

ANALYTICAL REPORT

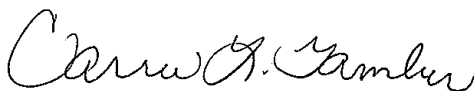
Job Number: 180-43257-1

Job Description: Harley Davidson

For:

Groundwater Sciences Corporation
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Harrisburg, PA 17110-9307

Attention: Allan Miller



Approved for release.
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4/29/2015 1:53 PM

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04/29/2015

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Table of Contents

Cover Title Page	1
Data Summaries	5
Definitions	5
Case Narrative	6
Detection Summary	7
Client Sample Results	11
Default Detection Limits	46
Surrogate Summary	48
QC Sample Results	49
QC Association	60
Chronicle	63
Certification Summary	67
Method Summary	68
Sample Summary	69
Manual Integration Summary	70
Reagent Traceability	78
COAs	99
Organic Sample Data	185
GC/MS VOA	185
Method 8260C Low Level	185
Method 8260C Low Level QC Summary	186
Method 8260C Low Level Sample Data	206
Standards Data	338
Method 8260C Low Level ICAL Data	338
Method 8260C Low Level CCAL Data	450
Raw QC Data	487

Table of Contents

Method 8260C Low Level Tune Data	487
Method 8260C Low Level Blank Data	507
Method 8260C Low Level LCS/LCSD Data	529
Method 8260C Low Level MS/MSD Data	550
Method 8260C Low Level Run Logs	564
HPLC/IC	569
300_ORGFMS	569
300_ORGFMS QC Summary	570
300_ORGFMS Sample Data	574
Standards Data	598
300_ORGFMS ICAL Data	598
300_ORGFMS CCAL Data	617
Raw QC Data	637
300_ORGFMS Blank Data	637
300_ORGFMS LCS/LCSD Data	652
300_ORGFMS MS/MSD Data	655
300_ORGFMS Run Logs	661
Inorganic Sample Data	664
Metals Data	664
Met Cover Page	665
Met Sample Data	666
Met QC Data	674
Met ICV/CCV	674
Met CRQL	677
Met Blanks	679
Met ICSA/ICSAB	683

Table of Contents

Met MS/MSD/PDS	687
Met LCS/LCSD	690
Met Serial Dilution	691
Met MDL	692
Met Linear Ranges	694
Met Preparation Log	695
Met Analysis Run Log	696
Met ICP/MS Int Stds	703
Met Raw Data	707
Met Prep Data	922
General Chemistry Data	924
Gen Chem Cover Page	925
Gen Chem Sample Data	926
Gen Chem QC Data	934
Gen Chem ICV/CCV	934
Gen Chem Blanks	935
Gen Chem Duplicates	936
Gen Chem LCS/LCSD	937
Gen Chem MDL	938
Gen Chem Analysis Run Log	940
Gen Chem Raw Data	941
Gen Chem Prep Data	943
Shipping and Receiving Documents	946
Client Chain of Custody	947
Sample Receipt Checklist	949

Definitions/Glossary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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.
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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: 180-43257-1

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 04/21/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.7 C.

VOLATILES

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

The laboratory control sample (LCS) for batch 139651 recovered outside control limits for the following analytes: Bromomethane and 2-Hexanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 139551 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Internal standard (ISTD) response for TBA-d9 for the following sample was outside acceptance criteria: (CCVIS 180-139551/2). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

METALS (ICP/MS)

Calcium and Sodium were detected in method blank MB 180-139272/1-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.

GENERAL CHEMISTRY

Bicarbonate Alkalinity as CaCO₃ and Total Alkalinity as CaCO₃ to pH 4.5 were detected in method blank MB 180-139318/2 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.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Client Sample ID: HD-MW-98S-0/1-0

Lab Sample ID: 180-43257-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.59	J	1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.25	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	8.6		1.0	0.24	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	1.2		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	8.2		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	9.4		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.7		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	57		1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	48		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	110000	B	500	2.8	ug/L	1		6020A	Total/NA
Potassium	2900		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	15000		500	1.2	ug/L	1		6020A	Total/NA
Sodium	30000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	300	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	300	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-98I-0/1-0

Lab Sample ID: 180-43257-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.65	J	1.0	0.30	ug/L	1		8260C	Total/NA
Acetone	2.8	J	5.0	2.5	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.30	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	10		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	10		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	11		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.4		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	57		1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	46		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	110000	B	500	2.8	ug/L	1		6020A	Total/NA
Potassium	2700		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	14000		500	1.2	ug/L	1		6020A	Total/NA
Sodium	28000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	320	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	320	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-99S-0/1-0

Lab Sample ID: 180-43257-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.8		1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.86	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	25		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.21	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	2.6		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	25		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	18		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.0		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	100		1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	31		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	94000	B	500	2.8	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: 180-43257-1

Client Sample ID: HD-MW-99S-0/1-0 (Continued)

Lab Sample ID: 180-43257-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3400		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	16000		500	1.2	ug/L	1		6020A	Total/NA
Sodium	48000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	270	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	270	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-145A-0/1-0

Lab Sample ID: 180-43257-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.53	J	1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.18	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.24	ug/L	1		8260C	Total/NA
Chloroform	0.21	J	1.0	0.17	ug/L	1		8260C	Total/NA
1,1,1-Trichloroethane	0.43	J	1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	12		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	8.2		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.8		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	150		1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	38		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	84000	B	500	2.8	ug/L	1		6020A	Total/NA
Potassium	4900		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	20000		500	1.2	ug/L	1		6020A	Total/NA
Sodium	74000	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-93D-0/1-0

Lab Sample ID: 180-43257-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.8	J	10	3.0	ug/L	10		8260C	Total/NA
1,1-Dichloroethane	2.4	J	10	1.2	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	52		10	2.4	ug/L	10		8260C	Total/NA
1,1,1-Trichloroethane	4.2	J	10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	100		10	1.4	ug/L	10		8260C	Total/NA
Tetrachloroethene	110		10	1.5	ug/L	10		8260C	Total/NA
Nitrate as N	0.41		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	100		1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	31		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	67000	B	500	2.8	ug/L	1		6020A	Total/NA
Potassium	4600		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	17000		500	1.2	ug/L	1		6020A	Total/NA
Sodium	50000	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-93S-0/1-0

Lab Sample ID: 180-43257-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.75	J	2.0	0.59	ug/L	2		8260C	Total/NA
trans-1,2-Dichloroethene	0.47	J	2.0	0.34	ug/L	2		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: 180-43257-1

Client Sample ID: HD-MW-93S-0/1-0 (Continued)

Lab Sample ID: 180-43257-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.93	J	2.0	0.23	ug/L	2		8260C	Total/NA
cis-1,2-Dichloroethene	36		2.0	0.47	ug/L	2		8260C	Total/NA
1,1,1-Trichloroethane	5.8		2.0	0.57	ug/L	2		8260C	Total/NA
Trichloroethene	37		2.0	0.29	ug/L	2		8260C	Total/NA
Tetrachloroethene	110	E	2.0	0.30	ug/L	2		8260C	Total/NA
Methylene Chloride - DL	1.0	J	5.0	0.63	ug/L	5		8260C	Total/NA
1,1-Dichloroethane - DL	0.85	J	5.0	0.58	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene - DL	32		5.0	1.2	ug/L	5		8260C	Total/NA
1,1,1-Trichloroethane - DL	5.3		5.0	1.4	ug/L	5		8260C	Total/NA
Trichloroethene - DL	35		5.0	0.72	ug/L	5		8260C	Total/NA
Tetrachloroethene - DL	110		5.0	0.74	ug/L	5		8260C	Total/NA
Nitrate as N	1.2		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	170		1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	31		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	67000	B	500	2.8	ug/L	1		6020A	Total/NA
Potassium	9200		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	21000		500	1.2	ug/L	1		6020A	Total/NA
Sodium	100000	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-37D-0/1-0

Lab Sample ID: 180-43257-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	6.3		4.0	1.2	ug/L	4		8260C	Total/NA
1,1-Dichloroethane	4.1		4.0	0.47	ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	56		4.0	0.95	ug/L	4		8260C	Total/NA
1,1,1-Trichloroethane	54		4.0	1.1	ug/L	4		8260C	Total/NA
Trichloroethene	250	E	4.0	0.57	ug/L	4		8260C	Total/NA
Tetrachloroethene	640	E	4.0	0.59	ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene - DL	52		40	9.5	ug/L	40		8260C	Total/NA
1,1,1-Trichloroethane - DL	41		40	11	ug/L	40		8260C	Total/NA
Trichloroethene - DL	230		40	5.7	ug/L	40		8260C	Total/NA
Tetrachloroethene - DL	680		40	5.9	ug/L	40		8260C	Total/NA
Nitrate as N	3.2		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	150		1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	39		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	89000	B	500	2.8	ug/L	1		6020A	Total/NA
Potassium	6400		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	21000		500	1.2	ug/L	1		6020A	Total/NA
Sodium	69000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	250	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	250	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-QC1-0/1-1

Lab Sample ID: 180-43257-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.54	J	1.0	0.30	ug/L	1		8260C	Total/NA
1,1-Dichloroethane	0.29	J	1.0	0.12	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	8.2		1.0	0.24	ug/L	1		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: 180-43257-1

Client Sample ID: HD-QC1-0/1-1 (Continued)

Lab Sample ID: 180-43257-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.1		1.0	0.29	ug/L	1		8260C	Total/NA
Trichloroethene	7.9		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	9.0		1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	3.6		0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	57		1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	48		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	110000	B	500	2.8	ug/L	1		6020A	Total/NA
Potassium	2900		500	5.8	ug/L	1		6020A	Total/NA
Magnesium	12000		500	1.2	ug/L	1		6020A	Total/NA
Sodium	25000	B	500	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	310	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	310	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-QC1-0/1-2

Lab Sample ID: 180-43257-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.14	J	1.0	0.13	ug/L	1		8260C	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: 180-43257-1

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

Client Sample ID: HD-MW-98S-0/1-0

Lab Sample ID: 180-43257-1

Date Collected: 04/20/15 13:35

Matrix: Water

Date Received: 04/21/15 09:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/24/15 19:47	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/24/15 19:47	1
Bromomethane	1.0	U *	1.0	0.31	ug/L			04/24/15 19:47	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 19:47	1
1,1-Dichloroethene	0.59	J	1.0	0.30	ug/L			04/24/15 19:47	1
Acetone	5.0	U	5.0	2.5	ug/L			04/24/15 19:47	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/24/15 19:47	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/24/15 19:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/15 19:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/24/15 19:47	1
1,1-Dichloroethane	0.25	J	1.0	0.12	ug/L			04/24/15 19:47	1
cis-1,2-Dichloroethene	8.6		1.0	0.24	ug/L			04/24/15 19:47	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/15 19:47	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/24/15 19:47	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/24/15 19:47	1
1,1,1-Trichloroethane	1.2		1.0	0.29	ug/L			04/24/15 19:47	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/24/15 19:47	1
Benzene	1.0	U	1.0	0.11	ug/L			04/24/15 19:47	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 19:47	1
Trichloroethene	8.2		1.0	0.14	ug/L			04/24/15 19:47	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/24/15 19:47	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/24/15 19:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/15 19:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/24/15 19:47	1
Toluene	1.0	U	1.0	0.15	ug/L			04/24/15 19:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/24/15 19:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 19:47	1
Tetrachloroethene	9.4		1.0	0.15	ug/L			04/24/15 19:47	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/24/15 19:47	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/24/15 19:47	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/24/15 19:47	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/15 19:47	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/24/15 19:47	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/24/15 19:47	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/24/15 19:47	1
Styrene	1.0	U	1.0	0.097	ug/L			04/24/15 19:47	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/24/15 19:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 19:47	1
Acrylonitrile	20	U	20	0.55	ug/L			04/24/15 19:47	1
1,4-Dioxane	200	U	200	34	ug/L			04/24/15 19:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		64 - 135		04/24/15 19:47	1
Toluene-d8 (Surr)	105		71 - 118		04/24/15 19:47	1
4-Bromofluorobenzene (Surr)	103		70 - 118		04/24/15 19:47	1
Dibromofluoromethane (Surr)	100		70 - 128		04/24/15 19:47	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-MW-981-0/1-0

Date Collected: 04/20/15 14:30

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/24/15 20:11	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/24/15 20:11	1
Bromomethane	1.0	U *	1.0	0.31	ug/L			04/24/15 20:11	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 20:11	1
1,1-Dichloroethene	0.65	J	1.0	0.30	ug/L			04/24/15 20:11	1
Acetone	2.8	J	5.0	2.5	ug/L			04/24/15 20:11	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/24/15 20:11	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/24/15 20:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/15 20:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/24/15 20:11	1
1,1-Dichloroethane	0.30	J	1.0	0.12	ug/L			04/24/15 20:11	1
cis-1,2-Dichloroethene	10		1.0	0.24	ug/L			04/24/15 20:11	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/15 20:11	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/24/15 20:11	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/24/15 20:11	1
1,1,1-Trichloroethane	1.5		1.0	0.29	ug/L			04/24/15 20:11	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/24/15 20:11	1
Benzene	1.0	U	1.0	0.11	ug/L			04/24/15 20:11	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 20:11	1
Trichloroethene	10		1.0	0.14	ug/L			04/24/15 20:11	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/24/15 20:11	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/24/15 20:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/15 20:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/24/15 20:11	1
Toluene	1.0	U	1.0	0.15	ug/L			04/24/15 20:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/24/15 20:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 20:11	1
Tetrachloroethene	11		1.0	0.15	ug/L			04/24/15 20:11	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/24/15 20:11	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/24/15 20:11	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/24/15 20:11	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/15 20:11	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/24/15 20:11	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/24/15 20:11	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/24/15 20:11	1
Styrene	1.0	U	1.0	0.097	ug/L			04/24/15 20:11	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/24/15 20:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 20:11	1
Acrylonitrile	20	U	20	0.55	ug/L			04/24/15 20:11	1
1,4-Dioxane	200	U	200	34	ug/L			04/24/15 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		64 - 135		04/24/15 20:11	1
Toluene-d8 (Surr)	102		71 - 118		04/24/15 20:11	1
4-Bromofluorobenzene (Surr)	100		70 - 118		04/24/15 20:11	1
Dibromofluoromethane (Surr)	99		70 - 128		04/24/15 20:11	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-MW-99S-0/1-0

Date Collected: 04/20/15 10:30

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/24/15 20:59	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/24/15 20:59	1
Bromomethane	1.0	U *	1.0	0.31	ug/L			04/24/15 20:59	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 20:59	1
1,1-Dichloroethene	1.8		1.0	0.30	ug/L			04/24/15 20:59	1
Acetone	5.0	U	5.0	2.5	ug/L			04/24/15 20:59	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/24/15 20:59	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/24/15 20:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/15 20:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/24/15 20:59	1
1,1-Dichloroethane	0.86	J	1.0	0.12	ug/L			04/24/15 20:59	1
cis-1,2-Dichloroethene	25		1.0	0.24	ug/L			04/24/15 20:59	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/15 20:59	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/24/15 20:59	1
Chloroform	0.21	J	1.0	0.17	ug/L			04/24/15 20:59	1
1,1,1-Trichloroethane	2.6		1.0	0.29	ug/L			04/24/15 20:59	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/24/15 20:59	1
Benzene	1.0	U	1.0	0.11	ug/L			04/24/15 20:59	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 20:59	1
Trichloroethene	25		1.0	0.14	ug/L			04/24/15 20:59	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/24/15 20:59	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/24/15 20:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/15 20:59	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/24/15 20:59	1
Toluene	1.0	U	1.0	0.15	ug/L			04/24/15 20:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/24/15 20:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 20:59	1
Tetrachloroethene	18		1.0	0.15	ug/L			04/24/15 20:59	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/24/15 20:59	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/24/15 20:59	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/24/15 20:59	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/15 20:59	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/24/15 20:59	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/24/15 20:59	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/24/15 20:59	1
Styrene	1.0	U	1.0	0.097	ug/L			04/24/15 20:59	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/24/15 20:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 20:59	1
Acrylonitrile	20	U	20	0.55	ug/L			04/24/15 20:59	1
1,4-Dioxane	200	U	200	34	ug/L			04/24/15 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 135		04/24/15 20:59	1
Toluene-d8 (Surr)	103		71 - 118		04/24/15 20:59	1
4-Bromofluorobenzene (Surr)	99		70 - 118		04/24/15 20:59	1
Dibromofluoromethane (Surr)	98		70 - 128		04/24/15 20:59	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-MW-145A-0/1-0

Date Collected: 04/20/15 11:42

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/24/15 14:34	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/24/15 14:34	1
Bromomethane	1.0	U *	1.0	0.31	ug/L			04/24/15 14:34	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 14:34	1
1,1-Dichloroethene	0.53	J	1.0	0.30	ug/L			04/24/15 14:34	1
Acetone	5.0	U	5.0	2.5	ug/L			04/24/15 14:34	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/24/15 14:34	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/24/15 14:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/15 14:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/24/15 14:34	1
1,1-Dichloroethane	0.18	J	1.0	0.12	ug/L			04/24/15 14:34	1
cis-1,2-Dichloroethene	10		1.0	0.24	ug/L			04/24/15 14:34	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/15 14:34	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/24/15 14:34	1
Chloroform	0.21	J	1.0	0.17	ug/L			04/24/15 14:34	1
1,1,1-Trichloroethane	0.43	J	1.0	0.29	ug/L			04/24/15 14:34	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/24/15 14:34	1
Benzene	1.0	U	1.0	0.11	ug/L			04/24/15 14:34	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 14:34	1
Trichloroethene	12		1.0	0.14	ug/L			04/24/15 14:34	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/24/15 14:34	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/24/15 14:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/15 14:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/24/15 14:34	1
Toluene	1.0	U	1.0	0.15	ug/L			04/24/15 14:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/24/15 14:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 14:34	1
Tetrachloroethene	8.2		1.0	0.15	ug/L			04/24/15 14:34	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/24/15 14:34	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/24/15 14:34	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/24/15 14:34	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/15 14:34	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/24/15 14:34	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/24/15 14:34	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/24/15 14:34	1
Styrene	1.0	U	1.0	0.097	ug/L			04/24/15 14:34	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/24/15 14:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 14:34	1
Acrylonitrile	20	U	20	0.55	ug/L			04/24/15 14:34	1
1,4-Dioxane	200	U	200	34	ug/L			04/24/15 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		64 - 135		04/24/15 14:34	1
Toluene-d8 (Surr)	103		71 - 118		04/24/15 14:34	1
4-Bromofluorobenzene (Surr)	98		70 - 118		04/24/15 14:34	1
Dibromofluoromethane (Surr)	96		70 - 128		04/24/15 14:34	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-MW-93D-0/1-0

Date Collected: 04/20/15 11:02

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	10	U	10	2.8	ug/L			04/24/15 21:47	10
Vinyl chloride	10	U	10	2.3	ug/L			04/24/15 21:47	10
Bromomethane	10	U *	10	3.1	ug/L			04/24/15 21:47	10
Chloroethane	10	U	10	2.1	ug/L			04/24/15 21:47	10
1,1-Dichloroethene	3.8	J	10	3.0	ug/L			04/24/15 21:47	10
Acetone	50	U	50	25	ug/L			04/24/15 21:47	10
Carbon disulfide	10	U	10	2.1	ug/L			04/24/15 21:47	10
Methylene Chloride	10	U	10	1.3	ug/L			04/24/15 21:47	10
trans-1,2-Dichloroethene	10	U	10	1.7	ug/L			04/24/15 21:47	10
Methyl tert-butyl ether	10	U	10	1.8	ug/L			04/24/15 21:47	10
1,1-Dichloroethane	2.4	J	10	1.2	ug/L			04/24/15 21:47	10
cis-1,2-Dichloroethene	52		10	2.4	ug/L			04/24/15 21:47	10
Bromochloromethane	10	U	10	1.8	ug/L			04/24/15 21:47	10
2-Butanone (MEK)	50	U	50	5.5	ug/L			04/24/15 21:47	10
Chloroform	10	U	10	1.7	ug/L			04/24/15 21:47	10
1,1,1-Trichloroethane	4.2	J	10	2.9	ug/L			04/24/15 21:47	10
Carbon tetrachloride	10	U	10	1.4	ug/L			04/24/15 21:47	10
Benzene	10	U	10	1.1	ug/L			04/24/15 21:47	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			04/24/15 21:47	10
Trichloroethene	100		10	1.4	ug/L			04/24/15 21:47	10
1,2-Dichloropropane	10	U	10	0.95	ug/L			04/24/15 21:47	10
Bromodichloromethane	10	U	10	1.3	ug/L			04/24/15 21:47	10
cis-1,3-Dichloropropene	10	U	10	1.9	ug/L			04/24/15 21:47	10
4-Methyl-2-pentanone (MIBK)	50	U	50	5.3	ug/L			04/24/15 21:47	10
Toluene	10	U	10	1.5	ug/L			04/24/15 21:47	10
trans-1,3-Dichloropropene	10	U	10	1.5	ug/L			04/24/15 21:47	10
1,1,2-Trichloroethane	10	U	10	2.0	ug/L			04/24/15 21:47	10
Tetrachloroethene	110		10	1.5	ug/L			04/24/15 21:47	10
2-Hexanone	50	U	50	1.6	ug/L			04/24/15 21:47	10
Dibromochloromethane	10	U	10	1.4	ug/L			04/24/15 21:47	10
1,2-Dibromoethane (EDB)	10	U	10	1.8	ug/L			04/24/15 21:47	10
Chlorobenzene	10	U	10	1.4	ug/L			04/24/15 21:47	10
1,1,1,2-Tetrachloroethane	10	U	10	2.8	ug/L			04/24/15 21:47	10
Ethylbenzene	10	U	10	2.3	ug/L			04/24/15 21:47	10
Xylenes, Total	30	U	30	4.9	ug/L			04/24/15 21:47	10
Styrene	10	U	10	0.97	ug/L			04/24/15 21:47	10
Bromoform	10	U	10	1.9	ug/L			04/24/15 21:47	10
1,1,1,2-Tetrachloroethane	10	U	10	2.0	ug/L			04/24/15 21:47	10
Acrylonitrile	200	U	200	5.5	ug/L			04/24/15 21:47	10
1,4-Dioxane	2000	U	2000	340	ug/L			04/24/15 21:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 135		04/24/15 21:47	10
Toluene-d8 (Surr)	105		71 - 118		04/24/15 21:47	10
4-Bromofluorobenzene (Surr)	101		70 - 118		04/24/15 21:47	10
Dibromofluoromethane (Surr)	99		70 - 128		04/24/15 21:47	10

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-MW-93S-0/1-0

Date Collected: 04/20/15 12:39

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	2.0	U	2.0	0.57	ug/L			04/24/15 22:10	2
Vinyl chloride	2.0	U	2.0	0.45	ug/L			04/24/15 22:10	2
Bromomethane	2.0	U *	2.0	0.63	ug/L			04/24/15 22:10	2
Chloroethane	2.0	U	2.0	0.43	ug/L			04/24/15 22:10	2
1,1-Dichloroethene	0.75	J	2.0	0.59	ug/L			04/24/15 22:10	2
Acetone	10	U	10	5.0	ug/L			04/24/15 22:10	2
Carbon disulfide	2.0	U	2.0	0.42	ug/L			04/24/15 22:10	2
Methylene Chloride	2.0	U	2.0	0.25	ug/L			04/24/15 22:10	2
trans-1,2-Dichloroethene	0.47	J	2.0	0.34	ug/L			04/24/15 22:10	2
Methyl tert-butyl ether	2.0	U	2.0	0.37	ug/L			04/24/15 22:10	2
1,1-Dichloroethane	0.93	J	2.0	0.23	ug/L			04/24/15 22:10	2
cis-1,2-Dichloroethene	36		2.0	0.47	ug/L			04/24/15 22:10	2
Bromochloromethane	2.0	U	2.0	0.36	ug/L			04/24/15 22:10	2
2-Butanone (MEK)	10	U	10	1.1	ug/L			04/24/15 22:10	2
Chloroform	2.0	U	2.0	0.34	ug/L			04/24/15 22:10	2
1,1,1-Trichloroethane	5.8		2.0	0.57	ug/L			04/24/15 22:10	2
Carbon tetrachloride	2.0	U	2.0	0.27	ug/L			04/24/15 22:10	2
Benzene	2.0	U	2.0	0.21	ug/L			04/24/15 22:10	2
1,2-Dichloroethane	2.0	U	2.0	0.42	ug/L			04/24/15 22:10	2
Trichloroethene	37		2.0	0.29	ug/L			04/24/15 22:10	2
1,2-Dichloropropane	2.0	U	2.0	0.19	ug/L			04/24/15 22:10	2
Bromodichloromethane	2.0	U	2.0	0.26	ug/L			04/24/15 22:10	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.37	ug/L			04/24/15 22:10	2
4-Methyl-2-pentanone (MIBK)	10	U	10	1.1	ug/L			04/24/15 22:10	2
Toluene	2.0	U	2.0	0.30	ug/L			04/24/15 22:10	2
trans-1,3-Dichloropropene	2.0	U	2.0	0.30	ug/L			04/24/15 22:10	2
1,1,2-Trichloroethane	2.0	U	2.0	0.40	ug/L			04/24/15 22:10	2
Tetrachloroethene	110	E	2.0	0.30	ug/L			04/24/15 22:10	2
2-Hexanone	10	U	10	0.32	ug/L			04/24/15 22:10	2
Dibromochloromethane	2.0	U	2.0	0.27	ug/L			04/24/15 22:10	2
1,2-Dibromoethane (EDB)	2.0	U	2.0	0.36	ug/L			04/24/15 22:10	2
Chlorobenzene	2.0	U	2.0	0.27	ug/L			04/24/15 22:10	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.55	ug/L			04/24/15 22:10	2
Ethylbenzene	2.0	U	2.0	0.45	ug/L			04/24/15 22:10	2
Xylenes, Total	6.0	U	6.0	0.98	ug/L			04/24/15 22:10	2
Styrene	2.0	U	2.0	0.19	ug/L			04/24/15 22:10	2
Bromoform	2.0	U	2.0	0.38	ug/L			04/24/15 22:10	2
1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.40	ug/L			04/24/15 22:10	2
Acrylonitrile	40	U	40	1.1	ug/L			04/24/15 22:10	2
1,4-Dioxane	400	U	400	69	ug/L			04/24/15 22:10	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		64 - 135		04/24/15 22:10	2
Toluene-d8 (Surr)	108		71 - 118		04/24/15 22:10	2
4-Bromofluorobenzene (Surr)	105		70 - 118		04/24/15 22:10	2
Dibromofluoromethane (Surr)	101		70 - 128		04/24/15 22:10	2

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-MW-37D-0/1-0

Date Collected: 04/20/15 14:12

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	4.0	U	4.0	1.1	ug/L			04/28/15 22:58	4
Vinyl chloride	4.0	U	4.0	0.91	ug/L			04/28/15 22:58	4
Bromomethane	4.0	U	4.0	1.3	ug/L			04/28/15 22:58	4
Chloroethane	4.0	U	4.0	0.86	ug/L			04/28/15 22:58	4
1,1-Dichloroethene	6.3		4.0	1.2	ug/L			04/28/15 22:58	4
Acetone	20	U	20	10	ug/L			04/28/15 22:58	4
Carbon disulfide	4.0	U	4.0	0.85	ug/L			04/28/15 22:58	4
Methylene Chloride	4.0	U	4.0	0.50	ug/L			04/28/15 22:58	4
trans-1,2-Dichloroethene	4.0	U	4.0	0.68	ug/L			04/28/15 22:58	4
Methyl tert-butyl ether	4.0	U	4.0	0.73	ug/L			04/28/15 22:58	4
1,1-Dichloroethane	4.1		4.0	0.47	ug/L			04/28/15 22:58	4
cis-1,2-Dichloroethene	56		4.0	0.95	ug/L			04/28/15 22:58	4
Bromochloromethane	4.0	U	4.0	0.72	ug/L			04/28/15 22:58	4
2-Butanone (MEK)	20	U	20	2.2	ug/L			04/28/15 22:58	4
Chloroform	4.0	U	4.0	0.68	ug/L			04/28/15 22:58	4
1,1,1-Trichloroethane	54		4.0	1.1	ug/L			04/28/15 22:58	4
Carbon tetrachloride	4.0	U	4.0	0.55	ug/L			04/28/15 22:58	4
Benzene	4.0	U	4.0	0.42	ug/L			04/28/15 22:58	4
1,2-Dichloroethane	4.0	U	4.0	0.85	ug/L			04/28/15 22:58	4
Trichloroethene	250	E	4.0	0.57	ug/L			04/28/15 22:58	4
1,2-Dichloropropane	4.0	U	4.0	0.38	ug/L			04/28/15 22:58	4
Bromodichloromethane	4.0	U	4.0	0.52	ug/L			04/28/15 22:58	4
cis-1,3-Dichloropropene	4.0	U	4.0	0.75	ug/L			04/28/15 22:58	4
4-Methyl-2-pentanone (MIBK)	20	U	20	2.1	ug/L			04/28/15 22:58	4
Toluene	4.0	U	4.0	0.60	ug/L			04/28/15 22:58	4
trans-1,3-Dichloropropene	4.0	U	4.0	0.59	ug/L			04/28/15 22:58	4
1,1,2-Trichloroethane	4.0	U	4.0	0.81	ug/L			04/28/15 22:58	4
Tetrachloroethene	640	E	4.0	0.59	ug/L			04/28/15 22:58	4
2-Hexanone	20	U	20	0.64	ug/L			04/28/15 22:58	4
Dibromochloromethane	4.0	U	4.0	0.55	ug/L			04/28/15 22:58	4
1,2-Dibromoethane (EDB)	4.0	U	4.0	0.72	ug/L			04/28/15 22:58	4
Chlorobenzene	4.0	U	4.0	0.54	ug/L			04/28/15 22:58	4
1,1,1,2-Tetrachloroethane	4.0	U	4.0	1.1	ug/L			04/28/15 22:58	4
Ethylbenzene	4.0	U	4.0	0.91	ug/L			04/28/15 22:58	4
Xylenes, Total	12	U	12	2.0	ug/L			04/28/15 22:58	4
Styrene	4.0	U	4.0	0.39	ug/L			04/28/15 22:58	4
Bromoform	4.0	U	4.0	0.77	ug/L			04/28/15 22:58	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.80	ug/L			04/28/15 22:58	4
Acrylonitrile	80	U	80	2.2	ug/L			04/28/15 22:58	4
1,4-Dioxane	800	U	800	140	ug/L			04/28/15 22:58	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		64 - 135		04/28/15 22:58	4
Toluene-d8 (Surr)	100		71 - 118		04/28/15 22:58	4
4-Bromofluorobenzene (Surr)	90		70 - 118		04/28/15 22:58	4
Dibromofluoromethane (Surr)	111		70 - 128		04/28/15 22:58	4

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-QC1-0/1-1

Lab Sample ID: 180-43257-8

Date Collected: 04/20/15 08:00

Matrix: Water

Date Received: 04/21/15 09:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/25/15 17:12	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/25/15 17:12	1
Bromomethane	1.0	U *	1.0	0.31	ug/L			04/25/15 17:12	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/25/15 17:12	1
1,1-Dichloroethene	0.54	J	1.0	0.30	ug/L			04/25/15 17:12	1
Acetone	5.0	U	5.0	2.5	ug/L			04/25/15 17:12	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/25/15 17:12	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/25/15 17:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/25/15 17:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/25/15 17:12	1
1,1-Dichloroethane	0.29	J	1.0	0.12	ug/L			04/25/15 17:12	1
cis-1,2-Dichloroethene	8.2		1.0	0.24	ug/L			04/25/15 17:12	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/15 17:12	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/25/15 17:12	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/25/15 17:12	1
1,1,1-Trichloroethane	1.1		1.0	0.29	ug/L			04/25/15 17:12	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/25/15 17:12	1
Benzene	1.0	U	1.0	0.11	ug/L			04/25/15 17:12	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/25/15 17:12	1
Trichloroethene	7.9		1.0	0.14	ug/L			04/25/15 17:12	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/25/15 17:12	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/25/15 17:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/15 17:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/25/15 17:12	1
Toluene	1.0	U	1.0	0.15	ug/L			04/25/15 17:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/25/15 17:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/25/15 17:12	1
Tetrachloroethene	9.0		1.0	0.15	ug/L			04/25/15 17:12	1
2-Hexanone	5.0	U *	5.0	0.16	ug/L			04/25/15 17:12	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/25/15 17:12	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/25/15 17:12	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/15 17:12	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/25/15 17:12	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/25/15 17:12	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/25/15 17:12	1
Styrene	1.0	U	1.0	0.097	ug/L			04/25/15 17:12	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/25/15 17:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/25/15 17:12	1
Acrylonitrile	20	U	20	0.55	ug/L			04/25/15 17:12	1
1,4-Dioxane	200	U	200	34	ug/L			04/25/15 17:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		64 - 135		04/25/15 17:12	1
Toluene-d8 (Surr)	101		71 - 118		04/25/15 17:12	1
4-Bromofluorobenzene (Surr)	99		70 - 118		04/25/15 17:12	1
Dibromofluoromethane (Surr)	98		70 - 128		04/25/15 17:12	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-QC1-0/1-2

Lab Sample ID: 180-43257-9

Date Collected: 04/20/15 12:00

Matrix: Water

Date Received: 04/21/15 09:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/24/15 14:10	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/24/15 14:10	1
Bromomethane	1.0	U *	1.0	0.31	ug/L			04/24/15 14:10	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 14:10	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/24/15 14:10	1
Acetone	5.0	U	5.0	2.5	ug/L			04/24/15 14:10	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/24/15 14:10	1
Methylene Chloride	0.14	J	1.0	0.13	ug/L			04/24/15 14:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/15 14:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/24/15 14:10	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/24/15 14:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/24/15 14:10	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/15 14:10	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/24/15 14:10	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/24/15 14:10	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/24/15 14:10	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/24/15 14:10	1
Benzene	1.0	U	1.0	0.11	ug/L			04/24/15 14:10	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 14:10	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/24/15 14:10	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/24/15 14:10	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/24/15 14:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/15 14:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/24/15 14:10	1
Toluene	1.0	U	1.0	0.15	ug/L			04/24/15 14:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/24/15 14:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 14:10	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/24/15 14:10	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/24/15 14:10	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/24/15 14:10	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/24/15 14:10	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/15 14:10	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/24/15 14:10	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/24/15 14:10	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/24/15 14:10	1
Styrene	1.0	U	1.0	0.097	ug/L			04/24/15 14:10	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/24/15 14:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 14:10	1
Acrylonitrile	20	U	20	0.55	ug/L			04/24/15 14:10	1
1,4-Dioxane	200	U	200	34	ug/L			04/24/15 14:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 135		04/24/15 14:10	1
Toluene-d8 (Surr)	106		71 - 118		04/24/15 14:10	1
4-Bromofluorobenzene (Surr)	99		70 - 118		04/24/15 14:10	1
Dibromofluoromethane (Surr)	94		70 - 128		04/24/15 14:10	1

Client Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-MW-93S-0/1-0

Lab Sample ID: 180-43257-6

Date Collected: 04/20/15 12:39

Matrix: Water

Date Received: 04/21/15 09:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	5.0	U	5.0	1.4	ug/L			04/25/15 16:23	5
Vinyl chloride	5.0	U	5.0	1.1	ug/L			04/25/15 16:23	5
Bromomethane	5.0	U *	5.0	1.6	ug/L			04/25/15 16:23	5
Chloroethane	5.0	U	5.0	1.1	ug/L			04/25/15 16:23	5
1,1-Dichloroethene	5.0	U	5.0	1.5	ug/L			04/25/15 16:23	5
Acetone	25	U	25	13	ug/L			04/25/15 16:23	5
Carbon disulfide	5.0	U	5.0	1.1	ug/L			04/25/15 16:23	5
Methylene Chloride	1.0	J	5.0	0.63	ug/L			04/25/15 16:23	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.85	ug/L			04/25/15 16:23	5
Methyl tert-butyl ether	5.0	U	5.0	0.92	ug/L			04/25/15 16:23	5
1,1-Dichloroethane	0.85	J	5.0	0.58	ug/L			04/25/15 16:23	5
cis-1,2-Dichloroethene	32		5.0	1.2	ug/L			04/25/15 16:23	5
Bromochloromethane	5.0	U	5.0	0.90	ug/L			04/25/15 16:23	5
2-Butanone (MEK)	25	U	25	2.7	ug/L			04/25/15 16:23	5
Chloroform	5.0	U	5.0	0.85	ug/L			04/25/15 16:23	5
1,1,1-Trichloroethane	5.3		5.0	1.4	ug/L			04/25/15 16:23	5
Carbon tetrachloride	5.0	U	5.0	0.68	ug/L			04/25/15 16:23	5
Benzene	5.0	U	5.0	0.53	ug/L			04/25/15 16:23	5
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/L			04/25/15 16:23	5
Trichloroethene	35		5.0	0.72	ug/L			04/25/15 16:23	5
1,2-Dichloropropane	5.0	U	5.0	0.47	ug/L			04/25/15 16:23	5
Bromodichloromethane	5.0	U	5.0	0.65	ug/L			04/25/15 16:23	5
cis-1,3-Dichloropropene	5.0	U	5.0	0.93	ug/L			04/25/15 16:23	5
4-Methyl-2-pentanone (MIBK)	25	U	25	2.6	ug/L			04/25/15 16:23	5
Toluene	5.0	U	5.0	0.75	ug/L			04/25/15 16:23	5
trans-1,3-Dichloropropene	5.0	U	5.0	0.74	ug/L			04/25/15 16:23	5
1,1,2-Trichloroethane	5.0	U	5.0	1.0	ug/L			04/25/15 16:23	5
Tetrachloroethene	110		5.0	0.74	ug/L			04/25/15 16:23	5
2-Hexanone	25	U *	25	0.80	ug/L			04/25/15 16:23	5
Dibromochloromethane	5.0	U	5.0	0.68	ug/L			04/25/15 16:23	5
1,2-Dibromoethane (EDB)	5.0	U	5.0	0.90	ug/L			04/25/15 16:23	5
Chlorobenzene	5.0	U	5.0	0.68	ug/L			04/25/15 16:23	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.4	ug/L			04/25/15 16:23	5
Ethylbenzene	5.0	U	5.0	1.1	ug/L			04/25/15 16:23	5
Xylenes, Total	15	U	15	2.4	ug/L			04/25/15 16:23	5
Styrene	5.0	U	5.0	0.48	ug/L			04/25/15 16:23	5
Bromoform	5.0	U	5.0	0.96	ug/L			04/25/15 16:23	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.0	ug/L			04/25/15 16:23	5
Acrylonitrile	100	U	100	2.7	ug/L			04/25/15 16:23	5
1,4-Dioxane	1000	U	1000	170	ug/L			04/25/15 16:23	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 135		04/25/15 16:23	5
Toluene-d8 (Surr)	106		71 - 118		04/25/15 16:23	5
4-Bromofluorobenzene (Surr)	103		70 - 118		04/25/15 16:23	5
Dibromofluoromethane (Surr)	97		70 - 128		04/25/15 16:23	5

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Client Sample ID: HD-MW-37D-0/1-0

Date Collected: 04/20/15 14:12

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	40	U	40	11	ug/L			04/25/15 16:48	40
Vinyl chloride	40	U	40	9.1	ug/L			04/25/15 16:48	40
Bromomethane	40	U *	40	13	ug/L			04/25/15 16:48	40
Chloroethane	40	U	40	8.6	ug/L			04/25/15 16:48	40
1,1-Dichloroethene	40	U	40	12	ug/L			04/25/15 16:48	40
Acetone	200	U	200	100	ug/L			04/25/15 16:48	40
Carbon disulfide	40	U	40	8.5	ug/L			04/25/15 16:48	40
Methylene Chloride	40	U	40	5.0	ug/L			04/25/15 16:48	40
trans-1,2-Dichloroethene	40	U	40	6.8	ug/L			04/25/15 16:48	40
Methyl tert-butyl ether	40	U	40	7.3	ug/L			04/25/15 16:48	40
1,1-Dichloroethane	40	U	40	4.7	ug/L			04/25/15 16:48	40
cis-1,2-Dichloroethene	52		40	9.5	ug/L			04/25/15 16:48	40
Bromochloromethane	40	U	40	7.2	ug/L			04/25/15 16:48	40
2-Butanone (MEK)	200	U	200	22	ug/L			04/25/15 16:48	40
Chloroform	40	U	40	6.8	ug/L			04/25/15 16:48	40
1,1,1-Trichloroethane	41		40	11	ug/L			04/25/15 16:48	40
Carbon tetrachloride	40	U	40	5.5	ug/L			04/25/15 16:48	40
Benzene	40	U	40	4.2	ug/L			04/25/15 16:48	40
1,2-Dichloroethane	40	U	40	8.5	ug/L			04/25/15 16:48	40
Trichloroethene	230		40	5.7	ug/L			04/25/15 16:48	40
1,2-Dichloropropane	40	U	40	3.8	ug/L			04/25/15 16:48	40
Bromodichloromethane	40	U	40	5.2	ug/L			04/25/15 16:48	40
cis-1,3-Dichloropropene	40	U	40	7.5	ug/L			04/25/15 16:48	40
4-Methyl-2-pentanone (MIBK)	200	U	200	21	ug/L			04/25/15 16:48	40
Toluene	40	U	40	6.0	ug/L			04/25/15 16:48	40
trans-1,3-Dichloropropene	40	U	40	5.9	ug/L			04/25/15 16:48	40
1,1,2-Trichloroethane	40	U	40	8.1	ug/L			04/25/15 16:48	40
Tetrachloroethene	680		40	5.9	ug/L			04/25/15 16:48	40
2-Hexanone	200	U *	200	6.4	ug/L			04/25/15 16:48	40
Dibromochloromethane	40	U	40	5.5	ug/L			04/25/15 16:48	40
1,2-Dibromoethane (EDB)	40	U	40	7.2	ug/L			04/25/15 16:48	40
Chlorobenzene	40	U	40	5.4	ug/L			04/25/15 16:48	40
1,1,1,2-Tetrachloroethane	40	U	40	11	ug/L			04/25/15 16:48	40
Ethylbenzene	40	U	40	9.1	ug/L			04/25/15 16:48	40
Xylenes, Total	120	U	120	20	ug/L			04/25/15 16:48	40
Styrene	40	U	40	3.9	ug/L			04/25/15 16:48	40
Bromoform	40	U	40	7.7	ug/L			04/25/15 16:48	40
1,1,2,2-Tetrachloroethane	40	U	40	8.0	ug/L			04/25/15 16:48	40
Acrylonitrile	800	U	800	22	ug/L			04/25/15 16:48	40
1,4-Dioxane	8000	U	8000	1400	ug/L			04/25/15 16:48	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		64 - 135		04/25/15 16:48	40
Toluene-d8 (Surr)	105		71 - 118		04/25/15 16:48	40
4-Bromofluorobenzene (Surr)	103		70 - 118		04/25/15 16:48	40
Dibromofluoromethane (Surr)	99		70 - 128		04/25/15 16:48	40

TestAmerica Pittsburgh

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-98S-0/1-0

Lab Sample ID: 180-43257-1

Date Collected: 04/20/15 13:35

Matrix: Water

Date Received: 04/21/15 09:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.7		0.10	0.0062	mg/L			04/21/15 15:42	1
Chloride	57		1.0	0.20	mg/L			04/21/15 15:42	1
Sulfate	48		1.0	0.21	mg/L			04/21/15 15:42	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-98I-0/1-0

Date Collected: 04/20/15 14:30

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.4		0.10	0.0062	mg/L			04/21/15 15:59	1
Chloride	57		1.0	0.20	mg/L			04/21/15 15:59	1
Sulfate	46		1.0	0.21	mg/L			04/21/15 15:59	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-99S-0/1-0

Date Collected: 04/20/15 10:30

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.0		0.10	0.0062	mg/L			04/21/15 20:19	1
Chloride	100		1.0	0.20	mg/L			04/21/15 20:19	1
Sulfate	31		1.0	0.21	mg/L			04/21/15 20:19	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-145A-0/1-0

Date Collected: 04/20/15 11:42

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.8		0.10	0.0062	mg/L			04/21/15 15:07	1
Chloride	150		1.0	0.20	mg/L			04/21/15 15:07	1
Sulfate	38		1.0	0.21	mg/L			04/21/15 15:07	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-93D-0/1-0

Date Collected: 04/20/15 11:02

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.41		0.10	0.0062	mg/L			04/21/15 20:36	1
Chloride	100		1.0	0.20	mg/L			04/21/15 20:36	1
Sulfate	31		1.0	0.21	mg/L			04/21/15 20:36	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-93S-0/1-0

Date Collected: 04/20/15 12:39

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1.2		0.10	0.0062	mg/L			04/21/15 20:53	1
Chloride	170		1.0	0.20	mg/L			04/21/15 20:53	1
Sulfate	31		1.0	0.21	mg/L			04/21/15 20:53	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-37D-0/1-0

Date Collected: 04/20/15 14:12

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.2		0.10	0.0062	mg/L			04/21/15 19:10	1
Chloride	150		1.0	0.20	mg/L			04/21/15 19:10	1
Sulfate	39		1.0	0.21	mg/L			04/21/15 19:10	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-QC1-0/1-1

Date Collected: 04/20/15 08:00

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.6		0.10	0.0062	mg/L			04/21/15 21:11	1
Chloride	57		1.0	0.20	mg/L			04/21/15 21:11	1
Sulfate	48		1.0	0.21	mg/L			04/21/15 21:11	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-98S-0/1-0

Date Collected: 04/20/15 13:35

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000	B	500	2.8	ug/L		04/22/15 10:12	04/26/15 01:12	1
Potassium	2900		500	5.8	ug/L		04/22/15 10:12	04/26/15 01:12	1
Magnesium	15000		500	1.2	ug/L		04/22/15 10:12	04/26/15 01:12	1
Sodium	30000	B	500	3.8	ug/L		04/22/15 10:12	04/26/15 01:12	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-98I-0/1-0

Date Collected: 04/20/15 14:30

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000	B	500	2.8	ug/L		04/22/15 10:12	04/26/15 01:17	1
Potassium	2700		500	5.8	ug/L		04/22/15 10:12	04/26/15 01:17	1
Magnesium	14000		500	1.2	ug/L		04/22/15 10:12	04/26/15 01:17	1
Sodium	28000	B	500	3.8	ug/L		04/22/15 10:12	04/26/15 01:17	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-99S-0/1-0

Date Collected: 04/20/15 10:30

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	94000	B	500	2.8	ug/L		04/22/15 10:12	04/26/15 01:23	1
Potassium	3400		500	5.8	ug/L		04/22/15 10:12	04/26/15 01:23	1
Magnesium	16000		500	1.2	ug/L		04/22/15 10:12	04/26/15 01:23	1
Sodium	48000	B	500	3.8	ug/L		04/22/15 10:12	04/26/15 01:23	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-145A-0/1-0

Date Collected: 04/20/15 11:42

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	84000	B	500	2.8	ug/L		04/22/15 10:12	04/26/15 01:28	1
Potassium	4900		500	5.8	ug/L		04/22/15 10:12	04/26/15 01:28	1
Magnesium	20000		500	1.2	ug/L		04/22/15 10:12	04/26/15 01:28	1
Sodium	74000	B	500	3.8	ug/L		04/22/15 10:12	04/26/15 01:28	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-93D-0/1-0

Date Collected: 04/20/15 11:02

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	67000	B	500	2.8	ug/L		04/22/15 10:12	04/26/15 01:53	1
Potassium	4600		500	5.8	ug/L		04/22/15 10:12	04/26/15 01:53	1
Magnesium	17000		500	1.2	ug/L		04/22/15 10:12	04/26/15 01:53	1
Sodium	50000	B	500	3.8	ug/L		04/22/15 10:12	04/26/15 01:53	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-93S-0/1-0

Date Collected: 04/20/15 12:39

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	67000	B	500	2.8	ug/L		04/22/15 10:12	04/26/15 01:58	1
Potassium	9200		500	5.8	ug/L		04/22/15 10:12	04/26/15 01:58	1
Magnesium	21000		500	1.2	ug/L		04/22/15 10:12	04/26/15 01:58	1
Sodium	100000	B	500	3.8	ug/L		04/22/15 10:12	04/26/15 01:58	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-37D-0/1-0

Date Collected: 04/20/15 14:12

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	89000	B	500	2.8	ug/L		04/22/15 10:12	04/26/15 02:18	1
Potassium	6400		500	5.8	ug/L		04/22/15 10:12	04/26/15 02:18	1
Magnesium	21000		500	1.2	ug/L		04/22/15 10:12	04/26/15 21:10	1
Sodium	69000	B	500	3.8	ug/L		04/22/15 10:12	04/26/15 21:10	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-QC1-0/1-1

Date Collected: 04/20/15 08:00

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000	B	500	2.8	ug/L		04/22/15 10:12	04/26/15 02:23	1
Potassium	2900		500	5.8	ug/L		04/22/15 10:12	04/26/15 02:23	1
Magnesium	12000		500	1.2	ug/L		04/22/15 10:12	04/26/15 21:15	1
Sodium	25000	B	500	3.8	ug/L		04/22/15 10:12	04/26/15 21:15	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

General Chemistry

Client Sample ID: HD-MW-98S-0/1-0

Date Collected: 04/20/15 13:35

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO ₃ to pH 4.5	300	B	5.0	0.41	mg/L			04/23/15 05:00	1
Bicarbonate Alkalinity as CaCO ₃	300	B	5.0	0.41	mg/L			04/23/15 05:00	1
Carbonate Alkalinity as CaCO ₃	5.0	U	5.0	0.41	mg/L			04/23/15 05:00	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

General Chemistry

Client Sample ID: HD-MW-98I-0/1-0

Date Collected: 04/20/15 14:30

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	320	B	5.0	0.41	mg/L			04/23/15 05:00	1
Bicarbonate Alkalinity as CaCO3	320	B	5.0	0.41	mg/L			04/23/15 05:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/23/15 05:00	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

General Chemistry

Client Sample ID: HD-MW-99S-0/1-0

Date Collected: 04/20/15 10:30

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	270	B	5.0	0.41	mg/L			04/23/15 05:00	1
Bicarbonate Alkalinity as CaCO3	270	B	5.0	0.41	mg/L			04/23/15 05:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/23/15 05:00	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

General Chemistry

Client Sample ID: HD-MW-145A-0/1-0

Date Collected: 04/20/15 11:42

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	220	B	5.0	0.41	mg/L			04/23/15 05:00	1
Bicarbonate Alkalinity as CaCO3	220	B	5.0	0.41	mg/L			04/23/15 05:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/23/15 05:00	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

General Chemistry

Client Sample ID: HD-MW-93D-0/1-0

Date Collected: 04/20/15 11:02

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-5

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			04/23/15 05:00	1
Bicarbonate Alkalinity as CaCO3	210	B	5.0	0.41	mg/L			04/23/15 05:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/23/15 05:00	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

General Chemistry

Client Sample ID: HD-MW-93S-0/1-0

Date Collected: 04/20/15 12:39

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-6

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			04/23/15 05:00	1
Bicarbonate Alkalinity as CaCO3	210	B	5.0	0.41	mg/L			04/23/15 05:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/23/15 05:00	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

General Chemistry

Client Sample ID: HD-MW-37D-0/1-0

Date Collected: 04/20/15 14:12

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	250	B	5.0	0.41	mg/L			04/23/15 05:00	1
Bicarbonate Alkalinity as CaCO3	250	B	5.0	0.41	mg/L			04/23/15 05:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/23/15 05:00	1

Client Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

General Chemistry

Client Sample ID: HD-QC1-0/1-1

Date Collected: 04/20/15 08:00

Date Received: 04/21/15 09:15

Lab Sample ID: 180-43257-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	310	B	5.0	0.41	mg/L			04/23/15 05:00	1
Bicarbonate Alkalinity as CaCO3	310	B	5.0	0.41	mg/L			04/23/15 05:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/23/15 05:00	1

Default Detection Limits

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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: 180-43257-1

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 CaCO ₃	5.0	0.41	mg/L	SM 2320B
Carbonate Alkalinity as CaCO ₃	5.0	0.41	mg/L	SM 2320B
Total Alkalinity as CaCO ₃ 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: 180-43257-1

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)
180-43257-1	HD-MW-98S-0/1-0	100	105	103	100
180-43257-2	HD-MW-98I-0/1-0	96	102	100	99
180-43257-3	HD-MW-99S-0/1-0	99	103	99	98
180-43257-4	HD-MW-145A-0/1-0	97	103	98	96
180-43257-4 MS	HD-MW-145A-0/1-0	103	101	99	96
180-43257-4 MSD	HD-MW-145A-0/1-0	97	100	97	97
180-43257-5	HD-MW-93D-0/1-0	101	105	101	99
180-43257-6	HD-MW-93S-0/1-0	100	108	105	101
180-43257-6 - DL	HD-MW-93S-0/1-0	98	106	103	97
180-43257-7 - DL	HD-MW-37D-0/1-0	99	105	103	99
180-43257-7	HD-MW-37D-0/1-0	113	100	90	111
180-43257-8	HD-QC1-0/1-1	97	101	99	98
180-43257-9	HD-QC1-0/1-2	99	106	99	94
LCS 180-139551/10	Lab Control Sample	107	103	98	102
LCS 180-139651/10	Lab Control Sample	106	104	99	100
LCS 180-139884/7	Lab Control Sample	91	104	101	96
MB 180-139551/6	Method Blank	97	103	98	93
MB 180-139651/5	Method Blank	98	102	100	96
MB 180-139884/4	Method Blank	107	99	87	102

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: 180-43257-1

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

Lab Sample ID: MB 180-139551/6

Matrix: Water

Analysis Batch: 139551

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloromethane	1.0	U	1.0	0.28	ug/L			04/24/15 12:42	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/24/15 12:42	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/24/15 12:42	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 12:42	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/24/15 12:42	1
Acetone	5.0	U	5.0	2.5	ug/L			04/24/15 12:42	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/24/15 12:42	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/24/15 12:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/15 12:42	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/24/15 12:42	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/24/15 12:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/24/15 12:42	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/15 12:42	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/24/15 12:42	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/24/15 12:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/24/15 12:42	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/24/15 12:42	1
Benzene	1.0	U	1.0	0.11	ug/L			04/24/15 12:42	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/24/15 12:42	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/24/15 12:42	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/24/15 12:42	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/24/15 12:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/15 12:42	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/24/15 12:42	1
Toluene	1.0	U	1.0	0.15	ug/L			04/24/15 12:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/24/15 12:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 12:42	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/24/15 12:42	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/24/15 12:42	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/24/15 12:42	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/24/15 12:42	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/15 12:42	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/24/15 12:42	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/24/15 12:42	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/24/15 12:42	1
Styrene	1.0	U	1.0	0.097	ug/L			04/24/15 12:42	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/24/15 12:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/24/15 12:42	1
Acrylonitrile	20	U	20	0.55	ug/L			04/24/15 12:42	1
1,4-Dioxane	200	U	200	34	ug/L			04/24/15 12:42	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	97		64 - 135		04/24/15 12:42	1
Toluene-d8 (Surr)	103		71 - 118		04/24/15 12:42	1
4-Bromofluorobenzene (Surr)	98		70 - 118		04/24/15 12:42	1
Dibromofluoromethane (Surr)	93		70 - 128		04/24/15 12:42	1

TestAmerica Pittsburgh

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Lab Sample ID: LCS 180-139551/10

Matrix: Water

Analysis Batch: 139551

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	10.1		ug/L		101	50 - 139
Vinyl chloride	10.0	10.4		ug/L		104	53 - 138
Bromomethane	10.0	15.1	*	ug/L		151	33 - 150
Chloroethane	10.0	12.9		ug/L		129	36 - 142
1,1-Dichloroethene	10.0	10.2		ug/L		102	65 - 136
Acetone	20.0	28.9		ug/L		144	22 - 150
Carbon disulfide	10.0	7.46		ug/L		75	54 - 132
Methylene Chloride	10.0	9.92		ug/L		99	63 - 129
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	73 - 126
Methyl tert-butyl ether	10.0	9.51		ug/L		95	64 - 123
1,1-Dichloroethane	10.0	10.0		ug/L		100	73 - 126
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	70 - 120
Bromochloromethane	10.0	10.2		ug/L		102	70 - 127
2-Butanone (MEK)	20.0	25.3		ug/L		127	39 - 138
Chloroform	10.0	10.5		ug/L		105	72 - 127
1,1,1-Trichloroethane	10.0	9.15		ug/L		92	63 - 133
Carbon tetrachloride	10.0	7.94		ug/L		79	55 - 150
Benzene	10.0	10.8		ug/L		108	80 - 120
1,2-Dichloroethane	10.0	11.0		ug/L		110	68 - 132
Trichloroethene	10.0	10.5		ug/L		105	73 - 120
1,2-Dichloropropane	10.0	9.83		ug/L		98	76 - 124
Bromodichloromethane	10.0	9.14		ug/L		91	66 - 130
cis-1,3-Dichloropropene	10.0	7.57		ug/L		76	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	18.7		ug/L		93	45 - 145
Toluene	10.0	11.3		ug/L		113	80 - 123
trans-1,3-Dichloropropene	10.0	6.80		ug/L		68	65 - 125
1,1,2-Trichloroethane	10.0	11.2		ug/L		112	77 - 127
Tetrachloroethene	10.0	10.9		ug/L		109	70 - 135
2-Hexanone	20.0	22.5		ug/L		112	25 - 132
Dibromochloromethane	10.0	8.54		ug/L		85	60 - 140
1,2-Dibromoethane (EDB)	10.0	8.57		ug/L		86	74 - 123
Chlorobenzene	10.0	11.2		ug/L		112	80 - 120
1,1,1,2-Tetrachloroethane	10.0	7.61		ug/L		76	63 - 140
Ethylbenzene	10.0	10.6		ug/L		106	72 - 126
Xylenes, Total	20.0	21.1		ug/L		106	76 - 128
Styrene	10.0	10.8		ug/L		108	71 - 127
Bromoform	10.0	7.96		ug/L		80	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	62 - 125
1,4-Dioxane	200	161	J	ug/L		81	10 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		64 - 135
Toluene-d8 (Surr)	103		71 - 118
4-Bromofluorobenzene (Surr)	98		70 - 118
Dibromofluoromethane (Surr)	102		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Lab Sample ID: 180-43257-4 MS

Matrix: Water

Analysis Batch: 139551

Client Sample ID: HD-MW-145A-0/1-0

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Chloromethane	1.0	U	10.0	9.93		ug/L		99	50 - 139
Vinyl chloride	1.0	U	10.0	10.2		ug/L		102	53 - 138
Bromomethane	1.0	U *	10.0	14.5		ug/L		145	33 - 150
Chloroethane	1.0	U	10.0	12.2		ug/L		122	36 - 142
1,1-Dichloroethene	0.53	J	10.0	10.0		ug/L		95	65 - 136
Acetone	5.0	U	20.0	29.3		ug/L		147	22 - 150
Carbon disulfide	1.0	U	10.0	7.60		ug/L		76	54 - 132
Methylene Chloride	1.0	U	10.0	9.49		ug/L		95	63 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	9.94		ug/L		99	73 - 126
Methyl tert-butyl ether	1.0	U	10.0	9.47		ug/L		95	64 - 123
1,1-Dichloroethane	0.18	J	10.0	9.57		ug/L		94	73 - 126
cis-1,2-Dichloroethene	10		10.0	19.4		ug/L		94	70 - 120
Bromochloromethane	1.0	U	10.0	9.58		ug/L		96	70 - 127
2-Butanone (MEK)	5.0	U	20.0	24.3		ug/L		122	39 - 138
Chloroform	0.21	J	10.0	10.2		ug/L		100	72 - 127
1,1,1-Trichloroethane	0.43	J	10.0	9.09		ug/L		87	63 - 133
Carbon tetrachloride	1.0	U	10.0	7.80		ug/L		78	55 - 150
Benzene	1.0	U	10.0	10.2		ug/L		102	80 - 120
1,2-Dichloroethane	1.0	U	10.0	10.8		ug/L		108	68 - 132
Trichloroethene	12		10.0	20.8		ug/L		89	73 - 120
1,2-Dichloropropane	1.0	U	10.0	9.39		ug/L		94	76 - 124
Bromodichloromethane	1.0	U	10.0	8.90		ug/L		89	66 - 130
cis-1,3-Dichloropropene	1.0	U	10.0	7.24		ug/L		72	66 - 120
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	18.4		ug/L		92	45 - 145
Toluene	1.0	U	10.0	11.0		ug/L		110	80 - 123
trans-1,3-Dichloropropene	1.0	U	10.0	6.83		ug/L		68	65 - 125
1,1,2-Trichloroethane	1.0	U	10.0	10.5		ug/L		105	77 - 127
Tetrachloroethene	8.2		10.0	17.7		ug/L		95	70 - 135
2-Hexanone	5.0	U	20.0	22.5		ug/L		112	25 - 132
Dibromochloromethane	1.0	U	10.0	8.76		ug/L		88	60 - 140
1,2-Dibromoethane (EDB)	1.0	U	10.0	9.29		ug/L		93	74 - 123
Chlorobenzene	1.0	U	10.0	11.0		ug/L		110	80 - 120
1,1,1,2-Tetrachloroethane	1.0	U	10.0	7.44		ug/L		74	63 - 140
Ethylbenzene	1.0	U	10.0	10.4		ug/L		104	72 - 126
Xylenes, Total	3.0	U	20.0	20.2		ug/L		101	76 - 128
Styrene	1.0	U	10.0	10.3		ug/L		103	71 - 127
Bromoform	1.0	U	10.0	7.42		ug/L		74	46 - 150
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.92		ug/L		99	62 - 125
1,4-Dioxane	200	U	200	158	J	ug/L		79	10 - 160
	MS	MS							
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	103		64 - 135						
Toluene-d8 (Surr)	101		71 - 118						
4-Bromofluorobenzene (Surr)	99		70 - 118						
Dibromofluoromethane (Surr)	96		70 - 128						

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Lab Sample ID: 180-43257-4 MSD

Matrix: Water

Analysis Batch: 139551

Client Sample ID: HD-MW-145A-0/1-0

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Chloromethane	1.0	U	10.0	9.34		ug/L		93	50 - 139	6	35
Vinyl chloride	1.0	U	10.0	9.45		ug/L		95	53 - 138	7	35
Bromomethane	1.0	U *	10.0	13.8		ug/L		138	33 - 150	5	35
Chloroethane	1.0	U	10.0	11.4		ug/L		114	36 - 142	7	35
1,1-Dichloroethene	0.53	J	10.0	9.37		ug/L		88	65 - 136	7	35
Acetone	5.0	U	20.0	26.0		ug/L		130	22 - 150	12	35
Carbon disulfide	1.0	U	10.0	7.02		ug/L		70	54 - 132	8	35
Methylene Chloride	1.0	U	10.0	9.25		ug/L		93	63 - 129	3	35
trans-1,2-Dichloroethene	1.0	U	10.0	9.14		ug/L		91	73 - 126	8	35
Methyl tert-butyl ether	1.0	U	10.0	9.46		ug/L		95	64 - 123	0	35
1,1-Dichloroethane	0.18	J	10.0	9.31		ug/L		91	73 - 126	3	35
cis-1,2-Dichloroethene	10		10.0	19.0		ug/L		90	70 - 120	2	35
Bromochloromethane	1.0	U	10.0	9.16		ug/L		92	70 - 127	4	35
2-Butanone (MEK)	5.0	U	20.0	23.6		ug/L		118	39 - 138	3	35
Chloroform	0.21	J	10.0	9.74		ug/L		95	72 - 127	5	35
1,1,1-Trichloroethane	0.43	J	10.0	8.81		ug/L		84	63 - 133	3	35
Carbon tetrachloride	1.0	U	10.0	7.35		ug/L		74	55 - 150	6	35
Benzene	1.0	U	10.0	9.74		ug/L		97	80 - 120	4	32
1,2-Dichloroethane	1.0	U	10.0	10.4		ug/L		104	68 - 132	4	32
Trichloroethene	12		10.0	19.9		ug/L		80	73 - 120	5	35
1,2-Dichloropropane	1.0	U	10.0	9.07		ug/L		91	76 - 124	4	34
Bromodichloromethane	1.0	U	10.0	8.61		ug/L		86	66 - 130	3	35
cis-1,3-Dichloropropene	1.0	U	10.0	6.98		ug/L		70	66 - 120	4	35
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	17.5		ug/L		87	45 - 145	5	35
Toluene	1.0	U	10.0	10.7		ug/L		107	80 - 123	3	35
trans-1,3-Dichloropropene	1.0	U	10.0	6.63		ug/L		66	65 - 125	3	35
1,1,2-Trichloroethane	1.0	U	10.0	10.4		ug/L		104	77 - 127	1	35
Tetrachloroethene	8.2		10.0	16.7		ug/L		85	70 - 135	6	35
2-Hexanone	5.0	U	20.0	20.4		ug/L		102	25 - 132	10	35
Dibromochloromethane	1.0	U	10.0	8.38		ug/L		84	60 - 140	4	35
1,2-Dibromoethane (EDB)	1.0	U	10.0	9.07		ug/L		91	74 - 123	2	35
Chlorobenzene	1.0	U	10.0	10.6		ug/L		106	80 - 120	3	29
1,1,1,2-Tetrachloroethane	1.0	U	10.0	7.37		ug/L		74	63 - 140	1	34
Ethylbenzene	1.0	U	10.0	9.76		ug/L		98	72 - 126	6	33
Xylenes, Total	3.0	U	20.0	19.4		ug/L		97	76 - 128	4	32
Styrene	1.0	U	10.0	9.84		ug/L		98	71 - 127	4	34
Bromoform	1.0	U	10.0	7.32		ug/L		73	46 - 150	1	35
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.56		ug/L		96	62 - 125	4	35
1,4-Dioxane	200	U	200	163	J	ug/L		81	10 - 160	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		64 - 135
Toluene-d8 (Surr)	100		71 - 118
4-Bromofluorobenzene (Surr)	97		70 - 118
Dibromofluoromethane (Surr)	97		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Lab Sample ID: MB 180-139651/5

Matrix: Water

Analysis Batch: 139651

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloromethane	1.0	U	1.0	0.28	ug/L			04/25/15 12:44	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/25/15 12:44	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/25/15 12:44	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/25/15 12:44	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/25/15 12:44	1
Acetone	5.0	U	5.0	2.5	ug/L			04/25/15 12:44	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/25/15 12:44	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/25/15 12:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/25/15 12:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/25/15 12:44	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/25/15 12:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/25/15 12:44	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/15 12:44	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/25/15 12:44	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/25/15 12:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/25/15 12:44	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/25/15 12:44	1
Benzene	1.0	U	1.0	0.11	ug/L			04/25/15 12:44	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/25/15 12:44	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/25/15 12:44	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/25/15 12:44	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/25/15 12:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/15 12:44	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/25/15 12:44	1
Toluene	1.0	U	1.0	0.15	ug/L			04/25/15 12:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/25/15 12:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/25/15 12:44	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/25/15 12:44	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/25/15 12:44	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/25/15 12:44	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/25/15 12:44	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/15 12:44	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/25/15 12:44	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/25/15 12:44	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/25/15 12:44	1
Styrene	1.0	U	1.0	0.097	ug/L			04/25/15 12:44	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/25/15 12:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/25/15 12:44	1
Acrylonitrile	20	U	20	0.55	ug/L			04/25/15 12:44	1
1,4-Dioxane	200	U	200	34	ug/L			04/25/15 12:44	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	98		64 - 135		04/25/15 12:44	1
Toluene-d8 (Surr)	102		71 - 118		04/25/15 12:44	1
4-Bromofluorobenzene (Surr)	100		70 - 118		04/25/15 12:44	1
Dibromofluoromethane (Surr)	96		70 - 128		04/25/15 12:44	1

TestAmerica Pittsburgh

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Lab Sample ID: LCS 180-139651/10

Matrix: Water

Analysis Batch: 139651

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	10.3		ug/L		103	50 - 139
Vinyl chloride	10.0	9.88		ug/L		99	53 - 138
Bromomethane	10.0	16.4	*	ug/L		164	33 - 150
Chloroethane	10.0	13.3		ug/L		133	36 - 142
1,1-Dichloroethene	10.0	9.98		ug/L		100	65 - 136
Acetone	20.0	25.9		ug/L		129	22 - 150
Carbon disulfide	10.0	8.28		ug/L		83	54 - 132
Methylene Chloride	10.0	10.0		ug/L		100	63 - 129
trans-1,2-Dichloroethene	10.0	9.72		ug/L		97	73 - 126
Methyl tert-butyl ether	10.0	10.2		ug/L		102	64 - 123
1,1-Dichloroethane	10.0	9.91		ug/L		99	73 - 126
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	70 - 120
Bromochloromethane	10.0	10.1		ug/L		101	70 - 127
2-Butanone (MEK)	20.0	25.9		ug/L		130	39 - 138
Chloroform	10.0	10.8		ug/L		108	72 - 127
1,1,1-Trichloroethane	10.0	8.99		ug/L		90	63 - 133
Carbon tetrachloride	10.0	8.38		ug/L		84	55 - 150
Benzene	10.0	10.5		ug/L		105	80 - 120
1,2-Dichloroethane	10.0	11.2		ug/L		112	68 - 132
Trichloroethene	10.0	10.4		ug/L		104	73 - 120
1,2-Dichloropropane	10.0	9.77		ug/L		98	76 - 124
Bromodichloromethane	10.0	9.30		ug/L		93	66 - 130
cis-1,3-Dichloropropene	10.0	7.36		ug/L		74	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	17.9		ug/L		89	45 - 145
Toluene	10.0	11.4		ug/L		114	80 - 123
trans-1,3-Dichloropropene	10.0	7.03		ug/L		70	65 - 125
1,1,2-Trichloroethane	10.0	11.0		ug/L		110	77 - 127
Tetrachloroethene	10.0	10.8		ug/L		108	70 - 135
2-Hexanone	20.0	27.5	*	ug/L		138	25 - 132
Dibromochloromethane	10.0	9.24		ug/L		92	60 - 140
1,2-Dibromoethane (EDB)	10.0	9.89		ug/L		99	74 - 123
Chlorobenzene	10.0	11.8		ug/L		118	80 - 120
1,1,1,2-Tetrachloroethane	10.0	7.91		ug/L		79	63 - 140
Ethylbenzene	10.0	10.6		ug/L		106	72 - 126
Xylenes, Total	20.0	21.8		ug/L		109	76 - 128
Styrene	10.0	11.3		ug/L		113	71 - 127
Bromoform	10.0	7.51		ug/L		75	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	62 - 125
1,4-Dioxane	200	188	J	ug/L		94	10 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		64 - 135
Toluene-d8 (Surr)	104		71 - 118
4-Bromofluorobenzene (Surr)	99		70 - 118
Dibromofluoromethane (Surr)	100		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Lab Sample ID: MB 180-139884/4

Matrix: Water

Analysis Batch: 139884

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloromethane	1.0	U	1.0	0.28	ug/L			04/28/15 13:05	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/28/15 13:05	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/28/15 13:05	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/28/15 13:05	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/28/15 13:05	1
Acetone	5.0	U	5.0	2.5	ug/L			04/28/15 13:05	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/28/15 13:05	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/28/15 13:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/28/15 13:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/28/15 13:05	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/28/15 13:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/28/15 13:05	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/28/15 13:05	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/28/15 13:05	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/28/15 13:05	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/28/15 13:05	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/28/15 13:05	1
Benzene	1.0	U	1.0	0.11	ug/L			04/28/15 13:05	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/28/15 13:05	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/28/15 13:05	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/28/15 13:05	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/28/15 13:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/28/15 13:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/28/15 13:05	1
Toluene	1.0	U	1.0	0.15	ug/L			04/28/15 13:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/28/15 13:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/28/15 13:05	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/28/15 13:05	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/28/15 13:05	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/28/15 13:05	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/28/15 13:05	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/28/15 13:05	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/28/15 13:05	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/28/15 13:05	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/28/15 13:05	1
Styrene	1.0	U	1.0	0.097	ug/L			04/28/15 13:05	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/28/15 13:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/28/15 13:05	1
Acrylonitrile	20	U	20	0.55	ug/L			04/28/15 13:05	1
1,4-Dioxane	200	U	200	34	ug/L			04/28/15 13:05	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	107		64 - 135		04/28/15 13:05	1
Toluene-d8 (Surr)	99		71 - 118		04/28/15 13:05	1
4-Bromofluorobenzene (Surr)	87		70 - 118		04/28/15 13:05	1
Dibromofluoromethane (Surr)	102		70 - 128		04/28/15 13:05	1

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Lab Sample ID: LCS 180-139884/7

Matrix: Water

Analysis Batch: 139884

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	8.80		ug/L		88	50 - 139
Vinyl chloride	10.0	9.25		ug/L		93	53 - 138
Bromomethane	10.0	8.81		ug/L		88	33 - 150
Chloroethane	10.0	8.69		ug/L		87	36 - 142
1,1-Dichloroethene	10.0	8.25		ug/L		82	65 - 136
Acetone	20.0	17.8		ug/L		89	22 - 150
Carbon disulfide	10.0	8.22		ug/L		82	54 - 132
Methylene Chloride	10.0	8.39		ug/L		84	63 - 129
trans-1,2-Dichloroethene	10.0	9.38		ug/L		94	73 - 126
Methyl tert-butyl ether	10.0	8.26		ug/L		83	64 - 123
1,1-Dichloroethane	10.0	8.90		ug/L		89	73 - 126
cis-1,2-Dichloroethene	10.0	8.83		ug/L		88	70 - 120
Bromochloromethane	10.0	8.89		ug/L		89	70 - 127
2-Butanone (MEK)	20.0	18.1		ug/L		91	39 - 138
Chloroform	10.0	9.14		ug/L		91	72 - 127
1,1,1-Trichloroethane	10.0	9.31		ug/L		93	63 - 133
Carbon tetrachloride	10.0	9.76		ug/L		98	55 - 150
Benzene	10.0	9.70		ug/L		97	80 - 120
1,2-Dichloroethane	10.0	9.22		ug/L		92	68 - 132
Trichloroethene	10.0	8.95		ug/L		90	73 - 120
1,2-Dichloropropane	10.0	9.15		ug/L		91	76 - 124
Bromodichloromethane	10.0	9.06		ug/L		91	66 - 130
cis-1,3-Dichloropropene	10.0	8.81		ug/L		88	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	18.5		ug/L		93	45 - 145
Toluene	10.0	10.3		ug/L		103	80 - 123
trans-1,3-Dichloropropene	10.0	9.29		ug/L		93	65 - 125
1,1,2-Trichloroethane	10.0	9.73		ug/L		97	77 - 127
Tetrachloroethene	10.0	10.2		ug/L		102	70 - 135
2-Hexanone	20.0	17.3		ug/L		86	25 - 132
Dibromochloromethane	10.0	10.3		ug/L		103	60 - 140
1,2-Dibromoethane (EDB)	10.0	9.58		ug/L		96	74 - 123
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.64		ug/L		96	63 - 140
Ethylbenzene	10.0	9.77		ug/L		98	72 - 126
Xylenes, Total	20.0	20.3		ug/L		102	76 - 128
Styrene	10.0	10.2		ug/L		102	71 - 127
Bromoform	10.0	9.81		ug/L		98	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	62 - 125
1,4-Dioxane	200	208		ug/L		104	10 - 160

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		64 - 135
Toluene-d8 (Surr)	104		71 - 118
4-Bromofluorobenzene (Surr)	101		70 - 118
Dibromofluoromethane (Surr)	96		70 - 128

QC Sample Results

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 180-139181/6
Matrix: Water
Analysis Batch: 139181

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			04/21/15 13:41	1
Chloride	1.0	U	1.0	0.20	mg/L			04/21/15 13:41	1
Sulfate	1.0	U	1.0	0.21	mg/L			04/21/15 13:41	1

Lab Sample ID: LCS 180-139181/5
Matrix: Water
Analysis Batch: 139181

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	51.0		mg/L		102	90 - 110
Sulfate	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: 180-43257-4 MS
Matrix: Water
Analysis Batch: 139181

Client Sample ID: HD-MW-145A-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	150		25.0	173	4	mg/L		90	80 - 120
Sulfate	38		25.0	62.0		mg/L		97	80 - 120

Lab Sample ID: 180-43257-4 MSD
Matrix: Water
Analysis Batch: 139181

Client Sample ID: HD-MW-145A-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
										RPD	Limit
Nitrate as N	3.8		1.25	5.06		mg/L		102	80 - 120	1	20
Chloride	150		25.0	174	4	mg/L		94	80 - 120	1	20
Sulfate	38		25.0	62.8		mg/L		100	80 - 120	1	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: 180-43257-4 MS
Matrix: Water
Analysis Batch: 139683

Client Sample ID: HD-MW-145A-0/1-0
Prep Type: Total/NA
Prep Batch: 139272

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	4900		50000	49800		ug/L		90	75 - 125
Magnesium	20000		50000	75200		ug/L		110	75 - 125
Sodium	74000	B	50000	132000		ug/L		116	75 - 125

Lab Sample ID: 180-43257-4 MSD
Matrix: Water
Analysis Batch: 139683

Client Sample ID: HD-MW-145A-0/1-0
Prep Type: Total/NA
Prep Batch: 139272

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
										RPD	Limit
Calcium	84000	B	50000	133000		ug/L		96	75 - 125	1	20

TestAmerica Pittsburgh

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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

Lab Sample ID: 180-43257-4 MSD

Matrix: Water

Analysis Batch: 139683

Client Sample ID: HD-MW-145A-0/1-0

Prep Type: Total/NA

Prep Batch: 139272

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	Limit	
Potassium	4900		50000	49900		ug/L		90	75 - 125	0	20
Magnesium	20000		50000	75700		ug/L		111	75 - 125	1	20
Sodium	74000	B	50000	132000		ug/L		116	75 - 125	0	20

Lab Sample ID: MB 180-139272/1-A

Matrix: Water

Analysis Batch: 139683

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 139272

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	3.27	J	500	2.8	ug/L		04/22/15 10:12	04/26/15 00:18	1
Potassium	500	U	500	5.8	ug/L		04/22/15 10:12	04/26/15 00:18	1
Magnesium	500	U	500	1.2	ug/L		04/22/15 10:12	04/26/15 00:18	1
Sodium	8.85	J	500	3.8	ug/L		04/22/15 10:12	04/26/15 00:18	1

Lab Sample ID: LCS 180-139272/2-A

Matrix: Water

Analysis Batch: 139683

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 139272

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
							Limits
Calcium	50000	47300		ug/L		95	80 - 120
Potassium	50000	44100		ug/L		88	80 - 120
Magnesium	50000	51700		ug/L		103	80 - 120
Sodium	50000	52300		ug/L		105	80 - 120

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-139318/2

Matrix: Water

Analysis Batch: 139318

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Alkalinity as CaCO3 to pH 4.5	2.06	J	5.0	0.41	mg/L			04/23/15 05:00	1
Bicarbonate Alkalinity as CaCO3	2.06	J	5.0	0.41	mg/L			04/23/15 05:00	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/23/15 05:00	1

Lab Sample ID: LCS 180-139318/1

Matrix: Water

Analysis Batch: 139318

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
							Limits
Total Alkalinity as CaCO3 to pH 4.5	250	272		mg/L		109	80 - 120

Lab Sample ID: 180-43257-4 DU

Matrix: Water

Analysis Batch: 139318

Client Sample ID: HD-MW-145A-0/1-0

Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD
	Result	Qualifier	Result	Qualifier				Limit
Total Alkalinity as CaCO3 to pH 4.5	220	B	231		mg/L		3	20

TestAmerica Pittsburgh

QC Sample Results

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 180-43257-4 DU

Matrix: Water

Analysis Batch: 139318

Client Sample ID: HD-MW-145A-0/1-0

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Bicarbonate Alkalinity as CaCO ₃	220	B	231		mg/L		3	20
Carbonate Alkalinity as CaCO ₃	5.0	U	5.0	U	mg/L		NC	20

QC Association Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

GC/MS VOA

Analysis Batch: 139551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-1	HD-MW-98S-0/1-0	Total/NA	Water	8260C	
180-43257-2	HD-MW-98I-0/1-0	Total/NA	Water	8260C	
180-43257-3	HD-MW-99S-0/1-0	Total/NA	Water	8260C	
180-43257-4	HD-MW-145A-0/1-0	Total/NA	Water	8260C	
180-43257-4 MS	HD-MW-145A-0/1-0	Total/NA	Water	8260C	
180-43257-4 MSD	HD-MW-145A-0/1-0	Total/NA	Water	8260C	
180-43257-5	HD-MW-93D-0/1-0	Total/NA	Water	8260C	
180-43257-6	HD-MW-93S-0/1-0	Total/NA	Water	8260C	
180-43257-9	HD-QC1-0/1-2	Total/NA	Water	8260C	
LCS 180-139551/10	Lab Control Sample	Total/NA	Water	8260C	
MB 180-139551/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 139651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-6 - DL	HD-MW-93S-0/1-0	Total/NA	Water	8260C	
180-43257-7 - DL	HD-MW-37D-0/1-0	Total/NA	Water	8260C	
180-43257-8	HD-QC1-0/1-1	Total/NA	Water	8260C	
LCS 180-139651/10	Lab Control Sample	Total/NA	Water	8260C	
MB 180-139651/5	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 139884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-7	HD-MW-37D-0/1-0	Total/NA	Water	8260C	
LCS 180-139884/7	Lab Control Sample	Total/NA	Water	8260C	
MB 180-139884/4	Method Blank	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 139181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-1	HD-MW-98S-0/1-0	Total/NA	Water	300.0	
180-43257-2	HD-MW-98I-0/1-0	Total/NA	Water	300.0	
180-43257-3	HD-MW-99S-0/1-0	Total/NA	Water	300.0	
180-43257-4	HD-MW-145A-0/1-0	Total/NA	Water	300.0	
180-43257-4 MS	HD-MW-145A-0/1-0	Total/NA	Water	300.0	
180-43257-4 MSD	HD-MW-145A-0/1-0	Total/NA	Water	300.0	
180-43257-5	HD-MW-93D-0/1-0	Total/NA	Water	300.0	
180-43257-6	HD-MW-93S-0/1-0	Total/NA	Water	300.0	
180-43257-7	HD-MW-37D-0/1-0	Total/NA	Water	300.0	
180-43257-8	HD-QC1-0/1-1	Total/NA	Water	300.0	
LCS 180-139181/5	Lab Control Sample	Total/NA	Water	300.0	
MB 180-139181/6	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 139272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-1	HD-MW-98S-0/1-0	Total/NA	Water	3005A	
180-43257-2	HD-MW-98I-0/1-0	Total/NA	Water	3005A	
180-43257-3	HD-MW-99S-0/1-0	Total/NA	Water	3005A	

TestAmerica Pittsburgh

QC Association Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Metals (Continued)

Prep Batch: 139272 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-4	HD-MW-145A-0/1-0	Total/NA	Water	3005A	
180-43257-4 MS	HD-MW-145A-0/1-0	Total/NA	Water	3005A	
180-43257-4 MSD	HD-MW-145A-0/1-0	Total/NA	Water	3005A	
180-43257-4 PDS	HD-MW-145A-0/1-0	Total/NA	Water	3005A	
180-43257-4 SD	HD-MW-145A-0/1-0	Total/NA	Water	3005A	
180-43257-5	HD-MW-93D-0/1-0	Total/NA	Water	3005A	
180-43257-6	HD-MW-93S-0/1-0	Total/NA	Water	3005A	
180-43257-7	HD-MW-37D-0/1-0	Total/NA	Water	3005A	
180-43257-8	HD-QC1-0/1-1	Total/NA	Water	3005A	
LCS 180-139272/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 180-139272/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 139683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-1	HD-MW-98S-0/1-0	Total/NA	Water	6020A	139272
180-43257-2	HD-MW-98I-0/1-0	Total/NA	Water	6020A	139272
180-43257-3	HD-MW-99S-0/1-0	Total/NA	Water	6020A	139272
180-43257-4	HD-MW-145A-0/1-0	Total/NA	Water	6020A	139272
180-43257-4 MS	HD-MW-145A-0/1-0	Total/NA	Water	6020A	139272
180-43257-4 MSD	HD-MW-145A-0/1-0	Total/NA	Water	6020A	139272
180-43257-4 PDS	HD-MW-145A-0/1-0	Total/NA	Water	6020A	139272
180-43257-4 SD	HD-MW-145A-0/1-0	Total/NA	Water	6020A	139272
180-43257-5	HD-MW-93D-0/1-0	Total/NA	Water	6020A	139272
180-43257-6	HD-MW-93S-0/1-0	Total/NA	Water	6020A	139272
180-43257-7	HD-MW-37D-0/1-0	Total/NA	Water	6020A	139272
180-43257-8	HD-QC1-0/1-1	Total/NA	Water	6020A	139272
CRI 180-139683/7	DL		Water	6020A	
CRI 180-139683/88	DL		Water	6020A	
ICSA 180-139683/8	ICS		Water	6020A	
ICSAB 180-139683/9	ICS		Water	6020A	
LCS 180-139272/2-A	Lab Control Sample	Total Recoverable	Water	6020A	139272
MB 180-139272/1-A	Method Blank	Total Recoverable	Water	6020A	139272

Analysis Batch: 139813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-7	HD-MW-37D-0/1-0	Total/NA	Water	6020A	139272
180-43257-8	HD-QC1-0/1-1	Total/NA	Water	6020A	139272
CRI 180-139813/27	DL		Water	6020A	
CRI 180-139813/7	DL		Water	6020A	
ICSA 180-139813/8	ICS		Water	6020A	
ICSAB 180-139813/9	ICS		Water	6020A	

General Chemistry

Analysis Batch: 139318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-1	HD-MW-98S-0/1-0	Total/NA	Water	SM 2320B	
180-43257-2	HD-MW-98I-0/1-0	Total/NA	Water	SM 2320B	
180-43257-3	HD-MW-99S-0/1-0	Total/NA	Water	SM 2320B	
180-43257-4	HD-MW-145A-0/1-0	Total/NA	Water	SM 2320B	

QC Association Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

General Chemistry (Continued)

Analysis Batch: 139318 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-43257-4 DU	HD-MW-145A-0/1-0	Total/NA	Water	SM 2320B	
180-43257-5	HD-MW-93D-0/1-0	Total/NA	Water	SM 2320B	
180-43257-6	HD-MW-93S-0/1-0	Total/NA	Water	SM 2320B	
180-43257-7	HD-MW-37D-0/1-0	Total/NA	Water	SM 2320B	
180-43257-8	HD-QC1-0/1-1	Total/NA	Water	SM 2320B	
LCS 180-139318/1	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 180-139318/2	Method Blank	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Client Sample ID: HD-MW-98S-0/1-0

Lab Sample ID: 180-43257-1

Date Collected: 04/20/15 13:35

Matrix: Water

Date Received: 04/21/15 09:15

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	139551	04/24/15 19:47	DLF	TAL PIT
		Instrument ID: CHHP6								
Total/NA	Analysis	300.0		1	1 mL		139181	04/21/15 15:42	MJH	TAL PIT
		Instrument ID: CHICS2100B								
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139683	04/26/15 01:12	WTR	TAL PIT
		Instrument ID: X								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	139318	04/23/15 05:00	CLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: HD-MW-98I-0/1-0

Lab Sample ID: 180-43257-2

Date Collected: 04/20/15 14:30

Matrix: Water

Date Received: 04/21/15 09:15

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	139551	04/24/15 20:11	DLF	TAL PIT
		Instrument ID: CHHP6								
Total/NA	Analysis	300.0		1	1 mL		139181	04/21/15 15:59	MJH	TAL PIT
		Instrument ID: CHICS2100B								
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139683	04/26/15 01:17	WTR	TAL PIT
		Instrument ID: X								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	139318	04/23/15 05:00	CLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: HD-MW-99S-0/1-0

Lab Sample ID: 180-43257-3

Date Collected: 04/20/15 10:30

Matrix: Water

Date Received: 04/21/15 09:15

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	139551	04/24/15 20:59	DLF	TAL PIT
		Instrument ID: CHHP6								
Total/NA	Analysis	300.0		1	1 mL		139181	04/21/15 20:19	MJH	TAL PIT
		Instrument ID: CHICS2100B								
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139683	04/26/15 01:23	WTR	TAL PIT
		Instrument ID: X								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	139318	04/23/15 05:00	CLL	TAL PIT
		Instrument ID: NOEQUIP								

Lab Chronicle

Client: Groundwater Sciences Corporation
 Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Client Sample ID: HD-MW-145A-0/1-0

Lab Sample ID: 180-43257-4

Date Collected: 04/20/15 11:42

Matrix: Water

Date Received: 04/21/15 09:15

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	139551	04/24/15 14:34	DLF	TAL PIT
		Instrument ID: CHHP6								
Total/NA	Analysis	300.0		1	1 mL		139181	04/21/15 15:07	MJH	TAL PIT
		Instrument ID: CHICS2100B								
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139683	04/26/15 01:28	WTR	TAL PIT
		Instrument ID: X								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	139318	04/23/15 05:00	CLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: HD-MW-93D-0/1-0

Lab Sample ID: 180-43257-5

Date Collected: 04/20/15 11:02

Matrix: Water

Date Received: 04/21/15 09:15

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	139551	04/24/15 21:47	DLF	TAL PIT
		Instrument ID: CHHP6								
Total/NA	Analysis	300.0		1	1 mL		139181	04/21/15 20:36	MJH	TAL PIT
		Instrument ID: CHICS2100B								
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139683	04/26/15 01:53	WTR	TAL PIT
		Instrument ID: X								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	139318	04/23/15 05:00	CLL	TAL PIT
		Instrument ID: NOEQUIP								

Client Sample ID: HD-MW-93S-0/1-0

Lab Sample ID: 180-43257-6

Date Collected: 04/20/15 12:39

Matrix: Water

Date Received: 04/21/15 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	5 mL	5 mL	139551	04/24/15 22:10	DLF	TAL PIT
		Instrument ID: CHHP6								
Total/NA	Analysis	8260C	DL	5	5 mL	5 mL	139651	04/25/15 16:23	DLF	TAL PIT
		Instrument ID: CHHP6								
Total/NA	Analysis	300.0		1	1 mL		139181	04/21/15 20:53	MJH	TAL PIT
		Instrument ID: CHICS2100B								
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139683	04/26/15 01:58	WTR	TAL PIT
		Instrument ID: X								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	139318	04/23/15 05:00	CLL	TAL PIT
		Instrument ID: NOEQUIP								

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Client Sample ID: HD-MW-37D-0/1-0

Lab Sample ID: 180-43257-7

Date Collected: 04/20/15 14:12

Matrix: Water

Date Received: 04/21/15 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	5 mL	5 mL	139884	04/28/15 22:58	DLF	TAL PIT
	Instrument ID: CHHP5									
Total/NA	Analysis	8260C	DL	40	5 mL	5 mL	139651	04/25/15 16:48	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		139181	04/21/15 19:10	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139683	04/26/15 02:18	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139813	04/26/15 21:10	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	139318	04/23/15 05:00	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-QC1-0/1-1

Lab Sample ID: 180-43257-8

Date Collected: 04/20/15 08:00

Matrix: Water

Date Received: 04/21/15 09:15

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	139651	04/25/15 17:12	DLF	TAL PIT
	Instrument ID: CHHP6									
Total/NA	Analysis	300.0		1	1 mL		139181	04/21/15 21:11	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139683	04/26/15 02:23	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Prep	3005A			50 mL	50 mL	139272	04/22/15 10:12	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	139813	04/26/15 21:15	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	139318	04/23/15 05:00	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-QC1-0/1-2

Lab Sample ID: 180-43257-9

Date Collected: 04/20/15 12:00

Matrix: Water

Date Received: 04/21/15 09:15

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	139551	04/24/15 14:10	DLF	TAL PIT
	Instrument ID: CHHP6									

Laboratory References:

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

Lab Chronicle

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Analyst References:

Lab: TAL PIT

Batch Type: Prep

AB1 = Ashwin Baikadi

Batch Type: Analysis

CLL = Cheryl Loheyde

DLF = Donald Ferguson

MJH = Matthew Hartman

WTR = Bill Reinheimer

Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Pennsylvania	NELAP	3	02-00416	04-30-15 *

* Certification renewal pending - certification considered valid.

Method Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-43257-1

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: 180-43257-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-43257-1	HD-MW-98S-0/1-0	Water	04/20/15 13:35	04/21/15 09:15
180-43257-2	HD-MW-98I-0/1-0	Water	04/20/15 14:30	04/21/15 09:15
180-43257-3	HD-MW-99S-0/1-0	Water	04/20/15 10:30	04/21/15 09:15
180-43257-4	HD-MW-145A-0/1-0	Water	04/20/15 11:42	04/21/15 09:15
180-43257-5	HD-MW-93D-0/1-0	Water	04/20/15 11:02	04/21/15 09:15
180-43257-6	HD-MW-93S-0/1-0	Water	04/20/15 12:39	04/21/15 09:15
180-43257-7	HD-MW-37D-0/1-0	Water	04/20/15 14:12	04/21/15 09:15
180-43257-8	HD-QC1-0/1-1	Water	04/20/15 08:00	04/21/15 09:15
180-43257-9	HD-QC1-0/1-2	Water	04/20/15 12:00	04/21/15 09:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP5 Analysis Batch Number: 139541Lab Sample ID: IC 180-139541/8 Client Sample ID: _____Date Analyzed: 04/24/15 16:47 Lab File ID: 50424008.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Iodomethane	3.58	Poor chromatography	fergusond	04/25/15 15:19
Isobutyl alcohol	6.95	Poor chromatography	fergusond	04/25/15 15:19
1,2-Dibromo-3-Chloropropane	13.86	Poor chromatography	fergusond	04/25/15 15:19

Lab Sample ID: IC 180-139541/9 Client Sample ID: _____Date Analyzed: 04/24/15 17:11 Lab File ID: 50424009.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.30	Peak Tail	fergusond	04/25/15 15:22
1,4-Dioxane	8.06	Split Peak	fergusond	04/25/15 15:22

Lab Sample ID: ICIS 180-139541/10 Client Sample ID: _____Date Analyzed: 04/24/15 17:35 Lab File ID: 50424010.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.25	Peak Tail	fergusond	04/25/15 12:59
TBA-d9 (IS)	4.30	Peak Tail	fergusond	04/25/15 12:59
1,4-Dioxane	8.06	Peak Tail	fergusond	04/25/15 15:09

Lab Sample ID: IC 180-139541/11 Client Sample ID: _____Date Analyzed: 04/24/15 17:59 Lab File ID: 50424011.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	04/25/15 15:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP5 Analysis Batch Number: 139541Lab Sample ID: IC 180-139541/15 Client Sample ID: _____Date Analyzed: 04/24/15 19:35 Lab File ID: 50424015.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.31	Peak Tail	fergusond	04/27/15 11:01

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP5 Analysis Batch Number: 139884

Lab Sample ID: CCVIS 180-139884/2 Client Sample ID: _____

Date Analyzed: 04/28/15 12:26 Lab File ID: 50428002.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	04/28/15 12:48

Lab Sample ID: LCS 180-139884/7 Client Sample ID: _____

Date Analyzed: 04/28/15 14:31 Lab File ID: 50428007.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.06	Peak Tail	fergusond	04/28/15 14:59

Lab Sample ID: 180-43257-7 Client Sample ID: HD-MW-37D-0/1-0

Date Analyzed: 04/28/15 22:58 Lab File ID: 50428028.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.36	Poor chromatography	gordonk	04/29/15 09:32

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP6 Analysis Batch Number: 138461

Lab Sample ID: IC 180-138461/4 Client Sample ID: _____

Date Analyzed: 04/14/15 15:56 Lab File ID: 60414004.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.17	Peak Tail	fergusond	04/15/15 08:58
1,1-Dichloroethene	3.29	Peak Tail	fergusond	04/15/15 08:58
Methyl tert-butyl ether	4.53	Poor chromatography	fergusond	04/15/15 08:58
Carbon tetrachloride	6.68	Split Peak	fergusond	04/15/15 08:58
Isobutyl alcohol	6.87	Peak Tail	fergusond	04/15/15 08:58
1,4-Dioxane	8.00	Poor chromatography	fergusond	04/15/15 08:58

Lab Sample ID: IC 180-138461/5 Client Sample ID: _____

Date Analyzed: 04/14/15 16:20 Lab File ID: 60414005.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.21	Poor chromatography	fergusond	04/15/15 10:49
Isobutyl alcohol	6.88	Peak Tail	fergusond	04/15/15 10:48

Lab Sample ID: ICIS 180-138461/6 Client Sample ID: _____

Date Analyzed: 04/14/15 16:44 Lab File ID: 60414006.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.00	Peak Tail	fergusond	04/15/15 08:44

Lab Sample ID: IC 180-138461/7 Client Sample ID: _____

Date Analyzed: 04/14/15 17:08 Lab File ID: 60414007.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.01	Peak Tail	fergusond	04/15/15 10:52

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP6 Analysis Batch Number: 138461Lab Sample ID: IC 180-138461/8 Client Sample ID: _____Date Analyzed: 04/14/15 17:32 Lab File ID: 60414008.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.20	Poor chromatography	fergusond	04/15/15 10:55

Lab Sample ID: IC 180-138461/9 Client Sample ID: _____Date Analyzed: 04/14/15 17:56 Lab File ID: 60414009.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.01	Peak Tail	fergusond	04/15/15 10:57

Lab Sample ID: IC 180-138461/10 Client Sample ID: _____Date Analyzed: 04/14/15 18:20 Lab File ID: 60414010.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.00	Peak Tail	fergusond	04/15/15 11:00

Lab Sample ID: IC 180-138461/11 Client Sample ID: _____Date Analyzed: 04/14/15 18:44 Lab File ID: 60414011.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.01	Peak Tail	fergusond	04/15/15 09:11

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP6 Analysis Batch Number: 139551Lab Sample ID: CCVIS 180-139551/2 Client Sample ID: _____Date Analyzed: 04/24/15 11:22 Lab File ID: 60424002.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.01	Baseline	fergusond	04/24/15 11:52

Lab Sample ID: MB 180-139551/6 Client Sample ID: _____Date Analyzed: 04/24/15 12:42 Lab File ID: 60424006.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.07	Poor chromatography	fergusond	04/24/15 15:00

Lab Sample ID: 180-43257-9 Client Sample ID: HD-QC1-0/1-2Date Analyzed: 04/24/15 14:10 Lab File ID: 60424008.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.40	Poor chromatography	fergusond	04/24/15 15:01

Lab Sample ID: 180-43257-4 Client Sample ID: HD-MW-145A-0/1-0Date Analyzed: 04/24/15 14:34 Lab File ID: 60424009.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	4.54	Poor chromatography	fergusond	04/24/15 14:58

Lab Sample ID: LCS 180-139551/10 Client Sample ID: _____Date Analyzed: 04/24/15 14:58 Lab File ID: 60424010.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.00	Peak Tail	fergusond	04/24/15 15:17

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP6 Analysis Batch Number: 139551Lab Sample ID: 180-43257-4 MS Client Sample ID: HD-MW-145A-0/1-0 MSDate Analyzed: 04/24/15 15:22 Lab File ID: 60424011.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.01	Peak Tail	fergusond	04/24/15 16:06

Lab Sample ID: 180-43257-4 MSD Client Sample ID: HD-MW-145A-0/1-0 MSDDate Analyzed: 04/24/15 15:46 Lab File ID: 60424012.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.00	Peak Tail	fergusond	04/24/15 16:07

Lab Sample ID: 180-43257-1 Client Sample ID: HD-MW-98S-0/1-0Date Analyzed: 04/24/15 19:47 Lab File ID: 60424022.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.40	Poor chromatography	fergusond	04/25/15 08:30
1,1-Dichloroethane	5.17	Poor chromatography	fergusond	04/25/15 08:30

Lab Sample ID: 180-43257-2 Client Sample ID: HD-MW-98I-0/1-0Date Analyzed: 04/24/15 20:11 Lab File ID: 60424023.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.31	Poor chromatography	fergusond	04/25/15 08:31

Lab Sample ID: 180-43257-3 Client Sample ID: HD-MW-99S-0/1-0Date Analyzed: 04/24/15 20:59 Lab File ID: 60424025.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.39	Poor chromatography	fergusond	04/25/15 08:35
1,1-Dichloroethane	5.17	Baseline	fergusond	04/25/15 08:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP6 Analysis Batch Number: 139651Lab Sample ID: CCVIS 180-139651/2 Client Sample ID: _____Date Analyzed: 04/25/15 11:28 Lab File ID: 60425002.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.18	Baseline	fergusond	04/25/15 12:19
1,4-Dioxane	8.01	Peak Tail	fergusond	04/25/15 12:19

Lab Sample ID: 180-43257-6 DL Client Sample ID: HD-MW-93S-0/1-0 DLDate Analyzed: 04/25/15 16:23 Lab File ID: 60425013.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.32	Split Peak	fergusond	04/27/15 08:27
Toluene	8.99	Split Peak	fergusond	04/27/15 08:27

Lab Sample ID: 180-43257-7 DL Client Sample ID: HD-MW-37D-0/1-0 DLDate Analyzed: 04/25/15 16:48 Lab File ID: 60425014.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.36	Poor chromatography	fergusond	04/27/15 08:29

Lab Sample ID: 180-43257-8 Client Sample ID: HD-QC1-0/1-1Date Analyzed: 04/25/15 17:12 Lab File ID: 60425015.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.18	Peak Not Integrated	fergusond	04/27/15 08:30

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
icccv_01218	04/21/15	04/10/15	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
icicv_01249	04/21/15	04/20/15	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
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
ICSTDL2_00171	04/16/15	04/15/15	DI Water, Lot SUPER Q	5 mL	ICSTDL6_00213	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_00213	04/16/15	04/15/15	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			(Purchased Reagent)		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
ICSTDL3_00209	04/16/15	04/15/15	DI Water, Lot SUPER Q	5 mL	ICSTDL6_00213	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_00213	04/16/15	04/15/15	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
ICSTDL4_00143	04/16/15	04/15/15	DI Water, Lot na	5 mL	ICSTDL7_00141	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
							Nitrite as N	0.5 ug/mL
.ICSTDL7_00141	04/16/15	04/15/15	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
ICSTDL5_00145	04/16/15	04/15/15	DI Water, Lot SUPER Q	5 mL	ICSTDL7_00141	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
							Nitrite as N	1 ug/mL
.ICSTDL7_00141	04/16/15	04/15/15	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
ICSTDL6_00213	04/16/15	04/15/15	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_00141	04/16/15	04/15/15	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
ICSTDL8_00112	04/16/15	04/15/15	DI Water, Lot SUPER Q	10 mL	ICPRIMARYSTA_00006	0.6 mL	Bromide	30 ug/mL
							Chloride	150 ug/mL
							Fluoride	7.5 ug/mL
							Nitrate as N	7.5 ug/mL
							Orthophosphate as P	7.5 ug/mL
							Sulfate	150 ug/mL
ICPRIMARYSTDB_00008	0.6 mL	Nitrite as N	7.5 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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.ICPRIMARYSTDB_00008	10/08/15		HIGH-PURITY STDS, Lot 1427626			(Purchased Reagent)	Nitrite as N	125 ug/mL
ICSTDL9_00115	04/16/15	04/15/15	DI Water, Lot SUPER Q	10 mL	ICPRIMARYSTA_00006	0.8 mL	Bromide	40 ug/mL
							Chloride	200 ug/mL
							Fluoride	10 ug/mL
							Nitrate as N	10 ug/mL
							Orthophosphate as P	10 ug/mL
					ICPRIMARYSTDB_00008	0.8 mL	Nitrite as N	10 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_00074	05/01/15	04/14/15	2% Nitric Acid, Lot 1241747	500 mL	MCALSPECAREV_00005	10 mL	Calcium	50 ppm
							Magnesium	50 ppm
							Potassium	50 ppm
							Sodium	50 ppm
.MCALSPECAREV_00005	05/01/15		Inorganic Ventures, Lot F2-MEB524026			(Purchased Reagent)	Calcium	2500 ppm
							Magnesium	2500 ppm
							Potassium	2500 ppm
							Sodium	2500 ppm
MCR1X_00065	05/07/15	04/07/15	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
							Sodium	125 ppm
MICSABX-2_00001	05/01/15	04/17/15	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
							Ti	2 ppm
					M6020ICS-0B-2_00001	1 mL	Ag	0.02 ppm
							As	0.02 ppm
							Cd	0.02 ppm
							Co	0.02 ppm
							Cr	0.02 ppm
							Cu	0.02 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MMSICSAB-1_00007	0.2 mL	Mn	0.04 ppm
							Ni	0.02 ppm
							Zn	0.025 ppm
							Ba	0.02 ppm
							Be	0.02 ppm
							Pb	0.02 ppm
							Sr	0.025 ppm
					MMSICSAB-2_00006	0.2 mL	Tl	0.02 ppm
							V	0.02 ppm
							B	0.05 ppm
							Sb	0.02 ppm
							Se	0.05 ppm
							Si	0.5 ppm
							Sn	0.1 ppm
.M6020ICS-0A_00005	09/01/15		Inorganic Ventures, Lot G2-MEB476152MCA		(Purchased Reagent)		Al	1000 ppm
							Calcium	1000 ppm
							Fe	1000 ppm
							Magnesium	1000 ppm
							Mo	20 ppm
							Potassium	1000 ppm
							Sodium	1000 ppm
							Ti	20 ppm
.M6020ICS-0B-2_00001	09/01/15		TAPITT, Lot TAPITT-AB		(Purchased Reagent)		Ag	2 ppm
							As	2 ppm
							Cd	2 ppm
							Co	2 ppm
							Cr	2 ppm
							Cu	2 ppm
							Mn	4 ppm
							Ni	2 ppm
							Zn	2.5 ppm
.MMSICSAB-1_00007	05/01/15		Inorganic Ventures, Lot F2-MEB524028		(Purchased Reagent)		Ba	10 ppm
							Be	10 ppm
							Pb	10 ppm
							Sr	12.5 ppm
							Tl	10 ppm
							V	10 ppm
.MMSICSAB-2_00006	05/01/15		Inorganic Ventures, Lot G2-MEB467043		(Purchased Reagent)		B	25 ppm
							Sb	10 ppm
							Se	25 ppm
							Si	250 ppm
							Sn	50 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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Potassium	100 ppm
							Sodium	100 ppm
							Ti	2 ppm
.M6020ICS-0A_00005	09/01/15		Inorganic Ventures, Lot G2-MEB476152MCA		(Purchased Reagent)		Al	1000 ppm
							Calcium	1000 ppm
							Fe	1000 ppm
							Magnesium	1000 ppm
							Mo	20 ppm
							Potassium	1000 ppm
							Sodium	1000 ppm
							Ti	20 ppm
MICVX_00031	05/09/15	04/09/15	2% Nitric Acid, Lot 25106	250 mg/L	MICPMSICV_00018	10 mg/L	Calcium	40 mg/L
							Magnesium	40 mg/L
							Potassium	40 mg/L
							Sodium	40 mg/L
.MICPMSICV_00018	11/30/15		SPEX CertiPrep, Lot 7-230WL		(Purchased Reagent)		Calcium	1000 ppm
							Magnesium	1000 ppm
							Potassium	1000 ppm
							Sodium	1000 ppm
MSTD2X_00043	05/01/15	04/14/15	DI Water, Lot 1241717	250 mL	MCALSPECAREV_00005	10 mg/L	Calcium	100 ppm
							Magnesium	100 ppm
							Potassium	100 ppm
							Sodium	100 ppm
.MCALSPECAREV_00005	05/01/15		Inorganic Ventures, Lot F2-MEB524026		(Purchased Reagent)		Calcium	2500 ppm
							Magnesium	2500 ppm
							Potassium	2500 ppm
							Sodium	2500 ppm
MTAPITTCFMS_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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
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_00031	05/03/15	04/03/15	Methanol, Lot 85233	10 mL	VOA8260INTRES_00032	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_00032	02/01/18		Restek, Lot A093504			(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_00033	05/03/15	04/03/15	Methanol, Lot 85233	100 mL	VOA8260SURRES_00087	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_00087	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					
VOA8260VOA2ND_00113	04/30/15	04/23/15	Methanol, Lot 85233	10 mL	VOA8260GAS2ND_00094	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00094	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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_00109	04/14/15	04/07/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00094	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_00106	1.25 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00094	01/31/18		Restek, Lot A0108198			(Purchased Reagent)	Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							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_00106	04/19/15	03/19/15	Methanol, Lot 85233	10 mL	VOA8260KET1ST_00038	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_00014	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00038	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_00014	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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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_00112	04/30/15	04/23/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00097	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00097	01/31/18		Restek, Lot A0108198		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							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_00112	04/30/15	04/23/15	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VOA8260MEGA1_00031	02/28/16		Restek, Lot A093581			(Purchased Reagent)	Xylenes, Total	4000 ug/mL
VOAACRPRI_00005	04/30/15	03/30/15	Methanol, Lot 85233	50 mL	VOAACRORES_00065	0.0625 mL	Acrolein	25 ug/mL
.VOAACRORES_00065	03/31/15		Restek, Lot A0107338			(Purchased Reagent)	Acrolein	20000 ug/mL
voaW VA pri R_00005	05/14/15	04/14/15	Methanol, Lot 85233	25 mL	VOA8260VARES_00053	0.125 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00053	08/31/15		Restek, Lot A0109190			(Purchased Reagent)	Vinyl acetate	5000 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
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
voaWKetpri Re_00004	04/30/15	03/30/15	Methanol, Lot 85233	50 mL	VOA8260KET1ST_00039	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_00039	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
WALK125PPMCCV_00083	10/01/15	04/01/15	DI Water, Lot SUPERQ	1000 mL	WNa2CO3P_00007	0.125 g	Total Alkalinity as CaCO3 to pH 4.5	125 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.WNa2CO3P_00007	07/09/18		Fisher Scientific, Lot 138124		(Purchased Reagent)		Total Alkalinity as CaCO3 to pH 4.5	1 g/g
WALK250PPMPi_00092	10/01/15	04/01/15	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

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 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.: 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
Page 2 of 2

Reagent

ICSECONDDSTD1_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

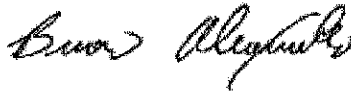
Certificate Prepared By:

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

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

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#
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.

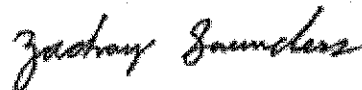
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

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

MCALSPECAREV_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 Custom Solution
Catalog No.: TAPITT-CAL-SPECA-REV
Lot Number: H2-MEB524026
Matrix: 3% HNO₃(v/v)

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

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	24.99 ± 0.18 µg/mL	Arsenic, As	4.998 ± 0.032 µg/mL	Barium, Ba	5.000 ± 0.032 µg/mL
Beryllium, Be	5.000 ± 0.028 µg/mL	Cadmium, Cd	4.998 ± 0.032 µg/mL	Calcium, Ca	2,500 ± 11 µg/mL
Chromium+3, Cr ₃	5.000 ± 0.028 µg/mL	Cobalt, Co	4.999 ± 0.032 µg/mL	Copper, Cu	4.999 ± 0.032 µg/mL
Iron, Fe	1,250 ± 6 µg/mL	Lead, Pb	4.998 ± 0.025 µg/mL	Magnesium, Mg	2,500 ± 16 µg/mL
Manganese, Mn	24.99 ± 0.17 µg/mL	Nickel, Ni	5.003 ± 0.028 µg/mL	Potassium, K	2,500 ± 11 µg/mL
Selenium, Se	5.002 ± 0.028 µg/mL	Silver, Ag	5.000 ± 0.036 µg/mL	Sodium, Na	2,499 ± 11 µg/mL
Strontium, Sr	5.000 ± 0.032 µg/mL	Thallium, Tl	5.000 ± 0.032 µg/mL	Vanadium, V	5.000 ± 0.032 µg/mL
Zinc, Zn	5.004 ± 0.032 µg/mL				

Certified Density: 1.051 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#
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	090514
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	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	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 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.

- 4.2 **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 $\mu\text{g}/\text{mL}$ - 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 $20 \pm 4^\circ\text{C}$. 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

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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.

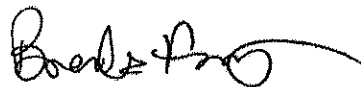
Certification Date: April 04, 2014

Expiration Date:

EXPIRES
01st 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Brenda Francis
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: *Larry Hinfey*

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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 123 of 949
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
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Cr3	ICP Assay	3112a	030730
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Fe	EDTA	928	928
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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
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Zn	EDTA	928	928

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(\bar{x}) = mean

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n = number of measurements

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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

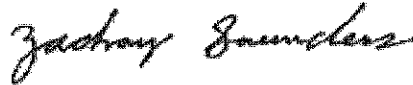
11.3 Period of Validity

- 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

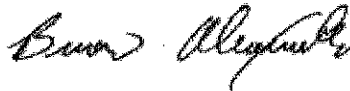
Certificate Prepared By:

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_00007

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** **Custom Solution**
 Catalog No.: TAPITT-MSICSAB-1
 Lot Number: **H2-MEB524028**
 Matrix: 3% HNO₃(v/v)

10 µg/mL ea:

Ba, Be, Pb, Sr, Tl, V

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Barium, Ba	9.99 ± 0.06 µg/mL	Beryllium, Be	10.00 ± 0.06 µg/mL	Lead, Pb	10.01 ± 0.05 µg/mL
Strontium, Sr	10.00 ± 0.06 µg/mL	Thallium, Tl	10.00 ± 0.06 µg/mL	Vanadium, V	9.99 ± 0.06 µg/mL

Certified Density: 1.022 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#
Ba	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	070222
Be	Calculated		See Sec. 4.2
Be	ICP Assay	3105a	090514
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
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

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 $20 \pm 4^\circ\text{C}$. **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.

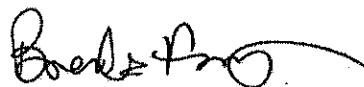
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: April 04, 2014

Expiration Date: **EXPIRES**
01/2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Brenda Francis
Product Documentation Technician



Certificate Approved By: Brian Alexander
PhD., Technical Process Director



Certifying Officer: Paul Gaines
PhD., Senior Technical Director



Reagent

MMSICSAB-2_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 **Custom Solution**

Catalog No.: TAPITT-MSICSAB-2

Lot Number: **G2-MEB467043**

Matrix: 3% HNO₃(v/v),
tr. HF

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

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.06 µg/mL	Boron, B	24.98 ± 0.17 µg/mL	Selenium, Se	25.01 ± 0.21 µg/mL
Silicon, Si	249.9 ± 1.6 µg/mL	Tin, Sn	50.04 ± 0.36 µg/mL		

Certified Density: 1.018 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/CRM. See section 4.2 for balance traceability.

4.1 ASSAY INFORMATION

ELEMENT	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	992106
Si	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330

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.

