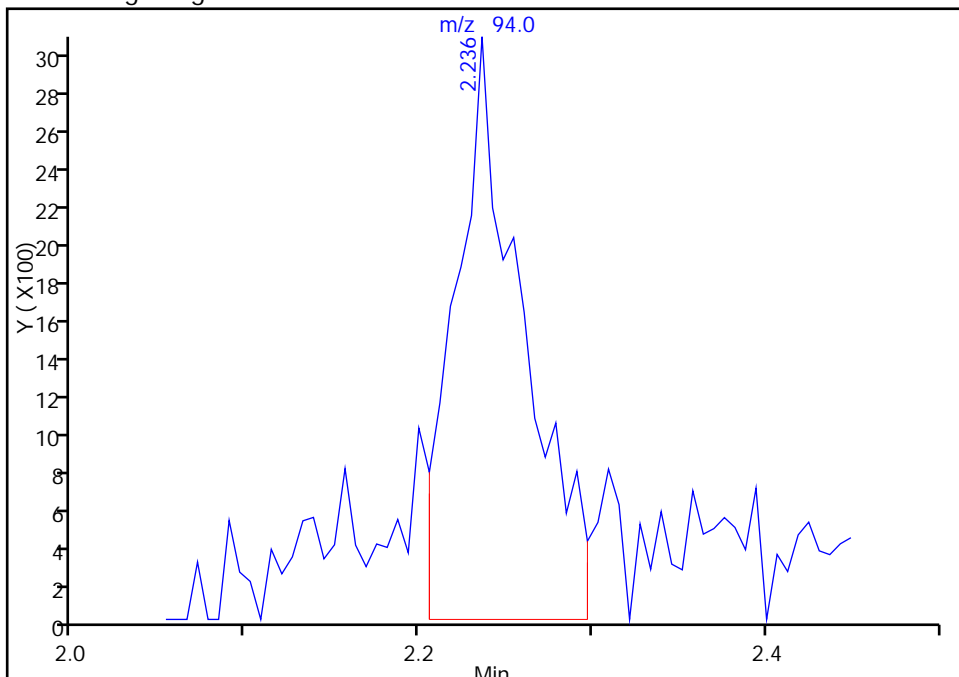
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501003.D
Injection Date: 01-May-2015 13:53:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

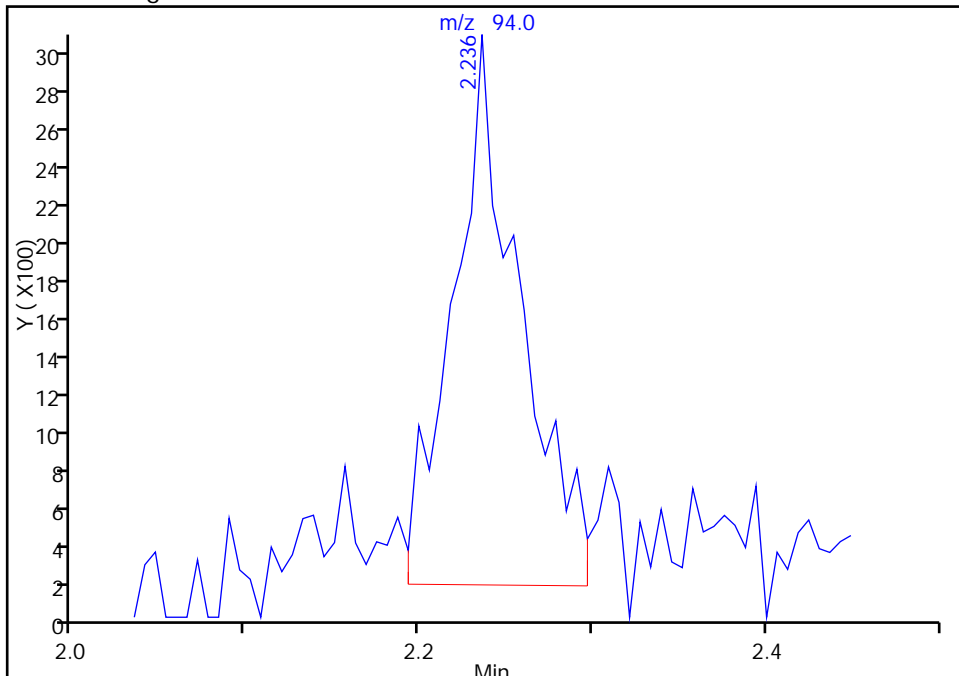
RT: 2.24
Area: 8392
Amount: 5.021302
Amount Units: ng

Processing Integration Results



RT: 2.24
Area: 7774
Amount: 6.585385
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 02-May-2015 10:38:44
Audit Action: Manually Integrated
Audit Reason: Baseline

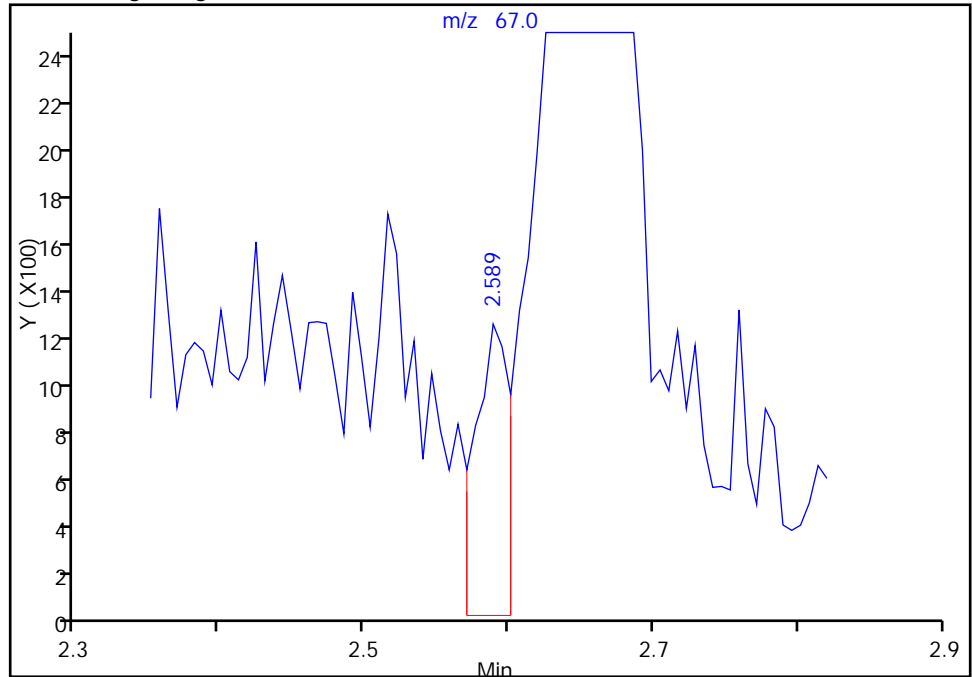
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501003.D
Injection Date: 01-May-2015 13:53:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

17 Dichlorofluoromethane, CAS: 75-43-4

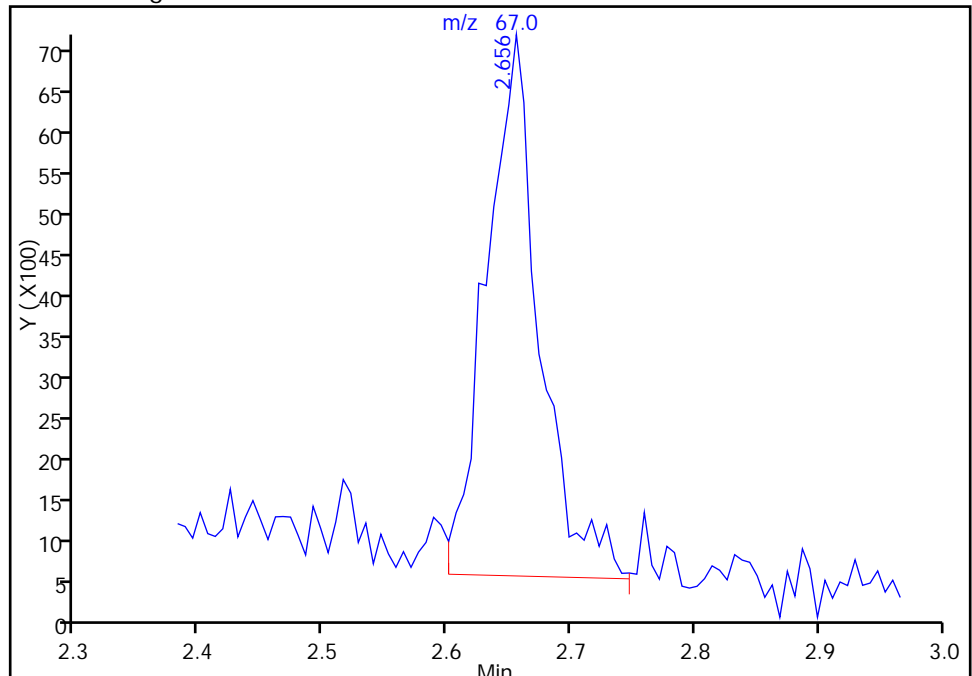
RT: 2.59
Area: 2061
Amount: 3.312701
Amount Units: ng

Processing Integration Results



RT: 2.66
Area: 20031
Amount: 5.806076
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 02-May-2015 10:38:44
Audit Action: Manually Integrated
Audit Reason: Baseline

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501006.D
 Lims ID: IC VSTD5
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 01-May-2015 14:17:30 ALS Bottle#: 4 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD5
 Misc. Info.: 180-0006721-006
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 02-May-2015 10:49:25 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: fergusond

Date: 02-May-2015 10:42:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.257	4.255	0.002	100	264370	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.287	7.291	-0.004	98	394999	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.402	10.405	-0.003	91	82880	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.750	12.748	0.002	97	129908	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.557	6.555	0.002	92	42078	25.0	25.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.934	6.938	-0.004	78	69113	25.0	25.3	
\$ 7 Toluene-d8 (Surr)	98	8.948	8.945	0.003	93	196169	25.0	28.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.588	11.592	-0.004	80	81543	25.0	28.5	
11 Dichlorodifluoromethane	85	1.605	1.603	0.002	99	62218	25.0	25.8	
12 Chloromethane	50	1.763	1.755	0.008	100	53152	25.0	26.5	
13 Vinyl chloride	62	1.897	1.889	0.008	97	56220	25.0	26.3	
14 Butadiene	39	1.946	1.931	0.015	94	54119	25.0	26.6	
15 Bromomethane	94	2.250	2.229	0.021	91	28897	25.0	26.0	
16 Chloroethane	64	2.390	2.381	0.009	99	33151	25.0	24.6	
17 Dichlorofluoromethane	67	2.657	2.655	0.002	99	90056	25.0	27.7	
18 Trichlorofluoromethane	101	2.694	2.692	0.002	82	67290	25.0	27.3	
20 Ethyl ether	59	3.053	3.051	0.002	87	50543	25.0	27.4	
21 Acrolein	56	3.235	3.227	0.008	99	42429	125.0	129.3	
22 1,1-Dichloroethene	96	3.339	3.343	-0.004	96	47470	25.0	26.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.418	3.403	0.015	95	48408	25.0	26.2	
24 Acetone	43	3.436	3.440	-0.004	97	28568	50.0	54.5	
25 Iodomethane	142	3.545	3.543	0.002	99	61771	25.0	26.4	
26 Carbon disulfide	76	3.631	3.641	-0.010	99	143618	25.0	26.8	
29 3-Chloro-1-propene	76	3.923	3.914	0.009	90	34624	25.0	27.0	
30 Methyl acetate	43	3.935	3.939	-0.004	97	235556	125.0	136.1	
31 Methylene Chloride	84	4.136	4.133	0.003	92	57152	25.0	25.7	
32 2-Methyl-2-propanol	59	4.391	4.389	0.002	100	75192	250.0	261.1	
33 Acrylonitrile	53	4.513	4.511	0.002	99	235229	250.0	266.3	
34 trans-1,2-Dichloroethene	96	4.561	4.565	-0.004	94	54099	25.0	26.5	
35 Methyl tert-butyl ether	73	4.580	4.584	-0.004	95	189455	25.0	25.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.993	4.991	0.002	89	70993	25.0	26.0	
37 1,1-Dichloroethane	63	5.200	5.198	0.002	96	103692	25.0	27.1	
38 Vinyl acetate	43	5.243	5.247	-0.004	97	125444	25.0	27.2	
42 2,2-Dichloropropane	77	5.942	5.946	-0.004	74	65618	25.0	27.6	
43 cis-1,2-Dichloroethene	96	5.942	5.946	-0.004	84	60662	25.0	26.2	
44 2-Butanone (MEK)	43	5.955	5.952	0.003	95	45773	50.0	52.5	
48 Chlorobromomethane	128	6.234	6.238	-0.004	96	25094	25.0	26.4	
49 Tetrahydrofuran	42	6.259	6.257	0.002	82	42422	50.0	52.3	
50 Chloroform	83	6.374	6.372	0.002	95	100773	25.0	27.2	
51 1,1,1-Trichloroethane	97	6.545	6.542	0.003	98	78188	25.0	25.7	
52 Cyclohexane	56	6.624	6.622	0.002	89	93429	25.0	25.6	
53 Carbon tetrachloride	117	6.715	6.719	-0.004	85	60197	25.0	25.9	
54 1,1-Dichloropropene	75	6.727	6.731	-0.004	94	76537	25.0	26.0	
55 Isobutyl alcohol	41	6.910	6.908	0.002	95	55741	625.0	700.2	
56 Benzene	78	6.946	6.944	0.002	96	236377	25.0	27.2	
57 1,2-Dichloroethane	62	7.019	7.023	-0.004	98	88016	25.0	26.7	
59 n-Heptane	43	7.311	7.315	-0.004	89	52724	25.0	25.1	
61 Trichloroethene	130	7.682	7.680	0.002	93	49633	25.0	26.4	
63 Methylcyclohexane	83	7.919	7.923	-0.004	91	92085	25.0	26.0	
64 1,2-Dichloropropane	63	7.956	7.954	0.002	83	59925	25.0	34.3	
65 1,4-Dioxane	88	8.047	8.039	0.008	41	11389	500.0	558.1	M
67 Dibromomethane	93	8.041	8.039	0.002	92	34683	25.0	25.0	
68 Dichlorobromomethane	83	8.236	8.234	0.002	97	72416	25.0	26.1	
71 cis-1,3-Dichloropropene	75	8.680	8.678	0.002	93	95523	25.0	26.0	
72 4-Methyl-2-pentanone (MIBK)	43	8.826	8.830	-0.004	95	122138	50.0	55.0	
73 Toluene	91	9.015	9.012	0.002	98	246446	25.0	28.7	
74 trans-1,3-Dichloropropene	75	9.258	9.256	0.002	95	86561	25.0	27.7	
75 Ethyl methacrylate	69	9.319	9.317	0.002	87	84855	25.0	27.1	
76 1,1,2-Trichloroethane	97	9.453	9.456	-0.003	93	49466	25.0	26.4	
77 Tetrachloroethene	164	9.532	9.529	0.003	95	39101	25.0	27.6	
78 1,3-Dichloropropane	76	9.611	9.615	-0.004	91	98360	25.0	27.8	
79 2-Hexanone	43	9.665	9.663	0.002	95	73724	50.0	54.4	
81 Chlorodibromomethane	129	9.830	9.828	0.002	89	39108	25.0	26.6	
82 Ethylene Dibromide	107	9.945	9.943	0.002	98	47993	25.0	27.1	
83 3-Chlorobenzotrifluoride	180	10.395	10.399	-0.004	88	69099	25.0	26.3	
84 Chlorobenzene	112	10.432	10.430	0.002	93	153098	25.0	28.2	
85 4-Chlorobenzotrifluoride	180	10.487	10.491	-0.004	96	66283	25.0	26.6	
86 1,1,1,2-Tetrachloroethane	131	10.529	10.527	0.002	92	43746	25.0	27.5	
87 Ethylbenzene	106	10.529	10.533	-0.004	99	83792	25.0	27.6	
88 m-Xylene & p-Xylene	106	10.663	10.661	0.002	100	106116	25.0	28.0	
89 o-Xylene	106	11.046	11.044	0.002	97	103108	25.0	28.0	
90 Styrene	104	11.065	11.063	0.003	94	171422	25.0	28.3	
91 Bromoform	173	11.247	11.251	-0.004	93	24665	25.0	26.2	
92 2-Chlorobenzotrifluoride	180	11.308	11.306	0.002	95	69992	25.0	26.4	
93 Isopropylbenzene	105	11.411	11.409	0.002	97	260050	25.0	29.1	
96 1,1,2,2-Tetrachloroethane	83	11.716	11.720	-0.004	96	72752	25.0	28.3	
95 Bromobenzene	156	11.728	11.726	0.002	97	54793	25.0	26.0	
97 trans-1,4-Dichloro-2-buten	53	11.752	11.756	-0.004	83	24523	25.0	25.3	
98 1,2,3-Trichloropropane	110	11.770	11.774	-0.004	85	23251	25.0	25.1	
99 N-Propylbenzene	120	11.831	11.829	0.002	99	65168	25.0	25.6	
100 2-Chlorotoluene	126	11.916	11.914	0.002	93	55085	25.0	26.4	
101 3-Chlorotoluene	126	11.983	11.981	0.002	97	58118	25.0	25.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.014	12.012	0.002	93	217291	25.0	26.9	
103 4-Chlorotoluene	126	12.038	12.042	-0.004	99	57566	25.0	26.1	
104 tert-Butylbenzene	119	12.330	12.328	0.002	90	164817	25.0	26.6	
106 1,2,4-Trimethylbenzene	105	12.385	12.389	-0.004	97	228421	25.0	27.0	
107 1,2-dichloro-4-(trifluorom	214	12.421	12.425	-0.004	96	53155	25.0	24.9	
108 sec-Butylbenzene	105	12.555	12.553	0.002	95	250114	25.0	26.5	
109 1,3-Dichlorobenzene	146	12.671	12.669	0.002	94	107399	25.0	26.7	
110 4-Isopropyltoluene	119	12.707	12.711	-0.004	96	198948	25.0	26.7	
111 1,4-Dichlorobenzene	146	12.774	12.772	0.002	92	112838	25.0	27.1	
113 2,4-Dichloro-1-(trifluorom	214	12.792	12.796	-0.004	94	54452	25.0	25.8	
114 2,5-Dichlorobenzotrifluori	214	12.835	12.833	0.002	98	56843	25.0	25.7	
116 n-Butylbenzene	91	13.115	13.119	-0.004	98	199711	25.0	26.6	
117 1,2-Dichlorobenzene	146	13.133	13.125	0.008	93	105916	25.0	26.6	
118 1,2-Dibromo-3-Chloropropan	75	13.924	13.922	0.002	73	15751	25.0	26.0	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.064	14.062	0.002	99	271825	75.0	81.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.477	14.481	-0.004	99	194878	50.0	53.0	
122 1,2,4-Trichlorobenzene	180	14.745	14.743	0.002	92	78246	25.0	28.1	
123 Hexachlorobutadiene	225	14.891	14.895	-0.004	94	25727	25.0	27.1	
124 Naphthalene	128	15.013	15.011	0.002	98	202675	25.0	27.5	
125 1,2,3-Trichlorobenzene	180	15.238	15.236	0.002	94	74534	25.0	28.5	
126 2,4,5-Trichlorotoluene	159	16.010	16.008	0.002	0	42820	25.0	25.9	
127 2,3,6-Trichlorotoluene	159	16.114	16.112	0.002	92	38864	25.0	25.9	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		50.0	52.7	
S 131 Xylenes, Total	106				0		50.0	56.0	
S 132 1,3-Dichloropropene, Total	1				0		50.0	53.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACROPRI_00005	Amount Added: 5.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 1.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 1.00	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 1.00	Units: uL	
voaWketPri Re_00005	Amount Added: 1.00	Units: uL	
VOA8260SURRE_00034	Amount Added: 1.00	Units: uL	
VOA8260INT_00032	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501006.D

Injection Date: 01-May-2015 14:17:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD5

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

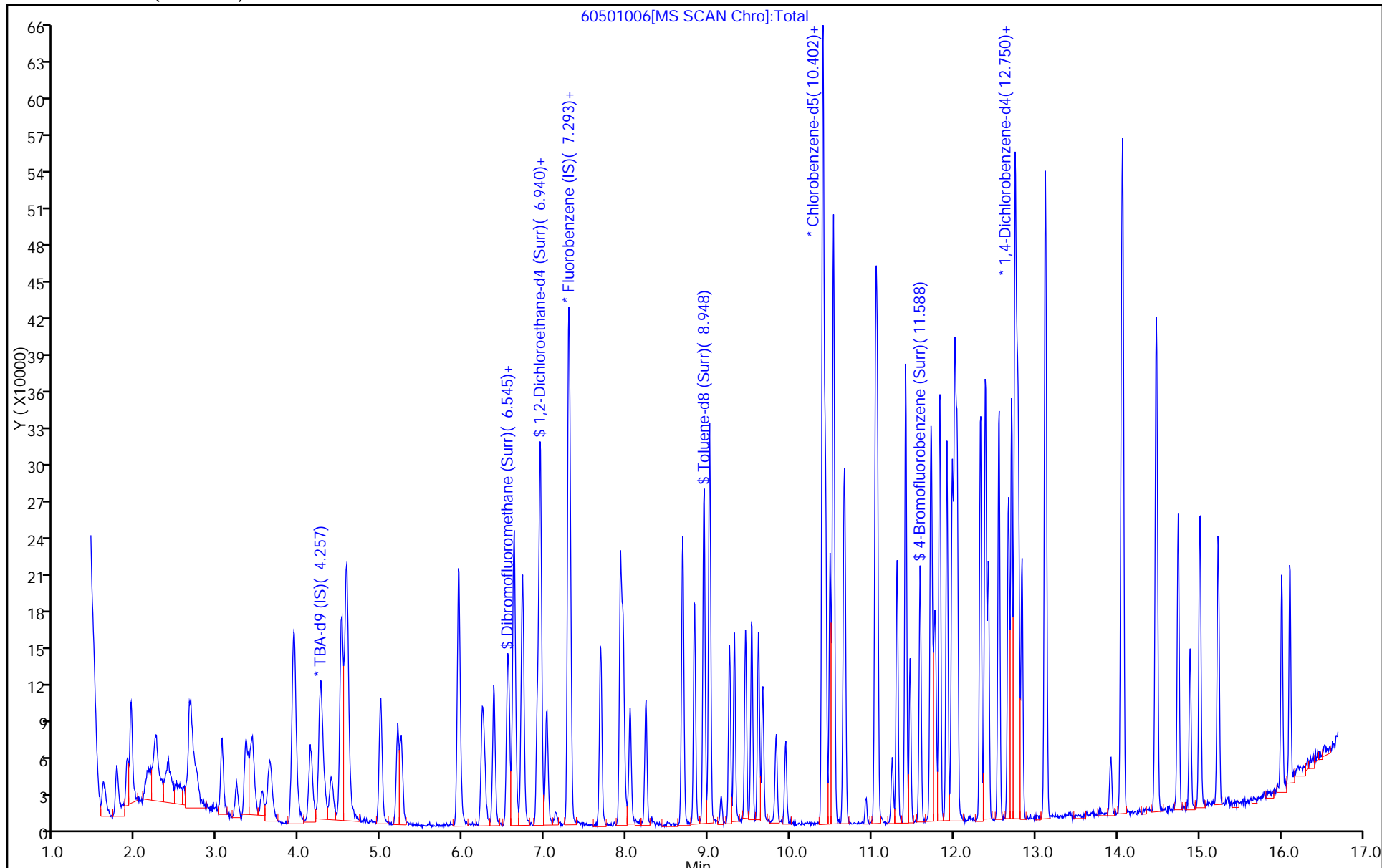
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



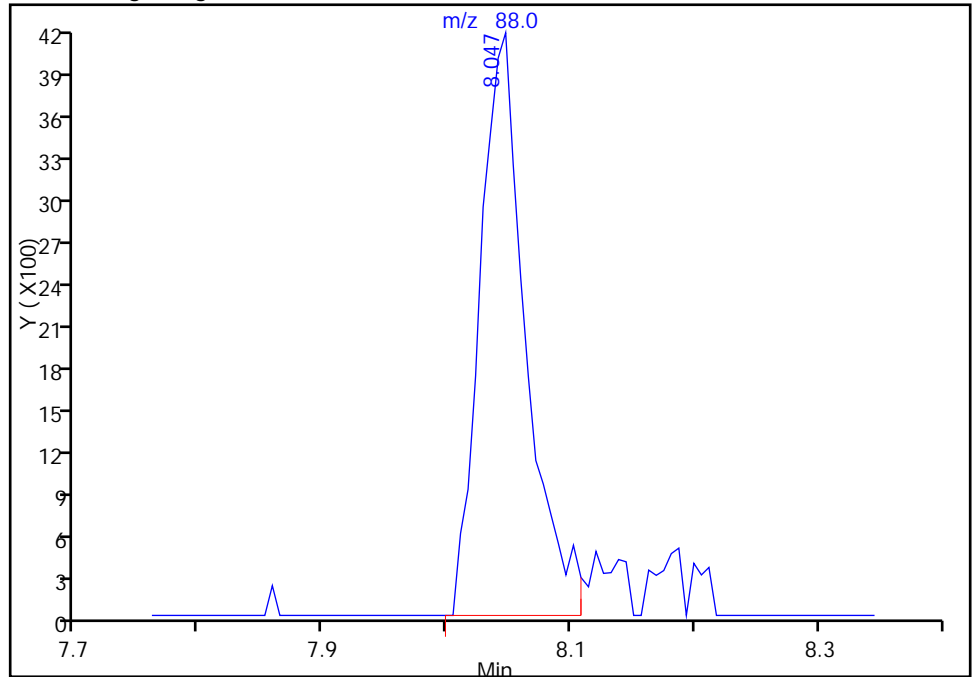
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501006.D
Injection Date: 01-May-2015 14:17:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

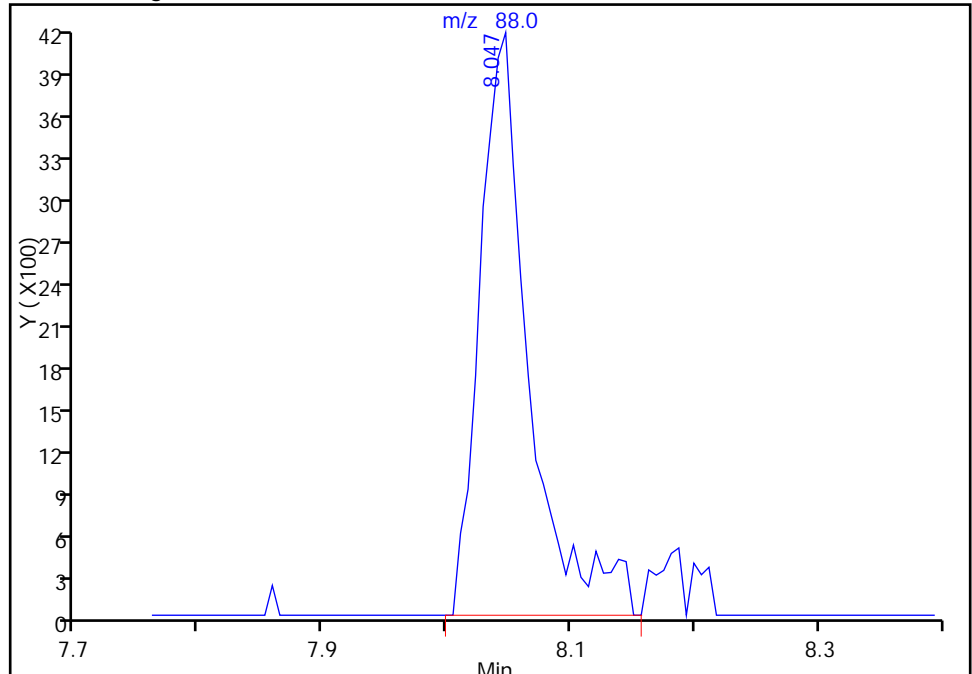
RT: 8.05
Area: 10646
Amount: 680.3497
Amount Units: ng

Processing Integration Results



RT: 8.05
Area: 11389
Amount: 558.1213
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 02-May-2015 10:42:12
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501007.D
 Lims ID: ICIS VSTD10
 Client ID:
 Sample Type: ICIS Calib Level: 3
 Inject. Date: 01-May-2015 14:41:30 ALS Bottle#: 5 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS VSTD10
 Misc. Info.: 180-0006721-007
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 02-May-2015 11:11:04 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: fergusond

Date: 02-May-2015 11:11:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.254	4.254	0.000	100	268623	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	98	433461	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.404	10.404	0.000	90	91273	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.753	12.753	0.000	97	138083	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.560	6.560	0.000	91	91685	50.0	51.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.937	6.937	0.000	72	149513	50.0	49.9	
\$ 7 Toluene-d8 (Surr)	98	8.944	8.944	0.000	94	427631	50.0	55.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.591	11.591	0.000	80	169309	50.0	53.8	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	99	126679	50.0	47.8	
12 Chloromethane	50	1.760	1.760	0.000	100	101459	50.0	46.1	
13 Vinyl chloride	62	1.888	1.888	0.000	98	111175	50.0	47.5	
14 Butadiene	39	1.936	1.936	0.000	93	107576	50.0	48.1	
15 Bromomethane	94	2.240	2.240	0.000	90	53923	50.0	44.2	
16 Chloroethane	64	2.386	2.386	0.000	99	63525	50.0	43.0	
17 Dichlorofluoromethane	67	2.660	2.660	0.000	98	171304	50.0	48.0	
18 Trichlorofluoromethane	101	2.697	2.697	0.000	94	126784	50.0	46.8	
20 Ethyl ether	59	3.050	3.050	0.000	89	91939	50.0	45.5	
21 Acrolein	56	3.226	3.226	0.000	99	51168	150.0	142.6	
22 1,1-Dichloroethene	96	3.348	3.348	0.000	98	97947	50.0	48.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.415	3.415	0.000	96	97512	50.0	48.1	
24 Acetone	43	3.433	3.433	0.000	98	54459	100.0	94.7	
25 Iodomethane	142	3.536	3.536	0.000	99	124319	50.0	48.4	
26 Carbon disulfide	76	3.634	3.634	0.000	99	280976	50.0	47.8	
29 3-Chloro-1-propene	76	3.919	3.919	0.000	90	66194	50.0	47.0	
30 Methyl acetate	43	3.938	3.938	0.000	97	448132	250.0	236.0	
31 Methylene Chloride	84	4.138	4.138	0.000	91	113752	50.0	46.7	
32 2-Methyl-2-propanol	59	4.394	4.394	0.000	99	148632	500.0	507.9	
33 Acrylonitrile	53	4.510	4.510	0.000	99	471254	500.0	486.2	
34 trans-1,2-Dichloroethene	96	4.564	4.564	0.000	98	106188	50.0	47.5	
35 Methyl tert-butyl ether	73	4.583	4.583	0.000	95	390371	50.0	48.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.984	4.984	0.000	90	141416	50.0	47.1	
37 1,1-Dichloroethane	63	5.197	5.197	0.000	96	204336	50.0	48.6	
38 Vinyl acetate	43	5.246	5.246	0.000	98	252021	50.0	49.8	
42 2,2-Dichloropropane	77	5.945	5.945	0.000	65	125582	50.0	48.2	
43 cis-1,2-Dichloroethene	96	5.945	5.945	0.000	83	119864	50.0	47.1	
44 2-Butanone (MEK)	43	5.957	5.957	0.000	98	85635	100.0	89.4	
48 Chlorobromomethane	128	6.237	6.237	0.000	97	48600	50.0	46.6	
49 Tetrahydrofuran	42	6.256	6.256	0.000	84	82088	100.0	92.3	
50 Chloroform	83	6.377	6.377	0.000	96	189114	50.0	46.6	
51 1,1,1-Trichloroethane	97	6.548	6.548	0.000	98	158279	50.0	47.4	
52 Cyclohexane	56	6.621	6.621	0.000	89	192149	50.0	48.0	
53 Carbon tetrachloride	117	6.718	6.718	0.000	96	116915	50.0	45.9	
54 1,1-Dichloropropene	75	6.730	6.730	0.000	96	152706	50.0	47.3	
55 Isobutyl alcohol	41	6.906	6.906	0.000	92	106831	1250.0	1222.9	
56 Benzene	78	6.943	6.943	0.000	96	454609	50.0	47.7	
57 1,2-Dichloroethane	62	7.022	7.022	0.000	98	170097	50.0	46.9	
59 n-Heptane	43	7.314	7.314	0.000	89	104766	50.0	45.4	
61 Trichloroethene	130	7.685	7.685	0.000	95	97663	50.0	47.4	
63 Methylcyclohexane	83	7.922	7.922	0.000	90	186510	50.0	48.0	
64 1,2-Dichloropropane	63	7.959	7.959	0.000	93	114408	50.0	45.5	
65 1,4-Dioxane	88	8.044	8.044	0.000	41	23730	1000.0	979.8	M
67 Dibromomethane	93	8.044	8.044	0.000	90	72777	50.0	47.8	
68 Dichlorobromomethane	83	8.233	8.233	0.000	99	140878	50.0	46.3	
71 cis-1,3-Dichloropropene	75	8.683	8.683	0.000	94	185519	50.0	46.1	
72 4-Methyl-2-pentanone (MIBK)	43	8.829	8.829	0.000	95	248428	100.0	101.6	
73 Toluene	91	9.011	9.011	0.000	99	472389	50.0	49.9	
74 trans-1,3-Dichloropropene	75	9.261	9.261	0.000	95	164800	50.0	47.8	
75 Ethyl methacrylate	69	9.322	9.322	0.000	87	171769	50.0	49.8	
76 1,1,2-Trichloroethane	97	9.455	9.455	0.000	93	100537	50.0	48.8	
77 Tetrachloroethene	164	9.528	9.528	0.000	95	77095	50.0	49.5	
78 1,3-Dichloropropane	76	9.614	9.614	0.000	91	192805	50.0	49.5	
79 2-Hexanone	43	9.662	9.662	0.000	96	148448	100.0	99.5	
81 Chlorodibromomethane	129	9.827	9.827	0.000	91	76638	50.0	47.3	
82 Ethylene Dibromide	107	9.942	9.942	0.000	98	94113	50.0	48.3	
83 3-Chlorobenzotrifluoride	180	10.398	10.398	0.000	90	148039	50.0	51.2	
84 Chlorobenzene	112	10.429	10.429	0.000	93	295391	50.0	49.4	
85 4-Chlorobenzotrifluoride	180	10.490	10.490	0.000	96	145575	50.0	53.1	
86 1,1,1,2-Tetrachloroethane	131	10.526	10.526	0.000	92	86295	50.0	49.3	
87 Ethylbenzene	106	10.532	10.532	0.000	99	164938	50.0	49.4	
88 m-Xylene & p-Xylene	106	10.660	10.660	0.000	100	204038	50.0	48.8	
89 o-Xylene	106	11.043	11.043	0.000	97	204569	50.0	50.4	
90 Styrene	104	11.061	11.061	0.000	95	332158	50.0	49.8	
91 Bromoform	173	11.250	11.250	0.000	90	47850	50.0	46.1	
92 2-Chlorobenzotrifluoride	180	11.311	11.311	0.000	96	147246	50.0	50.5	
93 Isopropylbenzene	105	11.414	11.414	0.000	97	506955	50.0	51.4	
96 1,1,2,2-Tetrachloroethane	83	11.718	11.718	0.000	96	138753	50.0	49.0	
95 Bromobenzene	156	11.731	11.731	0.000	95	108631	50.0	48.5	
97 trans-1,4-Dichloro-2-buten	53	11.755	11.755	0.000	85	46308	50.0	45.0	
98 1,2,3-Trichloropropane	110	11.779	11.779	0.000	83	46172	50.0	46.9	
99 N-Propylbenzene	120	11.828	11.828	0.000	99	129444	50.0	47.9	
100 2-Chlorotoluene	126	11.919	11.919	0.000	94	106218	50.0	47.8	
101 3-Chlorotoluene	126	11.980	11.980	0.000	97	117101	50.0	48.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	94	418940	50.0	48.8	
103 4-Chlorotoluene	126	12.041	12.041	0.000	98	113709	50.0	48.6	
104 tert-Butylbenzene	119	12.327	12.327	0.000	91	322788	50.0	49.0	
106 1,2,4-Trimethylbenzene	105	12.388	12.388	0.000	98	440328	50.0	48.9	
107 1,2-dichloro-4-(trifluorom	214	12.424	12.424	0.000	97	112527	50.0	49.7	
108 sec-Butylbenzene	105	12.552	12.552	0.000	96	497104	50.0	49.6	
109 1,3-Dichlorobenzene	146	12.674	12.674	0.000	94	204242	50.0	47.8	
110 4-Isopropyltoluene	119	12.710	12.710	0.000	95	387889	50.0	48.9	
111 1,4-Dichlorobenzene	146	12.777	12.777	0.000	90	213363	50.0	48.3	
113 2,4-Dichloro-1-(trifluorom	214	12.795	12.795	0.000	95	111058	50.0	49.5	
114 2,5-Dichlorobenzotrifluori	214	12.838	12.838	0.000	98	121492	50.0	49.5	
116 n-Butylbenzene	91	13.118	13.118	0.000	98	390925	50.0	49.1	
117 1,2-Dichlorobenzene	146	13.130	13.130	0.000	94	203881	50.0	48.2	
118 1,2-Dibromo-3-Chloropropan	75	13.915	13.921	-0.006	73	29597	50.0	45.9	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.061	14.061	0.000	98	557142	150.0	156.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.480	14.480	0.000	99	406060	100.0	103.8	
122 1,2,4-Trichlorobenzene	180	14.748	14.748	0.000	93	146069	50.0	49.3	
123 Hexachlorobutadiene	225	14.894	14.894	0.000	96	49256	50.0	48.8	
124 Naphthalene	128	15.010	15.010	0.000	99	399712	50.0	51.0	
125 1,2,3-Trichlorobenzene	180	15.235	15.235	0.000	93	136259	50.0	49.1	
126 2,4,5-Trichlorotoluene	159	16.013	16.013	0.000	0	84630	50.0	48.2	
127 2,3,6-Trichlorotoluene	159	16.111	16.111	0.000	91	74459	50.0	46.7	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	94.6	
S 131 Xylenes, Total	106				0		100.0	99.2	
S 132 1,3-Dichloropropene, Total	1				0		100.0	93.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00034	Amount Added: 2.00	Units: uL	
voaWketPri Re_00005	Amount Added: 2.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
VOAACROPRI_00005	Amount Added: 6.00	Units: uL	
VOA8260INT_00032	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501007.D

Injection Date: 01-May-2015 14:41:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: ICIS VSTD10

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

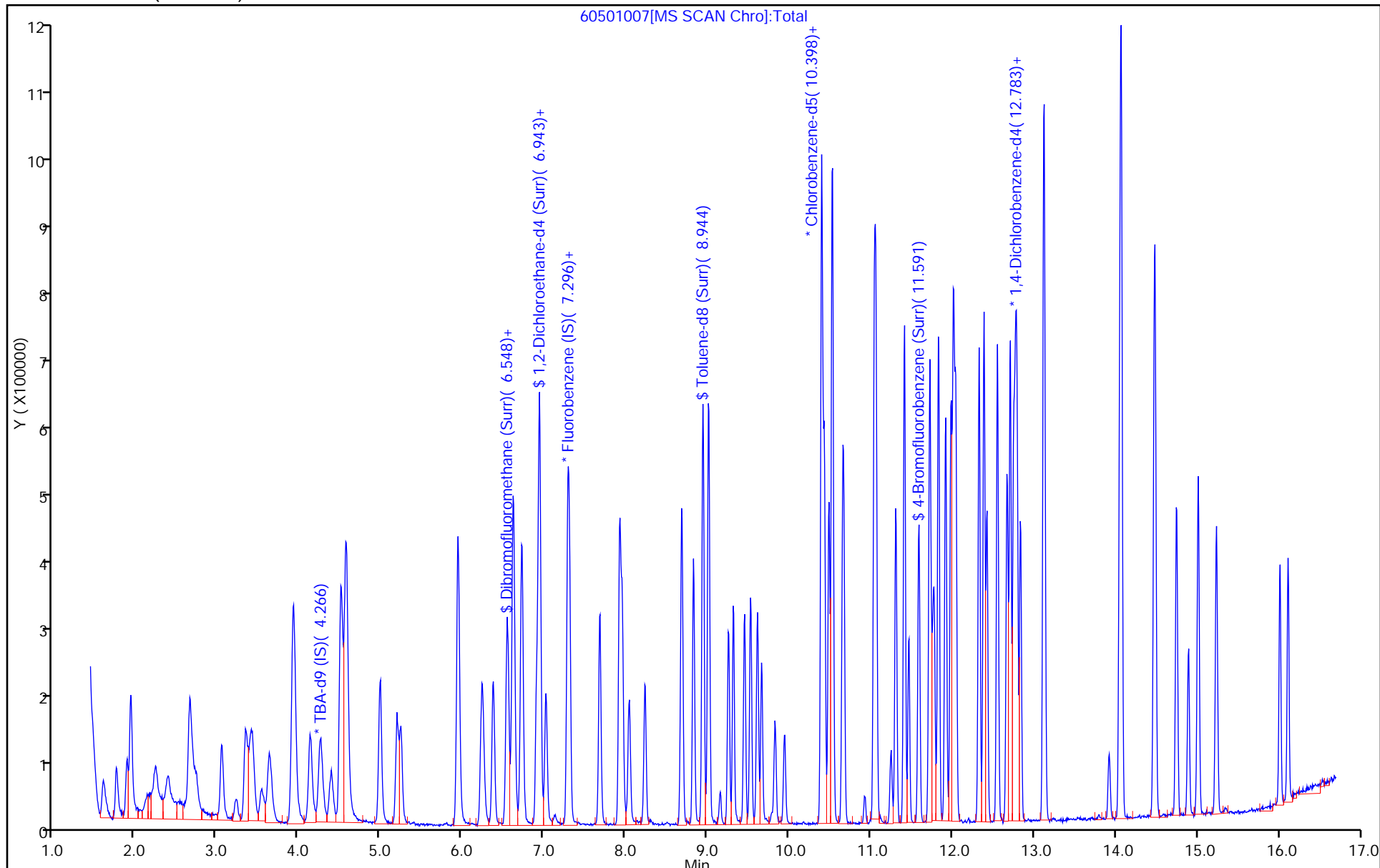
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



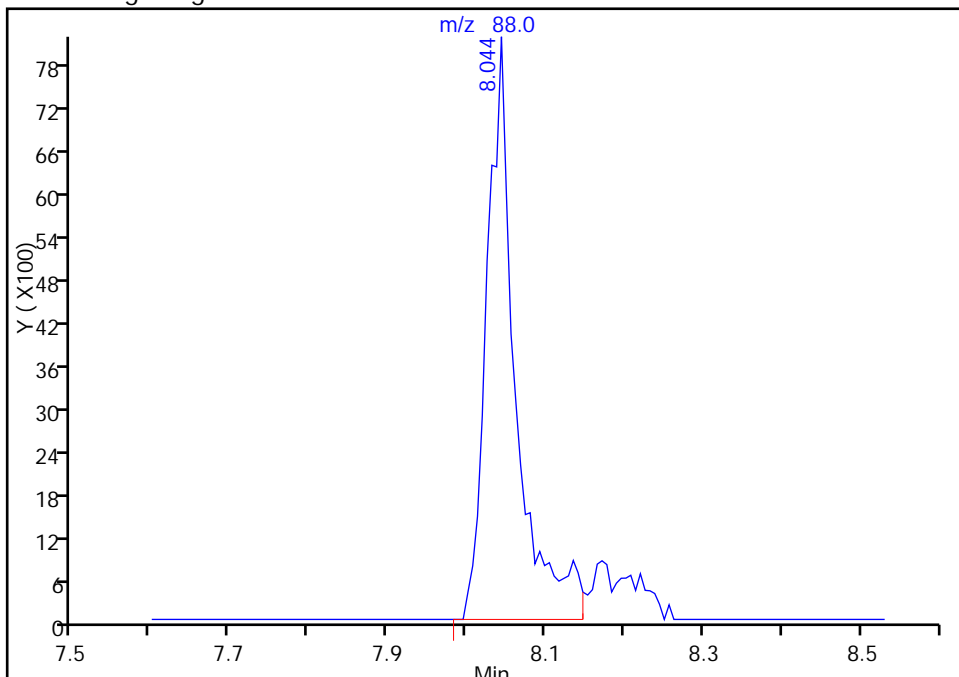
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501007.D
Injection Date: 01-May-2015 14:41:30 Instrument ID: CHHP6
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

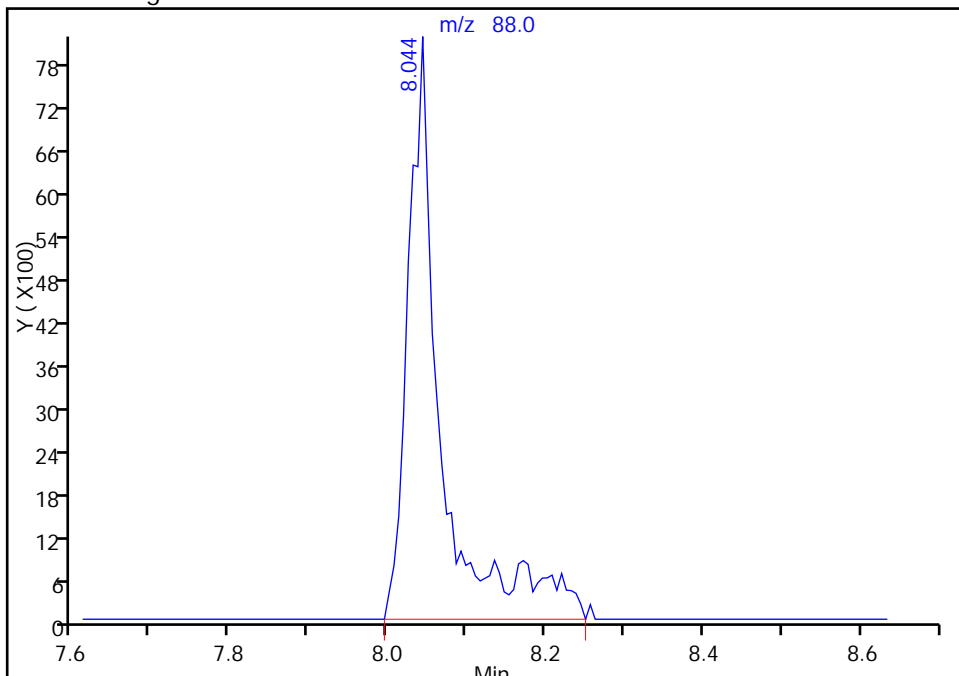
RT: 8.04
Area: 20740
Amount: 1234.6890
Amount Units: ng

Processing Integration Results



RT: 8.04
Area: 23730
Amount: 979.8254
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 02-May-2015 10:12:54
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501008.D
 Lims ID: IC VSTD15
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 01-May-2015 15:06:30 ALS Bottle#: 6 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD15
 Misc. Info.: 180-0006721-008
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 02-May-2015 10:49:28 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: fergusond

Date: 02-May-2015 10:45:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.255	4.255	0.000	100	254041	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.291	7.291	0.000	98	394597	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.405	10.405	0.000	90	85649	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.748	12.748	0.000	97	127119	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.555	6.555	0.000	91	127929	75.0	78.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.938	6.938	0.000	82	217902	75.0	79.9	
\$ 7 Toluene-d8 (Surr)	98	8.945	8.945	0.000	94	575027	75.0	79.3	
\$ 8 4-Bromofluorobenzene (Surr	95	11.592	11.592	0.000	82	230387	75.0	78.0	
11 Dichlorodifluoromethane	85	1.603	1.603	0.000	99	187095	75.0	77.6	
12 Chloromethane	50	1.755	1.755	0.000	99	152788	75.0	76.3	
13 Vinyl chloride	62	1.889	1.889	0.000	99	159170	75.0	74.6	
14 Butadiene	39	1.931	1.931	0.000	94	143792	75.0	70.6	
15 Bromomethane	94	2.229	2.229	0.000	92	77761	75.0	70.0	
16 Chloroethane	64	2.381	2.381	0.000	99	102015	75.0	75.9	
17 Dichlorofluoromethane	67	2.655	2.655	0.000	98	243522	75.0	75.0	
18 Trichlorofluoromethane	101	2.692	2.692	0.000	98	187475	75.0	76.0	
20 Ethyl ether	59	3.051	3.051	0.000	89	135802	75.0	73.8	
21 Acrolein	56	3.227	3.227	0.000	98	59022	175.0	180.0	
22 1,1-Dichloroethene	96	3.343	3.343	0.000	96	135482	75.0	74.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.403	3.403	0.000	97	140183	75.0	76.0	
24 Acetone	43	3.440	3.440	0.000	94	81971	150.0	156.5	
25 Iodomethane	142	3.543	3.543	0.000	99	180970	75.0	77.5	
26 Carbon disulfide	76	3.641	3.641	0.000	99	408054	75.0	76.2	
29 3-Chloro-1-propene	76	3.914	3.914	0.000	90	94749	75.0	73.9	
30 Methyl acetate	43	3.939	3.939	0.000	97	675270	375.0	390.6	
31 Methylene Chloride	84	4.133	4.133	0.000	92	172741	75.0	77.9	
32 2-Methyl-2-propanol	59	4.389	4.389	0.000	98	211317	750.0	763.6	
33 Acrylonitrile	53	4.511	4.511	0.000	98	700311	750.0	793.6	
34 trans-1,2-Dichloroethene	96	4.565	4.565	0.000	98	154219	75.0	75.7	
35 Methyl tert-butyl ether	73	4.584	4.584	0.000	95	589934	75.0	80.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.991	4.991	0.000	92	203332	75.0	74.4	
37 1,1-Dichloroethane	63	5.198	5.198	0.000	97	297015	75.0	77.6	
38 Vinyl acetate	43	5.247	5.247	0.000	97	360384	75.0	78.3	
42 2,2-Dichloropropane	77	5.946	5.946	0.000	65	184800	75.0	77.9	
43 cis-1,2-Dichloroethene	96	5.946	5.946	0.000	84	179083	75.0	77.4	
44 2-Butanone (MEK)	43	5.952	5.952	0.000	65	135914	150.0	155.9	
48 Chlorobromomethane	128	6.238	6.238	0.000	97	71233	75.0	75.0	
49 Tetrahydrofuran	42	6.257	6.257	0.000	86	124988	150.0	154.4	
50 Chloroform	83	6.372	6.372	0.000	94	281261	75.0	76.1	
51 1,1,1-Trichloroethane	97	6.542	6.542	0.000	97	234417	75.0	77.1	
52 Cyclohexane	56	6.622	6.622	0.000	88	275975	75.0	75.7	
53 Carbon tetrachloride	117	6.719	6.719	0.000	94	172271	75.0	74.3	
54 1,1-Dichloropropene	75	6.731	6.731	0.000	96	223842	75.0	76.1	
55 Isobutyl alcohol	41	6.908	6.908	0.000	93	157057	1875.0	1975.0	
56 Benzene	78	6.944	6.944	0.000	97	674168	75.0	77.7	
57 1,2-Dichloroethane	62	7.023	7.023	0.000	99	259031	75.0	78.5	
59 n-Heptane	43	7.315	7.315	0.000	90	152333	75.0	72.6	
61 Trichloroethene	130	7.680	7.680	0.000	94	145038	75.0	77.2	
63 Methylcyclohexane	83	7.923	7.923	0.000	90	267913	75.0	75.7	
64 1,2-Dichloropropane	63	7.954	7.954	0.000	94	174135	75.0	99.7	
65 1,4-Dioxane	88	8.039	8.039	0.000	51	33881	1500.0	1662.0	M
67 Dibromomethane	93	8.039	8.039	0.000	91	106380	75.0	76.7	
68 Dichlorobromomethane	83	8.234	8.234	0.000	99	212684	75.0	76.8	
71 cis-1,3-Dichloropropene	75	8.678	8.678	0.000	94	287718	75.0	78.5	
72 4-Methyl-2-pentanone (MIBK)	43	8.830	8.830	0.000	94	371586	150.0	161.9	
73 Toluene	91	9.012	9.012	0.000	99	692573	75.0	78.0	
74 trans-1,3-Dichloropropene	75	9.256	9.256	0.000	94	254423	75.0	78.7	
75 Ethyl methacrylate	69	9.317	9.317	0.000	88	259135	75.0	80.0	
76 1,1,2-Trichloroethane	97	9.456	9.456	0.000	93	154621	75.0	80.0	
77 Tetrachloroethene	164	9.529	9.529	0.000	95	112710	75.0	77.1	
78 1,3-Dichloropropane	76	9.615	9.615	0.000	90	290836	75.0	79.5	
79 2-Hexanone	43	9.663	9.663	0.000	94	223875	150.0	160.0	
81 Chlorodibromomethane	129	9.828	9.828	0.000	90	118323	75.0	77.7	
82 Ethylene Dibromide	107	9.943	9.943	0.000	100	144503	75.0	79.1	
83 3-Chlorobenzotrifluoride	180	10.399	10.399	0.000	91	207040	75.0	76.3	
84 Chlorobenzene	112	10.430	10.430	0.000	93	438228	75.0	78.2	
85 4-Chlorobenzotrifluoride	180	10.491	10.491	0.000	96	197098	75.0	76.6	
86 1,1,1,2-Tetrachloroethane	131	10.527	10.527	0.000	92	130058	75.0	79.1	
87 Ethylbenzene	106	10.533	10.533	0.000	98	249733	75.0	79.7	
88 m-Xylene & p-Xylene	106	10.661	10.661	0.000	100	304814	75.0	77.7	
89 o-Xylene	106	11.044	11.044	0.000	97	304301	75.0	80.0	
90 Styrene	104	11.063	11.063	0.000	94	506573	75.0	81.0	
91 Bromoform	173	11.251	11.251	0.000	93	77540	75.0	79.7	
92 2-Chlorobenzotrifluoride	180	11.306	11.306	0.000	94	214923	75.0	78.5	
93 Isopropylbenzene	105	11.409	11.409	0.000	97	737501	75.0	79.7	
96 1,1,2,2-Tetrachloroethane	83	11.720	11.720	0.000	97	211742	75.0	79.8	
95 Bromobenzene	156	11.726	11.726	0.000	97	160950	75.0	78.1	
97 trans-1,4-Dichloro-2-buten	53	11.756	11.756	0.000	89	71679	75.0	75.7	
98 1,2,3-Trichloropropane	110	11.774	11.774	0.000	84	69230	75.0	76.4	
99 N-Propylbenzene	120	11.829	11.829	0.000	99	193168	75.0	77.7	
100 2-Chlorotoluene	126	11.914	11.914	0.000	94	156618	75.0	76.6	
101 3-Chlorotoluene	126	11.981	11.981	0.000	97	172757	75.0	77.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.012	12.012	0.000	92	625299	75.0	79.1	
103 4-Chlorotoluene	126	12.042	12.042	0.000	99	167686	75.0	77.8	
104 tert-Butylbenzene	119	12.328	12.328	0.000	90	472090	75.0	77.9	
106 1,2,4-Trimethylbenzene	105	12.389	12.389	0.000	98	652905	75.0	78.8	
107 1,2-dichloro-4-(trifluorom	214	12.425	12.425	0.000	96	159882	75.0	76.6	
108 sec-Butylbenzene	105	12.553	12.553	0.000	96	726443	75.0	78.7	
109 1,3-Dichlorobenzene	146	12.669	12.669	0.000	93	311742	75.0	79.2	
110 4-Isopropyltoluene	119	12.711	12.711	0.000	95	575133	75.0	78.8	
111 1,4-Dichlorobenzene	146	12.772	12.772	0.000	91	322104	75.0	79.2	
113 2,4-Dichloro-1-(trifluorom	214	12.796	12.796	0.000	96	161041	75.0	78.0	
114 2,5-Dichlorobenzotrifluori	214	12.833	12.833	0.000	98	175409	75.0	81.0	
116 n-Butylbenzene	91	13.119	13.119	0.000	98	578451	75.0	78.8	
117 1,2-Dichlorobenzene	146	13.125	13.125	0.000	91	307417	75.0	79.0	
118 1,2-Dibromo-3-Chloropropan	75	13.922	13.922	0.000	71	45915	75.0	77.3	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.062	14.062	0.000	98	811375	225.0	247.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.481	14.481	0.000	99	605114	150.0	168.1	
122 1,2,4-Trichlorobenzene	180	14.743	14.743	0.000	92	230538	75.0	84.6	
123 Hexachlorobutadiene	225	14.895	14.895	0.000	96	74455	75.0	80.1	
124 Naphthalene	128	15.011	15.011	0.000	98	617410	75.0	85.6	
125 1,2,3-Trichlorobenzene	180	15.236	15.236	0.000	94	218128	75.0	85.3	
126 2,4,5-Trichlorotoluene	159	16.008	16.008	0.000	0	136106	75.0	84.2	
127 2,3,6-Trichlorotoluene	159	16.112	16.112	0.000	92	121283	75.0	82.7	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		150.0	153.1	
S 131 Xylenes, Total	106				0		150.0	157.7	
S 132 1,3-Dichloropropene, Total	1				0		150.0	157.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACROPRI_00005	Amount Added: 7.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 3.00	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 3.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 3.00	Units: uL	
voaWketPri Re_00005	Amount Added: 3.00	Units: uL	
VOA8260SURRE_00034	Amount Added: 3.00	Units: uL	
VOA8260INT_00032	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501008.D

Injection Date: 01-May-2015 15:06:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD15

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

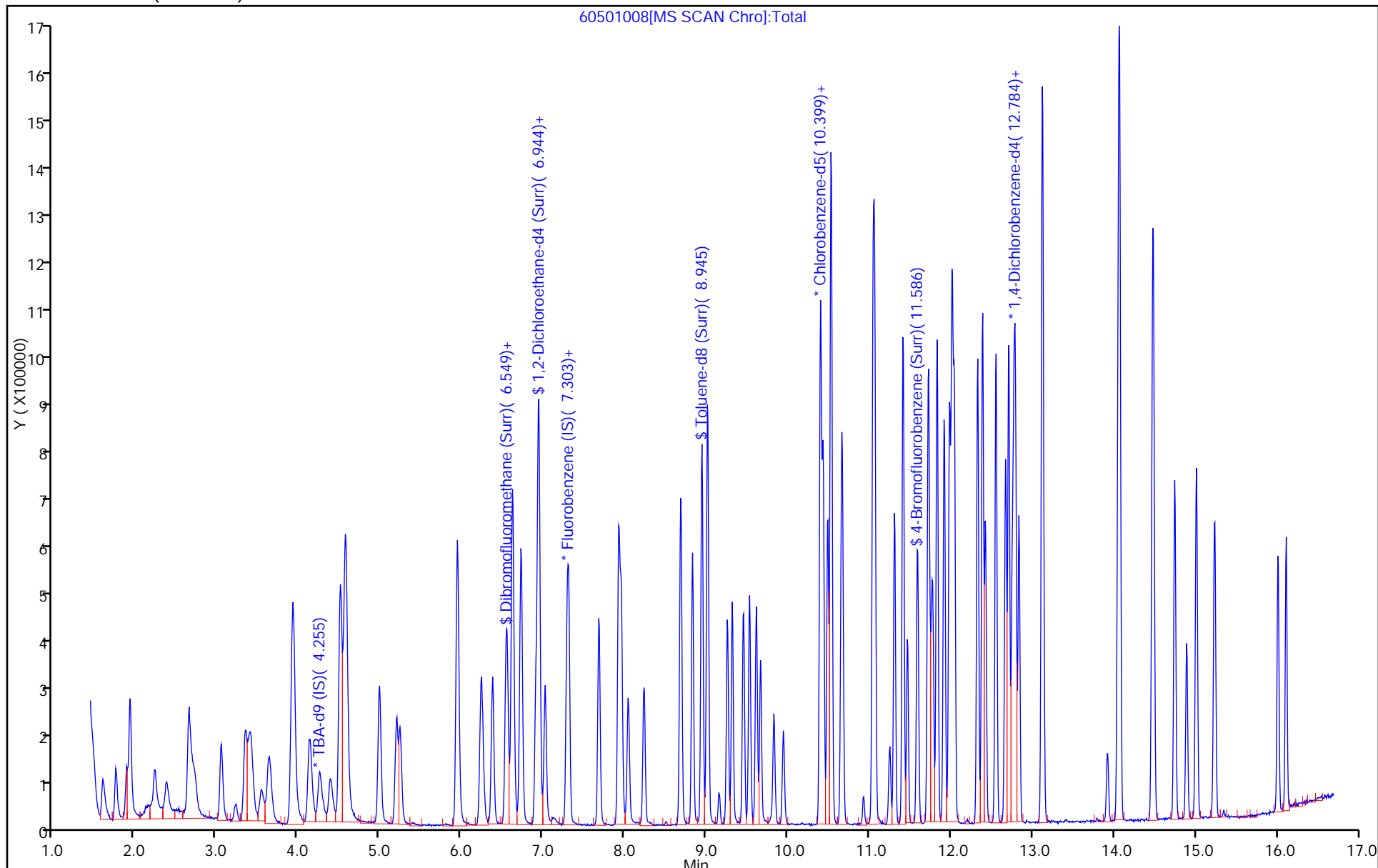
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



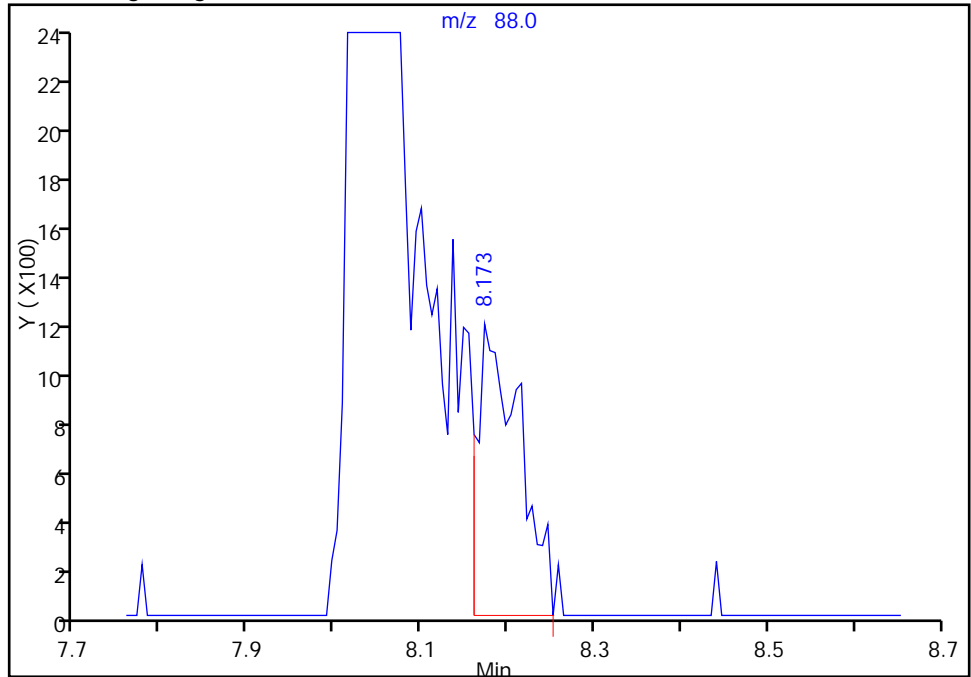
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501008.D
Injection Date: 01-May-2015 15:06:30 Instrument ID: CHHP6
Lims ID: IC VSTD15
Client ID:
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

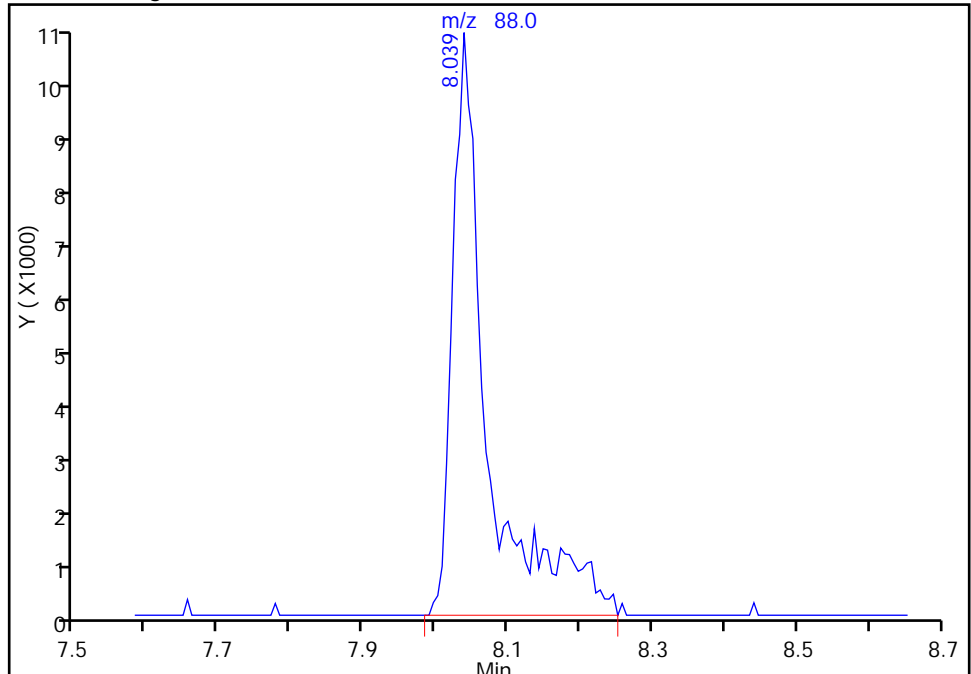
RT: 8.17
Area: 3884
Amount: 245.5513
Amount Units: ng

Processing Integration Results



RT: 8.04
Area: 33881
Amount: 1662.0398
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 02-May-2015 10:45:43
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501009.D
 Lims ID: IC VSTD20
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 01-May-2015 15:31:30 ALS Bottle#: 7 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD20
 Misc. Info.: 180-0006721-009
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 02-May-2015 11:01:05 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: fergusond

Date: 02-May-2015 10:49:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.263	4.255	0.008	100	258227	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.291	0.001	98	413350	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.407	10.405	0.002	89	93085	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.755	12.748	0.007	96	134368	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.562	6.555	0.007	92	158749	100.0	92.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.933	6.938	-0.005	78	266001	100.0	93.1	
\$ 7 Toluene-d8 (Surr)	98	8.947	8.945	0.002	93	689691	100.0	87.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.587	11.592	-0.005	80	287611	100.0	89.6	
11 Dichlorodifluoromethane	85	1.610	1.603	0.007	99	250149	100.0	99.1	
12 Chloromethane	50	1.762	1.755	0.007	99	197707	100.0	94.2	
13 Vinyl chloride	62	1.896	1.889	0.007	98	217145	100.0	97.2	
14 Butadiene	39	1.939	1.931	0.008	91	195445	100.0	91.6	
15 Bromomethane	94	2.249	2.229	0.020	93	109446	100.0	94.1	M
16 Chloroethane	64	2.395	2.381	0.014	99	134678	100.0	95.6	
17 Dichlorofluoromethane	67	2.657	2.655	0.002	98	331737	100.0	97.6	
18 Trichlorofluoromethane	101	2.687	2.692	-0.005	96	259631	100.0	100.5	
20 Ethyl ether	59	3.052	3.051	0.001	89	193102	100.0	100.2	
21 Acrolein	56	3.222	3.227	-0.005	99	68259	200.0	199.5	
22 1,1-Dichloroethene	96	3.350	3.343	0.007	97	186100	100.0	97.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.411	3.403	0.008	96	186259	100.0	96.4	
24 Acetone	43	3.441	3.440	0.001	99	106890	200.0	194.9	
25 Iodomethane	142	3.545	3.543	0.002	99	239779	100.0	98.0	
26 Carbon disulfide	76	3.642	3.641	0.001	100	545025	100.0	97.2	
29 3-Chloro-1-propene	76	3.916	3.914	0.002	89	133021	100.0	99.0	
30 Methyl acetate	43	3.940	3.939	0.001	96	904615	500.0	499.5	
31 Methylene Chloride	84	4.141	4.133	0.008	91	219046	100.0	94.3	
32 2-Methyl-2-propanol	59	4.390	4.389	0.001	98	284065	1000.0	1009.8	
33 Acrylonitrile	53	4.512	4.511	0.001	99	935388	1000.0	1012.0	
34 trans-1,2-Dichloroethene	96	4.567	4.565	0.002	97	210289	100.0	98.6	
35 Methyl tert-butyl ether	73	4.585	4.584	0.001	96	765940	100.0	100.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.993	4.991	0.002	91	271882	100.0	95.0	
37 1,1-Dichloroethane	63	5.199	5.198	0.001	96	386941	100.0	96.5	
38 Vinyl acetate	43	5.242	5.247	-0.005	97	481236	100.0	99.8	
42 2,2-Dichloropropane	77	5.942	5.946	-0.004	71	244089	100.0	98.3	
43 cis-1,2-Dichloroethene	96	5.948	5.946	0.002	85	231955	100.0	95.7	
44 2-Butanone (MEK)	43	5.954	5.952	0.002	94	180453	200.0	197.6	
48 Chlorobromomethane	128	6.234	6.238	-0.004	97	97630	100.0	98.2	
49 Tetrahydrofuran	42	6.258	6.257	0.001	83	155359	200.0	183.2	
50 Chloroform	83	6.374	6.372	0.002	96	379639	100.0	98.0	
51 1,1,1-Trichloroethane	97	6.544	6.542	0.002	97	306831	100.0	96.4	
52 Cyclohexane	56	6.623	6.622	0.001	88	374513	100.0	98.0	
53 Carbon tetrachloride	117	6.720	6.719	0.001	94	238253	100.0	98.0	
54 1,1-Dichloropropene	75	6.732	6.731	0.001	96	301032	100.0	97.7	
55 Isobutyl alcohol	41	6.909	6.908	0.001	93	212107	2500.0	2546.2	
56 Benzene	78	6.945	6.944	0.001	98	886979	100.0	97.5	
57 1,2-Dichloroethane	62	7.024	7.023	0.001	98	339774	100.0	98.3	
59 n-Heptane	43	7.310	7.315	-0.005	88	209022	100.0	95.1	
61 Trichloroethene	130	7.681	7.680	0.001	93	194700	100.0	99.0	
63 Methylcyclohexane	83	7.925	7.923	0.002	90	363050	100.0	98.0	
64 1,2-Dichloropropane	63	7.955	7.954	0.001	88	228950	100.0	95.5	
65 1,4-Dioxane	88	8.034	8.039	-0.005	51	43846	2000.0	1898.5	M
67 Dibromomethane	93	8.040	8.039	0.001	91	141515	100.0	97.4	
68 Dichlorobromomethane	83	8.235	8.234	0.001	99	286051	100.0	98.6	
71 cis-1,3-Dichloropropene	75	8.679	8.678	0.001	94	380296	100.0	99.1	
72 4-Methyl-2-pentanone (MIBK)	43	8.831	8.830	0.001	95	506634	200.0	203.1	
73 Toluene	91	9.014	9.012	0.002	98	910104	100.0	94.3	
74 trans-1,3-Dichloropropene	75	9.257	9.256	0.001	95	343888	100.0	97.8	
75 Ethyl methacrylate	69	9.318	9.317	0.001	87	344058	100.0	97.7	
76 1,1,2-Trichloroethane	97	9.458	9.456	0.002	94	204111	100.0	97.1	
77 Tetrachloroethene	164	9.531	9.529	0.002	95	153046	100.0	96.3	
78 1,3-Dichloropropane	76	9.610	9.615	-0.005	91	388394	100.0	97.7	
79 2-Hexanone	43	9.665	9.663	0.002	94	294952	200.0	193.9	
81 Chlorodibromomethane	129	9.829	9.828	0.001	90	163091	100.0	98.6	
82 Ethylene Dibromide	107	9.945	9.943	0.002	98	192453	100.0	96.9	
83 3-Chlorobenzotrifluoride	180	10.401	10.399	0.002	93	286874	100.0	97.3	
84 Chlorobenzene	112	10.431	10.430	0.001	92	585932	100.0	96.1	
85 4-Chlorobenzotrifluoride	180	10.486	10.491	-0.005	97	272731	100.0	97.5	
86 1,1,1,2-Tetrachloroethane	131	10.522	10.527	-0.005	93	173217	100.0	97.0	
87 Ethylbenzene	106	10.535	10.533	0.002	99	326136	100.0	95.8	
88 m-Xylene & p-Xylene	106	10.662	10.661	0.001	99	416204	100.0	97.6	
89 o-Xylene	106	11.046	11.044	0.002	95	403574	100.0	97.6	
90 Styrene	104	11.064	11.063	0.002	94	665694	100.0	97.9	
91 Bromoform	173	11.246	11.251	-0.005	93	104771	100.0	99.1	
92 2-Chlorobenzotrifluoride	180	11.307	11.306	0.001	95	293892	100.0	98.8	
93 Isopropylbenzene	105	11.411	11.409	0.002	98	976791	100.0	97.2	
96 1,1,2,2-Tetrachloroethane	83	11.721	11.720	0.001	96	282941	100.0	98.1	
95 Bromobenzene	156	11.727	11.726	0.001	97	209662	100.0	96.2	
97 trans-1,4-Dichloro-2-buten	53	11.757	11.756	0.001	84	97726	100.0	97.6	
98 1,2,3-Trichloropropane	110	11.776	11.774	0.002	83	93411	100.0	97.5	
99 N-Propylbenzene	120	11.830	11.829	0.001	98	251809	100.0	95.8	
100 2-Chlorotoluene	126	11.916	11.914	0.002	94	212346	100.0	98.3	
101 3-Chlorotoluene	126	11.982	11.981	0.001	97	226403	100.0	96.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.013	12.012	0.001	94	820602	100.0	98.1	
103 4-Chlorotoluene	126	12.043	12.042	0.001	99	220038	100.0	96.6	
104 tert-Butylbenzene	119	12.329	12.328	0.001	90	637815	100.0	99.5	
106 1,2,4-Trimethylbenzene	105	12.384	12.389	-0.005	98	867967	100.0	99.1	
107 1,2-dichloro-4-(trifluorom	214	12.427	12.425	0.002	96	213219	100.0	96.7	
108 sec-Butylbenzene	105	12.554	12.553	0.001	96	963722	100.0	98.8	
109 1,3-Dichlorobenzene	146	12.670	12.669	0.001	93	408084	100.0	98.1	
110 4-Isopropyltoluene	119	12.706	12.711	-0.005	95	765296	100.0	99.2	
111 1,4-Dichlorobenzene	146	12.773	12.772	0.001	94	417041	100.0	97.0	
113 2,4-Dichloro-1-(trifluorom	214	12.798	12.796	0.002	93	218417	100.0	100.1	
114 2,5-Dichlorobenzotrifluori	214	12.834	12.833	0.001	98	235142	100.0	100.0	
116 n-Butylbenzene	91	13.114	13.119	-0.005	98	773974	100.0	99.8	
117 1,2-Dichlorobenzene	146	13.126	13.125	0.001	94	407040	100.0	99.0	
118 1,2-Dibromo-3-Chloropropan	75	13.917	13.922	-0.005	72	62834	100.0	100.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.063	14.062	0.001	97	1059454	300.0	305.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.477	14.481	-0.004	97	772795	200.0	203.0	
122 1,2,4-Trichlorobenzene	180	14.744	14.743	0.001	92	289639	100.0	100.5	
123 Hexachlorobutadiene	225	14.890	14.895	-0.005	96	94269	100.0	96.0	
124 Naphthalene	128	15.012	15.011	0.001	99	780358	100.0	102.3	
125 1,2,3-Trichlorobenzene	180	15.237	15.236	0.001	93	270622	100.0	100.1	
126 2,4,5-Trichlorotoluene	159	16.010	16.008	0.002	0	156693	100.0	91.7	
127 2,3,6-Trichlorotoluene	159	16.113	16.112	0.001	93	144312	100.0	93.1	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		200.0	194.3	
S 131 Xylenes, Total	106				0		200.0	195.2	
S 132 1,3-Dichloropropene, Total	1				0		200.0	196.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWeemixPRI_00002	Amount Added: 4.00	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 4.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 4.00	Units: uL	
voaWketPri Re_00005	Amount Added: 4.00	Units: uL	
VOA8260SURR_00034	Amount Added: 4.00	Units: uL	
VOAACROPRI_00005	Amount Added: 8.00	Units: uL	
VOA8260INT_00032	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501009.D

Injection Date: 01-May-2015 15:31:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD20

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

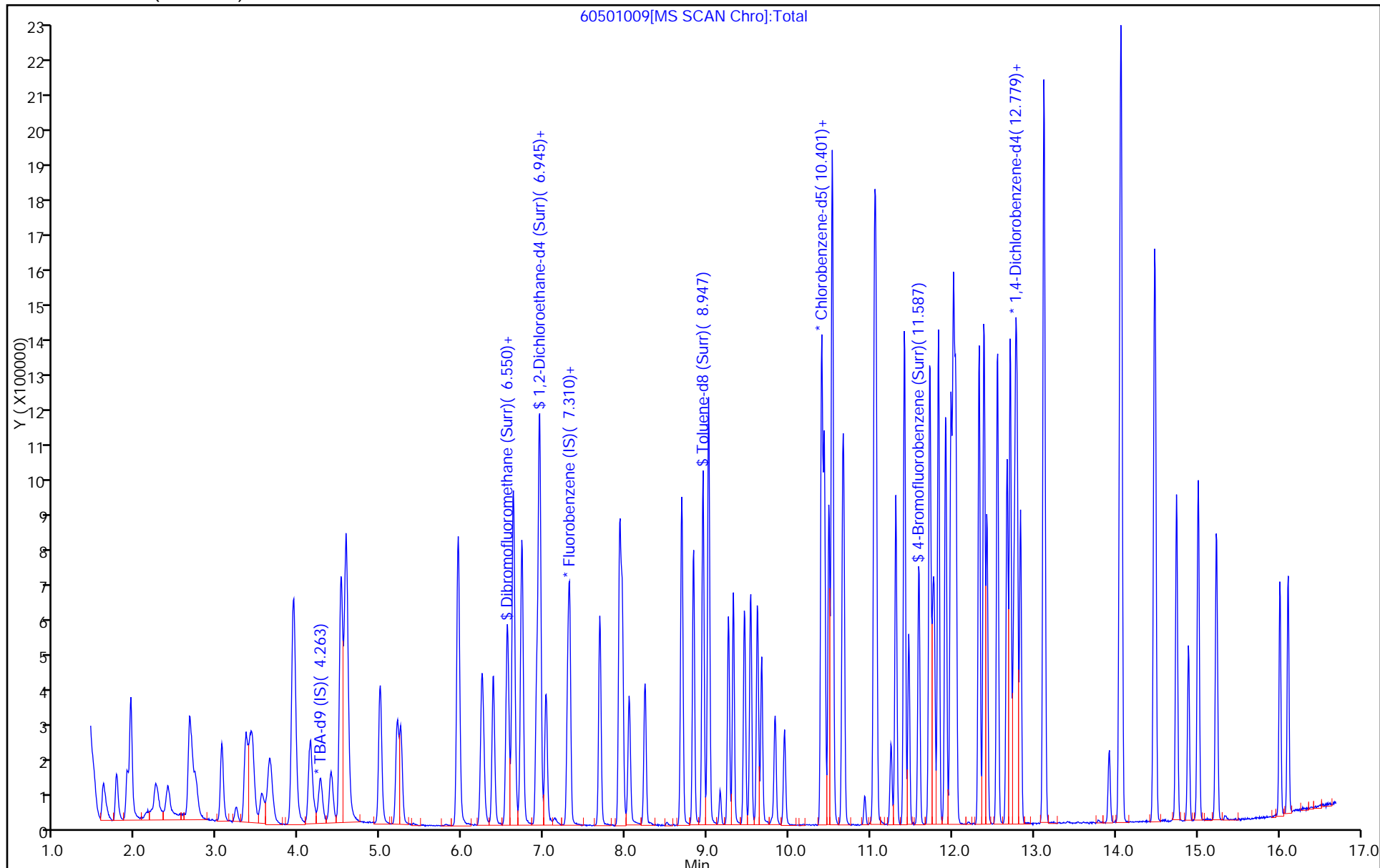
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



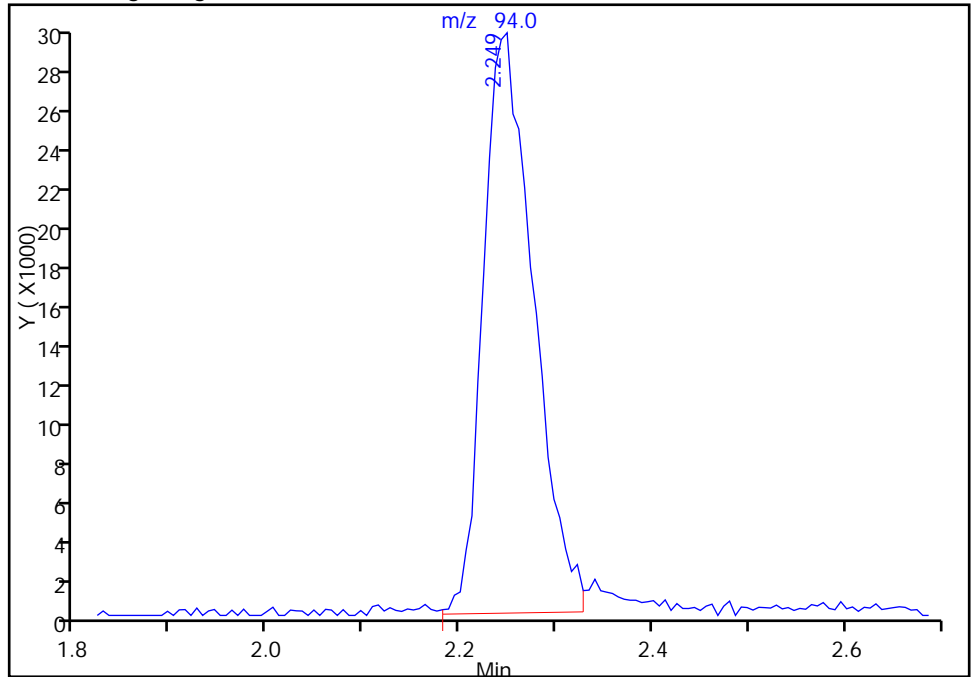
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501009.D
Injection Date: 01-May-2015 15:31:30 Instrument ID: CHHP6
Lims ID: IC VSTD20
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

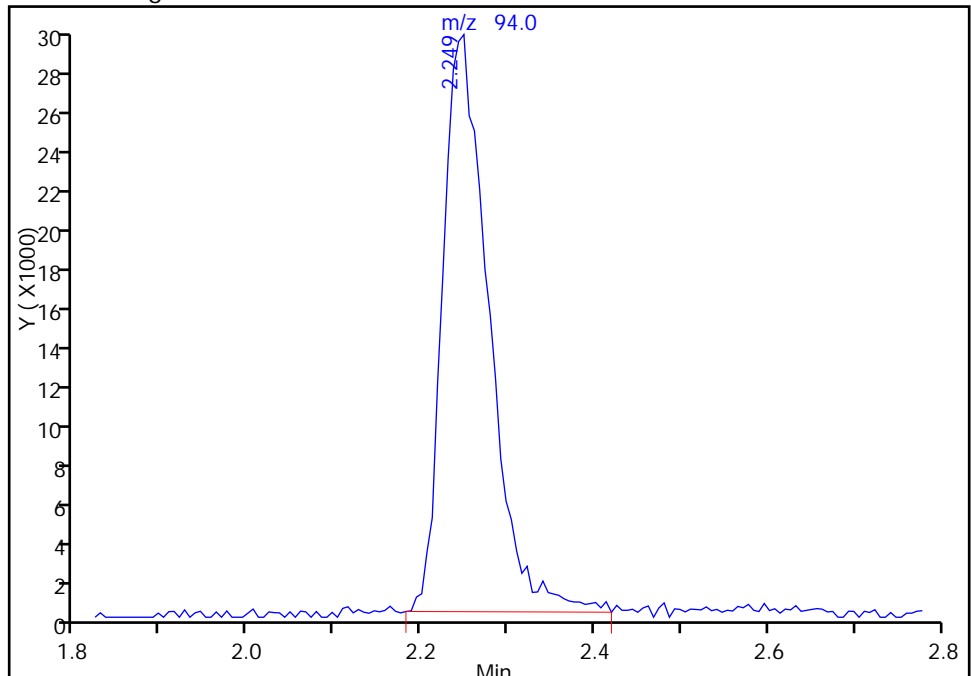
RT: 2.25
Area: 107353
Amount: 92.473255
Amount Units: ng

Processing Integration Results



RT: 2.25
Area: 109446
Amount: 94.064168
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 02-May-2015 10:49:03
Audit Action: Manually Integrated
Audit Reason: Baseline

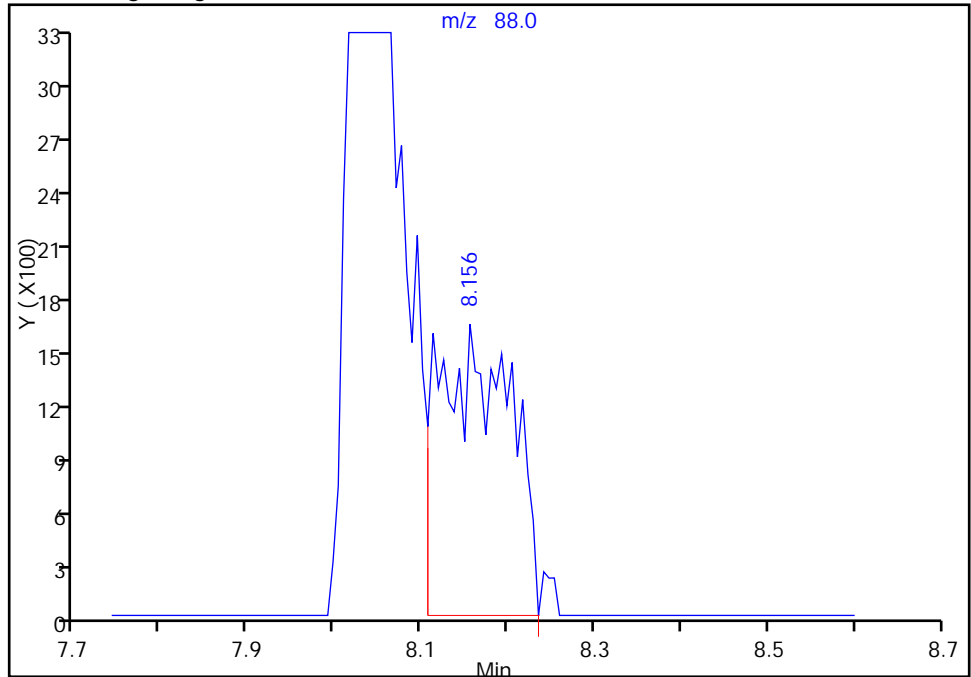
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501009.D
Injection Date: 01-May-2015 15:31:30 Instrument ID: CHHP6
Lims ID: IC VSTD20
Client ID:
Operator ID: 001562 ALS Bottle#: 7 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

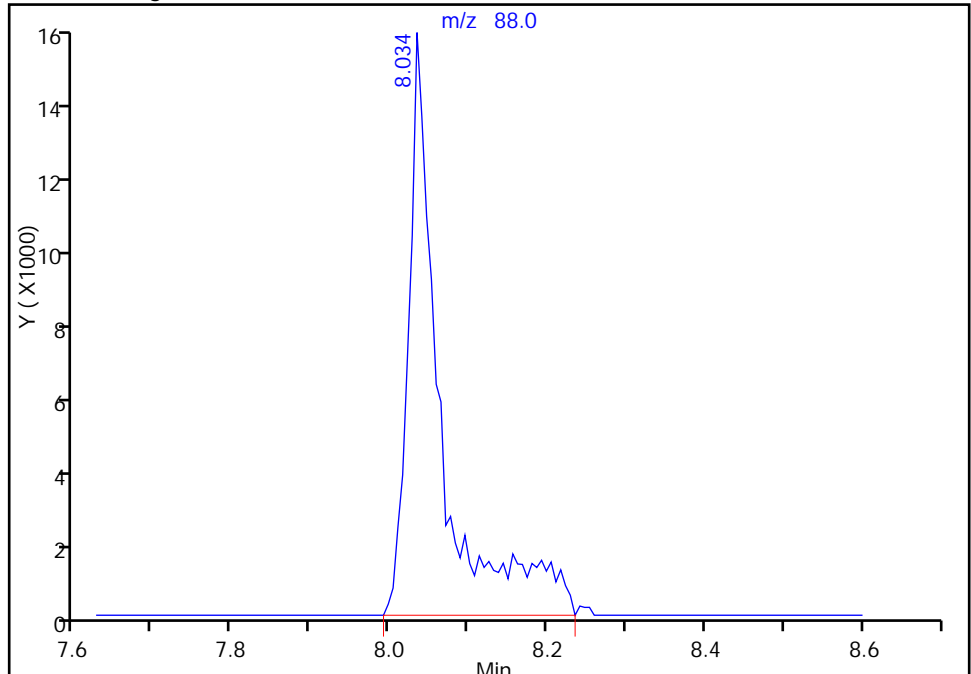
RT: 8.16
Area: 9186
Amount: 478.7433
Amount Units: ng

Processing Integration Results



RT: 8.03
Area: 43846
Amount: 1898.5105
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 02-May-2015 10:49:03
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501010.D
 Lims ID: IC VSTD35
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 01-May-2015 15:56:30 ALS Bottle#: 8 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD35
 Misc. Info.: 180-0006721-010
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 02-May-2015 10:57:11 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: fergusond

Date: 02-May-2015 10:57:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.259	4.255	0.004	99	214871	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.295	7.291	0.004	98	397215	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.403	10.405	-0.002	89	90562	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.751	12.748	0.003	94	124575	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.558	6.555	0.003	92	286117	175.0	174.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.936	6.938	-0.002	74	468642	175.0	170.7	
\$ 7 Toluene-d8 (Surr)	98	8.943	8.945	-0.002	94	1196797	175.0	156.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.590	11.592	-0.002	80	506432	175.0	162.1	
11 Dichlorodifluoromethane	85	1.607	1.603	0.004	100	393068	175.0	162.0	
12 Chloromethane	50	1.759	1.755	0.004	99	322970	175.0	160.2	
13 Vinyl chloride	62	1.899	1.889	0.010	98	348129	175.0	162.1	
14 Butadiene	39	1.935	1.931	0.004	92	311831	175.0	152.1	
15 Bromomethane	94	2.257	2.229	0.028	92	183599	175.0	164.2	
16 Chloroethane	64	2.391	2.381	0.010	99	224025	175.0	165.6	
17 Dichlorofluoromethane	67	2.659	2.655	0.004	97	522769	175.0	160.0	
18 Trichlorofluoromethane	101	2.695	2.692	0.003	98	406408	175.0	163.7	
20 Ethyl ether	59	3.048	3.051	-0.003	89	321282	175.0	173.4	
21 Acrolein	56	3.231	3.227	0.004	99	74857	225.0	227.6	M
22 1,1-Dichloroethene	96	3.340	3.343	-0.003	98	298478	175.0	162.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.407	3.403	0.004	97	301559	175.0	162.4	
24 Acetone	43	3.432	3.440	-0.008	100	181333	350.0	344.0	
25 Iodomethane	142	3.541	3.543	-0.002	99	395139	175.0	168.0	
26 Carbon disulfide	76	3.638	3.641	-0.003	100	874906	175.0	162.4	
29 3-Chloro-1-propene	76	3.924	3.914	0.010	89	217864	175.0	168.8	
30 Methyl acetate	43	3.937	3.939	-0.003	96	1531708	875.0	880.1	
31 Methylene Chloride	84	4.131	4.133	-0.002	91	379527	175.0	170.0	
32 2-Methyl-2-propanol	59	4.387	4.389	-0.002	99	437766	1750.0	1870.2	
33 Acrylonitrile	53	4.514	4.511	0.003	98	1611348	1750.0	1814.1	
34 trans-1,2-Dichloroethene	96	4.569	4.565	0.004	97	341011	175.0	166.4	
35 Methyl tert-butyl ether	73	4.581	4.584	-0.003	95	1295877	175.0	176.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.989	4.991	-0.002	91	449492	175.0	163.5	
37 1,1-Dichloroethane	63	5.202	5.198	0.004	97	650535	175.0	168.8	
38 Vinyl acetate	43	5.244	5.247	-0.003	97	761767	175.0	164.4	
42 2,2-Dichloropropane	77	5.944	5.946	-0.002	64	393550	175.0	164.9	
43 cis-1,2-Dichloroethene	96	5.944	5.946	-0.002	83	387653	175.0	166.4	
44 2-Butanone (MEK)	43	5.956	5.952	0.004	97	312233	350.0	355.8	
48 Chlorobromomethane	128	6.236	6.238	-0.002	97	163837	175.0	171.4	
49 Tetrahydrofuran	42	6.248	6.257	-0.009	84	277320	350.0	340.3	
50 Chloroform	83	6.376	6.372	0.004	96	631187	175.0	169.6	
51 1,1,1-Trichloroethane	97	6.546	6.542	0.004	98	514270	175.0	168.1	
52 Cyclohexane	56	6.625	6.622	0.003	93	599552	175.0	163.3	
53 Carbon tetrachloride	117	6.717	6.719	-0.002	96	387561	175.0	166.0	
54 1,1-Dichloropropene	75	6.729	6.731	-0.002	96	488097	175.0	164.9	
55 Isobutyl alcohol	41	6.911	6.908	0.003	92	348172	4375.0	4349.3	
56 Benzene	78	6.948	6.944	0.004	98	1442452	175.0	165.1	
57 1,2-Dichloroethane	62	7.021	7.023	-0.002	98	589729	175.0	177.6	
59 n-Heptane	43	7.313	7.315	-0.002	88	335663	175.0	158.9	
61 Trichloroethene	130	7.684	7.680	0.004	93	317378	175.0	167.9	
63 Methylcyclohexane	83	7.927	7.923	0.004	90	583932	175.0	164.0	
64 1,2-Dichloropropane	63	7.958	7.954	0.004	94	386326	175.0	219.8	
65 1,4-Dioxane	88	8.037	8.039	-0.002	36	75662	3500.0	3687.2	
67 Dibromomethane	93	8.043	8.039	0.004	90	243858	175.0	174.7	
68 Dichlorobromomethane	83	8.231	8.234	-0.003	99	493846	175.0	177.1	
71 cis-1,3-Dichloropropene	75	8.682	8.678	0.004	94	649830	175.0	176.1	
72 4-Methyl-2-pentanone (MIBK)	43	8.828	8.830	-0.002	94	852834	350.0	351.4	
73 Toluene	91	9.016	9.012	0.004	98	1469166	175.0	156.4	
74 trans-1,3-Dichloropropene	75	9.260	9.256	0.004	95	588746	175.0	172.2	
75 Ethyl methacrylate	69	9.320	9.317	0.003	87	607621	175.0	177.4	
76 1,1,2-Trichloroethane	97	9.454	9.456	-0.002	93	347762	175.0	170.1	
77 Tetrachloroethene	164	9.533	9.529	0.004	95	247215	175.0	160.0	
78 1,3-Dichloropropane	76	9.612	9.615	-0.003	91	657365	175.0	170.0	
79 2-Hexanone	43	9.661	9.663	-0.002	94	518554	350.0	350.4	
81 Chlorodibromomethane	129	9.831	9.828	0.003	88	288883	175.0	179.5	
82 Ethylene Dibromide	107	9.947	9.943	0.004	98	335705	175.0	173.7	
83 3-Chlorobenzotrifluoride	180	10.397	10.399	-0.002	91	463604	175.0	161.6	
84 Chlorobenzene	112	10.434	10.430	0.004	92	956397	175.0	161.3	
85 4-Chlorobenzotrifluoride	180	10.488	10.491	-0.003	95	438815	175.0	161.2	
86 1,1,1,2-Tetrachloroethane	131	10.525	10.527	-0.002	93	295523	175.0	170.0	
87 Ethylbenzene	106	10.531	10.533	-0.002	99	548629	175.0	165.6	
88 m-Xylene & p-Xylene	106	10.665	10.661	0.004	98	679172	175.0	163.7	
89 o-Xylene	106	11.042	11.044	-0.002	95	658013	175.0	163.5	
90 Styrene	104	11.066	11.063	0.004	93	1097806	175.0	165.9	
91 Bromoform	173	11.249	11.251	-0.002	91	188498	175.0	183.2	
92 2-Chlorobenzotrifluoride	180	11.310	11.306	0.004	94	466230	175.0	161.0	
93 Isopropylbenzene	105	11.413	11.409	0.004	98	1509094	175.0	154.3	
96 1,1,2,2-Tetrachloroethane	83	11.717	11.720	-0.003	97	473696	175.0	168.7	
95 Bromobenzene	156	11.729	11.726	0.003	98	351137	175.0	173.8	
97 trans-1,4-Dichloro-2-buten	53	11.754	11.756	-0.002	88	170289	175.0	183.5	
98 1,2,3-Trichloropropane	110	11.778	11.774	0.004	84	164103	175.0	184.8	
99 N-Propylbenzene	120	11.833	11.829	0.004	98	417057	175.0	171.2	
100 2-Chlorotoluene	126	11.918	11.914	0.004	93	341443	175.0	170.5	
101 3-Chlorotoluene	126	11.985	11.981	0.004	97	383186	175.0	175.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.015	12.012	0.003	95	1293117	175.0	166.8	
103 4-Chlorotoluene	126	12.040	12.042	-0.002	100	358037	175.0	169.5	
104 tert-Butylbenzene	119	12.326	12.328	-0.002	90	987056	175.0	166.1	
106 1,2,4-Trimethylbenzene	105	12.386	12.389	-0.003	99	1357258	175.0	167.2	
107 1,2-dichloro-4-(trifluorom	214	12.423	12.425	-0.002	96	343227	175.0	167.9	
108 sec-Butylbenzene	105	12.551	12.553	-0.002	96	1491702	175.0	165.0	
109 1,3-Dichlorobenzene	146	12.672	12.669	0.003	92	654979	175.0	169.8	
110 4-Isopropyltoluene	119	12.709	12.711	-0.002	94	1186196	175.0	165.9	
111 1,4-Dichlorobenzene	146	12.776	12.772	0.004	86	665067	175.0	166.9	
113 2,4-Dichloro-1-(trifluorom	214	12.794	12.796	-0.002	94	324649	175.0	160.4	
114 2,5-Dichlorobenzotrifluori	214	12.837	12.833	0.004	98	387822	175.0	178.9	
116 n-Butylbenzene	91	13.116	13.119	-0.003	97	1176426	175.0	163.6	
117 1,2-Dichlorobenzene	146	13.129	13.125	0.004	89	650565	175.0	170.6	
118 1,2-Dibromo-3-Chloropropan	75	13.919	13.922	-0.003	73	109457	175.0	188.2	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.065	14.062	0.003	96	1577392	525.0	490.1	
121 2,3- & 3,4- Dichlorotoluen	125	14.479	14.481	-0.002	96	1157594	350.0	328.1	
122 1,2,4-Trichlorobenzene	180	14.747	14.743	0.004	92	437105	175.0	163.6	
123 Hexachlorobutadiene	225	14.893	14.895	-0.002	96	142741	175.0	156.8	
124 Naphthalene	128	15.008	15.011	-0.003	99	1186321	175.0	167.8	
125 1,2,3-Trichlorobenzene	180	15.234	15.236	-0.002	92	402043	175.0	160.4	
126 2,4,5-Trichlorotoluene	159	16.012	16.008	0.004	0	238660	175.0	150.6	
127 2,3,6-Trichlorotoluene	159	16.110	16.112	-0.002	92	215650	175.0	150.0	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		350.0	332.8	
S 131 Xylenes, Total	106				0		350.0	327.3	
S 132 1,3-Dichloropropene, Total	1				0		350.0	348.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACROPRI_00005	Amount Added: 9.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 7.00	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 7.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 7.00	Units: uL	
voaWketPri Re_00005	Amount Added: 7.00	Units: uL	
VOA8260SURRE_00034	Amount Added: 7.00	Units: uL	
VOA8260INT_00032	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501010.D

Injection Date: 01-May-2015 15:56:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD35

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

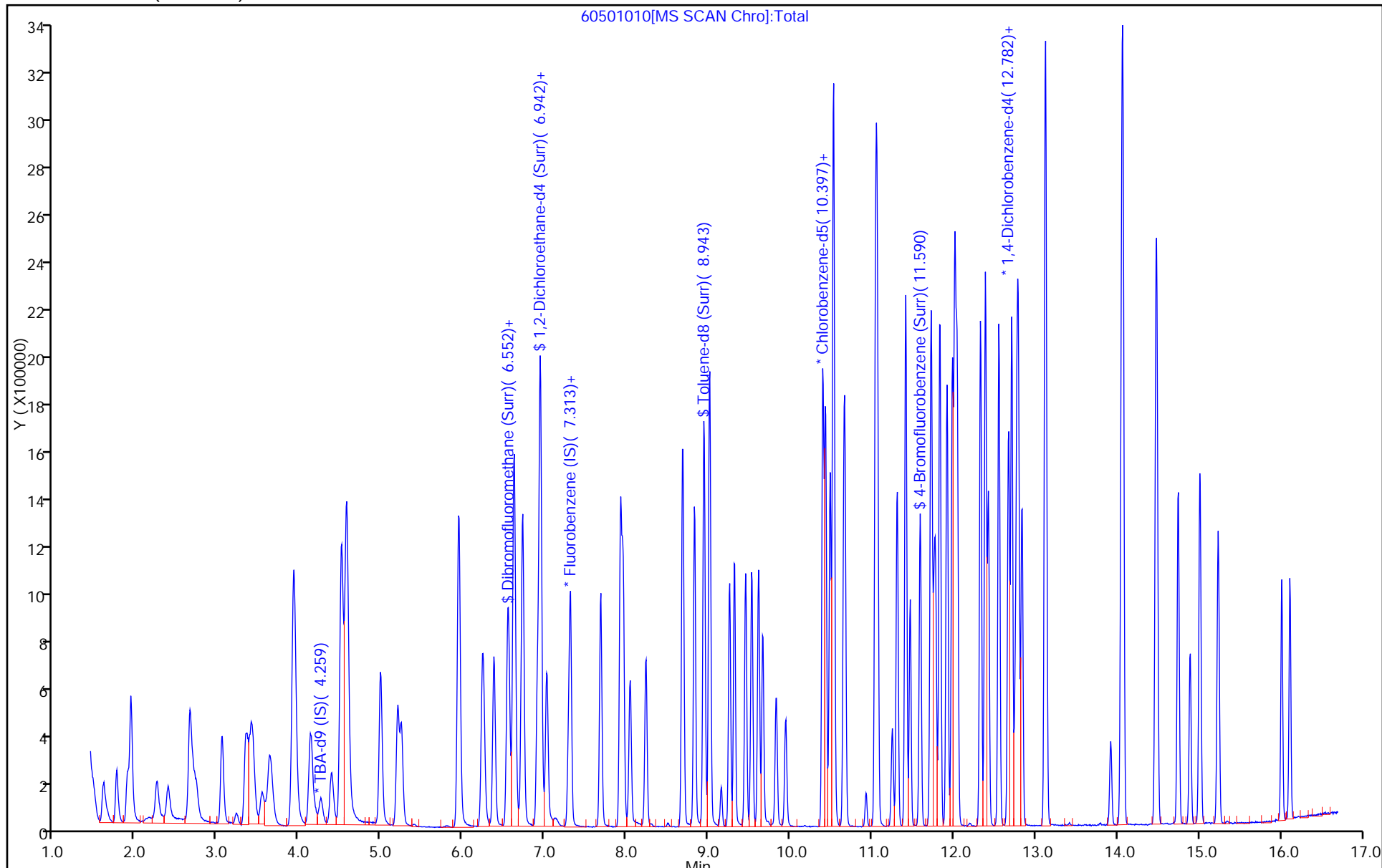
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



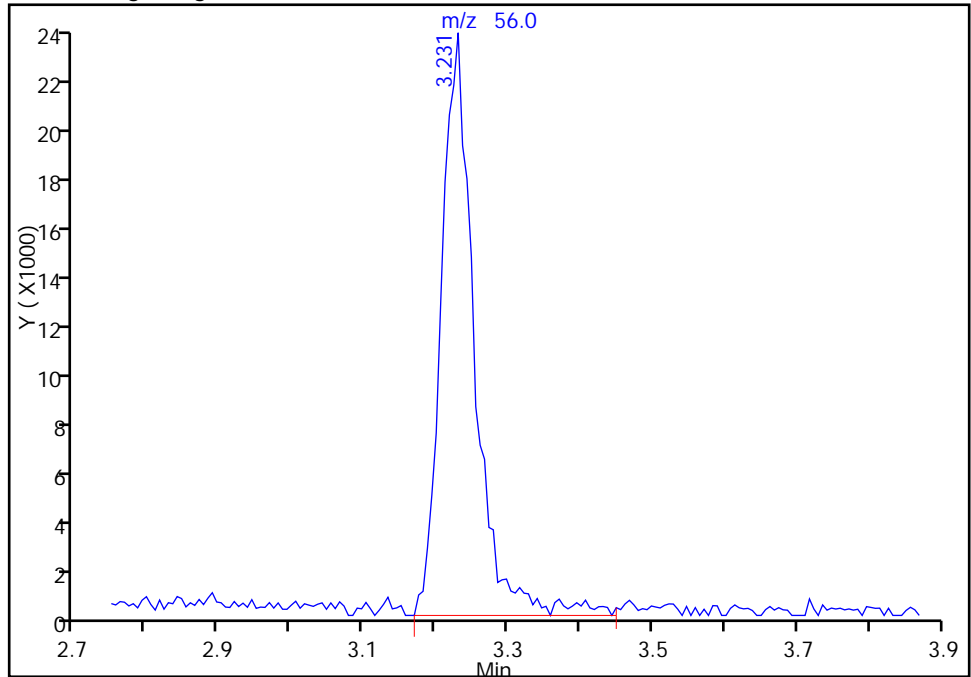
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501010.D
Injection Date: 01-May-2015 15:56:30 Instrument ID: CHHP6
Lims ID: IC VSTD35
Client ID:
Operator ID: 001562 ALS Bottle#: 8 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

21 Acrolein, CAS: 107-02-8

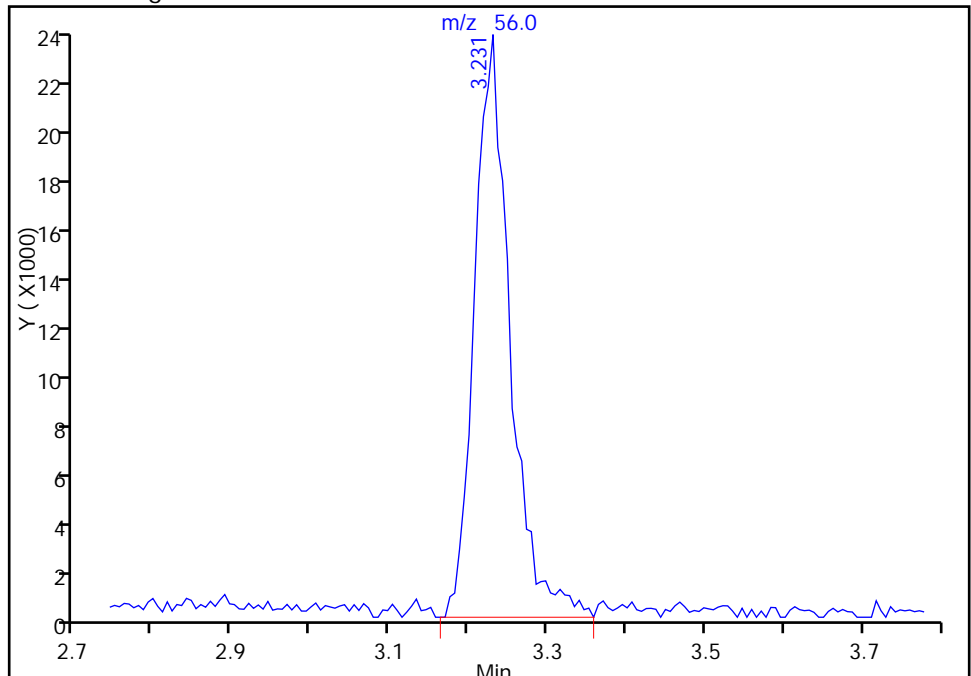
RT: 3.23
Area: 76920
Amount: 233.0790
Amount Units: ng

Processing Integration Results



RT: 3.23
Area: 74857
Amount: 227.6183
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 02-May-2015 10:57:11
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501011.D
 Lims ID: IC VSTD40
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 01-May-2015 16:20:30 ALS Bottle#: 9 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD40
 Misc. Info.: 180-0006721-011
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 02-May-2015 11:00:33 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: fergusond

Date: 02-May-2015 11:00:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.268	4.255	0.013	100	194509	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.292	7.291	0.001	98	413723	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.400	10.405	-0.005	89	97915	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.749	12.748	0.001	95	126587	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.556	6.555	0.001	92	328982	200.0	192.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.933	6.938	-0.005	80	537741	200.0	188.0	
\$ 7 Toluene-d8 (Surr)	98	8.947	8.945	0.001	94	1399177	200.0	168.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.587	11.592	-0.005	80	584398	200.0	173.0	
11 Dichlorodifluoromethane	85	1.598	1.603	-0.005	100	499728	200.0	197.8	
12 Chloromethane	50	1.756	1.755	0.001	99	398212	200.0	189.6	
13 Vinyl chloride	62	1.896	1.889	0.007	99	444140	200.0	198.6	
14 Butadiene	39	1.932	1.931	0.001	91	404201	200.0	189.3	
15 Bromomethane	94	2.243	2.229	0.014	92	230594	200.0	198.0	
16 Chloroethane	64	2.382	2.381	0.001	99	281244	200.0	199.6	
17 Dichlorofluoromethane	67	2.650	2.655	-0.005	98	664016	200.0	195.1	
18 Trichlorofluoromethane	101	2.693	2.692	0.001	98	500291	200.0	193.5	
20 Ethyl ether	59	3.052	3.051	0.001	89	341678	200.0	177.1	
21 Acrolein	56	3.222	3.227	-0.005	98	79297	250.0	231.5	
22 1,1-Dichloroethene	96	3.344	3.343	0.001	99	368258	200.0	192.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.404	3.403	0.001	97	375445	200.0	194.1	
24 Acetone	43	3.435	3.440	-0.005	100	187221	400.0	341.0	
25 Iodomethane	142	3.544	3.543	0.001	100	480425	200.0	196.1	
26 Carbon disulfide	76	3.642	3.641	0.001	100	1101219	200.0	196.2	
29 3-Chloro-1-propene	76	3.915	3.914	0.001	89	263380	200.0	195.9	
30 Methyl acetate	43	3.940	3.939	0.001	96	1680076	1000.0	926.8	
31 Methylene Chloride	84	4.134	4.133	0.001	91	440482	200.0	189.4	
32 2-Methyl-2-propanol	59	4.396	4.389	0.007	99	423693	2000.0	1999.6	
33 Acrylonitrile	53	4.512	4.511	0.001	98	1701239	2000.0	1838.8	
34 trans-1,2-Dichloroethene	96	4.566	4.565	0.001	97	413336	200.0	193.6	
35 Methyl tert-butyl ether	73	4.585	4.584	0.001	96	1477234	200.0	192.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.992	4.991	0.001	92	563934	200.0	196.9	
37 1,1-Dichloroethane	63	5.199	5.198	0.001	96	777143	200.0	193.6	
38 Vinyl acetate	43	5.248	5.247	0.001	97	890652	200.0	184.6	
42 2,2-Dichloropropane	77	5.947	5.946	0.001	65	480936	200.0	193.5	
43 cis-1,2-Dichloroethene	96	5.947	5.946	0.001	83	460452	200.0	189.7	
44 2-Butanone (MEK)	43	5.953	5.952	0.001	99	327104	400.0	357.9	
48 Chlorobromomethane	128	6.233	6.238	-0.005	97	182772	200.0	183.6	
49 Tetrahydrofuran	42	6.252	6.257	-0.005	85	303387	400.0	357.4	
50 Chloroform	83	6.379	6.372	0.007	96	744366	200.0	192.1	
51 1,1,1-Trichloroethane	97	6.544	6.542	0.002	98	632812	200.0	198.6	
52 Cyclohexane	56	6.623	6.622	0.001	92	746051	200.0	195.1	
53 Carbon tetrachloride	117	6.720	6.719	0.001	96	488872	200.0	201.0	
54 1,1-Dichloropropene	75	6.732	6.731	0.001	96	610679	200.0	198.1	
55 Isobutyl alcohol	41	6.909	6.908	0.001	93	339375	5000.0	4070.3	
56 Benzene	78	6.945	6.944	0.001	98	1687761	200.0	185.4	
57 1,2-Dichloroethane	62	7.024	7.023	0.001	98	669830	200.0	193.7	
59 n-Heptane	43	7.310	7.315	-0.005	88	427101	200.0	194.1	
61 Trichloroethene	130	7.681	7.680	0.001	93	380219	200.0	193.1	
63 Methylcyclohexane	83	7.924	7.923	0.001	90	731561	200.0	197.3	
64 1,2-Dichloropropane	63	7.955	7.954	0.001	87	455627	200.0	215.4	
65 1,4-Dioxane	88	8.040	8.039	0.001	75	85036	4000.0	3678.7	M
67 Dibromomethane	93	8.040	8.039	0.001	91	278635	200.0	191.7	
68 Dichlorobromomethane	83	8.235	8.234	0.001	99	577215	200.0	198.8	
71 cis-1,3-Dichloropropene	75	8.679	8.678	0.001	94	755309	200.0	196.5	
72 4-Methyl-2-pentanone (MIBK)	43	8.831	8.830	0.001	93	957320	400.0	364.8	
73 Toluene	91	9.013	9.012	0.001	97	1712971	200.0	168.7	
74 trans-1,3-Dichloropropene	75	9.257	9.256	0.001	95	675791	200.0	182.8	
75 Ethyl methacrylate	69	9.318	9.317	0.001	87	677036	200.0	182.8	
76 1,1,2-Trichloroethane	97	9.458	9.456	0.002	94	396004	200.0	179.2	
77 Tetrachloroethene	164	9.531	9.529	0.002	95	303279	200.0	181.5	
78 1,3-Dichloropropane	76	9.616	9.615	0.001	91	744014	200.0	177.9	
79 2-Hexanone	43	9.664	9.663	0.001	94	581725	400.0	363.6	
81 Chlorodibromomethane	129	9.829	9.828	0.001	90	331360	200.0	190.4	
82 Ethylene Dibromide	107	9.944	9.943	0.001	98	376974	200.0	180.4	
83 3-Chlorobenzotrifluoride	180	10.400	10.399	0.001	91	577854	200.0	186.3	
84 Chlorobenzene	112	10.431	10.430	0.001	91	1106916	200.0	172.7	
85 4-Chlorobenzotrifluoride	180	10.486	10.491	-0.005	96	550514	200.0	187.0	
86 1,1,1,2-Tetrachloroethane	131	10.528	10.527	0.001	93	348221	200.0	185.3	
87 Ethylbenzene	106	10.534	10.533	0.001	98	649357	200.0	181.3	
88 m-Xylene & p-Xylene	106	10.662	10.661	0.001	98	799744	200.0	178.3	
89 o-Xylene	106	11.045	11.044	0.001	96	771182	200.0	177.3	
90 Styrene	104	11.064	11.063	0.002	93	1254290	200.0	175.3	
91 Bromoform	173	11.246	11.251	-0.005	91	212157	200.0	190.7	
92 2-Chlorobenzotrifluoride	180	11.307	11.306	0.001	93	573355	200.0	183.1	
93 Isopropylbenzene	105	11.410	11.409	0.001	98	1796814	200.0	169.9	
96 1,1,2,2-Tetrachloroethane	83	11.721	11.720	0.001	97	530388	200.0	174.8	
95 Bromobenzene	156	11.727	11.726	0.001	98	402872	200.0	196.2	
97 trans-1,4-Dichloro-2-buten	53	11.757	11.756	0.001	89	197280	200.0	209.2	
98 1,2,3-Trichloropropane	110	11.775	11.774	0.001	85	182497	200.0	202.2	
99 N-Propylbenzene	120	11.830	11.829	0.001	98	495397	200.0	200.1	
100 2-Chlorotoluene	126	11.915	11.914	0.001	93	401659	200.0	197.4	
101 3-Chlorotoluene	126	11.982	11.981	0.001	97	450187	200.0	203.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.013	12.012	0.001	94	1522884	200.0	193.3	
103 4-Chlorotoluene	126	12.037	12.042	-0.005	100	420291	200.0	195.8	
104 tert-Butylbenzene	119	12.329	12.328	0.001	90	1188495	200.0	196.9	
106 1,2,4-Trimethylbenzene	105	12.390	12.389	0.001	99	1567584	200.0	190.0	
107 1,2-dichloro-4-(trifluorom	214	12.426	12.425	0.001	96	422746	200.0	203.5	
108 sec-Butylbenzene	105	12.554	12.553	0.001	96	1764994	200.0	192.1	
109 1,3-Dichlorobenzene	146	12.670	12.669	0.001	92	760032	200.0	193.9	
110 4-Isopropyltoluene	119	12.706	12.711	-0.005	94	1403979	200.0	193.3	
111 1,4-Dichlorobenzene	146	12.773	12.772	0.001	94	773327	200.0	190.9	
113 2,4-Dichloro-1-(trifluorom	214	12.797	12.796	0.001	96	421311	200.0	204.9	
114 2,5-Dichlorobenzotrifluori	214	12.834	12.833	0.001	98	441248	200.0	199.2	
116 n-Butylbenzene	91	13.114	13.119	-0.005	96	1394081	200.0	190.8	
117 1,2-Dichlorobenzene	146	13.126	13.125	0.001	94	730064	200.0	188.4	
118 1,2-Dibromo-3-Chloropropan	75	13.917	13.922	-0.005	72	114309	200.0	193.4	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.063	14.062	0.001	95	1760189	600.0	538.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.482	14.481	0.001	97	1257444	400.0	350.7	
122 1,2,4-Trichlorobenzene	180	14.744	14.743	0.001	92	458809	200.0	169.0	
123 Hexachlorobutadiene	225	14.890	14.895	-0.005	96	160877	200.0	173.9	
124 Naphthalene	128	15.012	15.011	0.001	99	1205925	200.0	167.8	
125 1,2,3-Trichlorobenzene	180	15.231	15.236	-0.005	92	411642	200.0	161.6	
126 2,4,5-Trichlorotoluene	159	16.009	16.008	0.001	0	303439	200.0	188.5	
127 2,3,6-Trichlorotoluene	159	16.113	16.112	0.001	91	270492	200.0	185.2	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		400.0	383.4	
S 131 Xylenes, Total	106				0		400.0	355.6	
S 132 1,3-Dichloropropene, Total	1				0		400.0	379.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACROPRI_00005	Amount Added: 10.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 8.00	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 8.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 8.00	Units: uL	
voaWketPri Re_00005	Amount Added: 8.00	Units: uL	
VOA8260SURRE_00034	Amount Added: 8.00	Units: uL	
VOA8260INT_00032	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501011.D

Injection Date: 01-May-2015 16:20:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD40

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

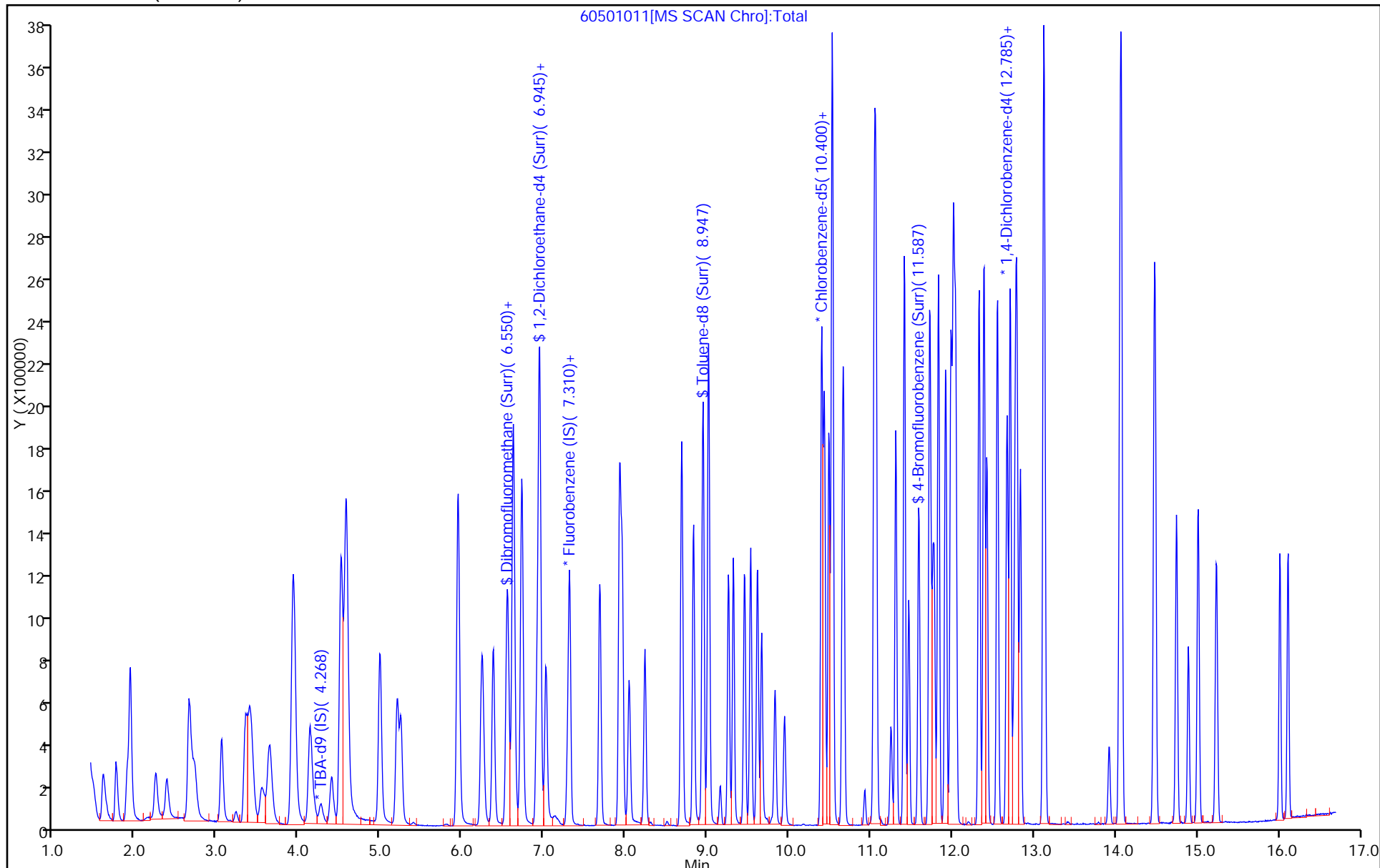
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



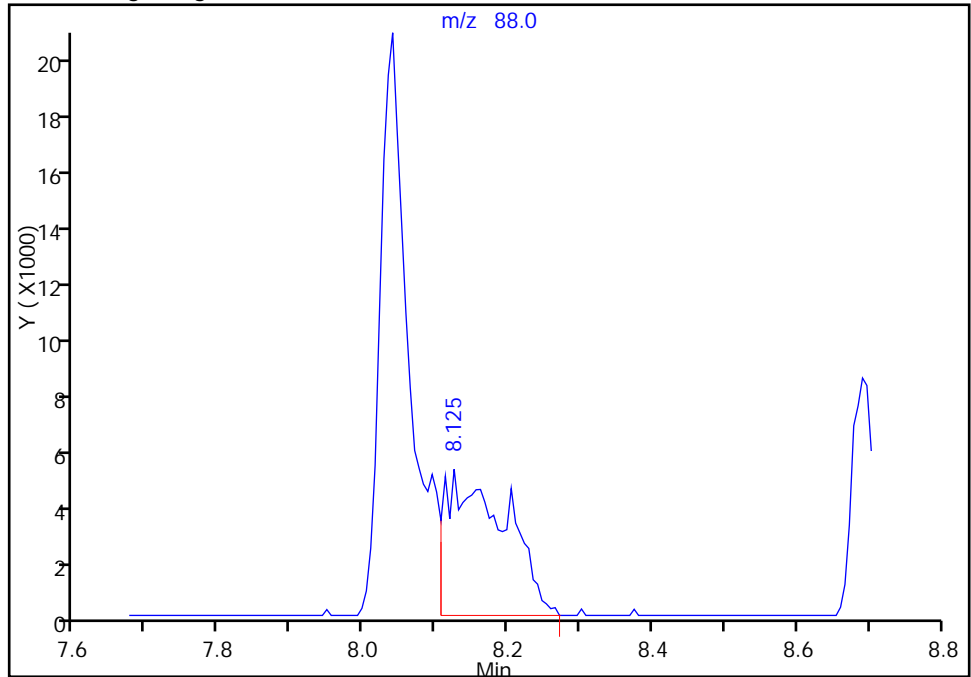
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501011.D
Injection Date: 01-May-2015 16:20:30 Instrument ID: CHHP6
Lims ID: IC VSTD40
Client ID:
Operator ID: 001562 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

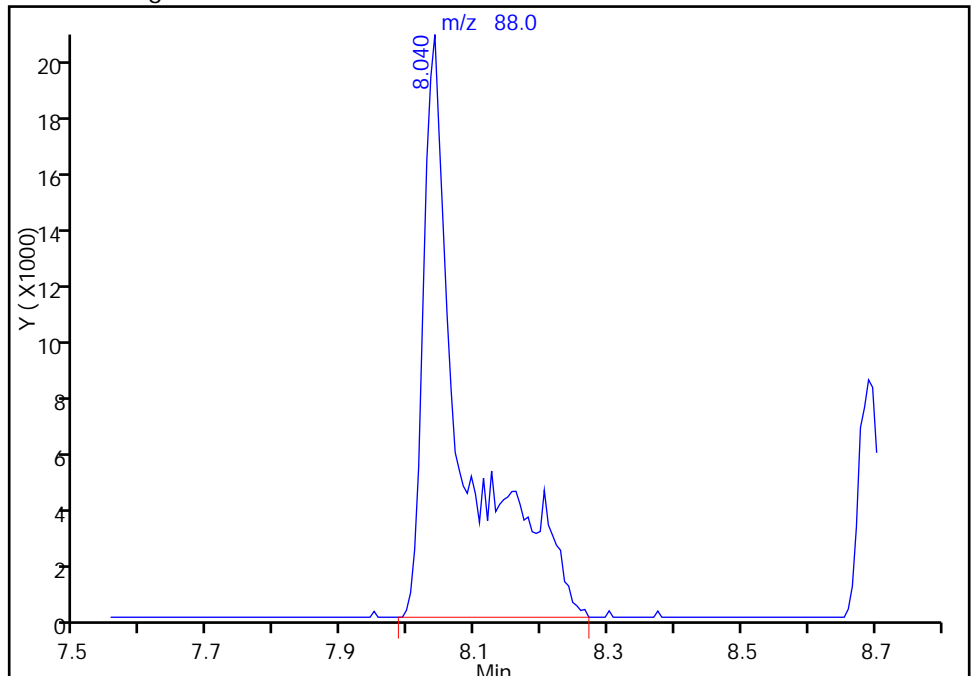
RT: 8.13
Area: 29275
Amount: 1369.7024
Amount Units: ng

Processing Integration Results



RT: 8.04
Area: 85036
Amount: 3678.6979
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 02-May-2015 11:00:33
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Lims ID: IC VSTD50
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 01-May-2015 16:46:30 ALS Bottle#: 10 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD50
 Misc. Info.: 180-0006721-012
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 02-May-2015 11:05:36 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: fergusond

Date: 02-May-2015 11:05:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.266	4.255	0.011	100	237620	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.291	-0.001	98	405351	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.405	-0.007	89	97849	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.753	12.748	0.005	92	126816	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.560	6.555	0.005	91	407664	250.0	243.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.937	6.938	-0.001	80	677859	250.0	241.9	
\$ 7 Toluene-d8 (Surr)	98	8.944	8.945	-0.001	94	1696172	250.0	204.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.591	11.592	-0.001	80	724215	250.0	214.6	
11 Dichlorodifluoromethane	85	1.602	1.603	-0.001	99	575476	250.0	232.4	
12 Chloromethane	50	1.760	1.755	0.005	99	478453	250.0	232.5	
13 Vinyl chloride	62	1.900	1.889	0.011	97	517720	250.0	236.3	
14 Butadiene	39	1.936	1.931	0.005	90	464004	250.0	221.8	
15 Bromomethane	94	2.253	2.229	0.024	92	272991	250.0	239.3	
16 Chloroethane	64	2.386	2.381	0.005	99	315384	250.0	228.4	
17 Dichlorofluoromethane	67	2.654	2.655	-0.001	97	753551	250.0	226.0	
18 Trichlorofluoromethane	101	2.691	2.692	-0.001	98	577522	250.0	228.0	
20 Ethyl ether	59	3.050	3.051	-0.001	90	451701	250.0	239.0	
21 Acrolein	56	3.226	3.227	-0.001	98	92403	275.0	275.3	
22 1,1-Dichloroethene	96	3.348	3.343	0.005	98	444270	250.0	236.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.409	3.403	0.005	97	444261	250.0	234.4	
24 Acetone	43	3.439	3.440	-0.001	100	285567	500.0	530.8	
25 Iodomethane	142	3.567	3.543	0.024	99	569324	250.0	237.2	
26 Carbon disulfide	76	3.640	3.641	-0.001	100	1262586	250.0	229.6	
29 3-Chloro-1-propene	76	3.913	3.914	-0.001	89	320994	250.0	243.7	
30 Methyl acetate	43	3.938	3.939	-0.001	96	2131842	1250.0	1200.3	
31 Methylene Chloride	84	4.139	4.133	0.006	91	538163	250.0	236.2	
32 2-Methyl-2-propanol	59	4.394	4.389	0.005	98	561100	2500.0	2167.6	
33 Acrylonitrile	53	4.516	4.511	0.005	98	2190199	2500.0	2416.2	
34 trans-1,2-Dichloroethene	96	4.564	4.565	-0.001	97	489846	250.0	234.2	
35 Methyl tert-butyl ether	73	4.583	4.584	-0.001	96	1827456	250.0	243.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.991	-0.001	91	655934	250.0	233.8	
37 1,1-Dichloroethane	63	5.197	5.198	-0.001	97	932123	250.0	237.0	
38 Vinyl acetate	43	5.246	5.247	-0.001	97	1164902	250.0	246.4	
42 2,2-Dichloropropane	77	5.945	5.946	-0.001	63	543470	250.0	223.2	
43 cis-1,2-Dichloroethene	96	5.945	5.946	-0.001	84	552410	250.0	232.3	
44 2-Butanone (MEK)	43	5.957	5.952	0.005	98	473847	500.0	529.1	
48 Chlorobromomethane	128	6.231	6.238	-0.007	97	230583	250.0	236.4	
49 Tetrahydrofuran	42	6.256	6.257	-0.001	84	397850	500.0	478.4	
50 Chloroform	83	6.377	6.372	0.005	96	898092	250.0	236.5	
51 1,1,1-Trichloroethane	97	6.541	6.542	-0.001	97	747775	250.0	239.5	
52 Cyclohexane	56	6.621	6.622	-0.001	89	856768	250.0	228.7	
53 Carbon tetrachloride	117	6.718	6.719	-0.001	96	583377	250.0	244.8	
54 1,1-Dichloropropene	75	6.730	6.731	-0.001	96	723072	250.0	239.4	
55 Isobutyl alcohol	41	6.907	6.908	-0.002	93	518160	6250.0	6342.9	
56 Benzene	78	6.949	6.944	0.005	98	1993212	250.0	223.5	
57 1,2-Dichloroethane	62	7.022	7.023	-0.001	98	832399	250.0	245.7	
59 n-Heptane	43	7.314	7.315	-0.001	88	485433	250.0	225.2	
61 Trichloroethene	130	7.679	7.680	-0.001	93	450242	250.0	233.4	
63 Methylcyclohexane	83	7.929	7.923	0.006	90	837825	250.0	230.6	
64 1,2-Dichloropropane	63	7.959	7.954	0.005	94	550561	250.0	234.2	
65 1,4-Dioxane	88	8.038	8.039	-0.001	37	113034	5000.0	4990.9	
67 Dibromomethane	93	8.044	8.039	0.005	91	347141	250.0	243.7	
68 Dichlorobromomethane	83	8.233	8.234	-0.001	98	713291	250.0	250.7	
71 cis-1,3-Dichloropropene	75	8.683	8.678	0.005	94	924184	250.0	245.5	
72 4-Methyl-2-pentanone (MIBK)	43	8.829	8.830	-0.001	92	1201067	500.0	458.0	
73 Toluene	91	9.017	9.012	0.005	97	2013806	250.0	198.5	
74 trans-1,3-Dichloropropene	75	9.261	9.256	0.005	95	840048	250.0	227.4	
75 Ethyl methacrylate	69	9.316	9.317	-0.001	88	853762	250.0	230.7	
76 1,1,2-Trichloroethane	97	9.455	9.456	-0.001	94	497273	250.0	225.2	
77 Tetrachloroethene	164	9.528	9.529	-0.001	92	356494	250.0	213.5	
78 1,3-Dichloropropane	76	9.614	9.615	-0.001	92	923637	250.0	221.0	
79 2-Hexanone	43	9.662	9.663	-0.001	93	778828	500.0	487.1	
81 Chlorodibromomethane	129	9.833	9.828	0.005	90	417451	250.0	240.1	
82 Ethylene Dibromide	107	9.942	9.943	-0.001	99	466009	250.0	223.2	
83 3-Chlorobenzotrifluoride	180	10.398	10.399	-0.001	92	640982	250.0	206.8	
84 Chlorobenzene	112	10.435	10.430	0.005	90	1320047	250.0	206.1	
85 4-Chlorobenzotrifluoride	180	10.490	10.491	-0.001	96	609472	250.0	207.2	
86 1,1,1,2-Tetrachloroethane	131	10.526	10.527	-0.001	93	423407	250.0	225.5	
87 Ethylbenzene	106	10.532	10.533	-0.001	98	772048	250.0	215.7	
88 m-Xylene & p-Xylene	106	10.666	10.661	0.005	97	967652	250.0	215.9	
89 o-Xylene	106	11.043	11.044	-0.001	96	916218	250.0	210.7	
90 Styrene	104	11.068	11.063	0.006	93	1497570	250.0	209.5	
91 Bromoform	173	11.250	11.251	-0.001	92	275852	250.0	248.1	
92 2-Chlorobenzotrifluoride	180	11.311	11.306	0.005	93	652016	250.0	208.4	
93 Isopropylbenzene	105	11.414	11.409	0.005	99	2087440	250.0	197.6	
96 1,1,2,2-Tetrachloroethane	83	11.719	11.720	-0.001	97	668303	250.0	220.3	
95 Bromobenzene	156	11.731	11.726	0.005	98	493553	250.0	239.9	
97 trans-1,4-Dichloro-2-buten	53	11.755	11.756	-0.001	87	243093	250.0	257.3	
98 1,2,3-Trichloropropane	110	11.779	11.774	0.005	83	228328	250.0	252.5	
99 N-Propylbenzene	120	11.834	11.829	0.005	97	589561	250.0	237.7	
100 2-Chlorotoluene	126	11.919	11.914	0.005	93	483577	250.0	237.2	
101 3-Chlorotoluene	126	11.980	11.981	-0.001	96	509493	250.0	229.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.017	12.012	0.005	95	1775313	250.0	225.0	
103 4-Chlorotoluene	126	12.041	12.042	-0.001	100	518735	250.0	241.3	
104 tert-Butylbenzene	119	12.327	12.328	-0.001	90	1388596	250.0	229.6	
106 1,2,4-Trimethylbenzene	105	12.388	12.389	-0.001	99	1844484	250.0	223.2	
107 1,2-dichloro-4-(trifluorom	214	12.424	12.425	-0.001	95	471815	250.0	226.7	
108 sec-Butylbenzene	105	12.552	12.553	-0.001	97	2027020	250.0	220.2	
109 1,3-Dichlorobenzene	146	12.674	12.669	0.005	92	911485	250.0	232.2	
110 4-Isopropyltoluene	119	12.710	12.711	-0.001	94	1622356	250.0	222.9	
111 1,4-Dichlorobenzene	146	12.777	12.772	0.005	92	935299	250.0	230.5	
113 2,4-Dichloro-1-(trifluorom	214	12.795	12.796	-0.001	93	446968	250.0	217.0	
114 2,5-Dichlorobenzotrifluori	214	12.838	12.833	0.005	97	516380	250.0	229.2	
116 n-Butylbenzene	91	13.118	13.119	-0.001	96	1618275	250.0	221.1	
117 1,2-Dichlorobenzene	146	13.130	13.125	0.005	94	885916	250.0	228.2	
118 1,2-Dibromo-3-Chloropropan	75	13.921	13.922	-0.001	92	153064	250.0	258.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.067	14.062	0.005	95	2000436	750.0	610.5	
121 2,3- & 3,4- Dichlorotoluen	125	14.480	14.481	-0.001	96	1491443	500.0	415.2	
122 1,2,4-Trichlorobenzene	180	14.748	14.743	0.005	92	593825	250.0	218.4	
123 Hexachlorobutadiene	225	14.894	14.895	-0.001	96	193594	250.0	208.9	
124 Naphthalene	128	15.010	15.011	-0.001	99	1599080	250.0	222.1	
125 1,2,3-Trichlorobenzene	180	15.235	15.236	-0.001	92	564994	250.0	221.5	
126 2,4,5-Trichlorotoluene	159	16.013	16.008	0.005	0	398998	250.0	247.4	
127 2,3,6-Trichlorotoluene	159	16.111	16.112	-0.001	91	367031	250.0	250.8	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		500.0	466.5	
S 131 Xylenes, Total	106				0		500.0	426.6	
S 132 1,3-Dichloropropene, Total	1				0		500.0	472.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWeemixPRI_00002	Amount Added: 10.00	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 10.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 10.00	Units: uL	
voaWketPri Re_00005	Amount Added: 10.00	Units: uL	
VOA8260SURR_00034	Amount Added: 10.00	Units: uL	
VOAACROPRI_00005	Amount Added: 11.00	Units: uL	
VOA8260INT_00032	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D

Injection Date: 01-May-2015 16:46:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD50

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

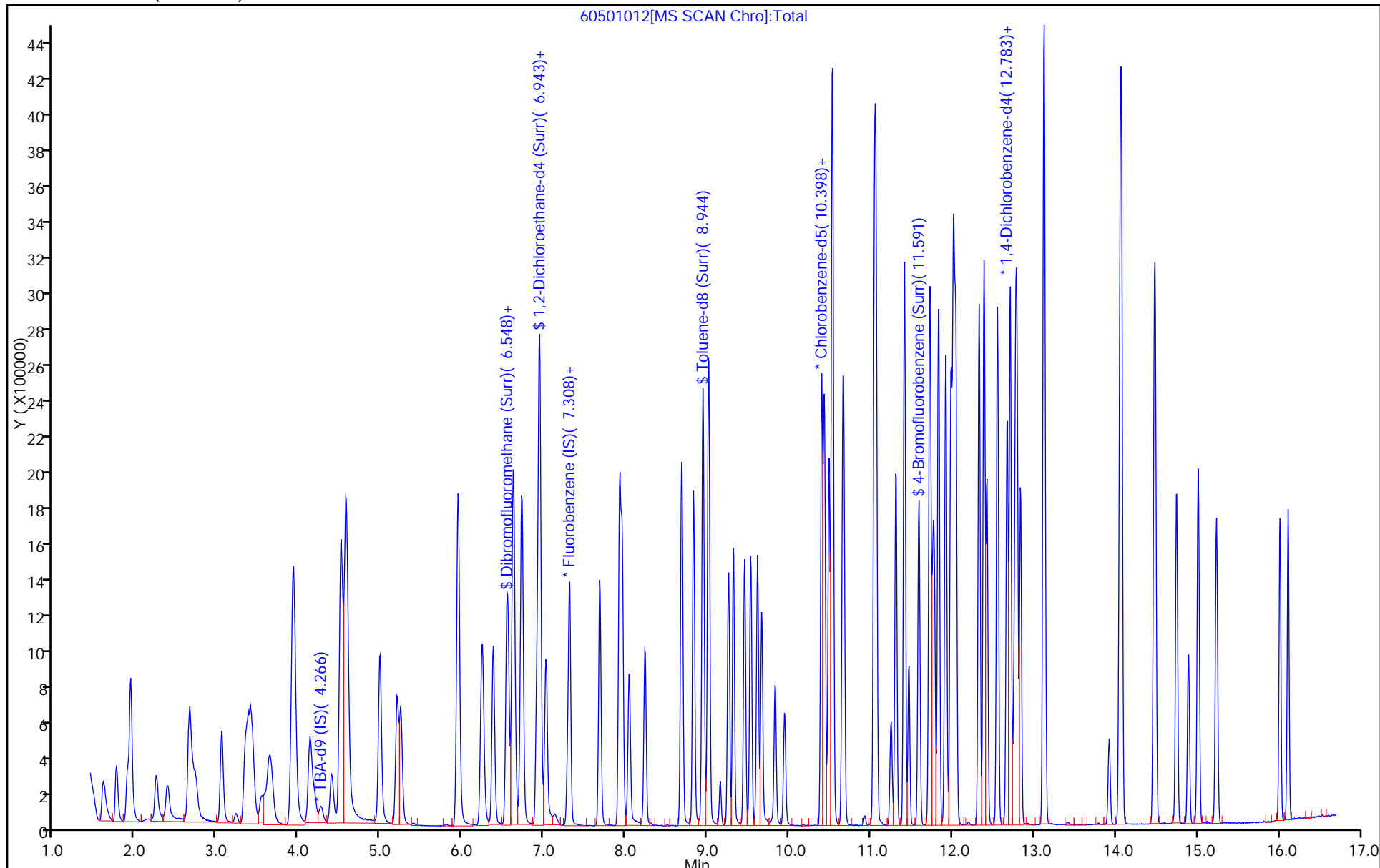
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-140579/2 Calibration Date: 05/05/2015 11:28
 Instrument ID: CHHP6 Calib Start Date: 04/10/2015 17:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/10/2015 19:27
 Lab File ID: 60505002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1938	0.1818	0.0100	18.8	20.0	-6.2	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 05-May-2015 11:28:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0006773-002
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub10
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 05-May-2015 13:53:46 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: fergusond

Date: 05-May-2015 12:00:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.242	4.242	0.000	98	180942	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	96	345760	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.392	10.392	0.000	89	74520	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	90	110772	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.547	6.547	0.000	42	70741	50.0	49.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	59	126641	50.0	53.0	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	80	315200	50.0	50.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.000	77	122699	50.0	47.7	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	59	108810	50.0	51.5	
12 Chloromethane	50	1.766	1.766	0.000	99	101530	50.0	57.9	
13 Vinyl chloride	62	1.894	1.894	0.000	99	109673	50.0	58.7	
14 Butadiene	39	1.942	1.942	0.000	90	102174	50.0	57.3	
15 Bromomethane	94	2.246	2.246	0.000	89	59049	50.0	60.7	
16 Chloroethane	64	2.392	2.392	0.000	94	69935	50.0	59.4	
17 Dichlorofluoromethane	67	2.660	2.660	0.000	80	180070	50.0	63.3	
18 Trichlorofluoromethane	101	2.678	2.678	0.000	72	142610	50.0	66.0	
20 Ethyl ether	59	3.043	3.043	0.000	88	87564	50.0	54.3	
21 Acrolein	56	3.220	3.220	0.000	87	41574	150.0	145.2	
22 1,1-Dichloroethene	96	3.341	3.341	0.000	96	78806	50.0	49.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.420	3.420	0.000	93	85242	50.0	52.7	
24 Acetone	43	3.427	3.427	0.000	87	58734	100.0	128.0	
25 Iodomethane	142	3.536	3.536	0.000	98	103933	50.0	50.8	
26 Carbon disulfide	76	3.633	3.633	0.000	99	231679	50.0	49.4	
29 3-Chloro-1-propene	76	3.913	3.913	0.000	66	51608	50.0	45.9	
30 Methyl acetate	43	3.925	3.925	0.000	97	365872	250.0	241.5	
31 Methylene Chloride	84	4.132	4.132	0.000	91	107795	50.0	55.5	
32 2-Methyl-2-propanol	59	4.370	4.370	0.000	89	93464	500.0	474.2	
33 Acrylonitrile	53	4.497	4.497	0.000	99	365767	500.0	473.1	
34 trans-1,2-Dichloroethene	96	4.558	4.558	0.000	69	89429	50.0	50.1	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	90	300518	50.0	46.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.990	0.000	93	118054	50.0	49.3	
37 1,1-Dichloroethane	63	5.197	5.197	0.000	97	174793	50.0	52.1	
38 Vinyl acetate	43	5.239	5.239	0.000	97	120384	50.0	29.9	
42 2,2-Dichloropropane	77	5.939	5.939	0.000	64	108087	50.0	52.0	
43 cis-1,2-Dichloroethene	96	5.945	5.945	0.000	73	94584	50.0	46.6	
44 2-Butanone (MEK)	43	5.951	5.951	0.000	75	87947	100.0	115.1	
48 Chlorobromomethane	128	6.231	6.231	0.000	90	38621	50.0	46.4	
49 Tetrahydrofuran	42	6.243	6.243	0.000	83	51988	100.0	73.3	
50 Chloroform	83	6.371	6.371	0.000	96	170017	50.0	52.5	
51 1,1,1-Trichloroethane	97	6.541	6.541	0.000	92	132511	50.0	49.8	
52 Cyclohexane	56	6.614	6.614	0.000	77	159789	50.0	50.0	
53 Carbon tetrachloride	117	6.718	6.718	0.000	72	99483	50.0	48.9	
54 1,1-Dichloropropene	75	6.724	6.724	0.000	92	133803	50.0	51.9	
55 Isobutyl alcohol	41	6.894	6.894	0.000	88	71021	1250.0	1019.2	
56 Benzene	78	6.943	6.943	0.000	97	396121	50.0	52.1	
57 1,2-Dichloroethane	62	7.016	7.016	0.000	92	151779	50.0	52.5	
59 n-Heptane	43	7.308	7.308	0.000	88	94243	50.0	51.2	
61 Trichloroethene	130	7.679	7.679	0.000	87	75627	50.0	46.0	
63 Methylcyclohexane	83	7.922	7.922	0.000	91	149330	50.0	48.2	
64 1,2-Dichloropropane	63	7.953	7.953	0.000	87	99312	50.0	49.5	
67 Dibromomethane	93	8.032	8.032	0.000	83	59227	50.0	48.7	
65 1,4-Dioxane	88	8.032	8.032	0.000	42	16025	1000.0	829.5	
68 Dichlorobromomethane	83	8.233	8.233	0.000	92	116004	50.0	47.8	
70 2-Chloroethyl vinyl ether	63	8.531	8.531	0.000	91	125737	100.0	93.8	
71 cis-1,3-Dichloropropene	75	8.677	8.677	0.000	90	145374	50.0	45.3	
72 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	95	172714	100.0	86.5	
73 Toluene	91	9.011	9.011	0.000	98	395463	50.0	51.2	
74 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	81	122878	50.0	43.7	
75 Ethyl methacrylate	69	9.315	9.315	0.000	87	113767	50.0	40.4	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	89	79000	50.0	47.0	
77 Tetrachloroethene	164	9.522	9.522	0.000	86	63234	50.0	49.7	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	93	158600	50.0	49.8	
79 2-Hexanone	43	9.662	9.662	0.000	95	156799	100.0	128.8	
81 Chlorodibromomethane	129	9.826	9.826	0.000	87	55790	50.0	42.1	
82 Ethylene Dibromide	107	9.942	9.942	0.000	97	73538	50.0	46.2	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	81	115378	50.0	48.9	
84 Chlorobenzene	112	10.429	10.429	0.000	87	241432	50.0	49.5	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	90	112068	50.0	50.0	
86 1,1,1,2-Tetrachloroethane	131	10.520	10.520	0.000	45	68187	50.0	47.7	
87 Ethylbenzene	106	10.526	10.526	0.000	99	136363	50.0	50.0	
88 m-Xylene & p-Xylene	106	10.660	10.660	0.000	99	165624	50.0	48.5	
89 o-Xylene	106	11.043	11.043	0.000	95	162388	50.0	49.0	
90 Styrene	104	11.061	11.061	0.000	93	263484	50.0	48.4	
91 Bromoform	173	11.244	11.244	0.000	86	33129	50.0	39.1	
92 2-Chlorobenzotrifluoride	180	11.305	11.305	0.000	93	117587	50.0	49.4	
93 Isopropylbenzene	105	11.408	11.408	0.000	97	407147	50.0	50.6	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	66	107859	50.0	46.7	
95 Bromobenzene	156	11.724	11.724	0.000	81	87030	50.0	48.4	
97 trans-1,4-Dichloro-2-buten	53	11.755	11.755	0.000	66	30394	50.0	36.8	
98 1,2,3-Trichloropropane	110	11.773	11.773	0.000	53	35786	50.0	45.3	
99 N-Propylbenzene	120	11.828	11.828	0.000	99	105342	50.0	48.6	
100 2-Chlorotoluene	126	11.913	11.913	0.000	92	81842	50.0	46.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.980	11.980	0.000	77	95646	50.0	49.3	
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	92	352769	50.0	51.2	
103 4-Chlorotoluene	126	12.035	12.035	0.000	99	94708	50.0	50.4	
104 tert-Butylbenzene	119	12.327	12.327	0.000	80	257111	50.0	48.7	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	99	359028	50.0	49.7	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.418	0.000	94	89195	50.0	49.1	
108 sec-Butylbenzene	105	12.546	12.546	0.000	97	413852	50.0	51.5	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	83	169392	50.0	49.4	
110 4-Isopropyltoluene	119	12.704	12.704	0.000	80	323913	50.0	51.0	
111 1,4-Dichlorobenzene	146	12.771	12.771	0.000	88	172068	50.0	48.6	
113 2,4-Dichloro-1-(trifluorom	214	12.789	12.789	0.000	82	82411	50.0	45.8	
114 2,5-Dichlorobenzotrifluori	214	12.832	12.832	0.000	95	103925	50.0	52.8	
116 n-Butylbenzene	91	13.111	13.111	0.000	95	322409	50.0	50.4	
117 1,2-Dichlorobenzene	146	13.124	13.124	0.000	83	169413	50.0	50.0	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.914	0.000	51	19064	50.0	36.9	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	97	440783	150.0	154.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.474	0.000	97	310231	100.0	98.9	
122 1,2,4-Trichlorobenzene	180	14.742	14.742	0.000	90	112526	50.0	47.4	
123 Hexachlorobutadiene	225	14.888	14.888	0.000	90	42304	50.0	52.3	
124 Naphthalene	128	15.009	15.009	0.000	98	262443	50.0	41.7	
125 1,2,3-Trichlorobenzene	180	15.229	15.229	0.000	93	101578	50.0	45.6	
126 2,4,5-Trichlorotoluene	159	16.007	16.007	0.000	0	56066	50.0	39.8	
127 2,3,6-Trichlorotoluene	159	16.111	16.111	0.000	90	52120	50.0	40.8	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	97.6	
S 130 1,2-Dichloroethene, Total	96				0		100.0	96.8	
S 132 1,3-Dichloropropene, Total	1				0		100.0	88.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWVA2ndRes_00001	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 2.00	Units: uL	
voaWketPri Re_00005	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
VOAACROPRI_00005	Amount Added: 6.00	Units: uL	
VOACEVEPRI_00006	Amount Added: 2.00	Units: uL	
VOA8260INT_00033	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00035	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505002.D

Injection Date: 05-May-2015 11:28:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

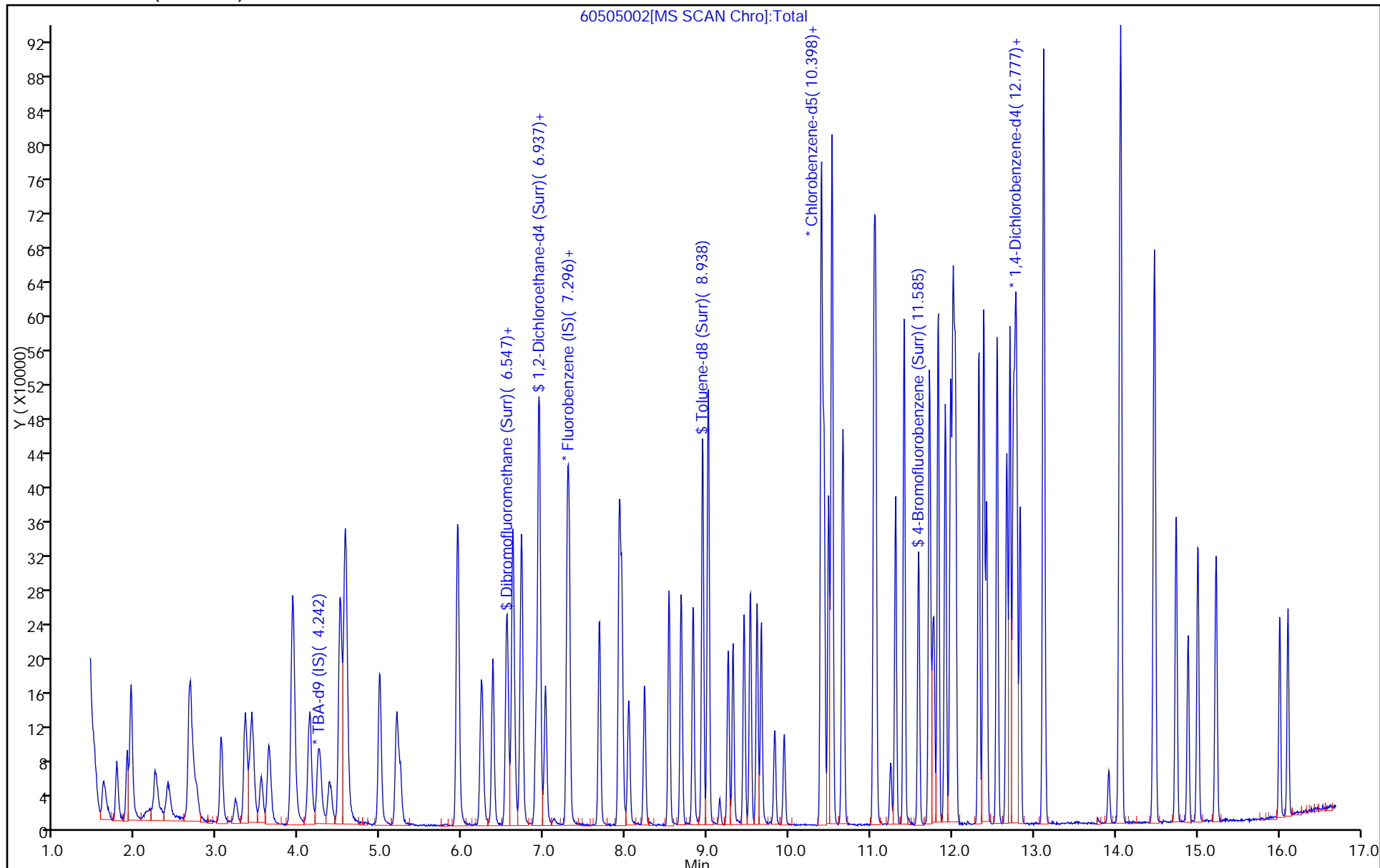
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-140579/2 Calibration Date: 05/05/2015 11:28
 Instrument ID: CHHP6 Calib Start Date: 05/01/2015 13:53
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/01/2015 16:46
 Lab File ID: 60505002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3054	0.3147	0.1000	10.3	10.0	3.0	20.0
Chloromethane	Ave	0.2538	0.2936	0.1000	11.6	10.0	15.7	20.0
Vinyl chloride	Ave	0.2703	0.3172	0.1000	11.7	10.0	17.4	20.0
Bromomethane	Ave	0.1407	0.1708	0.0500	12.1	10.0	21.3*	20.0
Chloroethane	Ave	0.1703	0.2023	0.0500	11.9	10.0	18.8	20.0
Dichlorofluoromethane	Ave	0.4113	0.5208	0.0100	12.7	10.0	26.6*	20.0
Trichlorofluoromethane	Ave	0.3125	0.4125	0.1000	13.2	10.0	32.0*	20.0
Ethyl ether	Ave	0.2332	0.2533	0.0100	10.9	10.0	8.6	20.0
Acrolein	Ave	0.0414	0.0401	0.0100	29.0	30.0	-3.2	20.0
1,1-Dichloroethene	Ave	0.2315	0.2279	0.1000	9.84	10.0	-1.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2338	0.2465	0.1000	10.5	10.0	5.5	20.0
Acetone	Ave	0.0664	0.0849	0.0500	25.6	20.0	28.0*	20.0
Iodomethane	Ave	0.2960	0.3006	0.0100	10.2	10.0	1.5	20.0
Carbon disulfide	Ave	0.6782	0.6701	0.1000	9.88	10.0	-1.2	20.0
Allyl chloride	Ave	0.1625	0.1493	0.0100	9.19	10.0	-8.1	20.0
Methyl acetate	Ave	0.2191	0.2116	0.1000	48.3	50.0	-3.4	20.0
Methylene Chloride	Ave	0.2810	0.3118	0.1000	11.1	10.0	10.9	20.0
tert-Butyl alcohol	Ave	1.089	1.033	0.0100	94.8	100	-5.2	20.0
Acrylonitrile	Ave	0.1118	0.1058	0.0100	94.6	100	-5.4	20.0
trans-1,2-Dichloroethene	Ave	0.2580	0.2586	0.1000	10.0	10.0	0.3	20.0
Methyl tert-butyl ether	Ave	0.9263	0.8692	0.1000	9.38	10.0	-6.2	20.0
Hexane	Ave	0.3461	0.3414	0.0100	9.87	10.0	-1.3	20.0
1,1-Dichloroethane	Ave	0.4851	0.5055	0.2000	10.4	10.0	4.2	20.0
Vinyl acetate	Ave	0.5832	0.3482	0.0100	5.97	10.0	-40.3*	20.0
2,2-Dichloropropane	Ave	0.3004	0.3126	0.0100	10.4	10.0	4.1	20.0
cis-1,2-Dichloroethene	Ave	0.2933	0.2736	0.1000	9.33	10.0	-6.7	20.0
2-Butanone (MEK)	Ave	0.1105	0.1272	0.0500	23.0	20.0	15.1	20.0
Bromochloromethane	Ave	0.1203	0.1117	0.0100	9.28	10.0	-7.2	20.0
Tetrahydrofuran	Ave	0.1026	0.0752	0.0100	14.7	20.0	-26.7*	20.0
Chloroform	Ave	0.4684	0.4917	0.2000	10.5	10.0	5.0	20.0
1,1,1-Trichloroethane	Ave	0.3851	0.3833	0.1000	9.95	10.0	-0.5	20.0
Cyclohexane	Ave	0.4620	0.4621	0.1000	10.0	10.0	0.0	20.0
Carbon tetrachloride	Ave	0.2940	0.2877	0.1000	9.79	10.0	-2.1	20.0
1,1-Dichloropropene	Ave	0.3726	0.3870	0.0100	10.4	10.0	3.9	20.0
Isobutyl alcohol	Ave	0.0101	0.0082*	0.0100	204	250	-18.5	20.0
Benzene	Ave	1.100	1.146	0.5000	10.4	10.0	4.2	20.0
1,2-Dichloroethane	Ave	0.4179	0.4390	0.1000	10.5	10.0	5.0	20.0
n-Heptane	Ave	0.2659	0.2726	0.0100	10.2	10.0	2.5	20.0
Trichloroethene	Ave	0.2379	0.2187	0.2000	9.19	10.0	-8.1	20.0
Methylcyclohexane	Ave	0.4482	0.4319	0.1000	9.64	10.0	-3.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-140579/2 Calibration Date: 05/05/2015 11:28
 Instrument ID: CHHP6 Calib Start Date: 05/01/2015 13:53
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/01/2015 16:46
 Lab File ID: 60505002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2900	0.2872	0.1000	9.90	10.0	-1.0	20.0
1,4-Dioxane	Ave	0.0028	0.0023*	0.0100	166	200	-17.0	20.0
Dibromomethane	Ave	0.1757	0.1713	0.0100	9.75	10.0	-2.5	20.0
Bromodichloromethane	Ave	0.3510	0.3355	0.2000	9.56	10.0	-4.4	20.0
cis-1,3-Dichloropropene	Ave	0.4644	0.4205	0.2000	9.05	10.0	-9.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.340	1.159	0.1000	17.3	20.0	-13.5	20.0
Toluene	Ave	5.185	5.307	0.4000	10.2	10.0	2.4	20.0
trans-1,3-Dichloropropene	Ave	1.888	1.649	0.1000	8.73	10.0	-12.7	20.0
Ethyl methacrylate	Ave	1.891	1.527	0.0100	8.07	10.0	-19.3	20.0
1,1,2-Trichloroethane	Ave	1.129	1.060	0.1000	9.39	10.0	-6.1	20.0
Tetrachloroethene	Ave	0.8533	0.8486	0.2000	9.94	10.0	-0.6	20.0
1,3-Dichloropropane	Ave	2.135	2.128	0.0100	9.97	10.0	-0.3	20.0
2-Hexanone	Ave	0.8171	1.052	0.1000	25.8	20.0	28.8*	20.0
Dibromochloromethane	Ave	0.8885	0.7487	0.1000	8.43	10.0	-15.7	20.0
1,2-Dibromoethane (EDB)	Ave	1.067	0.9868	0.1000	9.25	10.0	-7.5	20.0
3-Chlorobenzotrifluoride	Ave	1.584	1.548	0.0100	9.78	10.0	-2.2	20.0
Chlorobenzene	Ave	3.274	3.240	0.5000	9.90	10.0	-1.0	20.0
4-Chlorobenzotrifluoride	Ave	1.503	1.504	0.0100	10.0	10.0	0.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9596	0.9150	0.0100	9.54	10.0	-4.6	20.0
Ethylbenzene	Ave	1.829	1.830	0.1000	10.0	10.0	0.0	20.0
m-Xylene & p-Xylene	Ave	2.290	2.223	0.1000	9.70	10.0	-3.0	20.0
o-Xylene	Ave	2.222	2.179	0.3000	9.81	10.0	-1.9	20.0
Styrene	Ave	3.653	3.536	0.3000	9.68	10.0	-3.2	20.0
Bromoform	Ave	0.5680	0.4446	0.1000	7.83	10.0	-21.7*	20.0
2-Chlorobenzotrifluoride	Ave	1.599	1.578	0.0100	9.87	10.0	-1.3	20.0
Isopropylbenzene	Ave	5.399	5.464	0.1000	10.1	10.0	1.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.550	1.447	0.3000	9.34	10.0	-6.6	20.0
Bromobenzene	Ave	0.8110	0.7857	0.0100	9.69	10.0	-3.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3725	0.2744	0.0100	7.37	10.0	-26.3*	20.0
1,2,3-Trichloropropane	Ave	0.3565	0.3231	0.0100	9.06	10.0	-9.4	20.0
N-Propylbenzene	Ave	0.9779	0.9510	0.0100	9.72	10.0	-2.8	20.0
2-Chlorotoluene	Ave	0.8038	0.7388	0.0100	9.19	10.0	-8.1	20.0
3-Chlorotoluene	Ave	0.8753	0.8635	0.0100	9.87	10.0	-1.3	20.0
1,3,5-Trimethylbenzene	Ave	3.111	3.185	0.0100	10.2	10.0	2.4	20.0
4-Chlorotoluene	Ave	0.8477	0.8550	0.0100	10.1	10.0	0.9	20.0
tert-Butylbenzene	Ave	2.385	2.321	0.0100	9.73	10.0	-2.7	20.0
1,2,4-Trimethylbenzene	Ave	3.258	3.241	0.0100	9.95	10.0	-0.5	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8205	0.8052	0.0100	9.81	10.0	-1.9	20.0
sec-Butylbenzene	Ave	3.630	3.736	0.0100	10.3	10.0	2.9	20.0
1,3-Dichlorobenzene	Ave	1.548	1.529	0.6000	9.88	10.0	-1.2	20.0
4-Isopropyltoluene	Ave	2.869	2.924	0.0100	10.2	10.0	1.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-140579/2 Calibration Date: 05/05/2015 11:28
 Instrument ID: CHHP6 Calib Start Date: 05/01/2015 13:53
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/01/2015 16:46
 Lab File ID: 60505002.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dichlorobenzene	Ave	1.600	1.553	0.5000	9.71	10.0	-2.9	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.8122	0.7440	0.0100	9.16	10.0	-8.4	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8885	0.9382	0.0100	10.6	10.0	5.6	20.0
n-Butylbenzene	Ave	2.886	2.911	0.0100	10.1	10.0	0.9	20.0
1,2-Dichlorobenzene	Ave	1.531	1.529	0.4000	9.99	10.0	-0.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.2335	0.1721	0.0500	7.37	10.0	-26.3*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.292	1.326	0.0100	30.8	30.0	2.7	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.416	1.400	0.0100	19.8	20.0	-1.1	20.0
1,2,4-Trichlorobenzene	Ave	1.072	1.016	0.2000	9.47	10.0	-5.3	20.0
Hexachlorobutadiene	Ave	0.3654	0.3819	0.0100	10.5	10.0	4.5	20.0
Naphthalene	Ave	2.838	2.369	0.0100	8.35	10.0	-16.5	20.0
1,2,3-Trichlorobenzene	Ave	1.006	0.9170	0.0100	9.12	10.0	-8.8	20.0
2,4,5-Trichlorotoluene	Ave	0.6359	0.5061	0.0100	7.96	10.0	-20.4*	20.0
2,3,6-Trichlorotoluene	Ave	0.5770	0.4705	0.0100	8.15	10.0	-18.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2069	0.2046		9.89	10.0	-1.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3457	0.3663		10.6	10.0	6.0	20.0
Toluene-d8 (Surr)	Ave	4.231	4.230		10.0	10.0	-0.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.725	1.647		9.55	10.0	-4.5	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 05-May-2015 11:28:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0006773-002
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub10
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 05-May-2015 13:53:46 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: fergusond

Date: 05-May-2015 12:00:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.242	4.242	0.000	98	180942	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	96	345760	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.392	10.392	0.000	89	74520	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.746	0.000	90	110772	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.547	6.547	0.000	42	70741	50.0	49.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.931	0.000	59	126641	50.0	53.0	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.938	0.000	80	315200	50.0	50.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.000	77	122699	50.0	47.7	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	59	108810	50.0	51.5	
12 Chloromethane	50	1.766	1.766	0.000	99	101530	50.0	57.9	
13 Vinyl chloride	62	1.894	1.894	0.000	99	109673	50.0	58.7	
14 Butadiene	39	1.942	1.942	0.000	90	102174	50.0	57.3	
15 Bromomethane	94	2.246	2.246	0.000	89	59049	50.0	60.7	
16 Chloroethane	64	2.392	2.392	0.000	94	69935	50.0	59.4	
17 Dichlorofluoromethane	67	2.660	2.660	0.000	80	180070	50.0	63.3	
18 Trichlorofluoromethane	101	2.678	2.678	0.000	72	142610	50.0	66.0	
20 Ethyl ether	59	3.043	3.043	0.000	88	87564	50.0	54.3	
21 Acrolein	56	3.220	3.220	0.000	87	41574	150.0	145.2	
22 1,1-Dichloroethene	96	3.341	3.341	0.000	96	78806	50.0	49.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.420	3.420	0.000	93	85242	50.0	52.7	
24 Acetone	43	3.427	3.427	0.000	87	58734	100.0	128.0	
25 Iodomethane	142	3.536	3.536	0.000	98	103933	50.0	50.8	
26 Carbon disulfide	76	3.633	3.633	0.000	99	231679	50.0	49.4	
29 3-Chloro-1-propene	76	3.913	3.913	0.000	66	51608	50.0	45.9	
30 Methyl acetate	43	3.925	3.925	0.000	97	365872	250.0	241.5	
31 Methylene Chloride	84	4.132	4.132	0.000	91	107795	50.0	55.5	
32 2-Methyl-2-propanol	59	4.370	4.370	0.000	89	93464	500.0	474.2	
33 Acrylonitrile	53	4.497	4.497	0.000	99	365767	500.0	473.1	
34 trans-1,2-Dichloroethene	96	4.558	4.558	0.000	69	89429	50.0	50.1	
35 Methyl tert-butyl ether	73	4.570	4.570	0.000	90	300518	50.0	46.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.990	4.990	0.000	93	118054	50.0	49.3	
37 1,1-Dichloroethane	63	5.197	5.197	0.000	97	174793	50.0	52.1	
38 Vinyl acetate	43	5.239	5.239	0.000	97	120384	50.0	29.9	
42 2,2-Dichloropropane	77	5.939	5.939	0.000	64	108087	50.0	52.0	
43 cis-1,2-Dichloroethene	96	5.945	5.945	0.000	73	94584	50.0	46.6	
44 2-Butanone (MEK)	43	5.951	5.951	0.000	75	87947	100.0	115.1	
48 Chlorobromomethane	128	6.231	6.231	0.000	90	38621	50.0	46.4	
49 Tetrahydrofuran	42	6.243	6.243	0.000	83	51988	100.0	73.3	
50 Chloroform	83	6.371	6.371	0.000	96	170017	50.0	52.5	
51 1,1,1-Trichloroethane	97	6.541	6.541	0.000	92	132511	50.0	49.8	
52 Cyclohexane	56	6.614	6.614	0.000	77	159789	50.0	50.0	
53 Carbon tetrachloride	117	6.718	6.718	0.000	72	99483	50.0	48.9	
54 1,1-Dichloropropene	75	6.724	6.724	0.000	92	133803	50.0	51.9	
55 Isobutyl alcohol	41	6.894	6.894	0.000	88	71021	1250.0	1019.2	
56 Benzene	78	6.943	6.943	0.000	97	396121	50.0	52.1	
57 1,2-Dichloroethane	62	7.016	7.016	0.000	92	151779	50.0	52.5	
59 n-Heptane	43	7.308	7.308	0.000	88	94243	50.0	51.2	
61 Trichloroethene	130	7.679	7.679	0.000	87	75627	50.0	46.0	
63 Methylcyclohexane	83	7.922	7.922	0.000	91	149330	50.0	48.2	
64 1,2-Dichloropropane	63	7.953	7.953	0.000	87	99312	50.0	49.5	
67 Dibromomethane	93	8.032	8.032	0.000	83	59227	50.0	48.7	
65 1,4-Dioxane	88	8.032	8.032	0.000	42	16025	1000.0	829.5	
68 Dichlorobromomethane	83	8.233	8.233	0.000	92	116004	50.0	47.8	
70 2-Chloroethyl vinyl ether	63	8.531	8.531	0.000	91	125737	100.0	93.8	
71 cis-1,3-Dichloropropene	75	8.677	8.677	0.000	90	145374	50.0	45.3	
72 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	95	172714	100.0	86.5	
73 Toluene	91	9.011	9.011	0.000	98	395463	50.0	51.2	
74 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	81	122878	50.0	43.7	
75 Ethyl methacrylate	69	9.315	9.315	0.000	87	113767	50.0	40.4	
76 1,1,2-Trichloroethane	97	9.449	9.449	0.000	89	79000	50.0	47.0	
77 Tetrachloroethene	164	9.522	9.522	0.000	86	63234	50.0	49.7	
78 1,3-Dichloropropane	76	9.607	9.607	0.000	93	158600	50.0	49.8	
79 2-Hexanone	43	9.662	9.662	0.000	95	156799	100.0	128.8	
81 Chlorodibromomethane	129	9.826	9.826	0.000	87	55790	50.0	42.1	
82 Ethylene Dibromide	107	9.942	9.942	0.000	97	73538	50.0	46.2	
83 3-Chlorobenzotrifluoride	180	10.392	10.392	0.000	81	115378	50.0	48.9	
84 Chlorobenzene	112	10.429	10.429	0.000	87	241432	50.0	49.5	
85 4-Chlorobenzotrifluoride	180	10.483	10.483	0.000	90	112068	50.0	50.0	
86 1,1,1,2-Tetrachloroethane	131	10.520	10.520	0.000	45	68187	50.0	47.7	
87 Ethylbenzene	106	10.526	10.526	0.000	99	136363	50.0	50.0	
88 m-Xylene & p-Xylene	106	10.660	10.660	0.000	99	165624	50.0	48.5	
89 o-Xylene	106	11.043	11.043	0.000	95	162388	50.0	49.0	
90 Styrene	104	11.061	11.061	0.000	93	263484	50.0	48.4	
91 Bromoform	173	11.244	11.244	0.000	86	33129	50.0	39.1	
92 2-Chlorobenzotrifluoride	180	11.305	11.305	0.000	93	117587	50.0	49.4	
93 Isopropylbenzene	105	11.408	11.408	0.000	97	407147	50.0	50.6	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.712	0.000	66	107859	50.0	46.7	
95 Bromobenzene	156	11.724	11.724	0.000	81	87030	50.0	48.4	
97 trans-1,4-Dichloro-2-buten	53	11.755	11.755	0.000	66	30394	50.0	36.8	
98 1,2,3-Trichloropropane	110	11.773	11.773	0.000	53	35786	50.0	45.3	
99 N-Propylbenzene	120	11.828	11.828	0.000	99	105342	50.0	48.6	
100 2-Chlorotoluene	126	11.913	11.913	0.000	92	81842	50.0	46.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.980	11.980	0.000	77	95646	50.0	49.3	
102 1,3,5-Trimethylbenzene	105	12.010	12.010	0.000	92	352769	50.0	51.2	
103 4-Chlorotoluene	126	12.035	12.035	0.000	99	94708	50.0	50.4	
104 tert-Butylbenzene	119	12.327	12.327	0.000	80	257111	50.0	48.7	
106 1,2,4-Trimethylbenzene	105	12.381	12.381	0.000	99	359028	50.0	49.7	
107 1,2-dichloro-4-(trifluorom	214	12.418	12.418	0.000	94	89195	50.0	49.1	
108 sec-Butylbenzene	105	12.546	12.546	0.000	97	413852	50.0	51.5	
109 1,3-Dichlorobenzene	146	12.667	12.667	0.000	83	169392	50.0	49.4	
110 4-Isopropyltoluene	119	12.704	12.704	0.000	80	323913	50.0	51.0	
111 1,4-Dichlorobenzene	146	12.771	12.771	0.000	88	172068	50.0	48.6	
113 2,4-Dichloro-1-(trifluorom	214	12.789	12.789	0.000	82	82411	50.0	45.8	
114 2,5-Dichlorobenzotrifluori	214	12.832	12.832	0.000	95	103925	50.0	52.8	
116 n-Butylbenzene	91	13.111	13.111	0.000	95	322409	50.0	50.4	
117 1,2-Dichlorobenzene	146	13.124	13.124	0.000	83	169413	50.0	50.0	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.914	0.000	51	19064	50.0	36.9	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.060	0.000	97	440783	150.0	154.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.474	0.000	97	310231	100.0	98.9	
122 1,2,4-Trichlorobenzene	180	14.742	14.742	0.000	90	112526	50.0	47.4	
123 Hexachlorobutadiene	225	14.888	14.888	0.000	90	42304	50.0	52.3	
124 Naphthalene	128	15.009	15.009	0.000	98	262443	50.0	41.7	
125 1,2,3-Trichlorobenzene	180	15.229	15.229	0.000	93	101578	50.0	45.6	
126 2,4,5-Trichlorotoluene	159	16.007	16.007	0.000	0	56066	50.0	39.8	
127 2,3,6-Trichlorotoluene	159	16.111	16.111	0.000	90	52120	50.0	40.8	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	97.6	
S 130 1,2-Dichloroethene, Total	96				0		100.0	96.8	
S 132 1,3-Dichloropropene, Total	1				0		100.0	88.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWVA2ndRes_00001	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00114	Amount Added: 2.00	Units: uL	
voaWketPri Re_00005	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
VOAACROPRI_00005	Amount Added: 6.00	Units: uL	
VOACEVEPRI_00006	Amount Added: 2.00	Units: uL	
VOA8260INT_00033	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00035	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505002.D

Injection Date: 05-May-2015 11:28:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

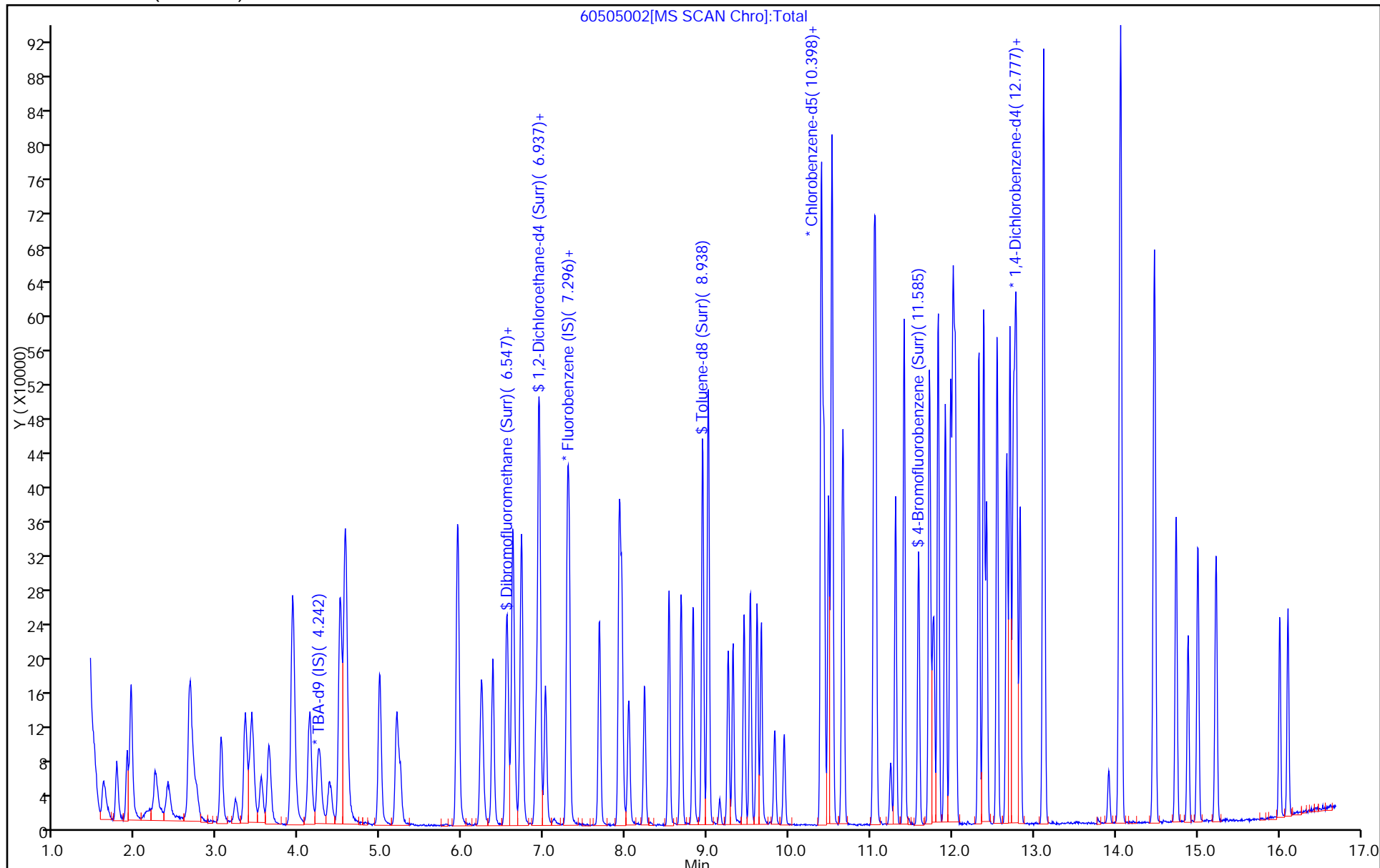
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-140724/7 Calibration Date: 05/06/2015 13:37
 Instrument ID: CHHP6 Calib Start Date: 04/10/2015 17:04
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/10/2015 19:27
 Lab File ID: 60506007.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1938	0.1964	0.0100	20.3	20.0	1.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506007.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 06-May-2015 13:37:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0006797-007
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub32
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 17:12:09 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond

Date: 06-May-2015 13:56:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.249	4.249	0.000	95	188592	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.284	7.284	0.000	98	422720	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.399	10.399	0.000	92	85680	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.741	12.741	0.000	94	129325	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.554	6.554	0.000	91	88523	50.0	50.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.932	6.932	0.000	67	164085	50.0	56.1	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	94	409438	50.0	56.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.000	78	157953	50.0	53.4	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	100	115280	50.0	44.6	
12 Chloromethane	50	1.761	1.761	0.000	99	118540	50.0	55.2	
13 Vinyl chloride	62	1.888	1.888	0.000	98	123427	50.0	54.0	
14 Butadiene	39	1.937	1.937	0.000	92	117888	50.0	54.0	
15 Bromomethane	94	2.259	2.259	0.000	92	71935	50.0	60.5	
16 Chloroethane	64	2.393	2.393	0.000	99	86477	50.0	60.1	
17 Dichlorofluoromethane	67	2.655	2.655	0.000	97	209530	50.0	60.3	
18 Trichlorofluoromethane	101	2.679	2.679	0.000	94	145604	50.0	55.1	
20 Ethyl ether	59	3.038	3.038	0.000	89	112724	50.0	57.2	
22 1,1-Dichloroethene	96	3.336	3.336	0.000	96	90096	50.0	46.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.421	3.421	0.000	95	94046	50.0	47.6	
24 Acetone	43	3.428	3.428	0.000	84	58016	100.0	103.4	
25 Iodomethane	142	3.531	3.531	0.000	99	113857	50.0	45.5	
26 Carbon disulfide	76	3.628	3.628	0.000	100	245117	50.0	42.7	
29 3-Chloro-1-propene	76	3.908	3.908	0.000	87	56783	50.0	41.3	
30 Methyl acetate	43	3.932	3.932	0.000	97	446514	250.0	241.1	
31 Methylene Chloride	84	4.127	4.127	0.000	97	123871	50.0	52.1	
32 2-Methyl-2-propanol	59	4.370	4.370	0.000	95	103044	500.0	501.6	
33 Acrylonitrile	53	4.510	4.510	0.000	99	464925	500.0	491.8	
34 trans-1,2-Dichloroethene	96	4.559	4.559	0.000	94	103438	50.0	47.4	
35 Methyl tert-butyl ether	73	4.577	4.577	0.000	96	372560	50.0	47.6	
36 Hexane	57	4.991	4.991	0.000	92	133389	50.0	45.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.198	5.198	0.000	97	207644	50.0	50.6	
38 Vinyl acetate	43	5.240	5.240	0.000	97	227622	50.0	46.2	
42 2,2-Dichloropropane	77	5.940	5.940	0.000	65	120078	50.0	47.3	
43 cis-1,2-Dichloroethene	96	5.940	5.940	0.000	87	115555	50.0	46.6	
44 2-Butanone (MEK)	43	5.946	5.946	0.000	63	93719	100.0	100.4	
48 Chlorobromomethane	128	6.232	6.232	0.000	93	47341	50.0	46.5	
49 Tetrahydrofuran	42	6.250	6.250	0.000	84	71816	100.0	82.8	
50 Chloroform	83	6.372	6.372	0.000	95	198424	50.0	50.1	
51 1,1,1-Trichloroethane	97	6.542	6.542	0.000	96	146484	50.0	45.0	
52 Cyclohexane	56	6.615	6.615	0.000	89	177015	50.0	45.3	
53 Carbon tetrachloride	117	6.719	6.719	0.000	66	102470	50.0	41.2	
54 1,1-Dichloropropene	75	6.725	6.725	0.000	93	149705	50.0	47.5	
55 Isobutyl alcohol	41	6.901	6.901	0.000	92	84363	1250.0	990.3	
56 Benzene	78	6.944	6.944	0.000	97	466415	50.0	50.2	
57 1,2-Dichloroethane	62	7.017	7.017	0.000	99	194223	50.0	55.0	
59 n-Heptane	43	7.309	7.309	0.000	90	103470	50.0	46.0	
61 Trichloroethene	130	7.674	7.674	0.000	91	87233	50.0	43.4	
63 Methylcyclohexane	83	7.923	7.923	0.000	92	164132	50.0	43.3	
64 1,2-Dichloropropane	63	7.954	7.954	0.000	94	121196	50.0	49.4	
65 1,4-Dioxane	88	8.033	8.033	0.000	37	18142	1000.0	768.1	M
67 Dibromomethane	93	8.039	8.039	0.000	86	71512	50.0	48.1	
68 Dichlorobromomethane	83	8.227	8.227	0.000	99	132179	50.0	44.5	
70 2-Chloroethyl vinyl ether	63	8.532	8.532	0.000	94	166069	100.0	101.4	
71 cis-1,3-Dichloropropene	75	8.678	8.678	0.000	92	169321	50.0	43.1	
72 4-Methyl-2-pentanone (MIBK)	43	8.824	8.824	0.000	95	178885	100.0	77.9	
73 Toluene	91	9.012	9.012	0.000	98	460666	50.0	51.8	
74 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	95	141911	50.0	43.9	
75 Ethyl methacrylate	69	9.316	9.316	0.000	87	147757	50.0	45.6	
76 1,1,2-Trichloroethane	97	9.450	9.450	0.000	94	98879	50.0	51.1	
77 Tetrachloroethene	164	9.529	9.529	0.000	92	69288	50.0	47.4	
78 1,3-Dichloropropane	76	9.608	9.608	0.000	93	197845	50.0	54.1	
79 2-Hexanone	43	9.663	9.663	0.000	96	168159	100.0	120.1	
81 Chlorodibromomethane	129	9.821	9.821	0.000	89	63094	50.0	41.4	
82 Ethylene Dibromide	107	9.943	9.943	0.000	98	91211	50.0	49.9	
83 3-Chlorobenzotrifluoride	180	10.393	10.393	0.000	90	143527	50.0	52.9	
84 Chlorobenzene	112	10.430	10.430	0.000	90	286796	50.0	51.1	
85 4-Chlorobenzotrifluoride	180	10.484	10.484	0.000	95	135455	50.0	52.6	
86 1,1,1,2-Tetrachloroethane	131	10.521	10.521	0.000	87	74624	50.0	45.4	
87 Ethylbenzene	106	10.527	10.527	0.000	99	156203	50.0	49.8	
88 m-Xylene & p-Xylene	106	10.661	10.661	0.000	99	192056	50.0	48.9	
89 o-Xylene	106	11.044	11.044	0.000	98	188947	50.0	49.6	
90 Styrene	104	11.062	11.062	0.000	94	309790	50.0	49.5	
91 Bromoform	173	11.245	11.245	0.000	90	35834	50.0	36.8	
92 2-Chlorobenzotrifluoride	180	11.306	11.306	0.000	93	141587	50.0	51.7	
93 Isopropylbenzene	105	11.409	11.409	0.000	98	467137	50.0	50.5	
96 1,1,2,2-Tetrachloroethane	83	11.713	11.713	0.000	95	132991	50.0	50.1	
95 Bromobenzene	156	11.725	11.725	0.000	95	102210	50.0	48.7	
97 trans-1,4-Dichloro-2-buten	53	11.756	11.756	0.000	81	34976	50.0	36.3	
98 1,2,3-Trichloropropane	110	11.780	11.780	0.000	84	44008	50.0	47.7	
99 N-Propylbenzene	120	11.829	11.829	0.000	99	117435	50.0	46.4	
100 2-Chlorotoluene	126	11.920	11.920	0.000	94	98365	50.0	47.3	
101 3-Chlorotoluene	126	11.981	11.981	0.000	98	118988	50.0	52.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.011	12.011	0.000	92	398689	50.0	49.5	
103 4-Chlorotoluene	126	12.036	12.036	0.000	98	108277	50.0	49.4	
104 tert-Butylbenzene	119	12.328	12.328	0.000	91	291238	50.0	47.2	
106 1,2,4-Trimethylbenzene	105	12.382	12.382	0.000	98	414016	50.0	49.1	
107 1,2-dichloro-4-(trifluorom	214	12.419	12.419	0.000	93	105548	50.0	49.7	
108 sec-Butylbenzene	105	12.547	12.547	0.000	97	449755	50.0	47.9	
109 1,3-Dichlorobenzene	146	12.668	12.668	0.000	91	195193	50.0	48.8	
110 4-Isopropyltoluene	119	12.705	12.705	0.000	95	350297	50.0	47.2	
111 1,4-Dichlorobenzene	146	12.772	12.772	0.000	89	205319	50.0	49.6	
113 2,4-Dichloro-1-(trifluorom	214	12.790	12.790	0.000	92	100971	50.0	48.1	
114 2,5-Dichlorobenzotrifluori	214	12.833	12.833	0.000	97	120116	50.0	52.3	
116 n-Butylbenzene	91	13.112	13.112	0.000	98	354696	50.0	47.5	
117 1,2-Dichlorobenzene	146	13.125	13.125	0.000	89	196398	50.0	49.6	
118 1,2-Dibromo-3-Chloropropan	75	13.909	13.915	-0.006	64	20989	50.0	34.8	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.061	14.061	0.000	97	512530	150.0	153.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.475	14.475	0.000	97	369021	100.0	100.7	
122 1,2,4-Trichlorobenzene	180	14.743	14.743	0.000	91	124588	50.0	44.9	
123 Hexachlorobutadiene	225	14.889	14.889	0.000	90	39642	50.0	41.9	
124 Naphthalene	128	15.004	15.004	0.000	99	299074	50.0	40.7	
125 1,2,3-Trichlorobenzene	180	15.229	15.229	0.000	91	110664	50.0	42.5	
126 2,4,5-Trichlorotoluene	159	16.008	16.008	0.000	0	55665	50.0	33.8	
127 2,3,6-Trichlorotoluene	159	16.105	16.105	0.000	92	52763	50.0	35.4	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	94.0	
S 131 Xylenes, Total	106				0		100.0	98.6	
S 132 1,3-Dichloropropene, Total	1				0		100.0	87.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00114	Amount Added: 2.00	Units: uL	
voaWketPri Re_00005	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00006	Amount Added: 2.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 2.00	Units: uL	
VOA8260INT_00033	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00035	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506007.D

Injection Date: 06-May-2015 13:37:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

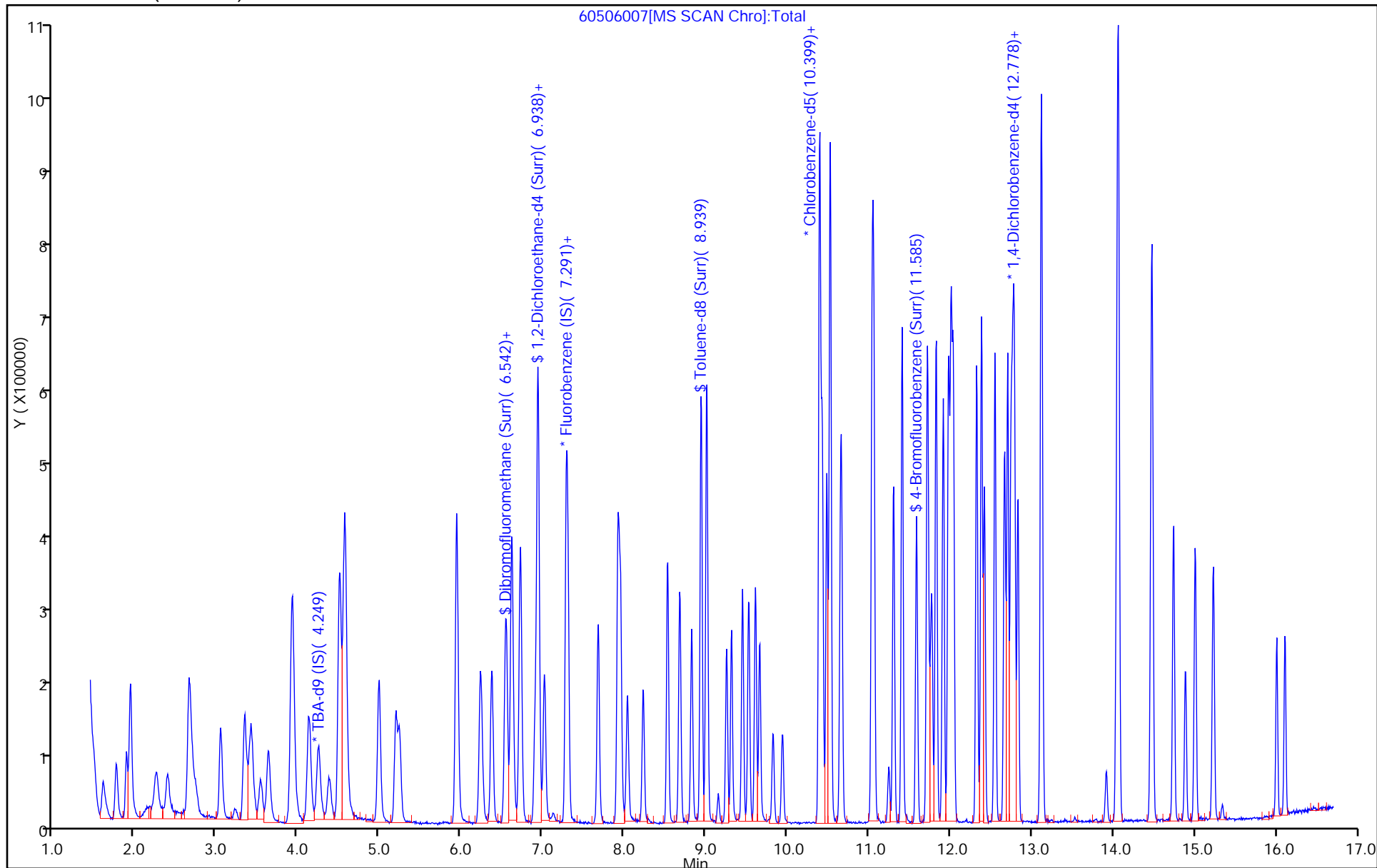
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-140724/7 Calibration Date: 05/06/2015 13:37
 Instrument ID: CHHP6 Calib Start Date: 05/01/2015 13:53
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/01/2015 16:46
 Lab File ID: 60506007.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3054	0.2727	0.1000	8.93	10.0	-10.7	20.0
Chloromethane	Ave	0.2538	0.2804	0.1000	11.0	10.0	10.5	20.0
Vinyl chloride	Ave	0.2703	0.2920	0.1000	10.8	10.0	8.0	20.0
Bromomethane	Ave	0.1407	0.1702	0.0500	12.1	10.0	20.9*	20.0
Chloroethane	Ave	0.1703	0.2046	0.0500	12.0	10.0	20.1*	20.0
Dichlorofluoromethane	Ave	0.4113	0.4957	0.0100	12.1	10.0	20.5*	20.0
Trichlorofluoromethane	Ave	0.3125	0.3445	0.1000	11.0	10.0	10.2	20.0
Ethyl ether	Ave	0.2332	0.2667	0.0100	11.4	10.0	14.4	20.0
1,1-Dichloroethene	Ave	0.2315	0.2131	0.1000	9.21	10.0	-7.9	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2338	0.2225	0.1000	9.52	10.0	-4.8	20.0
Acetone	Ave	0.0664	0.0686	0.0500	20.7	20.0	3.4	20.0
Iodomethane	Ave	0.2960	0.2693	0.0100	9.10	10.0	-9.0	20.0
Carbon disulfide	Ave	0.6782	0.5799	0.1000	8.55	10.0	-14.5	20.0
Allyl chloride	Ave	0.1625	0.1343	0.0100	8.27	10.0	-17.3	20.0
Methyl acetate	Ave	0.2191	0.2113	0.1000	48.2	50.0	-3.6	20.0
Methylene Chloride	Ave	0.2810	0.2930	0.1000	10.4	10.0	4.3	20.0
tert-Butyl alcohol	Ave	1.089	1.093	0.0100	100	100	0.3	20.0
Acrylonitrile	Ave	0.1118	0.1100	0.0100	98.4	100	-1.6	20.0
trans-1,2-Dichloroethene	Ave	0.2580	0.2447	0.1000	9.49	10.0	-5.1	20.0
Methyl tert-butyl ether	Ave	0.9263	0.8813	0.1000	9.51	10.0	-4.9	20.0
Hexane	Ave	0.3461	0.3156	0.0100	9.12	10.0	-8.8	20.0
1,1-Dichloroethane	Ave	0.4851	0.4912	0.2000	10.1	10.0	1.3	20.0
Vinyl acetate	Ave	0.5832	0.5385	0.0100	9.23	10.0	-7.7	20.0
2,2-Dichloropropane	Ave	0.3004	0.2841	0.0100	9.46	10.0	-5.4	20.0
cis-1,2-Dichloroethene	Ave	0.2933	0.2734	0.1000	9.32	10.0	-6.8	20.0
2-Butanone (MEK)	Ave	0.1105	0.1109	0.0500	20.1	20.0	0.4	20.0
Bromochloromethane	Ave	0.1203	0.1120	0.0100	9.31	10.0	-6.9	20.0
Tetrahydrofuran	Ave	0.1026	0.0850	0.0100	16.6	20.0	-17.2	20.0
Chloroform	Ave	0.4684	0.4694	0.2000	10.0	10.0	0.2	20.0
1,1,1-Trichloroethane	Ave	0.3851	0.3465	0.1000	9.00	10.0	-10.0	20.0
Cyclohexane	Ave	0.4620	0.4188	0.1000	9.06	10.0	-9.4	20.0
Carbon tetrachloride	Ave	0.2940	0.2424	0.1000	8.25	10.0	-17.5	20.0
1,1-Dichloropropene	Ave	0.3726	0.3542	0.0100	9.51	10.0	-4.9	20.0
Isobutyl alcohol	Ave	0.0101	0.0080*	0.0100	198	250	-20.8*	20.0
Benzene	Ave	1.100	1.103	0.5000	10.0	10.0	0.3	20.0
1,2-Dichloroethane	Ave	0.4179	0.4595	0.1000	11.0	10.0	9.9	20.0
n-Heptane	Ave	0.2659	0.2448	0.0100	9.20	10.0	-8.0	20.0
Trichloroethene	Ave	0.2379	0.2064	0.2000	8.67	10.0	-13.3	20.0
Methylcyclohexane	Ave	0.4482	0.3883	0.1000	8.66	10.0	-13.4	20.0
1,2-Dichloropropane	Ave	0.2900	0.2867	0.1000	9.89	10.0	-1.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-140724/7 Calibration Date: 05/06/2015 13:37
 Instrument ID: CHHP6 Calib Start Date: 05/01/2015 13:53
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/01/2015 16:46
 Lab File ID: 60506007.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.0028	0.0022*	0.0100	154	200	-23.2*	20.0
Dibromomethane	Ave	0.1757	0.1692	0.0100	9.63	10.0	-3.7	20.0
Bromodichloromethane	Ave	0.3510	0.3127	0.2000	8.91	10.0	-10.9	20.0
cis-1,3-Dichloropropene	Ave	0.4644	0.4006	0.2000	8.62	10.0	-13.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.340	1.044	0.1000	15.6	20.0	-22.1*	20.0
Toluene	Ave	5.185	5.377	0.4000	10.4	10.0	3.7	20.0
trans-1,3-Dichloropropene	Ave	1.888	1.656	0.1000	8.77	10.0	-12.3	20.0
Ethyl methacrylate	Ave	1.891	1.725	0.0100	9.12	10.0	-8.8	20.0
1,1,2-Trichloroethane	Ave	1.129	1.154	0.1000	10.2	10.0	2.3	20.0
Tetrachloroethene	Ave	0.8533	0.8087	0.2000	9.48	10.0	-5.2	20.0
1,3-Dichloropropane	Ave	2.135	2.309	0.0100	10.8	10.0	8.1	20.0
2-Hexanone	Ave	0.8171	0.9813	0.1000	24.0	20.0	20.1*	20.0
Dibromochloromethane	Ave	0.8885	0.7364	0.1000	8.29	10.0	-17.1	20.0
1,2-Dibromoethane (EDB)	Ave	1.067	1.065	0.1000	9.98	10.0	-0.2	20.0
3-Chlorobenzotrifluoride	Ave	1.584	1.675	0.0100	10.6	10.0	5.8	20.0
Chlorobenzene	Ave	3.274	3.347	0.5000	10.2	10.0	2.3	20.0
4-Chlorobenzotrifluoride	Ave	1.503	1.581	0.0100	10.5	10.0	5.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9596	0.8710	0.0100	9.08	10.0	-9.2	20.0
Ethylbenzene	Ave	1.829	1.823	0.1000	9.97	10.0	-0.3	20.0
m-Xylene & p-Xylene	Ave	2.290	2.242	0.1000	9.79	10.0	-2.1	20.0
o-Xylene	Ave	2.222	2.205	0.3000	9.93	10.0	-0.7	20.0
Styrene	Ave	3.653	3.616	0.3000	9.90	10.0	-1.0	20.0
Bromoform	Ave	0.5680	0.4182	0.1000	7.36	10.0	-26.4*	20.0
2-Chlorobenzotrifluoride	Ave	1.599	1.653	0.0100	10.3	10.0	3.4	20.0
Isopropylbenzene	Ave	5.399	5.452	0.1000	10.1	10.0	1.0	20.0
1,1,2,2-Tetrachloroethane	Ave	1.550	1.552	0.3000	10.0	10.0	0.1	20.0
Bromobenzene	Ave	0.8110	0.7903	0.0100	9.75	10.0	-2.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3725	0.2705	0.0100	7.26	10.0	-27.4*	20.0
1,2,3-Trichloropropane	Ave	0.3565	0.3403	0.0100	9.55	10.0	-4.5	20.0
N-Propylbenzene	Ave	0.9779	0.9081	0.0100	9.29	10.0	-7.1	20.0
2-Chlorotoluene	Ave	0.8038	0.7606	0.0100	9.46	10.0	-5.4	20.0
3-Chlorotoluene	Ave	0.8753	0.9201	0.0100	10.5	10.0	5.1	20.0
1,3,5-Trimethylbenzene	Ave	3.111	3.083	0.0100	9.91	10.0	-0.9	20.0
4-Chlorotoluene	Ave	0.8477	0.8373	0.0100	9.88	10.0	-1.2	20.0
tert-Butylbenzene	Ave	2.385	2.252	0.0100	9.44	10.0	-5.6	20.0
1,2,4-Trimethylbenzene	Ave	3.258	3.201	0.0100	9.83	10.0	-1.7	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.8205	0.8162	0.0100	9.95	10.0	-0.5	20.0
sec-Butylbenzene	Ave	3.630	3.478	0.0100	9.58	10.0	-4.2	20.0
1,3-Dichlorobenzene	Ave	1.548	1.509	0.6000	9.75	10.0	-2.5	20.0
4-Isopropyltoluene	Ave	2.869	2.709	0.0100	9.44	10.0	-5.6	20.0
1,4-Dichlorobenzene	Ave	1.600	1.588	0.5000	9.92	10.0	-0.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-140724/7 Calibration Date: 05/06/2015 13:37
 Instrument ID: CHHP6 Calib Start Date: 05/01/2015 13:53
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 05/01/2015 16:46
 Lab File ID: 60506007.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4-Dichlorobenzotrifluoride	Ave	0.8122	0.7808	0.0100	9.61	10.0	-3.9	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8885	0.9288	0.0100	10.5	10.0	4.5	20.0
n-Butylbenzene	Ave	2.886	2.743	0.0100	9.50	10.0	-5.0	20.0
1,2-Dichlorobenzene	Ave	1.531	1.519	0.4000	9.92	10.0	-0.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.2335	0.1623	0.0500	6.95	10.0	-30.5*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.292	1.321	0.0100	30.7	30.0	2.3	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.416	1.427	0.0100	20.1	20.0	0.7	20.0
1,2,4-Trichlorobenzene	Ave	1.072	0.9634	0.2000	8.98	10.0	-10.2	20.0
Hexachlorobutadiene	Ave	0.3654	0.3065	0.0100	8.39	10.0	-16.1	20.0
Naphthalene	Ave	2.838	2.313	0.0100	8.15	10.0	-18.5	20.0
1,2,3-Trichlorobenzene	Ave	1.006	0.8557	0.0100	8.51	10.0	-14.9	20.0
2,4,5-Trichlorotoluene	Ave	0.6359	0.4304	0.0100	6.77	10.0	-32.3*	20.0
2,3,6-Trichlorotoluene	Ave	0.5770	0.4080	0.0100	7.07	10.0	-29.3*	20.0
Dibromofluoromethane (Surr)	Ave	0.2069	0.2094		10.1	10.0	1.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3457	0.3882		11.2	10.0	12.3	20.0
Toluene-d8 (Surr)	Ave	4.231	4.779		11.3	10.0	13.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.725	1.844		10.7	10.0	6.9	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506007.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 06-May-2015 13:37:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0006797-007
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub32
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 17:12:09 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond

Date: 06-May-2015 13:56:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.249	4.249	0.000	95	188592	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.284	7.284	0.000	98	422720	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.399	10.399	0.000	92	85680	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.741	12.741	0.000	94	129325	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.554	6.554	0.000	91	88523	50.0	50.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.932	6.932	0.000	67	164085	50.0	56.1	
\$ 7 Toluene-d8 (Surr)	98	8.939	8.939	0.000	94	409438	50.0	56.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.000	78	157953	50.0	53.4	
11 Dichlorodifluoromethane	85	1.602	1.602	0.000	100	115280	50.0	44.6	
12 Chloromethane	50	1.761	1.761	0.000	99	118540	50.0	55.2	
13 Vinyl chloride	62	1.888	1.888	0.000	98	123427	50.0	54.0	
14 Butadiene	39	1.937	1.937	0.000	92	117888	50.0	54.0	
15 Bromomethane	94	2.259	2.259	0.000	92	71935	50.0	60.5	
16 Chloroethane	64	2.393	2.393	0.000	99	86477	50.0	60.1	
17 Dichlorofluoromethane	67	2.655	2.655	0.000	97	209530	50.0	60.3	
18 Trichlorofluoromethane	101	2.679	2.679	0.000	94	145604	50.0	55.1	
20 Ethyl ether	59	3.038	3.038	0.000	89	112724	50.0	57.2	
22 1,1-Dichloroethene	96	3.336	3.336	0.000	96	90096	50.0	46.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.421	3.421	0.000	95	94046	50.0	47.6	
24 Acetone	43	3.428	3.428	0.000	84	58016	100.0	103.4	
25 Iodomethane	142	3.531	3.531	0.000	99	113857	50.0	45.5	
26 Carbon disulfide	76	3.628	3.628	0.000	100	245117	50.0	42.7	
29 3-Chloro-1-propene	76	3.908	3.908	0.000	87	56783	50.0	41.3	
30 Methyl acetate	43	3.932	3.932	0.000	97	446514	250.0	241.1	
31 Methylene Chloride	84	4.127	4.127	0.000	97	123871	50.0	52.1	
32 2-Methyl-2-propanol	59	4.370	4.370	0.000	95	103044	500.0	501.6	
33 Acrylonitrile	53	4.510	4.510	0.000	99	464925	500.0	491.8	
34 trans-1,2-Dichloroethene	96	4.559	4.559	0.000	94	103438	50.0	47.4	
35 Methyl tert-butyl ether	73	4.577	4.577	0.000	96	372560	50.0	47.6	
36 Hexane	57	4.991	4.991	0.000	92	133389	50.0	45.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.198	5.198	0.000	97	207644	50.0	50.6	
38 Vinyl acetate	43	5.240	5.240	0.000	97	227622	50.0	46.2	
42 2,2-Dichloropropane	77	5.940	5.940	0.000	65	120078	50.0	47.3	
43 cis-1,2-Dichloroethene	96	5.940	5.940	0.000	87	115555	50.0	46.6	
44 2-Butanone (MEK)	43	5.946	5.946	0.000	63	93719	100.0	100.4	
48 Chlorobromomethane	128	6.232	6.232	0.000	93	47341	50.0	46.5	
49 Tetrahydrofuran	42	6.250	6.250	0.000	84	71816	100.0	82.8	
50 Chloroform	83	6.372	6.372	0.000	95	198424	50.0	50.1	
51 1,1,1-Trichloroethane	97	6.542	6.542	0.000	96	146484	50.0	45.0	
52 Cyclohexane	56	6.615	6.615	0.000	89	177015	50.0	45.3	
53 Carbon tetrachloride	117	6.719	6.719	0.000	66	102470	50.0	41.2	
54 1,1-Dichloropropene	75	6.725	6.725	0.000	93	149705	50.0	47.5	
55 Isobutyl alcohol	41	6.901	6.901	0.000	92	84363	1250.0	990.3	
56 Benzene	78	6.944	6.944	0.000	97	466415	50.0	50.2	
57 1,2-Dichloroethane	62	7.017	7.017	0.000	99	194223	50.0	55.0	
59 n-Heptane	43	7.309	7.309	0.000	90	103470	50.0	46.0	
61 Trichloroethene	130	7.674	7.674	0.000	91	87233	50.0	43.4	
63 Methylcyclohexane	83	7.923	7.923	0.000	92	164132	50.0	43.3	
64 1,2-Dichloropropane	63	7.954	7.954	0.000	94	121196	50.0	49.4	
65 1,4-Dioxane	88	8.033	8.033	0.000	37	18142	1000.0	768.1	M
67 Dibromomethane	93	8.039	8.039	0.000	86	71512	50.0	48.1	
68 Dichlorobromomethane	83	8.227	8.227	0.000	99	132179	50.0	44.5	
70 2-Chloroethyl vinyl ether	63	8.532	8.532	0.000	94	166069	100.0	101.4	
71 cis-1,3-Dichloropropene	75	8.678	8.678	0.000	92	169321	50.0	43.1	
72 4-Methyl-2-pentanone (MIBK)	43	8.824	8.824	0.000	95	178885	100.0	77.9	
73 Toluene	91	9.012	9.012	0.000	98	460666	50.0	51.8	
74 trans-1,3-Dichloropropene	75	9.255	9.255	0.000	95	141911	50.0	43.9	
75 Ethyl methacrylate	69	9.316	9.316	0.000	87	147757	50.0	45.6	
76 1,1,2-Trichloroethane	97	9.450	9.450	0.000	94	98879	50.0	51.1	
77 Tetrachloroethene	164	9.529	9.529	0.000	92	69288	50.0	47.4	
78 1,3-Dichloropropane	76	9.608	9.608	0.000	93	197845	50.0	54.1	
79 2-Hexanone	43	9.663	9.663	0.000	96	168159	100.0	120.1	
81 Chlorodibromomethane	129	9.821	9.821	0.000	89	63094	50.0	41.4	
82 Ethylene Dibromide	107	9.943	9.943	0.000	98	91211	50.0	49.9	
83 3-Chlorobenzotrifluoride	180	10.393	10.393	0.000	90	143527	50.0	52.9	
84 Chlorobenzene	112	10.430	10.430	0.000	90	286796	50.0	51.1	
85 4-Chlorobenzotrifluoride	180	10.484	10.484	0.000	95	135455	50.0	52.6	
86 1,1,1,2-Tetrachloroethane	131	10.521	10.521	0.000	87	74624	50.0	45.4	
87 Ethylbenzene	106	10.527	10.527	0.000	99	156203	50.0	49.8	
88 m-Xylene & p-Xylene	106	10.661	10.661	0.000	99	192056	50.0	48.9	
89 o-Xylene	106	11.044	11.044	0.000	98	188947	50.0	49.6	
90 Styrene	104	11.062	11.062	0.000	94	309790	50.0	49.5	
91 Bromoform	173	11.245	11.245	0.000	90	35834	50.0	36.8	
92 2-Chlorobenzotrifluoride	180	11.306	11.306	0.000	93	141587	50.0	51.7	
93 Isopropylbenzene	105	11.409	11.409	0.000	98	467137	50.0	50.5	
96 1,1,2,2-Tetrachloroethane	83	11.713	11.713	0.000	95	132991	50.0	50.1	
95 Bromobenzene	156	11.725	11.725	0.000	95	102210	50.0	48.7	
97 trans-1,4-Dichloro-2-buten	53	11.756	11.756	0.000	81	34976	50.0	36.3	
98 1,2,3-Trichloropropane	110	11.780	11.780	0.000	84	44008	50.0	47.7	
99 N-Propylbenzene	120	11.829	11.829	0.000	99	117435	50.0	46.4	
100 2-Chlorotoluene	126	11.920	11.920	0.000	94	98365	50.0	47.3	
101 3-Chlorotoluene	126	11.981	11.981	0.000	98	118988	50.0	52.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.011	12.011	0.000	92	398689	50.0	49.5	
103 4-Chlorotoluene	126	12.036	12.036	0.000	98	108277	50.0	49.4	
104 tert-Butylbenzene	119	12.328	12.328	0.000	91	291238	50.0	47.2	
106 1,2,4-Trimethylbenzene	105	12.382	12.382	0.000	98	414016	50.0	49.1	
107 1,2-dichloro-4-(trifluorom	214	12.419	12.419	0.000	93	105548	50.0	49.7	
108 sec-Butylbenzene	105	12.547	12.547	0.000	97	449755	50.0	47.9	
109 1,3-Dichlorobenzene	146	12.668	12.668	0.000	91	195193	50.0	48.8	
110 4-Isopropyltoluene	119	12.705	12.705	0.000	95	350297	50.0	47.2	
111 1,4-Dichlorobenzene	146	12.772	12.772	0.000	89	205319	50.0	49.6	
113 2,4-Dichloro-1-(trifluorom	214	12.790	12.790	0.000	92	100971	50.0	48.1	
114 2,5-Dichlorobenzotrifluori	214	12.833	12.833	0.000	97	120116	50.0	52.3	
116 n-Butylbenzene	91	13.112	13.112	0.000	98	354696	50.0	47.5	
117 1,2-Dichlorobenzene	146	13.125	13.125	0.000	89	196398	50.0	49.6	
118 1,2-Dibromo-3-Chloropropan	75	13.909	13.915	-0.006	64	20989	50.0	34.8	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.061	14.061	0.000	97	512530	150.0	153.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.475	14.475	0.000	97	369021	100.0	100.7	
122 1,2,4-Trichlorobenzene	180	14.743	14.743	0.000	91	124588	50.0	44.9	
123 Hexachlorobutadiene	225	14.889	14.889	0.000	90	39642	50.0	41.9	
124 Naphthalene	128	15.004	15.004	0.000	99	299074	50.0	40.7	
125 1,2,3-Trichlorobenzene	180	15.229	15.229	0.000	91	110664	50.0	42.5	
126 2,4,5-Trichlorotoluene	159	16.008	16.008	0.000	0	55665	50.0	33.8	
127 2,3,6-Trichlorotoluene	159	16.105	16.105	0.000	92	52763	50.0	35.4	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	94.0	
S 131 Xylenes, Total	106				0		100.0	98.6	
S 132 1,3-Dichloropropene, Total	1				0		100.0	87.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOAPRI_00114	Amount Added: 2.00	Units: uL	
voaWketPri Re_00005	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00006	Amount Added: 2.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 2.00	Units: uL	
VOA8260INT_00033	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00035	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506007.D

Injection Date: 06-May-2015 13:37:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

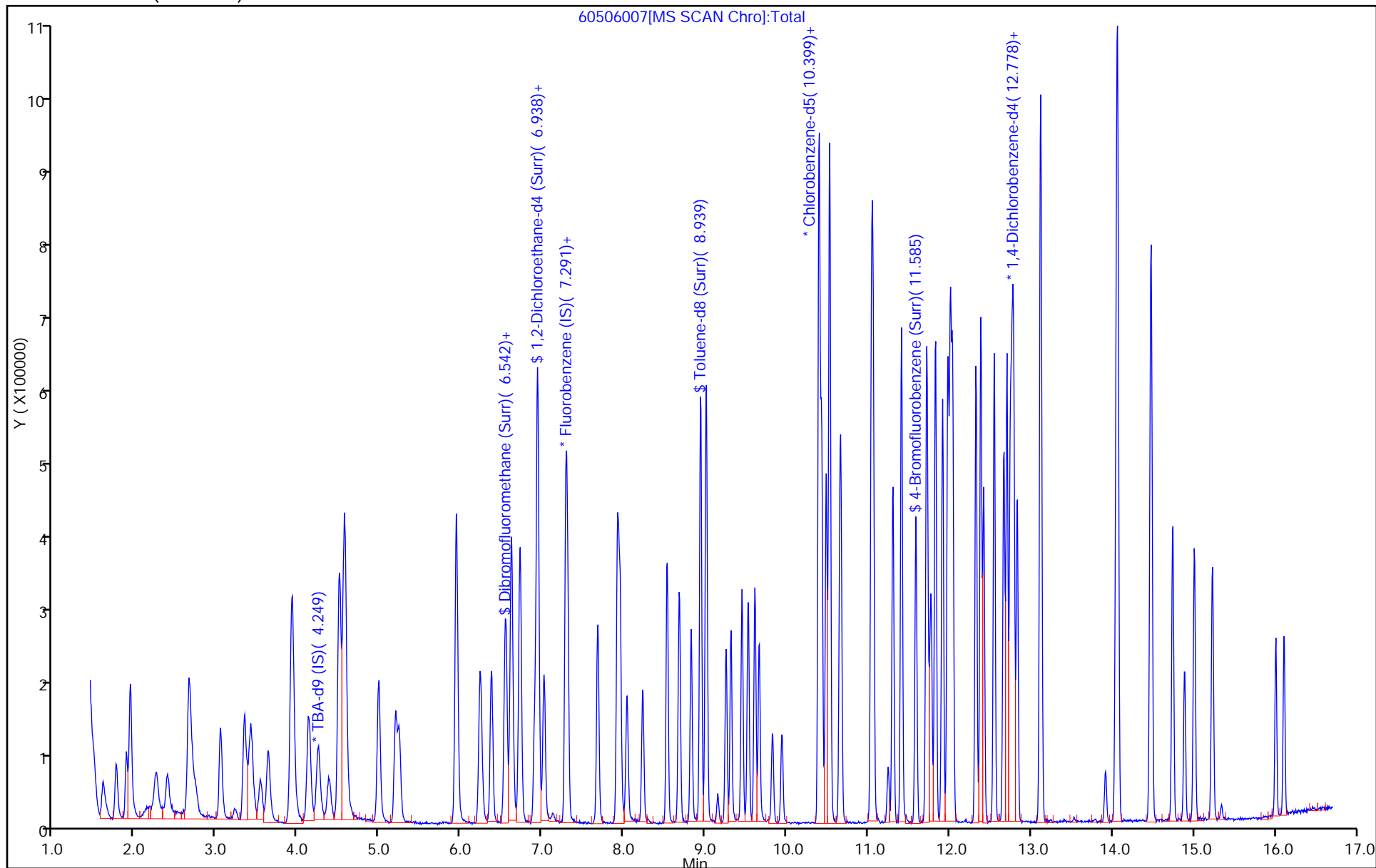
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



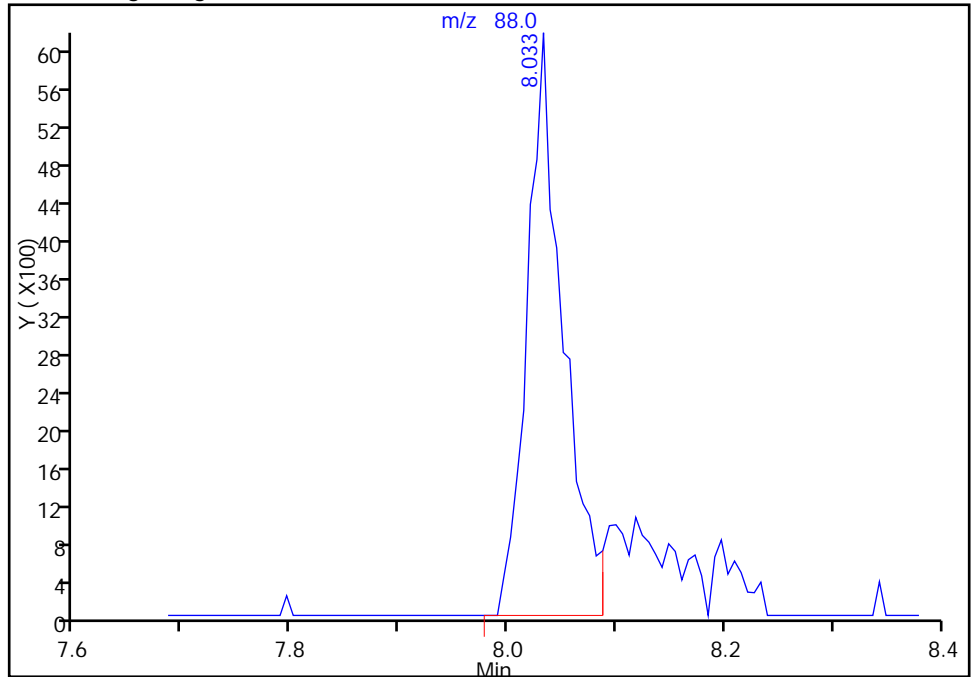
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506007.D
Injection Date: 06-May-2015 13:37:30 Instrument ID: CHHP6
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

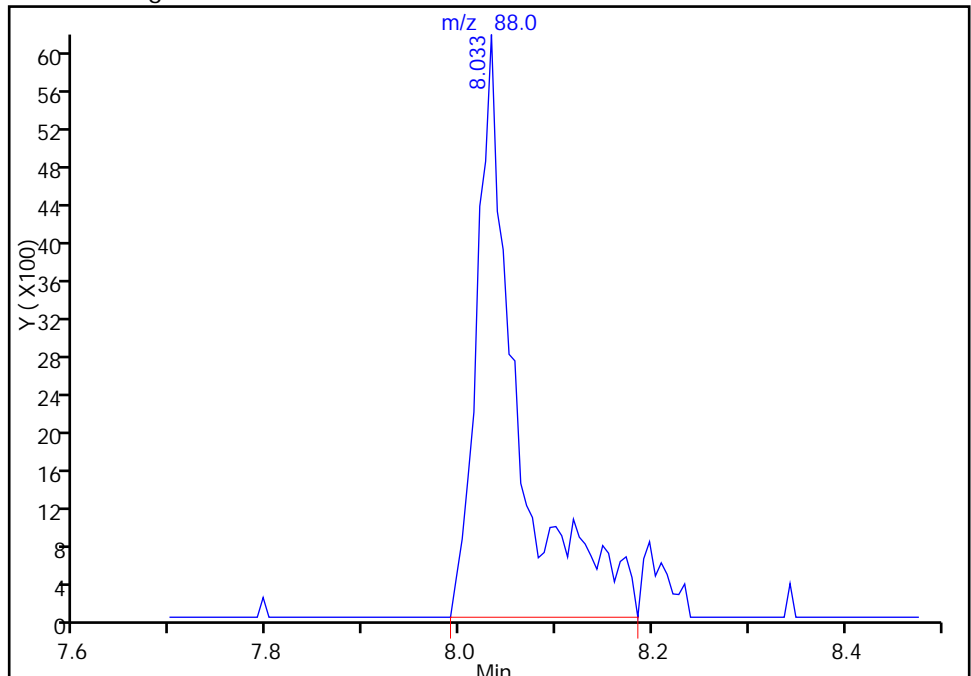
RT: 8.03
Area: 14231
Amount: 602.5368
Amount Units: ng

Processing Integration Results



RT: 8.03
Area: 18142
Amount: 768.1275
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 06-May-2015 14:06:21
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501005.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 01-May-2015 11:31:30 ALS Bottle#: 1 Worklist Smp#: 5
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0006721-005
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 02-May-2015 10:49:22 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK027

First Level Reviewer: fergusond Date: 01-May-2015 11:43:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
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\$ 10 BFB	95	8.383	8.383	0.000	0	105205	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

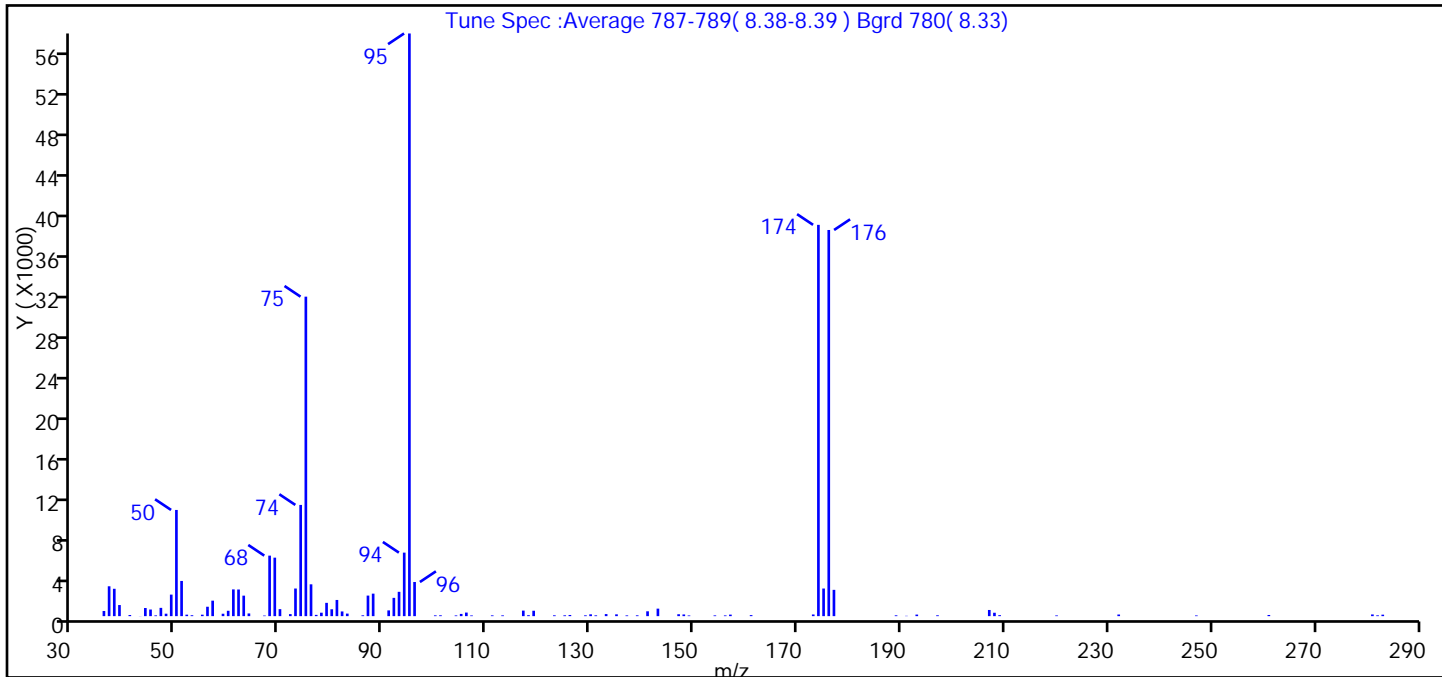
Reagents:

VOABFB25_00060 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501005.D
 Injection Date: 01-May-2015 11:31:30 Instrument ID: CHHP6
 Lims ID: BFB
 Client ID:
 Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 5
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
 Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.2
75	30 to 60% of m/z 95	54.8
96	5 to 9% of m/z 95	5.9
173	Less than 2% of m/z 174	0.3 (0.4)
174	50 to 120% of m/z 95	67.2
175	5 to 9% of m/z 174	4.7 (7.1)
176	Greater than 95% but less than 101% of m/z 174	66.3 (98.7)
177	5 to 9% of m/z 176	4.5 (6.8)

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501005.D\MSVOA_LL_CHHP6.rslt\spectra.d
 Injection Date: 01-May-2015 11:31:30
 Spectrum: Tune Spec :Average 787-789(8.38-8.39) Bgrd 780(8.33)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	506	67.00	57	100.00	77	149.00	67
37.00	2928	68.00	5932	101.00	83	154.00	74
38.00	2682	69.00	5733	104.00	70	156.00	72
39.00	1088	70.00	686	105.00	218	157.00	150
41.00	109	72.00	199	106.00	351	161.00	101
43.00	11	73.00	2708	107.00	68	173.00	163
44.00	797	74.00	10903	111.00	75	174.00	38360
45.00	649	75.00	31320	113.00	75	175.00	2707
46.00	74	76.00	3120	117.00	543	176.00	37856
47.00	812	77.00	124	118.00	93	177.00	2578
48.00	240	78.00	337	119.00	530	189.00	80
49.00	2111	79.00	1303	123.00	82	191.00	31
50.00	10410	80.00	674	125.00	80	193.00	153
51.00	3450	81.00	1586	126.00	113	197.00	83
52.00	145	82.00	461	129.00	79	207.00	605
53.00	88	83.00	250	130.00	179	208.00	332
55.00	142	86.00	81	131.00	78	209.00	97
56.00	922	87.00	2015	133.00	202	220.00	70
57.00	1518	88.00	2206	135.00	177	232.00	159
59.00	237	91.00	564	137.00	73	247.00	68
60.00	526	92.00	1792	139.00	80	261.00	113
61.00	2621	93.00	2384	141.00	475	281.00	166
62.00	2611	94.00	6227	143.00	735	282.00	79
63.00	2009	95.00	57120	147.00	187	283.00	144
64.00	265	96.00	3347	148.00	166		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501005.D

Injection Date: 01-May-2015 11:31:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 5

Client ID:

Injection Vol: 5.0 mL

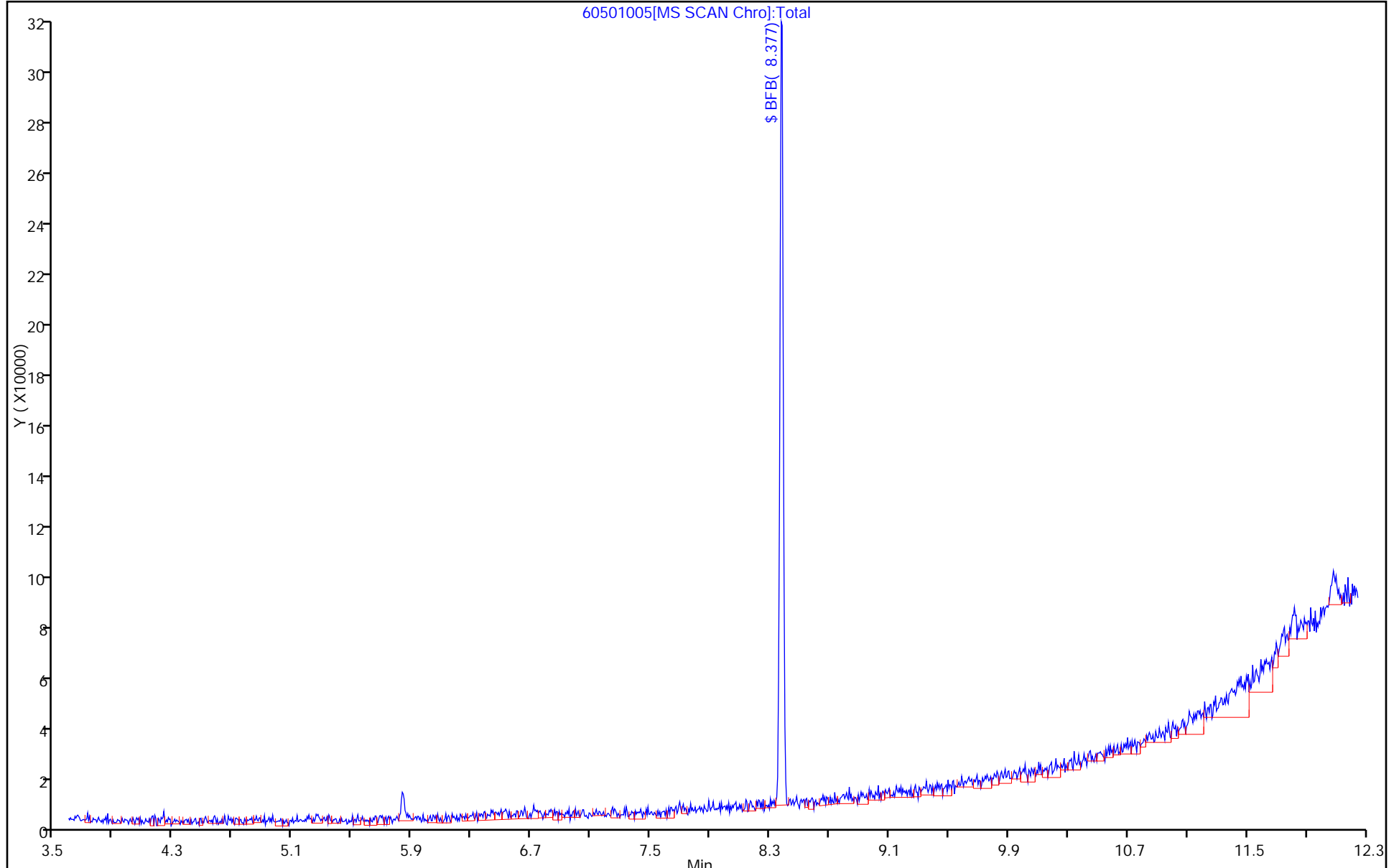
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505004.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 05-May-2015 10:45:30 ALS Bottle#: 1 Worklist Smp#: 4
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0006773-004
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 05-May-2015 13:53:42 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: fergusond Date: 05-May-2015 10:58:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
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\$ 10 BFB	95	8.378	8.378	0.000	0	63633	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

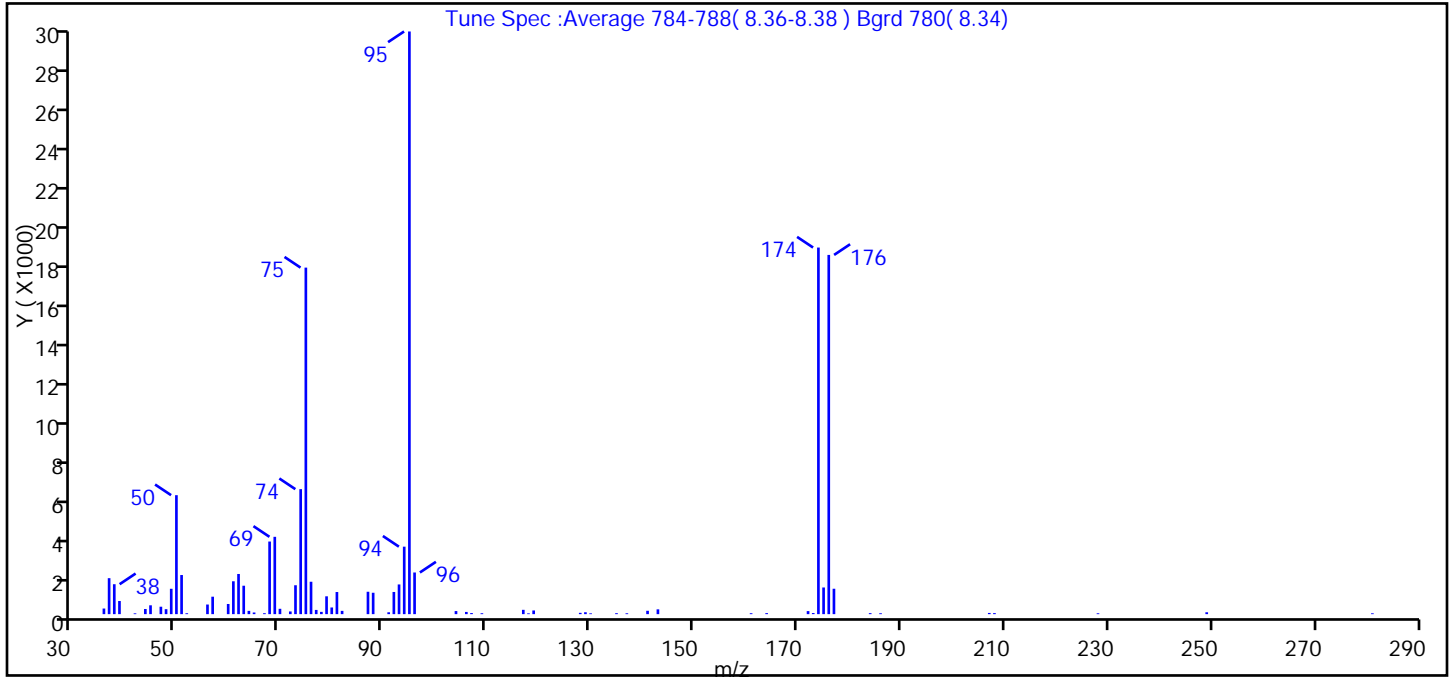
Reagents:

VOABFB25_00060 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505004.D
 Injection Date: 05-May-2015 10:45:30 Instrument ID: CHHP6
 Lims ID: BFB
 Client ID:
 Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 4
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
 Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.4
75	30 to 60% of m/z 95	59.5
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	62.9
175	5 to 9% of m/z 174	4.6 (7.3)
176	Greater than 95% but less than 101% of m/z 174	61.7 (98.0)
177	5 to 9% of m/z 176	4.4 (7.1)

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505004.D\MSVOA_LL_CHHP6.rslt\spectra.d
 Injection Date: 05-May-2015 10:45:30
 Spectrum: Tune Spec :Average 784-788(8.36-8.38) Bgrd 780(8.34)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	286	64.00	167	91.00	95	143.00	245
37.00	1835	65.00	84	92.00	1131	161.00	47
38.00	1527	67.00	48	93.00	1515	164.00	52
39.00	670	68.00	3705	94.00	3443	172.00	155
42.00	41	69.00	3945	95.00	29728	173.00	57
44.00	262	70.00	273	96.00	2125	174.00	18704
45.00	451	72.00	137	104.00	157	175.00	1360
47.00	379	73.00	1474	106.00	113	176.00	18328
48.00	253	74.00	6377	107.00	56	177.00	1296
49.00	1294	75.00	17680	109.00	46	184.00	51
50.00	6070	76.00	1653	117.00	220	186.00	45
51.00	1996	77.00	215	118.00	40	207.00	61
52.00	45	78.00	116	119.00	188	208.00	53
56.00	491	79.00	910	128.00	67	228.00	44
57.00	890	80.00	340	129.00	97	249.00	96
60.00	518	81.00	1129	130.00	41	281.00	43
61.00	1677	82.00	167	135.00	49		
62.00	2049	87.00	1142	137.00	44		
63.00	1450	88.00	1091	141.00	171		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505004.D

Injection Date: 05-May-2015 10:45:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 mL

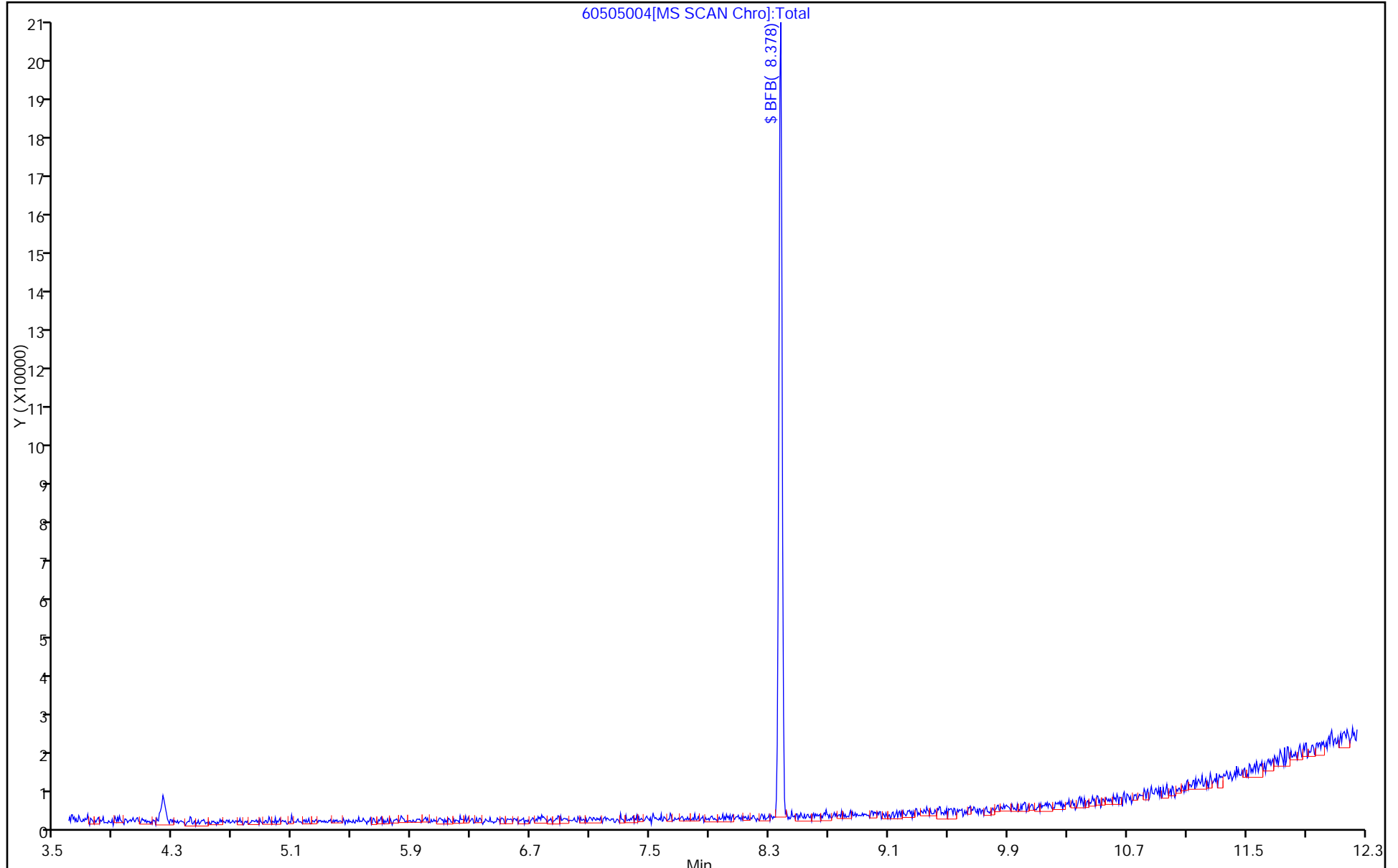
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506004.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 06-May-2015 11:19:30 ALS Bottle#: 1 Worklist Smp#: 4
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0006797-004
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 06-May-2015 17:12:06 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK011

First Level Reviewer: fergusond Date: 06-May-2015 11:32:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
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\$ 10 BFB	95	8.378	8.378	0.000	0	86444	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

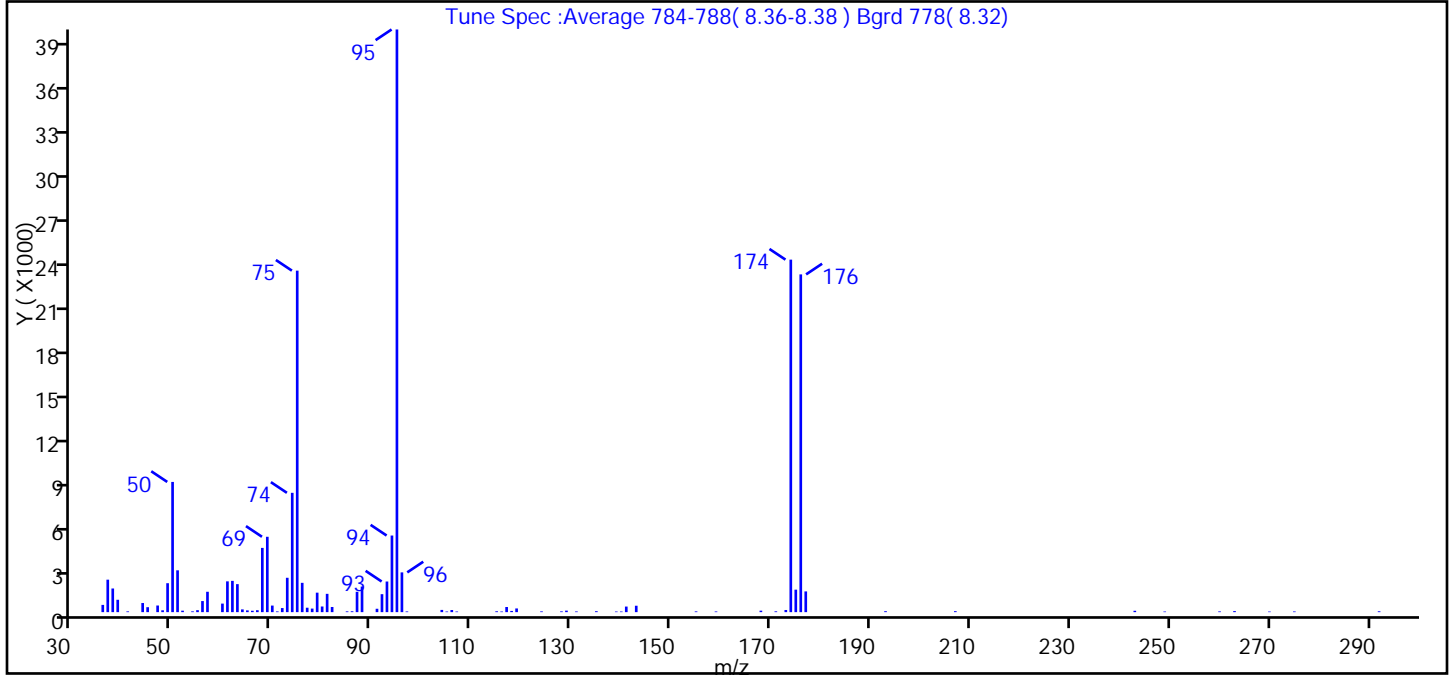
Reagents:

VOABFB25_00060 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506004.D
 Injection Date: 06-May-2015 11:19:30 Instrument ID: CHHP6
 Lims ID: BFB
 Client ID:
 Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 4
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
 Tune Method: BFB Method 8260

\$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.3
75	30 to 60% of m/z 95	58.6
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.4 (0.6)
174	50 to 120% of m/z 95	60.5
175	5 to 9% of m/z 174	3.9 (6.4)
176	Greater than 95% but less than 101% of m/z 174	58.0 (95.8)
177	5 to 9% of m/z 176	3.6 (6.1)

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506004.D\MSVOA_LL_CHHP6.rslt\spectra.d
 Injection Date: 06-May-2015 11:19:30
 Spectrum: Tune Spec :Average 784-788(8.36-8.38) Bgrd 778(8.32)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 87

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	495	65.00	121	91.00	231	140.00	44
37.00	2219	66.00	95	92.00	1228	141.00	381
38.00	1616	67.00	132	93.00	2093	143.00	438
39.00	845	68.00	4390	94.00	5235	155.00	51
41.00	51	69.00	5150	95.00	39816	159.00	46
44.00	623	70.00	449	96.00	2717	168.00	101
45.00	338	71.00	49	97.00	47	171.00	55
47.00	453	72.00	279	104.00	152	173.00	147
48.00	127	73.00	2348	105.00	42	174.00	24088
49.00	1978	74.00	8154	106.00	145	175.00	1536
50.00	8898	75.00	23336	107.00	42	176.00	23080
51.00	2858	76.00	2003	115.00	59	177.00	1417
52.00	100	77.00	302	116.00	44	193.00	64
54.00	53	78.00	243	117.00	351	207.00	66
55.00	135	79.00	1331	118.00	82	243.00	93
56.00	757	80.00	386	119.00	252	249.00	42
57.00	1392	81.00	1251	124.00	52	260.00	51
60.00	584	82.00	352	128.00	53	263.00	71
61.00	2104	85.00	53	129.00	104	270.00	41
62.00	2137	86.00	60	131.00	47	275.00	46
63.00	1914	87.00	1390	135.00	64	292.00	58
64.00	188	88.00	1748	139.00	42		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506004.D

Injection Date: 06-May-2015 11:19:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 mL

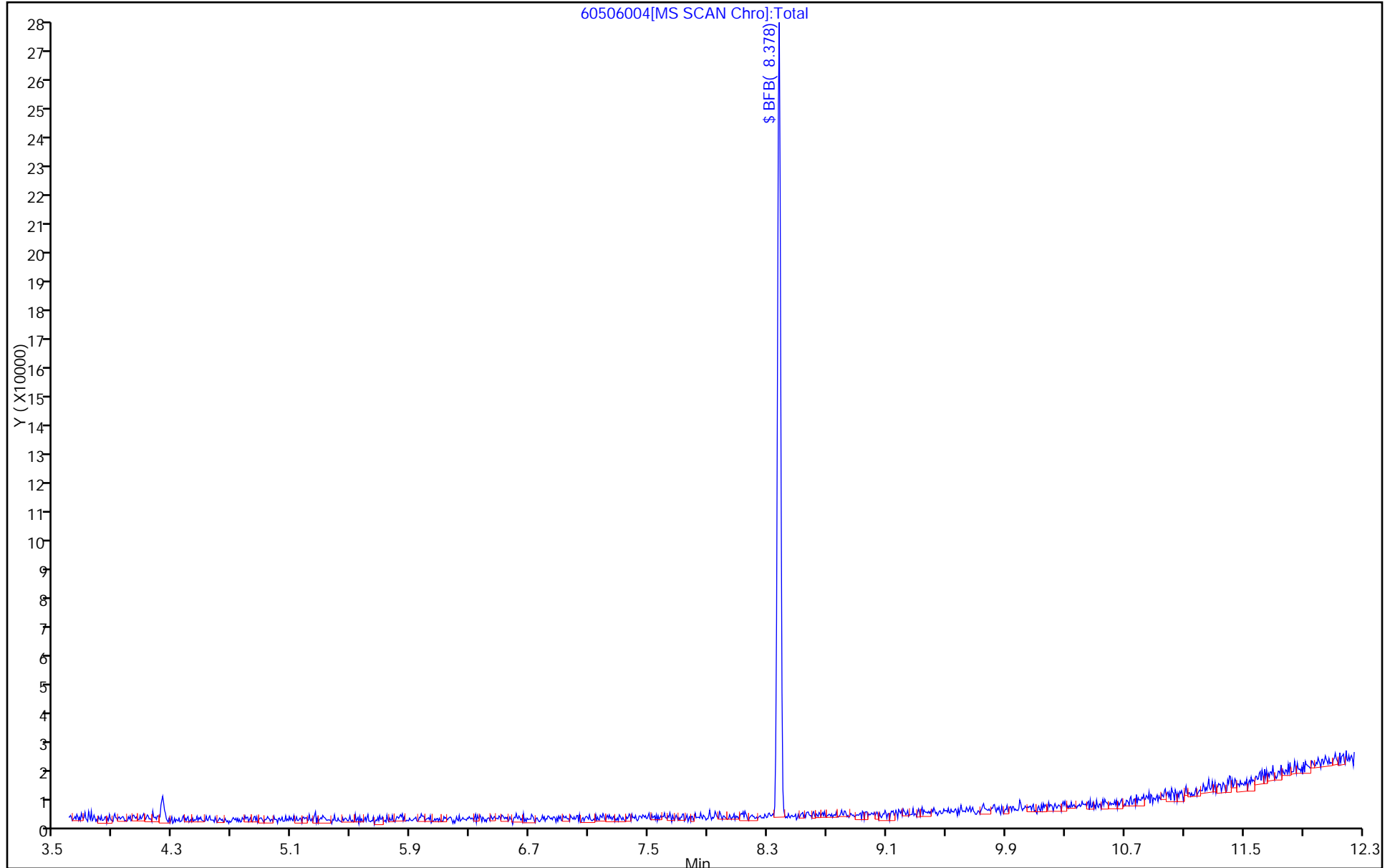
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-140579/6
 Matrix: Water Lab File ID: 60505006.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 12:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	1.0	U	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	1.0	U	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-140579/6
 Matrix: Water Lab File ID: 60505006.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 12:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20
107-13-1	Acrylonitrile	20	U	20	0.55
123-91-1	1,4-Dioxane	200	U	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		64-135
2037-26-5	Toluene-d8 (Surr)	111		71-118
460-00-4	4-Bromofluorobenzene (Surr)	105		70-118
1868-53-7	Dibromofluoromethane (Surr)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505006.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 05-May-2015 12:48:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 180-0006773-006
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 05-May-2015 14:54:42 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: fergusond

Date: 05-May-2015 14:54:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.225	4.239	-0.014	97	144525	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.285	7.286	-0.001	98	382815	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.400	10.401	-0.001	92	76665	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.748	12.743	0.005	97	113768	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.555	6.547	0.008	91	80506	50.0	50.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.932	6.931	0.001	71	144726	50.0	54.7	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.938	0.002	94	360342	50.0	55.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.586	11.585	0.002	78	138859	50.0	52.5	
11 Dichlorodifluoromethane	85		1.602					ND	
12 Chloromethane	50		1.766					ND	
13 Vinyl chloride	62		1.894					ND	
14 Butadiene	39		1.942					ND	
15 Bromomethane	94		2.246					ND	
16 Chloroethane	64		2.392					ND	
17 Dichlorofluoromethane	67		2.660					ND	
18 Trichlorofluoromethane	101		2.678					ND	
19 Ethanol	45		2.925					ND	
20 Ethyl ether	59		3.043					ND	
21 Acrolein	56		3.220					ND	
22 1,1-Dichloroethene	96		3.341					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.420					ND	
24 Acetone	43		3.427					ND	
25 Iodomethane	142		3.536					ND	
26 Carbon disulfide	76		3.633					ND	
27 Isopropyl alcohol	45		3.685					ND	
28 Acetonitrile	40		3.855					ND	
29 3-Chloro-1-propene	76		3.913					ND	
30 Methyl acetate	43		3.925					ND	
31 Methylene Chloride	84	4.116	4.132	-0.016	4	1332		0.6190	
32 2-Methyl-2-propanol	59		4.370					ND	
33 Acrylonitrile	53		4.497					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.558					ND	
35 Methyl tert-butyl ether	73		4.570					ND	
36 Hexane	57		4.990					ND	
37 1,1-Dichloroethane	63		5.197					ND	
38 Vinyl acetate	43		5.239					ND	
39 2-Chloro-1,3-butadiene	53		5.291					ND	
40 Isopropyl ether	45		5.297					ND	
41 Tert-butyl ethyl ether	59		5.772					ND	
42 2,2-Dichloropropane	77		5.939					ND	
43 cis-1,2-Dichloroethene	96		5.945					ND	
44 2-Butanone (MEK)	43		5.951					ND	
45 Propionitrile	54		6.015					ND	
46 Ethyl acetate	43		6.027					ND	
47 Methacrylonitrile	41		6.198					ND	
48 Chlorobromomethane	128		6.231					ND	
49 Tetrahydrofuran	42		6.243					ND	
50 Chloroform	83		6.371					ND	
51 1,1,1-Trichloroethane	97		6.541					ND	
52 Cyclohexane	56		6.614					ND	
53 Carbon tetrachloride	117		6.718					ND	
54 1,1-Dichloropropene	75		6.724					ND	
55 Isobutyl alcohol	41		6.894					ND	
56 Benzene	78		6.943					ND	
57 1,2-Dichloroethane	62		7.016					ND	
148 Isooctane	57		7.104					ND	
58 Tert-amyl methyl ether	73		7.122					ND	
59 n-Heptane	43		7.308					ND	
60 n-Butanol	56		7.609					ND	
61 Trichloroethene	130		7.679					ND	
62 Ethyl acrylate	55		7.791					ND	
63 Methylcyclohexane	83		7.922					ND	
64 1,2-Dichloropropane	63		7.953					ND	
66 Methyl methacrylate	69		8.029					ND	
67 Dibromomethane	93		8.032					ND	
65 1,4-Dioxane	88		8.032					ND	
68 Dichlorobromomethane	83		8.233					ND	
69 2-Nitropropane	41		8.448					ND	
70 2-Chloroethyl vinyl ether	63		8.531					ND	
71 cis-1,3-Dichloropropene	75		8.677					ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.823					ND	
73 Toluene	91		9.011					ND	
74 trans-1,3-Dichloropropene	75		9.255					ND	
75 Ethyl methacrylate	69		9.315					ND	
76 1,1,2-Trichloroethane	97		9.449					ND	
77 Tetrachloroethene	164		9.522					ND	
78 1,3-Dichloropropane	76		9.607					ND	
79 2-Hexanone	43		9.662					ND	
80 n-Butyl acetate	43		9.787					ND	
81 Chlorodibromomethane	129		9.826					ND	
82 Ethylene Dibromide	107		9.942					ND	
83 3-Chlorobenzotrifluoride	180		10.392					ND	
84 Chlorobenzene	112		10.429					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 4-Chlorobenzotrifluoride	180		10.483					ND	
86 1,1,1,2-Tetrachloroethane	131		10.520					ND	
87 Ethylbenzene	106		10.526					ND	
88 m-Xylene & p-Xylene	106		10.660					ND	
89 o-Xylene	106		11.043					ND	
90 Styrene	104		11.061					ND	
91 Bromoform	173		11.244					ND	
129 Cyclohexanol	57		11.289					ND	
92 2-Chlorobenzotrifluoride	180		11.305					ND	
93 Isopropylbenzene	105		11.408					ND	
94 Cyclohexanone	55		11.496					ND	
96 1,1,2,2-Tetrachloroethane	83		11.712					ND	
95 Bromobenzene	156		11.724					ND	
97 trans-1,4-Dichloro-2-buten	53		11.755					ND	
98 1,2,3-Trichloropropane	110		11.773					ND	
99 N-Propylbenzene	120		11.828					ND	
100 2-Chlorotoluene	126		11.913					ND	
101 3-Chlorotoluene	126		11.980					ND	
102 1,3,5-Trimethylbenzene	105		12.010					ND	
103 4-Chlorotoluene	126		12.035					ND	
104 tert-Butylbenzene	119		12.327					ND	
105 Pentachloroethane	167		12.360					ND	
106 1,2,4-Trimethylbenzene	105		12.381					ND	
107 1,2-dichloro-4-(trifluorom	214		12.418					ND	
108 sec-Butylbenzene	105		12.546					ND	
109 1,3-Dichlorobenzene	146		12.667					ND	
110 4-Isopropyltoluene	119		12.704					ND	
111 1,4-Dichlorobenzene	146		12.771					ND	
113 2,4-Dichloro-1-(triflourom	214		12.789					ND	
112 1,2,3-Trimethylbenzene	105		12.792					ND	
114 2,5-Dichlorobenzotrifluori	214		12.832					ND	
115 Benzyl chloride	91		12.883					ND	
116 n-Butylbenzene	91		13.111					ND	
117 1,2-Dichlorobenzene	146		13.124					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.914					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.060					ND	
120 1,3,5-Trichlorobenzene	180		14.106					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.474					ND	
122 1,2,4-Trichlorobenzene	180		14.742					ND	
123 Hexachlorobutadiene	225		14.888					ND	
124 Naphthalene	128		15.009					ND	
125 1,2,3-Trichlorobenzene	180		15.229					ND	
126 2,4,5-Trichlorotoluene	159		16.007					ND	
127 2,3,6-Trichlorotoluene	159		16.111					ND	
128 2-Methylnaphthalene	142		16.150					ND	
145 2,3-Dichlorotoluene	1		0.000					ND	
144 2,4-Dichlorotoluene	1		0.000					ND	
151 Tert-amyl methyl ether (TI	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
146 3,4-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
147 2,6-Dichlorotoluene	1		0.000					ND	