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

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 08, 2013

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

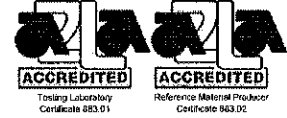


Reagent

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

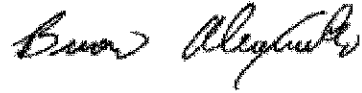
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTAPITTTMSA_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

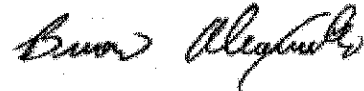
Certificate Prepared By:

Donna Senn
Product Documentation Technician



Certificate Approved By:

Brian Alexander
PhD., Technical Process Director



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MTAPIITMSC_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_00094



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:

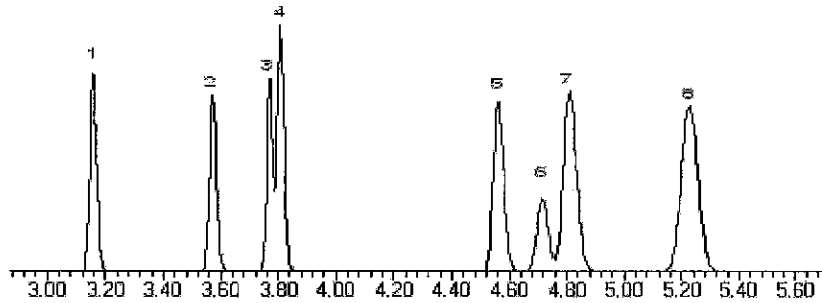
200°C

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>
--

Reagent

VOA8260GAS1ST_00097



CERTIFIED REFERENCE MATERIAL

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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. : 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:

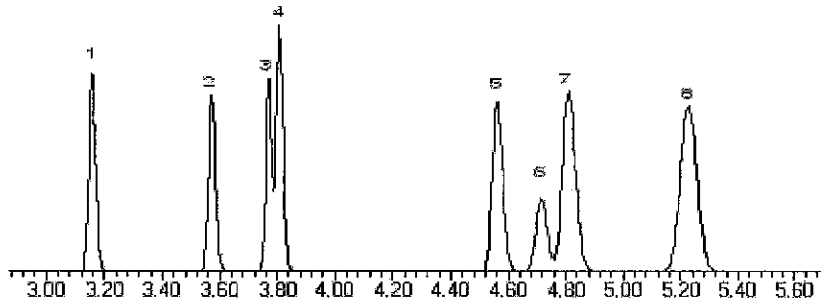
200°C

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>
--

Reagent

VOA8260GAS2ND_00094



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
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. : 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:

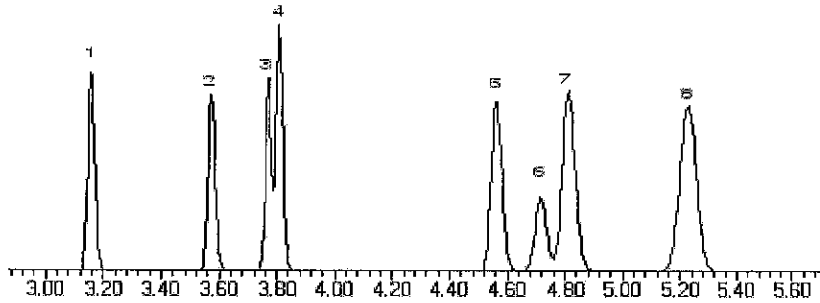
200°C

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

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

Reagent

VOA8260INTRES_00032



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 MSDS 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.: A093504
 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 : February 2018 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	5,000.0 µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS # 25725-11-5		+/-	110.6323	µg/mL	Unstressed
	Purity 99%		+/-	111.0833	µg/mL	Stressed
2	Fluorobenzene	250.0 µg/mL	+/-	1.4535	µg/mL	Gravimetric
	CAS # 462-06-6		+/-	5.5316	µg/mL	Unstressed
	Purity 99%		+/-	5.5542	µg/mL	Stressed
3	1,4-Dioxane-d8	5,000.0 µg/mL	+/-	29.0689	µg/mL	Gravimetric
	CAS # 17647-74-4		+/-	110.6323	µg/mL	Unstressed
	Purity 99%		+/-	111.0833	µg/mL	Stressed
4	Chlorobenzene-d5	250.0 µg/mL	+/-	1.4535	µg/mL	Gravimetric
	CAS # 3114-55-4		+/-	5.5316	µg/mL	Unstressed
	Purity 99%		+/-	5.5542	µg/mL	Stressed
5	1,4-Dichlorobenzene-d4	250.0 µg/mL	+/-	1.4535	µg/mL	Gravimetric
	CAS # 3855-82-1		+/-	5.5316	µg/mL	Unstressed
	Purity 99%		+/-	5.5542	µg/mL	Stressed

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

Reagent

VOA8260KET1ST_00038



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. : 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

VOA8260KET1ST_00039



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. : 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

110 Benner Circle
Bellefonte, PA 16823-8812
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. : 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

VOA8260MEGA1_00014



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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. : 567641 **Lot No.:** A093581
Description : 8260 List 1 / Std #1 MegaMix
8260 List 1 / Std #1 MegaMix 1000-50,000 µg/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : February 2016 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether)	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 60-29-7		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,999.9 µg/mL	+/-	11.6279	µg/mL	Gravimetric
	CAS # 76-13-1		+/-	44.2519	µg/mL	Unstressed
	Purity 97%		+/-	44.4323	µg/mL	Stressed
3	1,1-dichloroethene	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-35-4		+/-	44.2527	µg/mL	Unstressed
	Purity 98%		+/-	44.4331	µg/mL	Stressed
4	tert-Butanol (TBA)	20,000.0 µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 75-65-0		+/-	442.5291	µg/mL	Unstressed
	Purity 99%		+/-	444.3332	µg/mL	Stressed
5	Iodomethane (methyl iodide)	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-88-4		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed
6	Allyl chloride (3-chloropropene)	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 107-05-1		+/-	44.2527	µg/mL	Unstressed
	Purity 98%		+/-	44.4331	µg/mL	Stressed
7	Methyl acetate	10,000.0 µg/mL	+/-	58.1378	µg/mL	Gravimetric
	CAS # 79-20-9		+/-	221.2646	µg/mL	Unstressed
	Purity 99%		+/-	222.1666	µg/mL	Stressed
8	Carbon disulfide	2,000.0 µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-15-0		+/-	44.2527	µg/mL	Unstressed
	Purity 98%		+/-	44.4331	µg/mL	Stressed
9	Methylene chloride (dichloromethane)	2,000.0 µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-09-2		+/-	44.2531	µg/mL	Unstressed
	Purity 99%		+/-	44.4335	µg/mL	Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1				442.5291		Unstressed
	Purity 99%				444.3332		Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
13	n-Hexane (C6)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-54-3				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-34-3				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 594-20-7				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-60-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
17	chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1				1,106.3228		Unstressed
	Purity 99%				1,110.8331		Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9				88.5061		Unstressed
	Purity 99%				88.8670		Stressed
21	1,1,1-trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-82-7				44.2527		Unstressed
	Purity 98%				44.4331		Stressed
23	1,1-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 563-58-6				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
24	carbon tetrachloride	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 56-23-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
25	n-Heptane (C7)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-82-5				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2				44.2531		Unstressed
	Purity 99%				44.4335		Stressed
28	Trichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-01-6				44.2531		Unstressed
	Purity 99%				44.4335		Stressed

29	Methylcyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 108-87-2			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
30	1,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 78-87-5			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
31	1,4-Dioxane	40,000.0	µg/mL	+/-	232.5513	µg/mL	Gravimetric	
	CAS # 123-91-1			+/-	885.0582		µg/mL	Unstressed
	Purity 99%			+/-	888.6665		µg/mL	Stressed
32	Dibromomethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 74-95-3			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
33	bromodichloromethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric	
	CAS # 75-27-4			+/-	44.2540		µg/mL	Unstressed
	Purity 97%			+/-	44.4344		µg/mL	Stressed
34	cis-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 10061-01-5			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
35	Toluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 108-88-3			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
36	Ethyl methacrylate	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 97-63-2			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
37	trans-1,3-Dichloropropene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric	
	CAS # 10061-02-6			+/-	44.2540		µg/mL	Unstressed
	Purity 97%			+/-	44.4344		µg/mL	Stressed
38	1,1,2-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 79-00-5			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
39	1,3-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 142-28-9			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
40	Tetrachloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 127-18-4			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
41	dibromochloromethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric	
	CAS # 124-48-1			+/-	44.2527		µg/mL	Unstressed
	Purity 98%			+/-	44.4331		µg/mL	Stressed
42	1,2-Dibromoethane (EDB)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 106-93-4			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
43	Chlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 108-90-7			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
44	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 630-20-6			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed
45	m-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric	
	CAS # 108-38-3			+/-	22.1265		µg/mL	Unstressed
	Purity 99%			+/-	22.2167		µg/mL	Stressed
46	p-Xylene	1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric	
	CAS # 106-42-3			+/-	22.1265		µg/mL	Unstressed
	Purity 99%			+/-	22.2167		µg/mL	Stressed
47	o-Xylene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric	
	CAS # 95-47-6			+/-	44.2531		µg/mL	Unstressed
	Purity 99%			+/-	44.4335		µg/mL	Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
49	Styrene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-42-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
50	Isopropylbenzene (cumene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-82-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
51	bromoform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 75-25-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,1,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-18-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
54	trans-1,4-dichloro-2-butene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-57-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
56	Bromobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-86-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
57	1,3,5-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 108-67-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
58	2-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-49-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
59	4-Chlorotoluene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-43-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
60	tert-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 98-06-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 95-63-6			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-Cymene)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 99-87-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
65	1,4-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 106-46-7			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
66	n-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 104-51-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 97%	2,000.0 µg/mL	+/- 11.6284 +/- 44.2540 +/- 44.4344	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
72	1,2,3-Trichlorobenzene CAS # 87-61-6 Purity 99%	2,000.0 µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Column:
60m x .25mm x 1.4µm
Rtx-502.2 (cat.#10916)

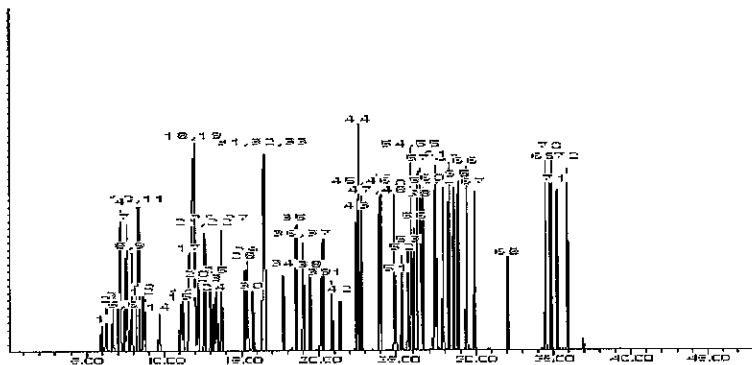
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



Jennifer L. Pollino
Jennifer L. Pollino - QC Analyst

Date Passed: 01-Mar-2013

Balance: B251644995

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

Reagent

VOA8260SURRES_00087



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. : 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

VOA8260VARES_00053



CERTIFIED REFERENCE MATERIAL

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

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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. : 569724 **Lot No.:** A0109190

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 : August 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 Purity 99%	5,023.0 µg/mL (Lot STBC8935V)	+/- 29.4778	µg/mL	Gravimetric
			+/- 267.3430	µg/mL	Unstressed
			+/- 267.6378	µg/mL	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_00065



CERTIFIED REFERENCE MATERIAL

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

Certificate of Analysis

www.restek.com



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. : 568720 **Lot No.:** A0107338

Description : 8260 List 1/Std #5 Acrolein High
8260 List 1/Std #5 Acrolein High 19,750 µg/ml, Water, 1 ml/ampul

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

Expiration Date : March 31, 2015 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acrolein CAS # 107-02-8 Purity 99% (Lot 140429JLM)	19,759.0 µg/mL	+/- 115.6933	µg/mL	Gravimetric
			+/- 633.5357	µg/mL	Unstressed
			+/- 736.4159	µg/mL	Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VOARESEE1ST_00019



CERTIFIED REFERENCE MATERIAL



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

Certificate of Analysis



www.restek.com

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

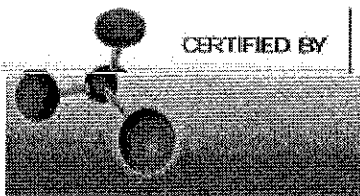
Certificate of Analysis

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. Hase
Lab Manager Fair Lawn

1243950
ID: WNa2CO3P_00007
Exp:07/09/18 Prpd:HRA Opm:07/09/14
Sodium Carbonate

1243948
ID: WNa2CO3P_00007
Exp:07/09/18 Prpd:HRA Opm:07/09/14
Sodium Carbonate

1243949
ID: WNa2CO3P_00007
Exp:07/09/18 Prpd:HRA Opm:07/09/14
Sodium Carbonate

1243947
ID: WNa2CO3P_00007
Exp:07/09/18 Prpd:HRA Opm: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.: 180-43257-1

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-MW-98S-0/1-0	180-43257-1	100	100	105	103
HD-MW-98I-0/1-0	180-43257-2	99	96	102	100
HD-MW-99S-0/1-0	180-43257-3	98	99	103	99
HD-MW-145A-0/1-0	180-43257-4	96	97	103	98
HD-MW-93D-0/1-0	180-43257-5	99	101	105	101
HD-MW-93S-0/1-0	180-43257-6	101	100	108	105
HD-MW-93S-0/1-0 DL	180-43257-6 DL	97	98	106	103
HD-MW-37D-0/1-0	180-43257-7	111	113	100	90
HD-MW-37D-0/1-0 DL	180-43257-7 DL	99	99	105	103
HD-QC1-0/1-1	180-43257-8	98	97	101	99
HD-QC1-0/1-2	180-43257-9	94	99	106	99
	MB 180-139551/6	93	97	103	98
	MB 180-139651/5	96	98	102	100
	MB 180-139884/4	102	107	99	87
	LCS 180-139551/10	102	107	103	98
	LCS 180-139651/10	100	106	104	99
	LCS 180-139884/7	96	91	104	101
HD-MW-145A-0/1-0 MS	180-43257-4 MS	96	103	101	99
HD-MW-145A-0/1-0 MSD	180-43257-4 MSD	97	97	100	97

QC LIMITS

DBFM = Dibromofluoromethane (Surr)	70-128
DCA = 1,2-Dichloroethane-d4 (Surr)	64-135
TOL = Toluene-d8 (Surr)	71-118
BFB = 4-Bromofluorobenzene (Surr)	70-118

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 60424010.D
 Lab ID: LCS 180-139551/10 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	10.1	101	50-139	
Vinyl chloride	10.0	10.4	104	53-138	
Bromomethane	10.0	15.1	151	33-150	*
Chloroethane	10.0	12.9	129	36-142	
1,1-Dichloroethene	10.0	10.2	102	65-136	
Acetone	20.0	28.9	144	22-150	
Carbon disulfide	10.0	7.46	75	54-132	
Methylene Chloride	10.0	9.92	99	63-129	
trans-1,2-Dichloroethene	10.0	10.3	103	73-126	
Methyl tert-butyl ether	10.0	9.51	95	64-123	
1,1-Dichloroethane	10.0	10.0	100	73-126	
cis-1,2-Dichloroethene	10.0	10.5	105	70-120	
Bromochloromethane	10.0	10.2	102	70-127	
2-Butanone (MEK)	20.0	25.3	127	39-138	
Chloroform	10.0	10.5	105	72-127	
1,1,1-Trichloroethane	10.0	9.15	92	63-133	
Carbon tetrachloride	10.0	7.94	79	55-150	
Benzene	10.0	10.8	108	80-120	
1,2-Dichloroethane	10.0	11.0	110	68-132	
Trichloroethene	10.0	10.5	105	73-120	
1,2-Dichloropropane	10.0	9.83	98	76-124	
Bromodichloromethane	10.0	9.14	91	66-130	
cis-1,3-Dichloropropene	10.0	7.57	76	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	18.7	93	45-145	
Toluene	10.0	11.3	113	80-123	
trans-1,3-Dichloropropene	10.0	6.80	68	65-125	
1,1,2-Trichloroethane	10.0	11.2	112	77-127	
Tetrachloroethene	10.0	10.9	109	70-135	
2-Hexanone	20.0	22.5	112	25-132	
Dibromochloromethane	10.0	8.54	85	60-140	
1,2-Dibromoethane (EDB)	10.0	8.57	86	74-123	
Chlorobenzene	10.0	11.2	112	80-120	
1,1,1,2-Tetrachloroethane	10.0	7.61	76	63-140	
Ethylbenzene	10.0	10.6	106	72-126	
Xylenes, Total	20.0	21.1	106	76-128	
Styrene	10.0	10.8	108	71-127	
Bromoform	10.0	7.96	80	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	62-125	
1,4-Dioxane	200	161 J	81	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.: 180-43257-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 60425010.D
 Lab ID: LCS 180-139651/10 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	10.3	103	50-139	
Vinyl chloride	10.0	9.88	99	53-138	
Bromomethane	10.0	16.4	164	33-150	*
Chloroethane	10.0	13.3	133	36-142	
1,1-Dichloroethene	10.0	9.98	100	65-136	
Acetone	20.0	25.9	129	22-150	
Carbon disulfide	10.0	8.28	83	54-132	
Methylene Chloride	10.0	10.0	100	63-129	
trans-1,2-Dichloroethene	10.0	9.72	97	73-126	
Methyl tert-butyl ether	10.0	10.2	102	64-123	
1,1-Dichloroethane	10.0	9.91	99	73-126	
cis-1,2-Dichloroethene	10.0	10.4	104	70-120	
Bromochloromethane	10.0	10.1	101	70-127	
2-Butanone (MEK)	20.0	25.9	130	39-138	
Chloroform	10.0	10.8	108	72-127	
1,1,1-Trichloroethane	10.0	8.99	90	63-133	
Carbon tetrachloride	10.0	8.38	84	55-150	
Benzene	10.0	10.5	105	80-120	
1,2-Dichloroethane	10.0	11.2	112	68-132	
Trichloroethene	10.0	10.4	104	73-120	
1,2-Dichloropropane	10.0	9.77	98	76-124	
Bromodichloromethane	10.0	9.30	93	66-130	
cis-1,3-Dichloropropene	10.0	7.36	74	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	17.9	89	45-145	
Toluene	10.0	11.4	114	80-123	
trans-1,3-Dichloropropene	10.0	7.03	70	65-125	
1,1,2-Trichloroethane	10.0	11.0	110	77-127	
Tetrachloroethene	10.0	10.8	108	70-135	
2-Hexanone	20.0	27.5	138	25-132	*
Dibromochloromethane	10.0	9.24	92	60-140	
1,2-Dibromoethane (EDB)	10.0	9.89	99	74-123	
Chlorobenzene	10.0	11.8	118	80-120	
1,1,1,2-Tetrachloroethane	10.0	7.91	79	63-140	
Ethylbenzene	10.0	10.6	106	72-126	
Xylenes, Total	20.0	21.8	109	76-128	
Styrene	10.0	11.3	113	71-127	
Bromoform	10.0	7.51	75	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	62-125	
1,4-Dioxane	200	188 J	94	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.: 180-43257-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: 50428007.D
 Lab ID: LCS 180-139884/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.80	88	50-139	
Vinyl chloride	10.0	9.25	93	53-138	
Bromomethane	10.0	8.81	88	33-150	
Chloroethane	10.0	8.69	87	36-142	
1,1-Dichloroethene	10.0	8.25	82	65-136	
Acetone	20.0	17.8	89	22-150	
Carbon disulfide	10.0	8.22	82	54-132	
Methylene Chloride	10.0	8.39	84	63-129	
trans-1,2-Dichloroethene	10.0	9.38	94	73-126	
Methyl tert-butyl ether	10.0	8.26	83	64-123	
1,1-Dichloroethane	10.0	8.90	89	73-126	
cis-1,2-Dichloroethene	10.0	8.83	88	70-120	
Bromochloromethane	10.0	8.89	89	70-127	
2-Butanone (MEK)	20.0	18.1	91	39-138	
Chloroform	10.0	9.14	91	72-127	
1,1,1-Trichloroethane	10.0	9.31	93	63-133	
Carbon tetrachloride	10.0	9.76	98	55-150	
Benzene	10.0	9.70	97	80-120	
1,2-Dichloroethane	10.0	9.22	92	68-132	
Trichloroethene	10.0	8.95	90	73-120	
1,2-Dichloropropane	10.0	9.15	91	76-124	
Bromodichloromethane	10.0	9.06	91	66-130	
cis-1,3-Dichloropropene	10.0	8.81	88	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	18.5	93	45-145	
Toluene	10.0	10.3	103	80-123	
trans-1,3-Dichloropropene	10.0	9.29	93	65-125	
1,1,2-Trichloroethane	10.0	9.73	97	77-127	
Tetrachloroethene	10.0	10.2	102	70-135	
2-Hexanone	20.0	17.3	86	25-132	
Dibromochloromethane	10.0	10.3	103	60-140	
1,2-Dibromoethane (EDB)	10.0	9.58	96	74-123	
Chlorobenzene	10.0	10.2	102	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.64	96	63-140	
Ethylbenzene	10.0	9.77	98	72-126	
Xylenes, Total	20.0	20.3	102	76-128	
Styrene	10.0	10.2	102	71-127	
Bromoform	10.0	9.81	98	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.4	104	62-125	
1,4-Dioxane	200	208	104	10-160	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 60424011.D

Lab ID: 180-43257-4 MS

Client ID: HD-MW-145A-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Chloromethane	10.0	1.0 U	9.93	99	50-139	
Vinyl chloride	10.0	1.0 U	10.2	102	53-138	
Bromomethane	10.0	1.0 U	14.5	145	33-150	
Chloroethane	10.0	1.0 U	12.2	122	36-142	
1,1-Dichloroethene	10.0	0.53 J	10.0	95	65-136	
Acetone	20.0	5.0 U	29.3	147	22-150	
Carbon disulfide	10.0	1.0 U	7.60	76	54-132	
Methylene Chloride	10.0	1.0 U	9.49	95	63-129	
trans-1,2-Dichloroethene	10.0	1.0 U	9.94	99	73-126	
Methyl tert-butyl ether	10.0	1.0 U	9.47	95	64-123	
1,1-Dichloroethane	10.0	0.18 J	9.57	94	73-126	
cis-1,2-Dichloroethene	10.0	10	19.4	94	70-120	
Bromochloromethane	10.0	1.0 U	9.58	96	70-127	
2-Butanone (MEK)	20.0	5.0 U	24.3	122	39-138	
Chloroform	10.0	0.21 J	10.2	100	72-127	
1,1,1-Trichloroethane	10.0	0.43 J	9.09	87	63-133	
Carbon tetrachloride	10.0	1.0 U	7.80	78	55-150	
Benzene	10.0	1.0 U	10.2	102	80-120	
1,2-Dichloroethane	10.0	1.0 U	10.8	108	68-132	
Trichloroethene	10.0	12	20.8	89	73-120	
1,2-Dichloropropane	10.0	1.0 U	9.39	94	76-124	
Bromodichloromethane	10.0	1.0 U	8.90	89	66-130	
cis-1,3-Dichloropropene	10.0	1.0 U	7.24	72	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	5.0 U	18.4	92	45-145	
Toluene	10.0	1.0 U	11.0	110	80-123	
trans-1,3-Dichloropropene	10.0	1.0 U	6.83	68	65-125	
1,1,2-Trichloroethane	10.0	1.0 U	10.5	105	77-127	
Tetrachloroethene	10.0	8.2	17.7	95	70-135	
2-Hexanone	20.0	5.0 U	22.5	112	25-132	
Dibromochloromethane	10.0	1.0 U	8.76	88	60-140	
1,2-Dibromoethane (EDB)	10.0	1.0 U	9.29	93	74-123	
Chlorobenzene	10.0	1.0 U	11.0	110	80-120	
1,1,1,2-Tetrachloroethane	10.0	1.0 U	7.44	74	63-140	
Ethylbenzene	10.0	1.0 U	10.4	104	72-126	
Xylenes, Total	20.0	3.0 U	20.2	101	76-128	
Styrene	10.0	1.0 U	10.3	103	71-127	
Bromoform	10.0	1.0 U	7.42	74	46-150	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	9.92	99	62-125	
1,4-Dioxane	200	200 U	158 J	79	10-160	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: 60424012.D

Lab ID: 180-43257-4 MSD

Client ID: HD-MW-145A-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Chloromethane	10.0	9.34	93	6	35	50-139	
Vinyl chloride	10.0	9.45	95	7	35	53-138	
Bromomethane	10.0	13.8	138	5	35	33-150	
Chloroethane	10.0	11.4	114	7	35	36-142	
1,1-Dichloroethene	10.0	9.37	88	7	35	65-136	
Acetone	20.0	26.0	130	12	35	22-150	
Carbon disulfide	10.0	7.02	70	8	35	54-132	
Methylene Chloride	10.0	9.25	93	3	35	63-129	
trans-1,2-Dichloroethene	10.0	9.14	91	8	35	73-126	
Methyl tert-butyl ether	10.0	9.46	95	0	35	64-123	
1,1-Dichloroethane	10.0	9.31	91	3	35	73-126	
cis-1,2-Dichloroethene	10.0	19.0	90	2	35	70-120	
Bromochloromethane	10.0	9.16	92	4	35	70-127	
2-Butanone (MEK)	20.0	23.6	118	3	35	39-138	
Chloroform	10.0	9.74	95	5	35	72-127	
1,1,1-Trichloroethane	10.0	8.81	84	3	35	63-133	
Carbon tetrachloride	10.0	7.35	74	6	35	55-150	
Benzene	10.0	9.74	97	4	32	80-120	
1,2-Dichloroethane	10.0	10.4	104	4	32	68-132	
Trichloroethene	10.0	19.9	80	5	35	73-120	
1,2-Dichloropropane	10.0	9.07	91	4	34	76-124	
Bromodichloromethane	10.0	8.61	86	3	35	66-130	
cis-1,3-Dichloropropene	10.0	6.98	70	4	35	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	17.5	87	5	35	45-145	
Toluene	10.0	10.7	107	3	35	80-123	
trans-1,3-Dichloropropene	10.0	6.63	66	3	35	65-125	
1,1,2-Trichloroethane	10.0	10.4	104	1	35	77-127	
Tetrachloroethene	10.0	16.7	85	6	35	70-135	
2-Hexanone	20.0	20.4	102	10	35	25-132	
Dibromochloromethane	10.0	8.38	84	4	35	60-140	
1,2-Dibromoethane (EDB)	10.0	9.07	91	2	35	74-123	
Chlorobenzene	10.0	10.6	106	3	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	7.37	74	1	34	63-140	
Ethylbenzene	10.0	9.76	98	6	33	72-126	
Xylenes, Total	20.0	19.4	97	4	32	76-128	
Styrene	10.0	9.84	98	4	34	71-127	
Bromoform	10.0	7.32	73	1	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	9.56	96	4	35	62-125	
1,4-Dioxane	200	163 J	81	3	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.: 180-43257-1
 SDG No.: _____
 Lab File ID: 60424006.D Lab Sample ID: MB 180-139551/6
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: CHHP6 Date Analyzed: 04/24/2015 12:42
 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
HD-QC1-0/1-2	180-43257-9	60424008.D	04/24/2015 14:10
HD-MW-145A-0/1-0	180-43257-4	60424009.D	04/24/2015 14:34
	LCS 180-139551/10	60424010.D	04/24/2015 14:58
HD-MW-145A-0/1-0 MS	180-43257-4 MS	60424011.D	04/24/2015 15:22
HD-MW-145A-0/1-0 MSD	180-43257-4 MSD	60424012.D	04/24/2015 15:46
HD-MW-98S-0/1-0	180-43257-1	60424022.D	04/24/2015 19:47
HD-MW-98I-0/1-0	180-43257-2	60424023.D	04/24/2015 20:11
HD-MW-99S-0/1-0	180-43257-3	60424025.D	04/24/2015 20:59
HD-MW-93D-0/1-0	180-43257-5	60424027.D	04/24/2015 21:47
HD-MW-93S-0/1-0	180-43257-6	60424028.D	04/24/2015 22:10

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
SDG No.: _____
Lab File ID: 60425005.D Lab Sample ID: MB 180-139651/5
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: CHHP6 Date Analyzed: 04/25/2015 12:44
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 180-139651/10	60425010.D	04/25/2015 15:11
HD-MW-93S-0/1-0 DL	180-43257-6 DL	60425013.D	04/25/2015 16:23
HD-MW-37D-0/1-0 DL	180-43257-7 DL	60425014.D	04/25/2015 16:48
HD-QC1-0/1-1	180-43257-8	60425015.D	04/25/2015 17:12

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
SDG No.: _____
Lab File ID: 50428004.D Lab Sample ID: MB 180-139884/4
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: CHHP5 Date Analyzed: 04/28/2015 13:05
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 180-139884/7	50428007.D	04/28/2015 14:31
HD-MW-37D-0/1-0	180-43257-7	50428028.D	04/28/2015 22:58

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab File ID: 50424005.D BFB Injection Date: 04/24/2015
 Instrument ID: CHHP5 BFB Injection Time: 10:55
 Analysis Batch No.: 139541

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	23.2
75	30.0 - 60.0 % of mass 95	50.5
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	0.6 (0.8)1
174	50.0 - 120.00 % of mass 95	75.2
175	5.0 - 9.0 % of mass 174	5.6 (7.5)1
176	95.0 - 101.0 % of mass 174	73.8 (98.2)1
177	5.0 - 9.0 % of mass 176	5.0 (6.7)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 180-139541/8	50424008.D	04/24/2015	16:47
	IC 180-139541/9	50424009.D	04/24/2015	17:11
	ICIS 180-139541/10	50424010.D	04/24/2015	17:35
	IC 180-139541/11	50424011.D	04/24/2015	17:59
	IC 180-139541/12	50424012.D	04/24/2015	18:23
	IC 180-139541/13	50424013.D	04/24/2015	18:47
	IC 180-139541/14	50424014.D	04/24/2015	19:11
	IC 180-139541/15	50424015.D	04/24/2015	19:35

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab File ID: 50428003.D BFB Injection Date: 04/28/2015
 Instrument ID: CHHP5 BFB Injection Time: 11:46
 Analysis Batch No.: 139884

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.9
75	30.0 - 60.0 % of mass 95	50.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	8.9
173	Less than 2.0 % of mass 174	0.4 (0.5)1
174	50.0 - 120.00 % of mass 95	82.1
175	5.0 - 9.0 % of mass 174	5.8 (7.1)1
176	95.0 - 101.0 % of mass 174	79.5 (96.9)1
177	5.0 - 9.0 % of mass 176	4.8 (6.0)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 180-139884/2	50428002.D	04/28/2015	12:26
	MB 180-139884/4	50428004.D	04/28/2015	13:05
	LCS 180-139884/7	50428007.D	04/28/2015	14:31
HD-MW-37D-0/1-0	180-43257-7	50428028.D	04/28/2015	22:58

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab File ID: 60414003.D BFB Injection Date: 04/14/2015
 Instrument ID: CHHP6 BFB Injection Time: 14:05
 Analysis Batch No.: 138461

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.7
75	30.0 - 60.0 % of mass 95	48.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.0
173	Less than 2.0 % of mass 174	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	66.8
175	5.0 - 9.0 % of mass 174	5.2 (7.8)1
176	95.0 - 101.0 % of mass 174	66.7 (99.9)1
177	5.0 - 9.0 % of mass 176	4.7 (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
	IC 180-138461/4	60414004.D	04/14/2015	15:56
	IC 180-138461/5	60414005.D	04/14/2015	16:20
	ICIS 180-138461/6	60414006.D	04/14/2015	16:44
	IC 180-138461/7	60414007.D	04/14/2015	17:08
	IC 180-138461/8	60414008.D	04/14/2015	17:32
	IC 180-138461/9	60414009.D	04/14/2015	17:56
	IC 180-138461/10	60414010.D	04/14/2015	18:20
	IC 180-138461/11	60414011.D	04/14/2015	18:44

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab File ID: 60424004.D BFB Injection Date: 04/24/2015
 Instrument ID: CHHP6 BFB Injection Time: 10:42
 Analysis Batch No.: 139551

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	22.2
75	30.0 - 60.0 % of mass 95	50.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.6
173	Less than 2.0 % of mass 174	0.4 (0.5)1
174	50.0 - 120.00 % of mass 95	76.1
175	5.0 - 9.0 % of mass 174	6.4 (8.4)1
176	95.0 - 101.0 % of mass 174	76.4 (100.4)1
177	5.0 - 9.0 % of mass 176	4.4 (5.8)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
	CCVIS 180-139551/2	60424002.D	04/24/2015	11:22
	MB 180-139551/6	60424006.D	04/24/2015	12:42
HD-QC1-0/1-2	180-43257-9	60424008.D	04/24/2015	14:10
HD-MW-145A-0/1-0	180-43257-4	60424009.D	04/24/2015	14:34
	LCS 180-139551/10	60424010.D	04/24/2015	14:58
HD-MW-145A-0/1-0 MS	180-43257-4 MS	60424011.D	04/24/2015	15:22
HD-MW-145A-0/1-0 MSD	180-43257-4 MSD	60424012.D	04/24/2015	15:46
HD-MW-98S-0/1-0	180-43257-1	60424022.D	04/24/2015	19:47
HD-MW-98I-0/1-0	180-43257-2	60424023.D	04/24/2015	20:11
HD-MW-99S-0/1-0	180-43257-3	60424025.D	04/24/2015	20:59
HD-MW-93D-0/1-0	180-43257-5	60424027.D	04/24/2015	21:47
HD-MW-93S-0/1-0	180-43257-6	60424028.D	04/24/2015	22:10

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab File ID: 60425001.D BFB Injection Date: 04/25/2015
 Instrument ID: CHHP6 BFB Injection Time: 10:50
 Analysis Batch No.: 139651

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	24.2
75	30.0 - 60.0 % of mass 95	46.3
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	0.0 (0.0)1
174	50.0 - 120.00 % of mass 95	75.8
175	5.0 - 9.0 % of mass 174	6.5 (8.5)1
176	95.0 - 101.0 % of mass 174	75.1 (99.1)1
177	5.0 - 9.0 % of mass 176	5.5 (7.3)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 180-139651/2	60425002.D	04/25/2015	11:28
	MB 180-139651/5	60425005.D	04/25/2015	12:44
	LCS 180-139651/10	60425010.D	04/25/2015	15:11
HD-MW-93S-0/1-0 DL	180-43257-6 DL	60425013.D	04/25/2015	16:23
HD-MW-37D-0/1-0 DL	180-43257-7 DL	60425014.D	04/25/2015	16:48
HD-QC1-0/1-1	180-43257-8	60425015.D	04/25/2015	17:12

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Sample No.: CCVIS 180-139884/2 Date Analyzed: 04/28/2015 12:26
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 50428002.D Heated Purge: (Y/N) N
 Calibration ID: 23554

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	138984	4.31	443985	7.27	95200	10.37	
UPPER LIMIT	277968	4.81	887970	7.77	190400	10.87	
LOWER LIMIT	69492	3.81	221993	6.77	47600	9.87	
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-139884/4	179704	4.30	487437	7.28	106909	10.36	
LCS 180-139884/7	150722	4.31	488449	7.27	106168	10.37	
180-43257-7	HD-MW-37D-0/1-0	108682	4.30	390007	7.27	86460	10.36

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.: 180-43257-1
 SDG No.: _____
 Sample No.: CCVIS 180-139884/2 Date Analyzed: 04/28/2015 12:26
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 50428002.D Heated Purge: (Y/N) N
 Calibration ID: 23554

	DCB		AREA #	RT #	AREA #	RT #	AREA #	RT #
	AREA #	RT #						
12/24 HOUR STD	149359	12.68						
UPPER LIMIT	298718	13.18						
LOWER LIMIT	74680	12.18						
LAB SAMPLE ID	CLIENT SAMPLE ID							
MB 180-139884/4			131712	12.69				
LCS 180-139884/7			167430	12.68				
180-43257-7	HD-MW-37D-0/1-0		114871	12.68				

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.: 180-43257-1
 SDG No.: _____
 Sample No.: CCVIS 180-139551/2 Date Analyzed: 04/24/2015 11:22
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 60424002.D Heated Purge: (Y/N) N
 Calibration ID: 23314

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	123270	4.21	465593	7.26	106272	10.37	
UPPER LIMIT	246540	4.71	931186	7.76	212544	10.87	
LOWER LIMIT	61635	3.71	232797	6.76	53136	9.87	
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-139551/6		148706	4.18	556853	7.26	123878	10.37
180-43257-9	HD-QC1-0/1-2	146065	4.19	554503	7.26	119591	10.37
180-43257-4	HD-MW-145A-0/1-0	138886	4.19	541238	7.26	121279	10.38
LCS 180-139551/10		137846	4.21	472279	7.26	108144	10.37
180-43257-4 MS	HD-MW-145A-0/1-0 MS	172800	4.22	490004	7.26	109203	10.37
180-43257-4 MSD	HD-MW-145A-0/1-0 MSD	166898	4.22	507303	7.26	110772	10.37
180-43257-1	HD-MW-98S-0/1-0	169480	4.20	533645	7.26	114483	10.37
180-43257-2	HD-MW-98I-0/1-0	170309	4.19	549429	7.26	122336	10.37
180-43257-3	HD-MW-99S-0/1-0	151434	4.19	533399	7.26	118449	10.37
180-43257-5	HD-MW-93D-0/1-0	153405	4.19	528960	7.26	115626	10.37
180-43257-6	HD-MW-93S-0/1-0	151718	4.20	519320	7.26	109712	10.38

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.: 180-43257-1
 SDG No.: _____
 Sample No.: CCVIS 180-139551/2 Date Analyzed: 04/24/2015 11:22
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 60424002.D Heated Purge: (Y/N) N
 Calibration ID: 23314

	DCB		AREA #	RT #	AREA #	RT #	AREA #	RT #
	AREA #	RT #						
12/24 HOUR STD	168388	12.72						
UPPER LIMIT	336776	13.22						
LOWER LIMIT	84194	12.22						
LAB SAMPLE ID	CLIENT SAMPLE ID							
MB 180-139551/6		196479	12.72					
180-43257-9	HD-QC1-0/1-2	193461	12.72					
180-43257-4	HD-MW-145A-0/1-0	195028	12.72					
LCS 180-139551/10		169931	12.72					
180-43257-4 MS	HD-MW-145A-0/1-0 MS	178113	12.72					
180-43257-4 MSD	HD-MW-145A-0/1-0 MSD	172629	12.72					
180-43257-1	HD-MW-98S-0/1-0	192193	12.72					
180-43257-2	HD-MW-98I-0/1-0	197370	12.72					
180-43257-3	HD-MW-99S-0/1-0	189346	12.72					
180-43257-5	HD-MW-93D-0/1-0	188206	12.72					
180-43257-6	HD-MW-93S-0/1-0	191364	12.72					

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.: 180-43257-1
 SDG No.: _____
 Sample No.: CCVIS 180-139651/2 Date Analyzed: 04/25/2015 11:28
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 60425002.D Heated Purge: (Y/N) N
 Calibration ID: 23314

	TBA		FB		CBZ		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	133678	4.21	557206	7.26	123086	10.37	
UPPER LIMIT	267356	4.71	1114412	7.76	246172	10.87	
LOWER LIMIT	66839	3.71	278603	6.76	61543	9.87	
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-139651/5	152834	4.19	583871	7.26	127079	10.37	
LCS 180-139651/10	165477	4.21	545613	7.26	118359	10.37	
180-43257-6 DL	HD-MW-93S-0/1-0 DL	193417	4.19	586672	7.26	127035	10.37
180-43257-7 DL	HD-MW-37D-0/1-0 DL	167805	4.20	577214	7.26	129190	10.37
180-43257-8	HD-QC1-0/1-1	172996	4.19	574977	7.26	130080	10.37

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.: 180-43257-1
 SDG No.: _____
 Sample No.: CCVIS 180-139651/2 Date Analyzed: 04/25/2015 11:28
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): 60425002.D Heated Purge: (Y/N) N
 Calibration ID: 23314

	DCB					
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	199855	12.72				
UPPER LIMIT	399710	13.22				
LOWER LIMIT	99928	12.22				
LAB SAMPLE ID	CLIENT SAMPLE ID					
MB 180-139651/5	211967	12.72				
LCS 180-139651/10	194106	12.72				
180-43257-6 DL	HD-MW-93S-0/1-0 DL	213948	12.72			
180-43257-7 DL	HD-MW-37D-0/1-0 DL	216490	12.73			
180-43257-8	HD-QC1-0/1-1	212689	12.73			

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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-98S-0/1-0 Lab Sample ID: 180-43257-1
 Matrix: Water Lab File ID: 60424022.D
 Analysis Method: 8260C Date Collected: 04/20/2015 13:35
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 19:47
 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.: 139551 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	0.59	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	0.25	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	8.6		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	1.2		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	8.2		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	9.4		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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-98S-0/1-0 Lab Sample ID: 180-43257-1
 Matrix: Water Lab File ID: 60424022.D
 Analysis Method: 8260C Date Collected: 04/20/2015 13:35
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 19:47
 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.: 139551 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)	100		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	100		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424022.D
 Lims ID: 180-43257-D-1 Lab Sample ID: 180-43257-1
 Client ID: HD-MW-98S-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 19:47:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43257-D-1
 Misc. Info.: 180-0006620-022
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 25-Apr-2015 08:30:13 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: fergusond

Date: 25-Apr-2015 08:30:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.199	4.205	-0.006	85	169480	1000.0	
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	99	533645	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.374	-0.006	89	114483	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	98	192193	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.523	0.006	92	109718	49.9	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.907	6.906	0.001	69	157175	49.8	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	93	502198	52.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	85	186494	51.6	
12 Chloromethane	50		1.735				ND	
13 Vinyl chloride	62		1.863				ND	
15 Bromomethane	94		2.192				ND	
16 Chloroethane	64		2.344				ND	
22 1,1-Dichloroethene	96	3.317	3.311	0.006	90	8175	2.96	
24 Acetone	43	3.402	3.384	0.018	63	5028	5.60	M
26 Carbon disulfide	76		3.603				ND	
31 Methylene Chloride	84		4.090				ND	
33 Acrylonitrile	53		4.461				ND	
34 trans-1,2-Dichloroethene	96		4.528				ND	
35 Methyl tert-butyl ether	73		4.534				ND	
37 1,1-Dichloroethane	63	5.173	5.160	0.013	61	7621	1.26	M
43 cis-1,2-Dichloroethene	96	5.915	5.902	0.013	80	146192	43.1	
44 2-Butanone (MEK)	43		5.909				ND	
48 Chlorobromomethane	128		6.201				ND	
50 Chloroform	83	6.341	6.347	-0.006	30	1532	0.3183	
51 1,1,1-Trichloroethane	97	6.517	6.511	0.006	94	19539	5.88	
53 Carbon tetrachloride	117		6.687				ND	
56 Benzene	78		6.906				ND	
57 1,2-Dichloroethane	62		6.991				ND	
61 Trichloroethene	130	7.655	7.655	0.000	97	119128	40.9	
64 1,2-Dichloropropane	63		7.928				ND	
65 1,4-Dioxane	88		8.013				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.208				ND	
71 cis-1,3-Dichloropropene	75		8.646				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.792				ND	
73 Toluene	91	8.987	8.981	0.006	92	6283	0.5306	
74 trans-1,3-Dichloropropene	75		9.224				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164	9.504	9.498	0.006	96	92707	47.2	
79 2-Hexanone	43		9.626				ND	
81 Chlorodibromomethane	129		9.802				ND	
82 Ethylene Dibromide	107		9.918				ND	
84 Chlorobenzene	112		10.404				ND	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.502				ND	
88 m-Xylene & p-Xylene	106		10.629				ND	
89 o-Xylene	106		11.013				ND	
90 Styrene	104		11.037				ND	
91 Bromoform	173		11.219				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424022.D

Injection Date: 24-Apr-2015 19:47:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-D-1

Lab Sample ID: 180-43257-1

Worklist Smp#: 22

Client ID: HD-MW-98S-0/1-0

Purge Vol: 5.000 mL

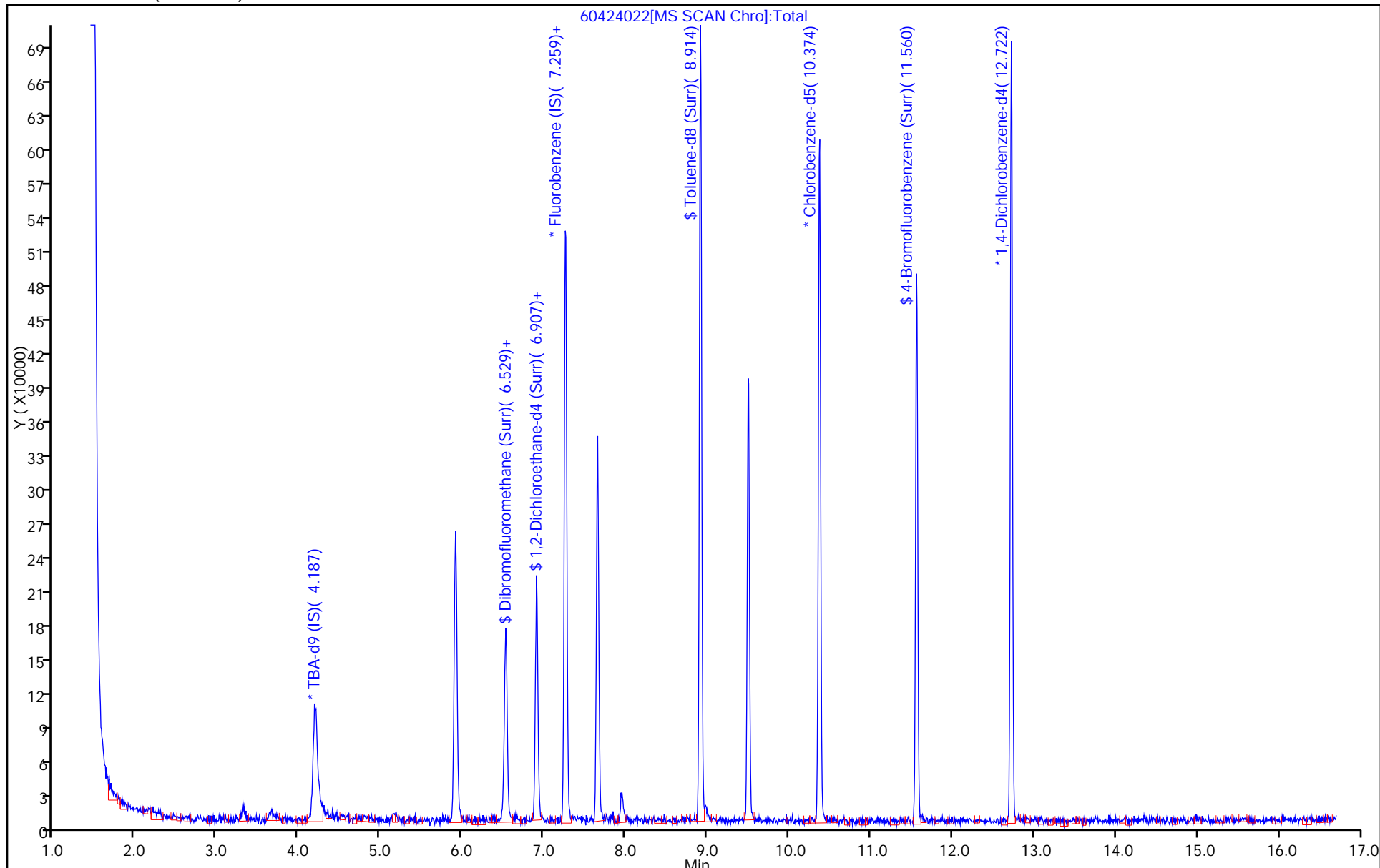
Dil. Factor: 1.0000

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\20150424-6620.b\60424022.D

Injection Date: 24-Apr-2015 19:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-1

Lab Sample ID: 180-43257-1

Client ID: HD-MW-98S-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

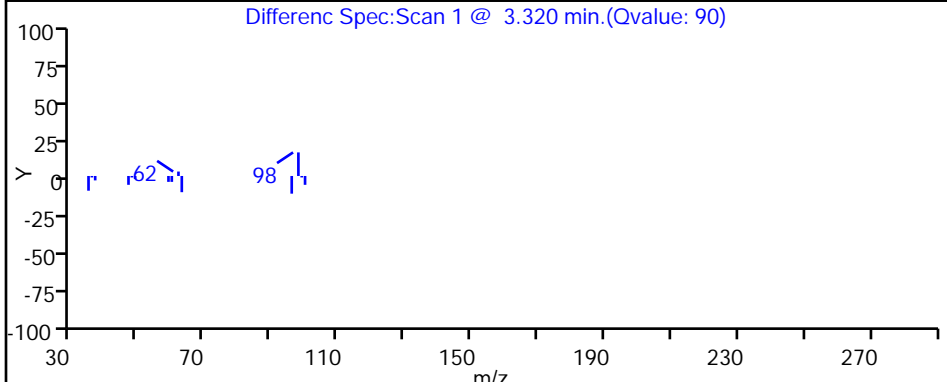
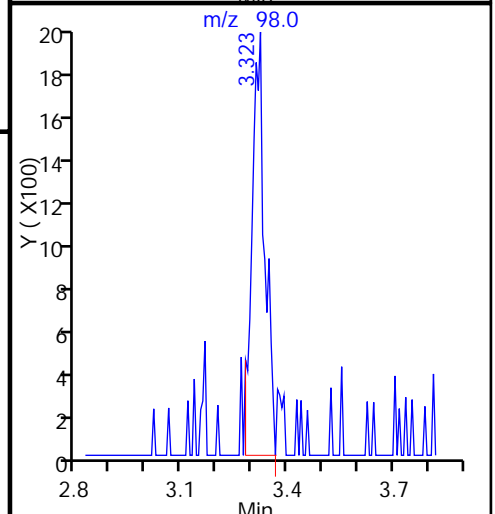
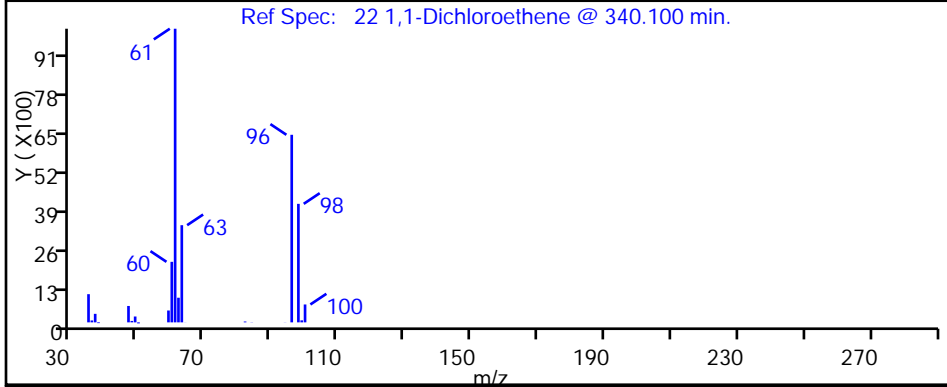
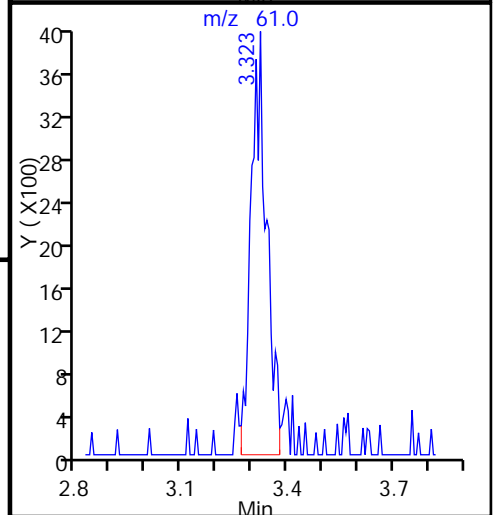
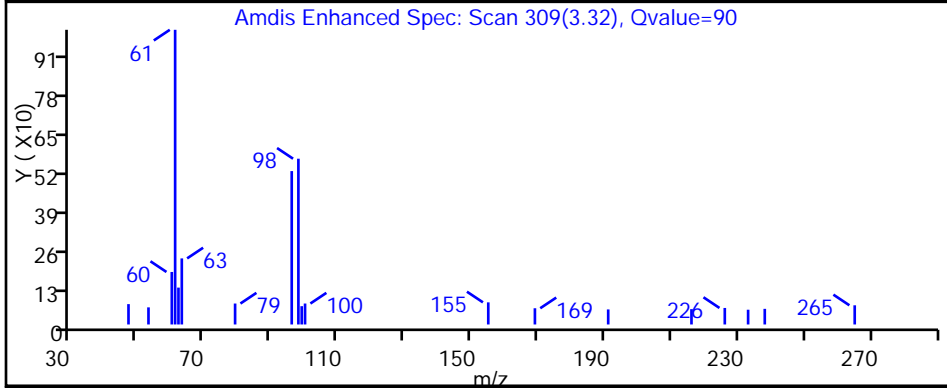
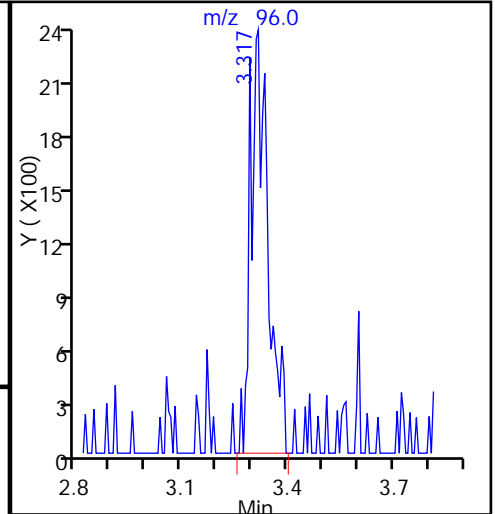
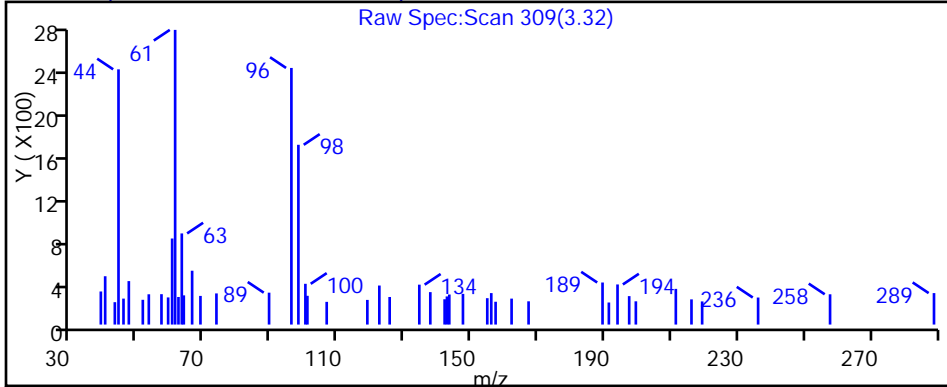
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424022.D

Injection Date: 24-Apr-2015 19:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-1

Lab Sample ID: 180-43257-1

Client ID: HD-MW-98S-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

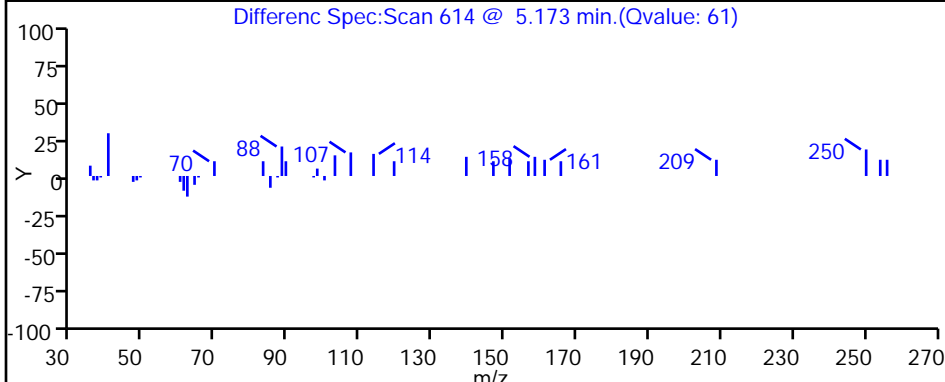
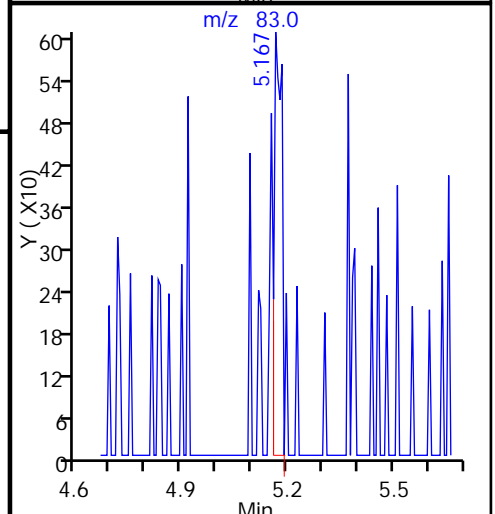
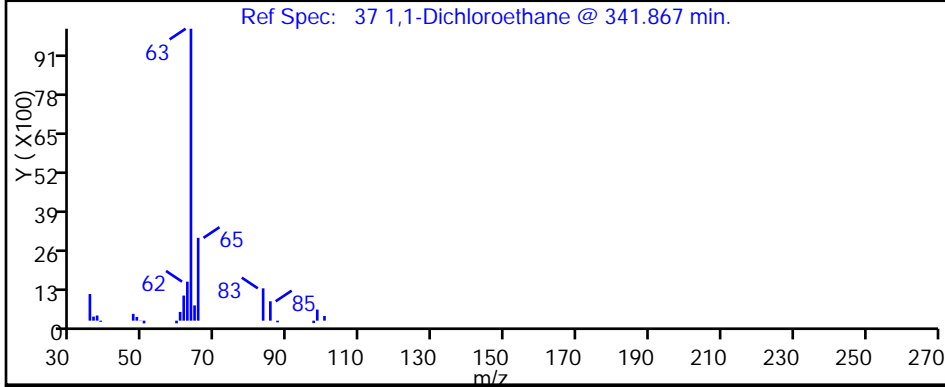
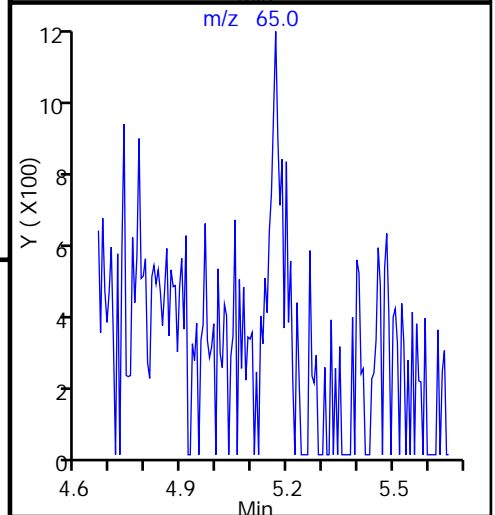
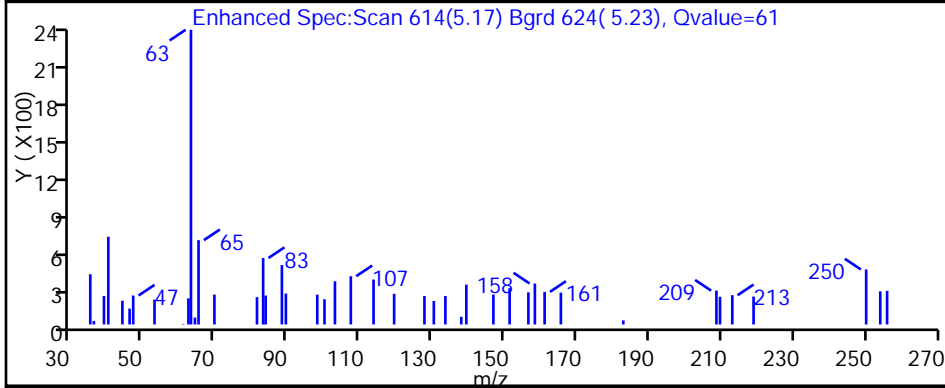
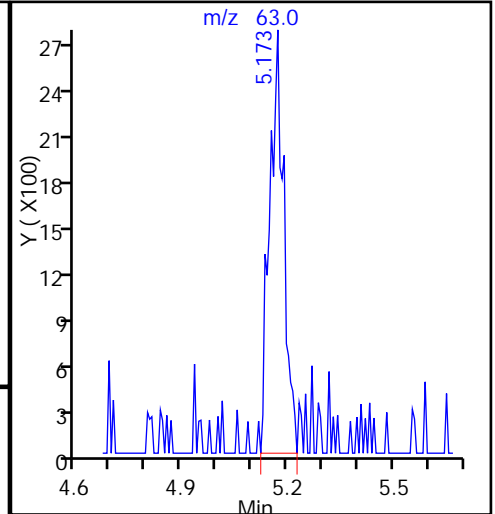
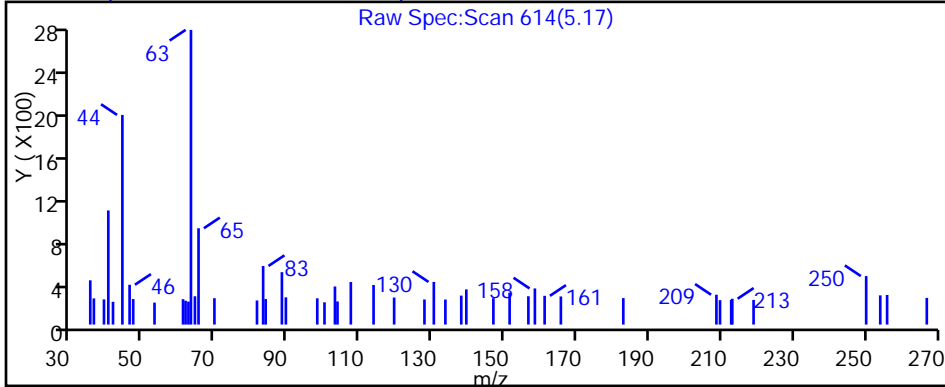
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424022.D

Injection Date: 24-Apr-2015 19:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-1

Lab Sample ID: 180-43257-1

Client ID: HD-MW-98S-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

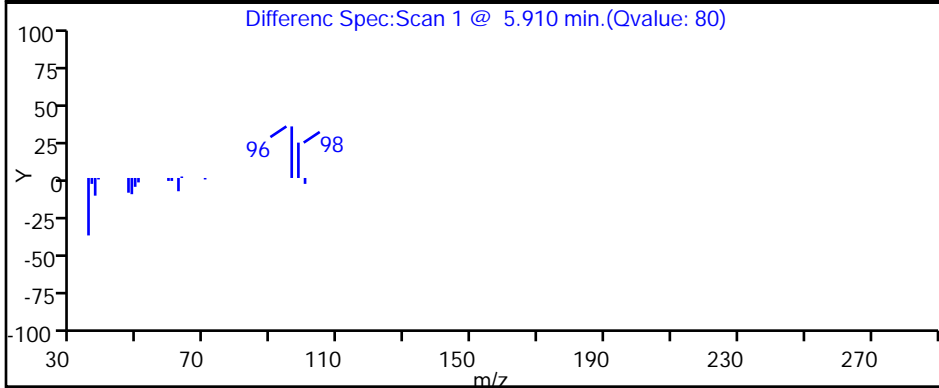
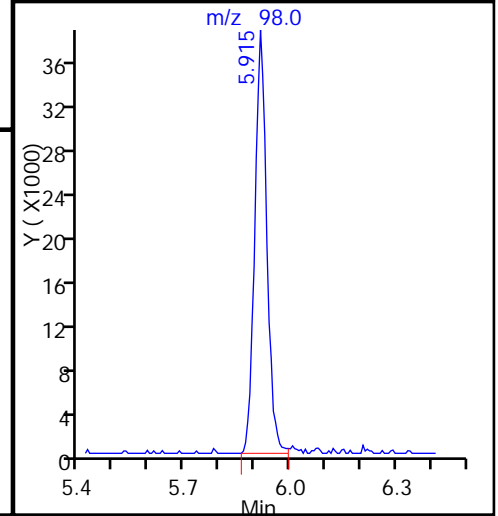
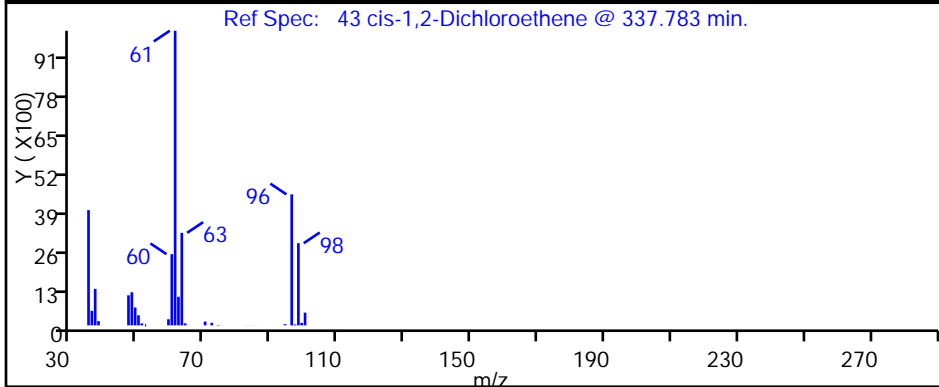
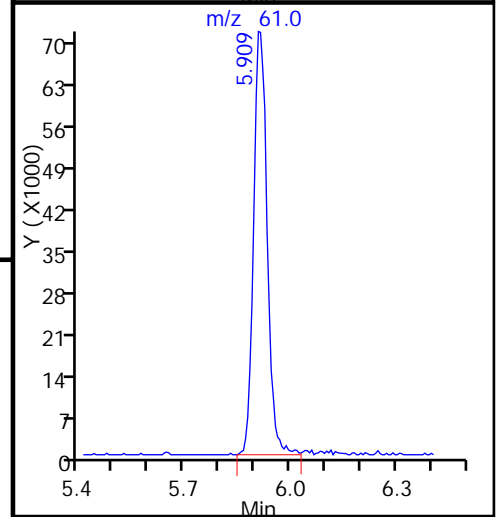
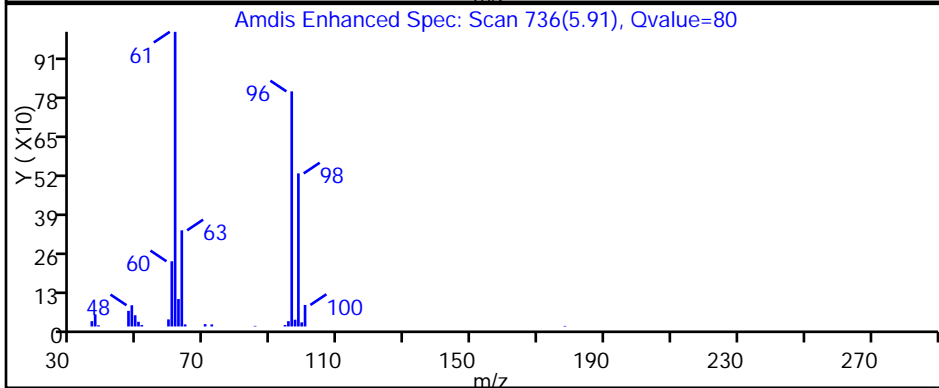
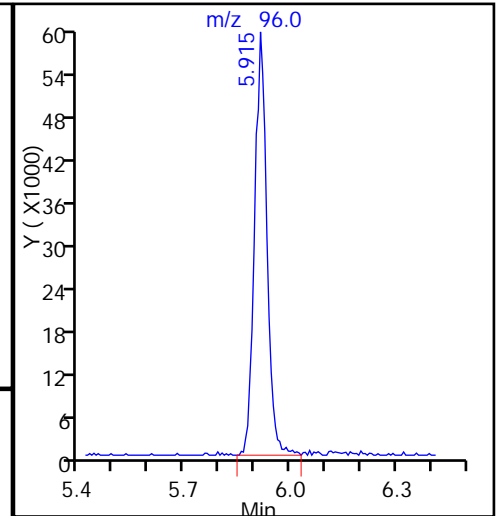
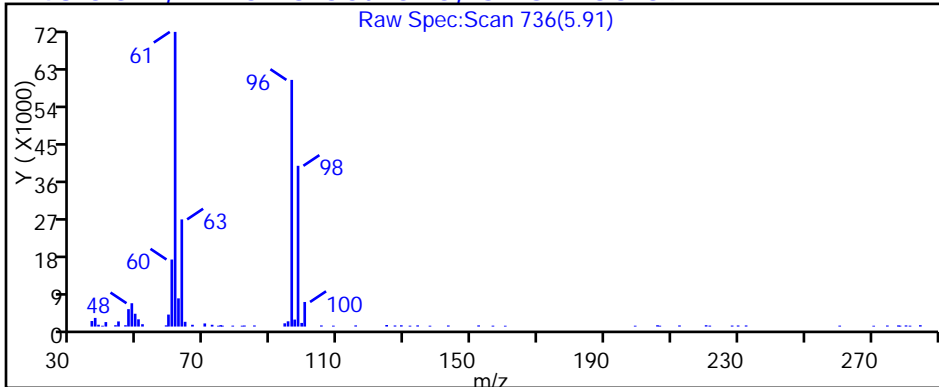
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424022.D

Injection Date: 24-Apr-2015 19:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-1

Lab Sample ID: 180-43257-1

Client ID: HD-MW-98S-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

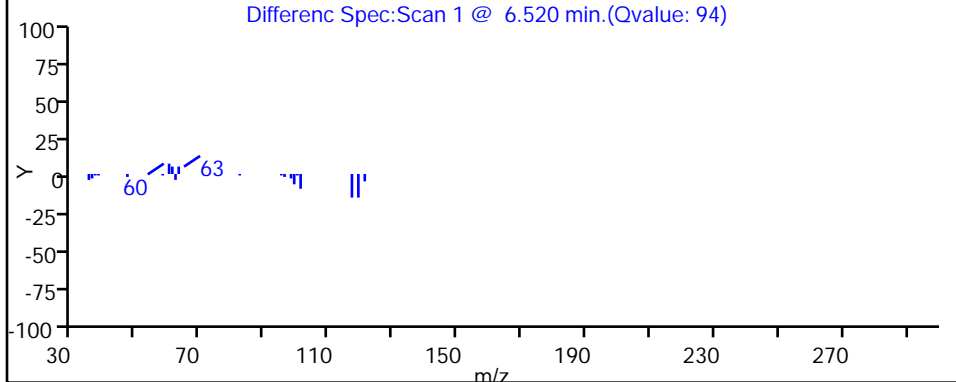
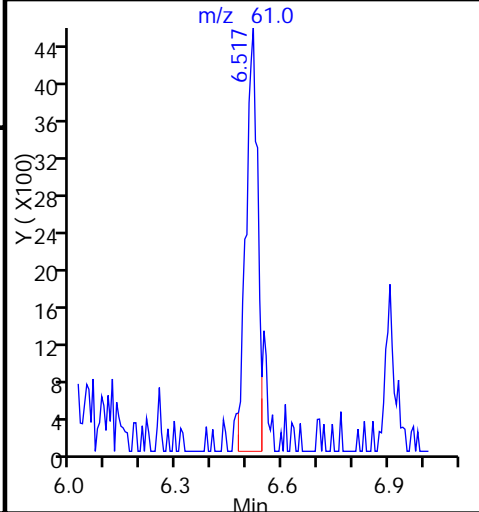
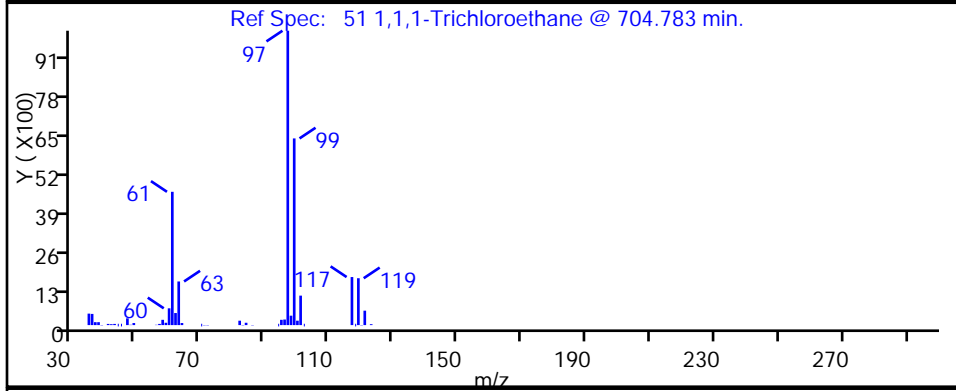
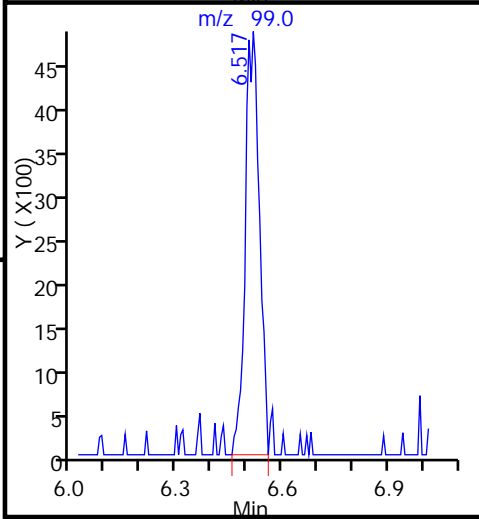
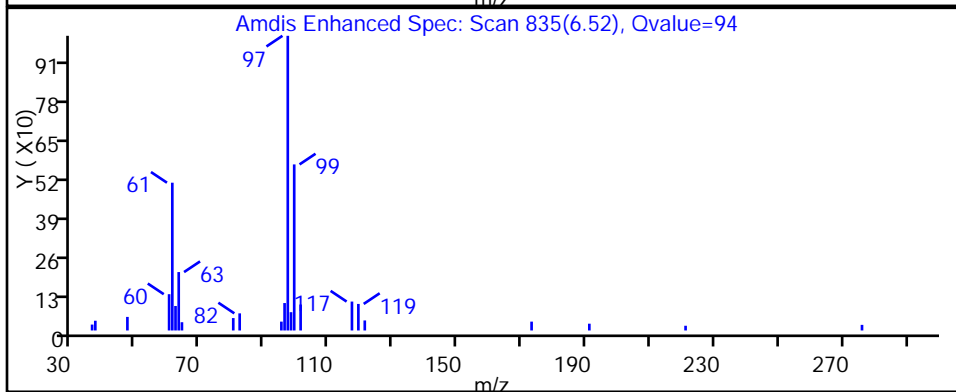
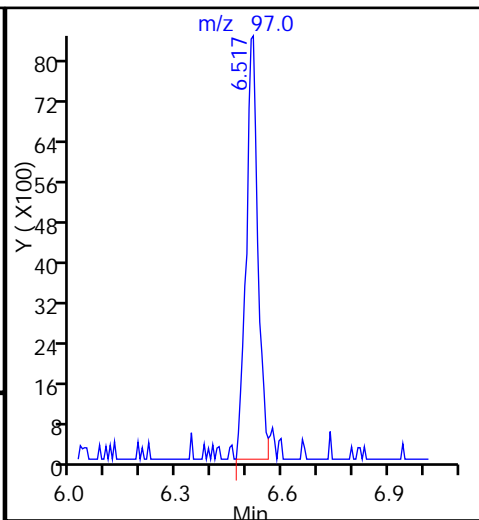
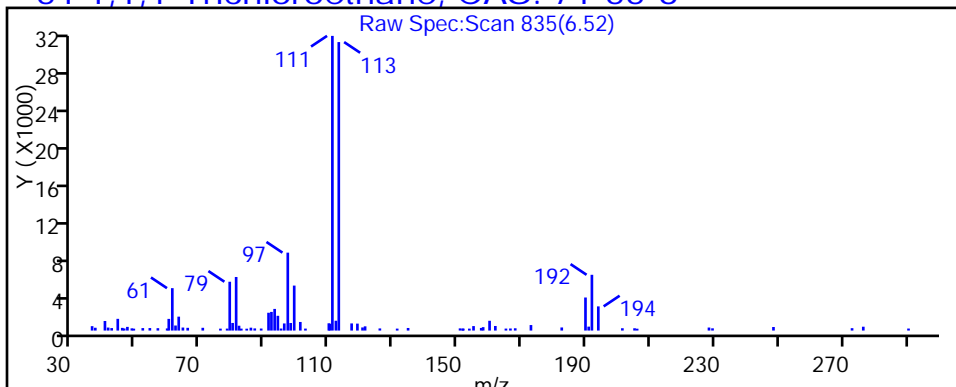
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424022.D

Injection Date: 24-Apr-2015 19:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-1

Lab Sample ID: 180-43257-1

Client ID: HD-MW-98S-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

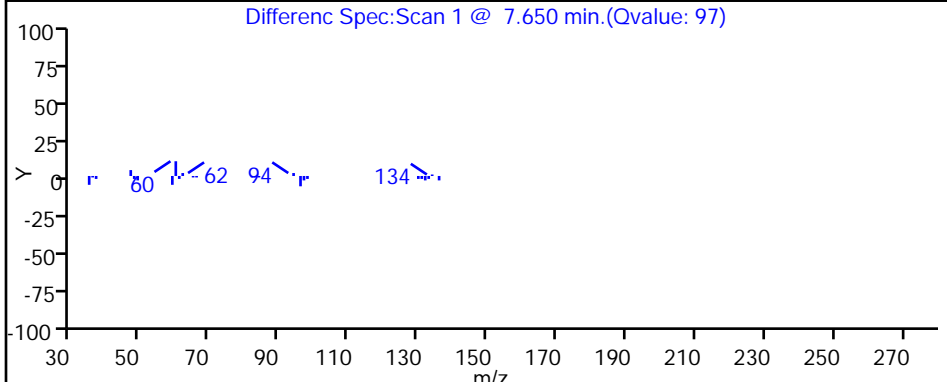
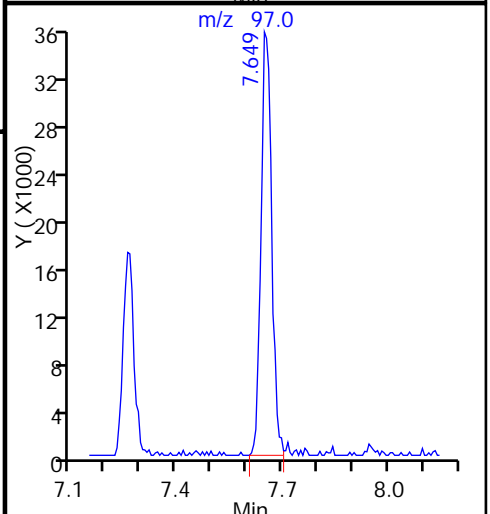
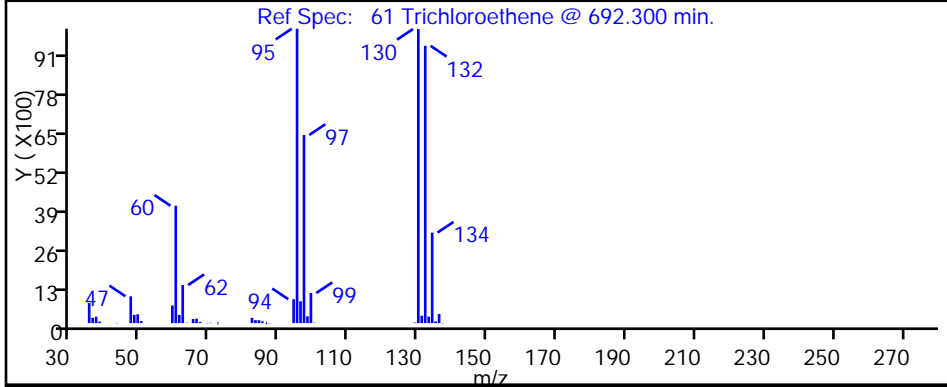
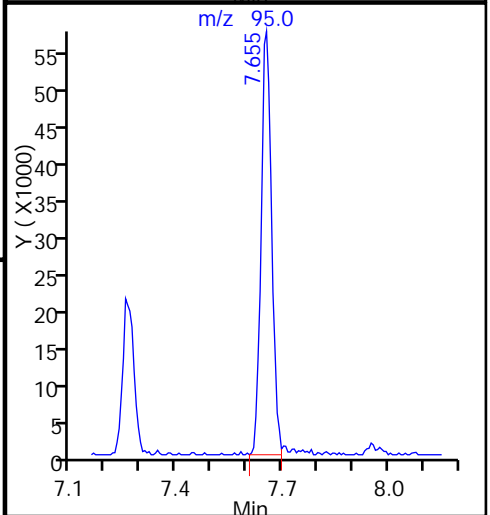
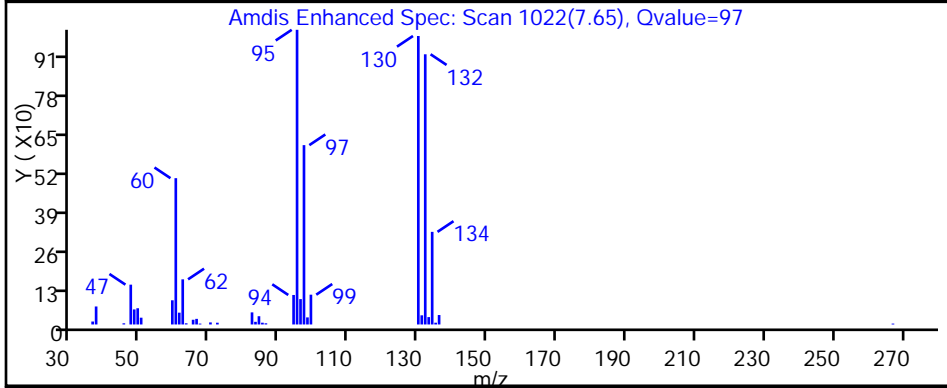
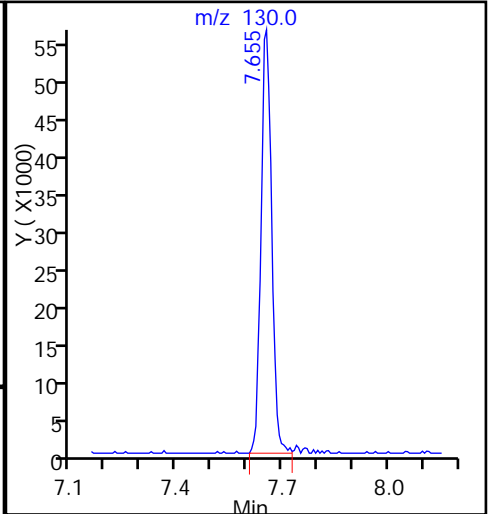
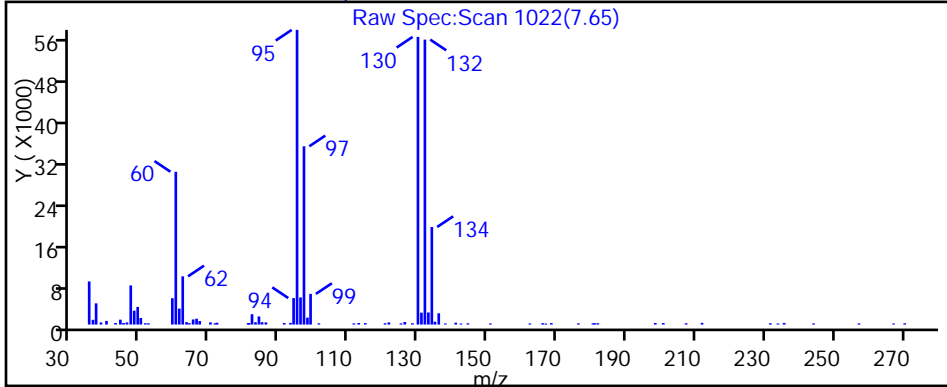
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424022.D

Injection Date: 24-Apr-2015 19:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-1

Lab Sample ID: 180-43257-1

Client ID: HD-MW-98S-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

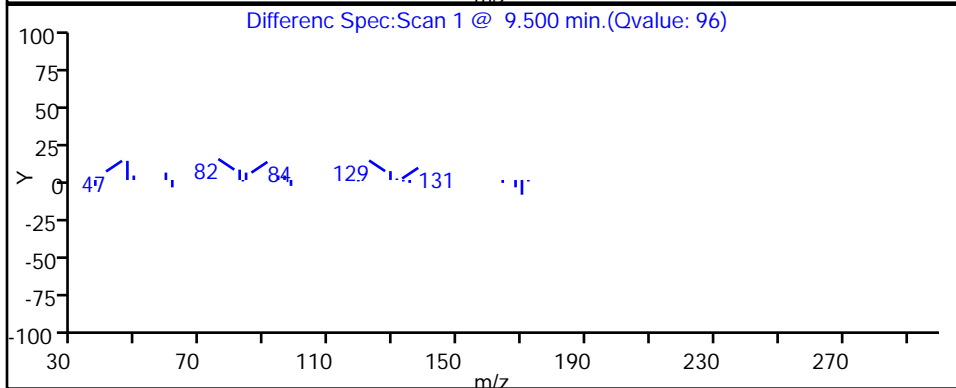
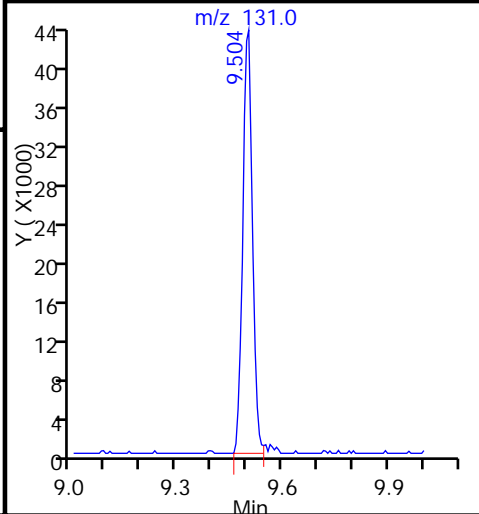
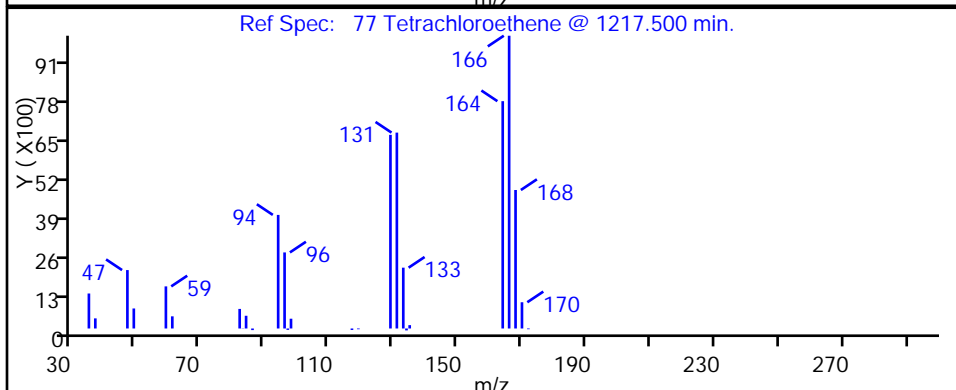
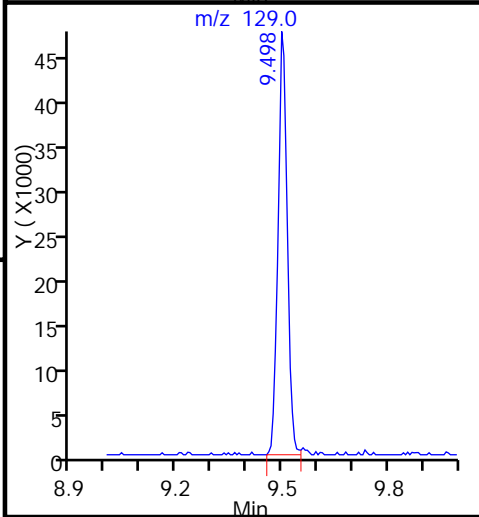
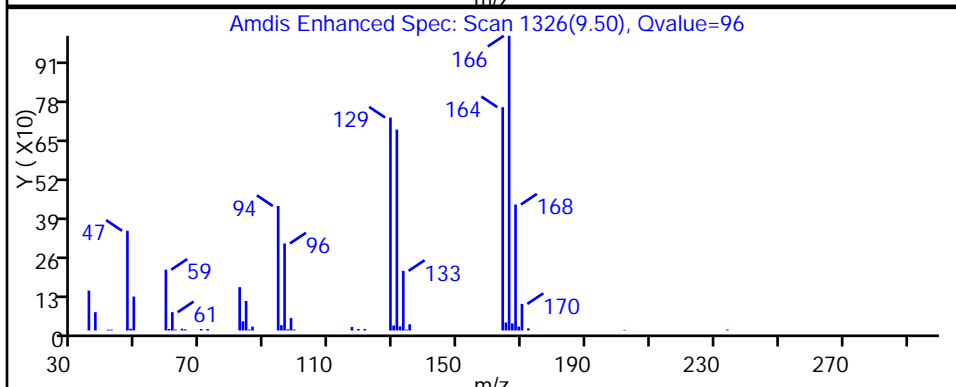
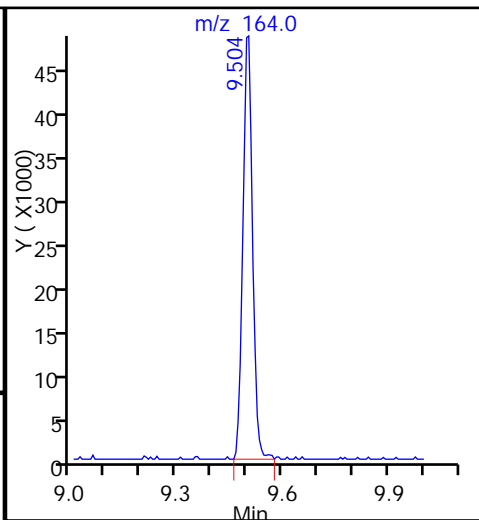
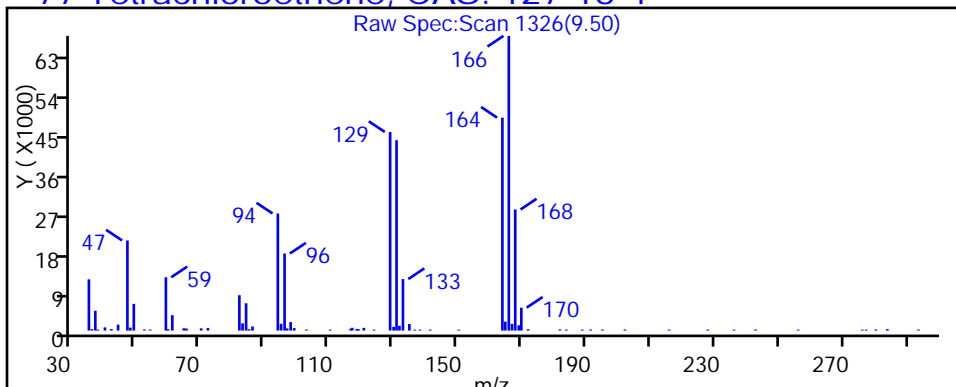
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



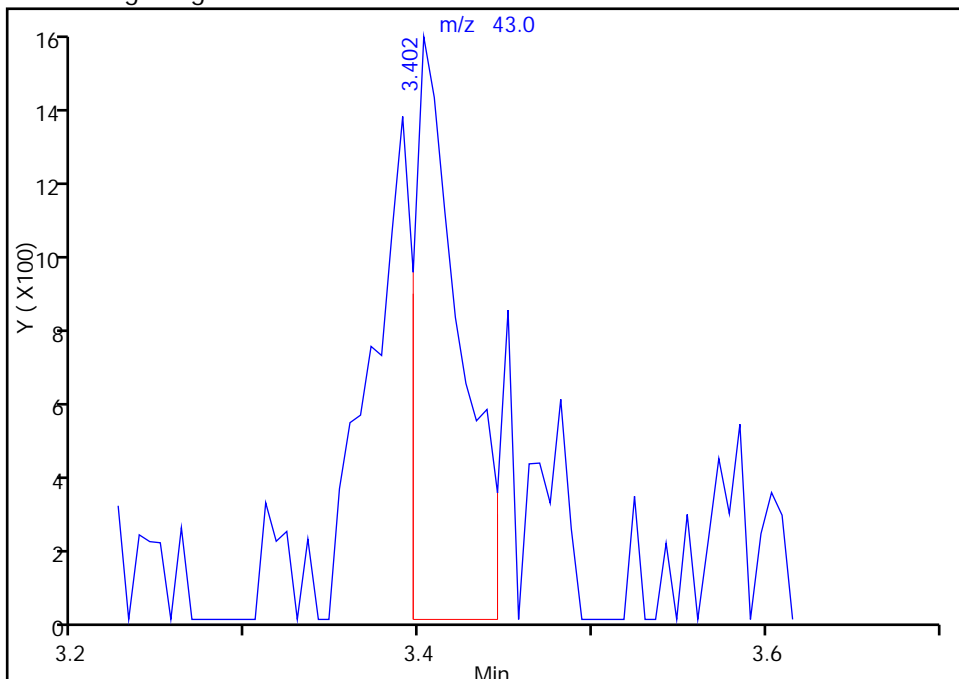
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424022.D
Injection Date: 24-Apr-2015 19:47:30 Instrument ID: CHHP6
Lims ID: 180-43257-D-1 Lab Sample ID: 180-43257-1
Client ID: HD-MW-98S-0/1-0
Operator ID: 001562 ALS Bottle#: 21 Worklist Smp#: 22
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

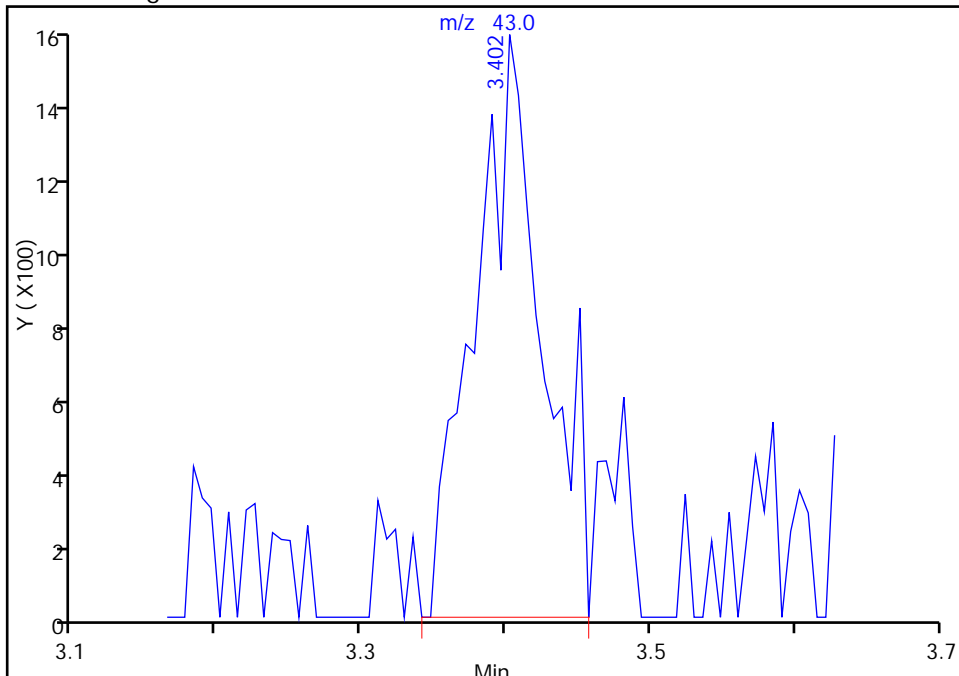
RT: 3.40
Area: 2835
Amount: 3.159423
Amount Units: ng

Processing Integration Results



RT: 3.40
Area: 5028
Amount: 5.603378
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 08:30:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

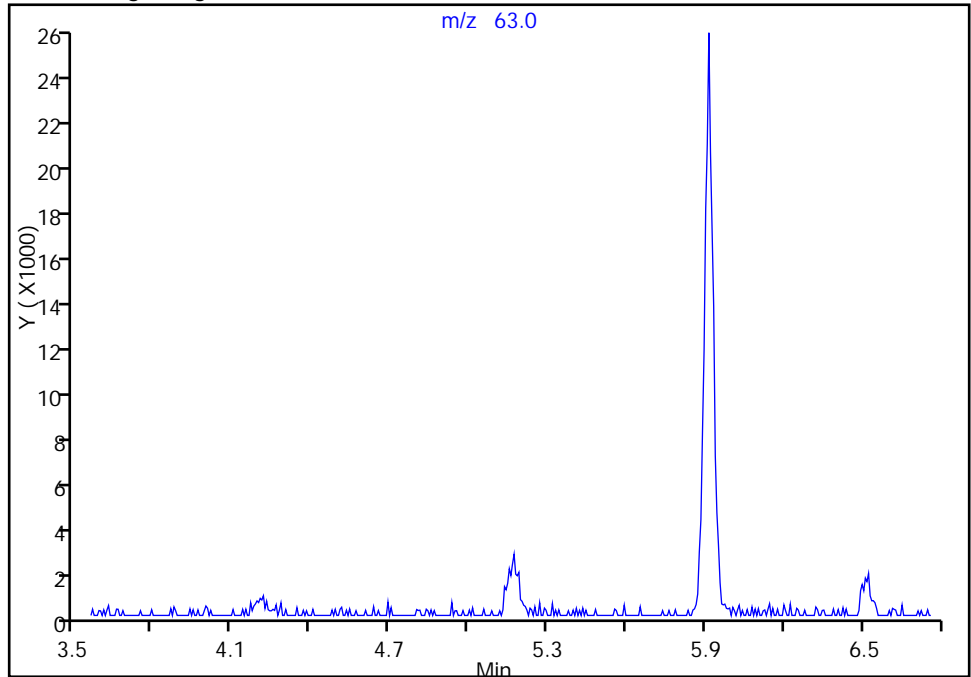
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424022.D
Injection Date: 24-Apr-2015 19:47:30 Instrument ID: CHHP6
Lims ID: 180-43257-D-1 Lab Sample ID: 180-43257-1
Client ID: HD-MW-98S-0/1-0
Operator ID: 001562 ALS Bottle#: 21 Worklist Smp#: 22
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

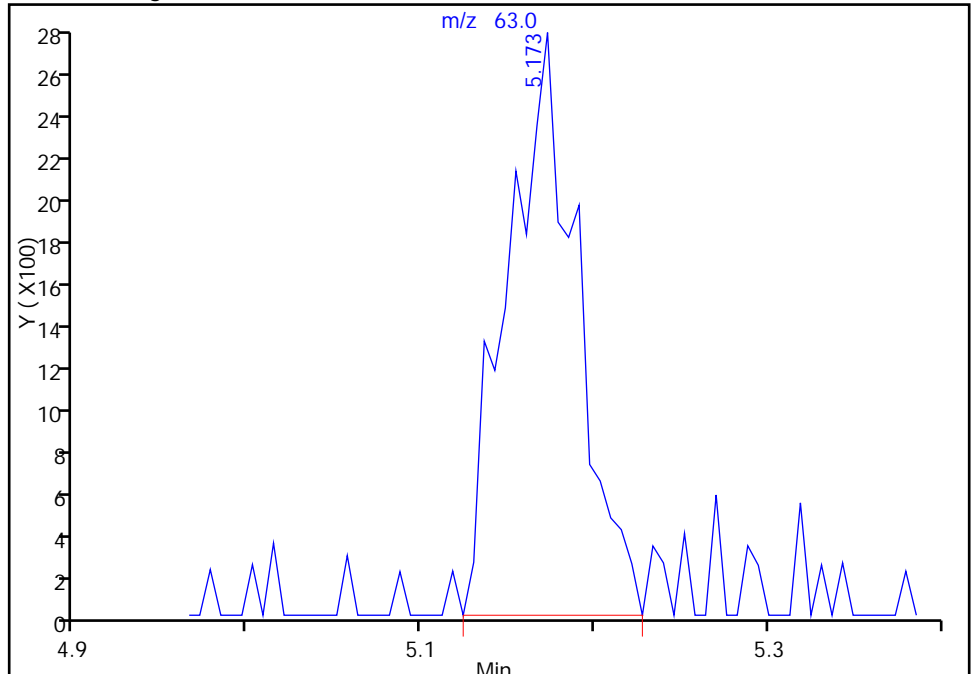
Not Detected
Expected RT: 5.16

Processing Integration Results



RT: 5.17
Area: 7621
Amount: 1.259754
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 08:30:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-98I-0/1-0 Lab Sample ID: 180-43257-2
 Matrix: Water Lab File ID: 60424023.D
 Analysis Method: 8260C Date Collected: 04/20/2015 14:30
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 20:11
 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.: 139551 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	0.65	J	1.0	0.30
67-64-1	Acetone	2.8	J	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	0.30	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10		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	10		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	11		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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-98I-0/1-0 Lab Sample ID: 180-43257-2
 Matrix: Water Lab File ID: 60424023.D
 Analysis Method: 8260C Date Collected: 04/20/2015 14:30
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 20:11
 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.: 139551 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)	96		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	100		70-118
1868-53-7	Dibromofluoromethane (Surr)	99		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424023.D
 Lims ID: 180-43257-E-2 Lab Sample ID: 180-43257-2
 Client ID: HD-MW-981-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 20:11:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43257-E-2
 Misc. Info.: 180-0006620-023
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 25-Apr-2015 08:31:59 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: fergusond

Date: 25-Apr-2015 08:31:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.189	4.205	-0.016	87	170309	1000.0	
* 2 Fluorobenzene (IS)	96	7.261	7.259	0.002	99	549429	50.0	
* 3 Chlorobenzene-d5	119	10.370	10.374	-0.004	90	122336	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.724	12.722	0.002	98	197370	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.531	6.523	0.008	93	111664	49.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.906	-0.003	68	155957	48.0	
\$ 7 Toluene-d8 (Surr)	98	8.916	8.914	0.002	94	521794	51.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.562	11.560	0.002	84	193585	50.1	
12 Chloromethane	50		1.735				ND	
13 Vinyl chloride	62		1.863				ND	
15 Bromomethane	94		2.192				ND	
16 Chloroethane	64		2.344				ND	
22 1,1-Dichloroethene	96	3.313	3.311	0.002	68	9316	3.27	M
24 Acetone	43	3.386	3.384	0.002	98	12796	13.9	
26 Carbon disulfide	76		3.603				ND	
31 Methylene Chloride	84		4.090				ND	
33 Acrylonitrile	53		4.461				ND	
34 trans-1,2-Dichloroethene	96		4.528				ND	
35 Methyl tert-butyl ether	73		4.534				ND	
37 1,1-Dichloroethane	63	5.175	5.160	0.015	64	9409	1.51	
43 cis-1,2-Dichloroethene	96	5.917	5.902	0.015	82	179539	51.4	
44 2-Butanone (MEK)	43		5.909				ND	
48 Chlorobromomethane	128		6.201				ND	
50 Chloroform	83	6.349	6.347	0.002	6	1936	0.3906	
51 1,1,1-Trichloroethane	97	6.519	6.511	0.008	47	24870	7.26	
53 Carbon tetrachloride	117		6.687				ND	
56 Benzene	78		6.906				ND	
57 1,2-Dichloroethane	62		6.991				ND	
61 Trichloroethene	130	7.657	7.655	0.002	97	152556	50.9	
64 1,2-Dichloropropane	63		7.928				ND	
65 1,4-Dioxane	88		8.013				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.208				ND	
71 cis-1,3-Dichloropropene	75		8.646				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.792				ND	
73 Toluene	91	8.989	8.981	0.008	97	7003	0.5534	
74 trans-1,3-Dichloropropene	75		9.224				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164	9.500	9.498	0.002	95	112773	53.7	
79 2-Hexanone	43		9.626				ND	
81 Chlorodibromomethane	129		9.802				ND	
82 Ethylene Dibromide	107		9.918				ND	
84 Chlorobenzene	112		10.404				ND	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.502				ND	
88 m-Xylene & p-Xylene	106		10.629				ND	
89 o-Xylene	106		11.013				ND	
90 Styrene	104		11.037				ND	
91 Bromoform	173		11.219				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424023.D

Injection Date: 24-Apr-2015 20:11:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-E-2

Lab Sample ID: 180-43257-2

Worklist Smp#: 23

Client ID: HD-MW-981-0/1-0

Purge Vol: 5.000 mL

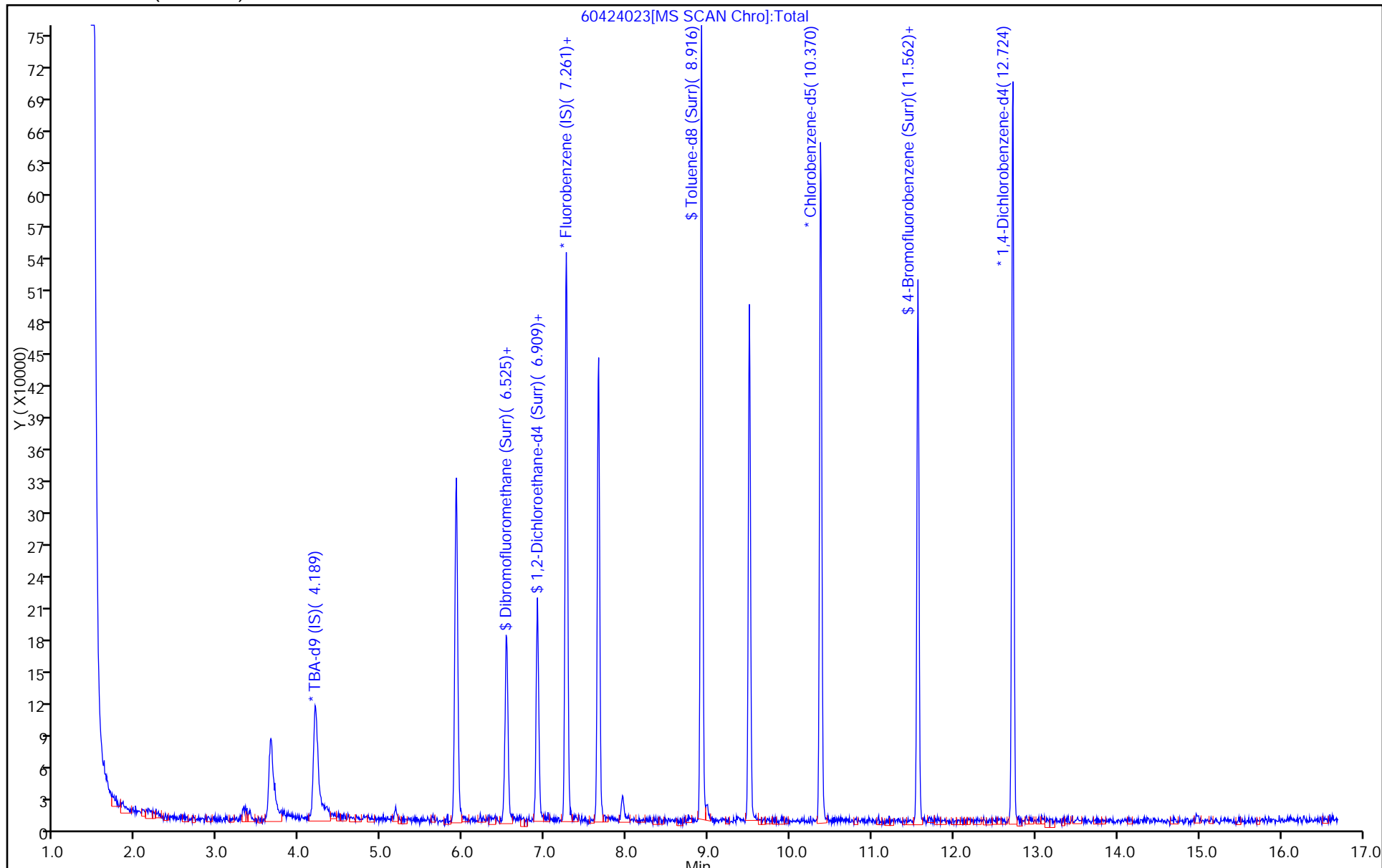
Dil. Factor: 1.0000

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\20150424-6620.b\60424023.D

Injection Date: 24-Apr-2015 20:11:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-2

Lab Sample ID: 180-43257-2

Client ID: HD-MW-981-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

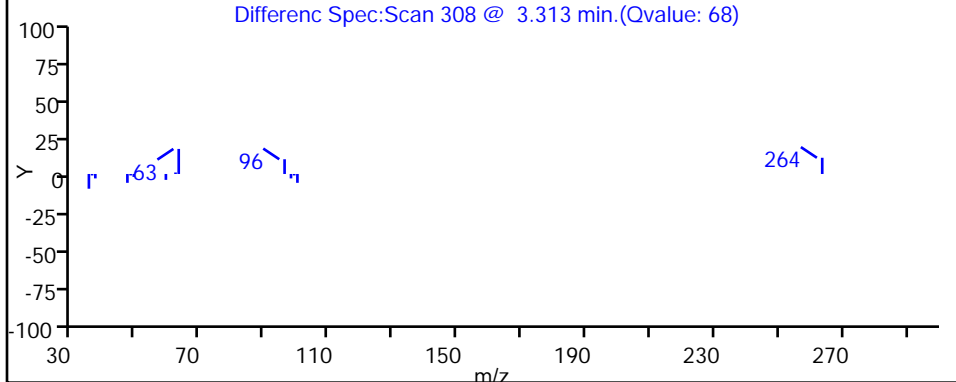
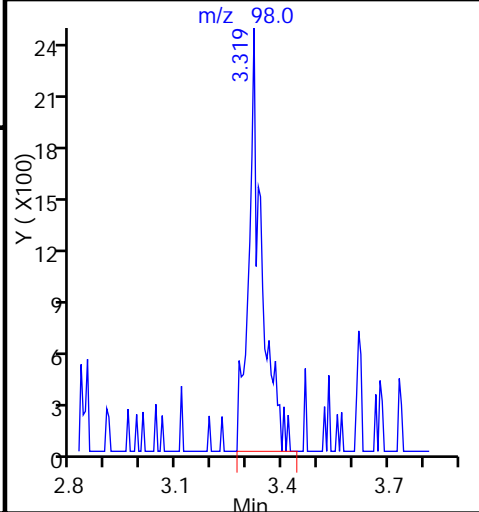
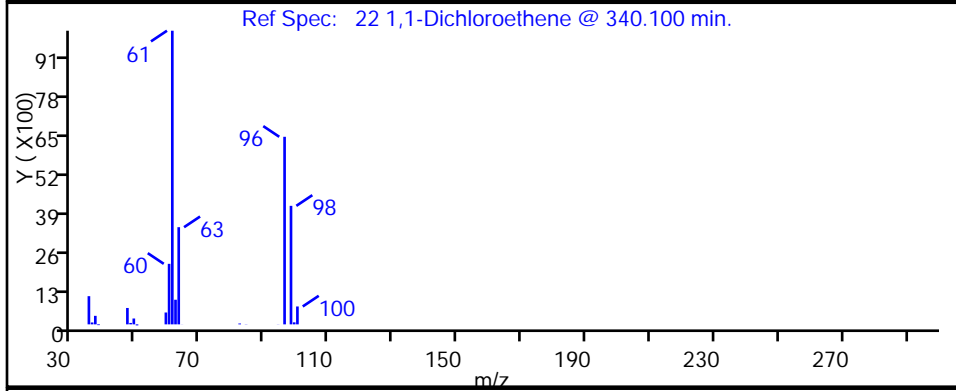
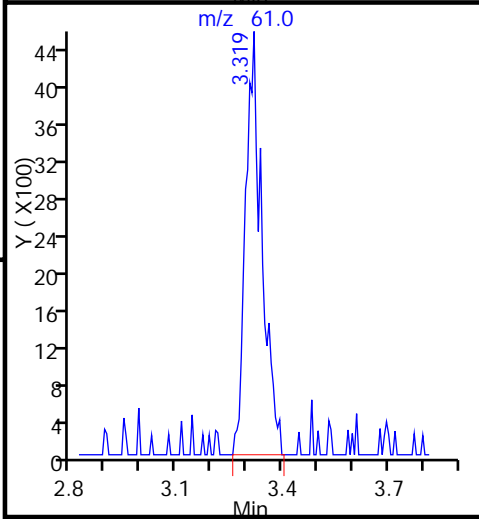
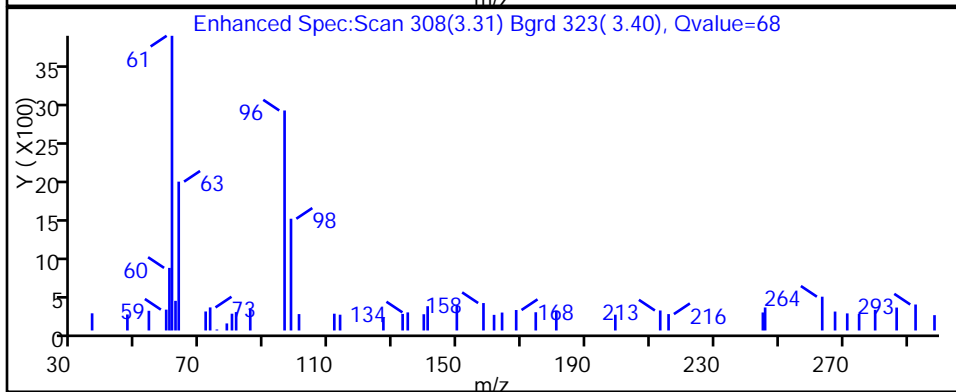
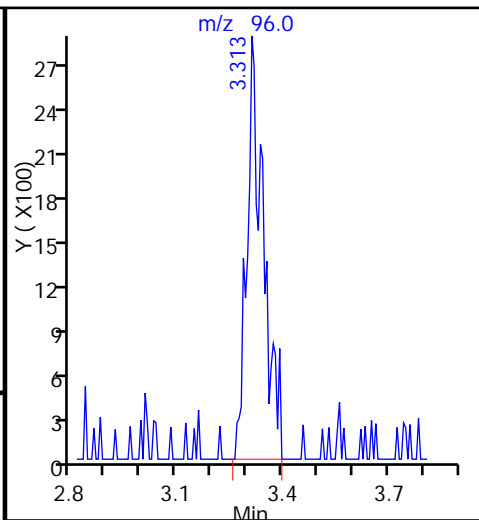
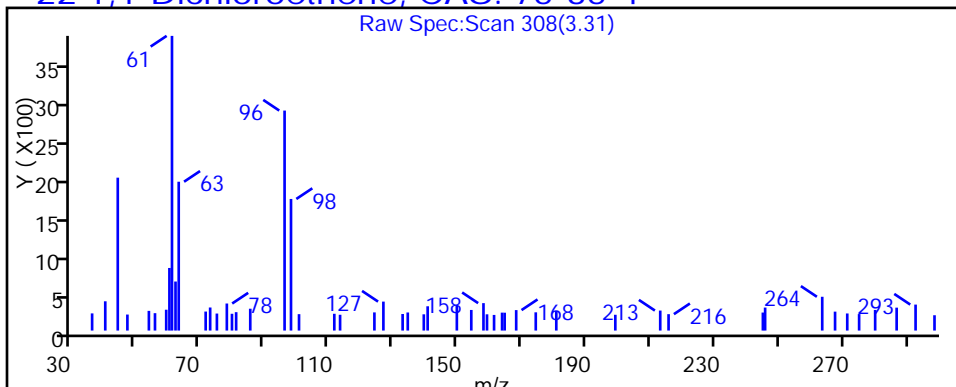
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424023.D

Injection Date: 24-Apr-2015 20:11:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-2

Lab Sample ID: 180-43257-2

Client ID: HD-MW-981-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

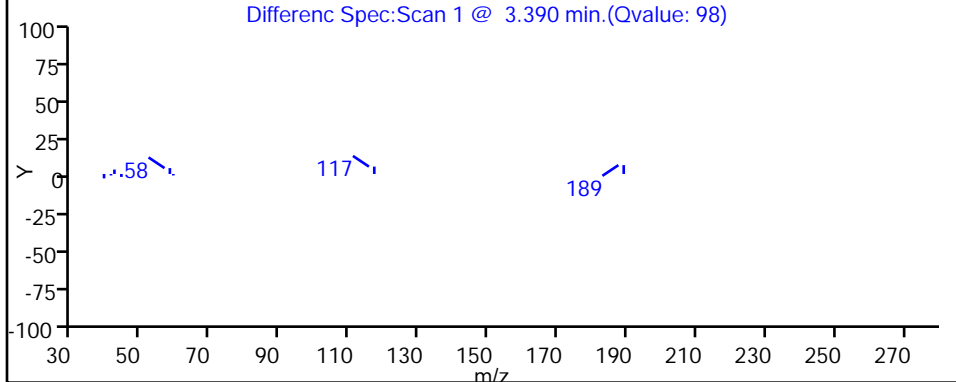
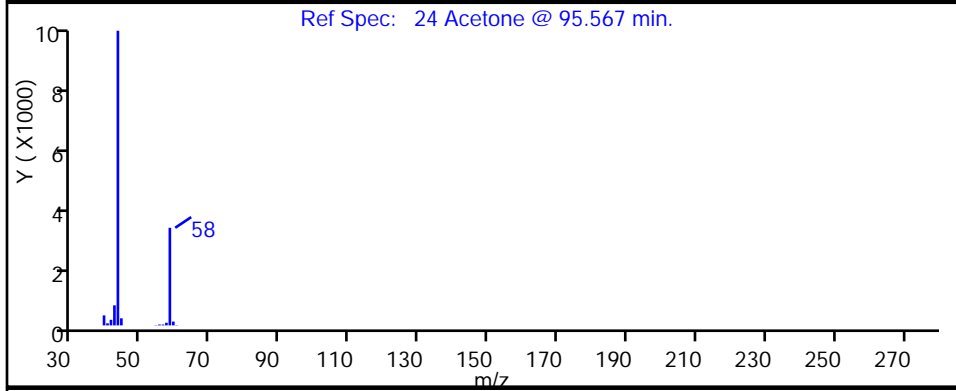
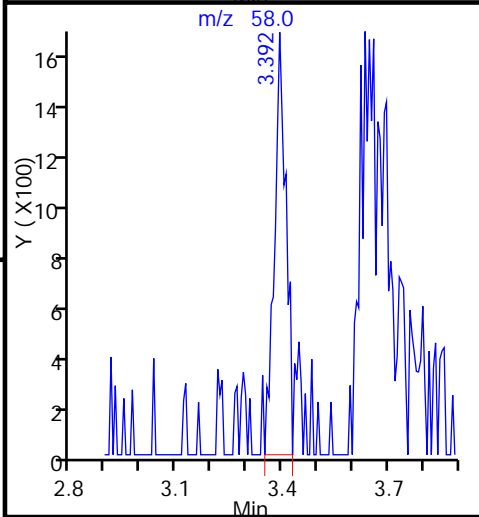
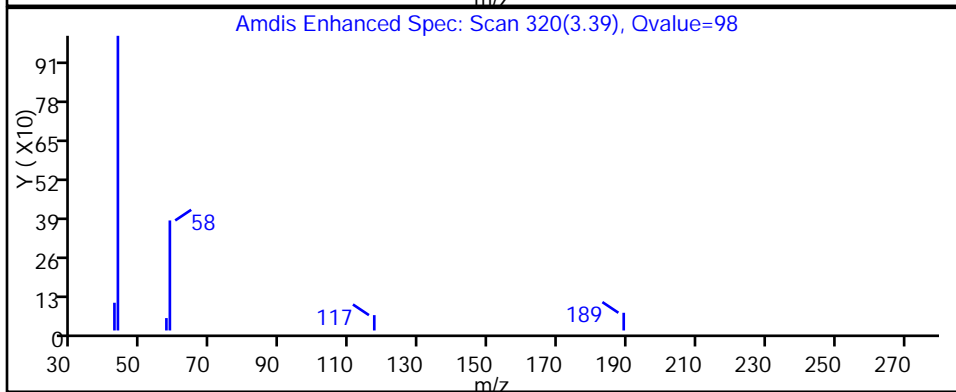
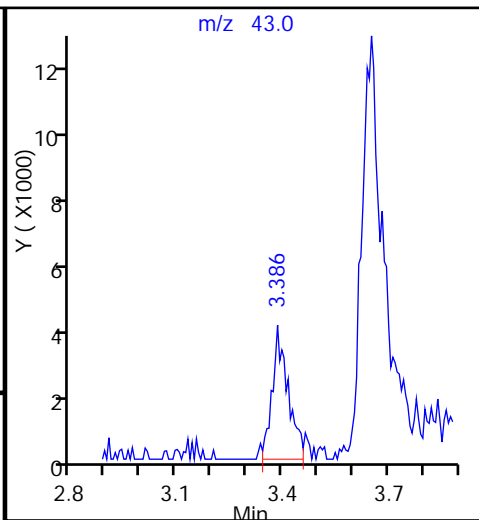
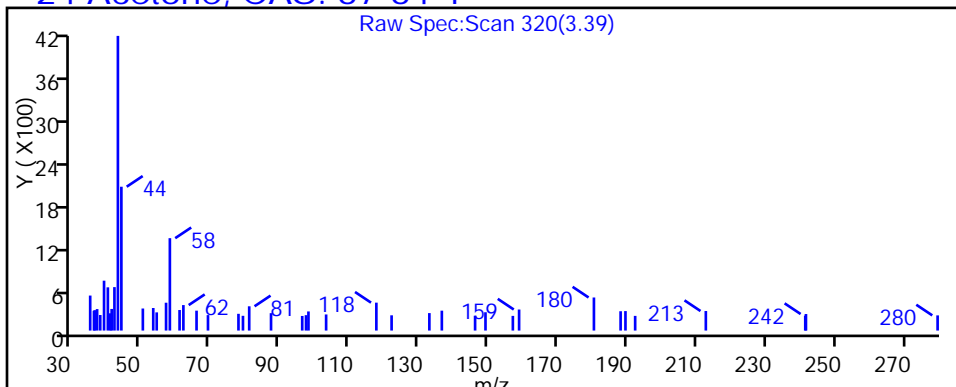
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

24 Acetone, CAS: 67-64-1



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424023.D

Injection Date: 24-Apr-2015 20:11:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-2

Lab Sample ID: 180-43257-2

Client ID: HD-MW-981-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

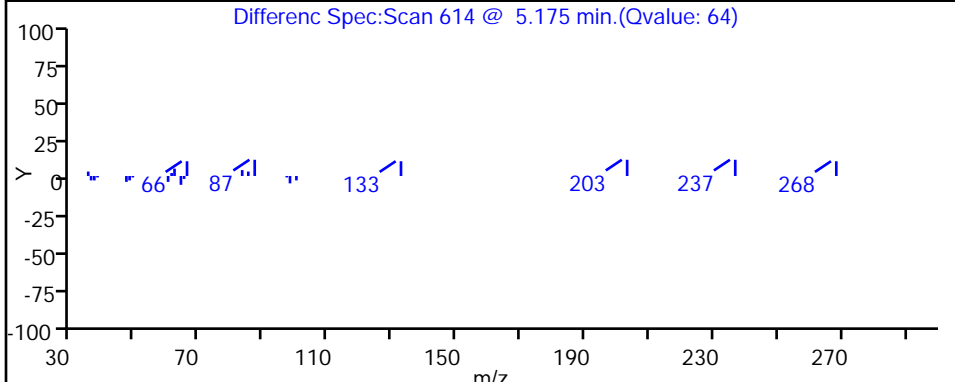
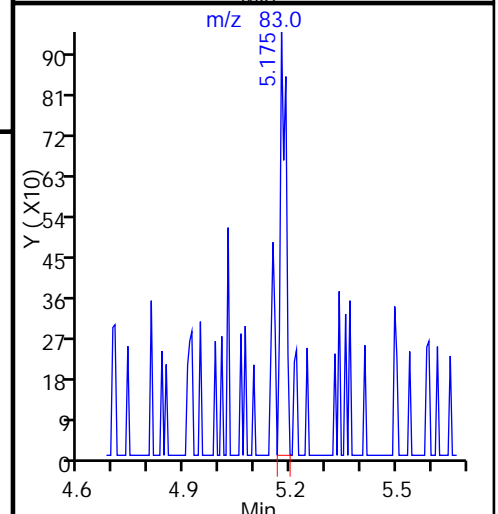
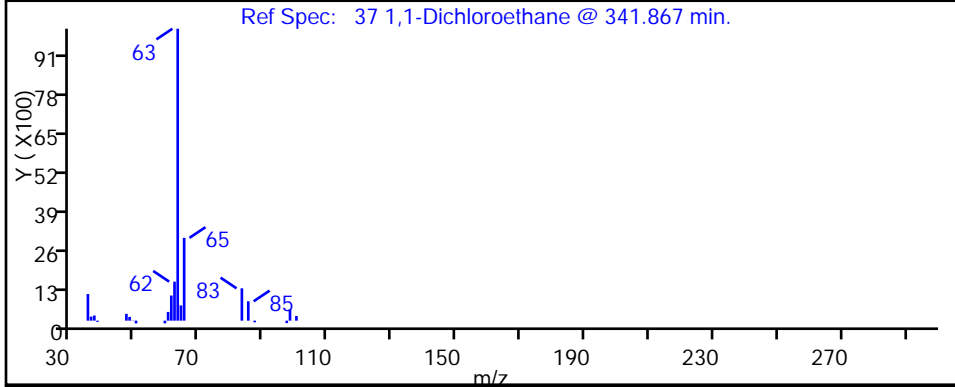
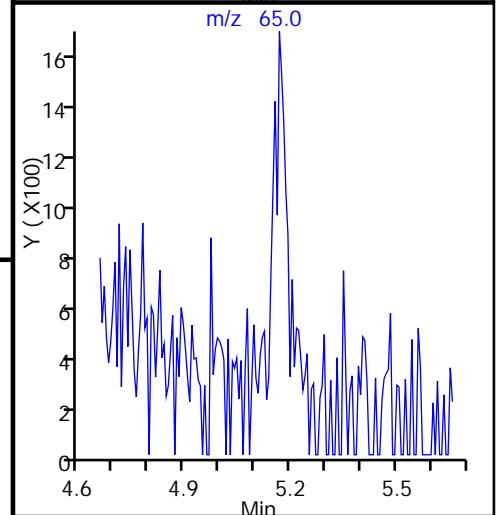
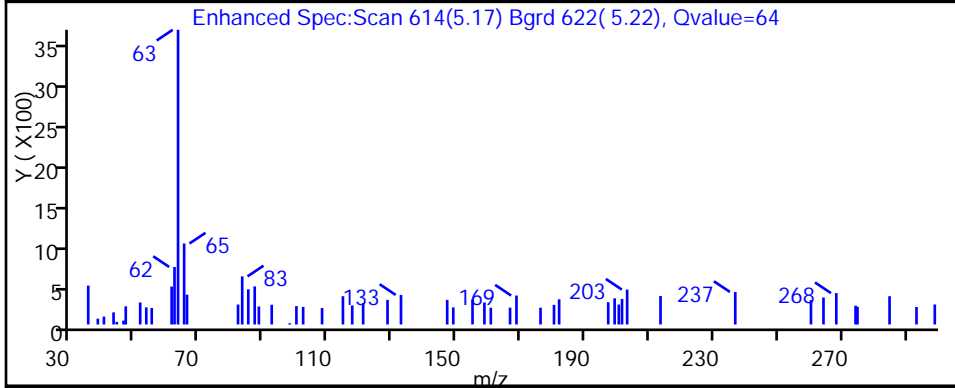
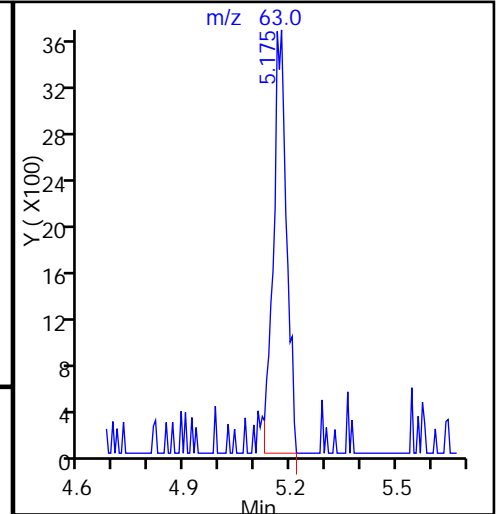
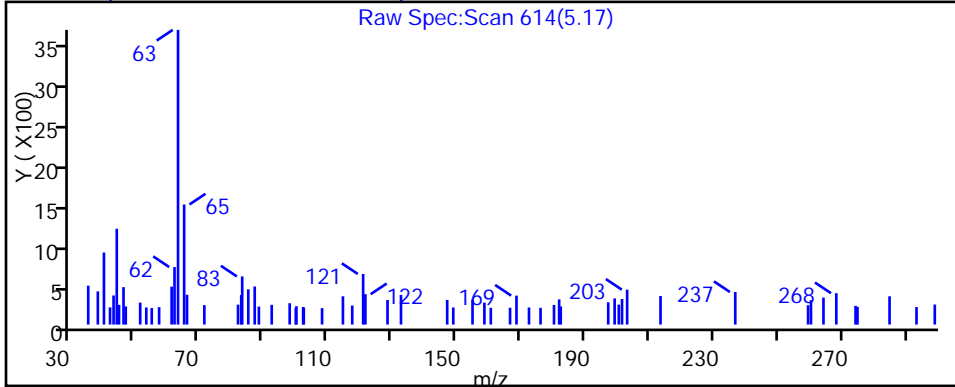
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424023.D

Injection Date: 24-Apr-2015 20:11:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-2

Lab Sample ID: 180-43257-2

Client ID: HD-MW-981-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

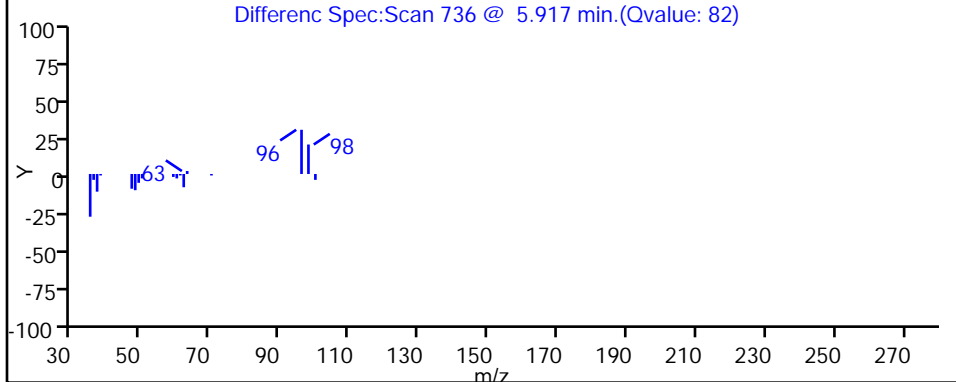
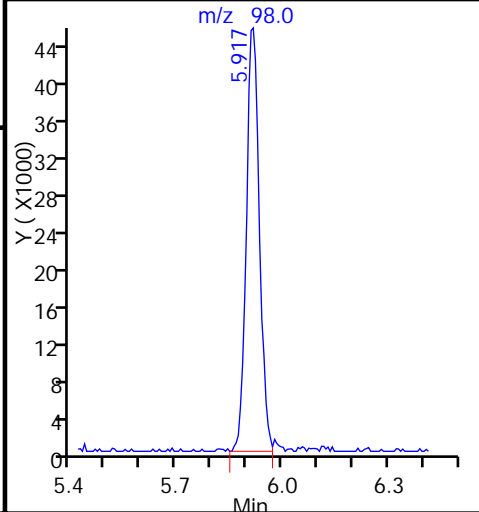
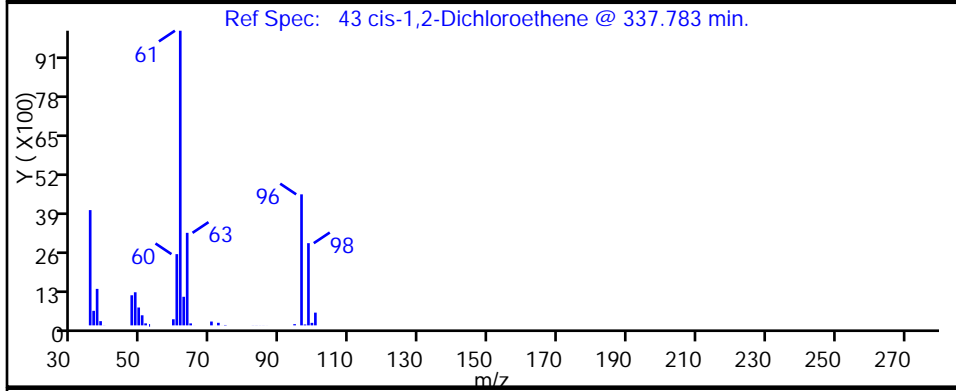
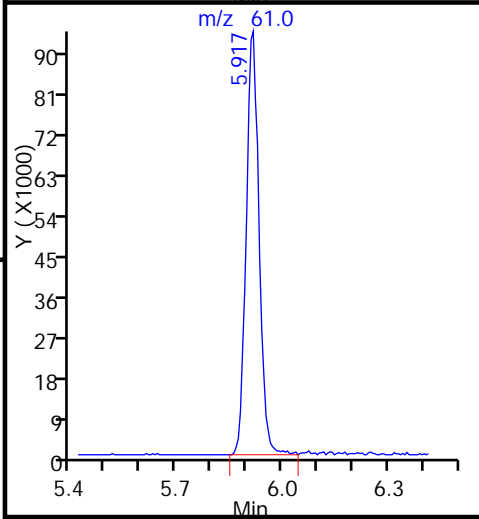
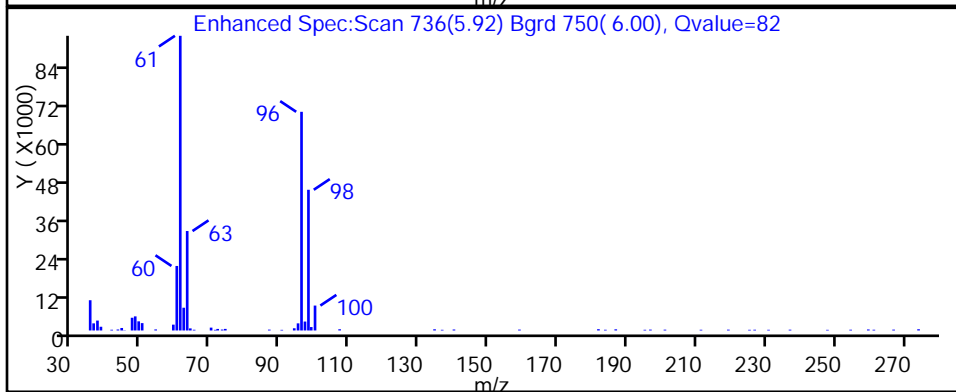
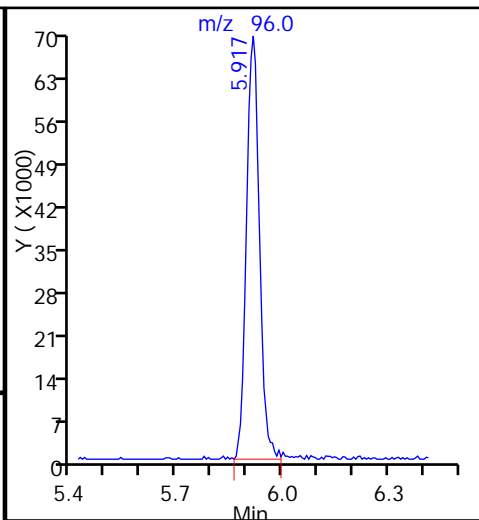
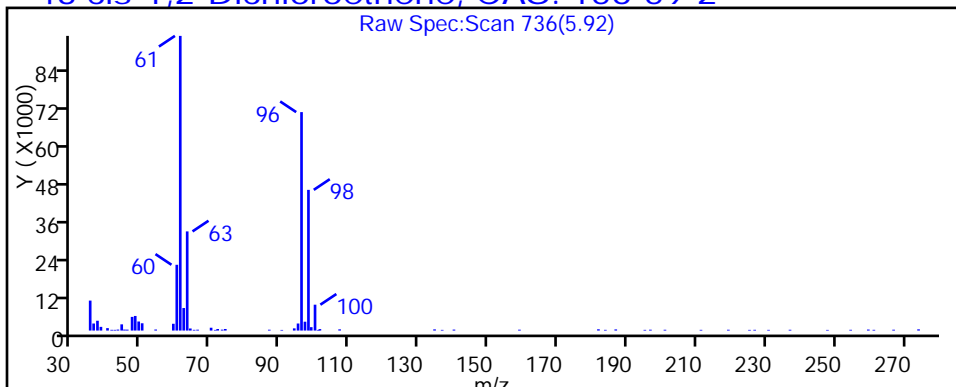
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424023.D

Injection Date: 24-Apr-2015 20:11:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-2

Lab Sample ID: 180-43257-2

Client ID: HD-MW-981-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

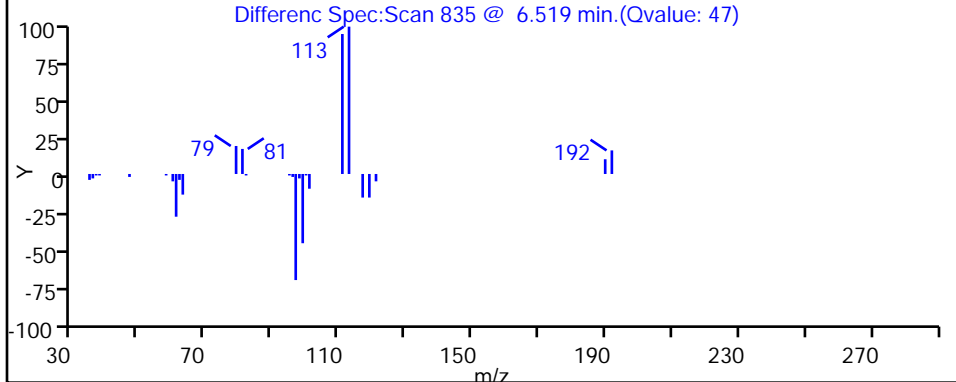
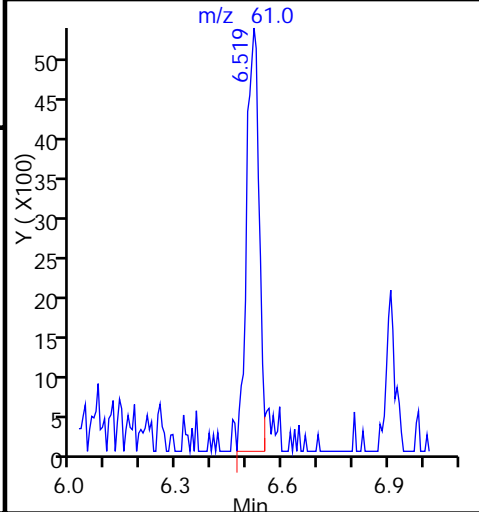
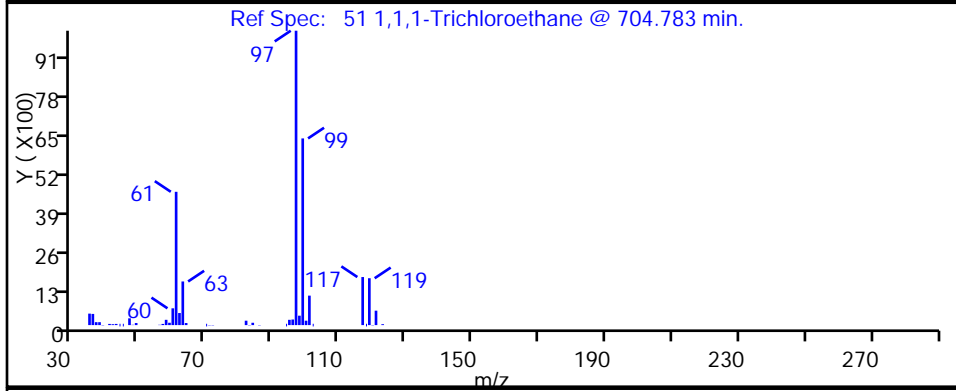
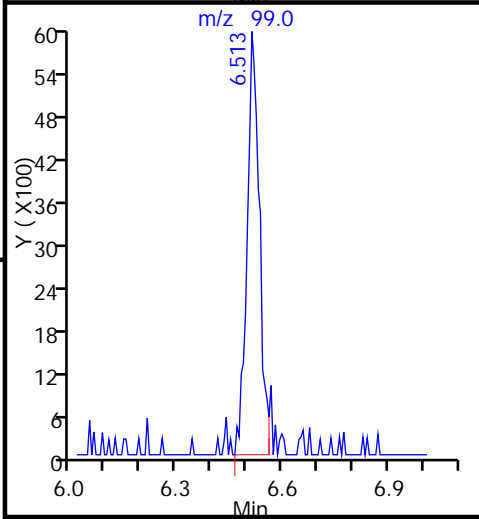
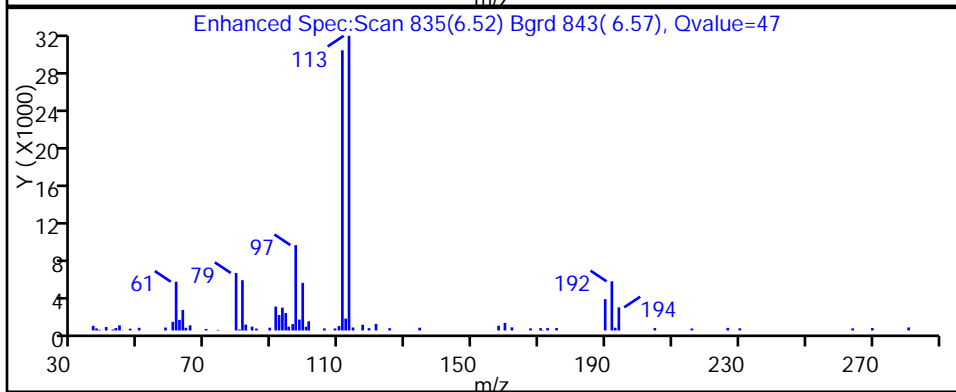
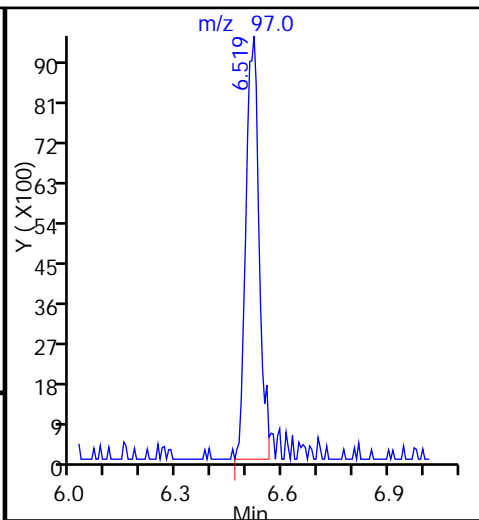
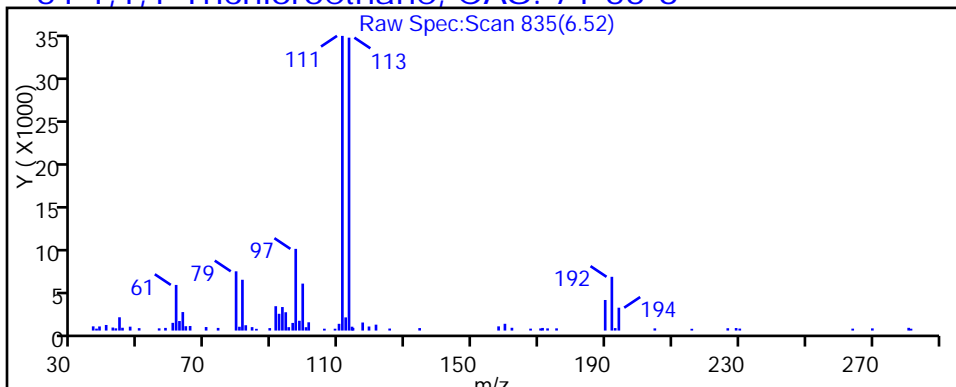
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424023.D

Injection Date: 24-Apr-2015 20:11:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-2

Lab Sample ID: 180-43257-2

Client ID: HD-MW-981-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

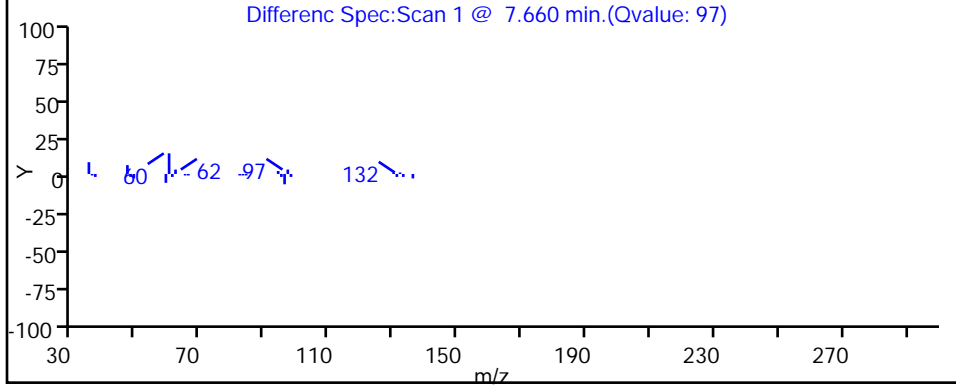
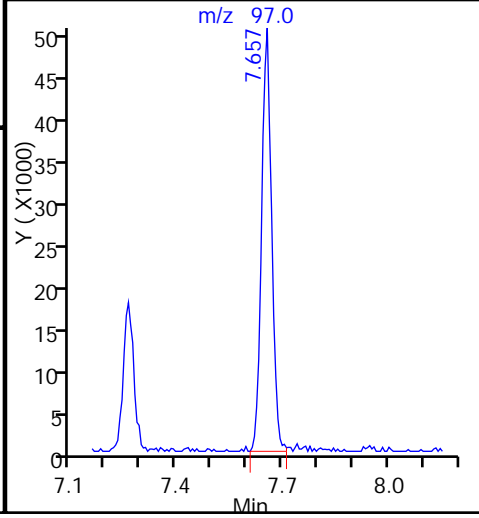
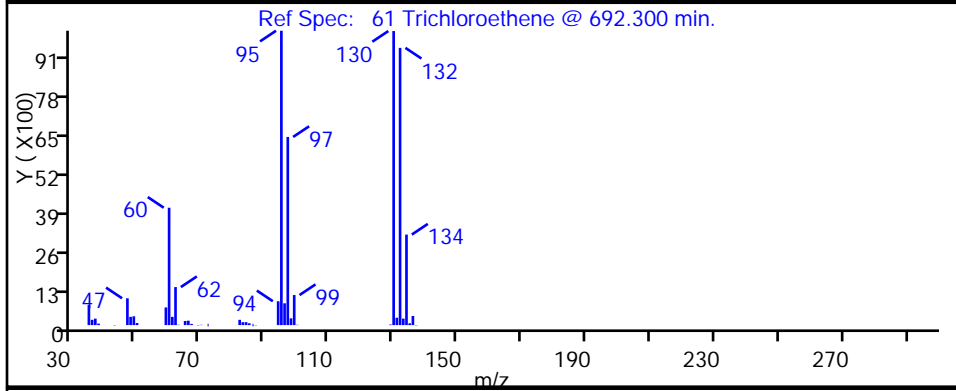
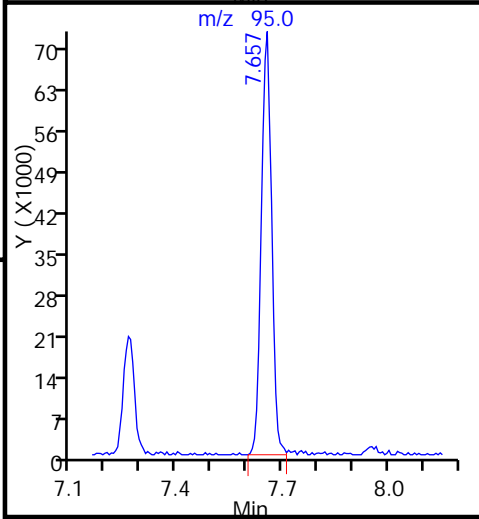
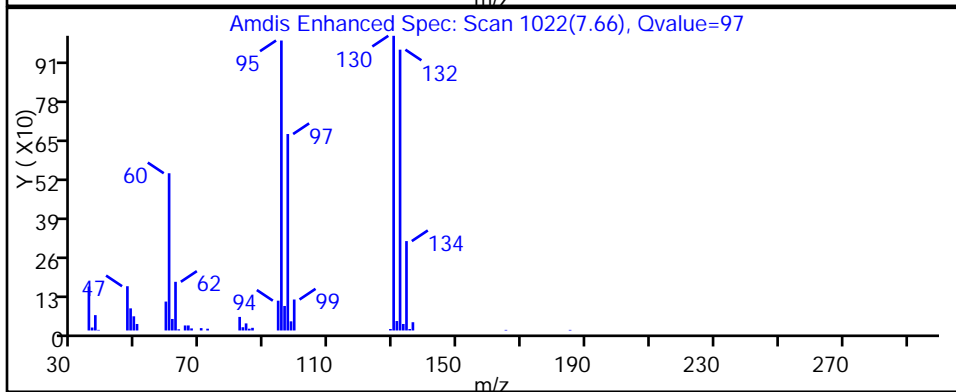
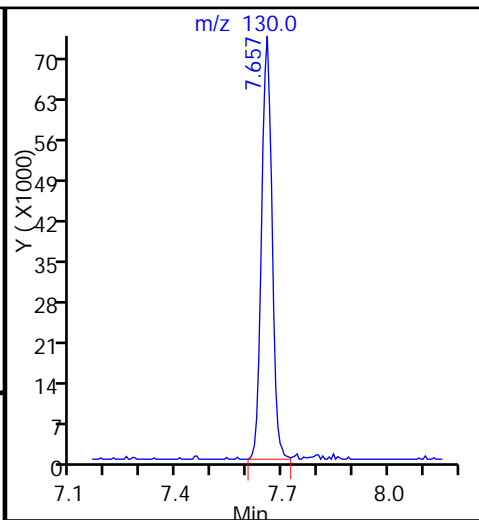
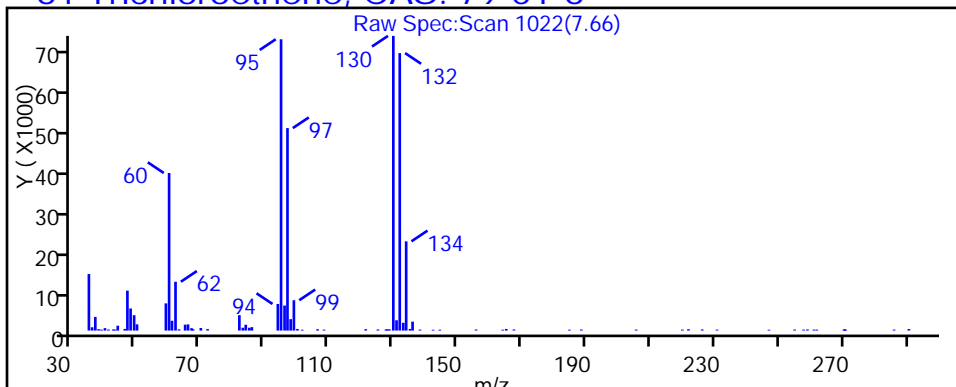
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424023.D

Injection Date: 24-Apr-2015 20:11:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-2

Lab Sample ID: 180-43257-2

Client ID: HD-MW-981-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

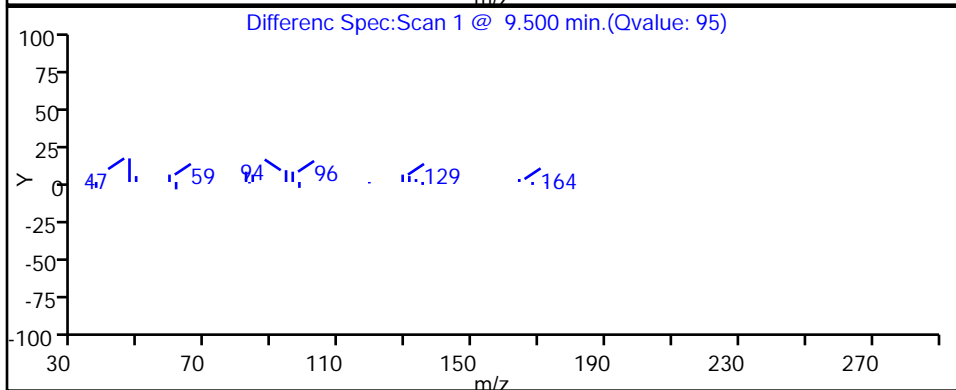
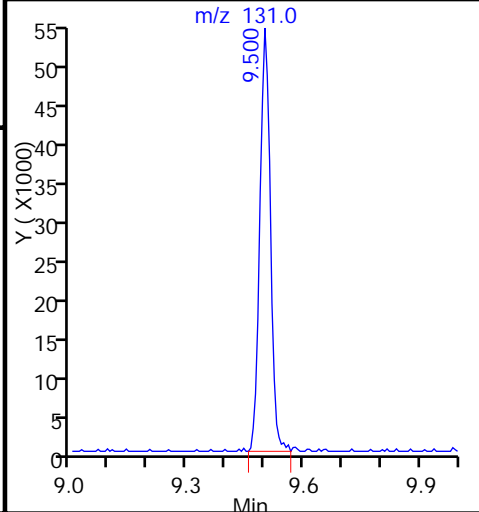
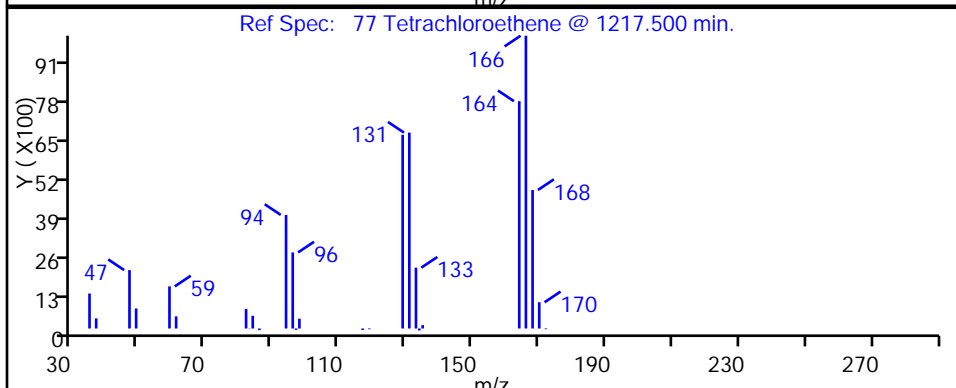
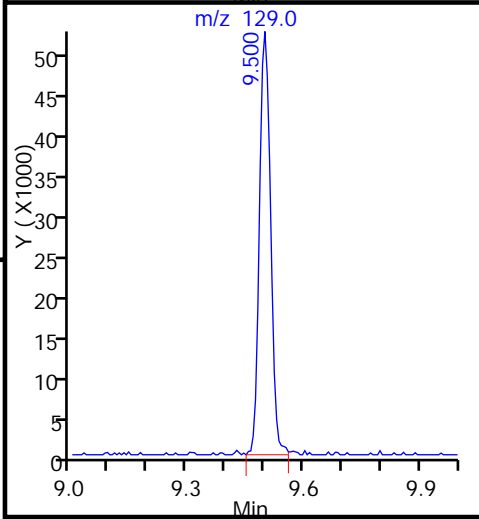
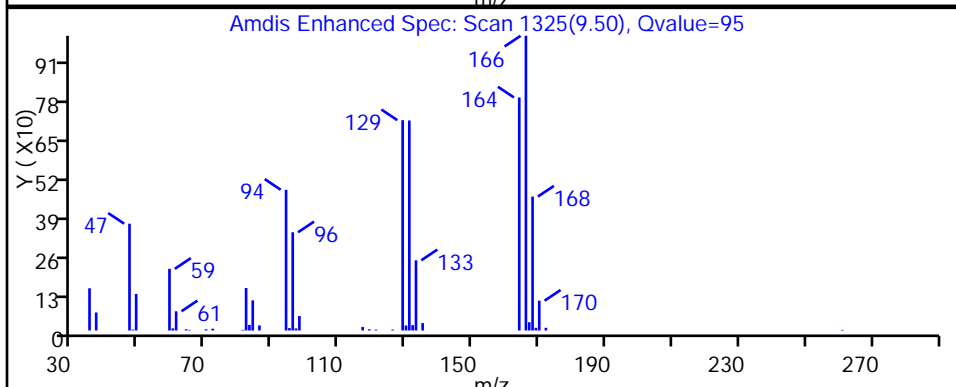
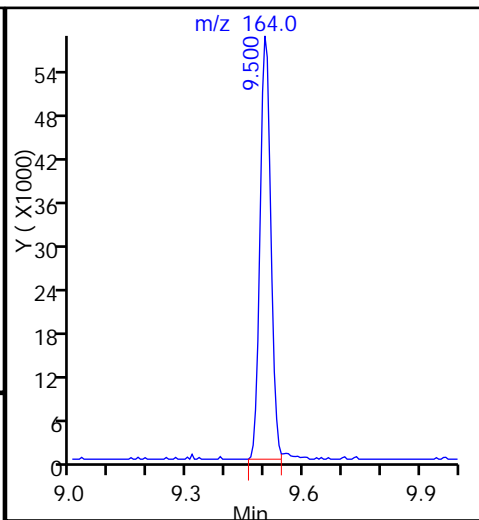
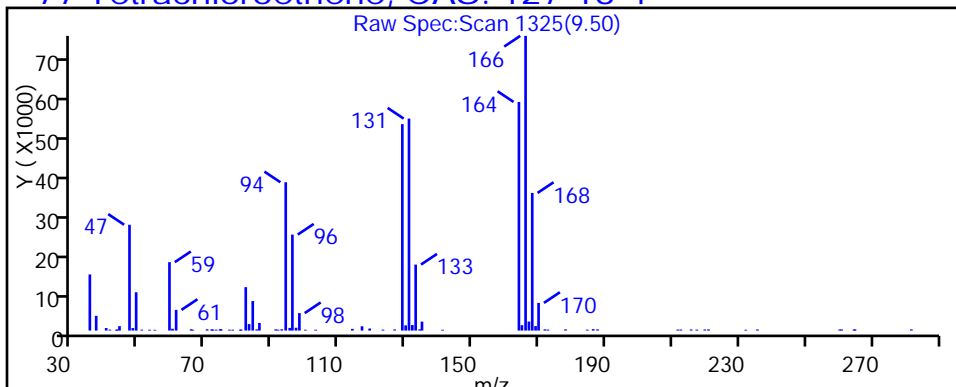
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



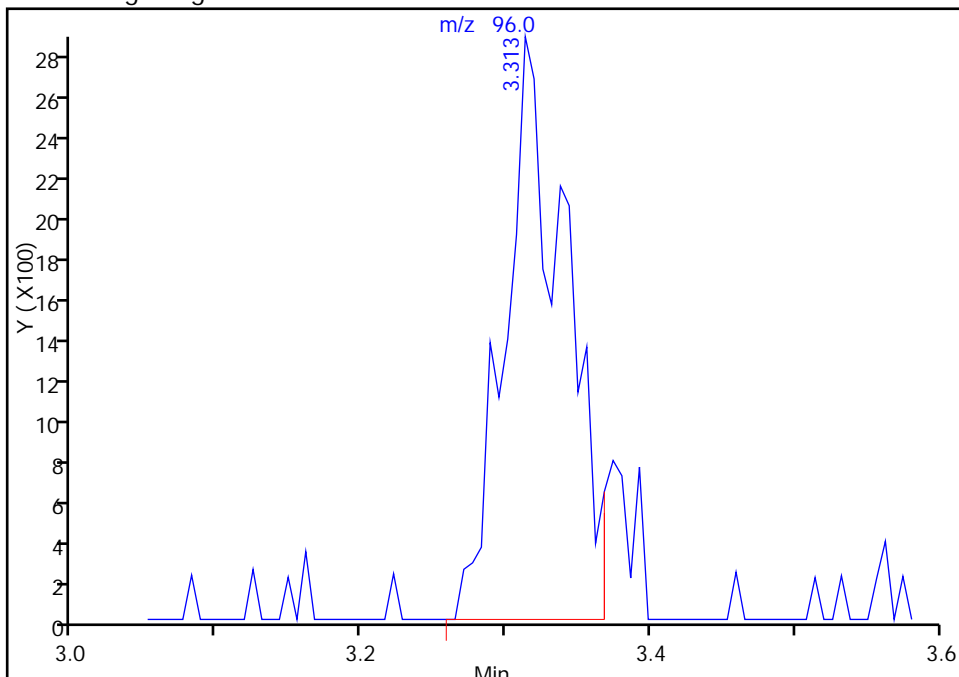
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424023.D
Injection Date: 24-Apr-2015 20:11:30 Instrument ID: CHHP6
Lims ID: 180-43257-E-2 Lab Sample ID: 180-43257-2
Client ID: HD-MW-981-0/1-0
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

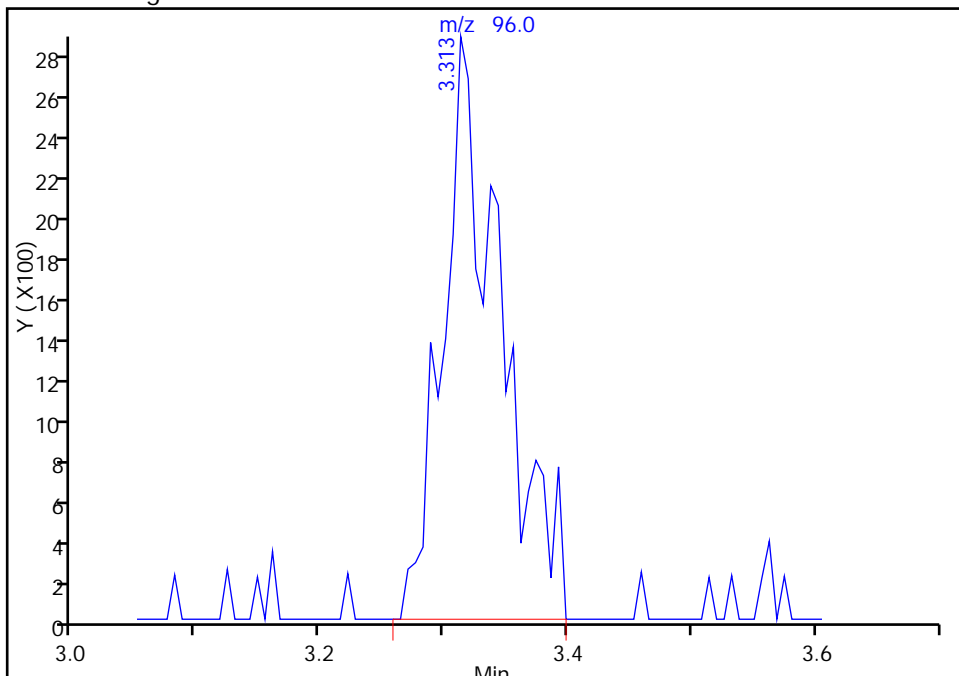
RT: 3.31
Area: 8423
Amount: 2.960526
Amount Units: ng

Processing Integration Results



RT: 3.31
Area: 9316
Amount: 3.274399
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 08:31:59
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-99S-0/1-0 Lab Sample ID: 180-43257-3
 Matrix: Water Lab File ID: 60424025.D
 Analysis Method: 8260C Date Collected: 04/20/2015 10:30
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 20:59
 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.: 139551 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	1.8		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	0.86	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	25		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	0.21	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	2.6		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	25		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	18		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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-99S-0/1-0 Lab Sample ID: 180-43257-3
 Matrix: Water Lab File ID: 60424025.D
 Analysis Method: 8260C Date Collected: 04/20/2015 10:30
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 20:59
 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.: 139551 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)	99		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	98		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424025.D
 Lims ID: 180-43257-E-3 Lab Sample ID: 180-43257-3
 Client ID: HD-MW-99S-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 20:59:30 ALS Bottle#: 24 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43257-E-3
 Misc. Info.: 180-0006620-025
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 25-Apr-2015 08:35:01 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: fergusond

Date: 25-Apr-2015 08:35:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.187	4.205	-0.018	86	151434	1000.0	
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	98	533399	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	90	118449	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	98	189346	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.523	0.006	93	107908	49.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.907	6.906	0.001	69	156958	49.7	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	94	508713	51.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	82	185552	49.6	
12 Chloromethane	50		1.735				ND	
13 Vinyl chloride	62		1.863				ND	
15 Bromomethane	94		2.192				ND	
16 Chloroethane	64		2.344				ND	
22 1,1-Dichloroethene	96	3.323	3.311	0.012	99	24274	8.79	
24 Acetone	43	3.390	3.384	0.006	50	4399	4.90	M
26 Carbon disulfide	76		3.603				ND	
31 Methylene Chloride	84		4.090				ND	
33 Acrylonitrile	53		4.461				ND	
34 trans-1,2-Dichloroethene	96	4.528	4.528	0.000	49	2148	0.6751	
35 Methyl tert-butyl ether	73		4.534				ND	
37 1,1-Dichloroethane	63	5.167	5.160	0.007	95	25936	4.29	M
43 cis-1,2-Dichloroethene	96	5.915	5.902	0.013	82	417103	123.0	
44 2-Butanone (MEK)	43		5.909				ND	
48 Chlorobromomethane	128		6.201				ND	
50 Chloroform	83	6.341	6.347	-0.006	58	5002	1.04	
51 1,1,1-Trichloroethane	97	6.511	6.511	0.000	95	44009	13.2	
53 Carbon tetrachloride	117		6.687				ND	
56 Benzene	78		6.906				ND	
57 1,2-Dichloroethane	62		6.991				ND	
61 Trichloroethene	130	7.655	7.655	0.000	96	359249	123.5	
64 1,2-Dichloropropane	63		7.928				ND	
65 1,4-Dioxane	88		8.013				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.208				ND	
71 cis-1,3-Dichloropropene	75		8.646				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.792				ND	
73 Toluene	91	8.987	8.981	0.006	94	6035	0.4926	
74 trans-1,3-Dichloropropene	75		9.224				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164	9.498	9.498	0.000	94	179757	88.5	
79 2-Hexanone	43		9.626				ND	
81 Chlorodibromomethane	129		9.802				ND	
82 Ethylene Dibromide	107		9.918				ND	
84 Chlorobenzene	112		10.404				ND	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.502				ND	
88 m-Xylene & p-Xylene	106		10.629				ND	
89 o-Xylene	106		11.013				ND	
90 Styrene	104		11.037				ND	
91 Bromoform	173		11.219				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424025.D

Injection Date: 24-Apr-2015 20:59:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-E-3

Lab Sample ID: 180-43257-3

Worklist Smp#: 25

Client ID: HD-MW-99S-0/1-0

Purge Vol: 5.000 mL

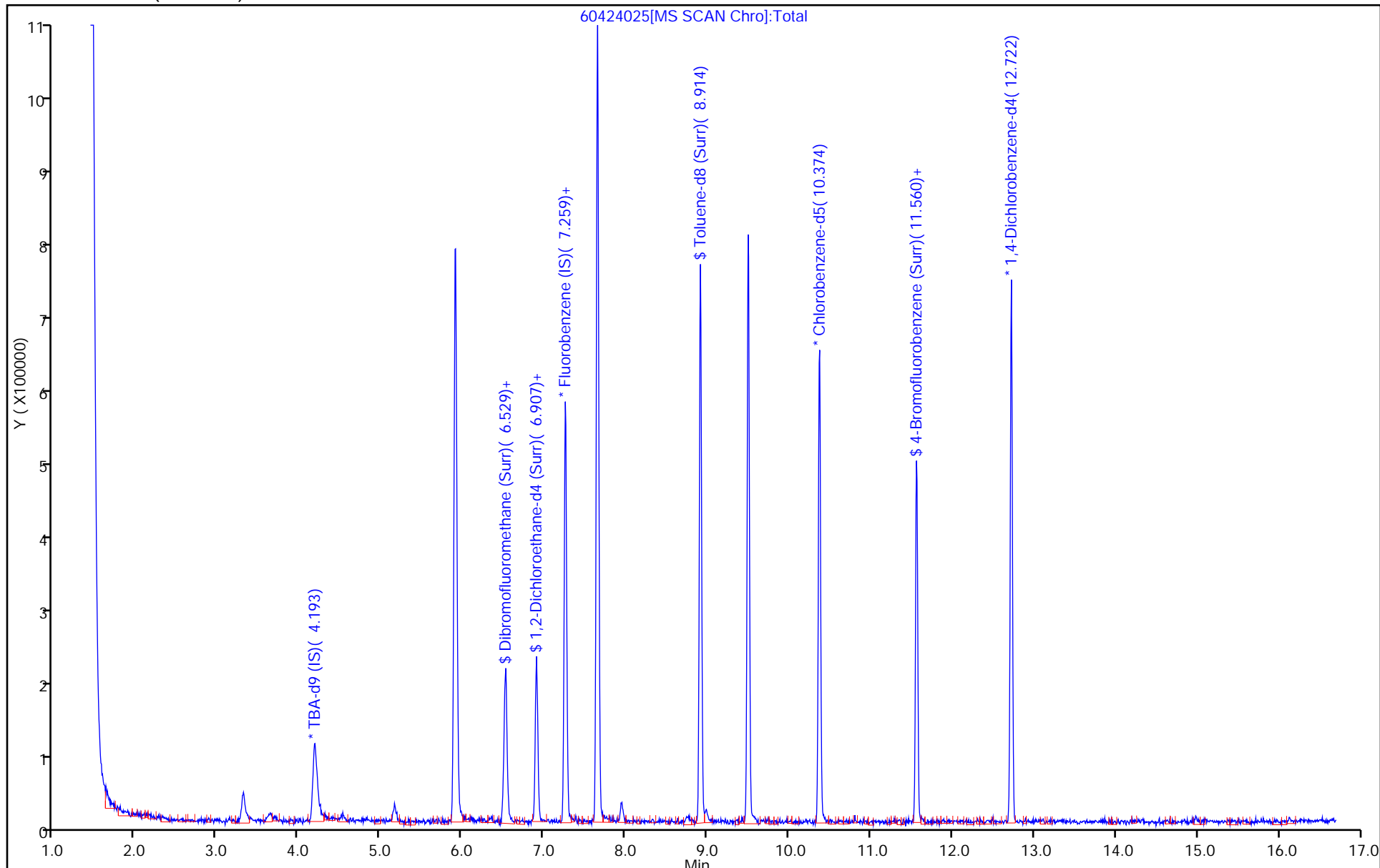
Dil. Factor: 1.0000

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\20150424-6620.b\60424025.D

Injection Date: 24-Apr-2015 20:59:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-3

Lab Sample ID: 180-43257-3

Client ID: HD-MW-99S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

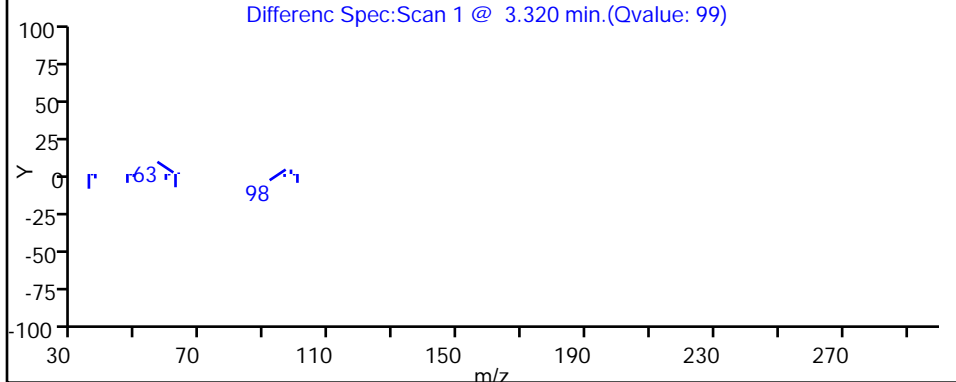
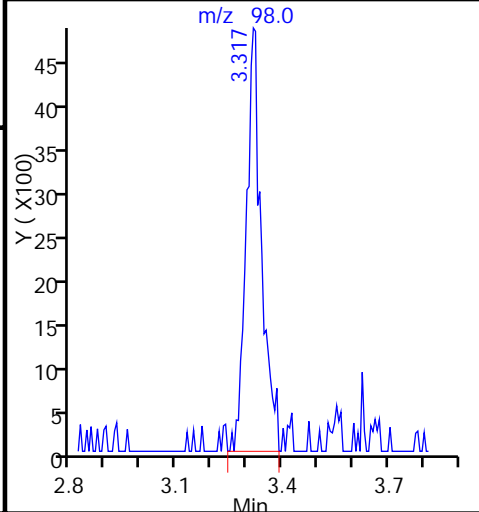
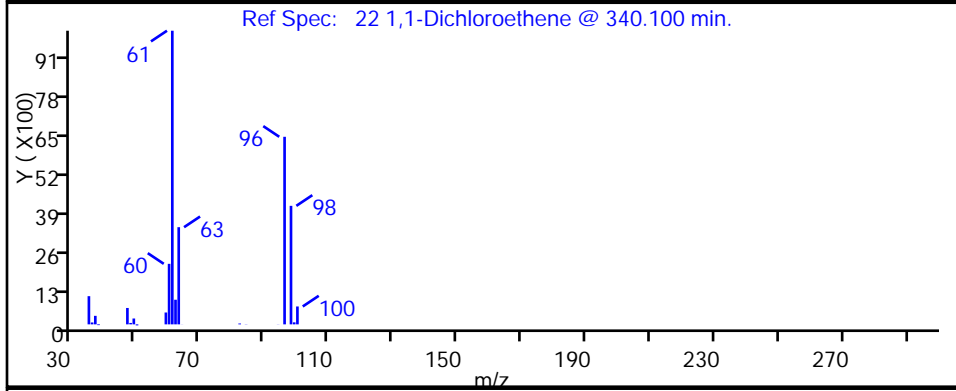
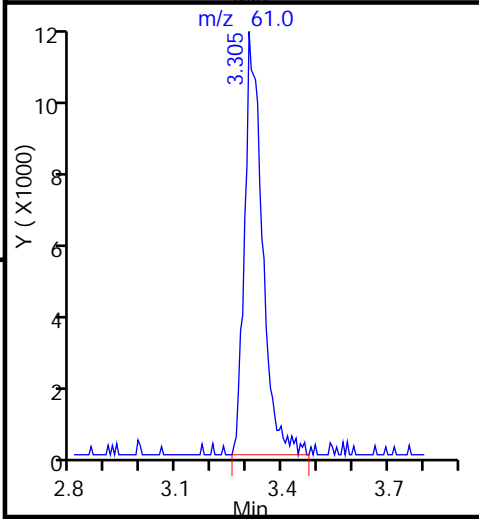
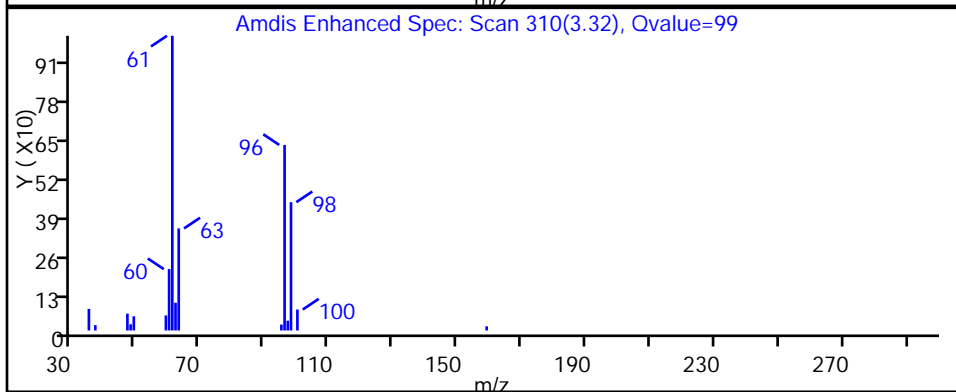
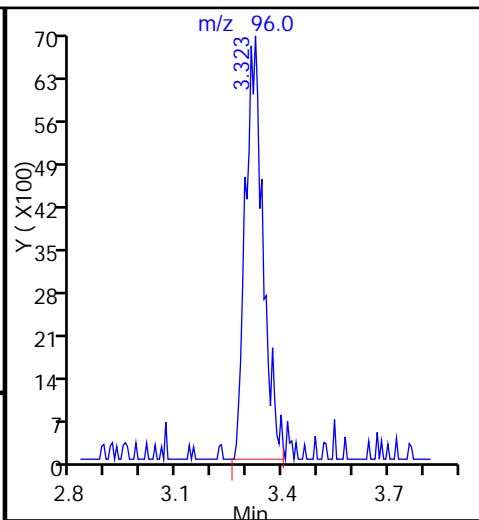
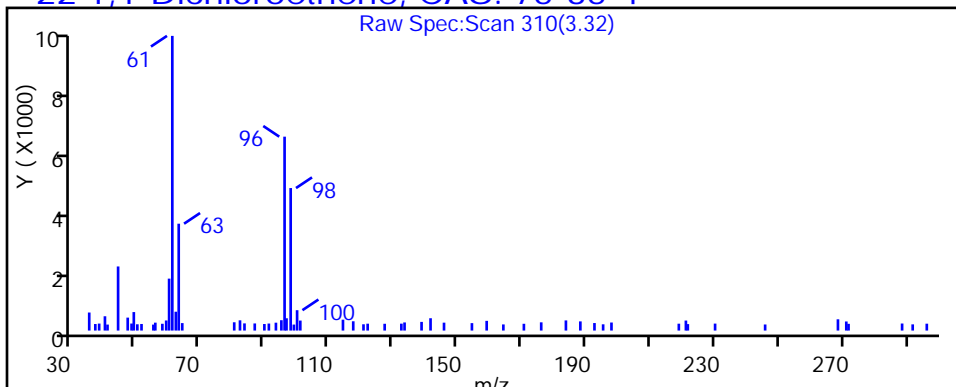
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424025.D

Injection Date: 24-Apr-2015 20:59:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-3

Lab Sample ID: 180-43257-3

Client ID: HD-MW-99S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

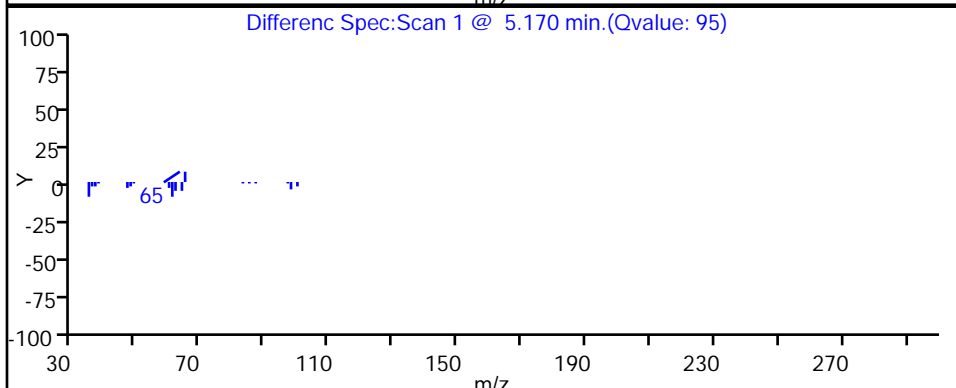
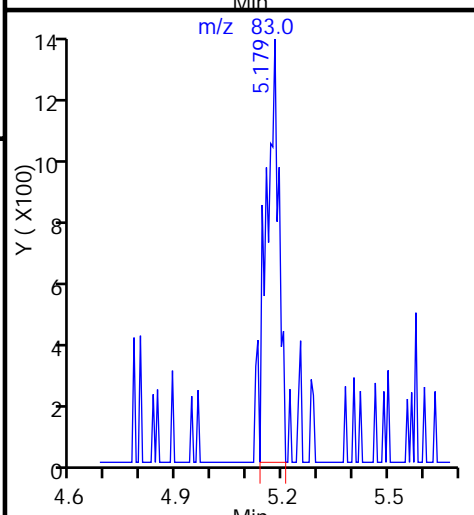
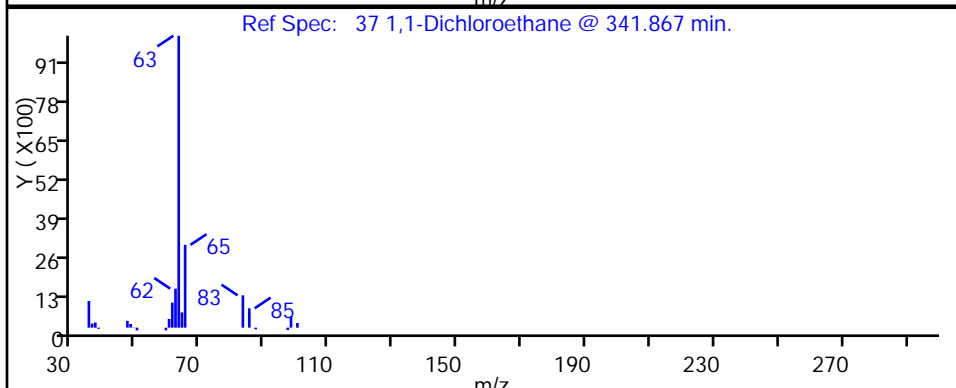
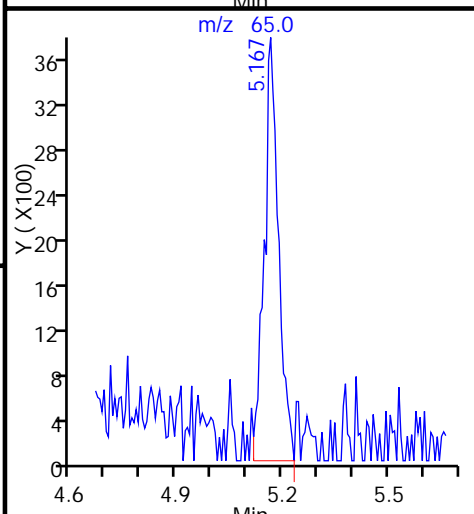
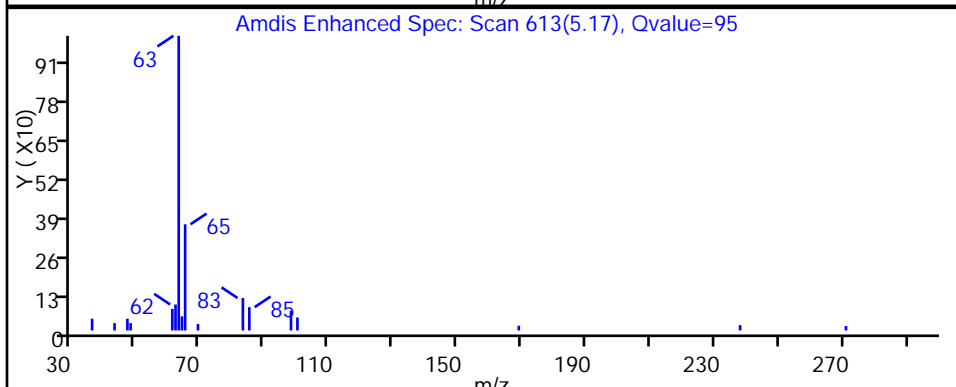
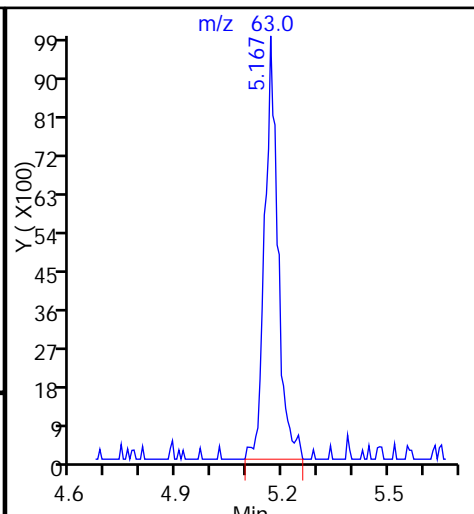
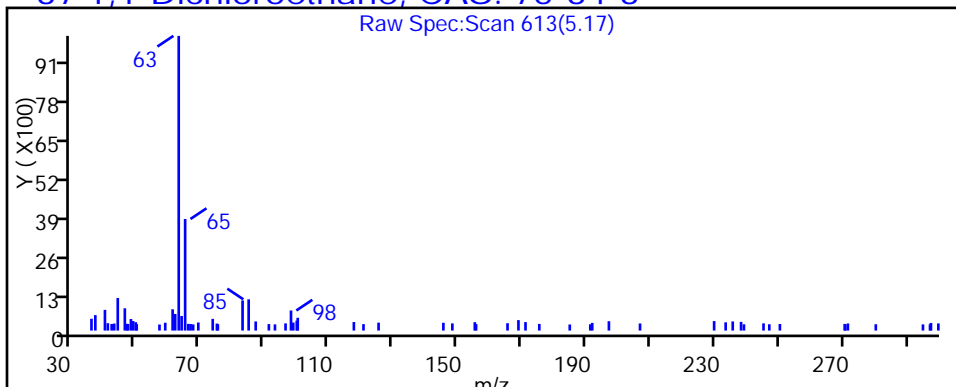
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424025.D

Injection Date: 24-Apr-2015 20:59:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-3

Lab Sample ID: 180-43257-3

Client ID: HD-MW-99S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

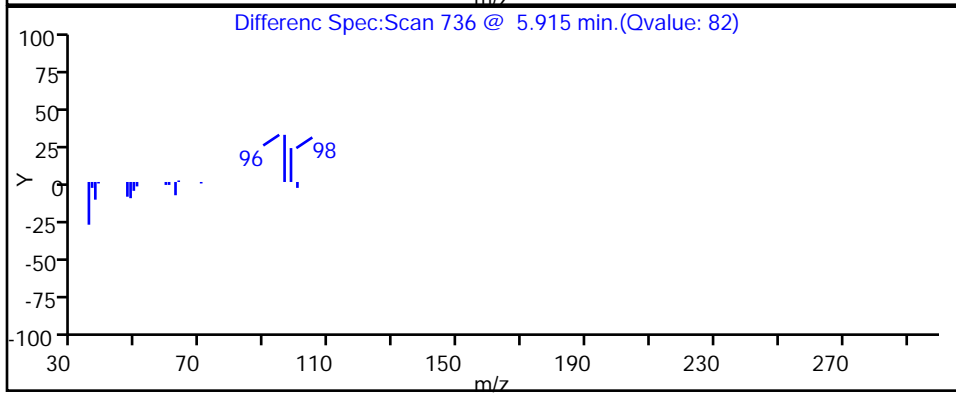
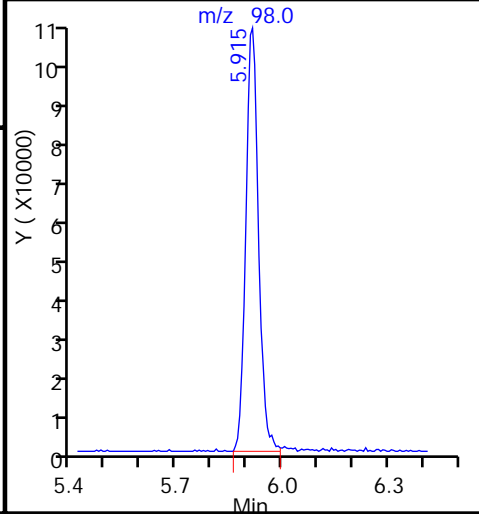
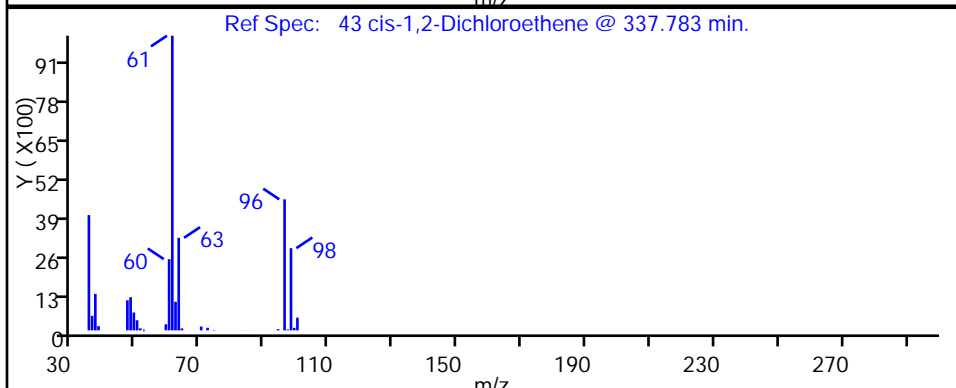
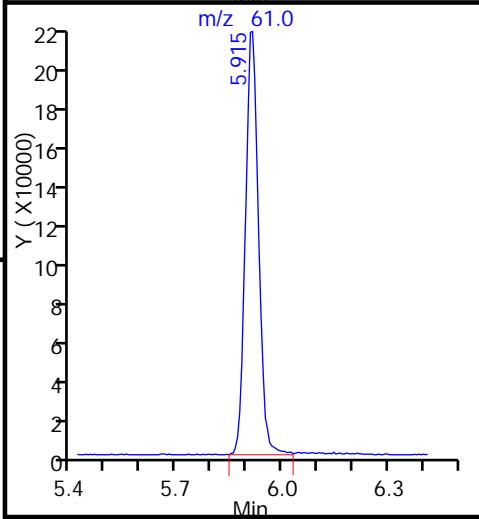
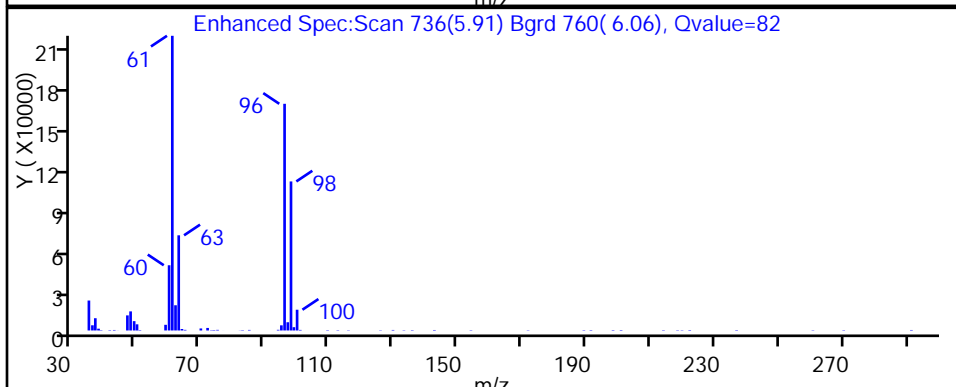
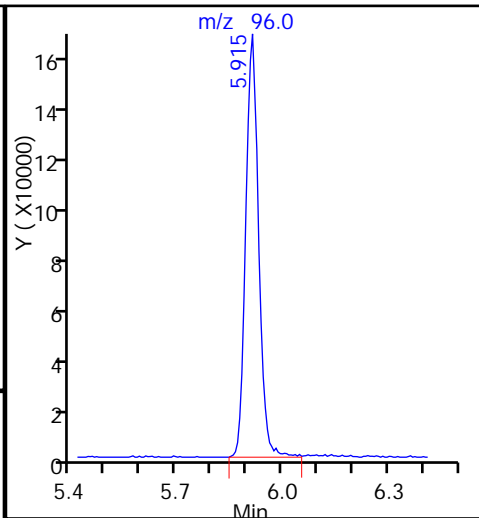
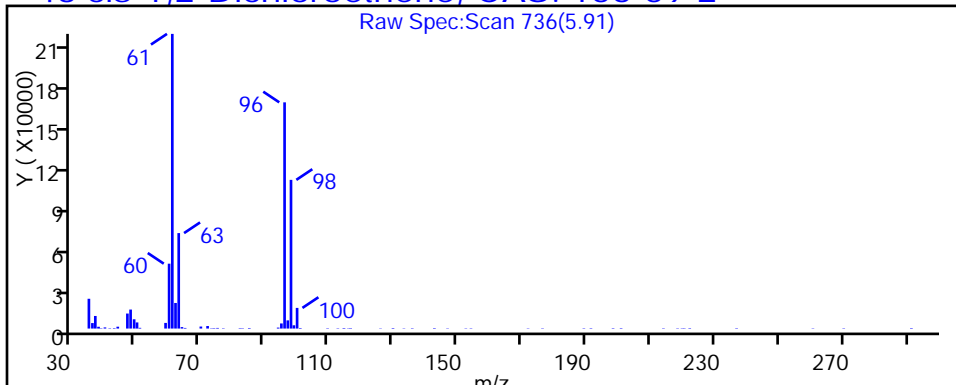
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424025.D

Injection Date: 24-Apr-2015 20:59:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-3

Lab Sample ID: 180-43257-3

Client ID: HD-MW-99S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

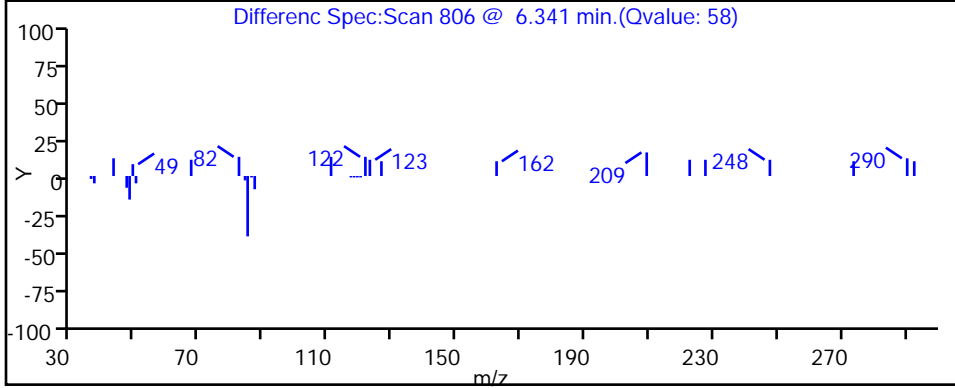
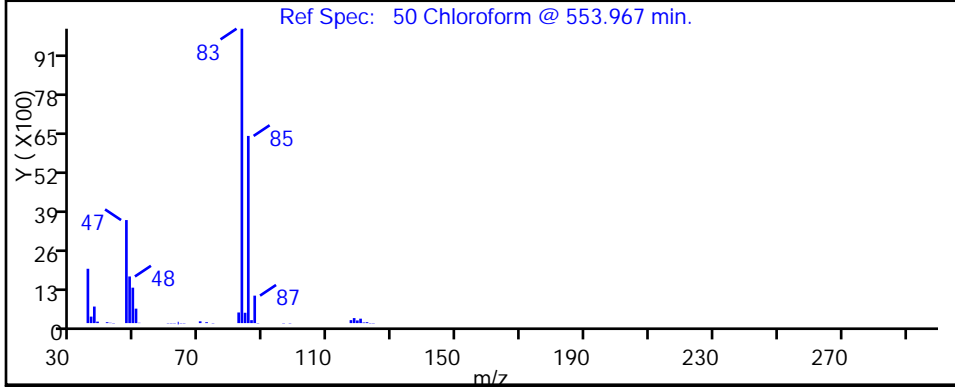
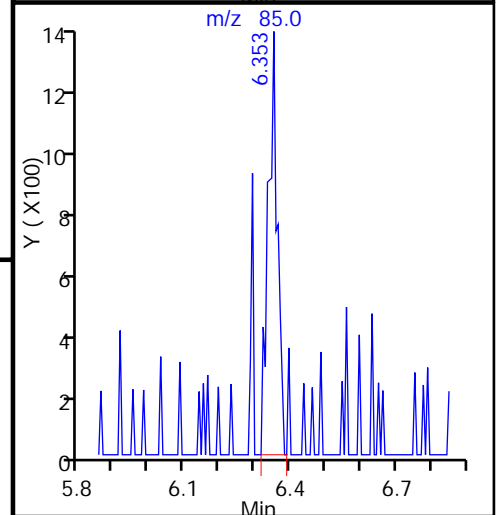
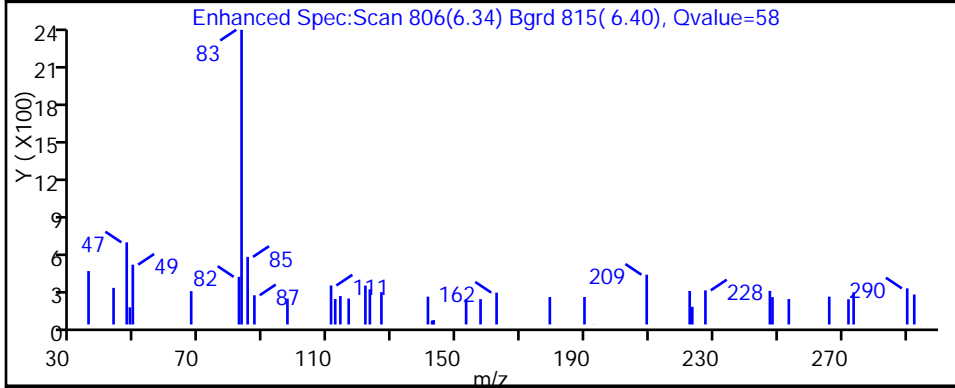
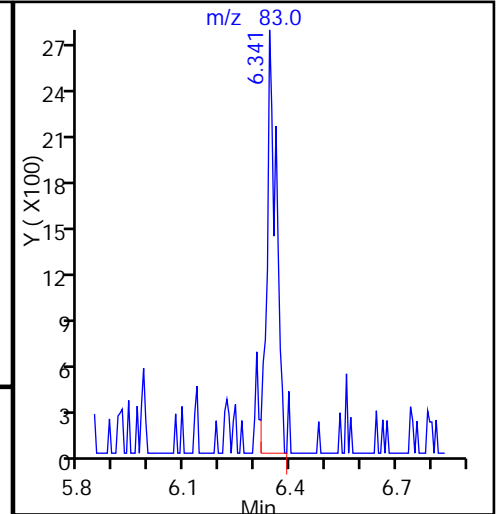
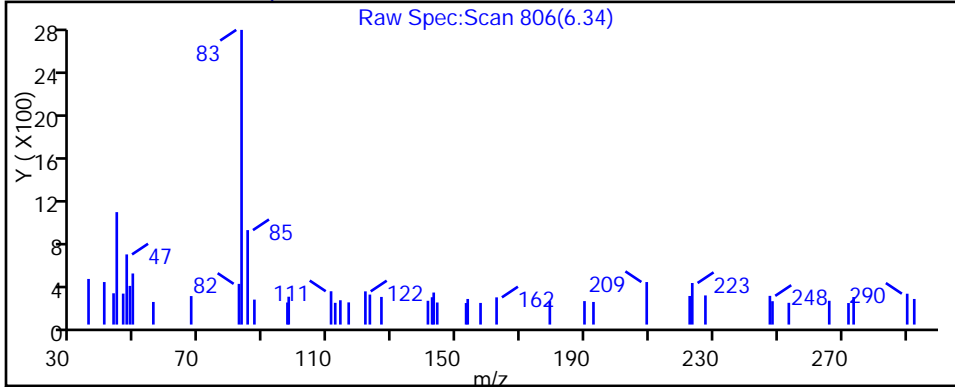
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424025.D

Injection Date: 24-Apr-2015 20:59:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-3

Lab Sample ID: 180-43257-3

Client ID: HD-MW-99S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

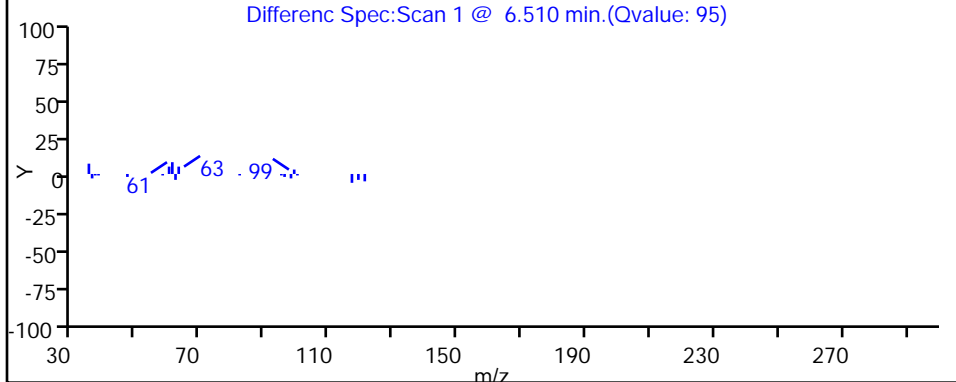
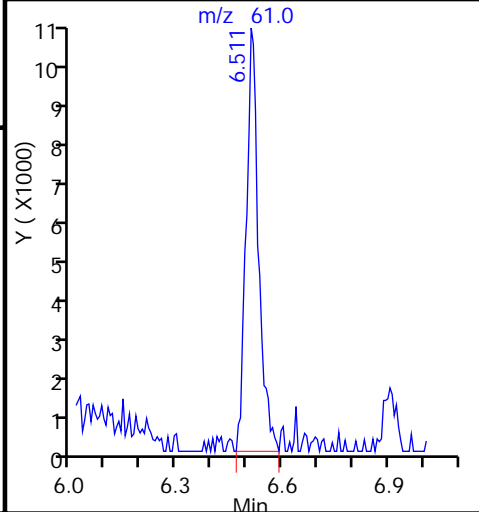
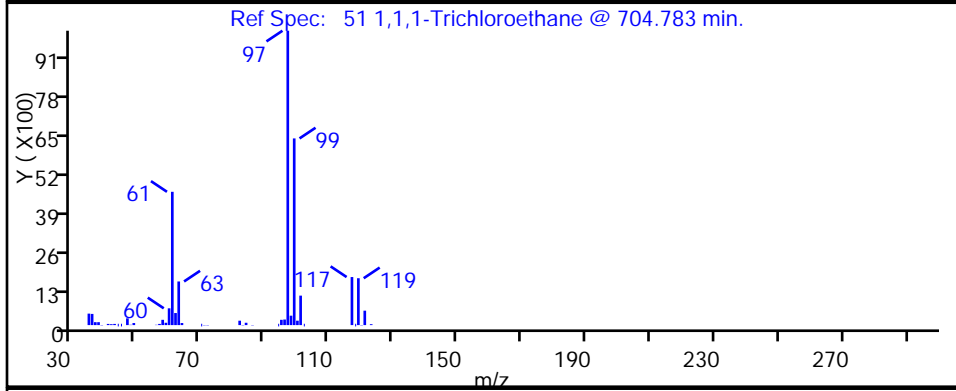
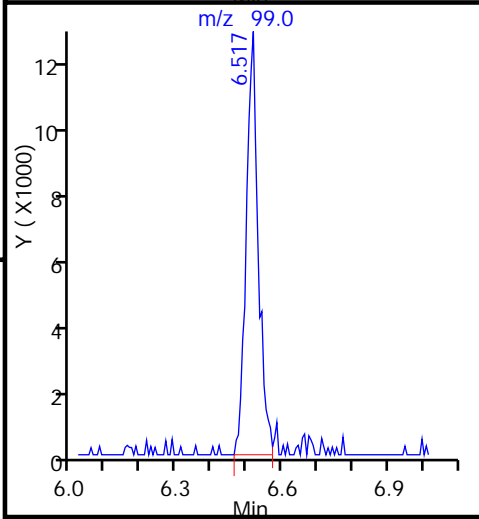
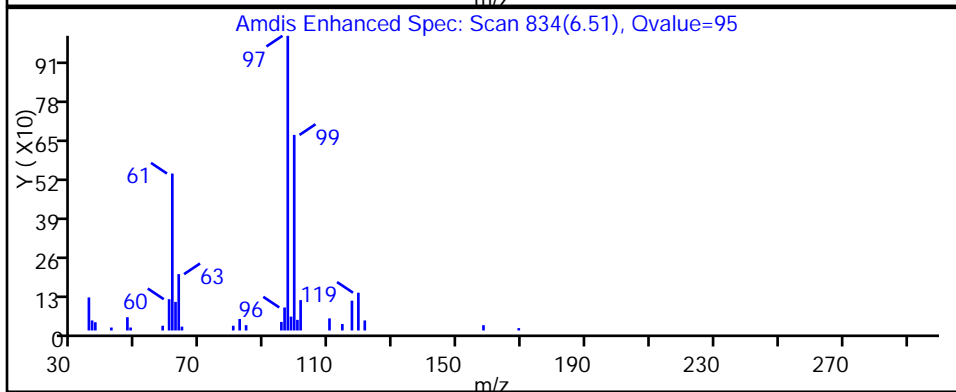
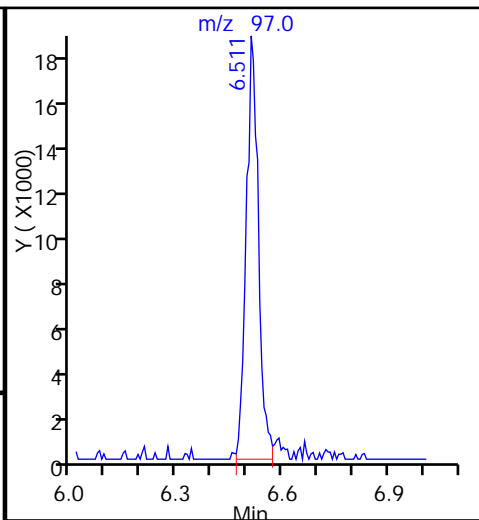
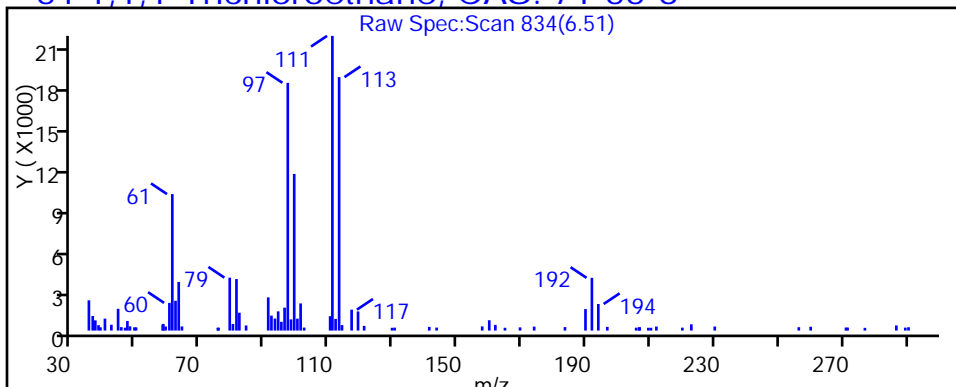
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424025.D

Injection Date: 24-Apr-2015 20:59:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-3

Lab Sample ID: 180-43257-3

Client ID: HD-MW-99S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

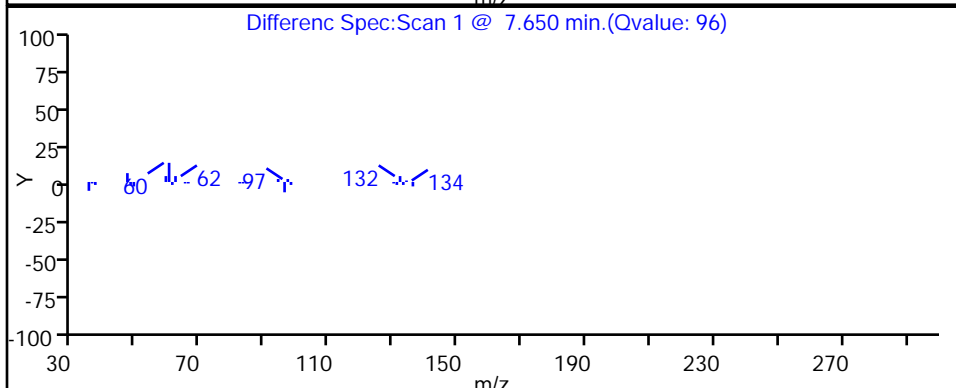
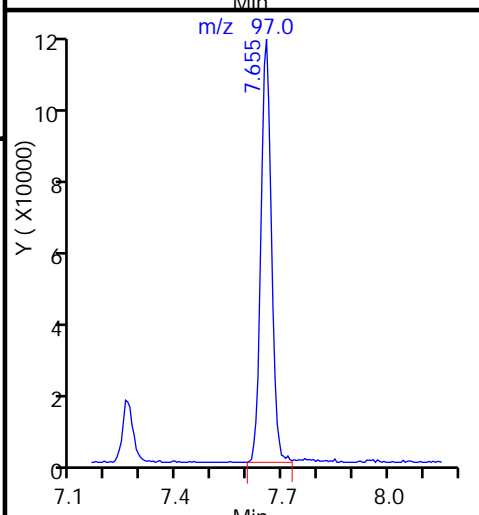
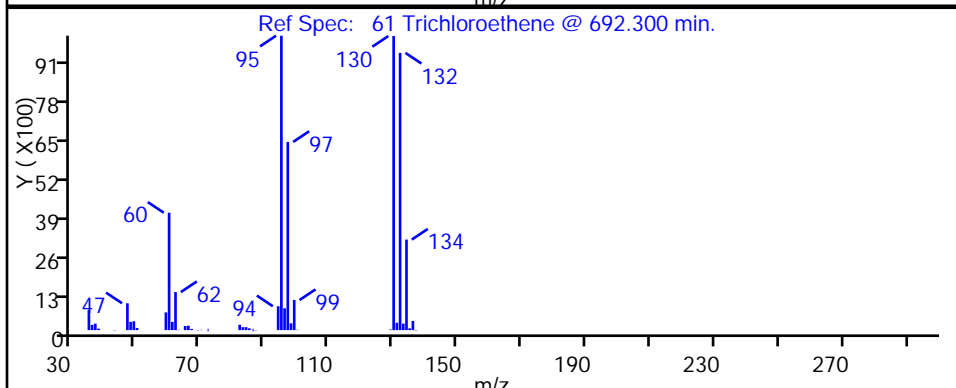
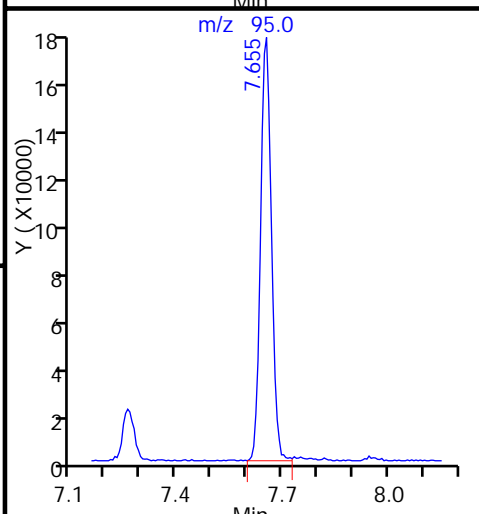
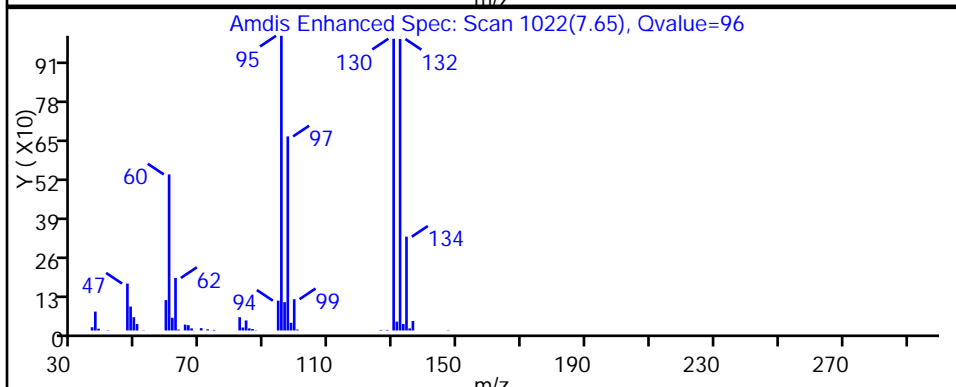
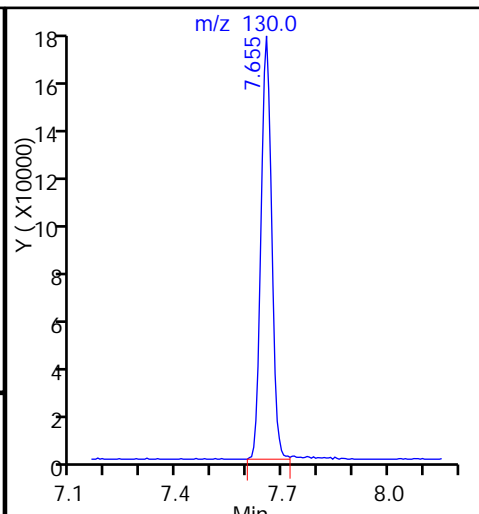
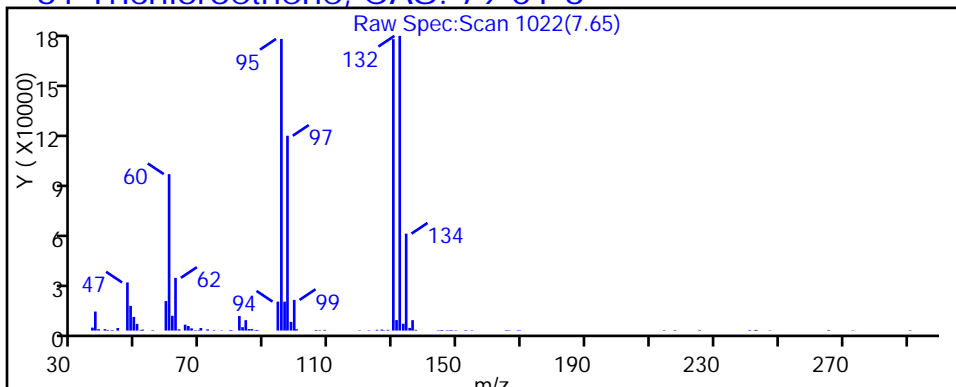
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424025.D

Injection Date: 24-Apr-2015 20:59:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-3

Lab Sample ID: 180-43257-3

Client ID: HD-MW-99S-0/1-0

Operator ID: 001562

ALS Bottle#: 24

Worklist Smp#: 25

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

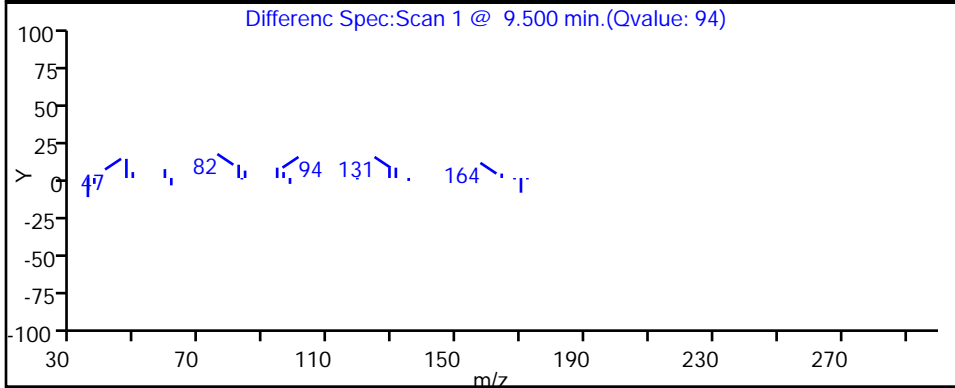
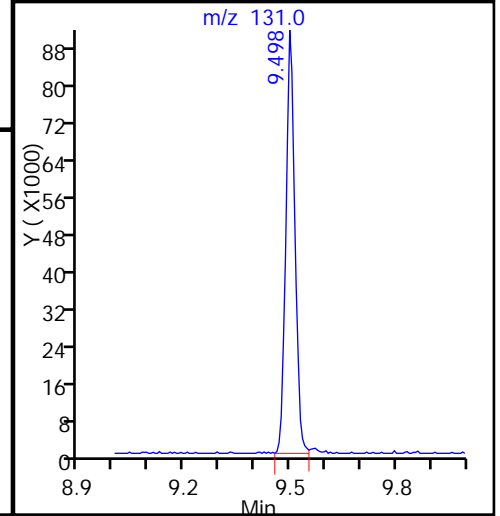
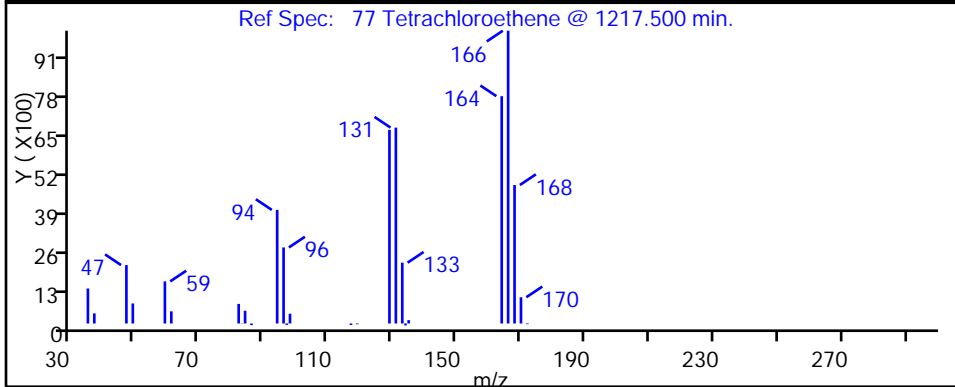
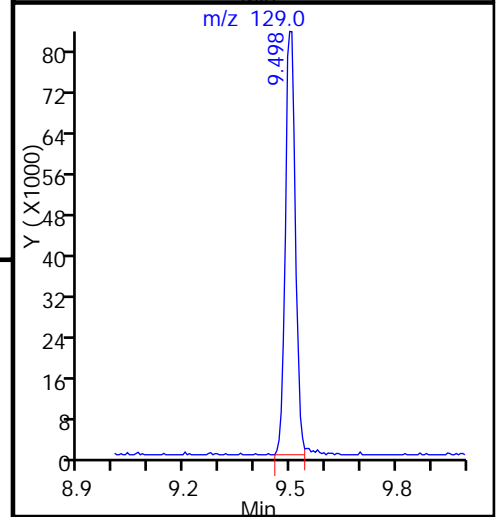
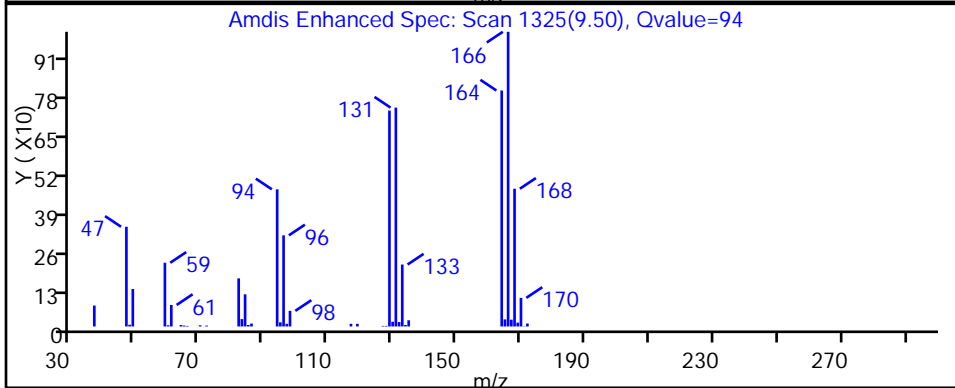
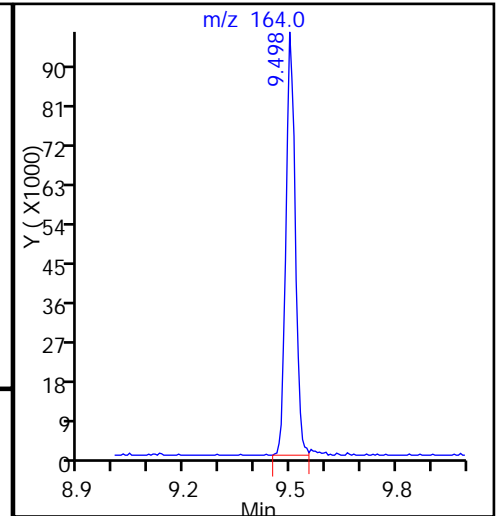
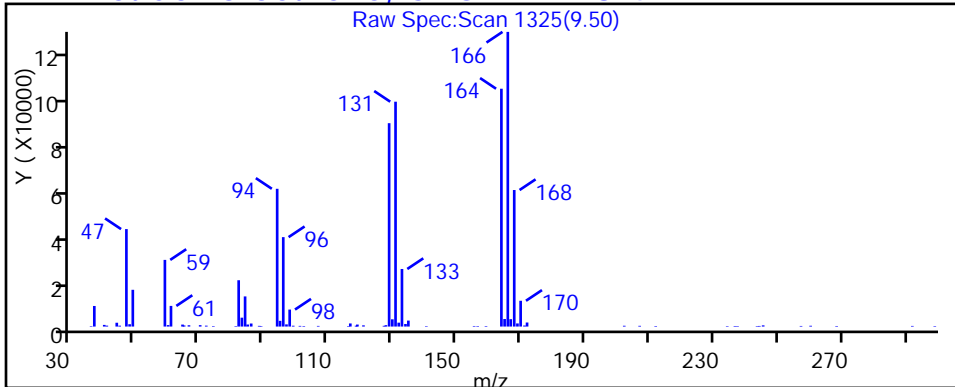
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



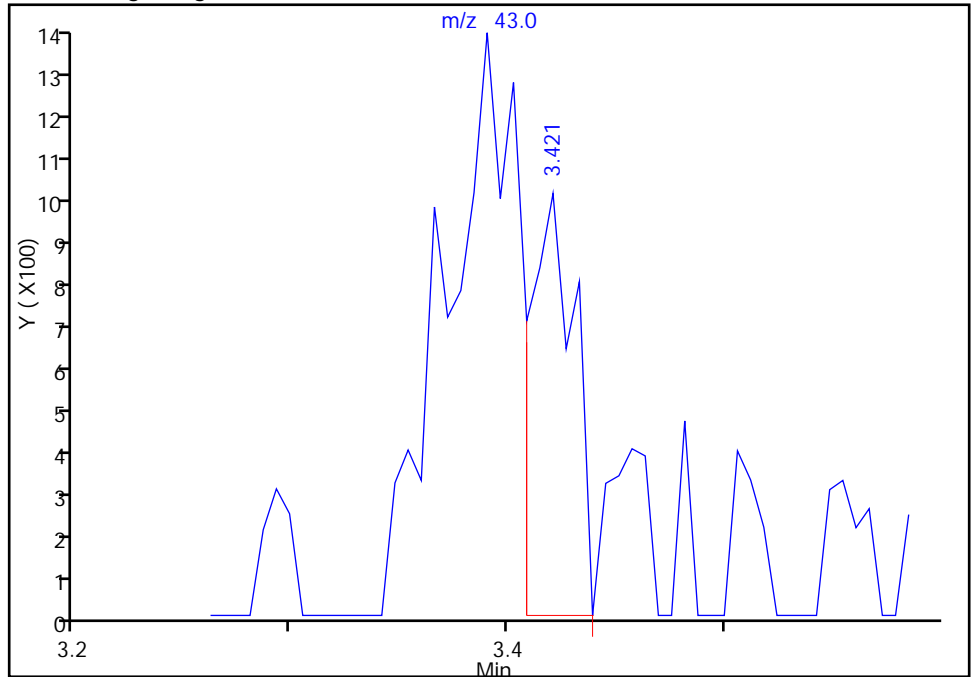
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424025.D
Injection Date: 24-Apr-2015 20:59:30 Instrument ID: CHHP6
Lims ID: 180-43257-E-3 Lab Sample ID: 180-43257-3
Client ID: HD-MW-99S-0/1-0
Operator ID: 001562 ALS Bottle#: 24 Worklist Smp#: 25
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

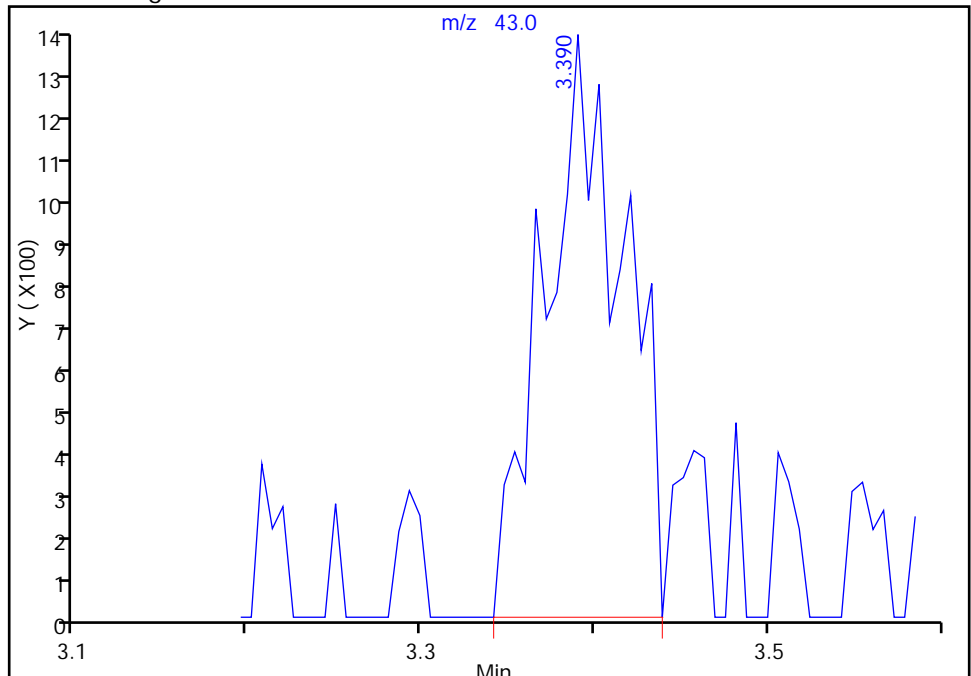
RT: 3.42
Area: 1441
Amount: 1.606641
Amount Units: ng

Processing Integration Results



RT: 3.39
Area: 4399
Amount: 4.904660
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 08:35:01
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

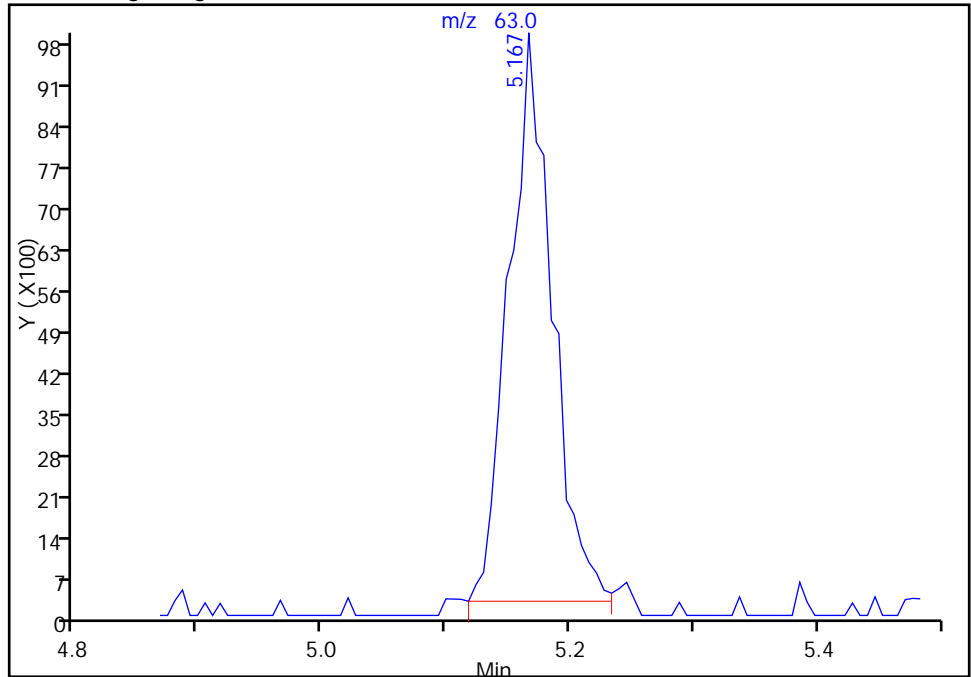
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424025.D
Injection Date: 24-Apr-2015 20:59:30 Instrument ID: CHHP6
Lims ID: 180-43257-E-3 Lab Sample ID: 180-43257-3
Client ID: HD-MW-99S-0/1-0
Operator ID: 001562 ALS Bottle#: 24 Worklist Smp#: 25
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

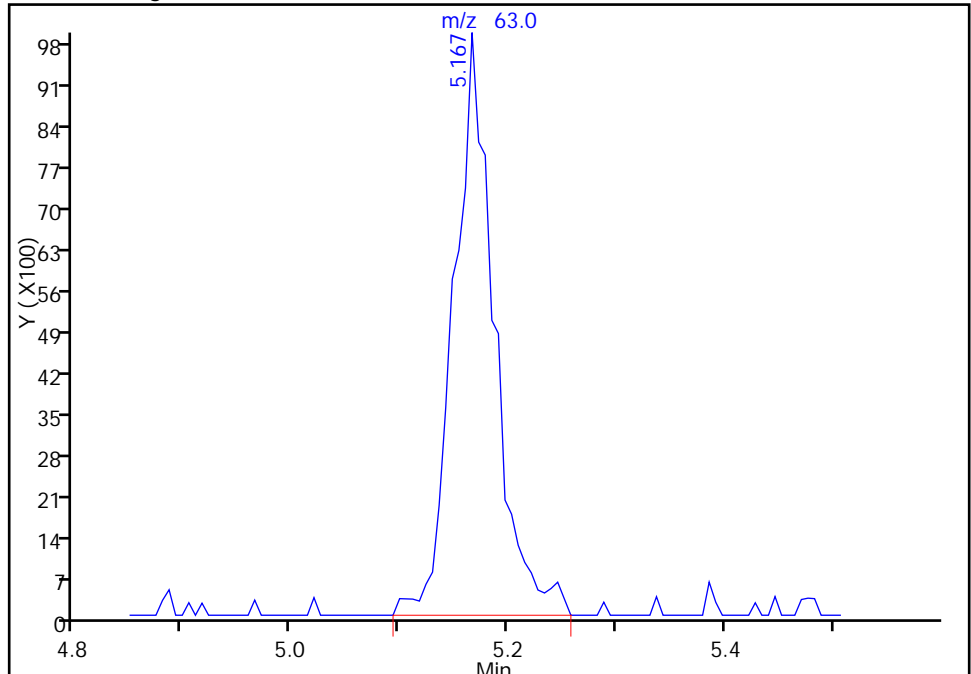
RT: 5.17
Area: 23399
Amount: 3.869646
Amount Units: ng

Processing Integration Results



RT: 5.17
Area: 25936
Amount: 4.289207
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 08:35:01
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-145A-0/1-0 Lab Sample ID: 180-43257-4
 Matrix: Water Lab File ID: 60424009.D
 Analysis Method: 8260C Date Collected: 04/20/2015 11:42
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 14:34
 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.: 139551 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	0.53	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	0.18	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10		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	0.21	J	1.0	0.17
71-55-6	1,1,1-Trichloroethane	0.43	J	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	8.2		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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-145A-0/1-0 Lab Sample ID: 180-43257-4
 Matrix: Water Lab File ID: 60424009.D
 Analysis Method: 8260C Date Collected: 04/20/2015 11:42
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 14:34
 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.: 139551 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)	97		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	96		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D
 Lims ID: 180-43257-C-4 Lab Sample ID: 180-43257-4
 Client ID: HD-MW-145A-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 14:34:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43257-C-4
 Misc. Info.: 180-0006620-009
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 24-Apr-2015 15:01:49 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK032

First Level Reviewer: fergusond

Date: 24-Apr-2015 15:02:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.189	4.205	-0.016	89	138886	1000.0	
* 2 Fluorobenzene (IS)	96	7.261	7.259	0.002	98	541238	50.0	
* 3 Chlorobenzene-d5	119	10.376	10.374	0.002	90	121279	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.724	12.722	0.002	97	195028	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.531	6.523	0.008	91	106753	47.9	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.908	6.906	0.002	68	155982	48.7	
\$ 7 Toluene-d8 (Surr)	98	8.916	8.914	0.002	93	519901	51.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.562	11.560	0.002	87	187549	49.0	
11 Dichlorodifluoromethane	85		1.577				ND	
12 Chloromethane	50		1.735				ND	
13 Vinyl chloride	62		1.863				ND	
14 Butadiene	39		1.906				ND	
15 Bromomethane	94		2.192				ND	
16 Chloroethane	64		2.344				ND	
17 Dichlorofluoromethane	67		2.611				ND	
18 Trichlorofluoromethane	101		2.636				ND	
19 Ethanol	45		2.888				ND	
20 Ethyl ether	59		3.007				ND	
21 Acrolein	56		3.177				ND	
22 1,1-Dichloroethene	96	3.319	3.311	0.008	94	7485	2.67	
23 1,1,2-Trichloro-1,2,2-trif	101		3.366				ND	
24 Acetone	43		3.384				ND	
25 Iodomethane	142		3.500				ND	
26 Carbon disulfide	76		3.603				ND	
27 Isopropyl alcohol	45	3.635	3.649	-0.014	33	6205	29.1	
28 Acetonitrile	40		3.795				ND	
29 3-Chloro-1-propene	76		3.877				ND	
30 Methyl acetate	43		3.883				ND	
31 Methylene Chloride	84		4.090				ND	
32 2-Methyl-2-propanol	59		4.333				ND	
33 Acrylonitrile	53		4.461				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
34 trans-1,2-Dichloroethene	96	4.548	4.528	0.020	31	1283	0.3974	
35 Methyl tert-butyl ether	73	4.536	4.534	0.002	3	2737	0.2915	M
36 Hexane	57		4.947				ND	
37 1,1-Dichloroethane	63	5.174	5.160	0.014	18	5392	0.8788	
38 Vinyl acetate	43		5.197				ND	
40 Isopropyl ether	45		5.255				ND	
39 2-Chloro-1,3-butadiene	53		5.255				ND	
41 Tert-butyl ethyl ether	59		5.735				ND	
42 2,2-Dichloropropane	77		5.902				ND	
43 cis-1,2-Dichloroethene	96	5.917	5.902	0.015	81	172675	50.2	
44 2-Butanone (MEK)	43		5.909				ND	
45 Propionitrile	54		5.979				ND	
46 Ethyl acetate	43		5.991				ND	
47 Methacrylonitrile	41		6.161				ND	
48 Chlorobromomethane	128		6.201				ND	
49 Tetrahydrofuran	42		6.207				ND	
50 Chloroform	83	6.349	6.347	0.002	69	5106	1.05	
51 1,1,1-Trichloroethane	97	6.519	6.511	0.008	36	7224	2.14	
52 Cyclohexane	56		6.590				ND	
53 Carbon tetrachloride	117		6.687				ND	
54 1,1-Dichloropropene	75		6.699				ND	
55 Isobutyl alcohol	41		6.870				ND	
56 Benzene	78		6.906				ND	
57 1,2-Dichloroethane	62		6.991				ND	
148 Isooctane	57		7.074				ND	
58 Tert-amyl methyl ether	73		7.092				ND	
59 n-Heptane	43		7.277				ND	
60 n-Butanol	56		7.579				ND	
61 Trichloroethene	130	7.657	7.655	0.002	96	175231	59.4	
62 Ethyl acrylate	55		7.767				ND	
63 Methylcyclohexane	83		7.892				ND	
64 1,2-Dichloropropane	63		7.928				ND	
66 Methyl methacrylate	69		7.998				ND	
67 Dibromomethane	93		8.013				ND	
65 1,4-Dioxane	88		8.013				ND	
68 Dichlorobromomethane	83		8.208				ND	
69 2-Nitropropane	41		8.418				ND	
70 2-Chloroethyl vinyl ether	63		8.500				ND	
71 cis-1,3-Dichloropropene	75		8.646				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.792				ND	
73 Toluene	91	8.989	8.981	0.008	64	6633	0.5287	
74 trans-1,3-Dichloropropene	75		9.224				ND	
75 Ethyl methacrylate	69		9.285				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164	9.506	9.498	0.008	95	85284	41.0	
78 1,3-Dichloropropane	76		9.583				ND	
79 2-Hexanone	43		9.626				ND	
80 n-Butyl acetate	43		9.756				ND	
81 Chlorodibromomethane	129		9.802				ND	
82 Ethylene Dibromide	107		9.918				ND	
83 3-Chlorobenzotrifluoride	180		10.368				ND	
84 Chlorobenzene	112		10.404				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
85 4-Chlorobenzotrifluoride	180		10.459				ND	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.502				ND	
88 m-Xylene & p-Xylene	106		10.629				ND	
89 o-Xylene	106		11.013				ND	
90 Styrene	104		11.037				ND	
91 Bromoform	173		11.219				ND	
92 2-Chlorobenzotrifluoride	180		11.280				ND	
129 Cyclohexanol	57		11.289				ND	
93 Isopropylbenzene	105		11.384				ND	
94 Cyclohexanone	55		11.472				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
95 Bromobenzene	156		11.700				ND	
97 trans-1,4-Dichloro-2-buten	53		11.724				ND	
98 1,2,3-Trichloropropane	110		11.749				ND	
99 N-Propylbenzene	120		11.797				ND	
100 2-Chlorotoluene	126		11.889				ND	
101 3-Chlorotoluene	126		11.956				ND	
102 1,3,5-Trimethylbenzene	105		11.986				ND	
103 4-Chlorotoluene	126		12.010				ND	
104 tert-Butylbenzene	119		12.296				ND	
105 Pentachloroethane	167		12.330				ND	
106 1,2,4-Trimethylbenzene	105		12.357				ND	
107 1,2-dichloro-4-(trifluorom	214		12.394				ND	
108 sec-Butylbenzene	105		12.521				ND	
109 1,3-Dichlorobenzene	146		12.643				ND	
110 4-Isopropyltoluene	119		12.679				ND	
111 1,4-Dichlorobenzene	146		12.746				ND	
113 2,4-Dichloro-1-(triflourom	214		12.765				ND	
112 1,2,3-Trimethylbenzene	105		12.768				ND	
114 2,5-Dichlorobenzotrifluori	214		12.801				ND	
115 Benzyl chloride	91		12.853				ND	
116 n-Butylbenzene	91		13.087				ND	
117 1,2-Dichlorobenzene	146		13.099				ND	
118 1,2-Dibromo-3-Chloropropan	75		13.896				ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.036				ND	
120 1,3,5-Trichlorobenzene	180		14.082				ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.450				ND	
122 1,2,4-Trichlorobenzene	180		14.717				ND	
123 Hexachlorobutadiene	225		14.863				ND	
124 Naphthalene	128	14.981	14.985	-0.004	30	4549	0.3789	
125 1,2,3-Trichlorobenzene	180		15.204				ND	
126 2,4,5-Trichlorotoluene	159		15.983				ND	
127 2,3,6-Trichlorotoluene	159		16.086				ND	
128 2-Methylnaphthalene	142		16.126				ND	
144 2,4-Dichlorotoluene	1		0.000				ND	
149 Isopropyl ether TIC	1		0.000				ND	
147 2,6-Dichlorotoluene	1		0.000				ND	
145 2,3-Dichlorotoluene	1		0.000				ND	
153 1,2 Epoxybutane TIC	1		0.000				ND	
146 3,4-Dichlorotoluene	1		0.000				ND	
151 Tert-amyl methyl ether (TI	1		0.000				ND	