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505006.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
149 Isopropyl ether TIC	1		0.000					ND	
143 2,5-Dichlorotoluene	1		0.000					ND	
150 Tert-butyl ethyl ether (TI	1		0.000					ND	
S 131 Xylenes, Total	106		1.000					ND	
S 130 1,2-Dichloroethene, Total	96		1.000					ND	
S 132 1,3-Dichloropropene, Total	1		0.000					ND	
T 135 Mesityl oxide TIC	83		0.000					ND	
T 134 Methyl n-amyl ketone TIC	43		0.000					ND	
T 133 Tetrahydrofuran TIC	42		0.000					ND	

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURRE_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505006.D

Injection Date: 05-May-2015 12:48:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

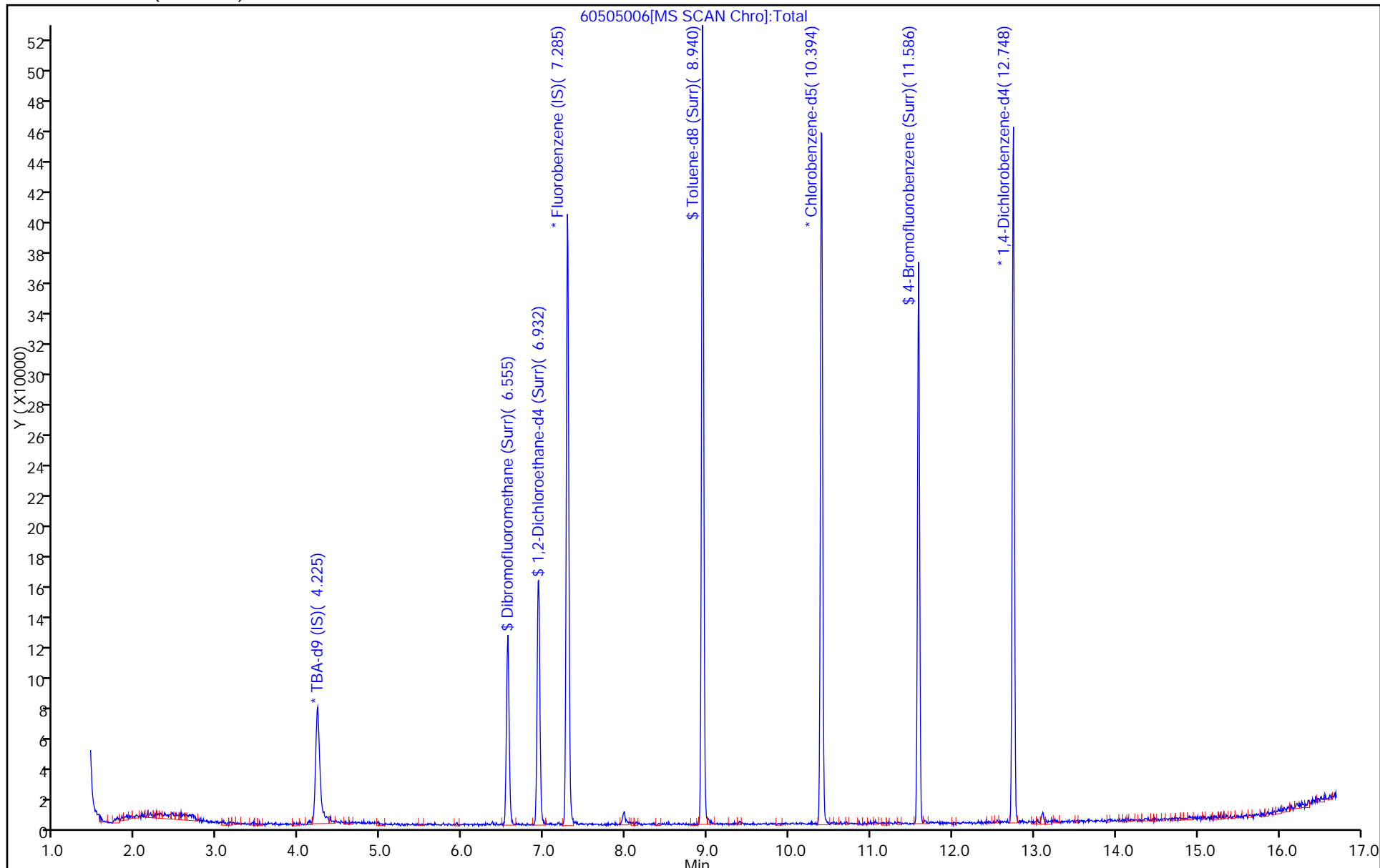
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-140724/10
 Matrix: Water Lab File ID: 60506010.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 14:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.28
75-01-4	Vinyl chloride	1.0	U	1.0	0.23
74-83-9	Bromomethane	1.0	U	1.0	0.31
75-00-3	Chloroethane	1.0	U	1.0	0.21
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.30
67-64-1	Acetone	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	1.0	U	1.0	0.21
75-09-2	Methylene Chloride	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.17
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.18
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.24
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	1.0	U	1.0	0.17
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.29
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.14
71-43-2	Benzene	1.0	U	1.0	0.11
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.21
79-01-6	Trichloroethene	1.0	U	1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.095
75-27-4	Bromodichloromethane	1.0	U	1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53
108-88-3	Toluene	1.0	U	1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.15
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.20
127-18-4	Tetrachloroethene	1.0	U	1.0	0.15
591-78-6	2-Hexanone	5.0	U	5.0	0.16
124-48-1	Dibromochloromethane	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18
108-90-7	Chlorobenzene	1.0	U	1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28
100-41-4	Ethylbenzene	1.0	U	1.0	0.23
1330-20-7	Xylenes, Total	3.0	U	3.0	0.49
100-42-5	Styrene	1.0	U	1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-140724/10
 Matrix: Water Lab File ID: 60506010.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 14:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	1.0	U	1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20
107-13-1	Acrylonitrile	20	U	20	0.55
123-91-1	1,4-Dioxane	200	U	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	102		70-118
1868-53-7	Dibromofluoromethane (Surr)	100		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506010.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 06-May-2015 14:50:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 180-0006797-010
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-May-2015 09:06:04 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: fergusond

Date: 07-May-2015 09:06:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.230	4.224	0.006	95	210754	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.290	7.290	0.000	97	468766	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.399	-0.001	92	96400	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.747	12.747	0.000	97	142139	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.560	6.554	0.006	91	96648	50.0	49.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.931	6.932	-0.001	71	177336	50.0	54.7	
\$ 7 Toluene-d8 (Surr)	98	8.944	8.939	0.005	94	441090	50.0	54.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.585	11.585	0.000	77	169625	50.0	51.0	
11 Dichlorodifluoromethane	85		1.602					ND	
12 Chloromethane	50		1.761					ND	
13 Vinyl chloride	62		1.888					ND	
14 Butadiene	39		1.937					ND	
15 Bromomethane	94		2.259					ND	
16 Chloroethane	64		2.393					ND	
17 Dichlorofluoromethane	67		2.655					ND	
18 Trichlorofluoromethane	101		2.679					ND	
19 Ethanol	45		2.916					ND	
20 Ethyl ether	59		3.038					ND	
21 Acrolein	56		3.227					ND	
22 1,1-Dichloroethene	96		3.336					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.421					ND	
24 Acetone	43		3.428					ND	
25 Iodomethane	142		3.531					ND	
26 Carbon disulfide	76		3.628					ND	
27 Isopropyl alcohol	45		3.683					ND	
28 Acetonitrile	40		3.847					ND	
29 3-Chloro-1-propene	76		3.908					ND	
30 Methyl acetate	43		3.932					ND	
31 Methylene Chloride	84		4.127					ND	
32 2-Methyl-2-propanol	59		4.370					ND	
33 Acrylonitrile	53		4.510					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96		4.559					ND	
35 Methyl tert-butyl ether	73		4.577					ND	
36 Hexane	57		4.991					ND	
37 1,1-Dichloroethane	63		5.198					ND	
38 Vinyl acetate	43		5.240					ND	
39 2-Chloro-1,3-butadiene	53		5.295					ND	
40 Isopropyl ether	45		5.295					ND	
41 Tert-butyl ethyl ether	59		5.769					ND	
42 2,2-Dichloropropane	77		5.940					ND	
43 cis-1,2-Dichloroethene	96		5.940					ND	
44 2-Butanone (MEK)	43		5.946					ND	
45 Propionitrile	54		6.012					ND	
46 Ethyl acetate	43		6.031					ND	
47 Methacrylonitrile	41		6.201					ND	
48 Chlorobromomethane	128		6.232					ND	
49 Tetrahydrofuran	42		6.250					ND	
50 Chloroform	83		6.372					ND	
51 1,1,1-Trichloroethane	97		6.542					ND	
52 Cyclohexane	56		6.615					ND	
53 Carbon tetrachloride	117		6.719					ND	
54 1,1-Dichloropropene	75		6.725					ND	
55 Isobutyl alcohol	41		6.901					ND	
56 Benzene	78		6.944					ND	
57 1,2-Dichloroethane	62		7.017					ND	
148 Isooctane	57		7.101					ND	
58 Tert-amyl methyl ether	73		7.120					ND	
59 n-Heptane	43		7.309					ND	
60 n-Butanol	56		7.619					ND	
61 Trichloroethene	130		7.674					ND	
62 Ethyl acrylate	55		7.795					ND	
63 Methylcyclohexane	83		7.923					ND	
64 1,2-Dichloropropane	63		7.954					ND	
66 Methyl methacrylate	69		8.026					ND	
65 1,4-Dioxane	88		8.033					ND	
67 Dibromomethane	93		8.039					ND	
68 Dichlorobromomethane	83		8.227					ND	
69 2-Nitropropane	41		8.446					ND	
70 2-Chloroethyl vinyl ether	63		8.532					ND	
71 cis-1,3-Dichloropropene	75		8.678					ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.824					ND	
73 Toluene	91		9.012					ND	
74 trans-1,3-Dichloropropene	75		9.255					ND	
75 Ethyl methacrylate	69		9.316					ND	
76 1,1,2-Trichloroethane	97		9.450					ND	
77 Tetrachloroethene	164		9.529					ND	
78 1,3-Dichloropropane	76		9.608					ND	
79 2-Hexanone	43		9.663					ND	
80 n-Butyl acetate	43		9.790					ND	
81 Chlorodibromomethane	129		9.821					ND	
82 Ethylene Dibromide	107		9.943					ND	
83 3-Chlorobenzotrifluoride	180		10.393					ND	
84 Chlorobenzene	112		10.430					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 4-Chlorobenzotrifluoride	180		10.484					ND	
86 1,1,1,2-Tetrachloroethane	131		10.521					ND	
87 Ethylbenzene	106		10.527					ND	
88 m-Xylene & p-Xylene	106		10.661					ND	
89 o-Xylene	106		11.044					ND	
90 Styrene	104		11.062					ND	
91 Bromoform	173		11.245					ND	
129 Cyclohexanol	57		11.289					ND	
92 2-Chlorobenzotrifluoride	180		11.306					ND	
93 Isopropylbenzene	105		11.409					ND	
94 Cyclohexanone	55		11.500					ND	
96 1,1,2,2-Tetrachloroethane	83		11.713					ND	
95 Bromobenzene	156		11.725					ND	
97 trans-1,4-Dichloro-2-buten	53		11.756					ND	
98 1,2,3-Trichloropropane	110		11.780					ND	
99 N-Propylbenzene	120		11.829					ND	
100 2-Chlorotoluene	126		11.920					ND	
101 3-Chlorotoluene	126		11.981					ND	
102 1,3,5-Trimethylbenzene	105		12.011					ND	
103 4-Chlorotoluene	126		12.036					ND	
104 tert-Butylbenzene	119		12.328					ND	
105 Pentachloroethane	167		12.358					ND	
106 1,2,4-Trimethylbenzene	105		12.382					ND	
107 1,2-dichloro-4-(trifluorom	214		12.419					ND	
108 sec-Butylbenzene	105		12.547					ND	
109 1,3-Dichlorobenzene	146		12.668					ND	
110 4-Isopropyltoluene	119		12.705					ND	
111 1,4-Dichlorobenzene	146		12.772					ND	
113 2,4-Dichloro-1-(triflourom	214		12.790					ND	
112 1,2,3-Trimethylbenzene	105		12.796					ND	
114 2,5-Dichlorobenzotrifluori	214		12.833					ND	
115 Benzyl chloride	91		12.881					ND	
116 n-Butylbenzene	91		13.112					ND	
117 1,2-Dichlorobenzene	146		13.125					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.915					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.061					ND	
120 1,3,5-Trichlorobenzene	180		14.110					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.475					ND	
122 1,2,4-Trichlorobenzene	180		14.743					ND	
123 Hexachlorobutadiene	225		14.889					ND	
124 Naphthalene	128		15.004					ND	
125 1,2,3-Trichlorobenzene	180		15.229					ND	
126 2,4,5-Trichlorotoluene	159		16.008					ND	
127 2,3,6-Trichlorotoluene	159		16.105					ND	
128 2-Methylnaphthalene	142		16.154					ND	
152 Formaldehyde TIC	1		0.000					ND	
146 3,4-Dichlorotoluene	1		0.000					ND	
147 2,6-Dichlorotoluene	1		0.000					ND	
150 Tert-butyl ethyl ether (TI	1		0.000					ND	
143 2,5-Dichlorotoluene	1		0.000					ND	
149 Isopropyl ether TIC	1		0.000					ND	
151 Tert-amyl methyl ether (TI	1		0.000					ND	

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506010.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
153 1,2 Epoxybutane TIC	1		0.000						ND
145 2,3-Dichlorotoluene	1		0.000						ND
144 2,4-Dichlorotoluene	1		0.000						ND
S 130 1,2-Dichloroethene, Total	96		1.000						ND
S 131 Xylenes, Total	106		1.000						ND
S 132 1,3-Dichloropropene, Total	1		0.000						ND
T 133 Tetrahydrofuran TIC	42		0.000						ND
T 134 Methyl n-amyl ketone TIC	43		0.000						ND
T 135 Mesityl oxide TIC	83		0.000						ND

Reagents:

VOA8260INT_00033

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURRE_00035

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506010.D

Injection Date: 06-May-2015 14:50:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

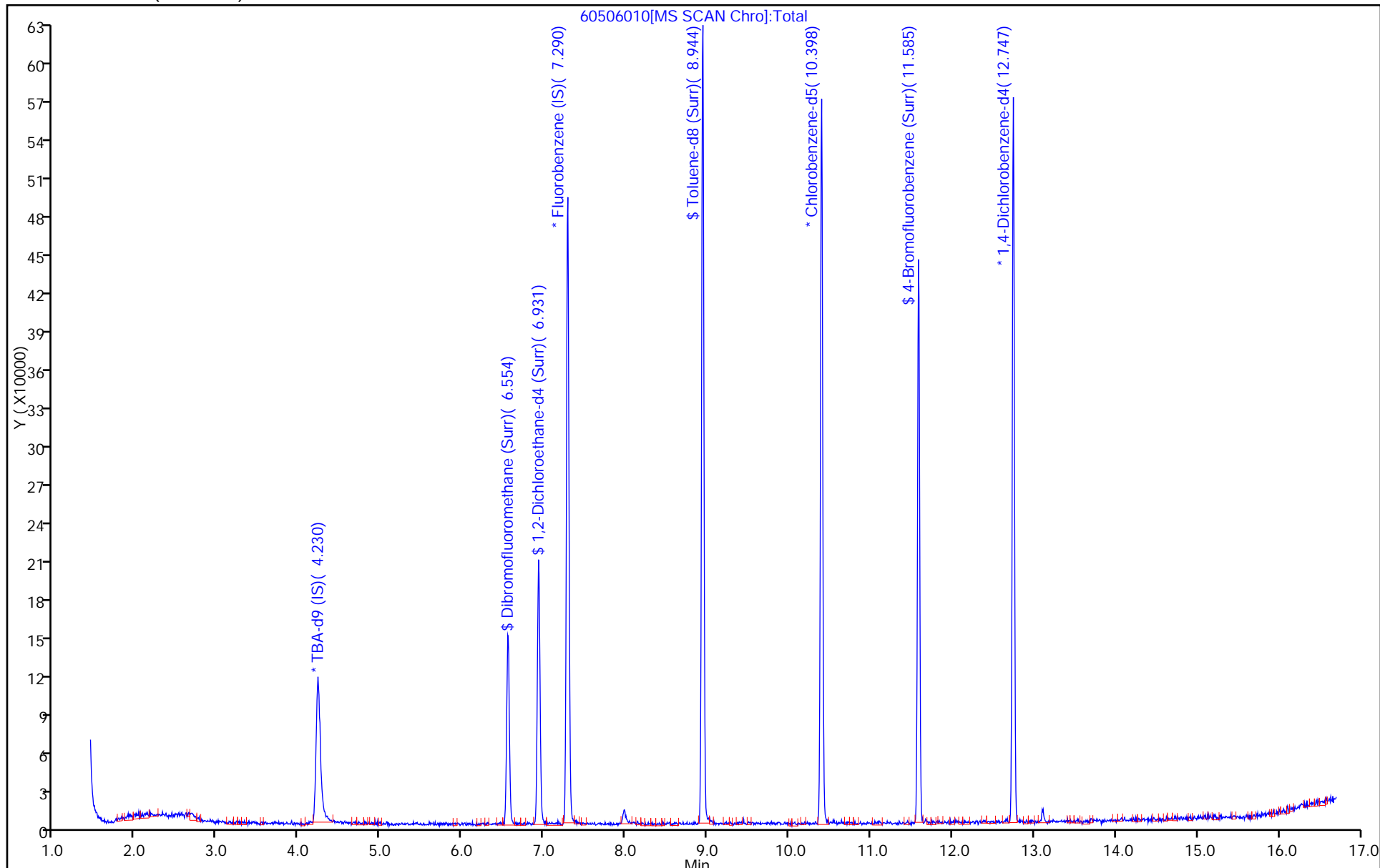
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-140579/9
 Matrix: Water Lab File ID: 60505009.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 14:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.5		1.0	0.28
75-01-4	Vinyl chloride	11.2		1.0	0.23
74-83-9	Bromomethane	12.3		1.0	0.31
75-00-3	Chloroethane	12.2		1.0	0.21
75-35-4	1,1-Dichloroethene	11.3		1.0	0.30
67-64-1	Acetone	27.5		5.0	2.5
75-15-0	Carbon disulfide	11.7		1.0	0.21
75-09-2	Methylene Chloride	12.2		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	11.5		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.8		1.0	0.18
75-34-3	1,1-Dichloroethane	12.2		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.24
74-97-5	Bromochloromethane	10.0		1.0	0.18
78-93-3	2-Butanone (MEK)	23.5		5.0	0.55
67-66-3	Chloroform	11.6		1.0	0.17
71-55-6	1,1,1-Trichloroethane	11.3		1.0	0.29
56-23-5	Carbon tetrachloride	10.9		1.0	0.14
71-43-2	Benzene	11.8		1.0	0.11
107-06-2	1,2-Dichloroethane	12.0		1.0	0.21
79-01-6	Trichloroethene	11.1		1.0	0.14
78-87-5	1,2-Dichloropropane	10.9		1.0	0.095
75-27-4	Bromodichloromethane	10.1		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.78		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	17.8		5.0	0.53
108-88-3	Toluene	11.9		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	10.3		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.9		1.0	0.20
127-18-4	Tetrachloroethene	11.1		1.0	0.15
591-78-6	2-Hexanone	19.7		5.0	0.16
124-48-1	Dibromochloromethane	9.55		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.4		1.0	0.18
108-90-7	Chlorobenzene	11.4		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	10.3		1.0	0.28
100-41-4	Ethylbenzene	11.4		1.0	0.23
1330-20-7	Xylenes, Total	22.4		3.0	0.49
100-42-5	Styrene	10.9		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-140579/9
 Matrix: Water Lab File ID: 60505009.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/05/2015 14:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140579 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	7.96		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.9		1.0	0.20
107-13-1	Acrylonitrile	106		20	0.55
123-91-1	1,4-Dioxane	175	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		64-135
2037-26-5	Toluene-d8 (Surr)	106		71-118
460-00-4	4-Bromofluorobenzene (Surr)	108		70-118
1868-53-7	Dibromofluoromethane (Surr)	107		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505009.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 05-May-2015 14:35:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 180-0006773-009
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 05-May-2015 14:55:56 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK028

First Level Reviewer: fergusond

Date: 05-May-2015 14:56:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.238	4.239	-0.001	96	155828	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.286	7.286	0.000	97	320979	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.394	10.401	-0.007	91	66925	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.749	12.743	0.006	95	101010	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.550	6.547	0.003	92	71038	50.0	53.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.933	6.931	0.002	72	123523	50.0	55.7	
\$ 7 Toluene-d8 (Surr)	98	8.940	8.938	0.002	94	301346	50.0	53.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.581	11.585	-0.003	78	124465	50.0	53.9	
11 Dichlorodifluoromethane	85	1.604	1.602	0.002	99	90383	50.0	46.1	
12 Chloromethane	50	1.762	1.766	-0.004	100	85546	50.0	52.5	
13 Vinyl chloride	62	1.890	1.894	-0.004	99	96921	50.0	55.9	
14 Butadiene	39	1.938	1.942	-0.004	94	102900	50.0	62.1	
15 Bromomethane	94	2.255	2.246	0.009	93	55418	50.0	61.3	
16 Chloroethane	64	2.401	2.392	0.009	100	66601	50.0	60.9	
17 Dichlorofluoromethane	67	2.656	2.660	-0.004	97	165607	50.0	62.7	
18 Trichlorofluoromethane	101	2.680	2.678	0.002	85	124627	50.0	62.1	
20 Ethyl ether	59	3.046	3.043	0.003	88	90273	50.0	60.3	
21 Acrolein	56	3.222	3.220	0.002	98	34894	150.0	131.3	
22 1,1-Dichloroethene	96	3.338	3.341	-0.003	96	83700	50.0	56.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.404	3.420	-0.016	95	87900	50.0	58.6	
24 Acetone	43	3.435	3.427	0.008	94	58537	100.0	137.4	
25 Iodomethane	142	3.532	3.536	-0.004	99	111013	50.0	58.4	
26 Carbon disulfide	76	3.630	3.633	-0.003	100	254919	50.0	58.5	
29 3-Chloro-1-propene	76	3.915	3.913	0.002	89	46508	50.0	44.6	
30 Methyl acetate	43	3.928	3.925	0.003	96	387072	250.0	275.2	
31 Methylene Chloride	84	4.122	4.132	-0.010	92	110076	50.0	61.0	
32 2-Methyl-2-propanol	59	4.366	4.370	-0.004	98	85579	500.0	504.1	
33 Acrylonitrile	53	4.506	4.497	0.009	98	381782	500.0	531.9	
34 trans-1,2-Dichloroethene	96	4.566	4.558	0.008	66	95509	50.0	57.7	
35 Methyl tert-butyl ether	73	4.572	4.570	0.002	97	320851	50.0	54.0	
36 Hexane	57	4.986	4.990	-0.004	92	127425	50.0	57.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.199	5.197	0.002	97	189948	50.0	61.0	
38 Vinyl acetate	43	5.236	5.239	-0.003	97	127330	50.0	34.0	
42 2,2-Dichloropropane	77	5.941	5.939	0.002	65	110864	50.0	57.5	
43 cis-1,2-Dichloroethene	96	5.941	5.945	-0.004	86	98498	50.0	52.3	
44 2-Butanone (MEK)	43	5.947	5.951	-0.004	64	83252	100.0	117.4	
48 Chlorobromomethane	128	6.233	6.231	0.002	94	38751	50.0	50.2	
49 Tetrahydrofuran	42	6.245	6.243	0.002	81	54996	100.0	83.5	
50 Chloroform	83	6.373	6.371	0.002	96	175089	50.0	58.2	
51 1,1,1-Trichloroethane	97	6.537	6.541	-0.004	97	139652	50.0	56.5	
52 Cyclohexane	56	6.623	6.614	0.009	89	162234	50.0	54.7	
53 Carbon tetrachloride	117	6.714	6.718	-0.004	95	102838	50.0	54.5	
54 1,1-Dichloropropene	75	6.726	6.724	0.002	95	147879	50.0	61.8	
55 Isobutyl alcohol	41	6.896	6.894	0.002	90	73739	1250.0	1139.9	
56 Benzene	78	6.945	6.943	0.002	97	415590	50.0	58.9	
57 1,2-Dichloroethane	62	7.018	7.016	0.002	98	161172	50.0	60.1	
59 n-Heptane	43	7.310	7.308	0.002	88	93355	50.0	54.7	
61 Trichloroethene	130	7.675	7.679	-0.004	90	84616	50.0	55.4	
63 Methylcyclohexane	83	7.918	7.922	-0.004	90	157352	50.0	54.7	
64 1,2-Dichloropropane	63	7.955	7.953	0.002	94	101479	50.0	54.5	
65 1,4-Dioxane	88	8.040	8.032	0.008	35	15664	1000.0	873.4	M
67 Dibromomethane	93	8.034	8.032	0.002	86	60239	50.0	53.4	
68 Dichlorobromomethane	83	8.229	8.233	-0.003	98	113573	50.0	50.4	
70 2-Chloroethyl vinyl ether	63	8.533	8.531	0.002	93	124483	100.0	100.1	
71 cis-1,3-Dichloropropene	75	8.679	8.677	0.002	94	145734	50.0	48.9	
72 4-Methyl-2-pentanone (MIBK)	43	8.825	8.823	0.002	95	159710	100.0	89.0	
73 Toluene	91	9.013	9.011	0.002	98	411697	50.0	59.3	
74 trans-1,3-Dichloropropene	75	9.257	9.255	0.002	95	130644	50.0	51.7	
75 Ethyl methacrylate	69	9.311	9.315	-0.004	88	119445	50.0	47.2	
76 1,1,2-Trichloroethane	97	9.451	9.449	0.002	95	82133	50.0	54.4	
77 Tetrachloroethene	164	9.524	9.522	0.002	91	63289	50.0	55.4	
78 1,3-Dichloropropane	76	9.610	9.607	0.003	92	161192	50.0	56.4	
79 2-Hexanone	43	9.658	9.662	-0.004	95	107708	100.0	98.5	
81 Chlorodibromomethane	129	9.822	9.826	-0.004	88	56796	50.0	47.8	
82 Ethylene Dibromide	107	9.938	9.942	-0.004	99	74166	50.0	51.9	
83 3-Chlorobenzotrifluoride	180	10.394	10.392	0.002	91	106921	50.0	50.4	
84 Chlorobenzene	112	10.431	10.429	0.002	91	249478	50.0	56.9	
85 4-Chlorobenzotrifluoride	180	10.486	10.483	0.003	96	101779	50.0	50.6	
86 1,1,1,2-Tetrachloroethane	131	10.522	10.520	0.002	88	65957	50.0	51.4	
87 Ethylbenzene	106	10.528	10.526	0.002	99	139504	50.0	57.0	
88 m-Xylene & p-Xylene	106	10.662	10.660	0.002	99	171235	50.0	55.9	
89 o-Xylene	106	11.039	11.043	-0.004	97	166659	50.0	56.0	
90 Styrene	104	11.064	11.061	0.003	94	267599	50.0	54.7	
91 Bromoform	173	11.246	11.244	0.002	89	30251	50.0	39.8	
92 2-Chlorobenzotrifluoride	180	11.307	11.305	0.002	93	107407	50.0	50.2	
93 Isopropylbenzene	105	11.410	11.408	0.002	97	430824	50.0	59.6	
96 1,1,2,2-Tetrachloroethane	83	11.714	11.712	0.002	96	112636	50.0	54.3	
95 Bromobenzene	156	11.721	11.724	-0.003	95	87685	50.0	53.5	
97 trans-1,4-Dichloro-2-buten	53	11.751	11.755	-0.004	79	25346	50.0	33.7	
98 1,2,3-Trichloropropane	110	11.775	11.773	0.002	86	37392	50.0	51.9	
99 N-Propylbenzene	120	11.824	11.828	-0.004	99	108519	50.0	54.9	
100 2-Chlorotoluene	126	11.915	11.913	0.002	93	87539	50.0	53.9	
101 3-Chlorotoluene	126	11.982	11.980	0.002	97	88189	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.006	12.010	-0.004	93	362420	50.0	57.7	
103 4-Chlorotoluene	126	12.037	12.035	0.002	98	96909	50.0	56.6	
104 tert-Butylbenzene	119	12.323	12.327	-0.004	90	270776	50.0	56.2	
106 1,2,4-Trimethylbenzene	105	12.384	12.381	0.003	98	366648	50.0	55.7	
107 1,2-dichloro-4-(trifluorom	214	12.420	12.418	0.002	96	84259	50.0	50.8	
108 sec-Butylbenzene	105	12.548	12.546	0.002	96	428922	50.0	58.5	
109 1,3-Dichlorobenzene	146	12.670	12.667	0.003	92	175562	50.0	56.1	
110 4-Isopropyltoluene	119	12.706	12.704	0.002	95	328387	50.0	56.7	
111 1,4-Dichlorobenzene	146	12.773	12.771	0.002	88	182160	50.0	56.4	
113 2,4-Dichloro-1-(trifluorom	214	12.791	12.789	0.002	94	82322	50.0	50.2	
114 2,5-Dichlorobenzotrifluori	214	12.828	12.832	-0.004	97	91940	50.0	51.2	
116 n-Butylbenzene	91	13.114	13.111	0.003	98	329131	50.0	56.5	
117 1,2-Dichlorobenzene	146	13.126	13.124	0.002	89	171400	50.0	55.4	
118 1,2-Dibromo-3-Chloropropan	75	13.917	13.914	0.003	64	19157	50.0	40.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.057	14.060	-0.003	96	395703	150.0	151.6	
121 2,3- & 3,4- Dichlorotoluen	125	14.470	14.474	-0.004	98	285937	100.0	99.9	
122 1,2,4-Trichlorobenzene	180	14.744	14.742	0.002	91	104293	50.0	48.1	
123 Hexachlorobutadiene	225	14.884	14.888	-0.004	95	37144	50.0	50.3	
124 Naphthalene	128	15.006	15.009	-0.003	99	255766	50.0	44.6	
125 1,2,3-Trichlorobenzene	180	15.231	15.229	0.003	91	92113	50.0	45.3	
126 2,4,5-Trichlorotoluene	159	16.009	16.007	0.002	0	41505	50.0	32.3	
127 2,3,6-Trichlorotoluene	159	16.107	16.111	-0.004	92	41085	50.0	35.2	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	110.0	
S 131 Xylenes, Total	106				0		100.0	111.9	
S 132 1,3-Dichloropropene, Total	1				0		100.0	100.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00114	Amount Added: 2.00	Units: uL	
voaWKet2n Res_00001	Amount Added: 2.00	Units: uL	
voaW ee2nd_00001	Amount Added: 2.00	Units: uL	
voaWVA2ndRes_00001	Amount Added: 2.00	Units: uL	
VOACEVEPRI_00006	Amount Added: 2.00	Units: uL	
voaWacro2 Res_00003	Amount Added: 6.00	Units: uL	
VOA8260INT_00033	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00035	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505009.D

Injection Date: 05-May-2015 14:35:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: LCS

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

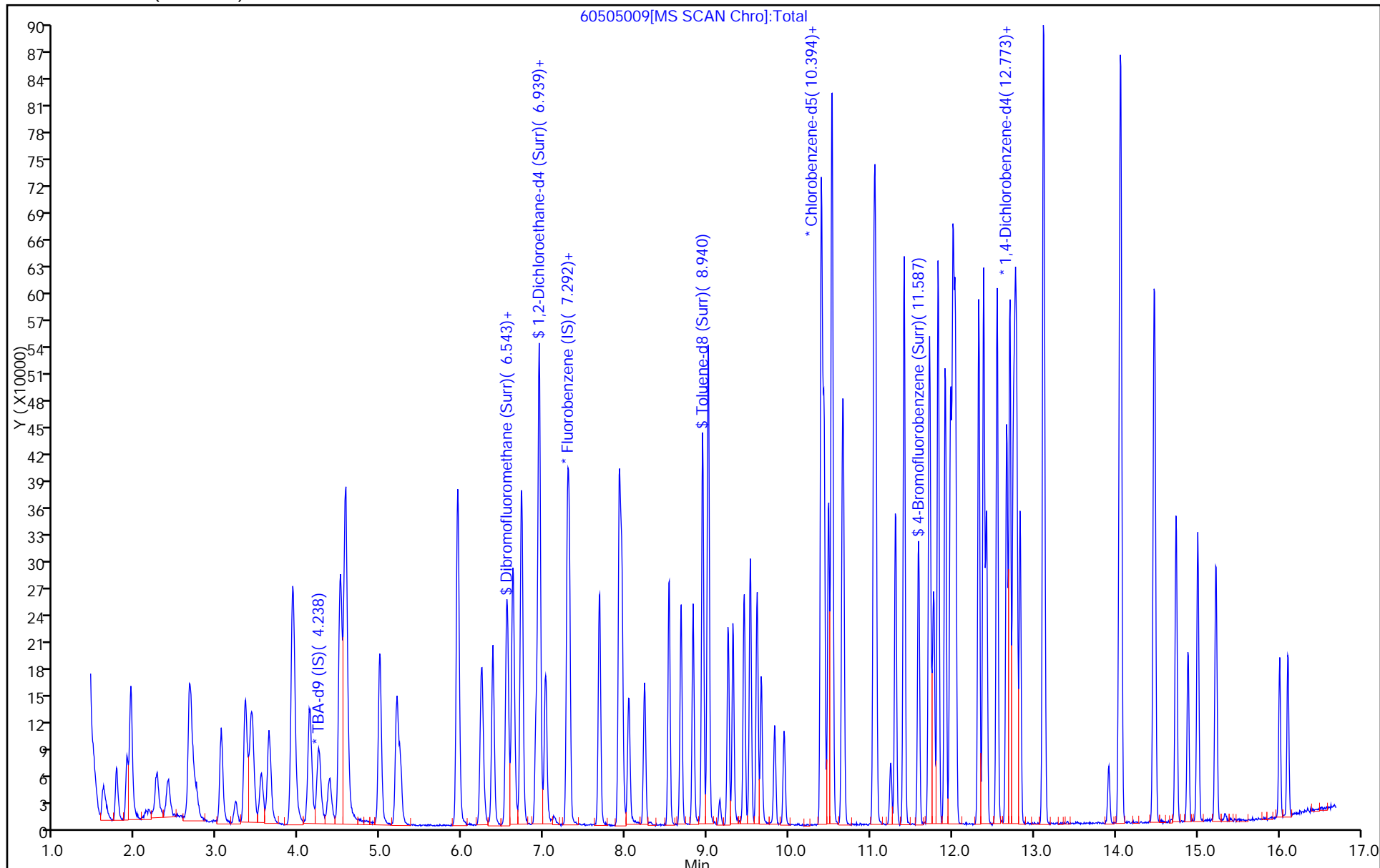
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



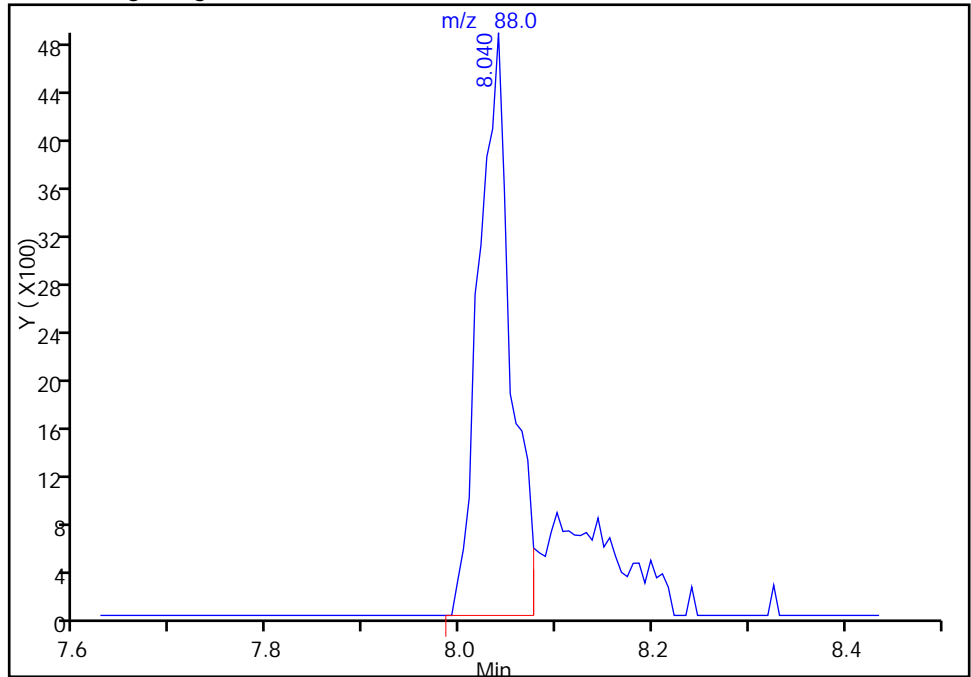
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150505-6773.b\60505009.D
Injection Date: 05-May-2015 14:35:30 Instrument ID: CHHP6
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

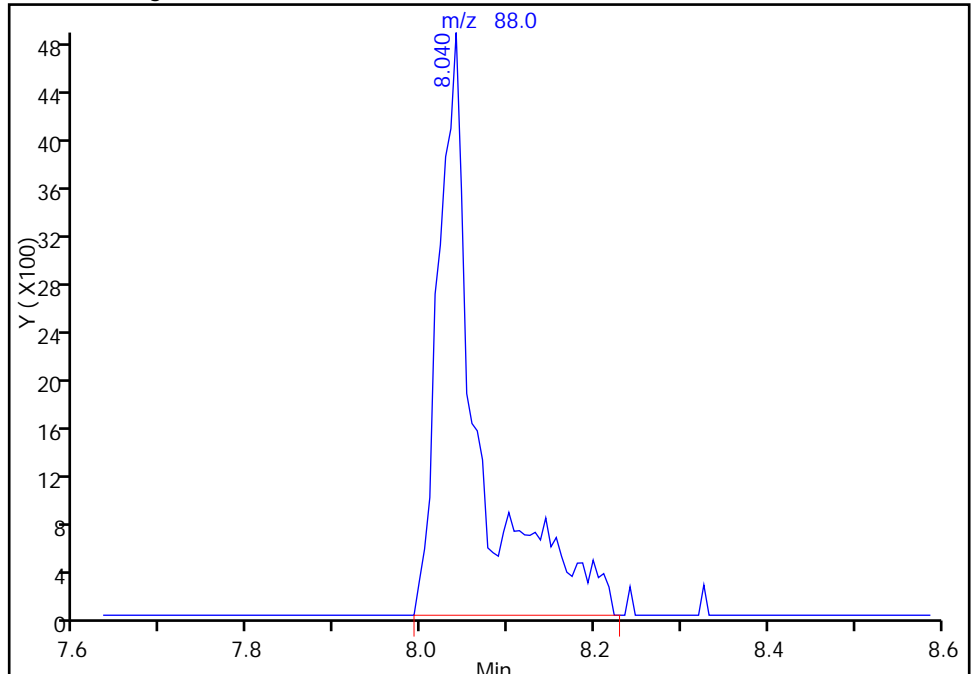
RT: 8.04
Area: 11177
Amount: 623.2318
Amount Units: ng

Processing Integration Results



RT: 8.04
Area: 15664
Amount: 873.4278
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 05-May-2015 14:53:42
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-140724/11
 Matrix: Water Lab File ID: 60506011.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 15:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	11.0		1.0	0.28
75-01-4	Vinyl chloride	11.0		1.0	0.23
74-83-9	Bromomethane	11.5		1.0	0.31
75-00-3	Chloroethane	11.8		1.0	0.21
75-35-4	1,1-Dichloroethene	8.56		1.0	0.30
67-64-1	Acetone	22.0		5.0	2.5
75-15-0	Carbon disulfide	8.70		1.0	0.21
75-09-2	Methylene Chloride	11.2		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.57		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.1		1.0	0.18
75-34-3	1,1-Dichloroethane	10.1		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.23		1.0	0.24
74-97-5	Bromochloromethane	9.77		1.0	0.18
78-93-3	2-Butanone (MEK)	21.6		5.0	0.55
67-66-3	Chloroform	10.2		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.16		1.0	0.29
56-23-5	Carbon tetrachloride	8.61		1.0	0.14
71-43-2	Benzene	10.1		1.0	0.11
107-06-2	1,2-Dichloroethane	11.5		1.0	0.21
79-01-6	Trichloroethene	9.02		1.0	0.14
78-87-5	1,2-Dichloropropane	10.1		1.0	0.095
75-27-4	Bromodichloromethane	9.32		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	8.80		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	14.5		5.0	0.53
108-88-3	Toluene	10.1		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	8.41		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.5		1.0	0.20
127-18-4	Tetrachloroethene	8.99		1.0	0.15
591-78-6	2-Hexanone	22.1		5.0	0.16
124-48-1	Dibromochloromethane	8.21		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.69		1.0	0.18
108-90-7	Chlorobenzene	9.98		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.18		1.0	0.28
100-41-4	Ethylbenzene	9.70		1.0	0.23
1330-20-7	Xylenes, Total	19.2		3.0	0.49
100-42-5	Styrene	9.85		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-140724/11
 Matrix: Water Lab File ID: 60506011.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 15:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	7.51		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	9.98		1.0	0.20
107-13-1	Acrylonitrile	101		20	0.55
123-91-1	1,4-Dioxane	102	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	105		70-118
1868-53-7	Dibromofluoromethane (Surr)	103		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506011.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 06-May-2015 15:38:30 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 180-0006797-011
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-May-2015 09:06:04 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: fergusond

Date: 07-May-2015 09:06:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.235	4.224	0.011	98	152542	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.290	-0.001	97	396320	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.399	-0.001	91	84972	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.747	-0.001	95	131052	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.553	6.554	-0.001	91	168300	100.0	102.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.932	-0.002	70	307142	100.0	112.1	
\$ 7 Toluene-d8 (Surr)	98	8.938	8.939	-0.001	95	745947	100.0	103.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.585	-0.001	79	307175	100.0	104.8	
11 Dichlorodifluoromethane	85	1.607	1.602	0.005	99	110931	50.0	45.8	
12 Chloromethane	50	1.766	1.761	0.005	99	110535	50.0	54.9	
13 Vinyl chloride	62	1.887	1.888	-0.001	98	117475	50.0	54.8	
14 Butadiene	39	1.930	1.937	-0.007	96	109112	50.0	53.4	
15 Bromomethane	94	2.258	2.259	-0.001	93	64011	50.0	57.4	
16 Chloroethane	64	2.386	2.393	-0.007	99	79525	50.0	58.9	
17 Dichlorofluoromethane	67	2.654	2.655	-0.001	99	201975	50.0	61.9	
18 Trichlorofluoromethane	101	2.684	2.679	0.005	96	144586	50.0	58.4	
20 Ethyl ether	59	3.043	3.038	0.005	88	106795	50.0	57.8	
21 Acrolein	56	3.226	3.227	0.000	95	36366	150.0	110.8	
22 1,1-Dichloroethene	96	3.341	3.336	0.005	96	78550	50.0	42.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.408	3.421	-0.013	95	88868	50.0	48.0	
24 Acetone	43	3.420	3.428	-0.008	100	57842	100.0	110.0	
25 Iodomethane	142	3.536	3.531	0.005	99	110371	50.0	47.0	
26 Carbon disulfide	76	3.633	3.628	0.005	100	233847	50.0	43.5	
29 3-Chloro-1-propene	76	3.913	3.908	0.005	84	54617	50.0	42.4	
30 Methyl acetate	43	3.925	3.932	-0.007	96	420792	250.0	242.3	
31 Methylene Chloride	84	4.120	4.127	-0.007	93	125099	50.0	56.2	
32 2-Methyl-2-propanol	59	4.369	4.370	-0.001	96	81940	500.0	493.1	
33 Acrylonitrile	53	4.497	4.510	-0.013	100	447003	500.0	504.4	
34 trans-1,2-Dichloroethene	96	4.558	4.559	-0.001	93	97861	50.0	47.9	
35 Methyl tert-butyl ether	73	4.570	4.577	-0.007	97	371642	50.0	50.6	
36 Hexane	57	4.990	4.991	-0.001	91	127045	50.0	46.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.191	5.198	-0.007	97	194484	50.0	50.6	
38 Vinyl acetate	43	5.239	5.240	-0.001	97	199848	50.0	43.2	
42 2,2-Dichloropropane	77	5.939	5.940	-0.001	64	113438	50.0	47.6	
43 cis-1,2-Dichloroethene	96	5.945	5.940	0.005	89	107261	50.0	46.1	
44 2-Butanone (MEK)	43	5.945	5.946	-0.001	67	94773	100.0	108.2	
48 Chlorobromomethane	128	6.231	6.232	-0.001	94	46589	50.0	48.9	
49 Tetrahydrofuran	42	6.243	6.250	-0.007	84	64877	100.0	79.8	
50 Chloroform	83	6.371	6.372	-0.001	94	189210	50.0	51.0	
51 1,1,1-Trichloroethane	97	6.541	6.542	-0.001	96	139847	50.0	45.8	
52 Cyclohexane	56	6.614	6.615	-0.001	91	168130	50.0	45.9	
53 Carbon tetrachloride	117	6.711	6.719	-0.008	94	100262	50.0	43.0	
54 1,1-Dichloropropene	75	6.724	6.725	-0.001	94	137310	50.0	46.5	
55 Isobutyl alcohol	41	6.900	6.901	-0.001	90	60230	1250.0	754.1	
56 Benzene	78	6.943	6.944	-0.001	96	439238	50.0	50.4	
57 1,2-Dichloroethane	62	7.016	7.017	-0.001	99	190611	50.0	57.5	
59 n-Heptane	43	7.308	7.309	-0.001	88	97868	50.0	46.4	
61 Trichloroethene	130	7.673	7.674	-0.001	91	85014	50.0	45.1	
63 Methylcyclohexane	83	7.922	7.923	-0.001	91	151700	50.0	42.7	
64 1,2-Dichloropropane	63	7.952	7.954	-0.002	94	116246	50.0	50.6	
65 1,4-Dioxane	88	8.032	8.033	-0.001	32	11283	1000.0	509.5	M
67 Dibromomethane	93	8.038	8.039	-0.001	85	72901	50.0	52.3	
68 Dichlorobromomethane	83	8.226	8.227	-0.001	98	129588	50.0	46.6	
70 2-Chloroethyl vinyl ether	63	8.530	8.532	-0.002	94	152187	100.0	99.1	
71 cis-1,3-Dichloropropene	75	8.676	8.678	-0.002	93	162007	50.0	44.0	
72 4-Methyl-2-pentanone (MIBK)	43	8.822	8.824	-0.002	96	164775	100.0	72.4	
73 Toluene	91	9.011	9.012	-0.001	99	444830	50.0	50.5	
74 trans-1,3-Dichloropropene	75	9.254	9.255	-0.001	96	134838	50.0	42.0	
75 Ethyl methacrylate	69	9.309	9.316	-0.007	88	141099	50.0	43.9	
76 1,1,2-Trichloroethane	97	9.449	9.450	-0.001	95	100960	50.0	52.6	
77 Tetrachloroethene	164	9.528	9.529	-0.001	91	65189	50.0	45.0	
78 1,3-Dichloropropane	76	9.607	9.608	-0.001	91	193462	50.0	53.3	
79 2-Hexanone	43	9.656	9.663	-0.007	95	153486	100.0	110.5	
81 Chlorodibromomethane	129	9.820	9.821	-0.001	89	62018	50.0	41.1	
82 Ethylene Dibromide	107	9.942	9.943	-0.001	98	87839	50.0	48.4	
83 3-Chlorobenzotrifluoride	180	10.392	10.393	-0.001	88	135526	50.0	50.4	
84 Chlorobenzene	112	10.428	10.430	-0.002	90	277595	50.0	49.9	
85 4-Chlorobenzotrifluoride	180	10.483	10.484	-0.001	96	124695	50.0	48.8	
86 1,1,1,2-Tetrachloroethane	131	10.520	10.521	-0.001	89	74892	50.0	45.9	
87 Ethylbenzene	106	10.526	10.527	-0.001	99	150790	50.0	48.5	
88 m-Xylene & p-Xylene	106	10.660	10.661	-0.001	100	185338	50.0	47.6	
89 o-Xylene	106	11.043	11.044	-0.001	98	182468	50.0	48.3	
90 Styrene	104	11.061	11.062	-0.001	94	305751	50.0	49.2	
91 Bromoform	173	11.244	11.245	-0.001	92	36228	50.0	37.5	
92 2-Chlorobenzotrifluoride	180	11.304	11.306	-0.002	92	134385	50.0	49.5	
93 Isopropylbenzene	105	11.408	11.409	-0.001	97	447328	50.0	48.8	
96 1,1,2,2-Tetrachloroethane	83	11.712	11.713	-0.001	94	131475	50.0	49.9	
95 Bromobenzene	156	11.724	11.725	-0.001	94	99861	50.0	47.0	
97 trans-1,4-Dichloro-2-buten	53	11.749	11.756	-0.007	81	34891	50.0	35.7	
98 1,2,3-Trichloropropane	110	11.779	11.780	-0.001	85	41847	50.0	44.8	
99 N-Propylbenzene	120	11.828	11.829	-0.001	99	112614	50.0	43.9	
100 2-Chlorotoluene	126	11.913	11.920	-0.007	93	97643	50.0	46.3	
101 3-Chlorotoluene	126	11.980	11.981	-0.001	98	111508	50.0	48.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.011	-0.001	94	389973	50.0	47.8	
103 4-Chlorotoluene	126	12.034	12.036	-0.002	98	100421	50.0	45.2	
104 tert-Butylbenzene	119	12.326	12.328	-0.002	91	276051	50.0	44.2	
106 1,2,4-Trimethylbenzene	105	12.381	12.382	-0.001	98	413054	50.0	48.4	
107 1,2-dichloro-4-(trifluorom	214	12.424	12.419	0.005	95	103935	50.0	48.3	
108 sec-Butylbenzene	105	12.552	12.547	0.005	96	440950	50.0	46.4	
109 1,3-Dichlorobenzene	146	12.667	12.668	-0.001	92	192331	50.0	47.4	
110 4-Isopropyltoluene	119	12.704	12.705	-0.001	95	343018	50.0	45.6	
111 1,4-Dichlorobenzene	146	12.771	12.772	-0.001	95	202405	50.0	48.3	
113 2,4-Dichloro-1-(trifluorom	214	12.789	12.790	-0.001	94	98490	50.0	46.3	
114 2,5-Dichlorobenzotrifluori	214	12.831	12.833	-0.002	96	120422	50.0	51.7	
116 n-Butylbenzene	91	13.111	13.112	-0.001	99	348717	50.0	46.1	
117 1,2-Dichlorobenzene	146	13.123	13.125	-0.002	89	201278	50.0	50.2	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.915	-0.001	66	20612	50.0	33.7	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.061	-0.001	97	509066	150.0	150.3	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.475	-0.001	97	364651	100.0	98.2	
122 1,2,4-Trichlorobenzene	180	14.742	14.743	-0.001	91	130485	50.0	46.4	
123 Hexachlorobutadiene	225	14.888	14.889	-0.001	95	40985	50.0	42.8	
124 Naphthalene	128	15.003	15.004	-0.001	98	302230	50.0	40.6	
125 1,2,3-Trichlorobenzene	180	15.228	15.229	-0.001	92	110670	50.0	42.0	
126 2,4,5-Trichlorotoluene	159	16.013	16.008	0.005	0	52391	50.0	31.4	
127 2,3,6-Trichlorotoluene	159	16.110	16.105	0.005	93	52134	50.0	34.5	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	94.0	
S 131 Xylenes, Total	106				0		100.0	95.9	
S 132 1,3-Dichloropropene, Total	1				0		100.0	86.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00114	Amount Added: 2.00	Units: uL
voaWKet2n Res_00001	Amount Added: 2.00	Units: uL
voaW ee2nd_00001	Amount Added: 2.00	Units: uL
voaW VA pri R_00005	Amount Added: 2.00	Units: uL
VOACEVEPRI_00006	Amount Added: 2.00	Units: uL
voaWacro2 Res_00003	Amount Added: 6.00	Units: uL
VOA8260INT_00033	Amount Added: 2.00	Units: uL
VOA8260SURR_00035	Amount Added: 4.00	Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506011.D

Injection Date: 06-May-2015 15:38:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: LCS

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

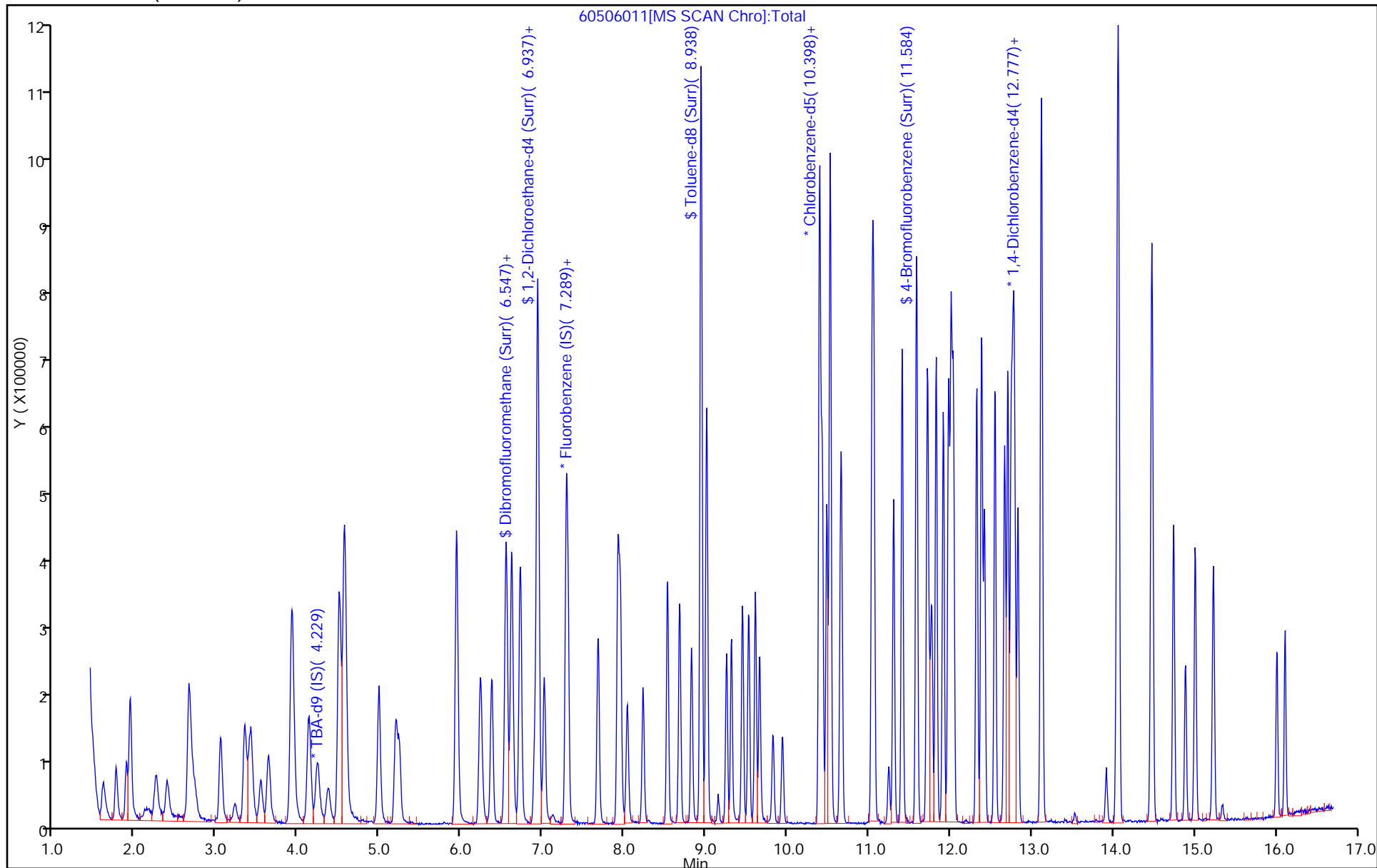
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



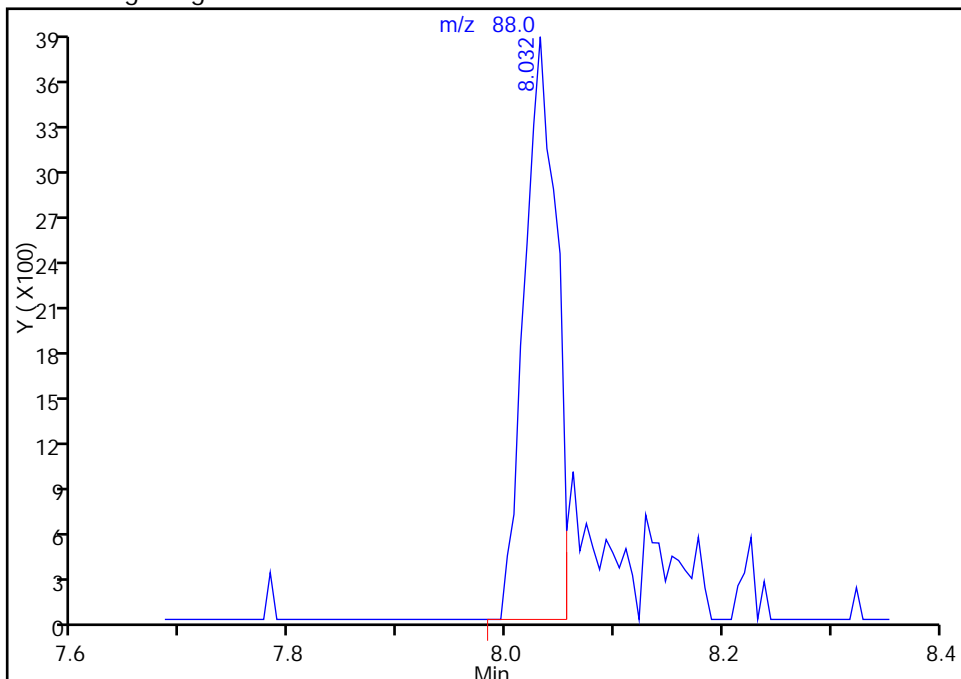
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506011.D
Injection Date: 06-May-2015 15:38:30 Instrument ID: CHHP6
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP6 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

65 1,4-Dioxane, CAS: 123-91-1

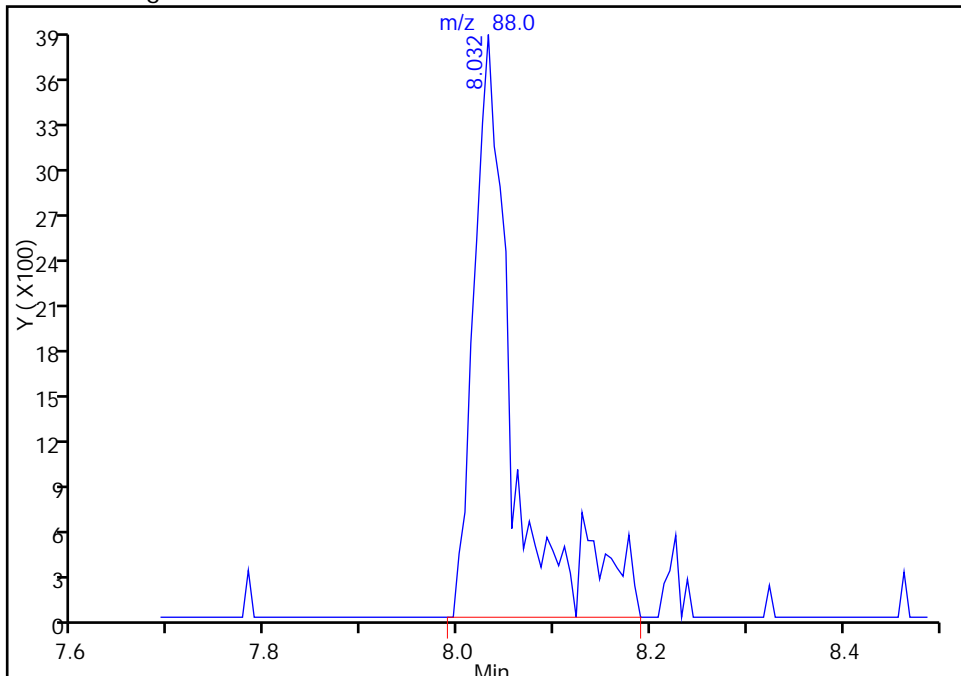
RT: 8.03
Area: 7942
Amount: 358.6616
Amount Units: ng

Processing Integration Results



RT: 8.03
Area: 11283
Amount: 509.5415
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 06-May-2015 16:03:03
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 180-140724/12
 Matrix: Water Lab File ID: 60506012.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 16:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	12.0		1.0	0.28
75-01-4	Vinyl chloride	12.4		1.0	0.23
74-83-9	Bromomethane	13.3		1.0	0.31
75-00-3	Chloroethane	13.1		1.0	0.21
75-35-4	1,1-Dichloroethene	10.0		1.0	0.30
67-64-1	Acetone	20.9		5.0	2.5
75-15-0	Carbon disulfide	9.65		1.0	0.21
75-09-2	Methylene Chloride	11.7		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	10.5		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.6		1.0	0.18
75-34-3	1,1-Dichloroethane	11.1		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.95		1.0	0.24
74-97-5	Bromochloromethane	9.88		1.0	0.18
78-93-3	2-Butanone (MEK)	21.0		5.0	0.55
67-66-3	Chloroform	11.1		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.4		1.0	0.29
56-23-5	Carbon tetrachloride	9.59		1.0	0.14
71-43-2	Benzene	10.7		1.0	0.11
107-06-2	1,2-Dichloroethane	12.1		1.0	0.21
79-01-6	Trichloroethene	10.0		1.0	0.14
78-87-5	1,2-Dichloropropane	10.2		1.0	0.095
75-27-4	Bromodichloromethane	9.80		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.18		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	15.9		5.0	0.53
108-88-3	Toluene	11.2		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.46		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.9		1.0	0.20
127-18-4	Tetrachloroethene	10.7		1.0	0.15
591-78-6	2-Hexanone	24.1		5.0	0.16
124-48-1	Dibromochloromethane	9.15		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.4		1.0	0.18
108-90-7	Chlorobenzene	11.0		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.99		1.0	0.28
100-41-4	Ethylbenzene	10.8		1.0	0.23
1330-20-7	Xylenes, Total	21.2		3.0	0.49
100-42-5	Styrene	10.5		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCSD 180-140724/12
 Matrix: Water Lab File ID: 60506012.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 05/06/2015 16:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 140724 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	7.53		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.6		1.0	0.20
107-13-1	Acrylonitrile	103		20	0.55
123-91-1	1,4-Dioxane	113	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		64-135
2037-26-5	Toluene-d8 (Surr)	111		71-118
460-00-4	4-Bromofluorobenzene (Surr)	111		70-118
1868-53-7	Dibromofluoromethane (Surr)	106		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506012.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 06-May-2015 16:02:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCSD
 Misc. Info.: 180-0006797-012
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 07-May-2015 09:08:05 Calib Date: 01-May-2015 16:46:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150501-6721.b\60501012.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: fergusond

Date: 07-May-2015 09:08:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.235	4.224	0.011	98	165229	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.289	7.290	-0.001	97	398453	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.398	10.399	-0.001	92	81396	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.746	12.747	-0.001	94	130248	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.553	6.554	-0.001	90	175327	100.0	106.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.930	6.932	-0.002	80	319644	100.0	116.0	
\$ 7 Toluene-d8 (Surr)	98	8.944	8.939	0.005	94	763169	100.0	110.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.584	11.585	-0.001	78	310315	100.0	110.5	
11 Dichlorodifluoromethane	85	1.601	1.602	-0.001	99	120933	50.0	49.7	
12 Chloromethane	50	1.759	1.761	-0.002	98	120942	50.0	59.8	
13 Vinyl chloride	62	1.887	1.888	-0.001	99	133220	50.0	61.9	
14 Butadiene	39	1.936	1.937	-0.001	91	118368	50.0	57.6	
15 Bromomethane	94	2.252	2.259	-0.007	92	74714	50.0	66.6	
16 Chloroethane	64	2.386	2.393	-0.007	100	89174	50.0	65.7	
17 Dichlorofluoromethane	67	2.654	2.655	-0.001	98	219073	50.0	66.8	
18 Trichlorofluoromethane	101	2.666	2.679	-0.013	68	163268	50.0	65.6	
20 Ethyl ether	59	3.043	3.038	0.005	89	112770	50.0	60.7	
21 Acrolein	56	3.232	3.227	0.006	98	43622	150.0	132.2	
22 1,1-Dichloroethene	96	3.341	3.336	0.005	96	92420	50.0	50.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.408	3.421	-0.013	96	98199	50.0	52.7	
24 Acetone	43	3.426	3.428	-0.002	90	55274	100.0	104.5	
25 Iodomethane	142	3.548	3.531	0.017	99	120470	50.0	51.1	
26 Carbon disulfide	76	3.627	3.628	-0.001	100	260840	50.0	48.3	
29 3-Chloro-1-propene	76	3.907	3.908	-0.001	72	60622	50.0	46.8	
30 Methyl acetate	43	3.931	3.932	-0.001	96	442824	250.0	253.6	
31 Methylene Chloride	84	4.126	4.127	-0.001	93	130519	50.0	58.3	
32 2-Methyl-2-propanol	59	4.369	4.370	-0.001	95	83311	500.0	462.9	
33 Acrylonitrile	53	4.503	4.510	-0.007	99	460577	500.0	516.9	
34 trans-1,2-Dichloroethene	96	4.564	4.559	0.005	94	108190	50.0	52.6	
35 Methyl tert-butyl ether	73	4.576	4.577	-0.001	97	392367	50.0	53.2	
36 Hexane	57	4.990	4.991	-0.001	93	135516	50.0	49.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.203	5.198	0.005	97	214264	50.0	55.4	
38 Vinyl acetate	43	5.239	5.240	-0.001	98	206919	50.0	44.5	
42 2,2-Dichloropropane	77	5.939	5.940	-0.001	66	127772	50.0	53.4	
43 cis-1,2-Dichloroethene	96	5.945	5.940	0.005	85	116247	50.0	49.7	
44 2-Butanone (MEK)	43	5.951	5.946	0.005	64	92278	100.0	104.8	
48 Chlorobromomethane	128	6.225	6.232	-0.007	94	47382	50.0	49.4	
49 Tetrahydrofuran	42	6.249	6.250	-0.001	83	70760	100.0	86.6	
50 Chloroform	83	6.377	6.372	0.005	94	206767	50.0	55.4	
51 1,1,1-Trichloroethane	97	6.541	6.542	-0.001	97	159975	50.0	52.1	
52 Cyclohexane	56	6.620	6.615	0.005	92	190997	50.0	51.9	
53 Carbon tetrachloride	117	6.717	6.719	-0.002	82	112377	50.0	48.0	
54 1,1-Dichloropropene	75	6.724	6.725	-0.001	93	157867	50.0	53.2	
55 Isobutyl alcohol	41	6.894	6.901	-0.007	93	70011	1250.0	871.9	
56 Benzene	78	6.943	6.944	-0.001	96	469863	50.0	53.6	
57 1,2-Dichloroethane	62	7.016	7.017	-0.001	99	201679	50.0	60.6	
59 n-Heptane	43	7.308	7.309	-0.001	87	107578	50.0	50.8	
61 Trichloroethene	130	7.679	7.674	0.005	91	95083	50.0	50.2	
63 Methylcyclohexane	83	7.922	7.923	-0.001	92	176096	50.0	49.3	
64 1,2-Dichloropropane	63	7.952	7.954	-0.002	94	117558	50.0	50.9	
65 1,4-Dioxane	88	8.031	8.033	-0.002	33	12539	1000.0	563.2	
67 Dibromomethane	93	8.038	8.039	-0.001	88	73051	50.0	52.2	
68 Dichlorobromomethane	83	8.226	8.227	-0.001	98	137013	50.0	49.0	
70 2-Chloroethyl vinyl ether	63	8.530	8.532	-0.002	92	162631	100.0	105.3	
71 cis-1,3-Dichloropropene	75	8.676	8.678	-0.002	92	169954	50.0	45.9	
72 4-Methyl-2-pentanone (MIBK)	43	8.828	8.824	0.004	97	173529	100.0	79.5	
73 Toluene	91	9.011	9.012	-0.001	98	473397	50.0	56.1	
74 trans-1,3-Dichloropropene	75	9.254	9.255	-0.001	95	145328	50.0	47.3	
75 Ethyl methacrylate	69	9.315	9.316	-0.001	88	146754	50.0	47.7	
76 1,1,2-Trichloroethane	97	9.449	9.450	-0.001	96	100251	50.0	54.6	
77 Tetrachloroethene	164	9.522	9.529	-0.007	93	74649	50.0	53.7	
78 1,3-Dichloropropane	76	9.607	9.608	-0.001	92	198436	50.0	57.1	
79 2-Hexanone	43	9.662	9.663	-0.001	94	160159	100.0	120.4	
81 Chlorodibromomethane	129	9.820	9.821	-0.001	88	66164	50.0	45.7	
82 Ethylene Dibromide	107	9.942	9.943	-0.001	97	90217	50.0	51.9	
83 3-Chlorobenzotrifluoride	180	10.392	10.393	-0.001	86	137332	50.0	53.3	
84 Chlorobenzene	112	10.428	10.430	-0.002	91	292931	50.0	55.0	
85 4-Chlorobenzotrifluoride	180	10.483	10.484	-0.001	96	128774	50.0	52.6	
86 1,1,1,2-Tetrachloroethane	131	10.526	10.521	0.005	89	78037	50.0	50.0	
87 Ethylbenzene	106	10.526	10.527	-0.001	99	161388	50.0	54.2	
88 m-Xylene & p-Xylene	106	10.660	10.661	-0.001	99	195732	50.0	52.5	
89 o-Xylene	106	11.037	11.044	-0.007	98	193592	50.0	53.5	
90 Styrene	104	11.061	11.062	-0.001	94	311883	50.0	52.4	
91 Bromoform	173	11.244	11.245	-0.001	91	34825	50.0	37.7	
92 2-Chlorobenzotrifluoride	180	11.304	11.306	-0.002	93	140940	50.0	54.2	
93 Isopropylbenzene	105	11.408	11.409	-0.001	97	493101	50.0	56.1	
96 1,1,2,2-Tetrachloroethane	83	11.718	11.713	0.005	95	133526	50.0	52.9	
95 Bromobenzene	156	11.724	11.725	-0.001	93	104360	50.0	49.4	
97 trans-1,4-Dichloro-2-buten	53	11.755	11.756	-0.001	80	37174	50.0	38.3	
98 1,2,3-Trichloropropane	110	11.773	11.780	-0.007	84	44447	50.0	47.9	
99 N-Propylbenzene	120	11.828	11.829	-0.001	99	122834	50.0	48.2	
100 2-Chlorotoluene	126	11.913	11.920	-0.007	93	102986	50.0	49.2	
101 3-Chlorotoluene	126	11.980	11.981	-0.001	98	122330	50.0	53.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
102 1,3,5-Trimethylbenzene	105	12.010	12.011	-0.001	93	425007	50.0	52.4	
103 4-Chlorotoluene	126	12.034	12.036	-0.002	99	111970	50.0	50.7	
104 tert-Butylbenzene	119	12.326	12.328	-0.002	91	308002	50.0	49.6	
106 1,2,4-Trimethylbenzene	105	12.381	12.382	-0.001	98	442474	50.0	52.1	
107 1,2-dichloro-4-(trifluorom	214	12.424	12.419	0.005	95	104444	50.0	48.9	
108 sec-Butylbenzene	105	12.545	12.547	-0.002	97	485203	50.0	51.3	
109 1,3-Dichlorobenzene	146	12.667	12.668	-0.001	91	209737	50.0	52.0	
110 4-Isopropyltoluene	119	12.704	12.705	-0.001	96	381083	50.0	51.0	
111 1,4-Dichlorobenzene	146	12.771	12.772	-0.002	88	211236	50.0	50.7	
113 2,4-Dichloro-1-(trifluorom	214	12.789	12.790	-0.001	92	100923	50.0	47.7	
114 2,5-Dichlorobenzotrifluori	214	12.831	12.833	-0.002	96	121009	50.0	52.3	
116 n-Butylbenzene	91	13.111	13.112	-0.001	99	386083	50.0	51.4	
117 1,2-Dichlorobenzene	146	13.123	13.125	-0.002	89	205422	50.0	51.5	
118 1,2-Dibromo-3-Chloropropan	75	13.914	13.915	-0.001	65	23399	50.0	38.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.060	14.061	-0.001	97	542633	150.0	161.2	
121 2,3- & 3,4- Dichlorotoluen	125	14.474	14.475	-0.001	97	381437	100.0	103.4	
122 1,2,4-Trichlorobenzene	180	14.742	14.743	-0.001	92	130060	50.0	46.6	
123 Hexachlorobutadiene	225	14.888	14.889	-0.001	94	42371	50.0	44.5	
124 Naphthalene	128	15.009	15.004	0.005	99	312943	50.0	42.3	
125 1,2,3-Trichlorobenzene	180	15.234	15.229	0.005	92	113129	50.0	43.2	
126 2,4,5-Trichlorotoluene	159	16.007	16.008	-0.001	0	57033	50.0	34.4	
127 2,3,6-Trichlorotoluene	159	16.110	16.105	0.005	91	54153	50.0	36.0	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 130 1,2-Dichloroethene, Total	96				0		100.0	102.4	
S 131 Xylenes, Total	106				0		100.0	106.0	
S 132 1,3-Dichloropropene, Total	1				0		100.0	93.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaWacro2 Res_00003	Amount Added: 6.00	Units: uL
voaW VA pri R_00005	Amount Added: 2.00	Units: uL
voaW ee2nd_00001	Amount Added: 2.00	Units: uL
voaWKet2n Res_00001	Amount Added: 2.00	Units: uL
VOA8260VOA2ND_00114	Amount Added: 2.00	Units: uL
VOACEVEPRI_00006	Amount Added: 2.00	Units: uL
VOA8260SURRE_00035	Amount Added: 4.00	Units: uL
VOA8260INT_00033	Amount Added: 2.00	Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150506-6797.b\60506012.D

Injection Date: 06-May-2015 16:02:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: LCSD

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

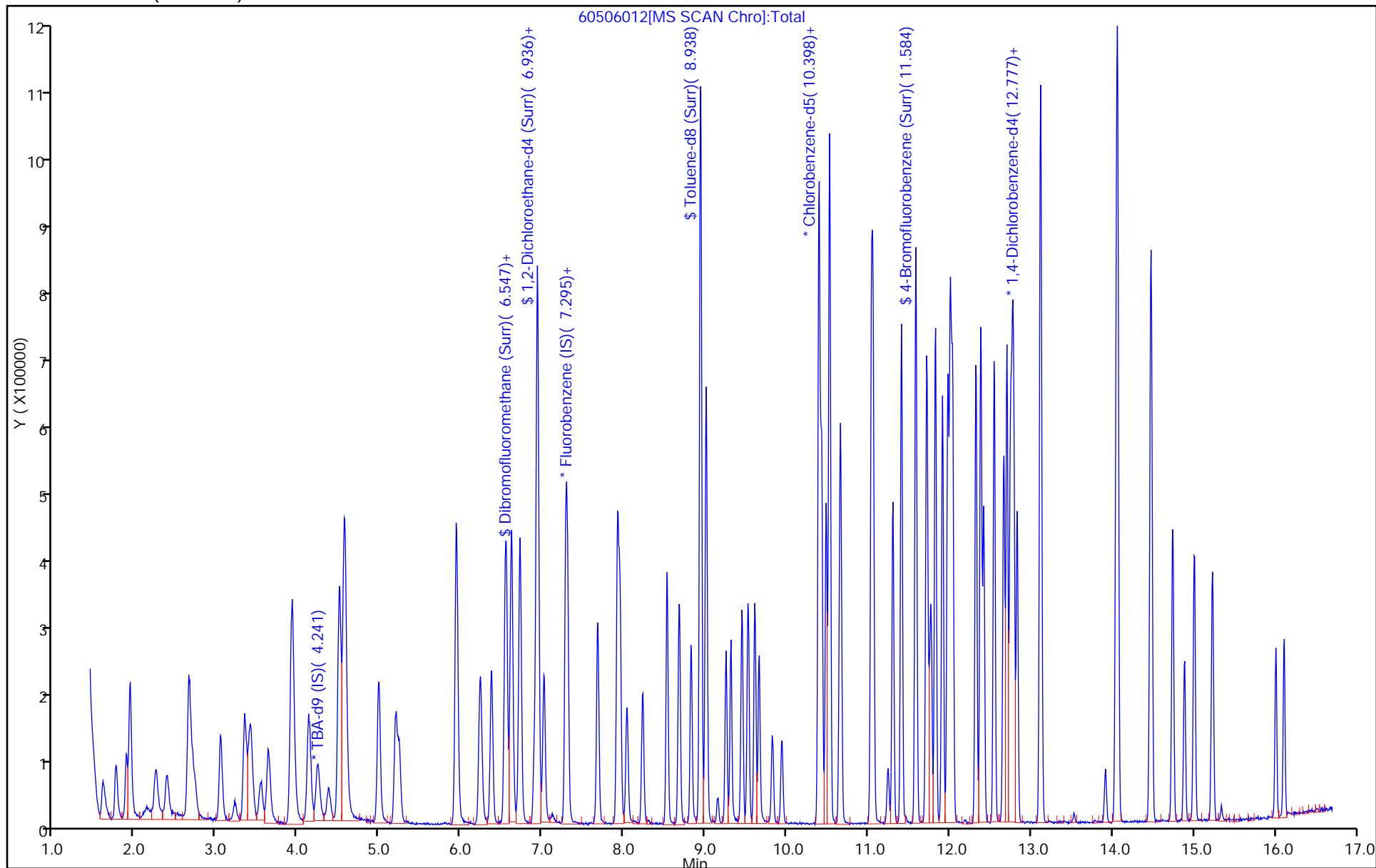
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHHP6 Start Date: 05/01/2015 11:31Analysis Batch Number: 140280 End Date: 05/02/2015 14:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-140280/5		05/01/2015 11:31	1	60501005.D	DB-624 0.18 (mm)
IC 180-140280/3		05/01/2015 13:53	1	60501003.D	DB-624 0.18 (mm)
IC 180-140280/6		05/01/2015 14:17	1	60501006.D	DB-624 0.18 (mm)
ICIS 180-140280/7		05/01/2015 14:41	1	60501007.D	DB-624 0.18 (mm)
IC 180-140280/8		05/01/2015 15:06	1	60501008.D	DB-624 0.18 (mm)
IC 180-140280/9		05/01/2015 15:31	1	60501009.D	DB-624 0.18 (mm)
IC 180-140280/10		05/01/2015 15:56	1	60501010.D	DB-624 0.18 (mm)
IC 180-140280/11		05/01/2015 16:20	1	60501011.D	DB-624 0.18 (mm)
IC 180-140280/12		05/01/2015 16:46	1	60501012.D	DB-624 0.18 (mm)
ICV 180-140280/18		05/02/2015 14:27	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHHP6 Start Date: 05/05/2015 10:45

Analysis Batch Number: 140579 End Date: 05/05/2015 22:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-140579/4		05/05/2015 10:45	1	60505004.D	DB-624 0.18 (mm)
CCVIS 180-140579/2		05/05/2015 11:28	1	60505002.D	DB-624 0.18 (mm)
ZZZZZ		05/05/2015 11:28	1		DB-624 0.18 (mm)
CCV 180-140579/3		05/05/2015 11:52	1	60505003.D	DB-624 0.18 (mm)
MB 180-140579/6		05/05/2015 12:48	1	60505006.D	DB-624 0.18 (mm)
ZZZZZ		05/05/2015 13:35	1		DB-624 0.18 (mm)
ZZZZZ		05/05/2015 14:11	1		DB-624 0.18 (mm)
LCS 180-140579/9		05/05/2015 14:35	1	60505009.D	DB-624 0.18 (mm)
ZZZZZ		05/05/2015 14:58	1		DB-624 0.18 (mm)
ZZZZZ		05/05/2015 15:22	1		DB-624 0.18 (mm)
ZZZZZ		05/05/2015 16:14	1		DB-624 0.18 (mm)
ZZZZZ		05/05/2015 16:38	1		DB-624 0.18 (mm)
ZZZZZ		05/05/2015 17:02	1		DB-624 0.18 (mm)
180-43402-2 DL	HD-MW-114-0/1-0 DL	05/05/2015 17:26	100	60505016.D	DB-624 0.18 (mm)
180-43402-3	HD-MW-132-0/1-0	05/05/2015 17:50	5	60505017.D	DB-624 0.18 (mm)
ZZZZZ		05/05/2015 18:38	1		DB-624 0.18 (mm)
180-43402-5	HD-MW-74S-0/1-0	05/05/2015 19:02	1	60505020.D	DB-624 0.18 (mm)
180-43402-1	HD-QC5-0/1-2	05/05/2015 19:26	1	60505021.D	DB-624 0.18 (mm)
180-43402-6	HD-MW-127-0/1-0	05/05/2015 19:50	10	60505022.D	DB-624 0.18 (mm)
180-43402-7	HD-MW-51D-0/1-0	05/05/2015 20:14	1	60505023.D	DB-624 0.18 (mm)
ZZZZZ		05/05/2015 20:38	1		DB-624 0.18 (mm)
180-43402-8	HD-MW-50S-0/1-0	05/05/2015 21:02	50	60505025.D	DB-624 0.18 (mm)
ZZZZZ		05/05/2015 21:27	1		DB-624 0.18 (mm)
ZZZZZ		05/05/2015 21:51	1		DB-624 0.18 (mm)
ZZZZZ		05/05/2015 22:15	1		DB-624 0.18 (mm)
ZZZZZ		05/05/2015 22:39	2.5		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica PittsburghJob No.: 180-43402-1

SDG No.: _____

Instrument ID: CHHP6Start Date: 05/06/2015 11:19Analysis Batch Number: 140724End Date: 05/06/2015 23:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-140724/4		05/06/2015 11:19	1	60506004.D	DB-624 0.18 (mm)
CCV 180-140724/3		05/06/2015 12:25	1	60506003.D	DB-624 0.18 (mm)
CCVIS 180-140724/7		05/06/2015 13:37	1	60506007.D	DB-624 0.18 (mm)
ZZZZZ		05/06/2015 13:37	1		DB-624 0.18 (mm)
CCV 180-140724/9		05/06/2015 14:25	1	60506009.D	DB-624 0.18 (mm)
MB 180-140724/10		05/06/2015 14:50	1	60506010.D	DB-624 0.18 (mm)
LCS 180-140724/11		05/06/2015 15:38	1	60506011.D	DB-624 0.18 (mm)
LCSD 180-140724/12		05/06/2015 16:02	1	60506012.D	DB-624 0.18 (mm)
ZZZZZ		05/06/2015 16:51	1		DB-624 0.18 (mm)
ZZZZZ		05/06/2015 17:15	1		DB-624 0.18 (mm)
180-43402-3 DL	HD-MW-132-0/1-0 DL	05/06/2015 17:39	40	60506016.D	DB-624 0.18 (mm)
180-43402-4	HD-MW-39D-0/1-0	05/06/2015 18:02	3	60506017.D	DB-624 0.18 (mm)
180-43402-7 DL	HD-MW-51D-0/1-0 DL	05/06/2015 18:26	25	60506018.D	DB-624 0.18 (mm)
ZZZZZ		05/06/2015 18:50	1		DB-624 0.18 (mm)
ZZZZZ		05/06/2015 19:14	1		DB-624 0.18 (mm)
ZZZZZ		05/06/2015 19:37	1		DB-624 0.18 (mm)
ZZZZZ		05/06/2015 20:02	1		DB-624 0.18 (mm)
ZZZZZ		05/06/2015 22:50	1		DB-624 0.18 (mm)
180-43402-2	HD-MW-114-0/1-0	05/06/2015 23:14	10	60506030.D	DB-624 0.18 (mm)

300_ORGFMS

Anions, Ion Chromatography

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: 04-24-1505.0000.d

Lab ID: LCS 180-139607/5 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Nitrate as N	2.50	2.30	92	90-110	
Chloride	50.0	52.6	105	90-110	
Sulfate	50.0	46.9	94	90-110	

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab File ID: 04-24-1506.0000.d Lab Sample ID: MB 180-139607/6
 Matrix: Water Date Extracted: _____
 Instrument ID: CHIC25 Date Analyzed: 04/24/2015 18:04
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 180-139607/4	04-24-1504.0000.d	04/24/2015 17:38
	LCS 180-139607/5	04-24-1505.0000.d	04/24/2015 17:51
	CCB 180-139607/16	04-24-1516.0000.d	04/24/2015 20:14
HD-MW-50S-0/1-0	180-43402-8	04-24-1524.0000.d	04/24/2015 21:59
HD-MW-50S-0/1-0	180-43402-8	04-24-1525.0000.d	04/24/2015 22:12
	CCB 180-139607/28	04-24-1528.0000.d	04/24/2015 22:51
HD-MW-114-0/1-0	180-43402-2	04-24-1530.0000.d	04/24/2015 23:17
HD-MW-114-0/1-0	180-43402-2	04-24-1531.0000.d	04/24/2015 23:30
HD-MW-132-0/1-0	180-43402-3	04-24-1532.0000.d	04/24/2015 23:43
HD-MW-39D-0/1-0	180-43402-4	04-24-1533.0000.d	04/24/2015 23:56
HD-MW-127-0/1-0	180-43402-6	04-24-1535.0000.d	04/25/2015 00:22
HD-MW-127-0/1-0	180-43402-6	04-24-1536.0000.d	04/25/2015 00:36
HD-MW-74S-0/1-0	180-43402-5	04-24-1537.0000.d	04/25/2015 00:49
	CCB 180-139607/40	04-24-1540.0000.d	04/25/2015 01:28
HD-MW-51D-0/1-0	180-43402-7	04-24-1541.0000.d	04/25/2015 01:41
	CCB 180-139607/46	04-24-1546.0000.d	04/25/2015 02:46

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-114-0/1-0 Lab Sample ID: 180-43402-2
 Matrix: Water Lab File ID: 04-24-1530.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 11:11
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 23:17
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.54		0.10	0.0062
14808-79-8	Sulfate	75		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1530.0000.d
 Lims ID: 180-43402-A-2 Lab Sample ID: 180-43402-2
 Client ID: HD-MW-114-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 23:17:00 ALS Bottle#: 0 Worklist Smp#: 30
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-030
 Misc. Info.: 27871 180-43402-a-2
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:16 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.133	2.992	0.141	268440386H	134.7	E
8 Nitrate as N	5.050	4.992	0.058	1374204H	0.5353	
3 Sulfate	8.033	8.058	-0.025	43345178H	74.5	

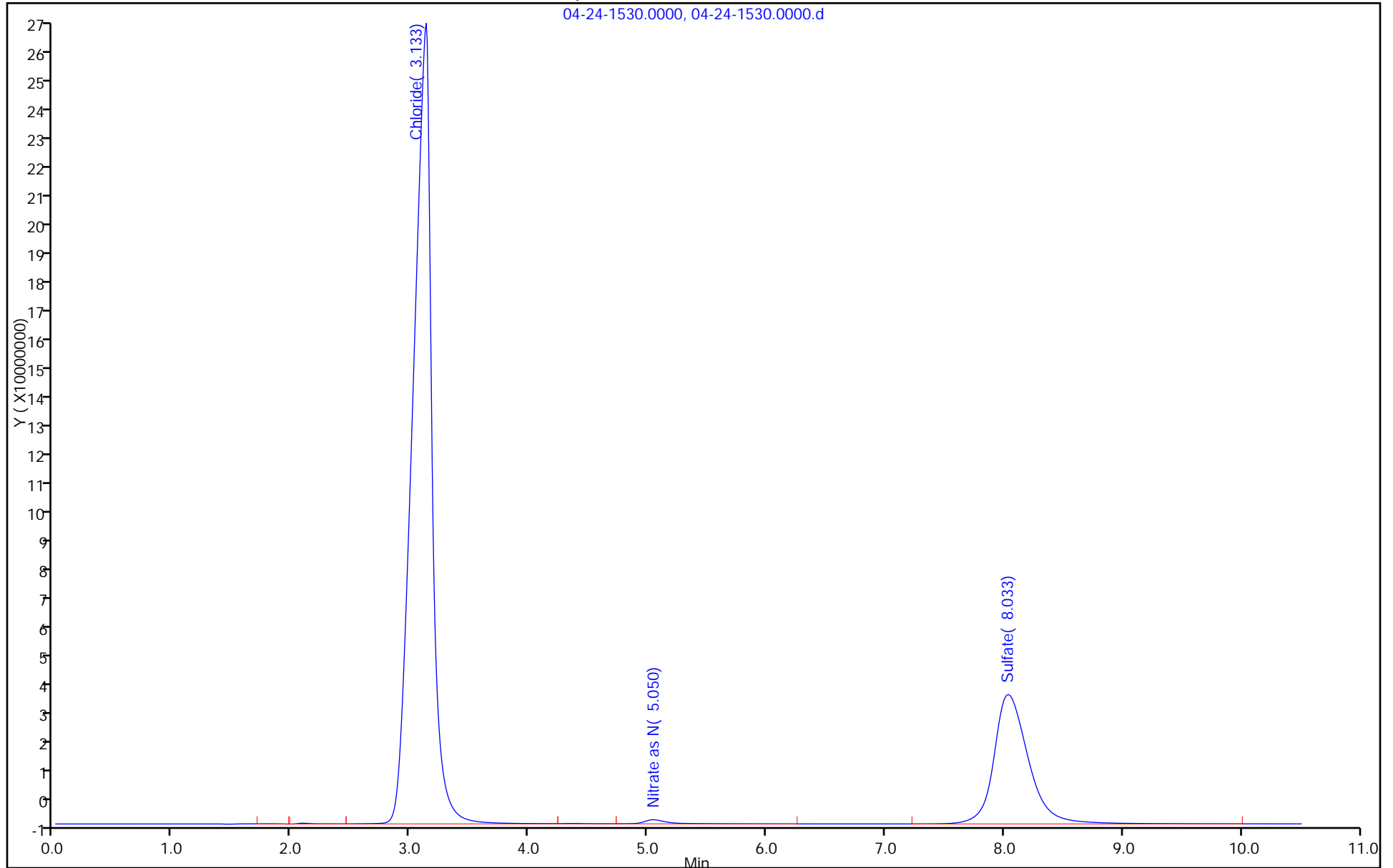
QC Flag Legend

Processing Flags
 E - Exceeded Maximum Amount
 H - Response Measured by Height

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1530.0000.d
Injection Date: 24-Apr-2015 23:17:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-2 Lab Sample ID: 180-43402-2
Client ID: HD-MW-114-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 30
ALS Bottle#: 0



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-114-0/1-0 Lab Sample ID: 180-43402-2
 Matrix: Water Lab File ID: 04-24-1531.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 11:11
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 23:30
 Con. Extract Vol.: _____ Dilution Factor: 10
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
16887-00-6	Chloride	150	B	10	2.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1531.0000.d
 Lims ID: 180-43402-A-2 Lab Sample ID: 180-43402-2
 Client ID: HD-MW-114-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 23:30:00 ALS Bottle#: 0 Worklist Smp#: 31
 Injection Vol: 25.0 ul Dil. Factor: 10.0000
 Sample Info: 180-0006626-031
 Misc. Info.: 23055 180-43402-a-2
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:16 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 25-Apr-2015 09:18:40

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	2.958	2.992	-0.034	29538756H	15.0	M
8 Nitrate as N	5.075	4.992	0.083	178996H	0.0697	
3 Sulfate	8.125	8.058	0.067	3249391H	5.59	

QC Flag Legend

Review Flags

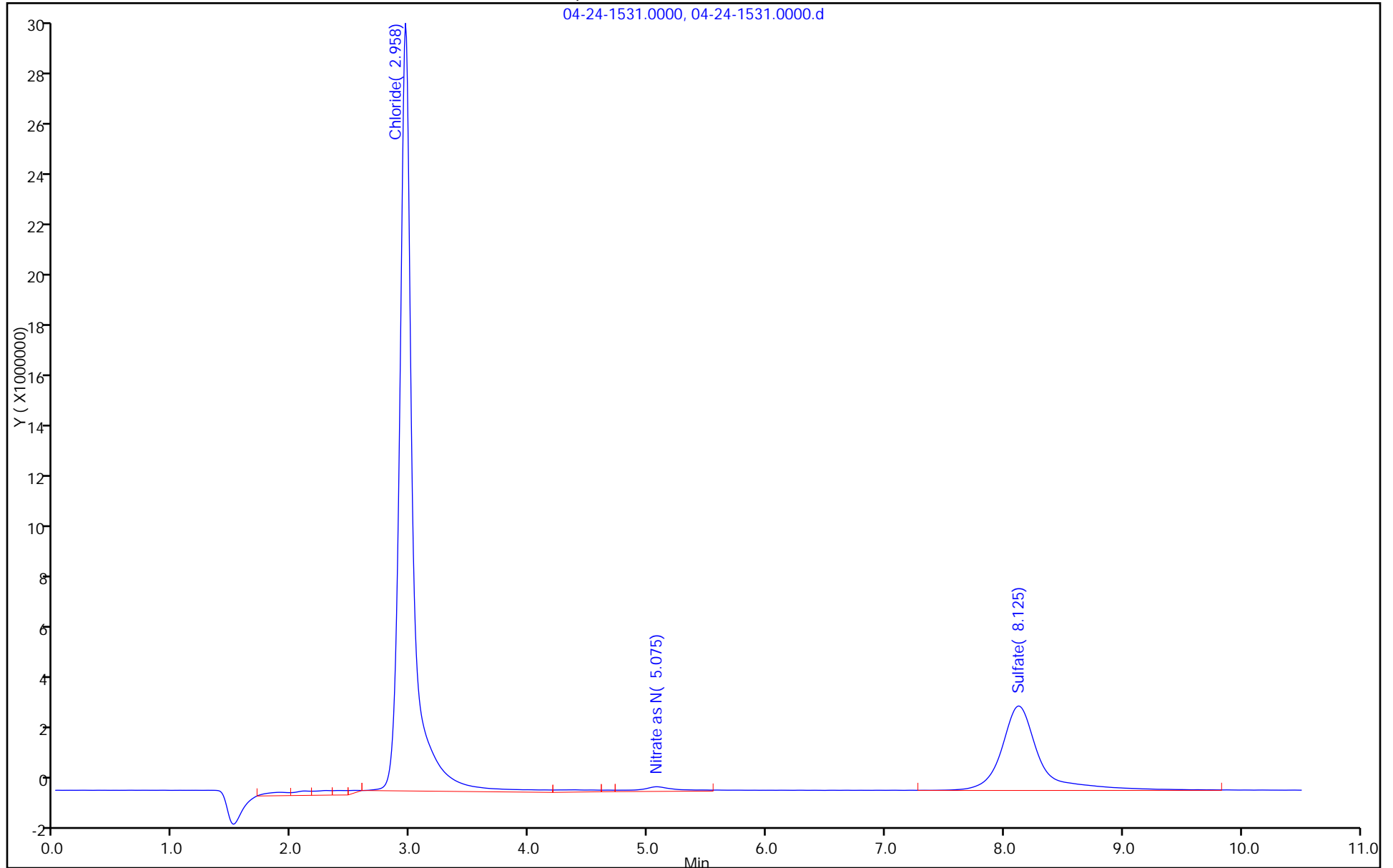
M - Manually Integrated

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1531.0000.d
Injection Date: 24-Apr-2015 23:30:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-2 Lab Sample ID: 180-43402-2
Client ID: HD-MW-114-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 31
ALS Bottle#: 0

04-24-1531.0000, 04-24-1531.0000.d



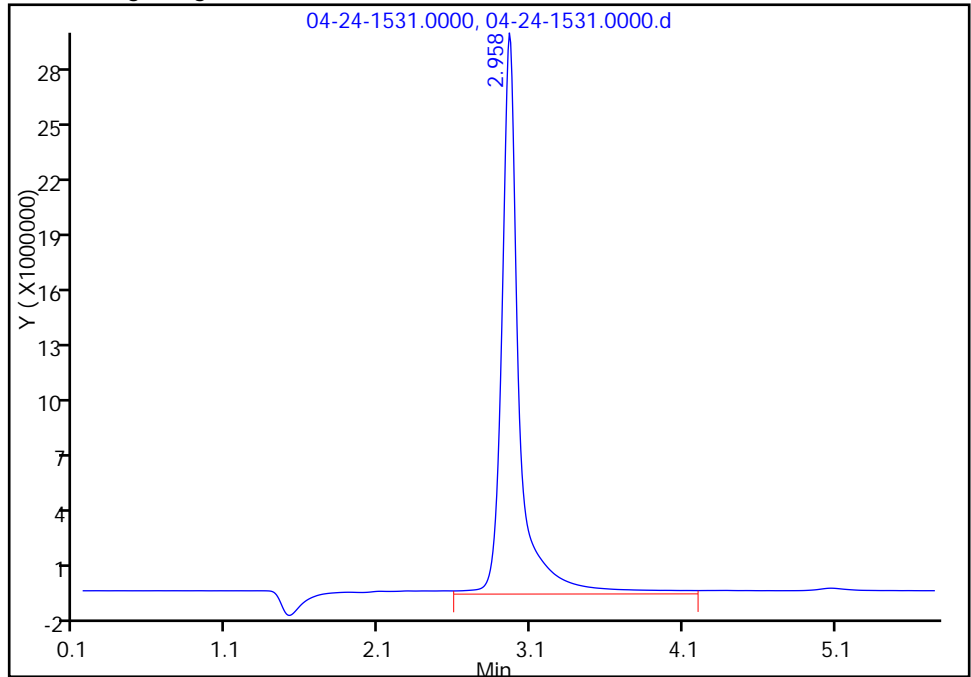
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1531.0000.d
Injection Date: 24-Apr-2015 23:30:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-2 Lab Sample ID: 180-43402-2
Client ID: HD-MW-114-0/1-0
Operator ID: ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

2 Chloride, CAS: 16887-00-6

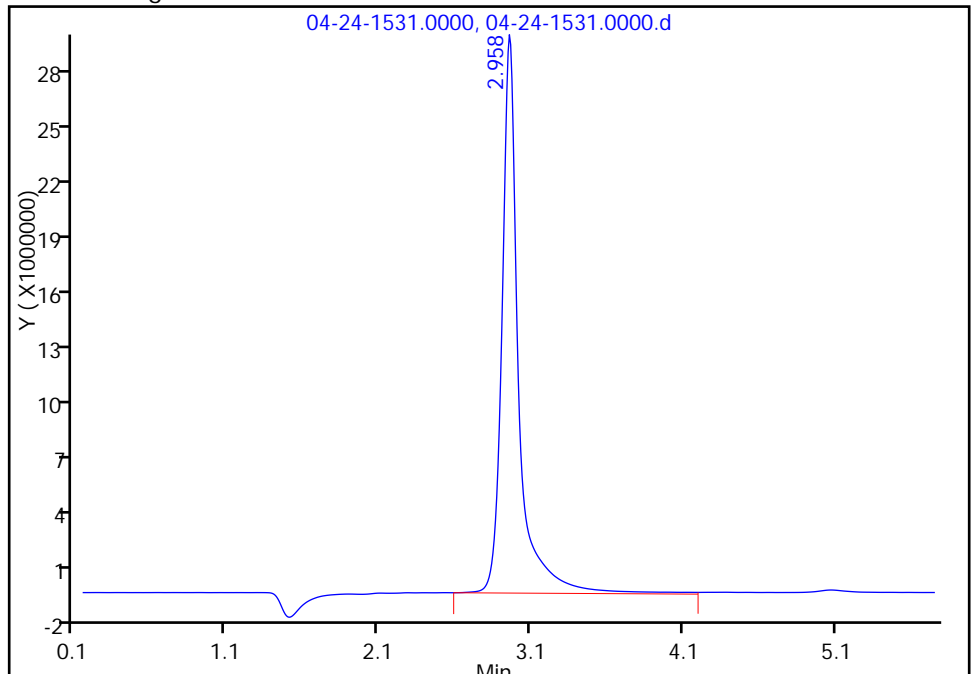
RT: 2.96
Height: 29688602
Amount: 15.090335
Amount Units: ug/ml

Processing Integration Results



RT: 2.96
Height: 29538756
Amount: 15.015249
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 25-Apr-2015 09:18:40
Audit Action: Assigned New Baseline
Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-132-0/1-0 Lab Sample ID: 180-43402-3
 Matrix: Water Lab File ID: 04-24-1532.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 13:07
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 23:43
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	4.2		0.10	0.0062
16887-00-6	Chloride	12	B	1.0	0.20
14808-79-8	Sulfate	2.8		1.0	0.21

TestAmerica Pittsburgh
 Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1532.0000.d
 Lims ID: 180-43402-A-3 Lab Sample ID: 180-43402-3
 Client ID: HD-MW-132-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 23:43:00 ALS Bottle#: 0 Worklist Smp#: 32
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-032
 Misc. Info.: 790 180-43402-a-3
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:16 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

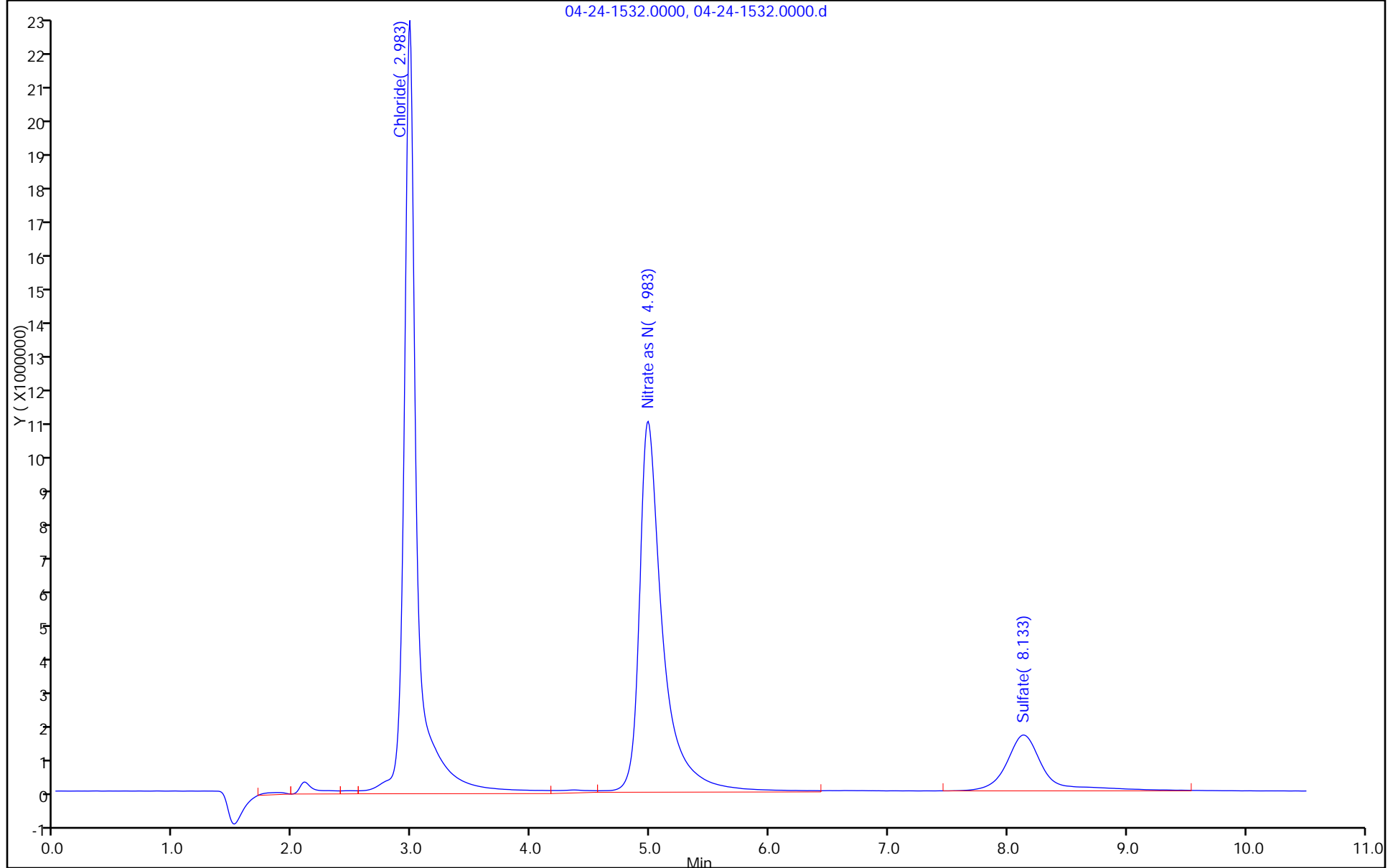
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	2.983	2.992	-0.009	22646338H	11.6	
8 Nitrate as N	4.983	4.992	-0.009	10858401H	4.23	
3 Sulfate	8.133	8.058	0.075	1636470H	2.81	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1532.0000.d
Injection Date: 24-Apr-2015 23:43:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-3 Lab Sample ID: 180-43402-3
Client ID: HD-MW-132-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 32
ALS Bottle#: 0

04-24-1532.0000, 04-24-1532.0000.d



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-39D-0/1-0 Lab Sample ID: 180-43402-4
 Matrix: Water Lab File ID: 04-24-1533.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 10:15
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 23:56
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.8		0.10	0.0062
16887-00-6	Chloride	91	B	1.0	0.20
14808-79-8	Sulfate	28		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1533.0000.d
 Lims ID: 180-43402-A-4 Lab Sample ID: 180-43402-4
 Client ID: HD-MW-39D-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 23:56:00 ALS Bottle#: 0 Worklist Smp#: 33
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-033
 Misc. Info.: 20339 180-43402-a-4
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:16 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

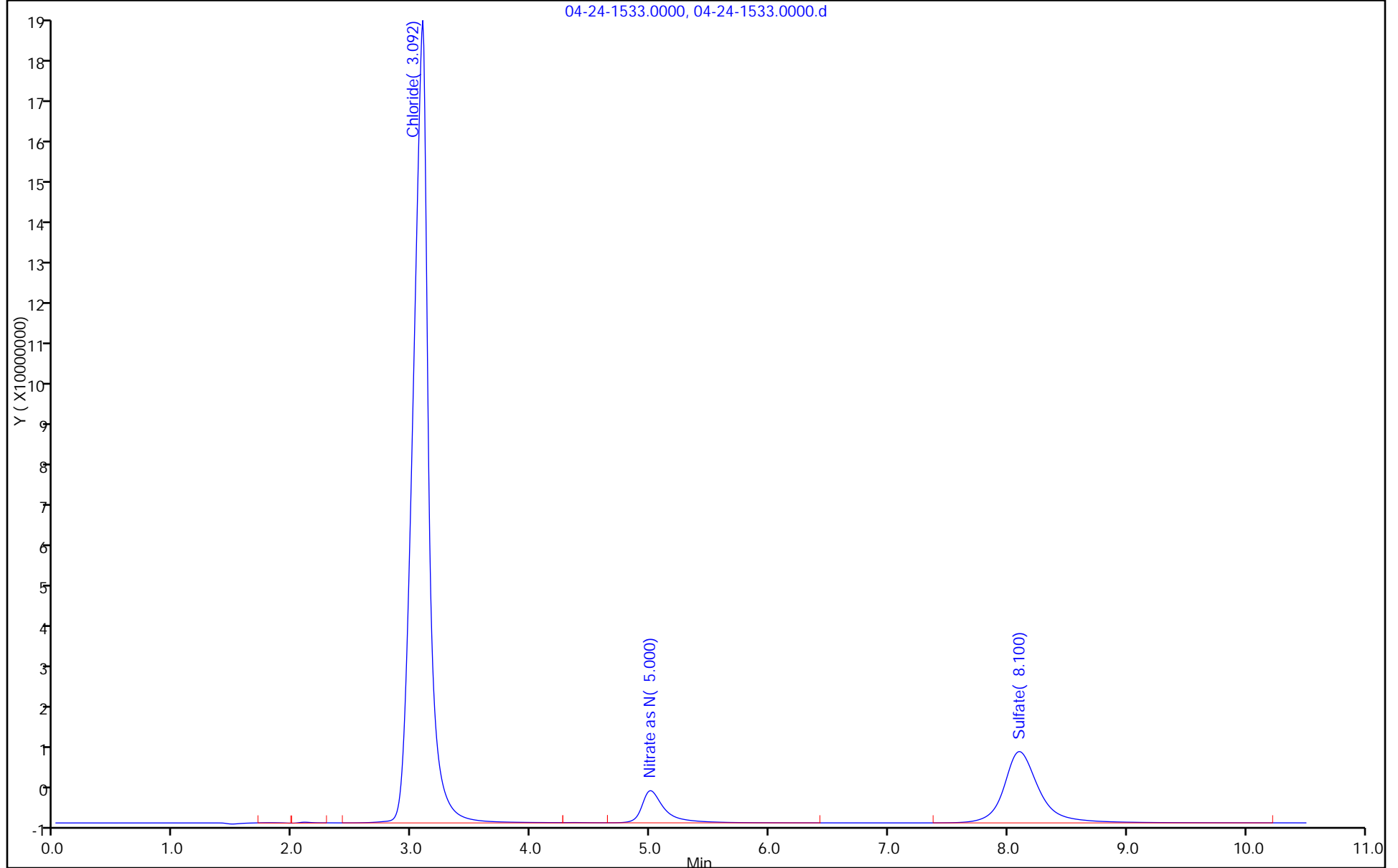
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.092	2.992	0.100	181432642H	91.1	
8 Nitrate as N	5.000	4.992	0.008	7259604H	2.83	
3 Sulfate	8.100	8.058	0.042	16120946H	27.7	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1533.0000.d
Injection Date: 24-Apr-2015 23:56:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-4 Lab Sample ID: 180-43402-4
Client ID: HD-MW-39D-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 33
ALS Bottle#: 0

04-24-1533.0000, 04-24-1533.0000.d



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-74S-0/1-0 Lab Sample ID: 180-43402-5
 Matrix: Water Lab File ID: 04-24-1537.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 09:10
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/25/2015 00:49
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	1.7		0.10	0.0062
16887-00-6	Chloride	74	B	1.0	0.20
14808-79-8	Sulfate	14		1.0	0.21

TestAmerica Pittsburgh
 Target Compound Quantitation Report

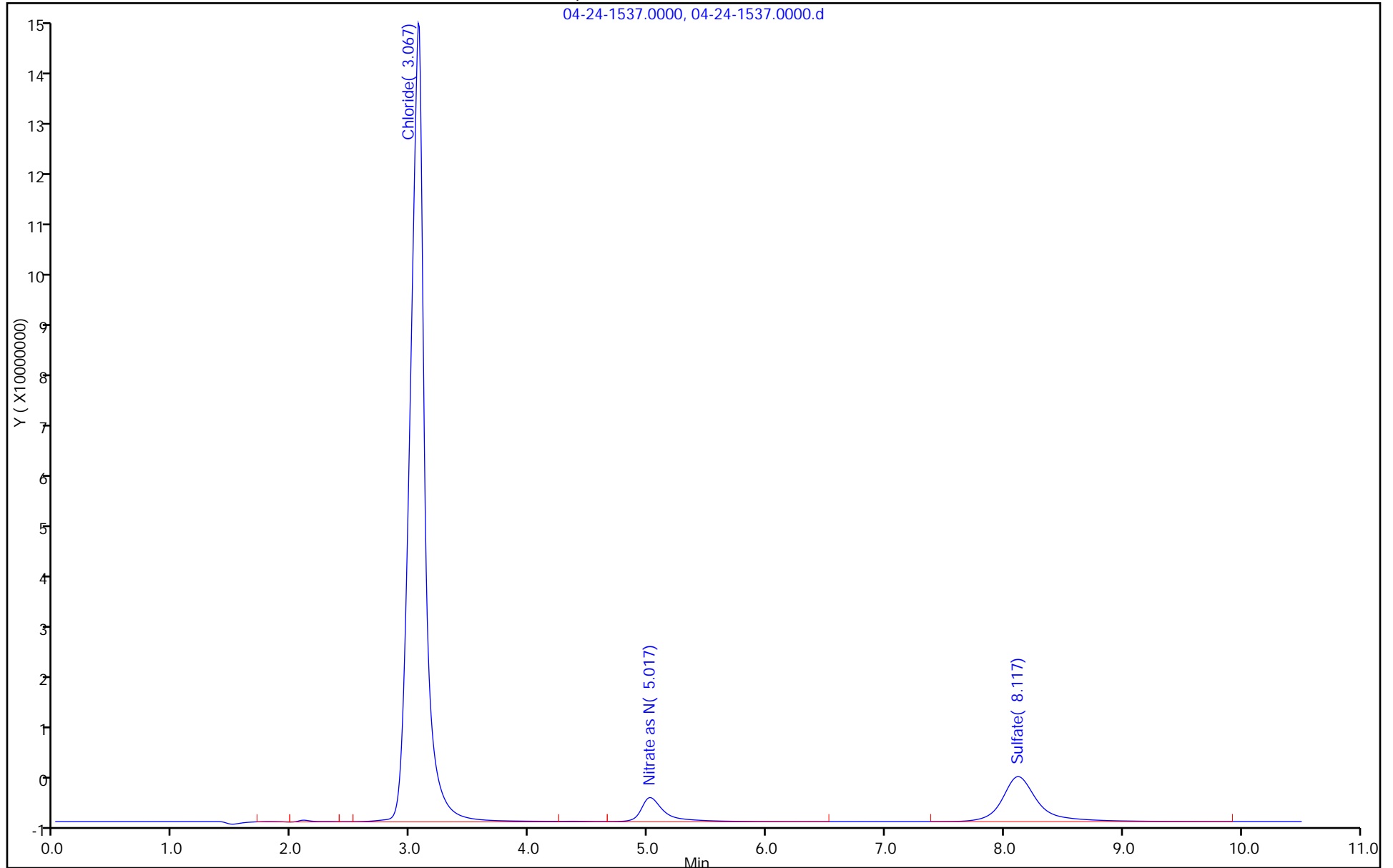
Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1537.0000.d
 Lims ID: 180-43402-A-5 Lab Sample ID: 180-43402-5
 Client ID: HD-MW-74S-0/1-0
 Sample Type: Client
 Inject. Date: 25-Apr-2015 00:49:00 ALS Bottle#: 0 Worklist Smp#: 37
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-037
 Misc. Info.: 5246 180-43402-a-5
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:16 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.067	2.992	0.075	148032719H	74.4	
8 Nitrate as N	5.017	4.992	0.025	4485855H	1.75	
3 Sulfate	8.117	8.058	0.059	8344816H	14.3	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1537.0000.d
Injection Date: 25-Apr-2015 00:49:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-5 Lab Sample ID: 180-43402-5
Client ID: HD-MW-74S-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 37
ALS Bottle#: 0



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-127-0/1-0 Lab Sample ID: 180-43402-6
 Matrix: Water Lab File ID: 04-24-1535.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/25/2015 00:22
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.0		0.10	0.0062
14808-79-8	Sulfate	5.6		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1535.0000.d
 Lims ID: 180-43402-A-6 Lab Sample ID: 180-43402-6
 Client ID: HD-MW-127-0/1-0
 Sample Type: Client
 Inject. Date: 25-Apr-2015 00:22:00 ALS Bottle#: 0 Worklist Smp#: 35
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-035
 Misc. Info.: 26068 180-43402-a-6
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:16 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.125	2.992	0.133	240456895H	120.7	E
8 Nitrate as N	5.017	4.992	0.025	5037396H	1.96	
3 Sulfate	8.133	8.058	0.075	3278502H	5.64	

QC Flag Legend

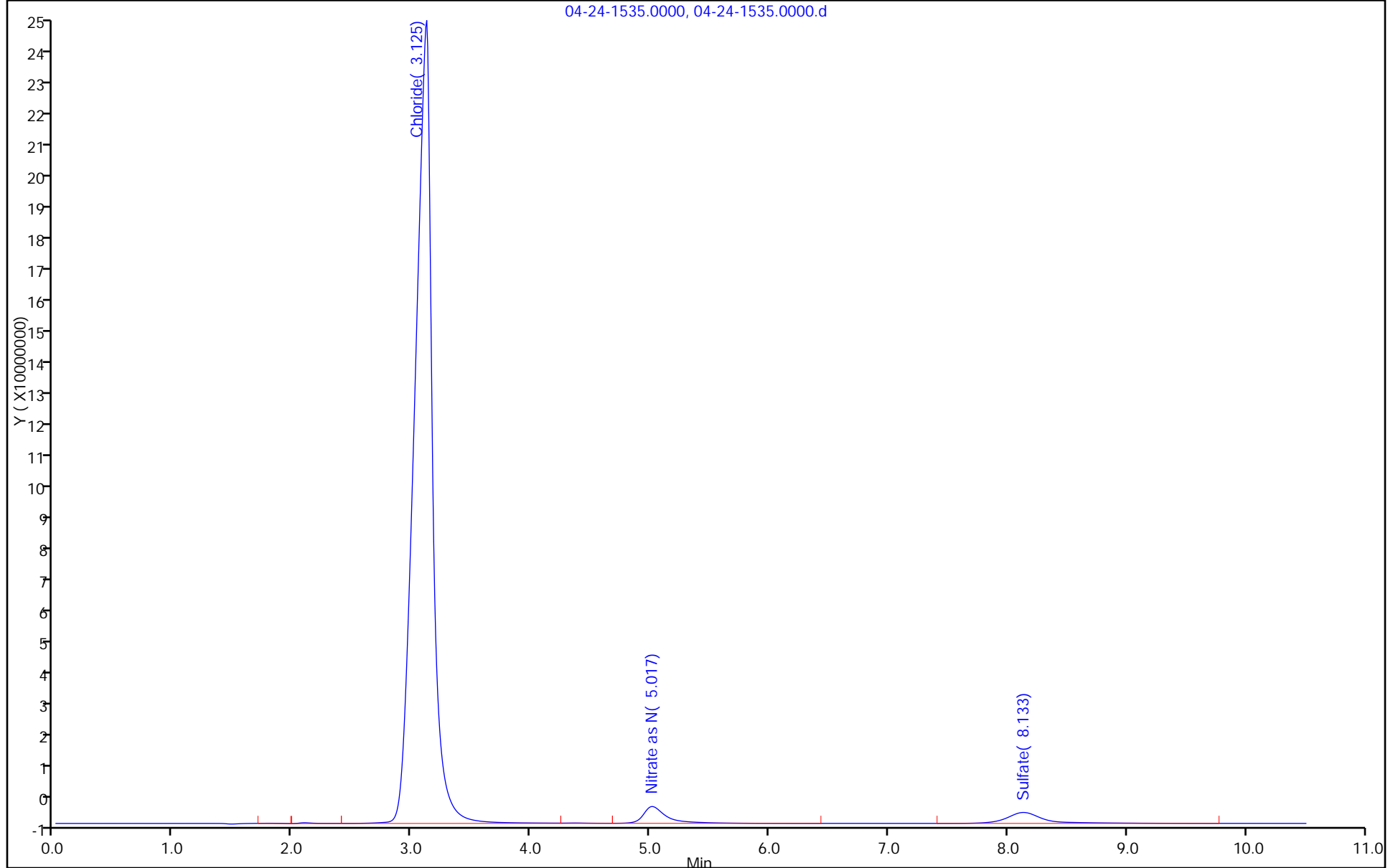
Processing Flags
 E - Exceeded Maximum Amount
 H - Response Measured by Height

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1535.0000.d
Injection Date: 25-Apr-2015 00:22:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-6 Lab Sample ID: 180-43402-6
Client ID: HD-MW-127-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 35
ALS Bottle#: 0

04-24-1535.0000, 04-24-1535.0000.d



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-127-0/1-0 Lab Sample ID: 180-43402-6
 Matrix: Water Lab File ID: 04-24-1536.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 11:40
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/25/2015 00:36
 Con. Extract Vol.: _____ Dilution Factor: 10
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
16887-00-6	Chloride	130	B	10	2.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1536.0000.d
 Lims ID: 180-43402-A-6 Lab Sample ID: 180-43402-6
 Client ID: HD-MW-127-0/1-0
 Sample Type: Client
 Inject. Date: 25-Apr-2015 00:36:00 ALS Bottle#: 0 Worklist Smp#: 36
 Injection Vol: 25.0 ul Dil. Factor: 10.0000
 Sample Info: 180-0006626-036
 Misc. Info.: 19574 180-43402-a-6
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:16 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 25-Apr-2015 09:19:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	2.958	2.992	-0.034	24886267H	12.7	M
8 Nitrate as N	5.058	4.992	0.066	537868H	0.2095	
3 Sulfate	8.125	8.058	0.067	457639H	0.7869	

QC Flag Legend

Review Flags

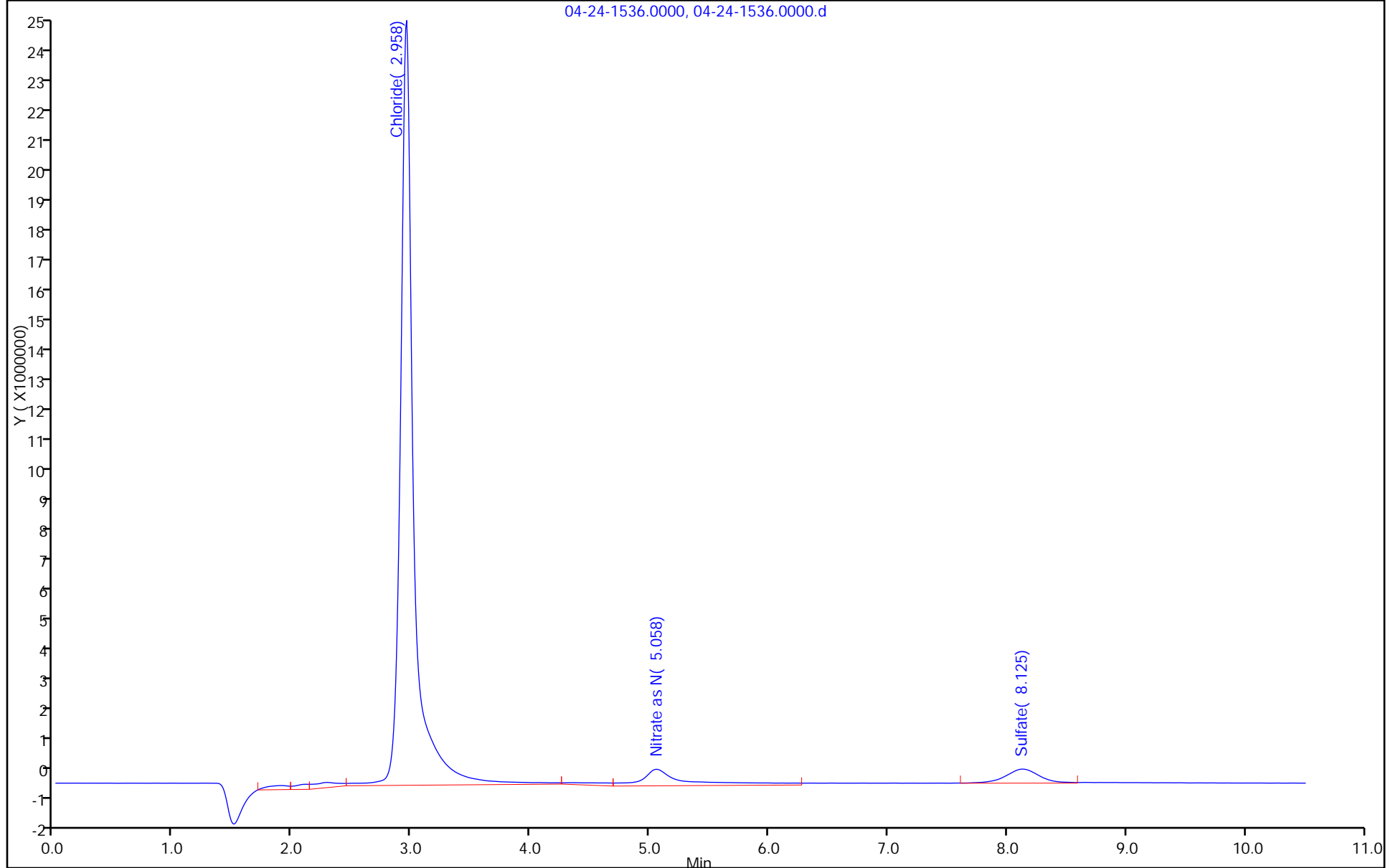
M - Manually Integrated

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1536.0000.d
Injection Date: 25-Apr-2015 00:36:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-6 Lab Sample ID: 180-43402-6
Client ID: HD-MW-127-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 36
ALS Bottle#: 0

04-24-1536.0000, 04-24-1536.0000.d



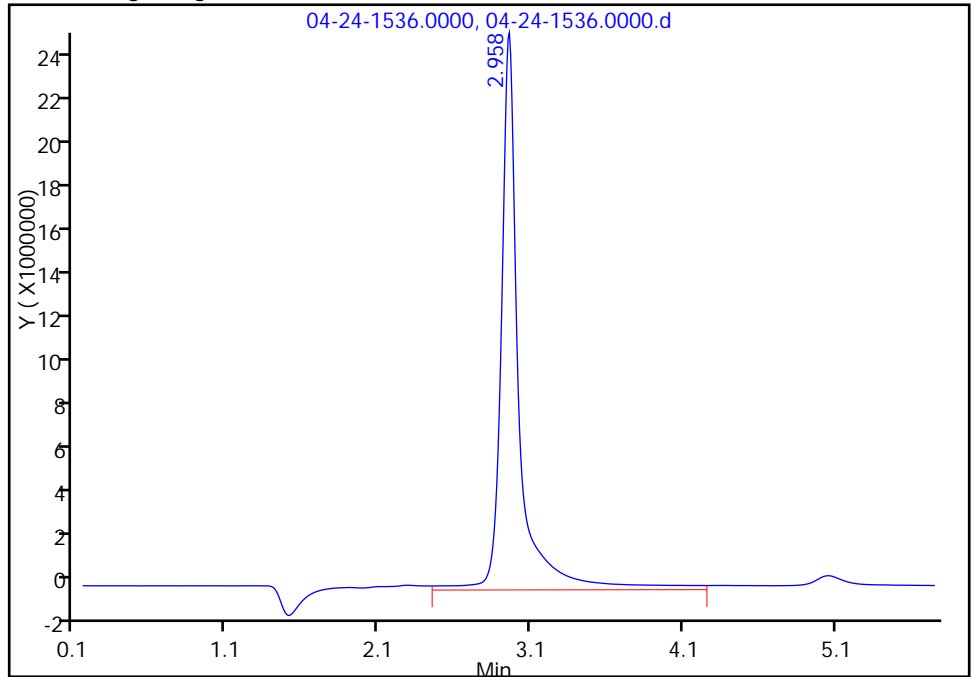
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1536.0000.d	Instrument ID:	CHIC25	Worklist Smp#:	36
Injection Date:	25-Apr-2015 00:36:00	Lab Sample ID:	180-43402-6		
Lims ID:	180-43402-A-6				
Client ID:	HD-MW-127-0/1-0				
Operator ID:		ALS Bottle#:	0		
Injection Vol:	25.0 ul	Dil. Factor:	10.0000		
Method:	300_9056_CHIC25	Limit Group:	GC Anions ICAL		
Column:		Detector:	0008		

2 Chloride, CAS: 16887-00-6

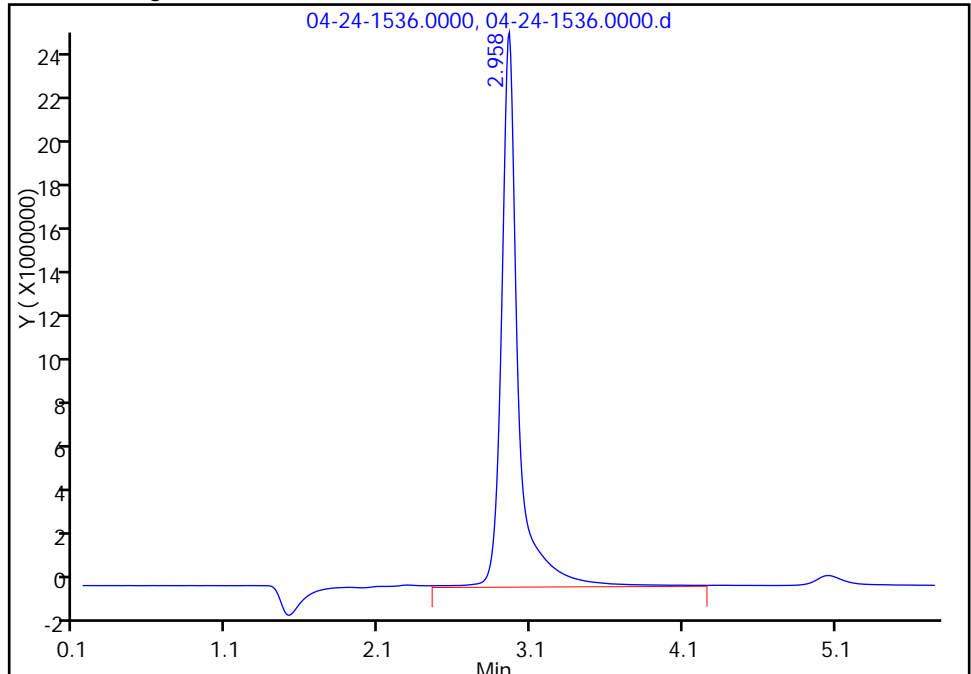
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Height: 25003038
Amount: 12.742448
Amount Units: ug/ml

Processing Integration Results



RT: 2.96
Height: 24886267
Amount: 12.683935
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 25-Apr-2015 09:19:22
Audit Action: Assigned New Baseline
Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-51D-0/1-0 Lab Sample ID: 180-43402-7
 Matrix: Water Lab File ID: 04-24-1541.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 12:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/25/2015 01:41
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.98		0.10	0.0062
16887-00-6	Chloride	82	B	1.0	0.20
14808-79-8	Sulfate	37		1.0	0.21

TestAmerica Pittsburgh
 Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1541.0000.d
 Lims ID: 180-43402-A-7 Lab Sample ID: 180-43402-7
 Client ID: HD-MW-51D-0/1-0
 Sample Type: Client
 Inject. Date: 25-Apr-2015 01:41:00 ALS Bottle#: 0 Worklist Smp#: 41
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-041
 Misc. Info.: 6959 180-43402-a-7
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:14 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

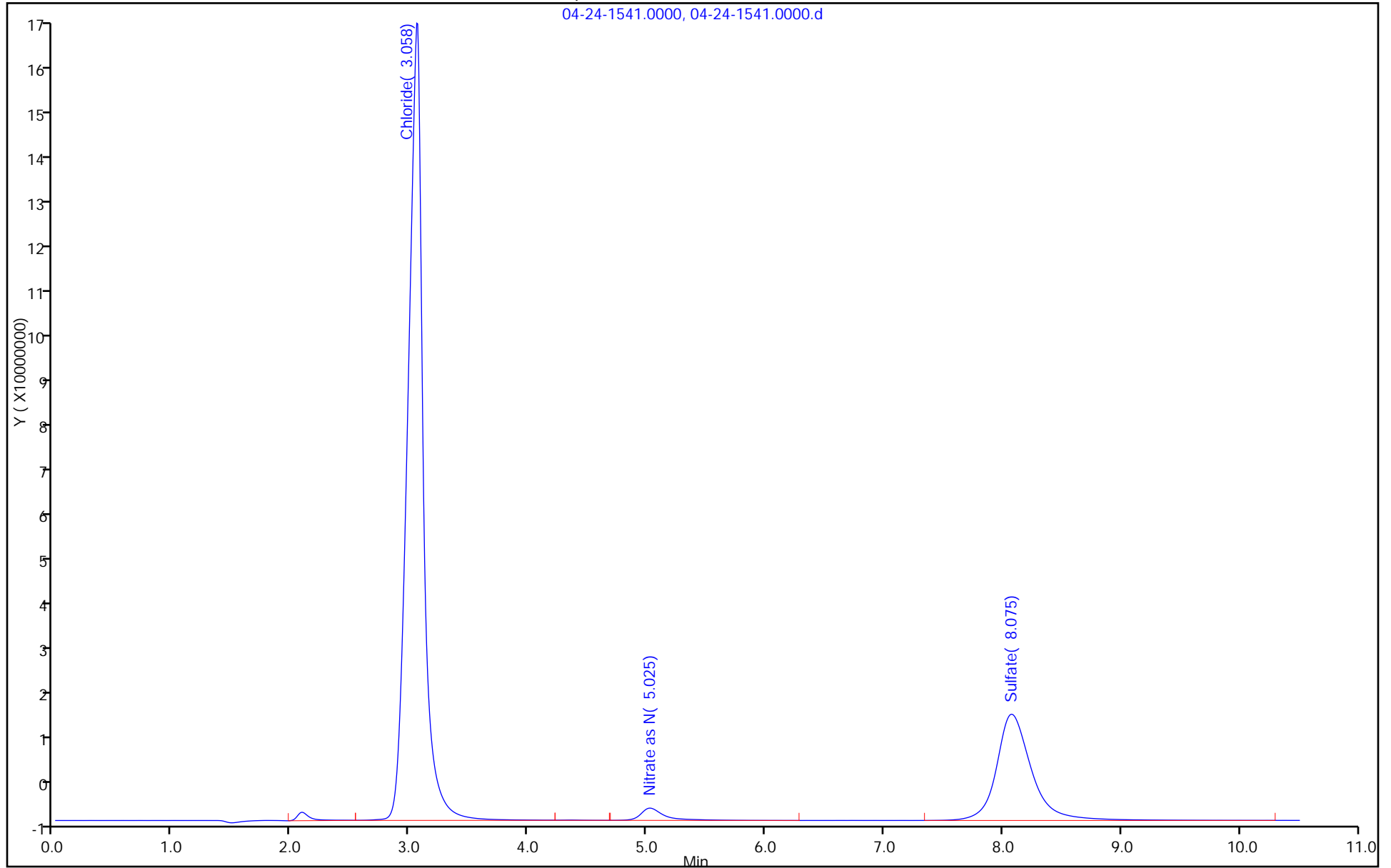
First Level Reviewer: hartmanm Date: 25-Apr-2015 09:06:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.058	2.992	0.066	162948830H	81.9	
8 Nitrate as N	5.025	4.983	0.042	2505338H	0.9758	
3 Sulfate	8.075	8.050	0.025	21715062H	37.3	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1541.0000.d
Injection Date: 25-Apr-2015 01:41:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-7 Lab Sample ID: 180-43402-7
Client ID: HD-MW-51D-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 41
ALS Bottle#: 0



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-50S-0/1-0 Lab Sample ID: 180-43402-8
 Matrix: Water Lab File ID: 04-24-1524.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 11:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 21:59
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.2		0.10	0.0062
14808-79-8	Sulfate	50		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1524.0000.d
 Lims ID: 180-43402-A-8 Lab Sample ID: 180-43402-8
 Client ID: HD-MW-50S-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 21:59:00 ALS Bottle#: 0 Worklist Smp#: 24
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-024
 Misc. Info.: 20919 180-43402-a-8
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:19 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.158	3.000	0.158	288805138H	144.9	E
8 Nitrate as N	5.042	4.992	0.050	5704089H	2.22	
3 Sulfate	8.108	8.058	0.050	29316971H	50.4	

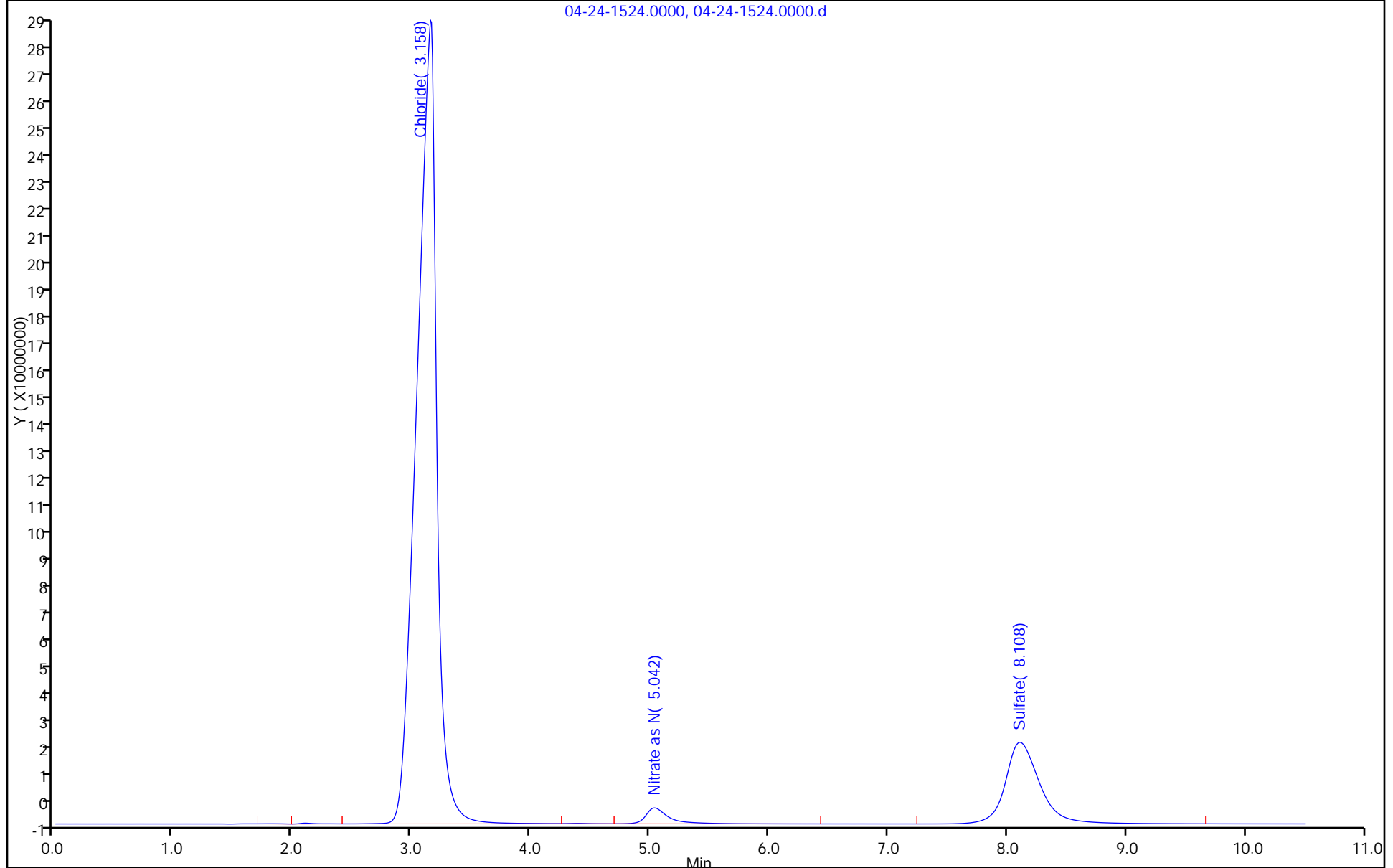
QC Flag Legend

Processing Flags
 E - Exceeded Maximum Amount
 H - Response Measured by Height

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1524.0000.d
Injection Date: 24-Apr-2015 21:59:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-8 Lab Sample ID: 180-43402-8
Client ID: HD-MW-50S-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 24
ALS Bottle#: 0



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: HD-MW-50S-0/1-0 Lab Sample ID: 180-43402-8
 Matrix: Water Lab File ID: 04-24-1525.0000.d
 Analysis Method: 300.0 Date Collected: 04/23/2015 11:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 22:12
 Con. Extract Vol.: _____ Dilution Factor: 10
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
16887-00-6	Chloride	170	B	10	2.0

TestAmerica Pittsburgh
 Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1525.0000.d
 Lims ID: 180-43402-A-8 Lab Sample ID: 180-43402-8
 Client ID: HD-MW-50S-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 22:12:00 ALS Bottle#: 0 Worklist Smp#: 25
 Injection Vol: 25.0 ul Dil. Factor: 10.0000
 Sample Info: 180-0006626-025
 Misc. Info.: 32 180-43402-a-8 10
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:19 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

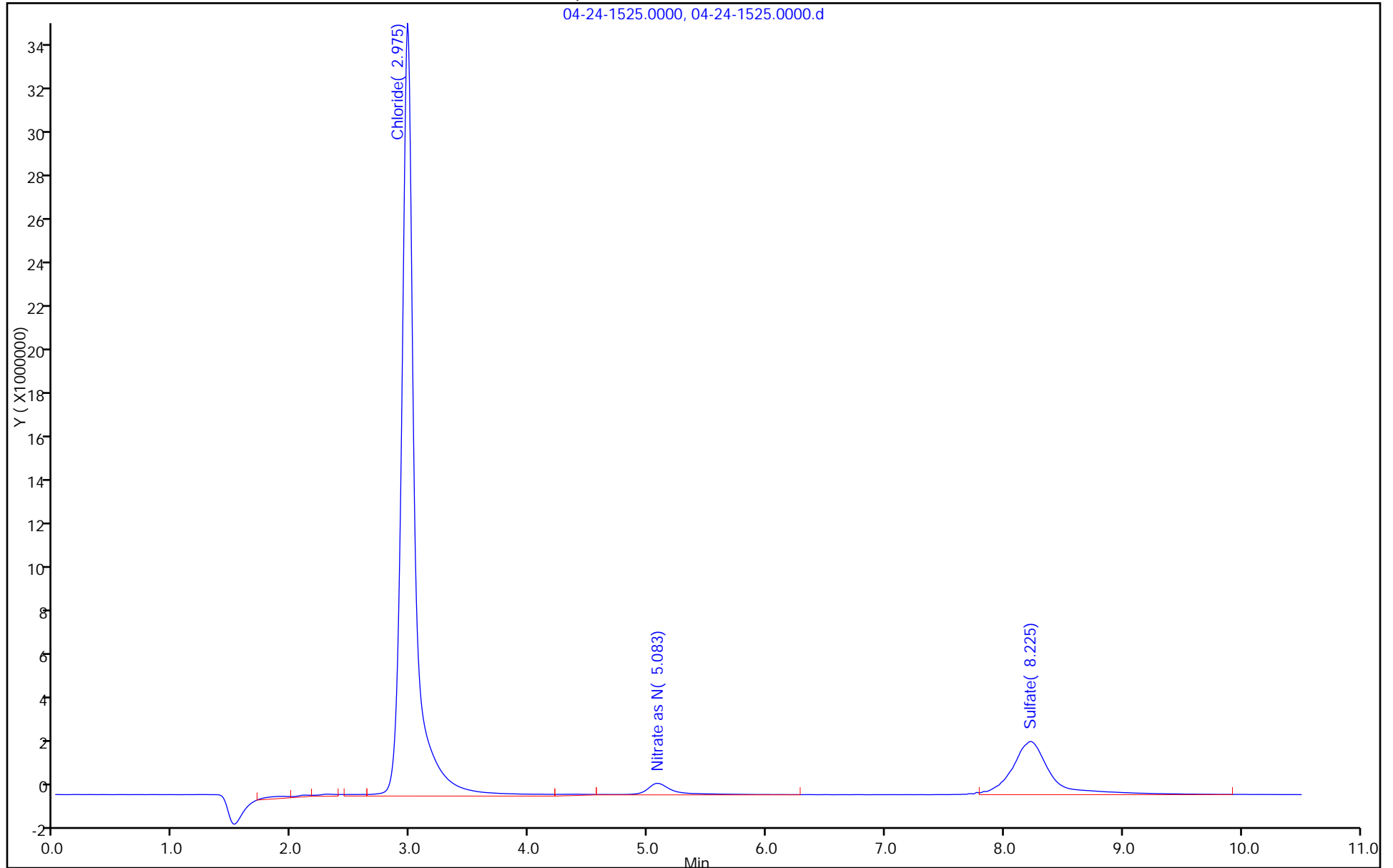
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	2.975	3.000	-0.025	34448700H	17.5	
8 Nitrate as N	5.083	4.992	0.091	514033H	0.2002	
3 Sulfate	8.225	8.058	0.167	2370031H	4.08	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1525.0000.d
Injection Date: 24-Apr-2015 22:12:00 Instrument ID: CHIC25
Lims ID: 180-43402-A-8 Lab Sample ID: 180-43402-8
Client ID: HD-MW-50S-0/1-0
Injection Vol: 25.0 ul Dil. Factor: 10.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL

Operator ID:
Worklist Smp#: 25
ALS Bottle#: 0

04-24-1525.0000, 04-24-1525.0000.d



FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1 Analy Batch No.: 139491

SDG No.: _____

Instrument ID: CHIC25 GC Column: AS-14 ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 04/23/2015 18:40 Calibration End Date: 04/23/2015 19:45 Calibration ID: 23497

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-139491/2	04-23-1502.0000.d
Level 2	IC 180-139491/3	04-23-1503.0000.d
Level 3	ICRT 180-139491/4	04-23-1504.0000.d
Level 4	IC 180-139491/5	04-23-1505.0000.d
Level 5	IC 180-139491/6	04-23-1506.0000.d
Level 6	IC 180-139491/7	04-23-1507.0000.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Fluoride	2.108	2.108	2.108	2.108	2.108	2.117					1.758 - 2.458	2.110
Chloride	2.975	2.992	2.992	3.008	3.050	3.108					2.700 - 3.400	3.021
Nitrite as N	3.542	3.542	3.533	3.533	3.542	3.550					3.442 - 3.642	3.540
Bromide	4.450	4.442	4.433	4.425	4.417	4.417					4.067 - 4.767	4.431
Nitrate as N	5.208	5.183	5.158	5.142	5.108	5.083					5.008 - 5.208	5.147
Orthophosphate as P	+++++	6.958	6.958	6.950	6.942	6.925					6.833 - 7.033	6.947
Sulfate	8.567	8.575	8.558	8.542	8.500	8.425					8.150 - 8.850	8.528

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1 Analy Batch No.: 139491

SDG No.: _____

Instrument ID: CHIC25 GC Column: AS-14 ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 04/23/2015 18:40 Calibration End Date: 04/23/2015 19:45 Calibration ID: 23497

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-139491/2	04-23-1502.0000.d
Level 2	IC 180-139491/3	04-23-1503.0000.d
Level 3	ICRT 180-139491/4	04-23-1504.0000.d
Level 4	IC 180-139491/5	04-23-1505.0000.d
Level 5	IC 180-139491/6	04-23-1506.0000.d
Level 6	IC 180-139491/7	04-23-1507.0000.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Fluoride	2349960 2744792	2872496 2881013	2804016	2762733	Lin2	-23705.062	2844878.29							0.9990		0.9950
Chloride	1586918 2050516	1762551 1837593	1974854	2172978	Lin2	-426448.56	1995651.57							0.9950		0.9950
Nitrite as N	2441700 2760843	2477800 3057300	2498838	2613914	LinF		2981340.86							0.9960		0.9950
Bromide	447570 488700	446425 551888	457629	472717	LinF		536395.578							0.9950		0.9950
Nitrate as N	2159960 2345954	2142124 2636787	2232546	2327721	LinF		2567388.92							0.9960		0.9950
Orthophosphate as P	++++ 615120	553760 665360	571078	615843	Lin2	-24876.269	642044.210							0.9980		0.9950
Sulfate	485842 534861	444047 597386	471445	514859	LinF		581582.207							0.9960		0.9950

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1 Analy Batch No.: 139491

SDG No.: _____

Instrument ID: CHIC25 GC Column: AS-14 ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 04/23/2015 18:40 Calibration End Date: 04/23/2015 19:45 Calibration ID: 23497

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-139491/2	04-23-1502.0000.d
Level 2	IC 180-139491/3	04-23-1503.0000.d
Level 3	ICRT 180-139491/4	04-23-1504.0000.d
Level 4	IC 180-139491/5	04-23-1505.0000.d
Level 5	IC 180-139491/6	04-23-1506.0000.d
Level 6	IC 180-139491/7	04-23-1507.0000.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Fluoride	Lin2	117498 14405063	718124	1402008	2762733	6861981	0.0500 5.00	0.250	0.500	1.00	2.50
Chloride	Lin2	1586918 183759255	8812756	19748544	43459563	102525806	1.00 100	5.00	10.0	20.0	50.0
Nitrite as N	LinF	122085 15286501	619450	1249419	2613914	6902108	0.0500 5.00	0.250	0.500	1.00	2.50
Bromide	LinF	89514 11037760	446425	915258	1890867	4887004	0.200 20.0	1.00	2.00	4.00	10.0
Nitrate as N	LinF	107998 13183933	535531	1116273	2327721	5864886	0.0500 5.00	0.250	0.500	1.00	2.50
Orthophosphate as P	Lin2	++++ 3326802	138440	285539	615843	1537800	++++ 5.00	0.250	0.500	1.00	2.50
Sulfate	LinF	485842 59738616	2220236	4714446	10297172	26743066	1.00 100	5.00	10.0	20.0	50.0

Curve Type Legend:

Lin2 = Linear 1/conc^2 by height
LinF = Linear Forced Zero by Height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1502.0000.d
 Lims ID: ic I2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 23-Apr-2015 18:40:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006608-002
 Misc. Info.: 2 ic I2
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 24-Apr-2015 15:23:26 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK005

First Level Reviewer: hartmanm Date: 24-Apr-2015 15:14:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.108	2.108	0.000	117498H	0.0500	0.0496	M
2 Chloride	2.975	3.050	-0.075	1586918H	1.00	1.01	M
10 Nitrite as N	3.542	3.542	0.000	122085H	0.0500	0.0409	M
4 Bromide	4.450	4.417	0.033	89514H	0.2000	0.1669	M
8 Nitrate as N	5.208	5.108	0.100	107998H	0.0500	0.0421	M
9 Orthophosphate as P	7.008	6.933	0.075	29054H	0.0500	0.0840	M
3 Sulfate	8.567	8.500	0.067	485842H	1.00	0.8354	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

ICSTDL2_00173

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1502.0000.d

Injection Date: 23-Apr-2015 18:40:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ic l2

Worklist Smp#: 2

Client ID:

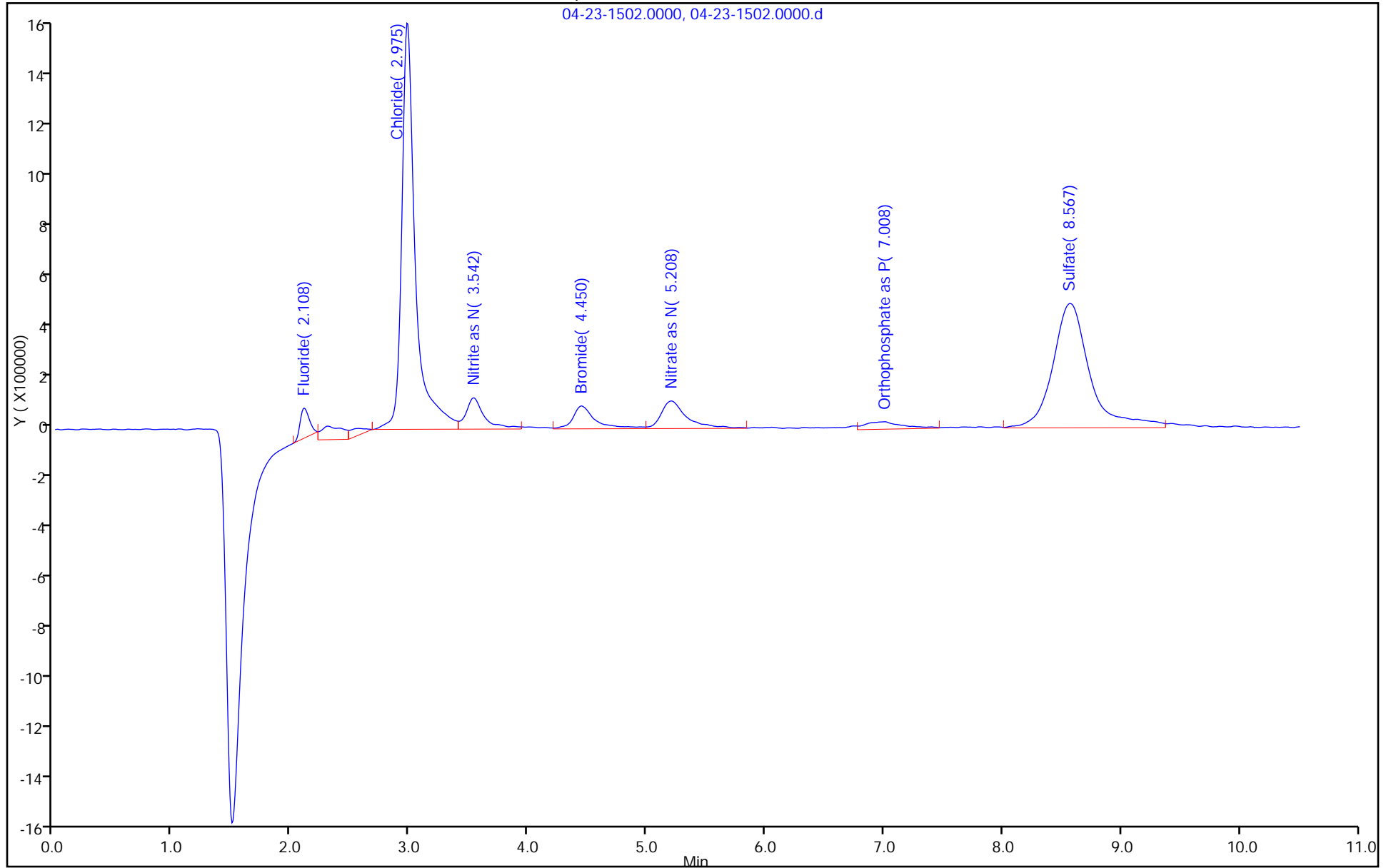
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



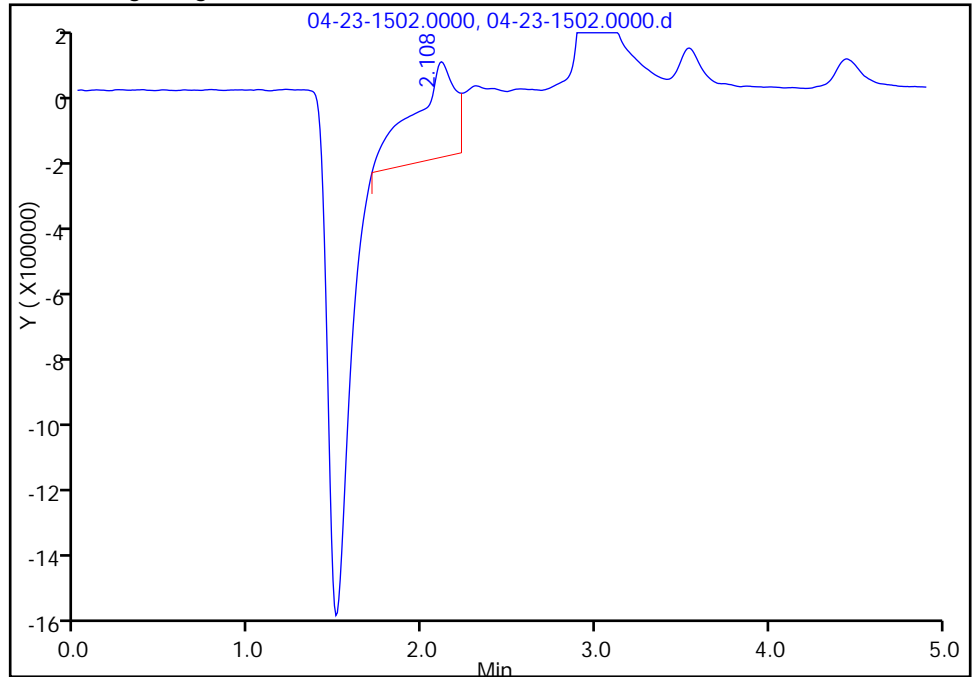
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1502.0000.d
Injection Date: 23-Apr-2015 18:40:00 Instrument ID: CHIC25
Lims ID: ic I2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

1 Fluoride, CAS: 16984-48-8

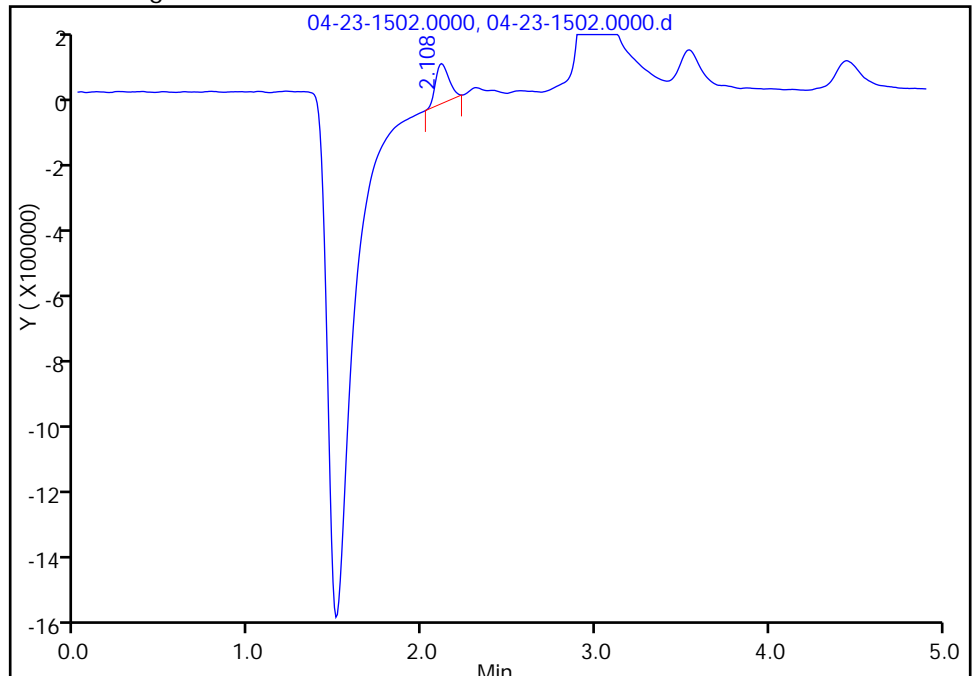
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Height: 279411
Amount: 0.106499
Amount Units: ug/ml

Processing Integration Results



RT: 2.11
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Amount: 0.049634
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 24-Apr-2015 15:19:36
Audit Action: Manually Integrated
Audit Reason: Baseline

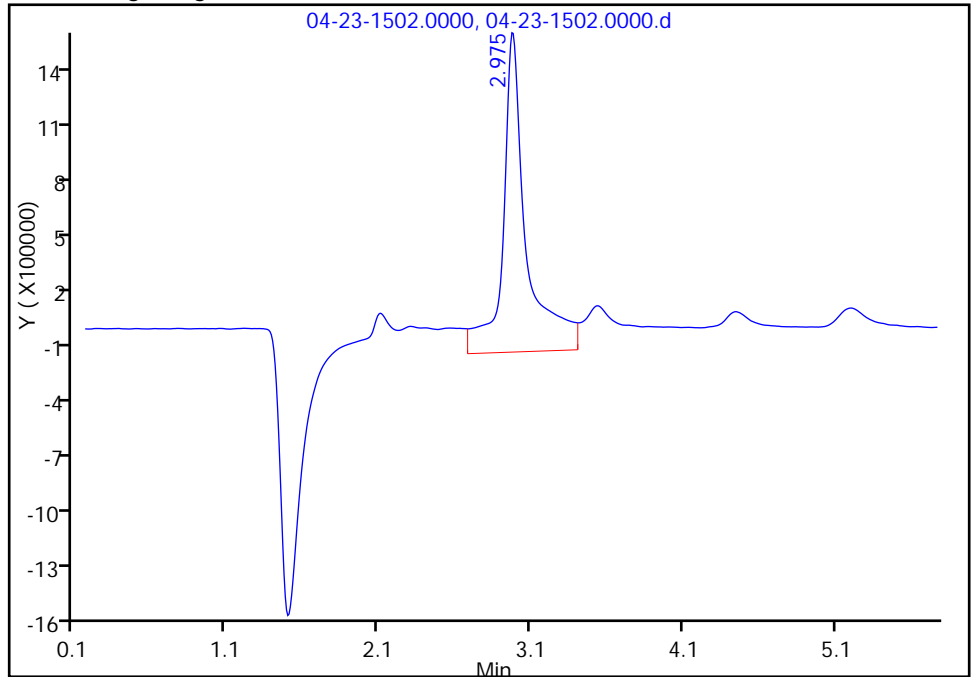
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1502.0000.d
Injection Date: 23-Apr-2015 18:40:00 Instrument ID: CHIC25
Lims ID: ic I2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

2 Chloride, CAS: 16887-00-6

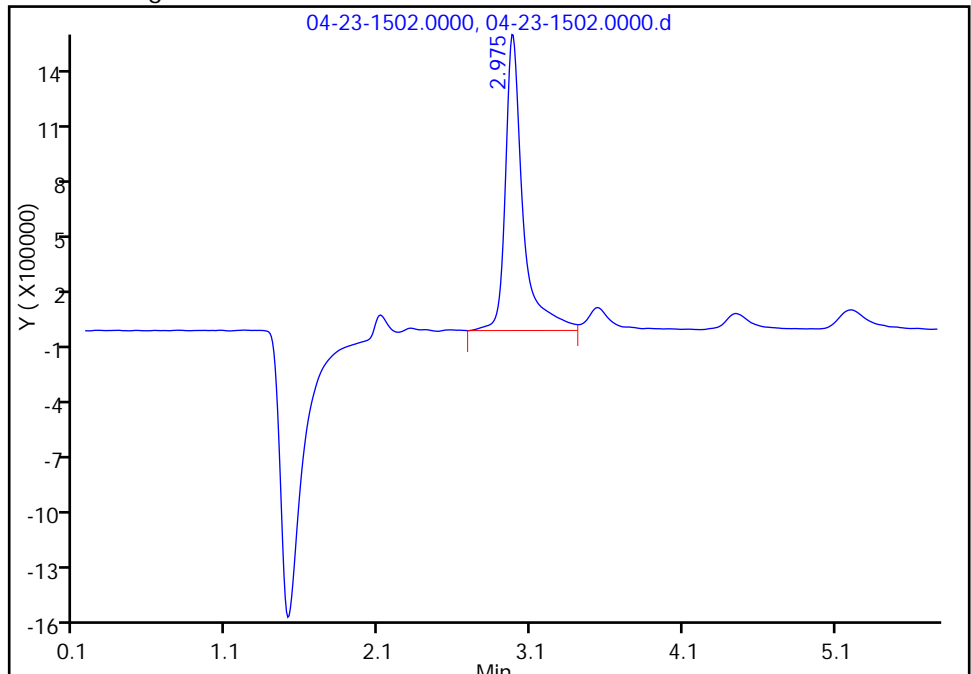
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Height: 1712389
Amount: 1.010644
Amount Units: ug/ml

Processing Integration Results



RT: 2.98
Height: 1586918
Amount: 1.008877
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 24-Apr-2015 15:19:36
Audit Action: Assigned New Baseline
Audit Reason: Baseline

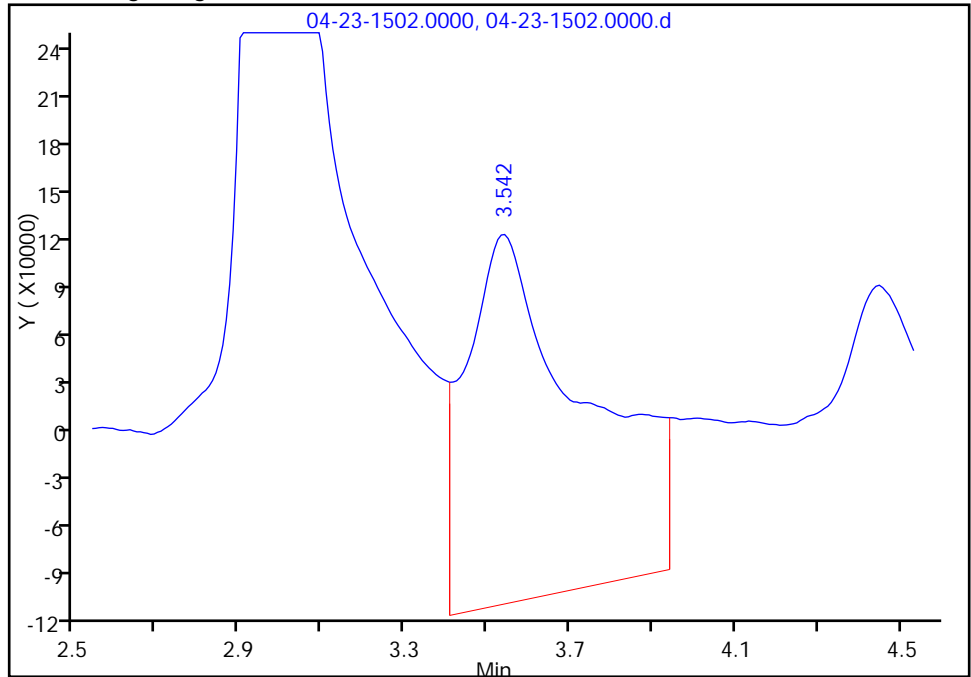
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1502.0000.d
Injection Date: 23-Apr-2015 18:40:00 Instrument ID: CHIC25
Lims ID: ic I2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

10 Nitrite as N, CAS: 14797-65-0

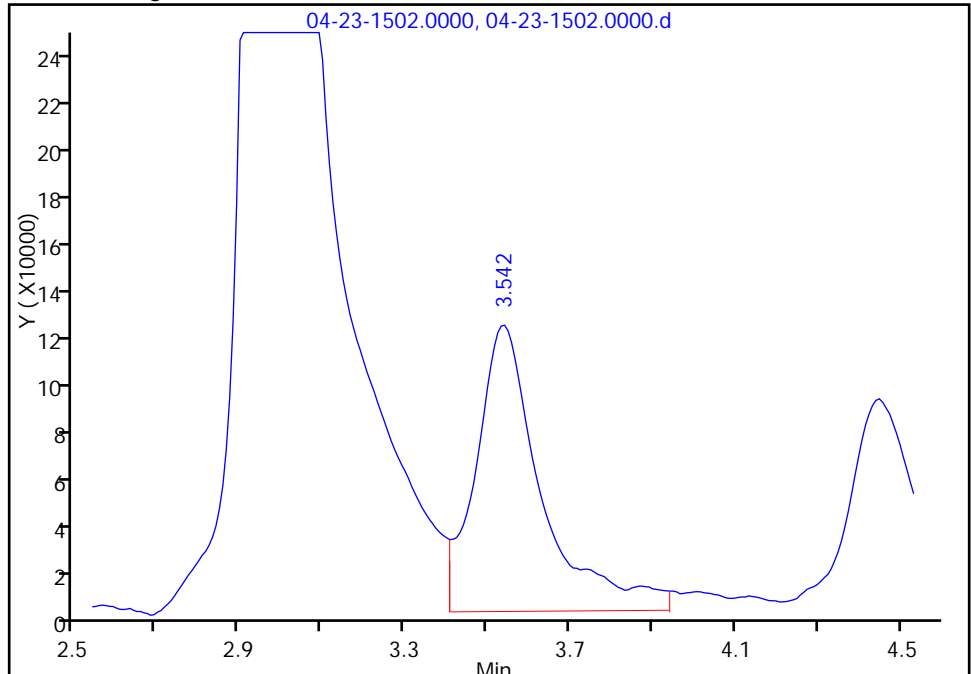
RT: 3.54
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Amount: 0.076675
Amount Units: ug/ml

Processing Integration Results



RT: 3.54
Height: 122085
Amount: 0.040950
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 24-Apr-2015 15:19:36
Audit Action: Assigned New Baseline
Audit Reason: Baseline

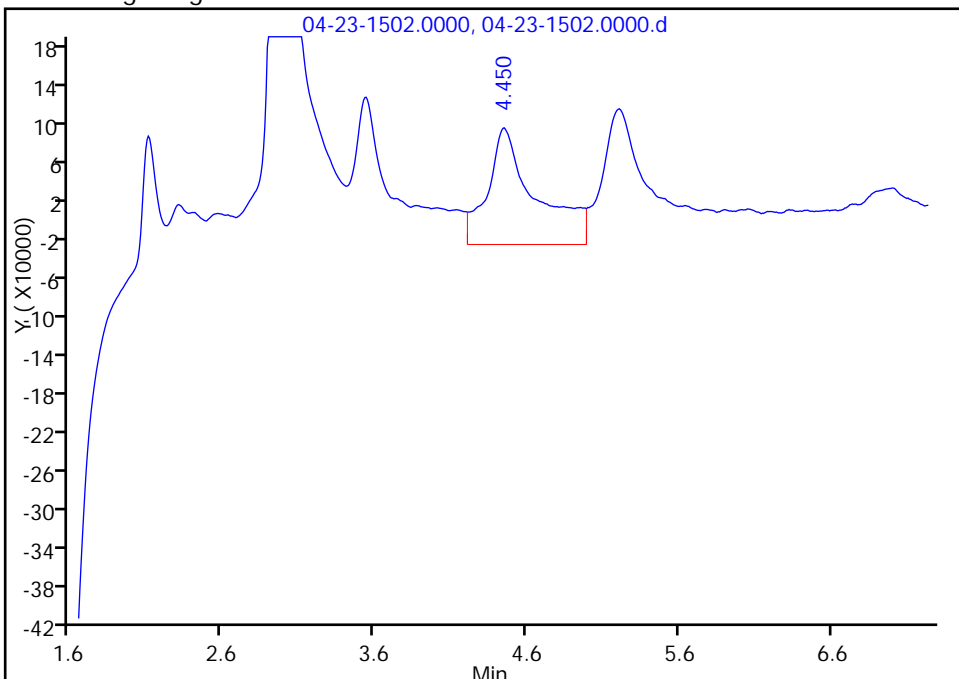
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1502.0000.d
Injection Date: 23-Apr-2015 18:40:00 Instrument ID: CHIC25
Lims ID: ic I2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

4 Bromide, CAS: 24959-67-9

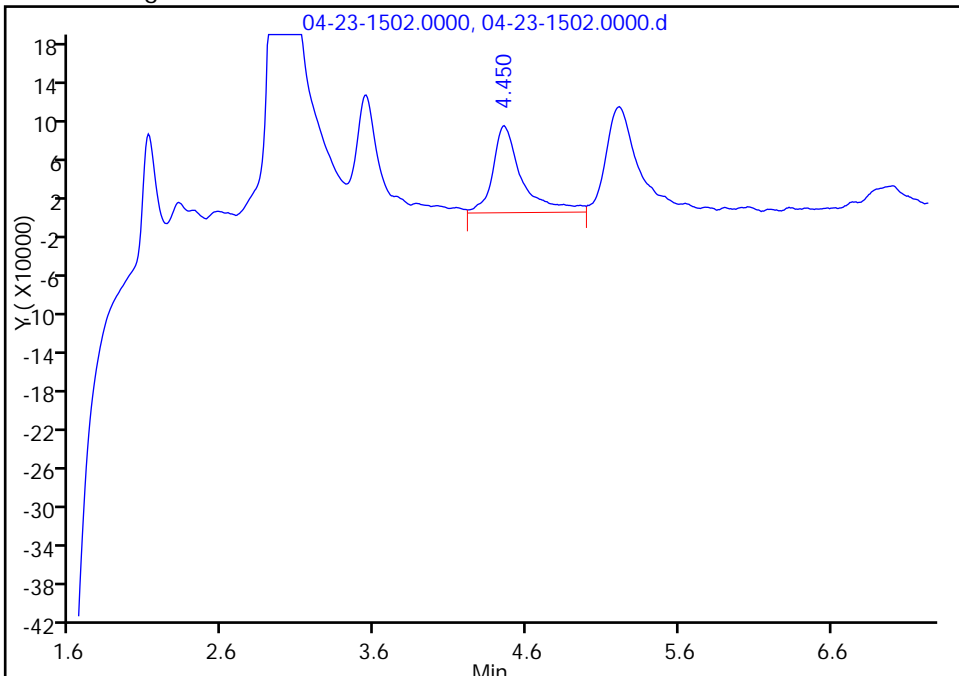
RT: 4.45
Height: 119890
Amount: 0.205594
Amount Units: ug/ml

Processing Integration Results



RT: 4.45
Height: 89514
Amount: 0.166881
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 24-Apr-2015 15:19:36
Audit Action: Assigned New Baseline
Audit Reason: Baseline

TestAmerica Pittsburgh

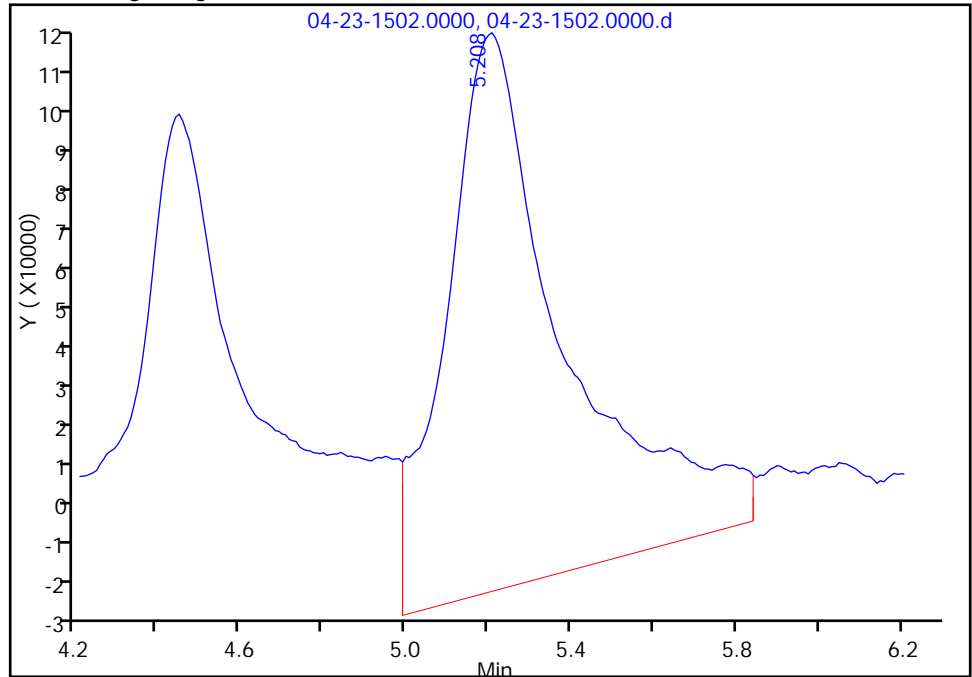
Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1502.0000.d
Injection Date: 23-Apr-2015 18:40:00 Instrument ID: CHIC25
Lims ID: ic I2
Client ID:
Operator ID:
Injection Vol: 25.0 ul
Method: 300_9056_CHIC25
Column:

ALS Bottle#: 0 Worklist Smp#: 2
Dil. Factor: 1.0000
Limit Group: GC Anions ICAL
Detector: 0008

8 Nitrate as N, CAS: 14797-55-8

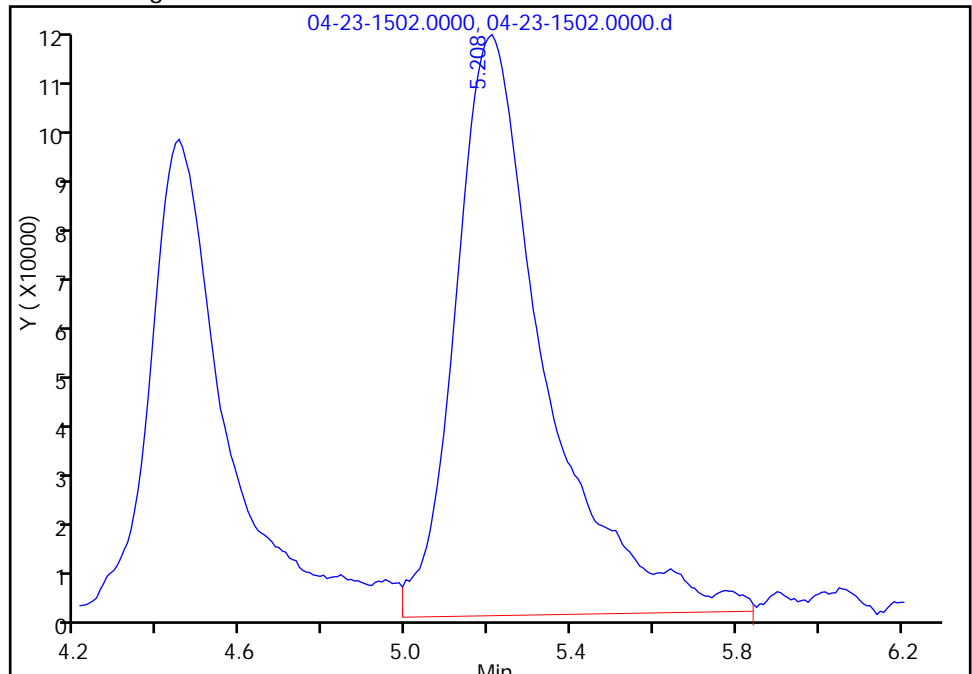
RT: 5.21
Height: 133616
Amount: 0.051248
Amount Units: ug/ml

Processing Integration Results



RT: 5.21
Height: 107998
Amount: 0.042065
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 24-Apr-2015 15:19:36
Audit Action: Assigned New Baseline
Audit Reason: Baseline

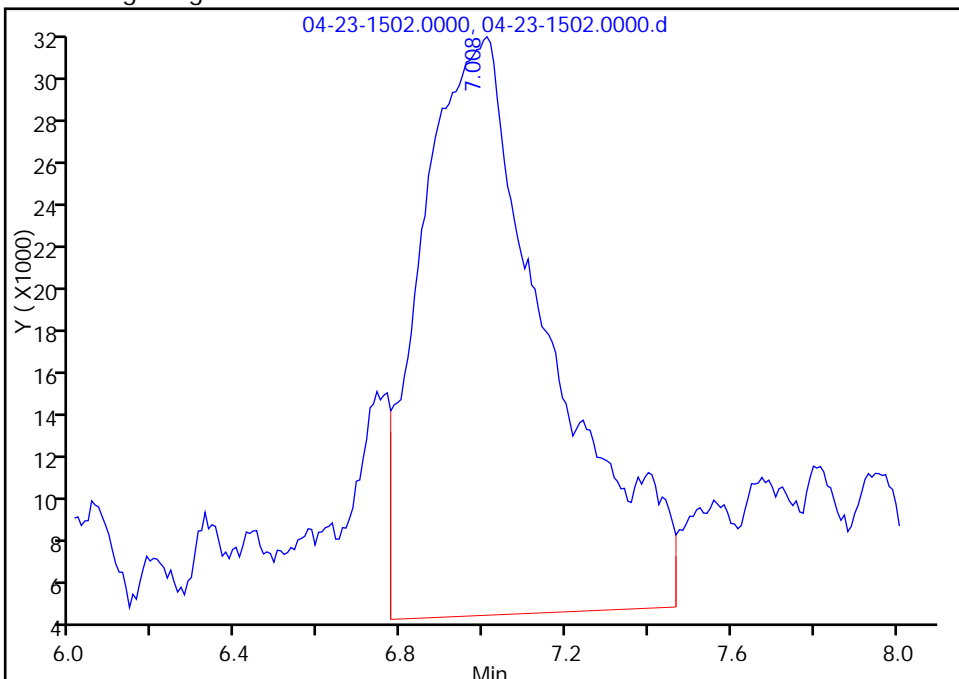
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1502.0000.d
Injection Date: 23-Apr-2015 18:40:00 Instrument ID: CHIC25
Lims ID: ic I2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

9 Orthophosphate as P, CAS: STL00599

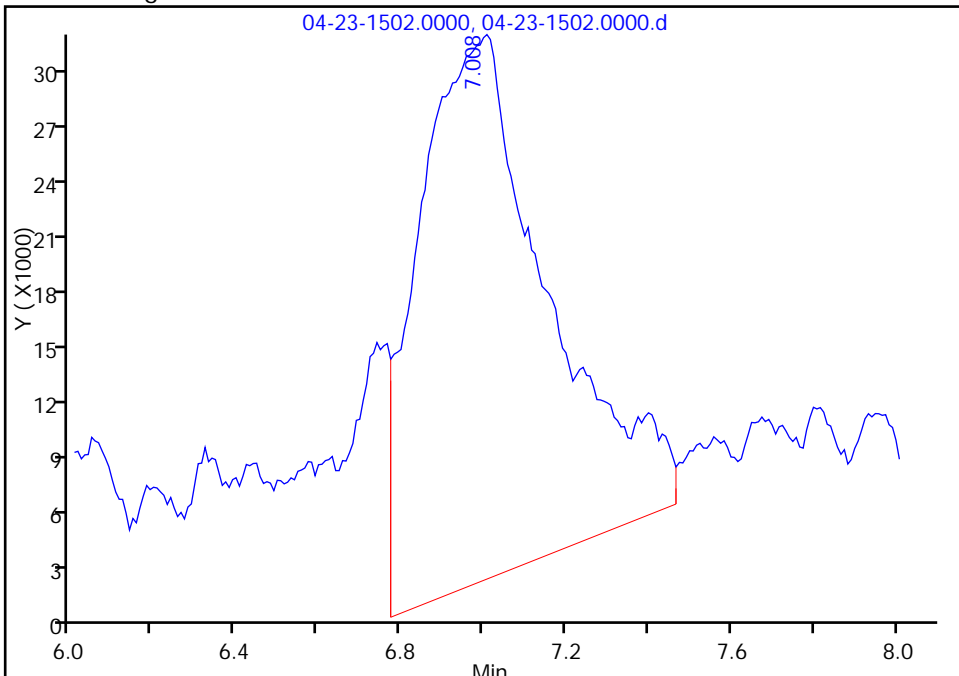
RT: 7.01
Height: 26793
Amount: 0.080476
Amount Units: ug/ml

Processing Integration Results



RT: 7.01
Height: 29054
Amount: 0.083998
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 24-Apr-2015 15:14:36
Audit Action: Assigned New Baseline
Audit Reason: Baseline

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1503.0000.d
 Lims ID: ic I3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 23-Apr-2015 18:53:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006608-003
 Misc. Info.: 3 ic I3
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 24-Apr-2015 15:23:27 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK005

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.108	2.108	0.000	718124H	0.2500	0.2608	
2 Chloride	2.992	3.050	-0.058	8812756H	5.00	4.63	
10 Nitrite as N	3.542	3.542	0.000	619450H	0.2500	0.2078	
4 Bromide	4.442	4.417	0.025	446425H	1.00	0.8323	
8 Nitrate as N	5.183	5.108	0.075	535531H	0.2500	0.2086	
9 Orthophosphate as P	6.958	6.933	0.025	138440H	0.2500	0.2544	
3 Sulfate	8.575	8.500	0.075	2220236H	5.00	3.82	

Reagents:

ICSTDL3_00211 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1503.0000.d

Injection Date: 23-Apr-2015 18:53:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ic I3

Worklist Smp#: 3

Client ID:

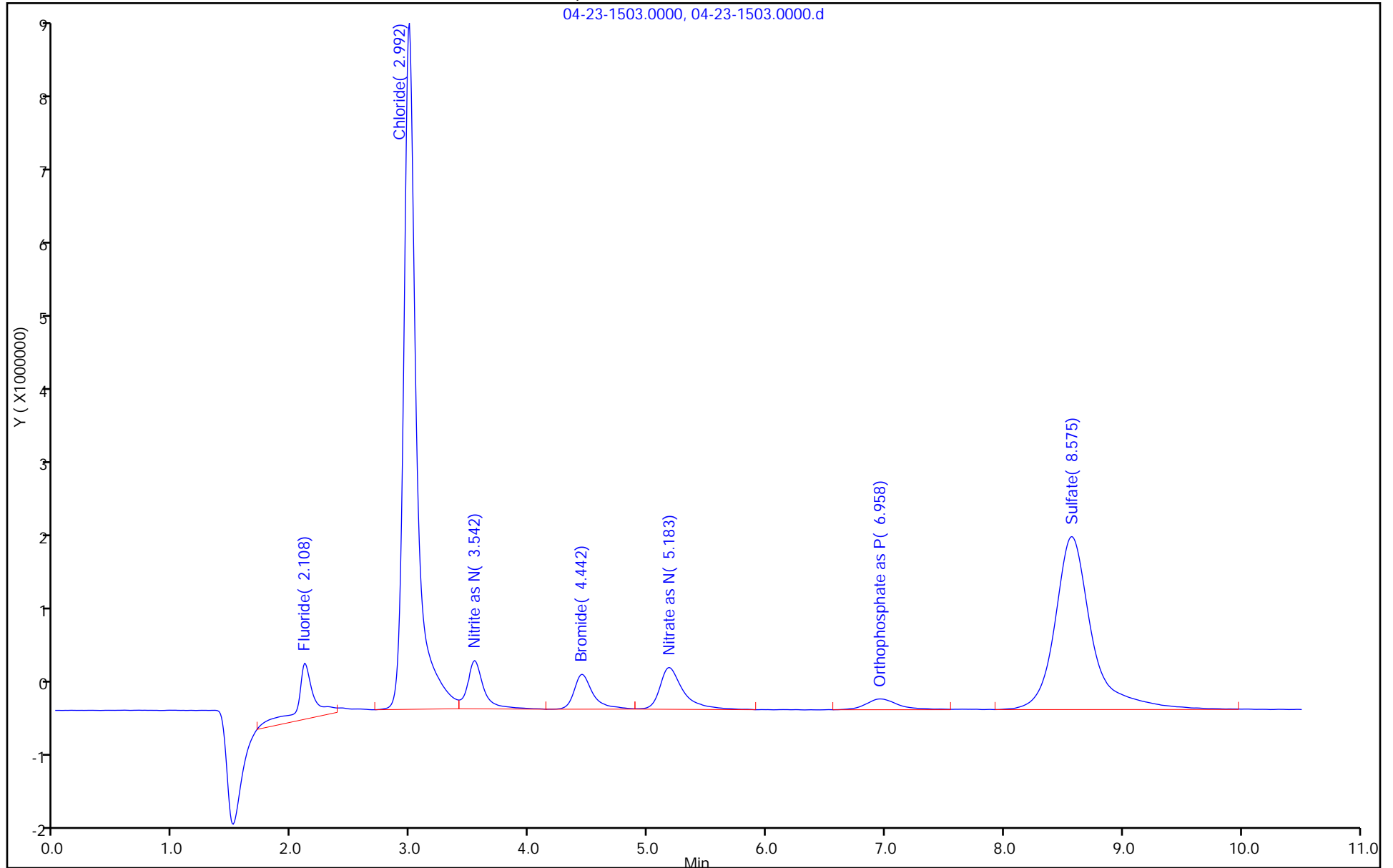
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1504.0000.d
 Lims ID: icrt I4
 Client ID:
 Sample Type: ICRT Calib Level: 4
 Inject. Date: 23-Apr-2015 19:06:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006608-004
 Misc. Info.: 4 icrt I4
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 24-Apr-2015 15:23:27 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK005

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.108	2.108	0.000	1402008H	0.5000	0.5012	
2 Chloride	2.992	2.992	0.000	19748544H	10.0	10.1	
10 Nitrite as N	3.533	3.533	0.000	1249419H	0.5000	0.4191	
4 Bromide	4.433	4.433	0.000	915258H	2.00	1.71	
8 Nitrate as N	5.158	5.158	0.000	1116273H	0.5000	0.4348	
9 Orthophosphate as P	6.958	6.958	0.000	285539H	0.5000	0.4835	
3 Sulfate	8.558	8.558	0.000	4714446H	10.0	8.11	

Reagents:

ICSTDL4_00144 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1504.0000.d

Injection Date: 23-Apr-2015 19:06:00

Instrument ID: CHIC25

Operator ID:

Lims ID: icrt I4

Worklist Smp#: 4

Client ID:

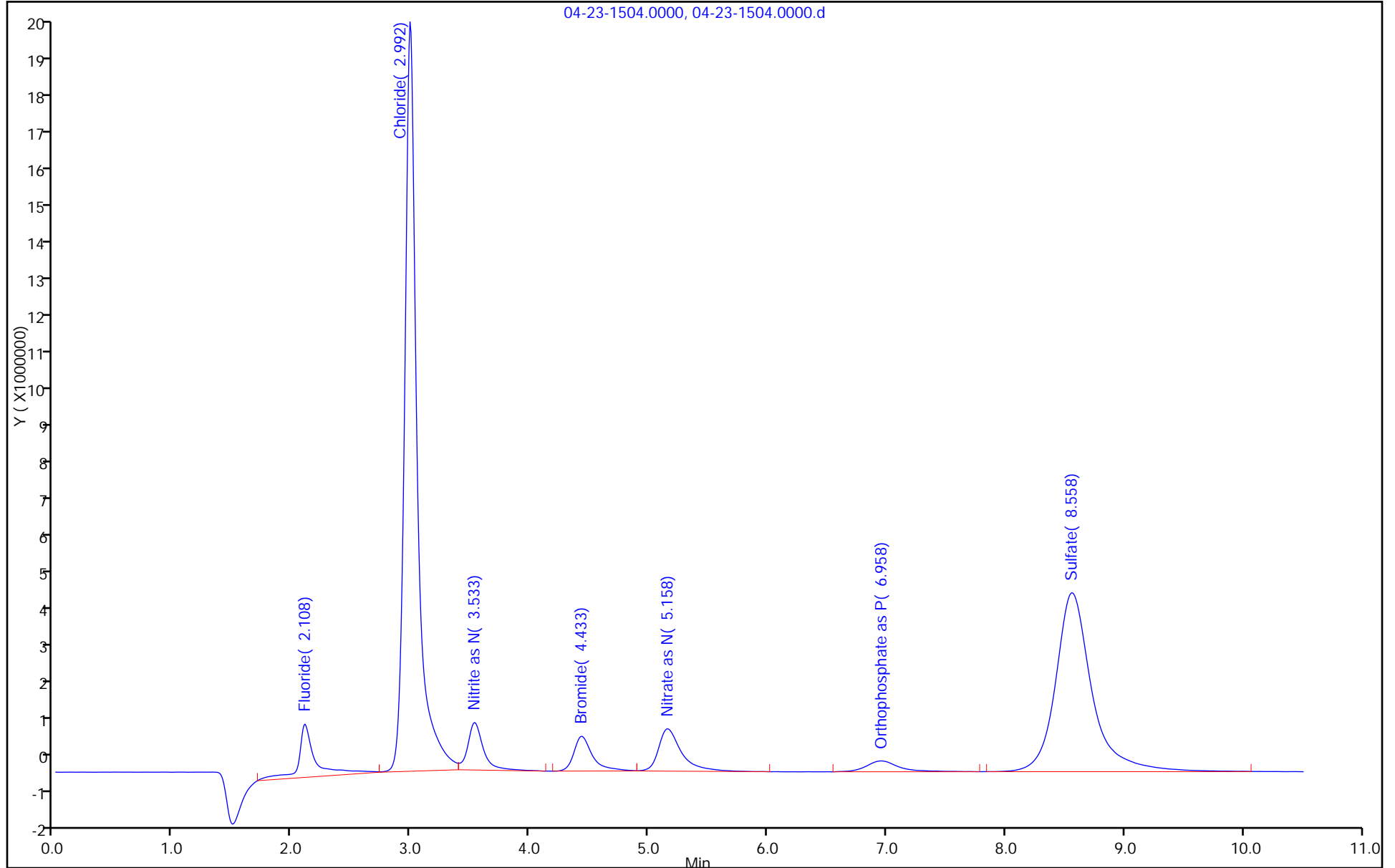
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1505.0000.d
 Lims ID: ic I5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 23-Apr-2015 19:19:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006608-005
 Misc. Info.: 5 ic I5
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 24-Apr-2015 15:23:27 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK005

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.108	2.108	0.000	2762733H	1.00	0.9795	
2 Chloride	3.008	2.992	0.016	43459563H	20.0	22.0	
10 Nitrite as N	3.533	3.533	0.000	2613914H	1.00	0.8768	
4 Bromide	4.425	4.433	-0.008	1890867H	4.00	3.53	
8 Nitrate as N	5.142	5.158	-0.016	2327721H	1.00	0.9066	
9 Orthophosphate as P	6.950	6.958	-0.008	615843H	1.00	1.00	
3 Sulfate	8.542	8.558	-0.016	10297172H	20.0	17.7	

Reagents:

ICSTDL5_00146 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1505.0000.d

Injection Date: 23-Apr-2015 19:19:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ic 15

Worklist Smp#: 5

Client ID:

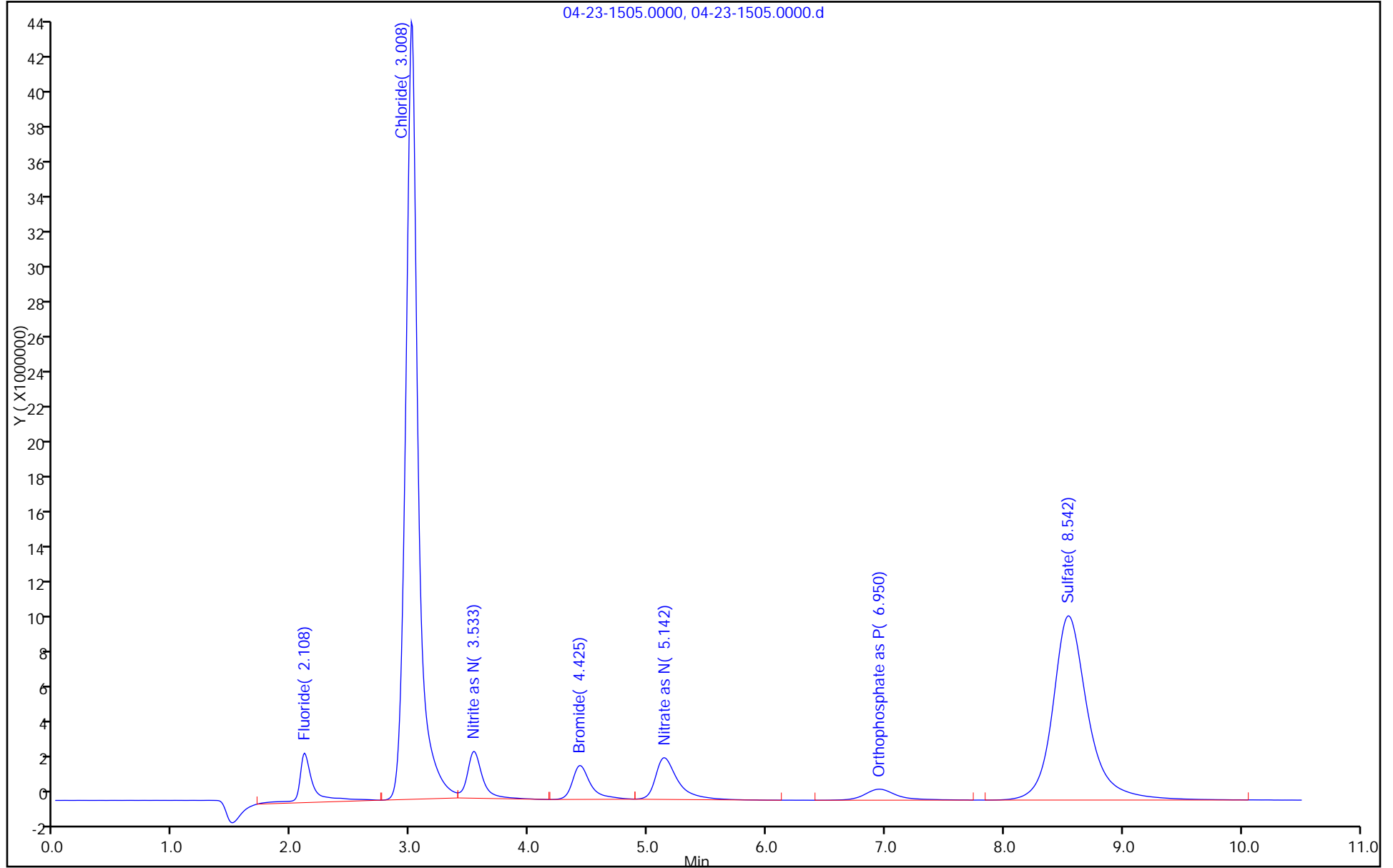
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1506.0000.d
 Lims ID: ic l6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 23-Apr-2015 19:32:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006608-006
 Misc. Info.: 6 ic l6
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 24-Apr-2015 15:23:28 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK005

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.108	2.108	0.000	6861981H	2.50	2.42	
2 Chloride	3.050	2.992	0.058	102525806H	50.0	51.6	
10 Nitrite as N	3.542	3.533	0.009	6902108H	2.50	2.32	
4 Bromide	4.417	4.433	-0.016	4887004H	10.0	9.11	
8 Nitrate as N	5.108	5.158	-0.050	5864886H	2.50	2.28	
9 Orthophosphate as P	6.942	6.958	-0.016	1537800H	2.50	2.43	
3 Sulfate	8.500	8.558	-0.058	26743066H	50.0	46.0	

Reagents:

ICSTDL6_00215 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1506.0000.d

Injection Date: 23-Apr-2015 19:32:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ic l6

Worklist Smp#: 6

Client ID:

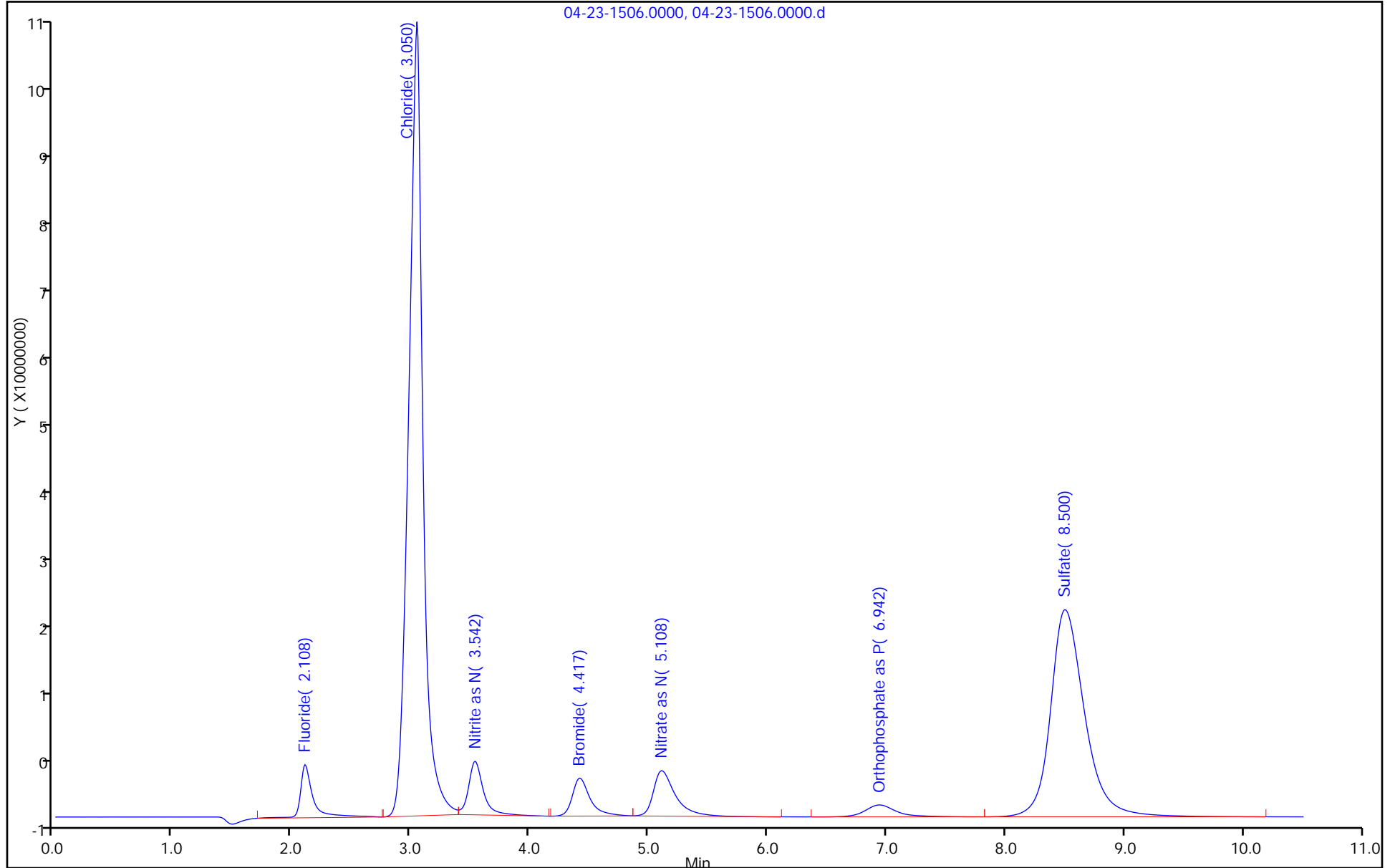
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Lims ID: ic I7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 23-Apr-2015 19:45:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006608-007
 Misc. Info.: 7 ic I7
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 24-Apr-2015 15:23:28 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK005

First Level Reviewer: hartmanm Date: 24-Apr-2015 15:17:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.117	2.108	0.009	14405063H	5.00	5.07	
2 Chloride	3.108	2.992	0.116	183759255H	100.0	92.3	
10 Nitrite as N	3.550	3.533	0.017	15286501H	5.00	5.13	
4 Bromide	4.417	4.433	-0.016	11037760H	20.0	20.6	
8 Nitrate as N	5.083	5.158	-0.075	13183933H	5.00	5.14	
9 Orthophosphate as P	6.925	6.958	-0.033	3326802H	5.00	5.22	
3 Sulfate	8.425	8.558	-0.133	59738616H	100.0	102.7	

Reagents:

ICSTDL7_00142 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d

Injection Date: 23-Apr-2015 19:45:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ic 17

Worklist Smp#: 7

Client ID:

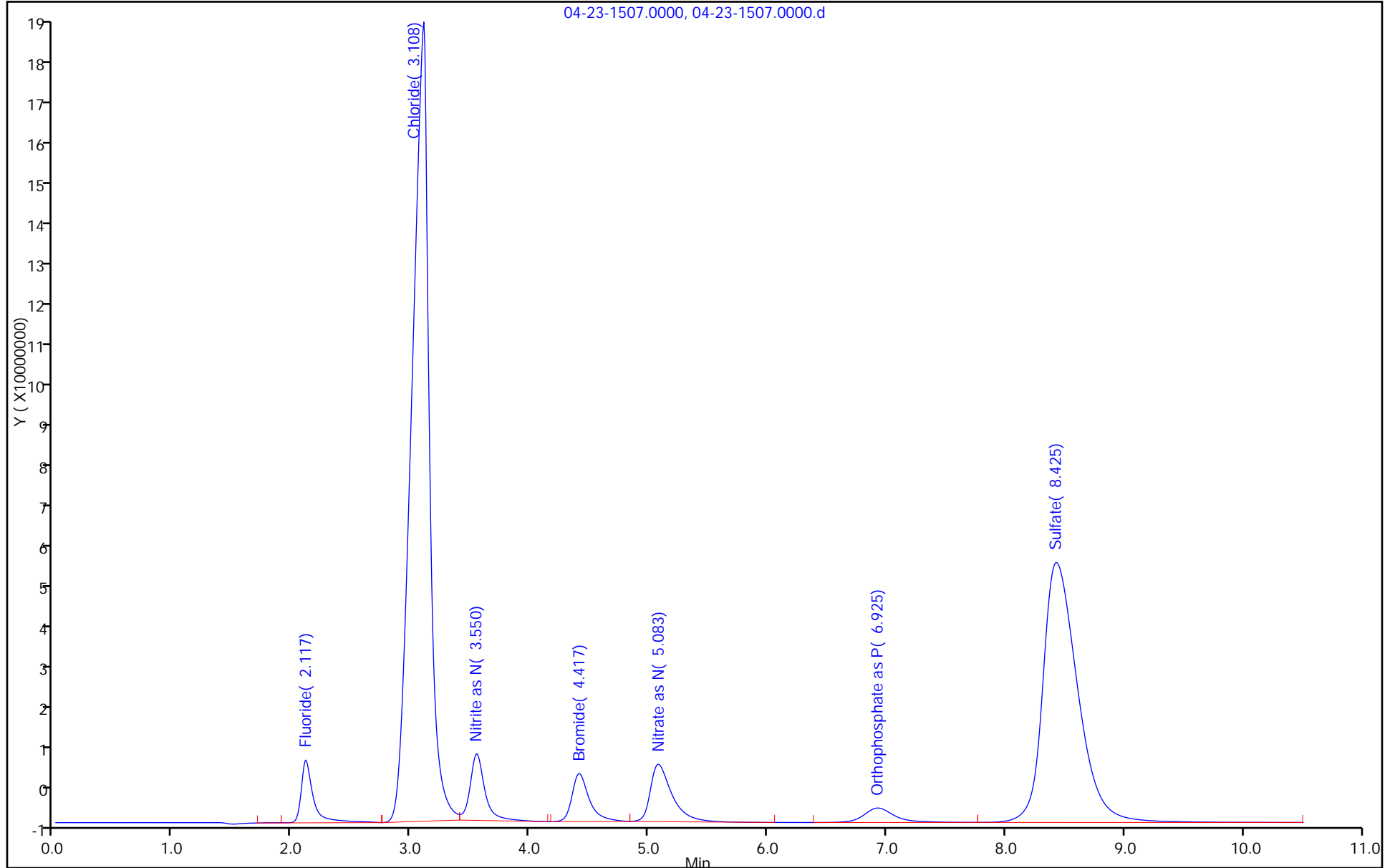
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: ICV 180-139607/2 Calibration Date: 04/24/2015 17:03
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1502.0000.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		2784067		2.94	3.00	-1.9	10.0
Chloride	Lin2		2165743		65.3	60.0	8.9	10.0
Nitrite as N	LinF		2826173		2.84	3.00	-5.2	10.0
Bromide	LinF		503200		11.3	12.0	-6.2	10.0
Nitrate as N	LinF		2372306		2.77	3.00	-7.6	10.0
Orthophosphate as P	Lin2		623638		2.95	3.00	-1.6	10.0
Sulfate	LinF		573921		59.2	60.0	-1.3	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: ICV 180-139607/2 Calibration Date: 04/24/2015 17:03
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1502.0000.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.08	1.74	2.44
Chloride	3.01	2.65	3.35
Nitrite as N	3.46	3.38	3.58
Bromide	4.29	3.98	4.68
Nitrate as N	4.94	4.89	5.09
Orthophosphate as P	6.47	6.52	6.72
Sulfate	7.83	7.68	8.38

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1502.0000.d
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 24-Apr-2015 17:03:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-002
 Misc. Info.: 11 icv
 Operator ID: Instrument ID: CHIC25
 Sublist:
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:26 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 24-Apr-2015 17:18:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.083	2.092	-0.009	8352200H	3.00	2.94	
2 Chloride	3.008	3.000	0.008	129944550H	60.0	65.3	
10 Nitrite as N	3.458	3.475	-0.017	8481911H	3.00	2.84	
4 Bromide	4.292	4.325	-0.033	6038401H	12.0	11.3	
8 Nitrate as N	4.942	4.992	-0.050	7116917H	3.00	2.77	
9 Orthophosphate as P	6.467	6.617	-0.150	1870913H	3.00	2.95	
3 Sulfate	7.833	8.025	-0.192	34435284H	60.0	59.2	

Reagents:

icicv_01251 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1502.0000.d

Injection Date: 24-Apr-2015 17:03:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ICV

Worklist Smp#: 2

Client ID:

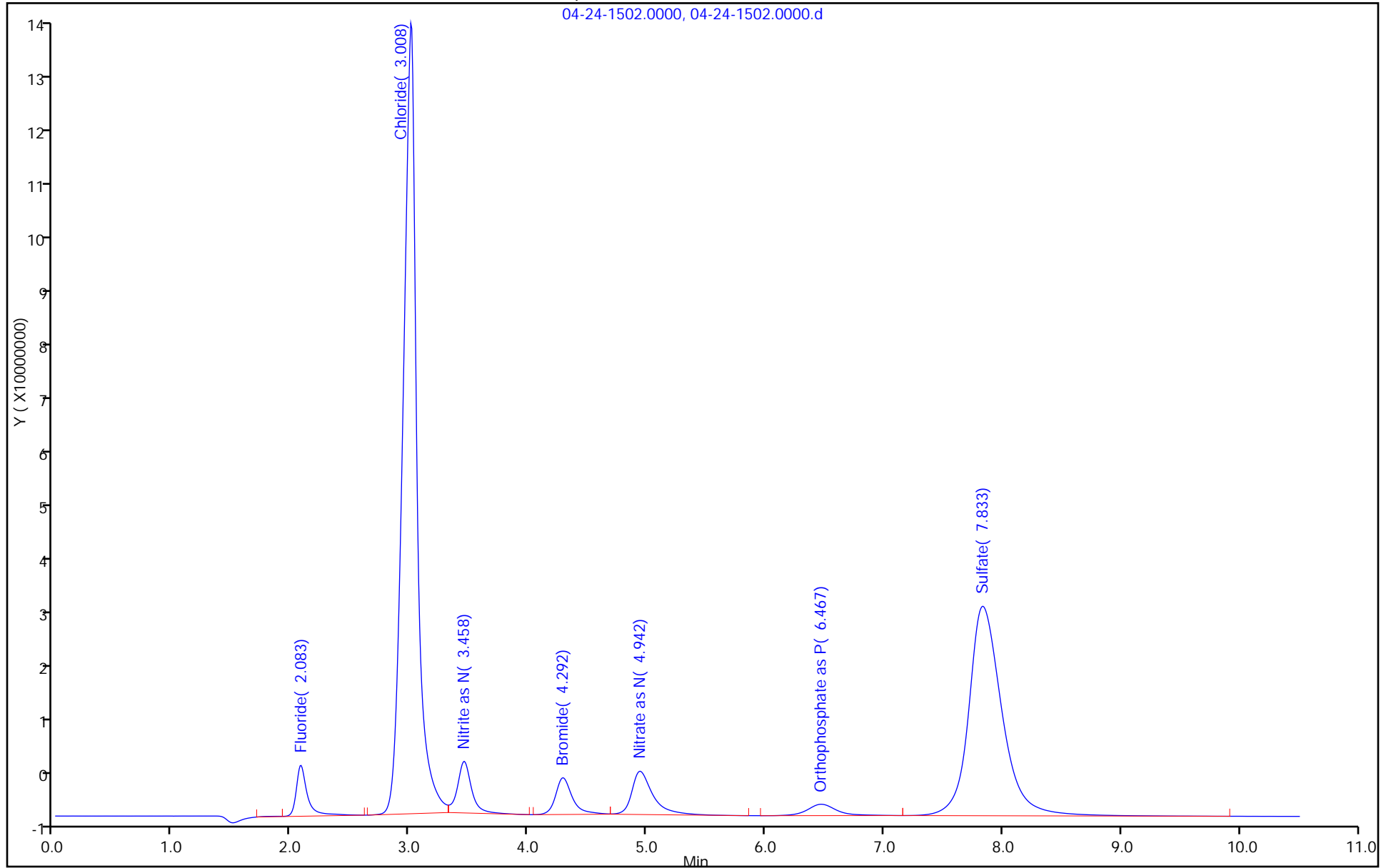
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/3 Calibration Date: 04/24/2015 17:21
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1503.0000.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		2808294		2.48	2.50	-1.0	10.0
Chloride	Lin2		2087542		52.5	50.0	5.0	10.0
Nitrite as N	LinF		2712218		2.27	2.50	-9.0	10.0
Bromide	LinF		487647		9.09	10.0	-9.1	10.0
Nitrate as N	LinF		2350712		2.29	2.50	-8.4	10.0
Orthophosphate as P	Lin2		609157		2.41	2.50	-3.6	10.0
Sulfate	LinF		545046		46.9	50.0	-6.3	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/3 Calibration Date: 04/24/2015 17:21
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1503.0000.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.09	1.74	2.44
Chloride	3.00	2.65	3.35
Nitrite as N	3.48	3.38	3.58
Bromide	4.33	3.98	4.68
Nitrate as N	4.99	4.89	5.09
Orthophosphate as P	6.62	6.52	6.72
Sulfate	8.03	7.68	8.38

TestAmerica Pittsburgh
 Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1503.0000.d
 Lims ID: CCV
 Client ID:
 Sample Type: CCV
 Inject. Date: 24-Apr-2015 17:21:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-003
 Misc. Info.: 12 ccv
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:26 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 24-Apr-2015 17:35:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.092	2.092	0.000	7020734H	2.50	2.48	
2 Chloride	3.000	3.000	0.000	104377109H	50.0	52.5	
10 Nitrite as N	3.475	3.475	0.000	6780544H	2.50	2.27	
4 Bromide	4.325	4.325	0.000	4876468H	10.0	9.09	
8 Nitrate as N	4.992	4.992	0.000	5876781H	2.50	2.29	
9 Orthophosphate as P	6.617	6.617	0.000	1522893H	2.50	2.41	
3 Sulfate	8.025	8.025	0.000	27252322H	50.0	46.9	

Reagents:

icccv_01220 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1503.0000.d

Injection Date: 24-Apr-2015 17:21:00

Instrument ID: CHIC25

Operator ID:

Lims ID: CCV

Worklist Smp#: 3

Client ID:

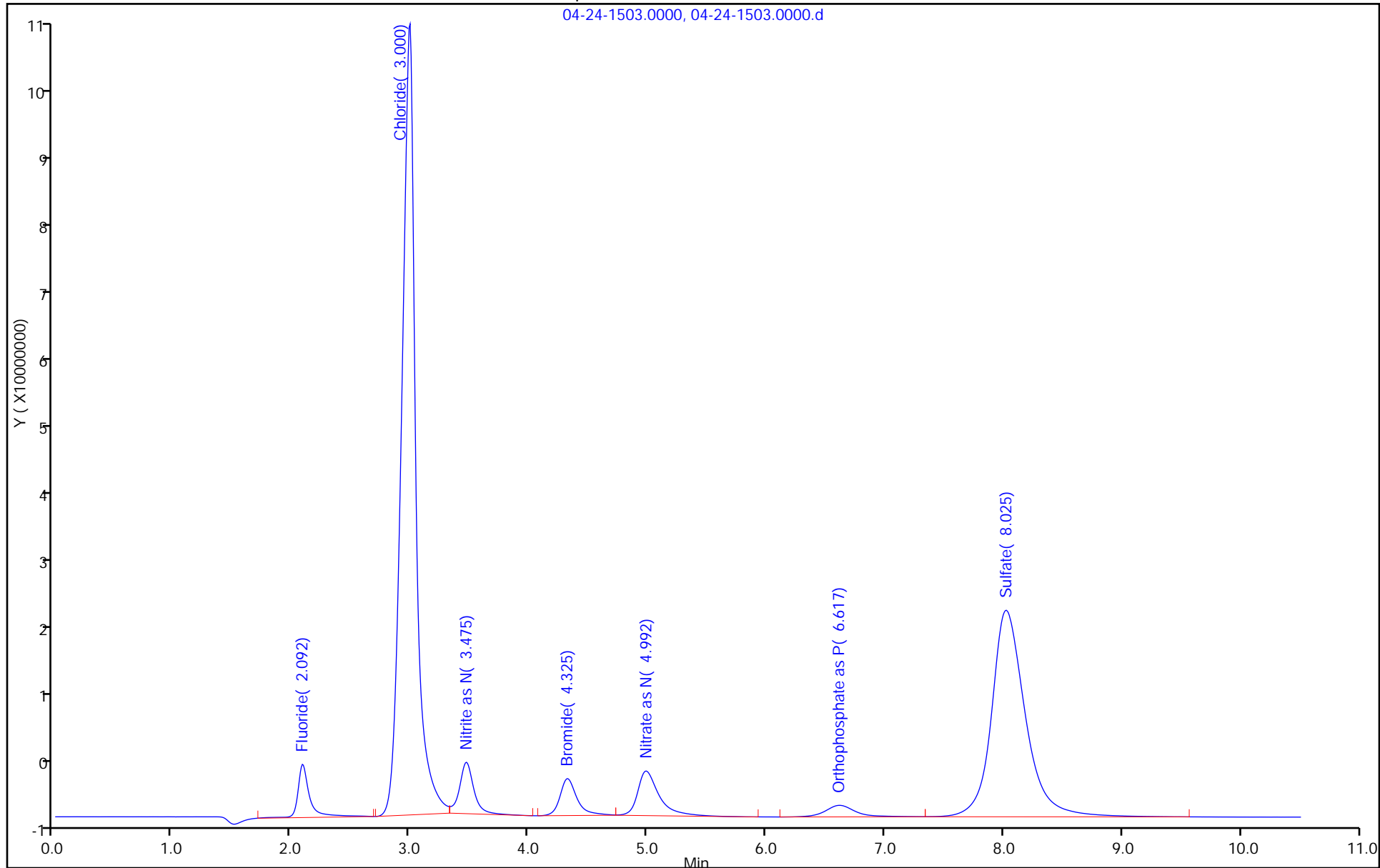
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/15 Calibration Date: 04/24/2015 20:01
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1515.0000.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		2781142		2.45	2.50	-1.9	10.0
Chloride	Lin2		2093678		52.7	50.0	5.3	10.0
Nitrite as N	LinF		2716817		2.28	2.50	-8.9	10.0
Bromide	LinF		483550		9.01	10.0	-9.9	10.0
Nitrate as N	LinF		2343112		2.28	2.50	-8.7	10.0
Orthophosphate as P	Lin2		622980		2.46	2.50	-1.4	10.0
Sulfate	LinF		548857		47.2	50.0	-5.6	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/15 Calibration Date: 04/24/2015 20:01
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1515.0000.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.11	1.76	2.46
Chloride	3.02	2.67	3.37
Nitrite as N	3.50	3.40	3.60
Bromide	4.37	4.02	4.72
Nitrate as N	5.04	4.94	5.14
Orthophosphate as P	6.68	6.58	6.78
Sulfate	8.09	7.74	8.44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1515.0000.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 24-Apr-2015 20:01:00 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-015
 Misc. Info.: 23 ccv
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:22 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.108	2.108	0.000	6952856H	2.50	2.45	
2 Chloride	3.017	3.017	0.000	104683882H	50.0	52.7	
10 Nitrite as N	3.500	3.500	0.000	6792043H	2.50	2.28	
4 Bromide	4.367	4.367	0.000	4835503H	10.0	9.01	
8 Nitrate as N	5.042	5.042	0.000	5857780H	2.50	2.28	
9 Orthophosphate as P	6.675	6.675	0.000	1557449H	2.50	2.46	
3 Sulfate	8.092	8.092	0.000	27442845H	50.0	47.2	

Reagents:

icccv_01220 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1515.0000.d

Injection Date: 24-Apr-2015 20:01:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ccv

Worklist Smp#: 15

Client ID:

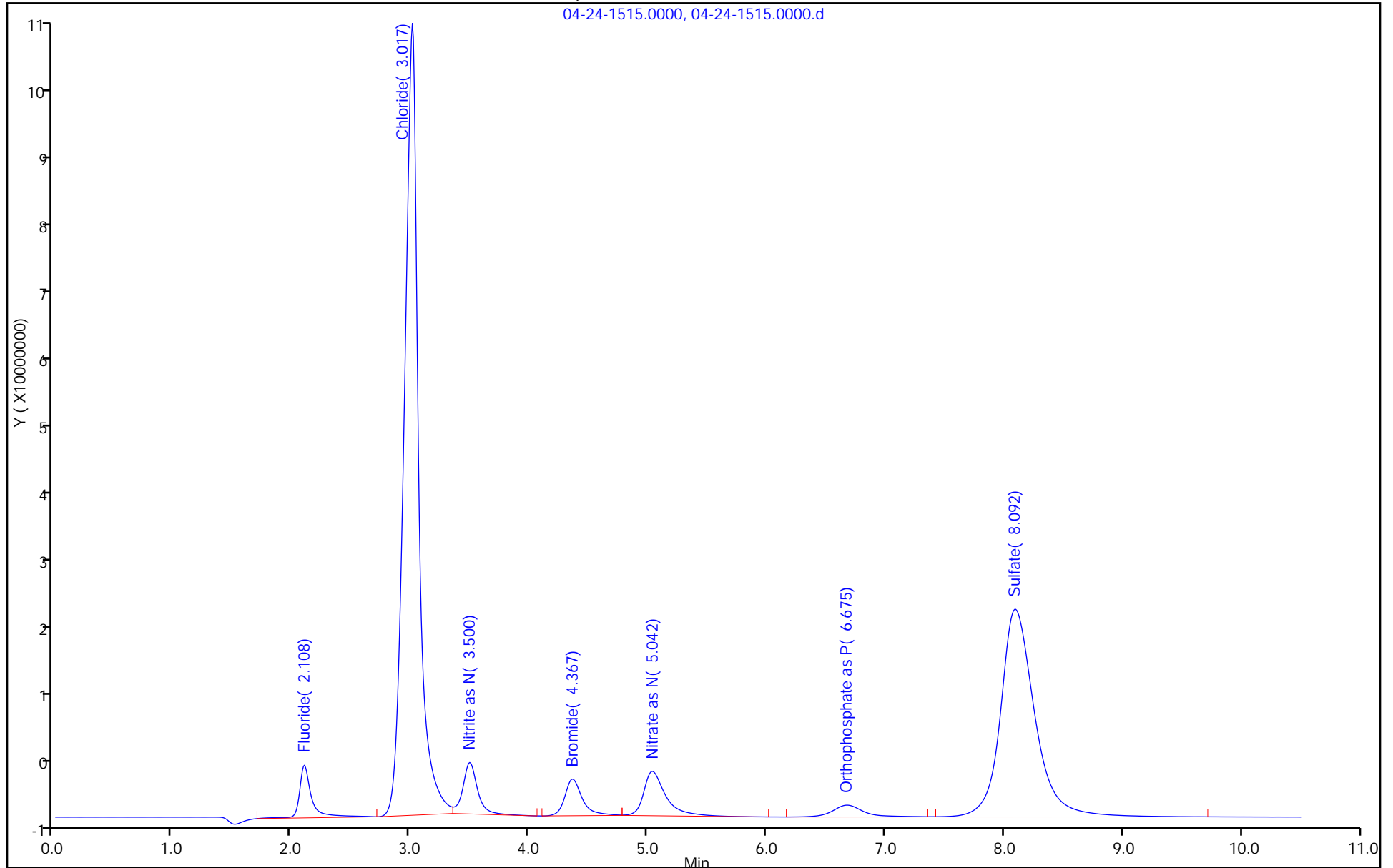
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/27 Calibration Date: 04/24/2015 22:38
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1527.0000.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		2844176		2.51	2.50	0.3	10.0
Chloride	Lin2		2138473		53.8	50.0	7.6	10.0
Nitrite as N	LinF		2745223		2.30	2.50	-7.9	10.0
Bromide	LinF		497107		9.27	10.0	-7.3	10.0
Nitrate as N	LinF		2419558		2.36	2.50	-5.8	10.0
Orthophosphate as P	Lin2		635296		2.51	2.50	0.5	10.0
Sulfate	LinF		562927		48.4	50.0	-3.2	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/27 Calibration Date: 04/24/2015 22:38
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1527.0000.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.09	1.74	2.44
Chloride	3.00	2.65	3.35
Nitrite as N	3.48	3.38	3.58
Bromide	4.33	3.98	4.68
Nitrate as N	4.99	4.89	5.09
Orthophosphate as P	6.64	6.54	6.74
Sulfate	8.06	7.71	8.41

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1527.0000.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 24-Apr-2015 22:38:00 ALS Bottle#: 0 Worklist Smp#: 27
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-027
 Misc. Info.: 27427 ccv
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:19 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.092	2.092	0.000	7110439H	2.50	2.51	
2 Chloride	3.000	3.000	0.000	106923674H	50.0	53.8	
10 Nitrite as N	3.475	3.475	0.000	6863058H	2.50	2.30	
4 Bromide	4.325	4.325	0.000	4971065H	10.0	9.27	
8 Nitrate as N	4.992	4.992	0.000	6048895H	2.50	2.36	
9 Orthophosphate as P	6.642	6.642	0.000	1588241H	2.50	2.51	
3 Sulfate	8.058	8.058	0.000	28146340H	50.0	48.4	

Reagents:

icccv_01220 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1527.0000.d

Injection Date: 24-Apr-2015 22:38:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ccv

Worklist Smp#: 27

Client ID:

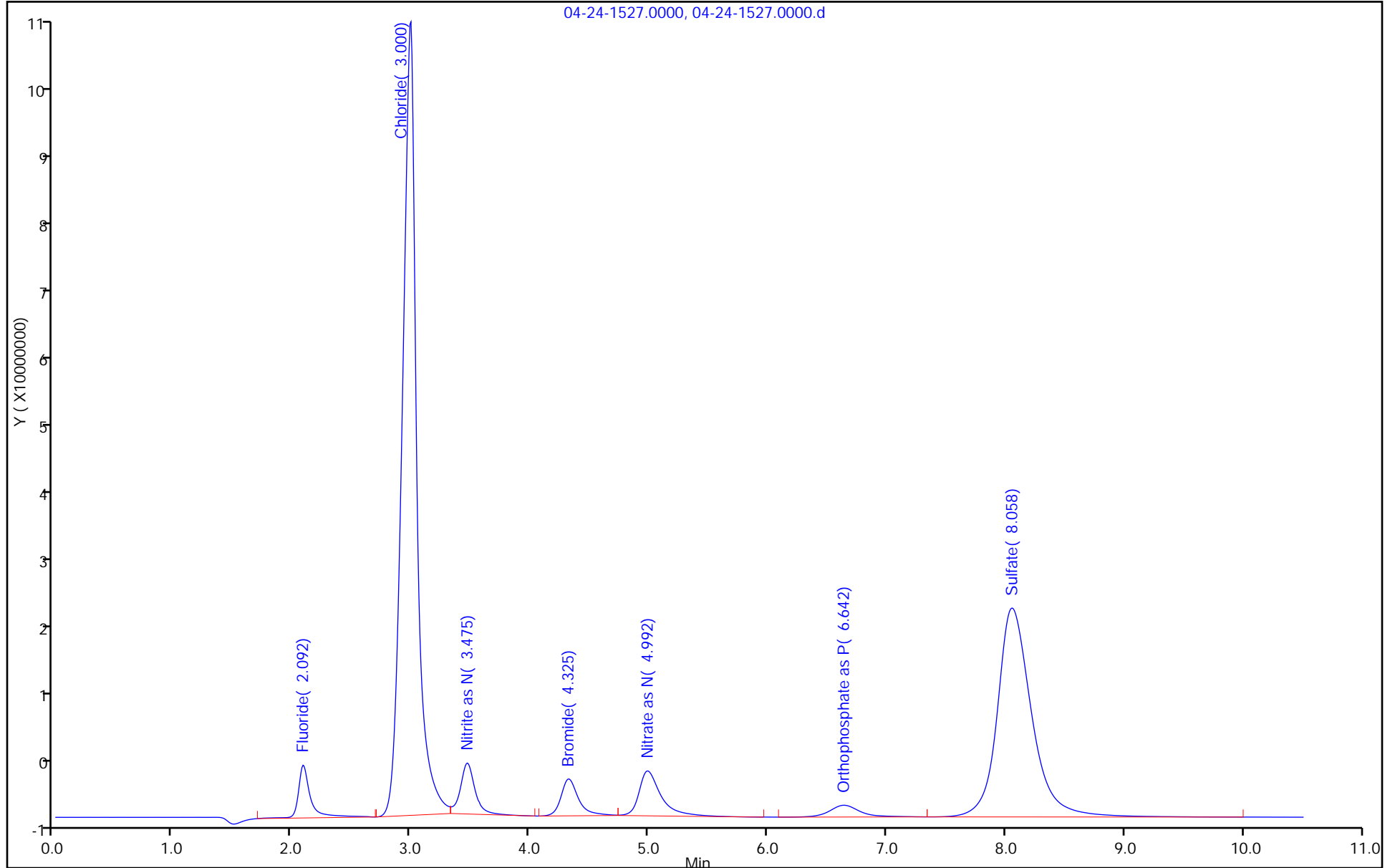
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/39 Calibration Date: 04/25/2015 01:15
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1539.0000.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		2812140		2.48	2.50	-0.8	10.0
Chloride	Lin2		2127054		53.5	50.0	7.0	10.0
Nitrite as N	LinF		2712810		2.27	2.50	-9.0	10.0
Bromide	LinF		492060		9.17	10.0	-8.3	10.0
Nitrate as N	LinF		2391795		2.33	2.50	-6.8	10.0
Orthophosphate as P	Lin2		627759		2.48	2.50	-0.7	10.0
Sulfate	LinF		557274		47.9	50.0	-4.2	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/39 Calibration Date: 04/25/2015 01:15
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1539.0000.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.09	1.74	2.44
Chloride	2.99	2.64	3.34
Nitrite as N	3.48	3.38	3.58
Bromide	4.33	3.98	4.68
Nitrate as N	4.99	4.89	5.09
Orthophosphate as P	6.63	6.53	6.73
Sulfate	8.06	7.71	8.41

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1539.0000.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 25-Apr-2015 01:15:00 ALS Bottle#: 0 Worklist Smp#: 39
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-039
 Misc. Info.: 3116 ccv
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:16 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.092	2.092	0.000	7030351H	2.50	2.48	
2 Chloride	2.992	2.992	0.000	106352702H	50.0	53.5	
10 Nitrite as N	3.475	3.475	0.000	6782025H	2.50	2.27	
4 Bromide	4.325	4.325	0.000	4920600H	10.0	9.17	
8 Nitrate as N	4.992	4.992	0.000	5979487H	2.50	2.33	
9 Orthophosphate as P	6.633	6.633	0.000	1569398H	2.50	2.48	
3 Sulfate	8.058	8.058	0.000	27863723H	50.0	47.9	

Reagents:

icccv_01220 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1539.0000.d

Injection Date: 25-Apr-2015 01:15:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ccv

Worklist Smp#: 39

Client ID:

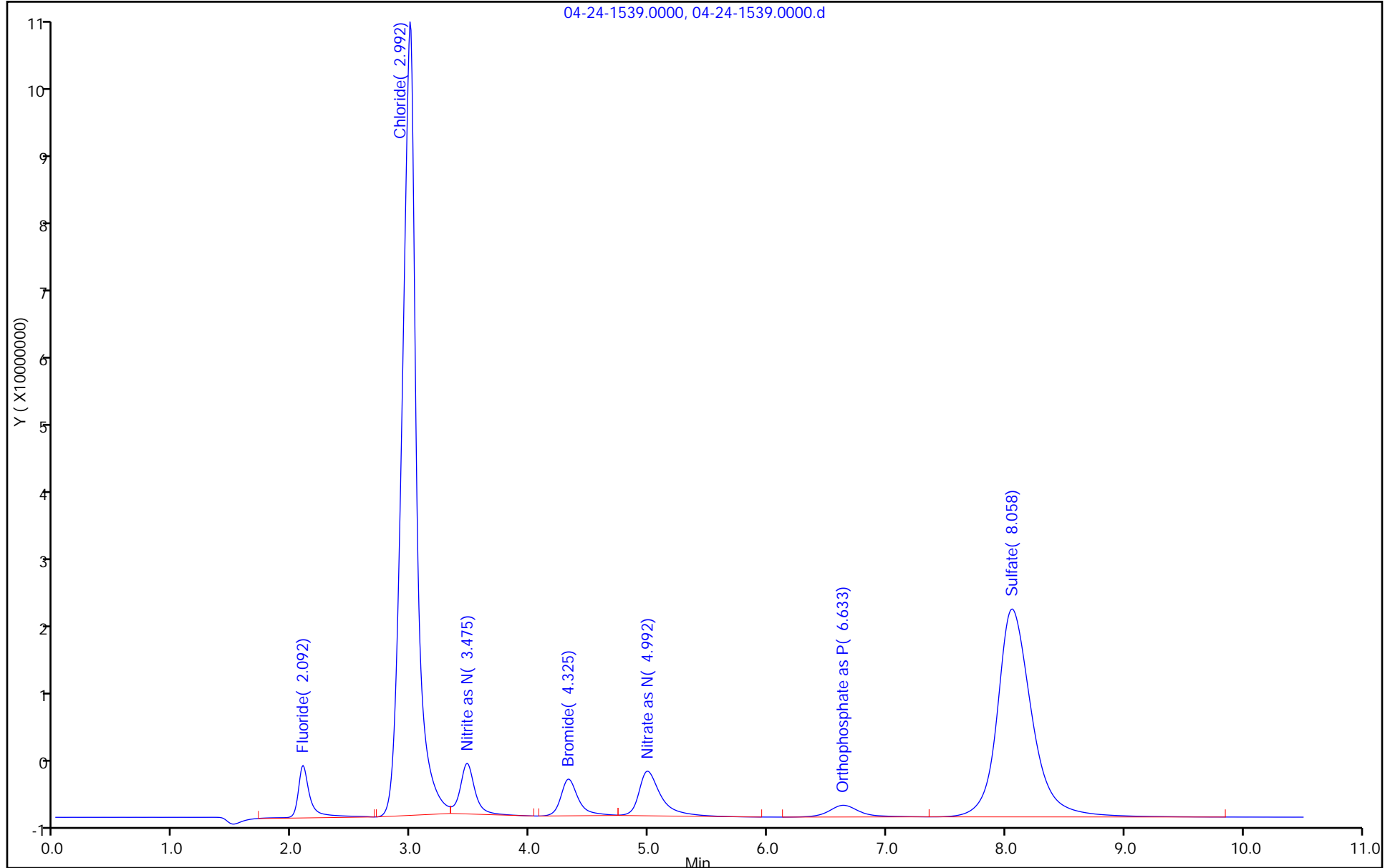
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/45 Calibration Date: 04/25/2015 02:33
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1545.0000.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		2813606		2.48	2.50	-0.8	10.0
Chloride	Lin2		2135137		53.7	50.0	7.4	10.0
Nitrite as N	LinF		2740595		2.30	2.50	-8.1	10.0
Bromide	LinF		491943		9.17	10.0	-8.3	10.0
Nitrate as N	LinF		2400578		2.34	2.50	-6.5	10.0
Orthophosphate as P	Lin2		632532		2.50	2.50	0.0	10.0
Sulfate	LinF		559904		48.1	50.0	-3.7	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139607/45 Calibration Date: 04/25/2015 02:33
 Instrument ID: CHIC25 Calib Start Date: 04/23/2015 18:40
 GC Column: AS-14 ID: _____ Calib End Date: 04/23/2015 19:45
 Lab File ID: 04-24-1545.0000.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	2.09	1.74	2.44
Chloride	2.99	2.64	3.34
Nitrite as N	3.47	3.37	3.57
Bromide	4.33	3.98	4.68
Nitrate as N	4.98	4.88	5.08
Orthophosphate as P	6.63	6.53	6.73
Sulfate	8.05	7.70	8.40

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1545.0000.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 25-Apr-2015 02:33:00 ALS Bottle#: 0 Worklist Smp#: 45
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-045
 Misc. Info.: 33 ccv
 Operator ID: Instrument ID: CHIC25
 Sublist: chrom-300_9056_CHIC25*sub1
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:14 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.092	2.092	0.000	7034014H	2.50	2.48	
2 Chloride	2.992	2.992	0.000	106756860H	50.0	53.7	
10 Nitrite as N	3.467	3.467	0.000	6851488H	2.50	2.30	
4 Bromide	4.325	4.325	0.000	4919431H	10.0	9.17	
8 Nitrate as N	4.983	4.983	0.000	6001445H	2.50	2.34	
9 Orthophosphate as P	6.633	6.633	0.000	1581331H	2.50	2.50	
3 Sulfate	8.050	8.050	0.000	27995180H	50.0	48.1	

Reagents:

icccv_01220 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1545.0000.d

Injection Date: 25-Apr-2015 02:33:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ccv

Worklist Smp#: 45

Client ID:

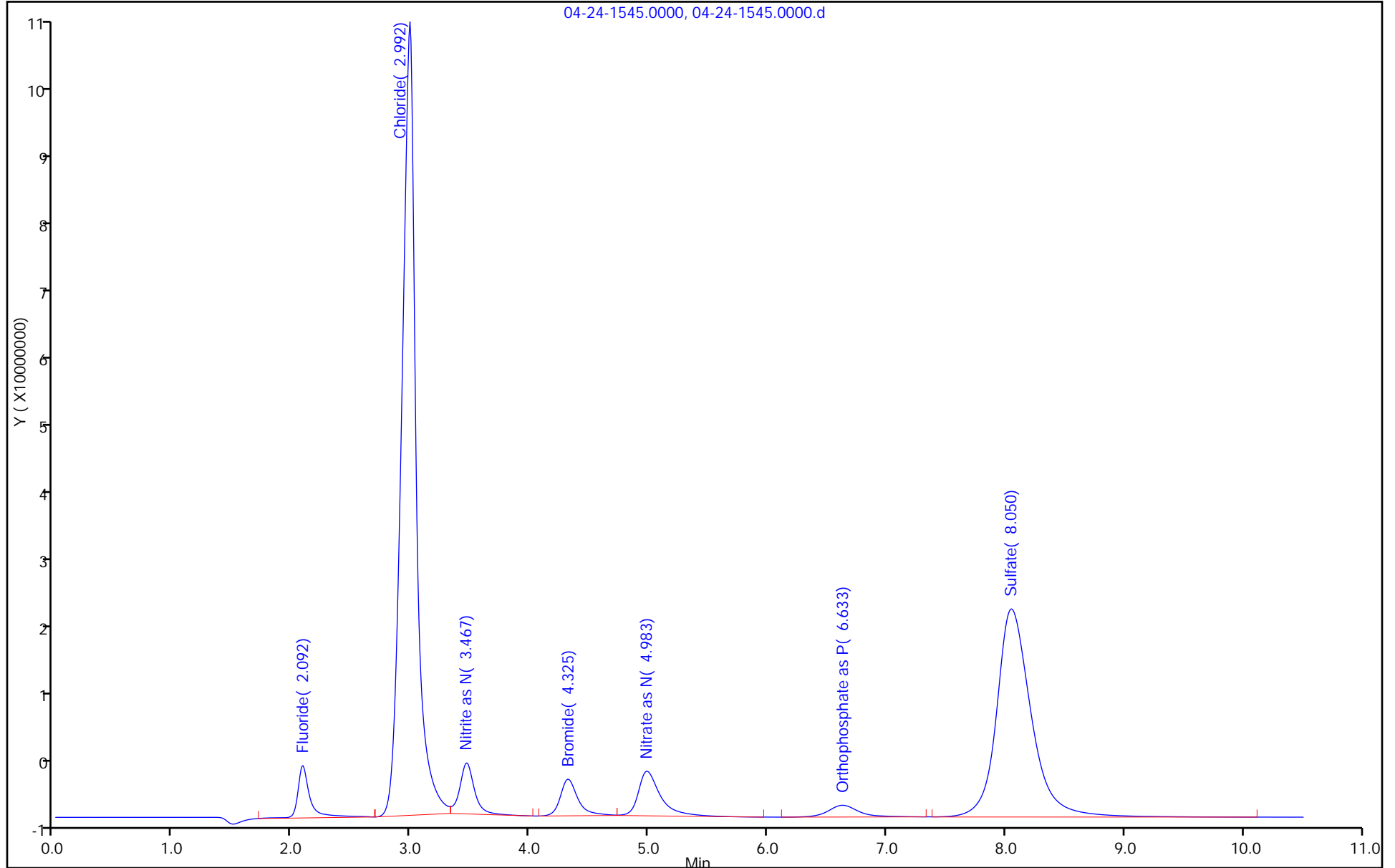
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-139607/6
 Matrix: Water Lab File ID: 04-24-1506.0000.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 18:04
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.10	U	0.10	0.0062
16887-00-6	Chloride	0.232	J	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1506.0000.d
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 24-Apr-2015 18:04:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-006
 Misc. Info.: 15 mb
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:22 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 24-Apr-2015 19:29:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.108				ND	M
2 Chloride	2.775	3.017	-0.242	36842H		0.2322	M
10 Nitrite as N		3.500				ND	
4 Bromide		4.367				ND	
8 Nitrate as N		5.042				ND	
9 Orthophosphate as P		6.675				ND	
3 Sulfate	8.125	8.092	0.033	94283H		0.1621	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1506.0000.d

Injection Date: 24-Apr-2015 18:04:00

Instrument ID: CHIC25

Operator ID:

Lims ID: mb

Worklist Smp#: 6

Client ID:

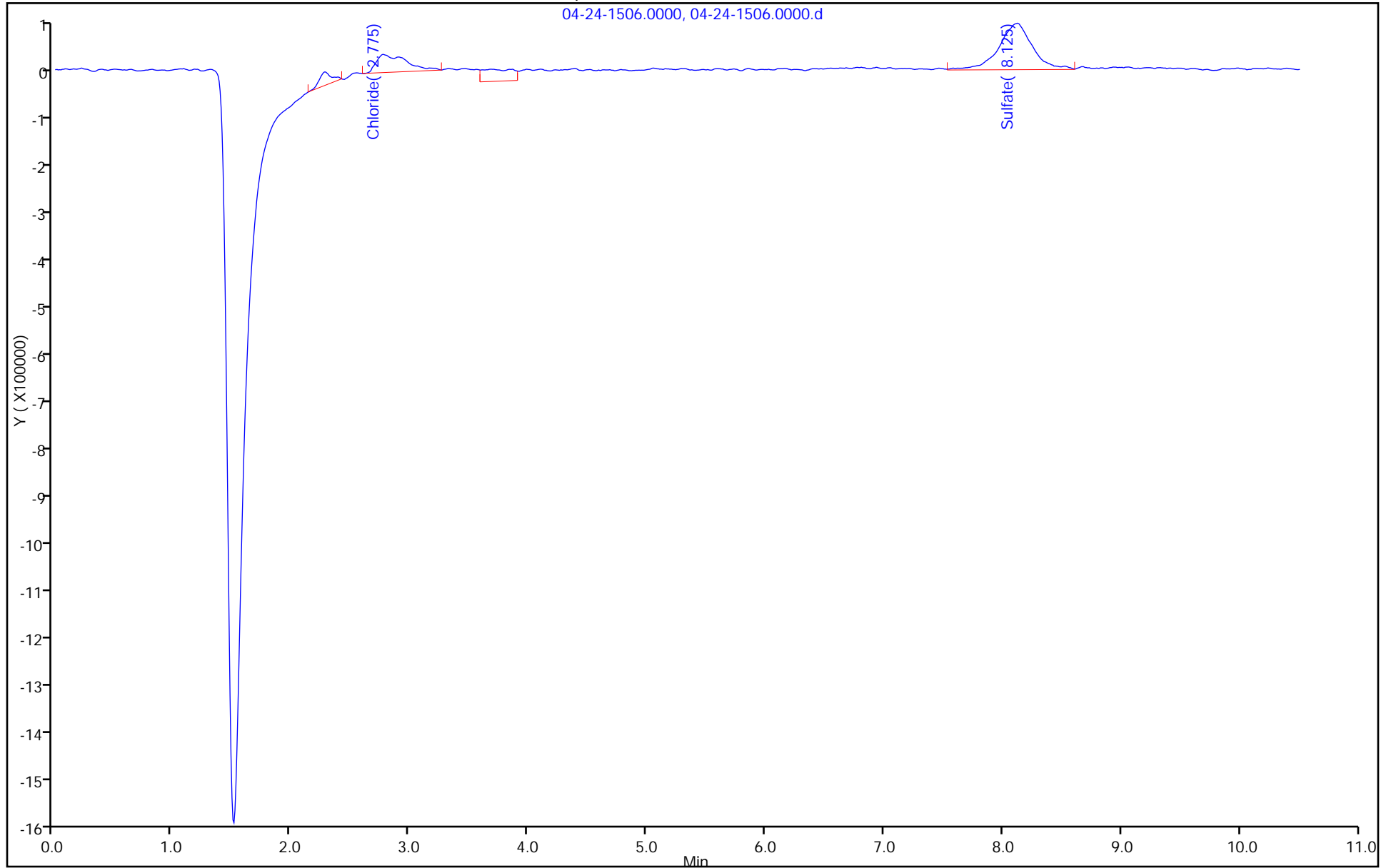
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



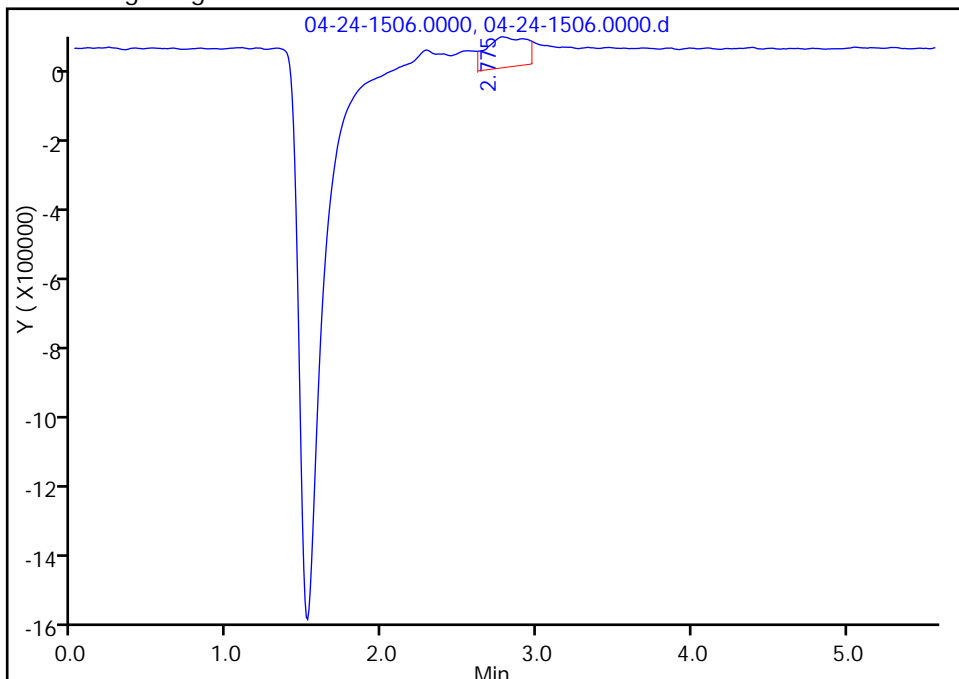
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1506.0000.d
Injection Date: 24-Apr-2015 18:04:00 Instrument ID: CHIC25
Lims ID: mb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

2 Chloride, CAS: 16887-00-6

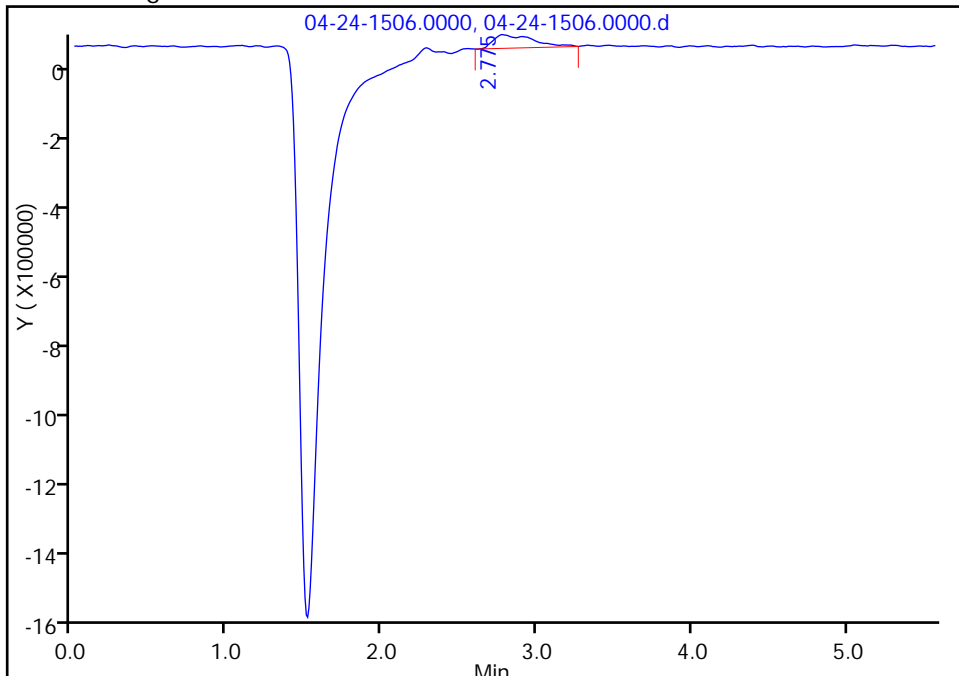
RT: 2.78
Height: 82922
Amount: 0.255240
Amount Units: ug/ml

Processing Integration Results



RT: 2.78
Height: 36842
Amount: 0.232150
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 24-Apr-2015 19:29:55
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 180-139607/4
 Matrix: Water Lab File ID: 04-24-1504.0000.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 17:38
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.10	U	0.10	0.0062
16887-00-6	Chloride	0.231	J	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1504.0000.d
 Lims ID: CCB
 Client ID:
 Sample Type: CCB
 Inject. Date: 24-Apr-2015 17:38:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-004
 Misc. Info.: 13 ccb
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:25 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 24-Apr-2015 18:02:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	
2 Chloride	2.808	3.000	-0.192	35148H		0.2313	M
10 Nitrite as N		3.475				ND	
4 Bromide		4.325				ND	
8 Nitrate as N		4.992				ND	
9 Orthophosphate as P		6.642				ND	
3 Sulfate	8.100	8.042	0.058	96310H		0.1656	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1504.0000.d

Injection Date: 24-Apr-2015 17:38:00

Instrument ID: CHIC25

Operator ID:

Lims ID: CCB

Worklist Smp#: 4

Client ID:

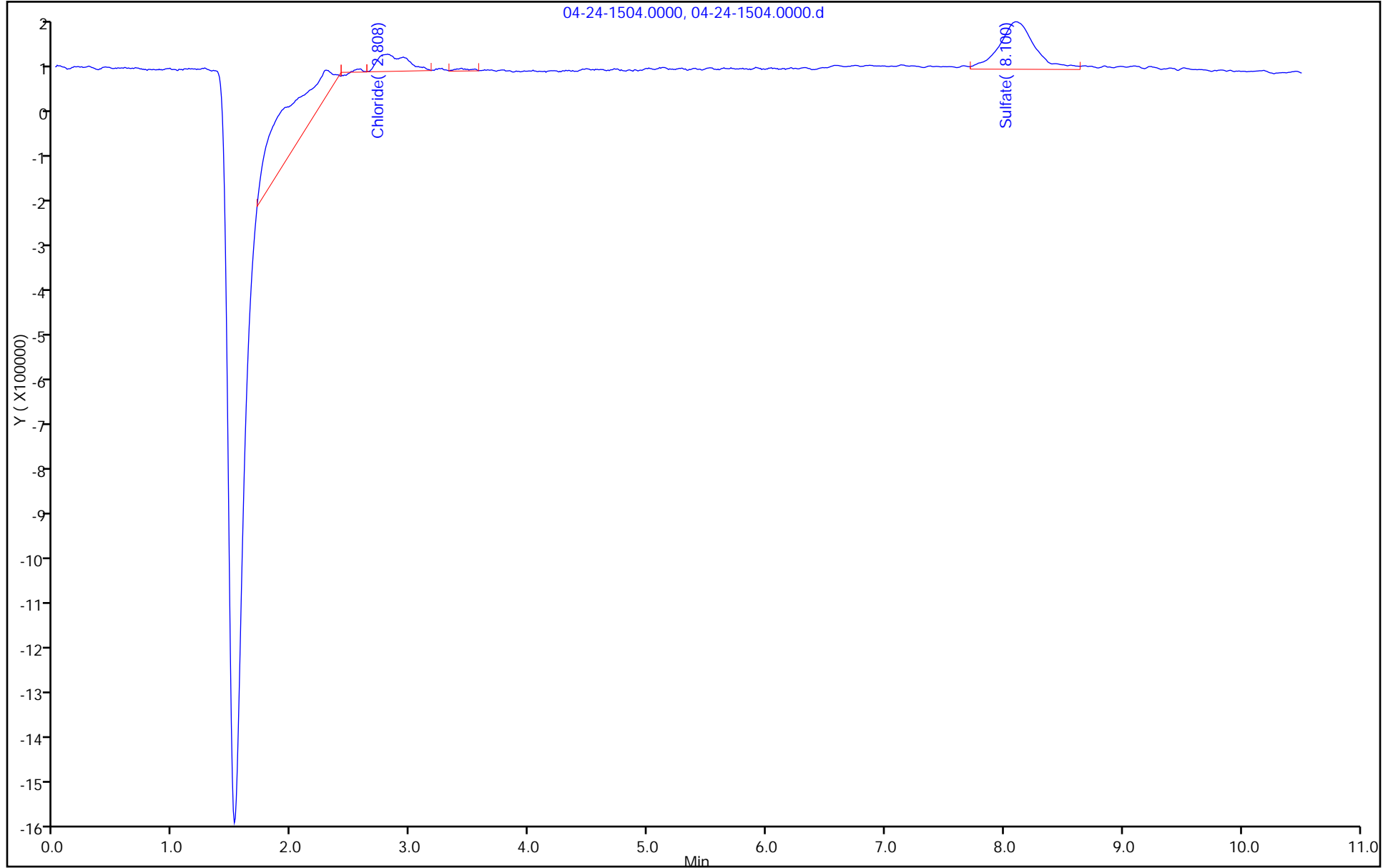
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh

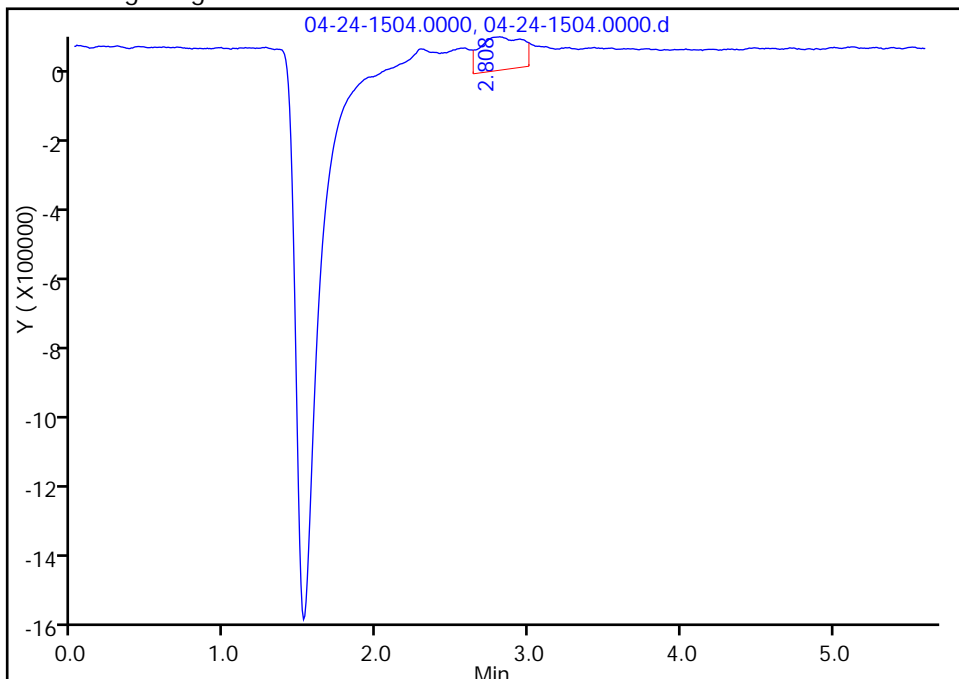
Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1504.0000.d
Injection Date: 24-Apr-2015 17:38:00 Instrument ID: CHIC25
Lims ID: CCB
Client ID:
Operator ID:
Injection Vol: 25.0 ul
Method: 300_9056_CHIC25
Column:

ALS Bottle#: 0 Worklist Smp#: 4
Dil. Factor: 1.0000
Limit Group: GC Anions ICAL
Detector: 0008