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
143 2,5-Dichlorotoluene	1		0.000				ND	
150 Tert-butyl ethyl ether (TI	1		0.000				ND	
152 Formaldehyde TIC	1		0.000				ND	
S 130 1,2-Dichloroethene, Total	96				0		50.6	
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	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D

Injection Date: 24-Apr-2015 14:34:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-C-4

Lab Sample ID: 180-43257-4

Worklist Smp#: 9

Client ID: HD-MW-145A-0/1-0

Purge Vol: 5.000 mL

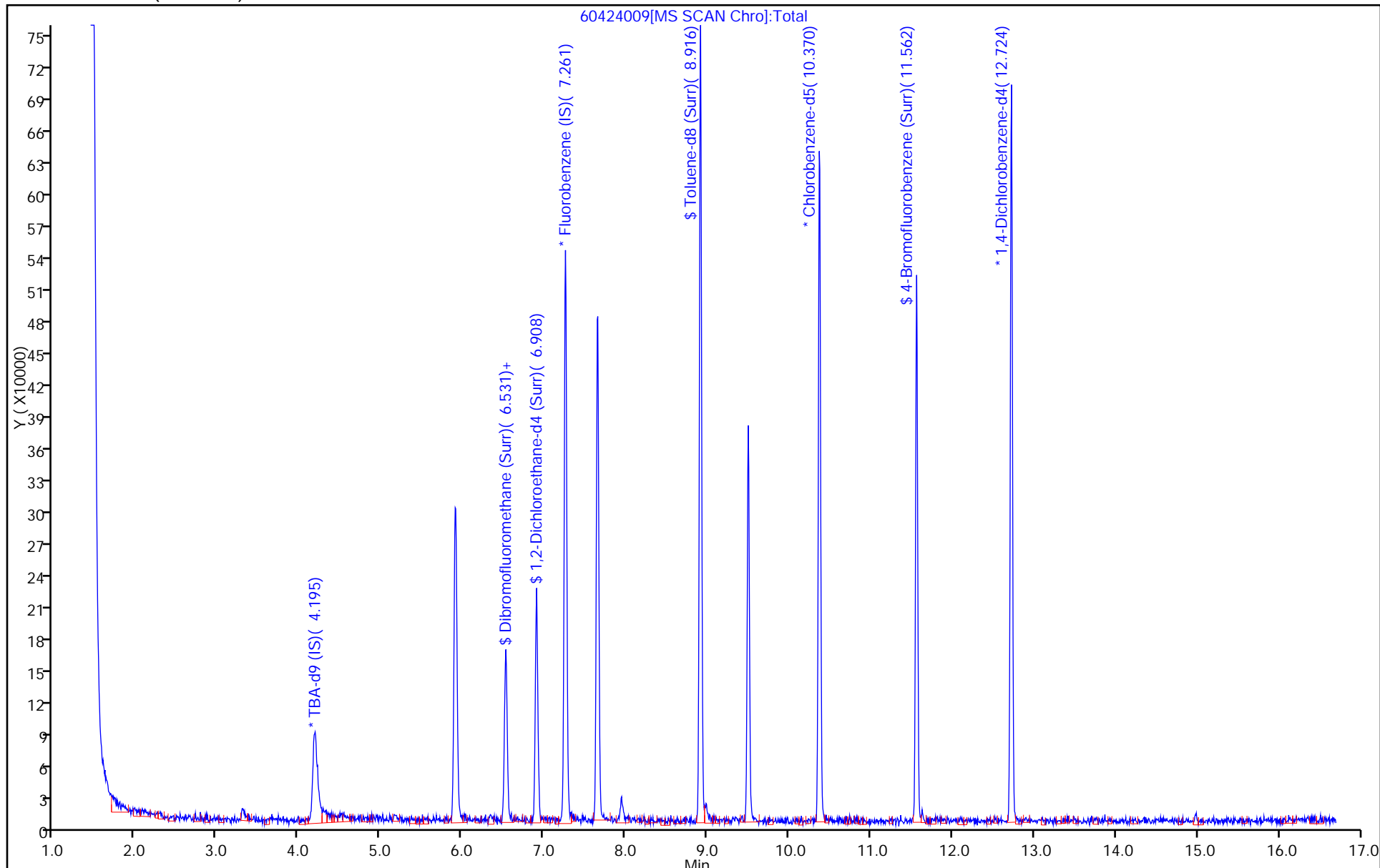
Dil. Factor: 1.0000

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\20150424-6620.b\60424009.D

Injection Date: 24-Apr-2015 14:34:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-4

Lab Sample ID: 180-43257-4

Client ID: HD-MW-145A-0/1-0

Operator ID: 001562

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

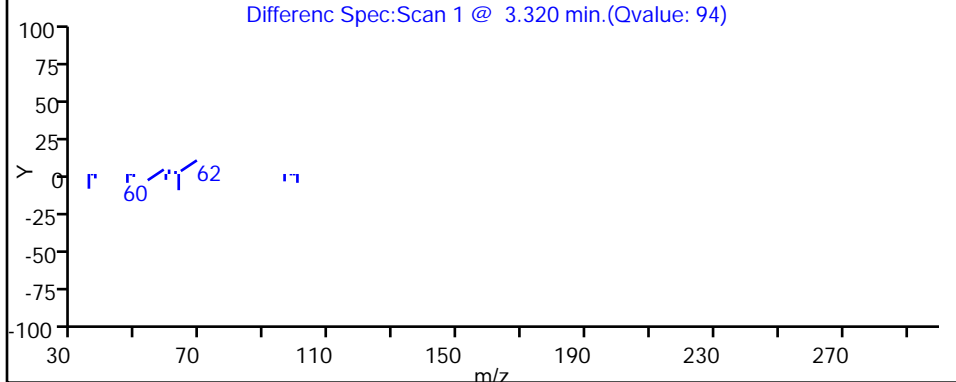
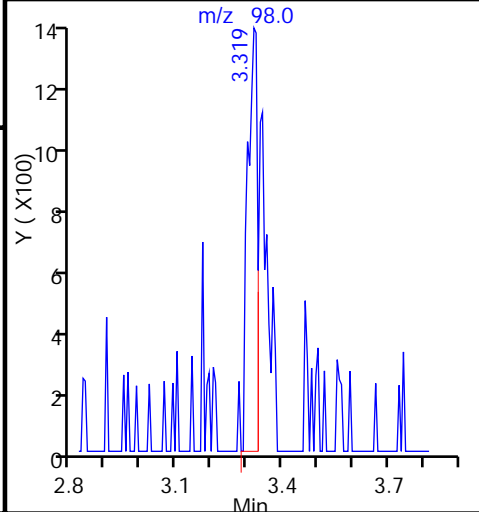
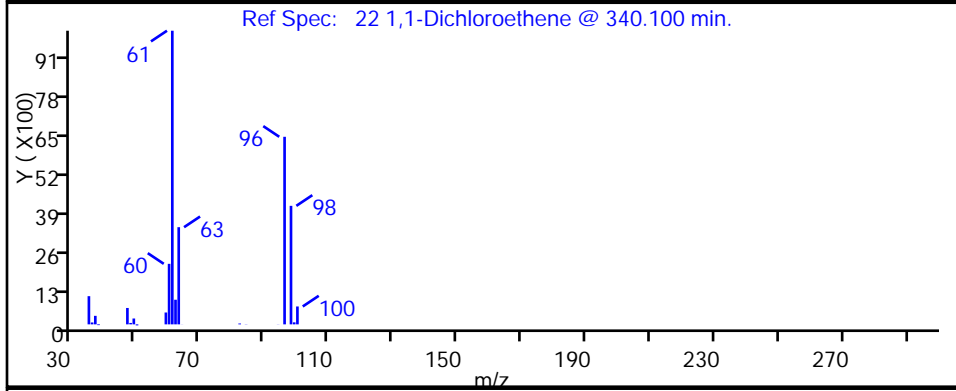
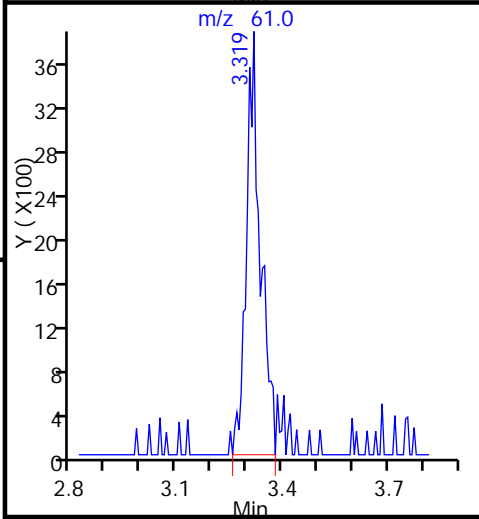
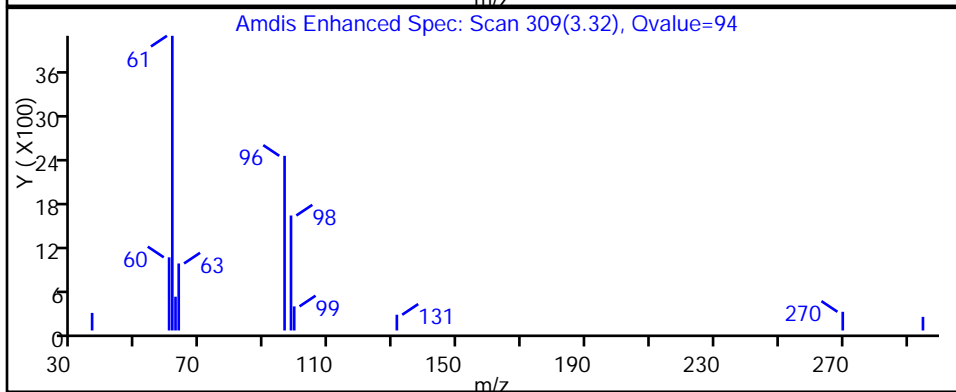
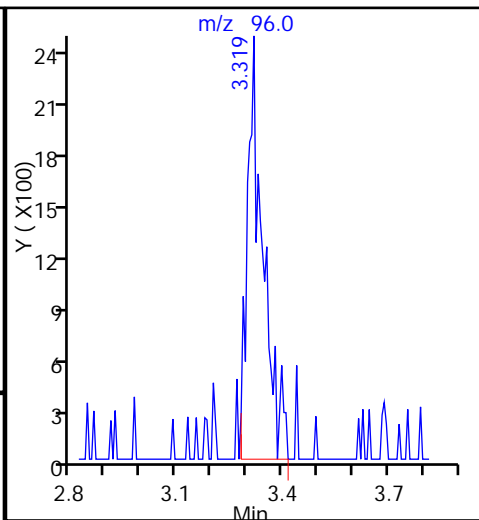
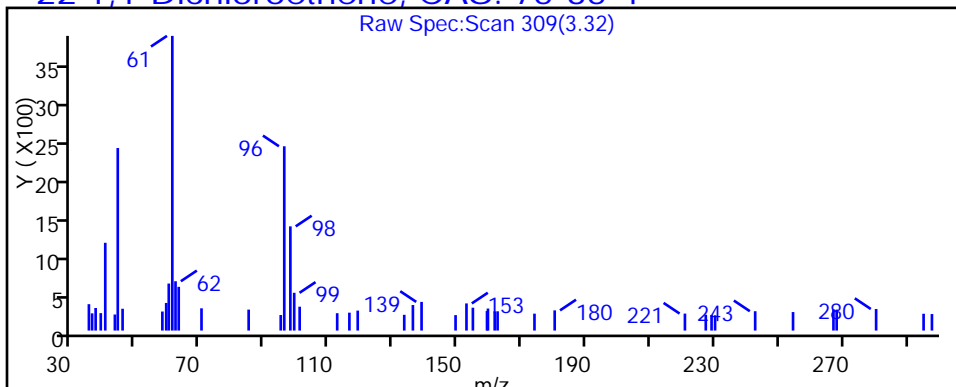
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D

Injection Date: 24-Apr-2015 14:34:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-4

Lab Sample ID: 180-43257-4

Client ID: HD-MW-145A-0/1-0

Operator ID: 001562

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

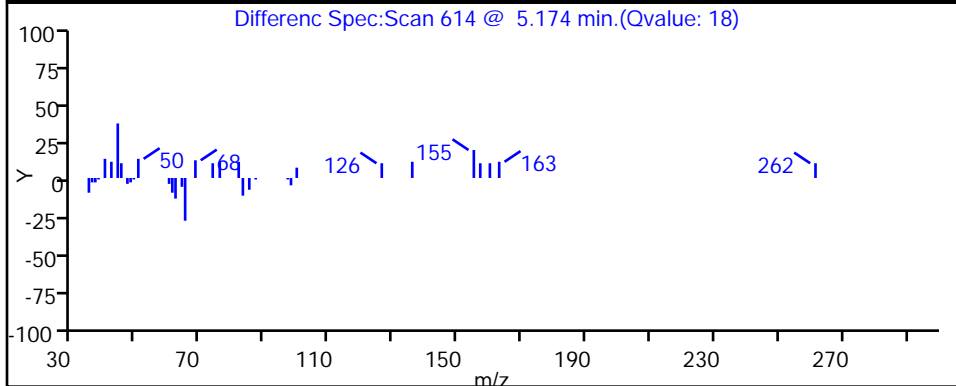
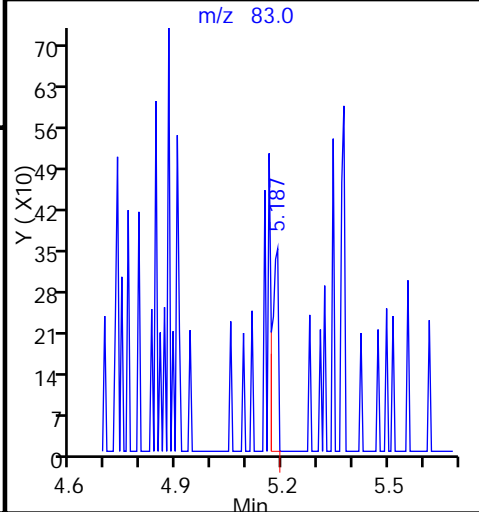
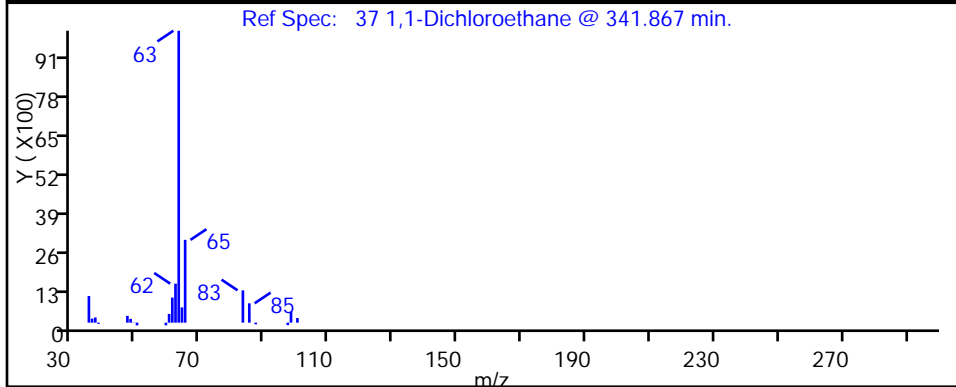
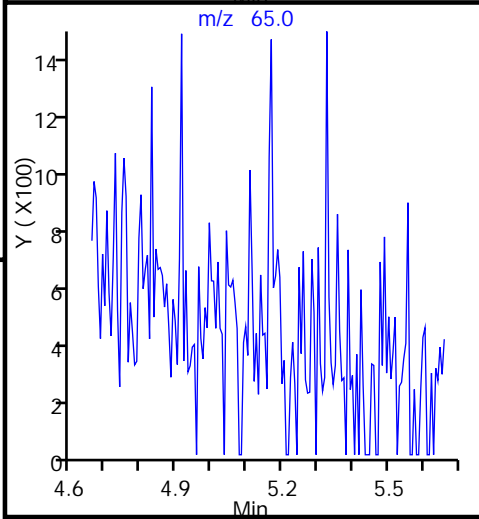
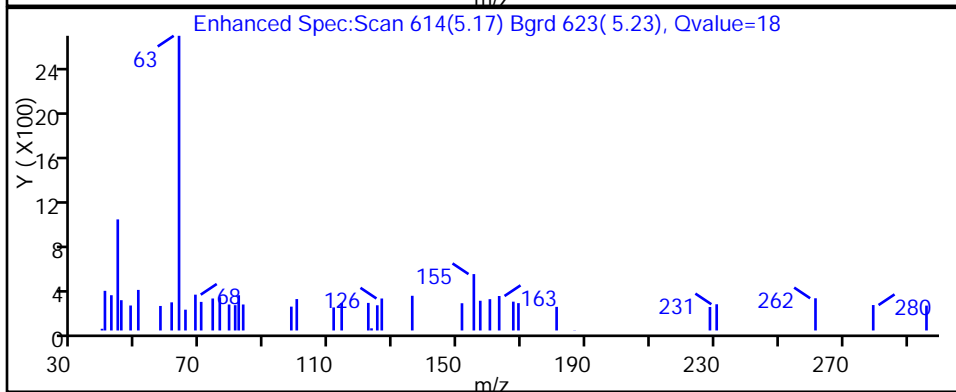
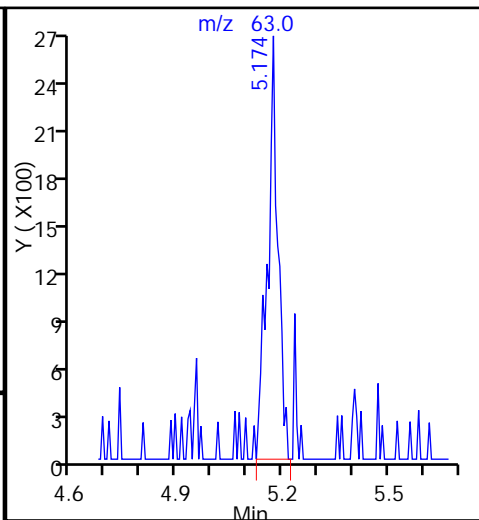
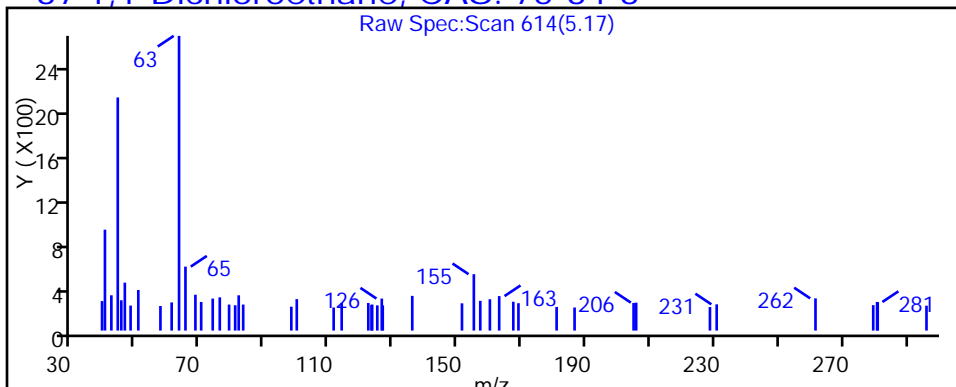
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D

Injection Date: 24-Apr-2015 14:34:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-4

Lab Sample ID: 180-43257-4

Client ID: HD-MW-145A-0/1-0

Operator ID: 001562

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

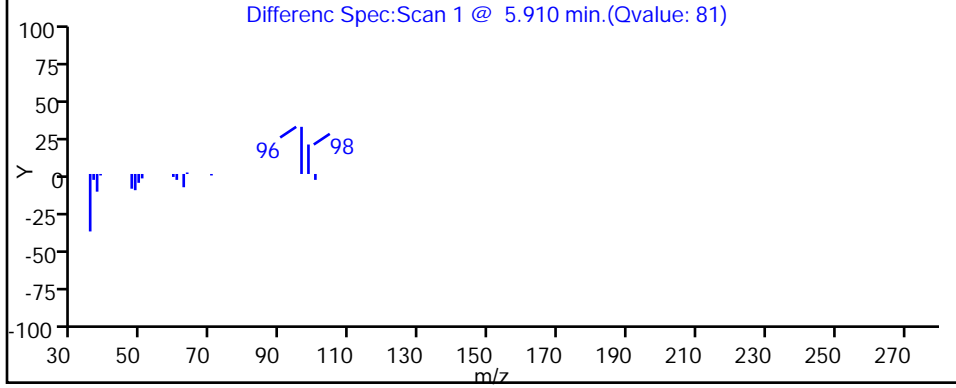
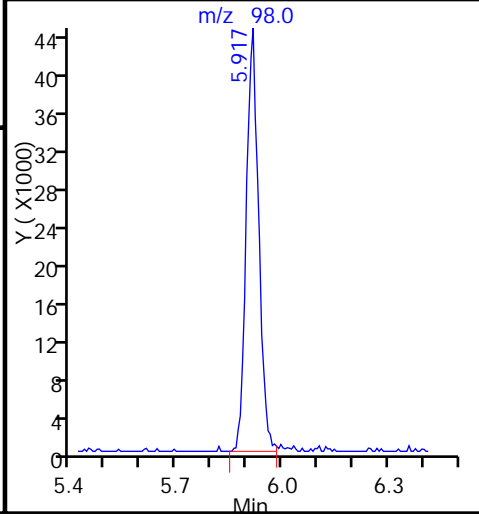
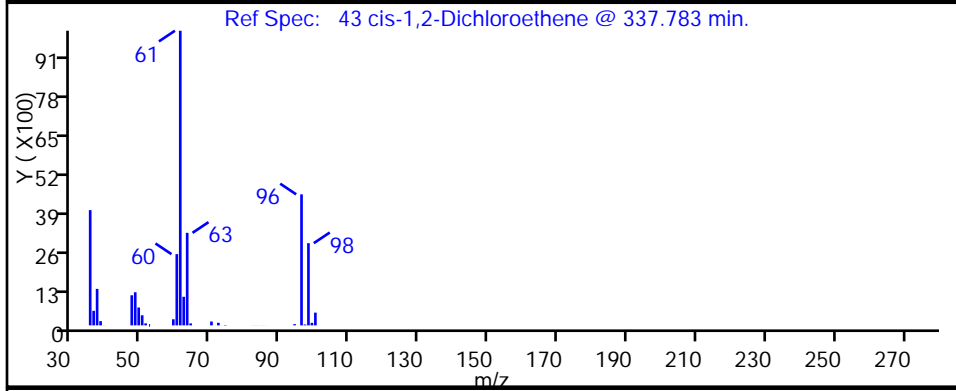
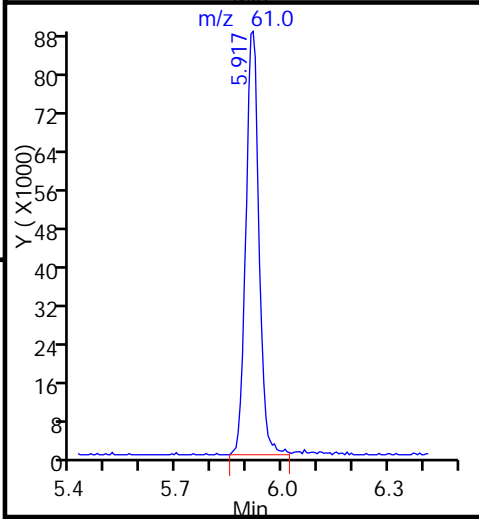
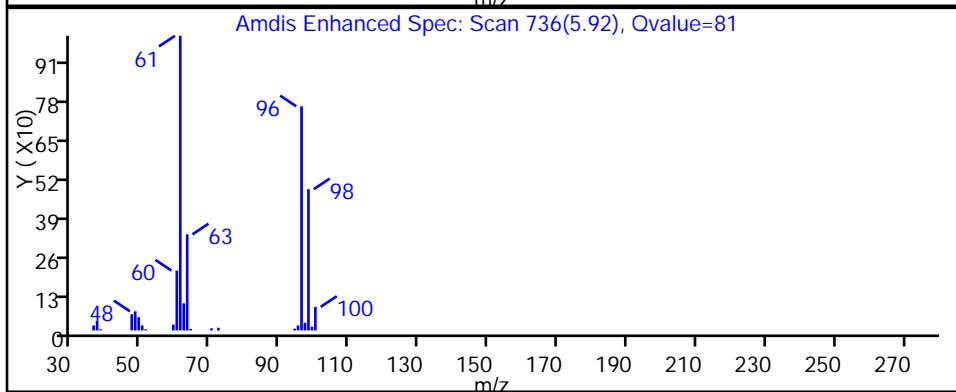
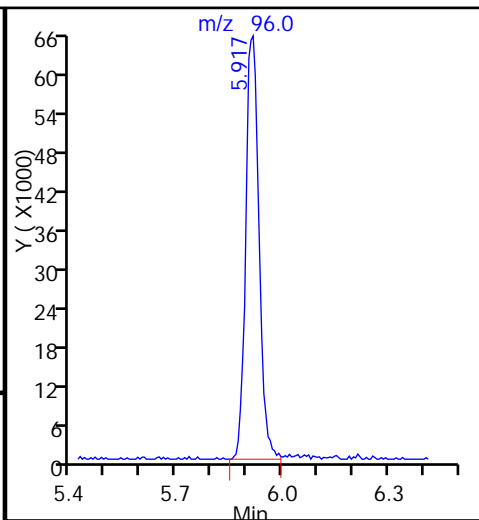
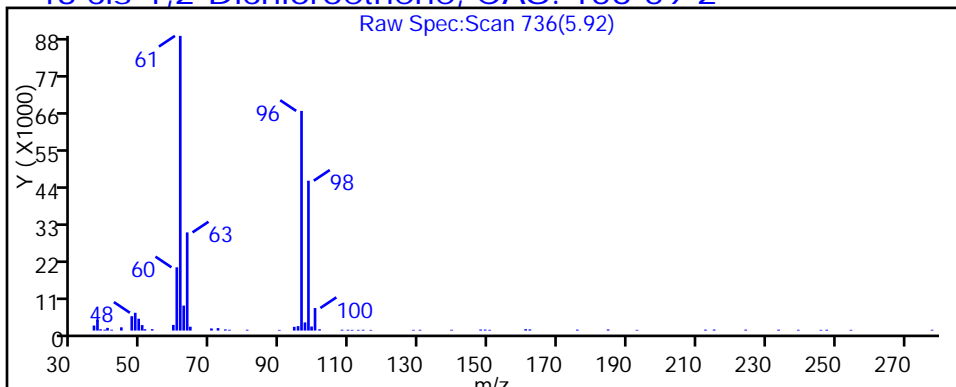
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D

Injection Date: 24-Apr-2015 14:34:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-4

Lab Sample ID: 180-43257-4

Client ID: HD-MW-145A-0/1-0

Operator ID: 001562

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

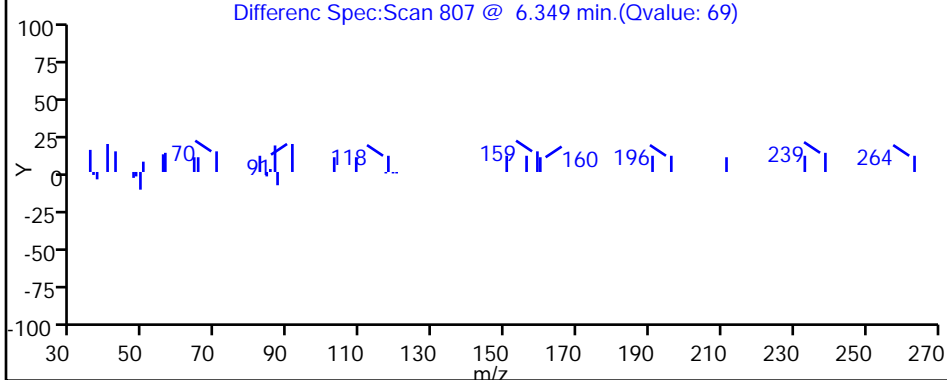
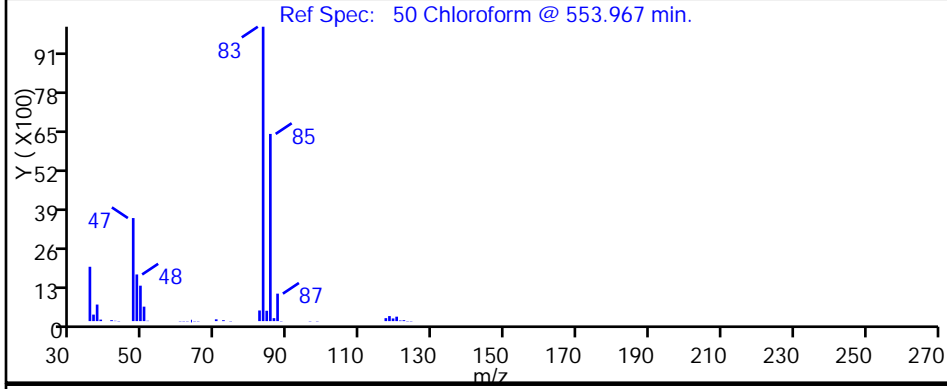
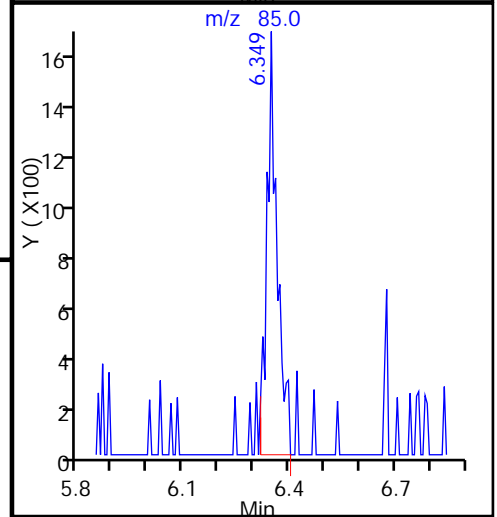
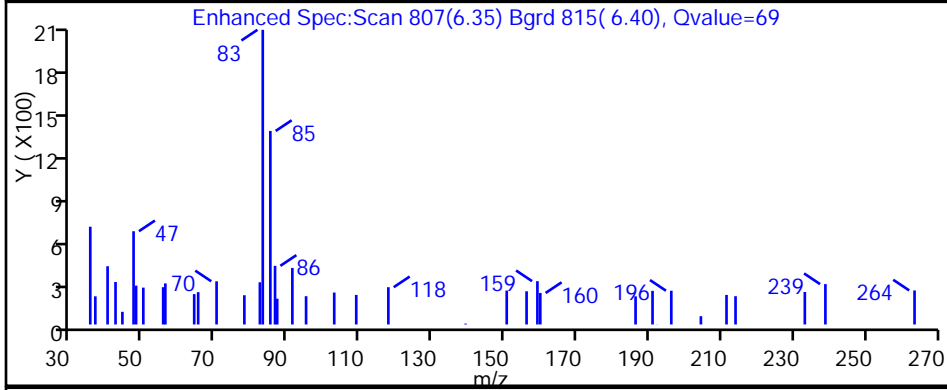
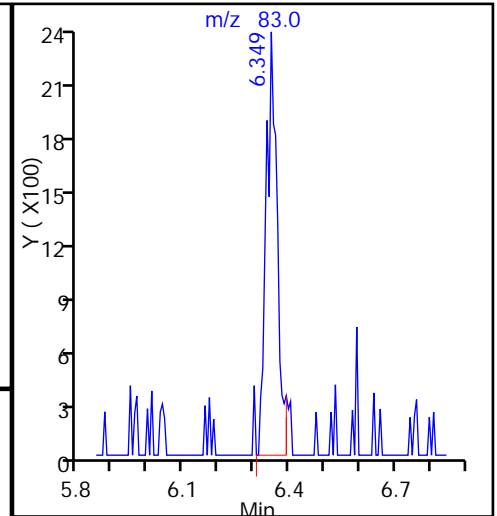
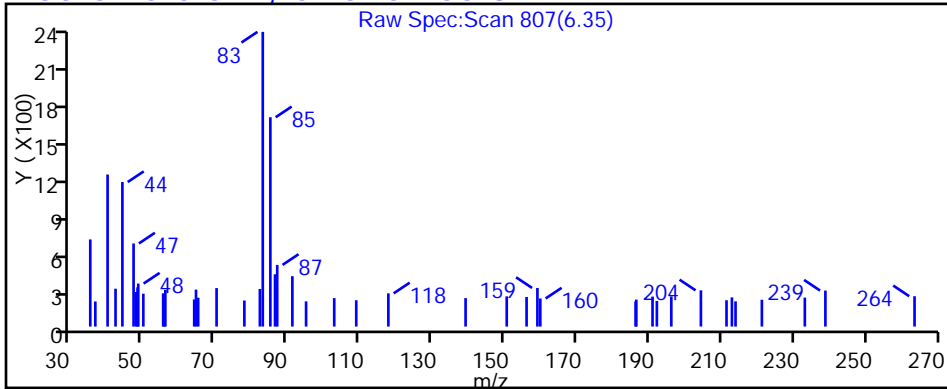
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

50 Chloroform, CAS: 67-66-3



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D

Injection Date: 24-Apr-2015 14:34:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-4

Lab Sample ID: 180-43257-4

Client ID: HD-MW-145A-0/1-0

Operator ID: 001562

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

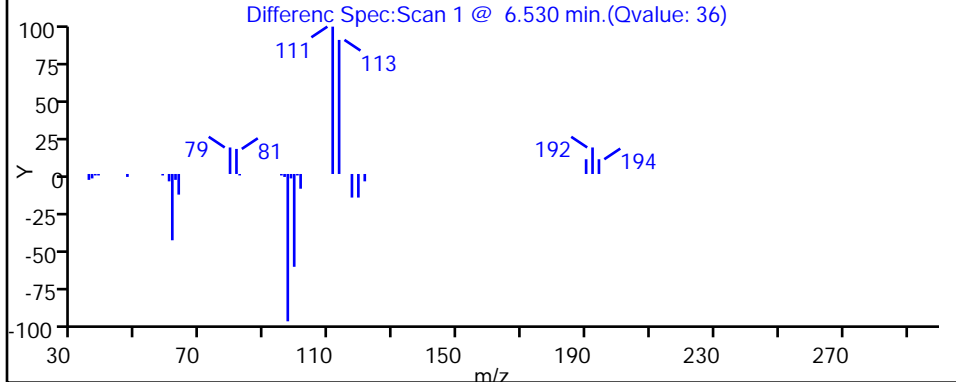
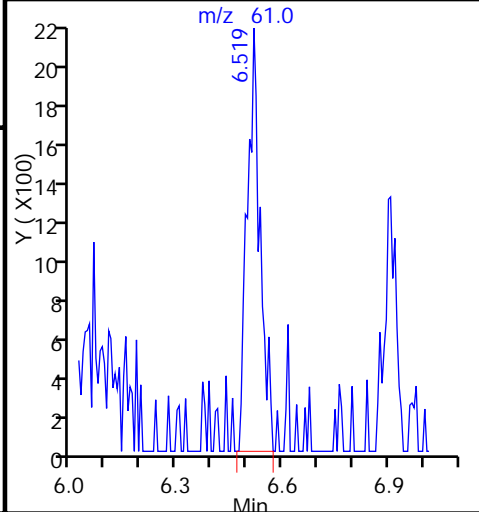
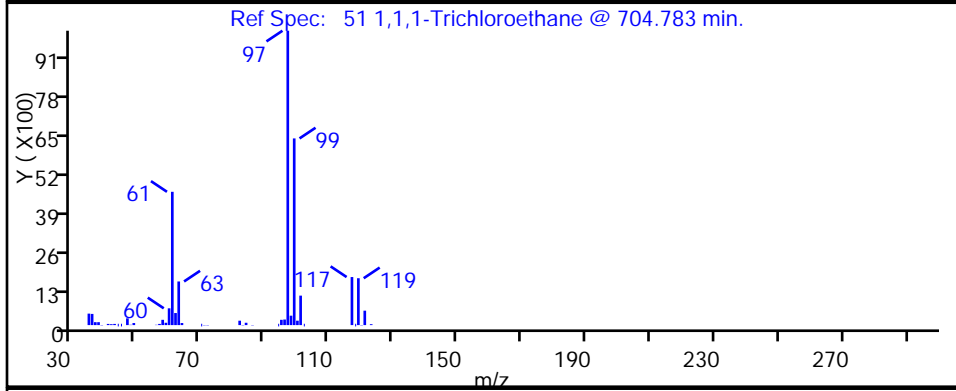
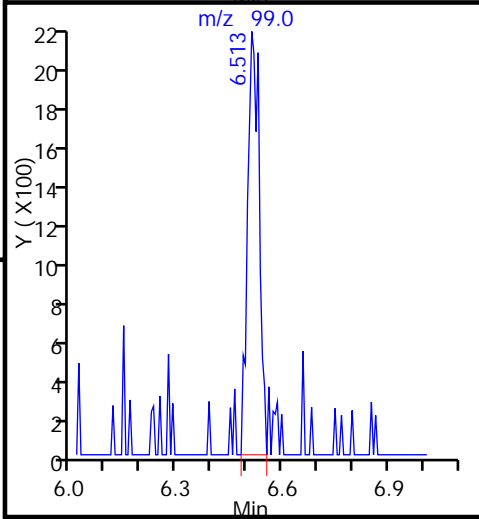
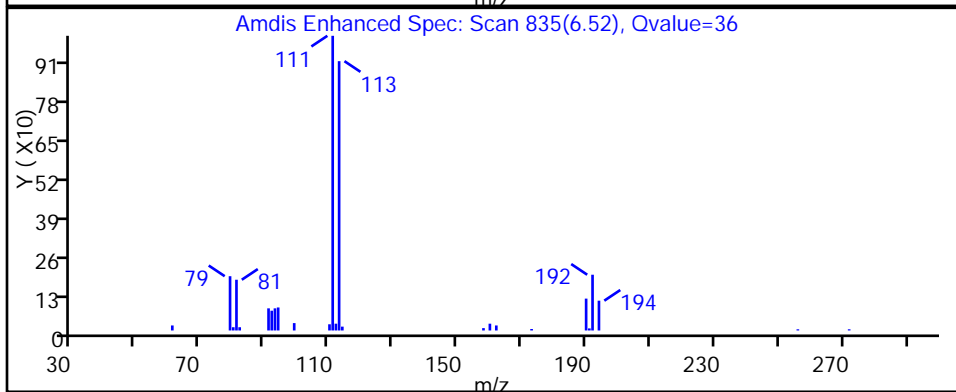
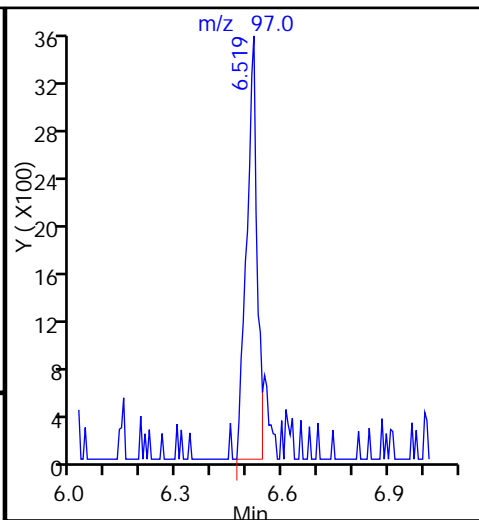
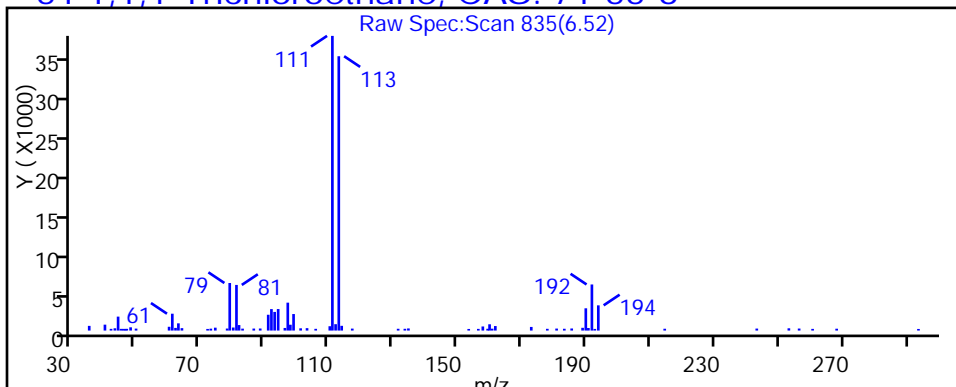
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D

Injection Date: 24-Apr-2015 14:34:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-4

Lab Sample ID: 180-43257-4

Client ID: HD-MW-145A-0/1-0

Operator ID: 001562

ALS Bottle#: 8 Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

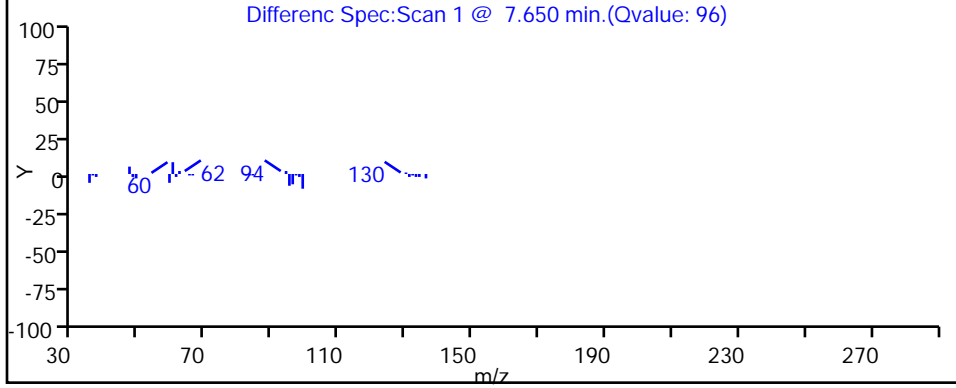
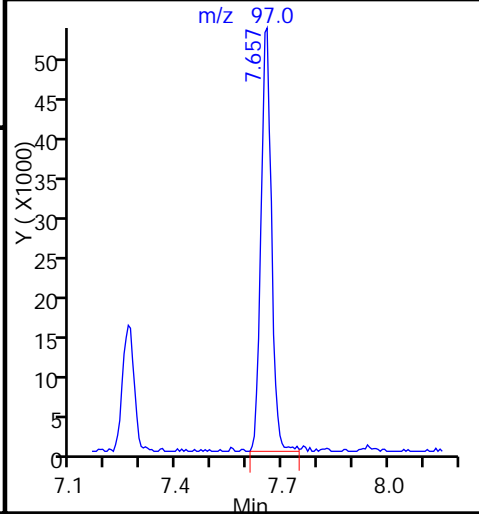
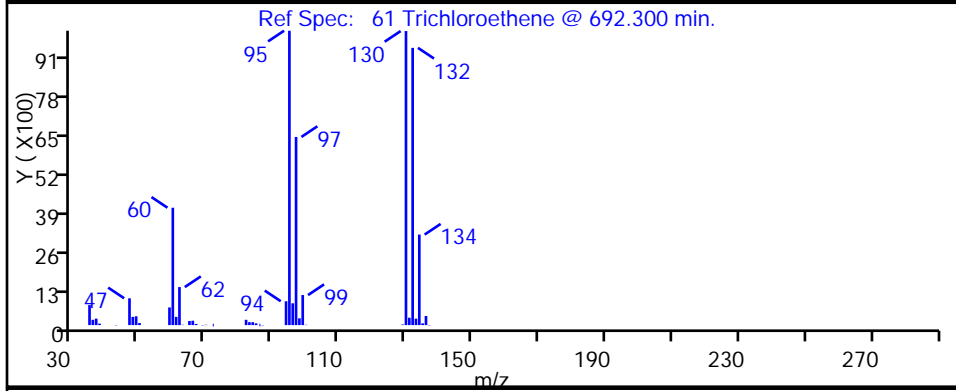
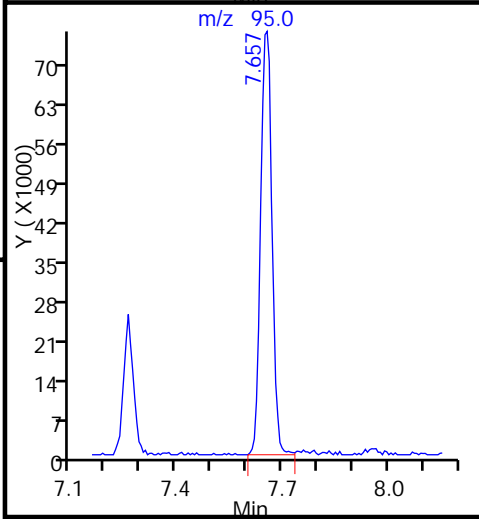
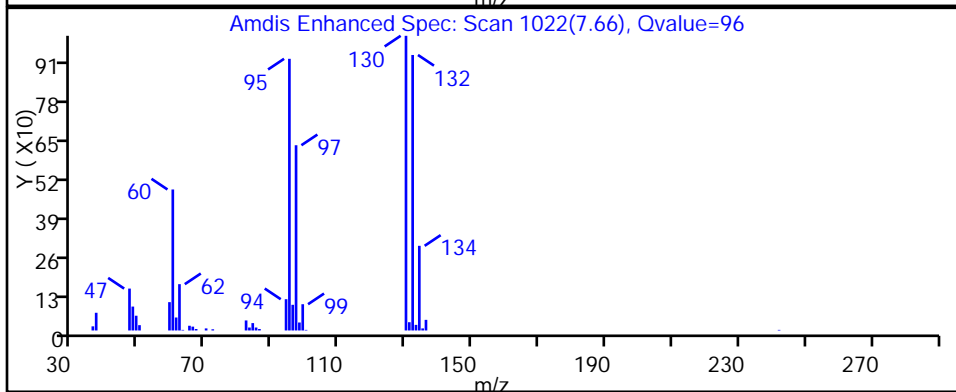
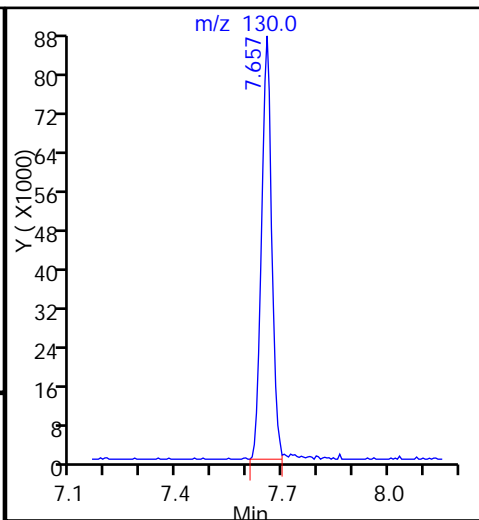
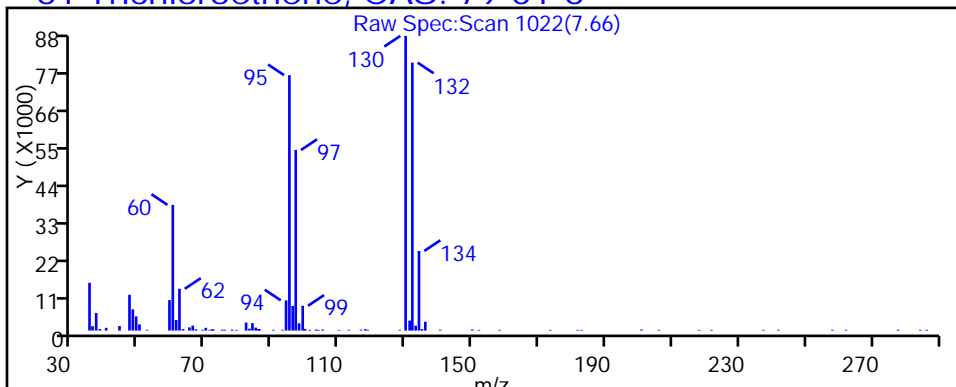
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D

Injection Date: 24-Apr-2015 14:34:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-4

Lab Sample ID: 180-43257-4

Client ID: HD-MW-145A-0/1-0

Operator ID: 001562

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

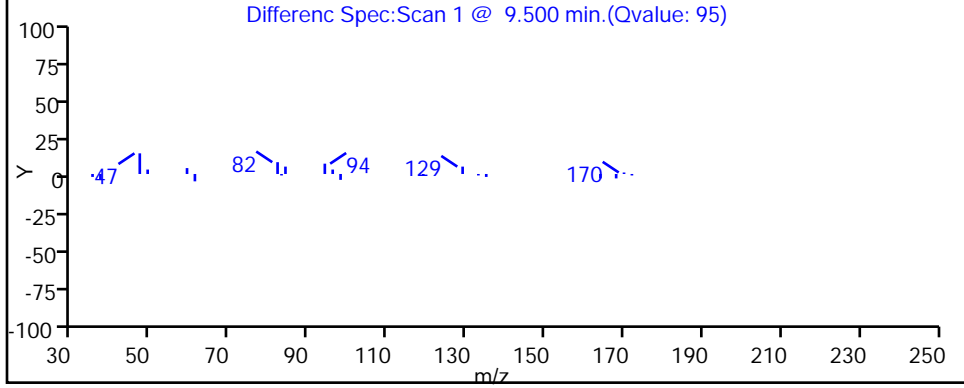
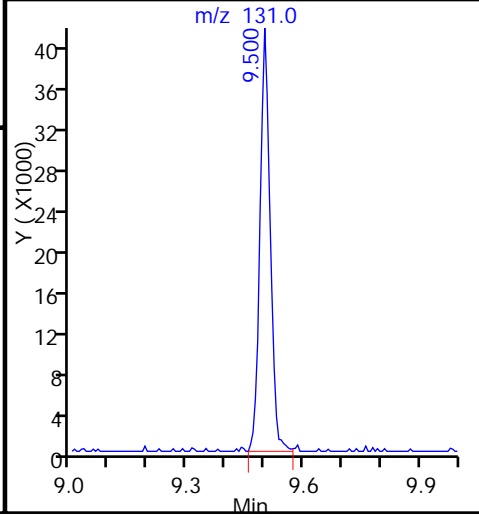
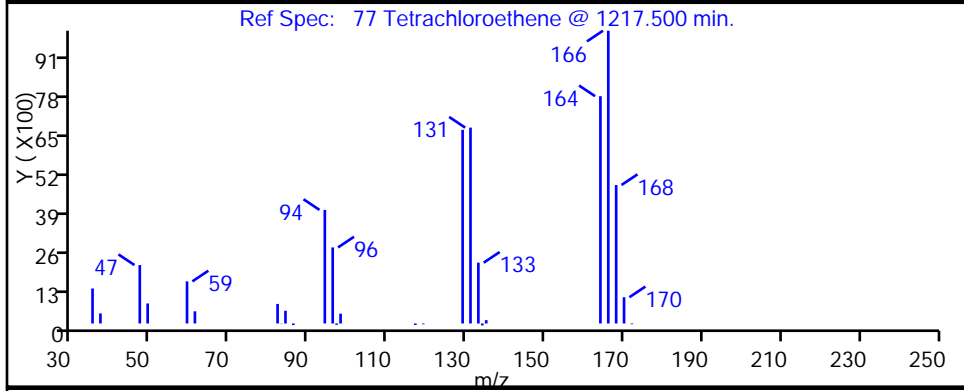
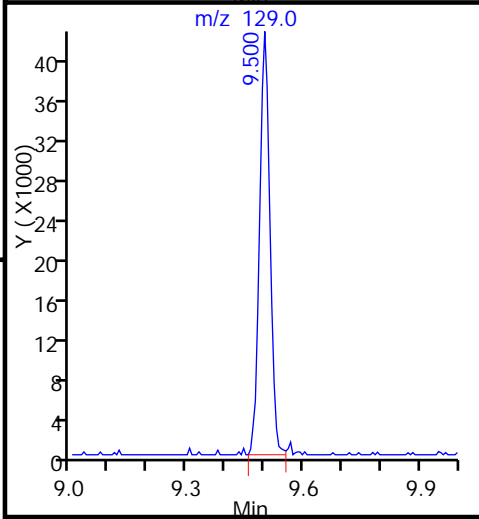
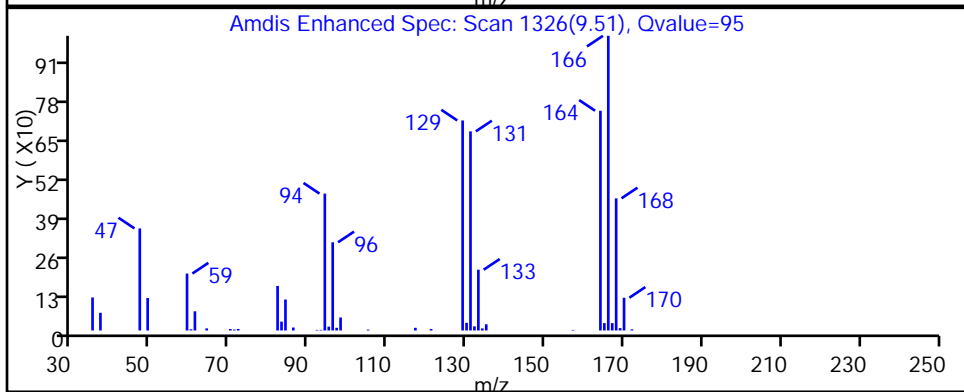
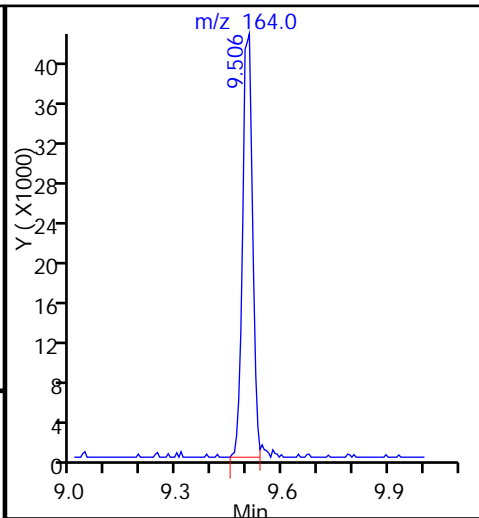
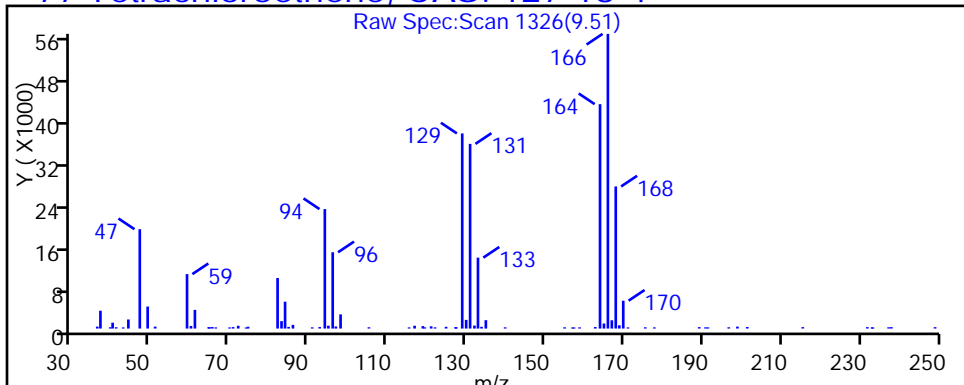
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



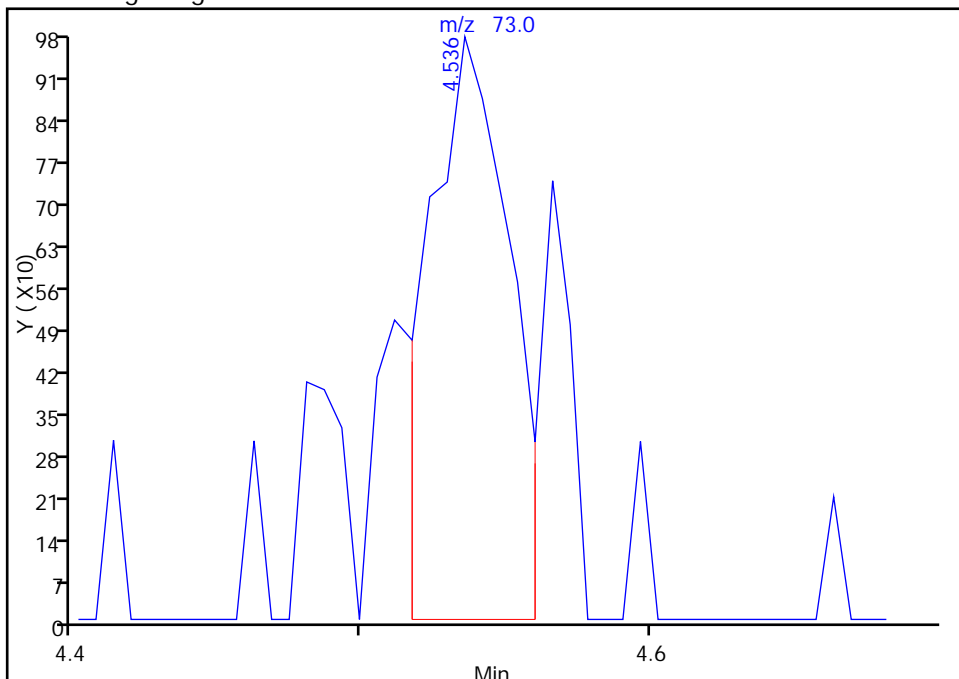
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424009.D
Injection Date: 24-Apr-2015 14:34:30 Instrument ID: CHHP6
Lims ID: 180-43257-C-4 Lab Sample ID: 180-43257-4
Client ID: HD-MW-145A-0/1-0
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

35 Methyl tert-butyl ether, CAS: 1634-04-4

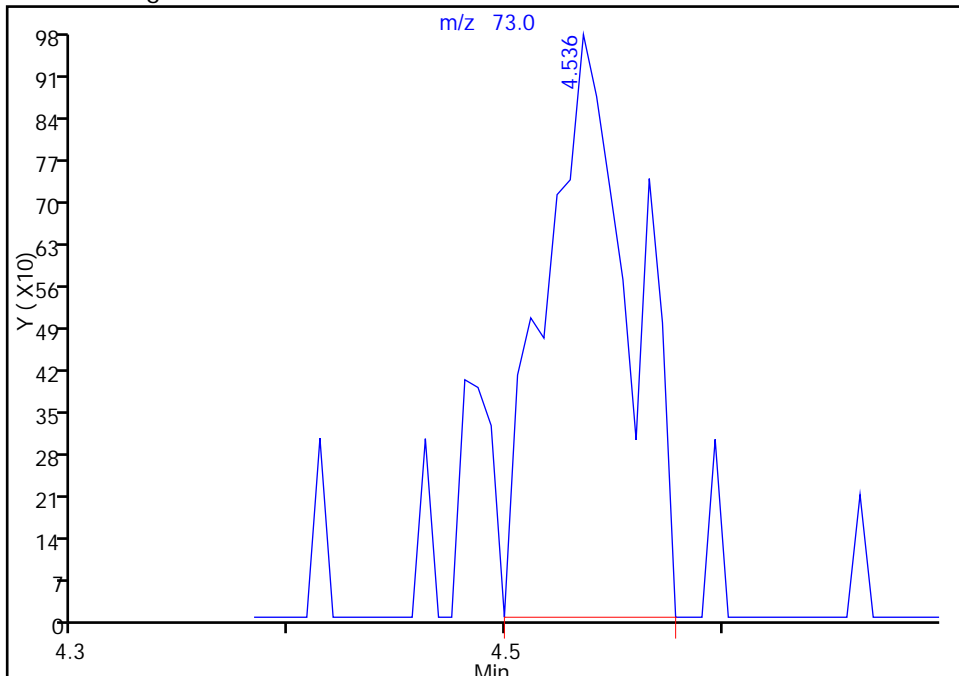
RT: 4.54
Area: 1955
Amount: 0.208245
Amount Units: ng

Processing Integration Results



RT: 4.54
Area: 2737
Amount: 0.291544
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 24-Apr-2015 14:58:03
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-93D-0/1-0 Lab Sample ID: 180-43257-5
 Matrix: Water Lab File ID: 60424027.D
 Analysis Method: 8260C Date Collected: 04/20/2015 11:02
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 21:47
 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.: 139551 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	3.8	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	10	U	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	2.4	J	10	1.2
156-59-2	cis-1,2-Dichloroethene	52		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	4.2	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	100		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	110		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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-93D-0/1-0 Lab Sample ID: 180-43257-5
 Matrix: Water Lab File ID: 60424027.D
 Analysis Method: 8260C Date Collected: 04/20/2015 11:02
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 21:47
 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.: 139551 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)	101		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)	99		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424027.D
 Lims ID: 180-43257-E-5 Lab Sample ID: 180-43257-5
 Client ID: HD-MW-93D-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 21:47:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 5.000 mL Dil. Factor: 10.0000
 Sample Info: 180-43257-E-5, 10x
 Misc. Info.: 180-0006620-027
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 25-Apr-2015 08:39:00 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: fergusond

Date: 25-Apr-2015 08:39:00

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.186	4.205	-0.019	89	153405	1000.0	
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	98	528960	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.374	-0.001	90	115626	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.721	12.722	-0.001	97	188206	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.523	0.005	92	107863	49.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.906	0.000	69	157638	50.4	
\$ 7 Toluene-d8 (Surr)	98	8.913	8.914	-0.001	93	503817	52.3	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	84	183853	50.4	
12 Chloromethane	50		1.735				ND	
13 Vinyl chloride	62	1.850	1.863	-0.013	1	1381	0.3631	
15 Bromomethane	94		2.192				ND	
16 Chloroethane	64		2.344				ND	
22 1,1-Dichloroethene	96	3.329	3.311	0.018	55	5228	1.91	
24 Acetone	43		3.384				ND	
26 Carbon disulfide	76		3.603				ND	
31 Methylene Chloride	84		4.090				ND	
33 Acrylonitrile	53		4.461				ND	
34 trans-1,2-Dichloroethene	96		4.528				ND	
35 Methyl tert-butyl ether	73		4.534				ND	
37 1,1-Dichloroethane	63	5.166	5.160	0.006	51	7058	1.18	
43 cis-1,2-Dichloroethene	96	5.914	5.902	0.012	83	88290	26.2	
44 2-Butanone (MEK)	43		5.909				ND	
48 Chlorobromomethane	128		6.201				ND	
50 Chloroform	83	6.358	6.347	0.011	1	1290	0.2704	
51 1,1,1-Trichloroethane	97	6.516	6.511	0.005	53	6936	2.10	
53 Carbon tetrachloride	117		6.687				ND	
56 Benzene	78		6.906				ND	
57 1,2-Dichloroethane	62		6.991				ND	
61 Trichloroethene	130	7.654	7.655	-0.001	97	144252	50.0	
64 1,2-Dichloropropane	63		7.928				ND	
65 1,4-Dioxane	88		8.013				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.208				ND	
71 cis-1,3-Dichloropropene	75		8.646				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.792				ND	
73 Toluene	91	8.986	8.981	0.005	95	4776	0.3993	
74 trans-1,3-Dichloropropene	75		9.224				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164	9.503	9.498	0.005	94	110250	55.6	
79 2-Hexanone	43		9.626				ND	
81 Chlorodibromomethane	129		9.802				ND	
82 Ethylene Dibromide	107		9.918				ND	
84 Chlorobenzene	112		10.404				ND	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.502				ND	
88 m-Xylene & p-Xylene	106		10.629				ND	
89 o-Xylene	106		11.013				ND	
90 Styrene	104		11.037				ND	
91 Bromoform	173		11.219				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
S 131 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424027.D

Injection Date: 24-Apr-2015 21:47:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-E-5

Lab Sample ID: 180-43257-5

Worklist Smp#: 27

Client ID: HD-MW-93D-0/1-0

Purge Vol: 5.000 mL

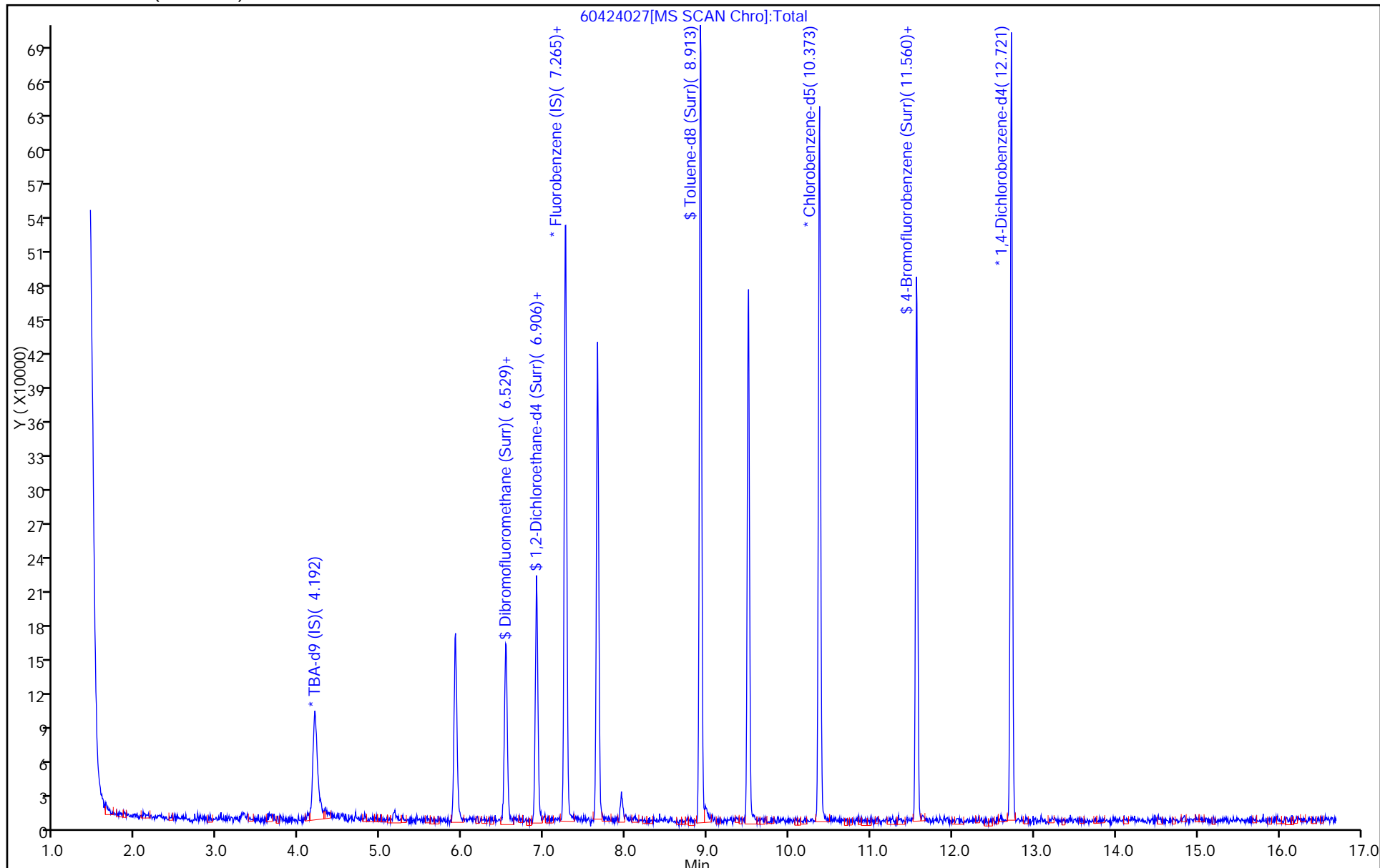
Dil. Factor: 10.0000

ALS Bottle#: 26

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424027.D

Injection Date: 24-Apr-2015 21:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-5

Lab Sample ID: 180-43257-5

Client ID: HD-MW-93D-0/1-0

Operator ID: 001562

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

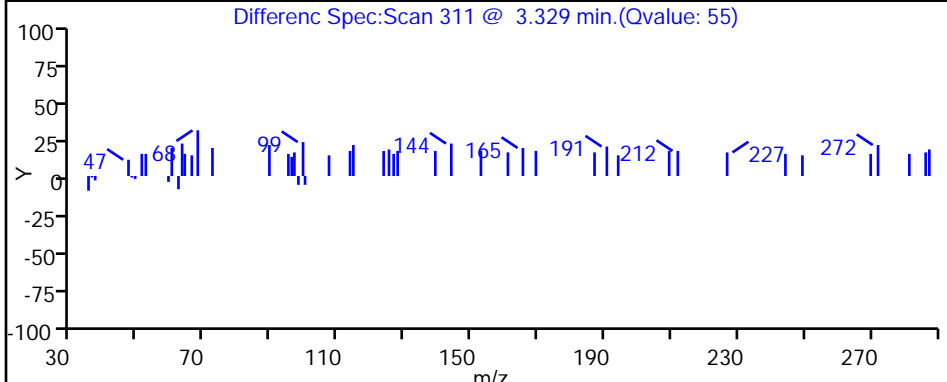
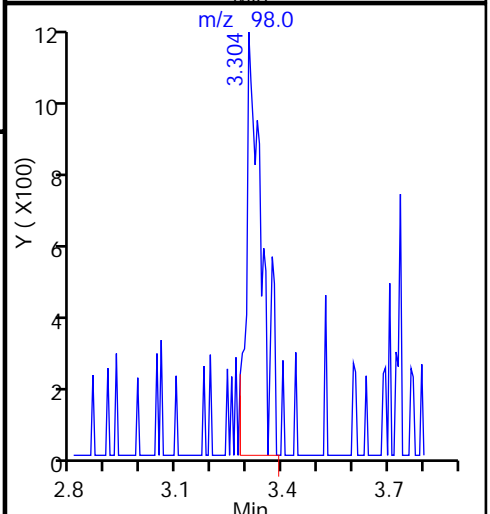
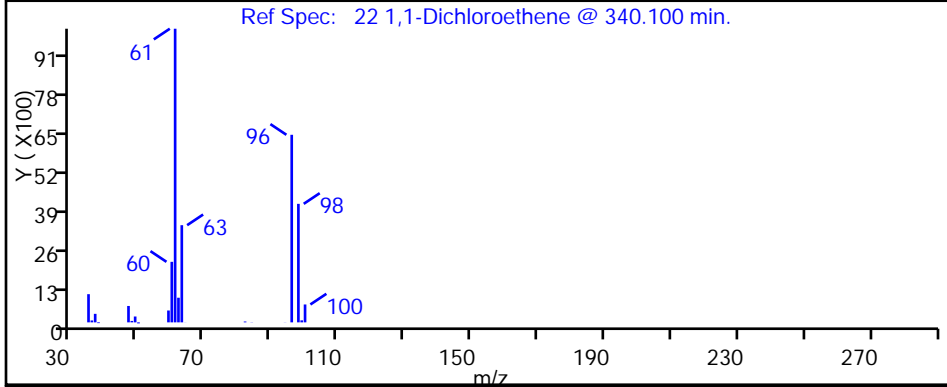
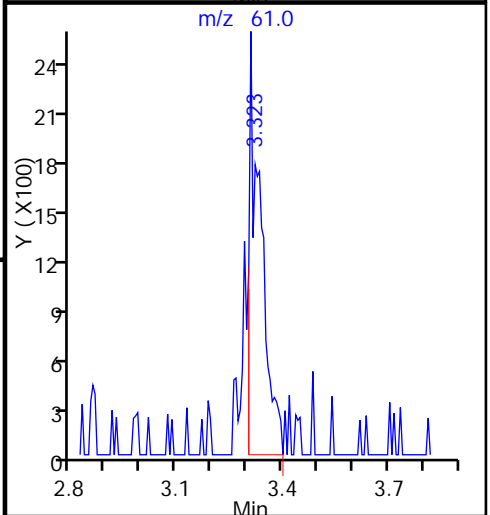
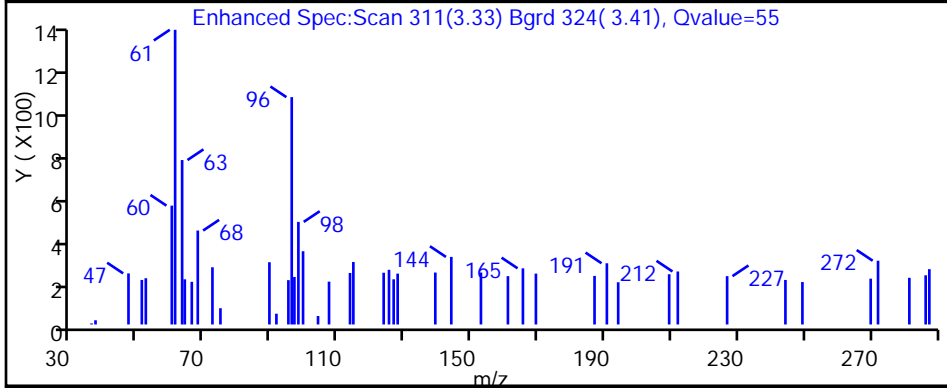
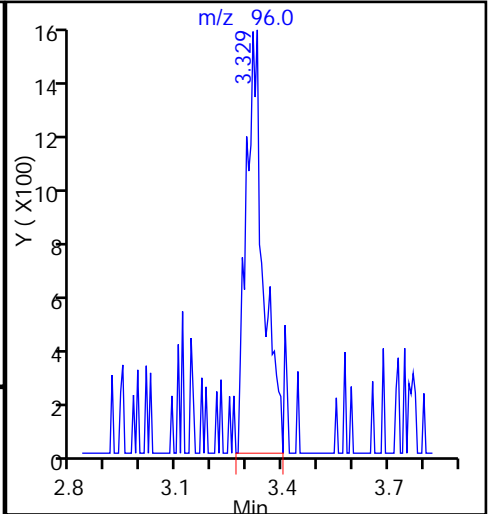
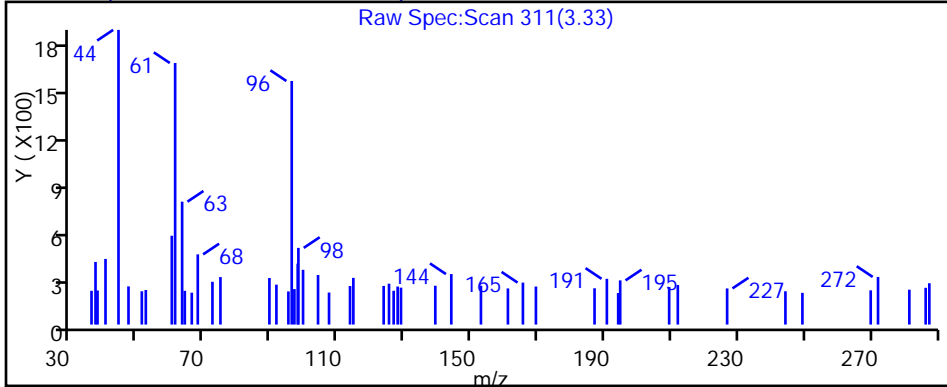
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424027.D

Injection Date: 24-Apr-2015 21:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-5

Lab Sample ID: 180-43257-5

Client ID: HD-MW-93D-0/1-0

Operator ID: 001562

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

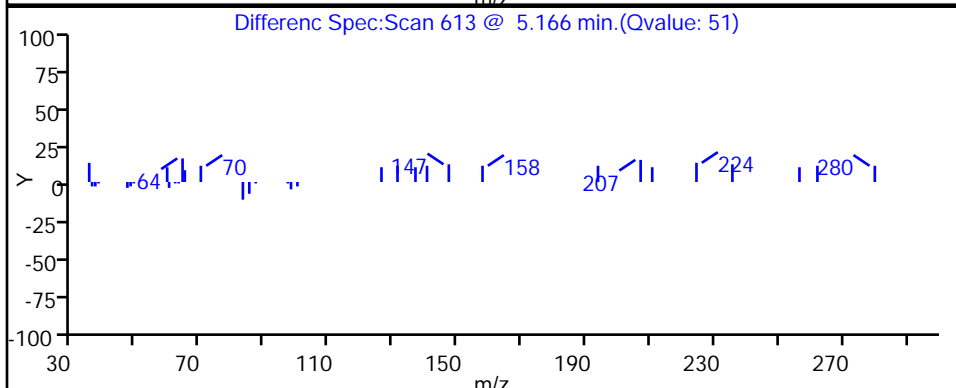
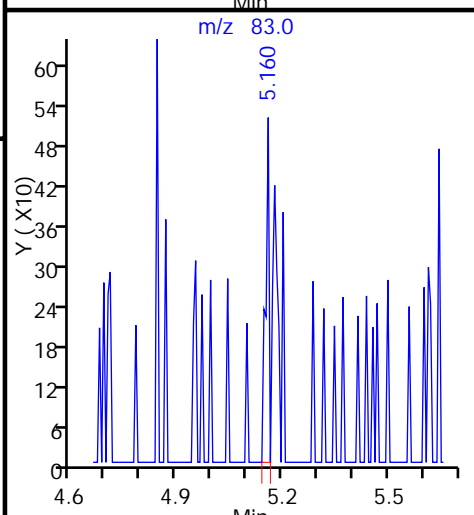
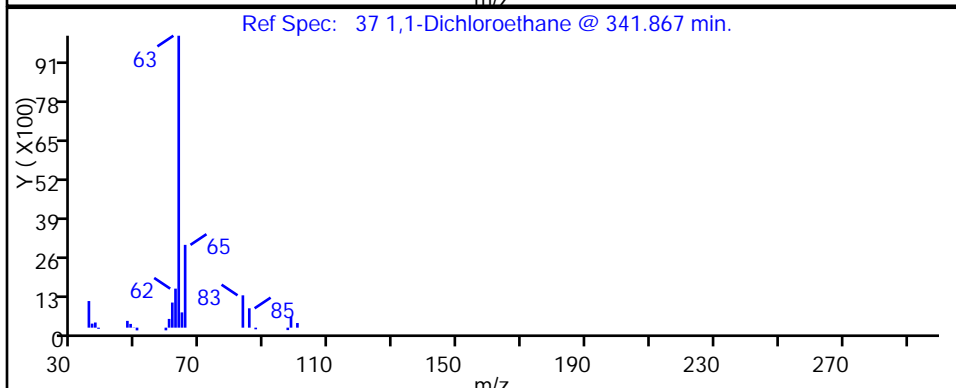
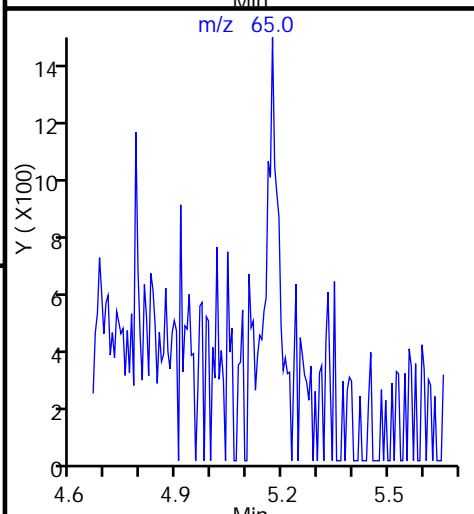
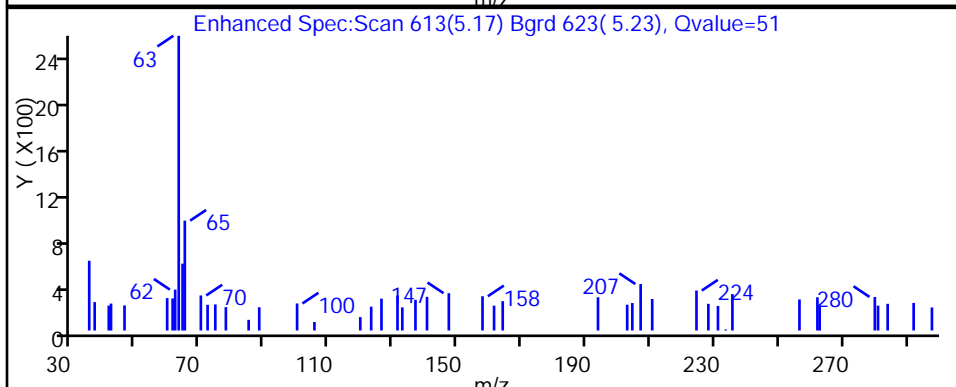
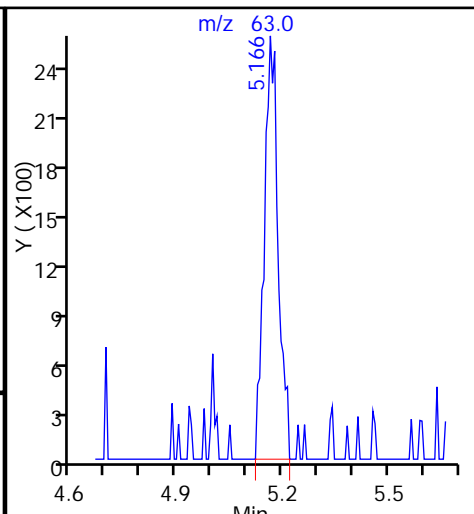
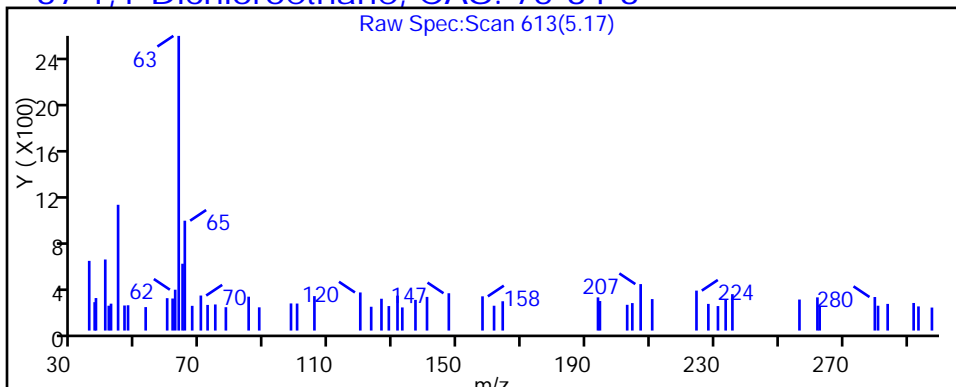
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424027.D

Injection Date: 24-Apr-2015 21:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-5

Lab Sample ID: 180-43257-5

Client ID: HD-MW-93D-0/1-0

Operator ID: 001562

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

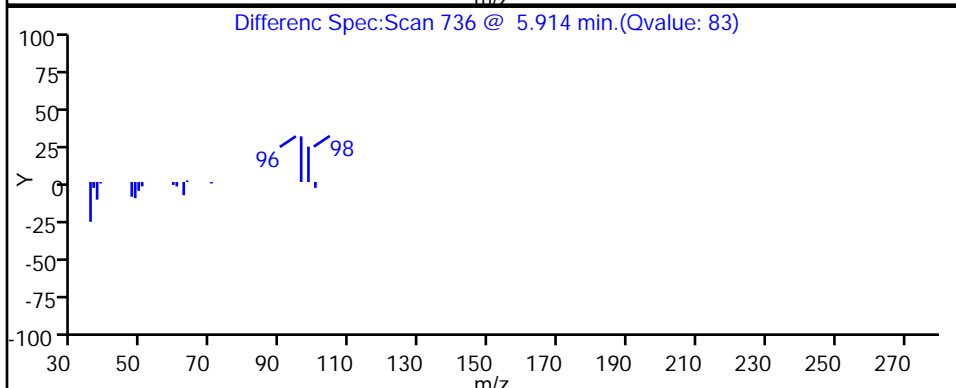
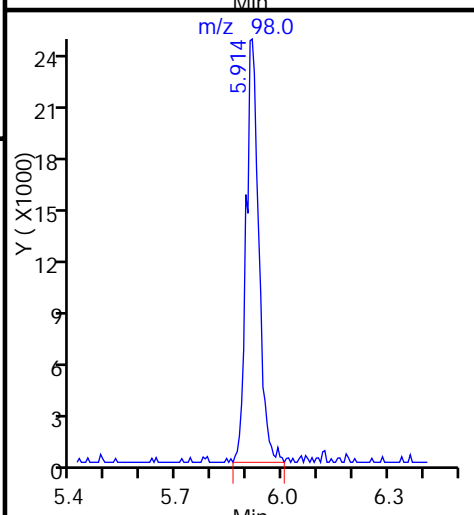
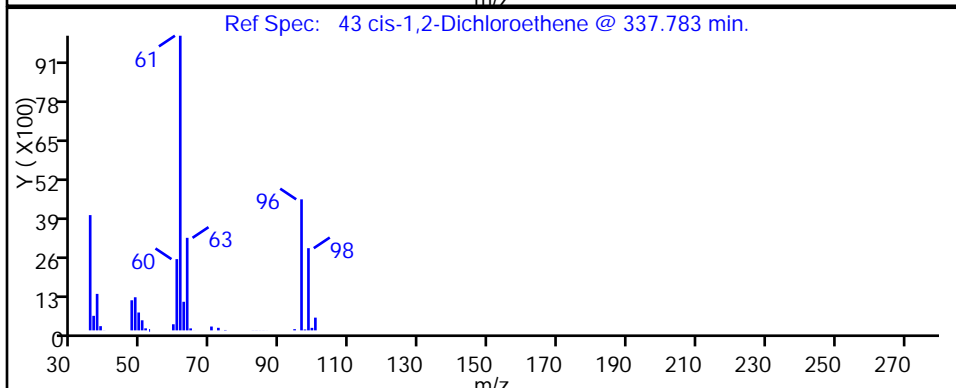
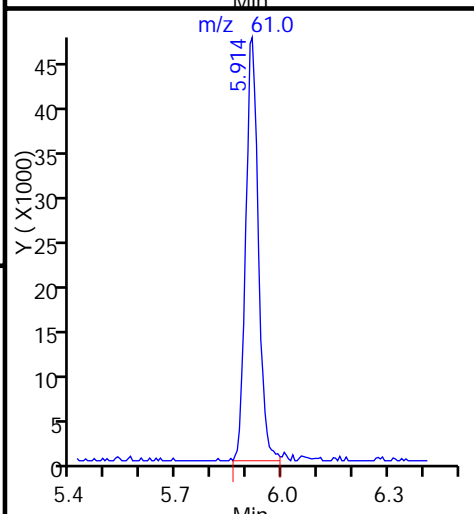
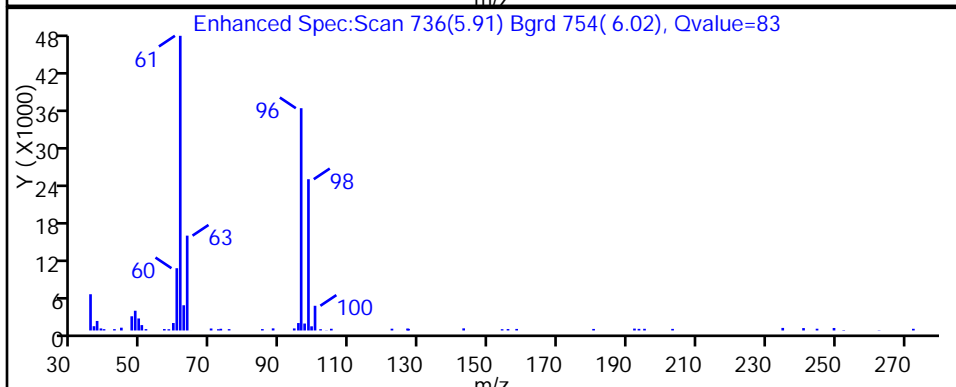
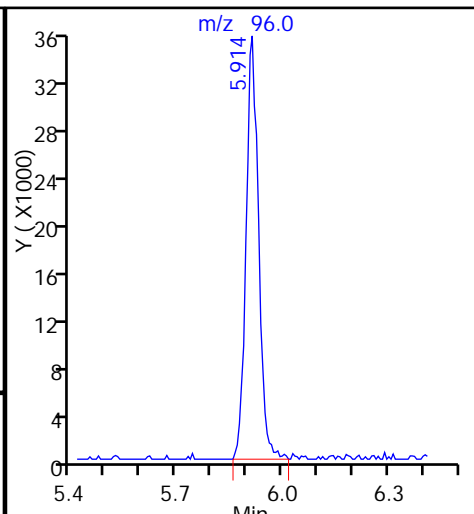
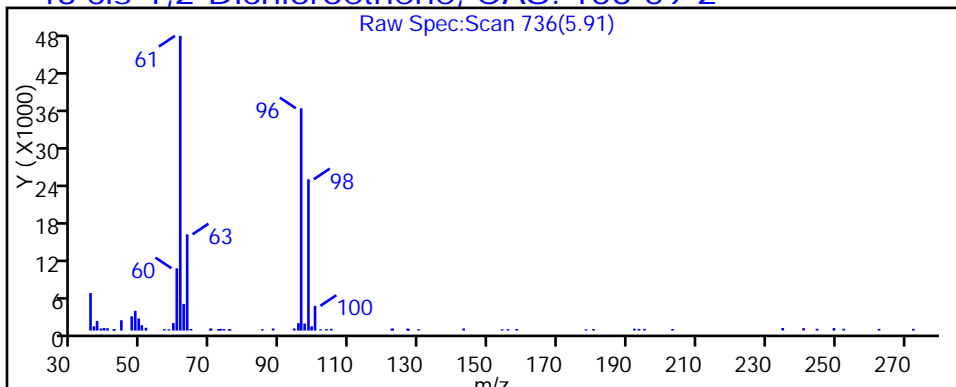
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424027.D

Injection Date: 24-Apr-2015 21:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-5

Lab Sample ID: 180-43257-5

Client ID: HD-MW-93D-0/1-0

Operator ID: 001562

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

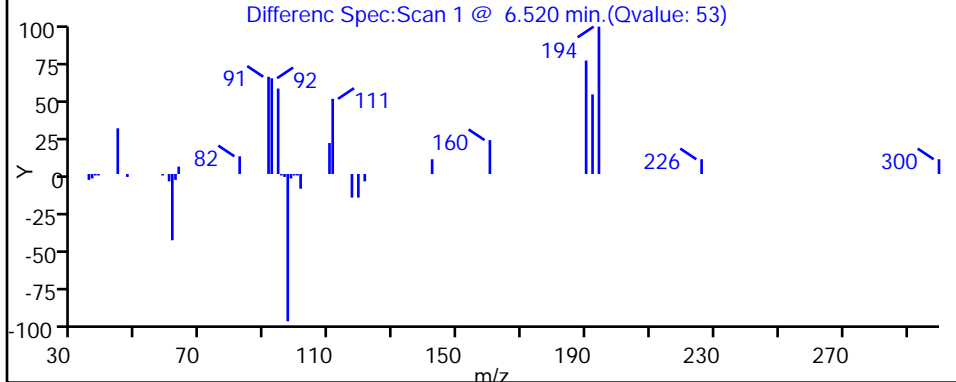
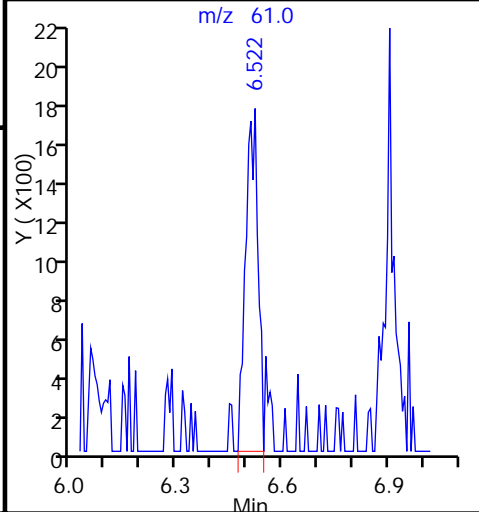
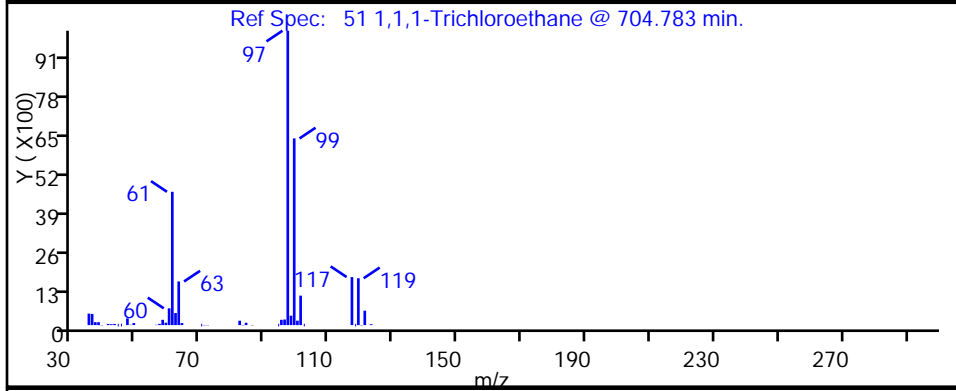
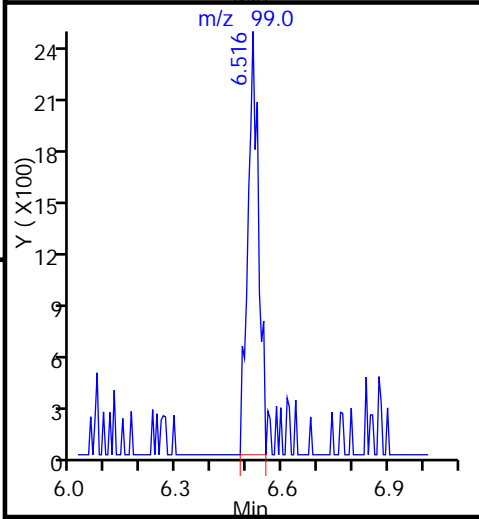
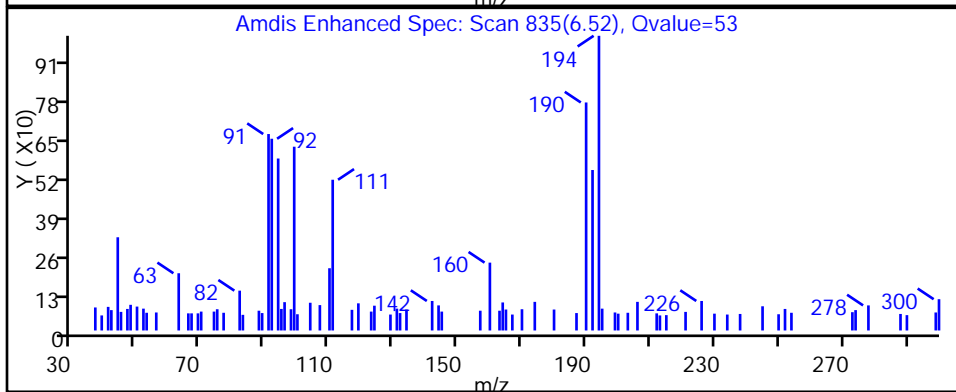
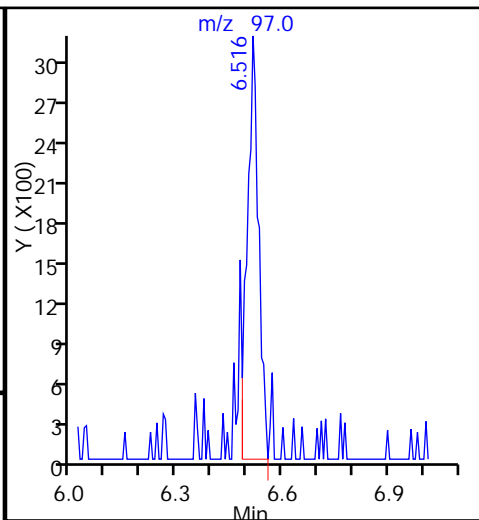
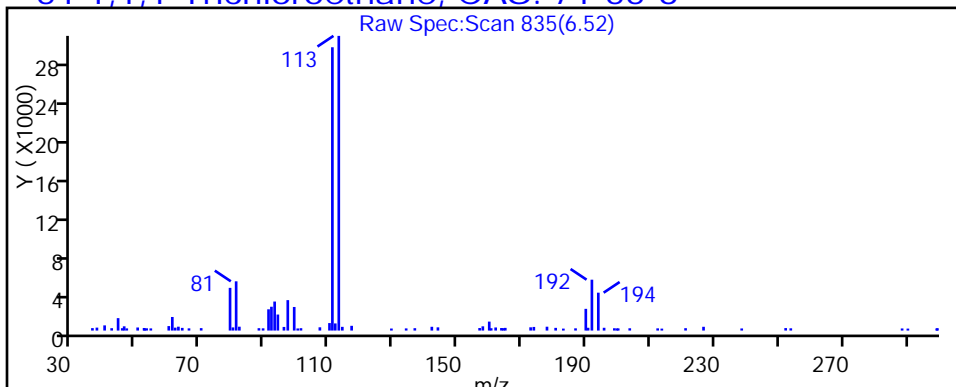
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424027.D

Injection Date: 24-Apr-2015 21:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-5

Lab Sample ID: 180-43257-5

Client ID: HD-MW-93D-0/1-0

Operator ID: 001562

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

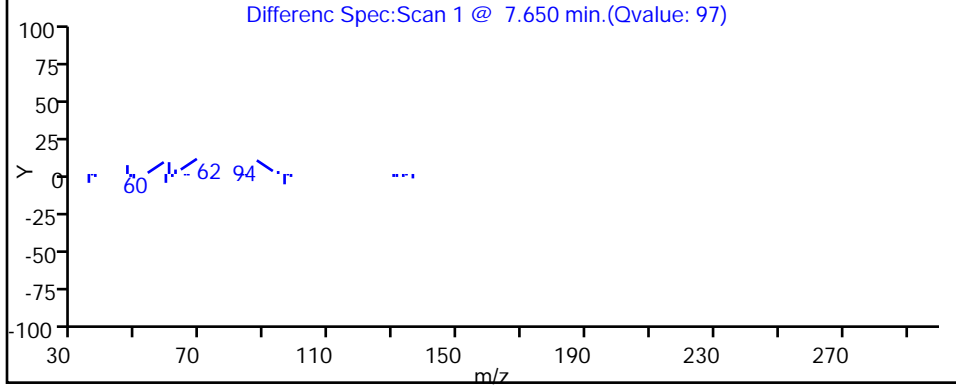
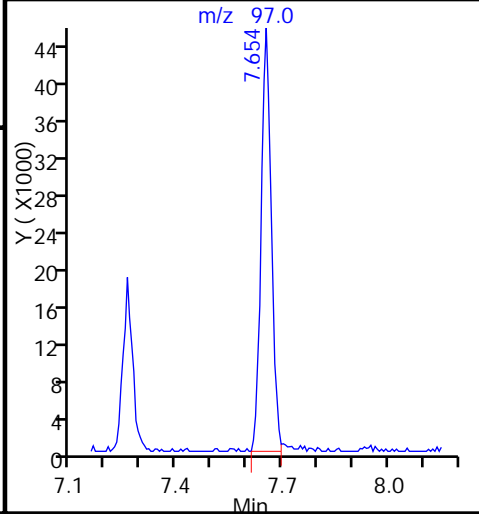
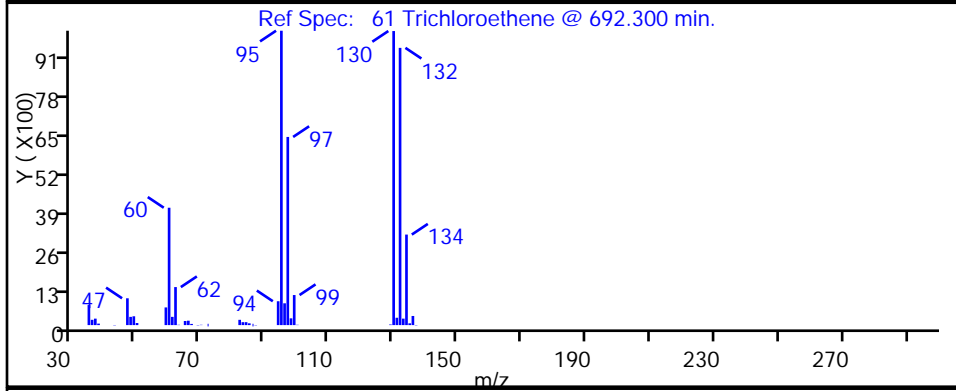
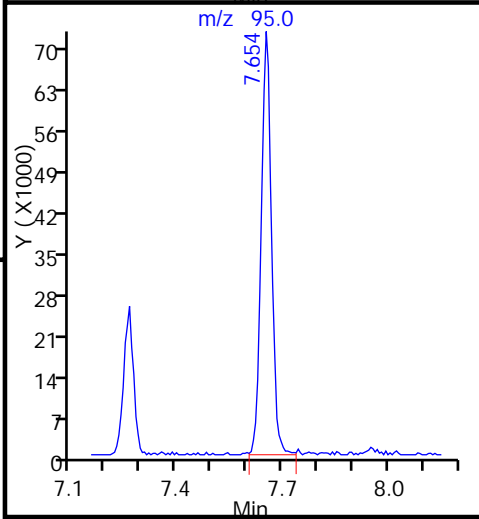
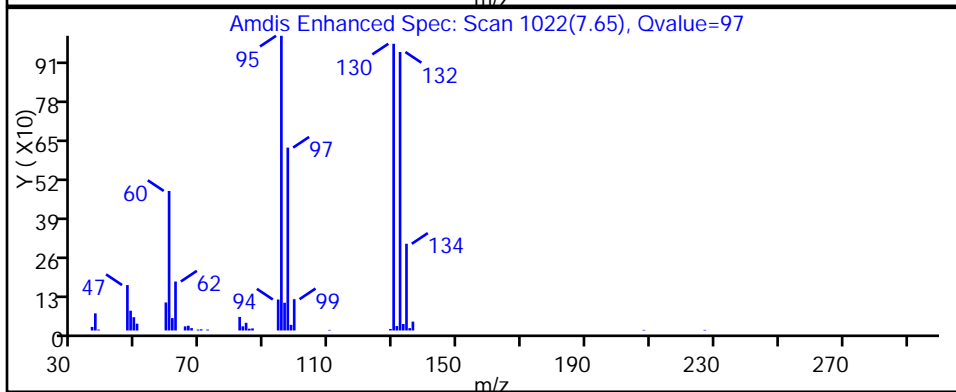
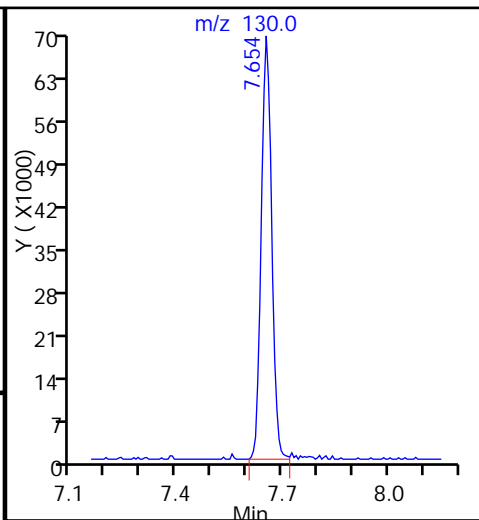
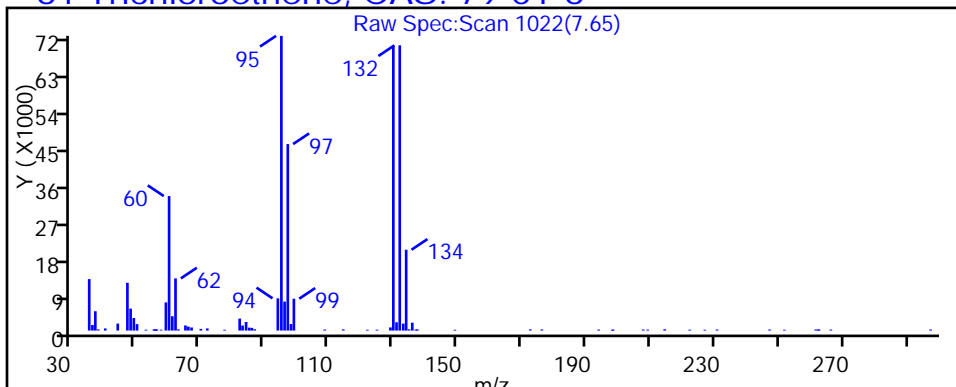
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424027.D

Injection Date: 24-Apr-2015 21:47:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-5

Lab Sample ID: 180-43257-5

Client ID: HD-MW-93D-0/1-0

Operator ID: 001562

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 5.000 mL

Dil. Factor: 10.0000

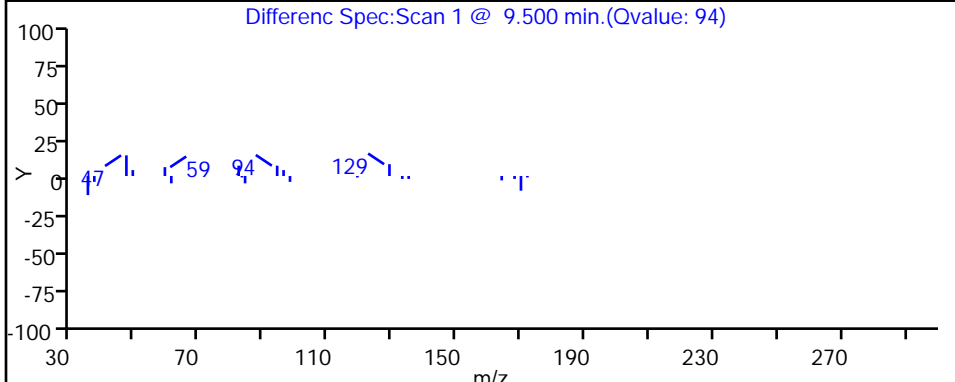
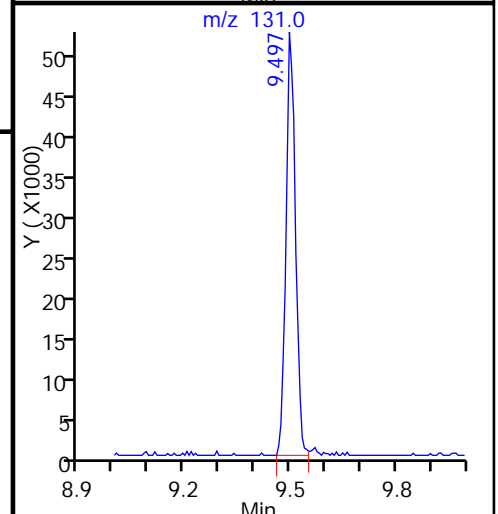
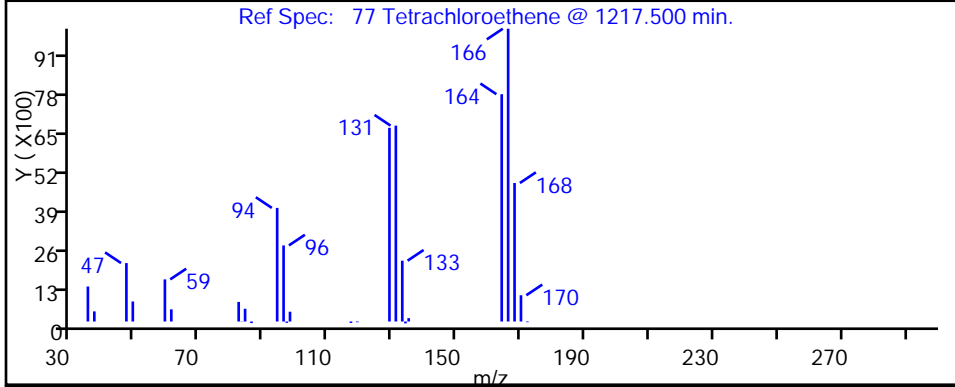
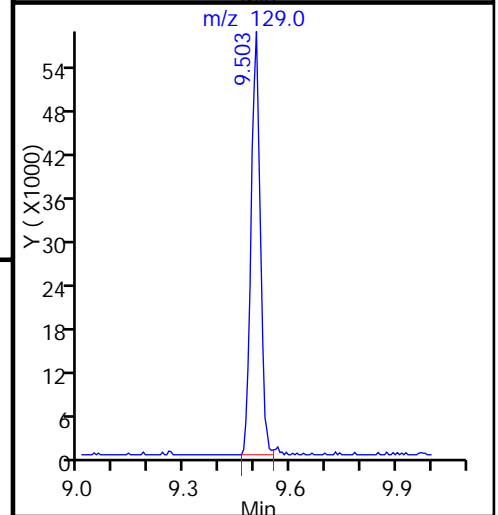
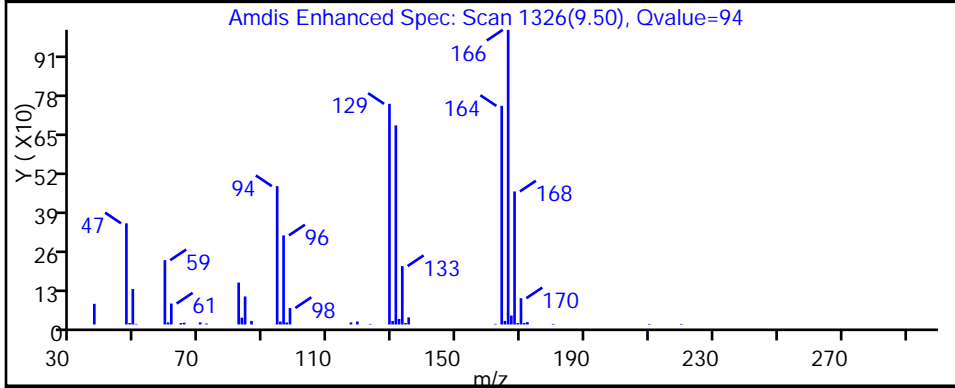
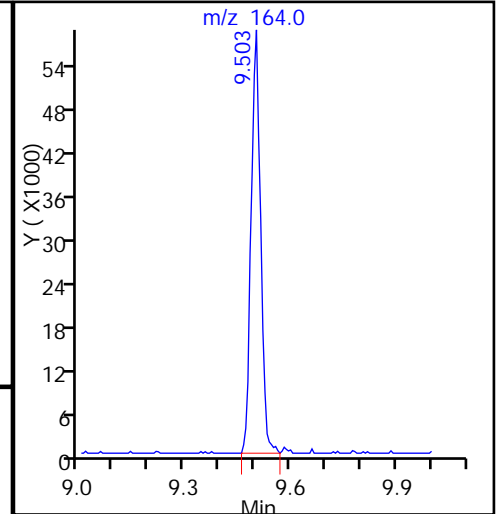
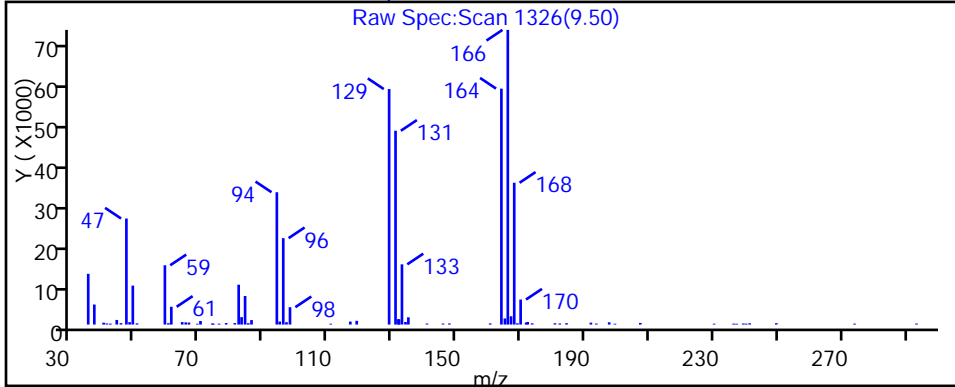
Method: MSVOA_LL_CHHP6

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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-93S-0/1-0 Lab Sample ID: 180-43257-6
 Matrix: Water Lab File ID: 60424028.D
 Analysis Method: 8260C Date Collected: 04/20/2015 12:39
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 22:10
 Soil Aliquot Vol: _____ Dilution Factor: 2
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 139551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	2.0	U	2.0	0.57
75-01-4	Vinyl chloride	2.0	U	2.0	0.45
74-83-9	Bromomethane	2.0	U *	2.0	0.63
75-00-3	Chloroethane	2.0	U	2.0	0.43
75-35-4	1,1-Dichloroethene	0.75	J	2.0	0.59
67-64-1	Acetone	10	U	10	5.0
75-15-0	Carbon disulfide	2.0	U	2.0	0.42
75-09-2	Methylene Chloride	2.0	U	2.0	0.25
156-60-5	trans-1,2-Dichloroethene	0.47	J	2.0	0.34
1634-04-4	Methyl tert-butyl ether	2.0	U	2.0	0.37
75-34-3	1,1-Dichloroethane	0.93	J	2.0	0.23
156-59-2	cis-1,2-Dichloroethene	36		2.0	0.47
74-97-5	Bromochloromethane	2.0	U	2.0	0.36
78-93-3	2-Butanone (MEK)	10	U	10	1.1
67-66-3	Chloroform	2.0	U	2.0	0.34
71-55-6	1,1,1-Trichloroethane	5.8		2.0	0.57
56-23-5	Carbon tetrachloride	2.0	U	2.0	0.27
71-43-2	Benzene	2.0	U	2.0	0.21
107-06-2	1,2-Dichloroethane	2.0	U	2.0	0.42
79-01-6	Trichloroethene	37		2.0	0.29
78-87-5	1,2-Dichloropropane	2.0	U	2.0	0.19
75-27-4	Bromodichloromethane	2.0	U	2.0	0.26
10061-01-5	cis-1,3-Dichloropropene	2.0	U	2.0	0.37
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	1.1
108-88-3	Toluene	2.0	U	2.0	0.30
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	0.30
79-00-5	1,1,2-Trichloroethane	2.0	U	2.0	0.40
127-18-4	Tetrachloroethene	110	E	2.0	0.30
591-78-6	2-Hexanone	10	U	10	0.32
124-48-1	Dibromochloromethane	2.0	U	2.0	0.27
106-93-4	1,2-Dibromoethane (EDB)	2.0	U	2.0	0.36
108-90-7	Chlorobenzene	2.0	U	2.0	0.27
630-20-6	1,1,1,2-Tetrachloroethane	2.0	U	2.0	0.55
100-41-4	Ethylbenzene	2.0	U	2.0	0.45
1330-20-7	Xylenes, Total	6.0	U	6.0	0.98
100-42-5	Styrene	2.0	U	2.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-93S-0/1-0 Lab Sample ID: 180-43257-6
 Matrix: Water Lab File ID: 60424028.D
 Analysis Method: 8260C Date Collected: 04/20/2015 12:39
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 22:10
 Soil Aliquot Vol: _____ Dilution Factor: 2
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 139551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	2.0	U	2.0	0.38
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.40
107-13-1	Acrylonitrile	40	U	40	1.1
123-91-1	1,4-Dioxane	400	U	400	69

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	105		70-118
1868-53-7	Dibromofluoromethane (Surr)	101		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424028.D
 Lims ID: 180-43257-D-6 Lab Sample ID: 180-43257-6
 Client ID: HD-MW-93S-0/1-0
 Sample Type: Client
 Inject. Date: 24-Apr-2015 22:10:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 2.0000
 Sample Info: 180-43257-D-6, 2x
 Misc. Info.: 180-0006620-028
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 25-Apr-2015 08:43:02 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: fergusond

Date: 25-Apr-2015 08:43:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.195	4.205	-0.010	85	151718	1000.0	
* 2 Fluorobenzene (IS)	96	7.261	7.259	0.002	99	519320	50.0	
* 3 Chlorobenzene-d5	119	10.376	10.374	0.002	91	109712	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.724	12.722	0.002	97	191364	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.531	6.523	0.008	93	107541	50.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.908	6.906	0.002	69	153249	49.9	
\$ 7 Toluene-d8 (Surr)	98	8.916	8.914	0.002	93	495642	54.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.562	11.560	0.002	84	182165	52.6	
12 Chloromethane	50		1.735				ND	
13 Vinyl chloride	62		1.863				ND	
15 Bromomethane	94		2.192				ND	
16 Chloroethane	64		2.344				ND	
22 1,1-Dichloroethene	96	3.331	3.311	0.020	26	5026	1.87	
24 Acetone	43	3.398	3.384	0.014	64	3823	4.38	
26 Carbon disulfide	76		3.603				ND	
31 Methylene Chloride	84	4.092	4.090	0.002	9	1871	0.5266	
33 Acrylonitrile	53		4.461				ND	
34 trans-1,2-Dichloroethene	96	4.530	4.528	0.002	92	3665	1.18	
35 Methyl tert-butyl ether	73		4.534				ND	
37 1,1-Dichloroethane	63	5.169	5.160	0.009	50	13645	2.32	
43 cis-1,2-Dichloroethene	96	5.911	5.902	0.009	83	295920	89.6	
44 2-Butanone (MEK)	43		5.909				ND	
48 Chlorobromomethane	128		6.201				ND	
50 Chloroform	83	6.337	6.347	-0.010	18	1284	0.2741	
51 1,1,1-Trichloroethane	97	6.519	6.511	0.008	95	46541	14.4	
53 Carbon tetrachloride	117		6.687				ND	
56 Benzene	78		6.906				ND	
57 1,2-Dichloroethane	62		6.991				ND	
61 Trichloroethene	130	7.657	7.655	0.002	97	264841	93.5	
64 1,2-Dichloropropane	63		7.928				ND	
65 1,4-Dioxane	88		8.013				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.208				ND	
71 cis-1,3-Dichloropropene	75		8.646				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.792				ND	
73 Toluene	91	8.977	8.981	-0.004	62	4644	0.4092	
74 trans-1,3-Dichloropropene	75		9.224				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164	9.500	9.498	0.002	93	509067	270.5	E
79 2-Hexanone	43		9.626				ND	
81 Chlorodibromomethane	129		9.802				ND	
82 Ethylene Dibromide	107		9.918				ND	
84 Chlorobenzene	112	10.406	10.404	0.002	29	1656	0.2313	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.502				ND	
88 m-Xylene & p-Xylene	106		10.629				ND	
89 o-Xylene	106		11.013				ND	
90 Styrene	104		11.037				ND	
91 Bromoform	173		11.219				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424028.D

Injection Date: 24-Apr-2015 22:10:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-D-6

Lab Sample ID: 180-43257-6

Worklist Smp#: 28

Client ID: HD-MW-93S-0/1-0

Purge Vol: 5.000 mL

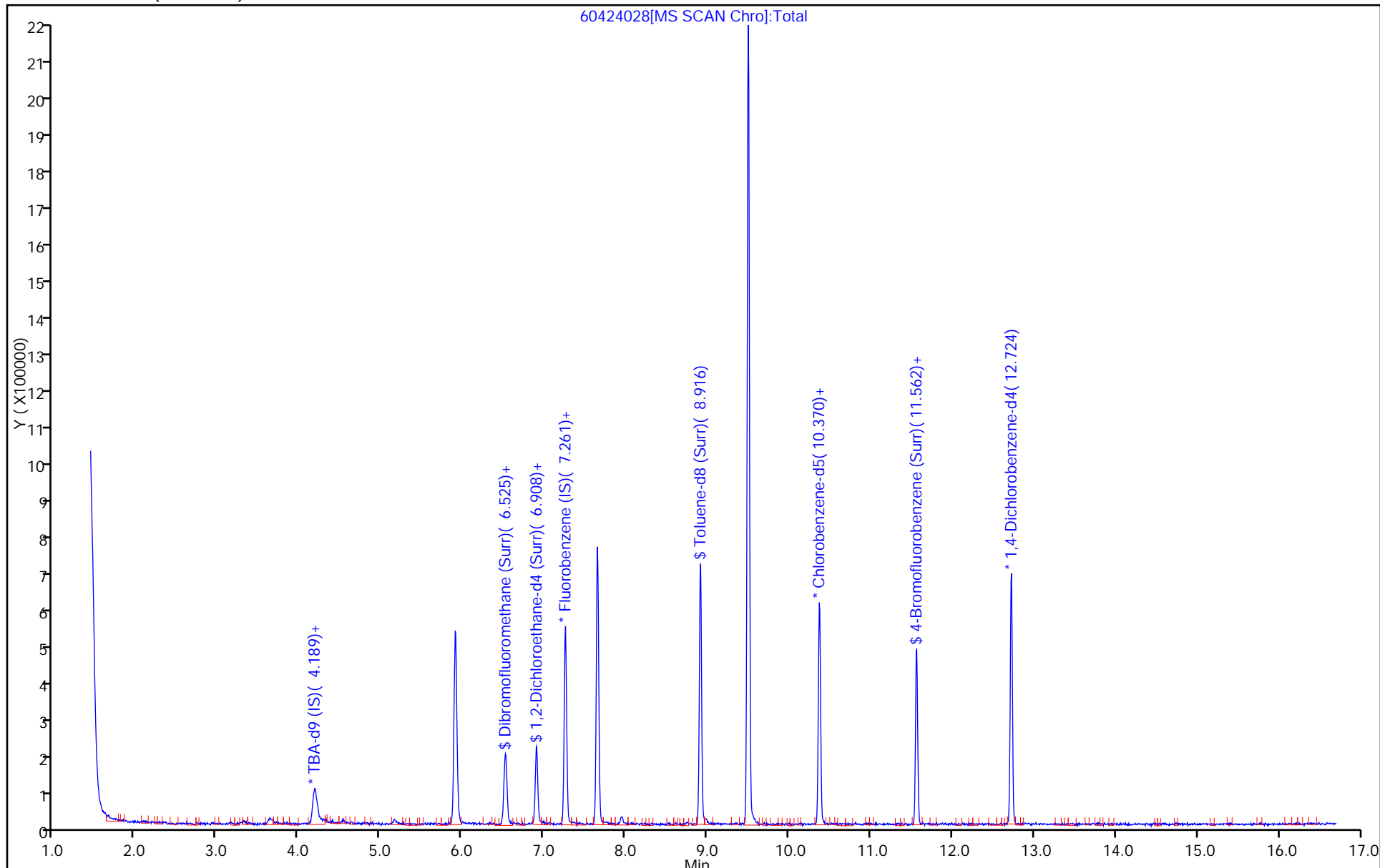
Dil. Factor: 2.0000

ALS Bottle#: 27

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424028.D

Injection Date: 24-Apr-2015 22:10:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

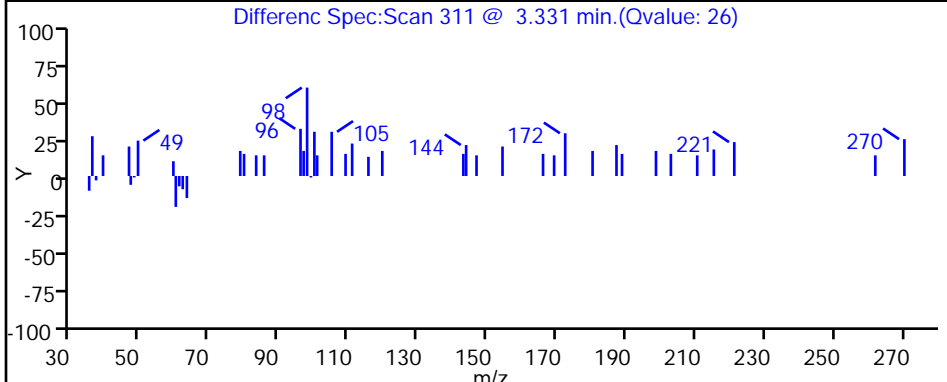
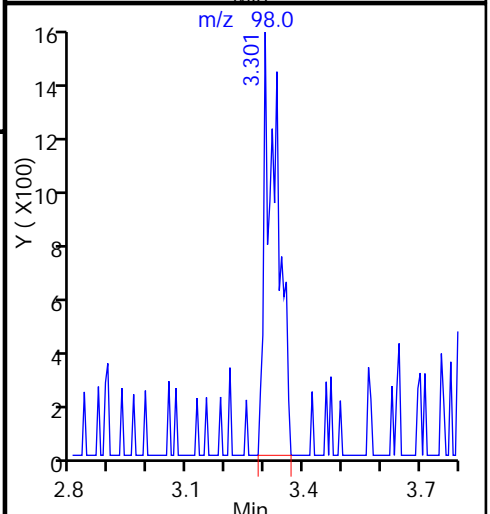
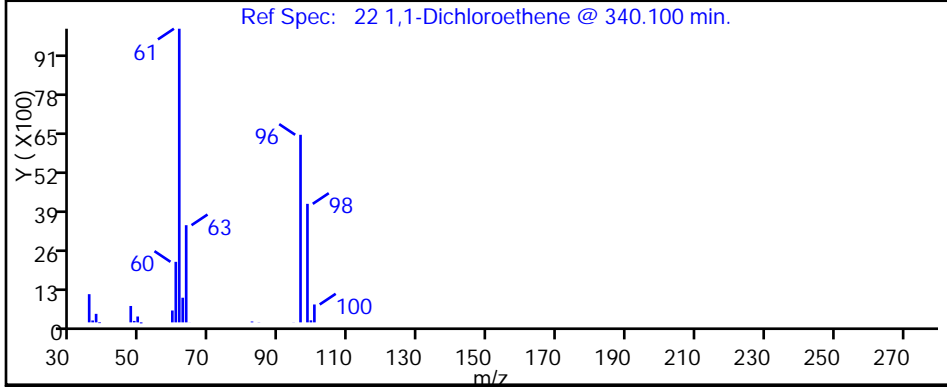
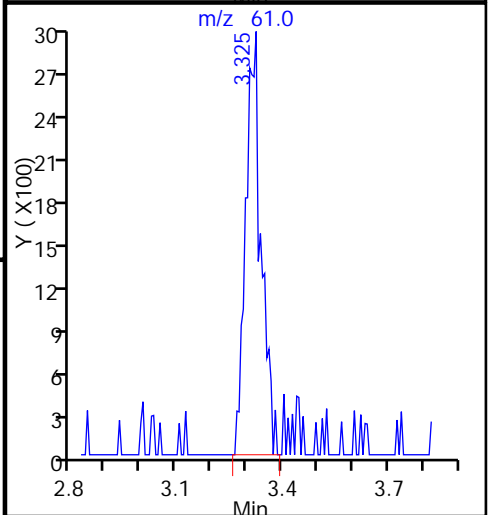
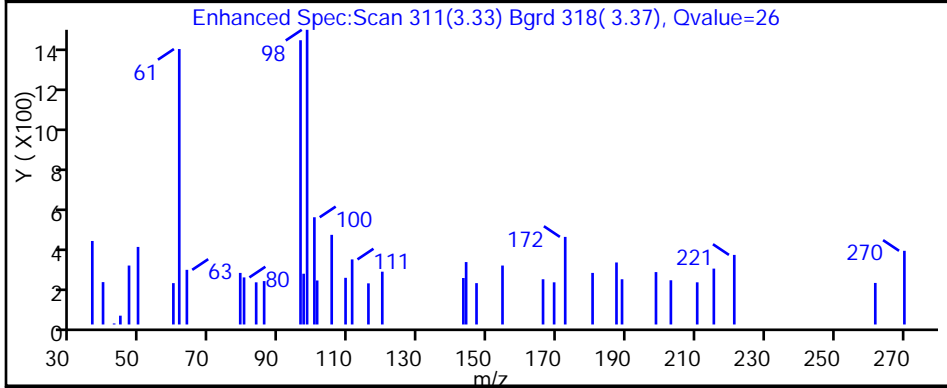
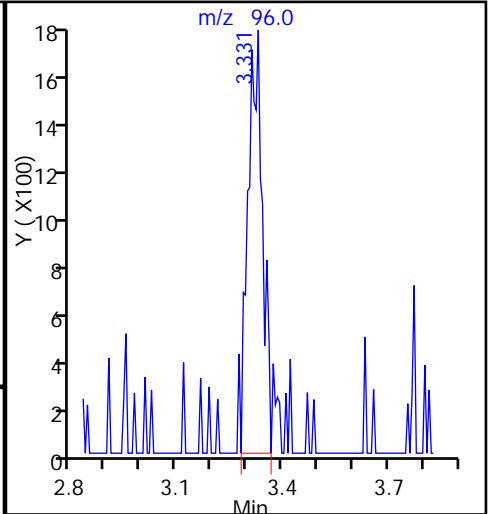
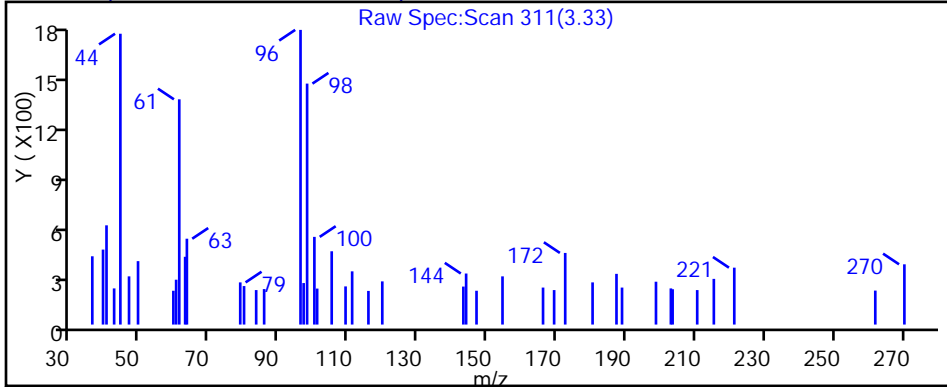
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424028.D

Injection Date: 24-Apr-2015 22:10:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

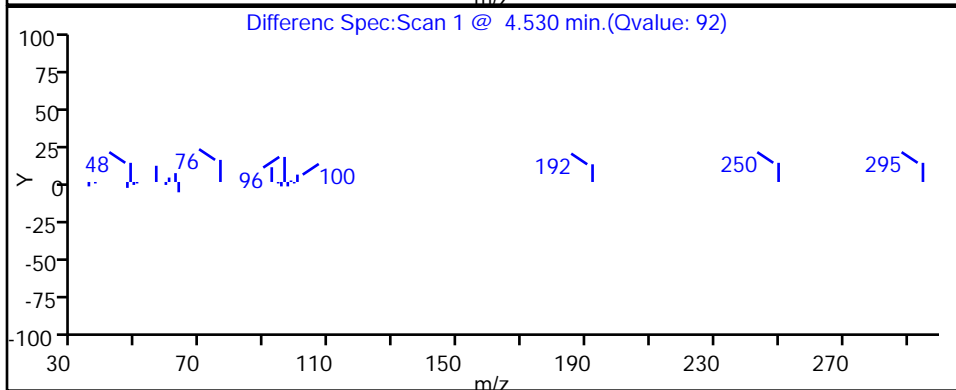
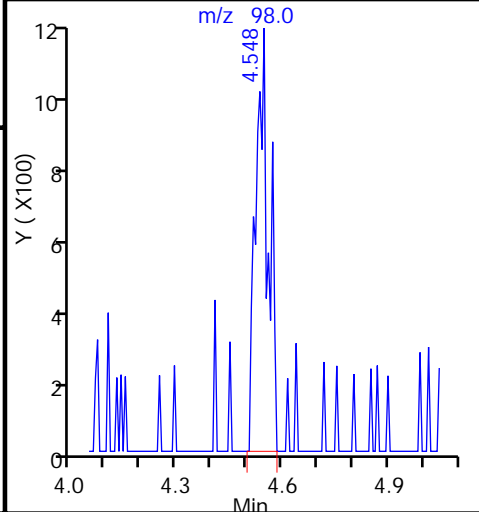
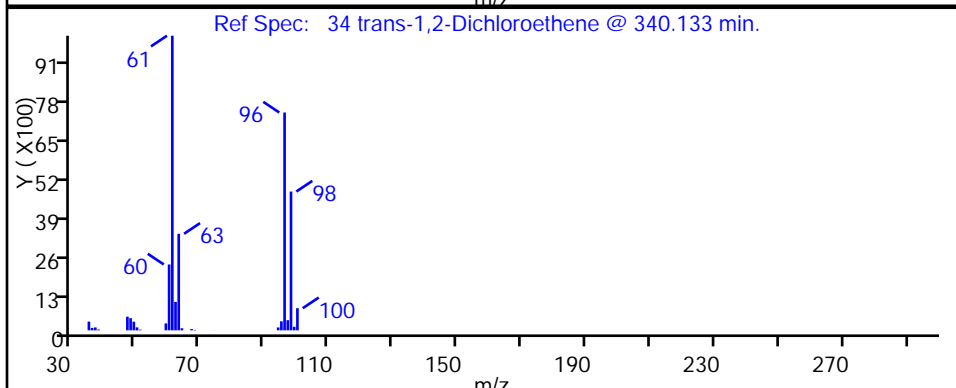
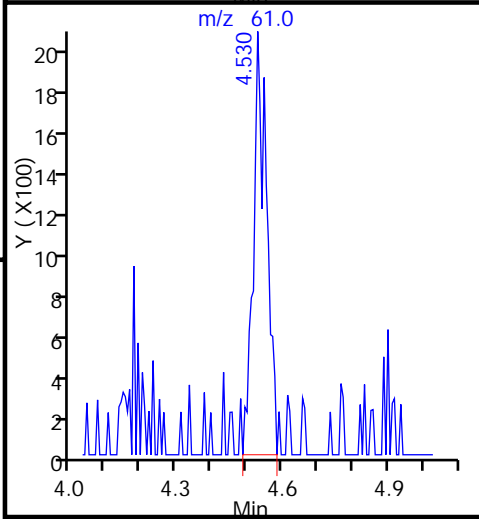
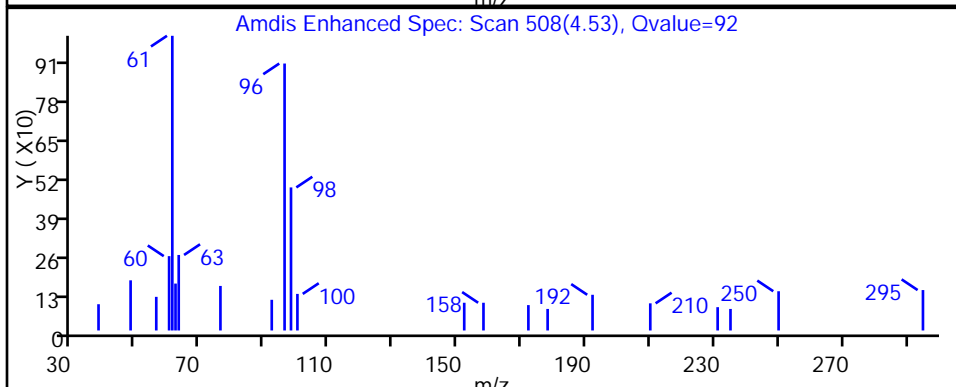
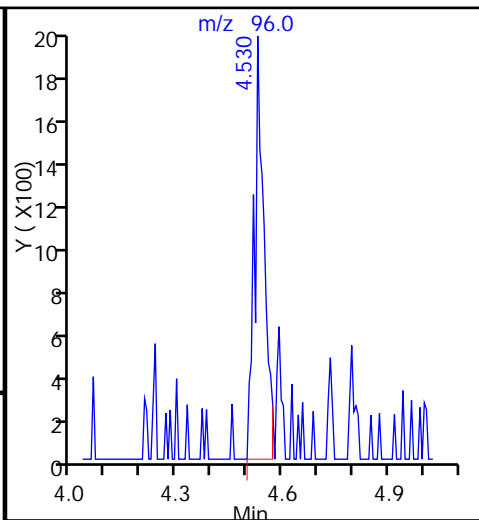
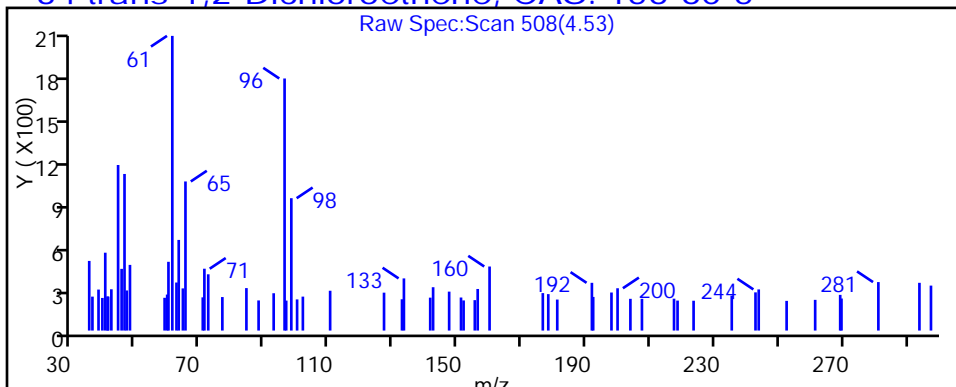
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424028.D

Injection Date: 24-Apr-2015 22:10:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

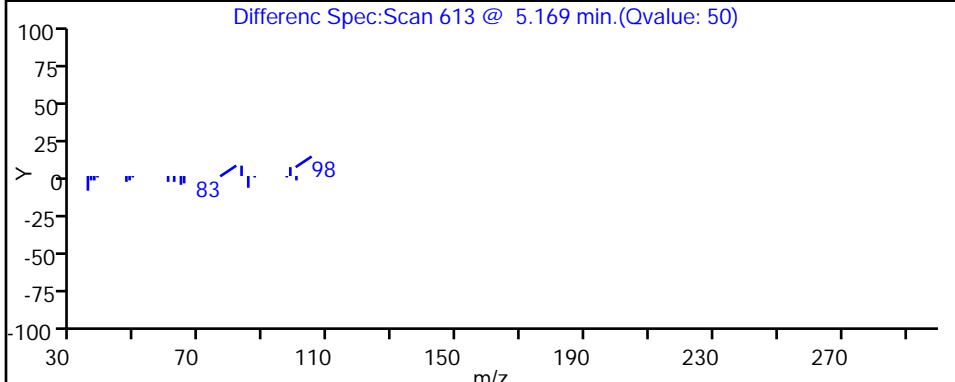
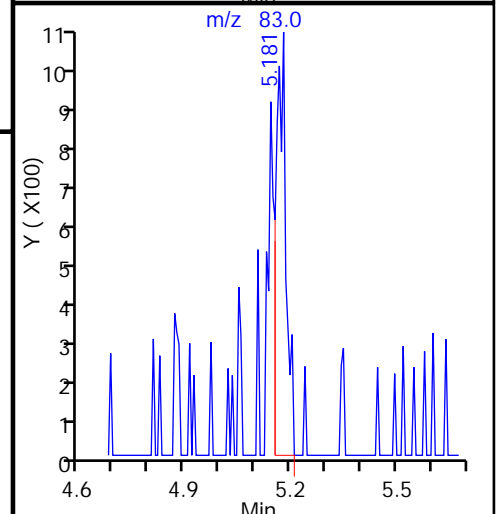
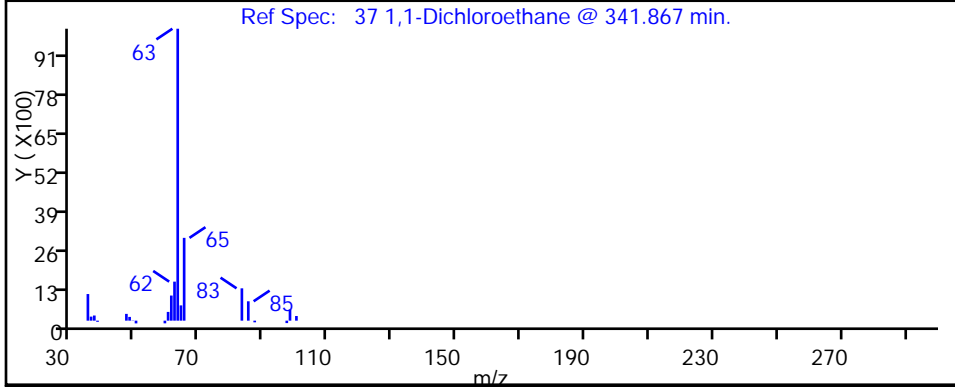
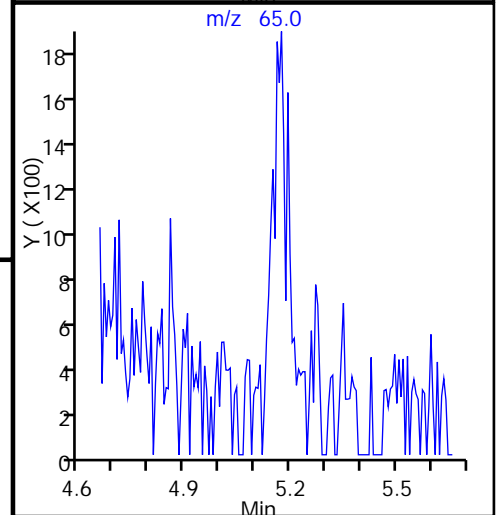
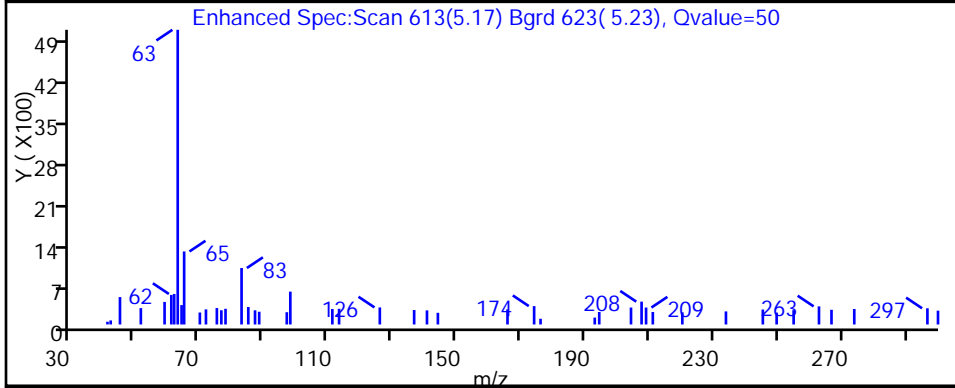
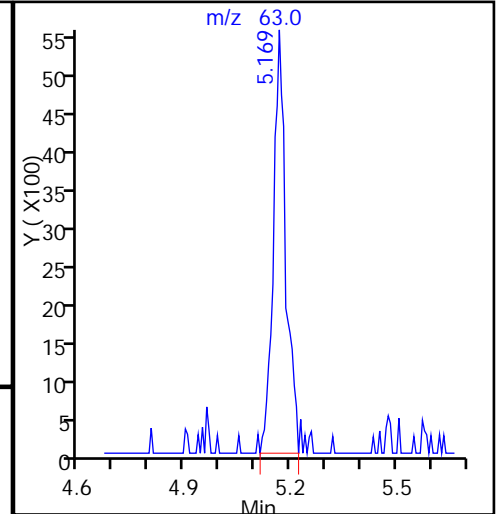
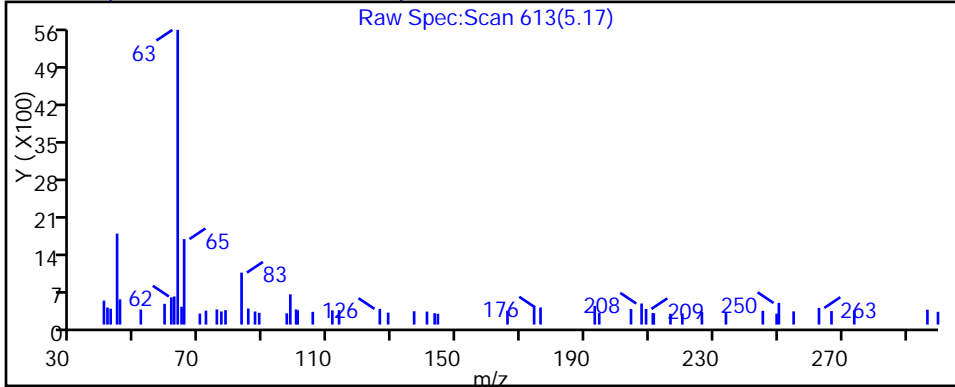
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424028.D

Injection Date: 24-Apr-2015 22:10:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

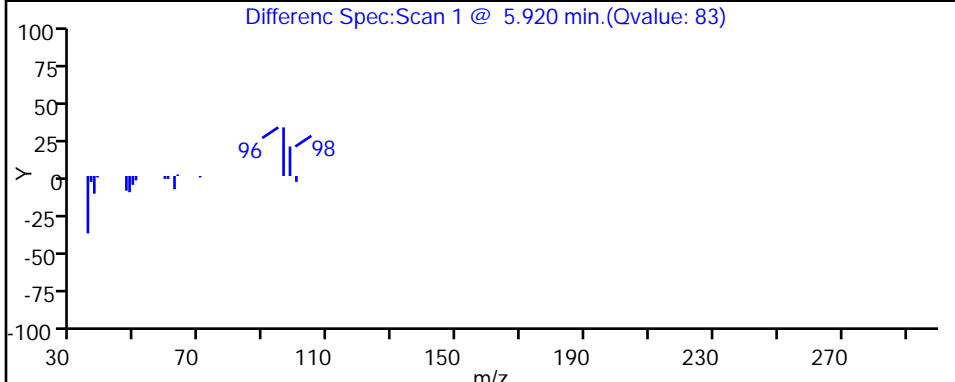
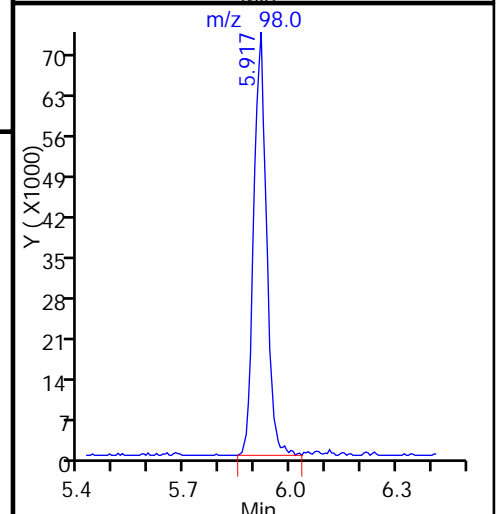
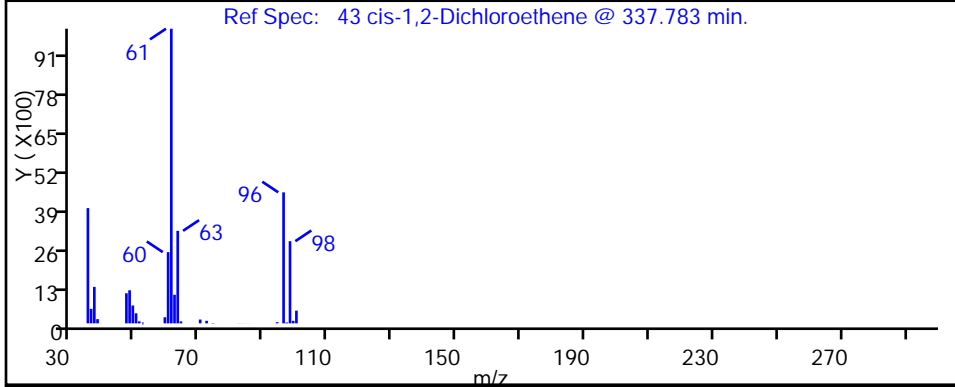
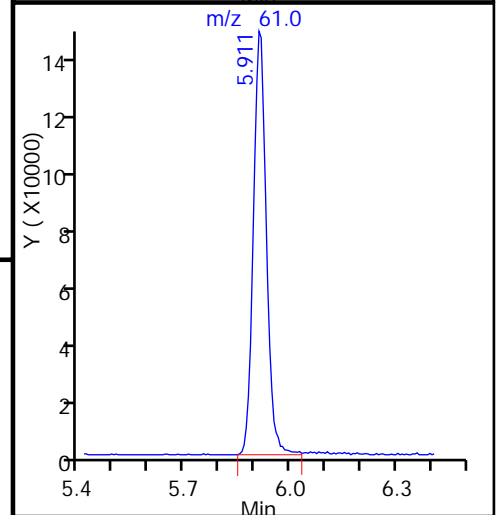
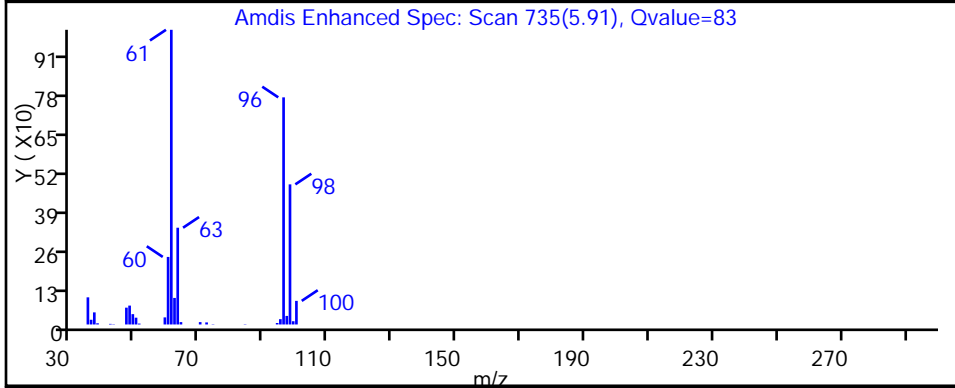
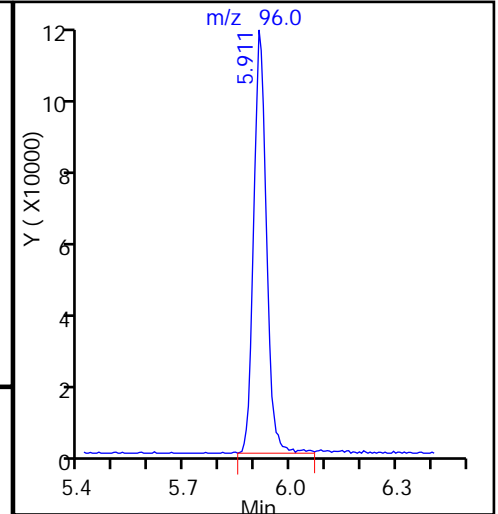
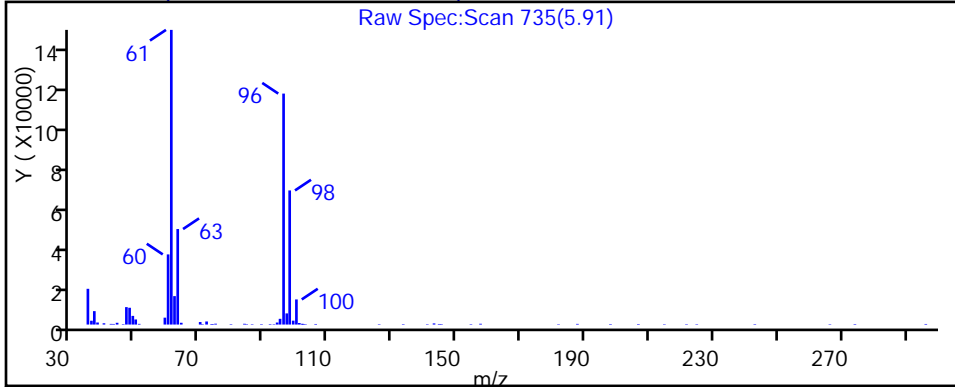
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424028.D

Injection Date: 24-Apr-2015 22:10:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

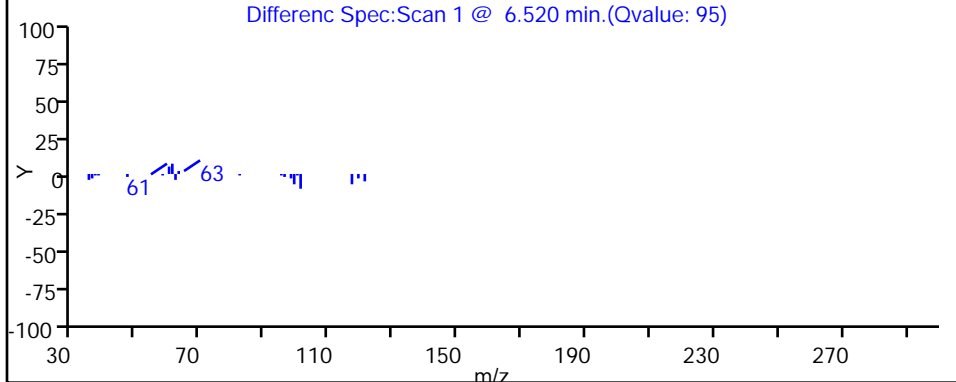
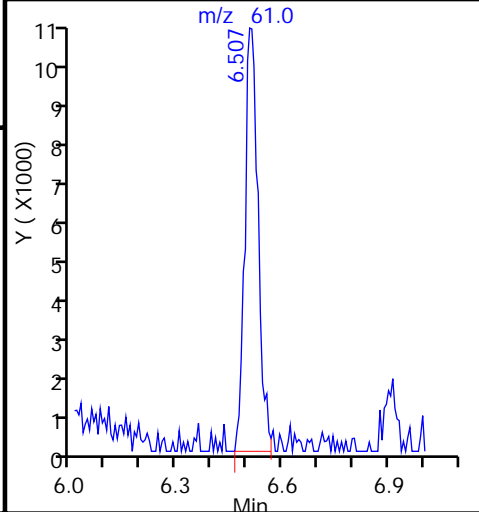
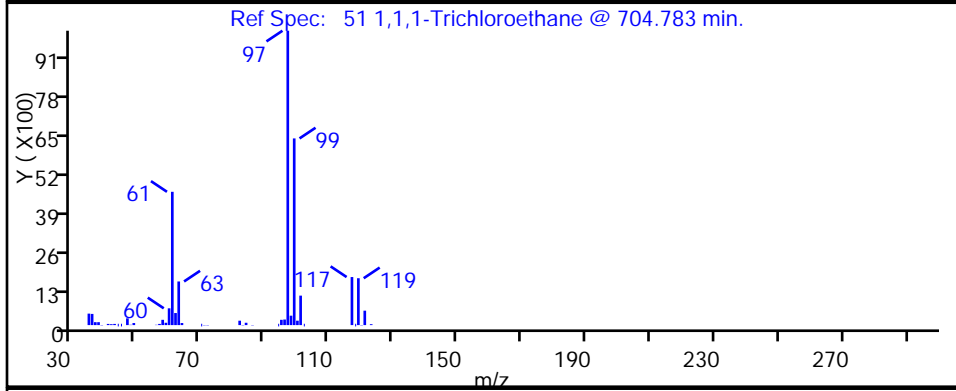
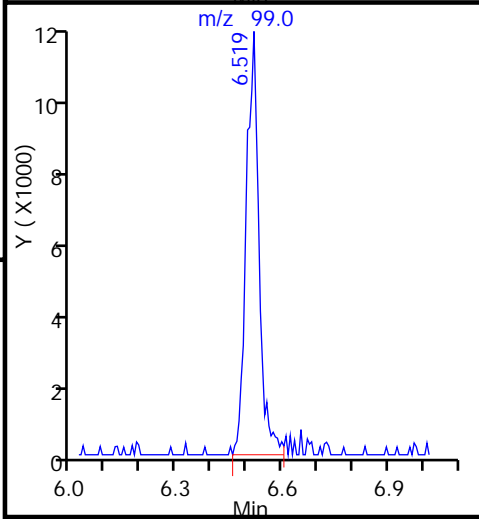
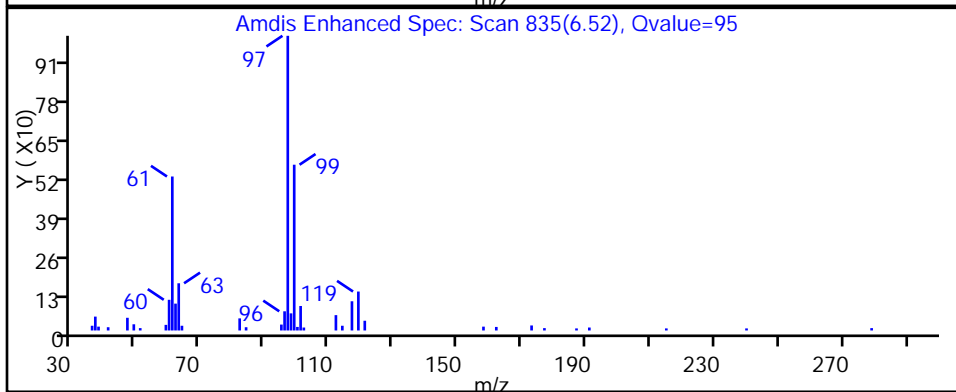
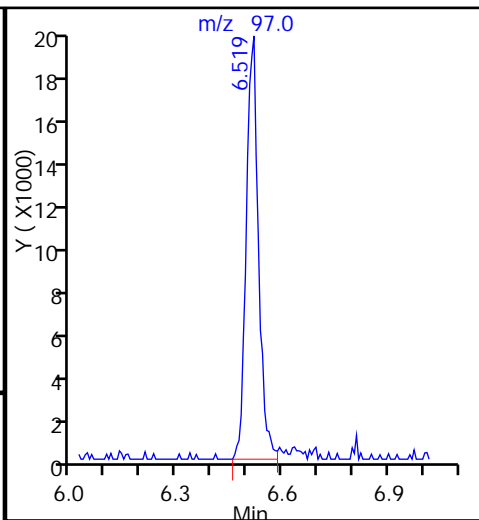
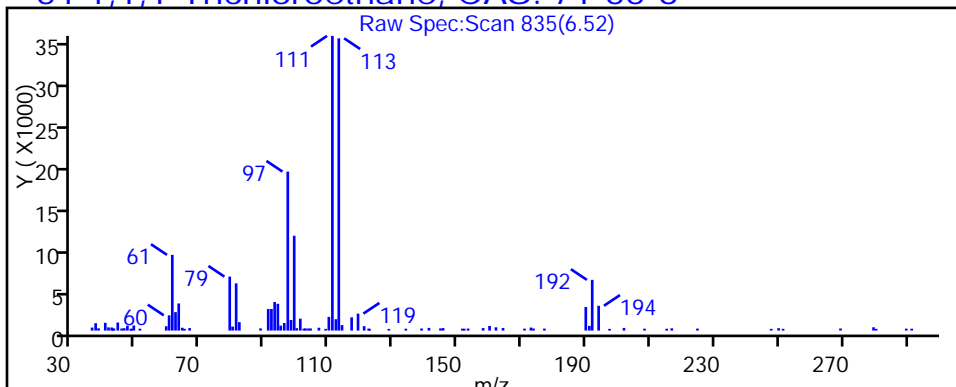
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424028.D

Injection Date: 24-Apr-2015 22:10:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

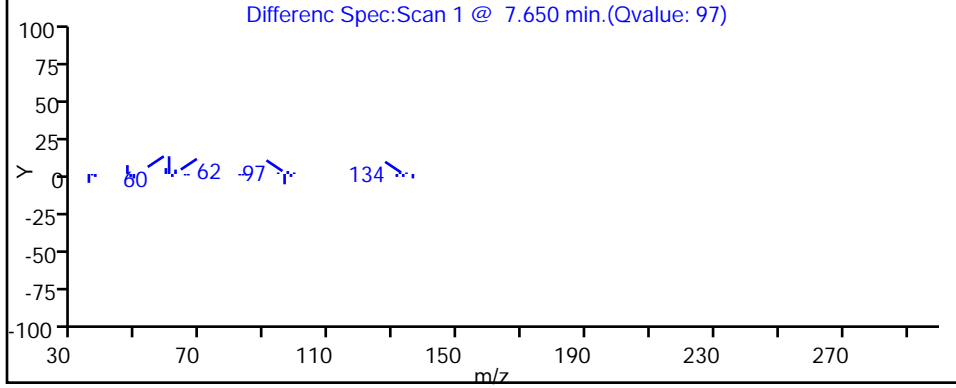
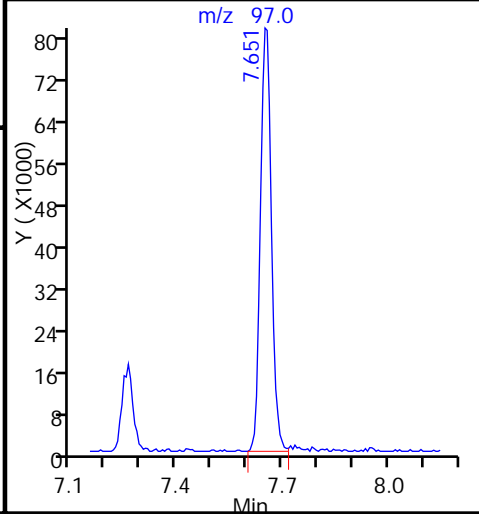
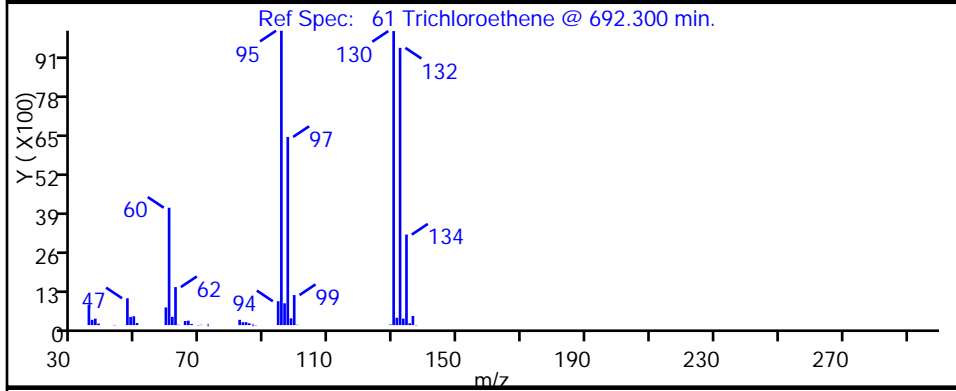
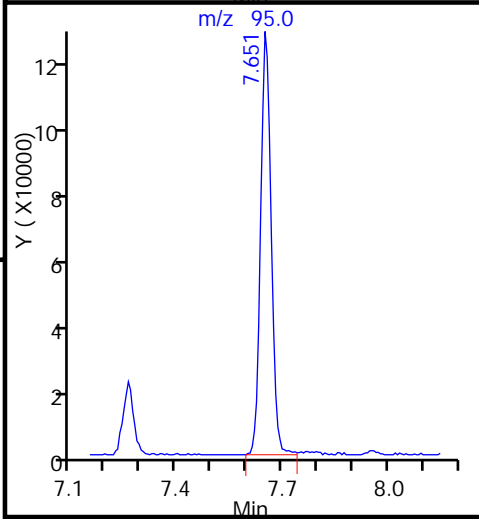
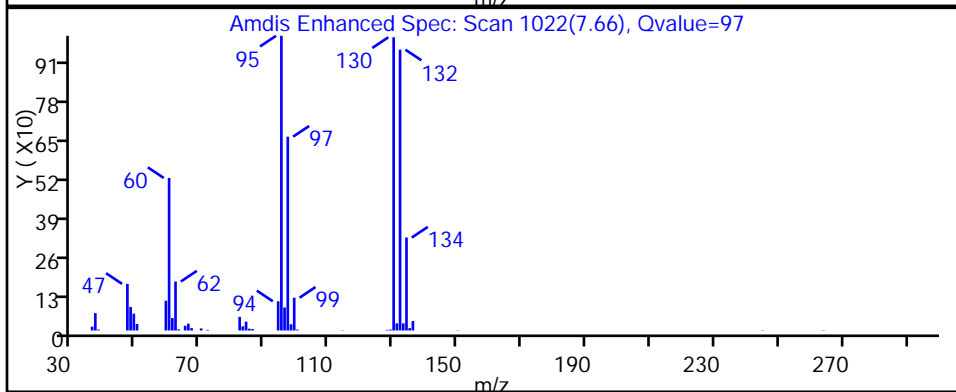
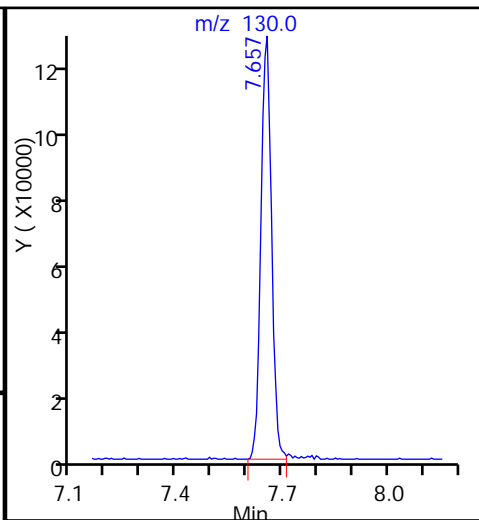
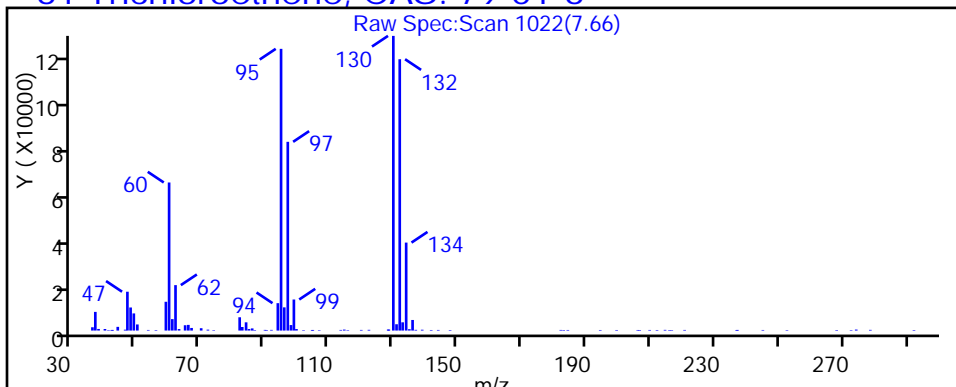
Method: MSVOA_LL_CHHP6

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\20150424-6620.b\60424028.D

Injection Date: 24-Apr-2015 22:10:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

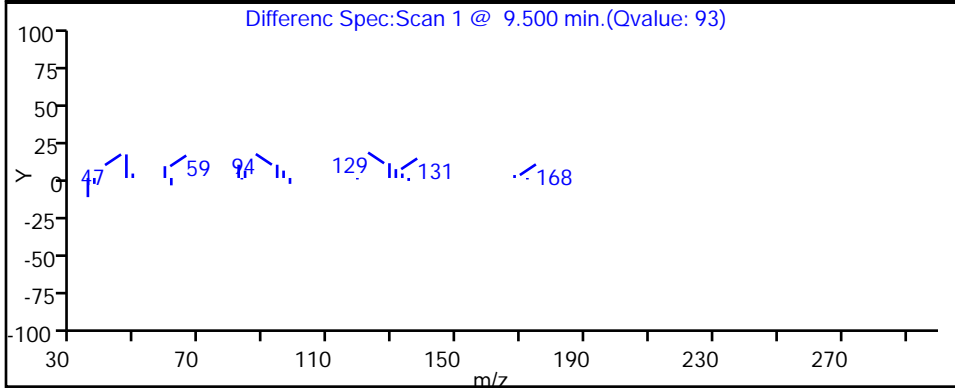
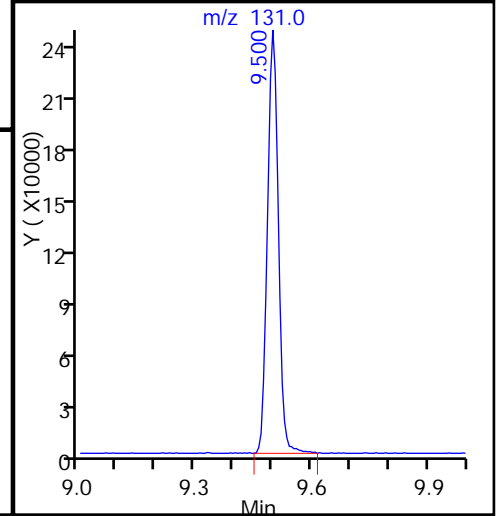
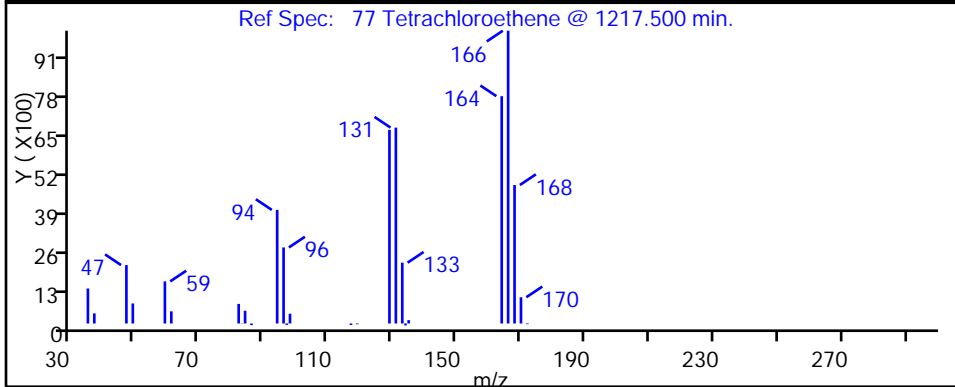
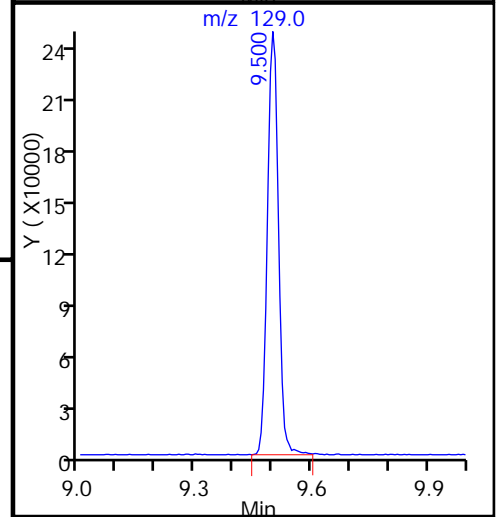
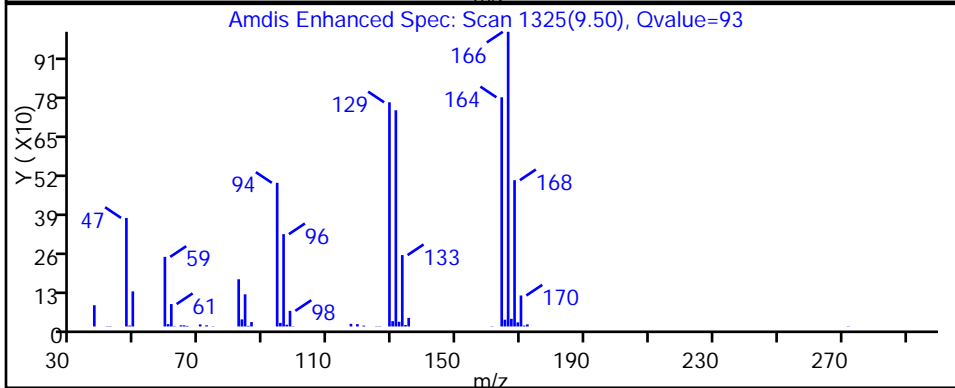
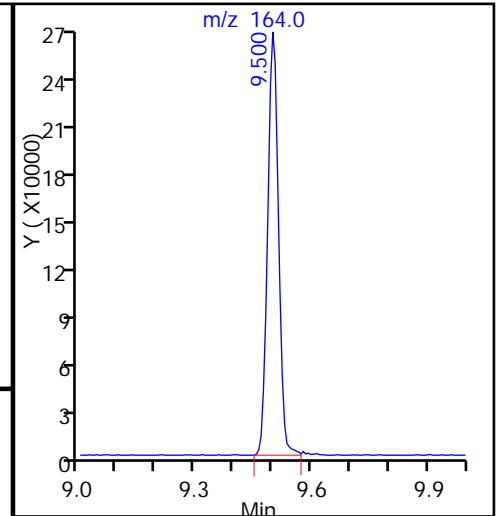
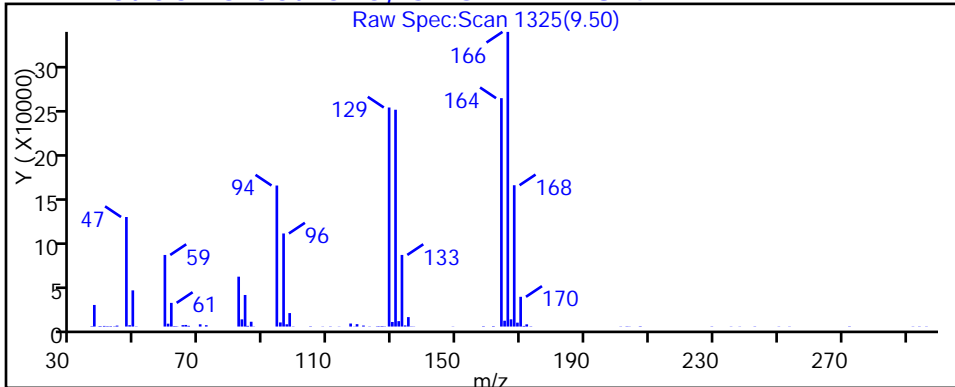
Method: MSVOA_LL_CHHP6

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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-93S-0/1-0 DL Lab Sample ID: 180-43257-6 DL
 Matrix: Water Lab File ID: 60425013.D
 Analysis Method: 8260C Date Collected: 04/20/2015 12:39
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 16:23
 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.: 139651 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	5.0	U	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	1.0	J	5.0	0.63
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.85
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.92
75-34-3	1,1-Dichloroethane	0.85	J	5.0	0.58
156-59-2	cis-1,2-Dichloroethene	32		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	5.3		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	35		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	110		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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-93S-0/1-0 DL Lab Sample ID: 180-43257-6 DL
 Matrix: Water Lab File ID: 60425013.D
 Analysis Method: 8260C Date Collected: 04/20/2015 12:39
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 16:23
 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.: 139651 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)	98		64-135
2037-26-5	Toluene-d8 (Surr)	106		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	97		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425013.D
 Lims ID: 180-43257-C-6 Lab Sample ID: 180-43257-6
 Client ID: HD-MW-93S-0/1-0
 Sample Type: Client
 Inject. Date: 25-Apr-2015 16:23:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 5.0000
 Sample Info: 180-43257-C-6, 5x
 Misc. Info.: 180-0006632-013
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 08:27:32 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 27-Apr-2015 08:27:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.188	4.205	-0.017	86	193417	1000.0	
* 2 Fluorobenzene (IS)	96	7.260	7.259	0.001	98	586672	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.367	0.007	89	127035	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.723	12.722	0.001	98	213948	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.530	6.529	0.001	93	117750	48.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.907	6.906	0.001	68	169538	48.9	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	93	559523	52.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.561	11.560	0.001	84	206736	51.5	
12 Chloromethane	50		1.741				ND	
13 Vinyl chloride	62		1.869				ND	
15 Bromomethane	94		2.210				ND	
16 Chloroethane	64		2.356				ND	
22 1,1-Dichloroethene	96	3.318	3.305	0.013	34	3130	1.03	M
24 Acetone	43		3.396				ND	
26 Carbon disulfide	76		3.603				ND	
31 Methylene Chloride	84	4.090	4.095	-0.005	22	4196	1.05	
33 Acrylonitrile	53		4.460				ND	
34 trans-1,2-Dichloroethene	96		4.527				ND	
35 Methyl tert-butyl ether	73		4.533				ND	
37 1,1-Dichloroethane	63	5.173	5.166	0.007	29	5621	0.8452	
44 2-Butanone (MEK)	43		5.908				ND	
43 cis-1,2-Dichloroethene	96	5.915	5.914	0.001	84	121238	32.5	
48 Chlorobromomethane	128		6.206				ND	
50 Chloroform	83		6.346				ND	
51 1,1,1-Trichloroethane	97	6.511	6.511	0.000	95	19493	5.33	
53 Carbon tetrachloride	117		6.687				ND	
56 Benzene	78		6.912				ND	
57 1,2-Dichloroethane	62		6.991				ND	
61 Trichloroethene	130	7.655	7.654	0.001	96	112029	35.0	
64 1,2-Dichloropropane	63		7.928				ND	
65 1,4-Dioxane	88		8.007				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.208				ND	
71 cis-1,3-Dichloropropene	75		8.652				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.798				ND	
73 Toluene	91	8.993	8.980	0.013	19	5679	0.4322	M
74 trans-1,3-Dichloropropene	75		9.230				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164	9.498	9.504	-0.006	95	235008	107.8	
79 2-Hexanone	43		9.631				ND	
81 Chlorodibromomethane	129		9.808				ND	
82 Ethylene Dibromide	107		9.917				ND	
84 Chlorobenzene	112		10.404				ND	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.501				ND	
88 m-Xylene & p-Xylene	106		10.635				ND	
89 o-Xylene	106		11.012				ND	
90 Styrene	104		11.031				ND	
91 Bromoform	173		11.225				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425013.D

Injection Date: 25-Apr-2015 16:23:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-C-6

Lab Sample ID: 180-43257-6

Worklist Smp#: 13

Client ID: HD-MW-93S-0/1-0

Purge Vol: 5.000 mL

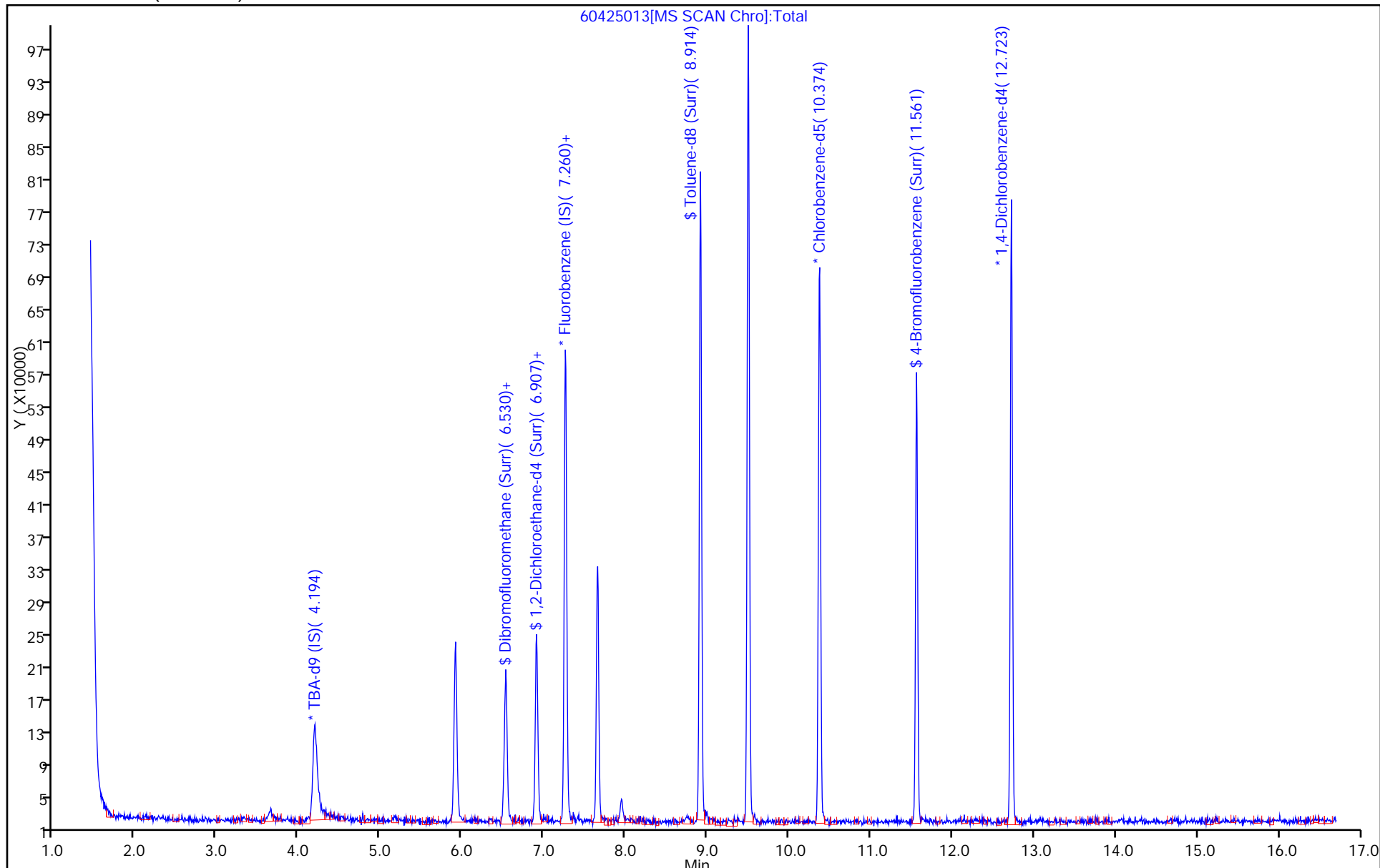
Dil. Factor: 5.0000

ALS Bottle#: 13

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425013.D

Injection Date: 25-Apr-2015 16:23:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

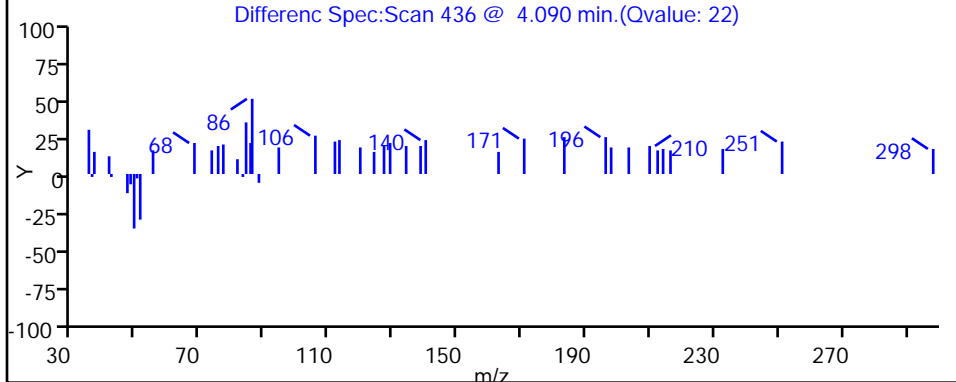
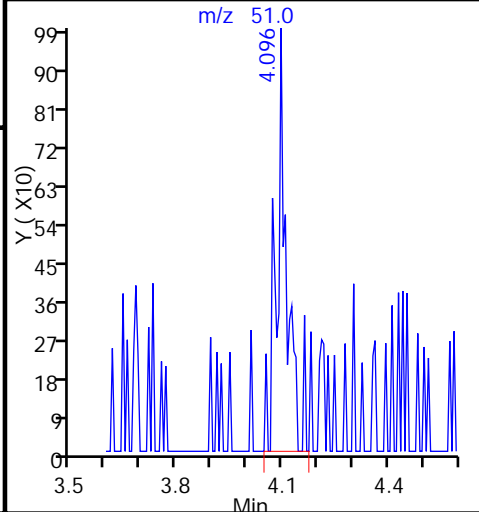
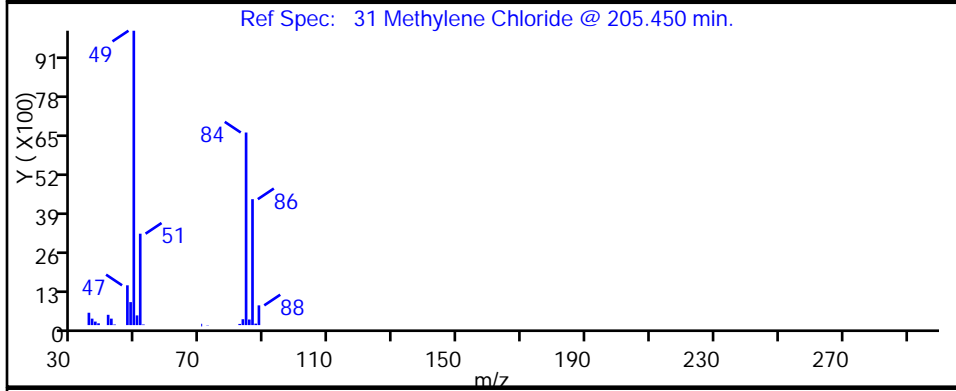
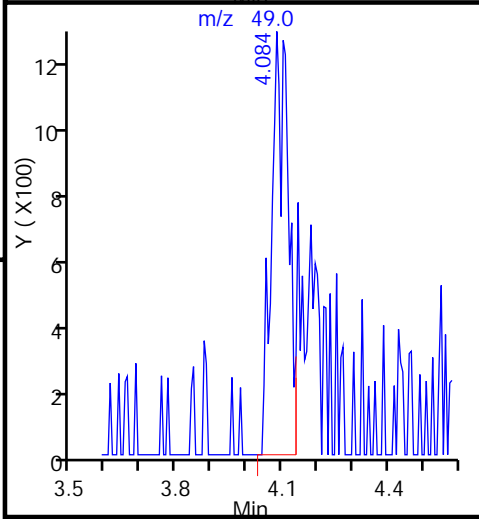
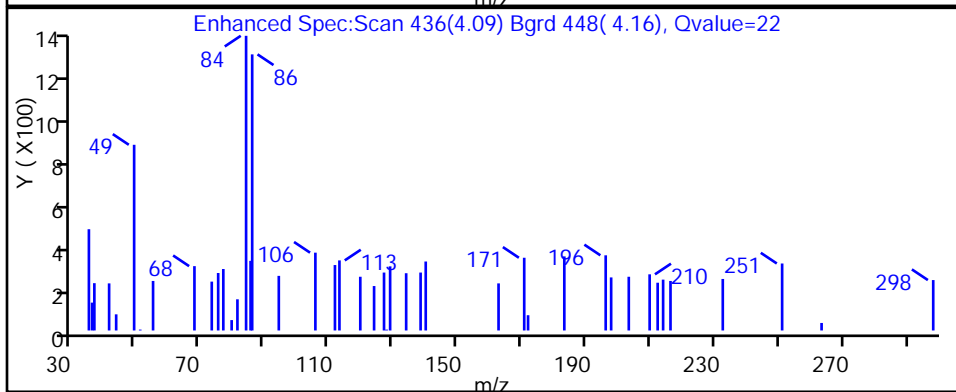
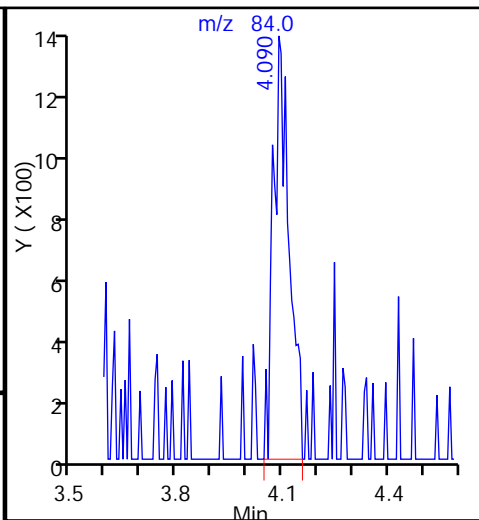
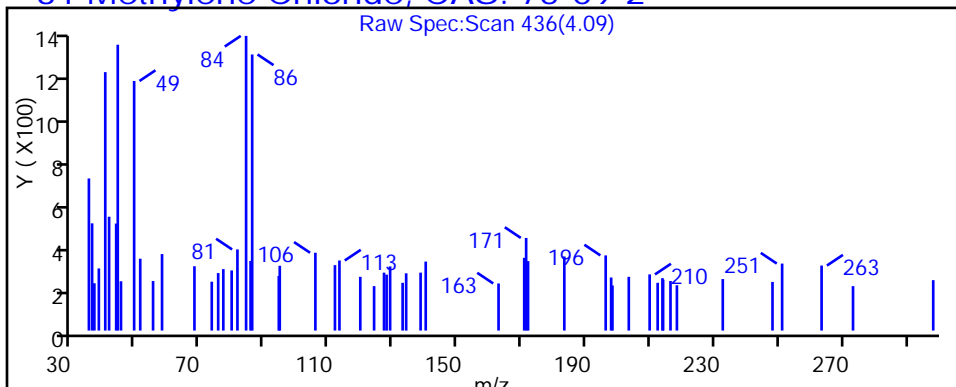
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425013.D

Injection Date: 25-Apr-2015 16:23:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

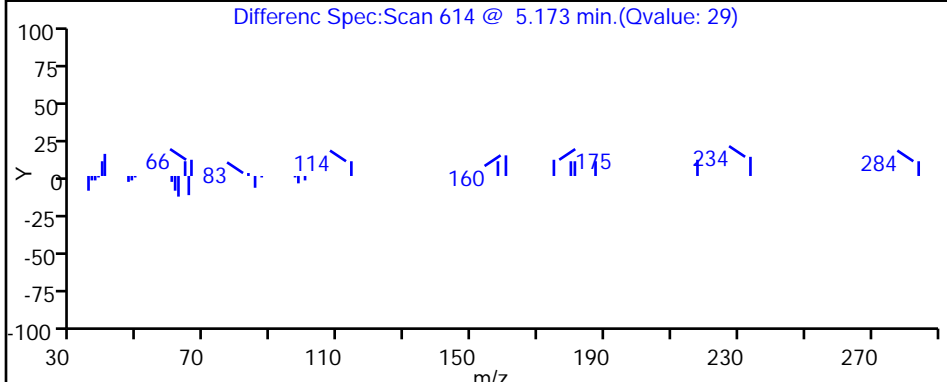
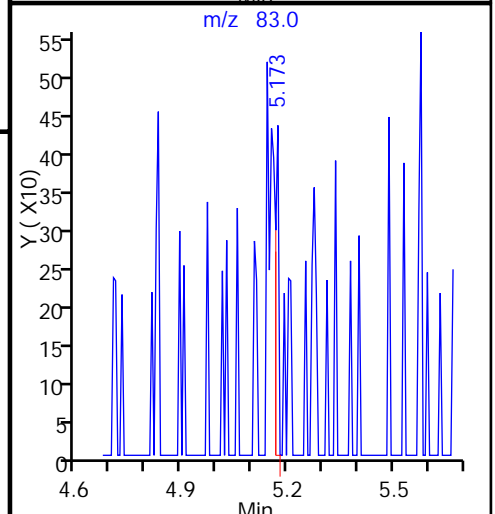
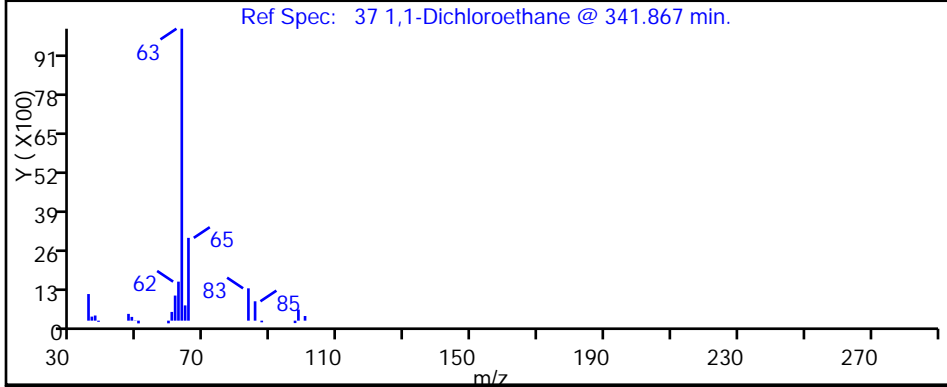
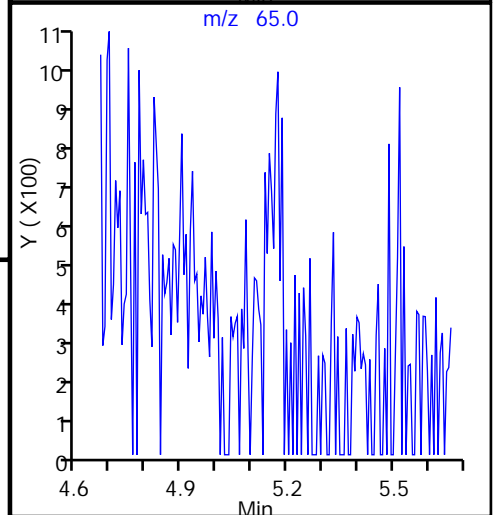
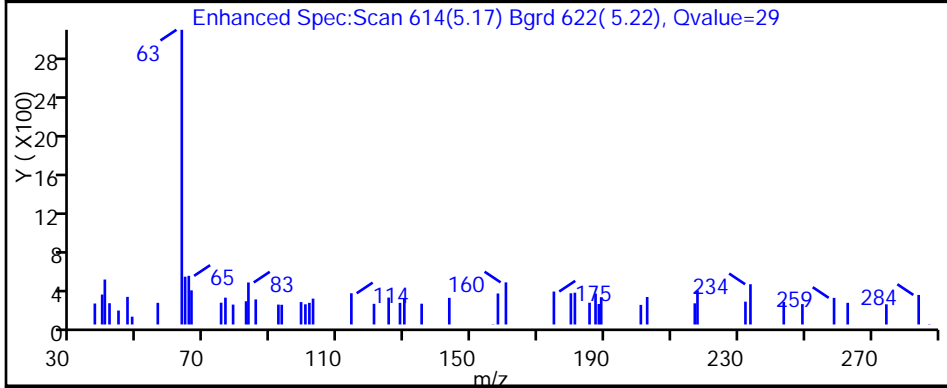
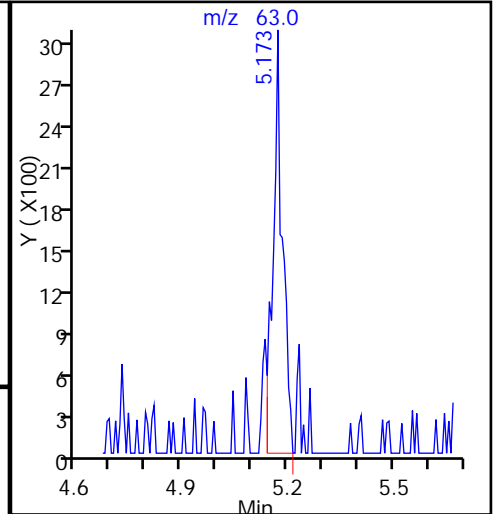
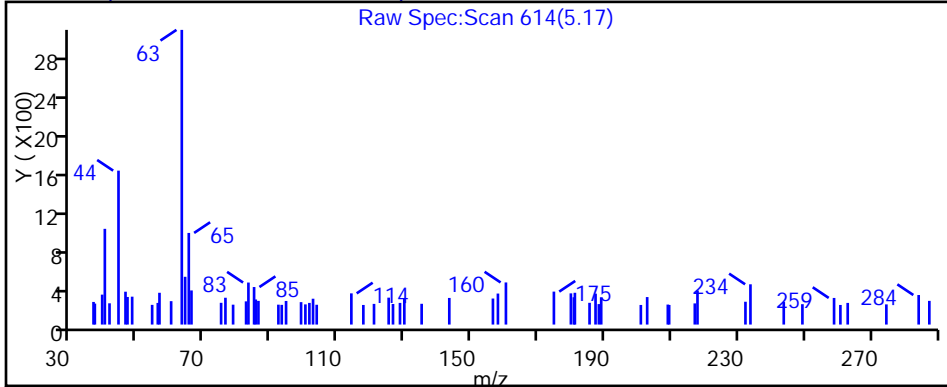
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425013.D

Injection Date: 25-Apr-2015 16:23:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

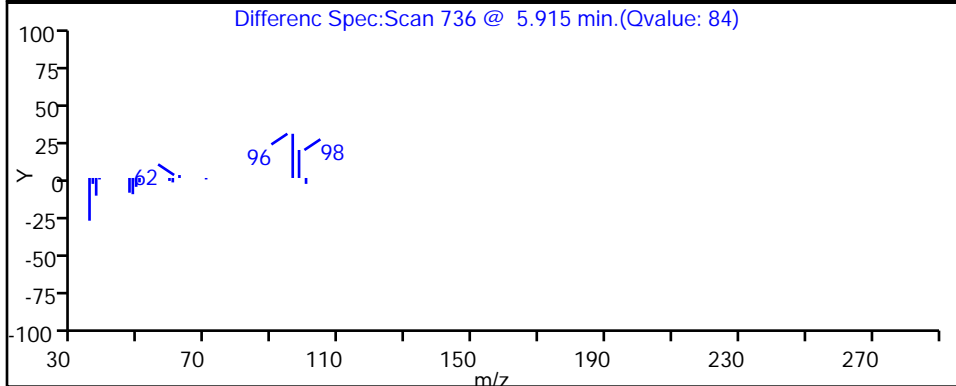
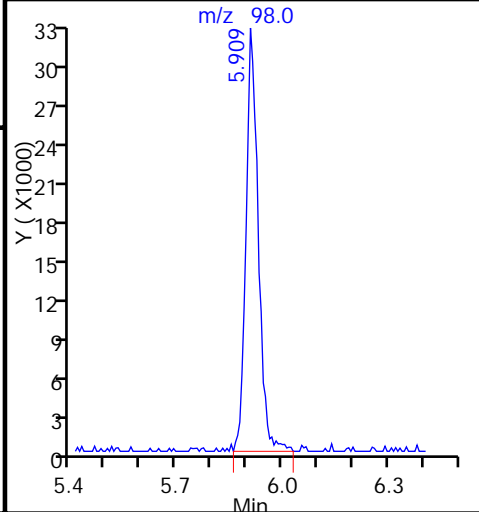
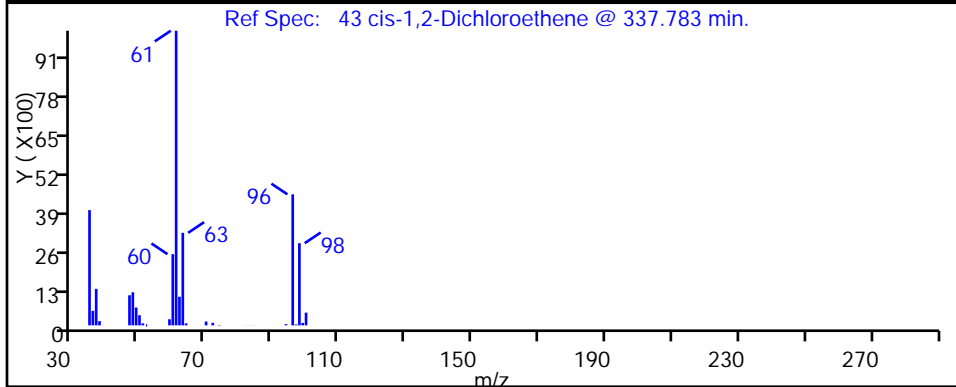
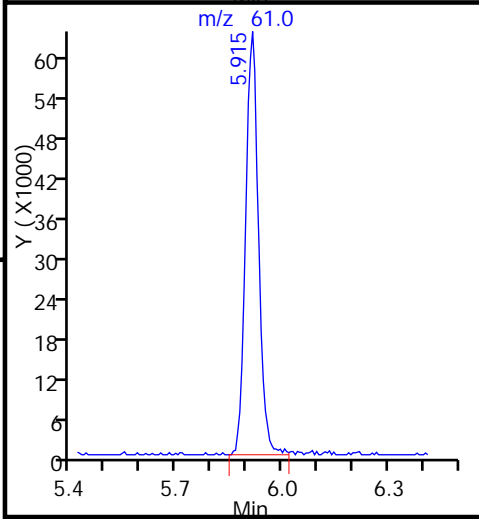
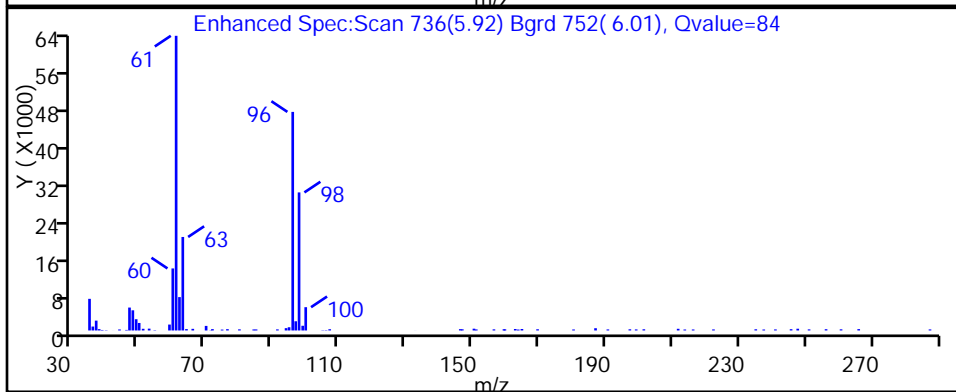
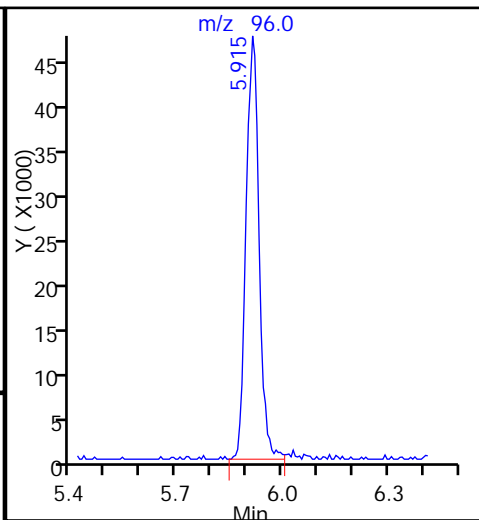
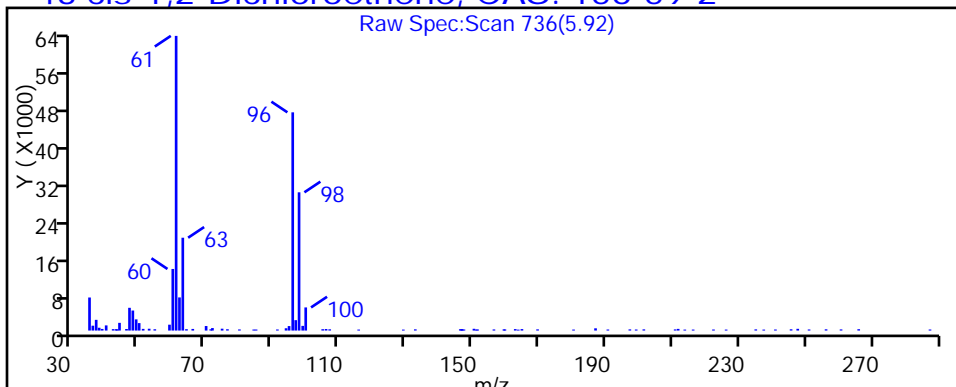
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425013.D

Injection Date: 25-Apr-2015 16:23:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

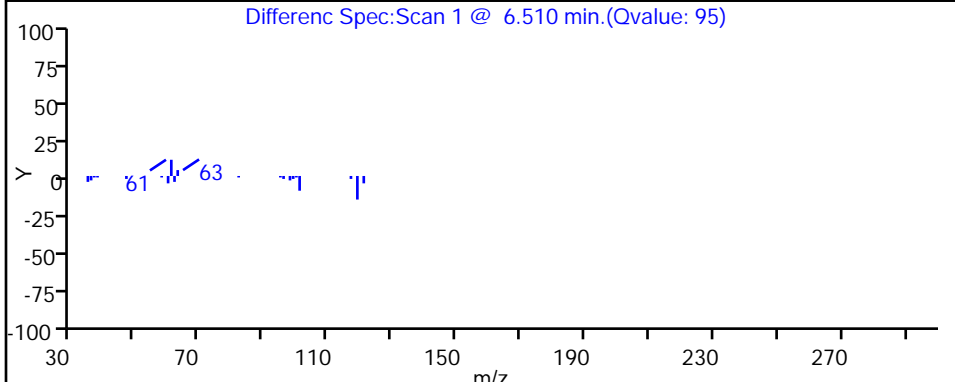
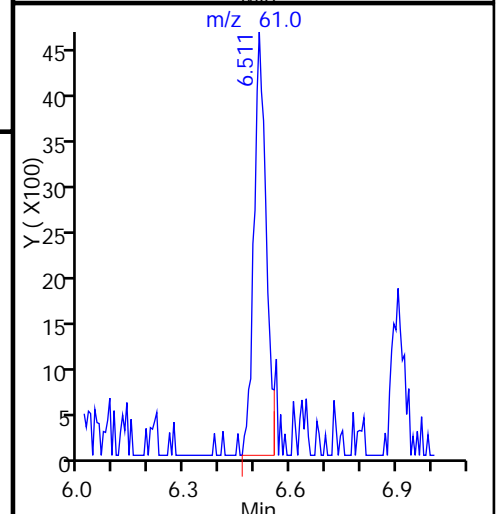
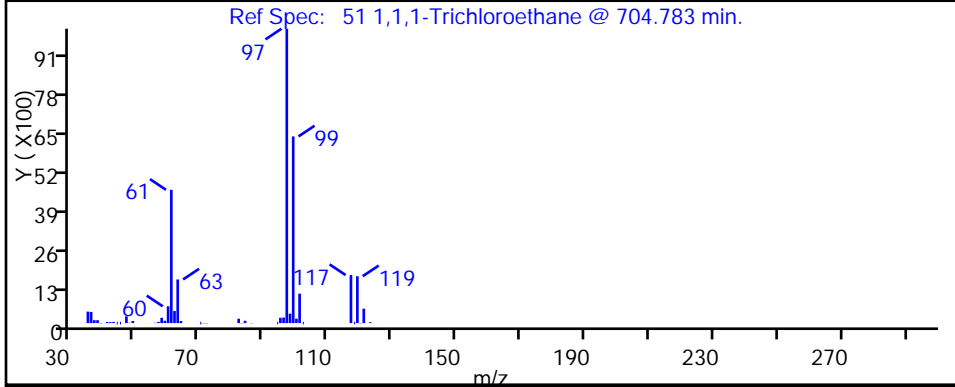
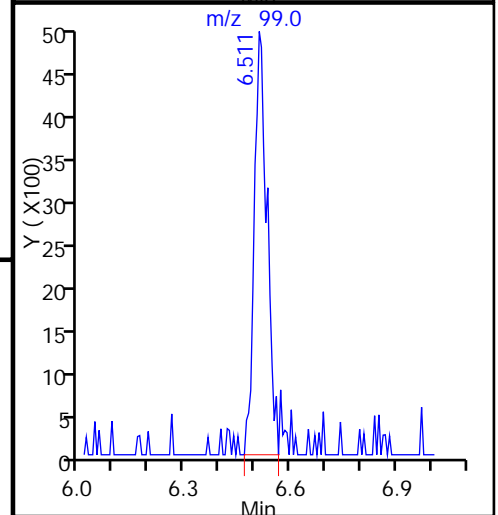
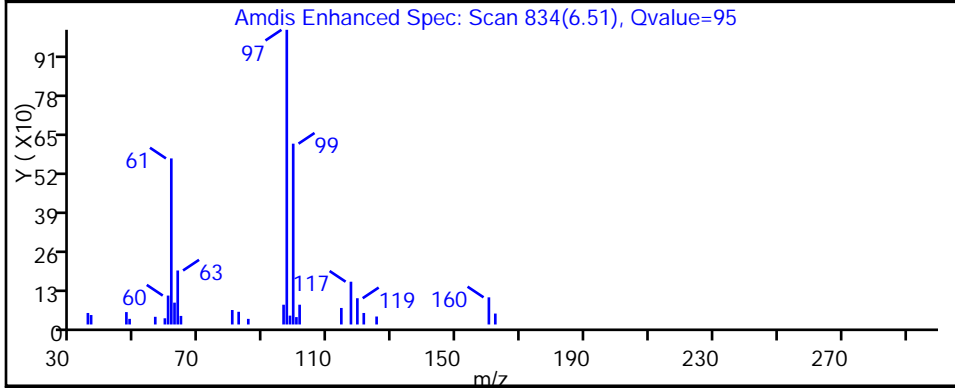
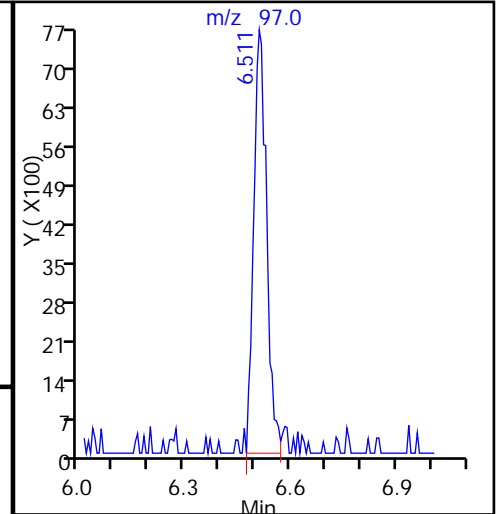
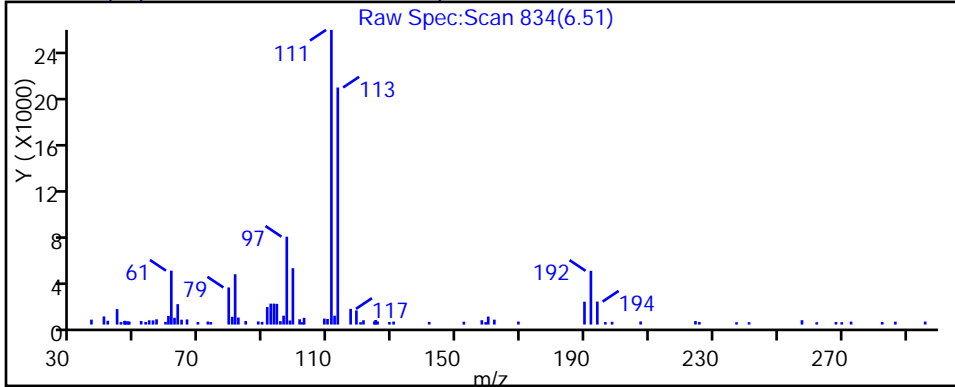
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425013.D

Injection Date: 25-Apr-2015 16:23:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

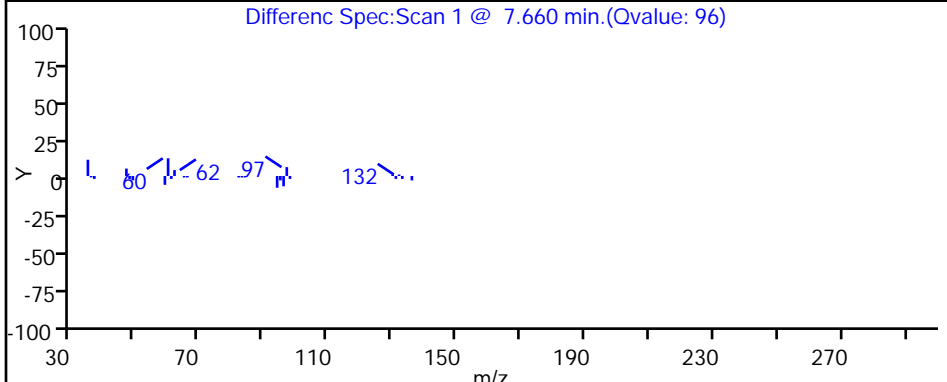
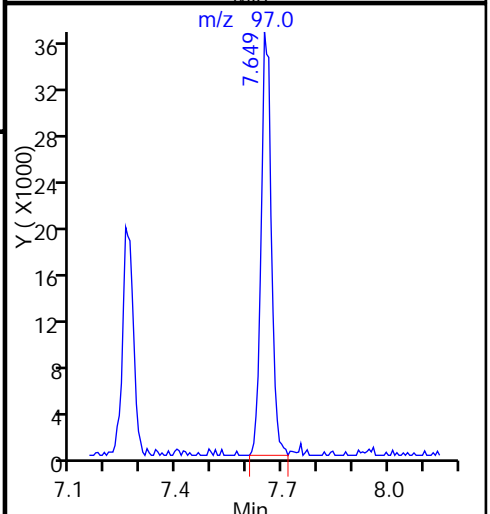
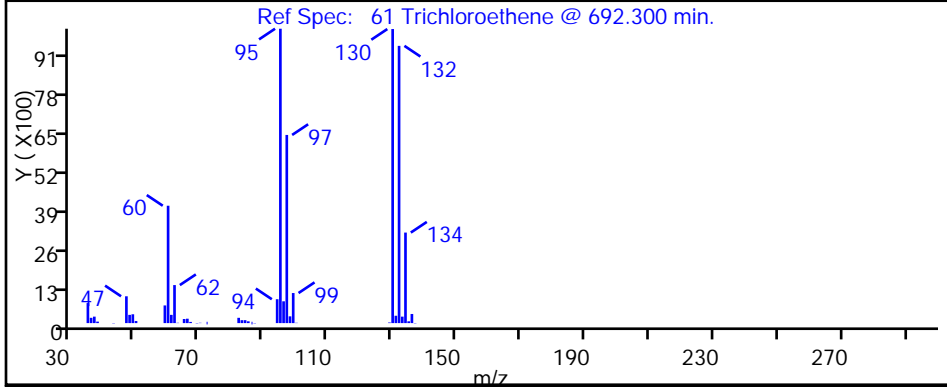
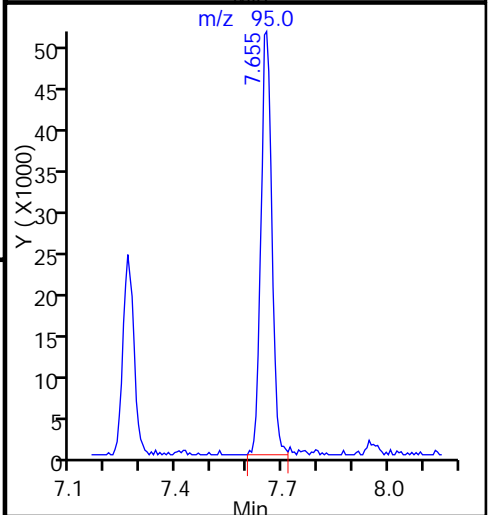
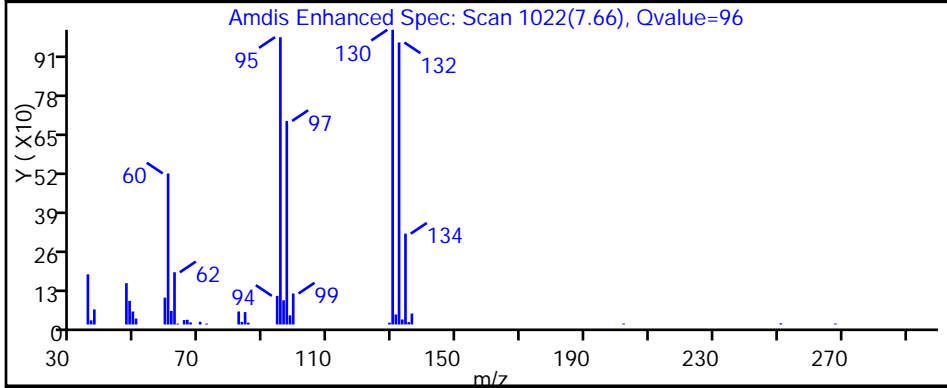
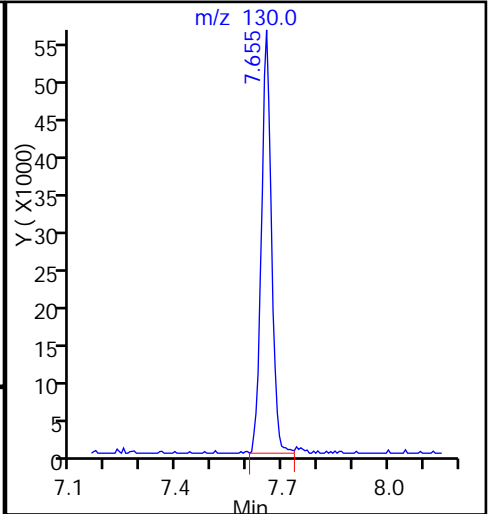
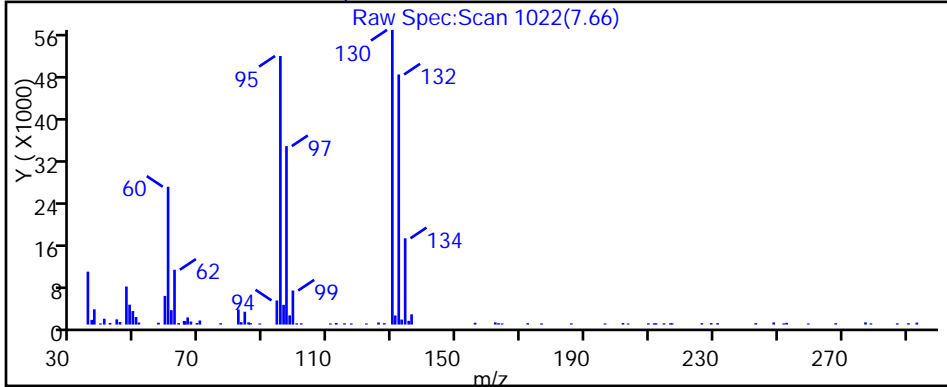
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425013.D

Injection Date: 25-Apr-2015 16:23:30

Instrument ID: CHHP6

Lims ID: 180-43257-C-6

Lab Sample ID: 180-43257-6

Client ID: HD-MW-93S-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 13

Purge Vol: 5.000 mL

Dil. Factor: 5.0000

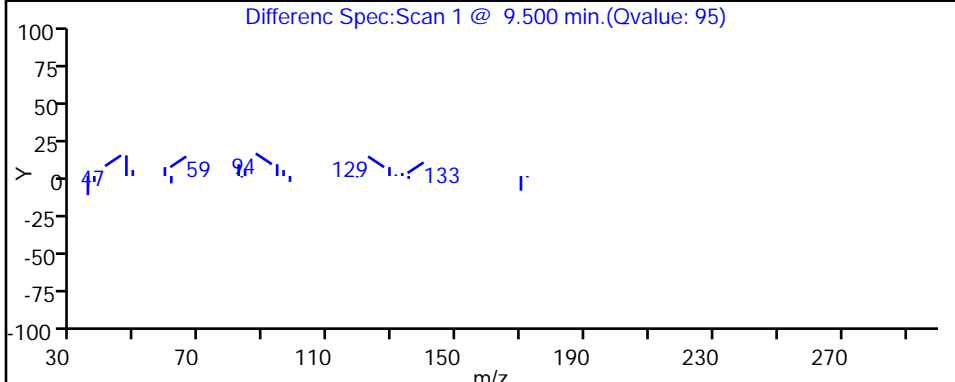
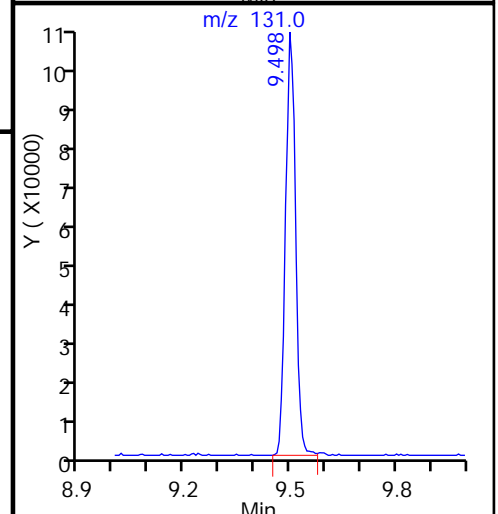
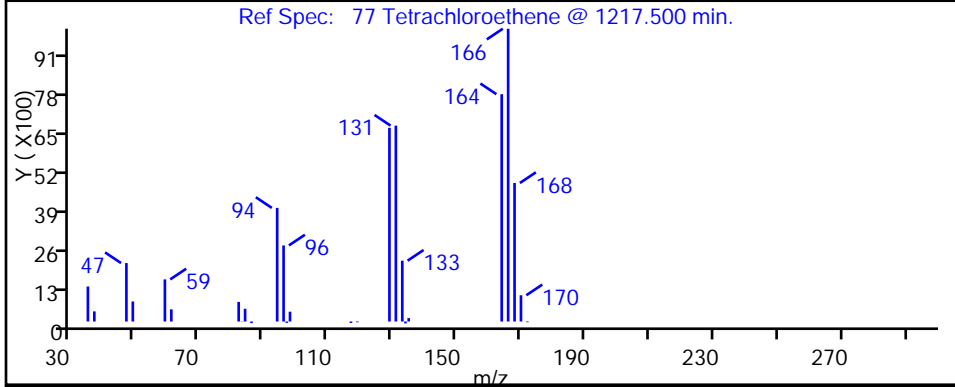
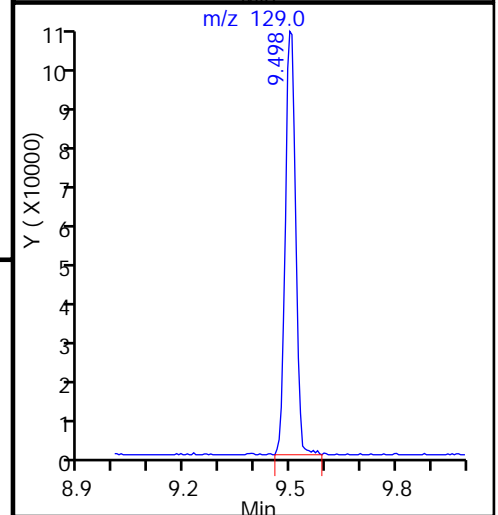
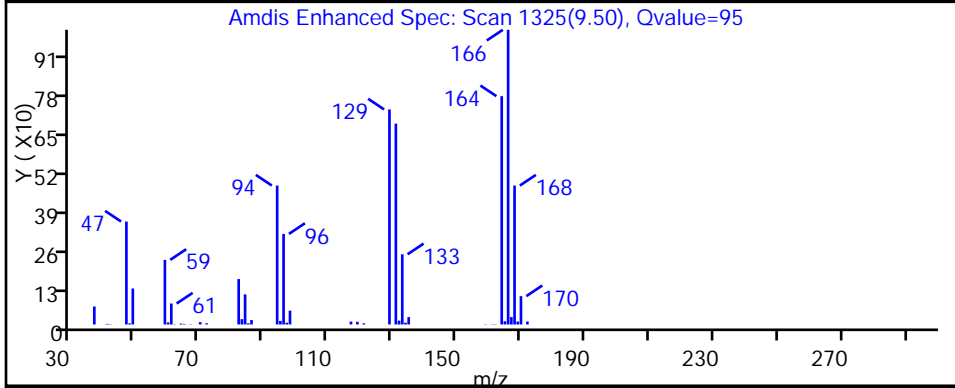
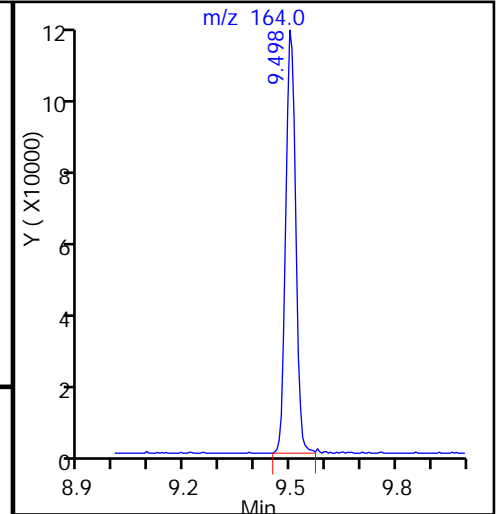
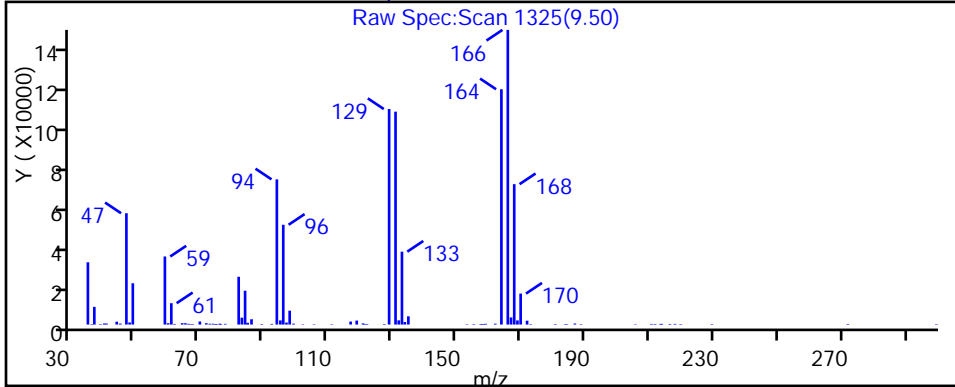
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



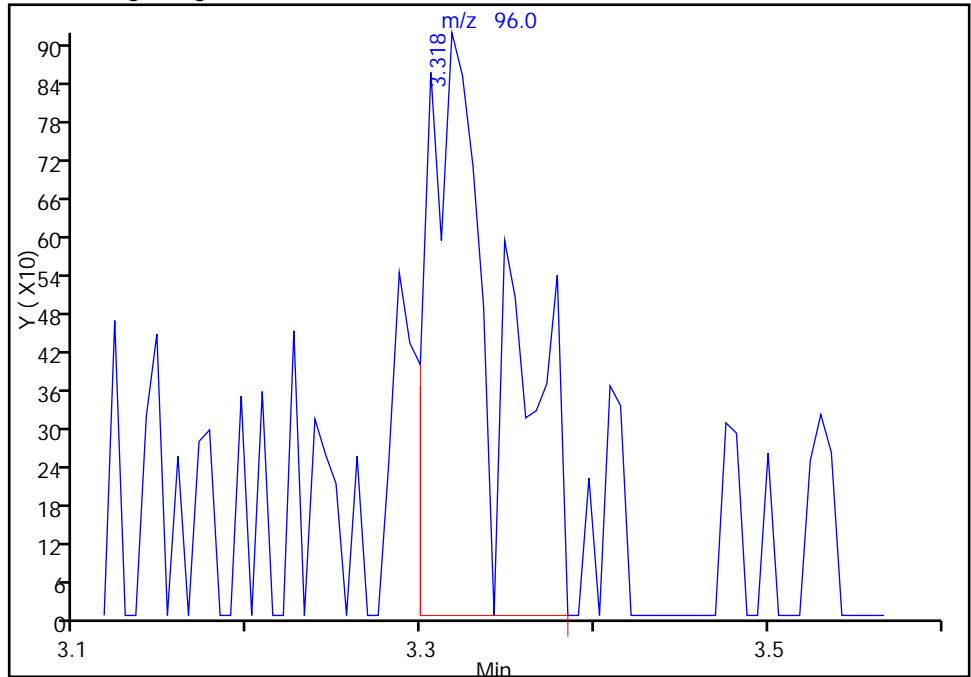
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425013.D
Injection Date: 25-Apr-2015 16:23:30 Instrument ID: CHHP6
Lims ID: 180-43257-C-6 Lab Sample ID: 180-43257-6
Client ID: HD-MW-93S-0/1-0
Operator ID: 001562 ALS Bottle#: 13 Worklist Smp#: 13
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

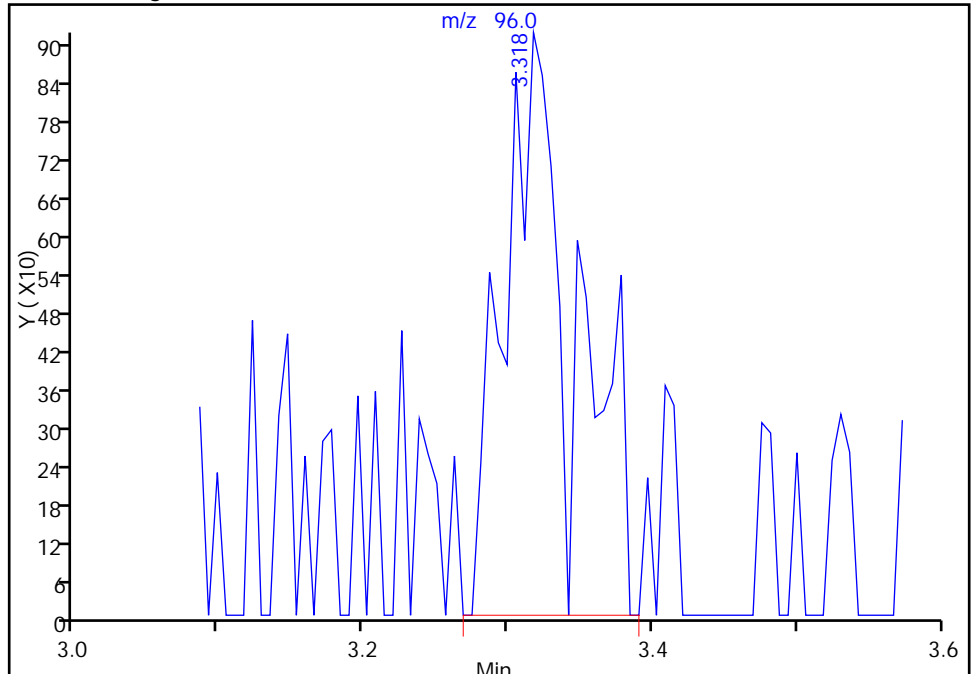
RT: 3.32
Area: 2691
Amount: 0.885792
Amount Units: ng

Processing Integration Results



RT: 3.32
Area: 3130
Amount: 1.030297
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 27-Apr-2015 08:27:32
Audit Action: Manually Integrated
Audit Reason: Split Peak

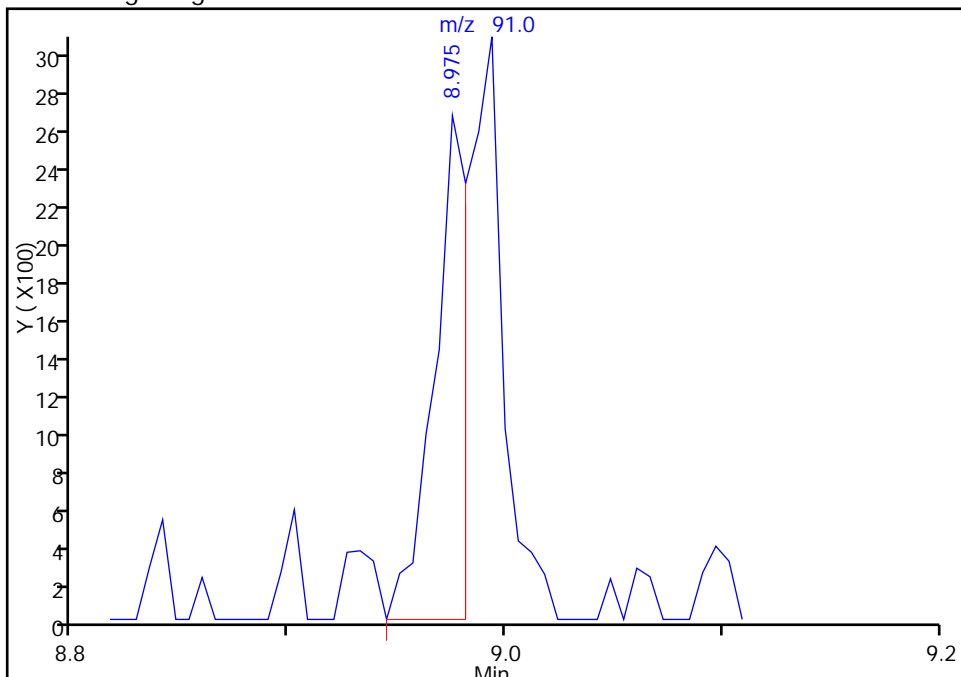
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425013.D
Injection Date: 25-Apr-2015 16:23:30 Instrument ID: CHHP6
Lims ID: 180-43257-C-6 Lab Sample ID: 180-43257-6
Client ID: HD-MW-93S-0/1-0
Operator ID: 001562 ALS Bottle#: 13 Worklist Smp#: 13
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

73 Toluene, CAS: 108-88-3

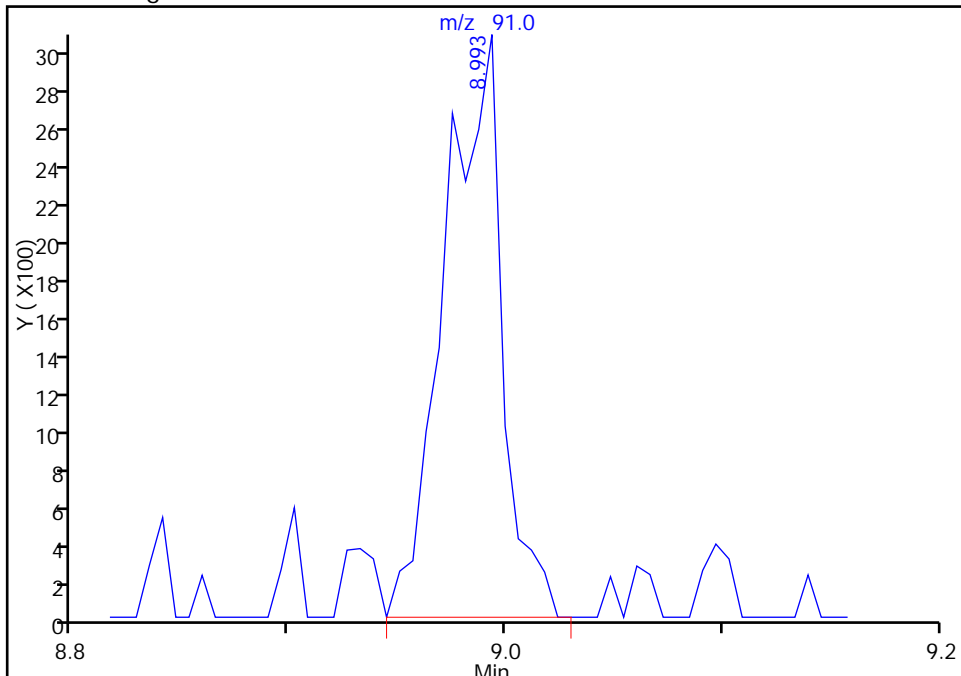
RT: 8.98
Area: 2883
Amount: 0.219403
Amount Units: ng

Processing Integration Results



RT: 8.99
Area: 5679
Amount: 0.432186
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 27-Apr-2015 08:27:32
Audit Action: Manually Integrated
Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-37D-0/1-0 Lab Sample ID: 180-43257-7
 Matrix: Water Lab File ID: 50428028.D
 Analysis Method: 8260C Date Collected: 04/20/2015 14:12
 Sample wt/vol: 5(mL) Date Analyzed: 04/28/2015 22:58
 Soil Aliquot Vol: _____ Dilution Factor: 4
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18(mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 139884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	4.0	U	4.0	1.1
75-01-4	Vinyl chloride	4.0	U	4.0	0.91
74-83-9	Bromomethane	4.0	U	4.0	1.3
75-00-3	Chloroethane	4.0	U	4.0	0.86
75-35-4	1,1-Dichloroethene	6.3		4.0	1.2
67-64-1	Acetone	20	U	20	10
75-15-0	Carbon disulfide	4.0	U	4.0	0.85
75-09-2	Methylene Chloride	4.0	U	4.0	0.50
156-60-5	trans-1,2-Dichloroethene	4.0	U	4.0	0.68
1634-04-4	Methyl tert-butyl ether	4.0	U	4.0	0.73
75-34-3	1,1-Dichloroethane	4.1		4.0	0.47
156-59-2	cis-1,2-Dichloroethene	56		4.0	0.95
74-97-5	Bromochloromethane	4.0	U	4.0	0.72
78-93-3	2-Butanone (MEK)	20	U	20	2.2
67-66-3	Chloroform	4.0	U	4.0	0.68
71-55-6	1,1,1-Trichloroethane	54		4.0	1.1
56-23-5	Carbon tetrachloride	4.0	U	4.0	0.55
71-43-2	Benzene	4.0	U	4.0	0.42
107-06-2	1,2-Dichloroethane	4.0	U	4.0	0.85
79-01-6	Trichloroethene	250	E	4.0	0.57
78-87-5	1,2-Dichloropropane	4.0	U	4.0	0.38
75-27-4	Bromodichloromethane	4.0	U	4.0	0.52
10061-01-5	cis-1,3-Dichloropropene	4.0	U	4.0	0.75
108-10-1	4-Methyl-2-pentanone (MIBK)	20	U	20	2.1
108-88-3	Toluene	4.0	U	4.0	0.60
10061-02-6	trans-1,3-Dichloropropene	4.0	U	4.0	0.59
79-00-5	1,1,2-Trichloroethane	4.0	U	4.0	0.81
127-18-4	Tetrachloroethene	640	E	4.0	0.59
591-78-6	2-Hexanone	20	U	20	0.64
124-48-1	Dibromochloromethane	4.0	U	4.0	0.55
106-93-4	1,2-Dibromoethane (EDB)	4.0	U	4.0	0.72
108-90-7	Chlorobenzene	4.0	U	4.0	0.54
630-20-6	1,1,1,2-Tetrachloroethane	4.0	U	4.0	1.1
100-41-4	Ethylbenzene	4.0	U	4.0	0.91
1330-20-7	Xylenes, Total	12	U	12	2.0
100-42-5	Styrene	4.0	U	4.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-37D-0/1-0 Lab Sample ID: 180-43257-7
 Matrix: Water Lab File ID: 50428028.D
 Analysis Method: 8260C Date Collected: 04/20/2015 14:12
 Sample wt/vol: 5(mL) Date Analyzed: 04/28/2015 22:58
 Soil Aliquot Vol: _____ Dilution Factor: 4
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 139884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	4.0	U	4.0	0.77
79-34-5	1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.80
107-13-1	Acrylonitrile	80	U	80	2.2
123-91-1	1,4-Dioxane	800	U	800	140