2 Chloride, CAS: 16887-00-6

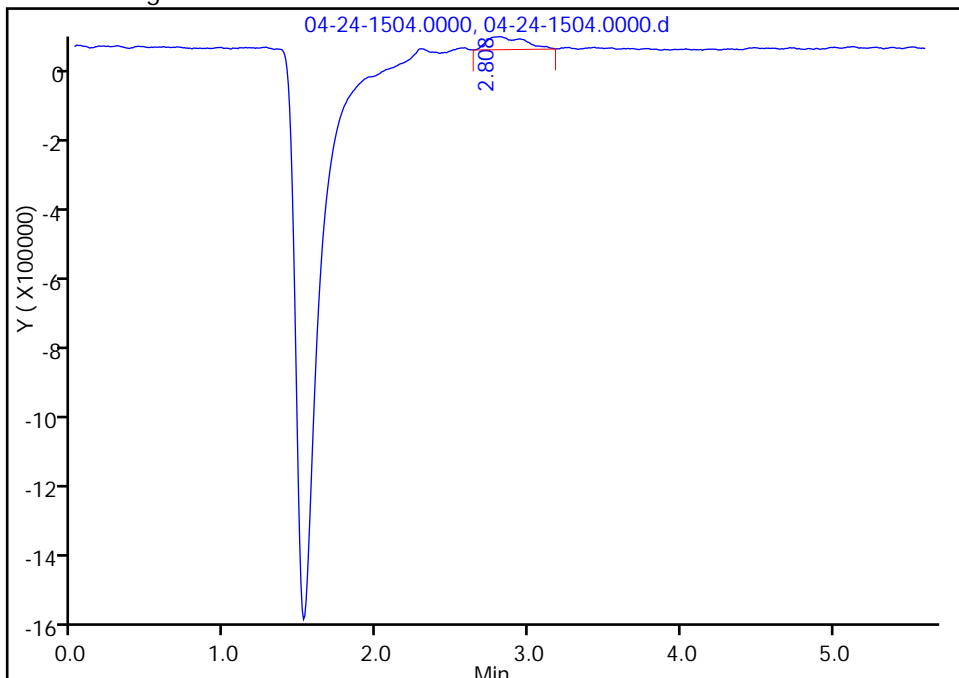
RT: 2.81
Height: 89423
Amount: 0.258498
Amount Units: ug/ml

Processing Integration Results



RT: 2.81
Height: 35148
Amount: 0.231301
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 24-Apr-2015 18:02:54
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 180-139607/16
 Matrix: Water Lab File ID: 04-24-1516.0000.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 20:14
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.10	U	0.10	0.0062
16887-00-6	Chloride	1.0	U	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1516.0000.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 24-Apr-2015 20:14:00 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-016
 Misc. Info.: 24 ccb
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:19 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 24-Apr-2015 20:35:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	
2 Chloride		3.000				ND	
10 Nitrite as N		3.475				ND	
4 Bromide		4.325				ND	
8 Nitrate as N		4.992				ND	
9 Orthophosphate as P		6.642				ND	
3 Sulfate	8.150	8.058	0.092	90861H		0.1562	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1516.0000.d

Injection Date: 24-Apr-2015 20:14:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ccb

Worklist Smp#: 16

Client ID:

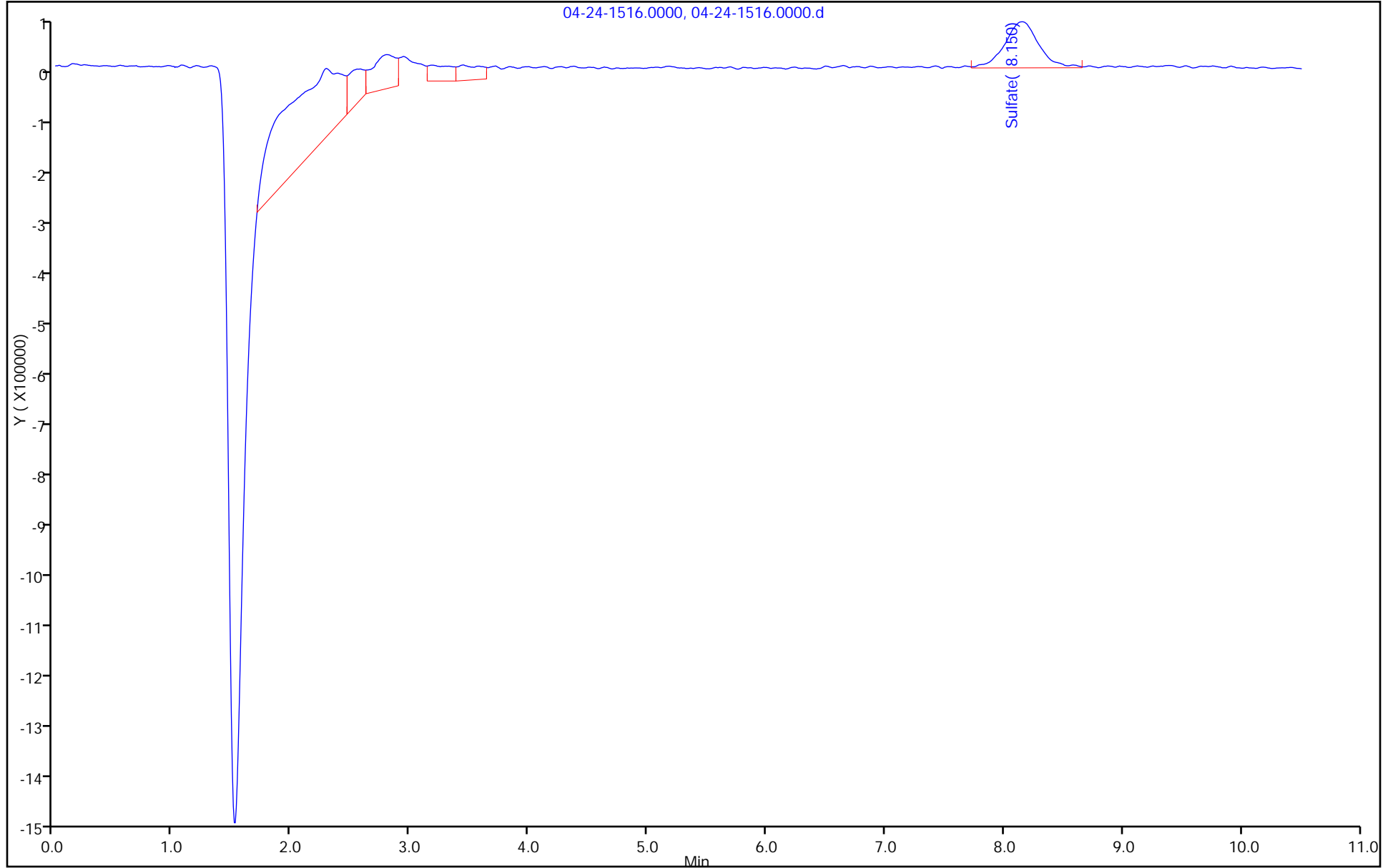
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 180-139607/28
 Matrix: Water Lab File ID: 04-24-1528.0000.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 22:51
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.10	U	0.10	0.0062
16887-00-6	Chloride	0.219	J	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1528.0000.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 24-Apr-2015 22:51:00 ALS Bottle#: 0 Worklist Smp#: 28
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-028
 Misc. Info.: 3063 ccb
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:16 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 25-Apr-2015 09:04:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	
2 Chloride	2.917	2.992	-0.075	9954H		0.2187	M
10 Nitrite as N		3.475				ND	
4 Bromide		4.325				ND	
8 Nitrate as N		4.992				ND	
9 Orthophosphate as P		6.633				ND	
3 Sulfate		8.058				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1528.0000.d

Injection Date: 24-Apr-2015 22:51:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ccb

Worklist Smp#: 28

Client ID:

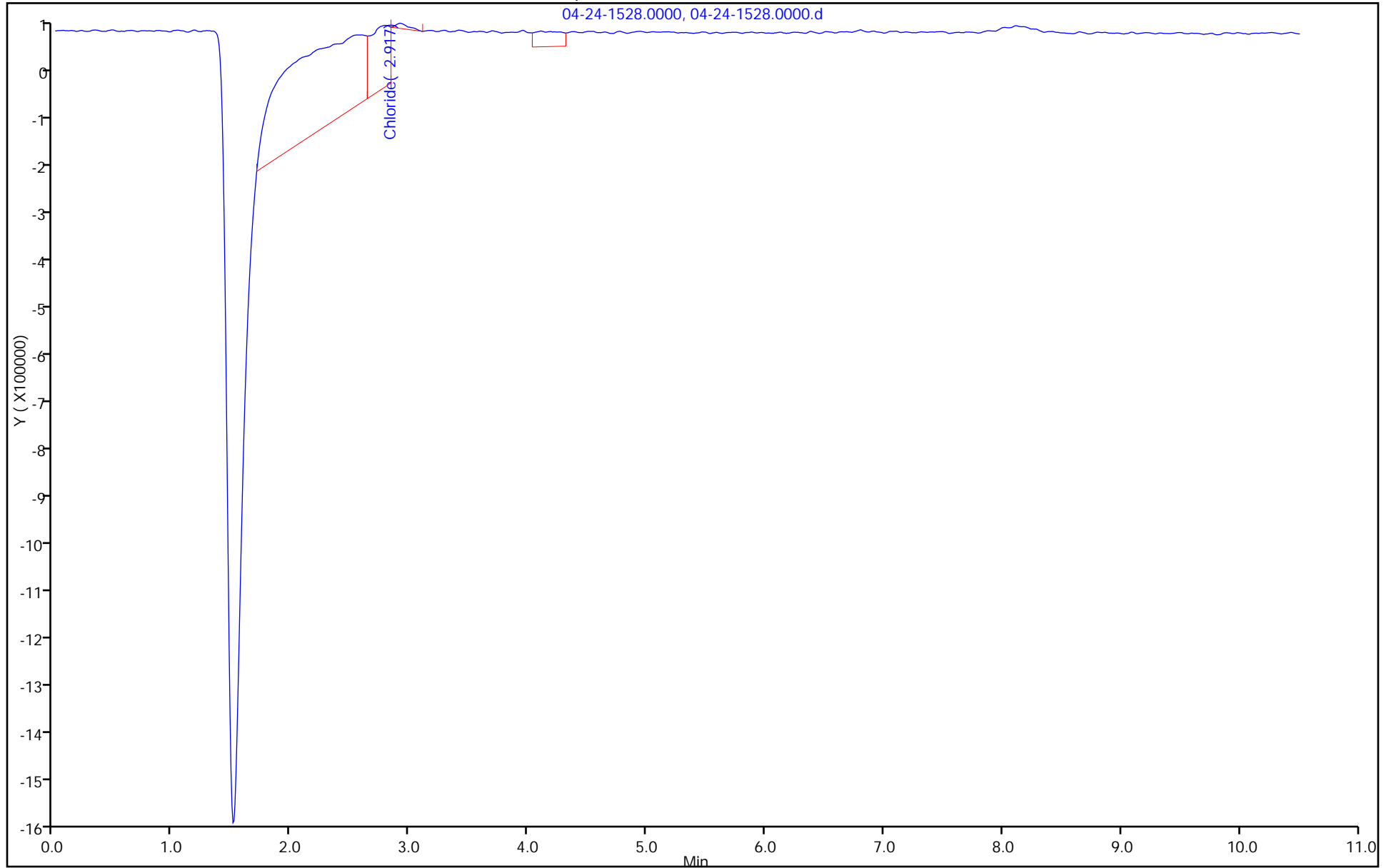
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



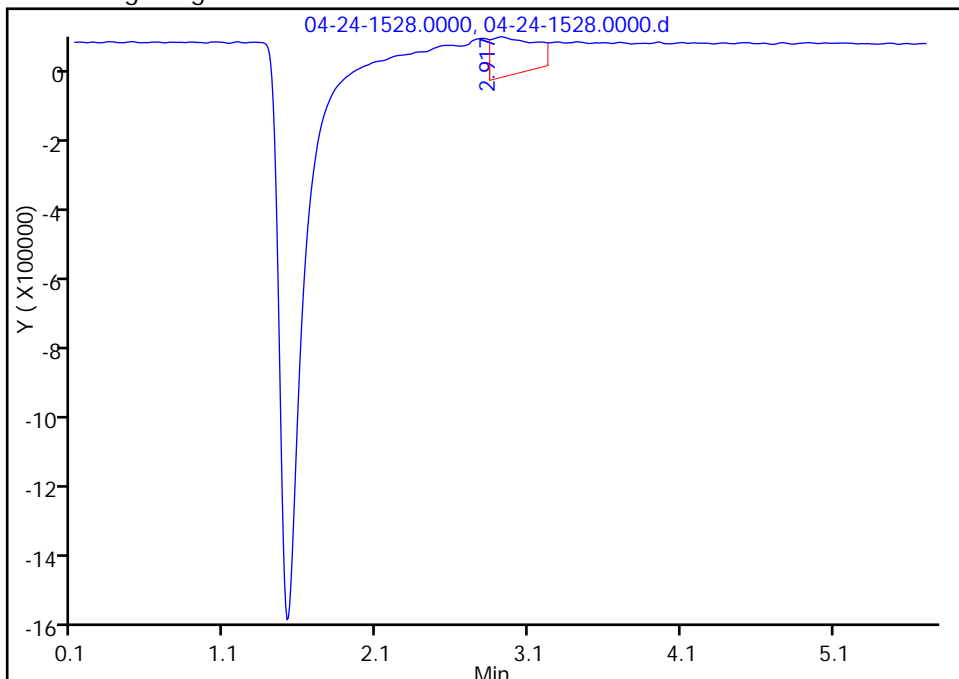
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1528.0000.d
Injection Date: 24-Apr-2015 22:51:00 Instrument ID: CHIC25
Lims ID: ccb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

2 Chloride, CAS: 16887-00-6

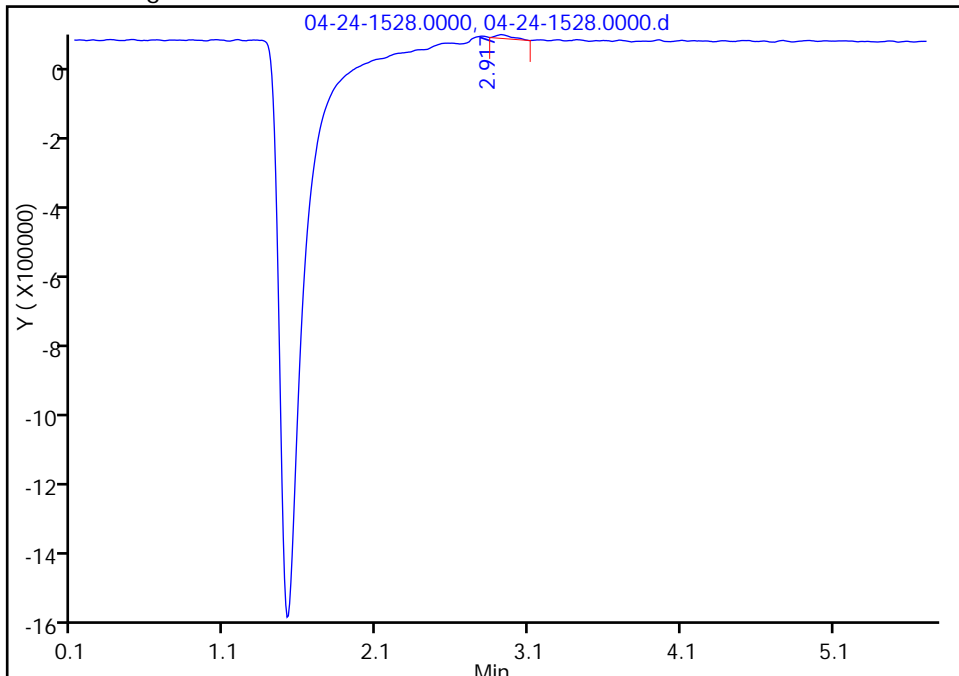
RT: 2.92
Height: 106332
Amount: 0.266971
Amount Units: ug/ml

Processing Integration Results



RT: 2.92
Height: 9954
Amount: 0.218677
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 25-Apr-2015 09:04:49
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 180-139607/40
 Matrix: Water Lab File ID: 04-24-1540.0000.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/25/2015 01:28
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.10	U	0.10	0.0062
16887-00-6	Chloride	0.217	J	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1540.0000.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 25-Apr-2015 01:28:00 ALS Bottle#: 0 Worklist Smp#: 40
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-040
 Misc. Info.: 11871 ccb
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:14 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 25-Apr-2015 09:06:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	
2 Chloride	2.942	2.992	-0.050	6194H		0.2168	M
10 Nitrite as N		3.467				ND	
4 Bromide		4.325				ND	
8 Nitrate as N		4.983				ND	
9 Orthophosphate as P		6.633				ND	
3 Sulfate		8.050				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1540.0000.d

Injection Date: 25-Apr-2015 01:28:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ccb

Worklist Smp#: 40

Client ID:

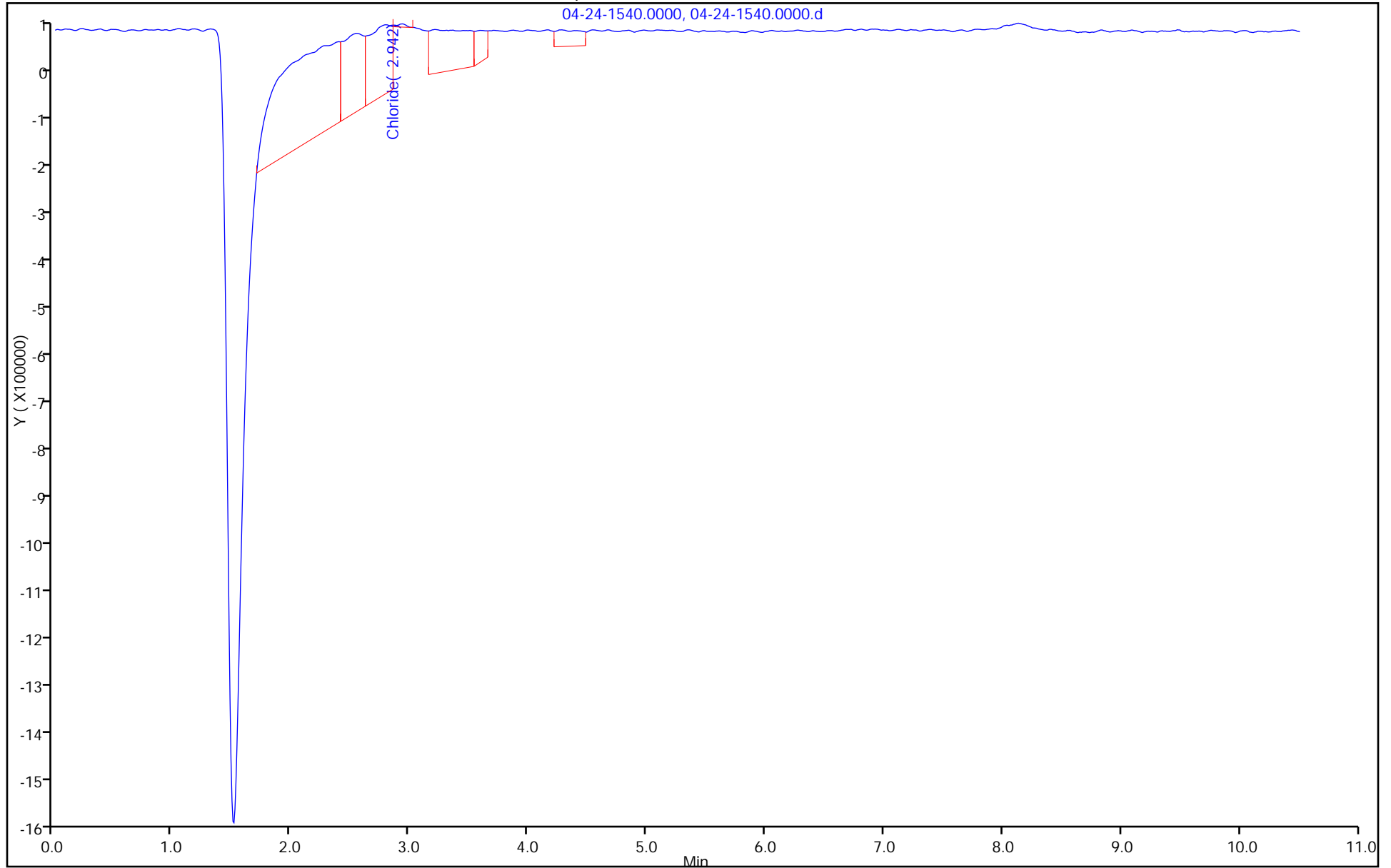
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



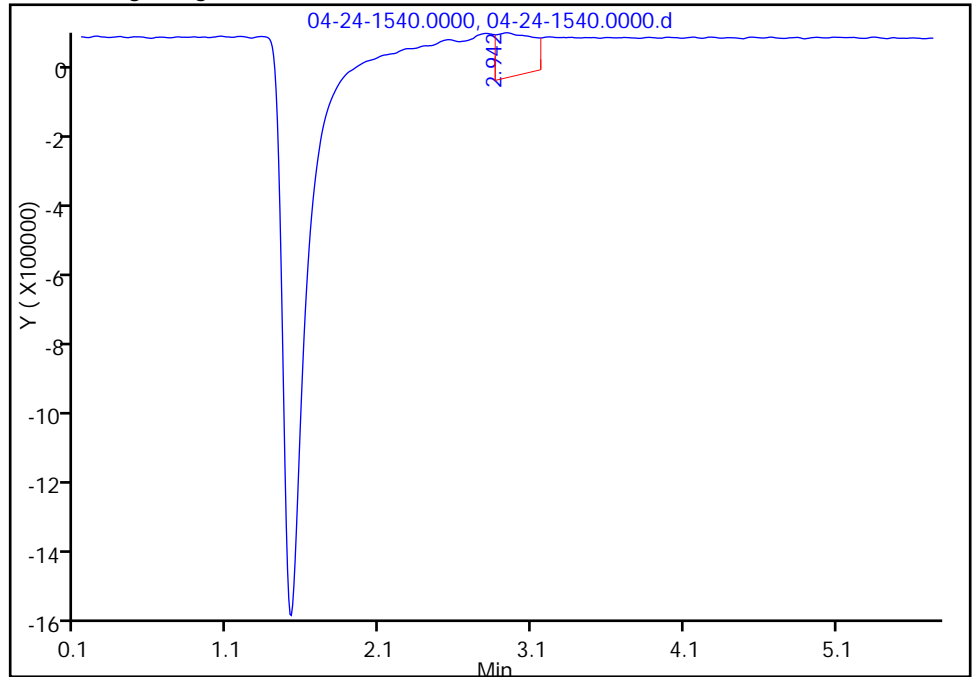
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1540.0000.d
Injection Date: 25-Apr-2015 01:28:00 Instrument ID: CHIC25
Lims ID: ccb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 40
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

2 Chloride, CAS: 16887-00-6

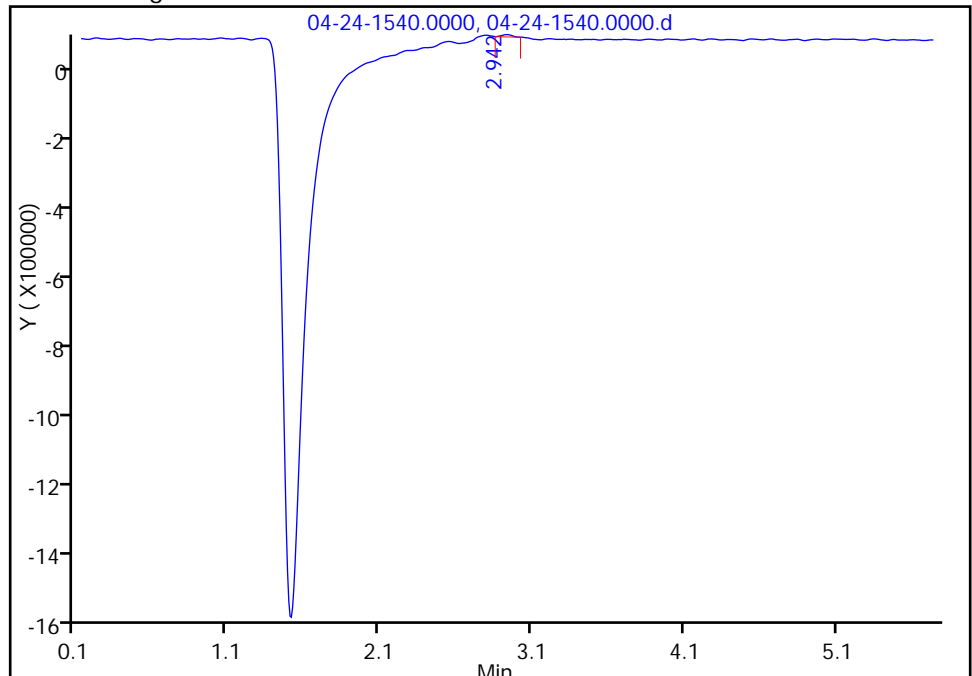
RT: 2.94
Height: 116107
Amount: 0.271869
Amount Units: ug/ml

Processing Integration Results



RT: 2.94
Height: 6194
Amount: 0.216793
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 25-Apr-2015 09:06:01
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 180-139607/46
 Matrix: Water Lab File ID: 04-24-1546.0000.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/25/2015 02:46
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.10	U	0.10	0.0062
16887-00-6	Chloride	0.219	J	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1546.0000.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 25-Apr-2015 02:46:00 ALS Bottle#: 0 Worklist Smp#: 46
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-046
 Misc. Info.: 34 ccb
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:26:55 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

First Level Reviewer: hartmanm Date: 25-Apr-2015 09:07:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	
2 Chloride	2.925	2.992	-0.067	10841H		0.2191	M
10 Nitrite as N		3.467				ND	
4 Bromide		4.325				ND	
8 Nitrate as N		4.983				ND	
9 Orthophosphate as P		6.633				ND	
3 Sulfate		8.050				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1546.0000.d

Injection Date: 25-Apr-2015 02:46:00

Instrument ID: CHIC25

Operator ID:

Lims ID: ccb

Worklist Smp#: 46

Client ID:

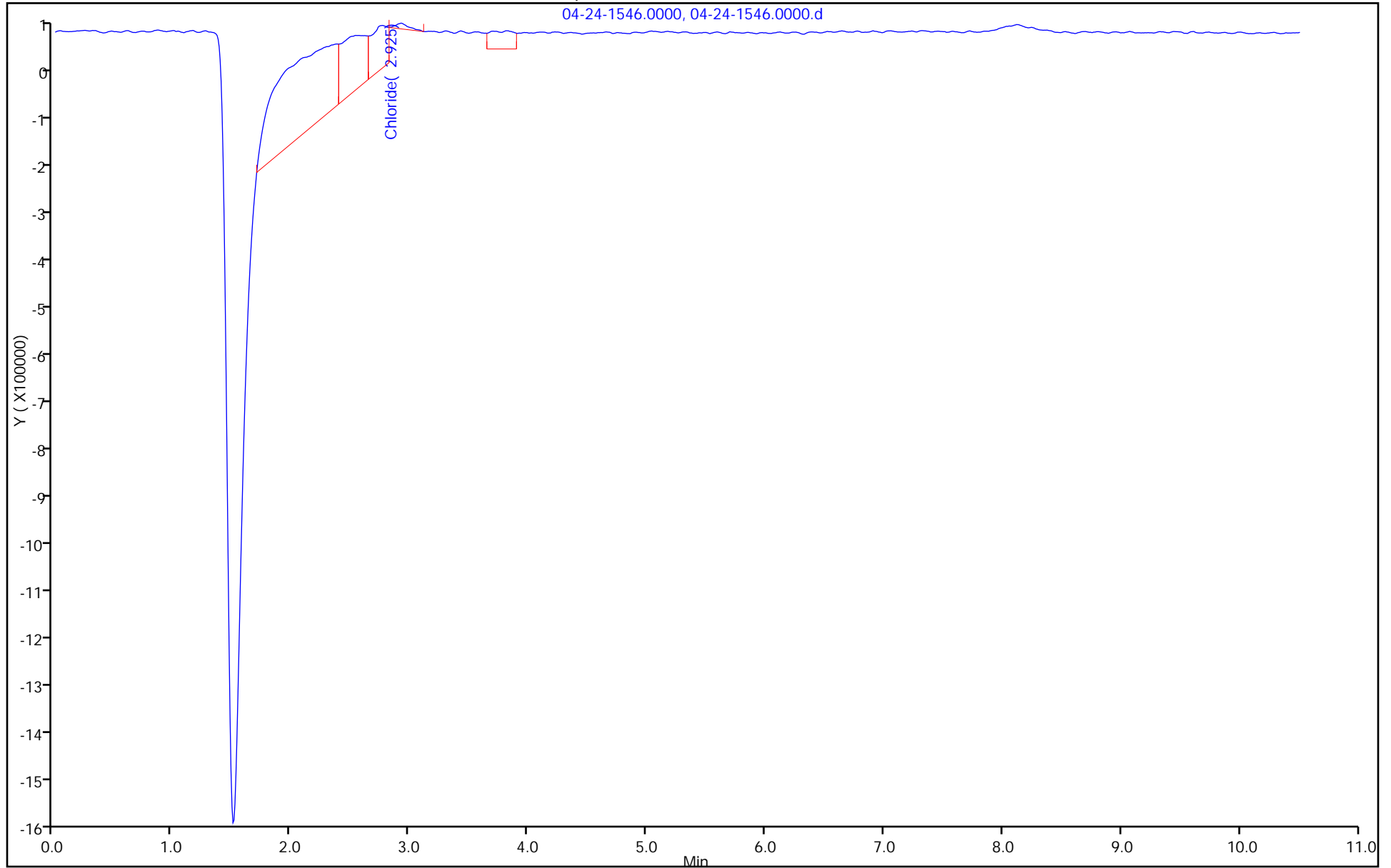
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



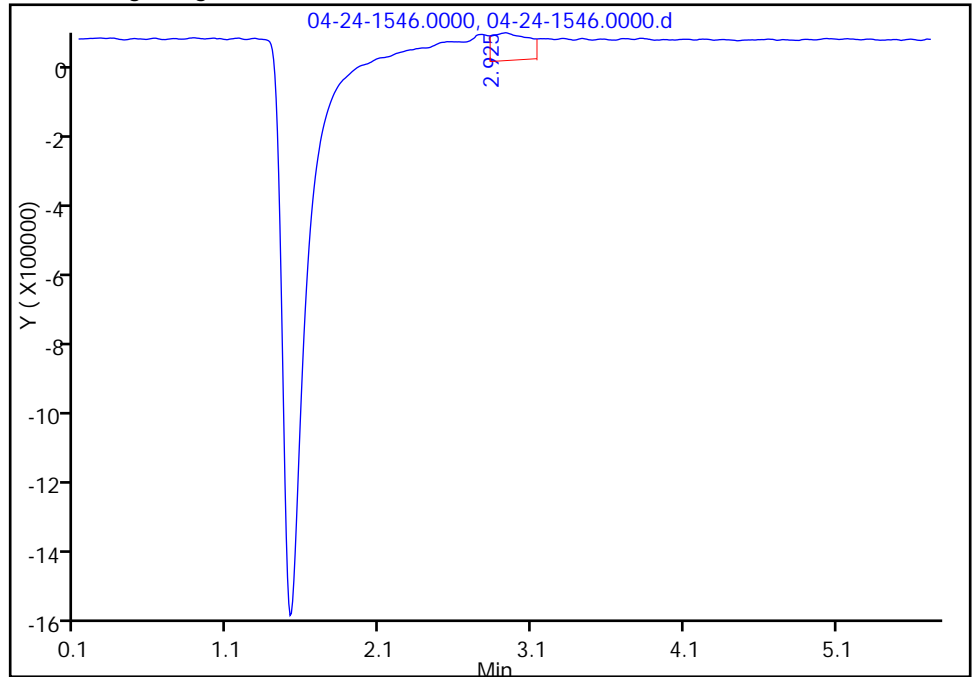
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1546.0000.d
Injection Date: 25-Apr-2015 02:46:00 Instrument ID: CHIC25
Lims ID: ccb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 46
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC25 Limit Group: GC Anions ICAL
Column: Detector 0008

2 Chloride, CAS: 16887-00-6

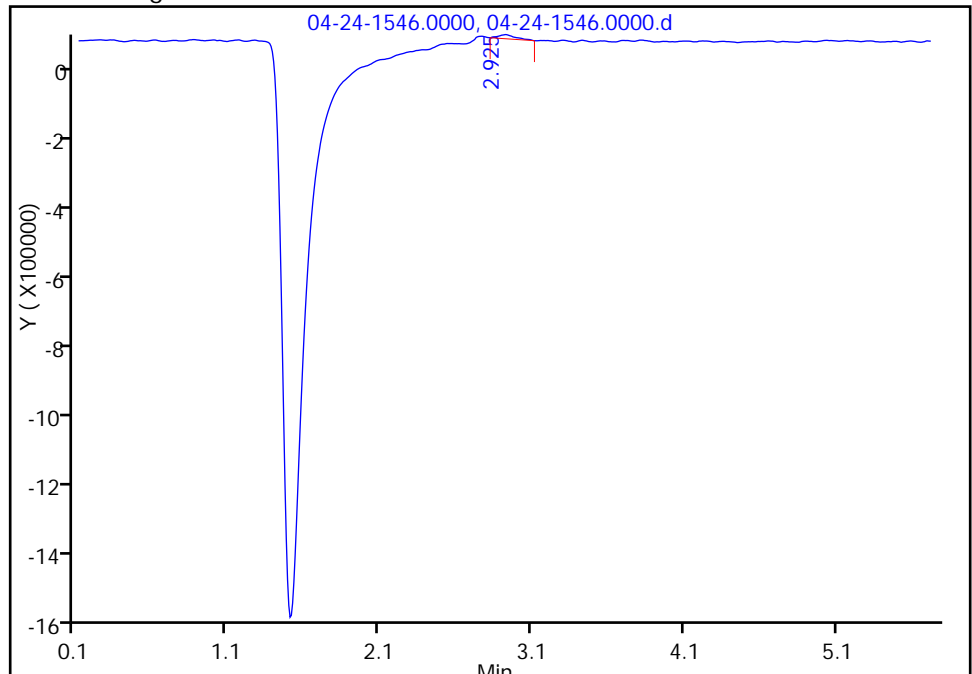
RT: 2.93
Height: 72478
Amount: 0.250007
Amount Units: ug/ml

Processing Integration Results



RT: 2.93
Height: 10841
Amount: 0.219121
Amount Units: ug/ml

Manual Integration Results



Reviewer: hartmann, 25-Apr-2015 09:07:03
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-139607/5
 Matrix: Water Lab File ID: 04-24-1505.0000.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/24/2015 17:51
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 25(uL) GC Column: AS-14 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139607 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.30		0.10	0.0062
16887-00-6	Chloride	52.6		1.0	0.20
14808-79-8	Sulfate	46.9		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1505.0000.d
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 24-Apr-2015 17:51:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 25.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006626-005
 Misc. Info.: 14 lcs
 Operator ID: Instrument ID: CHIC25
 Method: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\300_9056_CHIC25.m
 Limit Group: GC Anions ICAL
 Last Update: 25-Apr-2015 09:20:25 Calib Date: 23-Apr-2015 19:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHIC25\20150423-6608.b\04-23-1507.0000.d
 Column 1 : Det: 0008
 Process Host: XAWRK004

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.092	2.092	0.000	7039676H	2.50	2.48	
2 Chloride	3.000	3.000	0.000	104564850H	50.0	52.6	
10 Nitrite as N	3.475	3.475	0.000	6825267H	2.50	2.29	
4 Bromide	4.325	4.325	0.000	4878690H	10.0	9.10	
8 Nitrate as N	4.992	4.992	0.000	5914504H	2.50	2.30	
9 Orthophosphate as P	6.642	6.642	0.000	1524036H	2.50	2.41	
3 Sulfate	8.042	8.042	0.000	27303502H	50.0	46.9	

Reagents:

icccv_01220 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC25\20150424-6626.b\04-24-1505.0000.d

Injection Date: 24-Apr-2015 17:51:00

Instrument ID: CHIC25

Operator ID:

Lims ID: lcs

Worklist Smp#: 5

Client ID:

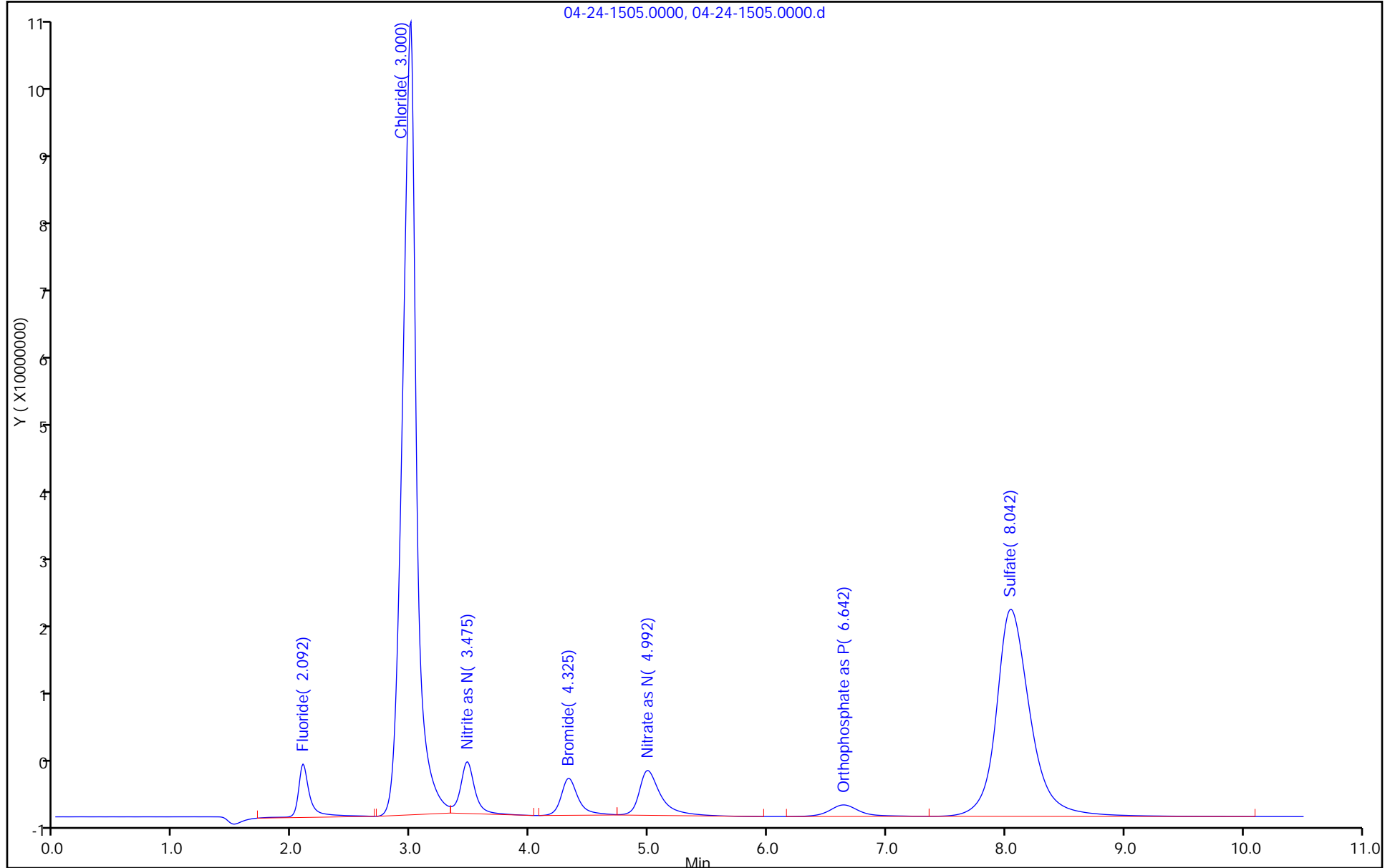
Injection Vol: 25.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC25

Limit Group: GC Anions ICAL



HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHIC25 Start Date: 04/23/2015 18:40

Analysis Batch Number: 139491 End Date: 04/23/2015 21:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 180-139491/2		04/23/2015 18:40	1	04-23-1502.0000 .d	AS-14
IC 180-139491/3		04/23/2015 18:53	1	04-23-1503.0000 .d	AS-14
ICRT 180-139491/4		04/23/2015 19:06	1	04-23-1504.0000 .d	AS-14
IC 180-139491/5		04/23/2015 19:19	1	04-23-1505.0000 .d	AS-14
IC 180-139491/6		04/23/2015 19:32	1	04-23-1506.0000 .d	AS-14
IC 180-139491/7		04/23/2015 19:45	1	04-23-1507.0000 .d	AS-14
ZZZZZ		04/23/2015 19:58	1		AS-14
ZZZZZ		04/23/2015 20:11	1		AS-14
ZZZZZ		04/23/2015 20:24	1		AS-14
ICV 180-139491/11		04/23/2015 20:37	1		AS-14
CCV 180-139491/12		04/23/2015 20:50	1		AS-14
CCB 180-139491/13		04/23/2015 21:04	1		AS-14
ZZZZZ		04/23/2015 21:17	1		AS-14
ZZZZZ		04/23/2015 21:30	1		AS-14

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHIC25 Start Date: 04/24/2015 16:43

Analysis Batch Number: 139607 End Date: 04/25/2015 02:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RINSE 180-139607/1		04/24/2015 16:43	1		AS-14
ICV 180-139607/2		04/24/2015 17:03	1	04-24-1502.0000.d	AS-14
CCV 180-139607/3		04/24/2015 17:21	1	04-24-1503.0000.d	AS-14
CCB 180-139607/4		04/24/2015 17:38	1	04-24-1504.0000.d	AS-14
LCS 180-139607/5		04/24/2015 17:51	1	04-24-1505.0000.d	AS-14
MB 180-139607/6		04/24/2015 18:04	1	04-24-1506.0000.d	AS-14
ZZZZZ		04/24/2015 18:17	1		AS-14
ZZZZZ		04/24/2015 18:30	1		AS-14
ZZZZZ		04/24/2015 18:43	1		AS-14
ZZZZZ		04/24/2015 18:56	1		AS-14
ZZZZZ		04/24/2015 19:09	1		AS-14
ZZZZZ		04/24/2015 19:22	1		AS-14
ZZZZZ		04/24/2015 19:35	1		AS-14
ZZZZZ		04/24/2015 19:48	1		AS-14
CCV 180-139607/15		04/24/2015 20:01	1	04-24-1515.0000.d	AS-14
CCB 180-139607/16		04/24/2015 20:14	1	04-24-1516.0000.d	AS-14
ZZZZZ		04/24/2015 20:27	1		AS-14
ZZZZZ		04/24/2015 20:41	1		AS-14
ZZZZZ		04/24/2015 20:54	5		AS-14
ZZZZZ		04/24/2015 21:07	1		AS-14
ZZZZZ		04/24/2015 21:20	5		AS-14
ZZZZZ		04/24/2015 21:33	2.5		AS-14
ZZZZZ		04/24/2015 21:46	25		AS-14
180-43402-8	HD-MW-50S-0/1-0	04/24/2015 21:59	1	04-24-1524.0000.d	AS-14
180-43402-8	HD-MW-50S-0/1-0	04/24/2015 22:12	10	04-24-1525.0000.d	AS-14
ZZZZZ		04/24/2015 22:25	1		AS-14
CCV 180-139607/27		04/24/2015 22:38	1	04-24-1527.0000.d	AS-14
CCB 180-139607/28		04/24/2015 22:51	1	04-24-1528.0000.d	AS-14
ZZZZZ		04/24/2015 23:04	1		AS-14
180-43402-2	HD-MW-114-0/1-0	04/24/2015 23:17	1	04-24-1530.0000.d	AS-14
180-43402-2	HD-MW-114-0/1-0	04/24/2015 23:30	10	04-24-1531.0000.d	AS-14
180-43402-3	HD-MW-132-0/1-0	04/24/2015 23:43	1	04-24-1532.0000.d	AS-14
180-43402-4	HD-MW-39D-0/1-0	04/24/2015 23:56	1	04-24-1533.0000.d	AS-14
180-43402-4	HD-MW-39D-0/1-0	04/25/2015 00:09	10	04-24-1534.0000.d	AS-14
180-43402-6	HD-MW-127-0/1-0	04/25/2015 00:22	1	04-24-1535.0000.d	AS-14
180-43402-6	HD-MW-127-0/1-0	04/25/2015 00:36	10	04-24-1536.0000.d	AS-14
180-43402-5	HD-MW-74S-0/1-0	04/25/2015 00:49	1	04-24-1537.0000.d	AS-14

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: CHIC25 Start Date: 04/24/2015 16:43

Analysis Batch Number: 139607 End Date: 04/25/2015 02:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
180-43402-5	HD-MW-74S-0/1-0	04/25/2015 01:02	5	04-24-1538.0000 .d	AS-14
CCV 180-139607/39		04/25/2015 01:15	1	04-24-1539.0000 .d	AS-14
CCB 180-139607/40		04/25/2015 01:28	1	04-24-1540.0000 .d	AS-14
180-43402-7	HD-MW-51D-0/1-0	04/25/2015 01:41	1	04-24-1541.0000 .d	AS-14
180-43402-7	HD-MW-51D-0/1-0	04/25/2015 01:54	5	04-24-1542.0000 .d	AS-14
ZZZZZ		04/25/2015 02:07	1		AS-14
ZZZZZ		04/25/2015 02:20	5		AS-14
CCV 180-139607/45		04/25/2015 02:33	1	04-24-1545.0000 .d	AS-14
CCB 180-139607/46		04/25/2015 02:46	1	04-24-1546.0000 .d	AS-14

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43402-1

SDG No.: _____

Project: Harley Davidson

Client Sample ID	Lab Sample ID
<u>HD-MW-114-0/1-0</u>	<u>180-43402-2</u>
<u>HD-MW-132-0/1-0</u>	<u>180-43402-3</u>
<u>HD-MW-39D-0/1-0</u>	<u>180-43402-4</u>
<u>HD-MW-74S-0/1-0</u>	<u>180-43402-5</u>
<u>HD-MW-127-0/1-0</u>	<u>180-43402-6</u>
<u>HD-MW-51D-0/1-0</u>	<u>180-43402-7</u>
<u>HD-MW-50S-0/1-0</u>	<u>180-43402-8</u>

Comments:

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-114-0/1-0

Lab Sample ID: 180-43402-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 11:11

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	120000	500	2.8	ug/L			1	6020A
7440-09-7	Potassium	8100	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	20000	500	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	35000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-132-0/1-0

Lab Sample ID: 180-43402-3

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 13:07

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	60000	500	2.8	ug/L			1	6020A
7440-09-7	Potassium	1800	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	3700	500	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	4500	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-39D-0/1-0

Lab Sample ID: 180-43402-4

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 10:15

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	110000	500	2.8	ug/L			1	6020A
7440-09-7	Potassium	6900	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	12000	500	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	27000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-74S-0/1-0

Lab Sample ID: 180-43402-5

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 09:10

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	92000	500	2.8	ug/L			1	6020A
7440-09-7	Potassium	3200	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	9700	500	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	24000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-127-0/1-0

Lab Sample ID: 180-43402-6

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 11:40

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	100000	500	2.8	ug/L			1	6020A
7440-09-7	Potassium	4200	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	18000	500	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	32000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-51D-0/1-0

Lab Sample ID: 180-43402-7

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 12:30

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	66000	500	2.8	ug/L			1	6020A
7440-09-7	Potassium	19000	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	16000	500	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	34000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-50S-0/1-0

Lab Sample ID: 180-43402-8

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 11:30

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	130000	500	2.8	ug/L			1	6020A
7440-09-7	Potassium	9400	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	14000	500	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	46000	500	3.8	ug/L		B	1	6020A

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

ICV Source: MICVX_00031 Concentration Units: ug/L

CCV Source: MCCV1X_00075

Analyte	ICV 180-140450/5 05/01/2015 11:03				CCV 180-140450/10 05/01/2015 11:54				CCV 180-140450/34 05/01/2015 13:31			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	40600		40000	102	51600		50000	103	49200		50000	98
Magnesium	40600		40000	101	52100		50000	104	49200		50000	98
Potassium	40800		40000	102	52100		50000	104	49400		50000	99
Sodium	40600		40000	102	51000		50000	102	47800		50000	96

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

ICV Source: MICVX_00031 Concentration Units: ug/L

CCV Source: MCCV1X_00075

Analyte	CCV 180-140450/46 05/01/2015 14:20				CCV 180-140450/58 05/01/2015 15:09				CCV 180-140450/70 05/01/2015 15:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	48900		50000	98	49700		50000	99	48400		50000	97
Magnesium	48300		50000	97	49400		50000	99	49000		50000	98
Potassium	48700		50000	97	50000		50000	100	48800		50000	98
Sodium	47700		50000	95	49200		50000	98	48400		50000	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
 Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Method: 6020A Instrument ID: M
 Lab Sample ID: CRI 180-140450/7 Concentration Units: ug/L
 CRQL Check Standard Source: MCRIX_00066

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	500	473	J	95	70-130
Potassium	500	492	J	98	70-130
Magnesium	500	478	J	96	70-130
Sodium	500	474	J	95	70-130

Lab Sample ID: CRI 180-140450/76 Concentration Units: ug/L
 CRQL Check Standard Source: MCRIX_00066

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	500	455	J	91	70-130
Potassium	500	489	J	98	70-130
Magnesium	500	507		101	70-130
Sodium	500	494	J	99	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 180-140450/6 05/01/2015 11:07		CCB1 180-140450/11 05/01/2015 11:57		CCB3 180-140450/35 05/01/2015 13:37		CCB4 180-140450/47 05/01/2015 14:27	
		Found	C	Found	C	Found	C	Found	C
Calcium	500	7.23	J	4.63	J	6.93	J	6.70	J
Magnesium	500	4.44	J	4.85	J	3.84	J	4.19	J
Potassium	500	8.39	J	9.82	J	500	U	500	U
Sodium	500	7.51	J	12.5	J	14.9	J	12.5	J

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB5 180-140450/59 05/01/2015 15:15		CCB6 180-140450/71 05/01/2015 16:04		Found	C	Found	C
		Found	C	Found	C				
Calcium	500	7.04	J	7.94	J				
Magnesium	500	4.46	J	5.06	J				
Potassium	500	500	U	500	U				
Sodium	500	9.76	J	11.4	J				

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
SDG No.: _____
Concentration Units: ug/L Lab Sample ID: MB 180-139894/1-A
Instrument Code: M Batch No.: 140450

CAS No.	Analyte	Concentration	C	Q	Method
7440-70-2	Calcium	500	U		6020A
7440-09-7	Potassium	500	U		6020A
7439-95-4	Magnesium	3.31	J		6020A
7440-23-5	Sodium	30.0	J		6020A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Lab Sample ID: ICSA 180-140450/8

Instrument ID: M

Lab File ID: M50501A.xml

ICS Source: MICSAX_00065

Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Calcium	100000	115600	116
Magnesium	100000	108400	108
Potassium	100000	111200	111
Sodium	100000	109200	109
<i>Aluminum</i>	<i>100000</i>	<i>106200</i>	<i>106</i>
<i>Antimony</i>		<i>0.0010</i>	
<i>Arsenic</i>		<i>-0.0060</i>	
<i>Barium</i>		<i>0.0960</i>	
<i>Beryllium</i>		<i>-0.0110</i>	
<i>Boron</i>		<i>0.266</i>	
<i>Cadmium</i>		<i>0.218</i>	
<i>Chromium</i>		<i>0.678</i>	
<i>Cobalt</i>		<i>0.0650</i>	
<i>Copper</i>		<i>1.35</i>	
<i>Iron</i>	<i>100000</i>	<i>113000</i>	<i>113</i>
<i>Lead</i>		<i>0.212</i>	
<i>Manganese</i>		<i>0.517</i>	
<i>Molybdenum</i>	<i>2000</i>	<i>2345</i>	<i>117</i>
<i>Nickel</i>		<i>0.0560</i>	
<i>Selenium</i>		<i>0.116</i>	
<i>Silicon</i>		<i>-291</i>	
<i>Silver</i>		<i>-0.0250</i>	
<i>Strontium</i>		<i>0.802</i>	
<i>Thallium</i>		<i>0.0060</i>	
<i>Tin</i>		<i>-0.0270</i>	
<i>Titanium</i>	<i>2000</i>	<i>2281</i>	<i>114</i>
<i>Vanadium</i>		<i>-0.291</i>	
<i>Zinc</i>		<i>2.44</i>	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Lab Sample ID: ICSAB 180-140450/9

Instrument ID: M

Lab File ID: M50501A.xml

ICS Source: MICSABX_00070

Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Calcium	100000	115233	115
Magnesium	100000	108400	108
Potassium	100000	110467	110
Sodium	100000	106000	106
<i>Aluminum</i>	<i>100000</i>	<i>105900</i>	<i>106</i>
<i>Antimony</i>	<i>20.0</i>	<i>20.8</i>	<i>104</i>
<i>Arsenic</i>	<i>20.0</i>	<i>21.4</i>	<i>107</i>
<i>Barium</i>	<i>20.0</i>	<i>21.4</i>	<i>107</i>
<i>Beryllium</i>	<i>20.0</i>	<i>21.3</i>	<i>107</i>
<i>Boron</i>	<i>50.0</i>	<i>49.1</i>	<i>98</i>
<i>Cadmium</i>	<i>20.0</i>	<i>21.2</i>	<i>106</i>
<i>Chromium</i>	<i>20.0</i>	<i>22.2</i>	<i>111</i>
<i>Cobalt</i>	<i>20.0</i>	<i>21.0</i>	<i>105</i>
<i>Copper</i>	<i>20.0</i>	<i>21.5</i>	<i>108</i>
<i>Iron</i>	<i>100000</i>	<i>110667</i>	<i>111</i>
<i>Lead</i>	<i>20.0</i>	<i>22.1</i>	<i>110</i>
<i>Manganese</i>	<i>22.5</i>	<i>22.1</i>	<i>98</i>
<i>Molybdenum</i>	<i>2000</i>	<i>2302</i>	<i>115</i>
<i>Nickel</i>	<i>20.0</i>	<i>20.5</i>	<i>103</i>
<i>Selenium</i>	<i>50.0</i>	<i>52.5</i>	<i>105</i>
<i>Silver</i>	<i>20.0</i>	<i>20.6</i>	<i>103</i>
<i>Strontium</i>	<i>25.0</i>	<i>23.7</i>	<i>95</i>
<i>Thallium</i>	<i>20.0</i>	<i>21.3</i>	<i>107</i>
<i>Tin</i>	<i>100</i>	<i>107</i>	<i>107</i>
<i>Titanium</i>	<i>2000</i>	<i>2285</i>	<i>114</i>
<i>Vanadium</i>	<i>20.0</i>	<i>21.4</i>	<i>107</i>
<i>Zinc</i>	<i>25.0</i>	<i>22.7</i>	<i>91</i>

Calculations are performed before rounding to avoid round-off errors in calculated results.

5A-IN
 MATRIX SPIKE SAMPLE RECOVERY
 METALS

Client ID: HD-MW-114-0/1-0 MS Lab ID: 180-43402-2 MS
 Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Matrix: Water Concentration Units: ug/L
 % Solids: _____

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Calcium	174000	120000	50000	103	75-125		6020A
Potassium	54000	8100	50000	92	75-125		6020A
Magnesium	58500	20000	50000	77	75-125		6020A
Sodium	72900	35000	50000	77	75-125		6020A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

5A-IN
 MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
 METALS

Client ID: HD-MW-114-0/1-0 MSD

Lab ID: 180-43402-2 MSD

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Matrix: Water

Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Calcium	181000	50000	117	75-125	4	20		6020A
Potassium	56300	50000	96	75-125	4	20		6020A
Magnesium	60900	50000	82	75-125	4	20		6020A
Sodium	74800	50000	81	75-125	3	20		6020A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

5B-IN
 POST DIGESTION SPIKE SAMPLE RECOVERY
 METALS

Client ID: HD-MW-114-0/1-0 PDS

Lab ID: 180-43402-2 PDS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Matrix: Water

Concentration Units: ug/L

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Calcium	180000	120000	50000	115	75-125		6020A
Potassium	61700	8100	50000	107	75-125		6020A
Magnesium	66100	20000	50000	92	75-125		6020A
Sodium	78900	35000	50000	89	75-125		6020A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 METALS - TOTAL RECOVERABLE

Lab ID: LCS 180-139894/2-A

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

Sample Matrix: Water

LCS Source: MTAPITMSA_00023

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	50000	52000		104	80	120		6020A
Potassium	50000	48600		97	80	120		6020A
Magnesium	50000	43000		86	80	120		6020A
Sodium	50000	42600		85	80	120		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
 ICP-AES AND ICP-MS SERIAL DILUTIONS
 METALS

Lab ID: 180-43402-2

SDG No: _____

Lab Name: TestAmerica Pittsburgh

Job No: 180-43402-1

Matrix: Water

Concentration Units: ug/L

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Difference	Q	Method
Calcium	120000	115000	6.0		6020A
Potassium	8100	7910	2.5		6020A
Magnesium	20000	19600	2.0		6020A
Sodium	35000	33500	2.9		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43402-1

SDG Number: _____

Matrix: Water

Instrument ID: M

Method: 6020A

MDL Date: 01/23/2010 18:33

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Calcium	44	500	2.8374
Magnesium	26	500	1.1665
Potassium	39	500	5.823
Sodium	23	500	3.8135

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43402-1

SDG Number: _____

Matrix: Water

Instrument ID: M

Method: 6020A

XMDL Date: 01/23/2010 18:33

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Calcium	44	500	2.8374
Magnesium	26	500	1.1665
Potassium	39	500	5.823
Sodium	23	500	3.8135

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Pittsburgh

Job No: 180-43402-1

SDG No.: _____

Instrument ID: M

Date: 03/14/2011 22:35

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Calcium		1500000	6020A
Potassium		450000	6020A
Magnesium		1500000	6020A
Sodium		450000	6020A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-139894/1-A	04/28/2015 11:24	139894		50	50
LCS 180-139894/2-A	04/28/2015 11:24	139894		50	50
180-43402-2	04/28/2015 11:24	139894		50	50
180-43402-2 MS	04/28/2015 11:24	139894		50	50
180-43402-2 MSD	04/28/2015 11:24	139894		50	50
180-43402-3	04/28/2015 11:24	139894		50	50
180-43402-4	04/28/2015 11:24	139894		50	50
180-43402-5	04/28/2015 11:24	139894		50	50
180-43402-6	04/28/2015 11:24	139894		50	50
180-43402-7	04/28/2015 11:24	139894		50	50
180-43402-8	04/28/2015 11:24	139894		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh
SDG No.: _____
Instrument ID: M
Start Date: 05/01/2015 09:24

Job No.: 180-43402-1
Analysis Method: 6020A
End Date: 05/01/2015 19:02

Lab Sample Id	D/F	Type	Time	Analytes																							
				Ca	K	Mg	N																				
ITUNE 180-140450/1			09:24																								
STD1 180-140450/2 IC	1		10:53	X	X	X	X																				
STD2 180-140450/3 IC	1		10:56	X	X	X	X																				
STD3 180-140450/4 IC	1		11:00	X	X	X	X																				
ICV 180-140450/5	1		11:03	X	X	X	X																				
ICB 180-140450/6	1		11:07	X	X	X	X																				
CRI 180-140450/7	1		11:40	X	X	X	X																				
ICSA 180-140450/8	1		11:44	X	X	X	X																				
ICSAB 180-140450/9	1		11:47	X	X	X	X																				
CCV 180-140450/10	1		11:54	X	X	X	X																				
CCB1 180-140450/11	1		11:57	X	X	X	X																				
ZZZZZZ			12:01																								
ZZZZZZ			12:05																								
ZZZZZZ			12:09																								
ZZZZZZ			12:13																								
ZZZZZZ			12:16																								
ZZZZZZ			12:20																								
ZZZZZZ			12:27																								
ZZZZZZ			12:31																								
ZZZZZZ			12:35																								
ZZZZZZ			12:38																								
CCV 180-140450/22			12:42																								
CCB2 180-140450/23			12:49																								
ZZZZZZ			12:53																								
ZZZZZZ			12:57																								
ZZZZZZ			13:00																								
ZZZZZZ			13:04																								
ZZZZZZ			13:08																								
ZZZZZZ			13:12																								
ZZZZZZ			13:16																								
ZZZZZZ			13:19																								
ZZZZZZ			13:23																								
ZZZZZZ			13:27																								
CCV 180-140450/34	1		13:31	X	X	X	X																				
CCB3 180-140450/35	1		13:37	X	X	X	X																				
ZZZZZZ			13:41																								
ZZZZZZ			13:45																								
ZZZZZZ			13:49																								
ZZZZZZ			13:53																								
ZZZZZZ			13:57																								
ZZZZZZ			14:00																								
ZZZZZZ			14:04																								

13-IN
 ANALYSIS RUN LOG
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1
 SDG No.: _____
 Instrument ID: M Analysis Method: 6020A
 Start Date: 05/01/2015 09:24 End Date: 05/01/2015 19:02

Lab Sample Id	D/F	T y p e	Time	Analytes																
				C a	K	M g	N a													
ZZZZZZ			14:08																	
MB 180-139894/1-A	1	R	14:12	X	X	X	X													
LCS 180-139894/2-A	1	R	14:16	X	X	X	X													
CCV 180-140450/46	1		14:20	X	X	X	X													
CCB4 180-140450/47	1		14:27	X	X	X	X													
180-43402-2	1	T	14:31	X	X	X	X													
180-43402-2 SD	5	T	14:34	X	X	X	X													
180-43402-2 MS	1	T	14:38	X	X	X	X													
180-43402-2 MSD	1	T	14:42	X	X	X	X													
180-43402-2 PDS	1	T	14:46	X	X	X	X													
180-43402-3	1	T	14:50	X	X	X	X													
180-43402-4	1	T	14:53	X	X	X	X													
180-43402-5	1	T	14:57	X	X	X	X													
180-43402-6	1	T	15:01	X	X	X	X													
180-43402-7	1	T	15:05	X	X	X	X													
CCV 180-140450/58	1		15:09	X	X	X	X													
CCB5 180-140450/59	1		15:15	X	X	X	X													
180-43402-8	1	T	15:19	X	X	X	X													
ZZZZZZ			15:23																	
ZZZZZZ			15:27																	
ZZZZZZ			15:31																	
ZZZZZZ			15:34																	
ZZZZZZ			15:38																	
ZZZZZZ			15:42																	
ZZZZZZ			15:46																	
ZZZZZZ			15:50																	
ZZZZZZ			15:53																	
CCV 180-140450/70	1		15:57	X	X	X	X													
CCB6 180-140450/71	1		16:04	X	X	X	X													
ZZZZZZ			16:08																	
ZZZZZZ			16:12																	
ZZZZZZ			16:15																	
ZZZZZZ			16:19																	
CRI 180-140450/76	1		16:30	X	X	X	X													
ZZZZZZ			16:34																	
ZZZZZZ			16:37																	
ZZZZZZ			16:41																	
ZZZZZZ			16:45																	
CCV 180-140450/81			16:49																	
CCB7 180-140450/82			16:56																	
ZZZZZZ			16:59																	
ZZZZZZ			17:03																	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: M Analysis Method: 6020A

Start Date: 05/01/2015 09:24 End Date: 05/01/2015 19:02

Lab Sample Id	D/F	Type	Time	Analytes																											
				C	K	M	N																								
ZZZZZZ			17:07																												
ZZZZZZ			17:11																												
ZZZZZZ			17:15																												
ZZZZZZ			17:18																												
ZZZZZZ			17:22																												
ZZZZZZ			17:26																												
ZZZZZZ			17:30																												
ZZZZZZ			17:34																												
CCV 180-140450/93			17:38																												
CCB8 180-140450/94			17:44																												
ZZZZZZ			17:48																												
ZZZZZZ			17:52																												
ZZZZZZ			17:56																												
ZZZZZZ			17:59																												
ZZZZZZ			18:03																												
ZZZZZZ			18:07																												
ZZZZZZ			18:11																												
ZZZZZZ			18:15																												
ZZZZZZ			18:19																												
CCV 180-140450/104			18:22																												
CCB9 180-140450/105			18:29																												
ZZZZZZ			18:33																												
ZZZZZZ			18:37																												
ZZZZZZ			18:40																												
ZZZZZZ			18:44																												
ZZZZZZ			18:48																												
ZZZZZZ			18:52																												
CCV 180-140450/112			18:56																												
CCB10 180-140450/113			19:02																												

Prep Types:
 R = Total Recoverable
 T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

ICP-MS Instrument ID: M Start Date: 05/01/2015 End Date: 05/01/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc	Q	Element Y-89	Q	Element Rh-103	Q	Element In	Q
STD1 180-140450/2 I	10:53	100		100		100		100		100	
STD2 180-140450/3 I	10:56	94		105		99		92		94	
STD3 180-140450/4 I	11:00	97		100		98		98		96	
ICV 180-140450/5	11:03	95		102		106		95		95	
ICB 180-140450/6	11:07	101		106		105		106		105	
CRI 180-140450/7	11:40	93		93		92		92		92	
ICSA 180-140450/8	11:44	65		70		71		70		75	
ICSAB 180-140450/9	11:47	64		72		78		71		78	
CCV 180-140450/10	11:54	77		92		97		87		91	
CCB1 180-140450/11	11:57	90		97		101		101		102	
CCV 180-140450/34	13:31	95		98		96		90		92	
CCB3 180-140450/35	13:37	115		116		113		112		108	
MB 180-139894/1-A	14:12	106		102		102		101		101	
LCS 180-139894/2-A	14:16	55		48		62		58		64	
CCV 180-140450/46	14:20	97		95		93		86		88	
CCB4 180-140450/47	14:27	116		113		104		104		100	
180-43402-2	14:31	61		54		65		61		66	
180-43402-2 SD	14:34	77		67		74		74		77	
180-43402-2 MS	14:38	55		46		58		54		60	
180-43402-2 MSD	14:42	52		44		57		53		59	
180-43402-2 PDS	14:46	52		46		57		53		58	
180-43402-3	14:50	52		42		54		53		58	
180-43402-4	14:53	49		41		53		51		57	
180-43402-5	14:57	51		42		52		51		55	
180-43402-6	15:01	50		40		52		51		56	
180-43402-7	15:05	46		39		50		49		55	
CCV 180-140450/58	15:09	94		88		84		82		81	
CCB5 180-140450/59	15:15	117		99		94		96		91	
180-43402-8	15:19	54		45		55		53		58	
CCV 180-140450/70	15:57	94		94		87		85		84	
CCB6 180-140450/71	16:04	110		109		98		100		94	
CRI 180-140450/76	16:30	113		116		107		97		91	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

ICP-MS Instrument ID: M Start Date: 05/01/2015 End Date: 05/01/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-140450/2 I	10:53	100		100		100					
STD2 180-140450/3 I	10:56	95		95		89					
STD3 180-140450/4 I	11:00	99		98		96					
ICV 180-140450/5	11:03	98		98		89					
ICB 180-140450/6	11:07	104		104		101					
CRI 180-140450/7	11:40	94		95		91					
ICSA 180-140450/8	11:44	80		79		90					
ICSAB 180-140450/9	11:47	82		83		80					
CCV 180-140450/10	11:54	96		97		92					
CCB1 180-140450/11	11:57	105		104		100					
CCV 180-140450/34	13:31	93		93		79					
CCB3 180-140450/35	13:37	103		101		92					
MB 180-139894/1-A	14:12	100		99		89					
LCS 180-139894/2-A	14:16	75		77		64					
CCV 180-140450/46	14:20	89		89		78					
CCB4 180-140450/47	14:27	95		94		88					
180-43402-2	14:31	77		78		68					
180-43402-2 SD	14:34	84		85		79					
180-43402-2 MS	14:38	73		74		60					
180-43402-2 MSD	14:42	71		73		59					
180-43402-2 PDS	14:46	71		73		58					
180-43402-3	14:50	70		72		65					
180-43402-4	14:53	69		71		63					
180-43402-5	14:57	67		69		64					
180-43402-6	15:01	69		71		63					
180-43402-7	15:05	67		69		62					
CCV 180-140450/58	15:09	85		85		79					
CCB5 180-140450/59	15:15	89		88		86					
180-43402-8	15:19	69		71		61					
CCV 180-140450/70	15:57	85		86		77					
CCB6 180-140450/71	16:04	90		90		86					
CRI 180-140450/76	16:30	88		87		85					

Dilution Corrected Concentrations

STD1 1542084 INT STD 5/1/2015 10:53:20 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	101.475%	-0.008	-0.130	-0.010	0.000	-0.343	0.103	0.069
2	10:53:58	96.661%	-0.005	0.111	0.019	0.000	0.298	0.031	-0.049
3	10:54:17	101.864%	0.012	0.019	-0.009	0.000	0.045	-0.134	-0.020
X		100.000%	0.000	0.000	-0.000	0.000	0.000	-0.000	-0.000
σ		2.898%	0.011	0.122	0.017	0.000	0.323	0.121	0.061
%RSD		2.898	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	-0.034	-19.810	0.000	0.163	0.204	-0.561	102.497%	0.040
2	10:53:58	-0.008	13.680	0.000	-0.488	-1.914	0.086	99.248%	-0.055
3	10:54:17	0.043	6.129	0.000	0.325	1.710	0.475	98.255%	0.016
X		0.000	0.000	0.000	-0.000	0.000	0.000	100.000%	-0.000
σ		0.039	17.570	0.000	0.430	1.820	0.523	2.219%	0.050
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	2.219	0.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	-0.001	0.004	-0.000	2.065	-0.036	-0.000	-0.022	-0.009
2	10:53:58	-0.000	-0.012	0.008	-1.062	0.176	0.000	0.001	0.024
3	10:54:17	0.001	0.008	-0.008	-1.003	-0.140	0.000	0.021	-0.015
X		0.000	0.000	-0.000	0.000	0.000	0.000	0.000	0.000
σ		0.001	0.010	0.008	1.789	0.161	0.000	0.021	0.021
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	-0.016	-0.117	0.091	-0.001	-0.066	-0.035	0.000	0.000
2	10:53:58	-0.020	0.060	-0.009	0.008	0.030	0.076	0.000	-0.002
3	10:54:17	0.036	0.057	-0.082	-0.007	0.036	-0.041	0.000	0.002
X		-0.000	-0.000	0.000	0.000	-0.000	0.000	0.000	0.000
σ		0.031	0.101	0.087	0.007	0.057	0.066	0.000	0.002
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	99.302%	0.008	0.001	99.946%	-0.003	-0.005	0.007	0.001
2	10:53:58	100.717%	-0.006	-0.003	100.096%	-0.008	-0.005	-0.020	-0.012
3	10:54:17	99.981%	-0.003	0.002	99.958%	0.011	0.010	0.013	0.012
X		100.000%	0.000	0.000	100.000%	-0.000	0.000	-0.000	-0.000
σ		0.708%	0.007	0.003	0.083%	0.010	0.009	0.017	0.012
%RSD		0.708	0.000	0.000	0.083	0.000	0.000	0.000	0.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:53:39	99.129%	-0.015	-0.007	0.001	-0.002	0.007	99.117%	98.386%
2	10:53:58	99.785%	0.016	-0.004	0.003	-0.002	-0.006	99.782%	99.966%
3	10:54:17	101.086%	-0.001	0.011	-0.003	0.004	-0.000	101.100%	101.648%
X		100.000%	-0.000	0.000	0.000	-0.000	-0.000	100.000%	100.000%
σ		0.996%	0.015	0.010	0.003	0.004	0.007	1.009%	1.631%
%RSD		0.996	0.000	0.000	0.000	0.000	0.000	1.009	1.631
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	10:53:39	0.002	-0.001	-0.002	100.071%				
2	10:53:58	-0.001	0.000	-0.000	101.084%				
3	10:54:17	-0.000	0.001	0.003	98.845%				
X		-0.000	0.000	0.000	100.000%				
σ		0.001	0.001	0.002	1.121%				
%RSD		0.000	0.000	0.000	1.121				

STD2 1558995 5/1/2015 10:56:36 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	96.565%	200.200	0.147	0.115	0.000	96980.000	97420.000	97750.000
2	10:56:55	93.611%	199.100	0.641	0.034	0.000	98550.000	99440.000	98700.000
3	10:57:14	92.236%	200.700	0.208	0.024	0.000	104500.000	103100.000	103500.000
X		94.137%	200.000	0.332	0.058	0.000	100000.000	100000.000	100000.000
σ		2.212%	0.834	0.269	0.050	0.000	3944.000	2897.000	3109.000
%RSD		2.350	0.417	81.050	86.250	0.000	3.944	2.897	3.109
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	965.200	-180.300	0.000	97140.000	102800.000	96950.000	107.778%	0.135
2	10:56:55	999.800	-149.700	0.000	100300.000	97370.000	100500.000	104.794%	0.113
3	10:57:14	1035.000	-150.600	0.000	102600.000	99780.000	102600.000	102.962%	0.097
X		1000.000	-160.200	0.000	100000.000	100000.000	100000.000	105.178%	0.115
σ		34.870	17.400	0.000	2738.000	2739.000	2845.000	2.431%	0.019
%RSD		3.487	10.860	0.000	2.738	2.739	2.845	2.311	16.480
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	196.200	198.500	986.300	49700.000	49490.000	200.700	200.500	198.200
2	10:56:55	201.900	203.000	1010.000	50620.000	50960.000	203.900	201.600	203.600
3	10:57:14	201.900	198.500	1004.000	49680.000	49550.000	195.400	197.800	198.200
X		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		3.255	2.594	12.220	537.300	830.600	4.323	1.948	3.117
%RSD		1.627	1.297	1.222	1.075	1.661	2.161	0.974	1.558
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	198.500	196.100	197.000	195.700	198.300	197.200	0.000	198.900
2	10:56:55	202.900	202.400	202.400	202.600	201.700	201.400	0.000	200.500
3	10:57:14	198.600	201.500	200.600	201.600	200.000	201.300	0.000	200.600
X		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		2.537	3.374	2.750	3.729	1.682	2.384	0.000	0.983
%RSD		1.269	1.687	1.375	1.865	0.841	1.192	0.000	0.492
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	98.000%	0.069	0.066	91.724%	197.800	199.500	198.100	198.900
2	10:56:55	98.217%	0.097	0.081	91.552%	201.700	200.500	199.200	201.100
3	10:57:14	99.489%	0.094	0.091	92.380%	200.500	200.000	202.600	200.000
X		98.569%	0.087	0.079	91.886%	200.000	200.000	200.000	200.000
σ		0.805%	0.016	0.013	0.437%	2.007	0.509	2.345	1.086
%RSD		0.816	17.970	15.920	0.476	1.003	0.255	1.173	0.543
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:56:36	93.293%	-0.038	0.172	0.121	198.600	199.200	93.308%	93.567%
2	10:56:55	93.792%	-0.011	0.131	0.155	201.400	199.000	95.278%	95.380%
3	10:57:14	93.463%	-0.004	0.138	0.153	200.100	201.700	96.913%	95.558%
X		93.516%	-0.018	0.147	0.143	200.000	200.000	95.166%	94.835%
σ		0.253%	0.018	0.022	0.019	1.386	1.500	1.805%	1.102%
%RSD		0.271	101.000	14.860	13.490	0.693	0.750	1.897	1.162
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	10:56:36	195.800	196.700	193.900	89.627%				
2	10:56:55	199.500	200.000	201.100	88.808%				
3	10:57:14	204.700	203.300	205.000	87.903%				
X		200.000	200.000	200.000	88.779%				
σ		4.499	3.334	5.639	0.862%				
%RSD		2.250	1.667	2.820	0.971				

STD3 1558996 5/1/2015 11:00:11 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	97.696%	0.057	195.800	202.800	0.000	25.500	20.350	21.150
2	11:00:31	96.854%	0.027	200.900	199.800	0.000	22.510	16.550	17.950
3	11:00:50	95.891%	0.070	203.300	197.400	0.000	21.540	16.990	17.450
X		96.813%	0.051	200.000	200.000	0.000	23.180	17.960	18.850
σ		0.903%	0.022	3.808	2.667	0.000	2.063	2.078	2.007
%RSD		0.933	43.580	1.904	1.334	0.000	8.901	11.570	10.650
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	22.170	10280.000	0.000	23.150	25.040	70.130	104.392%	195.800
2	11:00:31	21.420	9977.000	0.000	21.210	7.748	68.660	99.175%	201.500
3	11:00:50	21.570	9743.000	0.000	21.030	20.220	64.630	96.084%	202.600
X		21.720	10000.000	0.000	21.800	17.670	67.800	99.884%	200.000
σ		0.397	268.900	0.000	1.175	8.924	2.848	4.199%	3.648
%RSD		1.828	2.689	0.000	5.390	50.510	4.200	4.204	1.824
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	0.074	0.071	0.356	43.270	41.350	0.045	0.164	0.029
2	11:00:31	0.099	0.087	0.355	30.850	30.650	0.045	0.131	0.017
3	11:00:50	0.050	0.066	0.350	27.460	26.170	0.035	0.130	0.076
X		0.074	0.074	0.353	33.860	32.720	0.042	0.141	0.040
σ		0.024	0.011	0.003	8.320	7.799	0.006	0.019	0.031
%RSD		32.700	14.620	0.920	24.570	23.840	14.350	13.490	77.470
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	0.037	3.170	3.322	0.399	0.133	0.537	0.000	0.070
2	11:00:31	0.042	3.124	3.223	0.327	0.172	0.328	0.000	0.069
3	11:00:50	0.019	3.264	3.177	0.259	0.027	0.178	0.000	0.067
X		0.033	3.186	3.241	0.329	0.111	0.348	0.000	0.069
σ		0.012	0.071	0.074	0.070	0.075	0.180	0.000	0.002
%RSD		37.390	2.243	2.282	21.360	67.650	51.810	0.000	2.613
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	97.921%	197.500	197.000	99.160%	0.005	-0.016	0.061	-0.537
2	11:00:31	97.669%	201.300	201.200	97.903%	-0.001	-0.005	0.041	-0.517
3	11:00:50	96.907%	201.200	201.900	97.398%	0.010	0.005	0.043	-0.488
X		97.499%	200.000	200.000	98.154%	0.004	-0.005	0.048	-0.514
σ		0.528%	2.181	2.657	0.907%	0.006	0.010	0.011	0.025
%RSD		0.542	1.090	1.328	0.924	124.900	189.700	22.620	4.821
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:11	95.975%	198.100	197.400	197.500	0.062	0.236	97.228%	96.994%
2	11:00:31	96.040%	201.500	199.300	197.800	0.068	0.209	98.220%	97.785%
3	11:00:50	96.971%	200.400	203.300	204.700	0.102	0.215	101.264%	99.842%
X		96.329%	200.000	200.000	200.000	0.077	0.220	98.904%	98.207%
σ		0.557%	1.725	3.016	4.108	0.021	0.014	2.103%	1.470%
%RSD		0.578	0.862	1.508	2.054	27.770	6.502	2.127	1.497
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:00:11	0.068	0.074	0.120	95.655%				
2	11:00:31	0.066	0.062	0.114	96.177%				
3	11:00:50	0.065	0.066	0.116	94.601%				
X		0.066	0.067	0.117	95.478%				
σ		0.002	0.006	0.003	0.803%				
%RSD		2.984	9.411	2.859	0.841				

ICV 1527873 5/1/2015 11:03:51 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	100.953%	84.320	86.200	83.220	0.000	39740.000	39250.000	39510.000
2	11:04:10	92.851%	86.400	88.900	85.760	0.000	41240.000	41350.000	40720.000
3	11:04:29	91.900%	84.160	88.220	85.310	0.000	40880.000	41040.000	41420.000
X		95.235%	106.201%	109.716%	105.950%	0.000	101.545%	101.369%	101.383%
σ		4.975%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		5.224	1.468	1.603	1.600	0.000	1.930	2.801	2.386
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	401.900	4226.000	0.000	39840.000	39050.000	39870.000	103.829%	78.320
2	11:04:10	419.800	4377.000	0.000	41310.000	40070.000	40770.000	103.404%	81.720
3	11:04:29	418.100	4497.000	0.000	41350.000	40120.000	41240.000	99.129%	81.150
X		103.317%	109.168%	0.000	102.077%	99.364%	101.566%	102.121%	100.498%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.599%	n/a
%RSD		2.393	3.107	0.000	2.109	1.523	1.716	2.545	2.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	79.050	80.900	399.800	20130.000	20100.000	82.410	83.740	84.640
2	11:04:10	80.500	81.480	399.000	19820.000	19540.000	78.990	81.180	81.400
3	11:04:29	81.340	82.980	399.400	19960.000	19610.000	80.000	81.430	81.300
X		100.367%	102.232%	99.846%	99.835%	98.749%	100.586%	102.645%	103.056%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.443	1.314	0.104	0.777	1.542	2.184	1.718	2.306
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	84.220	84.510	84.200	82.570	86.560	85.850	0.000	78.880
2	11:04:10	81.610	84.630	84.500	82.350	86.960	86.800	0.000	79.980
3	11:04:29	82.610	85.570	85.950	83.030	87.350	87.000	0.000	79.870
X		103.517%	106.132%	106.102%	103.311%	108.695%	108.189%	0.000	99.472%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.591	0.685	1.105	0.419	0.454	0.708	0.000	0.761
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	106.984%	77.660	79.410	95.807%	81.280	81.160	81.320	80.920
2	11:04:10	106.445%	80.410	81.960	94.913%	81.930	82.560	83.780	83.770
3	11:04:29	105.020%	80.910	82.590	93.364%	82.050	82.960	83.140	82.630
X		106.150%	99.574%	101.650%	94.695%	102.189%	102.784%	103.431%	103.049%
σ		1.015%	n/a	n/a	1.236%	n/a	n/a	n/a	n/a
%RSD		0.956	2.200	2.072	1.305	0.506	1.150	1.543	1.739
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:03:51	96.338%	80.100	79.810	79.020	79.560	78.620	96.448%	95.665%
2	11:04:10	95.165%	80.710	80.300	80.080	80.010	79.940	98.355%	97.762%
3	11:04:29	94.766%	81.360	80.650	81.530	79.570	80.870	99.859%	99.534%
X		95.423%	100.908%	100.315%	100.263%	99.645%	99.767%	98.220%	97.653%
σ		0.817%	n/a	n/a	n/a	n/a	n/a	1.710%	1.937%
%RSD		0.856	0.782	0.524	1.573	0.323	1.416	1.741	1.983
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:03:51	83.290	83.220	81.790	89.449%				
2	11:04:10	85.280	86.550	84.530	90.485%				
3	11:04:29	88.550	89.720	87.020	87.903%				
X		107.135%	108.119%	105.558%	89.279%				
σ		n/a	n/a	n/a	1.300%				
%RSD		3.100	3.758	3.095	1.456				

ICB 5/1/2015 11:07:30 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	105.018%	0.048	0.295	0.406	0.000	8.426	5.585	5.910
2	11:07:50	103.796%	0.030	0.340	0.409	0.000	7.381	4.373	4.093
3	11:08:09	95.184%	0.060	0.155	0.346	0.000	6.736	3.574	3.307
X		101.332%	0.046	0.263	0.387	0.000	7.514	4.511	4.437
σ		5.360%	0.015	0.096	0.035	0.000	0.853	1.012	1.335
%RSD		5.289	32.550	36.520	9.114	0.000	11.350	22.440	30.080
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	1.351	-136.200	0.000	9.125	4.733	8.553	110.014%	0.066
2	11:07:50	1.429	-114.800	0.000	7.717	0.557	6.958	105.799%	-0.012
3	11:08:09	1.550	-90.490	0.000	8.327	8.081	6.190	101.740%	0.070
X		1.443	-113.900	0.000	8.389	4.457	7.234	105.851%	0.041
σ		0.100	22.880	0.000	0.706	3.770	1.205	4.137%	0.046
%RSD		6.945	20.100	0.000	8.416	84.580	16.660	3.908	111.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	0.022	0.018	0.162	17.100	13.670	0.011	-0.003	0.496
2	11:07:50	0.021	0.014	0.123	11.710	9.982	0.012	-0.014	0.512
3	11:08:09	0.025	0.027	0.122	10.660	7.341	0.007	-0.004	0.443
X		0.023	0.020	0.136	13.160	10.330	0.010	-0.007	0.483
σ		0.002	0.007	0.023	3.456	3.181	0.003	0.006	0.036
%RSD		8.587	34.220	16.770	26.270	30.780	27.550	88.450	7.480
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	0.413	0.745	0.760	-0.012	0.124	-0.041	0.000	0.035
2	11:07:50	0.423	0.769	0.758	0.014	-0.046	-0.015	0.000	0.035
3	11:08:09	0.418	0.758	0.717	-0.005	0.053	-0.042	0.000	0.028
X		0.418	0.757	0.745	-0.001	0.044	-0.033	0.000	0.033
σ		0.005	0.012	0.024	0.013	0.085	0.015	0.000	0.004
%RSD		1.151	1.610	3.243	1497.000	195.100	46.480	0.000	11.540
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	104.515%	0.635	0.594	106.386%	-0.029	-0.041	0.042	0.021
2	11:07:50	106.305%	0.469	0.501	106.218%	-0.023	-0.033	0.033	0.025
3	11:08:09	105.046%	0.401	0.405	104.898%	-0.036	-0.022	0.030	0.019
X		105.289%	0.502	0.500	105.834%	-0.030	-0.032	0.035	0.022
σ		0.919%	0.120	0.095	0.815%	0.007	0.009	0.006	0.003
%RSD		0.873	23.930	18.920	0.770	22.930	28.790	17.920	14.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:07:30	104.186%	0.161	-0.012	-0.007	0.032	0.018	102.947%	101.046%
2	11:07:50	104.648%	0.154	0.004	0.001	0.025	0.027	104.420%	103.776%
3	11:08:09	105.542%	0.140	0.006	0.009	0.038	0.030	105.621%	105.700%
X		104.792%	0.152	-0.001	0.001	0.032	0.025	104.329%	103.508%
σ		0.689%	0.011	0.010	0.008	0.006	0.007	1.339%	2.339%
%RSD		0.658	7.232	1139.000	888.400	19.950	26.240	1.284	2.259
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:07:30	0.019	0.027	0.038	100.796%				
2	11:07:50	0.026	0.023	0.035	102.379%				
3	11:08:09	0.025	0.028	0.035	99.255%				
X		0.023	0.026	0.036	100.810%				
σ		0.004	0.003	0.002	1.562%				
%RSD		15.550	10.280	5.148	1.550				

CRI 1554040 5/1/2015 11:40:21 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	97.860%	1.028	20.060	19.780	0.000	463.700	464.700	470.300
2	11:40:40	90.135%	1.185	21.280	19.890	0.000	481.100	472.200	478.400
3	11:40:59	90.805%	1.099	19.860	18.960	0.000	478.400	478.200	486.500
X		92.934%	110.393%	101.996%	97.724%	0.000	94.882%	94.336%	95.681%
σ		4.279%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		4.605	7.148	3.769	2.588	0.000	1.969	1.437	1.696
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	31.980	246.600	0.000	483.700	485.500	460.500	95.223%	5.481
2	11:40:40	33.050	262.500	0.000	493.800	491.100	478.900	91.645%	5.149
3	11:40:59	33.090	271.500	0.000	498.800	509.100	479.600	90.915%	5.005
X		109.017%	52.047%	0.000	98.416%	99.043%	94.603%	92.594%	104.226%
σ		n/a	n/a	0.000	n/a	n/a	n/a	2.305%	n/a
%RSD		1.922	4.840	0.000	1.566	2.484	2.284	2.490	4.682
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	1.164	2.144	5.219	58.990	57.480	0.530	1.105	2.257
2	11:40:40	1.161	2.139	5.320	59.790	58.150	0.549	1.074	2.183
3	11:40:59	1.014	2.137	5.250	58.070	56.960	0.508	0.940	2.264
X		111.291%	106.989%	105.259%	117.903%	115.058%	105.803%	103.955%	111.742%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		7.733	0.182	0.989	1.457	1.037	3.865	8.461	2.022
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	2.217	5.995	6.007	1.253	5.796	6.007	0.000	5.247
2	11:40:40	2.345	6.138	6.179	1.340	5.730	6.413	0.000	5.339
3	11:40:59	2.141	5.858	5.913	0.999	5.629	5.537	0.000	5.402
X		111.730%	119.940%	120.662%	119.737%	114.366%	119.719%	0.000	106.588%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		4.611	2.339	2.237	14.800	1.474	7.323	0.000	1.458
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	92.137%	4.756	4.777	93.078%	1.014	1.036	0.976	1.064
2	11:40:40	91.882%	4.871	4.914	92.235%	1.057	1.017	1.093	1.078
3	11:40:59	91.377%	4.750	4.988	91.882%	1.064	1.013	1.102	1.097
X		91.799%	95.851%	97.862%	92.398%	104.496%	102.181%	105.697%	107.948%
σ		0.387%	n/a	n/a	0.615%	n/a	n/a	n/a	n/a
%RSD		0.422	1.426	2.188	0.665	2.611	1.206	6.665	1.529
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:21	91.667%	4.623	1.884	1.929	9.808	10.220	92.975%	93.303%
2	11:40:40	91.790%	5.067	1.916	1.962	9.862	10.060	93.322%	93.684%
3	11:40:59	92.085%	4.914	1.972	1.983	9.924	10.110	96.323%	96.730%
X		91.847%	97.360%	96.203%	97.908%	98.648%	101.283%	94.207%	94.573%
σ		0.215%	n/a	n/a	n/a	n/a	n/a	1.841%	1.878%
%RSD		0.234	4.634	2.320	1.382	0.590	0.808	1.954	1.986
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:40:21	1.022	1.036	1.045	91.154%				
2	11:40:40	1.030	1.020	1.093	92.303%				
3	11:40:59	1.058	1.047	1.121	90.861%				
X		103.667%	103.404%	108.645%	91.440%				
σ		n/a	n/a	n/a	0.762%				
%RSD		1.801	1.331	3.572	0.834				

ICSA 1533081 5/1/2015 11:44:00 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	65.512%	-0.037	0.519	0.235	0.000	108900.000	107600.000	109600.000
2	11:44:19	64.794%	0.011	0.305	0.319	0.000	112100.000	110800.000	110500.000
3	11:44:38	65.117%	-0.006	0.125	0.243	0.000	106700.000	105100.000	105000.000
X		65.141%	-0.011	0.316	0.266	0.000	109200.000	107900.000	108400.000
σ		0.360%	0.024	0.197	0.046	0.000	2686.000	2852.000	2962.000
%RSD		0.552	228.700	62.430	17.480	0.000	2.459	2.645	2.733
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	107000.000	-297.600	0.000	107600.000	106100.000	110400.000	75.256%	2198.000
2	11:44:19	107900.000	-282.200	0.000	118300.000	119500.000	124300.000	64.653%	2424.000
3	11:44:38	103700.000	-292.700	0.000	107800.000	108400.000	112100.000	70.173%	2221.000
X		106200.000	-290.800	0.000	111200.000	111300.000	115600.000	70.027%	2281.000
σ		2224.000	7.848	0.000	6157.000	7182.000	7623.000	5.303%	124.100
%RSD		2.094	2.699	0.000	5.536	6.453	6.596	7.573	5.443
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	-0.302	0.709	0.487	108200.000	107700.000	0.065	0.031	1.456
2	11:44:19	-0.282	0.695	0.546	119200.000	118200.000	0.075	-0.036	1.586
3	11:44:38	-0.289	0.629	0.519	111500.000	110200.000	0.054	0.174	1.518
X		-0.291	0.678	0.517	113000.000	112000.000	0.065	0.056	1.520
σ		0.010	0.042	0.030	5649.000	5455.000	0.010	0.107	0.065
%RSD		3.559	6.266	5.722	5.000	4.868	16.140	190.400	4.283
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	1.252	2.425	1.244	0.044	-0.228	0.129	0.000	0.830
2	11:44:19	1.465	2.522	1.937	-0.077	-0.057	0.194	0.000	0.786
3	11:44:38	1.317	2.369	1.467	0.015	-0.043	0.026	0.000	0.789
X		1.345	2.439	1.549	-0.006	-0.109	0.116	0.000	0.802
σ		0.109	0.077	0.354	0.063	0.103	0.085	0.000	0.024
%RSD		8.128	3.176	22.840	1123.000	94.650	72.800	0.000	3.034
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	71.227%	2377.000	2324.000	69.910%	-0.037	-0.050	0.315	0.322
2	11:44:19	70.935%	2415.000	2363.000	69.304%	-0.024	-0.031	0.212	0.239
3	11:44:38	72.024%	2395.000	2348.000	69.455%	-0.015	-0.028	0.128	0.203
X		71.395%	2396.000	2345.000	69.556%	-0.025	-0.036	0.218	0.255
σ		0.564%	18.950	19.420	0.315%	0.011	0.012	0.094	0.061
%RSD		0.789	0.791	0.828	0.453	42.660	32.650	43.050	23.910
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:44:00	73.851%	-0.029	0.002	0.001	0.150	0.085	78.065%	77.593%
2	11:44:19	75.017%	-0.036	0.004	0.012	0.128	0.114	80.481%	80.047%
3	11:44:38	76.253%	-0.017	-0.003	0.014	0.099	0.088	80.913%	80.407%
X		75.040%	-0.027	0.001	0.009	0.126	0.096	79.820%	79.349%
σ		1.201%	0.009	0.004	0.007	0.025	0.016	1.535%	1.531%
%RSD		1.600	34.500	296.600	76.030	20.210	16.960	1.923	1.930
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:44:00	0.008	0.005	0.185	100.646%				
2	11:44:19	0.004	0.008	0.211	87.651%				
3	11:44:38	0.006	0.006	0.240	80.738%				
X		0.006	0.006	0.212	89.678%				
σ		0.002	0.001	0.028	10.107%				
%RSD		26.100	22.340	13.010	11.271				

IC SAB 1558998 5/1/2015 11:47:39 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	68.957%	21.380	49.010	50.600	0.000	106500.000	104900.000	104800.000
2	11:47:59	61.443%	22.390	53.200	49.220	0.000	106000.000	106100.000	109900.000
3	11:48:18	60.134%	20.260	55.190	47.590	0.000	105500.000	106900.000	110500.000
X		63.511%	106.728%	104.936%	98.273%	0.000	106.018%	105.962%	108.425%
σ		4.761%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		7.496	4.998	6.012	3.071	0.000	0.476	0.946	2.890
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	103400.000	231.600	0.000	104400.000	105100.000	108300.000	77.739%	2168.000
2	11:47:59	107700.000	285.800	0.000	109900.000	110600.000	113200.000	72.179%	2234.000
3	11:48:18	106600.000	301.700	0.000	117100.000	118500.000	124200.000	65.291%	2454.000
X		105.913%	54.608%	0.000	110.476%	111.411%	115.236%	71.736%	114.267%
σ		n/a	n/a	0.000	n/a	n/a	n/a	6.236%	n/a
%RSD		2.098	13.480	0.000	5.776	6.054	7.096	8.693	6.562
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	20.400	21.140	20.880	105200.000	104700.000	19.900	20.010	21.030
2	11:47:59	21.060	21.760	21.960	109700.000	108900.000	21.100	20.550	21.480
3	11:48:18	22.690	23.820	23.370	117100.000	115500.000	22.070	21.000	22.710
X		106.925%	111.212%	95.967%	110.677%	109.688%	105.118%	102.596%	108.707%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		5.502	6.315	5.665	5.429	4.922	5.185	2.422	3.983
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	21.640	22.090	21.010	20.480	50.610	52.610	0.000	23.490
2	11:47:59	21.030	22.400	22.230	21.640	51.610	52.020	0.000	23.850
3	11:48:18	21.910	23.690	23.860	21.980	52.950	52.890	0.000	23.690
X		107.631%	90.919%	89.466%	106.838%	103.443%	105.015%	0.000	118.373%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.095	3.737	6.408	3.690	2.267	0.841	0.000	0.758
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	78.100%	2289.000	2273.000	72.266%	20.260	20.010	21.000	20.400
2	11:47:59	77.189%	2336.000	2322.000	70.628%	20.790	20.330	21.430	20.940
3	11:48:18	77.602%	2315.000	2311.000	70.231%	20.650	20.250	21.070	20.790
X		77.630%	115.663%	115.091%	71.042%	102.833%	100.980%	105.817%	103.542%
σ		0.456%	n/a	n/a	1.079%	n/a	n/a	n/a	n/a
%RSD		0.588	1.026	1.108	1.518	1.334	0.838	1.091	1.345
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:47:39	78.352%	106.300	20.540	20.860	20.990	21.370	81.641%	81.296%
2	11:47:59	78.046%	108.300	20.780	21.160	22.090	21.730	81.920%	83.116%
3	11:48:18	77.985%	107.600	20.930	20.920	21.470	20.990	83.352%	83.349%
X		78.128%	107.414%	103.747%	104.903%	107.589%	106.812%	82.304%	82.587%
σ		0.197%	n/a	n/a	n/a	n/a	n/a	0.918%	1.124%
%RSD		0.252	0.974	0.947	0.744	2.560	1.711	1.115	1.361
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:47:39	20.380	20.210	20.640	82.796%				
2	11:47:59	21.690	21.410	22.400	79.744%				
3	11:48:18	22.020	22.420	23.190	77.678%				
X		106.807%	106.718%	110.382%	80.073%				
σ		n/a	n/a	n/a	2.575%				
%RSD		4.063	5.173	5.931	3.215				

CCV 1558997 5/1/2015 11:54:16 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	79.491%	106.100	105.800	100.100	0.000	49730.000	50190.000	50720.000
2	11:54:36	76.496%	110.500	103.600	100.300	0.000	51240.000	51540.000	51620.000
3	11:54:55	74.420%	111.600	109.000	104.100	0.000	52130.000	53780.000	53980.000
x		76.803%	109.382%	106.153%	101.505%	0.000	102.063%	103.676%	104.213%
σ		2.549%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.319	2.679	2.538	2.194	0.000	2.372	3.494	3.235
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	512.400	5007.000	0.000	50650.000	49030.000	49930.000	95.801%	99.400
2	11:54:36	511.400	4970.000	0.000	52360.000	51040.000	51870.000	89.903%	103.800
3	11:54:55	554.900	5152.000	0.000	53320.000	53080.000	53010.000	88.823%	104.500
x		105.242%	100.861%	0.000	104.223%	102.097%	103.213%	91.509%	102.571%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.756%	n/a
%RSD		4.718	1.908	0.000	2.591	3.964	3.017	4.105	2.702
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	96.840	98.480	494.700	24730.000	24630.000	97.470	98.170	98.890
2	11:54:36	102.800	102.700	520.800	26250.000	25920.000	102.500	103.600	103.600
3	11:54:55	103.000	104.500	528.900	26120.000	26130.000	102.300	103.600	105.200
x		100.869%	101.882%	102.960%	102.788%	102.227%	100.757%	101.782%	102.564%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.465	3.025	3.468	3.279	3.177	2.826	3.077	3.205
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	99.090	104.200	103.500	100.600	106.600	103.700	0.000	105.000
2	11:54:36	102.600	107.000	106.200	104.300	108.400	107.400	0.000	105.800
3	11:54:55	103.700	106.900	107.000	102.900	108.100	104.800	0.000	106.400
x		101.822%	106.041%	105.557%	102.635%	107.724%	105.336%	0.000	105.713%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.384	1.490	1.772	1.810	0.884	1.815	0.000	0.628
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	97.103%	101.100	104.000	87.701%	104.700	104.400	103.600	104.500
2	11:54:36	96.883%	102.800	104.700	87.292%	105.300	105.000	106.100	107.100
3	11:54:55	96.368%	104.300	108.000	85.999%	106.100	105.000	106.900	106.500
x		96.785%	102.728%	105.553%	86.997%	105.344%	104.792%	105.541%	106.032%
σ		0.377%	n/a	n/a	0.888%	n/a	n/a	n/a	n/a
%RSD		0.390	1.582	2.019	1.021	0.687	0.292	1.612	1.276
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:54:16	90.727%	101.400	99.860	100.300	101.300	102.500	94.816%	95.496%
2	11:54:36	90.646%	103.300	102.800	102.300	102.000	102.900	96.847%	97.387%
3	11:54:55	90.317%	104.300	104.200	103.100	102.700	104.000	96.514%	97.728%
x		90.564%	103.017%	102.270%	101.890%	102.016%	103.153%	96.059%	96.870%
σ		0.217%	n/a	n/a	n/a	n/a	n/a	1.089%	1.202%
%RSD		0.240	1.397	2.147	1.449	0.673	0.733	1.134	1.241
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:54:16	102.600	102.500	103.900	92.300%				
2	11:54:36	104.200	103.900	105.300	91.607%				
3	11:54:55	106.900	106.600	108.700	90.953%				
x		104.577%	104.326%	105.992%	91.620%				
σ		n/a	n/a	n/a	0.673%				
%RSD		2.113	2.006	2.321	0.735				

CCB1 5/1/2015 11:57:48 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	92.270%	-0.002	0.372	0.200	0.000	13.500	5.284	5.328
2	11:58:27	87.345%	0.025	0.107	0.143	0.000	12.820	4.491	4.762
3	11:58:46	88.985%	0.023	0.566	0.211	0.000	11.300	5.211	4.460
X		89.533%	0.015	0.348	0.185	0.000	12.540	4.995	4.850
σ		2.508%	0.015	0.231	0.036	0.000	1.128	0.439	0.441
%RSD		2.801	97.810	66.150	19.650	0.000	8.998	8.779	9.095
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	1.782	-340.200	0.000	10.350	6.872	4.710	99.439%	0.004
2	11:58:27	1.617	-335.700	0.000	9.423	1.232	3.763	96.502%	0.059
3	11:58:46	1.782	-340.200	0.000	9.673	6.956	5.422	95.055%	0.113
X		1.727	-338.700	0.000	9.817	5.020	4.632	96.998%	0.059
σ		0.095	2.598	0.000	0.482	3.281	0.832	2.234%	0.054
%RSD		5.527	0.767	0.000	4.906	65.360	17.970	2.303	92.830
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	0.025	0.041	0.149	26.050	25.490	0.020	-0.007	0.472
2	11:58:27	0.026	0.033	0.126	22.190	18.060	0.013	0.005	0.410
3	11:58:46	0.044	0.028	0.136	17.140	14.110	0.012	0.015	0.498
X		0.032	0.034	0.137	21.790	19.220	0.015	0.004	0.460
σ		0.011	0.006	0.012	4.466	5.777	0.004	0.011	0.045
%RSD		34.280	17.820	8.650	20.490	30.060	29.590	268.500	9.844
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	0.414	0.768	0.821	-0.003	-0.039	-0.082	0.000	0.037
2	11:58:27	0.420	0.693	0.783	0.049	0.137	-0.063	0.000	0.036
3	11:58:46	0.373	0.789	0.827	0.021	0.008	0.023	0.000	0.031
X		0.402	0.750	0.810	0.022	0.035	-0.040	0.000	0.035
σ		0.025	0.050	0.024	0.026	0.091	0.056	0.000	0.003
%RSD		6.278	6.681	2.948	116.900	256.500	138.100	0.000	8.982
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	100.877%	1.967	1.852	101.922%	-0.050	-0.064	0.024	0.019
2	11:58:27	100.616%	1.428	1.532	101.499%	-0.044	-0.053	0.028	0.019
3	11:58:46	100.252%	1.266	1.206	100.054%	-0.041	-0.047	-0.004	-0.003
X		100.581%	1.554	1.530	101.158%	-0.045	-0.054	0.016	0.012
σ		0.314%	0.367	0.323	0.979%	0.004	0.009	0.018	0.013
%RSD		0.312	23.630	21.100	0.968	9.936	16.110	110.500	108.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:58:07	102.010%	0.178	0.074	0.064	0.035	0.027	103.378%	102.492%
2	11:58:27	99.177%	0.213	0.070	0.093	0.036	0.012	104.234%	104.261%
3	11:58:46	103.930%	0.191	0.068	0.063	0.027	0.026	106.136%	105.379%
X		101.706%	0.194	0.071	0.073	0.033	0.022	104.583%	104.044%
σ		2.391%	0.018	0.003	0.017	0.005	0.008	1.412%	1.456%
%RSD		2.351	9.089	4.661	23.500	15.280	37.700	1.350	1.399
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	11:58:07	0.040	0.043	0.039	99.860%				
2	11:58:27	0.044	0.039	0.036	99.855%				
3	11:58:46	0.037	0.039	0.037	99.011%				
X		0.040	0.040	0.037	99.575%				
σ		0.003	0.002	0.001	0.488%				
%RSD		8.654	5.668	3.793	0.490				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	89.312%	0.012	-0.153	-0.079	0.000	-1.292	0.445	0.402
2	12:02:16	86.954%	0.014	0.067	-0.013	0.000	-1.594	0.150	-0.207
3	12:02:35	81.617%	-0.043	-0.004	0.040	0.000	-1.330	-0.109	-0.185
X		85.961%	-0.006	-0.030	-0.017	0.000	-1.405	0.162	0.003
σ		3.943%	0.032	0.112	0.059	0.000	0.165	0.277	0.345
%RSD		4.587	544.300	369.900	339.600	0.000	11.710	170.700	10060.000
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	-1.857	-370.100	0.000	-1.651	-13.250	-10.910	95.747%	-0.023
2	12:02:16	-2.138	-359.500	0.000	-1.832	-9.439	-10.770	92.949%	-0.042
3	12:02:35	-2.104	-356.700	0.000	-1.635	-14.120	-11.240	92.578%	0.065
X		-2.033	-362.100	0.000	-1.706	-12.270	-10.970	93.758%	0.000
σ		0.154	7.097	0.000	0.109	2.491	0.240	1.733%	0.057
%RSD		7.551	1.960	0.000	6.415	20.300	2.185	1.848	13670.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	-0.006	0.002	-0.035	4.836	4.510	-0.002	-0.067	-0.189
2	12:02:16	0.010	0.021	-0.045	4.449	2.835	-0.001	-0.069	-0.173
3	12:02:35	0.003	0.024	-0.030	3.018	3.058	0.002	-0.046	-0.186
X		0.002	0.016	-0.037	4.101	3.468	-0.000	-0.061	-0.183
σ		0.008	0.012	0.008	0.958	0.910	0.002	0.013	0.009
%RSD		331.300	76.700	20.680	23.360	26.230	467.500	20.690	4.667
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	-0.231	-1.149	-1.150	-0.024	-0.076	-0.037	0.000	-0.013
2	12:02:16	-0.216	-1.138	-1.169	-0.029	-0.126	-0.081	0.000	-0.014
3	12:02:35	-0.204	-1.123	-1.153	-0.042	-0.114	-0.054	0.000	-0.015
X		-0.217	-1.137	-1.158	-0.032	-0.105	-0.057	0.000	-0.014
σ		0.014	0.013	0.010	0.009	0.026	0.022	0.000	0.001
%RSD		6.306	1.127	0.897	29.740	25.090	39.020	0.000	6.063
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	97.612%	0.420	0.425	98.843%	-0.069	-0.082	0.001	-0.008
2	12:02:16	98.560%	0.434	0.379	98.118%	-0.079	-0.079	0.006	-0.001
3	12:02:35	98.717%	0.295	0.311	98.532%	-0.064	-0.072	-0.003	-0.008
X		98.296%	0.383	0.372	98.498%	-0.071	-0.078	0.001	-0.006
σ		0.597%	0.076	0.057	0.364%	0.007	0.005	0.005	0.004
%RSD		0.608	19.970	15.380	0.369	10.270	6.770	397.400	65.550
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:01:57	99.975%	-0.047	-0.012	-0.009	-0.030	-0.029	102.418%	102.540%
2	12:02:16	99.944%	-0.043	-0.010	-0.013	-0.030	-0.035	104.462%	105.377%
3	12:02:35	100.494%	-0.063	-0.010	-0.012	-0.033	-0.035	104.250%	105.226%
X		100.137%	-0.051	-0.011	-0.011	-0.031	-0.033	103.710%	104.381%
σ		0.309%	0.010	0.001	0.002	0.001	0.004	1.124%	1.596%
%RSD		0.308	20.160	11.820	19.970	4.311	11.290	1.084	1.529
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:01:57	0.008	0.010	-0.017	100.095%				
2	12:02:16	0.008	0.007	-0.013	99.792%				
3	12:02:35	0.012	0.009	-0.014	100.674%				
X		0.009	0.008	-0.015	100.187%				
σ		0.003	0.002	0.002	0.448%				
%RSD		28.220	18.320	11.910	0.447				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	75.424%	45.660	864.900	814.700	0.000	38750.000	39310.000	40030.000
2	12:06:04	73.154%	46.620	901.000	848.700	0.000	42430.000	42330.000	43350.000
3	12:06:23	74.566%	45.900	892.600	844.000	0.000	39110.000	40050.000	39980.000
X		74.381%	46.060	886.200	835.800	0.000	40100.000	40570.000	41120.000
σ		1.146%	0.500	18.900	18.450	0.000	2031.000	1575.000	1935.000
%RSD		1.541	1.086	2.133	2.207	0.000	5.066	3.882	4.705
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	1640.000	7975.000	0.000	43620.000	44870.000	45910.000	73.537%	908.500
2	12:06:04	1751.000	8503.000	0.000	48140.000	48720.000	50420.000	67.364%	976.400
3	12:06:23	1614.000	7942.000	0.000	44020.000	45250.000	45560.000	71.427%	916.300
X		1668.000	8140.000	0.000	45260.000	46280.000	47300.000	70.776%	933.700
σ		73.060	314.500	0.000	2504.000	2122.000	2713.000	3.137%	37.180
%RSD		4.379	3.864	0.000	5.531	4.584	5.737	4.433	3.982
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	472.600	187.100	465.200	952.500	992.500	464.000	458.500	230.400
2	12:06:04	506.200	198.200	496.800	1033.000	1078.000	494.000	473.800	239.900
3	12:06:23	467.400	185.100	467.900	957.100	1017.000	460.500	463.700	232.700
X		482.100	190.100	476.600	980.800	1029.000	472.800	465.300	234.300
σ		21.060	7.061	17.560	45.080	43.840	18.430	7.749	4.964
%RSD		4.369	3.714	3.684	4.597	4.261	3.898	1.665	2.118
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	233.100	458.800	460.600	36.730	9.488	9.837	0.000	899.600
2	12:06:04	242.300	484.300	478.400	36.760	9.934	9.683	0.000	899.600
3	12:06:23	231.000	465.600	463.900	35.160	9.532	9.779	0.000	905.800
X		235.500	469.600	467.600	36.220	9.651	9.766	0.000	901.700
σ		6.003	13.210	9.491	0.913	0.246	0.078	0.000	3.547
%RSD		2.549	2.813	2.030	2.521	2.547	0.796	0.000	0.393
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	75.277%	960.700	953.000	71.599%	46.900	47.160	47.790	43.100
2	12:06:04	77.361%	973.000	964.200	72.101%	47.120	47.540	47.900	44.340
3	12:06:23	76.914%	973.000	971.400	71.898%	46.830	47.280	48.150	43.020
X		76.518%	968.900	962.900	71.866%	46.950	47.330	47.950	43.480
σ		1.097%	7.088	9.224	0.253%	0.154	0.194	0.181	0.743
%RSD		1.434	0.732	0.958	0.351	0.328	0.411	0.378	1.709
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:05:45	75.173%	1792.000	432.800	443.700	1806.000	1766.000	82.529%	84.053%
2	12:06:04	76.969%	1792.000	434.800	448.500	1815.000	1763.000	83.788%	84.989%
3	12:06:23	76.791%	1803.000	440.000	467.700	1827.000	1782.000	85.288%	86.344%
X		76.311%	1795.000	435.900	453.300	1816.000	1770.000	83.868%	85.129%
σ		0.989%	6.343	3.725	12.710	10.330	10.170	1.381%	1.152%
%RSD		1.297	0.353	0.855	2.804	0.569	0.575	1.646	1.353
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:05:45	47.610	47.860	20.190	73.525%				
2	12:06:04	49.940	50.860	21.400	71.093%				
3	12:06:23	51.630	52.590	21.580	69.854%				
X		49.730	50.440	21.060	71.491%				
σ		2.020	2.393	0.756	1.867%				
%RSD		4.062	4.744	3.588	2.612				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	75.474%	45.700	858.900	835.600	0.000	38950.000	39010.000	39590.000
2	12:09:52	74.726%	47.260	919.200	847.400	0.000	40880.000	42160.000	42430.000
3	12:10:11	68.702%	45.700	901.600	892.000	0.000	41460.000	41610.000	41630.000
X		72.967%	46.220	893.200	858.300	0.000	40430.000	40930.000	41220.000
σ		3.713%	0.900	31.010	29.760	0.000	1313.000	1686.000	1465.000
%RSD		5.088	1.947	3.471	3.468	0.000	3.247	4.121	3.553
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	1580.000	7691.000	0.000	44680.000	45100.000	46290.000	70.482%	910.800
2	12:09:52	1690.000	8194.000	0.000	47620.000	49480.000	50130.000	63.397%	967.000
3	12:10:11	1657.000	8202.000	0.000	45770.000	47180.000	48010.000	67.083%	932.900
X		1642.000	8029.000	0.000	46020.000	47260.000	48140.000	66.987%	936.900
σ		56.020	292.900	0.000	1488.000	2190.000	1926.000	3.544%	28.300
%RSD		3.411	3.648	0.000	3.233	4.635	4.000	5.290	3.020
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	473.700	184.500	467.100	954.500	993.300	466.400	470.800	237.400
2	12:09:52	491.200	193.500	491.000	994.900	1053.000	488.000	484.600	245.300
3	12:10:11	481.600	185.000	469.500	932.900	986.400	452.300	444.200	228.100
X		482.200	187.700	475.900	960.700	1011.000	468.900	466.500	236.900
σ		8.782	5.056	13.170	31.450	36.450	18.000	20.500	8.597
%RSD		1.821	2.694	2.768	3.273	3.606	3.839	4.395	3.628
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	229.300	468.600	467.200	36.190	9.555	9.452	0.000	902.800
2	12:09:52	242.800	486.100	489.700	37.660	9.745	10.350	0.000	895.900
3	12:10:11	229.700	470.600	471.300	36.140	9.472	9.535	0.000	904.000
X		233.900	475.100	476.100	36.660	9.591	9.780	0.000	900.900
σ		7.657	9.579	11.970	0.864	0.140	0.498	0.000	4.340
%RSD		3.273	2.016	2.515	2.358	1.457	5.091	0.000	0.482
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	75.294%	964.400	963.800	71.325%	47.070	47.030	47.760	43.610
2	12:09:52	75.523%	976.200	967.000	70.798%	47.250	47.110	47.390	43.810
3	12:10:11	73.452%	976.800	978.500	69.008%	47.570	47.490	48.260	44.340
X		74.756%	972.500	969.700	70.377%	47.300	47.210	47.800	43.920
σ		1.136%	6.995	7.715	1.215%	0.253	0.249	0.436	0.375
%RSD		1.519	0.719	0.796	1.726	0.534	0.527	0.912	0.855
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:33	74.503%	1818.000	442.400	457.300	1830.000	1790.000	81.658%	83.256%
2	12:09:52	74.657%	1804.000	443.800	471.200	1843.000	1801.000	83.753%	84.781%
3	12:10:11	73.850%	1824.000	448.400	469.500	1838.000	1810.000	83.417%	84.523%
X		74.337%	1815.000	444.900	466.000	1837.000	1800.000	82.943%	84.187%
σ		0.428%	10.630	3.161	7.568	6.572	9.914	1.125%	0.817%
%RSD		0.576	0.586	0.711	1.624	0.358	0.551	1.356	0.970
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:09:33	51.550	51.960	21.670	67.190%				
2	12:09:52	52.870	53.420	22.380	67.081%				
3	12:10:11	52.430	53.480	21.950	68.256%				
X		52.290	52.950	22.000	67.509%				
σ		0.673	0.860	0.356	0.650%				
%RSD		1.288	1.625	1.620	0.962				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	67.101%	-0.023	195.600	193.800	0.000	799200.000	98940.000	98010.000
2	12:13:40	65.827%	0.055	194.100	193.700	0.000	811400.000	99980.000	99590.000
3	12:13:59	66.135%	0.024	188.800	192.700	0.000	810200.000	100700.000	102000.000
X		66.355%	0.018	192.800	193.400	0.000	807000.000	99860.000	99860.000
σ		0.665%	0.039	3.591	0.627	0.000	6737.000	871.400	2008.000
%RSD		1.002	211.000	1.862	0.324	0.000	0.835	0.873	2.010
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	116.200	324.900	0.000	36120.000	30810.000	32170.000	78.366%	2.258
2	12:13:40	133.100	368.300	0.000	37460.000	31690.000	32420.000	76.614%	2.194
3	12:13:59	120.500	372.000	0.000	37330.000	31020.000	32820.000	76.773%	1.981
X		123.300	355.100	0.000	36970.000	31180.000	32470.000	77.251%	2.145
σ		8.755	26.210	0.000	740.100	460.900	326.000	0.969%	0.145
%RSD		7.103	7.381	0.000	2.002	1.478	1.004	1.254	6.761
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	1.723	0.170	14.470	94.970	135.300	0.090	0.350	6.337
2	12:13:40	1.931	0.209	14.730	103.100	131.900	0.103	0.387	6.244
3	12:13:59	1.708	0.176	14.450	92.960	129.900	0.074	0.276	6.187
X		1.787	0.185	14.550	97.020	132.400	0.089	0.338	6.256
σ		0.125	0.021	0.157	5.393	2.685	0.015	0.057	0.075
%RSD		6.966	11.340	1.077	5.558	2.029	16.550	16.790	1.207
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	-0.014	0.681	0.308	3.730	-0.000	3.707	0.000	626.200
2	12:13:40	0.037	0.522	0.329	3.573	0.191	3.746	0.000	629.500
3	12:13:59	0.033	0.613	0.253	3.634	0.079	3.603	0.000	627.300
X		0.019	0.605	0.297	3.646	0.090	3.686	0.000	627.700
σ		0.028	0.080	0.039	0.079	0.096	0.074	0.000	1.676
%RSD		151.600	13.150	13.140	2.164	106.700	2.001	0.000	0.267
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	78.745%	6.792	6.987	71.210%	-0.074	-0.081	0.008	0.005
2	12:13:40	78.633%	5.930	6.106	70.084%	-0.072	-0.075	-0.011	-0.023
3	12:13:59	80.173%	5.500	5.516	70.561%	-0.070	-0.080	-0.006	-0.003
X		79.183%	6.074	6.203	70.618%	-0.072	-0.079	-0.003	-0.007
σ		0.859%	0.658	0.740	0.565%	0.002	0.003	0.010	0.014
%RSD		1.085	10.840	11.930	0.800	2.563	4.335	328.300	198.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:13:21	76.381%	1.074	0.301	0.297	88.420	86.890	80.364%	80.440%
2	12:13:40	76.445%	0.881	0.267	0.272	88.250	87.470	82.080%	82.276%
3	12:13:59	76.778%	0.783	0.211	0.241	89.130	88.590	82.964%	83.720%
X		76.535%	0.913	0.260	0.270	88.600	87.650	81.803%	82.145%
σ		0.213%	0.148	0.045	0.028	0.465	0.866	1.322%	1.644%
%RSD		0.278	16.240	17.400	10.260	0.525	0.988	1.616	2.001
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:13:21	0.242	0.242	0.099	63.300%				
2	12:13:40	0.215	0.222	0.109	62.980%				
3	12:13:59	0.204	0.201	0.108	63.772%				
X		0.220	0.222	0.105	63.351%				
σ		0.020	0.020	0.005	0.398%				
%RSD		9.007	9.072	4.873	0.629				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	71.727%	0.030	215.300	214.100	0.000	876300.000	110000.000	111900.000
2	12:17:28	73.316%	-0.040	215.800	210.200	0.000	860600.000	108900.000	111300.000
3	12:17:48	68.336%	0.035	206.700	209.900	0.000	868100.000	110100.000	112100.000
X		71.126%	0.008	212.600	211.400	0.000	868300.000	109700.000	111700.000
σ		2.544%	0.042	5.106	2.331	0.000	7834.000	645.100	398.100
%RSD		3.576	517.200	2.402	1.103	0.000	0.902	0.588	0.356
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	11.210	30.400	0.000	39760.000	33760.000	34130.000	89.401%	0.562
2	12:17:28	11.240	21.640	0.000	40330.000	34100.000	34940.000	86.233%	0.527
3	12:17:48	10.950	34.080	0.000	40300.000	34230.000	35010.000	88.041%	0.571
X		11.130	28.700	0.000	40130.000	34030.000	34690.000	87.892%	0.553
σ		0.157	6.390	0.000	320.500	241.900	490.900	1.589%	0.023
%RSD		1.412	22.260	0.000	0.799	0.711	1.415	1.808	4.151
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	1.428	0.116	13.900	8.145	60.250	0.065	0.267	6.877
2	12:17:28	1.822	0.081	14.160	7.527	58.850	0.066	0.235	7.186
3	12:17:48	1.931	0.123	14.060	6.391	59.240	0.057	0.260	6.962
X		1.727	0.107	14.040	7.354	59.440	0.063	0.254	7.009
σ		0.265	0.022	0.133	0.890	0.724	0.005	0.017	0.160
%RSD		15.330	20.920	0.950	12.100	1.218	8.205	6.571	2.278
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	0.431	4.922	4.595	4.837	0.015	8.204	0.000	667.000
2	12:17:28	0.417	5.261	5.117	4.950	0.029	8.518	0.000	675.000
3	12:17:48	0.460	4.869	4.445	4.905	0.009	8.167	0.000	670.600
X		0.436	5.017	4.719	4.897	0.018	8.296	0.000	670.900
σ		0.022	0.212	0.353	0.057	0.011	0.193	0.000	3.968
%RSD		4.999	4.232	7.477	1.165	59.520	2.323	0.000	0.592
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	84.119%	3.952	4.076	74.354%	-0.084	-0.085	0.060	0.044
2	12:17:28	84.488%	4.083	4.181	73.466%	-0.072	-0.080	0.026	0.011
3	12:17:48	85.564%	3.818	4.039	74.023%	-0.078	-0.082	0.008	0.000
X		84.724%	3.951	4.099	73.948%	-0.078	-0.082	0.031	0.019
σ		0.751%	0.132	0.074	0.449%	0.006	0.003	0.026	0.023
%RSD		0.886	3.349	1.795	0.607	7.404	3.234	84.030	123.500
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:17:09	79.292%	0.314	0.230	0.248	94.920	95.350	81.531%	82.379%
2	12:17:28	79.694%	0.331	0.249	0.252	96.060	95.520	84.700%	84.854%
3	12:17:48	80.056%	0.283	0.247	0.253	94.660	94.890	84.524%	85.451%
X		79.681%	0.309	0.242	0.251	95.210	95.250	83.585%	84.228%
σ		0.382%	0.024	0.011	0.003	0.743	0.326	1.781%	1.629%
%RSD		0.479	7.769	4.345	1.182	0.781	0.343	2.131	1.934
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:17:09	0.055	0.066	0.428	66.696%				
2	12:17:28	0.077	0.076	0.458	64.664%				
3	12:17:48	0.071	0.066	0.443	65.331%				
X		0.068	0.070	0.443	65.564%				
σ		0.011	0.006	0.015	1.036%				
%RSD		16.860	7.940	3.384	1.580				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	91.942%	0.020	46.400	49.350	0.000	187800.000	22290.000	22610.000
2	12:21:17	86.771%	-0.021	48.910	48.230	0.000	192100.000	22760.000	22680.000
3	12:21:36	84.003%	-0.020	48.600	48.620	0.000	193000.000	22410.000	22650.000
X		87.572%	-0.007	47.970	48.730	0.000	191000.000	22490.000	22650.000
σ		4.030%	0.024	1.368	0.571	0.000	2769.000	246.700	33.400
%RSD		4.602	333.300	2.851	1.172	0.000	1.450	1.097	0.147
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	-1.436	-320.700	0.000	8011.000	6796.000	6602.000	102.214%	0.060
2	12:21:17	-1.651	-310.500	0.000	8106.000	6898.000	6628.000	100.521%	0.013
3	12:21:36	-1.572	-300.200	0.000	8210.000	6958.000	6684.000	99.826%	0.043
X		-1.553	-310.500	0.000	8109.000	6884.000	6638.000	100.853%	0.039
σ		0.109	10.260	0.000	99.790	81.820	41.910	1.229%	0.024
%RSD		7.006	3.306	0.000	1.231	1.188	0.631	1.218	61.360
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	0.361	0.026	2.792	5.830	11.670	0.013	0.002	1.264
2	12:21:17	0.342	0.073	2.768	3.519	10.180	0.008	-0.007	1.227
3	12:21:36	0.414	0.044	2.752	3.608	11.130	0.013	-0.037	1.240
X		0.372	0.047	2.771	4.319	10.990	0.011	-0.014	1.244
σ		0.038	0.023	0.020	1.309	0.754	0.003	0.021	0.019
%RSD		10.080	49.480	0.711	30.320	6.860	26.460	146.200	1.515
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	-0.149	-0.509	-0.617	1.090	-0.151	1.900	0.000	144.500
2	12:21:17	-0.180	-0.579	-0.716	1.061	-0.062	1.828	0.000	143.900
3	12:21:36	-0.133	-0.514	-0.590	1.186	0.031	1.840	0.000	144.400
X		-0.154	-0.534	-0.641	1.112	-0.061	1.856	0.000	144.300
σ		0.024	0.039	0.066	0.065	0.091	0.039	0.000	0.323
%RSD		15.580	7.276	10.330	5.879	150.100	2.080	0.000	0.224
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	100.476%	0.899	0.971	93.215%	-0.081	-0.093	0.023	0.010
2	12:21:17	101.305%	0.928	0.936	93.013%	-0.082	-0.094	0.007	0.007
3	12:21:36	102.137%	1.048	0.965	93.755%	-0.075	-0.074	0.001	-0.001
X		101.306%	0.959	0.957	93.328%	-0.079	-0.087	0.010	0.005
σ		0.831%	0.079	0.019	0.384%	0.004	0.011	0.011	0.006
%RSD		0.820	8.205	1.944	0.411	4.862	12.720	113.100	117.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:58	96.437%	-0.003	0.010	-0.002	18.200	18.970	99.230%	99.798%
2	12:21:17	97.914%	-0.018	0.012	0.013	19.110	18.470	101.961%	102.765%
3	12:21:36	98.334%	-0.008	0.020	-0.004	18.840	18.750	101.964%	102.962%
X		97.562%	-0.010	0.014	0.003	18.720	18.730	101.052%	101.841%
σ		0.996%	0.008	0.005	0.009	0.470	0.252	1.578%	1.773%
%RSD		1.021	78.500	37.830	375.200	2.511	1.347	1.561	1.741
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:20:58	0.050	0.044	0.001	81.930%				
2	12:21:17	0.043	0.039	0.002	82.607%				
3	12:21:36	0.048	0.034	0.003	83.661%				
X		0.047	0.039	0.002	82.733%				
σ		0.004	0.005	0.001	0.872%				
%RSD		7.528	12.450	57.890	1.054				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	93.097%	-0.046	1.022	0.637	0.000	14.080	0.572	0.586
2	12:28:04	94.768%	-0.046	0.563	0.491	0.000	10.760	0.050	0.089
3	12:28:23	91.302%	0.033	0.715	0.670	0.000	10.140	-0.008	0.120
X		93.056%	-0.020	0.767	0.600	0.000	11.660	0.205	0.265
σ		1.733%	0.045	0.234	0.095	0.000	2.118	0.319	0.278
%RSD		1.863	227.900	30.520	15.860	0.000	18.160	155.900	104.900
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	-2.050	-411.800	0.000	-4.163	-13.200	-12.030	93.051%	-0.063
2	12:28:04	-2.107	-409.400	0.000	-5.415	-13.170	-12.360	91.283%	-0.073
3	12:28:23	-2.151	-407.300	0.000	-6.256	-14.130	-12.820	92.283%	-0.052
X		-2.103	-409.500	0.000	-5.278	-13.500	-12.400	92.206%	-0.062
σ		0.051	2.275	0.000	1.053	0.544	0.398	0.886%	0.011
%RSD		2.403	0.556	0.000	19.950	4.031	3.210	0.961	16.870
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	0.025	0.033	-0.040	1.864	0.027	0.000	-0.043	-0.176
2	12:28:04	0.006	0.014	-0.044	-0.057	-0.171	-0.001	-0.066	-0.182
3	12:28:23	0.012	0.017	-0.041	-1.641	-0.830	-0.002	-0.060	-0.196
X		0.014	0.021	-0.042	0.055	-0.325	-0.001	-0.057	-0.184
σ		0.009	0.010	0.002	1.755	0.449	0.001	0.012	0.010
%RSD		63.620	48.040	5.597	3163.000	138.200	129.500	21.010	5.469
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	-0.237	-1.086	-1.210	-0.030	-0.022	0.001	0.000	-0.010
2	12:28:04	-0.224	-1.127	-1.183	-0.037	0.042	-0.097	0.000	-0.010
3	12:28:23	-0.237	-1.158	-1.189	-0.017	-0.375	0.068	0.000	-0.012
X		-0.232	-1.124	-1.194	-0.028	-0.118	-0.009	0.000	-0.011
σ		0.007	0.036	0.014	0.010	0.224	0.083	0.000	0.001
%RSD		3.176	3.206	1.169	34.790	189.800	889.800	0.000	11.290
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	96.732%	0.110	0.090	94.940%	-0.080	-0.090	0.031	0.017
2	12:28:04	96.806%	0.102	0.092	94.894%	-0.079	-0.081	0.015	0.008
3	12:28:23	97.302%	0.078	0.095	94.902%	-0.077	-0.085	-0.042	-0.032
X		96.947%	0.097	0.093	94.912%	-0.079	-0.086	0.001	-0.002
σ		0.310%	0.017	0.002	0.024%	0.001	0.005	0.038	0.026
%RSD		0.320	17.150	2.368	0.026	1.805	5.374	2733.000	1214.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:27:45	97.606%	-0.103	-0.054	-0.057	-0.023	-0.025	98.769%	98.666%
2	12:28:04	97.783%	-0.099	-0.042	-0.043	-0.026	-0.031	101.765%	101.767%
3	12:28:23	98.343%	-0.091	-0.049	-0.049	-0.028	-0.033	102.603%	103.569%
X		97.911%	-0.098	-0.048	-0.050	-0.025	-0.030	101.046%	101.334%
σ		0.385%	0.006	0.006	0.007	0.002	0.004	2.016%	2.480%
%RSD		0.393	6.153	11.870	13.610	9.700	14.750	1.995	2.448
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:27:45	0.028	0.022	-0.020	92.859%				
2	12:28:04	0.020	0.025	-0.019	93.532%				
3	12:28:23	0.020	0.022	-0.018	95.712%				
X		0.023	0.023	-0.019	94.035%				
σ		0.005	0.002	0.001	1.491%				
%RSD		20.620	7.562	4.913	1.586				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	81.504%	45.810	919.900	869.000	0.000	42820.000	43040.000	42740.000
2	12:31:53	77.911%	46.840	940.400	892.000	0.000	41960.000	42490.000	43640.000
3	12:32:12	80.364%	46.820	924.000	871.600	0.000	42210.000	42260.000	43210.000
X		79.927%	46.490	928.100	877.500	0.000	42330.000	42600.000	43190.000
σ		1.836%	0.587	10.840	12.600	0.000	439.100	398.400	450.100
%RSD		2.297	1.262	1.168	1.435	0.000	1.037	0.935	1.042
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	1663.000	8224.000	0.000	47120.000	50760.000	49060.000	67.030%	1008.000
2	12:31:53	1729.000	8211.000	0.000	46520.000	48080.000	48040.000	71.718%	971.200
3	12:32:12	1690.000	8073.000	0.000	47710.000	51710.000	50860.000	67.805%	989.700
X		1694.000	8169.000	0.000	47120.000	50190.000	49320.000	68.851%	989.500
σ		33.310	83.770	0.000	595.100	1883.000	1429.000	2.513%	18.250
%RSD		1.966	1.025	0.000	1.263	3.752	2.898	3.650	1.845
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	502.500	203.200	487.800	1016.000	1106.000	500.300	511.600	254.500
2	12:31:53	480.800	197.300	470.100	961.000	1033.000	473.400	477.500	236.800
3	12:32:12	495.000	200.600	486.600	1007.000	1094.000	496.300	500.200	249.600
X		492.700	200.400	481.500	994.800	1078.000	490.000	496.400	246.900
σ		11.030	2.988	9.905	29.630	39.130	14.550	17.390	9.139
%RSD		2.238	1.491	2.057	2.979	3.632	2.969	3.503	3.701
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	252.400	486.600	485.100	36.850	9.809	9.987	0.000	897.600
2	12:31:53	236.400	469.500	470.500	36.720	9.348	10.230	0.000	897.800
3	12:32:12	248.500	484.800	487.200	36.400	9.695	10.140	0.000	893.600
X		245.800	480.300	481.000	36.660	9.618	10.120	0.000	896.300
σ		8.316	9.424	9.101	0.231	0.240	0.125	0.000	2.374
%RSD		3.384	1.962	1.892	0.631	2.496	1.230	0.000	0.265
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	74.948%	995.100	967.000	70.015%	49.340	49.130	48.290	45.460
2	12:31:53	77.179%	1008.000	980.600	70.985%	49.030	48.890	48.340	44.340
3	12:32:12	77.733%	1004.000	977.900	71.132%	49.020	48.710	49.060	46.420
X		76.620%	1002.000	975.200	70.711%	49.130	48.910	48.570	45.410
σ		1.474%	6.535	7.216	0.607%	0.181	0.210	0.432	1.038
%RSD		1.924	0.652	0.740	0.859	0.369	0.430	0.889	2.286
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:31:34	74.679%	1794.000	429.900	454.000	1793.000	1755.000	83.746%	83.838%
2	12:31:53	76.488%	1799.000	425.500	454.900	1802.000	1764.000	84.404%	85.403%
3	12:32:12	76.725%	1801.000	434.100	469.200	1807.000	1776.000	85.374%	86.601%
X		75.964%	1798.000	429.800	459.300	1801.000	1765.000	84.508%	85.281%
σ		1.119%	3.715	4.281	8.526	7.092	10.830	0.819%	1.385%
%RSD		1.473	0.207	0.996	1.856	0.394	0.614	0.969	1.624
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:31:34	51.590	51.660	21.740	70.503%				
2	12:31:53	51.900	53.190	21.910	72.179%				
3	12:32:12	55.210	56.110	23.200	67.987%				
X		52.900	53.650	22.280	70.223%				
σ		2.004	2.258	0.800	2.110%				
%RSD		3.789	4.209	3.589	3.004				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	80.260%	-0.042	237.800	233.600	0.000	61500.000	32590.000	33300.000
2	12:35:43	73.765%	-0.026	228.500	222.600	0.000	63010.000	33820.000	34610.000
3	12:36:02	72.036%	0.004	244.100	232.700	0.000	65260.000	34720.000	35720.000
X		75.354%	-0.021	236.800	229.600	0.000	63260.000	33710.000	34540.000
σ		4.336%	0.023	7.864	6.126	0.000	1891.000	1069.000	1212.000
%RSD		5.755	110.300	3.321	2.668	0.000	2.990	3.172	3.508
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	7.994	4342.000	0.000	6304.000	215200.000	202600.000	68.139%	0.533
2	12:35:43	8.175	4295.000	0.000	6787.000	224700.000	216600.000	61.192%	0.603
3	12:36:02	8.705	4457.000	0.000	6760.000	232300.000	217200.000	58.632%	0.482
X		8.291	4365.000	0.000	6617.000	224100.000	212100.000	62.654%	0.539
σ		0.369	83.110	0.000	271.200	8588.000	8273.000	4.919%	0.061
%RSD		4.451	1.904	0.000	4.099	3.833	3.901	7.852	11.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	-0.862	0.311	12610.000	5945.000	6361.000	11.270	3.891	1.373
2	12:35:43	-0.637	0.263	13630.000	6420.000	6755.000	11.730	4.222	1.380
3	12:36:02	-0.667	0.239	13450.000	6332.000	6684.000	11.940	3.628	1.489
X		-0.722	0.271	13230.000	6232.000	6600.000	11.650	3.913	1.414
σ		0.122	0.037	546.200	252.900	210.100	0.341	0.297	0.065
%RSD		16.910	13.650	4.129	4.058	3.183	2.925	7.597	4.583
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	1.098	11.220	10.740	4.304	-0.287	0.731	0.000	682.400
2	12:35:43	0.974	11.560	11.020	3.074	-0.280	0.427	0.000	686.800
3	12:36:02	1.070	11.710	11.220	4.224	-0.304	0.380	0.000	686.900
X		1.048	11.500	10.990	3.867	-0.290	0.512	0.000	685.400
σ		0.065	0.254	0.241	0.688	0.012	0.191	0.000	2.535
%RSD		6.197	2.205	2.190	17.790	4.201	37.230	0.000	0.370
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	70.699%	4.377	4.477	65.517%	-0.076	-0.077	0.476	0.402
2	12:35:43	69.720%	3.491	3.442	64.184%	-0.071	-0.088	0.454	0.400
3	12:36:02	69.446%	2.857	2.973	63.865%	-0.078	-0.071	0.422	0.444
X		69.955%	3.575	3.631	64.522%	-0.075	-0.079	0.451	0.415
σ		0.659%	0.763	0.770	0.876%	0.004	0.008	0.027	0.025
%RSD		0.942	21.340	21.200	1.358	4.846	10.630	6.048	6.020
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:24	68.841%	1.696	0.266	0.308	143.600	144.300	76.372%	77.144%
2	12:35:43	69.363%	1.278	0.296	0.302	142.800	142.900	76.638%	77.604%
3	12:36:02	69.454%	1.128	0.295	0.303	142.500	143.600	78.049%	78.219%
X		69.219%	1.367	0.285	0.305	143.000	143.600	77.019%	77.656%
σ		0.331%	0.294	0.017	0.003	0.552	0.706	0.901%	0.540%
%RSD		0.478	21.530	6.014	0.928	0.386	0.491	1.170	0.695
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:35:24	0.229	0.250	0.073	63.131%				
2	12:35:43	0.256	0.250	0.075	61.167%				
3	12:36:02	0.211	0.224	0.076	61.089%				
X		0.232	0.241	0.075	61.796%				
σ		0.023	0.015	0.002	1.157%				
%RSD		9.849	6.092	2.309	1.872				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	78.394%	-0.029	44.620	46.580	0.000	12820.000	6982.000	6968.000
2	12:39:33	72.545%	-0.054	44.590	46.550	0.000	12510.000	6692.000	6722.000
3	12:39:52	78.077%	-0.002	46.070	45.220	0.000	12210.000	6704.000	6760.000
X		76.339%	-0.028	45.090	46.120	0.000	12510.000	6793.000	6816.000
σ		3.289%	0.026	0.844	0.775	0.000	305.300	164.300	132.300
%RSD		4.308	91.440	1.872	1.681	0.000	2.440	2.418	1.941
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	-0.213	593.000	0.000	1273.000	38880.000	38430.000	79.716%	0.044
2	12:39:33	-0.042	561.800	0.000	1254.000	38980.000	40310.000	74.651%	-0.026
3	12:39:52	-0.275	526.000	0.000	1267.000	40140.000	40170.000	71.142%	0.033
X		-0.176	560.300	0.000	1265.000	39330.000	39640.000	75.170%	0.017
σ		0.121	33.570	0.000	9.462	697.100	1047.000	4.310%	0.038
%RSD		68.400	5.991	0.000	0.748	1.772	2.642	5.734	221.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	0.188	0.078	2521.000	1212.000	1265.000	2.288	0.786	0.081
2	12:39:33	-0.142	0.094	2562.000	1219.000	1267.000	2.361	0.901	0.106
3	12:39:52	-0.438	0.050	2634.000	1252.000	1324.000	2.307	0.740	0.127
X		-0.130	0.074	2572.000	1228.000	1285.000	2.319	0.809	0.105
σ		0.313	0.022	57.530	21.300	33.470	0.038	0.083	0.023
%RSD		240.000	29.720	2.236	1.736	2.605	1.634	10.300	21.650
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	0.016	1.890	1.848	1.022	-0.279	0.203	0.000	146.700
2	12:39:33	0.002	1.862	1.913	0.769	-0.215	0.004	0.000	146.700
3	12:39:52	0.031	1.994	1.899	1.117	-0.212	0.184	0.000	148.300
X		0.016	1.915	1.886	0.969	-0.235	0.130	0.000	147.200
σ		0.014	0.070	0.034	0.180	0.038	0.110	0.000	0.912
%RSD		88.310	3.646	1.800	18.570	16.120	84.460	0.000	0.619
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	81.292%	0.625	0.633	79.101%	-0.086	-0.084	0.106	0.067
2	12:39:33	81.002%	0.571	0.559	77.654%	-0.082	-0.090	0.128	0.071
3	12:39:52	79.988%	0.529	0.555	77.178%	-0.079	-0.079	0.079	0.074
X		80.761%	0.575	0.582	77.978%	-0.082	-0.084	0.104	0.071
σ		0.684%	0.048	0.044	1.001%	0.003	0.005	0.024	0.003
%RSD		0.848	8.314	7.556	1.284	3.875	6.336	23.060	4.934
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:39:14	82.457%	0.127	0.015	0.011	28.100	27.850	86.183%	86.974%
2	12:39:33	82.441%	0.164	0.007	0.009	27.820	27.790	87.815%	88.282%
3	12:39:52	82.100%	0.087	0.007	0.012	27.820	28.240	88.454%	89.576%
X		82.333%	0.126	0.010	0.011	27.910	27.960	87.484%	88.277%
σ		0.202%	0.038	0.005	0.002	0.162	0.242	1.171%	1.301%
%RSD		0.245	30.390	46.070	15.460	0.580	0.866	1.339	1.474
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:39:14	0.056	0.060	0.005	80.871%				
2	12:39:33	0.064	0.063	0.007	79.042%				
3	12:39:52	0.065	0.063	0.007	77.329%				
X		0.062	0.062	0.006	79.081%				
σ		0.005	0.002	0.001	1.772%				
%RSD		7.589	2.746	15.890	2.240				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	96.146%	105.600	110.700	100.900	0.000	48870.000	50210.000	51580.000
2	12:43:11	91.692%	110.200	110.700	103.800	0.000	50420.000	51510.000	52910.000
3	12:43:30	95.029%	106.800	100.300	99.300	0.000	50540.000	50960.000	50700.000
X		94.289%	107.527%	107.251%	101.332%	0.000	99.881%	101.788%	103.465%
σ		2.317%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.458	2.181	5.601	2.268	0.000	1.865	1.276	2.156
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	521.500	4877.000	0.000	50460.000	50070.000	50960.000	102.467%	103.900
2	12:43:11	530.900	4894.000	0.000	52930.000	52730.000	52980.000	95.843%	104.800
3	12:43:30	508.800	4730.000	0.000	53070.000	53540.000	52980.000	94.953%	107.700
X		104.075%	96.671%	0.000	104.302%	104.229%	104.615%	97.754%	105.472%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.106%	n/a
%RSD		2.132	1.861	0.000	2.819	3.480	2.234	4.200	1.894
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	104.000	104.700	493.600	25250.000	25000.000	100.200	102.400	104.400
2	12:43:11	104.300	104.800	520.000	26210.000	25770.000	104.000	106.400	108.100
3	12:43:30	105.700	107.500	532.500	26770.000	26100.000	106.700	108.300	108.200
X		104.652%	105.696%	103.074%	104.303%	102.498%	103.634%	105.682%	106.894%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.864	1.489	3.857	2.953	2.193	3.169	2.872	2.060
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	103.400	103.900	104.300	101.300	104.300	101.700	0.000	101.900
2	12:43:11	105.500	108.600	107.100	102.000	105.900	103.800	0.000	102.700
3	12:43:30	107.300	108.400	109.600	102.500	105.700	105.600	0.000	103.200
X		105.416%	106.985%	106.977%	101.938%	105.319%	103.663%	0.000	102.603%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.891	2.509	2.484	0.558	0.825	1.868	0.000	0.668
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	104.714%	97.840	100.700	90.963%	105.300	105.500	104.500	104.600
2	12:43:11	104.836%	100.600	103.800	90.611%	107.700	107.300	106.900	106.400
3	12:43:30	104.377%	102.900	105.600	90.050%	107.400	107.100	106.500	106.100
X		104.642%	100.427%	103.368%	90.541%	106.806%	106.667%	105.966%	105.695%
σ		0.238%	n/a	n/a	0.460%	n/a	n/a	n/a	n/a
%RSD		0.227	2.509	2.400	0.508	1.198	0.943	1.201	0.942
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:42:52	93.062%	101.900	100.500	102.500	102.200	103.000	92.957%	93.714%
2	12:43:11	93.478%	104.100	104.700	105.100	102.200	103.500	95.463%	95.461%
3	12:43:30	94.054%	104.300	104.500	104.000	104.000	104.100	96.124%	96.487%
X		93.531%	103.419%	103.237%	103.852%	102.784%	103.554%	94.848%	95.221%
σ		0.499%	n/a	n/a	n/a	n/a	n/a	1.671%	1.402%
%RSD		0.533	1.299	2.257	1.244	1.004	0.552	1.761	1.473
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:42:52	105.300	103.700	106.200	87.259%				
2	12:43:11	107.300	105.600	107.500	87.307%				
3	12:43:30	108.000	106.200	108.200	87.768%				
X		106.881%	105.169%	107.323%	87.445%				
σ		n/a	n/a	n/a	0.281%				
%RSD		1.317	1.231	0.953	0.321				