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		64-135
2037-26-5	Toluene-d8 (Surr)	100		71-118
460-00-4	4-Bromofluorobenzene (Surr)	90		70-118
1868-53-7	Dibromofluoromethane (Surr)	111		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428028.D
 Lims ID: 180-43257-E-7 Lab Sample ID: 180-43257-7
 Client ID: HD-MW-37D-0/1-0
 Sample Type: Client
 Inject. Date: 28-Apr-2015 22:58:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 5.000 mL Dil. Factor: 4.0000
 Sample Info: 180-43257-E-7, 4x
 Misc. Info.: 180-0006670-028
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\MMSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 29-Apr-2015 09:32:39 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK021

First Level Reviewer: gordonk

Date: 29-Apr-2015 09:32:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.299	4.305	-0.006	0	108682	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.274	0.000	98	390007	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.365	-0.001	88	86460	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.682	0.000	97	114871	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.532	6.532	0.000	71	98611	55.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.903	6.897	0.006	0	132536	56.6	
\$ 7 Toluene-d8 (Surr)	98	8.923	8.923	0.000	94	343591	50.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.533	-0.001	88	107763	45.0	
12 Chloromethane	50		1.775				ND	
13 Vinyl chloride	62		1.903				ND	
15 Bromomethane	94		2.249				ND	
16 Chloroethane	64		2.395				ND	
22 1,1-Dichloroethene	96	3.381	3.369	0.012	95	17919	7.84	
24 Acetone	43		3.490				ND	
26 Carbon disulfide	76		3.648				ND	
31 Methylene Chloride	84		4.135				ND	
33 Acrylonitrile	53		4.549				ND	
34 trans-1,2-Dichloroethene	96		4.561				ND	
35 Methyl tert-butyl ether	73		4.591				ND	
37 1,1-Dichloroethane	63	5.169	5.169	0.000	95	22336	5.08	
45 cis-1,2-Dichloroethene	96	5.942	5.936	0.006	81	169072	70.1	
46 2-Butanone (MEK)	43		5.991				ND	
49 Chlorobromomethane	128		6.228				ND	
52 Chloroform	83	6.361	6.337	0.024	1	1760	0.4642	M
53 1,1,1-Trichloroethane	97	6.538	6.532	0.006	95	177033	67.8	
56 Carbon tetrachloride	117		6.708				ND	
58 Benzene	78		6.952				ND	
59 1,2-Dichloroethane	62		6.982				ND	
64 Trichloroethene	130	7.669	7.670	-0.001	96	686167	306.7	E
67 1,2-Dichloropropane	63		7.901				ND	
70 1,4-Dioxane	88		8.053				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.193				ND	
74 cis-1,3-Dichloropropene	75		8.655				ND	
75 4-Methyl-2-pentanone (MIBK)	43		8.826				ND	
76 Toluene	91		8.990				ND	
77 trans-1,3-Dichloropropene	75		9.215				ND	
79 1,1,2-Trichloroethane	97		9.397				ND	
80 Tetrachloroethene	164	9.537	9.531	0.006	90	1320279	802.6	E
82 2-Hexanone	43		9.653				ND	
84 Chlorodibromomethane	129		9.787				ND	
85 Ethylene Dibromide	107		9.902				ND	
87 Chlorobenzene	112		10.389				ND	
89 1,1,1,2-Tetrachloroethane	131		10.474				ND	
90 Ethylbenzene	106		10.498				ND	
91 m-Xylene & p-Xylene	106		10.614				ND	
92 o-Xylene	106		11.009				ND	
93 Styrene	104		11.022				ND	
94 Bromoform	173		11.204				ND	
99 1,1,2,2-Tetrachloroethane	83		11.673				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428028.D

Injection Date: 28-Apr-2015 22:58:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Worklist Smp#: 28

Client ID: HD-MW-37D-0/1-0

Purge Vol: 5.000 mL

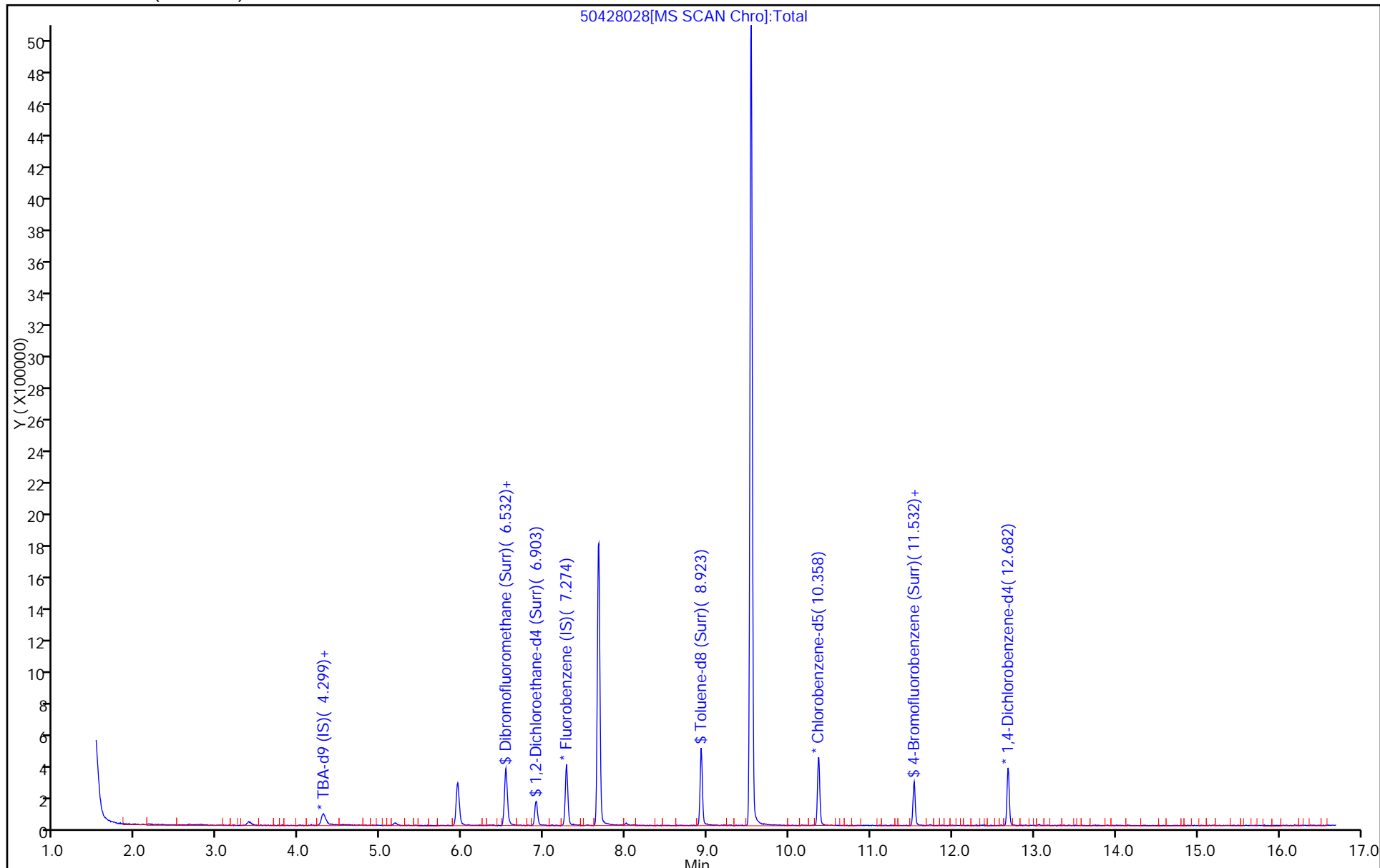
Dil. Factor: 4.0000

ALS Bottle#: 27

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428028.D

Injection Date: 28-Apr-2015 22:58:30

Instrument ID: CHHP5

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 4.0000

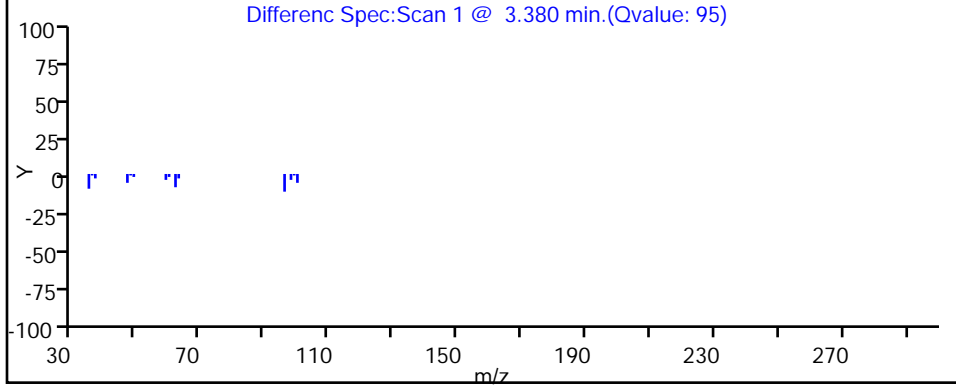
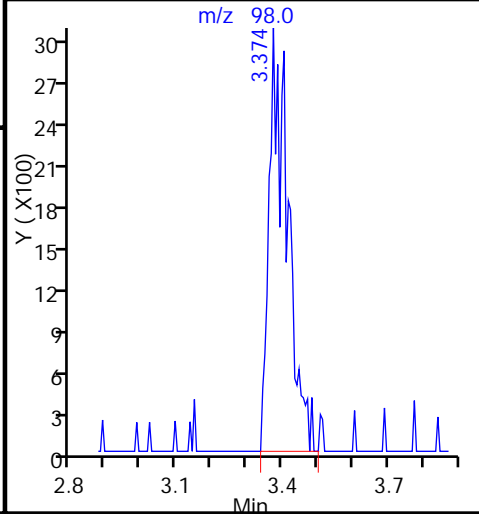
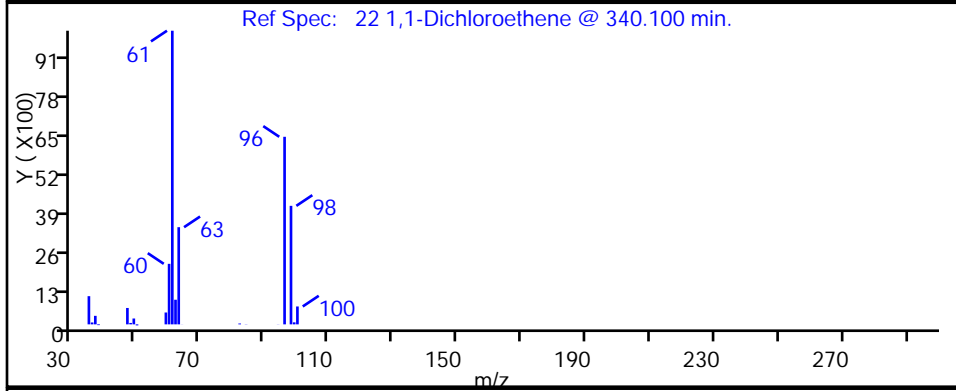
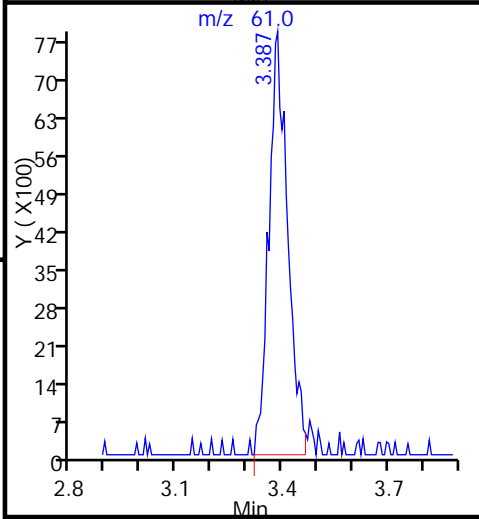
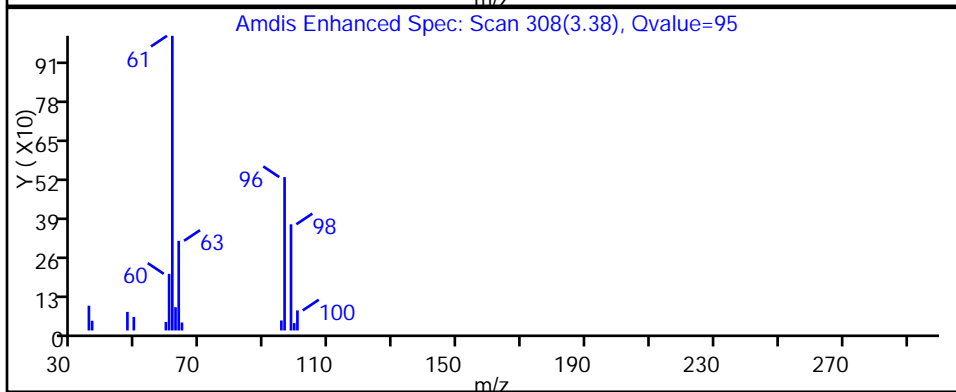
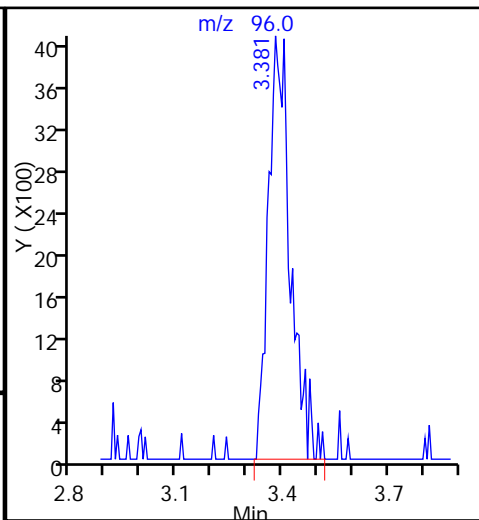
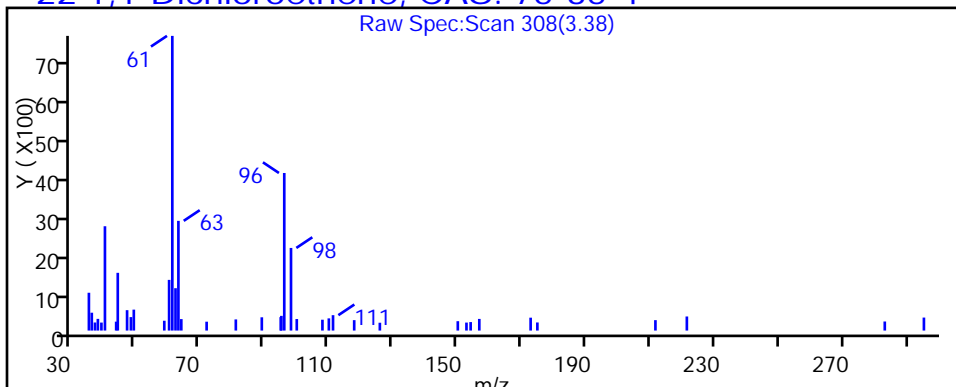
Method: MSVOA_LL_CHHP5

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\CHHP5\20150428-6670.b\50428028.D

Injection Date: 28-Apr-2015 22:58:30

Instrument ID: CHHP5

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 4.0000

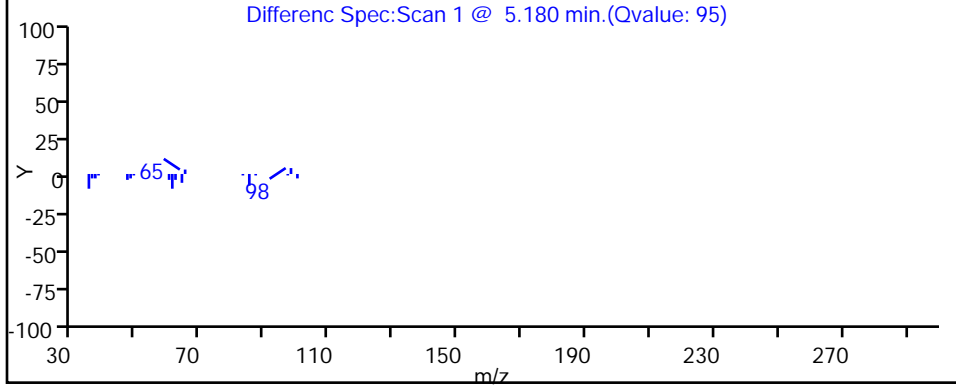
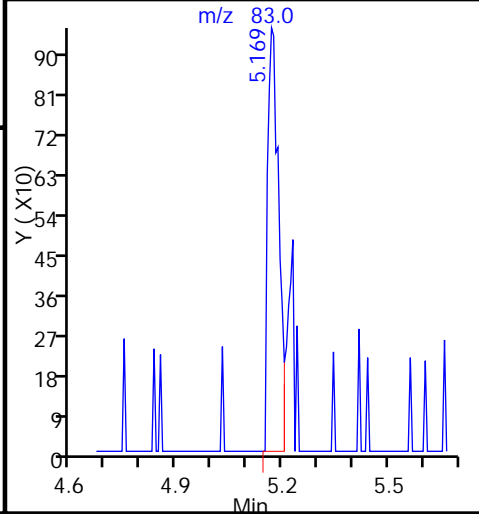
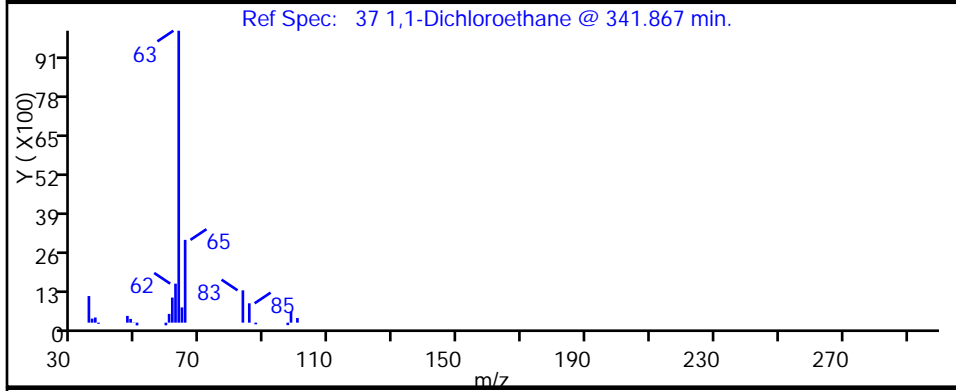
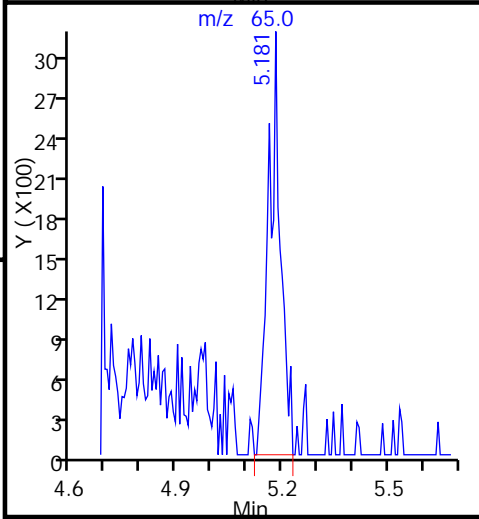
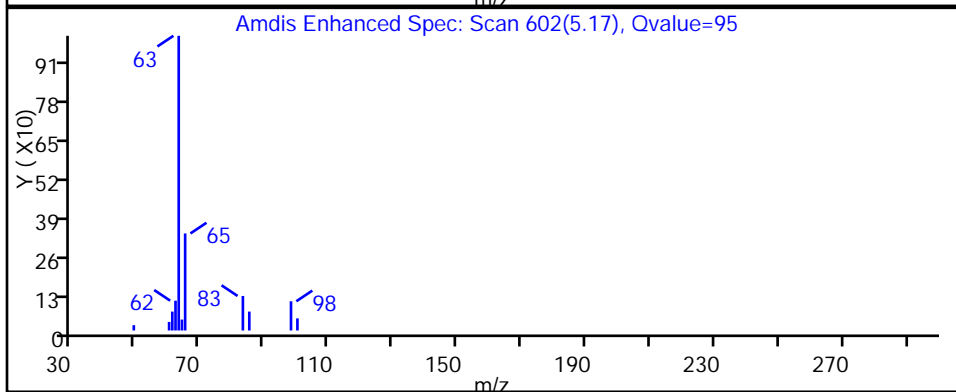
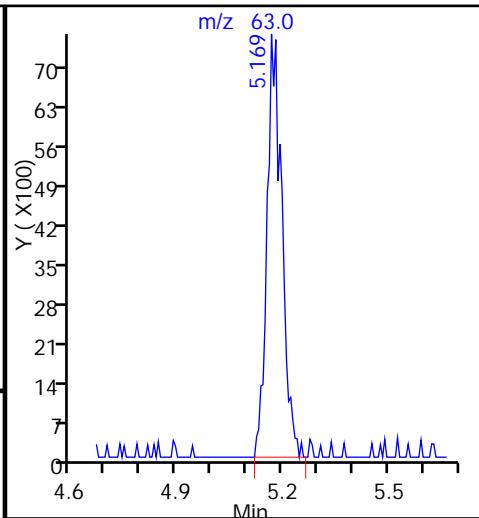
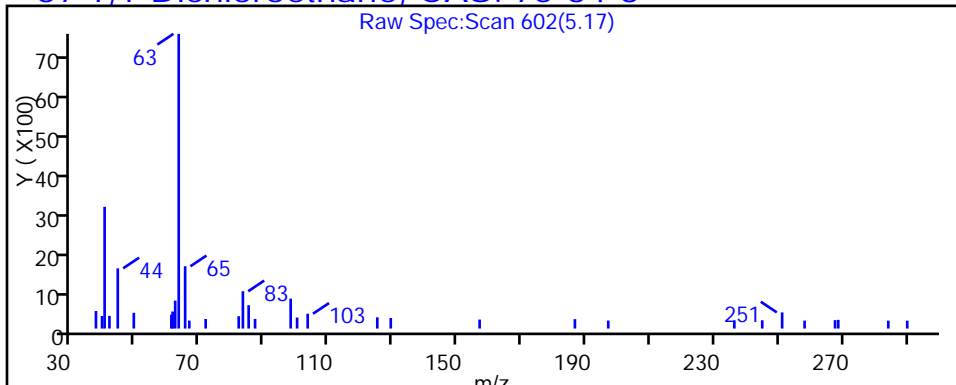
Method: MSVOA_LL_CHHP5

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\CHHP5\20150428-6670.b\50428028.D

Injection Date: 28-Apr-2015 22:58:30

Instrument ID: CHHP5

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 4.0000

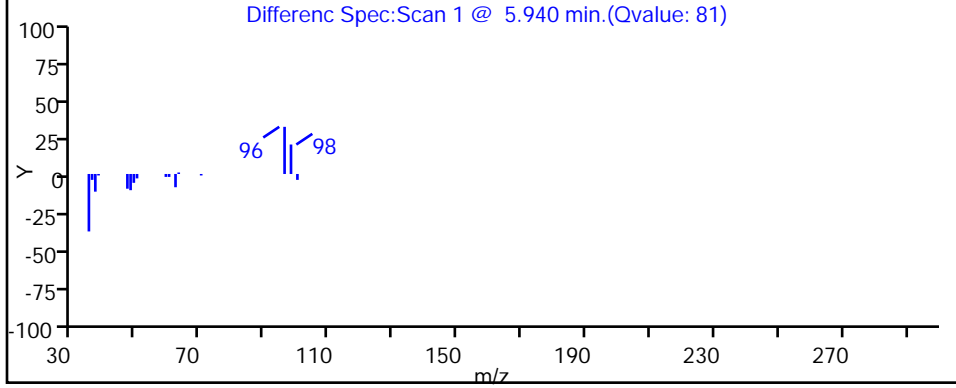
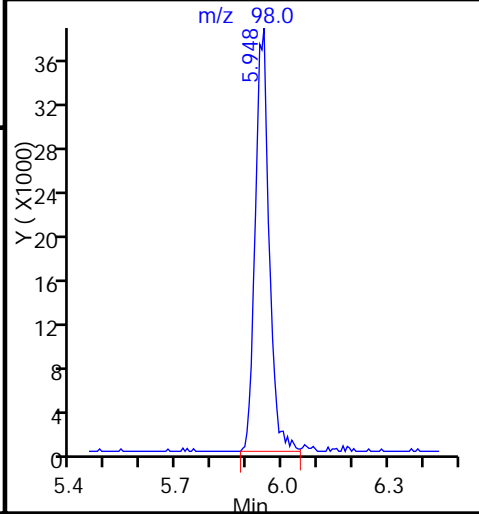
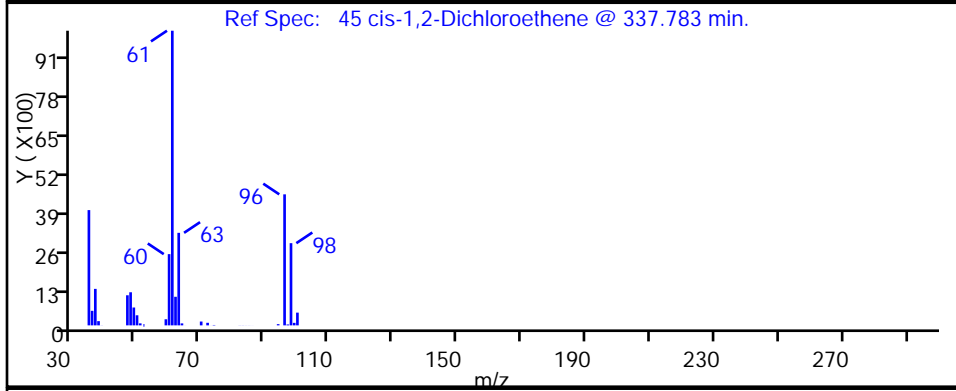
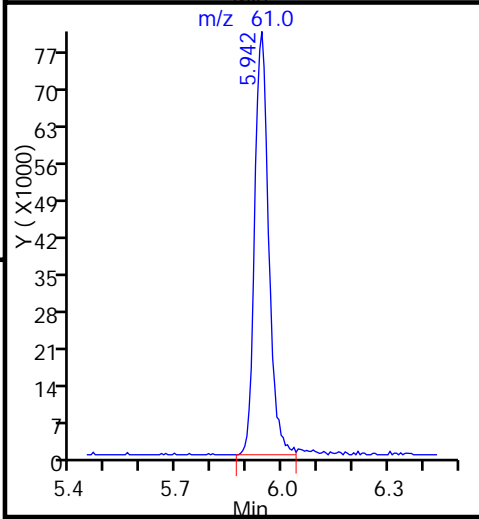
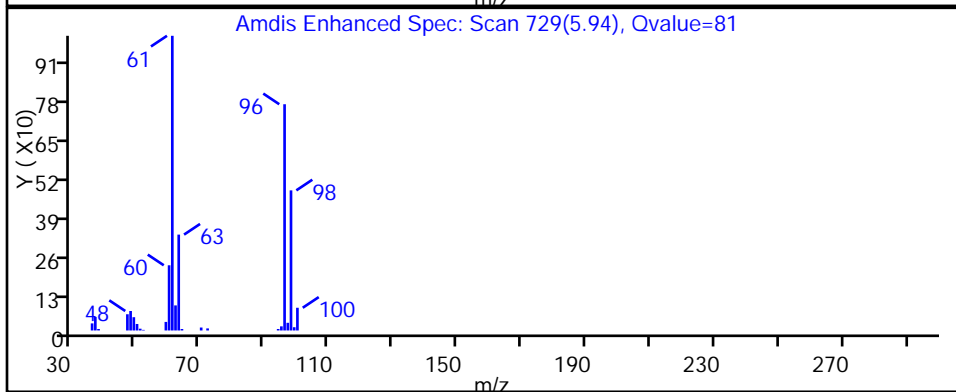
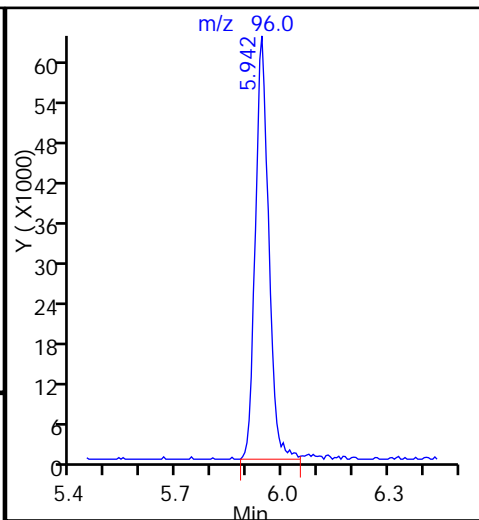
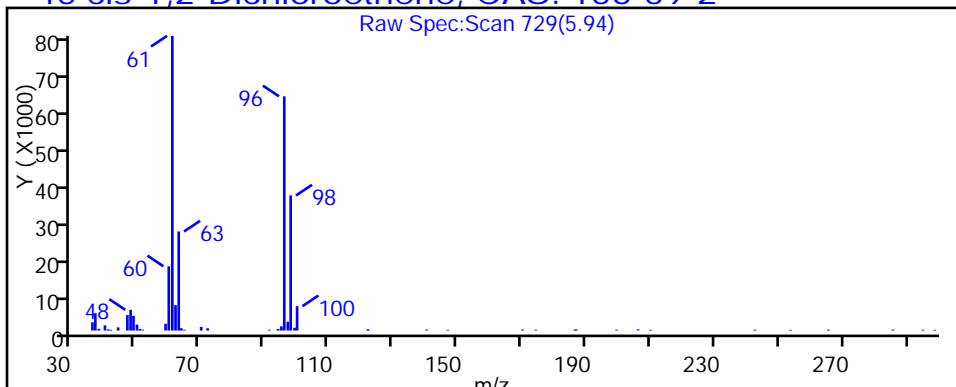
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428028.D

Injection Date: 28-Apr-2015 22:58:30

Instrument ID: CHHP5

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 4.0000

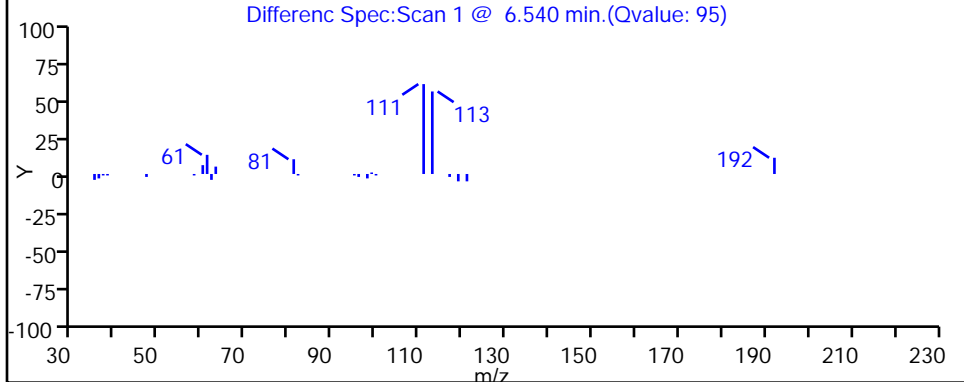
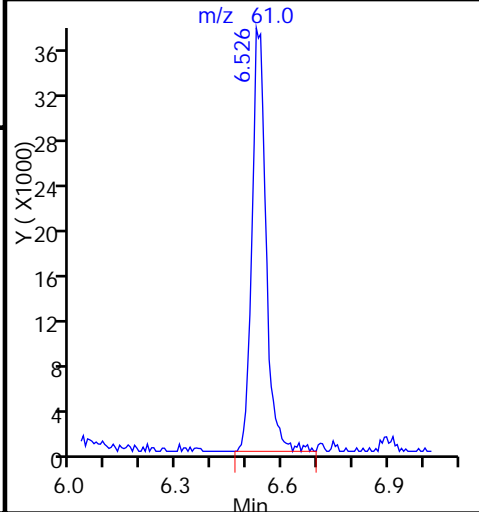
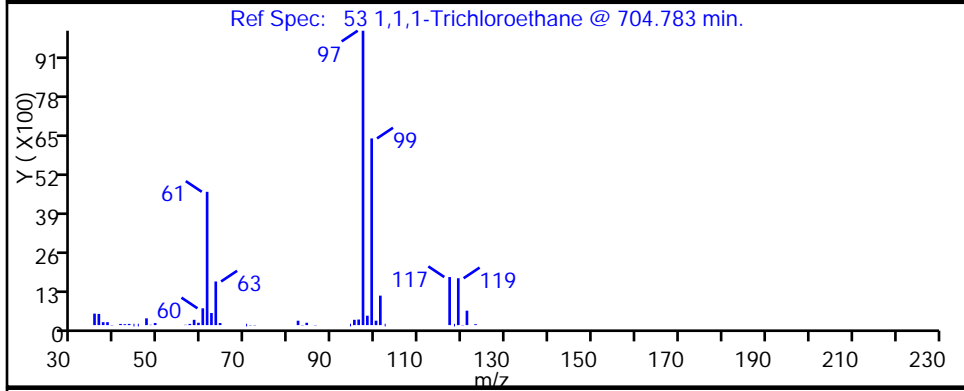
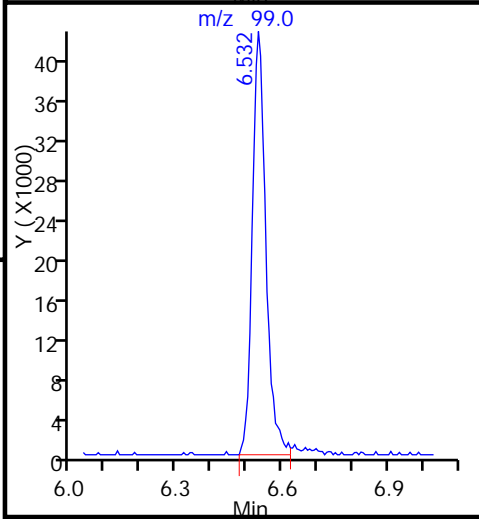
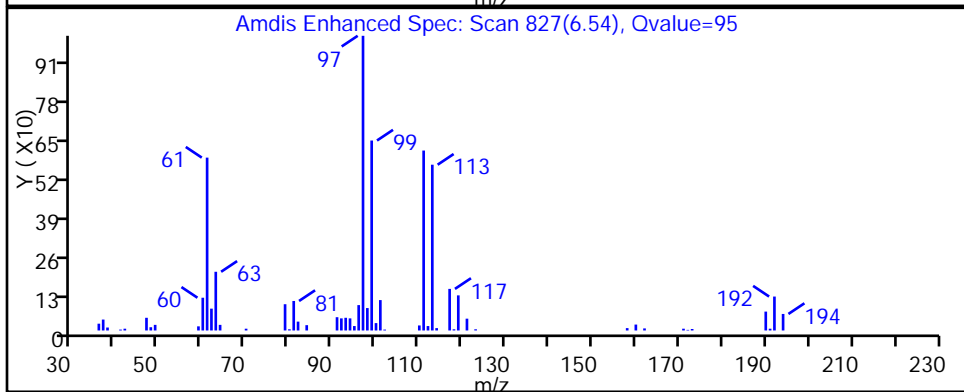
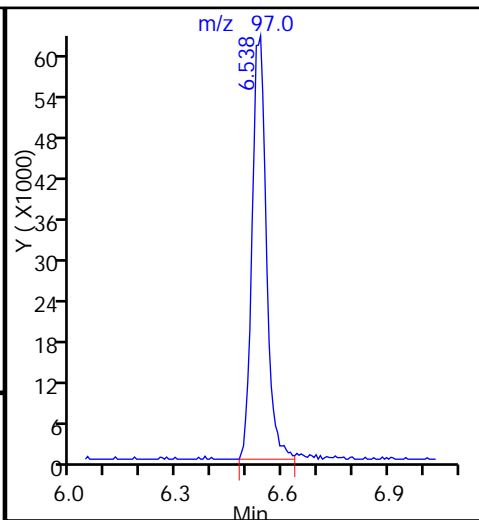
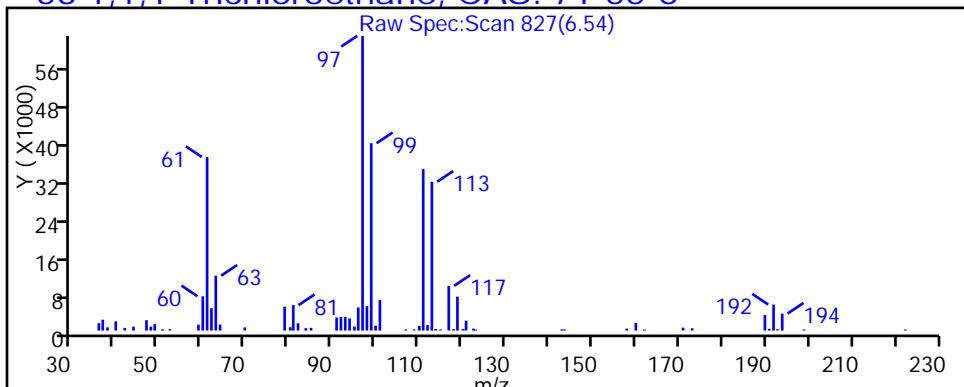
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

53 1,1,1-Trichloroethane, CAS: 71-55-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428028.D

Injection Date: 28-Apr-2015 22:58:30

Instrument ID: CHHP5

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 4.0000

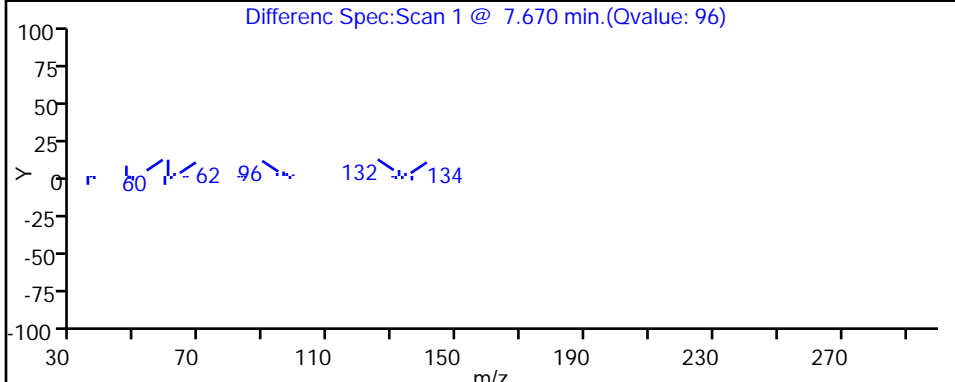
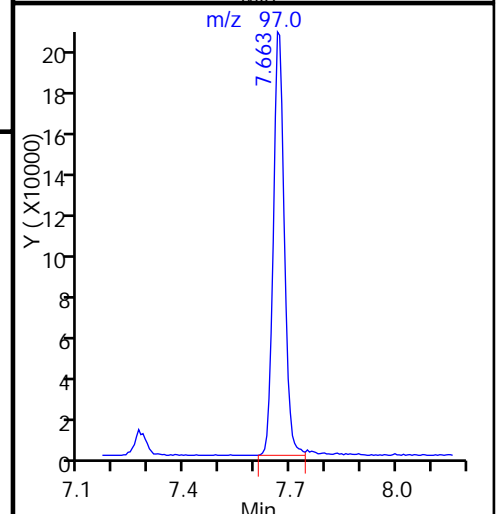
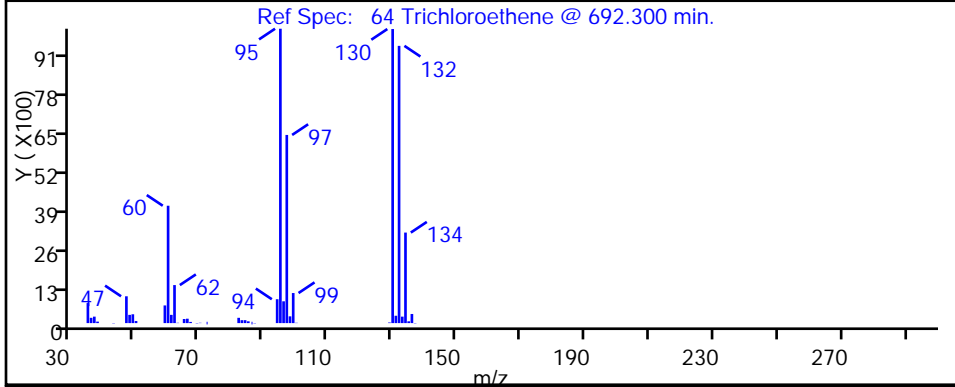
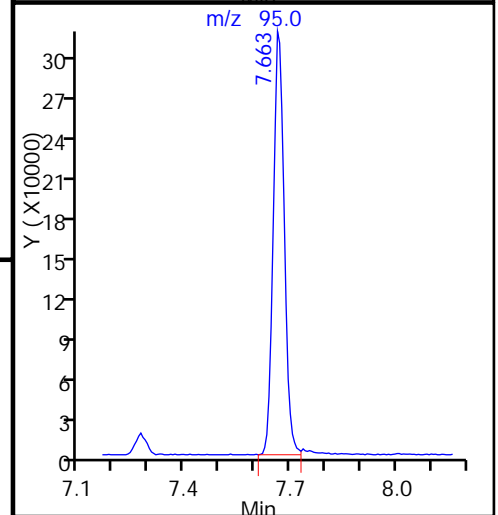
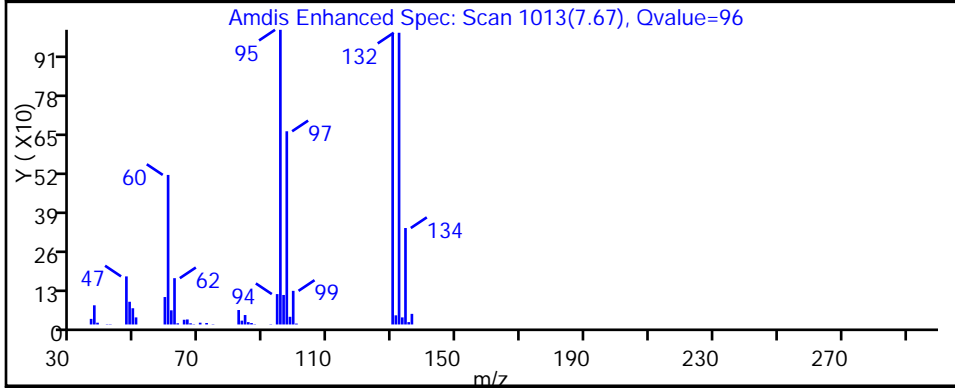
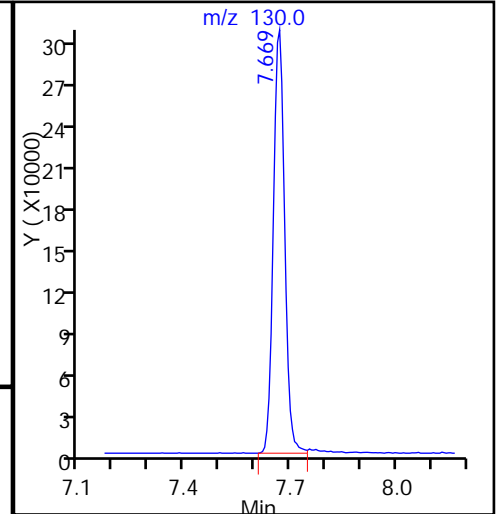
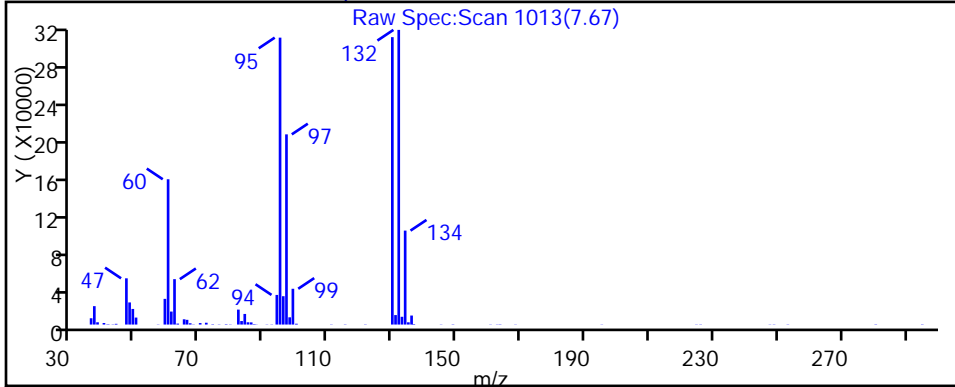
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

64 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428028.D

Injection Date: 28-Apr-2015 22:58:30

Instrument ID: CHHP5

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 5.000 mL

Dil. Factor: 4.0000

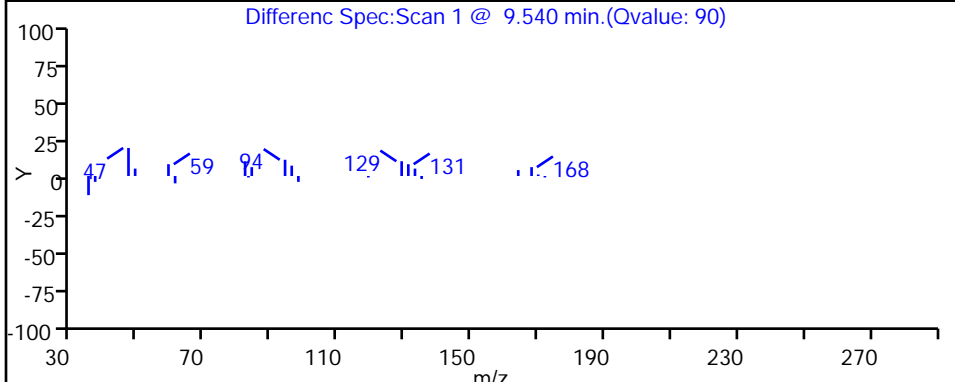
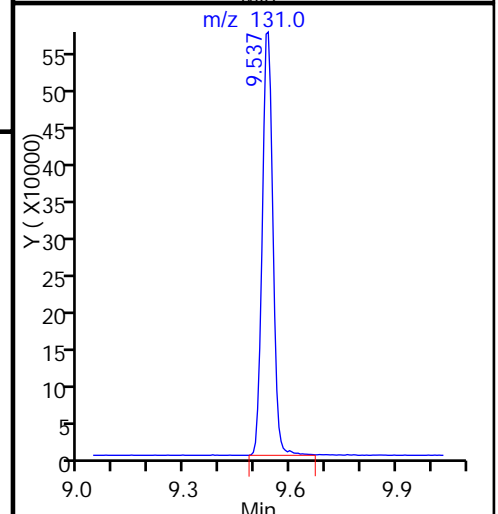
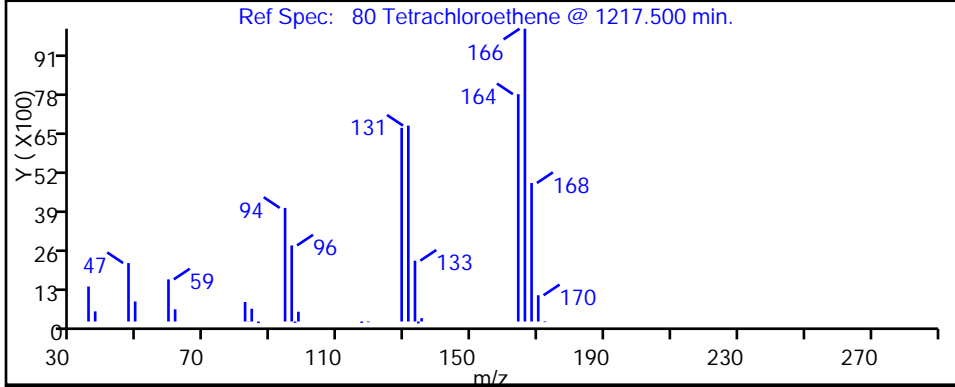
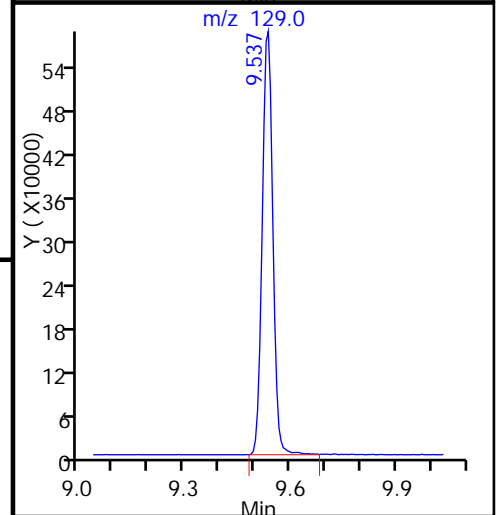
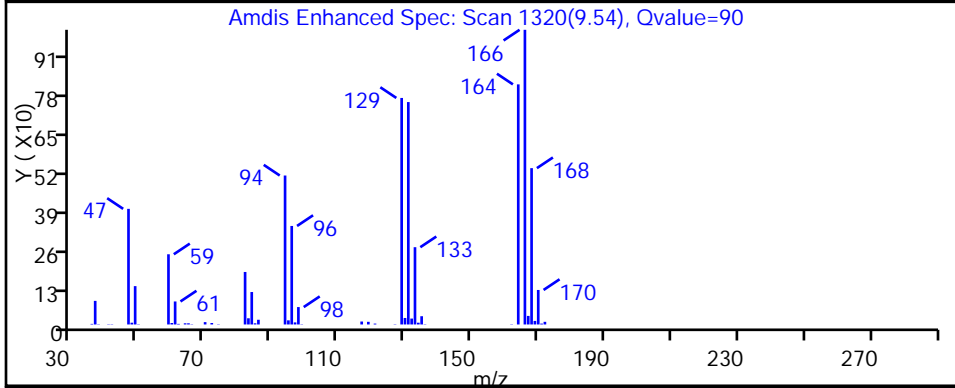
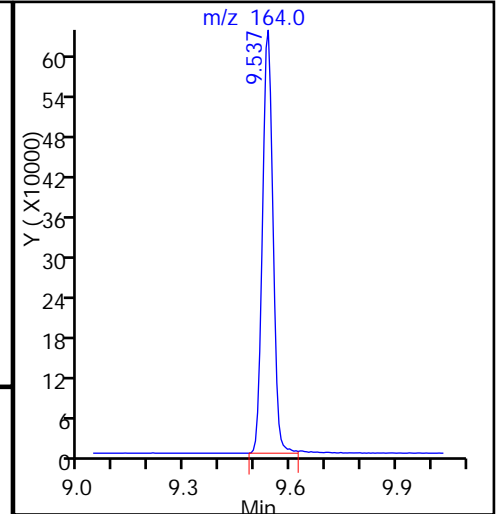
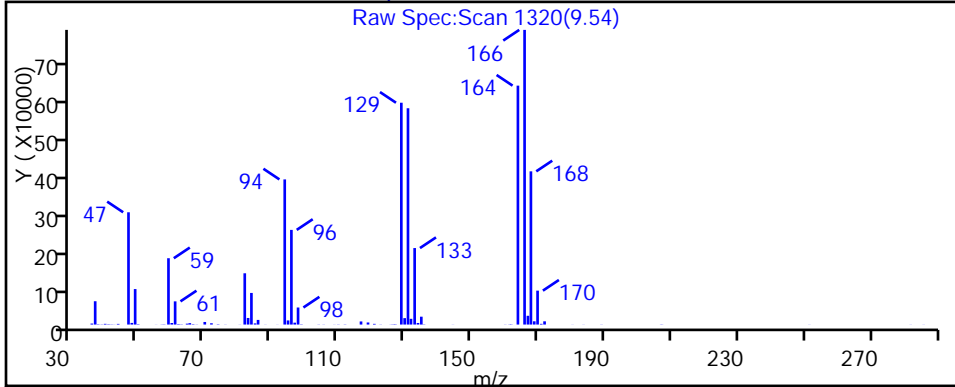
Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



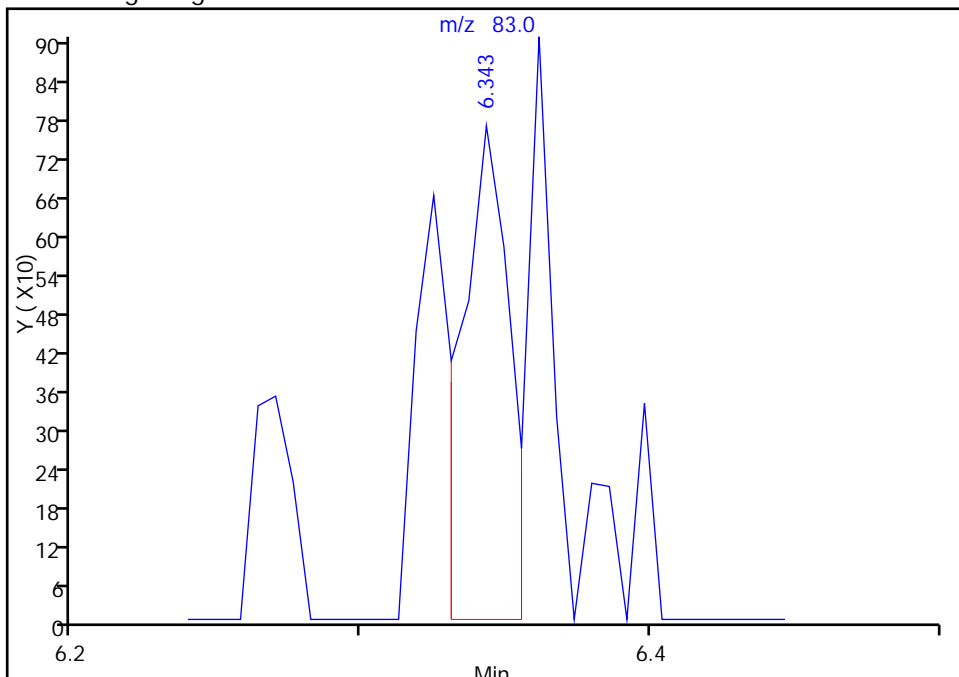
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428028.D
Injection Date: 28-Apr-2015 22:58:30 Instrument ID: CHHP5
Lims ID: 180-43257-E-7 Lab Sample ID: 180-43257-7
Client ID: HD-MW-37D-0/1-0
Operator ID: 001562 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 4.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

52 Chloroform, CAS: 67-66-3

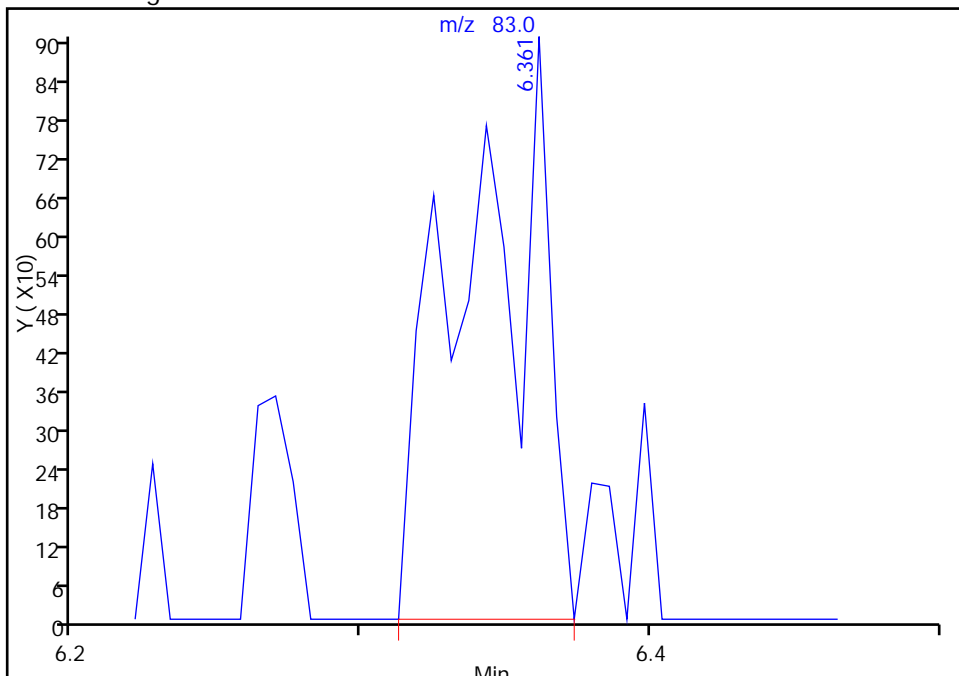
RT: 6.34
Area: 913
Amount: 0.240813
Amount Units: ng

Processing Integration Results



RT: 6.36
Area: 1760
Amount: 0.464218
Amount Units: ng

Manual Integration Results



Reviewer: gordonk, 29-Apr-2015 09:32:39
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-37D-0/1-0 DL Lab Sample ID: 180-43257-7 DL
 Matrix: Water Lab File ID: 60425014.D
 Analysis Method: 8260C Date Collected: 04/20/2015 14:12
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 16:48
 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.: 139651 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	40	U	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	40	U	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	40	U	40	4.7
156-59-2	cis-1,2-Dichloroethene	52		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	41		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	230		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	680		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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-37D-0/1-0 DL Lab Sample ID: 180-43257-7 DL
 Matrix: Water Lab File ID: 60425014.D
 Analysis Method: 8260C Date Collected: 04/20/2015 14:12
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 16:48
 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.: 139651 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	40	U	40	7.7
79-34-5	1,1,2,2-Tetrachloroethane	40	U	40	8.0
107-13-1	Acrylonitrile	800	U	800	22
123-91-1	1,4-Dioxane	8000	U	8000	1400

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		64-135
2037-26-5	Toluene-d8 (Surr)	105		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	99		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425014.D
 Lims ID: 180-43257-E-7 Lab Sample ID: 180-43257-7
 Client ID: HD-MW-37D-0/1-0
 Sample Type: Client
 Inject. Date: 25-Apr-2015 16:48:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 40.0000
 Sample Info: 180-43257-E-7, 40x
 Misc. Info.: 180-0006632-014
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 08:29:02 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 27-Apr-2015 08:29:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.196	4.205	-0.009	87	167805	1000.0	
* 2 Fluorobenzene (IS)	96	7.262	7.259	0.003	98	577214	50.0	
* 3 Chlorobenzene-d5	119	10.371	10.367	0.004	89	129190	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.725	12.722	0.003	98	216490	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.538	6.529	0.009	92	117258	49.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.909	6.906	0.003	69	168819	49.4	
\$ 7 Toluene-d8 (Surr)	98	8.917	8.914	0.003	93	565999	52.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.563	11.560	0.003	84	210920	51.7	
12 Chloromethane	50		1.741				ND	
13 Vinyl chloride	62		1.869				ND	
15 Bromomethane	94		2.210				ND	
16 Chloroethane	64		2.356				ND	
22 1,1-Dichloroethene	96	3.357	3.305	0.052	19	2979	1.00	M
24 Acetone	43		3.396				ND	
26 Carbon disulfide	76		3.603				ND	
31 Methylene Chloride	84		4.095				ND	
33 Acrylonitrile	53		4.460				ND	
34 trans-1,2-Dichloroethene	96		4.527				ND	
35 Methyl tert-butyl ether	73		4.533				ND	
37 1,1-Dichloroethane	63		5.166				ND	
44 2-Butanone (MEK)	43		5.908				ND	
43 cis-1,2-Dichloroethene	96	5.912	5.914	-0.002	83	23711	6.46	
48 Chlorobromomethane	128		6.206				ND	
50 Chloroform	83	6.350	6.346	0.004	29	2099	0.4031	
51 1,1,1-Trichloroethane	97	6.514	6.511	0.003	96	18608	5.17	
53 Carbon tetrachloride	117		6.687				ND	
56 Benzene	78		6.912				ND	
57 1,2-Dichloroethane	62		6.991				ND	
61 Trichloroethene	130	7.652	7.654	-0.002	96	91458	29.0	
64 1,2-Dichloropropane	63		7.928				ND	
65 1,4-Dioxane	88		8.007				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.208				ND	
71 cis-1,3-Dichloropropene	75		8.652				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.798				ND	
73 Toluene	91	8.990	8.980	0.010	63	4721	0.3533	
74 trans-1,3-Dichloropropene	75		9.230				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164	9.501	9.504	-0.003	95	189471	85.5	
79 2-Hexanone	43		9.631				ND	
81 Chlorodibromomethane	129		9.808				ND	
82 Ethylene Dibromide	107		9.917				ND	
84 Chlorobenzene	112		10.404				ND	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.501				ND	
88 m-Xylene & p-Xylene	106		10.635				ND	
89 o-Xylene	106		11.012				ND	
90 Styrene	104		11.031				ND	
91 Bromoform	173		11.225				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425014.D

Injection Date: 25-Apr-2015 16:48:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Worklist Smp#: 14

Client ID: HD-MW-37D-0/1-0

Purge Vol: 5.000 mL

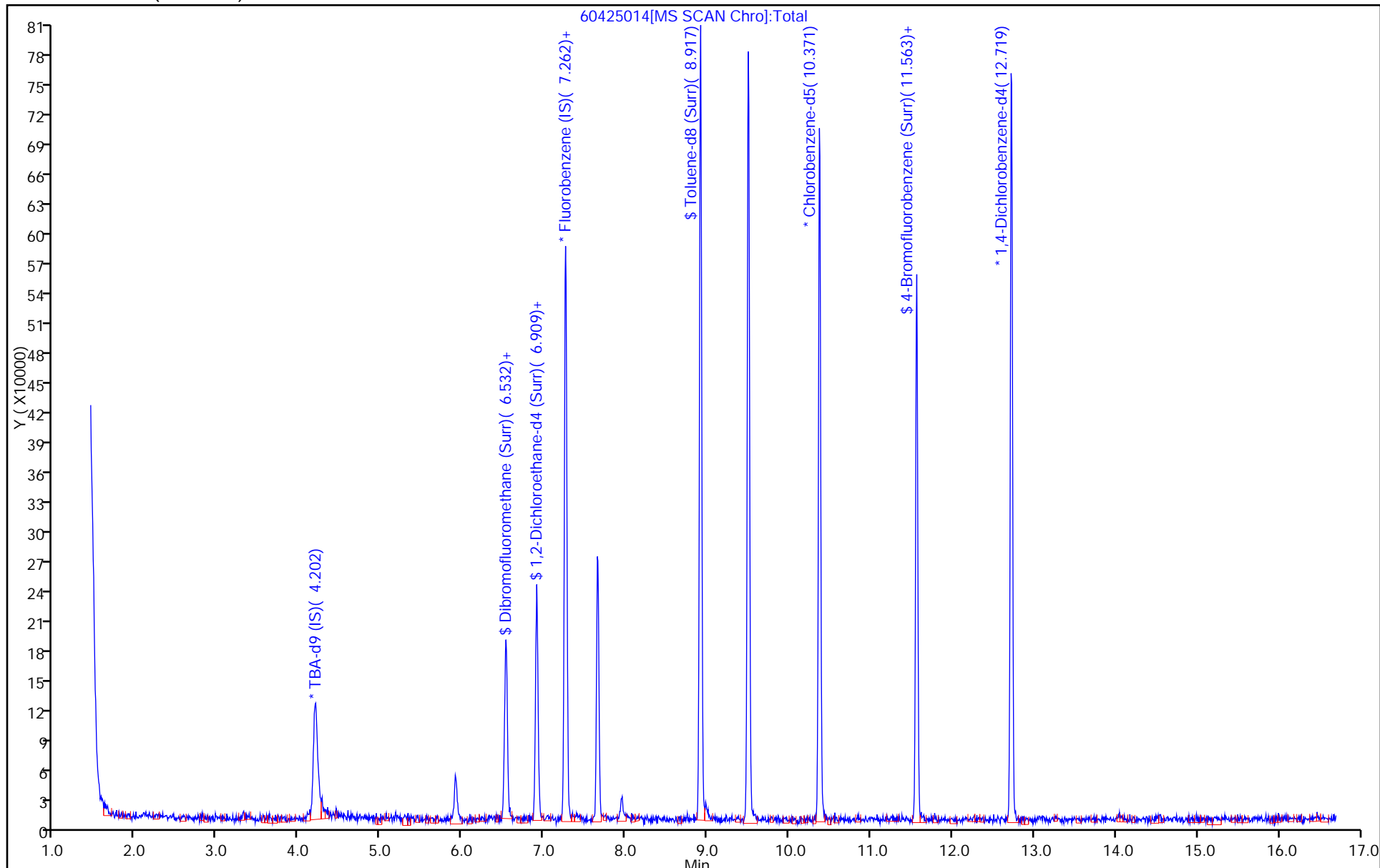
Dil. Factor: 40.0000

ALS Bottle#: 14

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425014.D

Injection Date: 25-Apr-2015 16:48:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

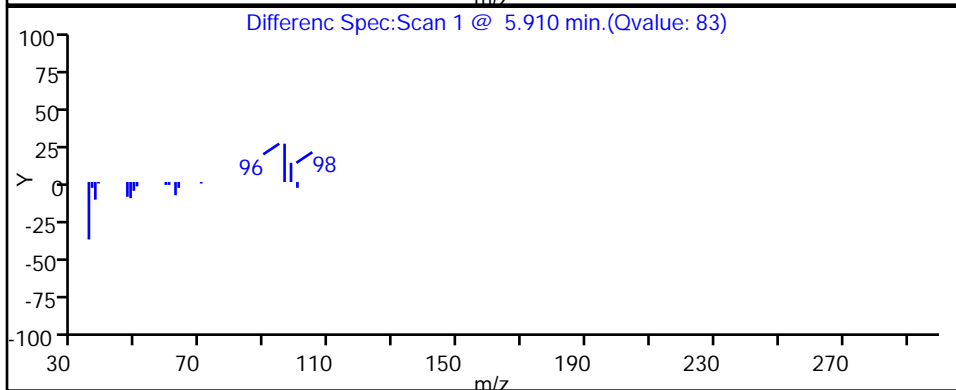
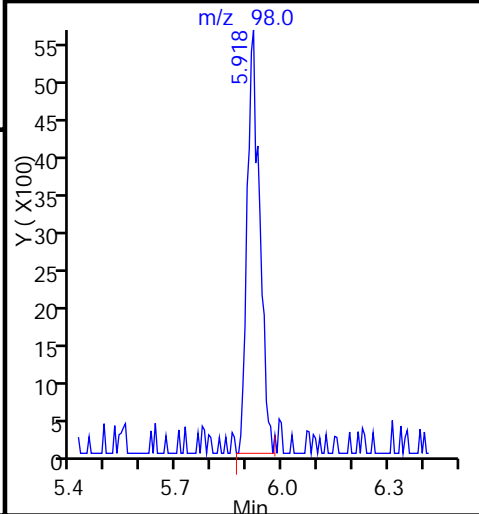
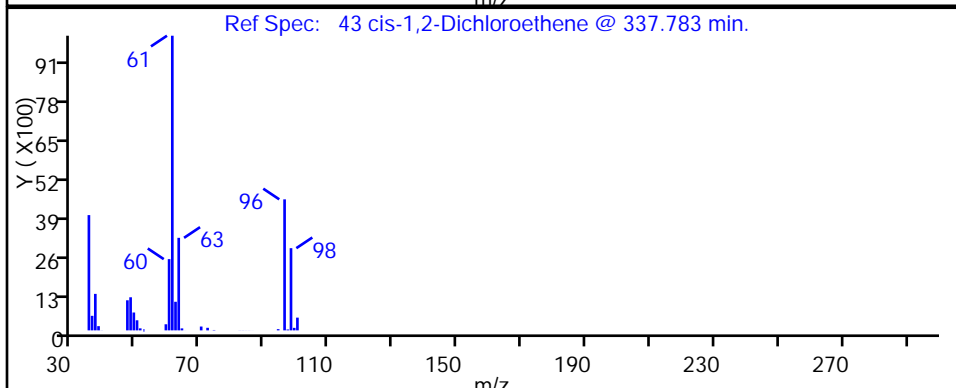
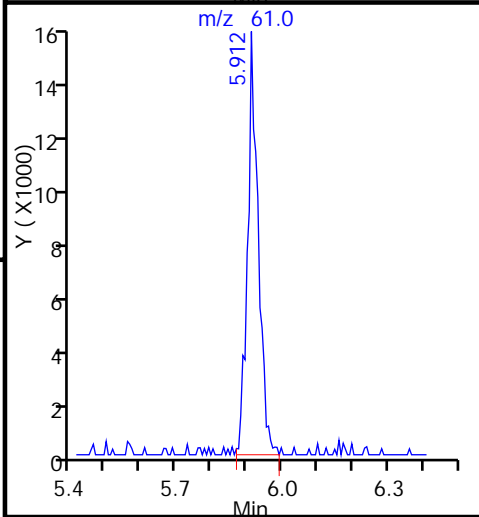
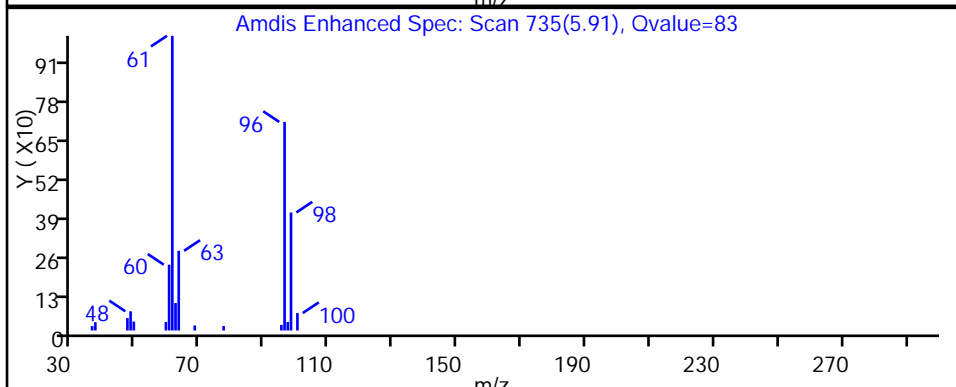
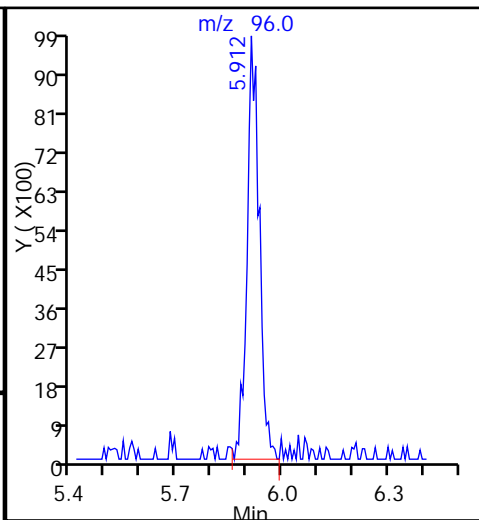
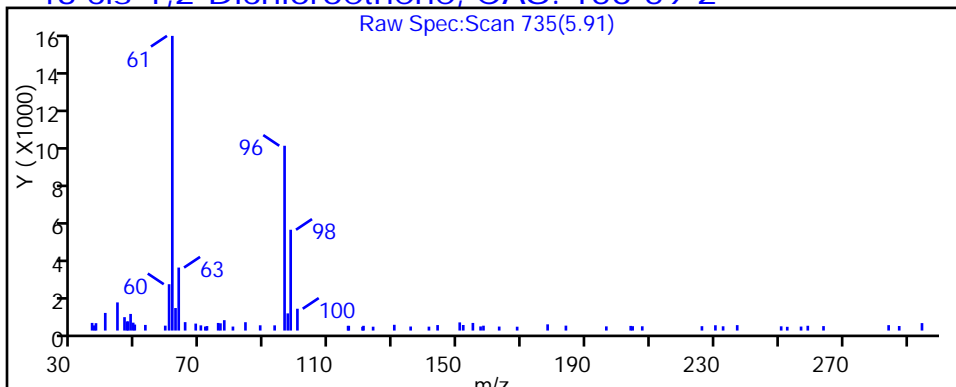
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425014.D

Injection Date: 25-Apr-2015 16:48:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

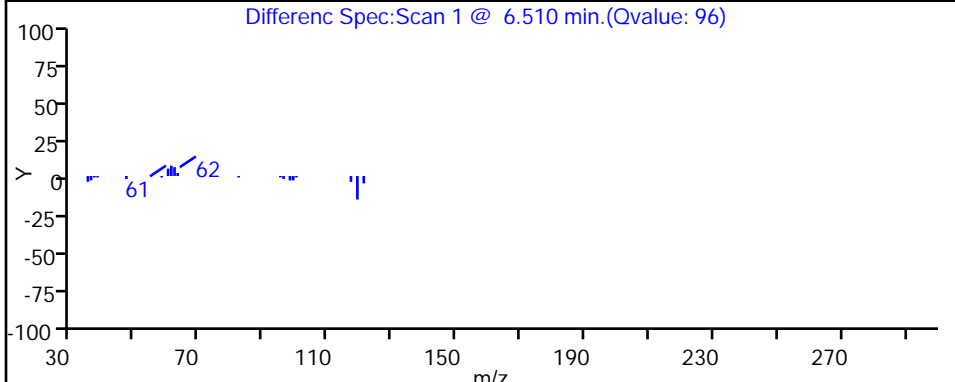
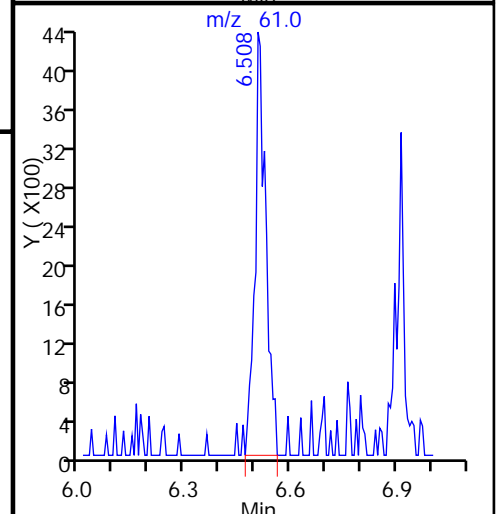
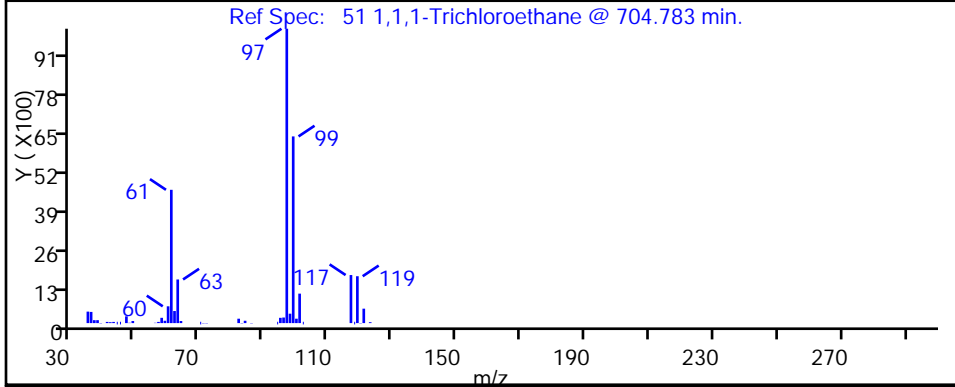
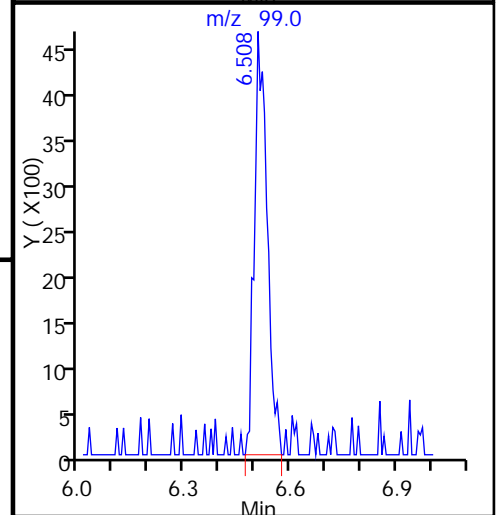
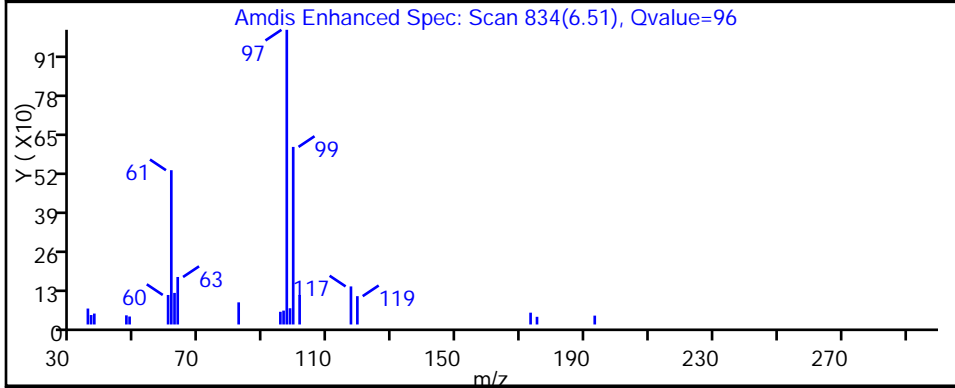
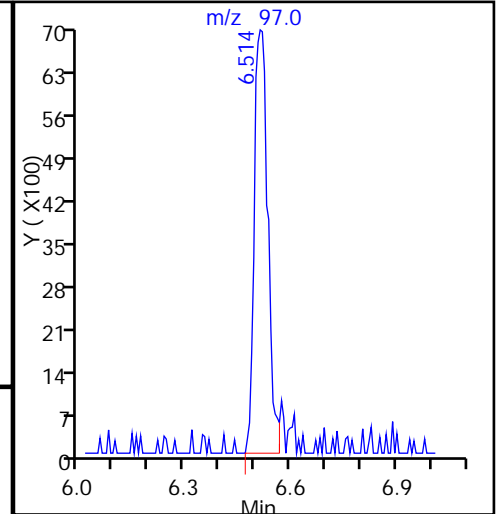
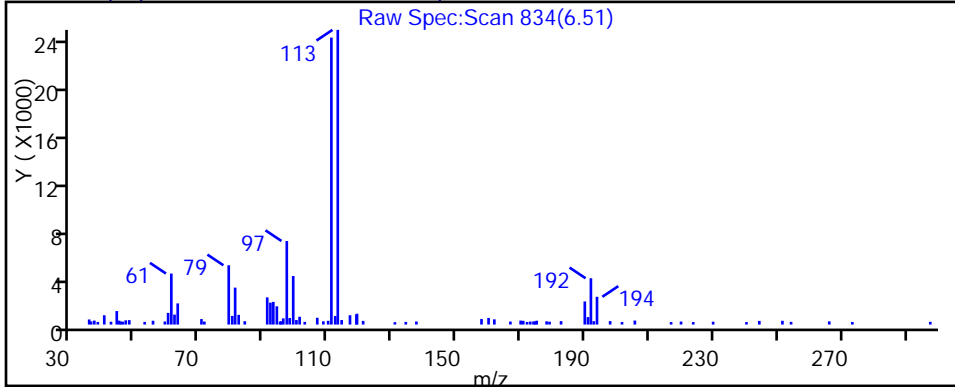
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

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



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425014.D

Injection Date: 25-Apr-2015 16:48:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

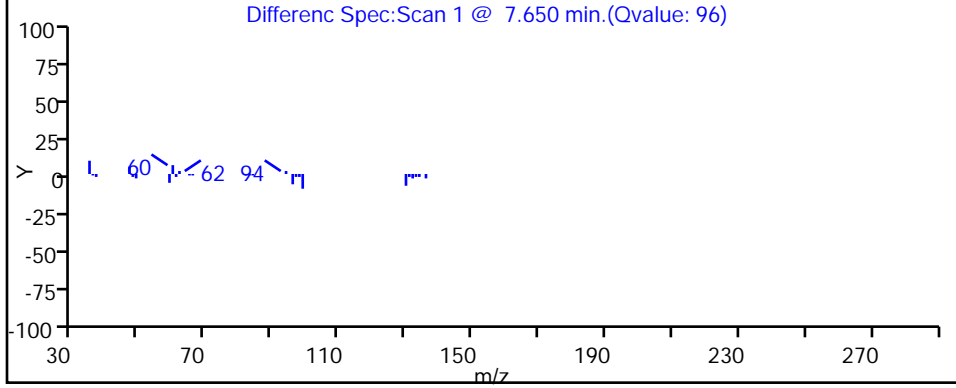
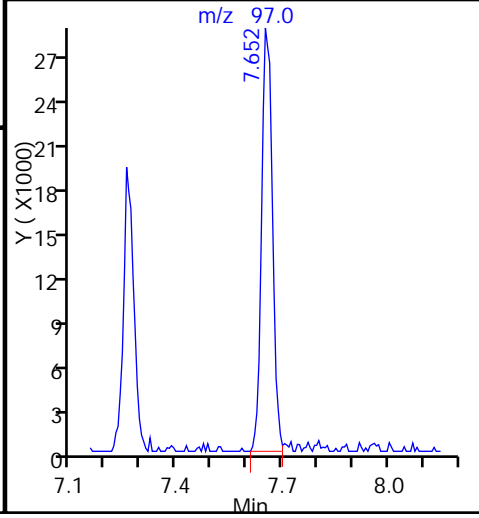
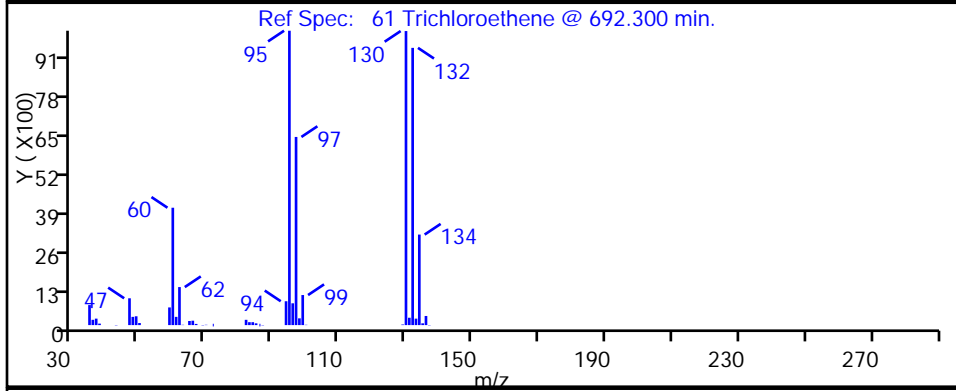
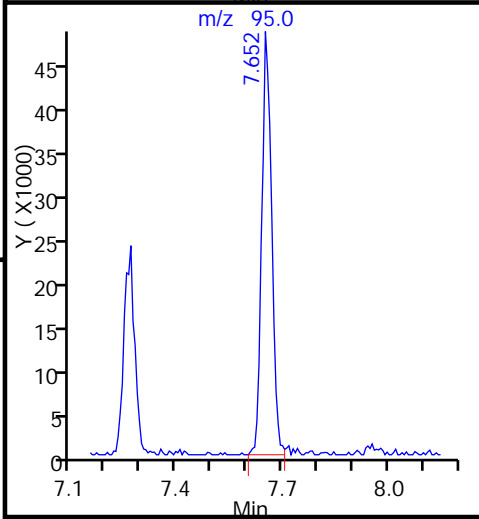
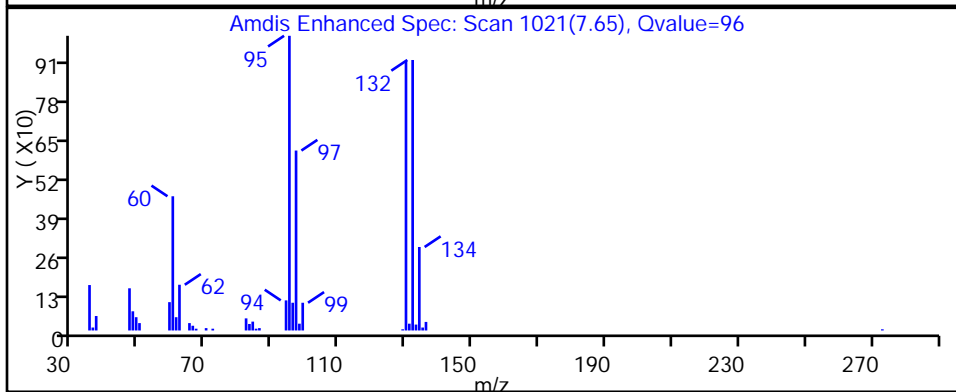
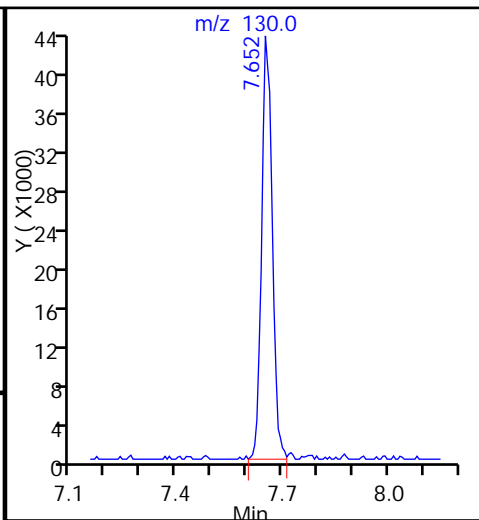
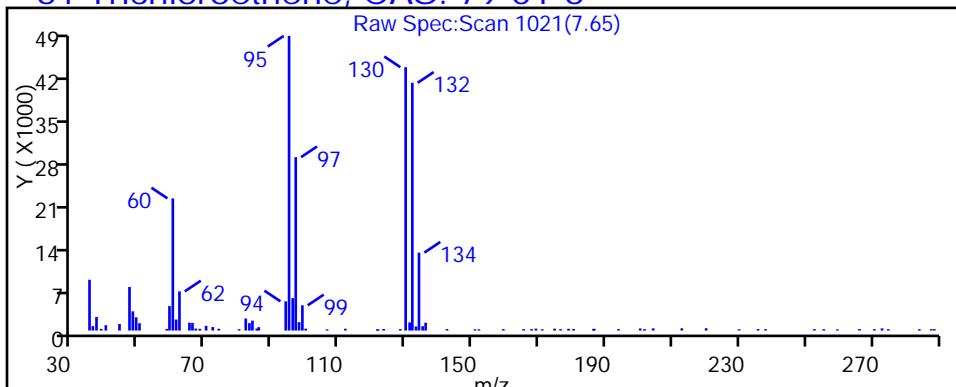
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

61 Trichloroethene, CAS: 79-01-6



TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425014.D

Injection Date: 25-Apr-2015 16:48:30

Instrument ID: CHHP6

Lims ID: 180-43257-E-7

Lab Sample ID: 180-43257-7

Client ID: HD-MW-37D-0/1-0

Operator ID: 001562

ALS Bottle#: 14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 40.0000

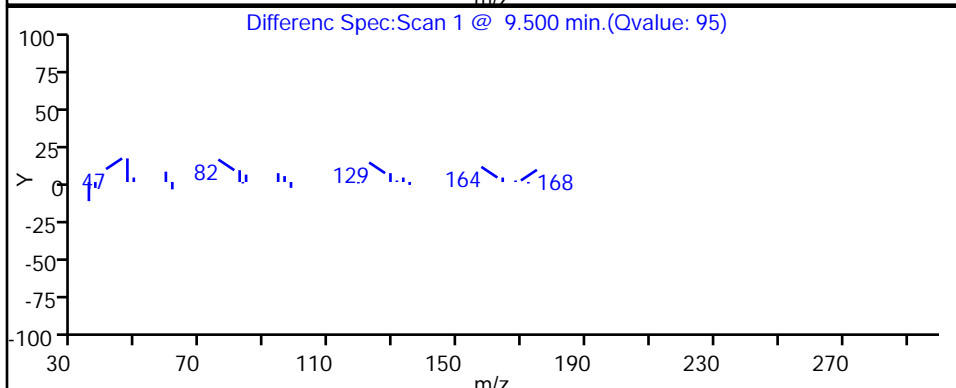
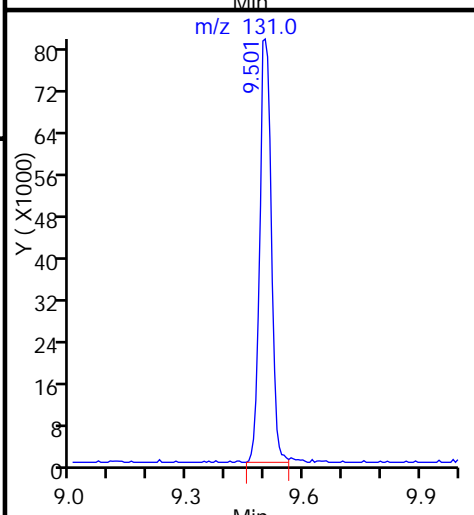
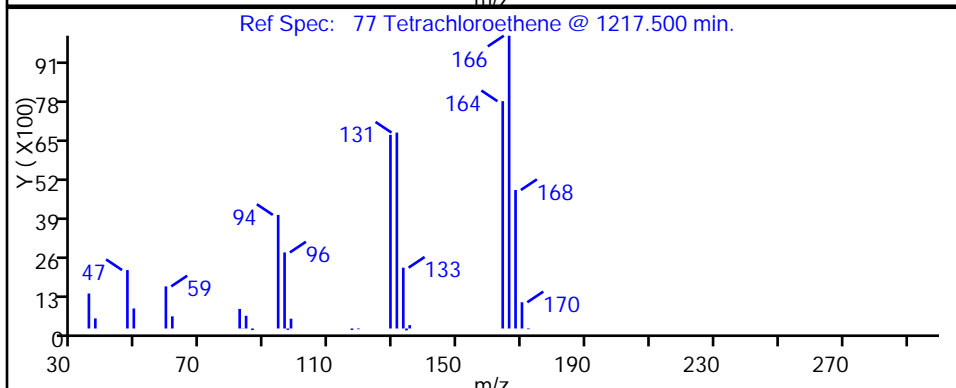
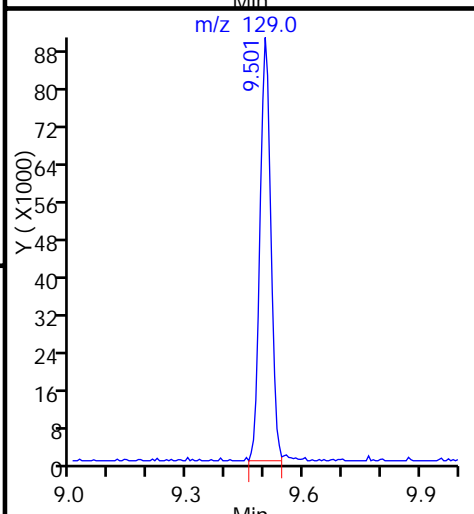
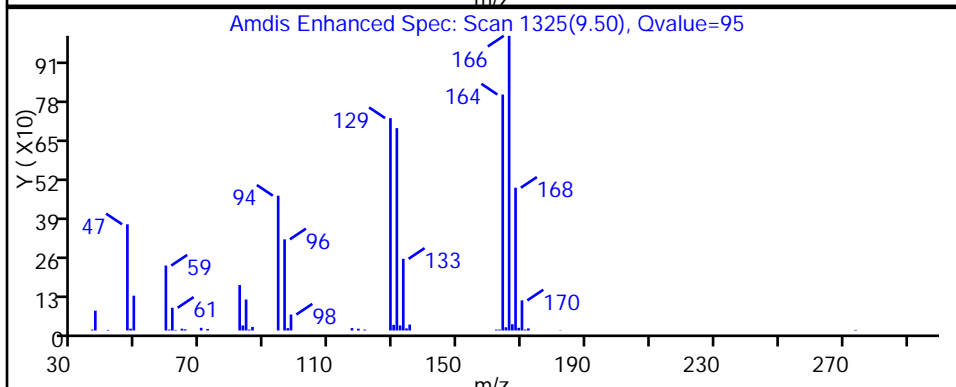
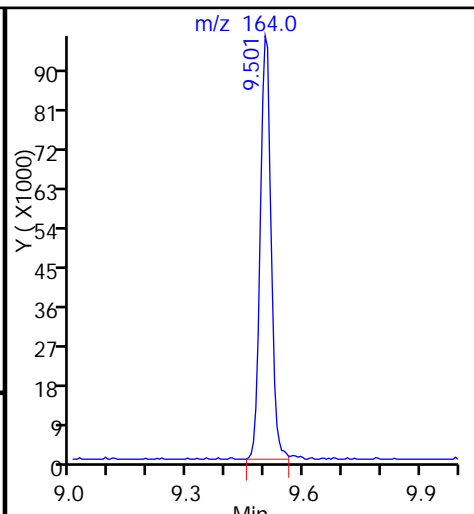
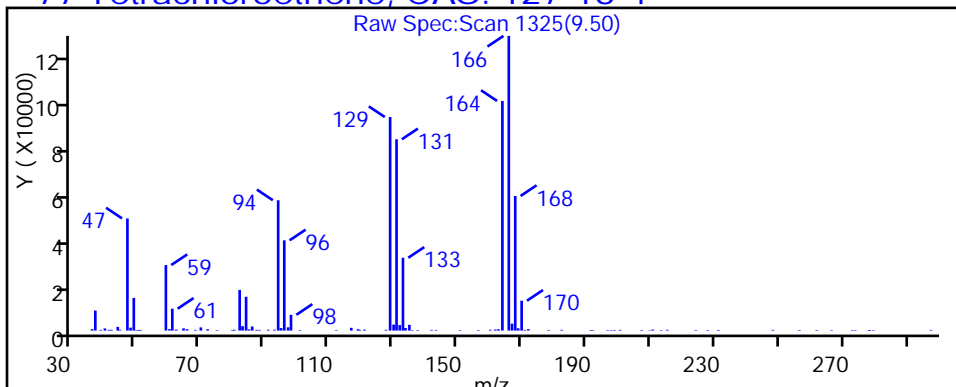
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



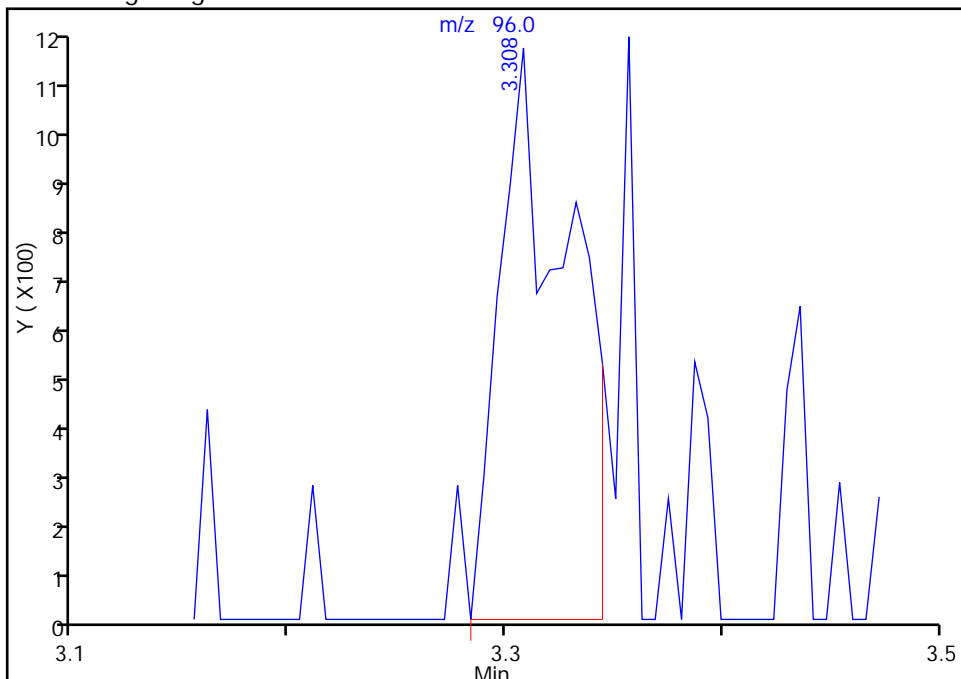
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425014.D
Injection Date: 25-Apr-2015 16:48:30 Instrument ID: CHHP6
Lims ID: 180-43257-E-7 Lab Sample ID: 180-43257-7
Client ID: HD-MW-37D-0/1-0
Operator ID: 001562 ALS Bottle#: 14 Worklist Smp#: 14
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

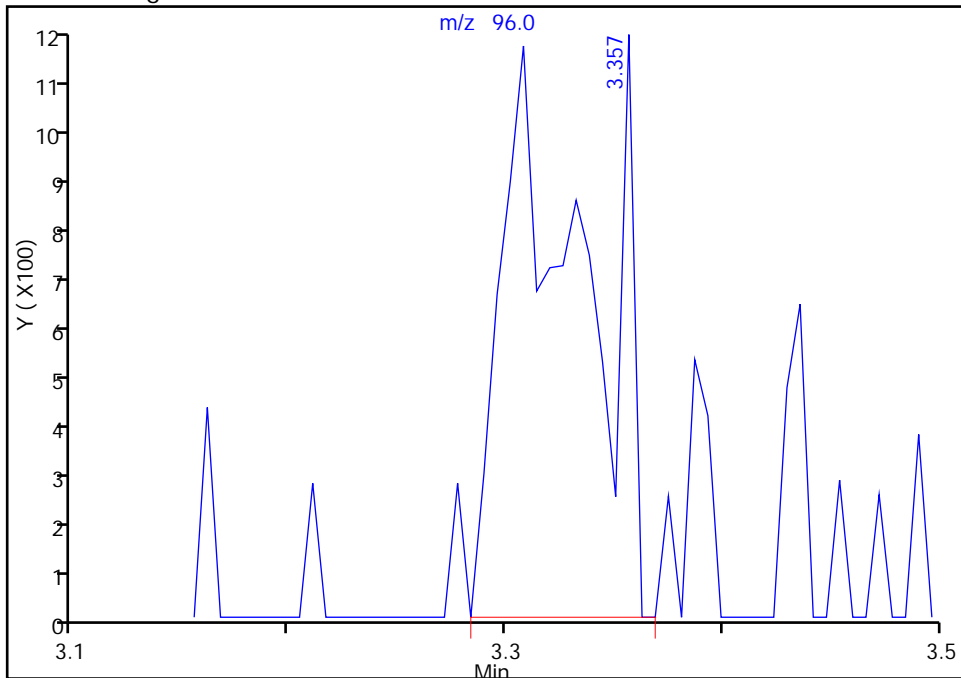
RT: 3.31
Area: 2485
Amount: 0.831387
Amount Units: ng

Processing Integration Results



RT: 3.36
Area: 2979
Amount: 0.996661
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 27-Apr-2015 08:29:02
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-43257-8
 Matrix: Water Lab File ID: 60425015.D
 Analysis Method: 8260C Date Collected: 04/20/2015 08:00
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 17:12
 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.: 139651 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	0.54	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	0.29	J	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	8.2		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	1.1		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	7.9		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	9.0		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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-43257-8
 Matrix: Water Lab File ID: 60425015.D
 Analysis Method: 8260C Date Collected: 04/20/2015 08:00
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 17:12
 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.: 139651 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)	97		64-135
2037-26-5	Toluene-d8 (Surr)	101		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	98		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425015.D
 Lims ID: 180-43257-D-8 Lab Sample ID: 180-43257-8
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 25-Apr-2015 17:12:30 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43257-D-8
 Misc. Info.: 180-0006632-015
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 08:30:45 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 27-Apr-2015 08:30:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.190	4.205	-0.015	88	172996	1000.0	
* 2 Fluorobenzene (IS)	96	7.262	7.259	0.003	98	574977	50.0	
* 3 Chlorobenzene-d5	119	10.371	10.367	0.004	91	130080	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.725	12.722	0.003	97	212689	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.532	6.529	0.003	92	116440	49.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.909	6.906	0.003	69	165050	48.5	
\$ 7 Toluene-d8 (Surr)	98	8.917	8.914	0.003	95	546882	50.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.563	11.560	0.003	85	203505	49.5	
12 Chloromethane	50		1.741				ND	
13 Vinyl chloride	62		1.869				ND	
15 Bromomethane	94		2.210				ND	
16 Chloroethane	64		2.356				ND	
22 1,1-Dichloroethene	96	3.320	3.305	0.015	81	8111	2.72	
24 Acetone	43		3.396				ND	
26 Carbon disulfide	76		3.603				ND	
31 Methylene Chloride	84		4.095				ND	
33 Acrylonitrile	53		4.460				ND	
34 trans-1,2-Dichloroethene	96		4.527				ND	
35 Methyl tert-butyl ether	73		4.533				ND	
37 1,1-Dichloroethane	63	5.182	5.166	0.016	1	9393	1.44	M
44 2-Butanone (MEK)	43		5.908				ND	
43 cis-1,2-Dichloroethene	96	5.912	5.914	-0.002	83	150165	41.1	
48 Chlorobromomethane	128		6.206				ND	
50 Chloroform	83	6.331	6.346	-0.015	34	2508	0.4836	
51 1,1,1-Trichloroethane	97	6.508	6.511	-0.003	97	20427	5.70	
53 Carbon tetrachloride	117		6.687				ND	
56 Benzene	78		6.912				ND	
57 1,2-Dichloroethane	62		6.991				ND	
61 Trichloroethene	130	7.657	7.654	0.003	97	123685	39.4	
64 1,2-Dichloropropane	63		7.928				ND	
65 1,4-Dioxane	88		8.007				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.208				ND	
71 cis-1,3-Dichloropropene	75		8.652				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.798				ND	
73 Toluene	91	8.978	8.980	-0.002	61	6126	0.4553	
74 trans-1,3-Dichloropropene	75		9.230				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164	9.501	9.504	-0.003	93	100971	45.2	
79 2-Hexanone	43		9.631				ND	
81 Chlorodibromomethane	129		9.808				ND	
82 Ethylene Dibromide	107		9.917				ND	
84 Chlorobenzene	112		10.404				ND	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.501				ND	
88 m-Xylene & p-Xylene	106		10.635				ND	
89 o-Xylene	106		11.012				ND	
90 Styrene	104		11.031				ND	
91 Bromoform	173		11.225				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425015.D

Injection Date: 25-Apr-2015 17:12:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-D-8

Lab Sample ID: 180-43257-8

Worklist Smp#: 15

Client ID: HD-QC1-0/1-1

Purge Vol: 5.000 mL

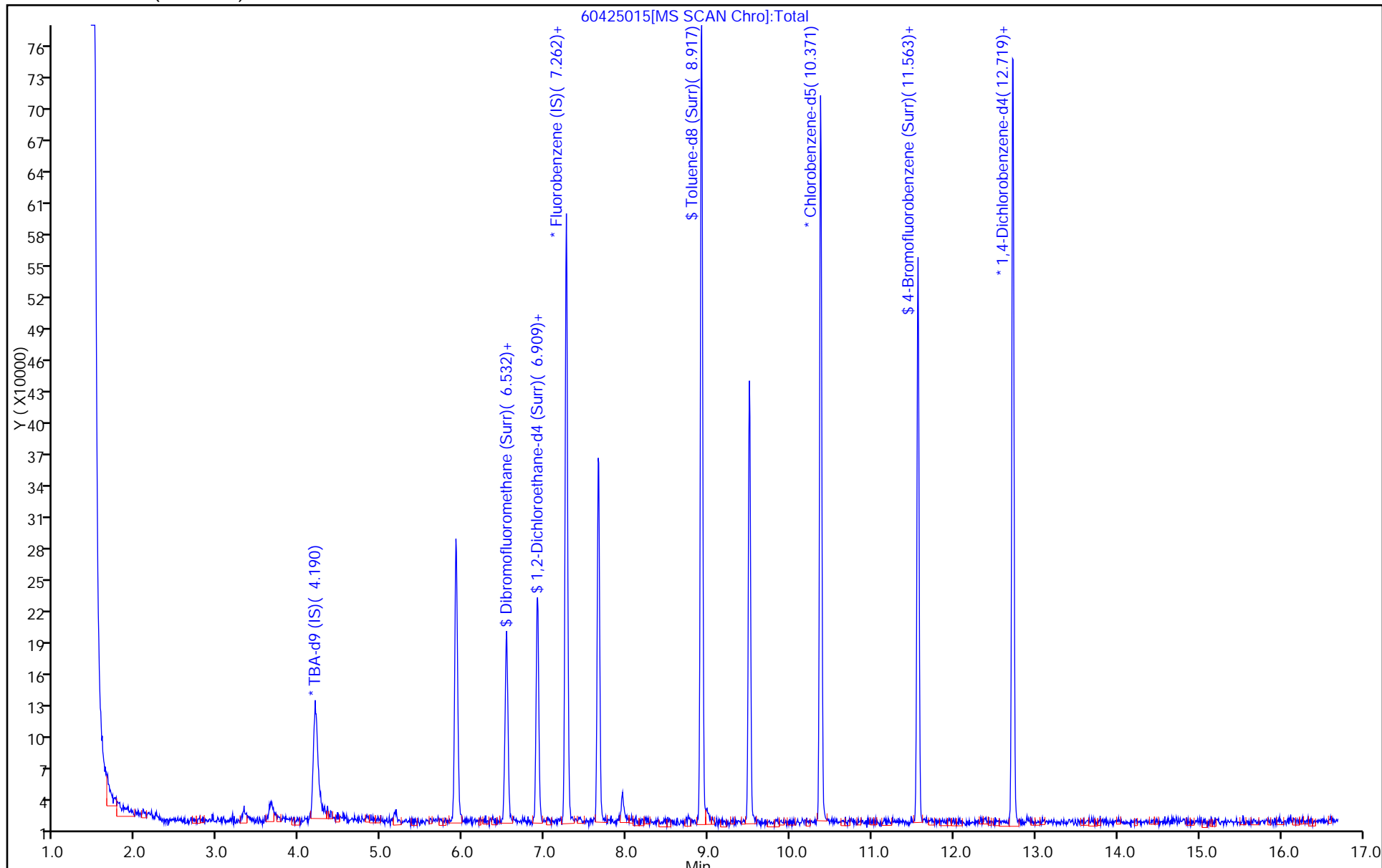
Dil. Factor: 1.0000

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\20150425-6632.b\60425015.D

Injection Date: 25-Apr-2015 17:12:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-8

Lab Sample ID: 180-43257-8

Client ID: HD-QC1-0/1-1

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

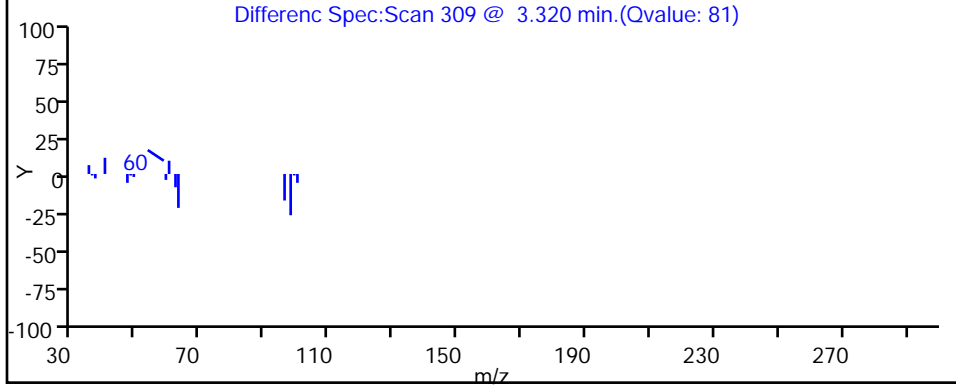
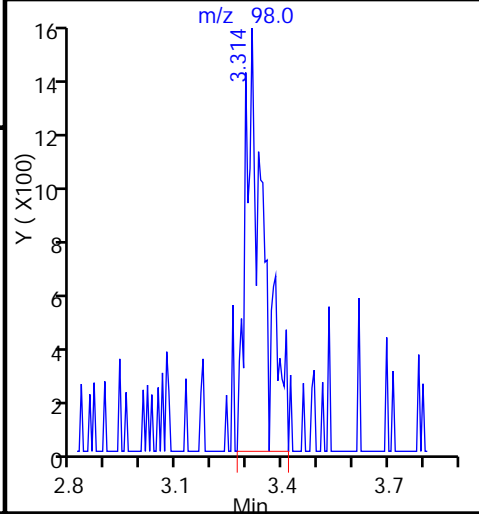
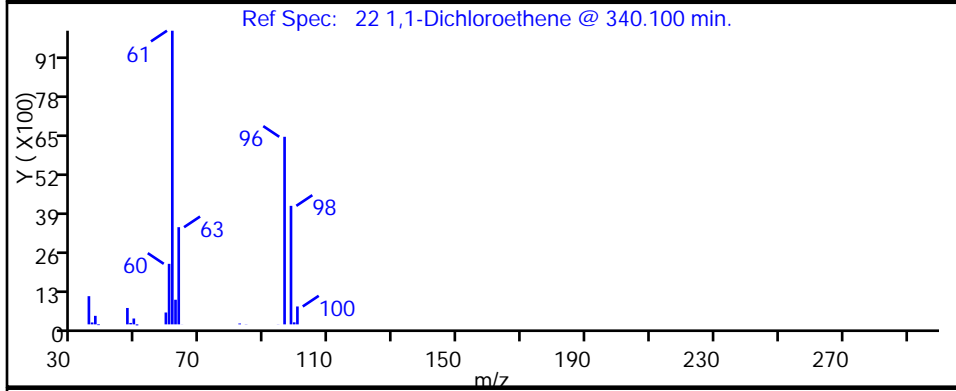
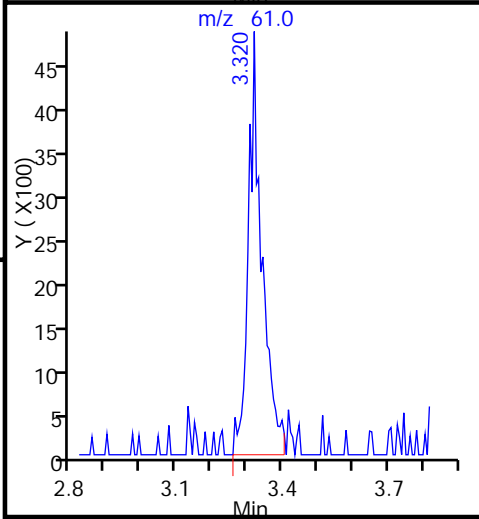
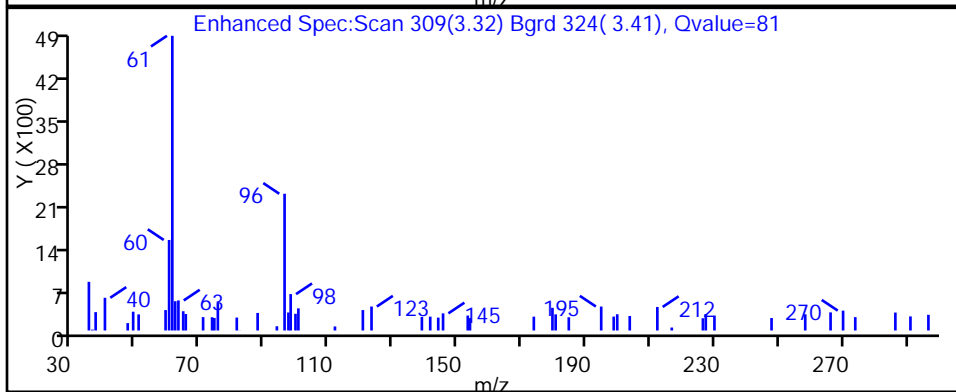
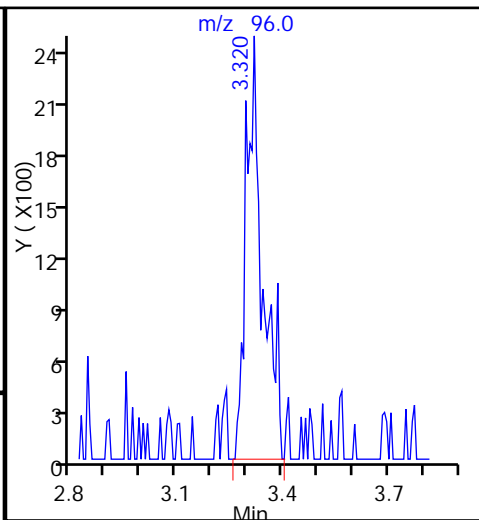
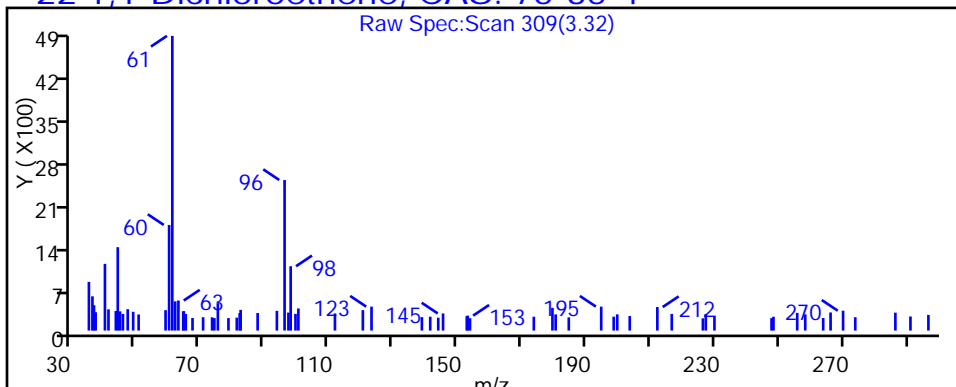
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425015.D

Injection Date: 25-Apr-2015 17:12:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-8

Lab Sample ID: 180-43257-8

Client ID: HD-QC1-0/1-1

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

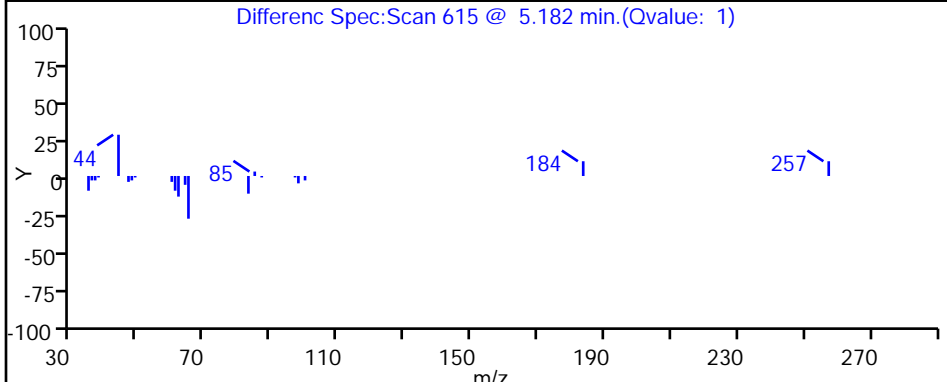
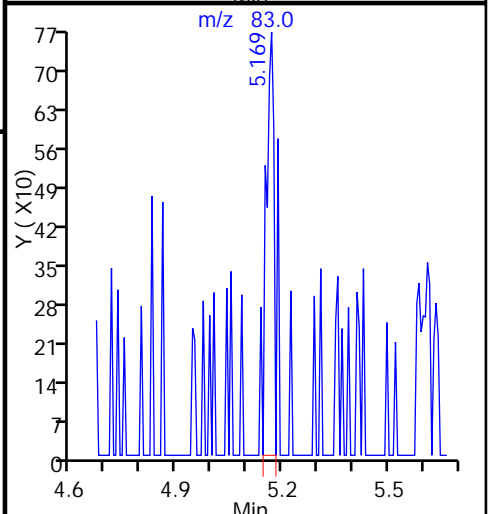
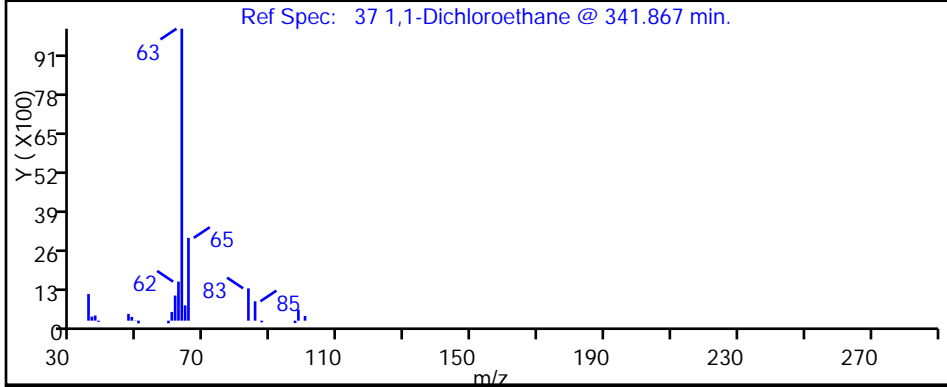
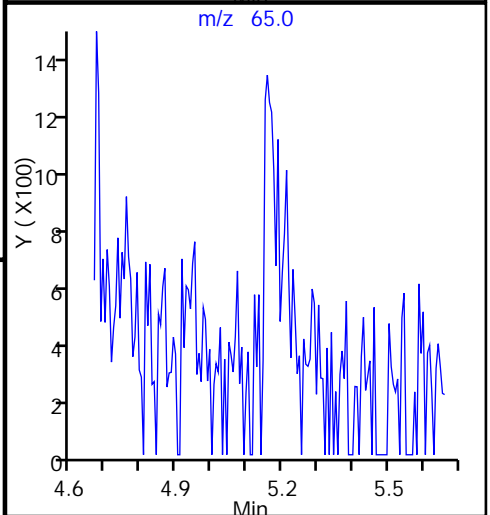
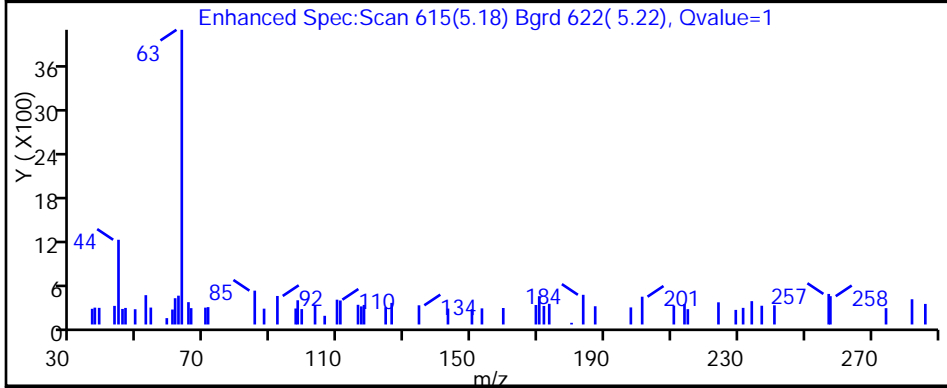
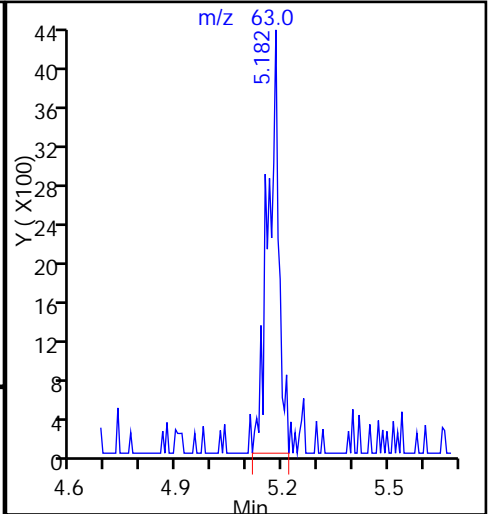
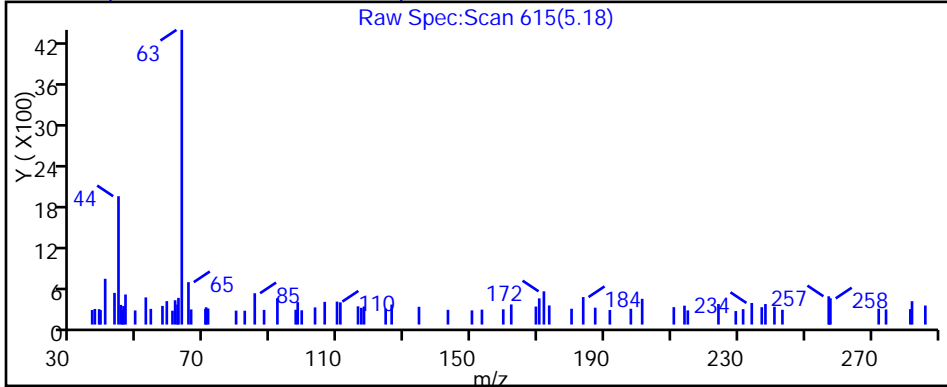
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425015.D

Injection Date: 25-Apr-2015 17:12:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-8

Lab Sample ID: 180-43257-8

Client ID: HD-QC1-0/1-1

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

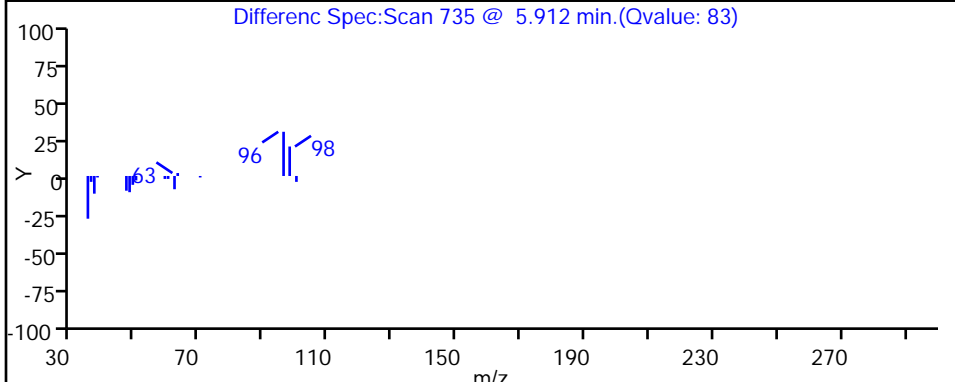
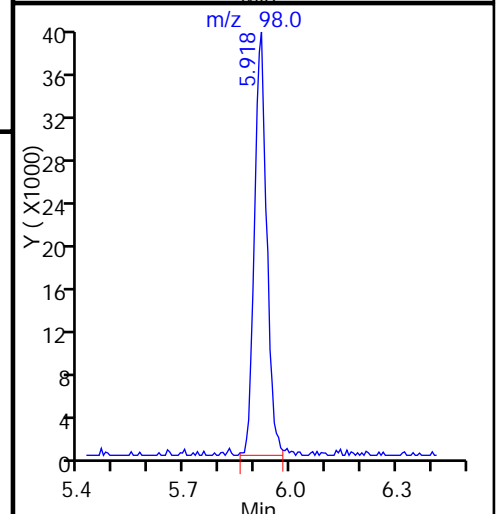
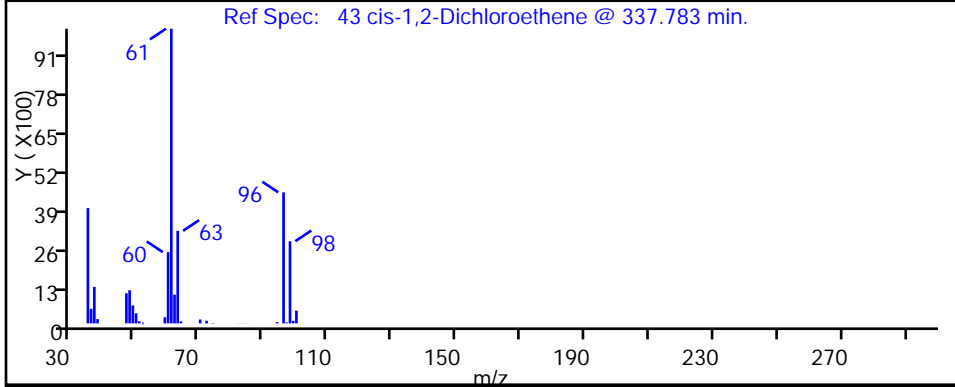
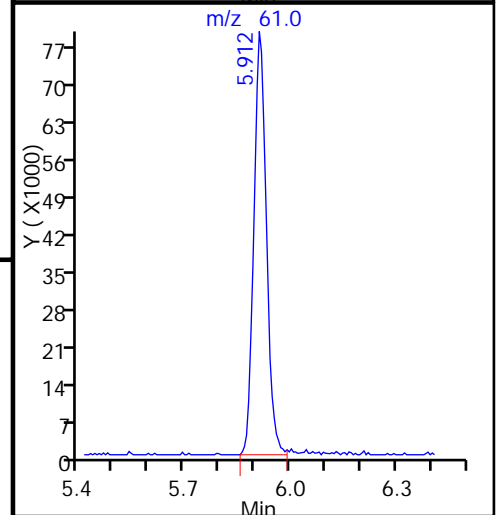
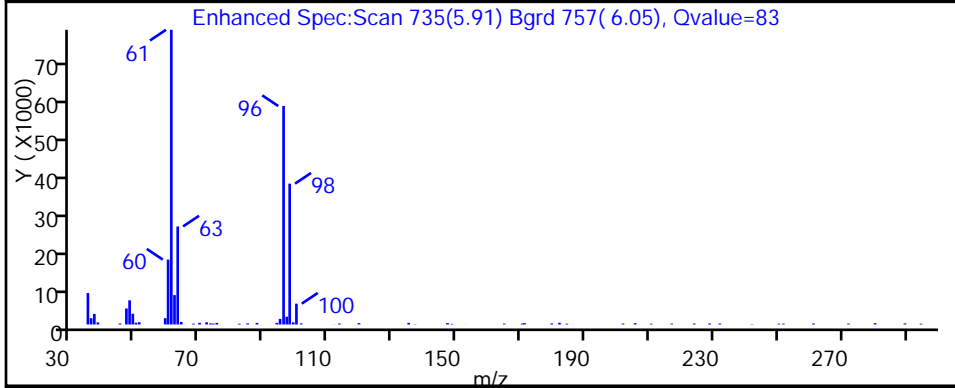
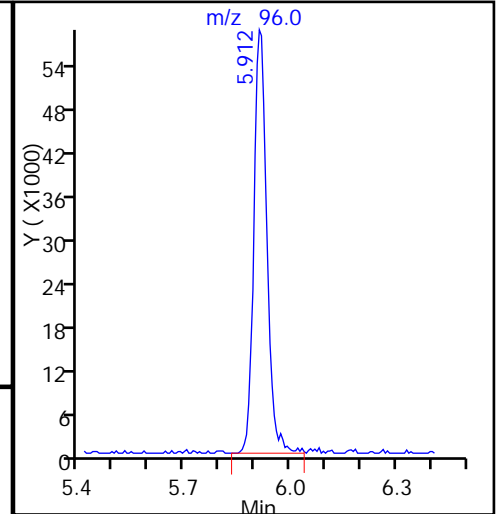
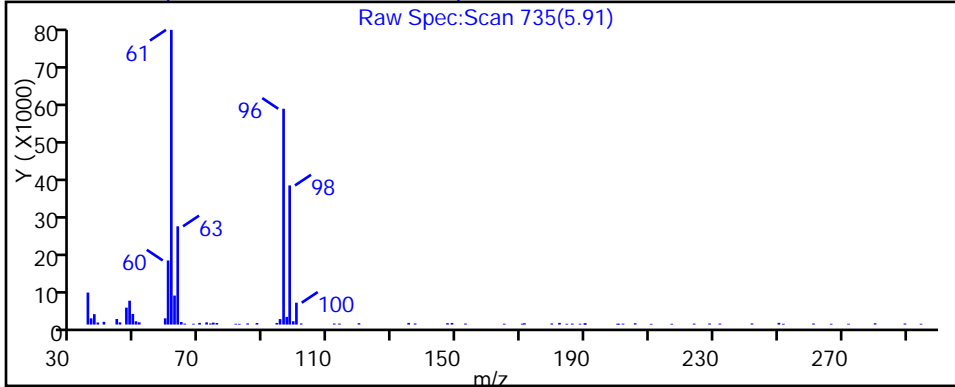
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425015.D

Injection Date: 25-Apr-2015 17:12:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-8

Lab Sample ID: 180-43257-8

Client ID: HD-QC1-0/1-1

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

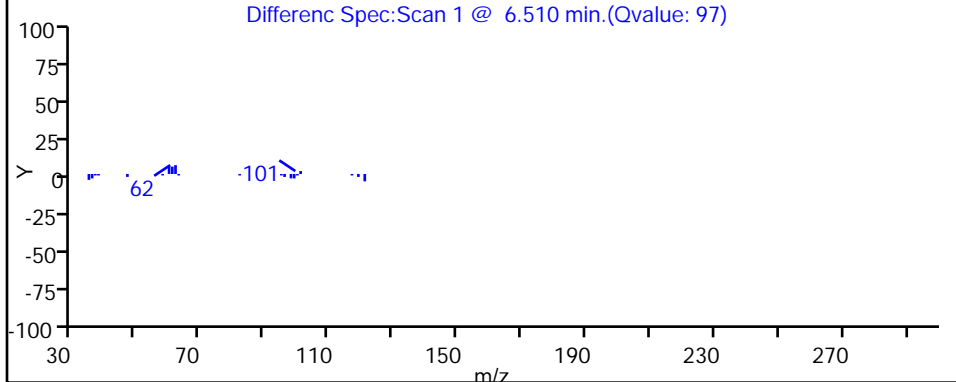
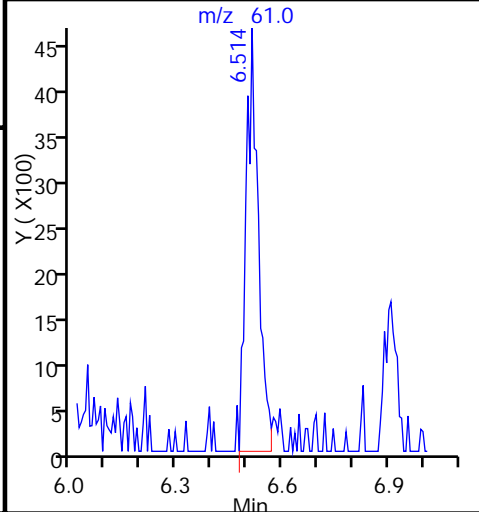
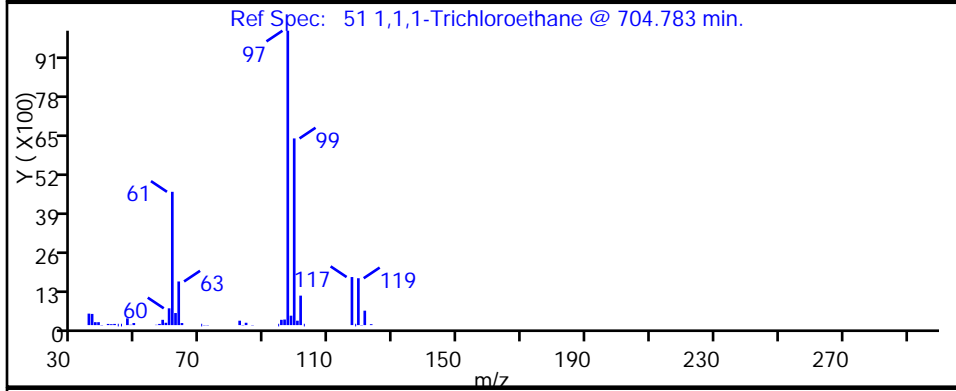
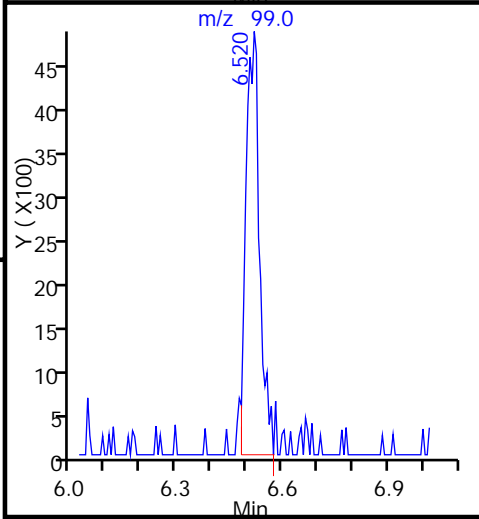
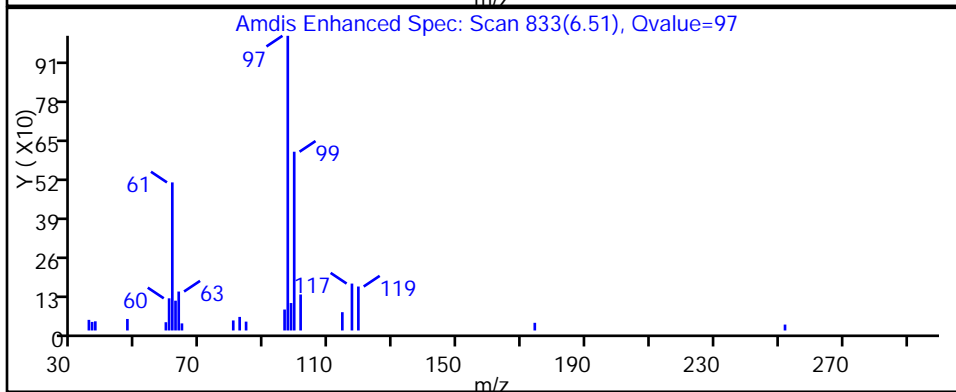
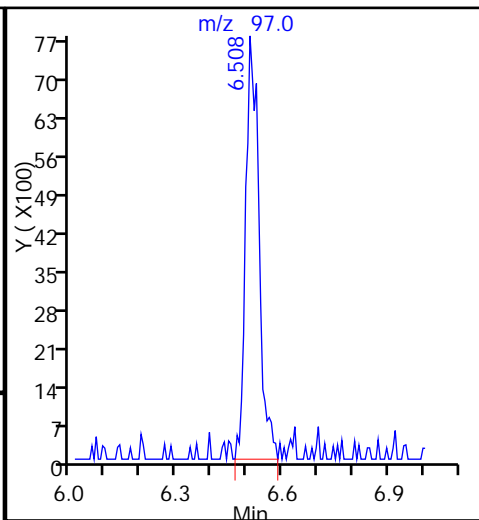
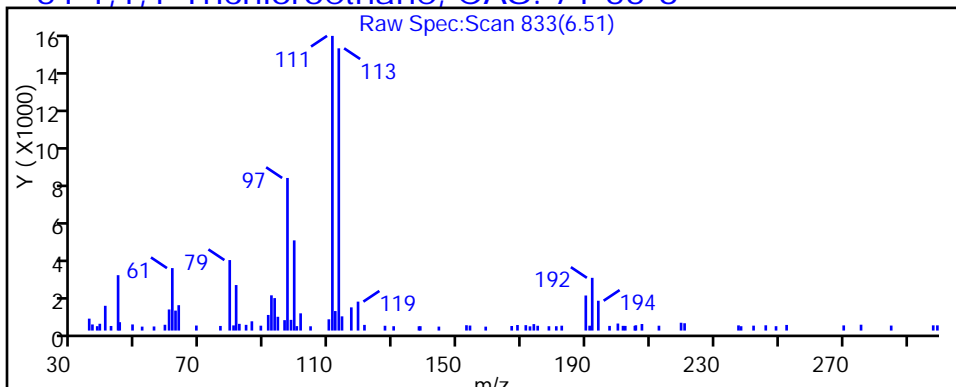
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425015.D

Injection Date: 25-Apr-2015 17:12:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-8

Lab Sample ID: 180-43257-8

Client ID: HD-QC1-0/1-1

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

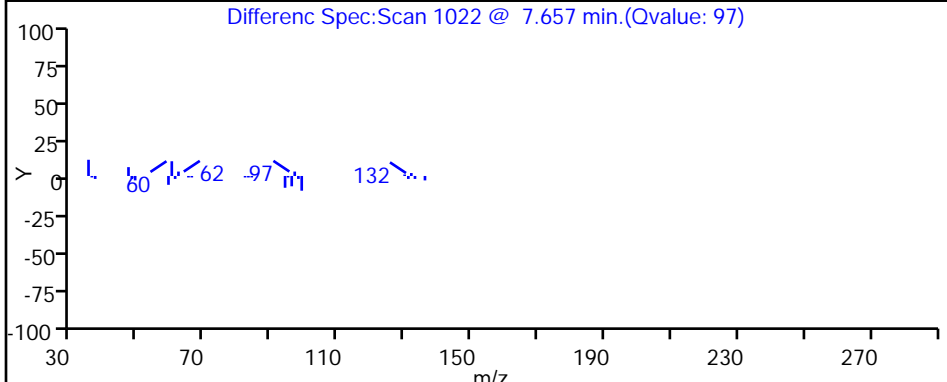
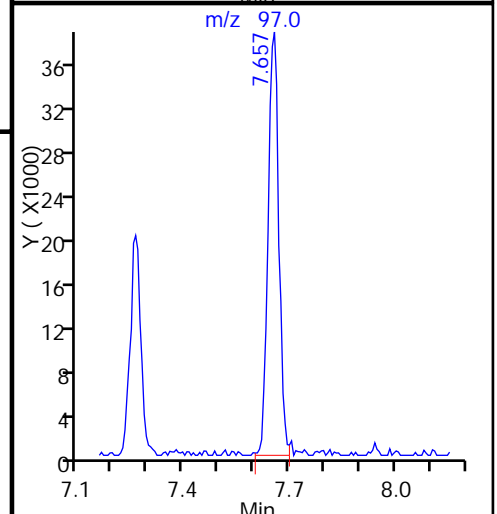
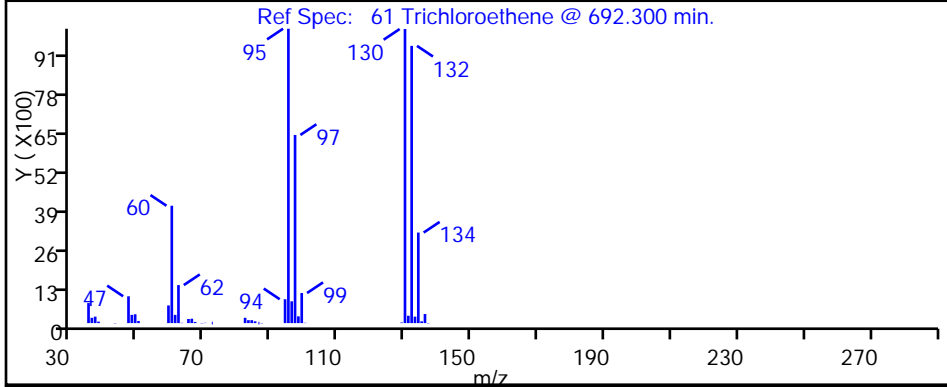
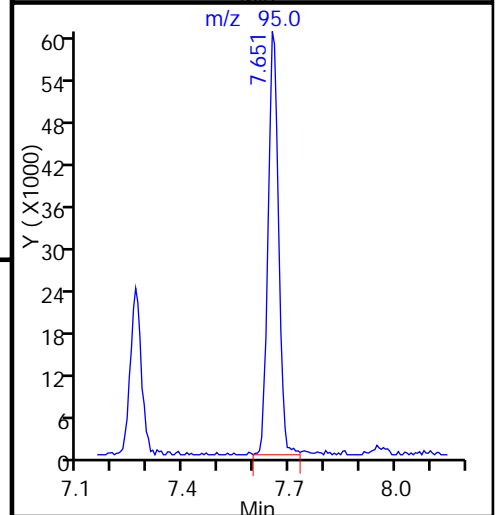
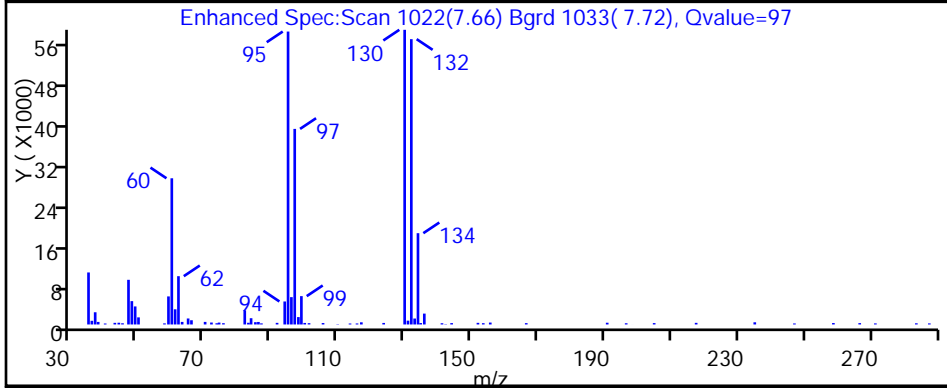
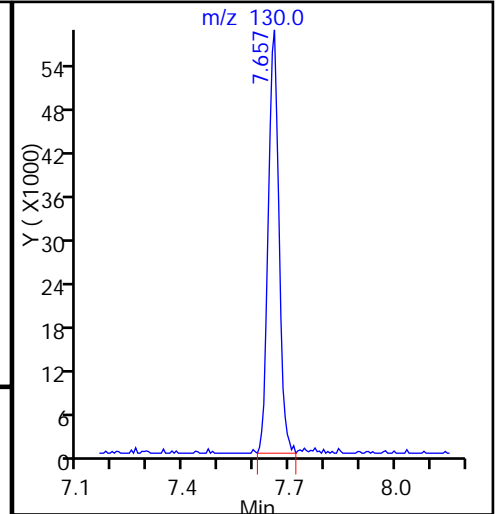
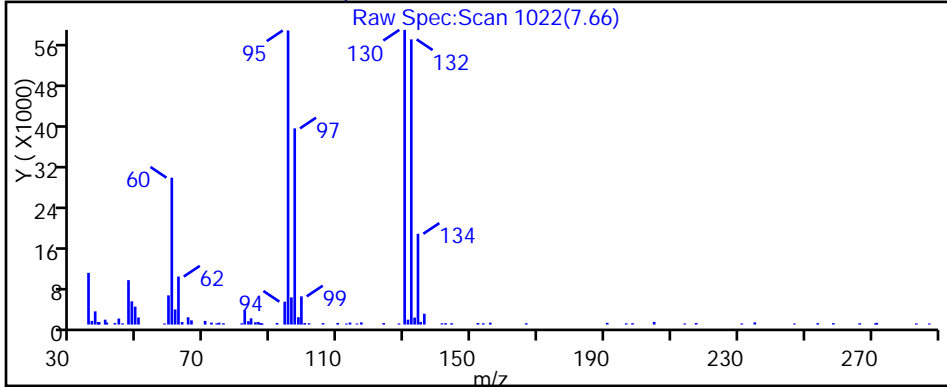
Method: MSVOA_LL_CHHP6

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\20150425-6632.b\60425015.D

Injection Date: 25-Apr-2015 17:12:30

Instrument ID: CHHP6

Lims ID: 180-43257-D-8

Lab Sample ID: 180-43257-8

Client ID: HD-QC1-0/1-1

Operator ID: 001562

ALS Bottle#: 15

Worklist Smp#: 15

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

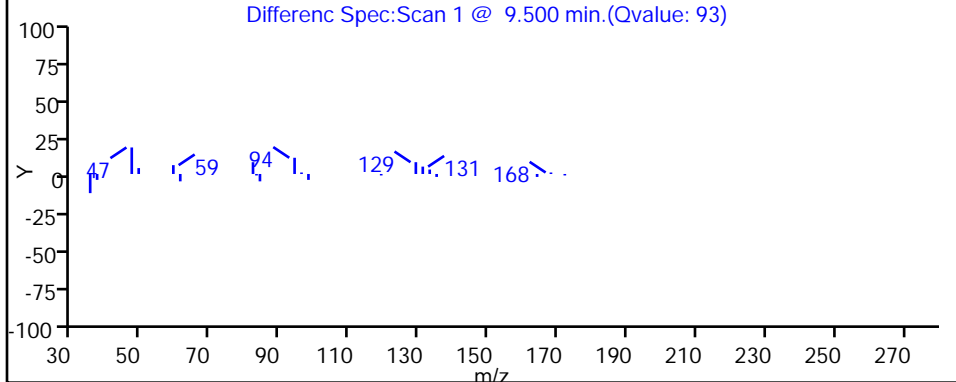
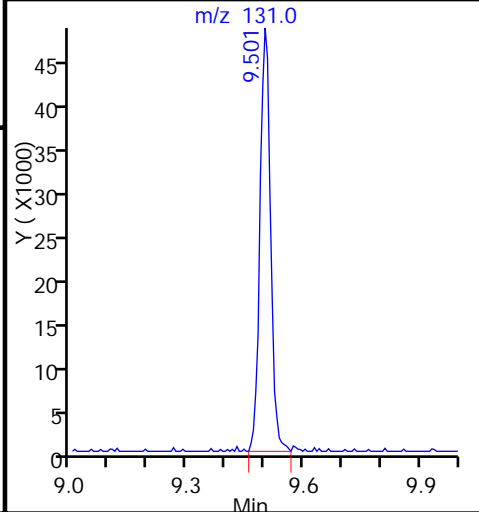
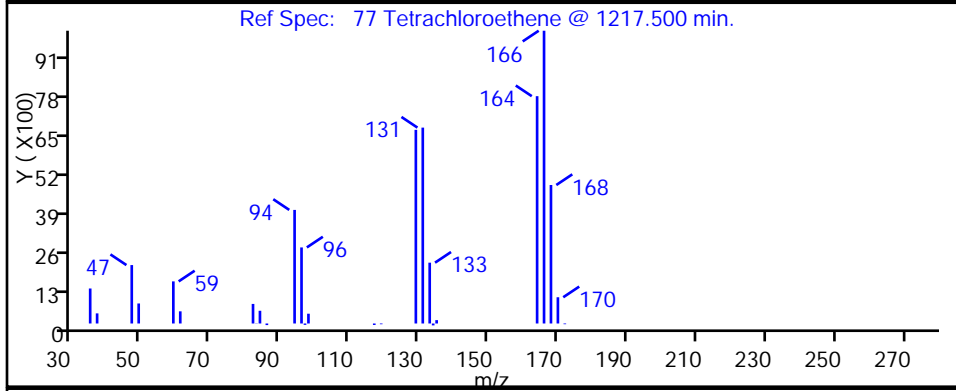
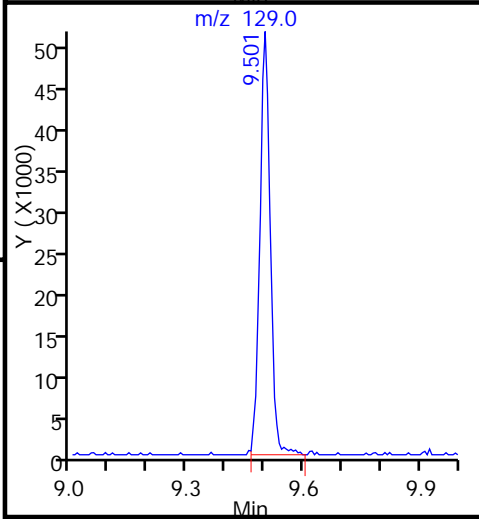
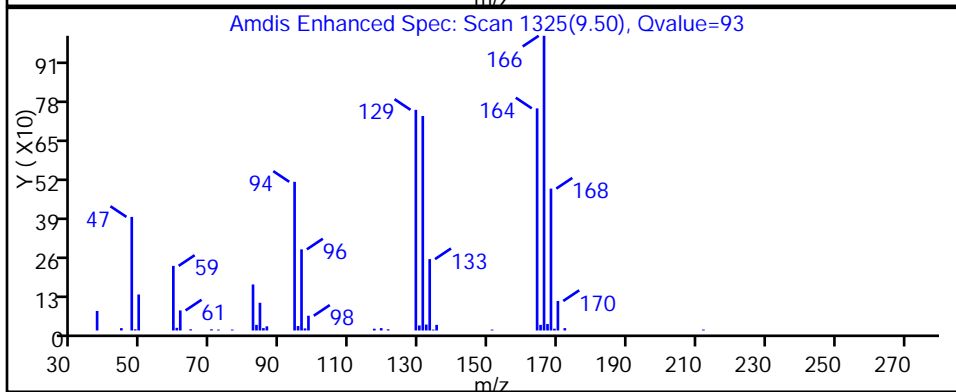
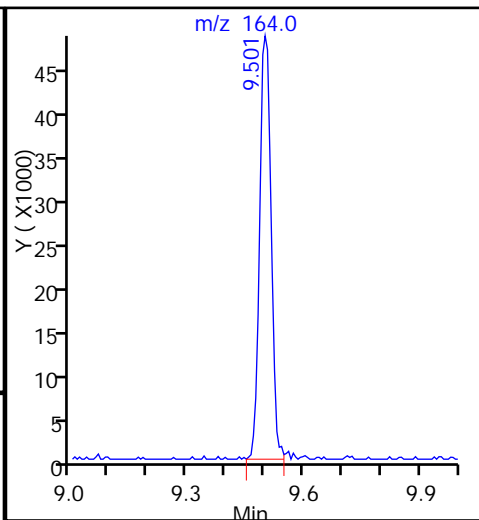
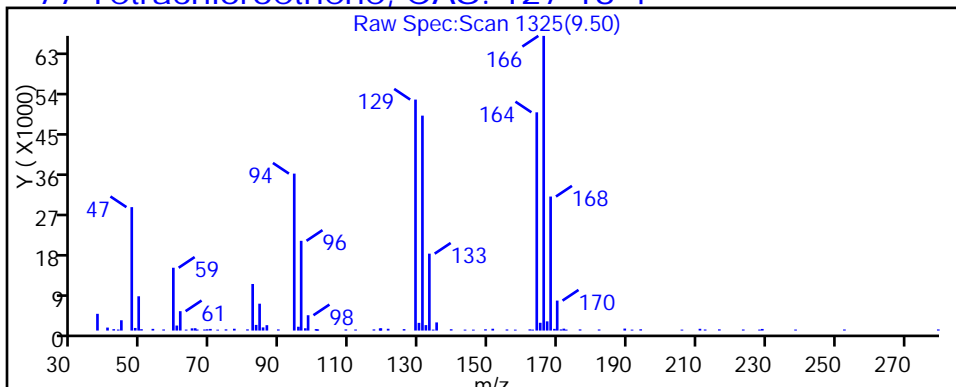
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

77 Tetrachloroethene, CAS: 127-18-4



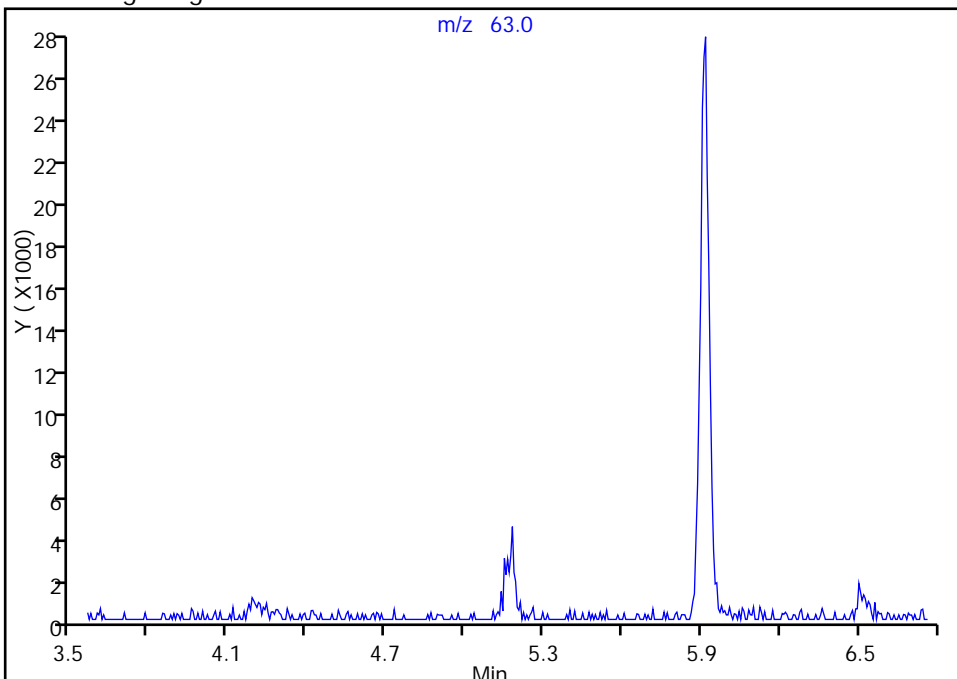
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425015.D
Injection Date: 25-Apr-2015 17:12:30 Instrument ID: CHHP6
Lims ID: 180-43257-D-8 Lab Sample ID: 180-43257-8
Client ID: HD-QC1-0/1-1
Operator ID: 001562 ALS Bottle#: 15 Worklist Smp#: 15
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

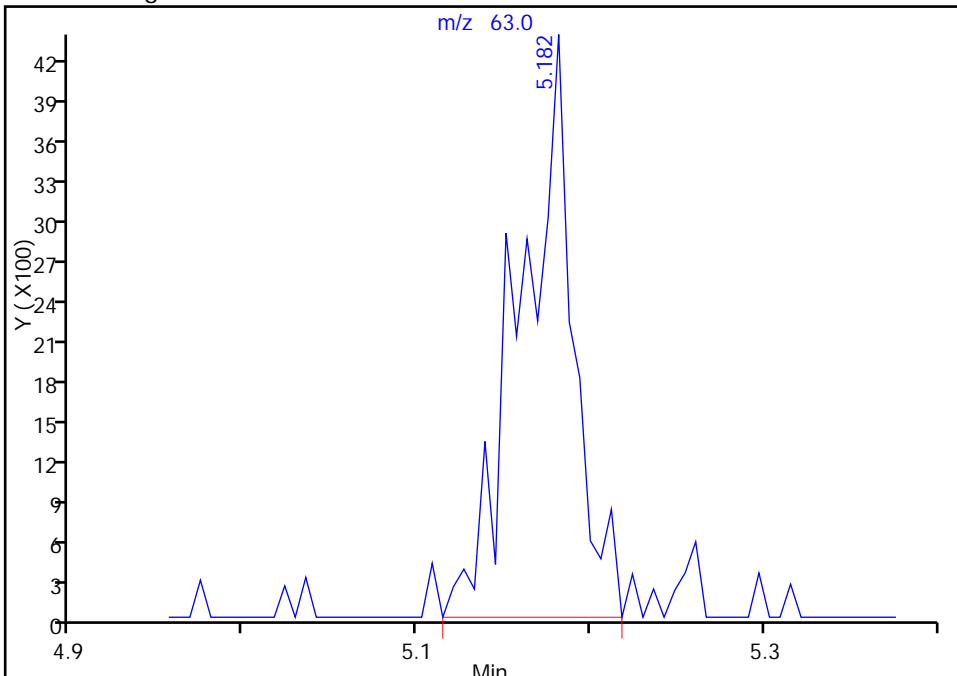
Not Detected
Expected RT: 5.17

Processing Integration Results



RT: 5.18
Area: 9393
Amount: 1.441053
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 27-Apr-2015 08:30:45
Audit Action: Manually Integrated
Audit Reason: Peak Not Integrated

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-43257-9
 Matrix: Water Lab File ID: 60424008.D
 Analysis Method: 8260C Date Collected: 04/20/2015 12:00
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 14:10
 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.: 139551 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	0.14	J	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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 180-43257-9
 Matrix: Water Lab File ID: 60424008.D
 Analysis Method: 8260C Date Collected: 04/20/2015 12:00
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 14:10
 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.: 139551 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)	99		64-135
2037-26-5	Toluene-d8 (Surr)	106		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	94		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424008.D
 Lims ID: 180-43257-A-9 Lab Sample ID: 180-43257-9
 Client ID: HD-QC1-0/1-2
 Sample Type: Client
 Inject. Date: 24-Apr-2015 14:10:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43257-A-9
 Misc. Info.: 180-0006620-008
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 24-Apr-2015 15:01:49 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK032

First Level Reviewer: fergusond

Date: 24-Apr-2015 15:01:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.187	4.205	-0.018	95	146065	1000.0	
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	99	554503	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	89	119591	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	98	193461	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.523	0.006	92	107871	47.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.906	0.000	69	161724	49.3	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	94	527568	52.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	85	186257	49.3	
12 Chloromethane	50		1.735				ND	
13 Vinyl chloride	62		1.863				ND	
15 Bromomethane	94		2.192				ND	
16 Chloroethane	64		2.344				ND	
22 1,1-Dichloroethene	96		3.311				ND	
24 Acetone	43	3.402	3.384	0.018	66	6149	6.59	M
26 Carbon disulfide	76		3.603				ND	
31 Methylene Chloride	84	4.084	4.090	-0.006	1	2596	0.6843	
33 Acrylonitrile	53		4.461				ND	
34 trans-1,2-Dichloroethene	96		4.528				ND	
35 Methyl tert-butyl ether	73		4.534				ND	
37 1,1-Dichloroethane	63		5.160				ND	
43 cis-1,2-Dichloroethene	96		5.902				ND	
44 2-Butanone (MEK)	43		5.909				ND	
48 Chlorobromomethane	128		6.201				ND	
50 Chloroform	83		6.347				ND	
51 1,1,1-Trichloroethane	97		6.511				ND	
53 Carbon tetrachloride	117		6.687				ND	
56 Benzene	78		6.906				ND	
57 1,2-Dichloroethane	62		6.991				ND	
61 Trichloroethene	130		7.655				ND	
64 1,2-Dichloropropane	63		7.928				ND	
65 1,4-Dioxane	88		8.013				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
68 Dichlorobromomethane	83		8.208				ND	
71 cis-1,3-Dichloropropene	75		8.646				ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.792				ND	
73 Toluene	91	8.981	8.981	0.000	89	4874	0.3940	
74 trans-1,3-Dichloropropene	75		9.224				ND	
76 1,1,2-Trichloroethane	97		9.425				ND	
77 Tetrachloroethene	164		9.498				ND	
79 2-Hexanone	43		9.626				ND	
81 Chlorodibromomethane	129		9.802				ND	
82 Ethylene Dibromide	107		9.918				ND	
84 Chlorobenzene	112		10.404				ND	
86 1,1,1,2-Tetrachloroethane	131		10.495				ND	
87 Ethylbenzene	106		10.502				ND	
88 m-Xylene & p-Xylene	106		10.629				ND	
89 o-Xylene	106		11.013				ND	
90 Styrene	104		11.037				ND	
91 Bromoform	173		11.219				ND	
96 1,1,2,2-Tetrachloroethane	83		11.688				ND	
S 131 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424008.D

Injection Date: 24-Apr-2015 14:10:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-A-9

Lab Sample ID: 180-43257-9

Worklist Smp#: 8

Client ID: HD-QC1-0/1-2

Purge Vol: 5.000 mL

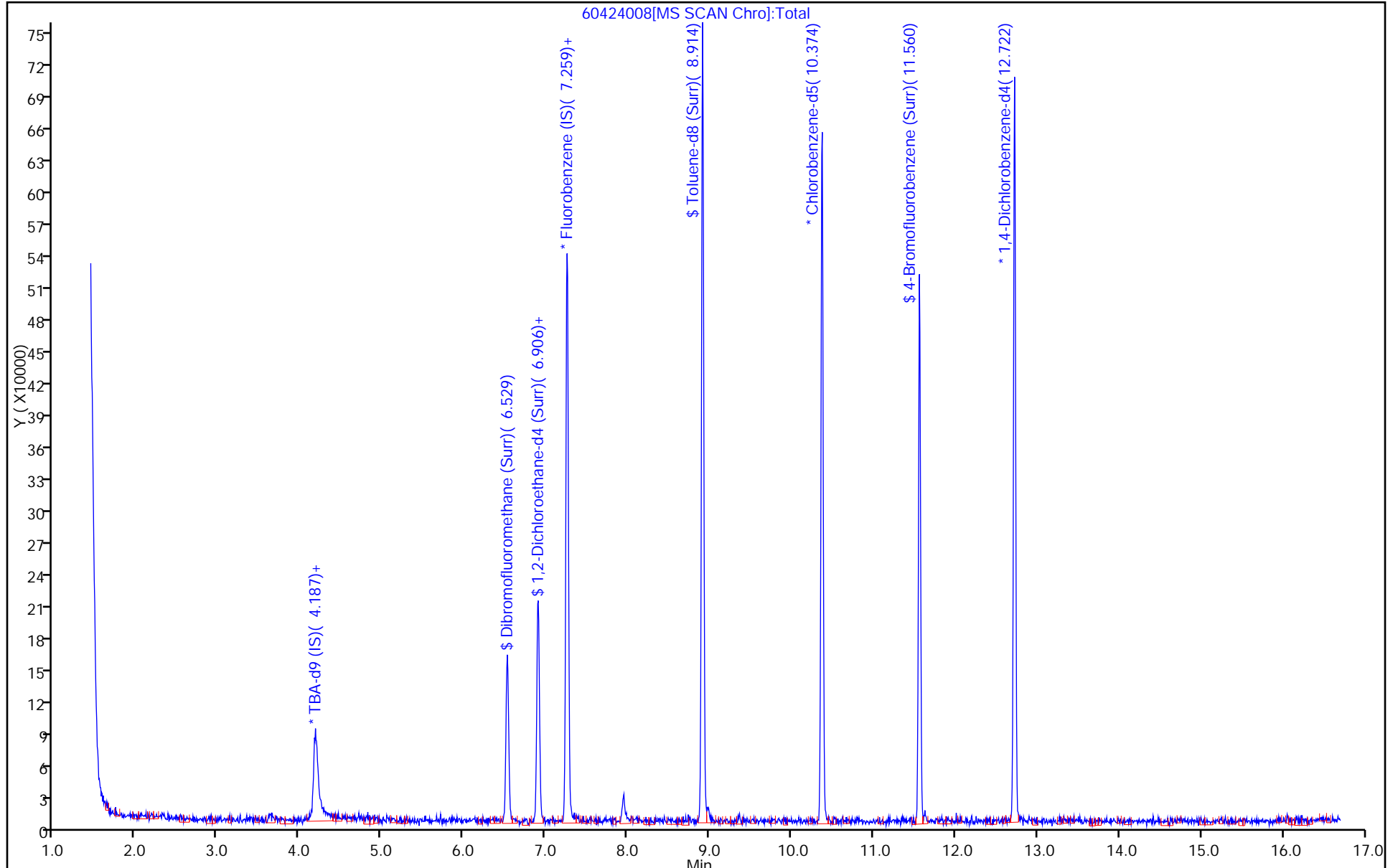
Dil. Factor: 1.0000

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\20150424-6620.b\60424008.D

Injection Date: 24-Apr-2015 14:10:30

Instrument ID: CHHP6

Lims ID: 180-43257-A-9

Lab Sample ID: 180-43257-9

Client ID: HD-QC1-0/1-2

Operator ID: 001562

ALS Bottle#: 7

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

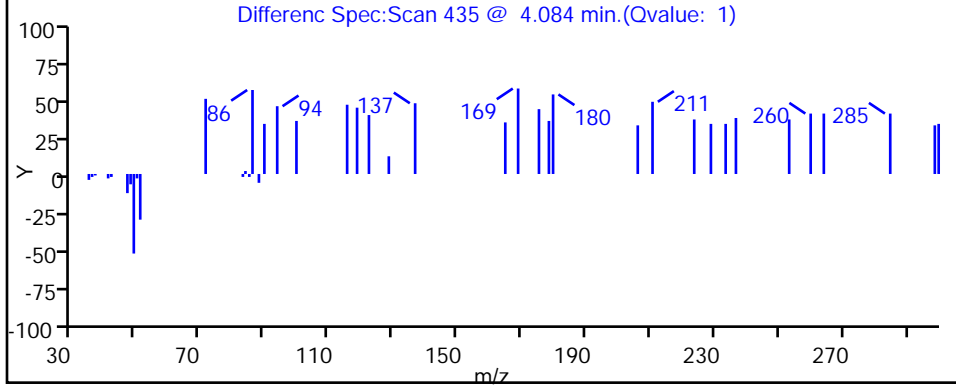
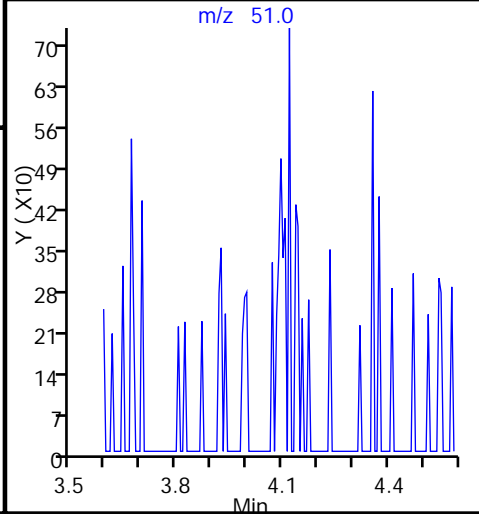
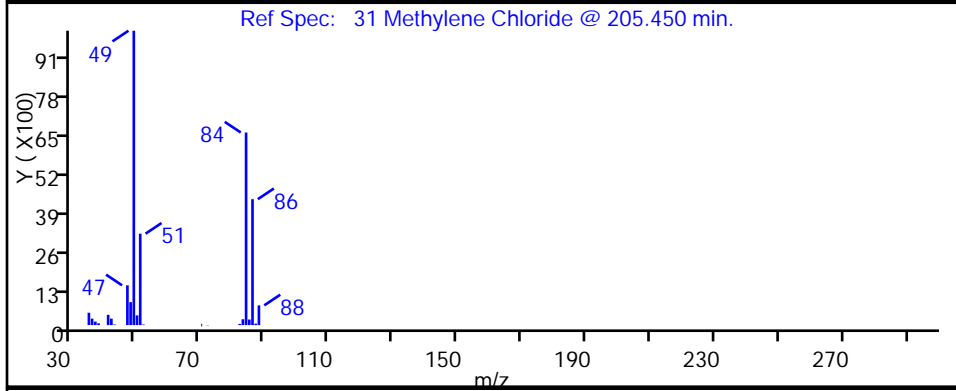
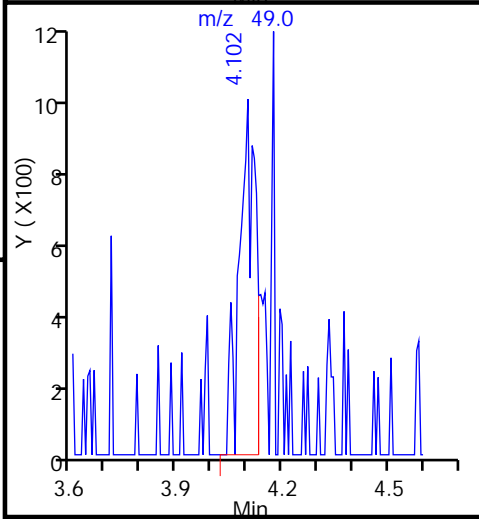
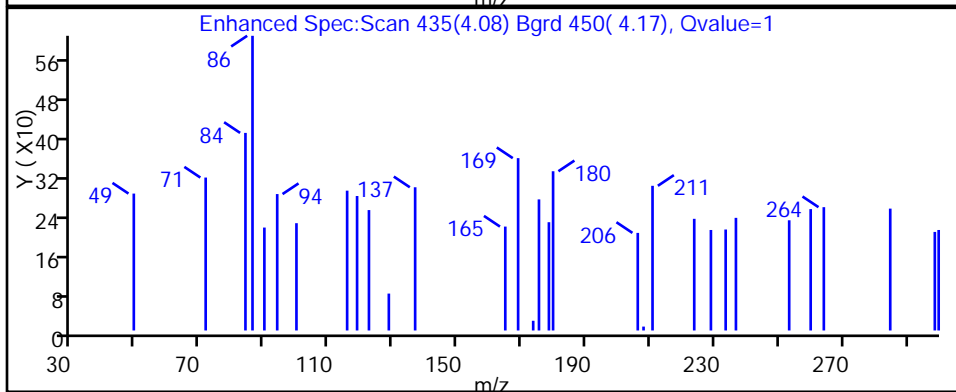
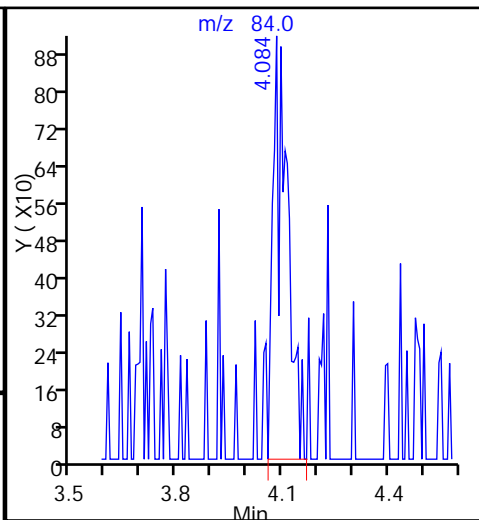
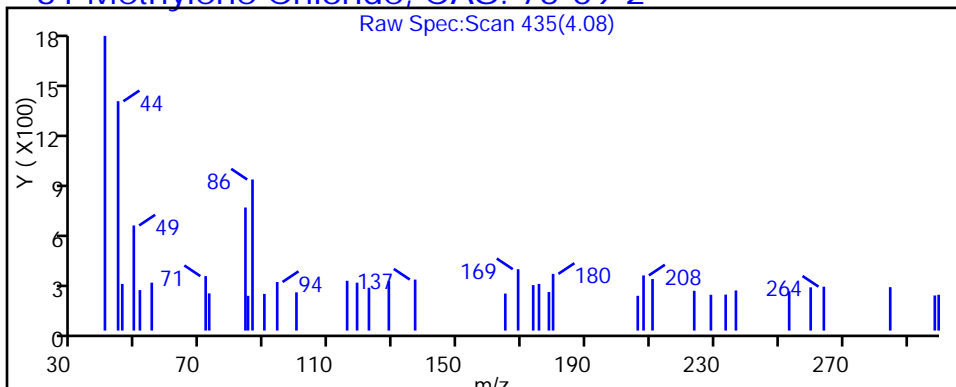
Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2



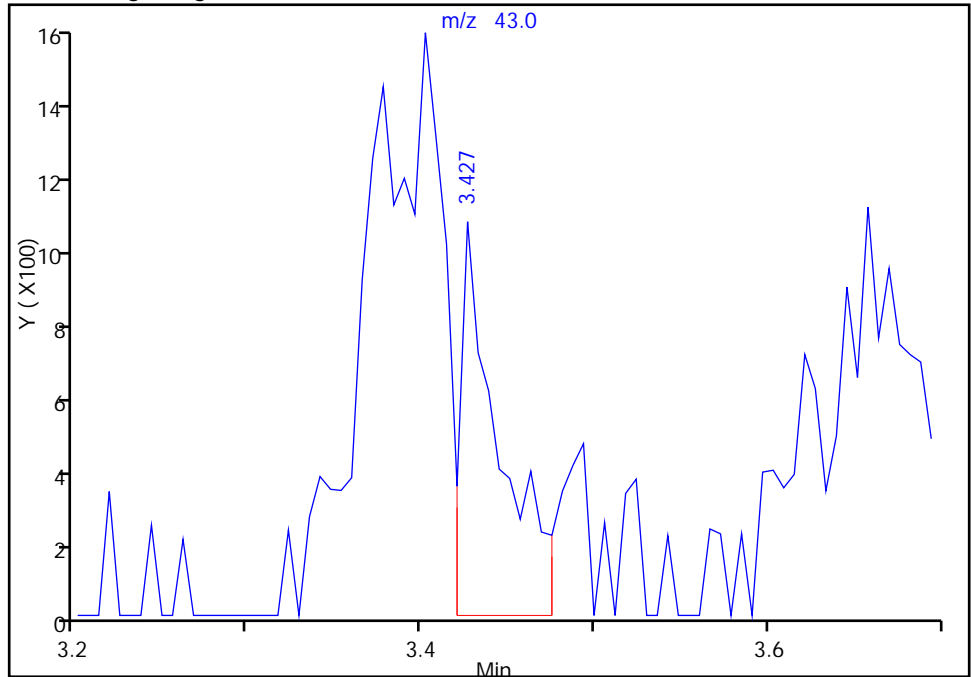
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424008.D
Injection Date: 24-Apr-2015 14:10:30 Instrument ID: CHHP6
Lims ID: 180-43257-A-9 Lab Sample ID: 180-43257-9
Client ID: HD-QC1-0/1-2
Operator ID: 001562 ALS Bottle#: 7 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

24 Acetone, CAS: 67-64-1

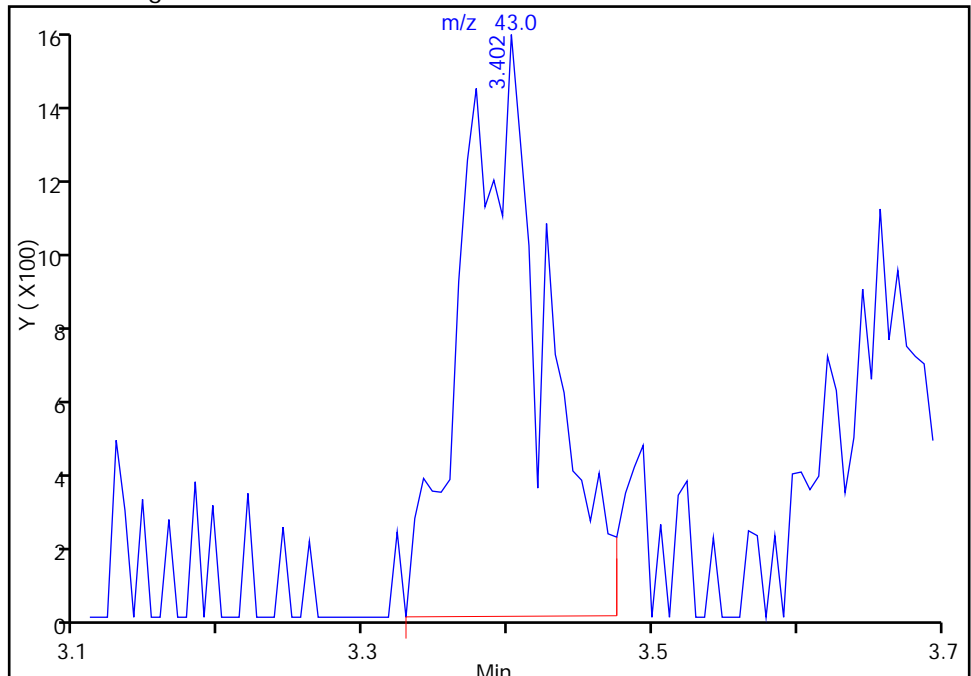
RT: 3.43
Area: 1655
Amount: 1.775012
Amount Units: ng

Processing Integration Results



RT: 3.40
Area: 6149
Amount: 6.594892
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 24-Apr-2015 15:01:49
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1 Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47 Calibration End Date: 04/24/2015 19:35 Calibration ID: 23554

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-139541/8	50424008.D
Level 2	IC 180-139541/9	50424009.D
Level 3	ICIS 180-139541/10	50424010.D
Level 4	IC 180-139541/11	50424011.D
Level 5	IC 180-139541/12	50424012.D
Level 6	IC 180-139541/13	50424013.D
Level 7	IC 180-139541/14	50424014.D
Level 8	IC 180-139541/15	50424015.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	0.4316 0.3166	0.3333 0.2978	0.3261 0.2900	0.3571	0.3323	Ave		0.3356		0.1000	13.2		20.0				
Chloromethane	0.5323 0.3754	0.4208 0.3621	0.4031 0.3461	0.3938	0.3816	Ave		0.4019		0.1000	14.3		20.0				
Vinyl chloride	0.4691 0.3576	0.3809 0.3450	0.3816 0.3257	0.3820	0.3572	Ave		0.3749		0.1000	11.5		20.0				
1,3-Butadiene	0.5722 0.3896	0.4515 0.3792	0.4408 0.3554	0.4462	0.4167	Ave		0.4314		0.0100	15.4		20.0				
Bromomethane	0.3180 0.2007	0.2624 0.2021	0.2199 0.1850	0.2048	0.2048	Ave		0.2247		0.0500	19.6		20.0				
Chloroethane	0.3695 0.2742	0.2965 0.2623	0.2721 0.2469	0.2716	0.2764	Ave		0.2837		0.0500	13.2		20.0				
Dichlorofluoromethane	0.7325 0.5683	0.6911 0.5628	0.6391 0.5066	0.5805	0.5668	Ave		0.6060		0.0100	12.4		20.0				
Trichlorofluoromethane	0.5454 0.4664	0.5104 0.4476	0.5275 0.4191	0.5015	0.4890	Ave		0.4884		0.1000	8.6		20.0				
Ethyl ether	0.3610 0.2859	0.3949 0.3399	0.3599 0.2695	0.2778	0.3512	Ave		0.3300		0.0100	14.0		20.0				
Acrolein	0.0271 0.0262	0.0334 0.0338	0.0333 0.0266	0.0257	0.0260	Ave		0.0290		0.0100	13.0		20.0				
1,1-Dichloroethene	0.3247 0.2623	0.3427 0.3085	0.3220 0.2458	0.2759	0.2616	Ave		0.2929		0.1000	12.2		20.0				
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3218 0.2712	0.3523 0.3349	0.3795 0.2560	0.2938	0.2838	Ave		0.3116		0.1000	13.7		20.0				
Acetone	0.1301 0.1127	0.1383 0.1362	0.1345 0.1026	0.0992	0.1055	Ave		0.1199		0.0500	13.8		20.0				
Iodomethane	0.4550 0.4096	0.4383 0.4760	0.4772 0.3871	0.3979	0.3990	Ave		0.4300		0.0100	8.5		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.: 180-43257-1

Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47

Calibration End Date: 04/24/2015 19:35

Calibration ID: 23554

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	0.5638 0.5871	0.4854 0.7253	0.6029 0.5770	0.5316	0.5433	Ave		0.5770			0.1000	12.2	20.0				
Allyl chloride	0.1283 0.1627	0.1314 0.1969	0.1711 0.1580	0.1510	0.1543	Ave		0.1567			0.0100	14.0	20.0				
Methyl acetate	0.2891 0.2785	0.2769 0.3410	0.3486 0.2504	0.2669	0.2695	Ave		0.2901			0.1000	12.3	20.0				
Methylene Chloride	0.3994 0.3104	0.3446 0.3700	0.3720 0.2883	0.3084	0.3041	Ave		0.3371			0.1000	11.9	20.0				
tert-Butyl alcohol	1.1809 1.0806	1.0617 1.0850	0.8900 1.0160	1.1686	1.0983	Ave		1.0726			0.0100	8.5	20.0				
Acrylonitrile	0.1352 0.1416	0.1344 0.1671	0.1347 0.1252	0.1388	0.1391	Ave		0.1395			0.0100	8.7	20.0				
trans-1,2-Dichloroethene	0.3013 0.2971	0.2832 0.3427	0.2936 0.2704	0.2980	0.2853	Ave		0.2964			0.1000	7.2	20.0				
Methyl tert-butyl ether	0.7324 0.7185	0.6399 0.9227	0.6490 0.6784	0.6555	0.6861	Ave		0.7103			0.1000	12.9	20.0				
Hexane	0.5303 0.4415	0.4123 0.5732	0.4589 0.4344	0.4673	0.4550	Ave		0.4716			0.0100	11.3	20.0				
1,1-Dichloroethane	0.5667 0.5559	0.5437 0.6977	0.5505 0.5143	0.5421	0.5351	Ave		0.5632			0.2000	10.0	20.0				
Vinyl acetate	0.4328 0.3817	0.4112 0.5357	0.3786 0.4819	0.4316	0.4551	Ave		0.4386			0.0100	12.0	20.0				
2,2-Dichloropropane	0.1977 0.1753	0.1837 0.1744	0.1784 0.1614	0.1740	0.1755	Ave		0.1775			0.0100	5.8	20.0				
cis-1,2-Dichloroethene	0.3331 0.3186	0.3022 0.3173	0.2998 0.2975	0.3028	0.3039	Ave		0.3094			0.1000	4.0	20.0				
2-Butanone (MEK)	0.1609 0.1628	0.1605 0.1652	0.1446 0.1604	0.1539	0.1688	Ave		0.1596			0.0500	4.6	20.0				
Bromochloromethane	0.1568 0.1402	0.1392 0.1352	0.1341 0.1304	0.1308	0.1342	Ave		0.1376			0.0100	6.2	20.0				
Tetrahydrofuran	0.1312 0.1078	0.0978 0.1056	0.1031 0.1038	0.1049	0.1053	Ave		0.1062			0.0100	10.6	20.0				
Chloroform	0.5803 0.4817	0.4892 0.4634	0.4838 0.4436	0.4714	0.4751	Ave		0.4861			0.2000	8.4	20.0				
1,1,1-Trichloroethane	0.3806 0.3299	0.3234 0.3346	0.3333 0.3158	0.3324	0.3289	Ave		0.3349			0.1000	5.8	20.0				
Cyclohexane	0.5332 0.5552	0.5202 0.5565	0.5508 0.5396	0.5615	0.5517	Ave		0.5461			0.1000	2.6	20.0				
Carbon tetrachloride	0.2701 0.2834	0.2737 0.2820	0.2727 0.2691	0.2802	0.2786	Ave		0.2762			0.1000	2.0	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.: 180-43257-1

Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47

Calibration End Date: 04/24/2015 19:35

Calibration ID: 23554

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	0.4343 0.3795	0.3684 0.3815	0.3711 0.3579	0.3922	0.3788	Ave		0.3830			0.0100	6.0	20.0				
Isobutyl alcohol	0.0094 0.0086	0.0074 0.0084	0.0063 0.0079	0.0078	0.0078	Ave		0.0080		*	0.0100	11.3	20.0				
Benzene	1.2836 1.1902	1.2579 1.1633	1.2135 1.0672	1.2388	1.1992	Ave		1.2017			0.5000	5.5	20.0				
1,2-Dichloroethane	0.4192 0.3890	0.3902 0.3792	0.3764 0.3645	0.3900	0.3840	Ave		0.3866			0.1000	4.1	20.0				
n-Heptane	0.4237 0.3594	0.3493 0.3775	0.3701 0.3583	0.3890	0.3791	Ave		0.3758			0.0100	6.2	20.0				
Trichloroethene	0.3230 0.2917	0.2846 0.2856	0.2838 0.2616	0.2879	0.2760	Ave		0.2868			0.2000	6.0	20.0				
Methylcyclohexane	0.4433 0.4818	0.4246 0.4869	0.4614 0.4631	0.4809	0.4833	Ave		0.4657			0.1000	4.8	20.0				
1,2-Dichloropropane	0.3343 0.3103	0.3133 0.3149	0.3017 0.2978	0.3020	0.3071	Ave		0.3102			0.1000	3.7	20.0				
Dibromomethane	0.1781 0.1634	0.1496 0.1626	0.1514 0.1555	0.1529	0.1606	Ave		0.1592			0.0100	5.8	20.0				
1,4-Dioxane	0.0019 0.0026	0.0018 0.0025	0.0024 0.0024	0.0024	0.0025	Ave		0.0023		*	0.0100	13.5	20.0				
Bromodichloromethane	0.2836 0.3331	0.3029 0.3208	0.2923 0.3147	0.3072	0.3122	Ave		0.3084			0.2000	5.1	20.0				
cis-1,3-Dichloropropene	0.3204 0.3820	0.2839 0.3810	0.3084 0.3817	0.3348	0.3456	Ave		0.3422			0.2000	10.9	20.0				
4-Methyl-2-pentanone (MIBK)	1.0850 1.3698	1.1766 1.3570	1.2553 1.2298	1.3388	1.4226	Ave		1.2794			0.1000	8.8	20.0				
Toluene	6.0265 4.8145	5.7398 4.6441	5.3815 4.1329	5.4870	5.3335	Ave		5.1950			0.4000	12.0	20.0				
trans-1,3-Dichloropropene	0.9840 1.2527	1.0715 1.2942	1.1008 1.2076	1.1804	1.2914	Ave		1.1728			0.1000	9.5	20.0				
Ethyl methacrylate	0.9564 1.4043	1.1195 1.4397	1.2340 1.3274	1.3422	1.3999	Ave		1.2779			0.0100	13.0	20.0				
1,1,2-Trichloroethane	1.2345 0.9757	1.1071 0.9516	0.9897 0.8746	1.0430	1.0706	Ave		1.0309			0.1000	10.7	20.0				
Tetrachloroethene	1.0896 0.8806	1.0492 0.8592	0.9945 0.7726	0.9827	0.9820	Ave		0.9513			0.2000	11.1	20.0				
1,3-Dichloropropane	1.8462 1.7962	2.0207 1.7920	1.7859 1.6088	1.8602	1.9439	Ave		1.8317			0.0100	6.7	20.0				
2-Hexanone	0.6934 0.9899	0.9169 1.0206	0.9293 0.8736	0.9912	1.0399	Ave		0.9319			0.1000	12.0	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.: 180-43257-1

Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47

Calibration End Date: 04/24/2015 19:35

Calibration ID: 23554

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													
Dibromochloromethane	0.6383 0.8350	0.7780 0.8405	0.7775 0.7736	0.8005	0.8332	Ave		0.7846			0.1000	8.3	20.0				
1,2-Dibromoethane (EDB)	0.9781 0.9534	1.0361 0.9563	0.9582 0.8624	0.9835	1.0060	Ave		0.9667			0.1000	5.2	20.0				
3-Chlorobenzotrifluoride	1.8108 1.5591	1.8200 1.4786	1.7433 1.3316	1.7864	1.7047	Ave		1.6543			0.0100	10.8	20.0				
Chlorobenzene	3.5191 3.0988	3.5008 2.9990	3.3434 2.6980	3.3559	3.2928	Ave		3.2260			0.5000	8.6	20.0				
4-Chlorobenzotrifluoride	1.6465 1.5167	1.7422 1.4357	1.7214 1.3155	1.7648	1.5738	Ave		1.5896			0.0100	10.1	20.0				
1,1,1,2-Tetrachloroethane	0.9225 1.0141	0.9859 0.9771	0.9582 0.8828	0.9665	1.0011	Ave		0.9685			0.0100	4.6	20.0				
Ethylbenzene	1.6220 1.7884	1.8660 1.7348	1.8093 1.5797	1.9082	1.8941	Ave		1.7753			0.1000	6.9	20.0				
m-Xylene & p-Xylene	1.8740 2.1760	2.0827 2.1273	2.2458 1.9158	2.2844	2.3005	Ave		2.1258			0.1000	7.6	20.0				
o-Xylene	1.8396 2.1128	2.0562 2.0276	2.1179 1.8491	2.2135	2.1551	Ave		2.0465			0.3000	6.7	20.0				
Styrene	2.7237 3.4333	3.3448 3.3194	3.4838 3.0030	3.6425	3.5968	Ave		3.3184			0.3000	9.4	20.0				
Bromoform	0.3760 0.5038	0.4323 0.5033	0.4237 0.4689	0.4663	0.4615	Ave		0.4545			0.1000	9.4	20.0				
2-Chlorobenzotrifluoride	1.6218 1.5385	1.7189 1.4505	1.7269 1.3381	1.7443	1.6084	Ave		1.5934			0.0100	9.1	20.0				
Isopropylbenzene	4.1995 4.9619	4.8049 4.7521	5.2548 4.2304	5.5100	5.2240	Ave		4.8672			0.1000	9.7	20.0				
1,1,2,2-Tetrachloroethane	1.3705 1.3549	1.5106 1.2813	1.3990 1.2048	1.4564	1.4216	Ave		1.3749			0.3000	7.1	20.0				
Bromobenzene	1.0387 0.8907	0.8749 0.9170	0.8661 0.8584	0.9188	0.8923	Ave		0.9071			0.0100	6.3	20.0				
1,2,3-Trichloropropane	0.4236 0.3111	0.3054 0.3110	0.3185 0.2992	0.3253	0.3084	Ave		0.3253			0.0100	12.4	20.0				
trans-1,4-Dichloro-2-butene	0.2530 0.2687	0.2139 0.2872	0.2353 0.2844	0.2521	0.2696	Ave		0.2580			0.0100	9.6	20.0				
N-Propylbenzene	1.0011 1.0642	0.9647 1.0968	1.0162 1.0439	1.1454	1.0992	Ave		1.0539			0.0100	5.6	20.0				
2-Chlorotoluene	0.9245 0.9062	0.8303 0.9230	0.8521 0.8700	0.9367	0.9239	Ave		0.8958			0.0100	4.4	20.0				
3-Chlorotoluene	0.9510 0.9777	0.9748 0.9653	0.9980 0.9310	1.0152	0.9659	Ave		0.9724			0.0100	2.7	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.: 180-43257-1

Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47

Calibration End Date: 04/24/2015 19:35

Calibration ID: 23554

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	2.7226 2.9155	2.8437 2.8963	2.9886 2.6797	3.1594	2.9929	Ave		2.8998			0.0100	5.3	20.0				
4-Chlorotoluene	1.0042 0.9816	0.9300 1.0246	1.0562 0.9762	1.0686	1.0538	Ave		1.0119			0.0100	4.7	20.0				
tert-Butylbenzene	2.4375 2.4114	2.1404 2.4356	2.3962 2.3248	2.5921	2.5228	Ave		2.4076			0.0100	5.6	20.0				
1,2,4-Trimethylbenzene	2.5646 2.9634	2.6632 2.9342	2.9377 2.7314	3.2479	2.9903	Ave		2.8791			0.0100	7.5	20.0				
3,4-Dichlorobenzotrifluoride	0.9636 0.7648	0.8265 0.7444	0.7950 0.7062	0.8404	0.7561	Ave		0.7996			0.0100	9.9	20.0				
sec-Butylbenzene	3.4369 3.4100	3.1719 3.4014	3.4560 3.1539	3.7684	3.5292	Ave		3.4160			0.0100	5.7	20.0				
1,3-Dichlorobenzene	1.9613 1.5650	1.5710 1.5530	1.5392 1.4498	1.6264	1.5557	Ave		1.6027			0.6000	9.5	20.0				
4-Isopropyltoluene	2.4457 2.8520	2.5688 2.7933	2.7477 2.6260	3.0642	2.8926	Ave		2.7488			0.0100	7.2	20.0				
1,4-Dichlorobenzene	1.7843 1.5995	1.6180 1.6105	1.5749 1.5033	1.6642	1.6279	Ave		1.6228			0.5000	4.9	20.0				
2,4-Dichlorobenzotrifluoride	0.9249 0.7033	0.7466 0.6695	0.7466 0.6646	0.8082	0.7104	Ave		0.7468			0.0100	11.5	20.0				
2,5-Dichlorobenzotrifluoride	0.8706 0.7946	0.8243 0.7799	0.7979 0.7064	0.8414	0.7563	Ave		0.7964			0.0100	6.4	20.0				
n-Butylbenzene	2.0606 2.4888	2.1415 2.4810	2.3763 2.3162	2.6540	2.4970	Ave		2.3769			0.0100	8.3	20.0				
1,2-Dichlorobenzene	1.5414 1.4570	1.4406 1.4060	1.4097 1.3141	1.5298	1.4048	Ave		1.4379			0.4000	5.1	20.0				
1,2-Dibromo-3-Chloropropane	0.1376 0.1264	0.1181 0.1253	0.1057 0.1206	0.1155	0.1172	Ave		0.1208			0.0500	7.7	20.0				
1,2,4-Trichlorobenzene	0.5838 0.6054	0.5294 0.5667	0.5067 0.5621	0.5744	0.5391	Ave		0.5585			0.2000	5.7	20.0				
Hexachlorobutadiene	0.3473 0.2633	0.2576 0.2585	0.2645 0.2483	0.2819	0.2468	Ave		0.2710			0.0100	12.1	20.0				
Naphthalene	0.8785 1.6936	1.0805 1.6469	1.2293 1.5850	1.4690	1.4045	Lin1	-6.330	1.6093			0.0100			0.9930		0.9900	
1,2,3-Trichlorobenzene	0.4326 0.4892	0.3883 0.4771	0.4093 0.4628	0.4519	0.4132	Ave		0.4406			0.0100	8.1	20.0				
2,4,5-Trichlorotoluene	0.1694 0.2125	0.1466 0.2266	0.1501 0.2274	0.1768	0.1614	Ave		0.1838			0.0100	18.2	20.0				
2,3,6-Trichlorotoluene	0.1136 +++++	0.1316 +++++	0.1509 +++++	0.1717	0.1600	Ave		0.1456			0.0100	15.9	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.: 180-43257-1 Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47 Calibration End Date: 04/24/2015 19:35 Calibration ID: 23554

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)	0.2654 0.2277	0.2390 0.2125	0.2203 0.2017	0.2251	0.2234	Ave		0.2269			8.4		20.0				
1,2-Dichloroethane-d4 (Surr)	0.3584 0.2981	0.3091 0.2839	0.2939 0.2654	0.2936	0.2972	Ave		0.2999			8.9		20.0				
Toluene-d8 (Surr)	4.5658 3.7402	4.2487 3.5134	4.2614 3.0888	4.1799	4.1306	Ave		3.9661			12.1		20.0				
4-Bromofluorobenzene (Surr)	1.3335 1.4247	1.4341 1.3339	1.4179 1.1942	1.4817	1.4688	Ave		1.3861			6.9		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.: 180-43257-1 Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47 Calibration End Date: 04/24/2015 19:35 Calibration ID: 23554

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-139541/8	50424008.D
Level 2	IC 180-139541/9	50424009.D
Level 3	ICIS 180-139541/10	50424010.D
Level 4	IC 180-139541/11	50424011.D
Level 5	IC 180-139541/12	50424012.D
Level 6	IC 180-139541/13	50424013.D
Level 7	IC 180-139541/14	50424014.D
Level 8	IC 180-139541/15	50424015.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
Dichlorodifluoromethane	FB	Ave	18296	69676	151822	246951	310594	5.00	25.0	50.0	75.0	100
			526683	589773	765200			175	200	250		
Chloromethane	FB	Ave	22564	87962	187676	272278	356693	5.00	25.0	50.0	75.0	100
			624497	717020	913210			175	200	250		
Vinyl chloride	FB	Ave	19885	79622	177669	264123	333911	5.00	25.0	50.0	75.0	100
			594883	683166	859437			175	200	250		
1,3-Butadiene	FB	Ave	24254	94380	205231	308497	389539	5.00	25.0	50.0	75.0	100
			648218	750828	937657			175	200	250		
Bromomethane	FB	Ave	13478	54850	102398	141577	191476	5.00	25.0	50.0	75.0	100
			333927	400199	488129			175	200	250		
Chloroethane	FB	Ave	15663	61977	126709	187821	258404	5.00	25.0	50.0	75.0	100
			456241	519359	651587			175	200	250		
Dichlorofluoromethane	FB	Ave	31048	144479	297579	401399	529798	5.00	25.0	50.0	75.0	100
			945590	1114470	1336664			175	200	250		
Trichlorofluoromethane	FB	Ave	23120	106707	245594	346749	457071	5.00	25.0	50.0	75.0	100
			775964	886318	1105877			175	200	250		
Ethyl ether	FB	Ave	15303	82562	167554	192108	328237	5.00	25.0	50.0	75.0	100
			475602	673008	711037			175	200	250		
Acrolein	FB	Ave	22933	34953	46520	41384	48540	100	125	150	175	200
			55976	83671	77313			225	250	275		
1,1-Dichloroethene	FB	Ave	13765	71651	149914	190753	244514	5.00	25.0	50.0	75.0	100
			436394	610859	648612			175	200	250		
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	13640	73641	176679	203143	265277	5.00	25.0	50.0	75.0	100
			451160	663086	675603			175	200	250		
Acetone	FB	Ave	27569	57822	125290	137125	197235	25.0	50.0	100	150	200
			374945	539402	541555			350	400	500		
Iodomethane	FB	Ave	19286	91631	222176	275115	372965	5.00	25.0	50.0	75.0	100
			681458	942559	1021402			175	200	250		
Carbon disulfide	FB	Ave	23899	101462	280717	367591	507865	5.00	25.0	50.0	75.0	100
			976725	1436286	1522450			175	200	250		

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1 Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47 Calibration End Date: 04/24/2015 19:35 Calibration ID: 23554

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	5438 270709	27475 389981	79680 416813	104436	144247	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	61272 2317074	289410 3376493	811539 3303347	922649	1259754	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	16929 516502	72038 732705	173216 760725	213229	284214	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	7618 282898	30993 368269	52407 369256	117030	144415	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	57310 2355192	280872 3308408	627357 3304194	959532	1300281	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	12770 494258	59212 678629	136694 713627	206068	266642	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	31047 1195424	133763 1827108	302168 1789952	453219	641286	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	22480 734565	86200 1135106	213672 1146126	323131	425270	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	24021 924823	113664 1381559	256304 1357103	374817	500170	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	18345 634995	85960 1060817	176299 1271694	298411	425398	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	8381 291680	38399 345280	83052 425787	120301	164025	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	14119 529989	63168 628379	139604 784878	209356	284042	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	34100 541568	67102 654379	134683 846548	212873	315569	25.0 350	50.0 400	100 500	150	200
Bromochloromethane	FB	Ave	6647 233207	29104 267815	62421 344147	90474	125429	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	11125 358563	40879 418333	86726 547861	145121	196945	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	24597 801408	102268 917660	225260 1170414	325980	444094	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	16134 548878	67616 662574	155175 833252	229812	307435	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	22603 923671	108740 1102084	256458 1423953	388244	515667	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	11449 471442	57211 558360	126987 710010	193765	260408	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	18408 631330	77015 755489	172806 944491	271160	354054	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	9983 356845	38587 414909	73797 519315	135500	182633	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.: 180-43257-1

Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47

Calibration End Date: 04/24/2015 19:35

Calibration ID: 23554

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	54412 1980227	262965 2303570	564997 2815995	856546	1120983	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	17768 647182	81564 750978	175265 961702	269688	358941	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	17959 597993	73025 747619	172344 945496	268964	354316	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	13692 485390	59490 565584	132156 690392	199059	257971	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	18792 801582	88756 964151	214826 1221901	332523	451734	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	14170 516271	65488 623655	140489 785719	208852	287048	5.00 175	25.0 200	50.0 250	75.0	100
Dibromomethane	FB	Ave	7549 271861	31273 321906	70471 410265	105705	150162	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	1584 86600	7427 99701	22441 125684	32863	47220	100 3500	500 4000	1000 5000	1500	2000
Bromodichloromethane	FB	Ave	12022 554188	63324 635165	136110 830465	212427	291863	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	13582 635611	59349 754429	143602 1007308	231470	323043	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	52647 1114206	106402 1331393	263464 1690241	417738	601430	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	58484 1957991	259529 2278169	564722 2840021	856050	1127417	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	9549 509463	48449 634859	115520 829818	184155	272983	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	9281 571133	50618 706226	129498 912178	209406	295910	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	11980 396807	50060 466823	103857 601009	162720	226306	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	10574 358149	47442 421487	104366 530884	153313	207570	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	17916 730477	91366 879071	187414 1105531	290221	410915	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	33647 805146	82918 1001355	195047 1200582	309278	439632	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	6194 339579	35178 412305	81585 531592	124887	176118	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	9492 387735	46847 469103	100552 592590	153435	212650	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	17573 634055	82294 725312	182941 915050	278698	360336	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.: 180-43257-1 Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47 Calibration End Date: 04/24/2015 19:35 Calibration ID: 23554

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	34151 1260240	158292 1471133	350848 1854004	523575	696046	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	15978 616841	78777 704270	180638 903960	275336	332668	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	8952 412437	44580 479304	104747 606640	150796	211608	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	15741 727329	84373 851009	189861 1085509	297703	400385	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	18186 884948	94172 1043532	235671 1316471	356405	486288	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	17852 859260	92974 994646	222250 1270648	345347	455563	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	26432 1396294	151237 1628344	365580 2063587	568277	760301	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	3649 204898	19549 246887	44458 322247	72754	97552	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	15739 625712	77721 711559	181217 919487	272143	339988	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	40754 2017940	217260 2331119	551431 2907035	859647	1104265	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	13300 551027	68304 628556	146808 827882	227215	300505	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	11927 508592	59067 595085	131268 746475	204220	266208	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	4864 177658	20616 201849	48273 260210	72293	92002	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	2905 153462	14439 186400	35659 247286	56028	80432	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	11495 607697	65130 711784	154023 907843	254584	327915	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	10616 517461	56052 599022	129151 756631	208195	275628	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	10920 558295	65810 626480	151265 809628	225643	288157	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	31263 1664840	191979 1879631	452974 2330403	702196	892859	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	11531 560503	62788 664958	160086 848924	237510	314376	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	27989 1376965	144501 1580607	363182 2021759	576117	752605	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	29449 1692205	179795 1904193	445258 2375385	721866	892073	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.: 180-43257-1 Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47 Calibration End Date: 04/24/2015 19:35 Calibration ID: 23554

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	11065 436727	55796 483067	120499 614103	186794	225562	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCB	Ave	39465 1947211	214138 2207424	523820 2742758	837548	1052833	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCB	Ave	22521 893637	106061 1007836	233301 1260788	361489	464100	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCB	Ave	28084 1628611	173421 1812779	416462 2283712	681053	862927	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCB	Ave	20489 913346	109230 1045148	238700 1307323	369885	485653	5.00 175	25.0 200	50.0 250	75.0	100
2,4-Dichlorobenzotrifluoride	DCB	Ave	10620 401592	50405 434504	113167 577923	179630	211922	5.00 175	25.0 200	50.0 250	75.0	100
2,5-Dichlorobenzotrifluoride	DCB	Ave	9997 453739	55652 506101	120939 614338	187006	225618	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCB	Ave	23662 1421186	144571 1610096	360178 2014246	589878	744919	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCB	Ave	17700 832000	97254 912433	213664 1142819	340009	419094	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromo-3-Chloropropane	DCB	Ave	1580 72152	7972 81300	16019 104851	25671	34973	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trichlorobenzene	DCB	Ave	6704 345696	35741 367766	76800 488804	127671	160841	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCB	Ave	3988 150359	17390 167765	40083 215908	62665	73637	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCB	Lin1	10088 967112	72943 1068807	186326 1378354	326496	418984	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCB	Ave	4968 279357	26215 309601	62030 402509	100441	123273	5.00 175	25.0 200	50.0 250	75.0	100
2,4,5-Trichlorotoluene	DCB	Ave	1945 121335	9895 147040	22748 197750	39289	48135	5.00 175	25.0 200	50.0 250	75.0	100
2,3,6-Trichlorotoluene	DCB	Ave	1304 ++++	8886 ++++	22869 ++++	38172	47738	5.00 ++++	25.0 ++++	50.0 ++++	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	11250 378900	49959 420743	102593 532269	155647	208780	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	15193 495909	64627 562219	136835 700249	202997	277811	5.00 175	25.0 200	50.0 250	75.0	100
Toluene-d8 (Surr)	CBZ	Ave	44309 1521094	192107 1723486	447179 2122561	652125	873150	5.00 175	25.0 200	50.0 250	75.0	100
4-Bromofluorobenzene (Surr)	CBZ	Ave	12941 579429	64846 654358	148791 820593	231161	310476	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.: 180-43257-1 Analy Batch No.: 139541

SDG No.: _____

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 16:47 Calibration End Date: 04/24/2015 19:35 Calibration ID: 23554

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424008.D
 Lims ID: IC VSTD1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 24-Apr-2015 16:47:30 ALS Bottle#: 3 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD1
 Misc. Info.: 180-0006617-008
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 11:30:07 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond Date: 25-Apr-2015 15:19:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.299	4.303	-0.004	0	129018	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.271	-0.003	98	423889	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.362	0.002	87	97045	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.680	0.002	97	114828	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.532	6.529	0.003	86	11250	5.00	5.85	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.891	6.894	-0.003	0	15193	5.00	5.97	
\$ 7 Toluene-d8 (Surr)	98	8.929	8.920	0.009	94	44309	5.00	5.76	
\$ 8 4-Bromofluorobenzene (Surr	95	11.532	11.536	-0.004	89	12941	5.00	4.81	
11 Dichlorodifluoromethane	85	1.629	1.620	0.009	3	18296	5.00	6.43	
12 Chloromethane	50	1.775	1.766	0.009	97	22564	5.00	6.62	
13 Vinyl chloride	62	1.908	1.900	0.008	57	19885	5.00	6.26	
14 Butadiene	39	1.939	1.942	-0.003	99	24254	5.00	6.63	
15 Bromomethane	94	2.286	2.265	0.021	46	13478	5.00	7.08	
16 Chloroethane	64	2.407	2.393	0.015	97	15663	5.00	6.51	
17 Dichlorofluoromethane	67	2.663	2.648	0.015	72	31048	5.00	6.04	
18 Trichlorofluoromethane	101	2.699	2.709	-0.010	72	23120	5.00	5.58	
20 Ethyl ether	59	3.076	3.080	-0.004	95	15303	5.00	5.47	
21 Acrolein	56	3.241	3.250	-0.009	98	22933	100.0	93.3	
22 1,1-Dichloroethene	96	3.375	3.366	0.008	68	13765	5.00	5.54	
23 1,1,2-Trichloro-1,2,2-trif	101	3.417	3.421	-0.004	56	13640	5.00	5.16	
24 Acetone	43	3.484	3.488	-0.004	76	27569	25.0	27.1	
25 Iodomethane	142	3.575	3.579	-0.004	96	19286	5.00	5.29	M
26 Carbon disulfide	76	3.648	3.664	-0.016	86	23899	5.00	4.89	
28 3-Chloro-1-propene	76	3.940	3.932	0.008	81	5438	5.00	4.09	
30 Methyl acetate	43	4.025	4.017	0.008	98	61272	25.0	24.9	
31 Methylene Chloride	84	4.135	4.138	-0.003	94	16929	5.00	5.92	
32 2-Methyl-2-propanol	59	4.427	4.430	-0.003	64	7618	50.0	55.0	
33 Acrylonitrile	53	4.555	4.546	0.009	98	57310	50.0	48.5	
34 trans-1,2-Dichloroethene	96	4.561	4.558	0.003	62	12770	5.00	5.08	
35 Methyl tert-butyl ether	73	4.597	4.589	0.008	90	31047	5.00	5.16	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.981	4.978	0.003	92	22480	5.00	5.62	
37 1,1-Dichloroethane	63	5.169	5.167	0.002	95	24021	5.00	5.03	
38 Vinyl acetate	43	5.297	5.294	0.003	95	18345	5.00	4.93	
44 2,2-Dichloropropane	77	5.923	5.927	-0.004	62	8381	5.00	5.57	
45 cis-1,2-Dichloroethene	96	5.923	5.933	-0.010	86	14119	5.00	5.38	
46 2-Butanone (MEK)	43	5.990	5.988	0.002	100	34100	25.0	25.2	
49 Chlorobromomethane	128	6.228	6.225	0.003	96	6647	5.00	5.70	
51 Tetrahydrofuran	42	6.295	6.286	0.009	95	11125	10.0	12.4	
52 Chloroform	83	6.343	6.335	0.008	94	24597	5.00	5.97	
53 1,1,1-Trichloroethane	97	6.538	6.529	0.009	94	16134	5.00	5.68	
54 Cyclohexane	56	6.581	6.584	-0.004	92	22603	5.00	4.88	
56 Carbon tetrachloride	117	6.714	6.718	-0.004	72	11449	5.00	4.89	
55 1,1-Dichloropropene	75	6.714	6.724	-0.010	89	18408	5.00	5.67	
57 Isobutyl alcohol	41	6.946	6.937	0.009	39	9983	125.0	148.0	M
58 Benzene	78	6.952	6.955	-0.003	97	54412	5.00	5.34	
59 1,2-Dichloroethane	62	6.976	6.986	-0.010	75	17768	5.00	5.42	
62 n-Heptane	43	7.274	7.278	-0.004	39	17959	5.00	5.64	
64 Trichloroethene	130	7.663	7.667	-0.004	95	13692	5.00	5.63	
66 Methylcyclohexane	83	7.858	7.855	0.003	88	18792	5.00	4.76	
67 1,2-Dichloropropane	63	7.901	7.904	-0.003	90	14170	5.00	5.39	
68 Dibromomethane	93	8.028	8.020	0.008	86	7549	5.00	5.59	
70 1,4-Dioxane	88	8.071	8.062	0.009	13	1584	100.0	81.0	
71 Dichlorobromomethane	83	8.199	8.196	0.003	97	12022	5.00	4.60	
74 cis-1,3-Dichloropropene	75	8.661	8.658	0.003	91	13582	5.00	4.68	
75 4-Methyl-2-pentanone (MIBK)	43	8.825	8.823	0.002	99	52647	25.0	21.2	
76 Toluene	91	8.990	8.987	0.003	96	58484	5.00	5.80	
77 trans-1,3-Dichloropropene	75	9.221	9.218	0.003	97	9549	5.00	4.19	
78 Ethyl methacrylate	69	9.312	9.315	-0.003	91	9281	5.00	3.74	
79 1,1,2-Trichloroethane	97	9.397	9.401	-0.004	91	11980	5.00	5.99	
80 Tetrachloroethene	164	9.531	9.534	-0.003	94	10574	5.00	5.73	
81 1,3-Dichloropropane	76	9.567	9.565	0.002	93	17916	5.00	5.04	
82 2-Hexanone	43	9.653	9.656	-0.003	97	33647	25.0	18.6	
84 Chlorodibromomethane	129	9.786	9.790	-0.004	88	6194	5.00	4.07	
85 Ethylene Dibromide	107	9.902	9.900	0.002	99	9492	5.00	5.06	
86 3-Chlorobenzotrifluoride	180	10.371	10.374	-0.004	57	17573	5.00	5.47	
87 Chlorobenzene	112	10.389	10.386	0.003	94	34151	5.00	5.45	
88 4-Chlorobenzotrifluoride	180	10.431	10.429	0.002	94	15978	5.00	5.18	
89 1,1,1,2-Tetrachloroethane	131	10.480	10.471	0.009	85	8952	5.00	4.76	
90 Ethylbenzene	106	10.498	10.502	-0.004	99	15741	5.00	4.57	
91 m-Xylene & p-Xylene	106	10.620	10.617	0.003	0	18186	5.00	4.41	
92 o-Xylene	106	11.003	11.013	-0.010	94	17852	5.00	4.49	
93 Styrene	104	11.028	11.025	0.003	93	26432	5.00	4.10	
94 Bromoform	173	11.210	11.207	0.003	49	3649	5.00	4.14	
96 2-Chlorobenzotrifluoride	180	11.277	11.274	0.003	95	15739	5.00	5.09	
97 Isopropylbenzene	105	11.374	11.378	-0.004	95	40754	5.00	4.31	
99 1,1,2,2-Tetrachloroethane	83	11.672	11.676	-0.004	86	13300	5.00	4.98	
100 Bromobenzene	156	11.691	11.682	0.009	96	11927	5.00	5.73	
101 1,2,3-Trichloropropane	110	11.715	11.718	-0.003	86	4864	5.00	6.51	
102 trans-1,4-Dichloro-2-buten	53	11.758	11.731	0.027	62	2905	5.00	4.90	
103 N-Propylbenzene	120	11.788	11.785	0.003	99	11495	5.00	4.75	
104 2-Chlorotoluene	126	11.873	11.871	0.002	94	10616	5.00	5.16	
105 3-Chlorotoluene	126	11.934	11.931	0.003	91	10920	5.00	4.89	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.964	11.962	0.002	95	31263	5.00	4.69	
107 4-Chlorotoluene	126	11.989	11.980	0.009	97	11531	5.00	4.96	
108 tert-Butylbenzene	119	12.287	12.290	-0.003	93	27989	5.00	5.06	
110 1,2,4-Trimethylbenzene	105	12.335	12.333	0.002	96	29449	5.00	4.45	
111 1,2-dichloro-4-(trifluorom	214	12.396	12.400	-0.004	96	11065	5.00	6.03	
112 sec-Butylbenzene	105	12.506	12.509	-0.003	93	39465	5.00	5.03	
113 1,3-Dichlorobenzene	146	12.621	12.619	0.002	96	22521	5.00	6.12	
114 4-Isopropyltoluene	119	12.652	12.649	0.003	94	28084	5.00	4.45	
115 1,4-Dichlorobenzene	146	12.707	12.710	-0.003	88	20489	5.00	5.50	
116 2,4-Dichloro-1-(trifluorom	214	12.755	12.759	-0.004	96	10620	5.00	6.19	
118 2,5-Dichlorobenzotrifluori	214	12.804	12.807	-0.003	0	9997	5.00	5.47	
120 n-Butylbenzene	91	13.059	13.063	-0.004	98	23662	5.00	4.33	
121 1,2-Dichlorobenzene	146	13.090	13.081	0.009	96	17700	5.00	5.36	
122 1,2-Dibromo-3-Chloropropan	75	13.856	13.860	-0.004	1	1580	5.00	5.70	M
123 2,4- & 2,5- & 2,6- Dichlor	125	14.008	14.012	-0.004	0	26386	15.0	13.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.428	14.426	0.002	0	13792	10.0	7.80	
126 1,2,4-Trichlorobenzene	180	14.690	14.693	-0.003	86	6704	5.00	5.23	
127 Hexachlorobutadiene	225	14.860	14.864	-0.004	90	3988	5.00	6.41	
128 Naphthalene	128	14.939	14.943	-0.004	97	10088	5.00	6.66	
129 1,2,3-Trichlorobenzene	180	15.183	15.180	0.003	91	4968	5.00	4.91	
131 2,4,5-Trichlorotoluene	159	15.967	15.959	0.008	0	1945	5.00	4.61	
130 2,3,6-Trichlorotoluene	159	16.065	16.062	0.003	7	1304	5.00	3.90	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		10.0	10.5	
S 133 Xylenes, Total	106				0		10.0	8.90	
S 135 1,3-Dichloropropene, Total	1				0		10.0	8.88	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00033	Amount Added: 0.20	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 0.20	Units: uL	
voaWeemixPRI_00002	Amount Added: 0.20	Units: uL	
voaW VA pri R_00005	Amount Added: 0.20	Units: uL	
voaWKetpri Re_00004	Amount Added: 0.80	Units: uL	
VOAACRPRI_00005	Amount Added: 4.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424008.D

Injection Date: 24-Apr-2015 16:47:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD1

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

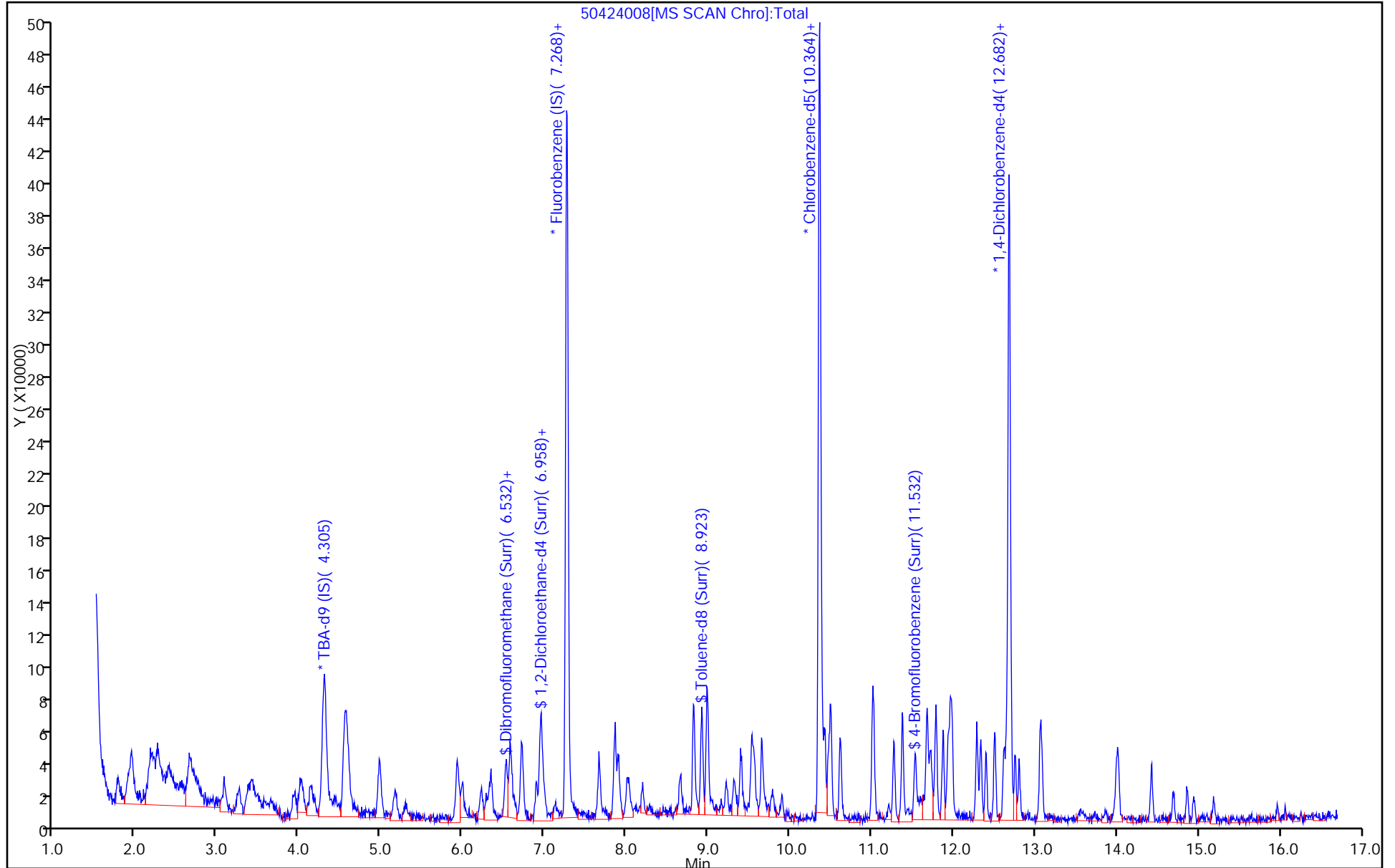
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



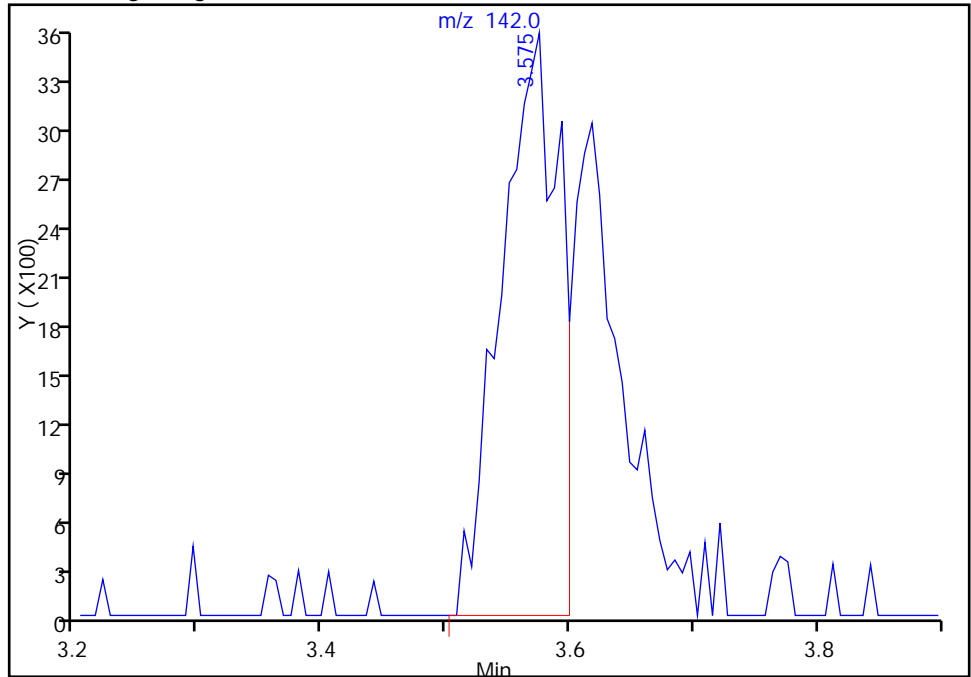
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424008.D
Injection Date: 24-Apr-2015 16:47:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

25 Iodomethane, CAS: 74-88-4

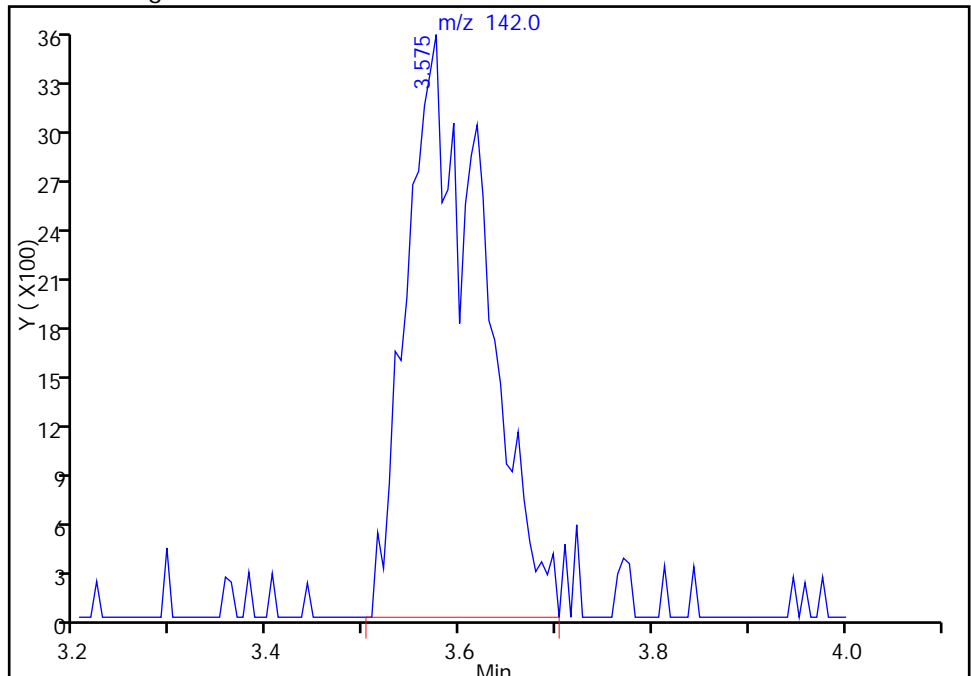
RT: 3.58
Area: 11607
Amount: 4.902519
Amount Units: ng

Processing Integration Results



RT: 3.58
Area: 19286
Amount: 5.290418
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 15:19:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

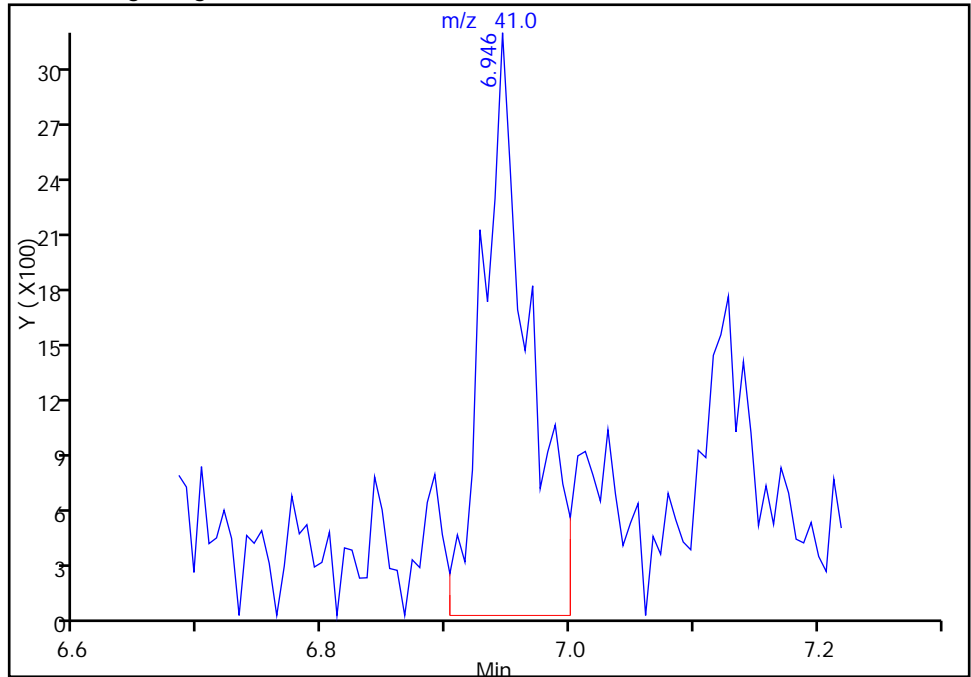
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424008.D
Injection Date: 24-Apr-2015 16:47:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

57 Isobutyl alcohol, CAS: 78-83-1

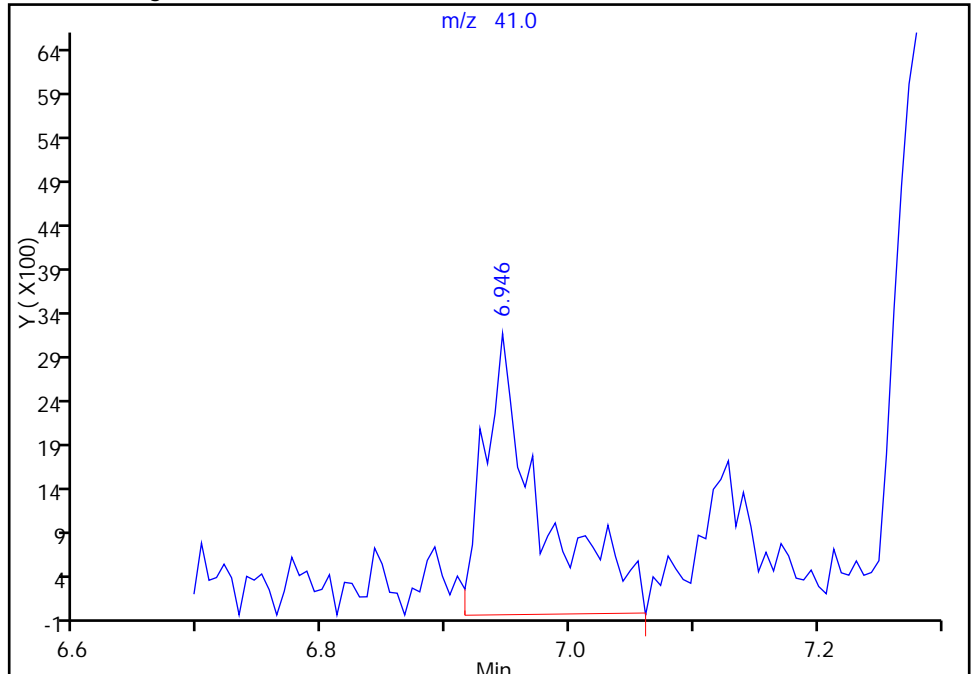
RT: 6.95
Area: 8027
Amount: 122.5981
Amount Units: ng

Processing Integration Results



RT: 6.95
Area: 9983
Amount: 148.0496
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 15:19:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

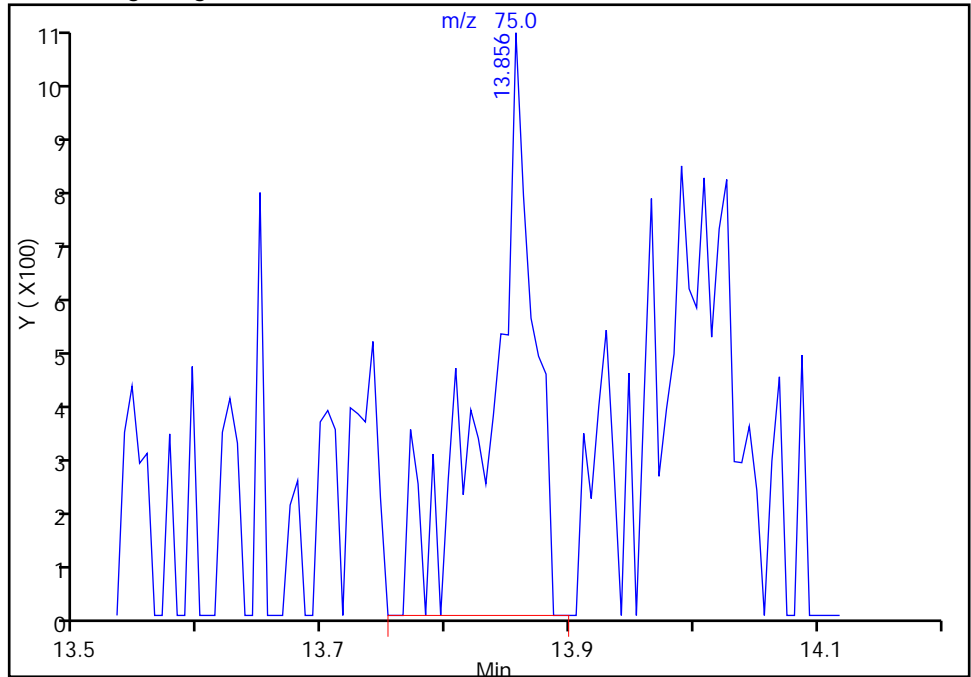
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424008.D
Injection Date: 24-Apr-2015 16:47:30 Instrument ID: CHHP5
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

122 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

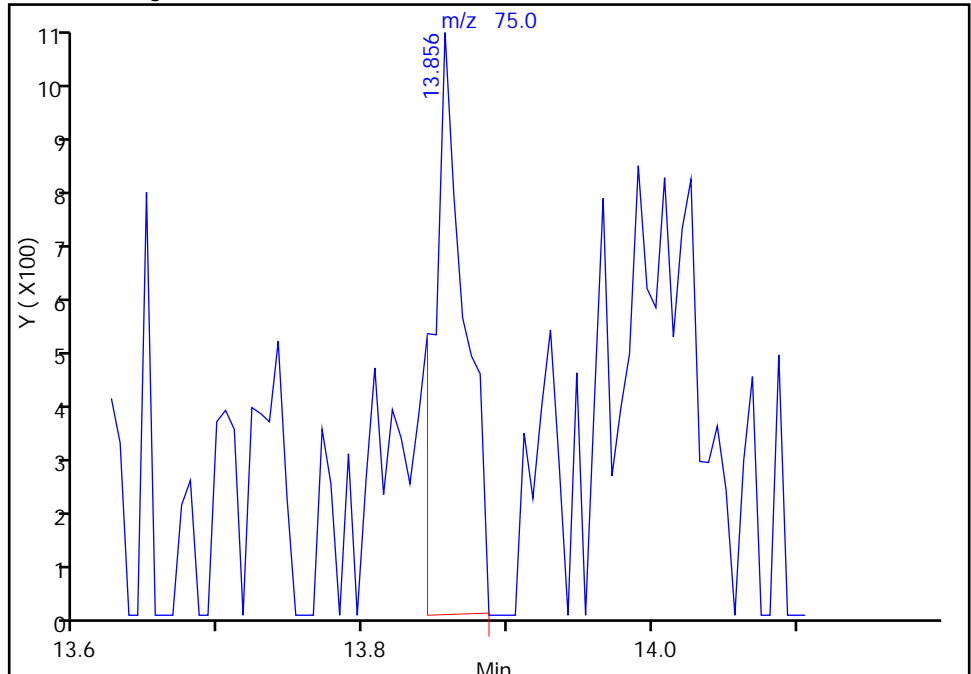
RT: 13.86
Area: 2725
Amount: 8.904627
Amount Units: ng