CCB2 5/1/2015 12:49:22 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	116.911%	0.045	0.660	0.824	0.000	10.760	4.270	3.734
2	12:50:00	115.713%	-0.006	1.031	0.894	0.000	9.407	3.597	3.551
3	12:50:19	112.654%	-0.023	1.163	0.857	0.000	9.240	3.425	3.747
X		115.092%	0.006	0.951	0.858	0.000	9.802	3.764	3.677
σ		2.195%	0.036	0.261	0.035	0.000	0.834	0.447	0.110
%RSD		1.907	644.100	27.420	4.133	0.000	8.503	11.860	2.979
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	2.011	-426.900	0.000	6.596	-0.958	3.932	117.048%	0.013
2	12:50:00	2.030	-426.400	0.000	6.367	1.608	4.118	114.612%	0.067
3	12:50:19	1.989	-438.500	0.000	5.370	4.582	4.966	115.140%	0.032
X		2.010	-430.600	0.000	6.111	1.744	4.339	115.600%	0.038
σ		0.021	6.869	0.000	0.652	2.773	0.551	1.282%	0.027
%RSD		1.026	1.595	0.000	10.670	159.000	12.710	1.109	73.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	0.039	0.048	0.183	15.660	7.607	0.009	0.013	0.543
2	12:50:00	0.047	0.043	0.154	12.140	6.685	0.011	-0.005	0.543
3	12:50:19	0.035	0.065	0.177	13.360	6.797	0.014	0.006	0.512
X		0.040	0.052	0.171	13.720	7.029	0.012	0.005	0.533
σ		0.006	0.012	0.015	1.789	0.503	0.002	0.009	0.018
%RSD		14.890	22.140	8.997	13.040	7.155	21.140	200.800	3.391
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	0.510	0.933	0.922	-0.006	0.102	0.116	0.000	0.044
2	12:50:00	0.424	0.948	0.990	0.038	0.339	0.069	0.000	0.045
3	12:50:19	0.488	0.887	0.947	0.029	0.102	0.042	0.000	0.038
X		0.474	0.922	0.953	0.020	0.181	0.076	0.000	0.042
σ		0.045	0.031	0.034	0.023	0.137	0.038	0.000	0.004
%RSD		9.454	3.408	3.598	114.900	75.600	49.830	0.000	8.730
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	115.629%	0.339	0.288	115.546%	-0.057	-0.057	0.065	0.044
2	12:50:00	118.054%	0.230	0.258	115.400%	-0.056	-0.062	0.044	0.037
3	12:50:19	117.627%	0.247	0.254	115.787%	-0.050	-0.056	0.028	0.012
X		117.103%	0.272	0.267	115.578%	-0.054	-0.058	0.046	0.031
σ		1.295%	0.059	0.018	0.196%	0.003	0.004	0.019	0.017
%RSD		1.106	21.590	6.925	0.169	6.447	6.048	40.730	53.390
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:41	112.076%	0.081	0.013	-0.010	0.048	0.026	107.153%	105.076%
2	12:50:00	108.303%	0.076	0.006	0.010	0.034	0.030	108.252%	106.753%
3	12:50:19	113.737%	0.034	0.002	0.007	0.021	0.008	108.712%	108.564%
X		111.372%	0.064	0.007	0.002	0.034	0.021	108.039%	106.798%
σ		2.784%	0.026	0.006	0.011	0.013	0.012	0.801%	1.744%
%RSD		2.500	41.140	84.160	505.000	38.470	55.330	0.741	1.633
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:49:41	0.034	0.029	0.034	98.141%				
2	12:50:00	0.033	0.030	0.038	97.418%				
3	12:50:19	0.033	0.033	0.038	97.487%				
X		0.033	0.031	0.037	97.682%				
σ		0.001	0.002	0.003	0.399%				
%RSD		1.897	6.466	7.246	0.408				

180-43511-D-1-B MS 5/1/2015 12:53:13 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	64.208%	45.450	1139.000	1099.000	0.000	111400.000	79940.000	79910.000
2	12:53:51	62.717%	41.480	1057.000	1057.000	0.000	107100.000	78040.000	79660.000
3	12:54:10	60.682%	43.980	1117.000	1082.000	0.000	109900.000	77850.000	79290.000
x		62.536%	43.640	1104.000	1079.000	0.000	109500.000	78610.000	79620.000
σ		1.770%	2.004	42.350	21.120	0.000	2176.000	1157.000	313.500
%RSD		2.831	4.592	3.834	1.957	0.000	1.988	1.472	0.394
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	1714.000	13480.000	0.000	55100.000	285700.000	271000.000	61.425%	987.700
2	12:53:51	1742.000	13480.000	0.000	55390.000	287600.000	270900.000	58.913%	1010.000
3	12:54:10	1713.000	13170.000	0.000	55310.000	287600.000	280000.000	57.830%	975.100
x		1723.000	13370.000	0.000	55260.000	287000.000	274000.000	59.389%	991.100
σ		16.610	178.000	0.000	152.500	1087.000	5250.000	1.844%	17.930
%RSD		0.964	1.331	0.000	0.276	0.379	1.916	3.105	1.809
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	501.900	195.600	13720.000	7228.000	7501.000	478.800	453.800	223.400
2	12:53:51	514.300	196.600	13980.000	7321.000	7578.000	480.800	451.400	220.400
3	12:54:10	504.400	196.900	13890.000	7150.000	7547.000	484.300	456.900	224.700
x		506.900	196.400	13860.000	7233.000	7542.000	481.300	454.000	222.800
σ		6.569	0.677	129.900	85.330	38.990	2.788	2.788	2.175
%RSD		1.296	0.345	0.937	1.180	0.517	0.579	0.614	0.976
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	225.700	441.000	441.700	39.210	9.197	9.924	0.000	1590.000
2	12:53:51	221.000	446.700	444.800	39.390	9.303	9.527	0.000	1604.000
3	12:54:10	224.700	447.800	444.600	40.130	9.233	9.997	0.000	1600.000
x		223.800	445.200	443.700	39.580	9.245	9.816	0.000	1598.000
σ		2.451	3.651	1.744	0.485	0.054	0.253	0.000	7.304
%RSD		1.095	0.820	0.393	1.227	0.584	2.575	0.000	0.457
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	69.815%	1001.000	1004.000	63.529%	45.830	45.150	46.020	41.780
2	12:53:51	68.522%	1004.000	1012.000	62.632%	45.960	45.720	46.390	41.530
3	12:54:10	68.243%	1009.000	1015.000	61.510%	45.930	45.880	45.880	41.680
x		68.860%	1005.000	1010.000	62.557%	45.910	45.580	46.090	41.660
σ		0.839%	4.122	5.986	1.012%	0.065	0.380	0.264	0.129
%RSD		1.218	0.410	0.593	1.617	0.141	0.833	0.572	0.310
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:53:32	68.711%	1833.000	437.400	454.400	1970.000	1920.000	76.315%	77.252%
2	12:53:51	68.193%	1838.000	433.300	454.200	1978.000	1930.000	76.948%	77.725%
3	12:54:10	67.743%	1843.000	439.400	456.900	1984.000	1937.000	77.162%	78.057%
x		68.216%	1838.000	436.700	455.200	1977.000	1929.000	76.809%	77.678%
σ		0.484%	5.031	3.105	1.465	7.099	8.630	0.440%	0.405%
%RSD		0.710	0.274	0.711	0.322	0.359	0.447	0.573	0.521
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:53:32	52.140	53.210	22.010	60.341%				
2	12:53:51	53.320	54.360	22.720	60.456%				
3	12:54:10	54.370	54.920	22.700	60.275%				
x		53.280	54.160	22.470	60.357%				
σ		1.114	0.868	0.402	0.092%				
%RSD		2.090	1.603	1.790	0.152				

180-43511-D-1-C MSD 5/1/2015 12:57:02 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	64.722%	42.490	1069.000	1054.000	0.000	106800.000	74420.000	75260.000
2	12:57:40	57.949%	45.170	1132.000	1079.000	0.000	108900.000	77380.000	77400.000
3	12:58:00	57.830%	42.980	1048.000	1093.000	0.000	106700.000	75070.000	76500.000
X		60.167%	43.550	1083.000	1075.000	0.000	107500.000	75630.000	76390.000
σ		3.945%	1.430	43.900	19.510	0.000	1265.000	1555.000	1075.000
%RSD		6.557	3.284	4.053	1.814	0.000	1.177	2.057	1.407
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	1636.000	12630.000	0.000	54300.000	279900.000	269300.000	56.974%	986.100
2	12:57:40	1714.000	13120.000	0.000	55220.000	286600.000	274600.000	53.837%	977.200
3	12:58:00	1604.000	12810.000	0.000	54560.000	283500.000	272900.000	52.127%	980.800
X		1651.000	12850.000	0.000	54690.000	283300.000	272300.000	54.313%	981.300
σ		56.670	246.300	0.000	475.300	3345.000	2740.000	2.458%	4.483
%RSD		3.432	1.916	0.000	0.869	1.181	1.006	4.526	0.457
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	490.700	192.700	13720.000	7235.000	7583.000	478.500	467.200	225.200
2	12:57:40	495.600	191.400	13860.000	7222.000	7575.000	489.900	468.200	230.200
3	12:58:00	497.500	192.000	13890.000	7167.000	7620.000	482.100	452.900	227.300
X		494.600	192.000	13820.000	7208.000	7593.000	483.500	462.800	227.600
σ		3.479	0.647	90.140	36.210	24.040	5.825	8.555	2.527
%RSD		0.703	0.337	0.652	0.502	0.317	1.205	1.848	1.110
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	223.200	441.900	449.100	38.990	9.237	10.150	0.000	1608.000
2	12:57:40	230.800	452.500	456.600	41.220	9.555	9.830	0.000	1604.000
3	12:58:00	226.800	453.700	449.000	39.570	9.275	9.532	0.000	1613.000
X		226.900	449.400	451.600	39.930	9.356	9.838	0.000	1608.000
σ		3.830	6.480	4.354	1.158	0.173	0.310	0.000	4.439
%RSD		1.688	1.442	0.964	2.900	1.851	3.153	0.000	0.276
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	66.499%	1007.000	1001.000	60.936%	45.990	46.000	47.700	42.410
2	12:57:40	65.611%	1004.000	1002.000	59.648%	46.210	45.940	46.970	42.160
3	12:58:00	64.463%	1009.000	1012.000	57.981%	46.040	45.910	46.100	42.270
X		65.524%	1007.000	1005.000	59.522%	46.080	45.950	46.920	42.280
σ		1.021%	2.473	6.295	1.481%	0.115	0.043	0.801	0.128
%RSD		1.558	0.246	0.626	2.489	0.249	0.094	1.706	0.304
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:57:21	66.317%	1843.000	442.600	464.100	1982.000	1948.000	76.112%	76.853%
2	12:57:40	66.210%	1837.000	461.300	458.900	1995.000	1945.000	75.891%	77.394%
3	12:58:00	65.593%	1844.000	437.800	458.000	1973.000	1942.000	75.714%	77.502%
X		66.040%	1841.000	447.200	460.300	1983.000	1945.000	75.906%	77.250%
σ		0.391%	3.499	12.380	3.299	11.030	3.053	0.199%	0.348%
%RSD		0.592	0.190	2.769	0.717	0.556	0.157	0.263	0.450
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	12:57:21	52.530	53.070	21.870	61.716%				
2	12:57:40	54.620	55.290	22.800	60.885%				
3	12:58:00	54.050	54.910	22.470	61.309%				
X		53.730	54.430	22.380	61.303%				
σ		1.077	1.188	0.469	0.416%				
%RSD		2.004	2.183	2.095	0.678				

180-43511-D-1-A PDS 5/1/2015 1:00:50 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	61.040%	47.050	1172.000	1145.000	0.000	107500.000	80380.000	81680.000
2	13:01:28	58.788%	49.350	1135.000	1082.000	0.000	108700.000	79030.000	79110.000
3	13:01:47	55.606%	45.330	1148.000	1104.000	0.000	105800.000	78150.000	79710.000
x		58.478%	47.250	1152.000	1110.000	0.000	107300.000	79190.000	80170.000
σ		2.731%	2.014	18.810	31.990	0.000	1435.000	1123.000	1348.000
%RSD		4.670	4.263	1.633	2.882	0.000	1.337	1.418	1.682
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	1868.000	14610.000	0.000	60310.000	283400.000	272400.000	54.756%	1168.000
2	13:01:28	1803.000	14480.000	0.000	59920.000	280200.000	267800.000	52.759%	1164.000
3	13:01:47	1811.000	13500.000	0.000	58920.000	279700.000	269000.000	51.329%	1175.000
x		1827.000	14200.000	0.000	59720.000	281100.000	269800.000	52.948%	1169.000
σ		35.190	607.100	0.000	720.800	2038.000	2413.000	1.721%	5.779
%RSD		1.926	4.277	0.000	1.207	0.725	0.894	3.251	0.495
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	539.600	213.800	13440.000	7102.000	7418.000	522.400	503.100	246.400
2	13:01:28	536.700	211.700	13420.000	7117.000	7385.000	519.100	492.900	243.200
3	13:01:47	544.100	211.200	13600.000	7210.000	7638.000	534.700	506.800	250.700
x		540.100	212.200	13490.000	7143.000	7481.000	525.400	500.900	246.800
σ		3.719	1.378	96.560	58.690	137.700	8.243	7.179	3.758
%RSD		0.689	0.649	0.716	0.822	1.841	1.569	1.433	1.523
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	248.900	492.400	496.800	43.500	10.280	10.680	0.000	1644.000
2	13:01:28	243.900	487.200	489.600	42.370	10.210	11.020	0.000	1651.000
3	13:01:47	247.800	492.400	492.500	42.460	10.230	9.948	0.000	1649.000
x		246.900	490.700	493.000	42.780	10.240	10.550	0.000	1648.000
σ		2.645	2.992	3.583	0.627	0.034	0.548	0.000	3.539
%RSD		1.071	0.610	0.727	1.465	0.334	5.199	0.000	0.215
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	64.683%	1190.000	1187.000	59.110%	44.720	44.650	49.950	46.320
2	13:01:28	64.154%	1188.000	1179.000	58.724%	44.790	44.590	51.990	44.980
3	13:01:47	63.318%	1197.000	1192.000	57.355%	44.730	44.350	52.060	46.780
x		64.052%	1192.000	1186.000	58.396%	44.750	44.530	51.330	46.030
σ		0.688%	4.924	6.661	0.922%	0.039	0.155	1.201	0.933
%RSD		1.074	0.413	0.562	1.579	0.086	0.349	2.339	2.028
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:01:09	64.881%	2148.000	505.100	538.900	2120.000	2086.000	74.446%	75.686%
2	13:01:28	64.484%	2187.000	516.400	543.100	2102.000	2065.000	74.649%	75.882%
3	13:01:47	63.877%	2184.000	521.000	537.500	2126.000	2073.000	74.751%	76.497%
x		64.414%	2173.000	514.200	539.800	2116.000	2074.000	74.615%	76.022%
σ		0.506%	21.400	8.215	2.900	12.450	10.270	0.155%	0.423%
%RSD		0.785	0.985	1.598	0.537	0.589	0.495	0.208	0.556
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:01:09	59.510	59.540	24.840	58.661%				
2	13:01:28	58.790	60.500	24.660	59.356%				
3	13:01:47	59.520	60.170	24.850	59.057%				
x		59.270	60.070	24.780	59.025%				
σ		0.417	0.485	0.105	0.348%				
%RSD		0.704	0.808	0.423	0.590				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	64.743%	-0.004	234.100	236.200	0.000	63310.000	33720.000	34410.000
2	13:05:15	60.753%	0.000	238.600	242.100	0.000	63520.000	34440.000	34790.000
3	13:05:34	58.827%	-0.033	242.800	236.300	0.000	64510.000	33200.000	33830.000
X		61.441%	-0.012	238.500	238.200	0.000	63780.000	33780.000	34340.000
σ		3.017%	0.018	4.355	3.406	0.000	638.100	623.000	484.500
%RSD		4.910	147.300	1.826	1.430	0.000	1.001	1.844	1.411
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	0.603	4412.000	0.000	7278.000	230600.000	219900.000	53.546%	0.777
2	13:05:15	0.916	4315.000	0.000	7359.000	233300.000	223100.000	51.895%	1.032
3	13:05:34	0.854	4458.000	0.000	7408.000	235400.000	228400.000	50.403%	0.772
X		0.791	4395.000	0.000	7348.000	233100.000	223800.000	51.948%	0.860
σ		0.165	73.130	0.000	65.620	2423.000	4254.000	1.572%	0.148
%RSD		20.900	1.664	0.000	0.893	1.040	1.901	3.027	17.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	0.138	0.240	13200.000	8899.000	9127.000	10.700	3.421	1.114
2	13:05:15	1.597	0.236	13340.000	8942.000	9277.000	10.480	3.230	1.079
3	13:05:34	0.938	0.220	13550.000	9066.000	9245.000	10.750	3.496	1.029
X		0.891	0.232	13360.000	8969.000	9216.000	10.640	3.382	1.074
σ		0.730	0.011	180.300	86.730	78.690	0.141	0.137	0.043
%RSD		81.980	4.546	1.350	0.967	0.854	1.328	4.048	3.982
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	0.784	8.639	8.862	5.946	-0.260	0.669	0.000	702.700
2	13:05:15	0.714	8.796	8.775	5.841	-0.226	0.641	0.000	708.600
3	13:05:34	0.911	8.247	8.307	6.736	-0.409	0.616	0.000	714.800
X		0.803	8.561	8.648	6.174	-0.298	0.642	0.000	708.700
σ		0.100	0.283	0.298	0.490	0.097	0.026	0.000	6.094
%RSD		12.430	3.301	3.449	7.930	32.610	4.086	0.000	0.860
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	63.275%	5.738	5.954	59.438%	-0.082	-0.089	0.347	0.305
2	13:05:15	62.204%	4.613	4.618	58.366%	-0.084	-0.079	0.327	0.327
3	13:05:34	61.476%	3.778	3.778	57.399%	-0.070	-0.077	0.390	0.401
X		62.319%	4.710	4.784	58.401%	-0.079	-0.082	0.354	0.344
σ		0.905%	0.984	1.097	1.020%	0.008	0.007	0.032	0.050
%RSD		1.452	20.890	22.940	1.747	9.685	7.952	9.068	14.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:04:56	63.665%	1.520	0.153	0.151	148.300	148.400	73.234%	74.838%
2	13:05:15	63.606%	1.176	0.162	0.132	145.700	146.800	73.452%	75.454%
3	13:05:34	63.027%	1.069	0.123	0.138	148.600	150.200	72.951%	74.257%
X		63.433%	1.255	0.146	0.140	147.500	148.500	73.212%	74.850%
σ		0.353%	0.235	0.021	0.009	1.618	1.683	0.251%	0.599%
%RSD		0.556	18.760	14.160	6.751	1.097	1.134	0.343	0.800
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:04:56	0.292	0.290	0.052	60.686%				
2	13:05:15	0.275	0.274	0.054	60.255%				
3	13:05:34	0.240	0.243	0.054	61.356%				
X		0.269	0.269	0.053	60.766%				
σ		0.027	0.024	0.001	0.555%				
%RSD		9.887	8.750	2.651	0.913				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	60.073%	-0.017	98.560	87.350	0.000	124100.000	13720.000	13430.000
2	13:09:02	58.201%	-0.015	92.550	89.720	0.000	121600.000	13650.000	13920.000
3	13:09:22	56.191%	-0.013	88.830	91.430	0.000	121100.000	13660.000	13670.000
X		58.155%	-0.015	93.310	89.500	0.000	122300.000	13680.000	13670.000
σ		1.941%	0.002	4.909	2.049	0.000	1588.000	34.210	243.600
%RSD		3.338	12.650	5.261	2.290	0.000	1.298	0.250	1.782
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	3.580	3383.000	0.000	8808.000	108500.000	111400.000	55.387%	0.908
2	13:09:02	3.505	3501.000	0.000	8719.000	110900.000	113700.000	52.964%	1.121
3	13:09:22	3.625	3279.000	0.000	8572.000	110900.000	112700.000	49.547%	1.024
X		3.570	3388.000	0.000	8700.000	110100.000	112600.000	52.633%	1.018
σ		0.060	110.900	0.000	119.300	1397.000	1114.000	2.934%	0.106
%RSD		1.694	3.274	0.000	1.371	1.269	0.989	5.574	10.440
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	1.296	0.416	1367.000	4052.000	4143.000	0.338	0.340	1.090
2	13:09:02	-0.654	0.371	1321.000	4029.000	4169.000	0.276	0.190	1.181
3	13:09:22	-0.883	0.374	1363.000	4005.000	4109.000	0.287	0.349	1.179
X		-0.080	0.387	1350.000	4029.000	4140.000	0.300	0.293	1.150
σ		1.197	0.025	25.360	23.380	30.160	0.033	0.089	0.052
%RSD		1493.000	6.473	1.878	0.580	0.729	10.990	30.510	4.525
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	0.363	3.164	2.772	2.837	-0.100	0.560	0.000	409.500
2	13:09:02	0.372	3.238	2.804	3.486	-0.020	0.470	0.000	412.100
3	13:09:22	0.361	3.215	3.120	3.381	-0.109	0.304	0.000	409.500
X		0.366	3.206	2.899	3.235	-0.076	0.445	0.000	410.400
σ		0.006	0.038	0.192	0.348	0.049	0.130	0.000	1.471
%RSD		1.560	1.180	6.626	10.760	64.130	29.170	0.000	0.358
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	63.309%	3.205	3.177	60.209%	-0.074	-0.086	-0.017	-0.031
2	13:09:02	62.649%	2.859	2.888	58.871%	-0.080	-0.086	-0.059	-0.052
3	13:09:22	61.867%	2.850	3.022	58.275%	-0.071	-0.080	-0.028	-0.018
X		62.608%	2.971	3.029	59.118%	-0.075	-0.084	-0.035	-0.034
σ		0.722%	0.203	0.144	0.990%	0.005	0.003	0.022	0.017
%RSD		1.153	6.821	4.772	1.675	6.057	4.111	63.140	49.980
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:08:43	64.751%	0.849	0.212	0.248	73.080	73.270	74.155%	75.385%
2	13:09:02	63.906%	0.764	0.215	0.231	74.100	74.080	74.583%	75.771%
3	13:09:22	64.317%	0.736	0.244	0.234	73.990	72.660	75.212%	76.292%
X		64.324%	0.783	0.224	0.238	73.730	73.340	74.650%	75.816%
σ		0.423%	0.059	0.017	0.009	0.561	0.710	0.531%	0.455%
%RSD		0.657	7.507	7.732	3.863	0.761	0.969	0.712	0.600
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:08:43	0.105	0.107	0.436	61.380%				
2	13:09:02	0.111	0.110	0.448	62.786%				
3	13:09:22	0.112	0.104	0.458	62.289%				
X		0.109	0.107	0.447	62.152%				
σ		0.004	0.003	0.011	0.713%				
%RSD		3.524	2.895	2.486	1.147				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	48.261%	0.058	274.300	261.400	0.000	726700.000	26690.000	27680.000
2	13:12:51	47.954%	0.059	257.400	241.000	0.000	709200.000	26010.000	26070.000
3	13:13:10	46.243%	-0.024	254.900	236.700	0.000	702200.000	25950.000	25980.000
x		47.486%	0.031	262.200	246.400	0.000	712700.000	26220.000	26580.000
σ		1.088%	0.048	10.530	13.170	0.000	12600.000	411.700	953.500
%RSD		2.290	153.300	4.016	5.346	0.000	1.768	1.570	3.587
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	0.147	11500.000	0.000	22900.000	382000.000	362700.000	51.718%	1.092
2	13:12:51	-0.289	11130.000	0.000	22870.000	384000.000	365900.000	50.137%	0.972
3	13:13:10	-0.107	10780.000	0.000	22950.000	389000.000	372800.000	49.049%	1.517
x		-0.083	11140.000	0.000	22910.000	385000.000	367100.000	50.301%	1.194
σ		0.219	362.700	0.000	38.320	3640.000	5140.000	1.342%	0.286
%RSD		264.700	3.257	0.000	0.167	0.946	1.400	2.668	23.960
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	-0.247	0.228	1539.000	37390.000	37650.000	0.556	0.555	6.036
2	13:12:51	0.076	0.229	1585.000	38270.000	37670.000	0.505	0.495	6.174
3	13:13:10	-0.213	0.280	1565.000	37980.000	37480.000	0.538	0.425	6.168
x		-0.128	0.246	1563.000	37880.000	37600.000	0.533	0.492	6.126
σ		0.178	0.029	23.090	452.000	104.500	0.026	0.065	0.078
%RSD		138.800	12.000	1.477	1.193	0.278	4.838	13.210	1.270
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	0.582	7.219	7.342	0.237	-0.018	0.617	0.000	1701.000
2	13:12:51	0.428	7.095	7.624	0.255	-0.196	0.329	0.000	1709.000
3	13:13:10	0.401	7.079	6.900	0.493	0.078	0.325	0.000	1713.000
x		0.470	7.131	7.289	0.328	-0.045	0.423	0.000	1708.000
σ		0.098	0.077	0.365	0.143	0.139	0.168	0.000	6.094
%RSD		20.760	1.074	5.004	43.510	307.600	39.560	0.000	0.357
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	62.322%	0.747	0.706	55.303%	-0.084	-0.089	-0.001	-0.016
2	13:12:51	61.572%	0.722	0.725	53.712%	-0.080	-0.086	-0.024	-0.026
3	13:13:10	60.608%	0.675	0.709	53.101%	-0.081	-0.087	-0.015	-0.017
x		61.501%	0.715	0.713	54.038%	-0.082	-0.087	-0.013	-0.020
σ		0.859%	0.037	0.010	1.137%	0.002	0.001	0.012	0.006
%RSD		1.397	5.146	1.379	2.103	2.139	1.480	88.460	28.260
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:32	61.449%	0.347	0.063	0.093	511.400	510.100	68.518%	69.489%
2	13:12:51	61.158%	0.381	0.044	0.079	508.200	506.400	69.533%	69.538%
3	13:13:10	60.759%	0.330	0.042	0.086	505.300	505.900	68.893%	69.910%
x		61.122%	0.352	0.050	0.086	508.300	507.500	68.981%	69.646%
σ		0.346%	0.026	0.011	0.007	3.017	2.310	0.514%	0.230%
%RSD		0.566	7.322	22.770	8.142	0.594	0.455	0.744	0.330
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:12:32	0.066	0.062	0.018	54.445%				
2	13:12:51	0.054	0.064	0.015	53.969%				
3	13:13:10	0.052	0.057	0.017	55.173%				
x		0.057	0.061	0.017	54.529%				
σ		0.008	0.004	0.001	0.606%				
%RSD		13.130	5.940	7.398	1.112				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	45.094%	-0.001	306.600	281.300	0.000	1037000.000	35690.000	36360.000
2	13:16:39	47.401%	-0.004	297.500	271.900	0.000	965500.000	32820.000	34350.000
3	13:16:59	47.333%	-0.025	288.800	274.600	0.000	959400.000	33160.000	34670.000
X		46.609%	-0.010	297.600	276.000	0.000	987300.000	33890.000	35130.000
σ		1.313%	0.013	8.898	4.827	0.000	43200.000	1567.000	1080.000
%RSD		2.817	134.300	2.989	1.749	0.000	4.375	4.623	3.075
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	1.690	10990.000	0.000	25610.000	502900.000	473300.000	52.126%	0.725
2	13:16:39	1.360	10240.000	0.000	25020.000	491600.000	477200.000	51.118%	0.895
3	13:16:59	1.550	10070.000	0.000	24940.000	498400.000	477000.000	49.343%	0.771
X		1.533	10430.000	0.000	25190.000	497600.000	475800.000	50.862%	0.797
σ		0.166	493.200	0.000	365.000	5655.000	2221.000	1.409%	0.088
%RSD		10.820	4.727	0.000	1.449	1.136	0.467	2.770	11.020
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	1.204	0.271	777.100	14970.000	15640.000	0.956	0.661	9.181
2	13:16:39	-1.378	0.224	791.400	15160.000	15630.000	1.007	0.574	9.235
3	13:16:59	-1.288	0.202	775.200	14940.000	15630.000	1.001	0.513	9.520
X		-0.487	0.232	781.300	15020.000	15640.000	0.988	0.583	9.312
σ		1.466	0.035	8.850	120.300	6.808	0.028	0.074	0.182
%RSD		300.800	15.250	1.133	0.800	0.044	2.855	12.760	1.955
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	0.872	3.724	3.188	3.313	0.264	0.655	0.000	2069.000
2	13:16:39	0.851	3.083	2.916	3.888	0.327	0.770	0.000	2052.000
3	13:16:59	0.854	3.093	3.054	3.314	0.323	0.918	0.000	2064.000
X		0.859	3.300	3.053	3.505	0.305	0.781	0.000	2062.000
σ		0.011	0.367	0.136	0.332	0.035	0.132	0.000	8.578
%RSD		1.313	11.130	4.464	9.469	11.520	16.930	0.000	0.416
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	61.402%	2.060	1.919	52.789%	-0.088	-0.090	-0.024	-0.020
2	13:16:39	61.065%	1.903	1.996	52.022%	-0.083	-0.090	-0.040	-0.032
3	13:16:59	60.066%	1.994	1.917	50.802%	-0.080	-0.082	-0.042	-0.040
X		60.844%	1.986	1.944	51.871%	-0.084	-0.087	-0.035	-0.031
σ		0.695%	0.079	0.045	1.003%	0.004	0.005	0.010	0.010
%RSD		1.142	3.971	2.320	1.933	5.149	5.208	27.360	32.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:20	60.111%	0.239	0.637	0.651	231.300	230.500	67.163%	67.577%
2	13:16:39	59.571%	0.242	0.662	0.714	229.900	230.500	67.702%	68.112%
3	13:16:59	59.832%	0.204	0.691	0.735	230.300	228.400	67.834%	68.042%
X		59.838%	0.228	0.663	0.700	230.500	229.800	67.566%	67.910%
σ		0.270%	0.021	0.027	0.044	0.712	1.206	0.356%	0.291%
%RSD		0.452	9.079	4.092	6.257	0.309	0.525	0.526	0.429
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:16:20	0.045	0.041	0.060	51.054%				
2	13:16:39	0.053	0.048	0.058	50.887%				
3	13:16:59	0.040	0.039	0.062	49.703%				
X		0.046	0.042	0.060	50.548%				
σ		0.007	0.005	0.002	0.736%				
%RSD		14.620	10.920	2.938	1.457				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	45.800%	2.027	421.900	401.300	0.000	1306000.000	66600.000	67090.000
2	13:20:29	44.272%	1.758	412.800	394.000	0.000	1294000.000	64190.000	63930.000
3	13:20:48	40.228%	2.060	404.400	388.900	0.000	1269000.000	63290.000	64410.000
X		43.433%	1.949	413.000	394.700	0.000	1289000.000	64690.000	65140.000
σ		2.879%	0.166	8.744	6.263	0.000	18750.000	1711.000	1707.000
%RSD		6.628	8.492	2.117	1.587	0.000	1.454	2.645	2.621
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	3089.000	12330.000	0.000	39550.000	598100.000	566400.000	51.531%	9.343
2	13:20:29	3018.000	11910.000	0.000	39050.000	595400.000	565800.000	49.407%	9.207
3	13:20:48	3115.000	12080.000	0.000	39140.000	602000.000	573100.000	47.347%	8.950
X		3074.000	12110.000	0.000	39250.000	598500.000	568500.000	49.428%	9.167
σ		50.260	212.400	0.000	271.000	3331.000	4054.000	2.092%	0.199
%RSD		1.635	1.754	0.000	0.691	0.556	0.713	4.233	2.175
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	8.150	3.531	3231.000	7636.000	8343.000	9.207	11.140	22.360
2	13:20:29	8.347	3.532	3278.000	7648.000	8258.000	9.204	10.760	22.450
3	13:20:48	8.007	3.667	3292.000	7685.000	8284.000	9.023	10.490	22.310
X		8.168	3.577	3267.000	7657.000	8295.000	9.145	10.800	22.370
σ		0.171	0.078	31.600	25.480	43.440	0.106	0.329	0.066
%RSD		2.091	2.188	0.967	0.333	0.524	1.155	3.044	0.295
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	13.000	32.670	32.450	1.706	3.474	4.294	0.000	2782.000
2	13:20:29	12.690	33.170	32.830	1.786	3.734	4.414	0.000	2778.000
3	13:20:48	12.730	34.710	33.770	1.888	3.693	4.342	0.000	2824.000
X		12.810	33.510	33.010	1.793	3.634	4.350	0.000	2794.000
σ		0.169	1.065	0.679	0.091	0.140	0.061	0.000	25.220
%RSD		1.317	3.176	2.058	5.089	3.841	1.397	0.000	0.902
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	68.557%	1.788	2.161	50.930%	-0.050	-0.052	0.478	0.417
2	13:20:29	67.277%	2.005	2.097	49.913%	-0.049	-0.053	0.448	0.551
3	13:20:48	64.412%	1.822	2.013	48.489%	-0.053	-0.050	0.489	0.514
X		66.749%	1.872	2.091	49.777%	-0.051	-0.052	0.472	0.494
σ		2.122%	0.117	0.074	1.226%	0.002	0.001	0.021	0.069
%RSD		3.180	6.233	3.553	2.464	4.831	2.848	4.538	13.950
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:20:10	57.790%	0.292	0.204	0.262	275.000	271.300	66.243%	66.220%
2	13:20:29	57.548%	0.232	0.221	0.227	273.700	271.600	64.925%	64.871%
3	13:20:48	56.472%	0.234	0.215	0.287	270.700	271.900	64.505%	64.938%
X		57.270%	0.253	0.214	0.259	273.100	271.600	65.225%	65.343%
σ		0.701%	0.034	0.009	0.030	2.225	0.340	0.907%	0.760%
%RSD		1.225	13.370	4.036	11.720	0.815	0.125	1.391	1.163
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:20:10	0.219	0.224	42.540	43.977%				
2	13:20:29	0.238	0.237	42.280	44.068%				
3	13:20:48	0.198	0.226	41.570	45.548%				
X		0.218	0.229	42.130	44.531%				
σ		0.020	0.007	0.500	0.882%				
%RSD		9.348	3.128	1.188	1.981				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	50.179%	-0.007	334.900	312.600	0.000	714900.000	46910.000	46920.000
2	13:24:18	49.034%	-0.006	323.100	301.100	0.000	666300.000	43880.000	45970.000
3	13:24:37	46.461%	0.063	324.800	309.800	0.000	707700.000	46730.000	46450.000
x		48.558%	0.017	327.600	307.900	0.000	696300.000	45840.000	46450.000
σ		1.904%	0.040	6.400	5.994	0.000	26190.000	1697.000	476.900
%RSD		3.922	239.500	1.953	1.947	0.000	3.762	3.703	1.027
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	6.094	13040.000	0.000	19820.000	411700.000	389800.000	52.681%	1.447
2	13:24:18	7.043	12590.000	0.000	19590.000	414500.000	397000.000	50.773%	1.329
3	13:24:37	5.788	12720.000	0.000	19920.000	418200.000	395700.000	48.934%	1.160
x		6.308	12780.000	0.000	19780.000	414800.000	394200.000	50.796%	1.312
σ		0.654	228.200	0.000	169.500	3297.000	3887.000	1.874%	0.144
%RSD		10.370	1.785	0.000	0.857	0.795	0.986	3.688	11.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	-0.232	0.313	2848.000	30670.000	30590.000	1.104	0.259	5.713
2	13:24:18	-1.416	0.356	2893.000	30610.000	30750.000	1.095	0.210	5.719
3	13:24:37	-0.243	0.354	2834.000	30390.000	30550.000	1.082	0.070	5.889
x		-0.630	0.341	2859.000	30560.000	30630.000	1.093	0.180	5.774
σ		0.681	0.024	30.940	146.900	105.300	0.011	0.098	0.100
%RSD		108.000	7.030	1.082	0.481	0.344	1.006	54.510	1.726
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	0.426	39.960	38.540	2.238	-0.079	0.663	0.000	2056.000
2	13:24:18	0.487	38.920	40.470	2.422	-0.179	0.497	0.000	2087.000
3	13:24:37	0.436	39.190	40.140	2.768	0.021	0.599	0.000	2043.000
x		0.450	39.360	39.710	2.476	-0.079	0.587	0.000	2062.000
σ		0.033	0.537	1.031	0.269	0.100	0.084	0.000	22.810
%RSD		7.288	1.363	2.595	10.870	125.900	14.270	0.000	1.106
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	60.214%	0.973	0.916	53.219%	-0.081	-0.086	-0.034	-0.023
2	13:24:18	59.581%	1.032	1.039	51.886%	-0.086	-0.091	-0.006	-0.004
3	13:24:37	59.679%	0.979	0.938	52.237%	-0.080	-0.090	-0.043	-0.049
x		59.825%	0.995	0.964	52.447%	-0.082	-0.089	-0.028	-0.025
σ		0.341%	0.032	0.066	0.691%	0.004	0.003	0.019	0.023
%RSD		0.569	3.243	6.818	1.317	4.392	3.064	69.750	89.120
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:59	59.679%	0.127	0.029	0.054	580.900	580.600	66.924%	67.720%
2	13:24:18	59.116%	0.144	0.046	0.090	591.900	596.200	66.502%	67.203%
3	13:24:37	60.114%	0.118	0.051	0.095	575.600	577.400	68.073%	68.390%
x		59.636%	0.130	0.042	0.080	582.800	584.800	67.166%	67.771%
σ		0.501%	0.013	0.011	0.023	8.300	10.040	0.813%	0.595%
%RSD		0.840	10.280	27.090	28.230	1.424	1.717	1.210	0.878
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:23:59	0.033	0.027	6.641	49.104%				
2	13:24:18	0.019	0.027	6.374	53.337%				
3	13:24:37	0.027	0.031	6.562	51.117%				
x		0.027	0.028	6.525	51.186%				
σ		0.007	0.002	0.137	2.118%				
%RSD		26.440	8.018	2.100	4.137				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	71.312%	0.004	12.380	10.940	0.000	113.600	11.020	9.720
2	13:28:07	65.661%	0.010	13.700	11.940	0.000	97.550	9.160	9.962
3	13:28:27	63.727%	0.077	10.800	11.470	0.000	91.040	7.631	8.457
X		66.900%	0.031	12.290	11.450	0.000	100.700	9.272	9.380
σ		3.942%	0.040	1.449	0.497	0.000	11.590	1.699	0.808
%RSD		5.892	132.000	11.790	4.338	0.000	11.500	18.330	8.614
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	0.885	-457.300	0.000	8.799	34.580	58.060	62.639%	0.272
2	13:28:07	0.962	-450.700	0.000	7.025	68.640	50.640	59.964%	0.124
3	13:28:27	0.984	-449.900	0.000	6.267	27.470	45.890	59.042%	-0.005
X		0.943	-452.600	0.000	7.364	43.560	51.530	60.548%	0.130
σ		0.052	4.038	0.000	1.299	22.010	6.136	1.868%	0.139
%RSD		5.508	0.892	0.000	17.640	50.520	11.910	3.086	106.600
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	1.144	0.373	1.023	35.720	34.510	0.136	0.160	0.227
2	13:28:07	0.515	0.376	0.912	29.890	25.160	0.125	0.164	0.262
3	13:28:27	1.023	0.380	0.947	31.270	28.080	0.113	0.095	0.189
X		0.894	0.376	0.961	32.290	29.250	0.125	0.140	0.226
σ		0.334	0.004	0.057	3.045	4.783	0.011	0.039	0.037
%RSD		37.350	1.002	5.884	9.428	16.350	9.005	27.790	16.240
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	0.219	5.937	5.657	-1.007	-0.271	0.125	0.000	0.351
2	13:28:07	0.143	5.867	5.764	-0.523	-0.382	0.231	0.000	0.277
3	13:28:27	0.194	5.917	5.624	-0.573	0.069	0.107	0.000	0.288
X		0.185	5.907	5.681	-0.701	-0.195	0.155	0.000	0.305
σ		0.039	0.036	0.073	0.266	0.235	0.067	0.000	0.040
%RSD		20.970	0.613	1.290	38.000	120.700	43.360	0.000	13.140
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	73.308%	0.106	0.096	72.054%	-0.083	-0.085	-0.020	-0.006
2	13:28:07	73.091%	0.100	0.095	71.557%	-0.078	-0.095	-0.025	-0.025
3	13:28:27	71.239%	0.064	0.092	69.998%	-0.073	-0.084	-0.001	-0.006
X		72.546%	0.090	0.094	71.203%	-0.078	-0.088	-0.016	-0.012
σ		1.137%	0.023	0.002	1.073%	0.005	0.006	0.013	0.011
%RSD		1.567	25.420	1.742	1.507	6.048	6.577	80.320	87.910
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:47	76.266%	0.137	-0.018	-0.016	0.176	0.200	84.053%	84.366%
2	13:28:07	77.051%	0.168	-0.020	-0.012	0.254	0.171	85.577%	86.495%
3	13:28:27	75.709%	0.111	-0.007	-0.016	0.200	0.172	84.574%	86.026%
X		76.342%	0.139	-0.015	-0.015	0.210	0.181	84.735%	85.629%
σ		0.674%	0.029	0.007	0.002	0.040	0.016	0.775%	1.119%
%RSD		0.883	20.720	46.560	14.060	19.000	9.073	0.914	1.307
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:27:47	0.013	0.020	0.088	76.460%				
2	13:28:07	0.018	0.017	0.081	76.679%				
3	13:28:27	0.019	0.020	0.088	76.282%				
X		0.017	0.019	0.086	76.473%				
σ		0.003	0.002	0.004	0.199%				
%RSD		19.180	8.863	4.420	0.260				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	98.319%	107.900	102.500	98.080	0.000	47780.000	48180.000	49300.000
2	13:31:45	94.745%	105.500	101.100	99.780	0.000	47130.000	48400.000	49170.000
3	13:32:04	92.337%	103.000	100.100	98.570	0.000	48420.000	48790.000	49020.000
x		95.134%	105.490%	101.219%	98.807%	0.000	95.556%	96.912%	98.324%
σ		3.010%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.164	2.297	1.172	0.886	0.000	1.351	0.633	0.288
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	501.600	4673.000	0.000	48480.000	48010.000	48070.000	103.063%	98.490
2	13:31:45	493.900	4713.000	0.000	49190.000	48830.000	48970.000	98.986%	102.100
3	13:32:04	497.000	4663.000	0.000	50450.000	51100.000	50410.000	92.813%	104.700
x		99.505%	93.657%	0.000	98.746%	98.633%	98.300%	98.287%	101.753%
σ		n/a	n/a	0.000	n/a	n/a	n/a	5.161%	n/a
%RSD		0.775	0.560	0.000	2.017	3.248	2.401	5.251	3.065
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	100.400	101.300	478.900	24320.000	24310.000	100.600	102.800	104.100
2	13:31:45	101.100	100.600	489.800	24730.000	24390.000	102.600	103.700	106.400
3	13:32:04	102.600	103.200	503.100	25520.000	25220.000	104.700	105.600	106.600
x		101.357%	101.703%	98.125%	99.442%	98.557%	102.635%	104.002%	105.692%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.092	1.338	2.470	2.456	2.041	1.971	1.368	1.314
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	105.400	104.100	103.700	104.500	106.700	107.600	0.000	103.900
2	13:31:45	105.400	105.100	105.400	105.600	109.200	108.700	0.000	105.000
3	13:32:04	108.500	106.600	107.400	105.800	111.600	107.600	0.000	104.700
x		106.422%	105.258%	105.527%	105.302%	109.182%	107.966%	0.000	104.517%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.697	1.220	1.765	0.672	2.237	0.569	0.000	0.565
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	96.287%	96.840	96.860	91.045%	100.900	100.700	98.810	99.200
2	13:31:45	95.462%	99.470	99.880	89.584%	101.500	101.800	100.500	99.090
3	13:32:04	95.504%	101.200	101.500	88.968%	101.500	102.100	101.800	102.100
x		95.751%	99.179%	99.423%	89.866%	101.290%	101.550%	100.394%	100.122%
σ		0.465%	n/a	n/a	1.066%	n/a	n/a	n/a	n/a
%RSD		0.485	2.224	2.381	1.187	0.360	0.715	1.514	1.687
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:31:26	92.951%	96.360	96.420	96.110	97.420	97.230	91.886%	91.477%
2	13:31:45	92.088%	96.220	96.460	97.020	95.990	96.970	93.443%	93.527%
3	13:32:04	91.557%	98.710	98.770	100.400	98.600	98.730	93.534%	93.668%
x		92.199%	97.095%	97.217%	97.848%	97.337%	97.642%	92.955%	92.891%
σ		0.703%	n/a	n/a	n/a	n/a	n/a	0.927%	1.226%
%RSD		0.763	1.440	1.385	2.320	1.344	0.973	0.997	1.320
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:31:26	105.600	104.500	107.700	78.225%				
2	13:31:45	106.300	104.800	108.800	80.073%				
3	13:32:04	107.800	107.500	110.200	79.512%				
x		106.588%	105.586%	108.899%	79.270%				
σ		n/a	n/a	n/a	0.948%				
%RSD		1.057	1.575	1.185	1.196				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	121.723%	0.016	1.436	0.966	0.000	17.450	4.241	4.209
2	13:38:34	112.119%	-0.041	1.302	1.136	0.000	13.610	4.230	3.540
3	13:38:53	111.036%	-0.004	1.218	1.040	0.000	13.770	3.319	3.769
x		114.959%	-0.009	1.319	1.047	0.000	14.940	3.930	3.839
σ		5.882%	0.029	0.110	0.085	0.000	2.172	0.529	0.340
%RSD		5.117	304.300	8.345	8.159	0.000	14.540	13.460	8.849
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	1.934	-472.400	0.000	5.269	12.740	8.390	118.609%	0.037
2	13:38:34	2.041	-471.700	0.000	5.210	11.900	6.519	116.251%	-0.012
3	13:38:53	1.867	-471.400	0.000	6.138	-0.482	5.870	113.341%	0.008
x		1.947	-471.800	0.000	5.539	8.055	6.926	116.067%	0.011
σ		0.087	0.514	0.000	0.520	7.405	1.309	2.639%	0.024
%RSD		4.488	0.109	0.000	9.384	91.930	18.890	2.273	216.100
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	0.053	0.045	0.255	14.990	7.767	0.006	0.027	0.514
2	13:38:34	0.038	0.036	0.203	12.790	6.496	0.013	0.028	0.514
3	13:38:53	0.040	0.034	0.224	11.840	5.965	0.014	0.020	0.510
x		0.044	0.039	0.228	13.210	6.743	0.011	0.025	0.513
σ		0.008	0.006	0.026	1.616	0.926	0.004	0.004	0.002
%RSD		17.980	14.570	11.420	12.240	13.730	38.260	16.240	0.464
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	0.480	0.989	0.953	-0.071	0.268	-0.068	0.000	0.063
2	13:38:34	0.511	0.944	0.954	0.001	0.031	0.086	0.000	0.049
3	13:38:53	0.447	0.868	1.043	0.032	0.365	0.048	0.000	0.061
x		0.479	0.934	0.983	-0.012	0.222	0.022	0.000	0.058
σ		0.032	0.061	0.052	0.053	0.172	0.080	0.000	0.008
%RSD		6.636	6.584	5.253	425.400	77.630	361.800	0.000	13.110
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	112.237%	0.281	0.292	112.034%	-0.062	-0.063	0.039	0.028
2	13:38:34	113.940%	0.215	0.229	111.257%	-0.064	-0.059	0.045	0.020
3	13:38:53	112.909%	0.197	0.213	111.173%	-0.056	-0.059	0.040	0.030
x		113.028%	0.231	0.245	111.488%	-0.061	-0.061	0.041	0.026
σ		0.858%	0.045	0.042	0.475%	0.004	0.002	0.003	0.005
%RSD		0.759	19.280	16.980	0.426	7.067	3.588	7.496	19.790
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:38:14	106.985%	0.033	-0.003	-0.009	0.050	0.032	101.692%	99.664%
2	13:38:34	108.259%	0.032	-0.006	-0.008	0.035	0.027	102.606%	101.347%
3	13:38:53	107.938%	0.043	-0.003	0.007	0.044	0.046	103.702%	102.843%
x		107.727%	0.036	-0.004	-0.003	0.043	0.035	102.667%	101.285%
σ		0.662%	0.006	0.002	0.009	0.007	0.010	1.006%	1.591%
%RSD		0.615	17.850	39.950	278.400	16.520	28.720	0.980	1.570
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:38:14	0.027	0.025	0.032	91.829%				
2	13:38:34	0.022	0.028	0.034	92.559%				
3	13:38:53	0.026	0.022	0.034	91.284%				
x		0.025	0.025	0.033	91.891%				
σ		0.003	0.003	0.001	0.640%				
%RSD		11.280	10.800	3.363	0.696				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:05	79.589%	-0.016	34.420	35.810	0.000	137.200	5.404	5.835
2	13:42:25	76.192%	0.014	39.120	35.640	0.000	140.700	5.850	5.721
3	13:42:44	75.207%	-0.013	35.440	35.150	0.000	139.500	5.469	5.561
	X	76.996%	-0.005	36.330	35.540	0.000	139.200	5.574	5.706
	σ	2.299%	0.016	2.472	0.344	0.000	1.800	0.241	0.138
	%RSD	2.986	323.300	6.805	0.969	0.000	1.294	4.325	2.409
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:05	10.900	-363.400	0.000	14.400	38.010	46.310	69.985%	0.191
2	13:42:25	11.240	-356.000	0.000	15.370	51.200	54.030	63.737%	0.126
3	13:42:44	10.990	-353.200	0.000	15.660	54.800	51.770	59.065%	0.227
	X	11.050	-357.500	0.000	15.140	48.000	50.700	64.263%	0.181
	σ	0.178	5.241	0.000	0.660	8.838	3.967	5.479%	0.051
	%RSD	1.608	1.466	0.000	4.358	18.410	7.824	8.526	28.110
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:05	-0.265	0.564	0.569	13.170	10.140	0.013	0.126	0.151
2	13:42:25	-1.578	0.607	0.564	12.280	10.150	0.020	0.076	0.101
3	13:42:44	-0.165	0.606	0.534	12.160	11.120	0.018	0.149	0.185
	X	-0.670	0.592	0.556	12.530	10.470	0.017	0.117	0.146
	σ	0.788	0.024	0.019	0.553	0.562	0.004	0.037	0.042
	%RSD	117.700	4.107	3.397	4.414	5.365	20.970	31.770	28.860
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:05	0.065	3.529	3.626	-0.640	-0.197	-0.019	0.000	0.166
2	13:42:25	0.173	3.722	3.440	-0.380	-0.169	0.235	0.000	0.153
3	13:42:44	0.107	3.256	3.283	-0.730	-0.250	-0.098	0.000	0.138
	X	0.115	3.502	3.450	-0.583	-0.205	0.039	0.000	0.152
	σ	0.054	0.234	0.172	0.182	0.041	0.174	0.000	0.014
	%RSD	47.170	6.686	4.979	31.200	19.880	444.300	0.000	9.216
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:05	75.053%	0.137	0.146	74.771%	-0.080	-0.084	-0.052	-0.036
2	13:42:25	73.490%	0.108	0.125	73.406%	-0.073	-0.079	-0.010	-0.012
3	13:42:44	73.529%	0.086	0.138	72.971%	-0.071	-0.074	-0.042	-0.038
	X	74.024%	0.110	0.136	73.716%	-0.075	-0.079	-0.035	-0.029
	σ	0.892%	0.026	0.011	0.939%	0.005	0.005	0.022	0.014
	%RSD	1.204	23.210	7.887	1.274	6.754	6.179	62.930	49.760
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:42:05	76.925%	0.558	0.058	0.035	0.124	0.100	82.724%	83.536%
2	13:42:25	77.122%	0.514	0.029	0.036	0.105	0.085	84.034%	85.688%
3	13:42:44	76.348%	0.515	0.032	0.042	0.116	0.122	85.498%	85.524%
	X	76.798%	0.529	0.040	0.038	0.115	0.102	84.086%	84.916%
	σ	0.402%	0.025	0.016	0.004	0.009	0.019	1.388%	1.198%
	%RSD	0.524	4.738	41.200	10.730	8.204	18.180	1.650	1.411
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:42:05	0.014	0.015	0.043	76.660%				
2	13:42:25	0.024	0.019	0.043	77.320%				
3	13:42:44	0.024	0.022	0.041	76.968%				
	X	0.021	0.019	0.043	76.983%				
	σ	0.006	0.003	0.001	0.330%				
	%RSD	27.070	16.470	2.636	0.429				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	63.512%	-0.035	18.530	19.670	0.000	20130.000	27840.000	28320.000
2	13:46:14	60.648%	-0.051	17.960	18.050	0.000	19050.000	26010.000	26460.000
3	13:46:33	58.425%	-0.015	17.450	17.580	0.000	18660.000	25820.000	26000.000
X		60.862%	-0.034	17.980	18.430	0.000	19280.000	26560.000	26930.000
σ		2.550%	0.018	0.541	1.098	0.000	757.900	1114.000	1231.000
%RSD		4.191	53.280	3.010	5.959	0.000	3.930	4.194	4.572
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	1.553	4213.000	0.000	1174.000	88490.000	88750.000	55.672%	0.496
2	13:46:14	0.963	4074.000	0.000	1167.000	87980.000	88350.000	54.839%	0.289
3	13:46:33	1.086	4010.000	0.000	1174.000	88660.000	89610.000	51.822%	0.444
X		1.201	4099.000	0.000	1172.000	88380.000	88900.000	54.111%	0.410
σ		0.312	103.900	0.000	3.901	354.200	647.100	2.026%	0.107
%RSD		25.960	2.535	0.000	0.333	0.401	0.728	3.744	26.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	0.271	0.772	1.442	10.450	128.500	0.066	0.794	0.205
2	13:46:14	2.659	0.776	1.460	10.510	121.000	0.077	0.458	0.290
3	13:46:33	0.793	0.878	1.435	12.630	136.500	0.060	0.673	0.271
X		1.241	0.809	1.446	11.200	128.700	0.068	0.642	0.255
σ		1.255	0.060	0.013	1.243	7.750	0.008	0.170	0.044
%RSD		101.200	7.389	0.908	11.100	6.023	12.110	26.530	17.300
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	0.104	6.126	6.427	-0.242	0.115	0.637	0.000	104.300
2	13:46:14	0.098	5.869	6.173	-0.667	0.222	0.504	0.000	106.100
3	13:46:33	0.154	5.561	6.019	-1.197	0.299	0.604	0.000	105.800
X		0.119	5.852	6.206	-0.702	0.212	0.582	0.000	105.400
σ		0.030	0.283	0.206	0.478	0.092	0.069	0.000	0.974
%RSD		25.540	4.832	3.321	68.160	43.550	11.890	0.000	0.924
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	65.646%	0.443	0.460	62.473%	-0.079	-0.083	-0.008	-0.017
2	13:46:14	64.830%	0.473	0.521	61.016%	-0.070	-0.091	-0.039	-0.038
3	13:46:33	64.306%	0.425	0.475	60.352%	-0.079	-0.075	-0.026	-0.018
X		64.927%	0.447	0.486	61.280%	-0.076	-0.083	-0.024	-0.024
σ		0.676%	0.024	0.032	1.085%	0.005	0.008	0.016	0.012
%RSD		1.041	5.431	6.604	1.771	7.067	9.605	64.700	48.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:45:54	67.128%	0.113	0.021	0.039	79.690	80.820	77.690%	79.071%
2	13:46:14	67.379%	0.080	0.027	0.032	80.580	79.860	77.253%	78.806%
3	13:46:33	67.337%	0.076	0.022	0.027	80.570	79.630	77.634%	79.230%
X		67.281%	0.090	0.023	0.033	80.280	80.100	77.526%	79.036%
σ		0.135%	0.020	0.003	0.006	0.509	0.630	0.238%	0.214%
%RSD		0.200	22.630	14.420	17.590	0.634	0.786	0.307	0.271
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:45:54	0.022	0.024	0.064	68.394%				
2	13:46:14	0.031	0.029	0.069	67.743%				
3	13:46:33	0.025	0.028	0.069	68.520%				
X		0.026	0.027	0.067	68.219%				
σ		0.005	0.003	0.003	0.417%				
%RSD		17.340	11.140	4.440	0.612				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	57.012%	0.022	582.400	590.200	0.000	75290.000	47410.000	48080.000
2	13:50:04	53.702%	0.008	596.400	562.500	0.000	73110.000	47180.000	46690.000
3	13:50:23	51.374%	-0.008	580.200	540.300	0.000	71020.000	45160.000	45000.000
X		54.029%	0.007	586.300	564.400	0.000	73140.000	46580.000	46590.000
σ		2.833%	0.015	8.789	25.000	0.000	2136.000	1235.000	1542.000
%RSD		5.244	202.600	1.499	4.429	0.000	2.921	2.650	3.310
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	5.087	8786.000	0.000	5277.000	118000.000	119400.000	54.395%	0.999
2	13:50:04	4.871	8631.000	0.000	5499.000	123100.000	122400.000	50.431%	0.693
3	13:50:23	4.666	8242.000	0.000	5256.000	120200.000	121000.000	48.379%	0.889
X		4.874	8553.000	0.000	5344.000	120400.000	120900.000	51.069%	0.860
σ		0.210	280.300	0.000	134.500	2600.000	1486.000	3.058%	0.155
%RSD		4.319	3.277	0.000	2.518	2.159	1.229	5.989	18.010
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	0.043	0.952	787.400	940.300	1085.000	4.643	17.850	1.668
2	13:50:04	2.381	0.989	808.300	994.200	1108.000	4.872	17.740	1.690
3	13:50:23	-0.211	1.004	813.200	999.100	1119.000	4.696	18.980	1.662
X		0.738	0.982	803.000	977.900	1104.000	4.737	18.190	1.674
σ		1.429	0.027	13.710	32.620	17.480	0.120	0.684	0.015
%RSD		193.600	2.707	1.708	3.336	1.583	2.531	3.761	0.877
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	1.124	3.705	4.631	0.668	-0.279	1.077	0.000	401.400
2	13:50:04	1.142	3.862	4.030	1.325	-0.201	1.360	0.000	404.400
3	13:50:23	1.196	3.743	3.702	0.986	-0.136	1.170	0.000	405.400
X		1.154	3.770	4.121	0.993	-0.205	1.202	0.000	403.700
σ		0.037	0.082	0.471	0.329	0.072	0.144	0.000	2.063
%RSD		3.248	2.179	11.430	33.110	34.910	12.000	0.000	0.511
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	62.668%	0.359	0.408	58.883%	-0.089	-0.091	-0.047	-0.026
2	13:50:04	62.361%	0.381	0.390	58.577%	-0.085	-0.083	-0.050	-0.038
3	13:50:23	61.056%	0.335	0.421	57.241%	-0.079	-0.080	-0.032	-0.017
X		62.028%	0.358	0.406	58.234%	-0.085	-0.085	-0.043	-0.027
σ		0.856%	0.023	0.016	0.873%	0.005	0.005	0.010	0.011
%RSD		1.380	6.429	3.889	1.499	6.172	6.401	22.560	38.960
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:49:45	64.265%	0.139	0.073	0.094	414.400	414.600	74.940%	76.723%
2	13:50:04	64.373%	0.159	0.092	0.095	410.000	414.400	76.404%	77.910%
3	13:50:23	64.353%	0.188	0.071	0.087	412.300	415.300	75.636%	77.118%
X		64.330%	0.162	0.079	0.092	412.300	414.800	75.660%	77.250%
σ		0.057%	0.025	0.012	0.005	2.185	0.435	0.732%	0.604%
%RSD		0.089	15.290	15.000	4.925	0.530	0.105	0.968	0.782
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:49:45	0.098	0.100	0.070	64.516%				
2	13:50:04	0.097	0.102	0.066	65.092%				
3	13:50:23	0.102	0.103	0.061	65.543%				
X		0.099	0.102	0.066	65.050%				
σ		0.003	0.002	0.004	0.515%				
%RSD		2.974	1.637	6.408	0.792				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	57.586%	0.057	26.630	26.060	0.000	41150.000	42380.000	42570.000
2	13:53:52	58.241%	-0.050	24.700	22.100	0.000	37700.000	39180.000	39270.000
3	13:54:11	54.071%	0.046	24.520	25.650	0.000	38600.000	40980.000	41910.000
X		56.633%	0.018	25.280	24.600	0.000	39150.000	40840.000	41250.000
σ		2.242%	0.059	1.169	2.175	0.000	1792.000	1604.000	1748.000
%RSD		3.960	333.500	4.622	8.841	0.000	4.577	3.927	4.237
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	17.590	6181.000	0.000	1820.000	144000.000	145100.000	52.363%	1.041
2	13:53:52	17.240	5796.000	0.000	1804.000	146600.000	148500.000	49.177%	1.173
3	13:54:11	18.050	6092.000	0.000	1804.000	144400.000	147600.000	48.539%	0.987
X		17.630	6023.000	0.000	1809.000	145000.000	147100.000	50.026%	1.067
σ		0.405	201.500	0.000	8.957	1400.000	1752.000	2.049%	0.095
%RSD		2.296	3.346	0.000	0.495	0.965	1.191	4.095	8.939
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	1.248	1.155	3.867	55.370	238.900	0.152	0.367	4.467
2	13:53:52	0.549	1.315	3.931	56.700	243.200	0.150	0.363	4.745
3	13:54:11	-0.256	1.243	3.918	53.590	223.800	0.147	0.256	4.424
X		0.514	1.238	3.905	55.220	235.300	0.150	0.329	4.545
σ		0.752	0.080	0.034	1.564	10.210	0.002	0.063	0.174
%RSD		146.400	6.495	0.866	2.833	4.341	1.663	19.290	3.831
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	4.065	2.833	2.713	-0.272	0.041	0.264	0.000	178.600
2	13:53:52	4.383	2.476	2.878	0.298	-0.287	0.305	0.000	180.600
3	13:54:11	4.212	2.440	2.300	0.064	-0.215	0.357	0.000	180.100
X		4.220	2.583	2.630	0.030	-0.154	0.309	0.000	179.800
σ		0.159	0.217	0.298	0.286	0.172	0.047	0.000	1.059
%RSD		3.769	8.405	11.330	953.100	112.100	15.240	0.000	0.589
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	61.542%	0.066	0.085	58.458%	-0.089	-0.086	0.015	0.006
2	13:53:52	61.107%	0.088	0.093	57.412%	-0.082	-0.088	-0.031	-0.024
3	13:54:11	60.112%	0.099	0.093	56.073%	-0.079	-0.080	-0.046	-0.032
X		60.921%	0.084	0.090	57.314%	-0.083	-0.085	-0.021	-0.017
σ		0.733%	0.017	0.005	1.195%	0.005	0.004	0.032	0.020
%RSD		1.203	19.770	5.269	2.086	5.796	5.106	150.800	118.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:53:33	64.456%	0.007	-0.000	0.000	139.400	139.500	74.410%	75.359%
2	13:53:52	63.546%	0.024	-0.008	-0.011	141.800	141.400	74.076%	76.119%
3	13:54:11	62.882%	0.035	-0.013	-0.012	141.700	141.700	74.960%	76.284%
X		63.628%	0.022	-0.007	-0.008	141.000	140.900	74.482%	75.921%
σ		0.790%	0.014	0.007	0.007	1.373	1.192	0.447%	0.493%
%RSD		1.242	63.020	92.770	87.880	0.974	0.846	0.600	0.649
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:53:33	0.021	0.019	0.292	65.118%				
2	13:53:52	0.020	0.020	0.318	64.374%				
3	13:54:11	0.019	0.022	0.295	65.009%				
X		0.020	0.020	0.302	64.833%				
σ		0.001	0.002	0.014	0.402%				
%RSD		5.851	8.103	4.783	0.620				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	60.733%	0.034	349.400	342.400	0.000	47870.000	44000.000	45780.000
2	13:57:39	53.032%	0.029	357.100	341.500	0.000	46960.000	43180.000	45040.000
3	13:57:58	53.939%	-0.049	350.600	353.600	0.000	48110.000	43720.000	44250.000
X		55.901%	0.005	352.400	345.800	0.000	47650.000	43630.000	45020.000
σ		4.209%	0.046	4.170	6.742	0.000	609.700	416.900	763.800
%RSD		7.529	946.100	1.183	1.950	0.000	1.280	0.955	1.696
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	0.905	6430.000	0.000	7458.000	136700.000	138000.000	50.289%	0.481
2	13:57:39	0.557	6273.000	0.000	7507.000	137400.000	137400.000	47.815%	0.675
3	13:57:58	0.582	6308.000	0.000	7333.000	134200.000	137100.000	45.252%	0.544
X		0.681	6337.000	0.000	7433.000	136100.000	137500.000	47.785%	0.567
σ		0.194	81.920	0.000	89.350	1688.000	473.000	2.519%	0.099
%RSD		28.510	1.293	0.000	1.202	1.240	0.344	5.271	17.450
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	0.563	0.917	1130.000	69.330	241.000	5.345	11.550	1.796
2	13:57:39	0.051	0.916	1158.000	72.290	235.300	5.315	11.250	1.714
3	13:57:58	0.821	0.852	1158.000	75.080	228.300	5.401	12.100	1.683
X		0.478	0.895	1149.000	72.230	234.900	5.354	11.630	1.731
σ		0.392	0.037	16.290	2.878	6.387	0.044	0.431	0.058
%RSD		81.910	4.152	1.418	3.984	2.720	0.817	3.709	3.359
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	1.454	10.710	10.060	-0.407	-0.310	0.876	0.000	282.800
2	13:57:39	1.454	10.400	10.450	-0.074	-0.240	0.996	0.000	281.400
3	13:57:58	1.471	10.180	10.400	-0.165	-0.132	0.871	0.000	280.700
X		1.460	10.430	10.300	-0.216	-0.227	0.915	0.000	281.700
σ		0.010	0.268	0.209	0.172	0.089	0.071	0.000	1.071
%RSD		0.705	2.565	2.027	79.800	39.360	7.735	0.000	0.380
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	60.627%	0.303	0.250	58.172%	-0.091	-0.085	0.047	0.053
2	13:57:39	59.693%	0.293	0.309	56.304%	-0.086	-0.088	0.070	0.090
3	13:57:58	60.245%	0.287	0.308	55.954%	-0.082	-0.081	0.091	0.086
X		60.189%	0.295	0.289	56.810%	-0.086	-0.085	0.069	0.076
σ		0.469%	0.008	0.034	1.193%	0.004	0.003	0.022	0.021
%RSD		0.780	2.668	11.750	2.100	4.907	4.003	32.370	26.990
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:57:20	62.477%	0.130	0.063	0.073	318.200	319.800	73.691%	75.517%
2	13:57:39	62.460%	0.100	0.059	0.057	314.300	314.400	74.246%	76.220%
3	13:57:58	62.587%	0.112	0.054	0.067	320.900	318.800	74.774%	76.555%
X		62.508%	0.114	0.059	0.066	317.800	317.700	74.237%	76.098%
σ		0.069%	0.015	0.004	0.008	3.295	2.861	0.541%	0.530%
%RSD		0.110	13.110	7.614	12.400	1.037	0.901	0.729	0.696
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	13:57:20	0.051	0.054	0.082	60.607%				
2	13:57:39	0.050	0.048	0.087	61.417%				
3	13:57:58	0.048	0.050	0.086	62.814%				
X		0.050	0.051	0.085	61.612%				
σ		0.002	0.003	0.003	1.117%				
%RSD		3.673	5.551	3.485	1.813				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	58.969%	0.038	17.760	16.710	0.000	4212.000	20850.000	20910.000
2	14:01:26	53.100%	-0.010	17.950	18.670	0.000	4696.000	22200.000	22170.000
3	14:01:45	50.693%	-0.007	22.040	18.340	0.000	4373.000	21920.000	21940.000
X		54.254%	0.007	19.250	17.910	0.000	4427.000	21660.000	21670.000
σ		4.257%	0.027	2.420	1.045	0.000	246.400	710.400	673.500
%RSD		7.846	374.900	12.570	5.837	0.000	5.565	3.280	3.108
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	6.182	4540.000	0.000	920.800	65830.000	67050.000	47.403%	0.868
2	14:01:26	7.357	4901.000	0.000	958.200	69950.000	69420.000	45.123%	0.851
3	14:01:45	6.885	4777.000	0.000	945.800	69430.000	69730.000	45.079%	0.830
X		6.808	4739.000	0.000	941.600	68400.000	68730.000	45.868%	0.850
σ		0.591	183.500	0.000	19.070	2241.000	1465.000	1.330%	0.019
%RSD		8.681	3.871	0.000	2.025	3.277	2.131	2.899	2.229
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	-0.663	0.786	16.420	448.400	535.800	0.053	0.197	0.003
2	14:01:26	1.426	0.764	16.160	440.900	516.800	0.056	0.132	0.016
3	14:01:45	1.056	0.735	16.480	482.500	530.100	0.054	0.081	0.043
X		0.607	0.762	16.360	457.200	527.600	0.054	0.137	0.021
σ		1.115	0.026	0.169	22.200	9.766	0.001	0.058	0.021
%RSD		183.800	3.363	1.031	4.856	1.851	2.381	42.360	100.000
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	0.026	2.026	2.174	3.526	-0.210	0.008	0.000	303.700
2	14:01:26	0.056	2.157	2.297	3.320	-0.376	0.185	0.000	306.000
3	14:01:45	0.021	1.965	2.463	3.693	-0.267	0.228	0.000	276.200
X		0.034	2.049	2.311	3.513	-0.284	0.140	0.000	295.300
σ		0.019	0.098	0.145	0.187	0.084	0.117	0.000	16.580
%RSD		55.950	4.787	6.289	5.324	29.680	83.230	0.000	5.613
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	59.007%	0.777	0.758	56.951%	-0.082	-0.086	-0.032	-0.029
2	14:01:26	58.036%	0.829	0.747	56.272%	-0.088	-0.086	-0.075	-0.054
3	14:01:45	57.647%	0.717	0.858	55.574%	-0.081	-0.077	-0.083	-0.064
X		58.230%	0.774	0.788	56.266%	-0.084	-0.083	-0.063	-0.049
σ		0.701%	0.056	0.061	0.689%	0.004	0.005	0.027	0.018
%RSD		1.203	7.197	7.780	1.224	4.734	5.884	43.150	37.220
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:01:07	62.389%	-0.027	-0.028	-0.035	177.200	176.600	73.228%	74.717%
2	14:01:26	61.972%	-0.008	-0.035	-0.021	176.700	177.500	74.868%	76.675%
3	14:01:45	62.050%	0.005	-0.029	-0.028	175.600	174.600	74.686%	75.920%
X		62.137%	-0.010	-0.031	-0.028	176.500	176.200	74.261%	75.771%
σ		0.222%	0.016	0.004	0.007	0.844	1.496	0.899%	0.988%
%RSD		0.357	158.700	12.350	24.830	0.478	0.849	1.211	1.304
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:01:07	0.007	0.008	0.076	64.021%				
2	14:01:26	0.010	0.007	0.067	66.107%				
3	14:01:45	0.010	0.008	0.070	66.080%				
X		0.009	0.008	0.071	65.403%				
σ		0.002	0.001	0.004	1.197%				
%RSD		17.360	8.559	6.073	1.830				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	58.612%	-0.032	11.020	9.529	0.000	6020.000	15810.000	16370.000
2	14:05:15	54.162%	-0.068	8.570	8.881	0.000	6062.000	15730.000	15930.000
3	14:05:34	54.797%	-0.049	10.920	9.095	0.000	6008.000	15360.000	15900.000
X		55.857%	-0.050	10.170	9.168	0.000	6030.000	15640.000	16070.000
σ		2.407%	0.018	1.387	0.330	0.000	28.680	238.300	259.400
%RSD		4.309	35.570	13.640	3.598	0.000	0.476	1.524	1.615
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	17.050	2798.000	0.000	282.100	53230.000	54320.000	47.943%	0.755
2	14:05:15	15.790	2810.000	0.000	288.100	55700.000	55880.000	45.045%	0.374
3	14:05:34	15.990	2675.000	0.000	285.400	54790.000	55570.000	43.775%	0.656
X		16.280	2761.000	0.000	285.200	54570.000	55260.000	45.588%	0.595
σ		0.674	74.700	0.000	2.981	1249.000	824.400	2.136%	0.198
%RSD		4.141	2.705	0.000	1.045	2.289	1.492	4.686	33.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	0.225	1.255	2.443	33.090	106.600	0.074	0.117	0.775
2	14:05:15	1.118	1.348	2.589	34.620	106.600	0.072	0.016	0.767
3	14:05:34	-0.467	1.334	2.474	33.640	109.900	0.076	0.117	0.874
X		0.292	1.312	2.502	33.780	107.700	0.074	0.083	0.805
σ		0.794	0.050	0.077	0.774	1.917	0.002	0.059	0.060
%RSD		271.900	3.812	3.071	2.290	1.780	2.800	70.430	7.428
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	0.679	2.723	2.915	0.087	-0.059	0.332	0.000	76.490
2	14:05:15	0.821	2.657	2.536	-0.366	-0.091	0.240	0.000	77.470
3	14:05:34	0.812	2.697	2.543	-0.816	0.007	0.216	0.000	77.440
X		0.771	2.692	2.664	-0.365	-0.048	0.263	0.000	77.140
σ		0.079	0.033	0.217	0.451	0.050	0.061	0.000	0.556
%RSD		10.280	1.241	8.137	123.700	104.100	23.340	0.000	0.721
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	58.831%	0.141	0.120	57.160%	-0.089	-0.090	-0.049	-0.041
2	14:05:15	57.642%	0.079	0.100	56.106%	-0.084	-0.087	-0.025	-0.014
3	14:05:34	57.149%	0.125	0.130	55.630%	-0.078	-0.086	-0.027	-0.025
X		57.874%	0.115	0.117	56.299%	-0.084	-0.088	-0.034	-0.027
σ		0.864%	0.032	0.015	0.783%	0.005	0.002	0.014	0.013
%RSD		1.494	28.160	13.060	1.391	6.381	1.886	40.060	50.350
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:55	61.991%	-0.049	-0.025	-0.017	7.500	7.120	72.625%	74.169%
2	14:05:15	61.847%	-0.047	-0.007	0.004	7.124	7.132	74.088%	75.234%
3	14:05:34	62.240%	-0.045	-0.018	-0.024	7.363	7.168	74.641%	76.220%
X		62.026%	-0.047	-0.017	-0.013	7.329	7.140	73.785%	75.208%
σ		0.198%	0.002	0.009	0.015	0.190	0.025	1.042%	1.026%
%RSD		0.320	5.193	56.560	117.500	2.592	0.352	1.412	1.364
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:04:55	0.006	0.005	0.108	66.251%				
2	14:05:15	0.007	0.011	0.114	65.594%				
3	14:05:34	0.007	0.009	0.111	66.219%				
X		0.007	0.008	0.111	66.021%				
σ		0.001	0.003	0.003	0.370%				
%RSD		8.481	36.890	2.556	0.561				

180-43451-G-1-A @10 5/1/2015 2:08:24 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	75.551%	-0.028	265.600	267.300	0.000	641700.000	80420.000	81050.000
2	14:09:03	69.001%	-0.024	279.300	275.600	0.000	650700.000	81960.000	82270.000
3	14:09:22	68.187%	-0.053	272.100	262.400	0.000	647000.000	81250.000	81930.000
X		70.913%	-0.035	272.300	268.400	0.000	646500.000	81210.000	81750.000
σ		4.037%	0.016	6.834	6.693	0.000	4537.000	767.700	628.200
%RSD		5.693	45.230	2.509	2.493	0.000	0.702	0.945	0.768
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	20.160	-365.800	0.000	25580.000	26290.000	27120.000	82.802%	1.103
2	14:09:03	20.640	-404.500	0.000	26000.000	26570.000	27600.000	82.260%	1.328
3	14:09:22	20.970	-402.600	0.000	26290.000	26930.000	27910.000	81.096%	1.114
X		20.590	-391.000	0.000	25960.000	26600.000	27540.000	82.053%	1.182
σ		0.411	21.820	0.000	355.300	319.300	396.400	0.871%	0.126
%RSD		1.998	5.581	0.000	1.369	1.200	1.439	1.062	10.700
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	0.272	0.124	2.945	50.010	84.580	0.043	0.129	4.759
2	14:09:03	0.109	0.132	2.853	49.670	83.990	0.048	0.097	4.870
3	14:09:22	0.542	0.129	2.928	50.580	83.600	0.049	0.196	4.969
X		0.308	0.128	2.909	50.090	84.060	0.047	0.141	4.866
σ		0.219	0.004	0.049	0.461	0.493	0.003	0.051	0.105
%RSD		71.020	3.242	1.669	0.919	0.586	7.005	36.030	2.161
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	0.156	-0.284	-0.462	1.688	-0.007	6.282	0.000	491.400
2	14:09:03	0.085	-0.255	-0.515	1.544	0.100	5.675	0.000	492.100
3	14:09:22	0.029	-0.284	-0.510	1.979	0.111	6.260	0.000	495.700
X		0.090	-0.274	-0.496	1.737	0.068	6.072	0.000	493.100
σ		0.063	0.017	0.030	0.222	0.066	0.345	0.000	2.321
%RSD		70.350	6.219	5.972	12.780	96.460	5.677	0.000	0.471
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	82.482%	0.665	0.689	75.368%	-0.086	-0.085	0.019	0.012
2	14:09:03	82.780%	0.776	0.653	75.172%	-0.085	-0.094	0.020	0.002
3	14:09:22	84.513%	0.720	0.692	75.431%	-0.079	-0.085	-0.021	-0.020
X		83.258%	0.720	0.678	75.324%	-0.084	-0.088	0.006	-0.002
σ		1.097%	0.056	0.022	0.135%	0.004	0.005	0.024	0.017
%RSD		1.317	7.748	3.197	0.179	4.576	5.564	383.700	850.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:08:44	79.599%	-0.161	-0.047	-0.042	1.161	1.190	84.964%	85.255%
2	14:09:03	80.931%	-0.161	-0.036	-0.038	1.262	1.268	87.553%	87.980%
3	14:09:22	82.074%	-0.153	-0.037	-0.034	1.198	1.216	88.631%	89.441%
X		80.868%	-0.158	-0.040	-0.038	1.207	1.225	87.049%	87.559%
σ		1.239%	0.005	0.006	0.004	0.051	0.040	1.885%	2.125%
%RSD		1.532	3.023	15.090	10.570	4.235	3.246	2.165	2.427
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:08:44	0.003	0.004	0.078	70.585%				
2	14:09:03	0.003	0.005	0.087	68.884%				
3	14:09:22	0.007	0.004	0.090	71.991%				
X		0.004	0.004	0.085	70.487%				
σ		0.002	0.001	0.006	1.556%				
%RSD		57.930	14.960	7.147	2.207				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	107.225%	-0.049	1.207	0.763	0.000	38.770	4.723	4.865
2	14:12:51	106.412%	-0.020	0.544	0.868	0.000	27.490	2.641	2.792
3	14:13:10	102.767%	-0.028	0.901	0.816	0.000	23.770	2.523	2.270
X		105.468%	-0.032	0.884	0.816	0.000	30.010	3.296	3.309
σ		2.374%	0.015	0.332	0.052	0.000	7.808	1.237	1.372
%RSD		2.251	46.370	37.540	6.401	0.000	26.020	37.550	41.470
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	-2.271	-483.600	0.000	-1.618	-10.110	-7.330	105.082%	-0.058
2	14:12:51	-2.264	-483.600	0.000	-1.408	-9.036	-7.725	100.558%	-0.095
3	14:13:10	-2.256	-482.800	0.000	-2.998	-11.640	-9.272	101.333%	-0.086
X		-2.264	-483.300	0.000	-2.008	-10.260	-8.109	102.324%	-0.080
σ		0.007	0.486	0.000	0.864	1.309	1.026	2.419%	0.019
%RSD		0.329	0.101	0.000	43.020	12.760	12.650	2.364	24.310
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	-0.011	0.024	0.008	4.354	0.371	0.001	-0.052	-0.199
2	14:12:51	0.011	0.025	-0.009	1.502	0.025	0.002	-0.054	-0.194
3	14:13:10	0.029	0.015	-0.017	1.355	-0.790	0.002	-0.062	-0.192
X		0.010	0.021	-0.006	2.403	-0.131	0.002	-0.056	-0.195
σ		0.020	0.005	0.013	1.690	0.596	0.001	0.005	0.003
%RSD		210.300	25.390	209.700	70.340	454.400	36.390	9.574	1.745
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	-0.225	-0.898	-0.965	0.056	-0.132	0.285	0.000	0.023
2	14:12:51	-0.210	-0.977	-0.938	0.028	-0.122	0.169	0.000	0.013
3	14:13:10	-0.215	-0.931	-0.975	0.000	-0.027	0.122	0.000	0.012
X		-0.217	-0.935	-0.959	0.028	-0.093	0.192	0.000	0.016
σ		0.007	0.039	0.019	0.028	0.058	0.084	0.000	0.006
%RSD		3.461	4.221	2.002	99.430	62.140	43.660	0.000	38.060
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	101.258%	-0.011	-0.003	100.845%	-0.085	-0.084	0.021	0.011
2	14:12:51	103.288%	0.009	-0.013	101.091%	-0.086	-0.086	0.039	0.025
3	14:13:10	102.236%	0.009	-0.014	100.214%	-0.078	-0.087	0.039	0.019
X		102.261%	0.002	-0.010	100.717%	-0.083	-0.086	0.033	0.018
σ		1.015%	0.011	0.006	0.452%	0.004	0.001	0.010	0.007
%RSD		0.993	471.200	61.740	0.449	5.138	1.329	31.440	36.610
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:12:32	100.115%	-0.186	-0.055	-0.057	0.015	0.014	97.646%	97.010%
2	14:12:51	101.410%	-0.188	-0.059	-0.055	0.018	0.007	100.145%	99.804%
3	14:13:10	101.352%	-0.175	-0.065	-0.055	0.025	0.023	101.219%	101.090%
X		100.959%	-0.183	-0.060	-0.055	0.019	0.015	99.670%	99.301%
σ		0.732%	0.007	0.005	0.001	0.005	0.008	1.833%	2.086%
%RSD		0.725	3.782	7.799	2.000	27.250	52.500	1.839	2.101
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:12:32	0.005	0.003	-0.017	90.073%				
2	14:12:51	0.003	0.002	-0.014	88.879%				
3	14:13:10	0.009	0.002	-0.014	88.273%				
X		0.006	0.002	-0.015	89.075%				
σ		0.003	0.000	0.002	0.916%				
%RSD		47.830	11.550	11.770	1.028				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	58.035%	51.020	996.900	936.600	0.000	43000.000	42930.000	44010.000
2	14:17:21	54.341%	51.210	970.100	953.900	0.000	43070.000	41930.000	42890.000
3	14:17:40	52.758%	50.130	957.300	925.900	0.000	41590.000	41430.000	42120.000
X		55.045%	50.790	974.800	938.800	0.000	42550.000	42100.000	43010.000
σ		2.708%	0.575	20.190	14.170	0.000	835.100	765.900	953.000
%RSD		4.920	1.131	2.071	1.509	0.000	1.963	1.819	2.216
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	1737.000	8241.000	0.000	48370.000	51890.000	51550.000	49.451%	1031.000
2	14:17:21	1701.000	8146.000	0.000	48810.000	52500.000	51560.000	47.595%	1051.000
3	14:17:40	1741.000	8170.000	0.000	48600.000	53210.000	52760.000	45.969%	1052.000
X		1726.000	8186.000	0.000	48590.000	52530.000	51960.000	47.672%	1045.000
σ		21.690	49.220	0.000	220.500	665.000	695.200	1.743%	12.170
%RSD		1.256	0.601	0.000	0.454	1.266	1.338	3.655	1.165
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	508.700	207.900	507.200	1049.000	1109.000	513.100	515.500	259.300
2	14:17:21	521.400	203.900	510.800	1040.000	1116.000	512.800	506.600	254.000
3	14:17:40	544.500	213.900	529.700	1061.000	1135.000	517.800	510.400	258.200
X		524.900	208.600	515.900	1050.000	1120.000	514.600	510.800	257.200
σ		18.160	5.027	12.050	10.330	13.440	2.770	4.491	2.789
%RSD		3.459	2.410	2.337	0.984	1.201	0.538	0.879	1.084
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	264.600	521.200	518.800	39.450	10.040	10.290	0.000	911.900
2	14:17:21	257.500	508.100	513.200	37.620	10.170	10.350	0.000	916.600
3	14:17:40	257.800	513.500	510.400	38.800	10.270	9.627	0.000	914.300
X		260.000	514.300	514.100	38.620	10.160	10.090	0.000	914.300
σ		4.021	6.557	4.248	0.928	0.115	0.401	0.000	2.362
%RSD		1.546	1.275	0.826	2.403	1.132	3.970	0.000	0.258
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	62.543%	1017.000	980.200	58.690%	49.300	49.700	49.290	46.300
2	14:17:21	61.305%	1013.000	992.500	57.597%	49.780	49.170	50.120	46.180
3	14:17:40	60.615%	1021.000	990.900	56.411%	48.960	48.850	50.060	47.340
X		61.488%	1017.000	987.900	57.566%	49.350	49.240	49.820	46.610
σ		0.977%	3.901	6.672	1.140%	0.408	0.428	0.463	0.634
%RSD		1.589	0.384	0.675	1.980	0.828	0.870	0.929	1.361
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:17:02	63.600%	1837.000	447.600	460.500	1796.000	1785.000	75.449%	77.027%
2	14:17:21	63.903%	1831.000	475.400	477.000	1800.000	1776.000	75.390%	77.082%
3	14:17:40	63.556%	1824.000	478.600	477.000	1826.000	1773.000	75.322%	77.292%
X		63.686%	1830.000	467.200	471.500	1807.000	1778.000	75.387%	77.134%
σ		0.189%	6.696	17.030	9.529	16.070	6.238	0.063%	0.140%
%RSD		0.297	0.366	3.646	2.021	0.889	0.351	0.084	0.181
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:17:02	53.010	53.840	22.390	64.563%				
2	14:17:21	54.370	55.450	22.920	63.766%				
3	14:17:40	54.670	55.540	22.900	63.816%				
X		54.010	54.940	22.740	64.048%				
σ		0.885	0.959	0.298	0.446%				
%RSD		1.639	1.745	1.312	0.697				

CCV 1558997 5/1/2015 2:20:39 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	102.259%	105.500	101.500	99.350	0.000	47000.000	46840.000	46880.000
2	14:20:59	95.680%	107.700	102.700	99.820	0.000	47810.000	48790.000	49820.000
3	14:21:19	93.955%	105.000	102.000	95.880	0.000	48400.000	48580.000	48100.000
X		97.298%	106.074%	102.070%	98.350%	0.000	95.471%	96.142%	96.531%
σ		4.382%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		4.504	1.318	0.582	2.188	0.000	1.473	2.221	3.067
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	470.300	4412.000	0.000	46500.000	47000.000	46990.000	99.983%	97.340
2	14:20:59	490.900	4642.000	0.000	49900.000	50060.000	49970.000	92.021%	99.590
3	14:21:19	467.600	4658.000	0.000	49550.000	49410.000	49590.000	91.643%	101.500
X		95.256%	91.407%	0.000	97.301%	97.647%	97.705%	94.549%	99.460%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.710%	n/a
%RSD		2.678	3.012	0.000	3.837	3.305	3.326	4.982	2.072
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	98.860	99.180	475.500	24320.000	24250.000	100.700	102.200	105.100
2	14:20:59	102.000	104.500	491.000	25260.000	24900.000	102.300	104.800	105.000
3	14:21:19	101.600	101.000	492.900	24890.000	24500.000	101.100	105.300	105.200
X		100.833%	101.552%	97.291%	99.288%	98.192%	101.369%	104.076%	105.108%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.710	2.670	1.964	1.890	1.343	0.803	1.619	0.106
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	103.800	100.100	101.100	100.900	105.000	104.000	0.000	99.060
2	14:20:59	106.300	104.300	104.200	102.600	107.900	106.600	0.000	102.000
3	14:21:19	105.700	104.400	104.700	103.300	107.300	106.800	0.000	101.600
X		105.297%	102.913%	103.318%	102.292%	106.724%	105.782%	0.000	100.888%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.236	2.390	1.879	1.216	1.470	1.476	0.000	1.581
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	93.961%	97.090	97.320	86.911%	99.380	99.760	98.490	98.560
2	14:20:59	92.543%	99.650	100.800	85.522%	101.200	101.600	101.300	100.600
3	14:21:19	92.634%	102.200	101.900	85.428%	101.600	101.700	103.100	102.200
X		93.046%	99.631%	100.002%	85.953%	100.718%	100.990%	100.962%	100.436%
σ		0.794%	n/a	n/a	0.830%	n/a	n/a	n/a	n/a
%RSD		0.853	2.540	2.390	0.966	1.169	1.057	2.313	1.808
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:20:39	88.436%	95.710	95.160	95.160	96.020	94.890	87.449%	87.674%
2	14:20:59	87.211%	97.210	97.530	98.660	96.830	97.610	89.101%	89.646%
3	14:21:19	86.768%	98.750	99.310	99.320	97.420	96.610	89.203%	89.934%
X		87.472%	97.225%	97.330%	97.713%	96.759%	96.369%	88.584%	89.085%
σ		0.864%	n/a	n/a	n/a	n/a	n/a	0.984%	1.230%
%RSD		0.988	1.561	2.139	2.291	0.726	1.431	1.111	1.381
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:20:39	103.800	103.200	104.600	76.931%				
2	14:20:59	106.200	105.500	107.200	78.742%				
3	14:21:19	105.800	104.800	107.400	79.425%				
X		105.253%	104.460%	106.402%	78.366%				
σ		n/a	n/a	n/a	1.289%				
%RSD		1.238	1.137	1.457	1.644				

CCB4 5/1/2015 2:27:09 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	114.961%	0.012	1.663	1.337	0.000	14.970	5.109	4.894
2	14:27:48	119.135%	-0.008	1.255	1.298	0.000	11.270	3.979	4.434
3	14:28:07	112.270%	0.041	1.446	1.087	0.000	11.360	4.099	3.232
X		115.455%	0.015	1.454	1.240	0.000	12.530	4.395	4.186
σ		3.459%	0.025	0.204	0.135	0.000	2.111	0.621	0.858
%RSD		2.996	163.000	14.030	10.850	0.000	16.850	14.120	20.500
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	1.939	-477.200	0.000	5.884	8.960	7.154	115.808%	-0.019
2	14:27:48	1.657	-477.900	0.000	5.449	10.220	6.806	113.139%	0.044
3	14:28:07	1.646	-477.700	0.000	5.535	5.628	6.127	109.039%	0.049
X		1.747	-477.600	0.000	5.623	8.269	6.696	112.662%	0.025
σ		0.166	0.367	0.000	0.231	2.373	0.522	3.410%	0.038
%RSD		9.496	0.077	0.000	4.100	28.700	7.803	3.026	154.500
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	0.047	0.017	0.216	8.303	7.259	0.020	-0.015	0.481
2	14:27:48	0.044	0.020	0.197	9.847	6.733	0.016	0.006	0.485
3	14:28:07	0.063	0.046	0.201	9.235	6.426	0.011	0.016	0.507
X		0.051	0.028	0.205	9.129	6.806	0.016	0.002	0.491
σ		0.010	0.016	0.010	0.777	0.421	0.005	0.015	0.014
%RSD		19.640	56.880	4.992	8.514	6.184	29.430	675.000	2.868
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	0.483	0.981	0.701	-0.004	0.075	-0.033	0.000	0.071
2	14:27:48	0.524	0.860	0.915	0.024	0.080	0.157	0.000	0.053
3	14:28:07	0.455	0.911	1.004	0.053	0.115	0.152	0.000	0.059
X		0.487	0.917	0.874	0.024	0.090	0.092	0.000	0.061
σ		0.035	0.061	0.156	0.029	0.022	0.108	0.000	0.009
%RSD		7.196	6.639	17.820	118.900	24.350	117.500	0.000	15.330
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	103.243%	0.499	0.498	104.247%	-0.057	-0.062	0.031	0.031
2	14:27:48	104.304%	0.470	0.423	104.650%	-0.067	-0.059	0.036	0.033
3	14:28:07	103.976%	0.362	0.375	104.093%	-0.055	-0.056	0.060	0.046
X		103.841%	0.444	0.431	104.330%	-0.059	-0.059	0.042	0.037
σ		0.543%	0.072	0.062	0.288%	0.006	0.003	0.015	0.008
%RSD		0.523	16.260	14.360	0.276	10.650	5.021	36.020	21.700
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:29	98.320%	0.176	0.007	0.001	0.074	0.047	93.304%	92.641%
2	14:27:48	101.323%	0.137	-0.001	-0.000	0.036	0.040	94.860%	93.550%
3	14:28:07	100.997%	0.133	-0.012	-0.004	0.043	0.039	95.628%	94.749%
X		100.214%	0.149	-0.002	-0.001	0.051	0.042	94.597%	93.647%
σ		1.648%	0.024	0.009	0.002	0.020	0.004	1.184%	1.058%
%RSD		1.644	15.880	420.100	238.200	39.660	10.220	1.252	1.129
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:27:29	0.050	0.050	0.036	86.839%				
2	14:27:48	0.045	0.047	0.035	88.005%				
3	14:28:07	0.040	0.047	0.035	87.569%				
X		0.045	0.048	0.035	87.471%				
σ		0.005	0.002	0.001	0.589%				
%RSD		11.610	3.549	1.898	0.674				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	63.580%	-0.052	130.100	122.300	0.000	34760.000	20140.000	20340.000
2	14:31:39	59.570%	-0.033	131.700	126.400	0.000	35290.000	20000.000	20070.000
3	14:31:58	59.253%	-0.033	124.300	122.600	0.000	33460.000	19440.000	19600.000
X		60.801%	-0.039	128.700	123.800	0.000	34500.000	19860.000	20010.000
σ		2.412%	0.011	3.909	2.258	0.000	938.700	367.800	375.000
%RSD		3.967	27.020	3.038	1.824	0.000	2.721	1.852	1.874
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	5.180	3910.000	0.000	8275.000	123700.000	121600.000	55.679%	0.549
2	14:31:39	5.058	3752.000	0.000	8035.000	119200.000	122100.000	53.963%	0.278
3	14:31:58	4.587	3639.000	0.000	8024.000	124000.000	123700.000	51.893%	0.443
X		4.941	3767.000	0.000	8111.000	122300.000	122500.000	53.845%	0.423
σ		0.313	136.400	0.000	141.700	2699.000	1072.000	1.896%	0.137
%RSD		6.336	3.621	0.000	1.747	2.207	0.875	3.521	32.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	0.104	1.296	131.600	560.300	710.600	0.557	2.015	0.501
2	14:31:39	1.637	1.219	131.900	555.500	705.200	0.556	1.804	0.506
3	14:31:58	0.539	1.383	135.300	573.400	741.400	0.608	2.356	0.509
X		0.760	1.299	132.900	563.100	719.100	0.574	2.058	0.506
σ		0.790	0.082	2.064	9.253	19.520	0.030	0.279	0.004
%RSD		104.000	6.334	1.553	1.643	2.714	5.234	13.530	0.774
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	0.220	13.280	12.800	0.165	-0.103	0.205	0.000	295.200
2	14:31:39	0.239	12.970	13.370	-0.125	0.009	0.494	0.000	296.900
3	14:31:58	0.226	12.100	12.640	-0.432	-0.204	0.206	0.000	290.600
X		0.228	12.780	12.940	-0.131	-0.099	0.301	0.000	294.200
σ		0.010	0.612	0.384	0.298	0.107	0.166	0.000	3.275
%RSD		4.215	4.787	2.968	228.700	107.300	55.200	0.000	1.113
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	65.206%	0.493	0.518	62.688%	-0.085	-0.087	0.002	-0.012
2	14:31:39	63.695%	0.464	0.459	60.542%	-0.077	-0.079	-0.027	-0.029
3	14:31:58	65.274%	0.464	0.447	60.391%	-0.073	-0.080	-0.056	-0.045
X		64.725%	0.474	0.475	61.207%	-0.079	-0.082	-0.027	-0.029
σ		0.893%	0.017	0.038	1.285%	0.006	0.004	0.029	0.016
%RSD		1.379	3.609	8.096	2.099	7.926	5.442	108.600	56.270
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:31:20	66.624%	0.472	0.125	0.158	45.380	45.010	76.097%	77.414%
2	14:31:39	65.910%	0.361	0.142	0.156	45.060	44.780	77.248%	78.471%
3	14:31:58	66.024%	0.349	0.142	0.131	44.980	44.890	77.044%	78.465%
X		66.186%	0.394	0.137	0.148	45.140	44.890	76.796%	78.117%
σ		0.384%	0.068	0.010	0.015	0.210	0.115	0.614%	0.609%
%RSD		0.580	17.140	7.152	10.100	0.465	0.256	0.800	0.779
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:31:20	0.162	0.157	0.144	68.715%				
2	14:31:39	0.149	0.161	0.154	67.760%				
3	14:31:58	0.165	0.154	0.159	66.670%				
X		0.159	0.157	0.152	67.715%				
σ		0.008	0.004	0.007	1.023%				
%RSD		5.295	2.289	4.804	1.511				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	80.795%	-0.017	25.580	23.190	0.000	7004.000	4087.000	4037.000
2	14:35:28	75.078%	-0.013	22.810	21.400	0.000	6481.000	3722.000	3751.000
3	14:35:47	74.677%	-0.054	24.110	22.150	0.000	6609.000	3911.000	3982.000
X		76.850%	-0.028	24.170	22.250	0.000	6698.000	3906.000	3923.000
σ		3.422%	0.023	1.388	0.895	0.000	272.500	182.300	151.600
%RSD		4.453	80.840	5.742	4.022	0.000	4.068	4.667	3.864
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	-1.468	429.800	0.000	1614.000	23380.000	23300.000	69.782%	0.022
2	14:35:28	-1.313	376.600	0.000	1505.000	22020.000	22100.000	68.090%	0.069
3	14:35:47	-1.383	423.000	0.000	1626.000	23860.000	23720.000	64.205%	0.094
X		-1.388	409.800	0.000	1582.000	23090.000	23040.000	67.359%	0.062
σ		0.078	28.940	0.000	66.790	953.900	839.400	2.860%	0.036
%RSD		5.592	7.061	0.000	4.222	4.131	3.644	4.245	59.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	0.278	0.250	26.300	124.000	152.900	0.117	0.437	-0.059
2	14:35:28	-0.201	0.258	24.590	114.400	140.600	0.128	0.421	-0.048
3	14:35:47	-0.031	0.310	27.040	126.200	152.100	0.122	0.502	-0.069
X		0.015	0.273	25.980	121.600	148.500	0.122	0.453	-0.058
σ		0.243	0.033	1.255	6.266	6.895	0.006	0.043	0.011
%RSD		1586.000	12.050	4.830	5.155	4.643	4.495	9.461	18.010
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	-0.097	2.087	1.831	-0.317	-0.204	0.110	0.000	64.750
2	14:35:28	-0.098	1.816	1.594	-0.016	-0.187	-0.015	0.000	59.870
3	14:35:47	-0.116	2.010	2.194	-0.235	-0.080	0.091	0.000	64.130
X		-0.104	1.971	1.873	-0.189	-0.157	0.062	0.000	62.910
σ		0.011	0.139	0.302	0.156	0.068	0.068	0.000	2.658
%RSD		10.270	7.074	16.130	82.150	43.000	109.500	0.000	4.224
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	74.082%	0.098	0.134	74.303%	-0.085	-0.090	-0.022	-0.019
2	14:35:28	75.044%	0.103	0.120	74.801%	-0.087	-0.087	-0.042	-0.032
3	14:35:47	73.539%	0.134	0.109	72.639%	-0.079	-0.082	-0.025	-0.022
X		74.222%	0.112	0.121	73.914%	-0.084	-0.086	-0.030	-0.024
σ		0.762%	0.019	0.012	1.132%	0.004	0.004	0.011	0.007
%RSD		1.027	17.240	10.200	1.531	5.337	4.197	36.910	27.260
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:35:09	76.342%	-0.068	-0.023	-0.031	8.868	9.001	83.014%	83.382%
2	14:35:28	78.570%	0.018	-0.029	-0.015	8.555	8.321	86.260%	86.605%
3	14:35:47	77.079%	-0.066	-0.030	-0.022	8.778	8.752	83.922%	84.672%
X		77.330%	-0.039	-0.027	-0.023	8.734	8.691	84.398%	84.886%
σ		1.135%	0.049	0.004	0.008	0.162	0.344	1.675%	1.622%
%RSD		1.468	127.000	14.270	35.430	1.851	3.957	1.984	1.911
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:35:09	0.037	0.038	0.011	78.320%				
2	14:35:28	0.034	0.038	0.013	80.835%				
3	14:35:47	0.042	0.040	0.017	77.996%				
X		0.038	0.039	0.014	79.051%				
σ		0.004	0.001	0.003	1.554%				
%RSD		11.030	3.113	21.390	1.966				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	58.306%	47.480	1052.000	968.100	0.000	75720.000	61350.000	60110.000
2	14:39:17	53.265%	46.360	986.400	919.200	0.000	70910.000	57820.000	58340.000
3	14:39:37	54.105%	45.570	991.500	950.700	0.000	71970.000	57560.000	56970.000
X		55.225%	46.470	1010.000	946.000	0.000	72870.000	58910.000	58480.000
σ		2.701%	0.960	36.560	24.800	0.000	2528.000	2117.000	1574.000
%RSD		4.890	2.065	3.620	2.622	0.000	3.469	3.593	2.692
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	1600.000	11880.000	0.000	53320.000	171300.000	171800.000	49.344%	955.200
2	14:39:17	1555.000	11440.000	0.000	54910.000	174200.000	176000.000	44.894%	1021.000
3	14:39:37	1580.000	11820.000	0.000	53850.000	173900.000	173700.000	44.556%	995.000
X		1578.000	11710.000	0.000	54030.000	173100.000	173800.000	46.265%	990.400
σ		22.580	235.500	0.000	809.700	1618.000	2092.000	2.672%	33.180
%RSD		1.431	2.011	0.000	1.499	0.934	1.203	5.776	3.350
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	485.500	193.100	619.300	1585.000	1775.000	478.300	477.600	233.500
2	14:39:17	524.000	205.400	652.500	1635.000	1834.000	496.500	490.000	240.700
3	14:39:37	492.000	197.300	636.500	1569.000	1795.000	486.200	472.500	231.700
X		500.500	198.600	636.100	1596.000	1801.000	487.000	480.100	235.300
σ		20.610	6.247	16.610	34.470	30.060	9.120	9.015	4.745
%RSD		4.119	3.145	2.610	2.160	1.669	1.873	1.878	2.017
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	236.400	471.100	472.400	36.150	9.101	9.454	0.000	1234.000
2	14:39:17	241.000	479.900	480.400	36.190	9.743	10.170	0.000	1217.000
3	14:39:37	235.200	478.100	473.300	36.580	9.074	9.952	0.000	1225.000
X		237.500	476.300	475.400	36.300	9.306	9.858	0.000	1225.000
σ		3.037	4.636	4.426	0.235	0.379	0.366	0.000	8.167
%RSD		1.279	0.973	0.931	0.649	4.069	3.717	0.000	0.666
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	58.390%	1004.000	1002.000	55.727%	46.880	46.770	47.700	43.790
2	14:39:17	58.615%	1004.000	1006.000	54.090%	47.860	47.140	48.550	43.960
3	14:39:37	56.959%	1018.000	1007.000	52.956%	47.420	46.990	48.930	43.600
X		57.988%	1009.000	1005.000	54.258%	47.390	46.970	48.400	43.790
σ		0.898%	7.836	2.577	1.393%	0.492	0.185	0.631	0.183
%RSD		1.549	0.777	0.256	2.567	1.038	0.394	1.305	0.419
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:58	60.242%	1873.000	473.500	478.400	1878.000	1846.000	72.608%	74.413%
2	14:39:17	60.151%	1851.000	475.100	470.500	1864.000	1838.000	73.092%	74.138%
3	14:39:37	59.367%	1876.000	480.700	482.200	1888.000	1862.000	72.548%	74.048%
X		59.920%	1867.000	476.500	477.000	1877.000	1849.000	72.749%	74.200%
σ		0.481%	13.700	3.772	5.954	12.060	12.220	0.298%	0.190%
%RSD		0.803	0.734	0.792	1.248	0.642	0.661	0.410	0.256
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:38:58	53.880	54.440	22.570	60.146%				
2	14:39:17	53.960	55.150	22.750	59.982%				
3	14:39:37	55.020	56.280	23.070	59.396%				
X		54.290	55.290	22.800	59.841%				
σ		0.637	0.929	0.256	0.394%				
%RSD		1.173	1.680	1.125	0.659				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	53.659%	50.580	1092.000	1025.000	0.000	77510.000	63370.000	63520.000
2	14:43:07	53.326%	46.360	982.600	973.000	0.000	74960.000	57920.000	59970.000
3	14:43:27	50.136%	44.360	999.300	962.600	0.000	71830.000	58010.000	59340.000
X		52.374%	47.100	1025.000	986.900	0.000	74770.000	59770.000	60940.000
σ		1.945%	3.176	58.880	33.540	0.000	2849.000	3120.000	2255.000
%RSD		3.713	6.743	5.746	3.398	0.000	3.811	5.221	3.700
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	1693.000	12400.000	0.000	57700.000	182400.000	183600.000	44.586%	1007.000
2	14:43:07	1625.000	11940.000	0.000	55030.000	177400.000	179400.000	43.204%	1037.000
3	14:43:27	1598.000	11790.000	0.000	56310.000	177400.000	180300.000	43.291%	1022.000
X		1639.000	12040.000	0.000	56340.000	179100.000	181100.000	43.694%	1022.000
σ		49.250	319.400	0.000	1337.000	2905.000	2174.000	0.774%	14.810
%RSD		3.005	2.653	0.000	2.372	1.622	1.200	1.772	1.449
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	507.500	200.900	641.700	1658.000	1888.000	504.200	501.000	247.200
2	14:43:07	508.900	204.100	654.300	1671.000	1888.000	501.000	490.200	242.800
3	14:43:27	511.200	206.600	639.700	1643.000	1836.000	484.600	476.700	236.800
X		509.200	203.900	645.200	1657.000	1871.000	496.600	489.300	242.300
σ		1.884	2.854	7.880	14.090	30.230	10.550	12.180	5.255
%RSD		0.370	1.400	1.221	0.850	1.616	2.125	2.489	2.169
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	244.300	490.500	492.700	36.610	9.698	10.310	0.000	1244.000
2	14:43:07	236.600	487.300	485.700	38.600	9.599	10.760	0.000	1231.000
3	14:43:27	236.400	487.500	484.700	36.860	9.510	10.250	0.000	1246.000
X		239.100	488.400	487.700	37.360	9.602	10.440	0.000	1240.000
σ		4.500	1.804	4.361	1.084	0.094	0.275	0.000	8.344
%RSD		1.882	0.369	0.894	2.902	0.980	2.630	0.000	0.673
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	57.908%	1016.000	1017.000	53.926%	47.960	47.680	48.560	44.100
2	14:43:07	56.747%	1024.000	1022.000	52.779%	48.110	47.610	48.560	44.010
3	14:43:27	55.906%	1029.000	1028.000	51.472%	47.990	47.570	49.710	44.540
X		56.854%	1023.000	1022.000	52.726%	48.020	47.620	48.940	44.220
σ		1.005%	6.510	5.891	1.228%	0.083	0.055	0.662	0.283
%RSD		1.768	0.636	0.576	2.329	0.173	0.115	1.353	0.641
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:42:48	58.982%	1907.000	481.900	488.800	1922.000	1878.000	71.034%	73.072%
2	14:43:07	58.577%	1897.000	482.400	484.300	1912.000	1883.000	71.568%	73.283%
3	14:43:27	58.405%	1900.000	478.500	480.700	1914.000	1865.000	70.581%	73.176%
X		58.655%	1901.000	480.900	484.600	1916.000	1876.000	71.061%	73.177%
σ		0.296%	5.175	2.113	4.054	5.239	9.149	0.494%	0.106%
%RSD		0.505	0.272	0.439	0.837	0.274	0.488	0.695	0.144
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:42:48	55.410	56.650	23.600	58.066%				
2	14:43:07	55.400	57.120	23.560	58.556%				
3	14:43:27	55.830	57.450	23.720	58.992%				
X		55.550	57.070	23.630	58.538%				
σ		0.249	0.401	0.084	0.463%				
%RSD		0.449	0.702	0.357	0.791				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	52.038%	51.340	1123.000	1091.000	0.000	81790.000	67100.000	67390.000
2	14:46:58	55.109%	48.700	1089.000	1037.000	0.000	78080.000	65470.000	65100.000
3	14:47:17	49.279%	49.260	1004.000	1034.000	0.000	76810.000	64850.000	65740.000
x		52.142%	49.760	1072.000	1054.000	0.000	78890.000	65810.000	66080.000
σ		2.916%	1.390	61.180	31.850	0.000	2589.000	1162.000	1180.000
%RSD		5.593	2.793	5.707	3.022	0.000	3.281	1.766	1.786
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	1838.000	14080.000	0.000	60900.000	177800.000	178400.000	47.490%	1162.000
2	14:46:58	1686.000	13200.000	0.000	62070.000	178800.000	182200.000	44.710%	1169.000
3	14:47:17	1748.000	13440.000	0.000	62040.000	178500.000	179700.000	44.651%	1190.000
x		1757.000	13570.000	0.000	61670.000	178400.000	180100.000	45.617%	1174.000
σ		76.200	456.300	0.000	669.900	517.400	1948.000	1.622%	14.710
%RSD		4.336	3.362	0.000	1.086	0.290	1.081	3.557	1.254
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	529.600	207.900	644.600	1576.000	1791.000	512.700	499.800	246.700
2	14:46:58	536.100	206.800	653.900	1604.000	1809.000	505.600	499.100	245.800
3	14:47:17	541.100	211.900	636.400	1582.000	1781.000	489.600	480.400	240.000
x		535.600	208.900	644.900	1587.000	1793.000	502.600	493.100	244.100
σ		5.770	2.683	8.786	14.920	13.990	11.800	10.980	3.627
%RSD		1.077	1.285	1.362	0.940	0.780	2.348	2.227	1.486
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	243.900	502.500	505.700	38.410	9.959	10.380	0.000	1259.000
2	14:46:58	247.600	500.000	501.800	37.480	9.672	9.872	0.000	1265.000
3	14:47:17	238.000	491.500	497.600	36.150	9.495	9.561	0.000	1258.000
x		243.200	498.000	501.700	37.350	9.708	9.938	0.000	1261.000
σ		4.859	5.766	4.077	1.137	0.234	0.414	0.000	3.941
%RSD		1.998	1.158	0.813	3.044	2.411	4.163	0.000	0.313
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	57.570%	1180.000	1177.000	54.279%	44.400	44.220	50.400	45.450
2	14:46:58	56.617%	1179.000	1176.000	53.287%	44.180	44.060	50.290	45.260
3	14:47:17	56.273%	1184.000	1178.000	52.203%	44.200	44.160	50.270	45.800
x		56.820%	1181.000	1177.000	53.257%	44.260	44.150	50.320	45.500
σ		0.672%	2.960	1.251	1.038%	0.122	0.079	0.071	0.271
%RSD		1.182	0.251	0.106	1.950	0.276	0.179	0.140	0.595
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:46:38	58.529%	2180.000	520.100	526.800	1962.000	1947.000	70.626%	71.968%
2	14:46:58	58.444%	2168.000	516.600	530.500	1982.000	1943.000	71.386%	73.067%
3	14:47:17	57.947%	2171.000	513.900	532.800	1975.000	1925.000	70.774%	72.754%
x		58.307%	2173.000	516.900	530.000	1973.000	1938.000	70.929%	72.597%
σ		0.315%	6.321	3.095	2.987	9.910	11.410	0.403%	0.566%
%RSD		0.539	0.291	0.599	0.564	0.502	0.589	0.568	0.780
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:46:38	57.820	59.880	24.390	57.398%				
2	14:46:58	59.460	60.870	24.740	57.310%				
3	14:47:17	58.250	59.520	24.420	58.384%				
x		58.510	60.090	24.520	57.697%				
σ		0.854	0.701	0.194	0.597%				
%RSD		1.459	1.166	0.789	1.034				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	54.625%	-0.011	8.533	8.000	0.000	4407.000	3448.000	3632.000
2	14:50:46	54.406%	0.047	8.687	8.554	0.000	4530.000	3607.000	3557.000
3	14:51:05	46.296%	0.088	11.270	8.947	0.000	4653.000	3693.000	3823.000
X		51.776%	0.041	9.498	8.500	0.000	4530.000	3583.000	3671.000
σ		4.747%	0.050	1.539	0.476	0.000	122.900	124.000	137.400
%RSD		9.168	119.900	16.210	5.597	0.000	2.713	3.462	3.743
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	381.000	4054.000	0.000	1730.000	58640.000	59660.000	43.879%	10.610
2	14:50:46	389.800	4215.000	0.000	1804.000	60220.000	59940.000	41.906%	10.800
3	14:51:05	398.100	4288.000	0.000	1789.000	60620.000	61110.000	40.035%	10.610
X		389.600	4186.000	0.000	1774.000	59830.000	60240.000	41.940%	10.670
σ		8.518	119.800	0.000	39.240	1047.000	765.800	1.922%	0.110
%RSD		2.186	2.861	0.000	2.211	1.749	1.271	4.583	1.032
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	-0.228	4.001	49.540	1518.000	1542.000	0.750	2.527	0.900
2	14:50:46	1.707	3.830	49.230	1471.000	1525.000	0.760	2.786	0.965
3	14:51:05	1.331	4.007	50.870	1499.000	1574.000	0.696	2.141	0.808
X		0.937	3.946	49.880	1496.000	1547.000	0.735	2.485	0.891
σ		1.026	0.101	0.871	23.280	25.110	0.035	0.325	0.079
%RSD		109.500	2.551	1.746	1.556	1.623	4.731	13.070	8.859
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	0.842	6.540	6.745	0.212	-0.327	0.264	0.000	122.200
2	14:50:46	0.859	6.415	6.760	-0.506	-0.220	0.272	0.000	122.500
3	14:51:05	0.849	6.680	6.986	-0.445	-0.102	0.173	0.000	122.100
X		0.850	6.545	6.830	-0.246	-0.216	0.236	0.000	122.300
σ		0.009	0.132	0.135	0.398	0.113	0.055	0.000	0.255
%RSD		1.013	2.020	1.977	161.600	52.130	23.340	0.000	0.209
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	55.510%	4.621	4.686	54.153%	-0.074	-0.080	-0.029	-0.041
2	14:50:46	53.889%	3.714	3.574	53.144%	-0.081	-0.089	-0.071	-0.049
3	14:51:05	53.094%	3.068	2.853	52.647%	-0.073	-0.076	-0.049	-0.041
X		54.164%	3.801	3.704	53.315%	-0.076	-0.082	-0.050	-0.044
σ		1.232%	0.780	0.923	0.767%	0.004	0.006	0.021	0.005
%RSD		2.274	20.530	24.930	1.439	5.587	7.906	42.900	11.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:27	58.992%	1.959	1.128	1.220	19.720	20.150	69.038%	71.207%
2	14:50:46	57.661%	1.459	0.803	0.851	20.410	20.670	70.077%	71.784%
3	14:51:05	58.455%	1.204	0.623	0.600	20.020	19.860	70.262%	71.964%
X		58.369%	1.541	0.851	0.890	20.050	20.230	69.792%	71.652%
σ		0.669%	0.384	0.256	0.312	0.343	0.411	0.660%	0.396%
%RSD		1.147	24.930	30.100	34.990	1.710	2.030	0.945	0.552
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:50:27	0.172	0.180	0.560	64.306%				
2	14:50:46	0.176	0.167	0.565	64.933%				
3	14:51:05	0.147	0.153	0.548	65.614%				
X		0.165	0.167	0.558	64.951%				
σ		0.015	0.013	0.008	0.655%				
%RSD		9.309	7.994	1.519	1.008				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	51.581%	0.052	29.800	28.140	0.000	27400.000	11860.000	12250.000
2	14:54:34	49.805%	-0.026	29.290	29.130	0.000	26360.000	11530.000	11710.000
3	14:54:53	45.590%	0.023	32.260	28.430	0.000	27880.000	12420.000	12370.000
X		48.992%	0.016	30.450	28.570	0.000	27210.000	11940.000	12110.000
σ		3.077%	0.040	1.592	0.509	0.000	775.700	449.500	355.700
%RSD		6.282	243.700	5.227	1.780	0.000	2.851	3.766	2.937
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	79.560	4115.000	0.000	6922.000	111100.000	109800.000	43.513%	2.130
2	14:54:34	78.120	3739.000	0.000	6714.000	111300.000	112800.000	40.567%	2.407
3	14:54:53	79.970	3960.000	0.000	6915.000	114000.000	115700.000	38.910%	2.387
X		79.220	3938.000	0.000	6850.000	112100.000	112800.000	40.996%	2.308
σ		0.969	189.200	0.000	118.000	1579.000	2956.000	2.332%	0.154
%RSD		1.223	4.805	0.000	1.723	1.408	2.621	5.688	6.676
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	0.302	2.300	10.330	303.800	416.100	0.223	0.465	0.406
2	14:54:34	-0.531	2.544	10.370	326.000	448.900	0.231	0.548	0.426
3	14:54:53	1.956	2.454	10.310	319.600	428.000	0.233	0.458	0.497
X		0.576	2.433	10.330	316.500	431.000	0.229	0.490	0.443
σ		1.266	0.123	0.030	11.440	16.610	0.005	0.050	0.048
%RSD		219.900	5.058	0.287	3.615	3.855	2.325	10.250	10.790
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	0.289	11.120	10.060	-0.640	-0.272	0.199	0.000	239.000
2	14:54:34	0.353	10.970	10.880	-0.473	-0.068	0.247	0.000	238.700
3	14:54:53	0.293	11.350	10.890	-1.414	-0.361	0.193	0.000	238.400
X		0.312	11.150	10.610	-0.843	-0.234	0.213	0.000	238.700
σ		0.036	0.191	0.475	0.502	0.150	0.030	0.000	0.302
%RSD		11.440	1.717	4.481	59.560	64.320	13.920	0.000	0.126
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	53.031%	1.109	1.147	51.701%	-0.087	-0.085	-0.037	-0.030
2	14:54:34	53.399%	1.052	1.046	50.959%	-0.084	-0.086	-0.038	-0.038
3	14:54:53	52.117%	0.954	1.032	49.526%	-0.074	-0.075	-0.041	-0.037
X		52.849%	1.038	1.075	50.729%	-0.082	-0.082	-0.039	-0.035
σ		0.660%	0.079	0.063	1.106%	0.007	0.006	0.002	0.004
%RSD		1.248	7.567	5.842	2.180	8.386	7.365	5.449	11.770
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:54:15	56.790%	0.768	0.178	0.218	45.250	44.990	68.391%	70.350%
2	14:54:34	56.663%	0.742	0.174	0.185	45.810	44.560	69.467%	71.262%
3	14:54:53	56.452%	0.703	0.149	0.191	45.170	45.220	69.379%	70.919%
X		56.635%	0.737	0.167	0.198	45.410	44.920	69.079%	70.844%
σ		0.171%	0.033	0.016	0.018	0.350	0.332	0.598%	0.461%
%RSD		0.302	4.432	9.398	8.899	0.771	0.740	0.865	0.650
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:54:15	0.070	0.061	0.222	63.807%				
2	14:54:34	0.065	0.070	0.230	61.996%				
3	14:54:53	0.067	0.065	0.233	62.457%				
X		0.067	0.065	0.228	62.753%				
σ		0.003	0.005	0.006	0.941%				
%RSD		3.827	7.674	2.414	1.500				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	52.558%	-0.009	21.710	19.880	0.000	24890.000	9606.000	9757.000
2	14:58:21	52.216%	-0.008	18.480	19.460	0.000	23130.000	9307.000	9513.000
3	14:58:40	49.189%	0.016	18.140	19.230	0.000	23760.000	9421.000	9685.000
X		51.321%	-0.000	19.440	19.530	0.000	23930.000	9445.000	9651.000
σ		1.854%	0.014	1.967	0.328	0.000	892.600	151.200	125.100
%RSD		3.613	10800.000	10.120	1.680	0.000	3.731	1.600	1.296
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	111.100	4128.000	0.000	3192.000	90300.000	91350.000	42.616%	3.169
2	14:58:21	105.300	4123.000	0.000	3150.000	91920.000	92370.000	41.501%	7.061
3	14:58:40	107.600	4127.000	0.000	3216.000	90690.000	91910.000	40.300%	2.986
X		108.000	4126.000	0.000	3186.000	90970.000	91870.000	41.473%	4.405
σ		2.923	2.941	0.000	33.640	844.100	511.700	1.158%	2.302
%RSD		2.706	0.071	0.000	1.056	0.928	0.557	2.792	52.250
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	-1.569	3.750	13.170	318.400	413.800	0.214	0.618	0.559
2	14:58:21	1.265	3.680	13.410	293.400	403.100	0.206	0.640	0.453
3	14:58:40	1.652	3.781	13.050	310.500	397.500	0.215	0.632	0.439
X		0.449	3.737	13.210	307.400	404.800	0.212	0.630	0.484
σ		1.758	0.052	0.186	12.780	8.281	0.005	0.011	0.066
%RSD		391.300	1.387	1.404	4.156	2.046	2.344	1.807	13.610
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	0.330	3.270	3.636	-0.536	-0.070	0.137	0.000	170.500
2	14:58:21	0.265	3.517	3.525	0.099	0.020	0.437	0.000	168.300
3	14:58:40	0.353	3.360	3.413	0.084	-0.166	0.563	0.000	169.800
X		0.316	3.383	3.525	-0.118	-0.072	0.379	0.000	169.500
σ		0.046	0.125	0.112	0.362	0.093	0.219	0.000	1.156
%RSD		14.530	3.694	3.169	308.000	128.400	57.870	0.000	0.682
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	52.011%	1.993	2.026	50.952%	-0.084	-0.082	-0.021	-0.019
2	14:58:21	52.237%	1.819	2.025	51.120%	-0.085	-0.084	-0.049	-0.042
3	14:58:40	51.733%	2.065	1.913	50.566%	-0.078	-0.088	-0.054	-0.020
X		51.994%	1.959	1.988	50.879%	-0.082	-0.085	-0.041	-0.027
σ		0.252%	0.127	0.065	0.284%	0.004	0.003	0.018	0.013
%RSD		0.486	6.460	3.272	0.558	4.842	3.518	42.980	48.360
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:58:02	55.106%	0.230	0.092	0.105	34.970	34.050	66.648%	68.527%
2	14:58:21	55.566%	0.208	0.108	0.098	34.400	33.480	67.576%	69.547%
3	14:58:40	55.425%	0.174	0.099	0.092	34.130	33.990	67.715%	70.014%
X		55.366%	0.204	0.100	0.098	34.500	33.840	67.313%	69.363%
σ		0.236%	0.028	0.008	0.006	0.428	0.311	0.580%	0.760%
%RSD		0.426	13.930	7.974	6.379	1.241	0.919	0.861	1.096
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	14:58:02	0.041	0.041	0.185	65.967%				
2	14:58:21	0.052	0.049	0.203	61.829%				
3	14:58:40	0.043	0.044	0.206	63.133%				
X		0.045	0.045	0.198	63.643%				
σ		0.006	0.004	0.012	2.115%				
%RSD		12.570	8.151	5.845	3.324				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	53.644%	0.029	13.460	12.900	0.000	28490.000	16260.000	16520.000
2	15:02:09	49.489%	-0.068	15.290	14.100	0.000	33500.000	18960.000	19020.000
3	15:02:28	47.136%	0.020	15.300	14.980	0.000	32560.000	18650.000	18490.000
X		50.090%	-0.006	14.680	13.990	0.000	31520.000	17960.000	18010.000
σ		3.295%	0.054	1.059	1.043	0.000	2660.000	1480.000	1314.000
%RSD		6.579	857.000	7.213	7.452	0.000	8.441	8.242	7.295
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	21.710	4223.000	0.000	3791.000	92860.000	94090.000	43.393%	0.890
2	15:02:09	23.480	4537.000	0.000	4417.000	107400.000	105700.000	38.998%	0.850
3	15:02:28	26.870	4625.000	0.000	4254.000	107400.000	108600.000	37.690%	1.194
X		24.020	4462.000	0.000	4154.000	102600.000	102800.000	40.027%	0.978
σ		2.625	211.300	0.000	324.700	8396.000	7685.000	2.987%	0.188
%RSD		10.930	4.736	0.000	7.817	8.187	7.475	7.463	19.260
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	1.131	1.355	16.770	134.900	251.900	0.145	0.440	0.429
2	15:02:09	-0.269	1.544	19.120	161.500	286.900	0.205	0.781	0.564
3	15:02:28	0.608	1.684	19.330	155.700	271.400	0.181	0.677	0.540
X		0.490	1.528	18.400	150.700	270.100	0.177	0.633	0.511
σ		0.708	0.166	1.421	14.000	17.530	0.030	0.175	0.072
%RSD		144.500	10.830	7.721	9.294	6.492	17.130	27.620	14.140
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	0.248	9.591	9.817	-0.290	-0.564	0.248	0.000	173.300
2	15:02:09	0.431	10.700	10.790	0.306	-0.023	0.078	0.000	197.700
3	15:02:28	0.334	11.650	11.290	0.102	-0.005	0.281	0.000	198.400
X		0.338	10.650	10.630	0.039	-0.197	0.202	0.000	189.800
σ		0.092	1.033	0.750	0.303	0.318	0.108	0.000	14.280
%RSD		27.190	9.698	7.056	770.000	160.900	53.620	0.000	7.523
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	55.048%	0.154	0.190	54.003%	-0.075	-0.087	-0.019	-0.006
2	15:02:09	51.324%	0.292	0.272	50.152%	-0.077	-0.080	0.025	0.029
3	15:02:28	50.494%	0.244	0.267	49.228%	-0.072	-0.084	-0.030	-0.029
X		52.289%	0.230	0.243	51.128%	-0.075	-0.084	-0.008	-0.002
σ		2.425%	0.070	0.046	2.532%	0.003	0.004	0.029	0.029
%RSD		4.639	30.470	18.960	4.953	3.612	4.243	370.300	1588.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:49	58.551%	0.134	0.034	0.035	33.890	34.050	71.779%	73.622%
2	15:02:09	54.777%	0.109	0.047	0.065	38.770	37.830	67.434%	69.832%
3	15:02:28	54.766%	0.142	0.033	0.038	37.640	38.740	67.912%	70.201%
X		56.031%	0.129	0.038	0.046	36.770	36.870	69.042%	71.218%
σ		2.182%	0.018	0.008	0.017	2.554	2.487	2.383%	2.090%
%RSD		3.894	13.650	20.570	36.360	6.946	6.745	3.451	2.935
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:01:49	0.025	0.031	0.144	67.372%				
2	15:02:09	0.039	0.039	0.166	60.025%				
3	15:02:28	0.034	0.031	0.170	60.455%				
X		0.033	0.033	0.160	62.617%				
σ		0.007	0.005	0.014	4.123%				
%RSD		22.960	13.570	8.747	6.585				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	48.499%	0.060	87.860	84.570	0.000	34510.000	15910.000	16260.000
2	15:05:57	46.051%	-0.023	90.300	82.110	0.000	32840.000	14990.000	15110.000
3	15:06:16	43.868%	-0.021	81.380	82.250	0.000	33290.000	15770.000	15590.000
X		46.139%	0.005	86.520	82.980	0.000	33550.000	15560.000	15650.000
σ		2.317%	0.047	4.610	1.384	0.000	864.100	495.200	574.300
%RSD		5.021	871.500	5.328	1.667	0.000	2.576	3.183	3.669
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	87.340	3379.000	0.000	18590.000	65000.000	64870.000	40.758%	2.545
2	15:05:57	82.640	3135.000	0.000	18300.000	65150.000	65560.000	38.605%	2.129
3	15:06:16	82.740	3302.000	0.000	19110.000	66790.000	66950.000	37.613%	2.293
X		84.240	3272.000	0.000	18670.000	65650.000	65790.000	38.992%	2.322
σ		2.683	124.400	0.000	410.400	994.400	1063.000	1.607%	0.210
%RSD		3.185	3.803	0.000	2.198	1.515	1.616	4.123	9.027
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	0.783	4.268	4.539	144.400	217.500	0.316	1.966	1.640
2	15:05:57	2.589	4.327	4.766	148.100	221.100	0.314	2.376	1.706
3	15:06:16	1.897	4.303	4.542	142.700	212.300	0.303	1.899	1.561
X		1.757	4.299	4.616	145.100	216.900	0.311	2.080	1.636
σ		0.911	0.030	0.131	2.733	4.424	0.007	0.259	0.073
%RSD		51.860	0.700	2.829	1.884	2.039	2.140	12.420	4.439
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	1.451	4.265	4.061	-0.914	-0.247	0.400	0.000	388.000
2	15:05:57	1.357	3.771	3.681	0.160	-0.540	0.610	0.000	388.700
3	15:06:16	1.533	3.571	3.842	-1.006	-0.179	0.425	0.000	393.800
X		1.447	3.869	3.861	-0.587	-0.322	0.478	0.000	390.200
σ		0.088	0.357	0.191	0.648	0.192	0.115	0.000	3.208
%RSD		6.074	9.233	4.942	110.400	59.610	23.980	0.000	0.822
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	50.764%	9.718	9.834	49.753%	-0.073	-0.073	-0.015	-0.003
2	15:05:57	50.756%	10.070	10.210	49.373%	-0.079	-0.082	-0.030	-0.020
3	15:06:16	48.909%	9.658	9.877	48.060%	-0.065	-0.071	0.056	0.016
X		50.143%	9.814	9.974	49.062%	-0.072	-0.075	0.003	-0.002
σ		1.069%	0.220	0.206	0.888%	0.007	0.006	0.046	0.018
%RSD		2.132	2.239	2.067	1.810	9.972	7.571	1331.000	833.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:05:37	54.302%	0.158	0.612	0.614	37.490	37.640	65.926%	67.834%
2	15:05:57	54.878%	0.145	0.636	0.635	36.970	37.790	66.696%	69.056%
3	15:06:16	54.268%	0.155	0.599	0.630	37.270	37.670	66.731%	69.588%
X		54.483%	0.153	0.616	0.626	37.240	37.700	66.451%	68.826%
σ		0.343%	0.006	0.019	0.011	0.265	0.077	0.455%	0.899%
%RSD		0.630	4.224	3.006	1.810	0.711	0.203	0.684	1.307
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:05:37	0.057	0.071	0.318	62.213%				
2	15:05:57	0.070	0.071	0.335	60.753%				
3	15:06:16	0.065	0.066	0.313	62.808%				
X		0.064	0.069	0.322	61.925%				
σ		0.007	0.003	0.011	1.058%				
%RSD		10.540	4.088	3.540	1.708				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	100.527%	103.900	107.200	97.400	0.000	48030.000	46960.000	48170.000
2	15:09:34	93.017%	107.100	105.000	101.300	0.000	49720.000	49370.000	49610.000
3	15:09:54	89.074%	106.300	110.800	101.400	0.000	49950.000	49490.000	50510.000
X		94.206%	105.781%	107.659%	100.020%	0.000	98.471%	97.209%	98.865%
σ		5.818%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		6.176	1.569	2.703	2.271	0.000	2.135	2.936	2.391
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	492.100	4601.000	0.000	49670.000	48680.000	49220.000	90.046%	99.820
2	15:09:34	491.100	4737.000	0.000	49750.000	49370.000	49150.000	87.711%	104.800
3	15:09:54	510.400	4731.000	0.000	50560.000	49870.000	50760.000	86.199%	101.100
X		99.574%	93.788%	0.000	99.988%	98.609%	99.420%	87.986%	101.920%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.938%	n/a
%RSD		2.189	1.640	0.000	0.989	1.210	1.825	2.203	2.554
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	99.930	101.700	494.600	25420.000	24860.000	100.600	105.100	106.300
2	15:09:34	102.100	102.500	504.700	25950.000	25200.000	102.400	105.700	105.200
3	15:09:54	102.800	104.600	502.200	25630.000	25400.000	100.100	102.700	104.100
X		101.616%	102.950%	100.103%	102.661%	100.614%	101.044%	104.475%	105.195%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.488	1.466	1.052	1.039	1.074	1.187	1.511	1.066
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	108.100	105.200	106.000	104.700	108.100	107.800	0.000	103.300
2	15:09:34	104.400	106.000	106.400	105.900	110.200	109.600	0.000	103.800
3	15:09:54	105.300	105.300	105.300	104.800	109.100	108.000	0.000	104.200
X		105.908%	105.503%	105.904%	105.120%	109.102%	108.466%	0.000	103.770%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.819	0.424	0.502	0.609	0.962	0.891	0.000	0.420
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	84.171%	97.150	96.880	81.638%	100.900	101.600	99.660	100.700
2	15:09:34	84.496%	98.900	99.190	81.667%	101.300	102.000	101.300	101.600
3	15:09:54	84.438%	101.500	100.700	82.188%	100.800	101.700	100.900	101.600
X		84.369%	99.179%	98.911%	81.831%	100.984%	101.743%	100.605%	101.299%
σ		0.173%	n/a	n/a	0.309%	n/a	n/a	n/a	n/a
%RSD		0.205	2.202	1.930	0.378	0.237	0.208	0.845	0.495
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:09:15	80.605%	97.880	98.110	97.060	96.820	96.830	83.131%	82.820%
2	15:09:34	81.521%	98.340	97.880	97.030	98.240	97.200	84.815%	84.961%
3	15:09:54	82.224%	98.950	98.100	98.850	97.110	97.690	85.919%	86.507%
X		81.450%	98.388%	98.029%	97.646%	97.390%	97.241%	84.622%	84.763%
σ		0.812%	n/a	n/a	n/a	n/a	n/a	1.404%	1.851%
%RSD		0.997	0.546	0.134	1.066	0.774	0.445	1.659	2.184
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:09:15	100.900	100.800	101.800	77.679%				
2	15:09:34	101.800	102.000	103.300	78.757%				
3	15:09:54	102.200	101.800	103.900	80.421%				
X		101.647%	101.556%	102.982%	78.952%				
σ		n/a	n/a	n/a	1.382%				
%RSD		0.628	0.619	1.063	1.750				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	15:16:04	118.110%	-0.033	0.891	0.628	0.000	10.380	4.892	4.599	
2	15:16:23	122.324%	-0.025	0.832	0.659	0.000	9.496	4.058	4.501	
3	15:16:43	111.178%	-0.031	1.035	0.675	0.000	9.410	3.665	4.266	
X		117.204%	-0.030	0.919	0.654	0.000	9.762	4.205	4.455	
		σ	5.628%	0.004	0.105	0.024	0.000	0.536	0.626	0.171
		%RSD	4.802	13.130	11.380	3.674	0.000	5.493	14.900	3.846
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	15:16:04	1.337	-483.000	0.000	3.888	2.361	7.971	104.094%	0.048	
2	15:16:23	1.469	-481.600	0.000	5.143	11.340	5.944	97.737%	-0.024	
3	15:16:43	1.350	-479.900	0.000	4.946	6.446	7.189	96.301%	0.008	
X		1.385	-481.500	0.000	4.659	6.715	7.035	99.377%	0.011	
		σ	0.072	1.596	0.000	0.675	4.495	1.023	4.147%	0.036
		%RSD	5.224	0.332	0.000	14.490	66.940	14.540	4.173	341.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	15:16:04	0.059	0.021	0.210	6.465	6.937	0.013	0.000	0.534	
2	15:16:23	0.017	0.037	0.201	6.843	6.788	0.012	0.006	0.547	
3	15:16:43	0.008	0.018	0.208	7.053	6.515	0.016	-0.010	0.526	
X		0.028	0.025	0.206	6.787	6.747	0.014	-0.001	0.536	
		σ	0.027	0.010	0.005	0.298	0.214	0.002	0.008	0.010
		%RSD	95.430	40.770	2.467	4.397	3.171	15.760	748.800	1.908
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	15:16:04	0.480	0.956	0.996	0.018	-0.006	0.139	0.000	0.081	
2	15:16:23	0.521	0.958	1.116	-0.036	-0.014	0.004	0.000	0.068	
3	15:16:43	0.527	0.890	1.090	-0.023	0.139	-0.020	0.000	0.063	
X		0.510	0.935	1.067	-0.013	0.040	0.041	0.000	0.071	
		σ	0.026	0.038	0.063	0.028	0.086	0.086	0.009	
		%RSD	5.019	4.115	5.925	211.700	217.500	209.400	0.000	12.790
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	15:16:04	94.322%	0.258	0.222	96.073%	-0.064	-0.058	0.040	0.030	
2	15:16:23	94.299%	0.246	0.231	96.450%	-0.067	-0.064	0.051	0.044	
3	15:16:43	93.842%	0.197	0.178	95.787%	-0.058	-0.065	0.058	0.039	
X		94.154%	0.234	0.210	96.103%	-0.063	-0.062	0.050	0.038	
		σ	0.270%	0.032	0.028	0.332%	0.004	0.004	0.009	0.008
		%RSD	0.287	13.820	13.370	0.346	7.164	6.015	17.740	20.140
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	15:16:04	90.576%	0.034	-0.002	0.016	0.065	0.042	87.414%	87.282%	
2	15:16:23	90.680%	0.063	0.009	-0.005	0.038	0.048	88.933%	88.497%	
3	15:16:43	91.141%	0.040	0.003	0.002	0.043	0.051	89.444%	88.874%	
X		90.799%	0.046	0.003	0.004	0.048	0.047	88.597%	88.218%	
		σ	0.301%	0.016	0.005	0.011	0.014	0.005	1.056%	0.832%
		%RSD	0.331	34.310	157.300	255.000	29.510	9.911	1.192	0.943
Run	Time	203Tl	205Tl	208Pb	209Bi					
		ppb	ppb	ppb	ppb					
1	15:16:04	0.026	0.027	0.036	85.702%					
2	15:16:23	0.025	0.031	0.038	85.430%					
3	15:16:43	0.024	0.030	0.039	85.394%					
X		0.025	0.029	0.038	85.509%					
		σ	0.001	0.002	0.001	0.168%				
		%RSD	3.626	7.931	3.692	0.197				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	59.174%	-0.015	289.000	286.600	0.000	45850.000	14050.000	14110.000
2	15:20:15	52.378%	-0.028	295.600	283.400	0.000	45670.000	14010.000	14140.000
3	15:20:35	50.890%	-0.048	283.700	277.400	0.000	46460.000	14520.000	14480.000
X		54.147%	-0.030	289.400	282.500	0.000	45990.000	14190.000	14240.000
σ		4.417%	0.016	5.956	4.643	0.000	414.400	284.800	206.100
%RSD		8.156	53.710	2.058	1.644	0.000	0.901	2.007	1.447
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	2.505	3920.000	0.000	9355.000	127300.000	131200.000	46.818%	0.504
2	15:20:15	2.259	4084.000	0.000	9335.000	131500.000	133400.000	44.446%	0.469
3	15:20:35	3.568	4311.000	0.000	9474.000	129900.000	130600.000	44.745%	0.400
X		2.777	4105.000	0.000	9388.000	129500.000	131800.000	45.336%	0.458
σ		0.695	196.500	0.000	75.590	2132.000	1457.000	1.292%	0.053
%RSD		25.030	4.786	0.000	0.805	1.645	1.106	2.850	11.550
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	-1.754	68.050	0.527	27.850	206.300	0.704	1.509	0.356
2	15:20:15	-0.640	69.610	0.550	24.060	196.100	0.594	1.363	0.378
3	15:20:35	0.932	67.850	0.542	21.790	181.100	0.638	1.368	0.413
X		-0.487	68.500	0.540	24.570	194.500	0.645	1.413	0.382
σ		1.350	0.963	0.012	3.061	12.670	0.055	0.083	0.029
%RSD		276.900	1.405	2.204	12.460	6.515	8.559	5.865	7.548
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	0.116	1.889	1.828	0.051	-0.218	0.495	0.000	258.300
2	15:20:15	0.049	1.603	1.509	-0.236	-0.040	0.390	0.000	258.700
3	15:20:35	0.139	1.617	1.428	-0.377	-0.115	0.612	0.000	260.900
X		0.101	1.703	1.588	-0.188	-0.125	0.499	0.000	259.300
σ		0.047	0.161	0.211	0.218	0.089	0.111	0.000	1.392
%RSD		46.040	9.470	13.320	116.200	71.540	22.260	0.000	0.537
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	56.025%	0.328	0.372	54.513%	-0.073	-0.083	0.033	0.024
2	15:20:15	54.745%	0.346	0.322	53.059%	-0.083	-0.081	-0.010	-0.011
3	15:20:35	53.915%	0.301	0.340	51.591%	-0.086	-0.088	-0.008	0.006
X		54.895%	0.325	0.345	53.054%	-0.081	-0.084	0.005	0.007
σ		1.063%	0.023	0.025	1.461%	0.007	0.003	0.024	0.017
%RSD		1.937	7.051	7.357	2.754	8.510	4.147	498.800	264.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:56	58.703%	0.206	0.111	0.101	49.260	49.170	68.947%	70.172%
2	15:20:15	57.739%	0.177	0.098	0.092	49.810	48.930	69.213%	70.826%
3	15:20:35	57.593%	0.158	0.061	0.060	48.790	49.290	69.455%	70.785%
X		58.012%	0.180	0.090	0.084	49.290	49.130	69.205%	70.594%
σ		0.603%	0.024	0.026	0.021	0.510	0.184	0.254%	0.367%
%RSD		1.040	13.270	28.890	25.150	1.035	0.375	0.367	0.519
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:19:56	0.027	0.034	0.036	59.469%				
2	15:20:15	0.032	0.032	0.035	60.487%				
3	15:20:35	0.027	0.027	0.034	61.627%				
X		0.029	0.031	0.035	60.528%				
σ		0.003	0.004	0.001	1.080%				
%RSD		9.218	12.140	3.454	1.784				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	60.087%	-0.016	34.540	33.960	0.000	7209.000	22750.000	22510.000
2	15:24:04	56.609%	-0.049	35.560	36.010	0.000	7300.000	22840.000	23680.000
3	15:24:23	54.557%	-0.030	36.890	37.470	0.000	7309.000	22990.000	23340.000
X		57.084%	-0.032	35.660	35.810	0.000	7273.000	22860.000	23180.000
σ		2.795%	0.017	1.179	1.762	0.000	55.310	120.600	599.900
%RSD		4.896	53.210	3.306	4.920	0.000	0.761	0.528	2.588
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	1.813	4374.000	0.000	969.200	75840.000	77000.000	46.948%	0.461
2	15:24:04	1.573	4447.000	0.000	992.100	79870.000	82010.000	44.365%	0.758
3	15:24:23	2.097	4477.000	0.000	987.200	80930.000	81450.000	43.599%	0.390
X		1.827	4433.000	0.000	982.800	78880.000	80150.000	44.971%	0.536
σ		0.262	53.310	0.000	12.050	2687.000	2747.000	1.755%	0.195
%RSD		14.360	1.203	0.000	1.226	3.407	3.428	3.902	36.400
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	0.255	1.255	0.323	3.290	110.300	0.068	0.033	0.118
2	15:24:04	2.479	1.235	0.325	4.494	107.700	0.069	0.074	0.192
3	15:24:23	1.782	1.327	0.347	2.182	107.800	0.056	0.108	0.239
X		1.505	1.272	0.332	3.322	108.600	0.064	0.071	0.183
σ		1.137	0.048	0.013	1.156	1.470	0.007	0.037	0.061
%RSD		75.550	3.791	3.910	34.810	1.354	11.260	52.470	33.120
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	0.146	1.722	1.609	0.166	-0.435	0.606	0.000	65.940
2	15:24:04	0.147	1.571	1.727	-0.197	-0.332	0.346	0.000	66.290
3	15:24:23	0.126	1.402	1.444	-0.944	0.091	0.375	0.000	66.780
X		0.140	1.565	1.593	-0.325	-0.225	0.443	0.000	66.340
σ		0.012	0.160	0.142	0.566	0.279	0.142	0.000	0.422
%RSD		8.713	10.230	8.909	174.200	123.700	32.210	0.000	0.637
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	54.823%	0.131	0.123	54.813%	-0.081	-0.097	-0.026	-0.020
2	15:24:04	55.030%	0.107	0.118	54.193%	-0.089	-0.090	-0.029	-0.023
3	15:24:23	54.335%	0.109	0.104	53.330%	-0.079	-0.083	-0.019	-0.010
X		54.730%	0.116	0.115	54.112%	-0.083	-0.090	-0.025	-0.018
σ		0.357%	0.013	0.010	0.745%	0.005	0.007	0.005	0.007
%RSD		0.652	11.570	8.677	1.376	6.334	7.660	20.890	39.950
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:23:45	58.146%	0.508	0.007	0.024	46.190	46.220	68.578%	70.603%
2	15:24:04	58.215%	0.594	0.014	0.014	46.590	46.480	69.818%	71.894%
3	15:24:23	57.130%	0.494	0.003	0.015	47.310	47.590	69.755%	71.447%
X		57.830%	0.532	0.008	0.018	46.700	46.760	69.384%	71.315%
σ		0.607%	0.054	0.006	0.006	0.566	0.724	0.698%	0.656%
%RSD		1.050	10.090	67.650	31.520	1.211	1.548	1.006	0.920
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:23:45	0.016	0.018	0.013	64.798%				
2	15:24:04	0.015	0.021	0.011	64.597%				
3	15:24:23	0.015	0.022	0.015	65.616%				
X		0.015	0.021	0.013	65.003%				
σ		0.001	0.002	0.002	0.540%				
%RSD		5.057	9.854	18.540	0.830				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	54.144%	0.009	23.540	21.060	0.000	130500.000	23910.000	24110.000
2	15:27:52	48.935%	-0.047	23.620	23.590	0.000	133700.000	25310.000	25570.000
3	15:28:11	45.920%	-0.023	22.400	21.300	0.000	132400.000	24490.000	24800.000
X		49.666%	-0.020	23.190	21.980	0.000	132200.000	24570.000	24830.000
σ		4.160%	0.028	0.681	1.395	0.000	1594.000	703.000	729.500
%RSD		8.376	138.400	2.935	6.344	0.000	1.206	2.862	2.939
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	3.143	4611.000	0.000	1399.000	91970.000	95850.000	42.272%	0.498
2	15:27:52	3.200	4983.000	0.000	1427.000	94810.000	96790.000	42.329%	0.474
3	15:28:11	3.040	4775.000	0.000	1396.000	95180.000	96190.000	40.068%	0.506
X		3.128	4790.000	0.000	1407.000	93990.000	96280.000	41.556%	0.493
σ		0.081	186.600	0.000	17.180	1757.000	477.000	1.289%	0.017
%RSD		2.582	3.895	0.000	1.221	1.869	0.495	3.103	3.379
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	-1.510	89.100	1.811	451.200	570.000	0.326	8.019	2.581
2	15:27:52	-0.259	86.820	1.678	449.000	525.900	0.267	7.566	2.449
3	15:28:11	-0.262	87.280	1.724	448.000	531.900	0.243	7.304	2.371
X		-0.677	87.730	1.738	449.400	542.600	0.279	7.630	2.467
σ		0.721	1.207	0.068	1.600	23.910	0.043	0.362	0.106
%RSD		106.600	1.376	3.886	0.356	4.406	15.400	4.741	4.306
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	1.601	1.884	1.604	0.168	-0.031	0.364	0.000	105.700
2	15:27:52	1.483	1.588	1.653	-0.464	-0.155	0.078	0.000	104.600
3	15:28:11	1.603	1.542	1.425	-0.643	-0.046	0.584	0.000	105.200
X		1.562	1.671	1.561	-0.313	-0.077	0.342	0.000	105.100
σ		0.069	0.186	0.120	0.426	0.068	0.254	0.000	0.564
%RSD		4.397	11.110	7.668	136.200	87.310	74.310	0.000	0.536
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	53.837%	0.841	0.933	52.340%	-0.090	-0.086	0.005	0.008
2	15:27:52	53.476%	0.802	0.793	51.817%	-0.084	-0.087	-0.060	-0.040
3	15:28:11	52.123%	0.971	0.914	50.236%	-0.088	-0.085	-0.058	-0.043
X		53.145%	0.871	0.880	51.464%	-0.087	-0.086	-0.038	-0.025
σ		0.904%	0.088	0.076	1.095%	0.003	0.001	0.037	0.029
%RSD		1.701	10.150	8.650	2.128	3.491	1.160	96.990	113.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:27:33	56.008%	0.000	-0.008	0.015	144.200	143.600	66.657%	68.422%
2	15:27:52	56.063%	0.038	0.007	-0.004	144.300	144.600	68.555%	70.224%
3	15:28:11	55.933%	0.003	0.013	0.004	142.800	144.200	68.124%	70.169%
X		56.001%	0.014	0.004	0.005	143.800	144.100	67.779%	69.605%
σ		0.065%	0.021	0.011	0.010	0.830	0.480	0.995%	1.025%
%RSD		0.117	155.600	270.600	203.500	0.577	0.333	1.468	1.472
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:27:33	0.018	0.020	0.023	56.329%				
2	15:27:52	0.016	0.016	0.020	58.700%				
3	15:28:11	0.022	0.012	0.022	59.410%				
X		0.019	0.016	0.022	58.146%				
σ		0.003	0.004	0.002	1.613%				
%RSD		15.280	24.000	7.840	2.775				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	53.482%	-0.048	16.960	15.880	0.000	5696.000	25530.000	25890.000
2	15:31:43	51.774%	0.012	14.630	15.020	0.000	5382.000	23920.000	24130.000
3	15:32:02	48.926%	-0.047	14.920	15.540	0.000	5368.000	24140.000	24460.000
X		51.394%	-0.028	15.500	15.480	0.000	5482.000	24530.000	24830.000
σ		2.301%	0.035	1.268	0.432	0.000	185.400	874.900	934.900
%RSD		4.478	125.400	8.179	2.794	0.000	3.383	3.567	3.766
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	0.380	4820.000	0.000	857.200	80670.000	81910.000	42.265%	0.452
2	15:31:43	0.556	4602.000	0.000	839.800	77430.000	79560.000	41.744%	0.294
3	15:32:02	0.201	4607.000	0.000	851.200	81540.000	82360.000	38.430%	0.353
X		0.379	4676.000	0.000	849.400	79880.000	81280.000	40.813%	0.366
σ		0.177	124.600	0.000	8.803	2166.000	1503.000	2.080%	0.080
%RSD		46.820	2.664	0.000	1.036	2.712	1.850	5.097	21.740
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	1.346	1.226	0.357	28.150	132.300	0.066	0.284	0.365
2	15:31:43	0.961	1.357	0.349	26.090	126.300	0.046	0.301	0.314
3	15:32:02	0.335	1.332	0.373	27.610	125.100	0.060	0.231	0.324
X		0.880	1.305	0.359	27.280	127.900	0.057	0.272	0.335
σ		0.510	0.069	0.012	1.069	3.822	0.010	0.037	0.027
%RSD		57.950	5.312	3.362	3.918	2.988	17.720	13.430	8.119
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	0.289	5.101	4.933	0.016	-0.228	0.175	0.000	80.750
2	15:31:43	0.226	4.855	4.960	-0.547	-0.337	0.143	0.000	80.970
3	15:32:02	0.325	5.006	5.392	-0.922	-0.004	0.183	0.000	81.050
X		0.280	4.987	5.095	-0.484	-0.189	0.167	0.000	80.920
σ		0.050	0.124	0.257	0.472	0.170	0.021	0.000	0.157
%RSD		17.830	2.481	5.049	97.520	89.580	12.660	0.000	0.194
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	53.192%	0.455	0.493	53.071%	-0.081	-0.093	-0.037	-0.030
2	15:31:43	52.769%	0.486	0.448	51.719%	-0.081	-0.087	-0.065	-0.034
3	15:32:02	52.007%	0.483	0.475	50.377%	-0.077	-0.088	-0.077	-0.059
X		52.656%	0.475	0.472	51.722%	-0.080	-0.089	-0.060	-0.041
σ		0.600%	0.017	0.023	1.347%	0.003	0.004	0.021	0.016
%RSD		1.140	3.597	4.835	2.605	3.240	3.953	34.630	38.040
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:31:23	56.547%	0.028	-0.011	-0.005	74.010	74.710	67.458%	69.807%
2	15:31:43	56.913%	0.022	-0.004	0.000	74.610	74.220	68.163%	70.041%
3	15:32:02	55.229%	0.023	-0.022	-0.004	74.340	74.840	68.538%	70.597%
X		56.230%	0.025	-0.012	-0.003	74.320	74.590	68.053%	70.148%
σ		0.886%	0.003	0.009	0.003	0.305	0.329	0.548%	0.406%
%RSD		1.576	13.430	74.360	93.980	0.410	0.441	0.806	0.578
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:31:23	0.015	0.011	0.024	61.243%				
2	15:31:43	0.011	0.011	0.021	62.513%				
3	15:32:02	0.012	0.009	0.028	62.369%				
X		0.013	0.010	0.025	62.042%				
σ		0.002	0.001	0.003	0.695%				
%RSD		17.810	8.667	13.960	1.121				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	55.568%	0.026	243.600	237.300	0.000	19050.000	24020.000	24300.000
2	15:35:32	54.450%	-0.029	233.400	221.000	0.000	18160.000	22280.000	22950.000
3	15:35:51	51.324%	0.034	224.700	220.800	0.000	18790.000	24010.000	23870.000
X		53.780%	0.010	233.900	226.400	0.000	18670.000	23440.000	23710.000
σ		2.200%	0.034	9.482	9.484	0.000	455.100	1004.000	690.500
%RSD		4.091	342.700	4.054	4.189	0.000	2.438	4.283	2.913
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	1.599	3898.000	0.000	1713.000	84810.000	85000.000	42.590%	0.448
2	15:35:32	1.358	3787.000	0.000	1702.000	86070.000	86800.000	41.149%	0.728
3	15:35:51	1.098	3905.000	0.000	1815.000	87210.000	89530.000	39.480%	0.515
X		1.352	3863.000	0.000	1743.000	86030.000	87110.000	41.073%	0.564
σ		0.250	66.160	0.000	61.810	1205.000	2282.000	1.556%	0.146
%RSD		18.530	1.713	0.000	3.546	1.401	2.620	3.789	25.970
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	-2.251	0.788	101.400	135.400	248.200	0.820	1.825	0.317
2	15:35:32	-1.267	0.866	100.300	136.400	248.900	0.853	2.112	0.279
3	15:35:51	1.790	0.840	103.500	139.200	232.000	0.756	2.031	0.268
X		-0.577	0.831	101.700	137.000	243.100	0.810	1.989	0.288
σ		2.107	0.040	1.595	1.934	9.569	0.049	0.148	0.026
%RSD		365.600	4.785	1.568	1.411	3.937	6.073	7.419	8.924
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	0.169	2.189	2.151	-0.066	-0.586	0.200	0.000	359.500
2	15:35:32	0.192	2.167	1.894	0.146	-0.246	0.078	0.000	347.300
3	15:35:51	0.298	2.072	1.703	-0.569	-0.363	0.452	0.000	362.800
X		0.220	2.143	1.916	-0.163	-0.398	0.243	0.000	356.500
σ		0.069	0.062	0.225	0.367	0.172	0.191	0.000	8.160
%RSD		31.360	2.905	11.730	225.700	43.270	78.450	0.000	2.289
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	53.180%	0.889	0.785	52.070%	-0.093	-0.095	-0.007	-0.007
2	15:35:32	53.842%	0.627	0.805	50.976%	-0.086	-0.088	-0.071	-0.048
3	15:35:51	52.060%	0.737	0.743	50.932%	-0.082	-0.082	-0.044	-0.047
X		53.027%	0.751	0.778	51.326%	-0.087	-0.088	-0.040	-0.034
σ		0.901%	0.132	0.032	0.645%	0.005	0.006	0.032	0.023
%RSD		1.699	17.500	4.069	1.256	6.320	7.160	78.970	67.950
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:35:13	55.997%	-0.049	-0.017	-0.019	46.410	47.070	66.765%	68.843%
2	15:35:32	55.690%	-0.071	-0.013	-0.024	46.750	47.380	67.758%	69.581%
3	15:35:51	55.287%	-0.043	-0.017	-0.004	46.640	46.940	68.284%	70.319%
X		55.658%	-0.054	-0.016	-0.016	46.600	47.130	67.602%	69.581%
σ		0.356%	0.015	0.002	0.010	0.173	0.229	0.772%	0.738%
%RSD		0.640	26.900	15.890	63.570	0.370	0.486	1.141	1.061
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:35:13	0.037	0.030	0.027	62.954%				
2	15:35:32	0.032	0.034	0.021	62.420%				
3	15:35:51	0.038	0.038	0.024	62.877%				
X		0.035	0.034	0.024	62.750%				
σ		0.003	0.004	0.003	0.288%				
%RSD		8.187	12.370	12.180	0.459				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	58.074%	-0.014	228.900	223.300	0.000	19750.000	24420.000	24590.000
2	15:39:22	51.217%	-0.027	252.400	248.000	0.000	20940.000	25690.000	26260.000
3	15:39:41	48.995%	-0.004	237.600	227.300	0.000	20100.000	24430.000	24960.000
X		52.762%	-0.015	239.600	232.900	0.000	20260.000	24850.000	25270.000
σ		4.733%	0.012	11.880	13.260	0.000	614.100	728.900	876.500
%RSD		8.970	75.520	4.959	5.693	0.000	3.030	2.934	3.468
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	2.244	4098.000	0.000	1789.000	86170.000	88780.000	44.771%	0.598
2	15:39:22	2.756	4247.000	0.000	1821.000	89970.000	92740.000	42.339%	0.219
3	15:39:41	2.972	4163.000	0.000	1819.000	91840.000	93360.000	40.328%	0.260
X		2.657	4170.000	0.000	1810.000	89330.000	91620.000	42.479%	0.359
σ		0.374	74.890	0.000	18.030	2891.000	2485.000	2.225%	0.208
%RSD		14.070	1.796	0.000	0.996	3.236	2.712	5.238	57.880
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	0.210	0.826	103.500	138.000	250.600	0.795	2.192	0.408
2	15:39:22	0.019	0.822	103.300	138.400	253.200	0.780	1.869	0.293
3	15:39:41	1.216	0.814	104.600	134.700	237.700	0.729	1.910	0.366
X		0.482	0.821	103.800	137.000	247.200	0.768	1.990	0.356
σ		0.643	0.006	0.676	1.992	8.281	0.034	0.176	0.058
%RSD		133.500	0.728	0.651	1.453	3.350	4.457	8.847	16.260
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	0.156	1.618	2.137	0.033	-0.309	0.140	0.000	377.300
2	15:39:22	0.306	1.709	1.305	-0.094	-0.187	0.037	0.000	375.500
3	15:39:41	0.251	1.442	1.568	-0.469	-0.084	-0.073	0.000	381.600
X		0.238	1.590	1.670	-0.177	-0.194	0.035	0.000	378.100
σ		0.076	0.136	0.425	0.261	0.113	0.107	0.000	3.171
%RSD		31.980	8.536	25.460	147.900	58.170	307.900	0.000	0.839
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	53.073%	0.915	0.819	51.487%	-0.085	-0.095	-0.049	-0.037
2	15:39:22	52.434%	0.769	0.824	51.708%	-0.085	-0.091	-0.029	-0.019
3	15:39:41	50.750%	0.839	0.841	50.068%	-0.083	-0.086	-0.029	-0.035
X		52.086%	0.841	0.828	51.088%	-0.084	-0.090	-0.036	-0.030
σ		1.200%	0.073	0.011	0.890%	0.001	0.004	0.011	0.010
%RSD		2.305	8.662	1.362	1.742	1.419	4.720	31.710	33.260
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:39:02	55.844%	-0.015	-0.014	-0.022	48.610	47.960	67.542%	68.811%
2	15:39:22	56.222%	-0.027	-0.024	-0.011	48.130	48.500	67.871%	70.572%
3	15:39:41	55.480%	-0.022	-0.018	-0.003	48.600	48.290	67.681%	69.900%
X		55.849%	-0.021	-0.018	-0.012	48.450	48.250	67.698%	69.761%
σ		0.371%	0.006	0.005	0.009	0.273	0.271	0.165%	0.889%
%RSD		0.664	29.540	27.080	75.670	0.563	0.562	0.244	1.274
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:39:02	0.025	0.030	0.031	61.873%				
2	15:39:22	0.040	0.034	0.024	62.196%				
3	15:39:41	0.043	0.038	0.025	63.830%				
X		0.036	0.034	0.027	62.633%				
σ		0.010	0.004	0.003	1.049%				
%RSD		26.530	11.200	12.500	1.675				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	50.869%	-0.007	159.300	147.300	0.000	13800.000	19970.000	20400.000
2	15:43:12	51.972%	-0.008	156.300	153.300	0.000	13570.000	19760.000	20240.000
3	15:43:31	48.789%	-0.004	144.100	138.400	0.000	13360.000	19740.000	19730.000
X		50.543%	-0.006	153.300	146.300	0.000	13570.000	19820.000	20120.000
σ		1.616%	0.002	8.062	7.480	0.000	222.900	127.700	349.200
%RSD		3.198	33.020	5.261	5.111	0.000	1.642	0.644	1.736
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	30.990	4373.000	0.000	1180.000	66550.000	68480.000	41.359%	1.461
2	15:43:12	29.580	4363.000	0.000	1167.000	66310.000	68870.000	39.657%	1.155
3	15:43:31	28.520	4350.000	0.000	1150.000	67560.000	68740.000	37.824%	1.215
X		29.700	4362.000	0.000	1165.000	66810.000	68700.000	39.613%	1.277
σ		1.240	11.360	0.000	14.850	664.200	202.300	1.768%	0.162
%RSD		4.174	0.261	0.000	1.274	0.994	0.294	4.463	12.700
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	0.928	0.820	36.850	111.900	196.000	0.237	1.162	0.587
2	15:43:12	1.696	0.766	37.390	113.800	192.900	0.234	1.432	0.607
3	15:43:31	1.394	0.788	38.030	118.400	196.400	0.247	0.937	0.524
X		1.339	0.791	37.420	114.700	195.100	0.239	1.177	0.573
σ		0.387	0.027	0.591	3.313	1.938	0.007	0.248	0.043
%RSD		28.860	3.390	1.579	2.888	0.993	2.845	21.050	7.542
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	0.433	2.241	2.227	-0.195	-0.364	-0.046	0.000	117.100
2	15:43:12	0.520	2.461	2.467	-0.334	-0.559	0.364	0.000	117.100
3	15:43:31	0.472	2.735	2.254	-0.808	-0.540	0.170	0.000	116.800
X		0.475	2.479	2.316	-0.446	-0.488	0.163	0.000	117.000
σ		0.043	0.247	0.131	0.321	0.107	0.205	0.000	0.160
%RSD		9.141	9.978	5.676	72.100	22.010	125.900	0.000	0.137
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	51.680%	0.393	0.453	51.216%	-0.092	-0.087	-0.027	-0.023
2	15:43:12	51.512%	0.414	0.428	50.594%	-0.090	-0.086	-0.055	-0.043
3	15:43:31	51.197%	0.430	0.432	49.936%	-0.088	-0.084	-0.029	-0.014
X		51.463%	0.412	0.438	50.582%	-0.090	-0.086	-0.037	-0.026
σ		0.245%	0.019	0.014	0.640%	0.002	0.001	0.016	0.015
%RSD		0.476	4.535	3.093	1.266	1.970	1.689	42.950	56.850
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:53	56.030%	0.036	-0.011	-0.010	57.740	57.210	67.877%	69.451%
2	15:43:12	55.575%	0.066	-0.015	-0.008	58.440	57.680	69.052%	70.698%
3	15:43:31	55.198%	0.071	-0.007	-0.002	57.610	59.090	68.175%	70.667%
X		55.601%	0.058	-0.011	-0.007	57.930	57.990	68.368%	70.272%
σ		0.416%	0.019	0.004	0.004	0.447	0.977	0.611%	0.711%
%RSD		0.749	32.700	38.200	59.890	0.772	1.684	0.893	1.012
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:42:53	0.042	0.048	0.088	61.258%				
2	15:43:12	0.042	0.037	0.086	63.319%				
3	15:43:31	0.045	0.043	0.083	62.723%				
X		0.043	0.043	0.086	62.433%				
σ		0.001	0.005	0.002	1.060%				
%RSD		3.330	12.800	2.799	1.698				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	50.108%	-0.006	277.700	271.700	0.000	67880.000	40740.000	40480.000
2	15:47:01	47.893%	0.019	274.700	278.700	0.000	70880.000	41460.000	41840.000
3	15:47:20	45.467%	-0.045	270.600	262.400	0.000	66530.000	38920.000	39800.000
X		47.823%	-0.011	274.300	270.900	0.000	68430.000	40370.000	40710.000
σ		2.321%	0.032	3.526	8.155	0.000	2227.000	1312.000	1037.000
%RSD		4.854	300.700	1.285	3.010	0.000	3.254	3.250	2.548
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	13.650	6377.000	0.000	2308.000	125600.000	128500.000	40.596%	1.273
2	15:47:01	14.330	6395.000	0.000	2369.000	131600.000	130600.000	38.859%	1.231
3	15:47:20	15.220	6773.000	0.000	2353.000	128300.000	132500.000	40.230%	1.480
X		14.400	6515.000	0.000	2343.000	128500.000	130500.000	39.895%	1.328
σ		0.787	223.900	0.000	31.630	2997.000	1998.000	0.916%	0.133
%RSD		5.463	3.437	0.000	1.350	2.332	1.531	2.295	10.030
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	0.702	0.819	38.930	3013.000	3142.000	0.347	10.790	0.662
2	15:47:01	-2.331	0.880	39.940	3054.000	3105.000	0.310	10.870	0.627
3	15:47:20	1.069	0.839	38.930	2950.000	3002.000	0.324	10.300	0.586
X		-0.187	0.846	39.270	3006.000	3083.000	0.327	10.650	0.625
σ		1.866	0.031	0.581	52.660	72.270	0.019	0.313	0.038
%RSD		999.000	3.707	1.480	1.752	2.344	5.720	2.940	6.074
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	0.277	6.842	7.230	4.271	-0.359	1.332	0.000	576.600
2	15:47:01	0.236	7.180	7.754	5.551	-0.163	1.193	0.000	574.000
3	15:47:20	0.163	6.964	7.042	4.453	-0.494	1.427	0.000	573.100
X		0.226	6.995	7.342	4.758	-0.339	1.318	0.000	574.500
σ		0.057	0.171	0.369	0.692	0.166	0.118	0.000	1.864
%RSD		25.450	2.443	5.028	14.550	49.080	8.924	0.000	0.324
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	51.293%	0.729	0.788	49.745%	-0.085	-0.087	0.027	0.022
2	15:47:01	50.952%	0.760	0.853	49.543%	-0.086	-0.087	0.023	0.026
3	15:47:20	51.065%	0.754	0.848	48.527%	-0.081	-0.089	0.004	0.004
X		51.103%	0.748	0.830	49.272%	-0.084	-0.087	0.018	0.017
σ		0.174%	0.017	0.036	0.653%	0.002	0.001	0.012	0.012
%RSD		0.341	2.239	4.350	1.325	2.861	1.586	68.080	68.160
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:46:42	53.871%	0.057	0.014	0.021	376.600	378.300	66.490%	68.253%
2	15:47:01	54.438%	0.028	0.009	0.050	376.400	377.500	67.231%	69.158%
3	15:47:20	54.344%	0.021	0.018	0.017	376.600	378.400	67.581%	68.995%
X		54.218%	0.035	0.014	0.029	376.600	378.000	67.101%	68.802%
σ		0.304%	0.019	0.005	0.018	0.108	0.506	0.557%	0.482%
%RSD		0.560	53.220	32.590	60.290	0.029	0.134	0.830	0.701
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:46:42	0.005	0.008	0.042	59.155%				
2	15:47:01	0.005	0.004	0.050	59.320%				
3	15:47:20	0.006	0.003	0.049	59.418%				
X		0.005	0.005	0.047	59.298%				
σ		0.000	0.002	0.005	0.133%				
%RSD		8.958	43.880	9.599	0.224				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	53.675%	-0.068	23.880	24.830	0.000	61500.000	25720.000	26120.000
2	15:50:49	54.021%	-0.010	23.920	25.640	0.000	58760.000	25280.000	25900.000
3	15:51:08	53.636%	0.029	24.310	24.390	0.000	60010.000	26230.000	26200.000
X		53.777%	-0.016	24.040	24.950	0.000	60090.000	25740.000	26070.000
σ		0.212%	0.049	0.233	0.633	0.000	1371.000	477.900	153.500
%RSD		0.393	301.100	0.970	2.537	0.000	2.282	1.857	0.589
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	31.430	4320.000	0.000	1467.000	92960.000	94620.000	45.169%	1.853
2	15:50:49	28.250	3976.000	0.000	1442.000	94070.000	96860.000	42.578%	1.578
3	15:51:08	27.620	4152.000	0.000	1427.000	92080.000	93540.000	41.424%	1.859
X		29.100	4149.000	0.000	1445.000	93030.000	95010.000	43.057%	1.763
σ		2.043	171.700	0.000	20.490	997.100	1695.000	1.918%	0.161
%RSD		7.021	4.137	0.000	1.418	1.072	1.785	4.454	9.126
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	1.768	2.278	1.697	69.050	186.700	0.090	0.428	5.124
2	15:50:49	-0.525	2.130	1.716	70.380	195.400	0.099	0.359	5.378
3	15:51:08	-0.212	2.044	1.763	66.410	181.600	0.079	0.363	5.407
X		0.343	2.151	1.726	68.610	187.900	0.089	0.384	5.303
σ		1.243	0.118	0.034	2.016	6.976	0.010	0.039	0.156
%RSD		362.000	5.499	1.968	2.938	3.714	11.180	10.060	2.935
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	5.200	5.234	5.441	-0.280	0.140	0.686	0.000	109.700
2	15:50:49	5.132	5.290	4.975	-0.311	0.231	0.606	0.000	110.800
3	15:51:08	5.016	5.164	5.017	-0.363	0.080	0.648	0.000	111.200
X		5.116	5.229	5.144	-0.318	0.150	0.646	0.000	110.500
σ		0.093	0.064	0.258	0.042	0.076	0.040	0.000	0.787
%RSD		1.816	1.215	5.012	13.340	50.530	6.188	0.000	0.712
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	54.592%	0.101	0.129	53.160%	-0.084	-0.083	0.007	-0.001
2	15:50:49	53.563%	0.129	0.116	52.472%	-0.073	-0.077	-0.007	-0.010
3	15:51:08	53.809%	0.120	0.132	52.323%	-0.078	-0.075	0.058	0.036
X		53.988%	0.117	0.126	52.652%	-0.078	-0.078	0.020	0.008
σ		0.538%	0.014	0.008	0.447%	0.006	0.004	0.034	0.025
%RSD		0.996	12.440	6.414	0.848	7.161	5.318	174.600	291.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:50:29	56.463%	-0.030	-0.019	-0.011	99.810	99.510	68.570%	70.234%
2	15:50:49	57.467%	-0.055	-0.020	0.005	98.580	99.550	69.736%	71.302%
3	15:51:08	57.106%	-0.062	-0.001	-0.025	101.300	100.500	69.408%	71.904%
X		57.012%	-0.049	-0.013	-0.011	99.890	99.860	69.238%	71.147%
σ		0.508%	0.017	0.011	0.015	1.347	0.579	0.602%	0.846%
%RSD		0.891	33.750	81.270	141.000	1.348	0.580	0.869	1.189
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:50:29	0.015	0.018	0.291	60.651%				
2	15:50:49	0.027	0.019	0.296	61.027%				
3	15:51:08	0.021	0.023	0.289	61.748%				
X		0.021	0.020	0.292	61.142%				
σ		0.006	0.002	0.003	0.557%				
%RSD		30.140	11.960	1.183	0.911				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	53.179%	0.030	23.380	25.260	0.000	60450.000	24810.000	26690.000
2	15:54:36	49.796%	-0.068	27.550	24.040	0.000	61230.000	25380.000	25690.000
3	15:54:55	48.016%	-0.025	24.100	24.990	0.000	55920.000	24200.000	25210.000
X		50.331%	-0.021	25.010	24.760	0.000	59200.000	24790.000	25860.000
σ		2.623%	0.049	2.226	0.640	0.000	2869.000	591.600	753.500
%RSD		5.211	234.000	8.902	2.585	0.000	4.847	2.386	2.913
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	26.570	4363.000	0.000	1453.000	94860.000	96300.000	42.550%	2.457
2	15:54:36	25.610	4064.000	0.000	1454.000	93420.000	94720.000	40.963%	2.050
3	15:54:55	25.890	4131.000	0.000	1437.000	95310.000	97000.000	39.028%	1.678
X		26.020	4186.000	0.000	1448.000	94530.000	96010.000	40.847%	2.062
σ		0.497	157.000	0.000	9.621	985.500	1170.000	1.764%	0.390
%RSD		1.910	3.752	0.000	0.664	1.043	1.219	4.318	18.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	-0.504	2.214	1.697	69.380	184.200	0.109	0.424	5.306
2	15:54:36	0.499	2.246	1.756	65.260	182.100	0.104	0.456	5.147
3	15:54:55	1.397	2.267	1.754	63.620	186.900	0.117	0.386	5.366
X		0.464	2.242	1.736	66.090	184.400	0.110	0.422	5.273
σ		0.951	0.026	0.033	2.966	2.398	0.006	0.035	0.113
%RSD		205.000	1.180	1.926	4.488	1.300	5.727	8.234	2.142
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	4.805	5.365	4.792	-0.707	0.006	0.724	0.000	110.300
2	15:54:36	5.253	4.773	4.847	0.682	0.005	0.572	0.000	109.500
3	15:54:55	4.988	5.254	4.445	-0.211	0.206	0.704	0.000	110.500
X		5.015	5.130	4.695	-0.079	0.073	0.667	0.000	110.100
σ		0.226	0.315	0.218	0.704	0.116	0.082	0.000	0.547
%RSD		4.496	6.136	4.636	895.800	159.400	12.350	0.000	0.497
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	52.422%	0.115	0.094	51.530%	-0.071	-0.073	-0.044	-0.012
2	15:54:36	52.414%	0.116	0.120	50.849%	-0.080	-0.082	-0.043	-0.029
3	15:54:55	50.822%	0.119	0.089	49.575%	-0.069	-0.075	-0.008	0.001
X		51.886%	0.117	0.101	50.651%	-0.073	-0.077	-0.032	-0.013
σ		0.922%	0.002	0.016	0.992%	0.006	0.005	0.020	0.015
%RSD		1.776	1.433	16.230	1.959	8.475	6.302	63.850	110.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:54:17	55.335%	0.011	-0.023	-0.013	100.900	100.300	66.916%	68.893%
2	15:54:36	56.241%	-0.003	-0.018	-0.009	100.200	100.100	67.361%	69.312%
3	15:54:55	54.587%	0.005	-0.007	-0.014	101.200	101.200	68.536%	70.550%
X		55.388%	0.004	-0.016	-0.012	100.800	100.500	67.604%	69.585%
σ		0.828%	0.007	0.008	0.003	0.487	0.574	0.837%	0.861%
%RSD		1.495	163.900	49.630	23.550	0.484	0.571	1.238	1.238
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:54:17	0.021	0.025	0.274	60.469%				
2	15:54:36	0.022	0.022	0.282	60.640%				
3	15:54:55	0.022	0.024	0.286	60.188%				
X		0.021	0.024	0.281	60.432%				
σ		0.001	0.001	0.006	0.228%				
%RSD		2.837	6.130	2.187	0.377				

CCV 1558997 5/1/2015 3:57:53 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	95.489%	110.500	106.000	100.500	0.000	47920.000	48410.000	48210.000
2	15:58:12	90.670%	111.900	104.900	101.900	0.000	49680.000	51850.000	50930.000
3	15:58:31	96.280%	103.100	97.680	95.180	0.000	47460.000	47620.000	48000.000
X		94.146%	108.522%	102.893%	99.222%	0.000	96.709%	98.585%	98.090%
σ		3.036%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.225	4.340	4.417	3.600	0.000	2.425	4.564	3.326
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	485.600	4778.000	0.000	47190.000	45930.000	46710.000	98.416%	96.090
2	15:58:12	498.200	4800.000	0.000	50380.000	49070.000	49310.000	93.424%	101.600
3	15:58:31	480.400	4622.000	0.000	48850.000	47920.000	49140.000	91.048%	101.200
X		97.615%	94.669%	0.000	97.612%	95.276%	96.768%	94.296%	99.646%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.761%	n/a
%RSD		1.867	2.048	0.000	3.265	3.332	3.001	3.988	3.099
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	96.860	97.840	479.500	24060.000	23830.000	98.250	99.420	100.100
2	15:58:12	100.500	97.900	486.400	25070.000	24300.000	98.660	102.300	106.700
3	15:58:31	99.860	103.400	500.600	25690.000	25100.000	102.900	105.800	105.000
X		99.085%	99.715%	97.767%	99.750%	97.643%	99.945%	102.522%	103.930%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.977	3.205	2.196	3.305	2.621	2.591	3.139	3.274
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	102.800	100.100	102.400	103.500	107.700	108.200	0.000	102.200
2	15:58:12	104.600	104.900	107.100	104.300	109.400	107.300	0.000	103.800
3	15:58:31	105.800	105.600	104.300	104.900	108.100	107.600	0.000	103.800
X		104.409%	103.510%	104.615%	104.242%	108.363%	107.705%	0.000	103.278%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.435	2.879	2.273	0.658	0.813	0.433	0.000	0.934
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	85.940%	95.380	94.900	84.183%	99.950	100.800	99.370	99.460
2	15:58:12	87.336%	96.890	97.820	84.692%	100.300	101.400	101.400	101.500
3	15:58:31	87.691%	100.200	100.700	84.527%	100.500	101.100	100.300	101.500
X		86.989%	97.493%	97.793%	84.467%	100.241%	101.113%	100.356%	100.812%
σ		0.925%	n/a	n/a	0.260%	n/a	n/a	n/a	n/a
%RSD		1.064	2.533	2.945	0.308	0.275	0.276	1.015	1.158
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:57:53	82.543%	96.350	97.330	96.540	96.520	96.700	84.296%	84.401%
2	15:58:12	83.256%	98.340	99.210	100.100	97.780	97.000	86.409%	86.079%
3	15:58:31	84.747%	98.060	98.220	98.960	98.410	97.140	85.161%	86.218%
X		83.515%	97.583%	98.255%	98.541%	97.570%	96.948%	85.288%	85.566%
σ		1.124%	n/a	n/a	n/a	n/a	n/a	1.062%	1.011%
%RSD		1.346	1.106	0.959	1.858	0.984	0.234	1.246	1.182
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	15:57:53	102.700	103.800	104.100	76.130%				
2	15:58:12	103.300	103.400	106.300	78.109%				
3	15:58:31	105.200	105.100	107.400	77.556%				
X		103.731%	104.106%	105.950%	77.265%				
σ		n/a	n/a	n/a	1.021%				
%RSD		1.232	0.844	1.611	1.321				

CCB6 5/1/2015 4:04:23 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	114.315%	-0.014	0.881	0.547	0.000	12.010	4.565	5.343
2	16:05:02	103.457%	-0.009	0.558	0.516	0.000	11.830	4.915	4.910
3	16:05:21	112.820%	-0.013	0.600	0.624	0.000	10.400	4.525	4.915
x		110.197%	-0.012	0.680	0.562	0.000	11.420	4.668	5.056
σ		5.885%	0.003	0.176	0.056	0.000	0.883	0.214	0.249
%RSD		5.341	23.310	25.860	9.966	0.000	7.738	4.592	4.922
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	2.009	-482.300	0.000	4.523	9.536	8.557	112.985%	0.036
2	16:05:02	1.928	-480.100	0.000	4.962	6.585	7.502	108.668%	0.032
3	16:05:21	1.693	-480.100	0.000	5.029	12.940	7.767	105.147%	0.036
x		1.877	-480.800	0.000	4.838	9.688	7.942	108.933%	0.035
σ		0.164	1.273	0.000	0.275	3.181	0.549	3.926%	0.002
%RSD		8.743	0.265	0.000	5.676	32.840	6.914	3.604	6.895
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	0.065	0.027	0.200	9.061	7.147	0.016	0.013	0.498
2	16:05:02	0.066	0.032	0.198	6.858	7.138	0.012	0.007	0.445
3	16:05:21	0.033	0.012	0.208	7.663	6.279	0.015	-0.004	0.518
x		0.055	0.024	0.202	7.861	6.855	0.014	0.005	0.487
σ		0.019	0.010	0.006	1.115	0.499	0.002	0.009	0.037
%RSD		33.860	43.580	2.792	14.190	7.274	13.910	160.800	7.673
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	0.451	0.943	0.960	-0.042	-0.094	-0.089	0.000	0.069
2	16:05:02	0.483	0.918	1.023	0.003	0.066	0.046	0.000	0.058
3	16:05:21	0.497	1.070	0.825	0.000	-0.068	0.058	0.000	0.068
x		0.477	0.977	0.936	-0.013	-0.032	0.005	0.000	0.065
σ		0.023	0.082	0.101	0.025	0.086	0.082	0.000	0.006
%RSD		4.929	8.353	10.800	198.100	266.400	1559.000	0.000	9.071
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	97.530%	0.222	0.214	99.894%	-0.063	-0.070	0.014	0.021
2	16:05:02	98.389%	0.162	0.217	100.537%	-0.061	-0.067	0.094	0.069
3	16:05:21	98.306%	0.135	0.170	100.543%	-0.053	-0.067	0.086	0.062
x		98.075%	0.173	0.200	100.325%	-0.059	-0.068	0.065	0.051
σ		0.474%	0.045	0.027	0.373%	0.005	0.002	0.044	0.026
%RSD		0.483	25.810	13.250	0.372	9.084	2.810	67.830	51.510
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:04:42	92.668%	0.039	-0.003	0.007	0.040	0.046	88.165%	87.641%
2	16:05:02	94.429%	0.034	-0.000	-0.003	0.031	0.065	89.468%	89.693%
3	16:05:21	93.993%	0.023	-0.012	-0.013	0.013	0.036	91.534%	91.446%
x		93.697%	0.032	-0.005	-0.003	0.028	0.049	89.722%	89.593%
σ		0.917%	0.008	0.006	0.010	0.014	0.015	1.699%	1.905%
%RSD		0.979	26.450	114.000	347.900	49.200	30.270	1.893	2.126
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:04:42	0.021	0.015	0.033	86.579%				
2	16:05:02	0.019	0.018	0.035	86.672%				
3	16:05:21	0.018	0.017	0.043	84.546%				
x		0.019	0.016	0.037	85.932%				
σ		0.002	0.001	0.005	1.202%				
%RSD		8.393	7.731	14.560	1.398				

180-43409-D-1-A @10 5/1/2015 4:08:14 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	84.067%	-0.007	197.600	209.100	0.000	184500.000	28160.000	28620.000
2	16:08:53	79.817%	-0.042	195.700	197.300	0.000	185700.000	28530.000	28410.000
3	16:09:12	76.570%	0.039	200.500	201.800	0.000	178400.000	27160.000	27970.000
X		80.151%	-0.004	197.900	202.700	0.000	182900.000	27950.000	28330.000
σ		3.760%	0.041	2.424	5.981	0.000	3947.000	709.800	333.500
%RSD		4.691	1133.000	1.225	2.950	0.000	2.159	2.539	1.177
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	449.100	1728.000	0.000	5378.000	21730.000	22290.000	83.448%	7.066
2	16:08:53	437.500	1617.000	0.000	5508.000	22080.000	22800.000	78.771%	7.874
3	16:09:12	448.300	1663.000	0.000	5510.000	22470.000	22870.000	75.145%	7.498
X		445.000	1670.000	0.000	5465.000	22090.000	22650.000	79.121%	7.479
σ		6.464	55.820	0.000	75.390	368.100	313.900	4.162%	0.405
%RSD		1.453	3.344	0.000	1.379	1.666	1.386	5.261	5.408
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	2.591	3.694	610.400	7891.000	7797.000	2.842	2.001	2.310
2	16:08:53	2.510	3.767	620.900	8000.000	7840.000	2.931	1.946	2.282
3	16:09:12	2.272	3.762	638.300	8115.000	8062.000	2.970	1.944	2.387
X		2.458	3.741	623.200	8002.000	7900.000	2.914	1.964	2.326
σ		0.166	0.041	14.080	111.900	142.500	0.066	0.033	0.054
%RSD		6.737	1.084	2.260	1.399	1.804	2.264	1.658	2.321
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	1.060	16.390	15.940	1.734	-0.158	0.785	0.000	196.300
2	16:08:53	1.103	15.600	16.580	1.882	-0.126	0.564	0.000	196.300
3	16:09:12	1.195	16.600	16.150	1.724	-0.085	0.816	0.000	195.200
X		1.119	16.200	16.220	1.780	-0.123	0.722	0.000	195.900
σ		0.069	0.529	0.325	0.089	0.037	0.137	0.000	0.650
%RSD		6.138	3.266	2.000	4.987	29.670	19.030	0.000	0.332
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	77.980%	0.343	0.370	76.637%	-0.082	-0.083	0.051	0.045
2	16:08:53	77.904%	0.363	0.382	75.032%	-0.078	-0.087	0.056	0.030
3	16:09:12	76.122%	0.388	0.367	73.575%	-0.083	-0.082	0.028	0.022
X		77.336%	0.365	0.373	75.082%	-0.081	-0.084	0.045	0.032
σ		1.051%	0.023	0.008	1.532%	0.002	0.003	0.015	0.012
%RSD		1.360	6.209	2.082	2.040	2.818	3.338	32.670	36.720
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:08:33	74.766%	0.386	0.013	0.002	12.690	12.550	79.653%	80.629%
2	16:08:53	74.419%	0.390	0.007	0.003	12.700	12.780	81.033%	81.412%
3	16:09:12	74.872%	0.313	0.004	0.002	12.230	12.460	81.957%	82.390%
X		74.686%	0.363	0.008	0.002	12.540	12.590	80.881%	81.477%
σ		0.237%	0.043	0.004	0.000	0.268	0.163	1.160%	0.883%
%RSD		0.317	11.960	53.480	20.160	2.136	1.298	1.434	1.083
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:08:33	0.007	0.009	0.939	80.565%				
2	16:08:53	0.010	0.012	1.015	75.295%				
3	16:09:12	0.011	0.009	1.065	74.563%				
X		0.010	0.010	1.006	76.808%				
σ		0.002	0.002	0.064	3.274%				
%RSD		23.040	15.200	6.318	4.263				

180-43409-D-2-A @10 5/1/2015 4:12:02 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	76.769%	-0.041	85.660	84.680	0.000	219700.000	26660.000	27450.000
2	16:12:41	76.065%	-0.041	84.920	83.330	0.000	221200.000	27090.000	27250.000
3	16:13:00	76.260%	-0.014	85.070	83.100	0.000	220500.000	26580.000	26400.000
X		76.364%	-0.032	85.220	83.700	0.000	220500.000	26770.000	27030.000
σ		0.363%	0.016	0.392	0.852	0.000	746.900	278.700	559.700
%RSD		0.476	48.130	0.460	1.017	0.000	0.339	1.041	2.070
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	0.078	360.000	0.000	7836.000	9782.000	9494.000	81.895%	0.270
2	16:12:41	-0.479	360.100	0.000	7915.000	9826.000	9548.000	79.746%	0.330
3	16:13:00	-0.312	344.100	0.000	7825.000	9956.000	9749.000	75.255%	0.380
X		-0.238	354.700	0.000	7859.000	9855.000	9597.000	78.965%	0.327
σ		0.286	9.220	0.000	49.210	90.640	134.400	3.388%	0.055
%RSD		120.100	2.599	0.000	0.626	0.920	1.401	4.291	16.850
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	0.130	0.341	12.400	549.500	561.400	0.194	0.095	1.464
2	16:12:41	0.101	0.328	12.380	544.700	540.900	0.188	0.089	1.568
3	16:13:00	-0.054	0.388	12.920	571.700	560.600	0.214	0.087	1.514
X		0.059	0.353	12.560	555.300	554.300	0.199	0.090	1.515
σ		0.099	0.031	0.308	14.360	11.610	0.014	0.004	0.052
%RSD		168.500	8.866	2.449	2.586	2.094	6.960	4.738	3.421
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	-0.163	-0.293	-0.310	0.377	-0.159	1.190	0.000	165.700
2	16:12:41	-0.143	-0.236	-0.463	0.466	-0.102	1.029	0.000	166.300
3	16:13:00	-0.142	-0.228	-0.383	0.637	0.187	1.349	0.000	166.500
X		-0.149	-0.253	-0.385	0.493	-0.025	1.190	0.000	166.100
σ		0.011	0.036	0.077	0.132	0.186	0.160	0.000	0.405
%RSD		7.664	14.080	19.900	26.810	751.700	13.450	0.000	0.244
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	79.103%	0.139	0.112	76.587%	-0.091	-0.095	-0.001	0.000
2	16:12:41	78.966%	0.149	0.143	76.449%	-0.085	-0.092	0.024	0.010
3	16:13:00	80.594%	0.148	0.131	76.774%	-0.082	-0.085	0.037	0.014
X		79.554%	0.145	0.129	76.603%	-0.086	-0.091	0.020	0.008
σ		0.903%	0.006	0.016	0.163%	0.004	0.005	0.019	0.007
%RSD		1.135	3.830	12.270	0.213	4.895	5.643	95.600	84.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:12:21	77.322%	-0.057	-0.041	-0.044	7.058	6.917	83.464%	83.944%
2	16:12:41	77.407%	-0.063	-0.051	-0.038	6.970	7.110	85.208%	87.082%
3	16:13:00	79.223%	-0.040	-0.054	-0.039	7.029	6.811	85.766%	87.096%
X		77.984%	-0.053	-0.049	-0.040	7.019	6.946	84.813%	86.041%
σ		1.074%	0.012	0.007	0.003	0.045	0.152	1.201%	1.816%
%RSD		1.377	21.900	13.570	8.559	0.638	2.185	1.416	2.110
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:12:21	-0.001	0.002	0.106	78.450%				
2	16:12:41	0.005	0.001	0.109	75.886%				
3	16:13:00	0.003	0.004	0.126	73.926%				
X		0.002	0.002	0.113	76.087%				
σ		0.003	0.001	0.011	2.269%				
%RSD		144.400	62.220	9.379	2.982				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	69.647%	0.008	0.967	1.300	0.000	2061.000	325.900	334.200
2	16:16:29	63.027%	-0.018	1.454	1.067	0.000	2146.000	341.200	342.900
3	16:16:48	56.764%	-0.013	1.977	1.076	0.000	2110.000	325.300	340.600
X		63.146%	-0.008	1.466	1.148	0.000	2106.000	330.800	339.200
σ		6.442%	0.014	0.505	0.132	0.000	42.900	9.016	4.477
%RSD		10.202	173.100	34.480	11.510	0.000	2.038	2.726	1.320
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	274.700	5731.000	0.000	1679.000	2621.000	2601.000	49.503%	20.630
2	16:16:29	283.400	5897.000	0.000	1657.000	2807.000	2661.000	48.686%	19.690
3	16:16:48	278.000	5863.000	0.000	1687.000	2748.000	2739.000	45.586%	21.140
X		278.700	5830.000	0.000	1674.000	2725.000	2667.000	47.925%	20.490
σ		4.366	87.880	0.000	15.300	94.750	69.260	2.066%	0.734
%RSD		1.566	1.507	0.000	0.914	3.476	2.597	4.311	3.581
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	-1.211	0.624	12.010	410.200	386.100	0.205	0.066	0.115
2	16:16:29	0.427	0.562	11.490	369.300	369.700	0.200	0.068	0.093
3	16:16:48	0.813	0.554	11.870	414.800	380.200	0.229	0.060	0.153
X		0.010	0.580	11.790	398.100	378.700	0.211	0.065	0.120
σ		1.075	0.038	0.271	25.040	8.287	0.015	0.004	0.030
%RSD		11130.000	6.601	2.301	6.291	2.188	7.235	6.501	25.120
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	0.012	2.362	2.786	-0.834	-0.477	-0.028	0.000	24.380
2	16:16:29	0.091	2.449	2.714	-0.448	-0.326	0.158	0.000	24.690
3	16:16:48	0.031	2.543	2.690	-0.277	-0.332	0.158	0.000	24.430
X		0.045	2.451	2.730	-0.519	-0.378	0.096	0.000	24.500
σ		0.042	0.090	0.050	0.285	0.086	0.107	0.000	0.165
%RSD		93.010	3.688	1.818	54.910	22.660	111.500	0.000	0.675
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	59.510%	0.069	0.072	60.300%	-0.088	-0.085	-0.040	-0.016
2	16:16:29	58.155%	0.081	0.071	58.489%	-0.086	-0.088	0.002	-0.005
3	16:16:48	58.150%	0.067	0.039	59.571%	-0.078	-0.088	0.000	0.000
X		58.605%	0.072	0.061	59.453%	-0.084	-0.087	-0.013	-0.007
σ		0.784%	0.007	0.018	0.911%	0.005	0.002	0.024	0.009
%RSD		1.337	10.280	30.570	1.533	6.363	2.083	187.700	118.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:09	62.316%	-0.014	0.167	0.170	72.780	72.590	71.481%	73.079%
2	16:16:29	62.327%	0.010	0.154	0.137	72.430	72.840	73.271%	74.787%
3	16:16:48	63.045%	-0.013	0.139	0.140	70.010	71.110	73.554%	74.909%
X		62.563%	-0.005	0.153	0.149	71.740	72.180	72.769%	74.258%
σ		0.418%	0.013	0.014	0.018	1.505	0.935	1.124%	1.023%
%RSD		0.667	246.200	9.159	12.260	2.098	1.295	1.545	1.377
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:16:09	0.012	0.007	0.288	67.104%				
2	16:16:29	0.009	0.009	0.286	68.814%				
3	16:16:48	0.008	0.012	0.288	69.745%				
X		0.010	0.009	0.287	68.554%				
σ		0.002	0.002	0.002	1.340%				
%RSD		21.960	25.150	0.564	1.954				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	62.336%	0.050	3.242	2.416	0.000	3268.000	479.500	504.600
2	16:20:18	57.181%	0.060	2.392	2.471	0.000	3468.000	495.800	497.900
3	16:20:37	51.344%	0.033	1.984	2.358	0.000	3342.000	529.800	522.800
X		56.954%	0.048	2.539	2.415	0.000	3359.000	501.700	508.400
σ		5.500%	0.014	0.642	0.056	0.000	100.800	25.630	12.870
%RSD		9.656	28.630	25.280	2.326	0.000	3.001	5.108	2.531
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	619.200	6355.000	0.000	1902.000	2331.000	2394.000	46.424%	28.250
2	16:20:18	625.900	6227.000	0.000	1804.000	2375.000	2380.000	42.783%	29.360
3	16:20:37	646.200	6430.000	0.000	1892.000	2452.000	2428.000	41.971%	28.660
X		630.400	6337.000	0.000	1866.000	2386.000	2401.000	43.726%	28.760
σ		14.040	103.100	0.000	53.970	61.360	24.890	2.371%	0.564
%RSD		2.227	1.626	0.000	2.892	2.571	1.037	5.423	1.960
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	0.615	0.838	12.520	786.800	799.800	0.125	0.007	0.079
2	16:20:18	-0.133	0.801	12.990	815.100	826.800	0.133	0.071	0.060
3	16:20:37	0.467	0.780	12.240	803.400	800.300	0.158	0.003	0.106
X		0.316	0.807	12.580	801.800	809.000	0.139	0.027	0.082
σ		0.396	0.029	0.377	14.220	15.440	0.017	0.038	0.023
%RSD		125.200	3.648	2.999	1.773	1.909	12.250	142.000	28.240
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	-0.011	4.838	4.954	-0.877	-0.558	0.237	0.000	37.420
2	16:20:18	0.059	5.469	4.960	-0.044	-0.384	0.046	0.000	37.670
3	16:20:37	-0.010	5.567	5.115	-0.358	-0.317	0.030	0.000	37.630
X		0.013	5.292	5.010	-0.426	-0.420	0.105	0.000	37.570
σ		0.040	0.396	0.091	0.421	0.124	0.115	0.000	0.133
%RSD		318.000	7.479	1.823	98.740	29.640	110.200	0.000	0.354
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	57.455%	-0.004	0.027	58.317%	-0.083	-0.081	-0.002	0.018
2	16:20:18	55.908%	0.011	0.011	56.309%	-0.074	-0.076	-0.036	-0.017
3	16:20:37	54.193%	0.033	0.021	54.851%	-0.070	-0.084	-0.039	-0.013
X		55.852%	0.013	0.020	56.492%	-0.076	-0.080	-0.025	-0.004
σ		1.631%	0.019	0.008	1.740%	0.007	0.004	0.020	0.019
%RSD		2.921	142.300	41.130	3.080	8.918	5.529	78.990	470.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:19:59	60.381%	-0.044	0.048	0.047	55.320	55.200	70.722%	72.385%
2	16:20:18	60.077%	-0.019	0.049	0.051	54.470	54.430	72.405%	73.542%
3	16:20:37	59.539%	-0.035	0.055	0.052	55.140	55.890	71.511%	73.783%
X		59.999%	-0.033	0.051	0.050	54.980	55.170	71.546%	73.236%
σ		0.426%	0.013	0.004	0.002	0.449	0.729	0.842%	0.747%
%RSD		0.710	39.280	7.961	4.544	0.817	1.321	1.177	1.020
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:19:59	0.033	0.030	1.678	66.639%				
2	16:20:18	0.033	0.030	1.707	67.721%				
3	16:20:37	0.034	0.029	1.668	68.813%				
X		0.033	0.030	1.684	67.724%				
σ		0.001	0.001	0.020	1.087%				
%RSD		2.212	2.246	1.215	1.604				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	114.345%	0.998	23.780	23.000	0.000	508.700	495.700	508.200
2	16:30:57	108.952%	1.272	25.010	23.170	0.000	502.900	502.200	517.100
3	16:31:16	114.444%	1.109	24.110	21.140	0.000	470.000	486.400	494.300
X		112.580%	112.616%	121.501%	112.169%	0.000	98.775%	98.952%	101.313%
σ		3.143%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.791	12.280	2.607	5.018	0.000	4.221	1.603	2.272
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	35.680	63.780	0.000	482.500	476.700	451.700	120.009%	4.761
2	16:30:57	36.020	77.550	0.000	489.900	458.000	455.600	116.007%	5.605
3	16:31:16	33.770	50.160	0.000	494.600	501.700	457.900	112.817%	5.952
X		117.187%	12.766%	0.000	97.805%	95.760%	91.019%	116.278%	108.782%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.604%	n/a
%RSD		3.440	21.450	0.000	1.247	4.586	0.686	3.099	11.270
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	1.176	2.036	4.767	48.830	53.780	0.504	0.957	2.128
2	16:30:57	1.131	2.075	4.934	52.300	53.390	0.544	1.058	2.198
3	16:31:16	1.186	2.167	4.982	54.290	52.930	0.532	1.005	2.168
X		116.433%	104.643%	97.885%	103.609%	106.730%	105.326%	100.658%	108.235%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.487	3.223	2.309	5.334	0.799	3.851	4.991	1.635
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	2.119	5.693	5.699	1.208	5.278	5.689	0.000	4.688
2	16:30:57	2.161	5.518	5.753	1.186	5.265	5.483	0.000	4.731
3	16:31:16	2.199	5.784	5.602	1.299	5.337	5.716	0.000	4.746
X		107.981%	113.294%	113.689%	123.104%	105.872%	112.593%	0.000	94.434%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.864	2.390	1.347	4.863	0.725	2.264	0.000	0.646
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	106.647%	4.557	4.646	97.604%	1.027	1.085	1.138	1.065
2	16:30:57	107.118%	4.593	4.740	96.993%	1.075	1.066	1.074	1.074
3	16:31:16	107.149%	4.634	4.576	97.248%	1.044	1.023	1.161	1.094
X		106.972%	91.891%	93.081%	97.282%	104.875%	105.760%	112.435%	107.797%
σ		0.281%	n/a	n/a	0.307%	n/a	n/a	n/a	n/a
%RSD		0.263	0.835	1.765	0.315	2.286	2.999	3.979	1.382
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:30:37	90.317%	4.680	1.844	1.902	10.620	10.090	86.006%	85.324%
2	16:30:57	91.073%	5.665	1.826	1.925	10.390	10.300	88.145%	87.261%
3	16:31:16	91.256%	4.696	1.907	1.865	10.340	10.160	88.634%	87.977%
X		90.882%	100.271%	92.940%	94.863%	104.509%	101.820%	87.595%	86.854%
σ		0.498%	n/a	n/a	n/a	n/a	n/a	1.397%	1.372%
%RSD		0.548	11.250	2.273	1.600	1.447	1.026	1.595	1.580
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:30:37	0.969	0.999	1.079	84.517%				
2	16:30:57	1.055	1.024	1.095	84.521%				
3	16:31:16	1.028	1.020	1.080	85.119%				
X		101.712%	101.423%	108.428%	84.719%				
σ		n/a	n/a	n/a	0.346%				
%RSD		4.294	1.360	0.825	0.409				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	127.650%	-0.052	0.201	0.079	0.000	-4.569	0.087	-0.079
2	16:34:47	116.972%	-0.042	0.175	0.098	0.000	-5.275	-0.216	-0.335
3	16:35:06	112.745%	-0.059	0.429	0.002	0.000	-5.319	-0.268	-0.313
X		119.123%	-0.051	0.269	0.060	0.000	-5.054	-0.133	-0.242
σ		7.682%	0.009	0.140	0.051	0.000	0.421	0.192	0.142
%RSD		6.449	16.970	52.150	85.450	0.000	8.333	144.700	58.490
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	3.059	-487.100	0.000	-2.739	-9.057	-10.980	115.074%	-0.097
2	16:34:47	3.065	-487.100	0.000	-3.020	-12.770	-10.580	113.046%	-0.079
3	16:35:06	3.426	-486.500	0.000	-1.598	-11.030	-10.660	107.422%	-0.096
X		3.184	-486.900	0.000	-2.452	-10.950	-10.740	111.847%	-0.091
σ		0.210	0.360	0.000	0.753	1.856	0.213	3.964%	0.010
%RSD		6.604	0.074	0.000	30.720	16.950	1.979	3.544	11.170
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	-0.010	-0.009	-0.003	0.500	1.310	-0.000	-0.068	-0.172
2	16:34:47	0.003	0.011	-0.012	1.813	1.125	-0.002	-0.060	-0.158
3	16:35:06	-0.005	-0.016	-0.006	2.070	1.154	-0.001	-0.062	-0.183
X		-0.004	-0.005	-0.007	1.461	1.196	-0.001	-0.063	-0.171
σ		0.006	0.014	0.004	0.842	0.100	0.001	0.004	0.012
%RSD		163.900	303.200	58.330	57.640	8.330	102.500	6.304	7.278
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	-0.234	-0.586	-0.728	-0.017	0.033	0.112	0.000	0.000
2	16:34:47	-0.225	-0.710	-0.753	0.020	-0.141	0.136	0.000	0.006
3	16:35:06	-0.200	-0.622	-0.695	0.029	-0.206	0.152	0.000	0.000
X		-0.220	-0.639	-0.726	0.011	-0.105	0.133	0.000	0.002
σ		0.017	0.063	0.029	0.025	0.123	0.020	0.000	0.003
%RSD		7.834	9.924	4.009	231.700	117.700	14.970	0.000	161.400
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	97.796%	0.015	-0.002	99.111%	-0.083	-0.087	0.063	0.043
2	16:34:47	97.654%	-0.007	-0.013	98.637%	-0.086	-0.088	0.060	0.039
3	16:35:06	98.225%	0.006	0.012	98.246%	-0.080	-0.085	0.060	0.041
X		97.892%	0.005	-0.001	98.665%	-0.083	-0.087	0.061	0.041
σ		0.297%	0.012	0.013	0.433%	0.003	0.001	0.002	0.002
%RSD		0.303	243.700	1542.000	0.439	3.241	1.583	2.802	4.452
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:28	91.863%	-0.125	-0.059	-0.059	0.706	0.782	85.500%	85.028%
2	16:34:47	92.157%	-0.116	-0.054	-0.065	0.739	0.742	87.908%	86.978%
3	16:35:06	92.823%	-0.126	-0.059	-0.068	0.688	0.813	89.043%	88.003%
X		92.281%	-0.122	-0.057	-0.064	0.711	0.779	87.484%	86.670%
σ		0.492%	0.006	0.003	0.004	0.026	0.036	1.809%	1.511%
%RSD		0.533	4.619	4.385	6.840	3.637	4.604	2.068	1.744
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:34:28	0.007	0.008	-0.016	84.697%				
2	16:34:47	0.003	0.006	-0.016	85.306%				
3	16:35:06	0.007	0.009	-0.013	83.625%				
X		0.006	0.008	-0.015	84.543%				
σ		0.003	0.002	0.002	0.851%				
%RSD		44.480	21.180	13.310	1.007				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	58.925%	47.960	898.000	895.600	0.000	39520.000	40570.000	43010.000
2	16:38:36	58.980%	49.400	974.600	909.000	0.000	40790.000	41860.000	41120.000
3	16:38:55	55.192%	48.990	956.500	889.200	0.000	41350.000	42310.000	44370.000
X		57.699%	48.780	943.000	897.900	0.000	40550.000	41580.000	42830.000
σ		2.171%	0.746	40.030	10.100	0.000	936.200	901.700	1635.000
%RSD		3.763	1.529	4.245	1.124	0.000	2.309	2.169	3.816
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	1695.000	8290.000	0.000	47690.000	51200.000	51920.000	48.730%	1033.000
2	16:38:36	1645.000	7900.000	0.000	47780.000	51120.000	51320.000	46.272%	1036.000
3	16:38:55	1738.000	8210.000	0.000	49690.000	51810.000	51120.000	44.096%	1007.000
X		1693.000	8133.000	0.000	48390.000	51380.000	51450.000	46.366%	1025.000
σ		46.710	205.800	0.000	1129.000	377.000	419.400	2.318%	15.990
%RSD		2.760	2.530	0.000	2.333	0.734	0.815	5.000	1.560
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	511.700	206.700	496.300	1013.000	1086.000	493.900	490.400	249.100
2	16:38:36	514.700	208.500	518.800	1064.000	1101.000	508.300	521.900	259.000
3	16:38:55	523.800	204.900	512.400	1035.000	1119.000	518.700	503.700	255.700
X		516.700	206.700	509.200	1037.000	1102.000	507.000	505.400	254.600
σ		6.265	1.806	11.560	25.480	16.330	12.450	15.820	5.042
%RSD		1.212	0.874	2.270	2.456	1.482	2.456	3.130	1.980
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	247.100	499.800	506.600	37.040	10.150	10.120	0.000	920.100
2	16:38:36	250.400	510.100	506.600	37.710	9.969	9.918	0.000	929.700
3	16:38:55	251.700	509.200	512.400	36.670	9.611	9.811	0.000	926.500
X		249.700	506.300	508.500	37.140	9.909	9.949	0.000	925.400
σ		2.356	5.714	3.329	0.529	0.273	0.156	0.000	4.874
%RSD		0.943	1.128	0.655	1.424	2.754	1.565	0.000	0.527
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	57.663%	1007.000	980.700	55.693%	49.160	49.030	49.280	45.280
2	16:38:36	56.673%	1009.000	1000.000	54.215%	49.300	48.920	50.020	45.890
3	16:38:55	57.546%	1003.000	993.700	55.206%	48.930	48.630	50.580	45.190
X		57.294%	1006.000	991.600	55.038%	49.130	48.860	49.960	45.460
σ		0.541%	3.255	10.020	0.754%	0.187	0.212	0.652	0.383
%RSD		0.945	0.324	1.010	1.369	0.381	0.433	1.306	0.841
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:38:17	58.953%	1868.000	470.400	469.900	1839.000	1816.000	70.316%	72.162%
2	16:38:36	58.979%	1857.000	480.200	479.000	1837.000	1813.000	70.142%	71.879%
3	16:38:55	58.849%	1872.000	477.800	487.000	1850.000	1813.000	70.536%	72.703%
X		58.927%	1866.000	476.100	478.600	1842.000	1814.000	70.331%	72.248%
σ		0.069%	7.862	5.124	8.525	6.624	1.842	0.197%	0.419%
%RSD		0.117	0.421	1.076	1.781	0.360	0.102	0.281	0.579
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:38:17	53.550	54.290	22.760	60.725%				
2	16:38:36	54.420	55.590	23.160	60.379%				
3	16:38:55	53.980	55.030	22.900	61.541%				
X		53.980	54.970	22.940	60.882%				
σ		0.436	0.652	0.206	0.596%				
%RSD		0.808	1.186	0.898	0.980				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	57.112%	0.023	70.940	74.110	0.000	136900.000	142500.000	143700.000
2	16:42:25	56.621%	0.005	70.770	68.930	0.000	142300.000	143200.000	144700.000
3	16:42:44	50.444%	0.014	72.160	73.170	0.000	141400.000	144300.000	148100.000
X		54.726%	0.014	71.290	72.070	0.000	140200.000	143300.000	145500.000
σ		3.716%	0.009	0.763	2.762	0.000	2897.000	880.000	2296.000
%RSD		6.791	62.630	1.071	3.833	0.000	2.067	0.614	1.578
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	4.897	14480.000	0.000	708.800	78410.000	81520.000	47.875%	2.173
2	16:42:25	4.337	14380.000	0.000	717.900	80020.000	81060.000	46.536%	1.753
3	16:42:44	4.579	14430.000	0.000	712.400	79440.000	81690.000	45.828%	1.867
X		4.604	14430.000	0.000	713.000	79290.000	81420.000	46.746%	1.931
σ		0.281	49.190	0.000	4.587	816.700	330.900	1.040%	0.217
%RSD		6.110	0.341	0.000	0.643	1.030	0.406	2.224	11.250
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	5.765	1.289	681.800	23.460	135.100	0.651	4.621	2.470
2	16:42:25	6.736	1.232	683.800	23.980	126.200	0.593	4.147	2.333
3	16:42:44	7.755	1.369	660.500	20.630	120.000	0.552	4.140	2.483
X		6.752	1.296	675.400	22.690	127.100	0.599	4.303	2.429
σ		0.995	0.069	12.890	1.804	7.602	0.050	0.276	0.083
%RSD		14.740	5.315	1.909	7.952	5.982	8.378	6.410	3.418
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	1.561	3.150	2.776	1.748	1.174	2.724	0.000	840.700
2	16:42:25	1.516	3.328	2.560	0.985	1.189	2.253	0.000	849.200
3	16:42:44	1.634	3.009	2.617	1.600	1.374	2.559	0.000	847.800
X		1.570	3.162	2.651	1.444	1.246	2.512	0.000	845.900
σ		0.059	0.160	0.112	0.405	0.112	0.239	0.000	4.597
%RSD		3.781	5.057	4.217	28.020	8.972	9.522	0.000	0.543
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	58.299%	8.036	8.394	55.498%	-0.084	-0.079	0.208	0.171
2	16:42:25	56.655%	7.228	7.543	53.842%	-0.075	-0.083	0.169	0.163
3	16:42:44	55.913%	6.587	7.117	53.350%	-0.078	-0.080	0.177	0.161
X		56.955%	7.284	7.684	54.230%	-0.079	-0.081	0.185	0.165
σ		1.221%	0.726	0.650	1.125%	0.005	0.002	0.021	0.005
%RSD		2.144	9.972	8.462	2.075	5.799	2.743	11.180	3.159
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:42:06	59.054%	1.048	0.075	0.117	141.700	143.200	69.599%	70.795%
2	16:42:25	58.443%	0.808	0.076	0.111	142.600	143.000	70.952%	72.391%
3	16:42:44	58.151%	0.588	0.081	0.107	142.100	141.700	70.802%	72.954%
X		58.549%	0.815	0.077	0.112	142.100	142.600	70.451%	72.047%
σ		0.461%	0.230	0.003	0.005	0.431	0.856	0.742%	1.120%
%RSD		0.787	28.270	4.105	4.814	0.303	0.600	1.053	1.555
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:42:06	0.216	0.215	0.106	58.549%				
2	16:42:25	0.167	0.198	0.099	59.056%				
3	16:42:44	0.157	0.175	0.101	60.638%				
X		0.180	0.196	0.102	59.414%				
σ		0.031	0.020	0.004	1.090%				
%RSD		17.480	10.120	3.560	1.834				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	76.309%	-0.028	16.940	14.900	0.000	28110.000	29420.000	29920.000
2	16:46:14	69.604%	-0.068	14.750	14.680	0.000	28970.000	29540.000	29850.000
3	16:46:34	66.422%	-0.052	16.510	15.350	0.000	29600.000	30340.000	30410.000
X		70.779%	-0.049	16.070	14.980	0.000	28890.000	29770.000	30060.000
σ		5.047%	0.020	1.156	0.342	0.000	749.500	501.500	305.700
%RSD		7.130	41.280	7.198	2.282	0.000	2.594	1.685	1.017
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	-0.912	2540.000	0.000	132.900	14890.000	14350.000	70.549%	0.316
2	16:46:14	-1.130	2584.000	0.000	141.200	15590.000	15820.000	62.216%	0.338
3	16:46:34	-1.005	2569.000	0.000	144.500	16200.000	15800.000	59.399%	0.193
X		-1.016	2564.000	0.000	139.500	15560.000	15330.000	64.055%	0.282
σ		0.109	22.440	0.000	5.988	654.700	843.000	5.798%	0.078
%RSD		10.760	0.875	0.000	4.291	4.208	5.501	9.051	27.720
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	1.401	0.308	124.100	3.925	27.370	0.122	0.828	0.334
2	16:46:14	0.999	0.343	133.300	4.355	26.090	0.127	0.951	0.368
3	16:46:34	1.450	0.358	134.500	5.102	24.900	0.100	0.798	0.387
X		1.283	0.336	130.600	4.460	26.120	0.116	0.859	0.363
σ		0.248	0.025	5.706	0.596	1.231	0.014	0.081	0.027
%RSD		19.300	7.570	4.369	13.350	4.714	12.260	9.452	7.394
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	0.099	-0.282	-0.350	0.605	-0.220	0.393	0.000	177.200
2	16:46:14	0.184	-0.255	-0.466	0.225	0.211	0.436	0.000	177.800
3	16:46:34	0.184	-0.305	-0.376	0.300	0.170	0.523	0.000	178.900
X		0.156	-0.281	-0.397	0.377	0.053	0.451	0.000	178.000
σ		0.049	0.025	0.061	0.202	0.237	0.066	0.000	0.885
%RSD		31.700	8.847	15.380	53.480	444.000	14.740	0.000	0.497
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	72.230%	1.261	1.347	72.060%	-0.086	-0.085	0.065	0.047
2	16:46:14	70.927%	1.387	1.344	69.899%	-0.082	-0.090	0.035	0.033
3	16:46:34	70.412%	1.202	1.277	69.022%	-0.083	-0.080	0.030	0.002
X		71.190%	1.284	1.322	70.327%	-0.084	-0.085	0.043	0.028
σ		0.937%	0.094	0.039	1.564%	0.002	0.005	0.019	0.023
%RSD		1.317	7.356	2.984	2.223	2.484	5.898	43.630	85.050
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:55	73.130%	0.000	-0.026	-0.024	28.300	27.770	81.057%	81.570%
2	16:46:14	72.476%	-0.009	-0.030	-0.026	28.140	28.380	81.536%	83.144%
3	16:46:34	72.623%	-0.037	-0.036	-0.031	28.920	27.770	81.722%	82.969%
X		72.743%	-0.015	-0.030	-0.027	28.450	27.970	81.438%	82.561%
σ		0.343%	0.020	0.005	0.004	0.412	0.354	0.343%	0.863%
%RSD		0.472	129.900	16.310	13.010	1.448	1.264	0.421	1.045
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:45:55	0.056	0.048	0.005	75.947%				
2	16:46:14	0.049	0.050	0.008	75.326%				
3	16:46:34	0.049	0.051	0.006	75.249%				
X		0.052	0.049	0.006	75.507%				
σ		0.004	0.002	0.002	0.382%				
%RSD		8.333	3.341	28.540	0.506				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	114.537%	103.300	98.060	93.090	0.000	46390.000	46470.000	46090.000
2	16:49:52	104.912%	105.200	98.480	97.350	0.000	47700.000	48260.000	49260.000
3	16:50:11	102.513%	105.800	99.100	96.690	0.000	47410.000	47360.000	49790.000
X		107.321%	104.766%	98.547%	95.709%	0.000	94.335%	94.728%	96.759%
σ		6.364%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		5.930	1.278	0.535	2.396	0.000	1.465	1.891	4.132
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	468.200	4666.000	0.000	46990.000	46270.000	46900.000	109.615%	97.100
2	16:49:52	497.700	4919.000	0.000	51030.000	49090.000	49080.000	102.094%	101.700
3	16:50:11	489.400	4727.000	0.000	50520.000	49080.000	49690.000	100.658%	105.300
X		97.018%	95.413%	0.000	99.019%	96.295%	97.118%	104.122%	101.388%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.811%	n/a
%RSD		3.130	2.765	0.000	4.446	3.375	3.023	4.620	4.064
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	99.380	100.300	476.500	24800.000	24220.000	101.100	105.000	105.300
2	16:49:52	100.800	101.300	491.400	25250.000	24900.000	101.700	104.700	105.300
3	16:50:11	102.400	103.300	493.500	25250.000	24880.000	102.300	103.700	105.500
X		100.851%	101.627%	97.423%	100.402%	98.669%	101.694%	104.501%	105.344%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.478	1.547	1.898	1.039	1.575	0.555	0.663	0.097
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	104.300	99.900	100.500	103.900	104.500	107.400	0.000	99.010
2	16:49:52	105.400	101.700	102.700	105.100	105.600	106.100	0.000	100.200
3	16:50:11	105.800	103.300	104.200	104.100	106.500	106.300	0.000	101.000
X		105.188%	101.661%	102.484%	104.393%	105.532%	106.588%	0.000	100.052%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.732	1.690	1.837	0.599	0.954	0.643	0.000	0.988
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	96.339%	95.460	95.370	90.943%	100.500	101.500	99.230	100.100
2	16:49:52	97.201%	97.880	98.140	90.672%	101.900	101.900	100.600	100.700
3	16:50:11	96.704%	97.970	99.850	90.576%	101.900	101.700	100.300	100.100
X		96.748%	97.107%	97.785%	90.730%	101.425%	101.693%	100.017%	100.305%
σ		0.433%	n/a	n/a	0.191%	n/a	n/a	n/a	n/a
%RSD		0.447	1.466	2.313	0.210	0.829	0.218	0.695	0.362
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:49:33	87.290%	96.890	96.770	96.460	96.660	98.080	86.292%	86.737%
2	16:49:52	87.928%	98.240	97.930	97.350	98.150	98.530	88.188%	87.727%
3	16:50:11	88.695%	97.260	98.160	97.940	98.530	98.630	88.630%	88.840%
X		87.971%	97.464%	97.622%	97.251%	97.781%	98.416%	87.703%	87.768%
σ		0.704%	n/a	n/a	n/a	n/a	n/a	1.242%	1.052%
%RSD		0.800	0.713	0.762	0.768	1.009	0.297	1.416	1.199
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:49:33	103.000	103.500	104.400	76.915%				
2	16:49:52	105.000	106.400	107.500	78.392%				
3	16:50:11	103.500	104.900	106.900	79.576%				
X		103.844%	104.953%	106.256%	78.294%				
σ		n/a	n/a	n/a	1.334%				
%RSD		0.975	1.387	1.553	1.703				

CCB7 5/1/2015 4:56:02 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	113.944%	-0.006	0.776	0.753	0.000	13.570	7.146	6.811
2	16:56:40	113.104%	0.040	0.755	0.733	0.000	12.770	6.278	6.636
3	16:56:59	113.308%	0.013	0.920	0.757	0.000	13.190	5.982	5.992
X		113.452%	0.016	0.817	0.748	0.000	13.180	6.469	6.480
σ		0.438%	0.023	0.090	0.013	0.000	0.397	0.605	0.431
%RSD		0.386	145.500	10.970	1.744	0.000	3.012	9.352	6.656
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	2.338	-480.800	0.000	6.263	12.710	7.856	122.511%	0.066
2	16:56:40	2.129	-480.800	0.000	8.716	10.170	7.789	117.303%	0.056
3	16:56:59	2.573	-478.800	0.000	7.167	18.380	10.930	117.149%	-0.029
X		2.347	-480.100	0.000	7.382	13.760	8.857	118.988%	0.031
σ		0.222	1.188	0.000	1.241	4.202	1.792	3.052%	0.052
%RSD		9.470	0.248	0.000	16.810	30.550	20.240	2.565	167.500
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	0.053	0.017	0.203	9.009	7.169	0.015	0.037	0.528
2	16:56:40	0.048	0.029	0.194	9.426	8.496	0.017	0.048	0.544
3	16:56:59	0.038	0.006	0.195	4.422	5.841	0.021	0.033	0.553
X		0.046	0.017	0.198	7.619	7.168	0.017	0.039	0.542
σ		0.007	0.012	0.005	2.777	1.327	0.003	0.007	0.012
%RSD		16.130	67.800	2.550	36.440	18.520	16.660	18.920	2.305
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	0.565	0.907	0.941	-0.003	0.149	0.106	0.000	0.066
2	16:56:40	0.456	1.077	0.881	0.041	0.105	0.190	0.000	0.070
3	16:56:59	0.538	0.998	1.027	-0.021	0.123	0.021	0.000	0.062
X		0.519	0.994	0.950	0.006	0.125	0.105	0.000	0.066
σ		0.057	0.085	0.073	0.032	0.022	0.085	0.000	0.004
%RSD		10.920	8.557	7.718	560.700	17.600	80.250	0.000	5.882
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	102.858%	0.294	0.291	105.215%	-0.063	-0.060	0.051	0.046
2	16:56:40	103.593%	0.233	0.245	105.834%	-0.066	-0.068	0.046	0.035
3	16:56:59	103.816%	0.236	0.240	106.279%	-0.051	-0.065	0.121	0.088
X		103.422%	0.255	0.259	105.776%	-0.060	-0.064	0.072	0.056
σ		0.501%	0.035	0.028	0.534%	0.008	0.004	0.042	0.028
%RSD		0.485	13.580	10.760	0.505	12.870	6.327	57.550	49.830
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:56:21	95.889%	0.058	0.000	-0.011	0.053	0.034	90.222%	89.110%
2	16:56:40	96.570%	0.045	0.000	0.008	0.066	0.051	92.573%	90.554%
3	16:56:59	97.491%	0.050	-0.005	0.005	0.056	0.045	92.886%	91.987%
X		96.650%	0.051	-0.001	0.001	0.058	0.043	91.894%	90.550%
σ		0.804%	0.007	0.003	0.010	0.007	0.009	1.456%	1.439%
%RSD		0.832	12.830	224.100	1849.000	12.080	19.730	1.584	1.589
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	16:56:21	0.029	0.029	0.037	84.807%				
2	16:56:40	0.035	0.028	0.037	84.425%				
3	16:56:59	0.034	0.032	0.033	84.868%				
X		0.033	0.030	0.036	84.700%				
σ		0.003	0.002	0.002	0.240%				
%RSD		8.897	7.301	5.577	0.284				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	57.998%	50.200	1013.000	1000.000	0.000	199900.000	197900.000	204200.000
2	17:00:32	56.433%	49.620	1023.000	955.100	0.000	201000.000	201300.000	200700.000
3	17:00:51	52.277%	48.080	1002.000	961.500	0.000	194800.000	200500.000	198600.000
X		55.569%	49.300	1012.000	972.200	0.000	198600.000	199900.000	201200.000
σ		2.956%	1.097	10.580	24.350	0.000	3321.000	1789.000	2828.000
%RSD		5.320	2.225	1.045	2.505	0.000	1.672	0.895	1.406
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	1806.000	24580.000	0.000	50890.000	135700.000	138600.000	50.929%	1067.000
2	17:00:32	1749.000	24620.000	0.000	51210.000	138100.000	140100.000	47.604%	1051.000
3	17:00:51	1692.000	23520.000	0.000	50510.000	137700.000	138800.000	45.411%	1049.000
X		1749.000	24240.000	0.000	50870.000	137200.000	139200.000	47.981%	1055.000
σ		56.960	624.300	0.000	352.800	1314.000	825.400	2.778%	9.774
%RSD		3.256	2.576	0.000	0.694	0.958	0.593	5.790	0.926
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	539.800	209.100	1248.000	1091.000	1254.000	515.600	499.800	246.900
2	17:00:32	538.500	208.600	1225.000	1084.000	1210.000	493.100	476.700	239.500
3	17:00:51	539.800	212.500	1226.000	1086.000	1239.000	488.700	477.500	241.100
X		539.400	210.100	1233.000	1087.000	1235.000	499.100	484.700	242.500
σ		0.717	2.113	13.240	3.327	22.720	14.410	13.150	3.887
%RSD		0.133	1.006	1.074	0.306	1.840	2.888	2.713	1.603
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	248.900	471.500	472.700	39.240	10.970	11.830	0.000	1877.000
2	17:00:32	238.400	454.900	457.700	37.580	10.300	11.450	0.000	1814.000
3	17:00:51	237.900	461.300	459.400	37.600	10.730	12.050	0.000	1833.000
X		241.800	462.600	463.300	38.140	10.670	11.780	0.000	1841.000
σ		6.230	8.403	8.191	0.950	0.338	0.307	0.000	32.560
%RSD		2.577	1.817	1.768	2.490	3.168	2.607	0.000	1.769
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	59.230%	1088.000	1085.000	55.010%	49.460	49.500	50.540	44.620
2	17:00:32	59.317%	1059.000	1062.000	54.937%	47.490	47.560	48.170	43.800
3	17:00:51	57.860%	1059.000	1062.000	53.350%	48.520	48.210	49.490	43.780
X		58.802%	1068.000	1069.000	54.432%	48.490	48.420	49.400	44.070
σ		0.817%	16.750	13.570	0.938%	0.987	0.991	1.189	0.479
%RSD		1.389	1.568	1.269	1.723	2.034	2.047	2.407	1.087
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:00:13	58.832%	2007.000	481.000	497.700	2162.000	2126.000	69.386%	70.995%
2	17:00:32	59.814%	1934.000	492.000	490.300	2064.000	2035.000	70.596%	72.708%
3	17:00:51	58.362%	1945.000	492.200	496.000	2089.000	2046.000	71.480%	73.028%
X		59.003%	1962.000	488.400	494.700	2105.000	2069.000	70.487%	72.244%
σ		0.741%	39.650	6.400	3.904	50.890	49.600	1.051%	1.093%
%RSD		1.256	2.021	1.310	0.789	2.417	2.397	1.491	1.513
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:00:13	49.190	49.410	20.060	67.424%				
2	17:00:32	56.890	57.760	24.010	56.758%				
3	17:00:51	57.090	58.150	24.100	57.016%				
X		54.390	55.110	22.720	60.399%				
σ		4.504	4.937	2.308	6.085%				
%RSD		8.280	8.959	10.160	10.075				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	57.197%	47.870	987.300	951.200	0.000	181100.000	188900.000	192500.000
2	17:04:21	50.253%	49.830	1030.000	976.800	0.000	195300.000	195400.000	198400.000
3	17:04:40	48.724%	50.480	999.700	1003.000	0.000	186200.000	193200.000	191200.000
X		52.058%	49.390	1006.000	976.900	0.000	187500.000	192500.000	194000.000
σ		4.515%	1.360	22.030	25.670	0.000	7201.000	3340.000	3858.000
%RSD		8.674	2.753	2.190	2.628	0.000	3.840	1.735	1.988
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	1749.000	23100.000	0.000	49460.000	130400.000	134900.000	47.894%	1011.000
2	17:04:21	1815.000	24740.000	0.000	50350.000	134400.000	135600.000	47.224%	1041.000
3	17:04:40	1711.000	23570.000	0.000	49810.000	133300.000	135900.000	46.437%	1013.000
X		1758.000	23800.000	0.000	49870.000	132700.000	135500.000	47.185%	1022.000
σ		52.600	842.800	0.000	450.700	2079.000	516.600	0.729%	16.790
%RSD		2.991	3.541	0.000	0.904	1.567	0.381	1.545	1.643
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	522.600	204.800	1191.000	1065.000	1224.000	499.200	488.500	243.200
2	17:04:21	540.800	208.400	1177.000	1033.000	1179.000	478.200	476.100	234.600
3	17:04:40	513.000	203.500	1160.000	1016.000	1168.000	474.900	454.700	234.000
X		525.500	205.600	1176.000	1038.000	1190.000	484.100	473.100	237.200
σ		14.150	2.501	15.510	24.810	29.570	13.160	17.130	5.156
%RSD		2.692	1.216	1.319	2.390	2.484	2.718	3.621	2.173
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	245.900	458.600	459.100	37.770	10.250	11.190	0.000	1783.000
2	17:04:21	236.100	457.200	461.200	38.260	10.840	12.250	0.000	1795.000
3	17:04:40	232.200	453.600	448.400	36.830	10.950	11.250	0.000	1797.000
X		238.000	456.500	456.300	37.620	10.680	11.570	0.000	1792.000
σ		7.076	2.604	6.870	0.726	0.379	0.595	0.000	7.272
%RSD		2.973	0.570	1.506	1.931	3.546	5.144	0.000	0.406
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	58.375%	1048.000	1040.000	53.958%	47.620	47.590	48.460	43.370
2	17:04:21	57.389%	1052.000	1058.000	53.702%	47.650	47.770	47.820	44.630
3	17:04:40	56.694%	1058.000	1055.000	52.620%	47.630	47.720	48.520	43.660
X		57.486%	1053.000	1051.000	53.427%	47.630	47.700	48.260	43.880
σ		0.844%	4.649	9.774	0.710%	0.020	0.093	0.389	0.660
%RSD		1.469	0.442	0.930	1.329	0.041	0.195	0.806	1.504
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:04:02	58.729%	1913.000	479.300	477.600	2063.000	2022.000	70.635%	72.045%
2	17:04:21	57.983%	1913.000	478.900	482.100	2058.000	2031.000	70.323%	71.819%
3	17:04:40	57.744%	1923.000	475.500	476.500	2067.000	2033.000	70.426%	72.854%
X		58.152%	1916.000	477.900	478.800	2063.000	2029.000	70.461%	72.239%
σ		0.514%	5.936	2.104	2.974	4.264	5.827	0.159%	0.544%
%RSD		0.884	0.310	0.440	0.621	0.207	0.287	0.225	0.753
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:04:02	55.600	57.150	23.650	56.625%				
2	17:04:21	55.980	57.030	23.820	58.003%				
3	17:04:40	56.210	57.180	23.670	57.908%				
X		55.930	57.120	23.710	57.512%				
σ		0.308	0.079	0.095	0.770%				
%RSD		0.550	0.138	0.402	1.338				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	58.991%	0.002	72.890	73.120	0.000	132200.000	138000.000	143400.000
2	17:08:09	52.842%	0.029	74.710	76.740	0.000	145700.000	150000.000	149600.000
3	17:08:28	54.735%	-0.049	77.100	77.080	0.000	141700.000	144300.000	142700.000
X		55.523%	-0.006	74.900	75.640	0.000	139900.000	144100.000	145300.000
σ		3.150%	0.040	2.111	2.195	0.000	6902.000	6029.000	3813.000
%RSD		5.672	672.300	2.819	2.902	0.000	4.934	4.184	2.625
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	0.795	14500.000	0.000	723.500	79070.000	80590.000	50.401%	1.769
2	17:08:09	1.261	14900.000	0.000	748.300	79890.000	81220.000	49.051%	1.700
3	17:08:28	0.934	14830.000	0.000	756.900	81330.000	81210.000	46.057%	2.154
X		0.997	14750.000	0.000	742.900	80100.000	81010.000	48.503%	1.874
σ		0.239	215.200	0.000	17.320	1143.000	361.900	2.224%	0.245
%RSD		23.990	1.460	0.000	2.331	1.428	0.447	4.584	13.050
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	6.043	1.268	712.300	33.880	138.300	0.708	4.057	2.721
2	17:08:09	7.503	1.319	712.500	29.840	134.500	0.632	4.032	2.539
3	17:08:28	7.750	1.293	722.200	29.950	126.700	0.626	4.376	2.594
X		7.098	1.294	715.700	31.220	133.200	0.655	4.155	2.618
σ		0.922	0.025	5.704	2.302	5.904	0.046	0.192	0.093
%RSD		12.990	1.970	0.797	7.372	4.433	6.961	4.615	3.565
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	1.673	3.587	3.572	0.635	1.166	2.204	0.000	822.000
2	17:08:09	1.550	3.713	3.155	1.319	1.109	2.150	0.000	831.300
3	17:08:28	1.680	3.258	3.328	0.686	1.174	2.249	0.000	825.300
X		1.634	3.519	3.351	0.880	1.150	2.201	0.000	826.200
σ		0.073	0.235	0.210	0.381	0.036	0.050	0.000	4.691
%RSD		4.472	6.670	6.253	43.310	3.102	2.251	0.000	0.568
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	59.351%	8.566	8.796	56.225%	-0.087	-0.089	0.185	0.176
2	17:08:09	58.111%	7.503	8.058	55.606%	-0.082	-0.088	0.141	0.182
3	17:08:28	58.037%	7.119	7.644	54.683%	-0.082	-0.087	0.166	0.159
X		58.500%	7.730	8.166	55.505%	-0.084	-0.088	0.164	0.173
σ		0.738%	0.750	0.583	0.776%	0.003	0.001	0.022	0.012
%RSD		1.262	9.700	7.140	1.398	3.839	1.034	13.190	6.843
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:07:50	60.193%	1.493	0.117	0.142	142.300	143.800	70.597%	72.779%
2	17:08:09	59.576%	1.141	0.102	0.127	143.900	144.100	71.851%	73.785%
3	17:08:28	59.803%	0.836	0.114	0.125	144.300	144.400	72.708%	74.447%
X		59.857%	1.157	0.111	0.131	143.500	144.100	71.719%	73.670%
σ		0.312%	0.329	0.008	0.009	1.031	0.304	1.062%	0.840%
%RSD		0.522	28.440	7.407	6.764	0.718	0.211	1.480	1.140
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:07:50	0.211	0.201	0.059	63.275%				
2	17:08:09	0.202	0.192	0.065	62.896%				
3	17:08:28	0.179	0.188	0.058	62.374%				
X		0.197	0.194	0.061	62.848%				
σ		0.016	0.007	0.004	0.452%				
%RSD		8.276	3.376	6.158	0.720				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	60.930%	-0.068	29.540	25.680	0.000	11650.000	8894.000	8943.000
2	17:11:57	54.685%	0.027	26.090	26.030	0.000	11970.000	9304.000	9409.000
3	17:12:16	48.692%	-0.025	27.480	25.810	0.000	11290.000	8714.000	8905.000
X		54.769%	-0.022	27.710	25.840	0.000	11640.000	8971.000	9086.000
σ		6.120%	0.048	1.735	0.173	0.000	338.800	302.100	280.600
%RSD		11.173	216.900	6.261	0.669	0.000	2.911	3.367	3.089
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	36.850	9786.000	0.000	2455.000	73610.000	76920.000	46.512%	2.135
2	17:11:57	37.850	10300.000	0.000	2575.000	78160.000	79720.000	42.534%	1.993
3	17:12:16	36.590	9829.000	0.000	2474.000	76650.000	77210.000	41.818%	2.029
X		37.100	9973.000	0.000	2501.000	76140.000	77950.000	43.622%	2.053
σ		0.664	287.100	0.000	64.270	2316.000	1541.000	2.529%	0.073
%RSD		1.789	2.879	0.000	2.569	3.042	1.977	5.797	3.571
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	1.083	2.214	555.100	5438.000	5518.000	1.836	2.607	0.765
2	17:11:57	1.672	2.240	560.600	5464.000	5590.000	1.786	2.841	0.891
3	17:12:16	0.080	2.180	565.000	5560.000	5676.000	1.717	2.748	0.901
X		0.945	2.212	560.300	5488.000	5595.000	1.780	2.732	0.852
σ		0.805	0.030	4.966	64.480	79.170	0.060	0.118	0.076
%RSD		85.160	1.365	0.886	1.175	1.415	3.372	4.303	8.922
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	0.710	3.505	3.787	10.230	-0.017	0.788	0.000	408.300
2	17:11:57	0.845	3.859	3.464	10.040	0.024	0.302	0.000	412.400
3	17:12:16	0.689	3.485	3.062	10.220	-0.142	0.468	0.000	412.100
X		0.748	3.616	3.438	10.160	-0.045	0.520	0.000	410.900
σ		0.085	0.210	0.363	0.109	0.087	0.247	0.000	2.255
%RSD		11.340	5.818	10.560	1.072	193.200	47.580	0.000	0.549
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	56.447%	2.395	2.453	56.039%	-0.082	-0.088	-0.052	-0.024
2	17:11:57	54.310%	2.366	2.528	53.782%	-0.086	-0.094	-0.000	0.003
3	17:12:16	53.348%	2.196	2.326	52.107%	-0.080	-0.087	-0.027	-0.026
X		54.702%	2.319	2.436	53.976%	-0.083	-0.090	-0.026	-0.016
σ		1.587%	0.107	0.102	1.974%	0.003	0.004	0.026	0.016
%RSD		2.901	4.634	4.194	3.656	3.681	4.539	98.070	103.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:11:38	59.428%	0.394	0.466	0.521	208.600	207.500	70.173%	72.012%
2	17:11:57	58.052%	0.353	0.463	0.504	210.500	211.200	69.641%	72.103%
3	17:12:16	57.696%	0.242	0.436	0.487	208.500	208.500	70.083%	71.781%
X		58.392%	0.330	0.455	0.504	209.200	209.100	69.965%	71.965%
σ		0.915%	0.079	0.017	0.017	1.124	1.921	0.285%	0.166%
%RSD		1.567	23.950	3.659	3.369	0.537	0.919	0.407	0.230
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:11:38	0.072	0.074	0.127	65.957%				
2	17:11:57	0.078	0.075	0.130	66.051%				
3	17:12:16	0.062	0.069	0.128	66.191%				
X		0.071	0.073	0.128	66.066%				
σ		0.008	0.003	0.001	0.118%				
%RSD		11.040	4.673	1.083	0.178				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	51.106%	0.013	26.850	25.830	0.000	12380.000	9386.000	9455.000
2	17:15:45	47.873%	-0.025	25.680	25.150	0.000	11380.000	8581.000	9102.000
3	17:16:05	51.475%	-0.027	25.210	23.290	0.000	11290.000	8558.000	8598.000
X		50.151%	-0.013	25.920	24.760	0.000	11690.000	8842.000	9052.000
σ		1.982%	0.023	0.847	1.316	0.000	606.500	471.700	431.100
%RSD		3.952	174.900	3.267	5.316	0.000	5.190	5.335	4.763
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	0.159	10470.000	0.000	2542.000	75650.000	77570.000	42.780%	0.997
2	17:15:45	-0.083	9527.000	0.000	2516.000	78830.000	78560.000	39.300%	1.017
3	17:16:05	0.112	9341.000	0.000	2551.000	78320.000	78680.000	37.746%	1.114
X		0.063	9778.000	0.000	2536.000	77600.000	78270.000	39.942%	1.042
σ		0.129	603.100	0.000	18.490	1709.000	609.600	2.578%	0.063
%RSD		205.000	6.168	0.000	0.729	2.202	0.779	6.454	6.002
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	0.886	0.457	424.400	3803.000	3885.000	1.317	2.174	0.448
2	17:15:45	0.561	0.428	450.700	4102.000	4197.000	1.422	2.387	0.510
3	17:16:05	0.170	0.447	450.900	4111.000	4203.000	1.399	2.285	0.513
X		0.539	0.444	442.000	4005.000	4095.000	1.379	2.282	0.490
σ		0.359	0.015	15.260	175.300	181.800	0.055	0.106	0.037
%RSD		66.600	3.307	3.452	4.376	4.440	4.013	4.664	7.447
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	0.418	2.858	2.898	7.590	-0.186	0.474	0.000	413.600
2	17:15:45	0.400	2.818	2.841	8.733	-0.174	0.531	0.000	413.000
3	17:16:05	0.490	2.773	3.060	7.640	-0.281	0.399	0.000	414.600
X		0.436	2.817	2.933	7.988	-0.214	0.468	0.000	413.700
σ		0.048	0.043	0.114	0.646	0.059	0.066	0.000	0.798
%RSD		10.980	1.516	3.873	8.085	27.390	14.100	0.000	0.193
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	52.725%	1.996	1.823	52.753%	-0.090	-0.094	-0.080	-0.067
2	17:15:45	51.613%	1.993	2.049	50.451%	-0.084	-0.091	-0.071	-0.052
3	17:16:05	50.979%	1.824	2.040	50.409%	-0.089	-0.085	-0.035	-0.024
X		51.772%	1.938	1.970	51.204%	-0.088	-0.090	-0.062	-0.048
σ		0.884%	0.098	0.128	1.341%	0.003	0.005	0.024	0.022
%RSD		1.707	5.075	6.473	2.620	3.690	5.415	38.200	45.770
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:15:26	56.600%	0.086	0.273	0.301	199.300	200.200	68.668%	70.287%
2	17:15:45	56.198%	0.028	0.300	0.276	199.600	200.600	68.585%	70.535%
3	17:16:05	55.718%	0.073	0.324	0.298	201.900	201.900	68.150%	69.964%
X		56.172%	0.062	0.299	0.292	200.300	200.900	68.467%	70.262%
σ		0.442%	0.031	0.025	0.014	1.434	0.903	0.279%	0.286%
%RSD		0.787	49.150	8.423	4.763	0.716	0.449	0.407	0.407
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:15:26	0.037	0.040	0.007	62.780%				
2	17:15:45	0.034	0.040	0.004	63.277%				
3	17:16:05	0.036	0.037	0.006	62.419%				
X		0.036	0.039	0.006	62.825%				
σ		0.001	0.002	0.002	0.431%				
%RSD		3.370	4.968	33.730	0.686				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	54.159%	0.028	31.010	30.240	0.000	19000.000	7915.000	7917.000
2	17:19:34	51.850%	-0.028	31.860	29.700	0.000	20120.000	8189.000	8434.000
3	17:19:53	52.095%	-0.068	32.540	28.260	0.000	18490.000	7678.000	7675.000
X		52.701%	-0.022	31.800	29.400	0.000	19200.000	7927.000	8009.000
σ		1.268%	0.048	0.766	1.021	0.000	830.200	255.700	387.600
%RSD		2.407	214.100	2.409	3.473	0.000	4.323	3.225	4.840
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	0.880	9207.000	0.000	2316.000	59140.000	57870.000	43.075%	1.742
2	17:19:34	1.027	8844.000	0.000	2288.000	58960.000	59740.000	40.742%	1.941
3	17:19:53	0.659	8258.000	0.000	2187.000	57200.000	59310.000	39.367%	1.762
X		0.855	8769.000	0.000	2264.000	58440.000	58970.000	41.061%	1.815
σ		0.185	479.000	0.000	67.730	1072.000	978.100	1.875%	0.110
%RSD		21.670	5.462	0.000	2.992	1.835	1.659	4.566	6.040
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	1.624	0.285	723.900	15410.000	15450.000	0.049	0.033	0.117
2	17:19:34	1.295	0.346	750.400	16230.000	16020.000	0.066	0.144	0.145
3	17:19:53	-1.355	0.223	740.100	15840.000	15540.000	0.059	0.204	0.118
X		0.521	0.285	738.100	15820.000	15670.000	0.058	0.127	0.127
σ		1.634	0.062	13.360	411.400	309.600	0.009	0.087	0.016
%RSD		313.200	21.630	1.810	2.599	1.976	14.980	68.350	12.540
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	-0.036	1.677	2.134	-0.052	-0.281	0.231	0.000	231.400
2	17:19:34	0.015	1.968	2.329	1.088	-0.353	0.318	0.000	232.500
3	17:19:53	0.064	1.939	2.448	0.439	-0.383	0.417	0.000	230.100
X		0.015	1.861	2.304	0.491	-0.339	0.322	0.000	231.300
σ		0.050	0.160	0.159	0.572	0.052	0.093	0.000	1.218
%RSD		342.100	8.613	6.886	116.400	15.420	28.950	0.000	0.526
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	52.792%	0.454	0.477	52.467%	-0.086	-0.093	-0.021	-0.012
2	17:19:34	52.245%	0.456	0.401	52.158%	-0.093	-0.092	-0.007	0.002
3	17:19:53	51.751%	0.457	0.415	51.212%	-0.079	-0.088	-0.037	-0.027
X		52.263%	0.456	0.431	51.946%	-0.086	-0.091	-0.021	-0.012
σ		0.521%	0.001	0.040	0.654%	0.007	0.003	0.015	0.015
%RSD		0.996	0.289	9.377	1.259	8.171	2.989	70.770	118.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:19:15	56.680%	0.033	-0.009	-0.020	428.100	430.500	67.238%	69.185%
2	17:19:34	57.031%	0.008	-0.024	-0.012	428.600	428.700	68.486%	70.678%
3	17:19:53	56.475%	0.009	-0.016	-0.008	430.700	427.800	68.006%	70.221%
X		56.729%	0.017	-0.017	-0.013	429.100	429.000	67.910%	70.028%
σ		0.282%	0.014	0.007	0.006	1.403	1.340	0.630%	0.765%
%RSD		0.496	86.920	44.980	46.480	0.327	0.312	0.927	1.092
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:19:15	0.025	0.032	0.016	62.036%				
2	17:19:34	0.026	0.029	0.018	62.723%				
3	17:19:53	0.035	0.024	0.022	62.723%				
X		0.029	0.028	0.019	62.494%				
σ		0.005	0.004	0.003	0.396%				
%RSD		18.950	14.830	16.940	0.634				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	52.496%	-0.048	28.290	30.130	0.000	18940.000	7933.000	8187.000
2	17:23:22	48.171%	0.018	29.200	29.930	0.000	18950.000	7870.000	7816.000
3	17:23:41	49.069%	0.038	32.490	29.390	0.000	18650.000	8038.000	8182.000
X		49.912%	0.003	29.990	29.820	0.000	18850.000	7947.000	8062.000
σ		2.282%	0.045	2.210	0.386	0.000	170.500	85.080	212.700
%RSD		4.573	1663.000	7.369	1.296	0.000	0.905	1.071	2.638
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	0.871	9000.000	0.000	2263.000	57950.000	58530.000	43.727%	2.008
2	17:23:22	0.806	9045.000	0.000	2265.000	56570.000	56700.000	39.708%	1.844
3	17:23:41	1.109	8832.000	0.000	2292.000	57870.000	59170.000	38.531%	2.005
X		0.928	8959.000	0.000	2273.000	57460.000	58130.000	40.655%	1.953
σ		0.160	112.100	0.000	16.250	774.500	1282.000	2.724%	0.094
%RSD		17.190	1.251	0.000	0.715	1.348	2.206	6.701	4.792
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	0.952	0.301	712.300	15040.000	14920.000	0.038	0.145	0.102
2	17:23:22	-0.496	0.239	725.900	15230.000	15440.000	0.034	0.103	0.067
3	17:23:41	-1.490	0.300	732.800	15210.000	15590.000	0.056	0.078	0.144
X		-0.345	0.280	723.700	15160.000	15320.000	0.043	0.109	0.104
σ		1.228	0.036	10.460	101.700	350.300	0.012	0.034	0.038
%RSD		356.300	12.760	1.446	0.671	2.287	27.780	31.190	36.870
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	0.158	2.102	2.025	1.146	-0.371	0.439	0.000	226.800
2	17:23:22	0.025	2.065	2.268	0.417	-0.284	0.614	0.000	228.800
3	17:23:41	-0.054	2.250	2.269	0.167	-0.186	0.340	0.000	229.500
X		0.043	2.139	2.187	0.577	-0.281	0.464	0.000	228.400
σ		0.107	0.098	0.141	0.508	0.093	0.139	0.000	1.420
%RSD		249.300	4.583	6.437	88.120	33.010	29.880	0.000	0.622
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	52.925%	0.380	0.454	52.894%	-0.083	-0.095	0.015	0.000
2	17:23:22	52.144%	0.437	0.463	51.336%	-0.086	-0.091	-0.036	-0.033
3	17:23:41	50.888%	0.406	0.405	50.429%	-0.083	-0.086	-0.023	-0.019
X		51.986%	0.408	0.441	51.553%	-0.084	-0.091	-0.015	-0.017
σ		1.027%	0.028	0.031	1.247%	0.002	0.004	0.026	0.017
%RSD		1.976	6.904	7.047	2.418	1.887	4.806	179.200	97.330
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:23:02	56.900%	0.042	-0.040	-0.031	426.100	424.400	68.008%	69.530%
2	17:23:22	55.845%	0.003	-0.027	-0.017	430.800	432.400	68.086%	69.634%
3	17:23:41	55.475%	0.057	-0.035	-0.044	430.900	434.500	68.623%	70.984%
X		56.073%	0.034	-0.034	-0.031	429.300	430.400	68.239%	70.049%
σ		0.739%	0.028	0.007	0.013	2.744	5.348	0.335%	0.811%
%RSD		1.318	82.100	20.130	42.970	0.639	1.242	0.490	1.158
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:23:02	0.029	0.022	0.010	62.893%				
2	17:23:22	0.025	0.026	0.006	62.529%				
3	17:23:41	0.023	0.025	0.011	62.943%				
X		0.026	0.024	0.009	62.788%				
σ		0.003	0.002	0.002	0.226%				
%RSD		11.320	7.540	25.010	0.360				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	50.009%	-0.068	86.390	91.980	0.000	19560.000	14220.000	14740.000
2	17:27:10	47.086%	-0.002	88.130	83.480	0.000	19390.000	14160.000	14220.000
3	17:27:29	44.170%	-0.044	89.580	85.010	0.000	18590.000	13930.000	14280.000
X		47.088%	-0.038	88.030	86.820	0.000	19180.000	14100.000	14410.000
σ		2.920%	0.033	1.596	4.529	0.000	520.000	155.000	284.800
%RSD		6.201	87.540	1.813	5.216	0.000	2.711	1.099	1.976
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	310.800	10390.000	0.000	4194.000	73460.000	73290.000	42.511%	6.136
2	17:27:10	309.000	9861.000	0.000	4206.000	71640.000	72740.000	39.861%	6.519
3	17:27:29	308.300	9822.000	0.000	4271.000	73500.000	73550.000	37.154%	7.195
X		309.400	10020.000	0.000	4224.000	72870.000	73190.000	39.842%	6.616
σ		1.285	314.700	0.000	41.380	1062.000	413.800	2.678%	0.536
%RSD		0.415	3.140	0.000	0.980	1.458	0.565	6.722	8.104
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	1.177	1.492	371.900	8943.000	9004.000	0.835	1.606	2.094
2	17:27:10	2.169	1.615	383.500	9225.000	9107.000	0.857	1.666	1.989
3	17:27:29	1.961	1.438	389.900	9430.000	9378.000	0.821	1.722	2.074
X		1.769	1.515	381.800	9199.000	9163.000	0.837	1.665	2.053
σ		0.523	0.091	9.124	244.500	193.000	0.018	0.058	0.056
%RSD		29.580	5.980	2.390	2.658	2.106	2.178	3.488	2.720
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	2.034	15.460	15.950	10.080	0.294	0.655	0.000	485.500
2	17:27:10	1.928	15.920	15.940	9.335	0.297	0.516	0.000	488.100
3	17:27:29	2.011	15.570	16.050	10.210	0.219	0.807	0.000	492.200
X		1.991	15.650	15.980	9.876	0.270	0.659	0.000	488.600
σ		0.056	0.242	0.061	0.474	0.044	0.146	0.000	3.332
%RSD		2.793	1.546	0.381	4.798	16.440	22.100	0.000	0.682
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	51.926%	9.204	9.418	51.633%	-0.079	-0.083	0.490	0.435
2	17:27:10	50.116%	8.997	9.574	49.341%	-0.075	-0.088	0.505	0.481
3	17:27:29	50.095%	9.172	9.484	49.528%	-0.080	-0.068	0.303	0.429
X		50.712%	9.124	9.492	50.167%	-0.078	-0.080	0.433	0.448
σ		1.051%	0.111	0.078	1.273%	0.002	0.010	0.112	0.029
%RSD		2.072	1.221	0.825	2.537	2.873	12.820	25.970	6.360
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:26:51	55.304%	-0.015	0.219	0.213	323.100	324.600	67.325%	69.252%
2	17:27:10	54.777%	0.013	0.225	0.217	318.600	320.200	67.699%	69.671%
3	17:27:29	54.694%	-0.012	0.249	0.225	320.800	322.500	67.121%	69.508%
X		54.925%	-0.005	0.231	0.218	320.800	322.400	67.382%	69.477%
σ		0.331%	0.015	0.016	0.006	2.284	2.242	0.293%	0.211%
%RSD		0.602	339.500	6.765	2.820	0.712	0.696	0.435	0.304
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:26:51	0.013	0.022	0.232	65.253%				
2	17:27:10	0.023	0.019	0.243	64.746%				
3	17:27:29	0.023	0.018	0.244	64.449%				
X		0.020	0.020	0.239	64.816%				
σ		0.006	0.002	0.007	0.407%				
%RSD		28.840	11.200	2.839	0.628				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	51.415%	-0.028	89.750	83.690	0.000	18780.000	14030.000	14060.000
2	17:30:59	51.191%	-0.027	78.460	80.330	0.000	17610.000	13330.000	13860.000
3	17:31:18	49.853%	-0.047	82.650	84.720	0.000	18530.000	14080.000	14680.000
X		50.819%	-0.034	83.620	82.910	0.000	18300.000	13810.000	14200.000
σ		0.845%	0.011	5.706	2.297	0.000	616.600	415.500	430.200
%RSD		1.662	33.200	6.824	2.770	0.000	3.369	3.008	3.029
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	-0.776	9441.000	0.000	3941.000	74850.000	76000.000	43.590%	0.977
2	17:30:59	-0.939	9019.000	0.000	3825.000	75810.000	76720.000	40.756%	1.122
3	17:31:18	-0.887	9288.000	0.000	4011.000	75250.000	76600.000	39.508%	1.656
X		-0.868	9249.000	0.000	3926.000	75300.000	76440.000	41.285%	1.252
σ		0.083	213.800	0.000	94.070	482.000	385.800	2.092%	0.358
%RSD		9.576	2.312	0.000	2.396	0.640	0.505	5.066	28.580
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	2.249	0.312	473.600	10090.000	10110.000	1.037	1.630	1.064
2	17:30:59	1.365	0.305	485.300	10210.000	10310.000	1.008	1.695	0.997
3	17:31:18	1.074	0.309	471.100	10070.000	10060.000	1.064	1.744	0.957
X		1.563	0.309	476.700	10120.000	10160.000	1.036	1.690	1.006
σ		0.612	0.003	7.592	75.980	134.100	0.028	0.058	0.054
%RSD		39.150	1.015	1.593	0.750	1.320	2.729	3.403	5.389
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	0.830	8.580	8.323	11.810	0.145	0.559	0.000	507.900
2	17:30:59	0.854	7.774	8.487	11.460	0.018	0.674	0.000	501.700
3	17:31:18	0.973	7.439	8.328	10.670	0.053	0.514	0.000	503.600
X		0.886	7.931	8.379	11.310	0.072	0.583	0.000	504.400
σ		0.077	0.587	0.093	0.585	0.066	0.083	0.000	3.155
%RSD		8.643	7.398	1.115	5.173	91.100	14.190	0.000	0.626
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	52.975%	8.059	7.977	52.731%	-0.087	-0.095	0.013	0.010
2	17:30:59	52.163%	8.089	7.914	51.932%	-0.085	-0.095	-0.010	-0.005
3	17:31:18	51.677%	7.927	8.070	51.083%	-0.080	-0.091	-0.070	-0.043
X		52.272%	8.025	7.987	51.915%	-0.084	-0.094	-0.023	-0.013
σ		0.656%	0.086	0.078	0.824%	0.004	0.002	0.043	0.027
%RSD		1.255	1.077	0.979	1.588	4.286	2.160	190.000	212.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:30:39	56.325%	-0.110	0.148	0.137	362.200	360.900	67.663%	69.144%
2	17:30:59	56.509%	-0.086	0.131	0.164	359.300	358.700	68.555%	70.106%
3	17:31:18	55.464%	-0.076	0.140	0.157	359.400	361.000	68.875%	71.085%
X		56.100%	-0.090	0.140	0.153	360.300	360.200	68.364%	70.112%
σ		0.558%	0.017	0.009	0.014	1.669	1.303	0.628%	0.971%
%RSD		0.994	19.280	6.183	8.992	0.463	0.362	0.919	1.385
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:30:39	0.012	0.016	0.001	64.161%				
2	17:30:59	0.013	0.013	0.001	63.827%				
3	17:31:18	0.012	0.016	-0.001	63.676%				
X		0.012	0.015	0.001	63.888%				
σ		0.000	0.002	0.001	0.248%				
%RSD		3.239	11.850	238.600	0.388				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	60.576%	-0.016	9.148	9.742	0.000	8.991	3.589	4.467
2	17:34:48	51.985%	0.012	11.700	10.920	0.000	8.216	3.530	3.555
3	17:35:07	51.427%	-0.027	10.820	10.210	0.000	7.954	3.330	3.507
X		54.663%	-0.011	10.560	10.290	0.000	8.387	3.483	3.843
σ		5.129%	0.020	1.296	0.596	0.000	0.539	0.136	0.541
%RSD		9.382	191.900	12.280	5.785	0.000	6.431	3.902	14.080
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	4.423	-460.800	0.000	3.056	28.190	30.720	43.569%	0.210
2	17:34:48	4.778	-461.200	0.000	5.044	10.980	25.850	42.990%	0.351
3	17:35:07	4.065	-458.500	0.000	3.125	14.180	32.150	41.189%	0.300
X		4.422	-460.200	0.000	3.742	17.780	29.570	42.583%	0.287
σ		0.356	1.484	0.000	1.128	9.155	3.299	1.241%	0.072
%RSD		8.063	0.323	0.000	30.150	51.480	11.160	2.914	24.960
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	0.323	0.530	0.546	14.990	13.730	0.009	0.071	-0.090
2	17:34:48	0.023	0.469	0.557	10.740	12.130	-0.004	0.004	-0.111
3	17:35:07	0.136	0.598	0.538	9.237	12.150	0.006	0.074	-0.074
X		0.161	0.532	0.547	11.660	12.670	0.004	0.050	-0.092
σ		0.151	0.064	0.010	2.983	0.920	0.007	0.040	0.019
%RSD		94.220	12.050	1.759	25.590	7.259	171.300	79.340	20.660
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	-0.147	11.120	10.580	-1.008	-0.345	0.155	0.000	0.566
2	17:34:48	-0.105	10.960	10.880	-0.215	-0.226	0.109	0.000	0.511
3	17:35:07	-0.077	11.870	11.150	0.573	0.140	-0.001	0.000	0.535
X		-0.110	11.320	10.870	-0.217	-0.144	0.088	0.000	0.537
σ		0.035	0.484	0.283	0.791	0.253	0.080	0.000	0.028
%RSD		31.940	4.278	2.603	364.700	175.800	91.180	0.000	5.163
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	56.121%	0.052	0.052	58.556%	-0.088	-0.093	0.077	0.058
2	17:34:48	53.905%	0.034	0.055	56.840%	-0.085	-0.087	0.029	0.035
3	17:35:07	52.564%	0.020	0.042	54.659%	-0.089	-0.088	0.030	0.083
X		54.197%	0.035	0.050	56.685%	-0.088	-0.089	0.045	0.059
σ		1.796%	0.016	0.007	1.953%	0.002	0.003	0.027	0.024
%RSD		3.314	44.570	13.430	3.446	2.463	3.733	60.140	41.010
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:34:29	60.197%	-0.059	-0.049	-0.045	0.794	0.868	70.969%	72.165%
2	17:34:48	59.934%	-0.057	-0.056	-0.052	0.754	0.759	70.738%	72.465%
3	17:35:07	58.411%	-0.035	-0.051	-0.035	0.836	0.897	70.022%	71.703%
X		59.514%	-0.050	-0.052	-0.044	0.794	0.841	70.577%	72.111%
σ		0.965%	0.013	0.004	0.009	0.041	0.073	0.494%	0.384%
%RSD		1.621	25.960	7.238	20.110	5.144	8.685	0.699	0.532
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:34:29	0.010	0.012	0.022	68.158%				
2	17:34:48	0.008	0.014	0.024	69.023%				
3	17:35:07	0.012	0.009	0.018	70.146%				
X		0.010	0.012	0.021	69.109%				
σ		0.002	0.003	0.003	0.997%				
%RSD		17.880	22.310	11.970	1.442				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	108.036%	108.700	104.200	96.050	0.000	48960.000	48540.000	48260.000
2	17:38:25	106.287%	104.600	102.300	96.710	0.000	49460.000	48490.000	48900.000
3	17:38:45	103.238%	106.000	99.810	99.470	0.000	48260.000	48340.000	49300.000
X		105.854%	106.446%	102.087%	97.413%	0.000	97.788%	96.909%	97.641%
σ		2.428%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.294	1.958	2.152	1.863	0.000	1.235	0.219	1.074
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	481.800	4767.000	0.000	48740.000	46620.000	46780.000	101.400%	95.990
2	17:38:25	482.500	4780.000	0.000	50590.000	48560.000	49160.000	94.165%	102.600
3	17:38:45	501.600	4808.000	0.000	49130.000	48740.000	49830.000	95.897%	100.700
X		97.729%	95.702%	0.000	98.976%	95.950%	97.185%	97.154%	99.762%
σ		n/a	n/a	0.000	n/a	n/a	n/a	3.778%	n/a
%RSD		2.293	0.438	0.000	1.969	2.444	3.302	3.888	3.417
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	99.550	97.950	476.700	24310.000	23900.000	98.940	104.200	104.300
2	17:38:25	100.900	103.200	502.900	25990.000	25660.000	106.000	110.100	110.200
3	17:38:45	101.900	104.100	496.100	25580.000	25200.000	103.700	108.800	109.300
X		100.764%	101.771%	98.377%	101.173%	99.672%	102.890%	107.701%	107.929%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.160	3.284	2.765	3.467	3.662	3.497	2.895	2.977
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	104.600	101.800	103.100	104.700	107.800	106.800	0.000	102.200
2	17:38:25	109.900	107.400	107.400	108.600	110.100	109.900	0.000	103.400
3	17:38:45	108.400	106.600	105.100	107.200	109.100	110.400	0.000	102.900
X		107.628%	105.296%	105.206%	106.838%	108.986%	109.046%	0.000	102.843%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.520	2.900	2.071	1.883	1.038	1.771	0.000	0.553
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	87.362%	97.020	95.540	84.856%	100.700	100.900	97.880	98.650
2	17:38:25	87.211%	99.530	98.380	85.349%	101.500	101.800	99.990	100.700
3	17:38:45	88.616%	99.780	100.500	86.192%	100.500	101.100	99.240	99.620
X		87.730%	98.775%	98.132%	85.466%	100.920%	101.236%	99.037%	99.660%
σ		0.771%	n/a	n/a	0.676%	n/a	n/a	n/a	n/a
%RSD		0.879	1.548	2.528	0.791	0.549	0.452	1.084	1.037
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:38:06	81.899%	97.440	97.570	97.490	97.010	97.100	81.722%	81.208%
2	17:38:25	82.487%	98.110	98.760	99.680	99.120	98.560	83.725%	83.692%
3	17:38:45	84.332%	97.180	99.680	98.770	98.610	98.390	85.731%	85.257%
X		82.906%	97.578%	98.672%	98.650%	98.248%	98.017%	83.726%	83.386%
σ		1.269%	n/a	n/a	n/a	n/a	n/a	2.004%	2.042%
%RSD		1.531	0.489	1.073	1.116	1.122	0.816	2.394	2.449
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:38:06	101.000	102.300	103.400	74.294%				
2	17:38:25	103.400	104.500	105.600	75.801%				
3	17:38:45	105.500	106.100	107.600	75.661%				
X		103.310%	104.267%	105.536%	75.252%				
σ		n/a	n/a	n/a	0.833%				
%RSD		2.205	1.835	2.006	1.107				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	117.447%	-0.042	0.687	0.661	0.000	12.000	7.075	6.387
2	17:45:14	108.288%	-0.012	0.694	0.552	0.000	12.040	5.963	6.257
3	17:45:33	119.404%	0.018	0.583	0.448	0.000	11.430	6.118	5.449
X		115.046%	-0.012	0.655	0.554	0.000	11.830	6.385	6.031
σ		5.934%	0.030	0.062	0.106	0.000	0.344	0.602	0.508
%RSD		5.158	252.400	9.488	19.210	0.000	2.909	9.425	8.426
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	2.322	-483.400	0.000	5.686	0.410	9.698	117.954%	-0.012
2	17:45:14	2.028	-481.500	0.000	6.452	5.429	8.519	114.854%	0.051
3	17:45:33	2.103	-483.400	0.000	6.340	2.049	6.341	111.331%	0.082
X		2.151	-482.800	0.000	6.159	2.629	8.186	114.713%	0.040
σ		0.153	1.090	0.000	0.414	2.560	1.703	3.314%	0.048
%RSD		7.108	0.226	0.000	6.716	97.340	20.800	2.889	119.100
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	0.046	-0.007	0.183	8.420	7.680	0.014	0.008	0.521
2	17:45:14	0.031	-0.002	0.215	7.726	6.937	0.021	0.019	0.535
3	17:45:33	0.055	0.027	0.235	9.024	6.249	0.017	-0.012	0.537
X		0.044	0.006	0.211	8.390	6.955	0.017	0.005	0.531
σ		0.012	0.018	0.026	0.650	0.716	0.003	0.016	0.009
%RSD		27.260	299.700	12.380	7.744	10.290	19.390	327.000	1.653
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	0.468	0.922	0.632	-0.006	-0.128	0.116	0.000	0.076
2	17:45:14	0.595	1.036	0.815	-0.006	-0.032	-0.030	0.000	0.078
3	17:45:33	0.478	1.125	1.158	0.029	0.160	0.029	0.000	0.067
X		0.514	1.028	0.868	0.006	-0.000	0.039	0.000	0.074
σ		0.071	0.102	0.267	0.020	0.146	0.073	0.000	0.006
%RSD		13.730	9.930	30.750	348.600	235900.000	190.100	0.000	7.526
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	98.643%	0.227	0.250	101.378%	-0.067	-0.072	0.051	0.035
2	17:45:14	99.760%	0.245	0.234	102.362%	-0.062	-0.060	0.069	0.057
3	17:45:33	100.415%	0.198	0.196	102.327%	-0.053	-0.056	0.072	0.059
X		99.606%	0.224	0.227	102.022%	-0.061	-0.063	0.064	0.050
σ		0.896%	0.024	0.028	0.558%	0.007	0.008	0.011	0.013
%RSD		0.899	10.690	12.190	0.547	11.470	13.200	17.860	26.250
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:44:55	92.567%	0.005	-0.005	-0.006	0.046	0.065	85.881%	85.342%
2	17:45:14	92.557%	0.021	-0.006	-0.000	0.048	0.057	87.974%	88.003%
3	17:45:33	93.591%	0.047	-0.016	0.001	0.036	0.068	89.531%	88.449%
X		92.905%	0.024	-0.009	-0.002	0.043	0.063	87.796%	87.264%
σ		0.594%	0.021	0.006	0.004	0.006	0.006	1.831%	1.680%
%RSD		0.640	88.590	68.520	179.200	14.120	9.456	2.086	1.925
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:44:55	0.024	0.022	0.036	84.044%				
2	17:45:14	0.020	0.022	0.039	85.403%				
3	17:45:33	0.025	0.021	0.038	84.834%				
X		0.023	0.022	0.038	84.760%				
σ		0.003	0.000	0.001	0.683%				
%RSD		11.060	1.907	3.549	0.805				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	76.819%	-0.068	9.373	9.789	0.000	16.770	4.598	4.677
2	17:49:06	62.867%	-0.035	11.980	10.220	0.000	16.180	4.399	4.183
3	17:49:25	62.012%	-0.068	9.989	9.137	0.000	16.560	5.145	4.062
X		67.233%	-0.057	10.450	9.717	0.000	16.500	4.714	4.307
σ		8.313%	0.019	1.360	0.547	0.000	0.295	0.387	0.326
%RSD		12.364	33.460	13.020	5.632	0.000	1.790	8.202	7.564
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	12.540	-436.100	0.000	11.450	30.360	20.320	54.673%	2.344
2	17:49:06	10.530	-426.800	0.000	9.571	13.310	24.510	51.597%	1.629
3	17:49:25	5.236	-432.200	0.000	8.585	17.530	26.270	47.426%	1.446
X		9.435	-431.700	0.000	9.867	20.400	23.700	51.232%	1.806
σ		3.773	4.667	0.000	1.453	8.881	3.055	3.637%	0.474
%RSD		39.990	1.081	0.000	14.730	43.540	12.890	7.099	26.250
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	-0.192	0.457	0.724	19.720	17.090	0.015	0.049	0.358
2	17:49:06	-0.563	0.395	0.740	16.030	17.320	0.015	0.076	0.266
3	17:49:25	-1.128	0.436	0.755	16.710	17.140	0.019	0.028	0.363
X		-0.628	0.429	0.740	17.480	17.180	0.017	0.051	0.329
σ		0.472	0.031	0.016	1.962	0.123	0.002	0.024	0.055
%RSD		75.120	7.255	2.132	11.220	0.716	12.140	46.710	16.580
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	0.297	12.940	13.000	-0.321	-0.122	0.097	0.000	0.401
2	17:49:06	0.346	12.590	12.990	-0.163	-0.165	0.127	0.000	0.400
3	17:49:25	0.361	13.320	13.260	0.146	-0.151	0.127	0.000	0.416
X		0.335	12.950	13.080	-0.113	-0.146	0.117	0.000	0.406
σ		0.033	0.368	0.156	0.238	0.022	0.017	0.000	0.009
%RSD		9.987	2.842	1.190	211.100	15.050	14.850	0.000	2.241
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	63.568%	0.170	0.146	65.827%	-0.081	-0.084	0.052	0.031
2	17:49:06	61.762%	0.092	0.102	63.881%	-0.081	-0.084	0.014	0.030
3	17:49:25	60.078%	0.091	0.113	62.306%	-0.078	-0.082	0.013	0.014
X		61.803%	0.118	0.120	64.005%	-0.080	-0.083	0.026	0.025
σ		1.745%	0.045	0.023	1.764%	0.002	0.001	0.022	0.010
%RSD		2.824	38.130	19.180	2.756	2.709	1.462	84.670	38.570
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:48:47	66.222%	0.131	0.032	0.029	0.851	0.923	74.266%	75.340%
2	17:49:06	64.423%	0.108	0.025	0.000	0.919	0.898	73.758%	75.006%
3	17:49:25	64.052%	0.105	-0.007	0.002	0.818	0.848	73.451%	74.870%
X		64.899%	0.114	0.017	0.010	0.863	0.890	73.825%	75.072%
σ		1.161%	0.014	0.020	0.017	0.052	0.038	0.412%	0.242%
%RSD		1.789	12.620	122.100	158.100	5.976	4.324	0.557	0.322
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:48:47	0.016	0.017	0.031	75.072%				
2	17:49:06	0.014	0.018	0.034	74.185%				
3	17:49:25	0.016	0.016	0.032	73.508%				
X		0.015	0.017	0.032	74.255%				
σ		0.001	0.001	0.001	0.784%				
%RSD		7.780	4.648	4.249	1.056				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	52.668%	-0.029	164.700	166.200	0.000	218600.000	6574.000	6921.000
2	17:52:55	51.769%	0.013	154.500	168.200	0.000	210500.000	6559.000	6757.000
3	17:53:14	47.435%	-0.024	158.000	159.100	0.000	209500.000	6191.000	6494.000
X		50.624%	-0.013	159.100	164.500	0.000	212800.000	6441.000	6724.000
σ		2.798%	0.023	5.180	4.791	0.000	4983.000	217.200	215.200
%RSD		5.527	168.000	3.256	2.913	0.000	2.341	3.373	3.200
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	186.000	9150.000	0.000	2672.000	66380.000	69640.000	43.058%	5.188
2	17:52:55	199.300	9101.000	0.000	2824.000	69450.000	72390.000	40.792%	6.199
3	17:53:14	191.400	9142.000	0.000	2739.000	69510.000	71260.000	40.113%	6.667
X		192.300	9131.000	0.000	2745.000	68450.000	71090.000	41.321%	6.018
σ		6.655	26.260	0.000	76.280	1788.000	1383.000	1.542%	0.756
%RSD		3.461	0.288	0.000	2.779	2.612	1.945	3.732	12.560
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	5.187	0.670	59.190	252.300	336.000	0.476	2.808	2.368
2	17:52:55	4.641	0.611	58.610	241.900	317.100	0.501	3.167	2.389
3	17:53:14	4.448	0.620	58.620	241.900	316.800	0.473	2.902	2.365
X		4.759	0.633	58.810	245.400	323.300	0.483	2.959	2.374
σ		0.384	0.032	0.333	6.033	11.010	0.016	0.186	0.013
%RSD		8.062	5.011	0.566	2.459	3.404	3.262	6.282	0.549
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	0.636	1.145	1.560	2.193	3.868	4.489	0.000	325.100
2	17:52:55	0.821	1.153	1.302	2.332	3.899	4.440	0.000	328.900
3	17:53:14	0.779	0.918	0.870	2.474	3.863	4.227	0.000	326.600
X		0.745	1.072	1.244	2.333	3.877	4.385	0.000	326.800
σ		0.097	0.134	0.349	0.141	0.019	0.139	0.000	1.902
%RSD		12.980	12.460	28.040	6.024	0.496	3.175	0.000	0.582
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	52.915%	3.396	3.334	51.467%	-0.087	-0.089	-0.023	0.002
2	17:52:55	51.333%	3.242	3.434	49.996%	-0.087	-0.089	0.033	0.016
3	17:53:14	51.616%	3.379	3.409	49.460%	-0.078	-0.092	-0.006	0.021
X		51.955%	3.339	3.392	50.307%	-0.084	-0.090	0.001	0.013
σ		0.844%	0.084	0.052	1.039%	0.005	0.002	0.029	0.010
%RSD		1.624	2.526	1.532	2.066	6.263	2.057	2036.000	78.340
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:52:36	54.867%	-0.000	6.208	6.420	75.790	75.020	66.593%	68.388%
2	17:52:55	54.710%	0.001	6.214	6.278	74.810	75.790	66.820%	69.393%
3	17:53:14	54.759%	-0.034	6.021	6.196	75.950	74.640	67.658%	69.195%
X		54.778%	-0.011	6.147	6.298	75.510	75.150	67.024%	68.992%
σ		0.080%	0.020	0.110	0.114	0.616	0.585	0.561%	0.532%
%RSD		0.147	180.500	1.786	1.806	0.815	0.779	0.837	0.772
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:52:36	0.023	0.017	0.284	57.514%				
2	17:52:55	0.021	0.024	0.285	58.537%				
3	17:53:14	0.021	0.019	0.284	60.632%				
X		0.021	0.020	0.284	58.895%				
σ		0.001	0.004	0.000	1.590%				
%RSD		5.920	19.260	0.158	2.699				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	50.070%	-0.006	172.400	164.500	0.000	221000.000	6685.000	6602.000
2	17:56:45	50.194%	-0.068	159.400	167.400	0.000	217400.000	6507.000	6455.000
3	17:57:05	46.160%	-0.068	156.500	152.500	0.000	201600.000	6044.000	6133.000
X		48.808%	-0.047	162.800	161.500	0.000	213400.000	6412.000	6396.000
σ		2.294%	0.036	8.487	7.919	0.000	10320.000	331.000	240.000
%RSD		4.700	75.730	5.214	4.904	0.000	4.836	5.161	3.751
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	2.843	8478.000	0.000	2664.000	67880.000	68930.000	42.197%	1.245
2	17:56:45	2.804	8670.000	0.000	2646.000	66260.000	68530.000	40.712%	1.221
3	17:57:05	2.819	8108.000	0.000	2595.000	66620.000	69030.000	39.783%	0.931
X		2.822	8419.000	0.000	2635.000	66920.000	68830.000	40.897%	1.132
σ		0.020	285.700	0.000	35.880	850.900	263.400	1.217%	0.175
%RSD		0.698	3.394	0.000	1.361	1.272	0.383	2.977	15.440
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	5.675	0.348	45.970	9.273	97.830	0.357	2.811	2.158
2	17:56:45	7.006	0.361	46.090	10.040	100.900	0.317	2.889	2.314
3	17:57:05	4.995	0.402	46.500	9.851	94.330	0.360	2.918	2.055
X		5.892	0.370	46.180	9.721	97.690	0.345	2.873	2.175
σ		1.023	0.028	0.279	0.399	3.290	0.024	0.055	0.131
%RSD		17.360	7.507	0.605	4.107	3.368	6.917	1.912	6.005
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	0.711	0.843	1.007	2.779	3.788	4.790	0.000	325.100
2	17:56:45	0.630	0.943	1.118	1.447	3.940	4.476	0.000	324.000
3	17:57:05	0.697	0.984	0.710	1.716	3.974	4.647	0.000	324.700
X		0.679	0.923	0.945	1.981	3.901	4.638	0.000	324.600
σ		0.043	0.073	0.211	0.704	0.099	0.157	0.000	0.569
%RSD		6.355	7.858	22.340	35.560	2.545	3.389	0.000	0.175
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	52.287%	3.282	3.296	50.793%	-0.089	-0.094	0.026	0.056
2	17:56:45	51.255%	3.340	3.429	50.016%	-0.074	-0.092	0.071	0.067
3	17:57:05	50.341%	3.064	3.307	48.611%	-0.080	-0.087	0.005	0.023
X		51.294%	3.229	3.344	49.807%	-0.081	-0.091	0.034	0.049
σ		0.974%	0.145	0.074	1.106%	0.008	0.004	0.034	0.023
%RSD		1.899	4.499	2.210	2.220	9.418	4.090	99.750	47.660
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:56:26	54.766%	-0.017	4.491	4.418	72.160	73.410	66.622%	68.657%
2	17:56:45	54.718%	0.010	4.595	4.646	73.130	73.910	66.981%	69.094%
3	17:57:05	54.452%	0.017	4.533	4.607	73.320	73.530	67.185%	68.557%
X		54.645%	0.003	4.540	4.557	72.870	73.620	66.929%	68.769%
σ		0.169%	0.018	0.052	0.122	0.622	0.261	0.285%	0.286%
%RSD		0.309	514.700	1.145	2.671	0.853	0.355	0.426	0.416
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	17:56:26	0.016	0.015	0.122	60.810%				
2	17:56:45	0.013	0.014	0.117	59.806%				
3	17:57:05	0.015	0.014	0.112	61.035%				
X		0.015	0.014	0.117	60.551%				
σ		0.002	0.001	0.005	0.655%				
%RSD		10.300	4.170	4.332	1.081				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	45.914%	-0.045	57.350	54.570	0.000	493300.000	56420.000	55190.000
2	18:00:34	43.873%	-0.044	57.440	52.730	0.000	514400.000	56390.000	57190.000
3	18:00:54	41.859%	-0.043	49.540	52.240	0.000	493300.000	54940.000	56040.000
X		43.882%	-0.044	54.780	53.180	0.000	500300.000	55920.000	56140.000
σ		2.028%	0.001	4.535	1.227	0.000	12200.000	850.200	1006.000
%RSD		4.621	2.301	8.280	2.307	0.000	2.438	1.520	1.792
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	1.794	8368.000	0.000	6600.000	454100.000	441200.000	41.998%	1.088
2	18:00:34	1.754	8550.000	0.000	6767.000	472000.000	454600.000	39.406%	0.965
3	18:00:54	2.160	8837.000	0.000	6630.000	460800.000	451900.000	40.669%	0.957
X		1.903	8585.000	0.000	6666.000	462300.000	449200.000	40.691%	1.003
σ		0.224	236.700	0.000	89.080	9040.000	7059.000	1.296%	0.073
%RSD		11.760	2.757	0.000	1.336	1.956	1.571	3.185	7.320
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	-0.708	0.627	656.400	453.300	1004.000	0.430	0.427	4.023
2	18:00:34	-0.905	0.701	663.600	466.700	990.700	0.440	0.093	3.871
3	18:00:54	-1.147	0.627	639.300	430.600	915.200	0.410	0.048	3.753
X		-0.920	0.652	653.100	450.200	970.000	0.426	0.189	3.882
σ		0.220	0.043	12.470	18.250	47.950	0.015	0.207	0.135
%RSD		23.910	6.531	1.910	4.054	4.944	3.589	109.300	3.486
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	0.235	6.445	6.367	3.585	-0.022	0.659	0.000	2774.000
2	18:00:34	0.304	5.989	6.529	2.159	0.046	0.779	0.000	2770.000
3	18:00:54	0.198	6.188	6.214	2.528	-0.035	0.575	0.000	2775.000
X		0.246	6.208	6.370	2.757	-0.004	0.671	0.000	2773.000
σ		0.053	0.229	0.158	0.740	0.044	0.103	0.000	2.694
%RSD		21.750	3.683	2.473	26.850	1244.000	15.280	0.000	0.097
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	51.260%	0.707	0.699	47.355%	-0.083	-0.093	-0.026	-0.029
2	18:00:34	51.060%	0.591	0.658	46.586%	-0.082	-0.092	-0.013	-0.016
3	18:00:54	50.413%	0.650	0.659	45.371%	-0.085	-0.092	-0.047	-0.039
X		50.911%	0.649	0.672	46.438%	-0.084	-0.092	-0.028	-0.028
σ		0.443%	0.058	0.023	1.001%	0.002	0.001	0.017	0.012
%RSD		0.869	8.910	3.453	2.155	1.988	0.722	60.480	41.130
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:15	52.990%	-0.043	0.015	0.103	209.300	209.500	62.935%	64.108%
2	18:00:34	52.263%	-0.058	0.049	0.084	212.400	210.600	63.264%	65.431%
3	18:00:54	52.136%	-0.037	0.029	0.069	210.200	210.800	63.164%	64.109%
X		52.463%	-0.046	0.031	0.085	210.700	210.300	63.121%	64.549%
σ		0.461%	0.011	0.017	0.017	1.588	0.687	0.169%	0.763%
%RSD		0.878	23.270	56.060	20.140	0.754	0.327	0.267	1.183
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:00:15	0.007	0.007	0.052	52.765%				
2	18:00:34	0.005	0.007	0.065	52.843%				
3	18:00:54	0.010	0.008	0.052	53.162%				
X		0.007	0.008	0.056	52.923%				
σ		0.002	0.001	0.007	0.210%				
%RSD		32.920	7.854	13.110	0.397				

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	47.220%	-0.002	64.770	54.290	0.000	517900.000	60530.000	61170.000
2	18:04:23	43.707%	-0.021	60.120	56.410	0.000	528600.000	59630.000	58540.000
3	18:04:42	41.698%	-0.019	58.140	54.830	0.000	504600.000	58200.000	57630.000
X		44.209%	-0.014	61.010	55.170	0.000	517000.000	59450.000	59110.000
σ		2.795%	0.010	3.406	1.099	0.000	12020.000	1173.000	1837.000
%RSD		6.322	72.290	5.583	1.992	0.000	2.326	1.973	3.107
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	0.649	9029.000	0.000	6989.000	484900.000	470800.000	41.170%	1.064
2	18:04:23	0.765	9230.000	0.000	6751.000	471600.000	462700.000	40.820%	0.953
3	18:04:42	0.499	8916.000	0.000	6759.000	471700.000	461800.000	39.769%	0.783
X		0.638	9058.000	0.000	6833.000	476100.000	465100.000	40.587%	0.933
σ		0.133	159.300	0.000	135.200	7645.000	4943.000	0.729%	0.141
%RSD		20.900	1.758	0.000	1.978	1.606	1.063	1.797	15.160
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	0.041	0.685	663.700	453.400	1013.000	0.422	0.383	4.066
2	18:04:23	-0.241	0.705	646.000	424.900	964.500	0.413	0.007	3.942
3	18:04:42	0.026	0.653	650.800	437.300	975.200	0.427	0.070	4.002
X		-0.058	0.681	653.500	438.500	984.300	0.420	0.153	4.004
σ		0.158	0.026	9.144	14.280	25.590	0.007	0.201	0.062
%RSD		273.600	3.847	1.399	3.257	2.600	1.729	131.400	1.551
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	0.432	0.739	0.828	0.642	0.122	0.610	0.000	2819.000
2	18:04:23	0.419	0.923	0.622	2.802	0.059	0.901	0.000	2795.000
3	18:04:42	0.361	0.593	0.802	1.985	0.031	0.698	0.000	2801.000
X		0.404	0.752	0.750	1.810	0.071	0.736	0.000	2805.000
σ		0.037	0.165	0.112	1.090	0.046	0.149	0.000	12.400
%RSD		9.284	21.980	14.930	60.260	65.150	20.250	0.000	0.442
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	50.600%	0.745	0.748	45.939%	-0.087	-0.088	-0.042	-0.033
2	18:04:23	50.795%	0.716	0.735	45.828%	-0.085	-0.087	-0.074	-0.052
3	18:04:42	50.237%	0.642	0.721	45.372%	-0.088	-0.093	-0.049	-0.041
X		50.544%	0.701	0.735	45.713%	-0.087	-0.089	-0.055	-0.042
σ		0.284%	0.053	0.014	0.300%	0.001	0.003	0.017	0.009
%RSD		0.561	7.517	1.857	0.656	1.562	3.646	30.250	22.370
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:04:04	51.867%	-0.072	0.010	0.111	214.100	214.100	63.011%	63.845%
2	18:04:23	52.075%	-0.049	0.004	0.056	216.700	216.600	63.073%	64.406%
3	18:04:42	52.539%	-0.087	0.019	0.090	215.800	213.200	63.242%	63.930%
X		52.160%	-0.069	0.011	0.086	215.500	214.600	63.109%	64.060%
σ		0.344%	0.019	0.008	0.028	1.326	1.800	0.120%	0.302%
%RSD		0.659	27.790	69.220	32.450	0.615	0.839	0.189	0.472
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:04:04	0.007	0.005	0.011	48.836%				
2	18:04:23	0.008	0.006	0.011	49.562%				
3	18:04:42	0.005	0.010	0.011	49.702%				
X		0.007	0.007	0.011	49.366%				
σ		0.002	0.002	0.000	0.465%				
%RSD		21.870	33.790	2.658	0.942				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	47.657%	0.346	121.300	120.700	0.000	250700.000	17570.000	18140.000
2	18:08:12	43.340%	0.265	115.800	108.500	0.000	231900.000	16310.000	17010.000
3	18:08:31	41.524%	0.403	118.100	105.700	0.000	230100.000	17000.000	17240.000
x		44.174%	0.338	118.400	111.600	0.000	237600.000	16960.000	17460.000
σ		3.150%	0.069	2.782	7.979	0.000	11400.000	632.000	594.200
%RSD		7.131	20.490	2.350	7.148	0.000	4.800	3.726	3.403
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	7619.000	38520.000	0.000	8808.000	103000.000	102900.000	38.217%	98.480
2	18:08:12	7179.000	38290.000	0.000	8666.000	98870.000	100200.000	37.980%	95.980
3	18:08:31	7088.000	37010.000	0.000	8658.000	100200.000	102300.000	37.167%	91.290
x		7295.000	37940.000	0.000	8711.000	100700.000	101800.000	37.788%	95.250
σ		284.100	813.200	0.000	84.600	2118.000	1451.000	0.551%	3.652
%RSD		3.894	2.144	0.000	0.971	2.103	1.426	1.458	3.834
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	69.440	12.400	506.800	5082.000	5122.000	4.269	17.900	9.333
2	18:08:12	66.260	12.290	490.200	4807.000	4947.000	3.876	17.630	9.149
3	18:08:31	68.520	12.300	513.100	4929.000	4985.000	4.118	16.980	8.952
x		68.070	12.330	503.400	4939.000	5018.000	4.088	17.510	9.144
σ		1.637	0.062	11.800	137.700	92.080	0.198	0.472	0.190
%RSD		2.404	0.505	2.344	2.787	1.835	4.847	2.697	2.082
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	7.443	16.230	17.320	73.770	4.046	4.538	0.000	339.600
2	18:08:12	6.997	17.170	16.700	76.440	4.226	4.653	0.000	340.300
3	18:08:31	7.012	16.840	17.610	72.640	3.768	5.108	0.000	301.700
x		7.151	16.750	17.210	74.280	4.013	4.767	0.000	327.200
σ		0.253	0.474	0.466	1.951	0.231	0.301	0.000	22.100
%RSD		3.540	2.828	2.707	2.627	5.746	6.323	0.000	6.753
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	51.472%	8.944	8.953	47.993%	-0.057	-0.066	0.027	0.060
2	18:08:12	49.859%	8.629	9.072	45.503%	-0.059	-0.053	0.020	0.077
3	18:08:31	50.177%	8.443	8.713	45.294%	-0.061	-0.065	0.092	0.068
x		50.503%	8.672	8.913	46.263%	-0.059	-0.061	0.046	0.069
σ		0.854%	0.253	0.183	1.502%	0.002	0.007	0.040	0.009
%RSD		1.692	2.922	2.055	3.246	3.000	11.790	85.680	12.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:07:52	52.900%	0.147	485.500	486.700	76.610	77.650	65.475%	66.775%
2	18:08:12	52.153%	0.159	476.100	485.200	79.070	78.080	64.746%	66.551%
3	18:08:31	52.396%	0.165	479.000	483.500	77.160	77.500	64.941%	67.020%
x		52.483%	0.157	480.200	485.100	77.620	77.750	65.054%	66.782%
σ		0.381%	0.009	4.778	1.605	1.293	0.300	0.378%	0.235%
%RSD		0.726	5.776	0.995	0.331	1.666	0.386	0.581	0.351
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:07:52	0.242	0.227	3.380	55.156%				
2	18:08:12	0.246	0.253	3.429	55.336%				
3	18:08:31	0.268	0.254	3.372	56.237%				
x		0.252	0.245	3.394	55.576%				
σ		0.014	0.015	0.031	0.579%				
%RSD		5.654	6.296	0.918	1.042				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	43.273%	0.456	113.500	116.300	0.000	253800.000	17430.000	17280.000
2	18:12:00	41.031%	0.233	112.200	105.600	0.000	234300.000	16910.000	17100.000
3	18:12:19	41.007%	0.235	115.100	113.300	0.000	230500.000	16360.000	16440.000
X		41.770%	0.308	113.600	111.700	0.000	239500.000	16900.000	16940.000
σ		1.301%	0.128	1.449	5.504	0.000	12530.000	535.200	443.400
%RSD		3.114	41.510	1.276	4.926	0.000	5.229	3.167	2.617
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	2416.000	29070.000	0.000	7819.000	97580.000	99090.000	37.675%	2.939
2	18:12:00	2290.000	27690.000	0.000	7950.000	102200.000	102300.000	35.945%	3.630
3	18:12:19	2354.000	28420.000	0.000	7770.000	100600.000	102500.000	33.511%	3.514
X		2353.000	28390.000	0.000	7846.000	100100.000	101300.000	35.710%	3.361
σ		63.170	690.400	0.000	92.880	2336.000	1921.000	2.092%	0.370
%RSD		2.684	2.431	0.000	1.184	2.333	1.897	5.857	11.010
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	46.560	0.898	457.400	18.610	137.900	2.124	12.490	5.651
2	18:12:00	49.330	0.908	458.300	17.780	135.300	2.177	11.630	5.428
3	18:12:19	48.120	0.846	473.900	16.690	127.400	2.216	12.980	5.721
X		48.000	0.884	463.200	17.700	133.500	2.172	12.370	5.600
σ		1.389	0.033	9.236	0.965	5.507	0.047	0.686	0.153
%RSD		2.893	3.749	1.994	5.451	4.124	2.147	5.547	2.731
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	3.649	4.551	4.743	66.710	4.016	5.411	0.000	330.100
2	18:12:00	3.690	4.165	4.098	68.480	4.331	5.709	0.000	333.000
3	18:12:19	3.636	4.562	4.907	67.700	3.935	5.163	0.000	334.400
X		3.658	4.426	4.583	67.630	4.094	5.428	0.000	332.500
σ		0.028	0.227	0.428	0.886	0.209	0.273	0.000	2.233
%RSD		0.763	5.117	9.330	1.310	5.115	5.033	0.000	0.671
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	49.122%	8.650	8.864	46.819%	-0.088	-0.087	0.031	0.041
2	18:12:00	47.280%	8.830	9.067	44.490%	-0.084	-0.088	-0.017	0.012
3	18:12:19	46.757%	8.835	8.853	43.649%	-0.071	-0.082	-0.045	0.006
X		47.720%	8.772	8.928	44.986%	-0.081	-0.086	-0.011	0.020
σ		1.242%	0.106	0.120	1.642%	0.009	0.003	0.038	0.019
%RSD		2.603	1.207	1.347	3.650	11.340	3.532	364.700	96.310
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:11:41	51.733%	-0.068	462.600	463.000	50.600	50.460	64.957%	66.608%
2	18:12:00	50.753%	-0.028	464.600	473.600	51.460	50.340	64.308%	66.486%
3	18:12:19	51.032%	-0.067	467.400	467.100	49.730	50.930	64.972%	66.677%
X		51.173%	-0.054	464.900	467.900	50.600	50.580	64.746%	66.590%
σ		0.505%	0.023	2.398	5.336	0.865	0.310	0.379%	0.097%
%RSD		0.986	41.660	0.516	1.141	1.710	0.613	0.586	0.145
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:11:41	0.142	0.150	0.039	58.853%				
2	18:12:00	0.155	0.153	0.038	57.393%				
3	18:12:19	0.160	0.157	0.043	57.402%				
X		0.152	0.153	0.040	57.883%				
σ		0.010	0.004	0.003	0.840%				
%RSD		6.286	2.324	7.011	1.451				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	44.236%	0.189	170.600	174.300	0.000	203000.000	8063.000	8117.000
2	18:15:48	41.730%	0.081	162.200	153.900	0.000	197300.000	7771.000	7941.000
3	18:16:10	41.214%	0.259	159.500	155.300	0.000	194500.000	7401.000	7486.000
X		42.393%	0.176	164.100	161.200	0.000	198200.000	7745.000	7848.000
σ		1.617%	0.090	5.753	11.400	0.000	4344.000	331.700	326.100
%RSD		3.814	50.990	3.506	7.072	0.000	2.191	4.283	4.155
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	4333.000	20850.000	0.000	3729.000	65790.000	66670.000	38.191%	129.300
2	18:15:48	4014.000	19110.000	0.000	3702.000	65280.000	65530.000	35.689%	135.700
3	18:16:10	4005.000	18980.000	0.000	3648.000	64640.000	66860.000	34.200%	147.600
X		4117.000	19650.000	0.000	3693.000	65240.000	66350.000	36.027%	137.500
σ		186.700	1046.000	0.000	41.060	578.500	719.200	2.017%	9.280
%RSD		4.535	5.325	0.000	1.112	0.887	1.084	5.598	6.747
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	22.690	6.835	196.300	4621.000	4658.000	2.519	6.122	6.291
2	18:15:48	23.680	7.198	203.100	4807.000	4786.000	2.659	6.970	6.392
3	18:16:10	20.550	7.117	202.300	4772.000	4805.000	2.436	6.393	6.235
X		22.310	7.050	200.600	4733.000	4750.000	2.538	6.495	6.306
σ		1.600	0.191	3.754	98.710	79.850	0.113	0.433	0.079
%RSD		7.171	2.708	1.872	2.085	1.681	4.435	6.667	1.257
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	4.813	13.580	13.930	2.476	4.395	4.716	0.000	317.300
2	18:15:48	4.847	13.720	13.860	1.975	4.018	5.268	0.000	351.700
3	18:16:10	4.737	13.590	14.520	2.254	4.420	4.685	0.000	353.000
X		4.799	13.630	14.100	2.235	4.278	4.890	0.000	340.700
σ		0.056	0.080	0.362	0.251	0.225	0.328	0.000	20.230
%RSD		1.169	0.584	2.566	11.240	5.258	6.704	0.000	5.937
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	49.574%	1.808	2.125	45.937%	-0.082	-0.076	0.283	0.292
2	18:15:48	48.877%	1.843	2.054	45.181%	-0.075	-0.076	0.277	0.285
3	18:16:10	48.489%	1.772	1.985	44.430%	-0.065	-0.075	0.347	0.308
X		48.980%	1.808	2.055	45.183%	-0.074	-0.076	0.302	0.295
σ		0.550%	0.035	0.070	0.754%	0.009	0.001	0.039	0.012
%RSD		1.122	1.961	3.410	1.668	11.760	1.106	12.820	4.054
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:15:29	51.318%	0.247	0.819	0.783	94.990	94.660	64.096%	66.513%
2	18:15:48	52.049%	0.209	0.735	0.811	94.200	93.430	65.396%	67.395%
3	18:16:10	51.049%	0.226	0.832	0.832	93.450	93.340	64.730%	66.863%
X		51.472%	0.227	0.795	0.809	94.210	93.810	64.741%	66.924%
σ		0.518%	0.019	0.053	0.025	0.766	0.736	0.650%	0.444%
%RSD		1.005	8.347	6.639	3.071	0.813	0.785	1.004	0.664
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:15:29	0.103	0.110	3.226	60.287%				
2	18:15:48	0.102	0.109	3.385	57.384%				
3	18:16:10	0.124	0.114	3.373	58.006%				
X		0.110	0.111	3.328	58.559%				
σ		0.012	0.002	0.089	1.528%				
%RSD		11.280	1.998	2.664	2.610				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	46.333%	-0.023	167.600	170.800	0.000	210200.000	7212.000	7518.000
2	18:19:39	42.236%	-0.044	175.500	172.800	0.000	216000.000	7393.000	7571.000
3	18:19:59	44.232%	-0.044	160.800	154.300	0.000	192400.000	6906.000	7146.000
X		44.267%	-0.037	168.000	166.000	0.000	206200.000	7170.000	7412.000
σ		2.049%	0.012	7.365	10.120	0.000	12280.000	246.300	231.800
%RSD		4.628	32.460	4.385	6.096	0.000	5.954	3.434	3.128
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	8.559	10030.000	0.000	2636.000	64760.000	65400.000	38.274%	0.997
2	18:19:39	11.020	9758.000	0.000	2593.000	64200.000	66140.000	37.892%	1.267
3	18:19:59	8.050	9031.000	0.000	2618.000	64530.000	66300.000	36.087%	0.927
X		9.209	9608.000	0.000	2616.000	64500.000	65950.000	37.417%	1.064
σ		1.586	518.600	0.000	21.200	277.900	478.700	1.168%	0.180
%RSD		17.220	5.397	0.000	0.811	0.431	0.726	3.122	16.880
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	7.137	0.456	151.200	30.700	117.700	0.997	2.933	2.472
2	18:19:39	7.055	0.432	150.100	27.910	111.100	0.980	2.870	2.586
3	18:19:59	6.361	0.431	156.100	29.280	116.800	1.124	3.148	2.477
X		6.851	0.440	152.500	29.300	115.200	1.034	2.984	2.512
σ		0.426	0.014	3.218	1.397	3.556	0.079	0.146	0.064
%RSD		6.223	3.153	2.110	4.769	3.087	7.610	4.889	2.545
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	0.777	2.358	2.097	1.063	3.916	5.048	0.000	321.400
2	18:19:39	0.744	2.276	2.326	0.467	4.635	5.036	0.000	323.300
3	18:19:59	0.920	2.113	1.918	0.278	4.249	4.838	0.000	358.600
X		0.814	2.249	2.114	0.603	4.266	4.974	0.000	334.400
σ		0.094	0.125	0.205	0.409	0.360	0.118	0.000	20.960
%RSD		11.520	5.535	9.690	67.940	8.442	2.368	0.000	6.267
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	48.623%	1.715	1.802	46.589%	-0.092	-0.096	0.198	0.172
2	18:19:39	48.258%	1.578	1.826	45.931%	-0.081	-0.090	0.231	0.198
3	18:19:59	47.151%	1.675	1.743	45.432%	-0.084	-0.084	0.103	0.165
X		48.011%	1.656	1.790	45.984%	-0.086	-0.090	0.177	0.178
σ		0.766%	0.071	0.043	0.580%	0.006	0.006	0.067	0.017
%RSD		1.596	4.281	2.388	1.262	6.554	6.721	37.530	9.517
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:19:20	52.303%	0.089	0.372	0.383	63.250	62.990	63.837%	66.258%
2	18:19:39	51.531%	0.057	0.324	0.383	62.940	63.480	64.561%	66.740%
3	18:19:59	51.393%	0.088	0.359	0.358	61.990	62.590	64.705%	66.493%
X		51.743%	0.078	0.352	0.375	62.730	63.020	64.367%	66.497%
σ		0.490%	0.018	0.025	0.014	0.661	0.443	0.465%	0.241%
%RSD		0.948	23.380	7.029	3.800	1.053	0.703	0.723	0.363
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:19:20	0.015	0.015	0.061	59.380%				
2	18:19:39	0.011	0.016	0.060	59.376%				
3	18:19:59	0.020	0.016	0.072	58.145%				
X		0.015	0.016	0.065	58.967%				
σ		0.005	0.001	0.007	0.712%				
%RSD		30.060	3.693	10.450	1.207				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	107.723%	107.400	100.800	98.690	0.000	46310.000	45200.000	45480.000
2	18:23:17	95.815%	106.500	102.000	100.100	0.000	47770.000	47190.000	47720.000
3	18:23:36	95.469%	110.900	102.800	96.350	0.000	47080.000	48800.000	48780.000
X		99.669%	108.252%	101.858%	98.369%	0.000	94.104%	94.131%	94.659%
σ		6.977%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		7.000	2.146	0.969	1.914	0.000	1.558	3.837	3.562
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	448.900	4502.000	0.000	47920.000	47160.000	47710.000	93.304%	95.860
2	18:23:17	490.000	4838.000	0.000	49920.000	49590.000	50310.000	90.932%	104.300
3	18:23:36	492.700	4822.000	0.000	50690.000	50780.000	50390.000	89.605%	103.400
X		95.442%	94.412%	0.000	99.022%	98.357%	98.938%	91.280%	101.184%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.874%	n/a
%RSD		5.143	4.016	0.000	2.887	3.756	3.079	2.053	4.577
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	98.370	99.560	478.200	25140.000	24500.000	103.400	107.200	108.100
2	18:23:17	103.700	106.100	494.300	25380.000	25130.000	103.700	106.200	108.500
3	18:23:36	103.900	103.600	497.700	25840.000	25310.000	103.400	107.100	107.300
X		101.971%	103.084%	98.016%	101.807%	99.915%	103.505%	106.837%	107.986%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.065	3.201	2.128	1.404	1.713	0.172	0.520	0.535
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	109.800	103.000	103.700	106.300	106.800	108.700	0.000	102.200
2	18:23:17	108.100	105.300	104.800	106.600	109.900	110.900	0.000	103.700
3	18:23:36	109.900	106.200	106.700	109.900	111.200	108.100	0.000	104.800
X		109.256%	104.837%	105.024%	107.607%	109.305%	109.243%	0.000	103.552%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.946	1.567	1.447	1.825	2.070	1.349	0.000	1.264
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	85.973%	96.280	95.200	82.875%	101.000	100.900	98.540	99.740
2	18:23:17	86.420%	99.950	100.500	82.831%	102.100	102.400	100.700	101.200
3	18:23:36	86.905%	102.000	101.100	84.114%	101.900	102.100	100.400	101.000
X		86.433%	99.403%	98.940%	83.273%	101.689%	101.779%	99.867%	100.653%
σ		0.466%	n/a	n/a	0.728%	n/a	n/a	n/a	n/a
%RSD		0.539	2.908	3.283	0.874	0.596	0.808	1.163	0.788
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:22:57	80.697%	96.120	96.720	97.690	97.370	97.560	81.169%	82.060%
2	18:23:17	81.398%	98.560	97.940	98.150	99.220	100.700	83.462%	83.907%
3	18:23:36	83.829%	97.400	98.920	98.510	97.450	98.400	87.023%	86.406%
X		81.975%	97.360%	97.858%	98.116%	98.012%	98.897%	83.885%	84.124%
σ		1.644%	n/a	n/a	n/a	n/a	n/a	2.950%	2.181%
%RSD		2.005	1.251	1.125	0.422	1.066	1.660	3.517	2.593
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:22:57	104.000	104.100	105.200	74.072%				
2	18:23:17	104.100	103.600	107.000	76.567%				
3	18:23:36	106.700	106.000	108.500	76.905%				
X		104.915%	104.554%	106.872%	75.848%				
σ		n/a	n/a	n/a	1.548%				
%RSD		1.436	1.226	1.548	2.040				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	118.095%	-0.016	1.106	0.806	0.000	18.410	6.631	6.117
2	18:30:07	113.678%	-0.023	0.726	0.544	0.000	15.770	5.367	6.165
3	18:30:26	120.603%	-0.017	0.579	0.526	0.000	14.080	5.823	5.826
X		117.459%	-0.018	0.803	0.625	0.000	16.090	5.940	6.036
σ		3.506%	0.004	0.272	0.157	0.000	2.183	0.640	0.184
%RSD		2.985	20.540	33.820	25.090	0.000	13.570	10.780	3.042
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	2.458	-481.300	0.000	5.574	8.706	9.854	113.096%	0.080
2	18:30:07	2.271	-481.500	0.000	6.261	4.307	8.705	107.363%	0.024
3	18:30:26	2.163	-482.300	0.000	5.953	15.530	9.141	107.363%	-0.031
X		2.297	-481.700	0.000	5.930	9.513	9.233	109.274%	0.024
σ		0.149	0.536	0.000	0.344	5.652	0.580	3.310%	0.056
%RSD		6.508	0.111	0.000	5.806	59.420	6.283	3.029	227.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	0.036	0.030	0.210	8.177	7.062	0.013	-0.004	0.576
2	18:30:07	0.064	0.029	0.221	9.672	6.032	0.015	0.003	0.525
3	18:30:26	0.028	0.042	0.203	7.723	5.583	0.017	0.019	0.468
X		0.043	0.033	0.211	8.524	6.226	0.015	0.006	0.523
σ		0.019	0.008	0.009	1.020	0.758	0.002	0.012	0.054
%RSD		43.730	22.880	4.228	11.970	12.180	13.960	200.800	10.320
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	0.499	1.100	0.926	-0.041	-0.000	-0.004	0.000	0.091
2	18:30:07	0.499	1.045	1.014	0.010	0.163	0.105	0.000	0.077
3	18:30:26	0.475	0.900	0.974	0.005	0.301	0.089	0.000	0.079
X		0.491	1.015	0.971	-0.008	0.155	0.063	0.000	0.082
σ		0.014	0.103	0.044	0.028	0.151	0.059	0.000	0.007
%RSD		2.764	10.190	4.577	328.200	97.400	93.540	0.000	8.984
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	96.176%	0.153	0.197	97.397%	-0.055	-0.065	0.074	0.054
2	18:30:07	97.195%	0.198	0.142	98.584%	-0.060	-0.071	0.076	0.046
3	18:30:26	97.514%	0.118	0.138	98.152%	-0.059	-0.065	0.056	0.030
X		96.962%	0.156	0.159	98.044%	-0.058	-0.067	0.069	0.043
σ		0.699%	0.040	0.033	0.600%	0.003	0.004	0.011	0.012
%RSD		0.721	25.790	20.960	0.612	4.503	5.511	15.810	28.660
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:48	89.590%	0.012	-0.006	-0.010	0.050	0.035	86.006%	85.265%
2	18:30:07	91.389%	0.039	0.002	-0.005	0.056	0.083	88.070%	87.924%
3	18:30:26	91.652%	0.016	-0.003	0.000	0.046	0.044	88.009%	87.623%
X		90.877%	0.022	-0.002	-0.005	0.051	0.054	87.362%	86.937%
σ		1.123%	0.014	0.004	0.005	0.005	0.026	1.174%	1.456%
%RSD		1.235	65.090	179.800	98.570	10.370	47.320	1.344	1.675
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:29:48	0.012	0.010	0.036	83.806%				
2	18:30:07	0.015	0.016	0.036	83.273%				
3	18:30:26	0.017	0.018	0.037	83.241%				
X		0.015	0.015	0.036	83.440%				
σ		0.003	0.004	0.000	0.317%				
%RSD		20.220	26.880	0.677	0.380				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	51.957%	-0.028	52.950	53.070	0.000	499000.000	56370.000	55790.000
2	18:33:58	48.597%	-0.026	51.600	50.560	0.000	490900.000	53810.000	54160.000
3	18:34:17	46.583%	-0.024	53.090	53.170	0.000	502400.000	55400.000	57460.000
X		49.046%	-0.026	52.550	52.270	0.000	497400.000	55190.000	55800.000
σ		2.715%	0.002	0.828	1.482	0.000	5871.000	1293.000	1649.000
%RSD		5.535	8.947	1.575	2.835	0.000	1.180	2.342	2.954
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	-0.696	8934.000	0.000	6662.000	456700.000	446500.000	45.062%	1.118
2	18:33:58	-0.609	8993.000	0.000	6768.000	455900.000	455000.000	43.650%	0.751
3	18:34:17	-0.568	8751.000	0.000	6590.000	460100.000	459300.000	40.208%	0.919
X		-0.624	8892.000	0.000	6673.000	457600.000	453600.000	42.974%	0.929
σ		0.065	126.500	0.000	89.620	2193.000	6485.000	2.497%	0.184
%RSD		10.460	1.423	0.000	1.343	0.479	1.430	5.810	19.780
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	0.767	0.604	653.800	434.400	1011.000	0.373	0.267	3.923
2	18:33:58	-0.626	0.659	645.200	433.300	974.700	0.389	0.178	3.880
3	18:34:17	-1.333	0.623	649.100	428.800	1018.000	0.451	0.161	4.215
X		-0.397	0.629	649.400	432.200	1001.000	0.404	0.202	4.006
σ		1.069	0.028	4.303	2.956	23.200	0.041	0.057	0.183
%RSD		269.100	4.480	0.663	0.684	2.318	10.180	27.980	4.560
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	0.249	0.874	0.322	1.753	-0.217	1.164	0.000	2756.000
2	18:33:58	0.396	0.883	0.541	1.999	0.057	0.811	0.000	2790.000
3	18:34:17	0.368	0.984	0.288	3.282	0.010	0.586	0.000	2760.000
X		0.338	0.914	0.384	2.345	-0.050	0.854	0.000	2769.000
σ		0.078	0.061	0.137	0.821	0.147	0.291	0.000	18.600
%RSD		23.070	6.669	35.780	35.030	293.300	34.150	0.000	0.672
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	52.799%	0.756	0.841	49.010%	-0.087	-0.083	-0.061	-0.048
2	18:33:58	52.449%	0.713	0.730	47.604%	-0.085	-0.093	-0.015	-0.018
3	18:34:17	51.996%	0.746	0.760	46.943%	-0.083	-0.082	-0.050	-0.042
X		52.415%	0.739	0.777	47.852%	-0.085	-0.086	-0.042	-0.036
σ		0.402%	0.023	0.057	1.055%	0.002	0.006	0.024	0.016
%RSD		0.768	3.056	7.347	2.206	2.358	6.977	58.050	44.650
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:33:39	53.474%	0.158	0.074	0.190	215.400	213.200	62.976%	64.096%
2	18:33:58	52.585%	0.041	0.069	0.183	215.900	216.400	63.219%	64.206%
3	18:34:17	52.776%	0.039	0.076	0.144	216.900	214.100	63.245%	64.700%
X		52.945%	0.079	0.073	0.172	216.000	214.500	63.147%	64.334%
σ		0.468%	0.068	0.003	0.025	0.773	1.664	0.148%	0.322%
%RSD		0.884	85.930	4.729	14.540	0.358	0.775	0.235	0.500
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:33:39	0.015	0.016	-0.000	49.964%				
2	18:33:58	0.013	0.015	-0.002	51.609%				
3	18:34:17	0.013	0.013	0.001	50.220%				
X		0.014	0.015	-0.000	50.598%				
σ		0.001	0.002	0.002	0.885%				
%RSD		9.963	10.580	642.500	1.749				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	47.179%	-0.003	60.610	57.130	0.000	500800.000	57430.000	57340.000
2	18:37:47	43.014%	0.003	57.260	55.120	0.000	513400.000	56580.000	57290.000
3	18:38:07	43.062%	-0.044	48.310	51.440	0.000	498400.000	54740.000	55500.000
X		44.418%	-0.014	55.390	54.560	0.000	504200.000	56250.000	56710.000
σ		2.391%	0.026	6.355	2.883	0.000	8045.000	1379.000	1051.000
%RSD		5.383	179.800	11.470	5.284	0.000	1.596	2.451	1.854
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	1.219	8770.000	0.000	6602.000	468900.000	455600.000	42.502%	1.305
2	18:37:47	1.572	8992.000	0.000	6860.000	473500.000	459400.000	41.466%	1.340
3	18:38:07	1.350	8630.000	0.000	6573.000	448200.000	447400.000	40.529%	1.204
X		1.380	8797.000	0.000	6678.000	463500.000	454100.000	41.499%	1.283
σ		0.179	182.500	0.000	158.100	13460.000	6164.000	0.987%	0.071
%RSD		12.940	2.075	0.000	2.367	2.904	1.357	2.378	5.530
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	0.764	0.794	650.200	441.900	1053.000	0.434	0.504	4.110
2	18:37:47	1.989	0.759	657.500	469.100	1019.000	0.408	0.349	3.853
3	18:38:07	-0.133	0.762	641.000	447.100	965.000	0.426	0.172	3.972
X		0.874	0.771	649.600	452.700	1013.000	0.423	0.342	3.978
σ		1.065	0.020	8.302	14.410	44.560	0.013	0.166	0.128
%RSD		121.900	2.529	1.278	3.184	4.400	3.071	48.720	3.222
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	0.363	2.139	2.547	1.798	0.011	0.798	0.000	2760.000
2	18:37:47	0.233	1.906	1.782	1.982	-0.091	1.001	0.000	2762.000
3	18:38:07	0.351	2.035	1.673	1.191	0.144	0.819	0.000	2746.000
X		0.316	2.026	2.000	1.657	0.021	0.873	0.000	2756.000
σ		0.072	0.117	0.476	0.414	0.117	0.112	0.000	8.614
%RSD		22.860	5.756	23.800	24.980	553.900	12.770	0.000	0.313
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	51.640%	0.674	0.730	46.742%	-0.089	-0.089	-0.003	-0.017
2	18:37:47	50.528%	0.654	0.711	46.093%	-0.073	-0.089	-0.023	-0.016
3	18:38:07	49.694%	0.770	0.721	44.958%	-0.076	-0.082	-0.036	-0.033
X		50.621%	0.700	0.720	45.931%	-0.079	-0.087	-0.021	-0.022
σ		0.977%	0.062	0.009	0.903%	0.009	0.004	0.016	0.009
%RSD		1.929	8.877	1.286	1.966	10.930	5.027	79.040	41.930
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:37:28	52.217%	-0.037	0.049	0.136	211.600	214.500	61.673%	63.028%
2	18:37:47	51.781%	0.006	0.049	0.153	212.200	212.500	62.380%	63.717%
3	18:38:07	52.007%	-0.021	0.038	0.143	213.100	213.000	61.655%	63.705%
X		52.001%	-0.017	0.045	0.144	212.300	213.400	61.903%	63.483%
σ		0.218%	0.022	0.006	0.008	0.771	1.005	0.414%	0.394%
%RSD		0.420	126.600	14.210	5.836	0.363	0.471	0.669	0.621
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:37:28	0.010	0.009	0.087	52.218%				
2	18:37:47	0.009	0.010	0.100	50.132%				
3	18:38:07	0.009	0.009	0.089	50.768%				
X		0.009	0.009	0.092	51.039%				
σ		0.001	0.001	0.007	1.069%				
%RSD		9.501	8.319	7.560	2.094				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	73.793%	0.044	1.651	1.666	0.000	1137.000	15690.000	15860.000
2	18:41:37	71.743%	0.148	1.929	1.394	0.000	1120.000	15300.000	15540.000
3	18:41:56	69.509%	0.022	1.787	1.667	0.000	1071.000	14920.000	15040.000
X		71.682%	0.071	1.789	1.576	0.000	1109.000	15300.000	15480.000
σ		2.142%	0.068	0.139	0.157	0.000	33.990	383.200	413.300
%RSD		2.989	94.750	7.772	9.988	0.000	3.064	2.504	2.670
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	13.880	647.600	0.000	3488.000	33270.000	32490.000	63.359%	0.018
2	18:41:37	13.760	619.000	0.000	3570.000	33610.000	33240.000	59.705%	0.091
3	18:41:56	13.520	571.800	0.000	3536.000	33590.000	33420.000	55.845%	-0.018
X		13.720	612.800	0.000	3531.000	33490.000	33050.000	59.637%	0.030
σ		0.180	38.300	0.000	41.260	193.300	493.200	3.758%	0.056
%RSD		1.316	6.250	0.000	1.168	0.577	1.492	6.301	182.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	0.088	0.017	3342.000	31920.000	30890.000	26.250	5.760	19.920
2	18:41:37	0.160	-0.060	3403.000	32530.000	31240.000	26.310	5.373	19.900
3	18:41:56	-0.014	0.053	3509.000	34470.000	33200.000	27.140	5.579	21.270
X		0.078	0.003	3418.000	32970.000	31780.000	26.570	5.571	20.360
σ		0.087	0.058	84.470	1332.000	1243.000	0.500	0.194	0.784
%RSD		111.500	1780.000	2.472	4.041	3.913	1.883	3.477	3.849
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	19.550	589.000	582.400	-0.102	-0.591	0.150	0.000	123.200
2	18:41:37	19.580	596.200	591.900	-0.150	-0.600	0.039	0.000	121.200
3	18:41:56	21.080	600.300	601.800	-0.043	-0.526	0.041	0.000	122.300
X		20.070	595.200	592.100	-0.098	-0.572	0.077	0.000	122.200
σ		0.876	5.730	9.670	0.054	0.040	0.064	0.000	1.028
%RSD		4.364	0.963	1.633	54.570	7.068	82.840	0.000	0.841
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	86.825%	-0.016	-0.016	67.303%	-0.076	-0.069	0.470	0.420
2	18:41:37	87.477%	-0.012	-0.023	67.673%	-0.063	-0.063	0.461	0.424
3	18:41:56	87.785%	0.008	-0.008	66.997%	-0.065	-0.075	0.436	0.401
X		87.362%	-0.007	-0.016	67.324%	-0.068	-0.069	0.456	0.415
σ		0.490%	0.013	0.007	0.338%	0.007	0.006	0.018	0.012
%RSD		0.561	188.500	47.320	0.502	10.460	8.308	3.884	2.978
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:18	67.997%	-0.190	-0.048	-0.050	4.135	3.978	75.208%	76.107%
2	18:41:37	69.425%	-0.179	-0.037	-0.041	3.993	3.703	77.568%	79.134%
3	18:41:56	69.381%	-0.205	-0.046	-0.042	3.732	3.855	78.228%	79.834%
X		68.934%	-0.192	-0.044	-0.044	3.954	3.845	77.001%	78.359%
σ		0.812%	0.013	0.006	0.005	0.204	0.138	1.588%	1.981%
%RSD		1.178	6.774	13.110	10.320	5.171	3.584	2.062	2.528
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:41:18	0.011	0.013	0.011	73.843%				
2	18:41:37	0.015	0.011	0.014	70.366%				
3	18:41:56	0.018	0.015	0.021	69.441%				
X		0.015	0.013	0.015	71.217%				
σ		0.004	0.002	0.005	2.321%				
%RSD		23.850	16.710	35.690	3.259				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	107.730%	-0.039	0.369	0.427	0.000	224.000	2952.000	2954.000	
2	18:45:26	99.967%	-0.037	0.299	0.410	0.000	225.800	3051.000	3049.000	
3	18:45:45	93.418%	-0.013	0.543	0.400	0.000	227.200	3131.000	3194.000	
X		100.372%	-0.030	0.404	0.413	0.000	225.700	3045.000	3066.000	
		σ	7.164%	0.015	0.126	0.014	0.000	1.576	89.610	120.800
		%RSD	7.138	49.340	31.100	3.306	0.000	0.699	2.943	3.941
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	3.020	-276.300	0.000	650.700	6149.000	5929.000	86.924%	-0.048	
2	18:45:26	2.779	-268.300	0.000	653.700	6221.000	6069.000	85.030%	-0.094	
3	18:45:45	3.055	-263.100	0.000	693.100	6261.000	6210.000	82.145%	0.015	
X		2.951	-269.200	0.000	665.800	6210.000	6069.000	84.700%	-0.042	
		σ	0.150	6.645	0.000	23.680	56.550	140.600	2.407%	0.055
		%RSD	5.090	2.468	0.000	3.556	0.910	2.316	2.842	128.800
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	-0.039	-0.018	632.000	6306.000	6547.000	5.444	1.207	4.425	
2	18:45:26	-0.016	-0.011	655.600	6492.000	6561.000	5.539	1.051	4.364	
3	18:45:45	0.098	0.012	658.700	6442.000	6575.000	5.464	1.198	4.421	
X		0.014	-0.005	648.800	6413.000	6561.000	5.482	1.152	4.403	
		σ	0.073	0.016	14.580	96.280	13.810	0.050	0.088	0.034
		%RSD	526.100	288.800	2.247	1.501	0.210	0.914	7.627	0.770
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	4.309	122.000	124.000	0.034	-0.220	0.157	0.000	27.990	
2	18:45:26	4.335	124.200	124.600	-0.021	-0.002	0.085	0.000	28.000	
3	18:45:45	4.367	124.200	126.700	-0.015	0.015	0.133	0.000	28.200	
X		4.337	123.500	125.100	-0.001	-0.069	0.125	0.000	28.060	
		σ	0.029	1.302	1.384	0.030	0.131	0.037	0.000	0.118
		%RSD	0.660	1.054	1.106	3195.000	190.000	29.410	0.000	0.420
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	89.082%	-0.028	-0.020	85.037%	-0.069	-0.074	0.168	0.151	
2	18:45:26	89.854%	-0.039	-0.035	85.567%	-0.066	-0.074	0.116	0.115	
3	18:45:45	87.464%	-0.003	-0.025	84.027%	-0.064	-0.063	0.108	0.092	
X		88.800%	-0.023	-0.026	84.877%	-0.066	-0.070	0.131	0.119	
		σ	1.220%	0.018	0.007	0.782%	0.003	0.006	0.033	0.030
		%RSD	1.374	78.910	28.150	0.922	4.071	9.077	24.870	24.770
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	18:45:07	81.867%	-0.195	-0.054	-0.054	0.772	0.817	82.603%	82.266%	
2	18:45:26	81.883%	-0.181	-0.052	-0.059	0.702	0.840	85.177%	84.323%	
3	18:45:45	82.205%	-0.188	-0.055	-0.060	0.864	0.758	85.971%	85.946%	
X		81.985%	-0.188	-0.054	-0.058	0.779	0.805	84.583%	84.178%	
		σ	0.191%	0.007	0.002	0.003	0.081	0.042	1.761%	1.844%
		%RSD	0.233	3.608	3.500	5.272	10.410	5.265	2.082	2.191
Run	Time	203Tl	205Tl	208Pb	209Bi					
		ppb	ppb	ppb	ppb					
1	18:45:07	0.002	0.002	-0.000	79.404%					
2	18:45:26	0.003	0.001	0.005	78.263%					
3	18:45:45	0.002	0.003	0.006	79.251%					
X		0.002	0.002	0.003	78.972%					
		σ	0.001	0.001	0.003	0.619%				
		%RSD	36.380	42.660	97.190	0.784				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	95.077%	5.128	91.040	84.260	0.000	5307.000	18220.000	18490.000
2	18:49:16	78.626%	5.758	100.500	92.400	0.000	5584.000	19280.000	19560.000
3	18:49:36	79.662%	4.472	97.120	93.980	0.000	5486.000	19220.000	19760.000
X		84.455%	5.120	96.230	90.210	0.000	5459.000	18910.000	19270.000
σ		9.213%	0.643	4.803	5.218	0.000	140.400	594.000	680.200
%RSD		10.909	12.560	4.991	5.784	0.000	2.572	3.141	3.530
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	186.900	1417.000	0.000	7936.000	34550.000	35100.000	73.276%	100.700
2	18:49:16	192.500	1519.000	0.000	8478.000	36590.000	36190.000	71.185%	102.200
3	18:49:36	194.900	1537.000	0.000	8390.000	36350.000	35800.000	67.224%	101.600
X		191.400	1491.000	0.000	8268.000	35830.000	35690.000	70.562%	101.500
σ		4.108	64.610	0.000	290.900	1115.000	550.900	3.074%	0.740
%RSD		2.146	4.332	0.000	3.519	3.113	1.543	4.356	0.729
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	51.490	20.480	3196.000	31020.000	30130.000	76.590	58.410	46.270
2	18:49:16	51.290	20.760	3206.000	30660.000	29350.000	72.250	56.090	44.470
3	18:49:36	50.140	20.510	3236.000	30810.000	30150.000	74.620	56.090	44.880
X		50.970	20.580	3213.000	30830.000	29880.000	74.490	56.870	45.210
σ		0.731	0.150	21.130	180.000	456.400	2.172	1.336	0.944
%RSD		1.434	0.730	0.658	0.584	1.528	2.916	2.350	2.087
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	46.730	607.700	596.600	3.587	0.458	0.870	0.000	179.000
2	18:49:16	43.730	592.500	593.400	3.176	0.495	1.146	0.000	180.500
3	18:49:36	44.160	605.800	597.900	3.481	0.529	1.064	0.000	180.900
X		44.880	602.000	595.900	3.415	0.494	1.027	0.000	180.100
σ		1.623	8.289	2.306	0.213	0.036	0.142	0.000	0.993
%RSD		3.616	1.377	0.387	6.245	7.274	13.840	0.000	0.551
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	96.883%	87.640	93.020	75.171%	4.923	5.098	5.462	4.898
2	18:49:16	95.523%	88.990	93.830	73.816%	5.139	5.119	5.464	4.858
3	18:49:36	94.918%	89.170	94.270	73.966%	4.968	5.124	5.429	5.101
X		95.775%	88.600	93.710	74.318%	5.010	5.114	5.452	4.952
σ		1.006%	0.839	0.631	0.743%	0.114	0.014	0.019	0.130
%RSD		1.051	0.947	0.673	1.000	2.271	0.266	0.356	2.632
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:48:57	74.979%	197.200	48.150	48.920	195.400	198.500	80.572%	80.935%
2	18:49:16	74.490%	196.800	48.570	49.650	195.700	197.600	81.989%	83.149%
3	18:49:36	74.974%	198.100	48.920	48.980	197.900	197.900	82.787%	83.559%
X		74.814%	197.400	48.550	49.180	196.300	198.000	81.782%	82.547%
σ		0.281%	0.682	0.381	0.406	1.378	0.446	1.122%	1.412%
%RSD		0.376	0.345	0.785	0.826	0.702	0.225	1.371	1.710
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:48:57	4.829	4.867	2.082	78.131%				
2	18:49:16	5.157	5.183	2.197	75.479%				
3	18:49:36	5.235	5.252	2.209	76.064%				
X		5.074	5.101	2.163	76.558%				
σ		0.215	0.205	0.070	1.393%				
%RSD		4.245	4.024	3.235	1.820				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	78.187%	5.683	101.200	91.980	0.000	5666.000	19230.000	19100.000
2	18:53:06	77.410%	5.295	90.680	88.440	0.000	5345.000	18090.000	18880.000
3	18:53:25	72.411%	5.001	96.080	87.070	0.000	5441.000	19150.000	19340.000
X		76.003%	5.326	95.980	89.160	0.000	5484.000	18830.000	19110.000
σ		3.134%	0.342	5.242	2.534	0.000	165.000	636.900	229.900
%RSD		4.124	6.427	5.462	2.842	0.000	3.009	3.383	1.203
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	193.800	1477.000	0.000	8255.000	35480.000	35610.000	73.138%	100.200
2	18:53:06	195.700	1477.000	0.000	8141.000	36010.000	36270.000	69.714%	103.200
3	18:53:25	194.600	1448.000	0.000	8342.000	37550.000	37520.000	64.784%	103.400
X		194.700	1468.000	0.000	8246.000	36350.000	36470.000	69.212%	102.300
σ		0.972	16.540	0.000	100.600	1074.000	968.200	4.199%	1.831
%RSD		0.499	1.127	0.000	1.220	2.956	2.655	6.067	1.791
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	50.240	20.650	3255.000	30930.000	29180.000	73.220	55.970	44.140
2	18:53:06	51.600	20.590	3325.000	31390.000	30530.000	75.270	55.930	44.400
3	18:53:25	53.180	21.320	3329.000	31880.000	30760.000	76.210	57.590	45.700
X		51.670	20.850	3303.000	31400.000	30160.000	74.900	56.500	44.750
σ		1.470	0.407	41.990	476.000	854.700	1.526	0.948	0.838
%RSD		2.844	1.951	1.271	1.516	2.834	2.038	1.678	1.872
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	43.030	586.200	588.000	3.234	0.487	0.929	0.000	181.300
2	18:53:06	43.530	590.900	588.600	3.647	0.503	1.254	0.000	180.700
3	18:53:25	45.260	611.900	604.100	3.535	0.550	0.905	0.000	181.500
X		43.940	596.400	593.500	3.472	0.513	1.030	0.000	181.100
σ		1.171	13.680	9.111	0.213	0.033	0.195	0.000	0.405
%RSD		2.665	2.294	1.535	6.146	6.402	18.940	0.000	0.223
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	95.311%	87.440	93.460	74.736%	5.185	5.084	5.417	4.888
2	18:53:06	94.985%	87.970	94.100	73.696%	4.937	5.034	5.296	4.829
3	18:53:25	94.090%	88.600	94.120	73.583%	4.979	5.026	5.559	5.043
X		94.795%	88.000	93.890	74.005%	5.033	5.048	5.424	4.920
σ		0.632%	0.577	0.376	0.635%	0.133	0.031	0.132	0.110
%RSD		0.667	0.656	0.400	0.859	2.634	0.616	2.427	2.244
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:47	74.882%	195.200	48.070	48.720	195.300	196.200	80.620%	81.517%
2	18:53:06	74.585%	196.100	48.400	48.320	196.000	196.900	81.670%	82.809%
3	18:53:25	74.363%	196.100	48.130	48.500	193.300	195.100	82.699%	83.227%
X		74.610%	195.800	48.200	48.510	194.900	196.100	81.663%	82.518%
σ		0.260%	0.505	0.174	0.205	1.414	0.884	1.039%	0.891%
%RSD		0.349	0.258	0.360	0.422	0.725	0.451	1.273	1.080
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:52:47	4.707	4.763	2.023	81.463%				
2	18:53:06	5.042	5.045	2.108	78.516%				
3	18:53:25	5.164	5.188	2.191	77.010%				
X		4.971	4.998	2.107	78.997%				
σ		0.237	0.217	0.084	2.265%				
%RSD		4.758	4.331	3.991	2.867				

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	107.652%	101.400	98.930	95.130	0.000	44990.000	45810.000	46090.000
2	18:56:44	108.674%	104.700	101.200	98.040	0.000	47140.000	47450.000	48360.000
3	18:57:04	103.713%	107.000	100.600	100.200	0.000	50140.000	48810.000	49560.000
X		106.680%	104.389%	100.266%	97.799%	0.000	94.851%	94.715%	96.006%
σ		2.619%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.455	2.681	1.188	2.620	0.000	5.452	3.169	3.677
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	463.800	4542.000	0.000	47490.000	45920.000	46520.000	102.326%	99.010
2	18:56:44	490.400	4744.000	0.000	49400.000	48260.000	49630.000	97.595%	101.900
3	18:57:04	508.200	5003.000	0.000	51920.000	49820.000	50000.000	93.267%	105.500
X		97.494%	95.262%	0.000	99.210%	96.001%	97.432%	97.729%	102.123%
σ		n/a	n/a	0.000	n/a	n/a	n/a	4.531%	n/a
%RSD		4.586	4.853	0.000	4.480	4.097	3.928	4.637	3.163
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	99.740	102.500	473.700	24650.000	24010.000	100.600	104.500	106.300
2	18:56:44	103.200	101.900	481.200	25370.000	24660.000	102.900	109.300	108.500
3	18:57:04	105.000	105.100	497.100	25270.000	25200.000	105.800	109.400	110.800
X		102.651%	103.165%	96.800%	100.385%	98.502%	103.101%	107.767%	108.559%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.607	1.676	2.465	1.547	2.429	2.501	2.603	2.071
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	106.500	100.600	100.500	106.200	109.000	108.400	0.000	101.300
2	18:56:44	109.000	103.800	103.800	107.300	109.500	109.100	0.000	103.100
3	18:57:04	111.500	106.700	107.100	108.400	111.000	111.300	0.000	103.800
X		109.000%	103.684%	103.783%	107.272%	109.830%	109.614%	0.000	102.713%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.286	2.943	3.159	1.042	0.948	1.349	0.000	1.252
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	87.346%	97.610	97.860	85.618%	100.100	101.200	97.160	98.090
2	18:56:44	88.008%	101.600	100.800	85.880%	101.200	101.700	98.790	100.400
3	18:57:04	86.532%	104.000	103.000	84.624%	102.900	103.300	101.500	101.000
X		87.296%	101.049%	100.535%	85.374%	101.386%	102.076%	99.143%	99.833%
σ		0.740%	n/a	n/a	0.663%	n/a	n/a	n/a	n/a
%RSD		0.847	3.177	2.546	0.776	1.350	1.064	2.205	1.539
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:56:25	82.519%	96.500	93.310	94.350	96.750	97.640	82.756%	82.487%
2	18:56:44	83.170%	98.940	96.560	98.770	98.490	98.600	83.353%	82.816%
3	18:57:04	81.290%	99.390	99.620	98.430	99.340	99.710	83.727%	83.797%
X		82.326%	98.277%	96.498%	97.183%	98.194%	98.652%	83.279%	83.033%
σ		0.954%	n/a	n/a	n/a	n/a	n/a	0.489%	0.681%
%RSD		1.159	1.579	3.267	2.527	1.345	1.050	0.588	0.821
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	18:56:25	101.500	101.400	102.900	76.057%				
2	18:56:44	103.700	102.900	105.800	76.172%				
3	18:57:04	104.400	104.500	106.500	76.985%				
X		103.226%	102.925%	105.068%	76.405%				
σ		n/a	n/a	n/a	0.506%				
%RSD		1.493	1.528	1.819	0.662				

CCB10 5/1/2015 7:02:55 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:14	113.287%	-0.013	0.531	0.565	0.000	18.710	6.664	6.488
2	19:03:34	117.783%	-0.024	0.308	0.466	0.000	14.980	5.568	5.826
3	19:03:53	114.984%	0.031	0.358	0.363	0.000	14.090	6.029	5.476
X		115.351%	-0.002	0.399	0.465	0.000	15.930	6.087	5.930
σ		2.270%	0.029	0.117	0.101	0.000	2.447	0.550	0.514
%RSD		1.968	1346.000	29.330	21.690	0.000	15.360	9.043	8.670
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:14	2.171	-485.300	0.000	7.096	15.340	14.180	102.403%	0.089
2	19:03:34	2.278	-486.000	0.000	5.838	6.036	10.990	102.273%	0.021
3	19:03:53	1.837	-485.900	0.000	7.239	10.760	7.578	96.801%	0.049
X		2.095	-485.800	0.000	6.724	10.710	10.920	100.492%	0.053
σ		0.230	0.379	0.000	0.771	4.652	3.302	3.198%	0.034
%RSD		10.990	0.078	0.000	11.470	43.430	30.250	3.182	64.630
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:14	0.030	0.012	0.220	10.820	7.709	0.027	-0.006	0.551
2	19:03:34	0.050	0.027	0.213	11.210	8.054	0.017	0.029	0.568
3	19:03:53	0.040	0.007	0.237	10.540	6.346	0.014	0.050	0.495
X		0.040	0.015	0.224	10.860	7.370	0.019	0.024	0.538
σ		0.010	0.010	0.012	0.338	0.903	0.007	0.029	0.038
%RSD		25.060	69.620	5.499	3.109	12.250	36.110	118.100	7.109
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:14	0.521	0.992	1.063	0.030	-0.082	0.068	0.000	0.087
2	19:03:34	0.483	1.110	1.004	0.052	0.197	0.180	0.000	0.085
3	19:03:53	0.464	1.026	1.207	0.021	0.339	0.150	0.000	0.075
X		0.489	1.043	1.091	0.035	0.151	0.133	0.000	0.082
σ		0.029	0.061	0.105	0.016	0.214	0.058	0.000	0.006
%RSD		5.985	5.829	9.584	46.020	141.600	43.690	0.000	7.504
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:14	91.727%	0.305	0.245	94.844%	-0.069	-0.069	0.074	0.056
2	19:03:34	93.128%	0.231	0.262	95.220%	-0.066	-0.069	0.085	0.058
3	19:03:53	92.483%	0.238	0.194	94.638%	-0.061	-0.067	0.038	0.034
X		92.446%	0.258	0.233	94.901%	-0.066	-0.068	0.065	0.049
σ		0.701%	0.041	0.035	0.295%	0.004	0.001	0.025	0.013
%RSD		0.758	15.960	15.200	0.311	6.272	1.347	37.770	27.150
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:03:14	86.271%	0.133	-0.005	-0.003	0.059	0.043	83.416%	82.520%
2	19:03:34	86.841%	0.157	-0.014	0.007	0.044	0.066	85.275%	84.990%
3	19:03:53	88.558%	0.146	-0.005	-0.007	0.048	0.073	86.230%	85.474%
X		87.223%	0.145	-0.008	-0.001	0.050	0.060	84.974%	84.328%
σ		1.190%	0.012	0.005	0.007	0.008	0.016	1.431%	1.585%
%RSD		1.365	8.155	66.270	759.600	15.270	26.390	1.684	1.879
Run	Time	203Tl	205Tl	208Pb	209Bi				
		ppb	ppb	ppb	ppb				
1	19:03:14	0.020	0.025	0.031	82.377%				
2	19:03:34	0.024	0.024	0.036	81.836%				
3	19:03:53	0.025	0.023	0.038	81.105%				
X		0.023	0.024	0.035	81.772%				
σ		0.003	0.001	0.003	0.638%				
%RSD		12.370	2.896	9.640	0.780				

Performance Report

Sample details

Sample name : ITUNE

Acquired at : 5/1/2015 9:24:56 AM

Report name : EPA ILMO5.2/6020A 2.1 [3/15/2013 11:49:53 AM]

Mass Calibration verification

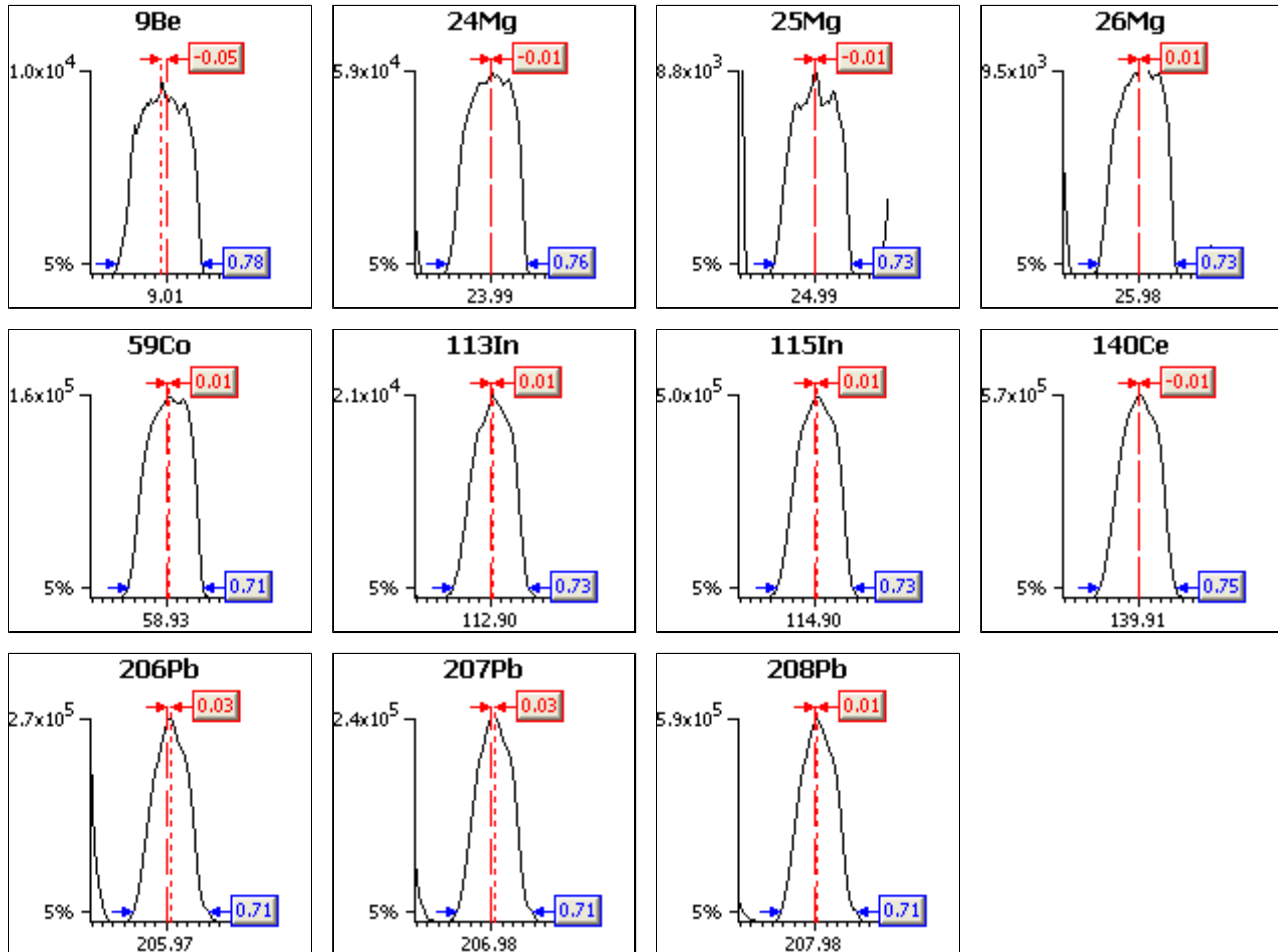
Acquisition parameters

Sweeps : 25

Dwell : 2.0 mSecs

Point spacing : 0.02 amu

Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.45	0.10	0.78	-0.05
24Mg	0.90	0.45	0.10	0.76	-0.01
25Mg	0.90	0.45	0.10	0.73	-0.01
26Mg	0.90	0.45	0.10	0.73	0.01
59Co	0.90	0.45	0.10	0.71	0.01
113In	0.90	0.45	0.10	0.73	0.01
115In	0.90	0.45	0.10	0.73	0.01
140Ce	0.90	0.45	0.10	0.75	-0.01
206Pb	0.90	0.45	0.10	0.71	0.03
207Pb	0.90	0.45	0.10	0.71	0.03
208Pb	0.90	0.45	0.10	0.71	0.01

Sample details

Sample name : ITUNE

Acquired at : 5/1/2015 9:24:56 AM

Report name : EPA ILM05.2/6020A 2.1 [3/15/2013 11:49:53 AM]

Tune conditions

Major		Minor		Global		Add. Gases	
Extraction	-137	Lens 2	-26.7	Standard resolution	n/a	He/H2	0.00
Lens 1	3.8	Lens 3	-171.8	High resolution	n/a	He/NH3	0.00
Focus	27.8	Forward power	1404	Analogue Detector	n/a		
D1	-37.6	Horizontal	61	PC Detector	n/a		
Pole Bias	3.0	Vertical	471				
Hexapole Bias	-3.0	D2	-160				
Nebuliser	0.89	DA	-80.0				
Sampling Depth	200	Cool	13.0				
		Auxiliary	0.90				

Sensitivity and stability results**Acquisition parameters**

Sweeps : 150

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	137Ba++
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-
	Countrate	-	>500	>500	>500	>500	-	>5000	-
1	9:25:44 AM	0	8694	56266	7376	8918	369277	150752	5
2	9:27:09 AM	0	8663	55755	7614	9013	365966	150921	4
3	9:28:35 AM	0	8731	57029	7700	9055	372067	152925	5
4	9:30:00 AM	0	8566	55599	7408	9015	369066	153295	6
5	9:31:25 AM	0	8570	56548	7679	9141	371382	153063	4
x		0	8645	56240	7555	9028	369551	152191	5
σ		0.05	74.31	584.07	152.98	80.76	2389.88	1245.03	0.89
%RSD		70.711	0.860	1.039	2.025	0.895	0.647	0.818	18.130

Run	Time	138Ba++	101Bkg	113In	115In	138Ba	140Ce	156Ce O	206Pb
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	-	-	5.0%	5.0%	-	5.0%	-	5.0%
	Countrate	-	-	>200	>5000	-	>10000	-	>500
1	9:25:44 AM	37	0	20842	490438	4179	572635	6739	268018
2	9:27:09 AM	33	0	20938	493357	4312	577812	6761	268622
3	9:28:35 AM	43	0	21196	497405	4203	577829	6818	268261
4	9:30:00 AM	36	0	21132	496449	4341	578626	6802	267527
5	9:31:25 AM	32	0	21334	495800	4267	577765	6872	266855
x		36	0	21088	494690	4260	576933	6798	267857
σ		4.12	0.07	197.99	2808.77	69.29	2429.50	51.96	686.99
%RSD		11.325	100.000	0.939	0.568	1.626	0.421	0.764	0.256

Run	Time	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	-
	Countrate	>500	>500	<2500
1	9:25:44 AM	244463	589372	0
2	9:27:09 AM	244978	588393	0
3	9:28:35 AM	244193	585342	0
4	9:30:00 AM	242835	584907	0
5	9:31:25 AM	244098	585960	0
x		244113	586795	0
σ		792.30	1972.64	0.06
%RSD		0.325	0.336	104.583

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0500
1	9:25:44 AM	0
2	9:27:09 AM	0

3	9:28:35 AM	0
4	9:30:00 AM	0
5	9:31:25 AM	0
\bar{x}		0.0118
σ		0.00
%RSD		0.6054

Result : The performance report passed.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Batch Number: 139894 Batch Start Date: 04/28/15 13:15 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 04/28/15 17:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTCPPMS 00020	MTAPITTMISA 00023	MTAPITTMSC 00029	
MB 180-139894/1		3005A, 6020A		50 mL	50 mL				
LCS 180-139894/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-43402-B-2	HD-MW-114-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43402-B-2 MS	HD-MW-114-0/1-0	3005A, 6020A	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-43402-B-2 MSD	HD-MW-114-0/1-0	3005A, 6020A	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-43402-B-3	HD-MW-132-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43402-B-4	HD-MW-39D-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43402-B-5	HD-MW-74S-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43402-B-6	HD-MW-127-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43402-B-7	HD-MW-51D-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43402-B-8	HD-MW-50S-0/1-0	3005A, 6020A	T	50 mL	50 mL				

Batch Notes	
Batch Comment	Metals D4
First End time	17:15
Lot # of hydrochloric acid	2.5 ml 1533280
Lot # of Nitric Acid	1.0 ml 1513887
Hot Block ID number	#3
Oven, Bath or Block Temperature 1	95
Pipette ID	L1201611U
Person who witnessed spiking	AB
First Start time	13:15
ID number of the thermometer	IP2-14 CF=0.0 D1
Digestion Tube/Cup Lot #	1408268
Uncorrected Temperature	95 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43402-1

SDG No.: _____

Project: Harley Davidson

Client Sample ID	Lab Sample ID
<u>HD-MW-114-0/1-0</u>	<u>180-43402-2</u>
<u>HD-MW-132-0/1-0</u>	<u>180-43402-3</u>
<u>HD-MW-39D-0/1-0</u>	<u>180-43402-4</u>
<u>HD-MW-74S-0/1-0</u>	<u>180-43402-5</u>
<u>HD-MW-127-0/1-0</u>	<u>180-43402-6</u>
<u>HD-MW-51D-0/1-0</u>	<u>180-43402-7</u>
<u>HD-MW-50S-0/1-0</u>	<u>180-43402-8</u>

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: HD-MW-114-0/1-0

Lab Sample ID: 180-43402-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 11:11

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	220	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	220	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: HD-MW-132-0/1-0

Lab Sample ID: 180-43402-3

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 13:07

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	140	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	140	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: HD-MW-39D-0/1-0

Lab Sample ID: 180-43402-4

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 10:15

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	240	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	240	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: HD-MW-74S-0/1-0

Lab Sample ID: 180-43402-5

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 09:10

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	240	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	240	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: HD-MW-127-0/1-0

Lab Sample ID: 180-43402-6

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 11:40

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	280	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	280	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: HD-MW-51D-0/1-0

Lab Sample ID: 180-43402-7

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 12:30

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	210	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	210	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: HD-MW-50S-0/1-0

Lab Sample ID: 180-43402-8

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/23/2015 11:30

Reporting Basis: WET

Date Received: 04/24/2015 08:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	200	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	200	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

2-IN
 CALIBRATION QUALITY CONTROL
 GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Analyst: CLL

Batch Start Date: 05/01/2015

Reporting Units: mg/L

Analytical Batch No.: 140221

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	CCV	05:23	Total Alkalinity as CaCO3 to pH 4.5	133	125	106	80-120		WALK125PPMCCV_00084
14	CCB	05:23	Total Alkalinity as CaCO3 to pH 4.5	2.01				J	
			Bicarbonate Alkalinity as CaCO3	2.01				J	
			Carbonate Alkalinity as CaCO3	5.0				U	
24	CCV	05:23	Total Alkalinity as CaCO3 to pH 4.5	133	125	106	80-120		WALK125PPMCCV_00084
25	CCB	05:23	Total Alkalinity as CaCO3 to pH 4.5	2.01				J	
			Bicarbonate Alkalinity as CaCO3	2.01				J	
			Carbonate Alkalinity as CaCO3	5.0				U	
35	CCV	05:23	Total Alkalinity as CaCO3 to pH 4.5	133	125	106	80-120		WALK125PPMCCV_00084
36	CCB	05:23	Total Alkalinity as CaCO3 to pH 4.5	2.01				J	
			Bicarbonate Alkalinity as CaCO3	2.01				J	
			Carbonate Alkalinity as CaCO3	5.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43402-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 140221 Date: 05/01/2015 05:23							
SM 2320B	MB 180-140221/2	Total Alkalinity as CaCO3 to pH 4.5	2.01	J	mg/L	5.0	1
SM 2320B	MB 180-140221/2	Bicarbonate Alkalinity as CaCO3	2.01	J	mg/L	5.0	1
SM 2320B	MB 180-140221/2	Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1
Batch ID: 140221 Date: 05/01/2015 05:23							
SM 2320B	MB 180-140221/27	Total Alkalinity as CaCO3 to pH 4.5	2.01	J	mg/L	5.0	1
SM 2320B	MB 180-140221/27	Bicarbonate Alkalinity as CaCO3	2.01	J	mg/L	5.0	1
SM 2320B	MB 180-140221/27	Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 140221 Date: 05/01/2015 05:23								
SM 2320B	HD-MW-114-0/1-0	180-43402-2	Total Alkalinity as CaCO3 to pH 4.5	220	mg/L			
SM 2320B	HD-MW-114-0/1-0	180-43402-2 DU	Total Alkalinity as CaCO3 to pH 4.5	215	mg/L	0	20	
SM 2320B	HD-MW-114-0/1-0	180-43402-2	Bicarbonate Alkalinity as CaCO3	220	mg/L			
SM 2320B	HD-MW-114-0/1-0	180-43402-2 DU	Bicarbonate Alkalinity as CaCO3	215	mg/L	0	20	
SM 2320B	HD-MW-114-0/1-0	180-43402-2	Carbonate Alkalinity as CaCO3	5.0	mg/L			U
SM 2320B	HD-MW-114-0/1-0	180-43402-2 DU	Carbonate Alkalinity as CaCO3	5.0	mg/L	NC	20	U

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
 LAB CONTROL SAMPLE
 GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 140221 Date: 05/01/2015 05:23											
						LCS Source: WALK250PPMPi_00093					
SM 2320B	LCS 180-140221/1	Total Alkalinity as CaCO3 to pH 4.5	275		mg/L	250	110	80-120			
Batch ID: 140221 Date: 05/01/2015 05:23											
						LCS Source: WALK250PPMPi_00093					
SM 2320B	LCS 180-140221/26	Total Alkalinity as CaCO3 to pH 4.5	275		mg/L	250	110	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43402-1

SDG Number: _____

Matrix: Water

Instrument ID: NOEQUIP

Method: SM 2320B

MDL Date: 01/27/2011 15:49

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Bicarbonate Alkalinity as CaCO ₃		5	0.4111
Carbonate Alkalinity as CaCO ₃		5	0.4111
Total Alkalinity as CaCO ₃ to pH 4.5		5	0.4111

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh

Job Number: 180-43402-1

SDG Number: _____

Matrix: Water

Instrument ID: NOEQUIP

Method: SM 2320B

XMDL Date: 01/27/2011 15:49

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Bicarbonate Alkalinity as CaCO ₃		5	0.4111
Carbonate Alkalinity as CaCO ₃		5	0.4111
Total Alkalinity as CaCO ₃ to pH 4.5		5	0.4111

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: SM 2320B

Start Date: 05/01/2015 05:23 End Date: 05/01/2015 05:23

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				A l k	B A L K C C	C a r A l k																									
Ics 180-140221/1	1	T	05:23	X																											
MB 180-140221/2	1	T	05:23	X	X	X																									
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
CCV 180-140221/13	1		05:23	X																											
CCB 180-140221/14	1		05:23	X	X	X																									
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
180-43402-2	1	T	05:23	X	X	X																									
180-43402-2 DU	1	T	05:23	X	X	X																									
180-43402-3	1	T	05:23	X	X	X																									
180-43402-4	1	T	05:23	X	X	X																									
180-43402-5	1	T	05:23	X	X	X																									
CCV 180-140221/24	1		05:23	X																											
CCB 180-140221/25	1		05:23	X	X	X																									
Ics 180-140221/26	1	T	05:23	X																											
MB 180-140221/27	1	T	05:23	X	X	X																									
180-43402-6	1	T	05:23	X	X	X																									
180-43402-7	1	T	05:23	X	X	X																									
180-43402-8	1	T	05:23	X	X	X																									
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												
CCV 180-140221/35	1		05:23	X																											
CCB 180-140221/36	1		05:23	X	X	X																									
ZZZZZZ			05:23																												
ZZZZZZ			05:23																												

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: SM 2320B

Start Date: 05/01/2015 05:23 End Date: 05/01/2015 05:23

Lab Sample Id	D/F	Type	Time	Analytes																											
				A l k	B A L K C C	C a r A l k																									
ZZZZZZ			05:23																												
CCV 180-140221/40			05:23																												
CCB 180-140221/41			05:23																												
ZZZZZZ			05:23																												

Prep Types: _____
T = Total/NA

716 #050115 A-K

Analyst: Chahuyk
Reviewed By: Sel DR
pH Meter ID: Accumet XL 511 #94102132
pH 4 Start: 4.01

Date: 5-1-15
Date: 05-1-15
AD Batch: 140221
pH 4 End: 4.05

Job Number(s): 43311-43359-43400-43401-43402-43418
43420-43421

Calculations:

$$\text{Alkalinity as CaCO}_3 \text{ mg/L} = \frac{(\text{mL of H}_2\text{SO}_4) (N)(50,000)}{\text{mL of Sample}}$$

Alkalinity Relationships:

P = Phenolphthalein Alkalinity (pH 8.3)

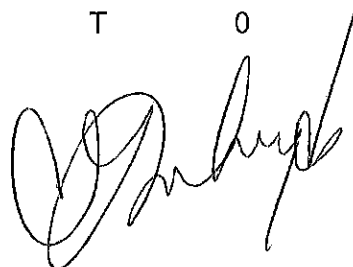
T = Total Alkalinity

OH⁻ = Hydroxide Alkalinity as CaCO₃

CO₃²⁻ = Carbonate Alkalinity as CaCO₃

HCO₃⁻ = Bicarbonate Concentration as CaCO₃

Results	OH ⁻	CO ₃ ²⁻	HCO ₃ ⁻	Results	OH ⁻	CO ₃ ²⁻	HCO ₃ ⁻
P = 0	0	0	T	P = 1/2 T	0	2P	0
P < 1/2 T	0	2P	T-2P	P > 1/2 T	2P-T	2(T-P)	0
				P = T	T	0	0



Sample ID	pH	Sample Volume	mL to pH 8.3	Ttl mL pH 4.5	N	T	P	OH ⁻	CO ₃ ²⁻	HCO ₃
LCS	10.82	50	7.0	13.7	10201	275.37				
MB	5.75		0	0.1		2.01				
180-43311-1	6.58		0	20.6		414.06				
180-43359-2	7.28		0	11.6		233.16				
3	7.13		0	13.4		269.34				
4	7.19		0	12.2		245.22				
5	7.23		0	12.7		255.27				
6	7.37		0	10.9		219.09				
7	7.08		0	12.7		255.27				
8	7.13		0	13.3		267.33				
8X	7.16		0	13.4		269.34				
9	7.39		0	16.3		327.63				
CUV	10.55		2.9	6.6		132.66				
CVB	5.71		0	0.1		2.01				
180-43359-10	7.28		0	14.1		283.41				
11	7.21		0	14.8		297.48				
12	7.15		0	15.4		309.54				
13	7.19		0	11.3		227.13				
180-43402-2	7.19		0	10.7		215.07				
2X	7.17		0	10.7		215.07				
3	7.24		0	7.2		144.72				
4	7.21		0	11.9		239.19				
5	7.28		0	11.8		237.18				
CUV	10.61		3.0	6.6		132.66				
CVB	5.77		0	0.1		2.01				
LCS	10.89		6.9	13.7		275.37				

Sample ID	pH	Sample Volume	mL to pH 8.3	Ttl mL pH 4.5	N	T	P	OH ⁻	CO ₃ ²⁻	HCO ₃
MB	5.83	50	0	0.1	10201	2.01				
180-43402-6	7.25		0	13.7		275.39				
↓ 7	7.90		0	10.2		205.02				
↓ 8	7.25		0	9.9		198.99				
180-43400-1	7.88		0	4.7		94.47				
180-43401-1	7.55		0	3.1		62.31				
180-43418-1	9.05		0.7	6.9		138.69				
↓ -1X	9.02		0.7	7.0		140.7				
CEU	10.46		3.0	6.6		132.66				
CEB	5.64		0	0.1		2.01				
180-43420-1	7.83		0	5.8		116.58				
180-43421-1	7.83		0	3.9		78.39				
↓ -1X	7.87		0	3.8		76.38				
CEU	10.59		2.9	6.6		132.66				
CEB	5.57		0	0.1		2.01				

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Batch Number: 140221 Batch Start Date: 05/01/15 05:23 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 2320B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	Initial pH	BuretStart1	BuretStop1	TitrantVolume1	BuretStart2
LCS 180-140221/1		SM 2320B		50 mL	10.82 SU	0 mL	7.0 mL	7 mL	0 mL
MB 180-140221/2		SM 2320B		50 mL	5.75 SU	0 mL	0 mL	0 mL	0 mL
CCV 180-140221/13		SM 2320B		50 mL	10.55 SU	0 mL	2.9 mL	2.9 mL	0 mL
CCB 180-140221/14		SM 2320B		50 mL	5.71 SU	0 mL	0 mL	0 mL	0 mL
180-43402-A-2	HD-MW-114-0/1-0	SM 2320B	T	50 mL	7.19 SU	0 mL	0 mL	0 mL	0 mL
180-43402-A-2 DU	HD-MW-114-0/1-0	SM 2320B	T	50 mL	7.17 SU	0 mL	0 mL	0 mL	0 mL
180-43402-A-3	HD-MW-132-0/1-0	SM 2320B	T	50 mL	7.24 SU	0 mL	0 mL	0 mL	0 mL
180-43402-A-4	HD-MW-39D-0/1-0	SM 2320B	T	50 mL	7.21 SU	0 mL	0 mL	0 mL	0 mL
180-43402-A-5	HD-MW-74S-0/1-0	SM 2320B	T	50 mL	7.28 SU	0 mL	0 mL	0 mL	0 mL
CCV 180-140221/24		SM 2320B		50 mL	10.61 SU	0 mL	3.0 mL	3 mL	0 mL
CCB 180-140221/25		SM 2320B		50 mL	5.77 SU	0 mL	0 mL	0 mL	0 mL
LCS 180-140221/26		SM 2320B		50 mL	10.89 SU	0 mL	6.9 mL	6.9 mL	0 mL
MB 180-140221/27		SM 2320B		50 mL	5.83 SU	0 mL	0 mL	0 mL	0 mL
180-43402-A-6	HD-MW-127-0/1-0	SM 2320B	T	50 mL	7.25 SU	0 mL	0 mL	0 mL	0 mL
180-43402-A-7	HD-MW-51D-0/1-0	SM 2320B	T	50 mL	7.90 SU	0 mL	0 mL	0 mL	0 mL
180-43402-A-8	HD-MW-50S-0/1-0	SM 2320B	T	50 mL	7.25 SU	0 mL	0 mL	0 mL	0 mL
CCV 180-140221/35		SM 2320B		50 mL	10.46 SU	0 mL	3.0 mL	3 mL	0 mL
CCB 180-140221/36		SM 2320B		50 mL	5.64 SU	0 mL	0 mL	0 mL	0 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStop2	TitrantVolume2	CalcMsg	carb	hydr	bCarb
LCS 180-140221/1		SM 2320B		6.7 mL	6.7 mL	Case 4	269.34 mg/L	6.029999999999999 7 mg/L	0 mg/L
MB 180-140221/2		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.01 mg/L
CCV 180-140221/13		SM 2320B		3.7 mL	3.7 mL	Case 2	116.58 mg/L	0 mg/L	16.08 mg/L
CCB 180-140221/14		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.01 mg/L
180-43402-A-2	HD-MW-114-0/1-0	SM 2320B	T	10.7 mL	10.7 mL	Case 1	0 mg/L	0 mg/L	215.07 mg/L

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Batch Number: 140221 Batch Start Date: 05/01/15 05:23 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 2320B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStop2	TitrantVolume2	CalcMsg	carb	hydr	bCarb
180-43402-A-2 DU	HD-MW-114-0/1-0	SM 2320B	T	10.7 mL	10.7 mL	Case 1	0 mg/L	0 mg/L	215.07 mg/L
180-43402-A-3	HD-MW-132-0/1-0	SM 2320B	T	7.2 mL	7.2 mL	Case 1	0 mg/L	0 mg/L	144.72 mg/L
180-43402-A-4	HD-MW-39D-0/1-0	SM 2320B	T	11.9 mL	11.9 mL	Case 1	0 mg/L	0 mg/L	239.19 mg/L
180-43402-A-5	HD-MW-74S-0/1-0	SM 2320B	T	11.8 mL	11.8 mL	Case 1	0 mg/L	0 mg/L	237.18 mg/L
CCV 180-140221/24		SM 2320B		3.6 mL	3.6 mL	Case 2	120.6 mg/L	0 mg/L	12.06 mg/L
CCB 180-140221/25		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.01 mg/L
LCS 180-140221/26		SM 2320B		6.8 mL	6.8 mL	Case 4	273.36 mg/L	2.0099999999999999 9 mg/L	0 mg/L
MB 180-140221/27		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.01 mg/L
180-43402-A-6	HD-MW-127-0/1-0	SM 2320B	T	13.7 mL	13.7 mL	Case 1	0 mg/L	0 mg/L	275.37 mg/L
180-43402-A-7	HD-MW-51D-0/1-0	SM 2320B	T	10.2 mL	10.2 mL	Case 1	0 mg/L	0 mg/L	205.02 mg/L
180-43402-A-8	HD-MW-50S-0/1-0	SM 2320B	T	9.9 mL	9.9 mL	Case 1	0 mg/L	0 mg/L	198.99 mg/L
CCV 180-140221/35		SM 2320B		3.6 mL	3.6 mL	Case 2	120.6 mg/L	0 mg/L	12.06 mg/L
CCB 180-140221/36		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.01 mg/L

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	WALK125PPMCCV 00084	WALK250PPMPi 00093
LCS 180-140221/1		SM 2320B		140.7 mg/L	275.37 mg/L	50 mL		50 mL
MB 180-140221/2		SM 2320B		0 mg/L	2.01 mg/L	50 mL		
CCV 180-140221/13		SM 2320B		58.29 mg/L	132.66 mg/L	50 mL	50 mL	
CCB 180-140221/14		SM 2320B		0 mg/L	2.01 mg/L	50 mL		
180-43402-A-2	HD-MW-114-0/1-0	SM 2320B	T	0 mg/L	215.07 mg/L	50 mL		
180-43402-A-2 DU	HD-MW-114-0/1-0	SM 2320B	T	0 mg/L	215.07 mg/L	50 mL		
180-43402-A-3	HD-MW-132-0/1-0	SM 2320B	T	0 mg/L	144.72 mg/L	50 mL		
180-43402-A-4	HD-MW-39D-0/1-0	SM 2320B	T	0 mg/L	239.19 mg/L	50 mL		
180-43402-A-5	HD-MW-74S-0/1-0	SM 2320B	T	0 mg/L	237.18 mg/L	50 mL		
CCV 180-140221/24		SM 2320B		60.3 mg/L	132.66 mg/L	50 mL	50 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43402-1

SDG No.: _____

Batch Number: 140221 Batch Start Date: 05/01/15 05:23 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 2320B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	WALK125PPMCCV 00084	WALK250PPMPi 00093	
CCB 180-140221/25		SM 2320B		0 mg/L	2.01 mg/L	50 mL			
LCS 180-140221/26		SM 2320B		138.69 mg/L	275.37 mg/L	50 mL		50 mL	
MB 180-140221/27		SM 2320B		0 mg/L	2.01 mg/L	50 mL			
180-43402-A-6	HD-MW-127-0/1-0	SM 2320B	T	0 mg/L	275.37 mg/L	50 mL			
180-43402-A-7	HD-MW-51D-0/1-0	SM 2320B	T	0 mg/L	205.02 mg/L	50 mL			
180-43402-A-8	HD-MW-50S-0/1-0	SM 2320B	T	0 mg/L	198.99 mg/L	50 mL			
CCV 180-140221/35		SM 2320B		60.3 mg/L	132.66 mg/L	50 mL	50 mL		
CCB 180-140221/36		SM 2320B		0 mg/L	2.01 mg/L	50 mL			

Batch Notes	
Batch Comment	PH 4 START: 4.01 PH 4 END: 4.05
pH Buffer 1 ID	1179927
pH Buffer 2 ID	1282792
pH Buffer 3 ID	1524103
pH Buffer 4 ID	1538765
pH Buffer 5 ID	1535729
Sulfuric Acid Lot Number	1543398
Sulfuric Acid Vendor	RICCA
Nominal Amount Used	50 mL
Normality of first Titrant	.0201 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Pittsburgh
301 Alpha Drive
Pittsburgh, PA 15238
phone 412.963.7058 fax 412.963.2470

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

COC No: TAP2015042301

Job No. 10012.16.0005

Carrier: FEDEX

Date Submitted: 4/23/2015

1 of 1 COCs

Container No. 1

Site Contact: Jennifer S. Reese

Lab Contact: Carrie Gamber

Project Manager: Jennifer S. Reese

Tel/Fax: 717-901-8181 / (717) 657-1611

Analysis Turnaround Time

Calendar (C) or Work Days (W)

TAL if different from Below: Standard

2 weeks

1 week

5 days

1 day

Project Name: Dry Season Shutdown 12

Site: Harley-Davidson, York, PA

Quote # 18000557

Specific Notes:

180-43402 Chain of Custody

Alkalinity (Carb/Bicarb), SO4, CL, NO3 2320B/300.0

Total Na, Ca, K, and Mg (SW846 6020A)

VOCs (8260C)

Number of Containers

Field Filter

Preservation Used: 1= Ice; 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Unpreserved; 7= Zinc Acetate & NaOH

Possible Hazard Identification

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab For Months

Relinquished by (Print and Sign):

Relinquished by:

Relinquished by:

Company: GSC

Company: WAF

Company: WAF

Company: WAF

Date/Time: 4/23/15 13:45

Date/Time: 4/23/15 16:50

Date/Time: 4/24/15

Company: GSC

Company: WAF

Company: WAF

Company: WAF

Date/Time: 4/23/15 13:45

Date/Time: 4/23/15 16:50

Date/Time: 4/24/15

Company: GSC

Company: WAF

Company: WAF

Company: WAF

Date/Time: 4/23/15 13:45

Date/Time: 4/23/15 16:50

Date/Time: 4/24/15

Company: GSC

Company: WAF

Company: WAF



180-43402 Waybill

ORIGIN ID: KPDA (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1008 WEST 9TH AVE

SHIP DATE 23APR15
ACTWGT. 41.0 LB
CAD 8490299/INET3610

KING OF PRUSSIA, PA 19406
UNITED STATES US

BILL RECIPIENT

TO **SAMPLE RECEIPT**
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238

(412) 963-7008

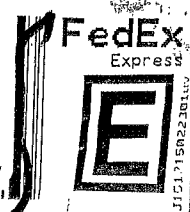
REF:

INV:

PO:

DEPT:

Uncorrected temp	<u>1.4</u>	°C
Thermometer ID	<u>6</u>	
CF <u>0</u>	Initials <u>LS</u>	
PT-WI-SR-001 effective 7/26/13		



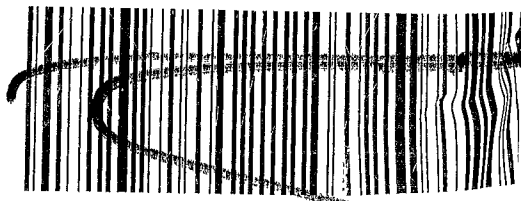
53712/8F65/EE48
JUL15/15R22/0110

TRK# 7734 4452 3628
0201

FRI - 24 APR AA
STANDARD OVERNIGHT

EV AGCA

1
PA-



RT **197** 1 15:00 A
FZ **199** 3628 04.24

TestAmerica
THE LEADER IN ENVIRONMENTAL
520302
14 of 715

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-43402-1

Login Number: 43402
List Number: 1
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	