Processing Integration Results



RT: 13.86
Area: 1580
Amount: 5.695835
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 15:19:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424009.D
 Lims ID: IC VSTD5
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 24-Apr-2015 17:11:30 ALS Bottle#: 4 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD5
 Misc. Info.: 180-0006617-009
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 11:30:09 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 25-Apr-2015 15:19:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.302	4.303	-0.001	0	116767	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	97	418096	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.367	10.362	0.005	88	90432	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.680	0.005	95	135021	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.528	6.529	-0.001	83	49959	25.0	26.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.894	0.006	0	64627	25.0	25.8	
\$ 7 Toluene-d8 (Surr)	98	8.925	8.920	0.005	93	192107	25.0	26.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.536	-0.007	90	64846	25.0	25.9	
11 Dichlorodifluoromethane	85	1.625	1.620	0.005	87	69676	25.0	24.8	
12 Chloromethane	50	1.771	1.766	0.005	99	87962	25.0	26.2	
13 Vinyl chloride	62	1.899	1.900	-0.001	98	79622	25.0	25.4	
14 Butadiene	39	1.942	1.942	0.000	94	94380	25.0	26.2	
15 Bromomethane	94	2.264	2.265	-0.001	91	54850	25.0	29.2	
16 Chloroethane	64	2.392	2.393	0.000	98	61977	25.0	26.1	
17 Dichlorofluoromethane	67	2.647	2.648	-0.001	97	144479	25.0	28.5	
18 Trichlorofluoromethane	101	2.726	2.709	0.017	93	106707	25.0	26.1	
20 Ethyl ether	59	3.085	3.080	0.005	97	82562	25.0	29.9	
21 Acrolein	56	3.262	3.250	0.012	99	34953	125.0	144.1	
22 1,1-Dichloroethene	96	3.365	3.366	-0.001	91	71651	25.0	29.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.426	3.421	0.005	93	73641	25.0	28.3	
24 Acetone	43	3.493	3.488	0.005	84	57822	50.0	57.7	
25 Iodomethane	142	3.572	3.579	-0.007	99	91631	25.0	25.5	
26 Carbon disulfide	76	3.651	3.664	-0.013	99	101462	25.0	21.0	
28 3-Chloro-1-propene	76	3.925	3.932	-0.007	89	27475	25.0	21.0	
30 Methyl acetate	43	4.016	4.017	-0.001	98	289410	125.0	119.3	
31 Methylene Chloride	84	4.138	4.138	0.000	94	72038	25.0	25.6	
32 2-Methyl-2-propanol	59	4.430	4.430	0.000	86	30993	250.0	247.5	
33 Acrylonitrile	53	4.557	4.546	0.011	100	280872	250.0	240.8	
34 trans-1,2-Dichloroethene	96	4.564	4.558	0.006	60	59212	25.0	23.9	
35 Methyl tert-butyl ether	73	4.600	4.589	0.011	95	133763	25.0	22.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.983	4.978	0.005	94	86200	25.0	21.9	
37 1,1-Dichloroethane	63	5.166	5.167	-0.001	96	113664	25.0	24.1	
38 Vinyl acetate	43	5.294	5.294	0.000	97	85960	25.0	23.4	
44 2,2-Dichloropropane	77	5.926	5.927	-0.001	51	38399	25.0	25.9	
45 cis-1,2-Dichloroethene	96	5.932	5.933	-0.001	83	63168	25.0	24.4	
46 2-Butanone (MEK)	43	5.987	5.988	-0.001	99	67102	50.0	50.3	
49 Chlorobromomethane	128	6.224	6.225	-0.001	95	29104	25.0	25.3	
51 Tetrahydrofuran	42	6.285	6.286	-0.001	92	40879	50.0	46.0	
52 Chloroform	83	6.346	6.335	0.011	95	102268	25.0	25.2	
53 1,1,1-Trichloroethane	97	6.528	6.529	-0.001	97	67616	25.0	24.1	
54 Cyclohexane	56	6.583	6.584	-0.001	96	108740	25.0	23.8	
56 Carbon tetrachloride	117	6.711	6.718	-0.007	79	57211	25.0	24.8	
55 1,1-Dichloropropene	75	6.723	6.724	-0.001	92	77015	25.0	24.1	
57 Isobutyl alcohol	41	6.948	6.937	0.011	37	38587	625.0	580.2	
58 Benzene	78	6.954	6.955	-0.001	97	262965	25.0	26.2	
59 1,2-Dichloroethane	62	6.979	6.986	-0.007	97	81564	25.0	25.2	
62 n-Heptane	43	7.283	7.278	0.005	54	73025	25.0	23.2	
64 Trichloroethene	130	7.666	7.667	-0.001	98	59490	25.0	24.8	
66 Methylcyclohexane	83	7.861	7.855	0.006	90	88756	25.0	22.8	
67 1,2-Dichloropropane	63	7.897	7.904	-0.007	94	65488	25.0	25.2	
68 Dibromomethane	93	8.019	8.020	-0.001	94	31273	25.0	23.5	
70 1,4-Dioxane	88	8.055	8.062	-0.007	75	7427	500.0	385.0	M
71 Dichlorobromomethane	83	8.195	8.196	-0.001	97	63324	25.0	24.6	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	91	59349	25.0	20.7	
75 4-Methyl-2-pentanone (MIBK)	43	8.822	8.823	-0.001	99	106402	50.0	46.0	
76 Toluene	91	8.986	8.987	-0.001	98	259529	25.0	27.6	
77 trans-1,3-Dichloropropene	75	9.217	9.218	-0.001	97	48449	25.0	22.8	
78 Ethyl methacrylate	69	9.315	9.315	0.000	89	50618	25.0	21.9	
79 1,1,2-Trichloroethane	97	9.400	9.401	-0.001	92	50060	25.0	26.8	
80 Tetrachloroethene	164	9.534	9.534	0.000	97	47442	25.0	27.6	
81 1,3-Dichloropropane	76	9.564	9.565	-0.001	95	91366	25.0	27.6	
82 2-Hexanone	43	9.655	9.656	-0.001	97	82918	50.0	49.2	
84 Chlorodibromomethane	129	9.789	9.790	-0.001	88	35178	25.0	24.8	
85 Ethylene Dibromide	107	9.899	9.900	-0.001	98	46847	25.0	26.8	
86 3-Chlorobenzotrifluoride	180	10.367	10.374	-0.007	94	82294	25.0	27.5	
87 Chlorobenzene	112	10.391	10.386	0.005	94	158292	25.0	27.1	
88 4-Chlorobenzotrifluoride	180	10.428	10.429	-0.001	93	78777	25.0	27.4	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.471	0.000	90	44580	25.0	25.4	
90 Ethylbenzene	106	10.501	10.502	-0.001	98	84373	25.0	26.3	
91 m-Xylene & p-Xylene	106	10.617	10.617	0.000	0	94172	25.0	24.5	
92 o-Xylene	106	11.012	11.013	-0.001	96	92974	25.0	25.1	
93 Styrene	104	11.024	11.025	-0.001	94	151237	25.0	25.2	
94 Bromoform	173	11.207	11.207	0.000	92	19549	25.0	23.8	
96 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	96	77721	25.0	27.0	
97 Isopropylbenzene	105	11.377	11.378	-0.001	96	217260	25.0	24.7	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.676	-0.001	94	68304	25.0	27.5	
100 Bromobenzene	156	11.681	11.682	-0.001	95	59067	25.0	24.1	
101 1,2,3-Trichloropropane	110	11.724	11.718	0.006	86	20616	25.0	23.5	
102 trans-1,4-Dichloro-2-buten	53	11.724	11.731	-0.007	64	14439	25.0	20.7	
103 N-Propylbenzene	120	11.791	11.785	0.006	99	65130	25.0	22.9	
104 2-Chlorotoluene	126	11.870	11.871	-0.001	95	56052	25.0	23.2	
105 3-Chlorotoluene	126	11.931	11.931	0.000	96	65810	25.0	25.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.962	-0.001	96	191979	25.0	24.5	
107 4-Chlorotoluene	126	11.985	11.980	0.005	97	62788	25.0	23.0	
108 tert-Butylbenzene	119	12.290	12.290	0.000	94	144501	25.0	22.2	
110 1,2,4-Trimethylbenzene	105	12.332	12.333	-0.001	97	179795	25.0	23.1	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.400	-0.001	97	55796	25.0	25.8	
112 sec-Butylbenzene	105	12.509	12.509	0.000	94	214138	25.0	23.2	
113 1,3-Dichlorobenzene	146	12.618	12.619	-0.001	98	106061	25.0	24.5	
114 4-Isopropyltoluene	119	12.655	12.649	0.006	98	173421	25.0	23.4	
115 1,4-Dichlorobenzene	146	12.709	12.710	-0.001	94	109230	25.0	24.9	
116 2,4-Dichloro-1-(trifluorom	214	12.758	12.759	-0.001	94	50405	25.0	25.0	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.807	0.000	0	55652	25.0	25.9	
120 n-Butylbenzene	91	13.062	13.063	-0.001	98	144571	25.0	22.5	
121 1,2-Dichlorobenzene	146	13.080	13.081	-0.001	96	97254	25.0	25.0	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.860	-0.001	81	7972	25.0	24.4	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.011	14.012	-0.001	0	151464	75.0	65.8	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.426	-0.001	0	93817	50.0	45.1	
126 1,2,4-Trichlorobenzene	180	14.692	14.693	-0.001	93	35741	25.0	23.7	
127 Hexachlorobutadiene	225	14.863	14.864	-0.001	94	17390	25.0	23.8	
128 Naphthalene	128	14.936	14.943	-0.007	97	72943	25.0	20.7	
129 1,2,3-Trichlorobenzene	180	15.191	15.180	0.011	93	26215	25.0	22.0	
131 2,4,5-Trichlorotoluene	159	15.964	15.959	0.005	0	9895	25.0	19.9	
130 2,3,6-Trichlorotoluene	159	16.061	16.062	-0.001	91	8886	25.0	22.6	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		50.0	48.3	
S 133 Xylenes, Total	106				0		50.0	49.6	
S 135 1,3-Dichloropropene, Total	1				0		50.0	43.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added: 5.00	Units: uL	
VOA8260SURR_00033	Amount Added: 1.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 1.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 1.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 1.00	Units: uL	
voaW VA pri R_00005	Amount Added: 1.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424009.D

Injection Date: 24-Apr-2015 17:11:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD5

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

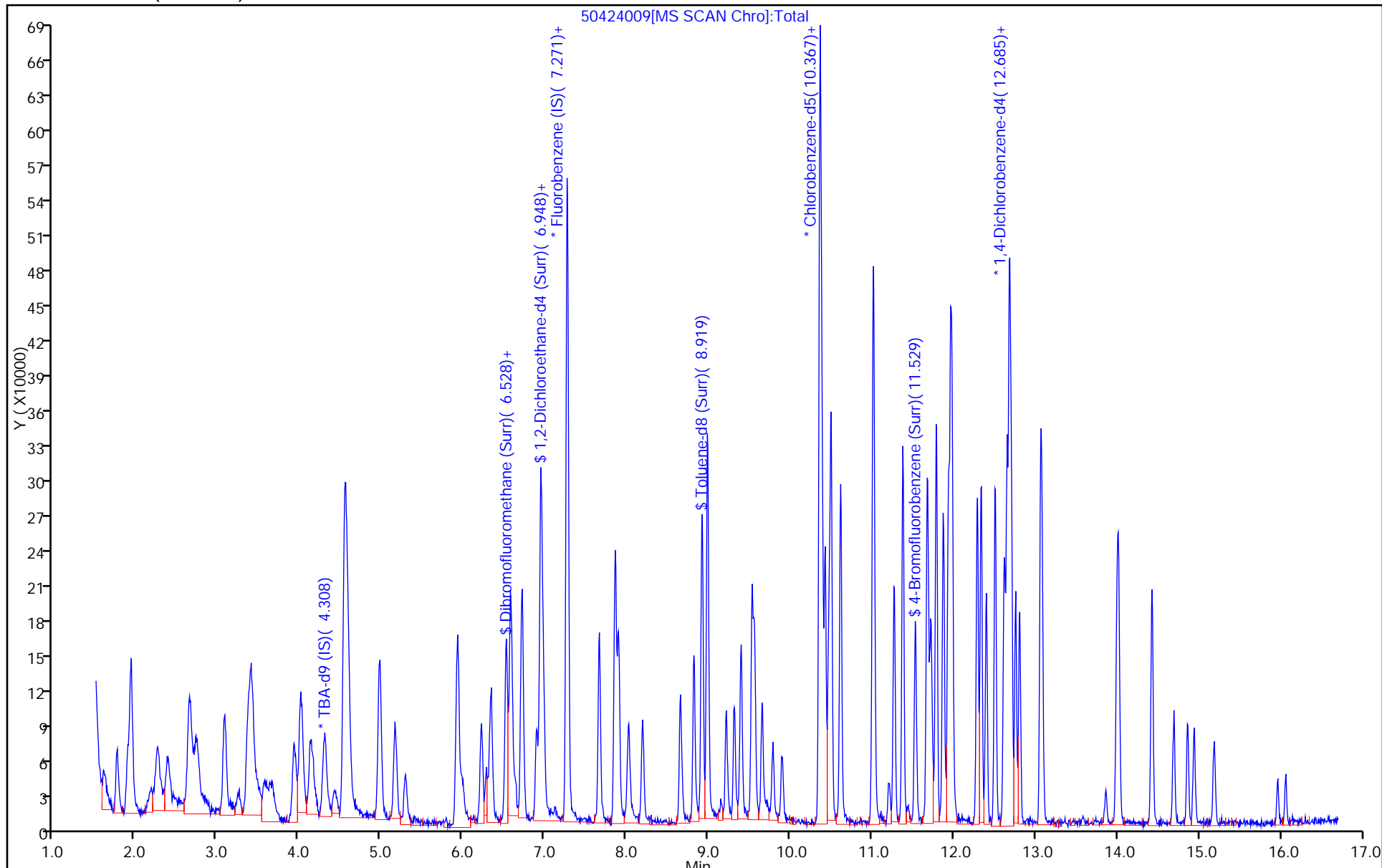
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



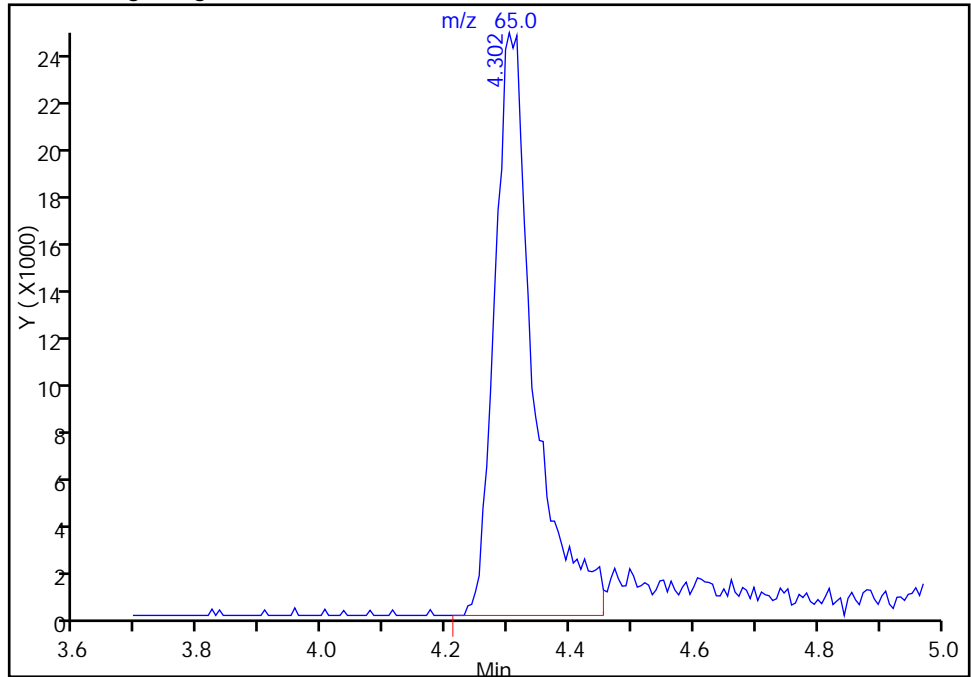
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424009.D
Injection Date: 24-Apr-2015 17:11:30 Instrument ID: CHHP5
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

* 1 TBA-d9 (IS), CAS: 25725-11-5

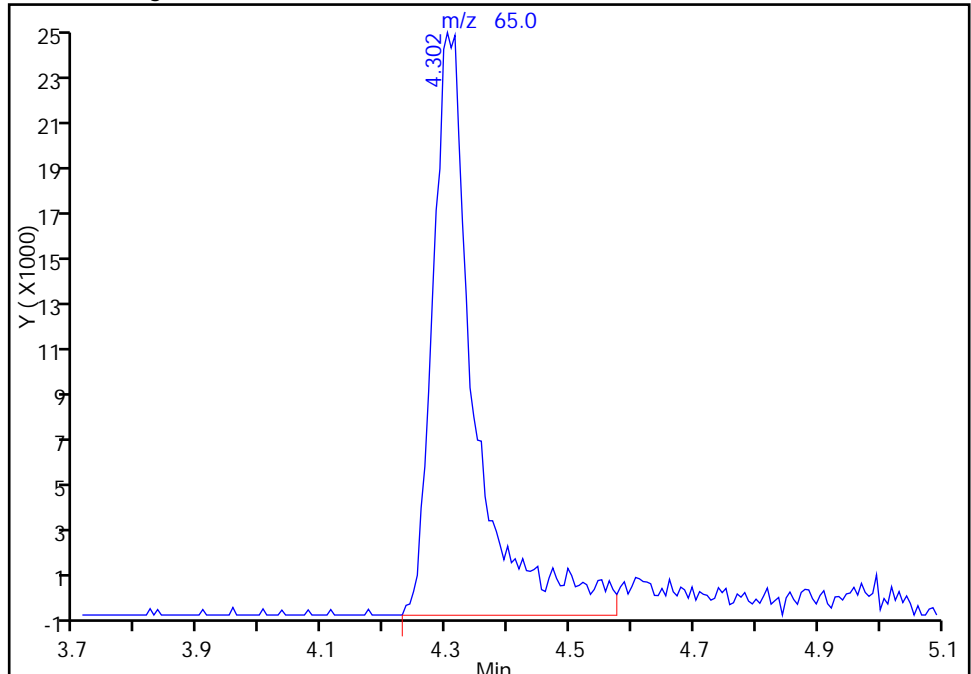
RT: 4.30
Area: 106945
Amount: 1000.0000
Amount Units: ng

Processing Integration Results



RT: 4.30
Area: 116767
Amount: 1000.0000
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 15:22:30
Audit Action: Manually Integrated
Audit Reason: Peak Tail

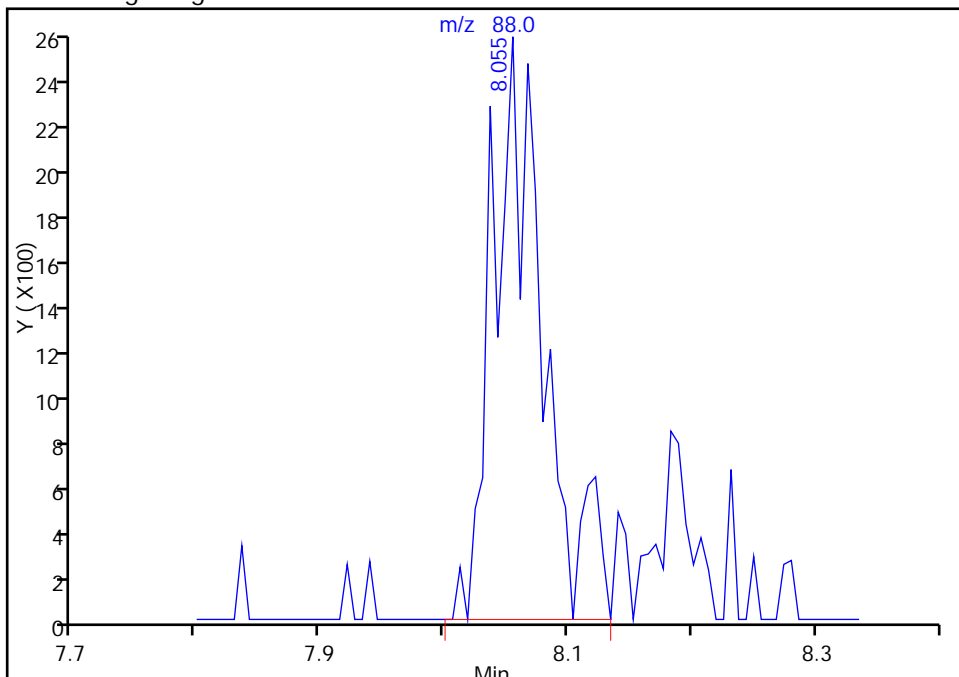
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424009.D
Injection Date: 24-Apr-2015 17:11:30 Instrument ID: CHHP5
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

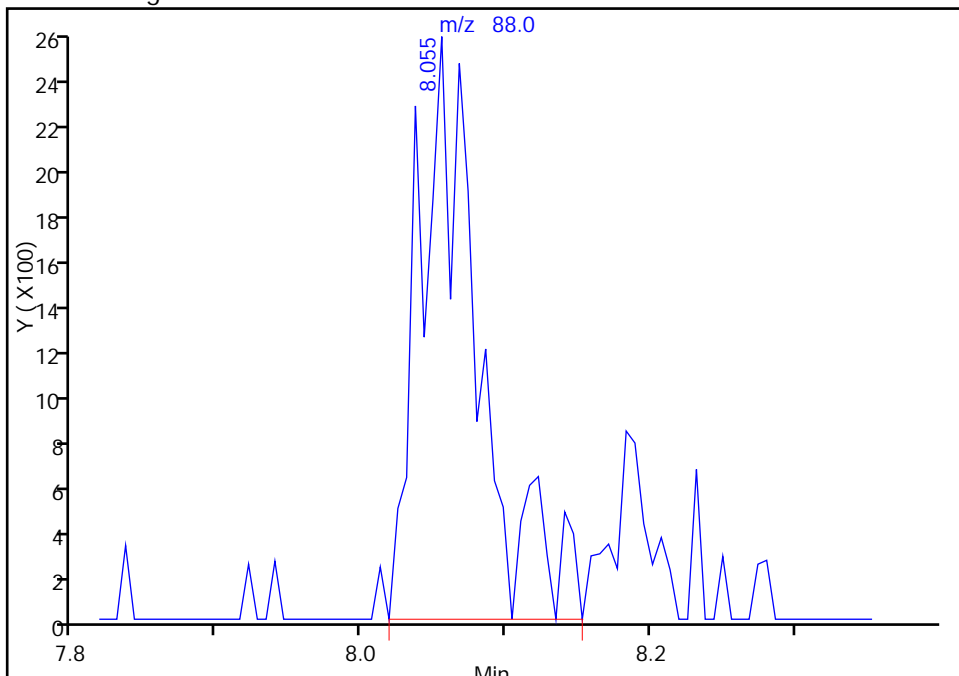
RT: 8.06
Area: 7205
Amount: 381.5886
Amount Units: ng

Processing Integration Results



RT: 8.06
Area: 7427
Amount: 384.9506
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 15:22:30
Audit Action: Manually Integrated
Audit Reason: Split Peak

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424010.D
 Lims ID: ICIS VSTD10
 Client ID:
 Sample Type: ICIS Calib Level: 3
 Inject. Date: 24-Apr-2015 17:35:30 ALS Bottle#: 5 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS VSTD10
 Misc. Info.: 180-0006617-010
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 11:30:11 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 25-Apr-2015 12:59:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.303	4.303	0.000	0	117762	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	98	465609	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.362	10.362	0.000	88	104938	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.680	12.680	0.000	92	151568	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.529	0.000	81	102593	50.0	48.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.894	6.894	0.000	0	136835	50.0	49.0	
\$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	94	447179	50.0	53.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.536	11.536	0.000	87	148791	50.0	51.1	
11 Dichlorodifluoromethane	85	1.620	1.620	0.000	100	151822	50.0	48.6	
12 Chloromethane	50	1.766	1.766	0.000	99	187676	50.0	50.1	
13 Vinyl chloride	62	1.900	1.900	0.000	99	177669	50.0	50.9	
14 Butadiene	39	1.942	1.942	0.000	95	205231	50.0	51.1	
15 Bromomethane	94	2.265	2.265	0.000	91	102398	50.0	48.9	
16 Chloroethane	64	2.393	2.393	0.000	98	126709	50.0	48.0	
17 Dichlorofluoromethane	67	2.648	2.648	0.000	97	297579	50.0	52.7	
18 Trichlorofluoromethane	101	2.709	2.709	0.000	96	245594	50.0	54.0	
20 Ethyl ether	59	3.080	3.080	0.000	97	167554	50.0	54.5	
21 Acrolein	56	3.250	3.250	0.000	98	46520	150.0	172.3	M
22 1,1-Dichloroethene	96	3.366	3.366	0.000	94	149914	50.0	55.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.421	3.421	0.000	95	176679	50.0	60.9	
24 Acetone	43	3.488	3.488	0.000	97	125290	100.0	112.2	
25 Iodomethane	142	3.579	3.579	0.000	99	222176	50.0	55.5	
26 Carbon disulfide	76	3.664	3.664	0.000	100	280717	50.0	52.2	
28 3-Chloro-1-propene	76	3.932	3.932	0.000	86	79680	50.0	54.6	
30 Methyl acetate	43	4.017	4.017	0.000	98	811539	250.0	300.4	
31 Methylene Chloride	84	4.138	4.138	0.000	98	173216	50.0	55.2	
32 2-Methyl-2-propanol	59	4.430	4.430	0.000	88	52407	500.0	414.9	
33 Acrylonitrile	53	4.546	4.546	0.000	99	627357	500.0	482.9	
34 trans-1,2-Dichloroethene	96	4.558	4.558	0.000	97	136694	50.0	49.5	
35 Methyl tert-butyl ether	73	4.589	4.589	0.000	96	302168	50.0	45.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.978	4.978	0.000	95	213672	50.0	48.7	
37 1,1-Dichloroethane	63	5.167	5.167	0.000	96	256304	50.0	48.9	
38 Vinyl acetate	43	5.294	5.294	0.000	98	176299	50.0	43.2	
44 2,2-Dichloropropane	77	5.927	5.927	0.000	79	83052	50.0	50.2	
45 cis-1,2-Dichloroethene	96	5.933	5.933	0.000	83	139604	50.0	48.5	
46 2-Butanone (MEK)	43	5.988	5.988	0.000	99	134683	100.0	90.6	
49 Chlorobromomethane	128	6.225	6.225	0.000	95	62421	50.0	48.7	
51 Tetrahydrofuran	42	6.286	6.286	0.000	90	86726	100.0	87.7	
52 Chloroform	83	6.335	6.335	0.000	95	225260	50.0	49.8	
53 1,1,1-Trichloroethane	97	6.529	6.529	0.000	96	155175	50.0	49.8	
54 Cyclohexane	56	6.584	6.584	0.000	91	256458	50.0	50.4	
56 Carbon tetrachloride	117	6.718	6.718	0.000	97	126987	50.0	49.4	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	92	172806	50.0	48.5	
57 Isobutyl alcohol	41	6.937	6.937	0.000	47	73797	1250.0	996.4	
58 Benzene	78	6.955	6.955	0.000	98	564997	50.0	50.5	
59 1,2-Dichloroethane	62	6.986	6.986	0.000	96	175265	50.0	48.7	
62 n-Heptane	43	7.278	7.278	0.000	94	172344	50.0	49.2	
64 Trichloroethene	130	7.667	7.667	0.000	98	132156	50.0	49.5	
66 Methylcyclohexane	83	7.855	7.855	0.000	94	214826	50.0	49.5	
67 1,2-Dichloropropane	63	7.904	7.904	0.000	94	140489	50.0	48.6	
68 Dibromomethane	93	8.020	8.020	0.000	97	70471	50.0	47.5	
70 1,4-Dioxane	88	8.062	8.062	0.000	94	22441	1000.0	1044.5	M
71 Dichlorobromomethane	83	8.196	8.196	0.000	97	136110	50.0	47.4	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	93	143602	50.0	45.1	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	99	263464	100.0	98.1	
76 Toluene	91	8.987	8.987	0.000	98	564722	50.0	51.8	
77 trans-1,3-Dichloropropene	75	9.218	9.218	0.000	99	115520	50.0	46.9	
78 Ethyl methacrylate	69	9.315	9.315	0.000	91	129498	50.0	48.3	
79 1,1,2-Trichloroethane	97	9.401	9.401	0.000	93	103857	50.0	48.0	
80 Tetrachloroethene	164	9.534	9.534	0.000	95	104366	50.0	52.3	
81 1,3-Dichloropropane	76	9.565	9.565	0.000	95	187414	50.0	48.8	
82 2-Hexanone	43	9.656	9.656	0.000	98	195047	100.0	99.7	
84 Chlorodibromomethane	129	9.790	9.790	0.000	89	81585	50.0	49.5	
85 Ethylene Dibromide	107	9.900	9.900	0.000	97	100552	50.0	49.6	
86 3-Chlorobenzotrifluoride	180	10.374	10.374	0.000	94	182941	50.0	52.7	
87 Chlorobenzene	112	10.386	10.386	0.000	94	350848	50.0	51.8	
88 4-Chlorobenzotrifluoride	180	10.429	10.429	0.000	96	180638	50.0	54.1	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.471	0.000	93	104747	50.0	51.5	
90 Ethylbenzene	106	10.502	10.502	0.000	99	189861	50.0	51.0	
91 m-Xylene & p-Xylene	106	10.617	10.617	0.000	0	235671	50.0	52.8	
92 o-Xylene	106	11.013	11.013	0.000	97	222250	50.0	51.7	
93 Styrene	104	11.025	11.025	0.000	94	365580	50.0	52.5	
94 Bromoform	173	11.207	11.207	0.000	95	44458	50.0	46.6	
96 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	96	181217	50.0	54.2	
97 Isopropylbenzene	105	11.378	11.378	0.000	97	551431	50.0	54.0	
99 1,1,2,2-Tetrachloroethane	83	11.676	11.676	0.000	95	146808	50.0	50.9	
100 Bromobenzene	156	11.682	11.682	0.000	95	131268	50.0	47.7	
101 1,2,3-Trichloropropane	110	11.718	11.718	0.000	87	48273	50.0	49.0	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	72	35659	50.0	45.6	
103 N-Propylbenzene	120	11.785	11.785	0.000	99	154023	50.0	48.2	
104 2-Chlorotoluene	126	11.871	11.871	0.000	96	129151	50.0	47.6	
105 3-Chlorotoluene	126	11.931	11.931	0.000	94	151265	50.0	51.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.962	11.962	0.000	95	452974	50.0	51.5	
107 4-Chlorotoluene	126	11.980	11.980	0.000	98	160086	50.0	52.2	
108 tert-Butylbenzene	119	12.290	12.290	0.000	93	363182	50.0	49.8	
110 1,2,4-Trimethylbenzene	105	12.333	12.333	0.000	95	445258	50.0	51.0	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	97	120499	50.0	49.7	
112 sec-Butylbenzene	105	12.509	12.509	0.000	94	523820	50.0	50.6	
113 1,3-Dichlorobenzene	146	12.619	12.619	0.000	98	233301	50.0	48.0	
114 4-Isopropyltoluene	119	12.649	12.649	0.000	96	416462	50.0	50.0	
115 1,4-Dichlorobenzene	146	12.710	12.710	0.000	94	238700	50.0	48.5	
116 2,4-Dichloro-1-(trifluorom	214	12.759	12.759	0.000	96	113167	50.0	50.0	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.807	0.000	0	120939	50.0	50.1	
120 n-Butylbenzene	91	13.063	13.063	0.000	98	360178	50.0	50.0	
121 1,2-Dichlorobenzene	146	13.081	13.081	0.000	96	213664	50.0	49.0	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.860	0.000	73	16019	50.0	43.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.012	14.012	0.000	0	383147	150.0	148.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.426	0.000	0	225386	100.0	96.5	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	93	76800	50.0	45.4	
127 Hexachlorobutadiene	225	14.864	14.864	0.000	96	40083	50.0	48.8	
128 Naphthalene	128	14.943	14.943	0.000	98	186326	50.0	42.1	
129 1,2,3-Trichlorobenzene	180	15.180	15.180	0.000	95	62030	50.0	46.4	
131 2,4,5-Trichlorotoluene	159	15.959	15.959	0.000	0	22748	50.0	40.8	
130 2,3,6-Trichlorotoluene	159	16.062	16.062	0.000	96	22869	50.0	51.8	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		100.0	98.0	
S 133 Xylenes, Total	106				0		100.0	104.6	
S 135 1,3-Dichloropropene, Total	1				0		100.0	92.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 2.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
VOAACRPRI_00005	Amount Added: 6.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424010.D

Injection Date: 24-Apr-2015 17:35:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: ICIS VSTD10

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

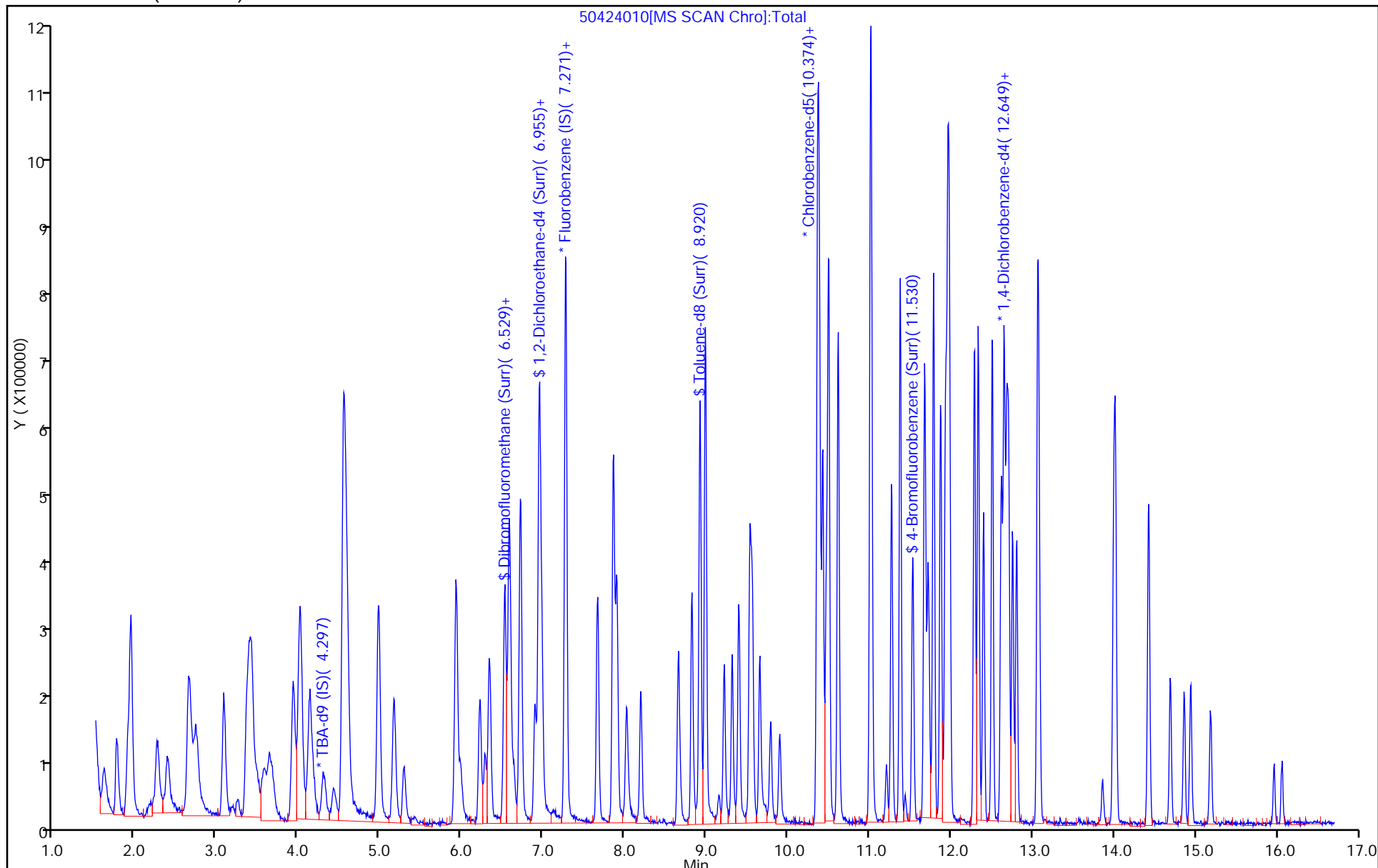
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



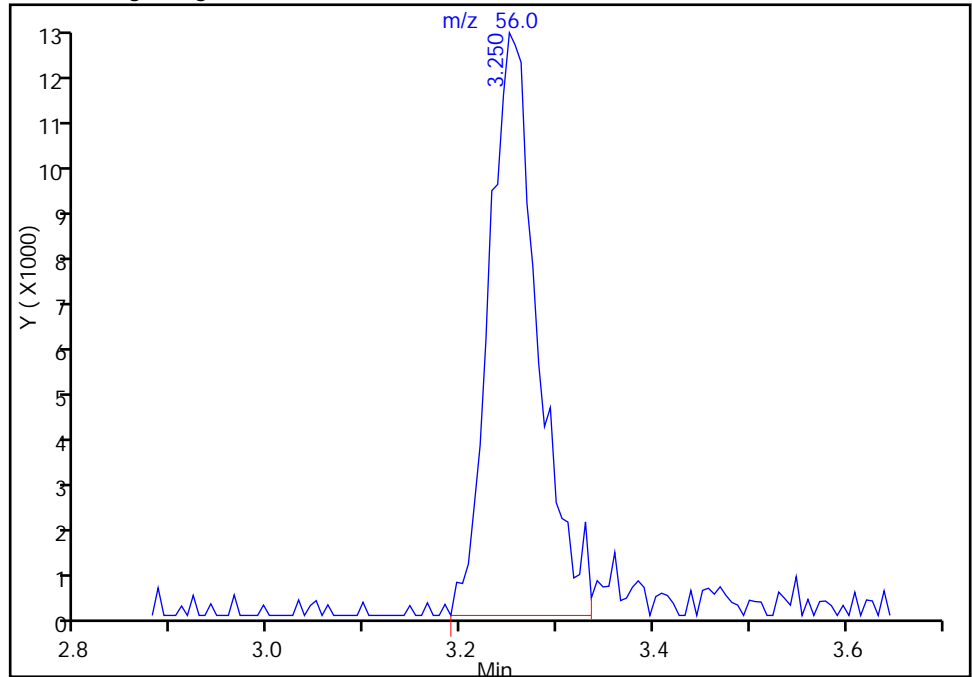
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424010.D
Injection Date: 24-Apr-2015 17:35:30 Instrument ID: CHHP5
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

21 Acrolein, CAS: 107-02-8

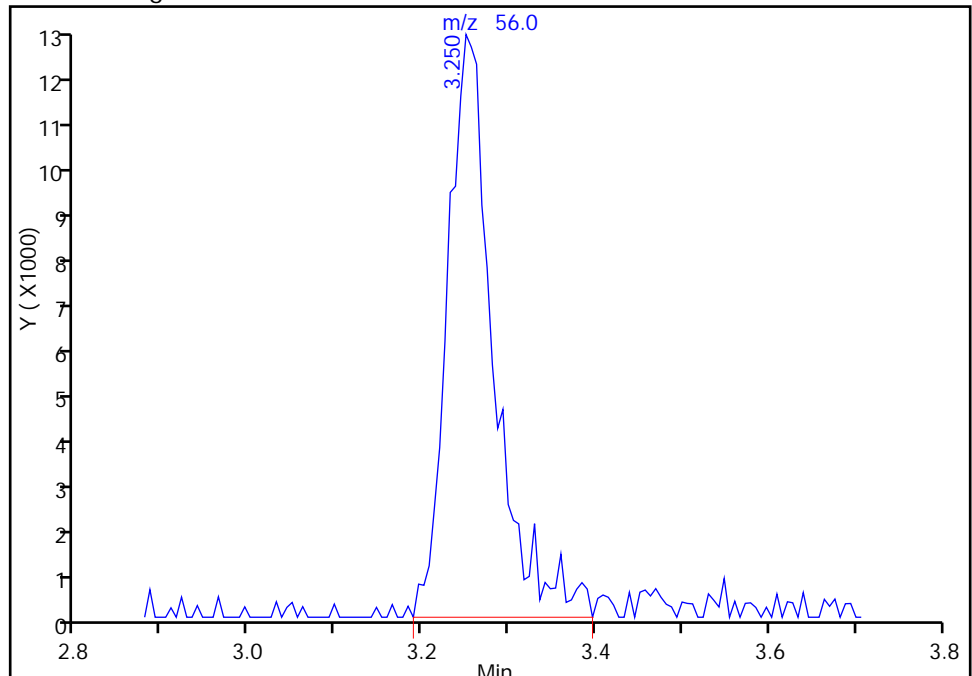
RT: 3.25
Area: 44336
Amount: 165.2778
Amount Units: ng

Processing Integration Results



RT: 3.25
Area: 46520
Amount: 172.2507
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 12:59:44
Audit Action: Manually Integrated
Audit Reason: Peak Tail

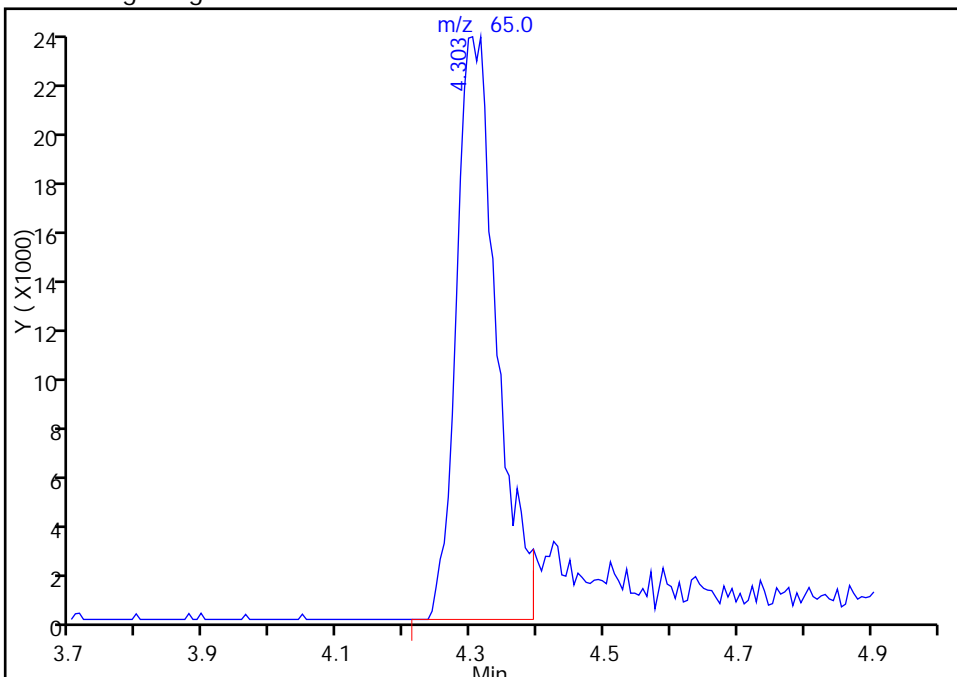
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424010.D
Injection Date: 24-Apr-2015 17:35:30 Instrument ID: CHHP5
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

* 1 TBA-d9 (IS), CAS: 25725-11-5

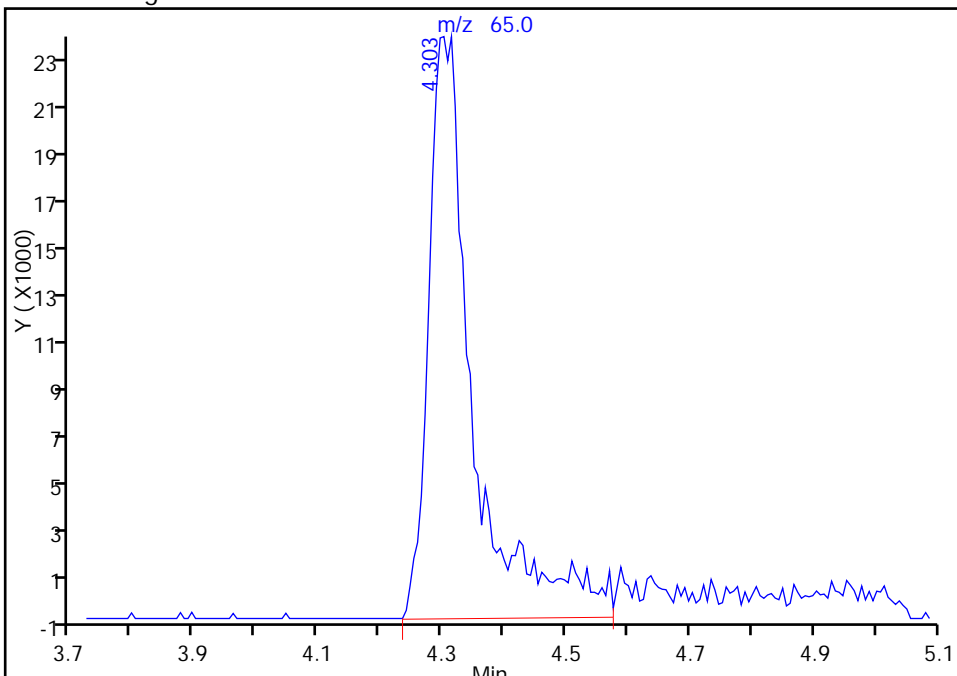
Processing Integration Results

RT: 4.30
Area: 98942
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 4.30
Area: 117762
Amount: 1000.0000
Amount Units: ng



Reviewer: fergusond, 25-Apr-2015 12:59:44
Audit Action: Manually Integrated
Audit Reason: Peak Tail

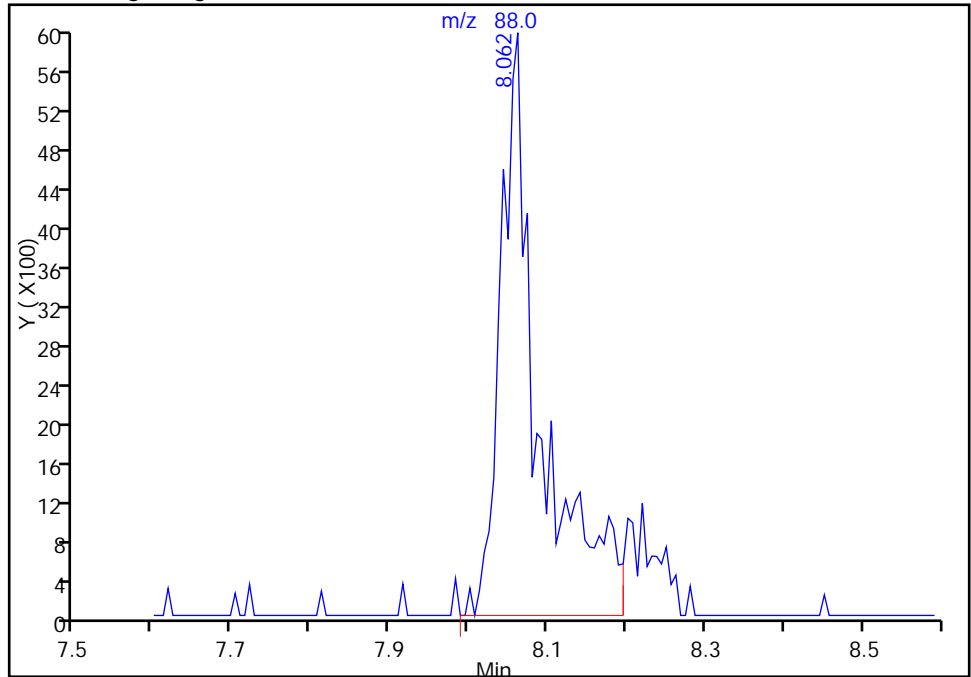
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424010.D
Injection Date: 24-Apr-2015 17:35:30 Instrument ID: CHHP5
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 001562 ALS Bottle#: 5 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

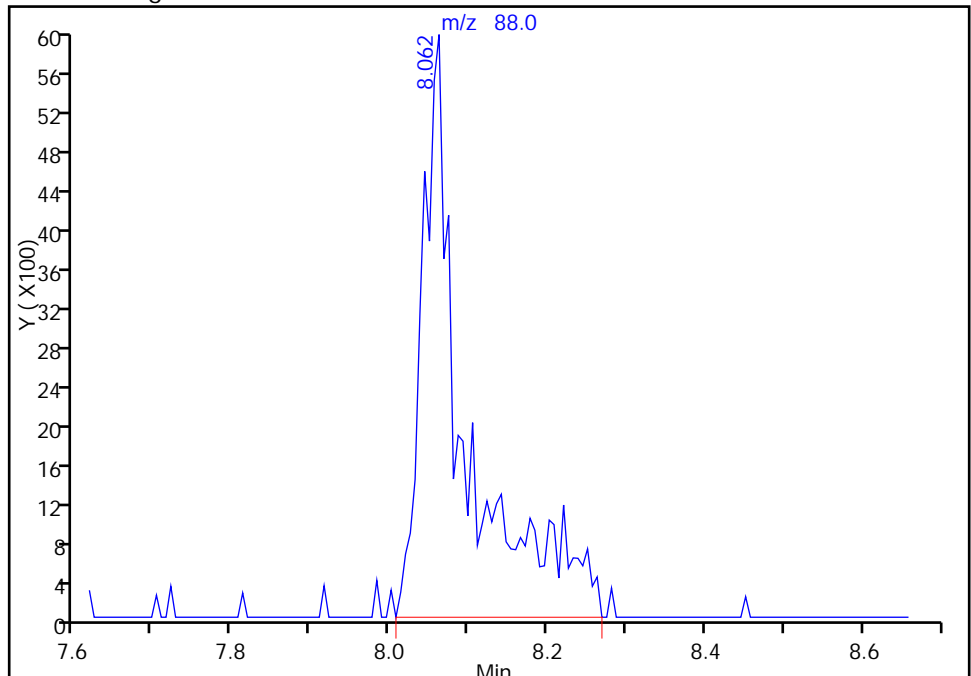
RT: 8.06
Area: 19957
Amount: 941.7768
Amount Units: ng

Processing Integration Results



RT: 8.06
Area: 22441
Amount: 1044.4518
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 15:09:30
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424011.D
 Lims ID: IC VSTD15
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 24-Apr-2015 17:59:30 ALS Bottle#: 6 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD15
 Misc. Info.: 180-0006617-011
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 11:30:13 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 25-Apr-2015 15:24:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.309	4.309	0.000	0	133533	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	98	460973	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.356	10.356	0.000	87	104010	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.686	12.686	0.000	93	148172	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.529	0.000	85	155647	75.0	74.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	0	202997	75.0	73.4	
\$ 7 Toluene-d8 (Surr)	98	8.920	8.920	0.000	94	652125	75.0	79.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.530	0.000	88	231161	75.0	80.2	
11 Dichlorodifluoromethane	85	1.614	1.614	0.000	98	246951	75.0	79.8	
12 Chloromethane	50	1.772	1.772	0.000	99	272278	75.0	73.5	
13 Vinyl chloride	62	1.906	1.906	0.000	98	264123	75.0	76.4	
14 Butadiene	39	1.942	1.942	0.000	98	308497	75.0	77.6	
15 Bromomethane	94	2.271	2.271	0.000	91	141577	75.0	68.3	
16 Chloroethane	64	2.399	2.399	0.000	98	187821	75.0	71.8	
17 Dichlorofluoromethane	67	2.654	2.654	0.000	98	401399	75.0	71.8	
18 Trichlorofluoromethane	101	2.727	2.727	0.000	96	346749	75.0	77.0	
20 Ethyl ether	59	3.080	3.080	0.000	93	192108	75.0	63.1	
21 Acrolein	56	3.256	3.256	0.000	97	41384	175.0	154.8	
22 1,1-Dichloroethene	96	3.372	3.372	0.000	98	190753	75.0	70.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.427	3.427	0.000	95	203143	75.0	70.7	
24 Acetone	43	3.487	3.487	0.000	99	137125	150.0	124.1	
25 Iodomethane	142	3.591	3.591	0.000	98	275115	75.0	69.4	
26 Carbon disulfide	76	3.658	3.658	0.000	100	367591	75.0	69.1	
28 3-Chloro-1-propene	76	3.932	3.932	0.000	88	104436	75.0	72.3	
30 Methyl acetate	43	4.011	4.011	0.000	98	922649	375.0	345.0	
31 Methylene Chloride	84	4.132	4.132	0.000	96	213229	75.0	68.6	
32 2-Methyl-2-propanol	59	4.430	4.430	0.000	86	117030	750.0	817.1	
33 Acrylonitrile	53	4.546	4.546	0.000	99	959532	750.0	746.1	
34 trans-1,2-Dichloroethene	96	4.558	4.558	0.000	53	206068	75.0	75.4	
35 Methyl tert-butyl ether	73	4.595	4.595	0.000	96	453219	75.0	69.2	

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	96	323131	75.0	74.3	
37 1,1-Dichloroethane	63	5.173	5.173	0.000	96	374817	75.0	72.2	
38 Vinyl acetate	43	5.288	5.288	0.000	97	298411	75.0	73.8	
44 2,2-Dichloropropane	77	5.921	5.921	0.000	61	120301	75.0	73.5	
45 cis-1,2-Dichloroethene	96	5.933	5.933	0.000	84	209356	75.0	73.4	
46 2-Butanone (MEK)	43	5.982	5.982	0.000	100	212873	150.0	144.6	
49 Chlorobromomethane	128	6.225	6.225	0.000	94	90474	75.0	71.3	
51 Tetrahydrofuran	42	6.286	6.286	0.000	89	145121	150.0	148.2	
52 Chloroform	83	6.341	6.341	0.000	95	325980	75.0	72.7	
53 1,1,1-Trichloroethane	97	6.529	6.529	0.000	95	229812	75.0	74.4	
54 Cyclohexane	56	6.584	6.584	0.000	92	388244	75.0	77.1	
56 Carbon tetrachloride	117	6.712	6.712	0.000	95	193765	75.0	76.1	
55 1,1-Dichloropropene	75	6.724	6.724	0.000	94	271160	75.0	76.8	
57 Isobutyl alcohol	41	6.943	6.943	0.000	93	135500	1875.0	1847.8	
58 Benzene	78	6.955	6.955	0.000	98	856546	75.0	77.3	
59 1,2-Dichloroethane	62	6.985	6.985	0.000	96	269688	75.0	75.7	
62 n-Heptane	43	7.277	7.277	0.000	94	268964	75.0	77.6	
64 Trichloroethene	130	7.667	7.667	0.000	98	199059	75.0	75.3	
66 Methylcyclohexane	83	7.861	7.861	0.000	93	332523	75.0	77.5	
67 1,2-Dichloropropane	63	7.898	7.898	0.000	94	208852	75.0	73.0	
68 Dibromomethane	93	8.026	8.026	0.000	97	105705	75.0	72.0	
70 1,4-Dioxane	88	8.050	8.050	0.000	96	32863	1500.0	1544.9	M
71 Dichlorobromomethane	83	8.196	8.196	0.000	97	212427	75.0	74.7	
74 cis-1,3-Dichloropropene	75	8.658	8.658	0.000	93	231470	75.0	73.4	
75 4-Methyl-2-pentanone (MIBK)	43	8.823	8.823	0.000	99	417738	150.0	157.0	
76 Toluene	91	8.987	8.987	0.000	98	856050	75.0	79.2	
77 trans-1,3-Dichloropropene	75	9.218	9.218	0.000	98	184155	75.0	75.5	
78 Ethyl methacrylate	69	9.315	9.315	0.000	91	209406	75.0	78.8	
79 1,1,2-Trichloroethane	97	9.401	9.401	0.000	91	162720	75.0	75.9	
80 Tetrachloroethene	164	9.534	9.534	0.000	96	153313	75.0	77.5	
81 1,3-Dichloropropane	76	9.565	9.565	0.000	96	290221	75.0	76.2	
82 2-Hexanone	43	9.656	9.656	0.000	98	309278	150.0	159.5	
84 Chlorodibromomethane	129	9.784	9.784	0.000	92	124887	75.0	76.5	
85 Ethylene Dibromide	107	9.899	9.899	0.000	99	153435	75.0	76.3	
86 3-Chlorobenzotrifluoride	180	10.368	10.368	0.000	94	278698	75.0	81.0	
87 Chlorobenzene	112	10.386	10.386	0.000	94	523575	75.0	78.0	
88 4-Chlorobenzotrifluoride	180	10.429	10.429	0.000	95	275336	75.0	83.3	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.471	0.000	94	150796	75.0	74.8	
90 Ethylbenzene	106	10.502	10.502	0.000	98	297703	75.0	80.6	
91 m-Xylene & p-Xylene	106	10.611	10.611	0.000	0	356405	75.0	80.6	
92 o-Xylene	106	11.013	11.013	0.000	95	345347	75.0	81.1	
93 Styrene	104	11.025	11.025	0.000	91	568277	75.0	82.3	
94 Bromoform	173	11.207	11.207	0.000	95	72754	75.0	77.0	
96 2-Chlorobenzotrifluoride	180	11.268	11.268	0.000	96	272143	75.0	82.1	
97 Isopropylbenzene	105	11.378	11.378	0.000	97	859647	75.0	84.9	
99 1,1,2,2-Tetrachloroethane	83	11.670	11.670	0.000	95	227215	75.0	79.4	
100 Bromobenzene	156	11.682	11.682	0.000	96	204220	75.0	76.0	
101 1,2,3-Trichloropropane	110	11.718	11.718	0.000	86	72293	75.0	75.0	
102 trans-1,4-Dichloro-2-buten	53	11.731	11.731	0.000	73	56028	75.0	73.3	
103 N-Propylbenzene	120	11.785	11.785	0.000	99	254584	75.0	81.5	
104 2-Chlorotoluene	126	11.870	11.870	0.000	96	208195	75.0	78.4	
105 3-Chlorotoluene	126	11.931	11.931	0.000	95	225643	75.0	78.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.962	11.962	0.000	95	702196	75.0	81.7	
107 4-Chlorotoluene	126	11.980	11.980	0.000	98	237510	75.0	79.2	
108 tert-Butylbenzene	119	12.284	12.284	0.000	94	576117	75.0	80.7	
110 1,2,4-Trimethylbenzene	105	12.333	12.333	0.000	98	721866	75.0	84.6	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.400	0.000	97	186794	75.0	78.8	
112 sec-Butylbenzene	105	12.509	12.509	0.000	94	837548	75.0	82.7	
113 1,3-Dichlorobenzene	146	12.619	12.619	0.000	97	361489	75.0	76.1	
114 4-Isopropyltoluene	119	12.649	12.649	0.000	97	681053	75.0	83.6	
115 1,4-Dichlorobenzene	146	12.710	12.710	0.000	95	369885	75.0	76.9	
116 2,4-Dichloro-1-(trifluorom	214	12.759	12.759	0.000	97	179630	75.0	81.2	
118 2,5-Dichlorobenzotrifluori	214	12.801	12.801	0.000	0	187006	75.0	79.2	
120 n-Butylbenzene	91	13.063	13.063	0.000	98	589878	75.0	83.7	
121 1,2-Dichlorobenzene	146	13.081	13.081	0.000	96	340009	75.0	79.8	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.860	0.000	77	25671	75.0	71.7	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.006	14.006	0.000	0	637721	225.0	252.5	
125 2,3- & 3,4- Dichlorotoluen	125	14.426	14.426	0.000	0	382970	150.0	167.7	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	94	127671	75.0	77.1	
127 Hexachlorobutadiene	225	14.864	14.864	0.000	97	62665	75.0	78.0	
128 Naphthalene	128	14.943	14.943	0.000	97	326496	75.0	72.4	
129 1,2,3-Trichlorobenzene	180	15.186	15.186	0.000	96	100441	75.0	76.9	
131 2,4,5-Trichlorotoluene	159	15.965	15.965	0.000	0	39289	75.0	72.1	
130 2,3,6-Trichlorotoluene	159	16.062	16.062	0.000	93	38172	75.0	88.5	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		150.0	148.8	
S 133 Xylenes, Total	106				0		150.0	161.7	
S 135 1,3-Dichloropropene, Total	1				0		150.0	148.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added: 7.00	Units: uL	
VOA8260SURR_00033	Amount Added: 3.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 3.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 3.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 3.00	Units: uL	
voaW VA pri R_00005	Amount Added: 3.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424011.D

Injection Date: 24-Apr-2015 17:59:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD15

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

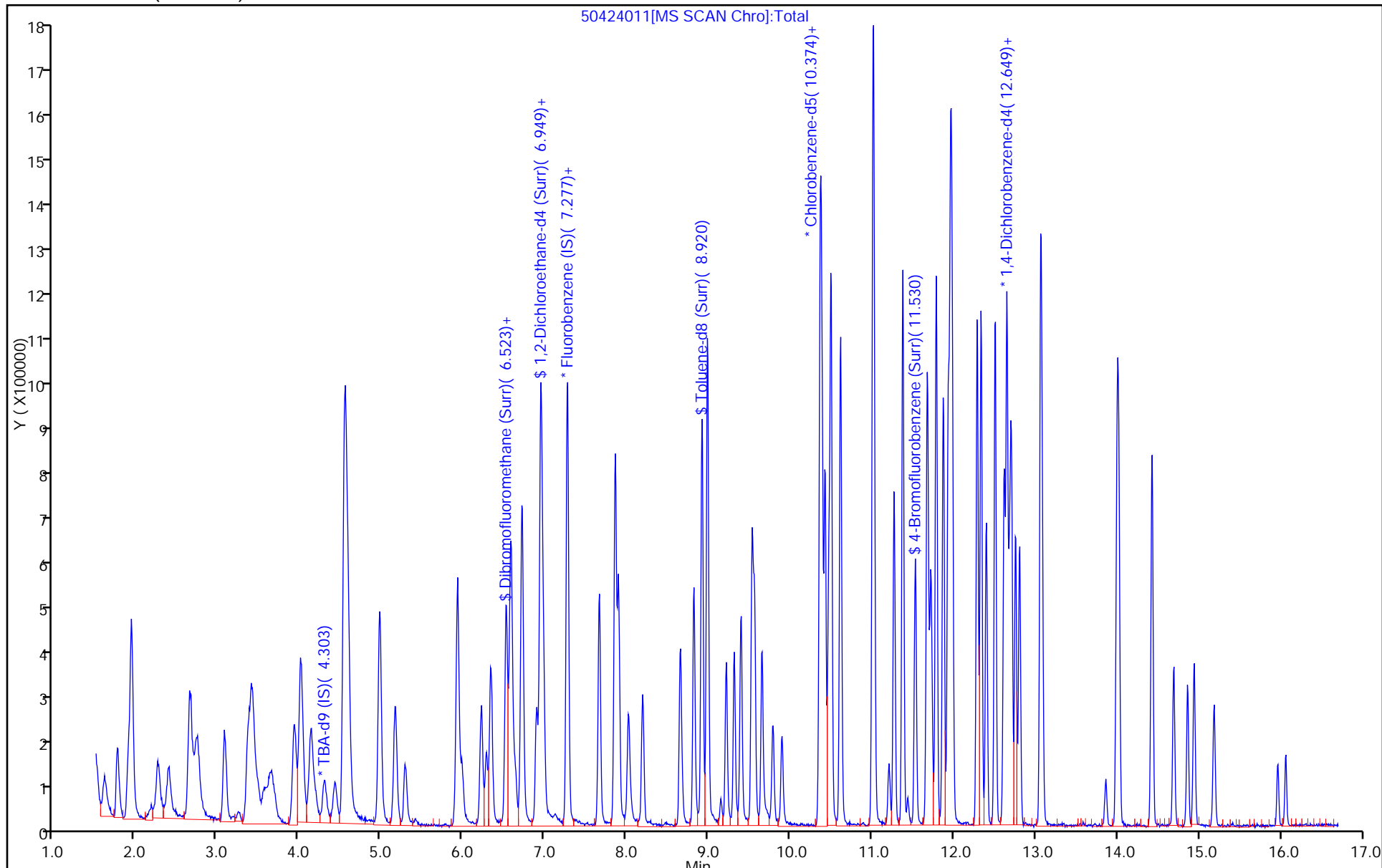
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



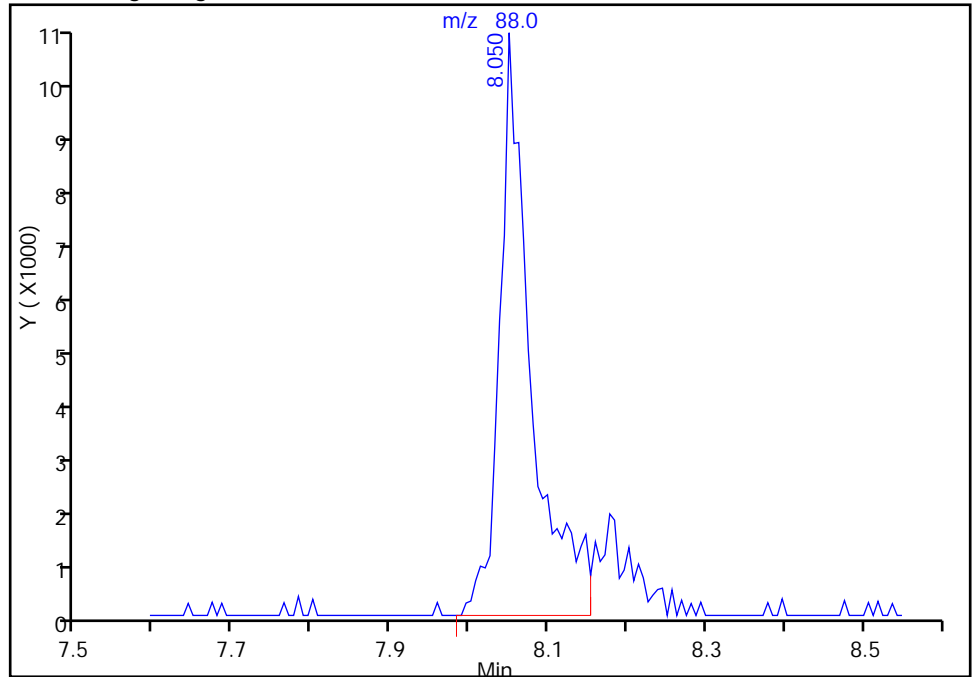
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424011.D
Injection Date: 24-Apr-2015 17:59:30 Instrument ID: CHHP5
Lims ID: IC VSTD15
Client ID:
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

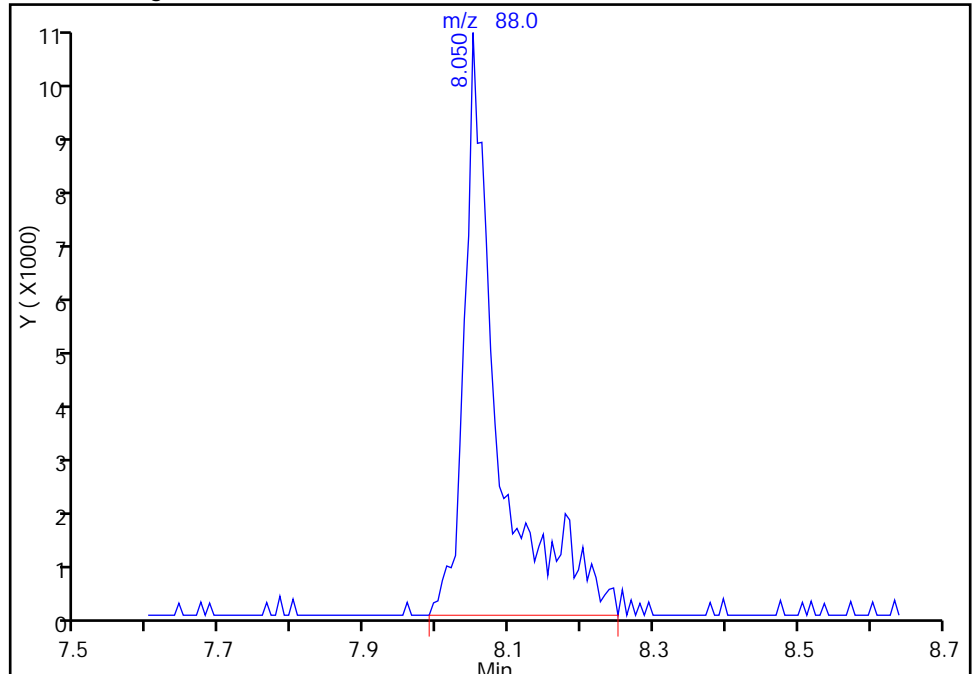
RT: 8.05
Area: 28149
Amount: 1348.1872
Amount Units: ng

Processing Integration Results



RT: 8.05
Area: 32863
Amount: 1544.8961
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 15:24:10
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424012.D
 Lims ID: IC VSTD20
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 24-Apr-2015 18:23:30 ALS Bottle#: 7 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD20
 Misc. Info.: 180-0006617-012
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 11:30:15 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 27-Apr-2015 10:56:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.308	4.309	-0.001	0	131491	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	99	467373	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.356	0.005	88	105692	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.679	12.686	-0.007	90	149162	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.529	0.000	83	208780	100.0	98.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.900	0.000	0	277811	100.0	99.1	
\$ 7 Toluene-d8 (Surr)	98	8.919	8.920	-0.001	93	873150	100.0	104.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.530	-0.001	87	310476	100.0	106.0	
11 Dichlorodifluoromethane	85	1.619	1.614	0.005	99	310594	100.0	99.0	
12 Chloromethane	50	1.771	1.772	-0.001	99	356693	100.0	95.0	
13 Vinyl chloride	62	1.905	1.906	-0.001	99	333911	100.0	95.3	
14 Butadiene	39	1.942	1.942	0.000	99	389539	100.0	96.6	
15 Bromomethane	94	2.264	2.271	-0.007	93	191476	100.0	91.2	
16 Chloroethane	64	2.398	2.399	-0.001	99	258404	100.0	97.4	
17 Dichlorofluoromethane	67	2.653	2.654	-0.001	98	529798	100.0	93.5	
18 Trichlorofluoromethane	101	2.726	2.727	-0.001	97	457071	100.0	100.1	
20 Ethyl ether	59	3.085	3.080	0.005	96	328237	100.0	106.4	
21 Acrolein	56	3.256	3.256	0.000	99	48540	200.0	179.1	
22 1,1-Dichloroethene	96	3.377	3.372	0.005	97	244514	100.0	89.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.426	3.427	-0.001	92	265277	100.0	91.1	
24 Acetone	43	3.493	3.487	0.006	99	197235	200.0	176.0	
25 Iodomethane	142	3.578	3.591	-0.013	97	372965	100.0	92.8	
26 Carbon disulfide	76	3.663	3.658	0.005	100	507865	100.0	94.2	
28 3-Chloro-1-propene	76	3.937	3.932	0.005	90	144247	100.0	98.5	
30 Methyl acetate	43	4.016	4.011	0.005	98	1259754	500.0	464.5	
31 Methylene Chloride	84	4.144	4.132	0.012	98	284214	100.0	90.2	
32 2-Methyl-2-propanol	59	4.430	4.430	0.000	86	144415	1000.0	1023.9	
33 Acrylonitrile	53	4.551	4.546	0.005	99	1300281	1000.0	997.2	
34 trans-1,2-Dichloroethene	96	4.564	4.558	0.006	97	266642	100.0	96.2	
35 Methyl tert-butyl ether	73	4.588	4.595	-0.007	97	641286	100.0	96.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.977	4.984	-0.007	96	425270	100.0	96.5	
37 1,1-Dichloroethane	63	5.172	5.173	-0.001	97	500170	100.0	95.0	
38 Vinyl acetate	43	5.288	5.288	0.000	98	425398	100.0	103.8	
44 2,2-Dichloropropane	77	5.920	5.921	-0.001	79	164025	100.0	98.8	
45 cis-1,2-Dichloroethene	96	5.938	5.933	0.005	84	284042	100.0	98.2	
46 2-Butanone (MEK)	43	5.987	5.982	0.005	100	315569	200.0	211.5	
49 Chlorobromomethane	128	6.224	6.225	-0.001	94	125429	100.0	97.5	
51 Tetrahydrofuran	42	6.279	6.286	-0.007	91	196945	200.0	198.4	
52 Chloroform	83	6.340	6.341	-0.001	95	444094	100.0	97.7	
53 1,1,1-Trichloroethane	97	6.535	6.529	0.006	96	307435	100.0	98.2	
54 Cyclohexane	56	6.583	6.584	-0.001	91	515667	100.0	101.0	
56 Carbon tetrachloride	117	6.717	6.712	0.005	74	260408	100.0	100.9	
55 1,1-Dichloropropene	75	6.723	6.724	-0.001	92	354054	100.0	98.9	
57 Isobutyl alcohol	41	6.942	6.943	-0.001	93	182633	2500.0	2456.5	
58 Benzene	78	6.954	6.955	-0.001	98	1120983	100.0	99.8	
59 1,2-Dichloroethane	62	6.985	6.985	0.000	96	358941	100.0	99.3	
62 n-Heptane	43	7.277	7.277	0.000	91	354316	100.0	100.9	
64 Trichloroethene	130	7.666	7.667	-0.001	97	257971	100.0	96.2	
66 Methylcyclohexane	83	7.861	7.861	0.000	93	451734	100.0	103.8	
67 1,2-Dichloropropane	63	7.903	7.898	0.005	95	287048	100.0	99.0	
68 Dibromomethane	93	8.019	8.026	-0.007	97	150162	100.0	100.9	
70 1,4-Dioxane	88	8.049	8.050	-0.001	96	47220	2000.0	2189.4	
71 Dichlorobromomethane	83	8.195	8.196	-0.001	99	291863	100.0	101.3	
74 cis-1,3-Dichloropropene	75	8.652	8.658	-0.006	93	323043	100.0	101.0	
75 4-Methyl-2-pentanone (MIBK)	43	8.822	8.823	-0.001	98	601430	200.0	222.4	
76 Toluene	91	8.986	8.987	-0.001	99	1127417	100.0	102.7	
77 trans-1,3-Dichloropropene	75	9.217	9.218	-0.001	98	272983	100.0	110.1	
78 Ethyl methacrylate	69	9.315	9.315	0.000	92	295910	100.0	109.5	
79 1,1,2-Trichloroethane	97	9.400	9.401	-0.001	93	226306	100.0	103.9	
80 Tetrachloroethene	164	9.534	9.534	0.000	96	207570	100.0	103.2	
81 1,3-Dichloropropane	76	9.564	9.565	-0.001	94	410915	100.0	106.1	
82 2-Hexanone	43	9.655	9.656	-0.001	98	439632	200.0	223.2	
84 Chlorodibromomethane	129	9.789	9.784	0.005	91	176118	100.0	106.2	
85 Ethylene Dibromide	107	9.899	9.899	0.000	98	212650	100.0	104.1	
86 3-Chlorobenzotrifluoride	180	10.373	10.368	0.005	93	360336	100.0	103.0	
87 Chlorobenzene	112	10.392	10.386	0.006	93	696046	100.0	102.1	
88 4-Chlorobenzotrifluoride	180	10.428	10.429	-0.001	95	332668	100.0	99.0	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.471	0.000	93	211608	100.0	103.4	
90 Ethylbenzene	106	10.501	10.502	-0.001	98	400385	100.0	106.7	
91 m-Xylene & p-Xylene	106	10.617	10.611	0.006	0	486288	100.0	108.2	
92 o-Xylene	106	11.012	11.013	-0.001	94	455563	100.0	105.3	
93 Styrene	104	11.024	11.025	-0.001	95	760301	100.0	108.4	
94 Bromoform	173	11.213	11.207	0.006	94	97552	100.0	101.5	
96 2-Chlorobenzotrifluoride	180	11.274	11.268	0.006	97	339988	100.0	100.9	
97 Isopropylbenzene	105	11.377	11.378	-0.001	97	1104265	100.0	107.3	
99 1,1,2,2-Tetrachloroethane	83	11.675	11.670	0.005	95	300505	100.0	103.4	
100 Bromobenzene	156	11.681	11.682	-0.001	96	266208	100.0	98.4	
101 1,2,3-Trichloropropane	110	11.718	11.718	0.000	87	92002	100.0	94.8	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.731	-0.001	68	80432	100.0	104.5	
103 N-Propylbenzene	120	11.785	11.785	0.000	98	327915	100.0	104.3	
104 2-Chlorotoluene	126	11.870	11.870	0.000	96	275628	100.0	103.1	
105 3-Chlorotoluene	126	11.931	11.931	0.000	95	288157	100.0	99.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.962	-0.001	97	892859	100.0	103.2	
107 4-Chlorotoluene	126	11.979	11.980	-0.001	98	314376	100.0	104.1	
108 tert-Butylbenzene	119	12.290	12.284	0.006	94	752605	100.0	104.8	
110 1,2,4-Trimethylbenzene	105	12.332	12.333	-0.001	97	892073	100.0	103.9	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.400	-0.001	97	225562	100.0	94.6	
112 sec-Butylbenzene	105	12.509	12.509	0.000	95	1052833	100.0	103.3	
113 1,3-Dichlorobenzene	146	12.618	12.619	-0.001	97	464100	100.0	97.1	
114 4-Isopropyltoluene	119	12.649	12.649	0.000	96	862927	100.0	105.2	
115 1,4-Dichlorobenzene	146	12.703	12.710	-0.007	92	485653	100.0	100.3	
116 2,4-Dichloro-1-(trifluorom	214	12.758	12.759	-0.001	98	211922	100.0	95.1	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.801	0.006	0	225618	100.0	95.0	
120 n-Butylbenzene	91	13.062	13.063	-0.001	98	744919	100.0	105.1	
121 1,2-Dichlorobenzene	146	13.080	13.081	-0.001	95	419094	100.0	97.7	
122 1,2-Dibromo-3-Chloropropan	75	13.859	13.860	-0.001	78	34973	100.0	97.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.005	14.006	-0.001	0	768635	300.0	302.3	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.426	-0.001	0	474185	200.0	206.3	
126 1,2,4-Trichlorobenzene	180	14.693	14.693	0.000	93	160841	100.0	96.5	
127 Hexachlorobutadiene	225	14.857	14.864	-0.007	97	73637	100.0	91.1	
128 Naphthalene	128	14.942	14.943	-0.001	98	418984	100.0	91.2	
129 1,2,3-Trichlorobenzene	180	15.185	15.186	-0.001	96	123273	100.0	93.8	
131 2,4,5-Trichlorotoluene	159	15.964	15.965	-0.001	0	48135	100.0	87.8	
130 2,3,6-Trichlorotoluene	159	16.061	16.062	-0.001	95	47738	100.0	109.9	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		200.0	194.4	
S 133 Xylenes, Total	106				0		200.0	213.5	
S 135 1,3-Dichloropropene, Total	1				0		200.0	211.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACRPRI_00005	Amount Added: 8.00	Units: uL	
VOA8260SURR_00033	Amount Added: 4.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 4.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 4.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 4.00	Units: uL	
voaW VA pri R_00005	Amount Added: 4.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424012.D

Injection Date: 24-Apr-2015 18:23:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD20

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

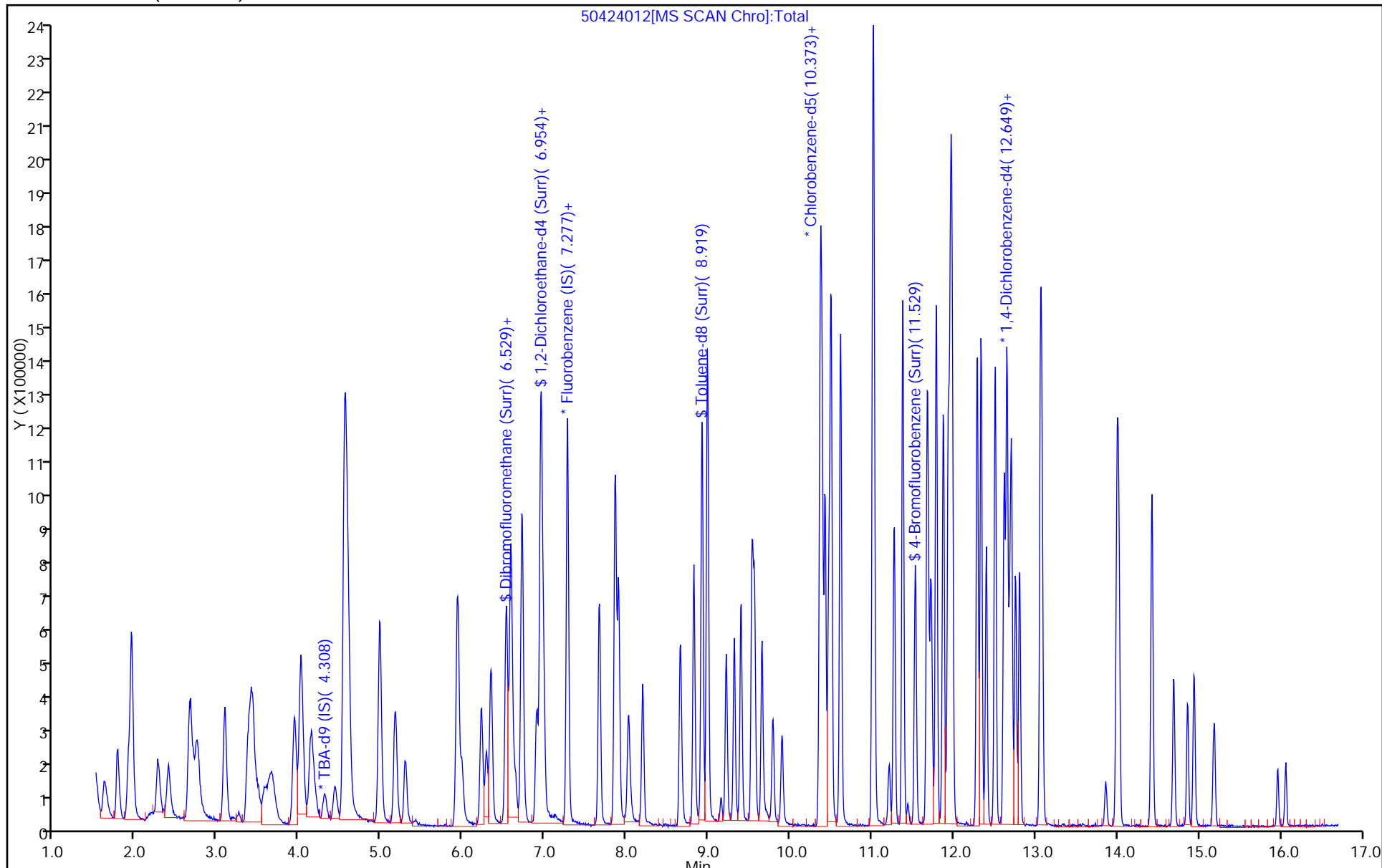
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424013.D
 Lims ID: IC VSTD35
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 24-Apr-2015 18:47:30 ALS Bottle#: 8 Worklist Smp#: 13
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD35
 Misc. Info.: 180-0006617-013
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 11:30:17 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 27-Apr-2015 10:57:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.317	4.309	0.008	0	149602	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.268	7.271	-0.003	98	475358	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.364	10.356	0.008	88	116197	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.686	-0.004	95	163152	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.526	6.529	-0.003	83	378900	175.0	175.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.897	6.900	-0.003	0	495909	175.0	173.9	
\$ 7 Toluene-d8 (Surr)	98	8.923	8.920	0.003	94	1521094	175.0	165.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.526	11.530	-0.004	86	579429	175.0	179.9	
11 Dichlorodifluoromethane	85	1.622	1.614	0.008	99	526683	175.0	165.1	
12 Chloromethane	50	1.775	1.772	0.003	99	624497	175.0	163.4	
13 Vinyl chloride	62	1.908	1.906	0.002	98	594883	175.0	166.9	
14 Butadiene	39	1.945	1.942	0.003	95	648218	175.0	158.0	
15 Bromomethane	94	2.261	2.271	-0.010	90	333927	175.0	156.3	
16 Chloroethane	64	2.401	2.399	0.002	99	456241	175.0	169.2	
17 Dichlorofluoromethane	67	2.651	2.654	-0.003	98	945590	175.0	164.1	
18 Trichlorofluoromethane	101	2.724	2.727	-0.003	86	775964	175.0	167.1	
20 Ethyl ether	59	3.089	3.080	0.009	96	475602	175.0	151.6	
21 Acrolein	56	3.259	3.256	0.003	98	55976	225.0	203.0	
22 1,1-Dichloroethene	96	3.375	3.372	0.003	97	436394	175.0	156.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.423	3.427	-0.004	95	451160	175.0	152.3	
24 Acetone	43	3.490	3.487	0.003	99	374945	350.0	329.0	
25 Iodomethane	142	3.563	3.591	-0.028	98	681458	175.0	166.7	
26 Carbon disulfide	76	3.654	3.658	-0.004	100	976725	175.0	178.0	
28 3-Chloro-1-propene	76	3.940	3.932	0.008	89	270709	175.0	181.7	
30 Methyl acetate	43	4.019	4.011	0.008	98	2317074	875.0	840.1	
31 Methylene Chloride	84	4.141	4.132	0.009	97	516502	175.0	161.1	
32 2-Methyl-2-propanol	59	4.439	4.430	0.009	87	282898	1750.0	1762.9	
33 Acrylonitrile	53	4.549	4.546	0.003	98	2355192	1750.0	1775.8	
34 trans-1,2-Dichloroethene	96	4.555	4.558	-0.003	54	494258	175.0	175.4	
35 Methyl tert-butyl ether	73	4.591	4.595	-0.004	97	1195424	175.0	177.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.974	4.984	-0.010	96	734565	175.0	163.8	
37 1,1-Dichloroethane	63	5.169	5.173	-0.004	96	924823	175.0	172.7	
38 Vinyl acetate	43	5.291	5.288	0.003	97	634995	175.0	152.3	
44 2,2-Dichloropropane	77	5.923	5.921	0.002	80	291680	175.0	172.8	
45 cis-1,2-Dichloroethene	96	5.936	5.933	0.003	84	529989	175.0	180.2	
46 2-Butanone (MEK)	43	5.984	5.982	0.002	100	541568	350.0	356.8	
49 Chlorobromomethane	128	6.222	6.225	-0.003	94	233207	175.0	178.2	
51 Tetrahydrofuran	42	6.289	6.286	0.002	90	358563	350.0	355.1	
52 Chloroform	83	6.343	6.341	0.002	95	801408	175.0	173.4	
53 1,1,1-Trichloroethane	97	6.526	6.529	-0.003	97	548878	175.0	172.4	
54 Cyclohexane	56	6.587	6.584	0.003	90	923671	175.0	177.9	
56 Carbon tetrachloride	117	6.714	6.712	0.002	95	471442	175.0	179.5	
55 1,1-Dichloropropene	75	6.720	6.724	-0.004	93	631330	175.0	173.4	
57 Isobutyl alcohol	41	6.939	6.943	-0.004	94	356845	4375.0	4719.1	
58 Benzene	78	6.952	6.955	-0.003	99	1980227	175.0	173.3	
59 1,2-Dichloroethane	62	6.982	6.985	-0.003	96	647182	175.0	176.1	
62 n-Heptane	43	7.280	7.277	0.003	93	597993	175.0	167.4	
64 Trichloroethene	130	7.663	7.667	-0.004	97	485390	175.0	178.0	
66 Methylcyclohexane	83	7.858	7.861	-0.003	91	801582	175.0	181.1	
67 1,2-Dichloropropane	63	7.901	7.898	0.003	94	516271	175.0	175.1	
68 Dibromomethane	93	8.022	8.026	-0.004	97	271861	175.0	179.6	
70 1,4-Dioxane	88	8.059	8.050	0.009	98	86600	3500.0	3947.9	
71 Dichlorobromomethane	83	8.193	8.196	-0.003	98	554188	175.0	189.0	
74 cis-1,3-Dichloropropene	75	8.655	8.658	-0.003	93	635611	175.0	195.4	
75 4-Methyl-2-pentanone (MIBK)	43	8.819	8.823	-0.004	98	1114206	350.0	374.7	
76 Toluene	91	8.990	8.987	0.003	98	1957991	175.0	162.2	
77 trans-1,3-Dichloropropene	75	9.215	9.218	-0.003	98	509463	175.0	186.9	
78 Ethyl methacrylate	69	9.312	9.315	-0.003	91	571133	175.0	192.3	
79 1,1,2-Trichloroethane	97	9.397	9.401	-0.004	92	396807	175.0	165.6	
80 Tetrachloroethene	164	9.531	9.534	-0.003	95	358149	175.0	162.0	
81 1,3-Dichloropropane	76	9.561	9.565	-0.004	94	730477	175.0	171.6	
82 2-Hexanone	43	9.653	9.656	-0.003	98	805146	350.0	371.8	
84 Chlorodibromomethane	129	9.786	9.784	0.002	92	339579	175.0	186.2	
85 Ethylene Dibromide	107	9.902	9.899	0.003	98	387735	175.0	172.6	
86 3-Chlorobenzotrifluoride	180	10.371	10.368	0.002	94	634055	175.0	164.9	
87 Chlorobenzene	112	10.389	10.386	0.003	93	1260240	175.0	168.1	
88 4-Chlorobenzotrifluoride	180	10.425	10.429	-0.004	96	616841	175.0	167.0	
89 1,1,1,2-Tetrachloroethane	131	10.468	10.471	-0.003	94	412437	175.0	183.2	
90 Ethylbenzene	106	10.498	10.502	-0.004	98	727329	175.0	176.3	
91 m-Xylene & p-Xylene	106	10.614	10.611	0.003	0	884948	175.0	179.1	
92 o-Xylene	106	11.009	11.013	-0.004	94	859260	175.0	180.7	
93 Styrene	104	11.021	11.025	-0.004	91	1396294	175.0	181.1	
94 Bromoform	173	11.210	11.207	0.003	95	204898	175.0	194.0	
96 2-Chlorobenzotrifluoride	180	11.271	11.268	0.003	96	625712	175.0	169.0	
97 Isopropylbenzene	105	11.374	11.378	-0.004	97	2017940	175.0	178.4	
99 1,1,2,2-Tetrachloroethane	83	11.672	11.670	0.002	95	551027	175.0	172.5	
100 Bromobenzene	156	11.678	11.682	-0.004	96	508592	175.0	171.8	
101 1,2,3-Trichloropropane	110	11.715	11.718	-0.003	87	177658	175.0	167.4	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.731	0.002	84	153462	175.0	182.3	
103 N-Propylbenzene	120	11.788	11.785	0.003	98	607697	175.0	176.7	
104 2-Chlorotoluene	126	11.873	11.870	0.003	96	517461	175.0	177.0	
105 3-Chlorotoluene	126	11.934	11.931	0.003	94	558295	175.0	176.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.958	11.962	-0.004	95	1664840	175.0	175.9	
107 4-Chlorotoluene	126	11.983	11.980	0.003	98	560503	175.0	169.8	
108 tert-Butylbenzene	119	12.287	12.284	0.003	92	1376965	175.0	175.3	
110 1,2,4-Trimethylbenzene	105	12.335	12.333	0.002	97	1692205	175.0	180.1	
111 1,2-dichloro-4-(trifluorom	214	12.402	12.400	0.002	97	436727	175.0	167.4	
112 sec-Butylbenzene	105	12.506	12.509	-0.003	95	1947211	175.0	174.7	
113 1,3-Dichlorobenzene	146	12.615	12.619	-0.004	97	893637	175.0	170.9	
114 4-Isopropyltoluene	119	12.652	12.649	0.003	96	1628611	175.0	181.6	
115 1,4-Dichlorobenzene	146	12.707	12.710	-0.003	93	913346	175.0	172.5	
116 2,4-Dichloro-1-(trifluorom	214	12.755	12.759	-0.004	97	401592	175.0	164.8	
118 2,5-Dichlorobenzotrifluori	214	12.804	12.801	0.003	0	453739	175.0	174.6	
120 n-Butylbenzene	91	13.059	13.063	-0.004	97	1421186	175.0	183.2	
121 1,2-Dichlorobenzene	146	13.078	13.081	-0.003	96	832000	175.0	177.3	
122 1,2-Dibromo-3-Chloropropan	75	13.856	13.860	-0.004	78	72152	175.0	183.1	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.002	14.006	-0.004	0	1611999	525.0	579.7	
125 2,3- & 3,4- Dichlorotoluen	125	14.422	14.426	-0.004	0	992828	350.0	394.9	
126 1,2,4-Trichlorobenzene	180	14.690	14.693	-0.003	93	345696	175.0	189.7	
127 Hexachlorobutadiene	225	14.860	14.864	-0.004	98	150359	175.0	170.0	
128 Naphthalene	128	14.939	14.943	-0.004	98	967112	175.0	188.1	
129 1,2,3-Trichlorobenzene	180	15.183	15.186	-0.003	95	279357	175.0	194.3	
131 2,4,5-Trichlorotoluene	159	15.961	15.965	-0.004	0	121335	175.0	202.3	
130 2,3,6-Trichlorotoluene	159	16.059	16.062	-0.003	94	117640	175.0	247.7	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		350.0	355.6	
S 133 Xylenes, Total	106				0		350.0	359.8	
S 135 1,3-Dichloropropene, Total	1				0		350.0	382.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

voaW VA pri R_00005	Amount Added: 7.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 7.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 7.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 7.00	Units: uL	
VOA8260SURR_00033	Amount Added: 7.00	Units: uL	
VOAACRPRI_00005	Amount Added: 9.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424013.D

Injection Date: 24-Apr-2015 18:47:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD35

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

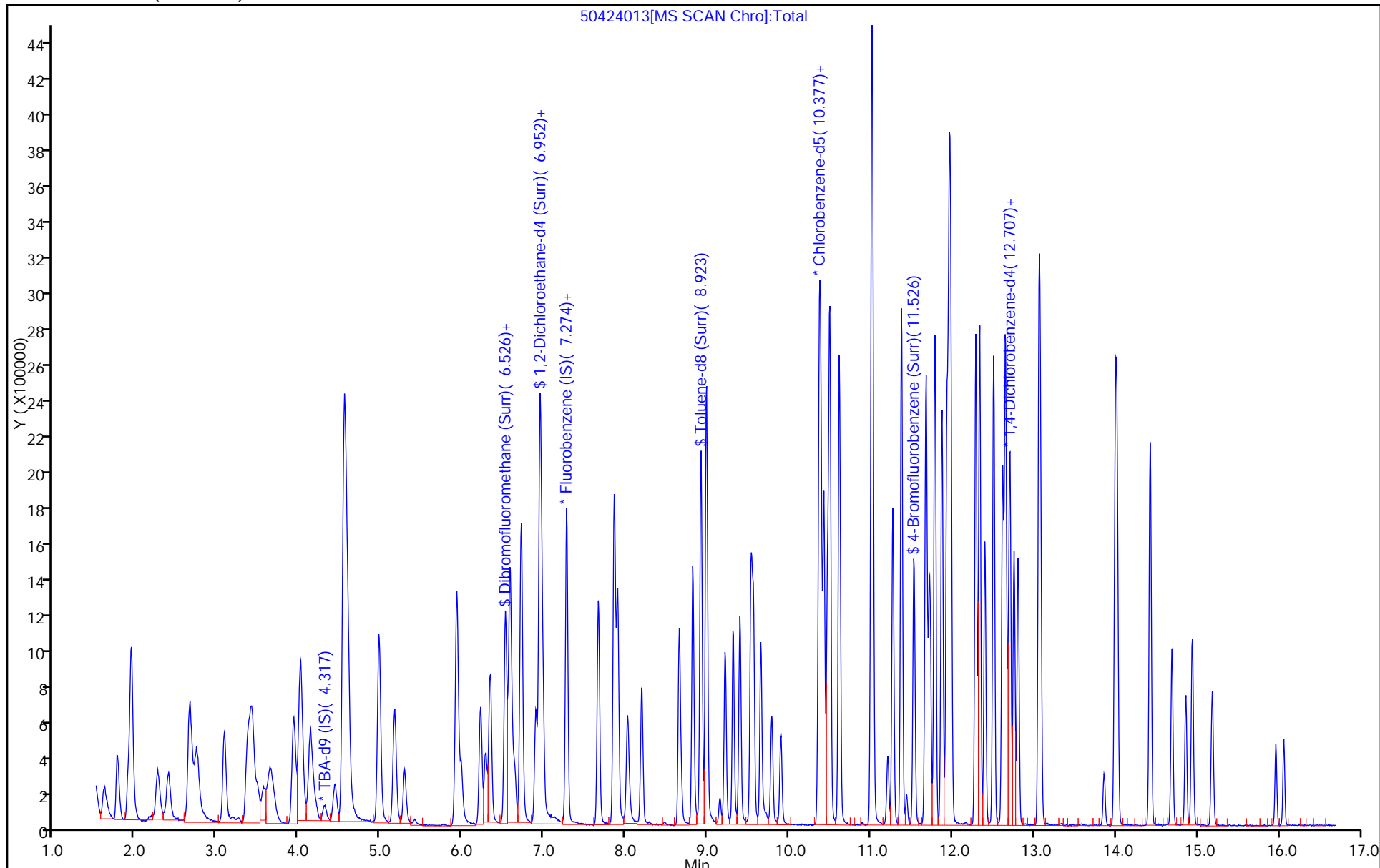
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424014.D
 Lims ID: IC VSTD40
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 24-Apr-2015 19:11:30 ALS Bottle#: 9 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD40
 Misc. Info.: 180-0006617-014
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 11:30:19 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 27-Apr-2015 10:59:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.310	4.309	0.001	0	169712	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.267	7.271	-0.004	97	495061	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.363	10.356	0.007	89	122637	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.681	12.686	-0.005	95	162243	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.525	6.529	-0.004	92	420743	200.0	187.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.896	6.900	-0.004	0	562219	200.0	189.3	
\$ 7 Toluene-d8 (Surr)	98	8.922	8.920	0.002	94	1723486	200.0	177.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.531	11.530	0.001	88	654358	200.0	192.5	
11 Dichlorodifluoromethane	85	1.615	1.614	0.001	99	589773	200.0	177.5	
12 Chloromethane	50	1.774	1.772	0.002	99	717020	200.0	180.2	
13 Vinyl chloride	62	1.913	1.906	0.007	98	683166	200.0	184.1	
14 Butadiene	39	1.944	1.942	0.002	95	750828	200.0	175.8	
15 Bromomethane	94	2.260	2.271	-0.011	91	400199	200.0	179.9	
16 Chloroethane	64	2.388	2.399	-0.011	100	519359	200.0	184.9	
17 Dichlorofluoromethane	67	2.650	2.654	-0.004	98	1114470	200.0	185.8	
18 Trichlorofluoromethane	101	2.723	2.727	-0.004	97	886318	200.0	183.3	
20 Ethyl ether	59	3.082	3.080	0.002	96	673008	200.0	206.0	
21 Acrolein	56	3.258	3.256	0.002	98	83671	250.0	291.4	
22 1,1-Dichloroethene	96	3.374	3.372	0.002	96	610859	200.0	210.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.416	3.427	-0.011	95	663086	200.0	214.9	
24 Acetone	43	3.489	3.487	0.002	98	539402	400.0	454.4	
25 Iodomethane	142	3.586	3.591	-0.005	99	942559	200.0	221.4	
26 Carbon disulfide	76	3.659	3.658	0.001	100	1436286	200.0	251.4	
28 3-Chloro-1-propene	76	3.933	3.932	0.001	87	389981	200.0	251.3	
30 Methyl acetate	43	4.018	4.011	0.007	98	3376493	1000.0	1175.5	
31 Methylene Chloride	84	4.140	4.132	0.008	99	732705	200.0	219.5	
32 2-Methyl-2-propanol	59	4.444	4.430	0.014	86	368269	2000.0	2023.0	
33 Acrylonitrile	53	4.548	4.546	0.002	98	3308408	2000.0	2395.2	
34 trans-1,2-Dichloroethene	96	4.560	4.558	0.002	97	678629	200.0	231.2	
35 Methyl tert-butyl ether	73	4.596	4.595	0.001	97	1827108	200.0	259.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.973	4.984	-0.011	96	1135106	200.0	243.1	
37 1,1-Dichloroethane	63	5.168	5.173	-0.005	96	1381559	200.0	247.7	
38 Vinyl acetate	43	5.290	5.288	0.002	98	1060817	200.0	244.3	
44 2,2-Dichloropropane	77	5.929	5.921	0.008	52	345280	200.0	196.4	
45 cis-1,2-Dichloroethene	96	5.935	5.933	0.002	84	628379	200.0	205.1	
46 2-Butanone (MEK)	43	5.983	5.982	0.001	99	654379	400.0	414.0	
49 Chlorobromomethane	128	6.227	6.225	0.002	94	267815	200.0	196.5	
51 Tetrahydrofuran	42	6.281	6.286	-0.005	90	418333	400.0	397.8	
52 Chloroform	83	6.342	6.341	0.001	95	917660	200.0	190.7	
53 1,1,1-Trichloroethane	97	6.531	6.529	0.002	98	662574	200.0	199.8	
54 Cyclohexane	56	6.586	6.584	0.002	91	1102084	200.0	203.8	
56 Carbon tetrachloride	117	6.713	6.712	0.001	95	558360	200.0	204.2	
55 1,1-Dichloropropene	75	6.726	6.724	0.002	95	755489	200.0	199.2	
57 Isobutyl alcohol	41	6.945	6.943	0.002	95	414909	5000.0	5268.6	
58 Benzene	78	6.951	6.955	-0.004	99	2303570	200.0	193.6	
59 1,2-Dichloroethane	62	6.987	6.985	0.002	96	750978	200.0	196.2	
62 n-Heptane	43	7.279	7.277	0.002	95	747619	200.0	200.9	
64 Trichloroethene	130	7.662	7.667	-0.005	97	565584	200.0	199.2	
66 Methylcyclohexane	83	7.857	7.861	-0.004	94	964151	200.0	209.1	
67 1,2-Dichloropropane	63	7.900	7.898	0.002	95	623655	200.0	203.1	
68 Dibromomethane	93	8.021	8.026	-0.005	97	321906	200.0	204.2	
70 1,4-Dioxane	88	8.058	8.050	0.008	98	99701	4000.0	4364.2	
71 Dichlorobromomethane	83	8.198	8.196	0.002	98	635165	200.0	208.0	
74 cis-1,3-Dichloropropene	75	8.654	8.658	-0.004	93	754429	200.0	222.6	
75 4-Methyl-2-pentanone (MIBK)	43	8.818	8.823	-0.005	98	1331393	400.0	424.3	
76 Toluene	91	8.989	8.987	0.002	98	2278169	200.0	178.8	
77 trans-1,3-Dichloropropene	75	9.220	9.218	0.002	97	634859	200.0	220.7	
78 Ethyl methacrylate	69	9.317	9.315	0.002	91	706226	200.0	225.3	
79 1,1,2-Trichloroethane	97	9.396	9.401	-0.005	92	466823	200.0	184.6	
80 Tetrachloroethene	164	9.530	9.534	-0.004	94	421487	200.0	180.6	
81 1,3-Dichloropropane	76	9.560	9.565	-0.005	95	879071	200.0	195.7	
82 2-Hexanone	43	9.652	9.656	-0.004	97	1001355	400.0	438.1	
84 Chlorodibromomethane	129	9.785	9.784	0.001	91	412305	200.0	214.3	
85 Ethylene Dibromide	107	9.895	9.899	-0.004	98	469103	200.0	197.8	
86 3-Chlorobenzotrifluoride	180	10.370	10.368	0.002	95	725312	200.0	178.8	
87 Chlorobenzene	112	10.388	10.386	0.002	93	1471133	200.0	185.9	
88 4-Chlorobenzotrifluoride	180	10.424	10.429	-0.005	97	704270	200.0	180.6	
89 1,1,1,2-Tetrachloroethane	131	10.473	10.471	0.002	94	479304	200.0	201.8	
90 Ethylbenzene	106	10.497	10.502	-0.005	98	851009	200.0	195.4	
91 m-Xylene & p-Xylene	106	10.613	10.611	0.002	0	1043532	200.0	200.1	
92 o-Xylene	106	11.008	11.013	-0.005	93	994646	200.0	198.2	
93 Styrene	104	11.020	11.025	-0.005	93	1628344	200.0	200.1	
94 Bromoform	173	11.209	11.207	0.002	96	246887	200.0	221.5	
96 2-Chlorobenzotrifluoride	180	11.270	11.268	0.002	95	711559	200.0	182.1	
97 Isopropylbenzene	105	11.373	11.378	-0.005	97	2331119	200.0	195.3	
99 1,1,2,2-Tetrachloroethane	83	11.671	11.670	0.001	96	628556	200.0	186.4	
100 Bromobenzene	156	11.684	11.682	0.002	97	595085	200.0	202.2	
101 1,2,3-Trichloropropane	110	11.720	11.718	0.002	86	201849	200.0	191.2	
102 trans-1,4-Dichloro-2-buten	53	11.726	11.731	-0.005	84	186400	200.0	222.6	
103 N-Propylbenzene	120	11.787	11.785	0.002	97	711784	200.0	208.1	
104 2-Chlorotoluene	126	11.872	11.870	0.002	96	599022	200.0	206.1	
105 3-Chlorotoluene	126	11.933	11.931	0.002	94	626480	200.0	198.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.963	11.962	0.001	95	1879631	200.0	199.8	
107 4-Chlorotoluene	126	11.982	11.980	0.002	98	664958	200.0	202.5	
108 tert-Butylbenzene	119	12.286	12.284	0.002	92	1580607	200.0	202.3	
110 1,2,4-Trimethylbenzene	105	12.334	12.333	0.001	98	1904193	200.0	203.8	
111 1,2-dichloro-4-(trifluorom	214	12.401	12.400	0.001	97	483067	200.0	186.2	
112 sec-Butylbenzene	105	12.505	12.509	-0.004	95	2207424	200.0	199.1	
113 1,3-Dichlorobenzene	146	12.620	12.619	0.001	97	1007836	200.0	193.8	
114 4-Isopropyltoluene	119	12.651	12.649	0.002	95	1812779	200.0	203.2	
115 1,4-Dichlorobenzene	146	12.706	12.710	-0.004	94	1045148	200.0	198.5	
116 2,4-Dichloro-1-(trifluorom	214	12.754	12.759	-0.005	98	434504	200.0	179.3	
118 2,5-Dichlorobenzotrifluori	214	12.803	12.801	0.002	0	506101	200.0	195.8	
120 n-Butylbenzene	91	13.058	13.063	-0.005	97	1610096	200.0	208.8	
121 1,2-Dichlorobenzene	146	13.083	13.081	0.002	95	912433	200.0	195.6	
122 1,2-Dibromo-3-Chloropropan	75	13.861	13.860	0.001	82	81300	200.0	207.4	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.007	14.006	0.001	0	1700748	600.0	615.0	
125 2,3- & 3,4- Dichlorotoluen	125	14.421	14.426	-0.005	0	1064995	400.0	426.0	
126 1,2,4-Trichlorobenzene	180	14.689	14.693	-0.004	94	367766	200.0	202.9	
127 Hexachlorobutadiene	225	14.859	14.864	-0.005	97	167765	200.0	190.8	
128 Naphthalene	128	14.938	14.943	-0.005	98	1068807	200.0	208.6	
129 1,2,3-Trichlorobenzene	180	15.182	15.186	-0.004	95	309601	200.0	216.6	
131 2,4,5-Trichlorotoluene	159	15.960	15.965	-0.005	0	147040	200.0	246.5	
130 2,3,6-Trichlorotoluene	159	16.064	16.062	0.002	96	139036	200.0	294.4	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		400.0	436.3	
S 133 Xylenes, Total	106				0		400.0	398.3	
S 135 1,3-Dichloropropene, Total	1				0		400.0	443.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOAACRPRI_00005	Amount Added: 10.00	Units: uL	
voaW VA pri R_00005	Amount Added: 8.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 8.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 8.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 8.00	Units: uL	
VOA8260SURR_00033	Amount Added: 8.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424014.D

Injection Date: 24-Apr-2015 19:11:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD40

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

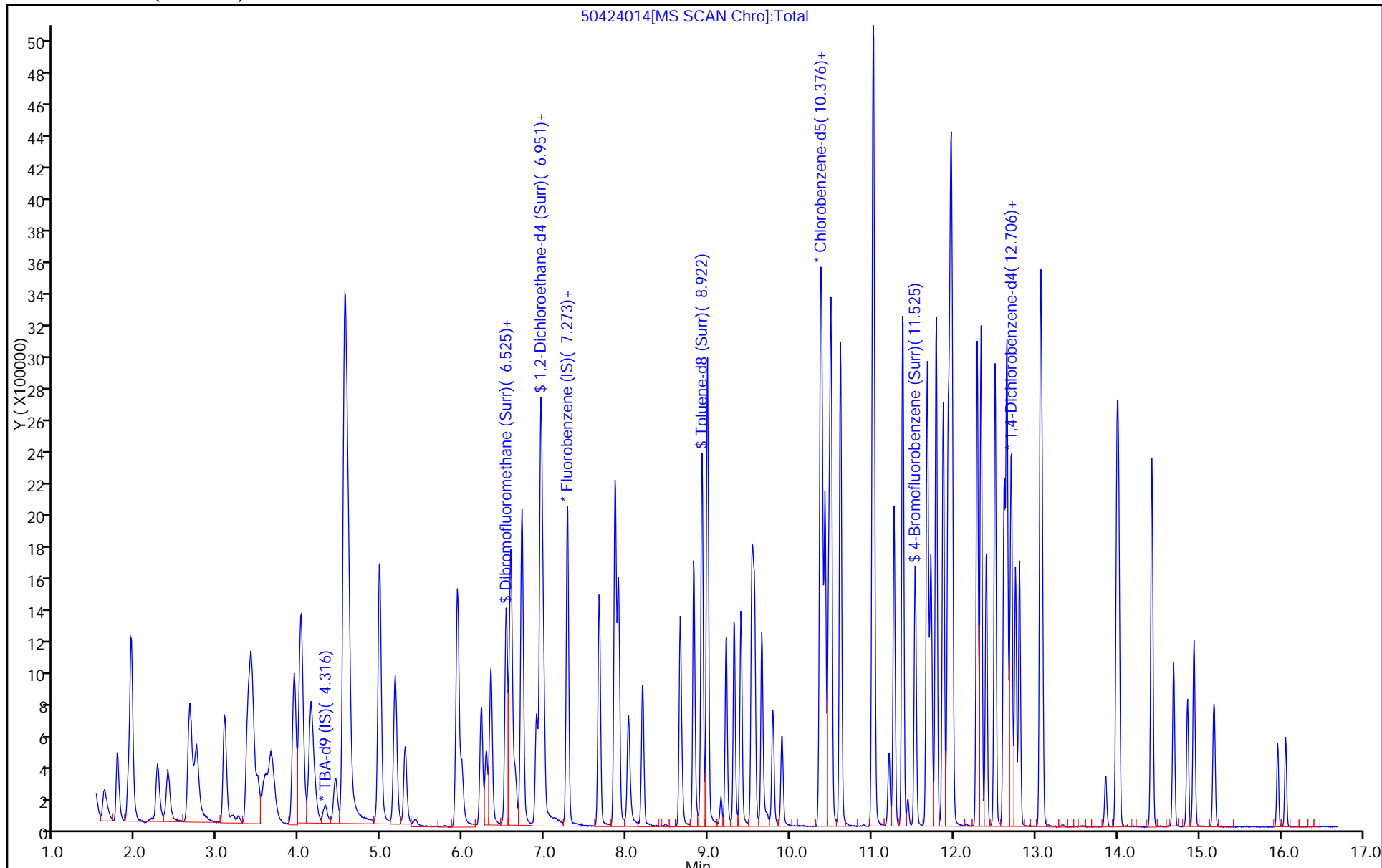
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Lims ID: IC VSTD50
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 24-Apr-2015 19:35:30 ALS Bottle#: 10 Worklist Smp#: 15
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD50
 Misc. Info.: 180-0006617-015
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub4
 Method: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 11:30:21 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 27-Apr-2015 11:00:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.314	4.309	0.005	0	145371	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.271	7.271	0.000	98	527737	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.356	0.005	86	137435	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.686	-0.001	85	173929	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.522	6.529	-0.007	93	532269	250.0	222.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.893	6.900	-0.007	0	700249	250.0	221.2	
\$ 7 Toluene-d8 (Surr)	98	8.919	8.920	-0.001	94	2122561	250.0	194.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.529	11.530	-0.001	86	820593	250.0	215.4	
11 Dichlorodifluoromethane	85	1.613	1.614	-0.001	100	765200	250.0	216.0	
12 Chloromethane	50	1.777	1.772	0.005	99	913210	250.0	215.3	
13 Vinyl chloride	62	1.917	1.906	0.011	98	859437	250.0	217.2	
14 Butadiene	39	1.942	1.942	0.000	96	937657	250.0	205.9	
15 Bromomethane	94	2.270	2.271	-0.001	92	488129	250.0	205.8	
16 Chloroethane	64	2.392	2.399	-0.007	99	651587	250.0	217.6	
17 Dichlorofluoromethane	67	2.653	2.654	-0.001	99	1336664	250.0	209.0	
18 Trichlorofluoromethane	101	2.720	2.727	-0.007	98	1105877	250.0	214.5	
20 Ethyl ether	59	3.079	3.080	-0.001	95	711037	250.0	204.1	
21 Acrolein	56	3.243	3.256	-0.013	96	77313	275.0	252.6	
22 1,1-Dichloroethene	96	3.371	3.372	-0.001	99	648612	250.0	209.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.426	3.427	-0.001	94	675603	250.0	205.4	
24 Acetone	43	3.487	3.487	0.000	100	541555	500.0	428.0	
25 Iodomethane	142	3.578	3.591	-0.013	98	1021402	250.0	225.1	
26 Carbon disulfide	76	3.651	3.658	-0.007	100	1522450	250.0	250.0	
28 3-Chloro-1-propene	76	3.931	3.932	-0.001	90	416813	250.0	252.0	
30 Methyl acetate	43	4.016	4.011	0.005	98	3303347	1250.0	1078.8	
31 Methylene Chloride	84	4.132	4.132	0.000	97	760725	250.0	213.8	
32 2-Methyl-2-propanol	59	4.442	4.430	0.012	88	369256	2500.0	2368.1	
33 Acrylonitrile	53	4.545	4.546	-0.001	98	3304194	2500.0	2244.1	
34 trans-1,2-Dichloroethene	96	4.557	4.558	-0.001	98	713627	250.0	228.1	
35 Methyl tert-butyl ether	73	4.594	4.595	-0.001	97	1789952	250.0	238.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.977	4.984	-0.007	95	1146126	250.0	230.2	
37 1,1-Dichloroethane	63	5.172	5.173	-0.001	97	1357103	250.0	228.3	
38 Vinyl acetate	43	5.294	5.288	0.006	98	1271694	250.0	274.7	
44 2,2-Dichloropropane	77	5.920	5.921	-0.001	79	425787	250.0	227.2	
45 cis-1,2-Dichloroethene	96	5.932	5.933	-0.001	83	784878	250.0	240.4	
46 2-Butanone (MEK)	43	5.987	5.982	0.005	100	846548	500.0	502.4	
49 Chlorobromomethane	128	6.218	6.225	-0.007	95	344147	250.0	236.9	
51 Tetrahydrofuran	42	6.279	6.286	-0.007	89	547861	500.0	488.8	
52 Chloroform	83	6.340	6.341	-0.001	95	1170414	250.0	228.1	
53 1,1,1-Trichloroethane	97	6.522	6.529	-0.007	97	833252	250.0	235.8	
54 Cyclohexane	56	6.583	6.584	-0.001	93	1423953	250.0	247.1	
56 Carbon tetrachloride	117	6.717	6.712	0.005	95	710010	250.0	243.5	
55 1,1-Dichloropropene	75	6.723	6.724	-0.001	94	944491	250.0	233.7	
57 Isobutyl alcohol	41	6.942	6.943	-0.001	93	519315	6250.0	6186.0	
58 Benzene	78	6.954	6.955	-0.001	99	2815995	250.0	222.0	
59 1,2-Dichloroethane	62	6.985	6.985	0.000	96	961702	250.0	235.7	
62 n-Heptane	43	7.277	7.277	0.000	92	945496	250.0	238.4	
64 Trichloroethene	130	7.660	7.667	-0.007	97	690392	250.0	228.1	
66 Methylcyclohexane	83	7.861	7.861	0.000	93	1221901	250.0	248.6	
67 1,2-Dichloropropane	63	7.897	7.898	-0.001	94	785719	250.0	240.0	
68 Dibromomethane	93	8.019	8.026	-0.007	96	410265	250.0	244.1	
70 1,4-Dioxane	88	8.055	8.050	0.005	95	125684	5000.0	5161.0	
71 Dichlorobromomethane	83	8.195	8.196	-0.001	98	830465	250.0	255.2	
74 cis-1,3-Dichloropropene	75	8.652	8.658	-0.006	93	1007308	250.0	278.9	
75 4-Methyl-2-pentanone (MIBK)	43	8.822	8.823	-0.001	97	1690241	500.0	480.6	
76 Toluene	91	8.986	8.987	-0.001	97	2840021	250.0	198.9	
77 trans-1,3-Dichloropropene	75	9.217	9.218	-0.001	98	829818	250.0	257.4	
78 Ethyl methacrylate	69	9.315	9.315	0.000	91	912178	250.0	259.7	
79 1,1,2-Trichloroethane	97	9.394	9.401	-0.007	92	601009	250.0	212.1	
80 Tetrachloroethene	164	9.534	9.534	0.000	94	530884	250.0	203.0	
81 1,3-Dichloropropane	76	9.564	9.565	-0.001	96	1105531	250.0	219.6	
82 2-Hexanone	43	9.655	9.656	-0.001	97	1200582	500.0	468.7	
84 Chlorodibromomethane	129	9.789	9.784	0.005	90	531592	250.0	246.5	
85 Ethylene Dibromide	107	9.899	9.899	0.000	100	592590	250.0	223.0	
86 3-Chlorobenzotrifluoride	180	10.367	10.368	-0.001	94	915050	250.0	201.2	
87 Chlorobenzene	112	10.385	10.386	-0.001	96	1854004	250.0	209.1	
88 4-Chlorobenzotrifluoride	180	10.428	10.429	-0.001	97	903960	250.0	206.9	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.471	0.000	94	606640	250.0	227.9	
90 Ethylbenzene	106	10.501	10.502	-0.001	97	1085509	250.0	222.4	
91 m-Xylene & p-Xylene	106	10.617	10.611	0.006	0	1316471	250.0	225.3	
92 o-Xylene	106	11.012	11.013	-0.001	95	1270648	250.0	225.9	
93 Styrene	104	11.024	11.025	-0.001	91	2063587	250.0	226.2	
94 Bromoform	173	11.207	11.207	0.000	96	322247	250.0	258.0	
96 2-Chlorobenzotrifluoride	180	11.267	11.268	-0.001	96	919487	250.0	209.9	
97 Isopropylbenzene	105	11.377	11.378	-0.001	97	2907035	250.0	217.3	
99 1,1,2,2-Tetrachloroethane	83	11.669	11.670	-0.001	95	827882	250.0	219.1	
100 Bromobenzene	156	11.681	11.682	-0.001	97	746475	250.0	236.6	
101 1,2,3-Trichloropropane	110	11.718	11.718	0.000	85	260210	250.0	229.9	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.731	-0.001	85	247286	250.0	275.5	
103 N-Propylbenzene	120	11.785	11.785	0.000	97	907843	250.0	247.6	
104 2-Chlorotoluene	126	11.876	11.870	0.006	96	756631	250.0	242.8	
105 3-Chlorotoluene	126	11.931	11.931	0.000	94	809628	250.0	239.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.962	-0.001	97	2330403	250.0	231.0	
107 4-Chlorotoluene	126	11.979	11.980	-0.001	98	848924	250.0	241.2	
108 tert-Butylbenzene	119	12.290	12.284	0.006	93	2021759	250.0	241.4	
110 1,2,4-Trimethylbenzene	105	12.332	12.333	-0.001	97	2375385	250.0	237.2	
111 1,2-dichloro-4-(trifluorom	214	12.399	12.400	-0.001	97	614103	250.0	220.8	
112 sec-Butylbenzene	105	12.509	12.509	0.000	96	2742758	250.0	230.8	
113 1,3-Dichlorobenzene	146	12.618	12.619	-0.001	96	1260788	250.0	226.1	
114 4-Isopropyltoluene	119	12.648	12.649	-0.001	95	2283712	250.0	238.8	
115 1,4-Dichlorobenzene	146	12.703	12.710	-0.007	93	1307323	250.0	231.6	
116 2,4-Dichloro-1-(trifluorom	214	12.758	12.759	-0.001	97	577923	250.0	222.5	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.801	0.006	0	614338	250.0	221.7	
120 n-Butylbenzene	91	13.056	13.063	-0.007	97	2014246	250.0	243.6	
121 1,2-Dichlorobenzene	146	13.080	13.081	-0.001	96	1142819	250.0	228.5	
122 1,2-Dibromo-3-Chloropropan	75	13.853	13.860	-0.007	81	104851	250.0	249.5	
123 2,4- & 2,5- & 2,6- Dichlor	125	13.999	14.006	-0.007	0	2169867	750.0	731.9	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.426	-0.001	0	1353657	500.0	505.1	
126 1,2,4-Trichlorobenzene	180	14.686	14.693	-0.007	93	488804	250.0	251.6	
127 Hexachlorobutadiene	225	14.863	14.864	-0.001	98	215908	250.0	229.0	
128 Naphthalene	128	14.936	14.943	-0.007	98	1378354	250.0	250.2	
129 1,2,3-Trichlorobenzene	180	15.185	15.186	-0.001	95	402509	250.0	262.6	
131 2,4,5-Trichlorotoluene	159	15.964	15.965	-0.001	0	197750	250.0	309.2	
130 2,3,6-Trichlorotoluene	159	16.061	16.062	-0.001	96	188571	250.0	372.4	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
S 134 1,2-Dichloroethene, Total	96				0		500.0	468.4	
S 133 Xylenes, Total	106				0		500.0	451.2	
S 135 1,3-Dichloropropene, Total	1				0		500.0	536.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00033	Amount Added: 10.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 10.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 10.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 10.00	Units: uL	
voaW VA pri R_00005	Amount Added: 10.00	Units: uL	
VOAACRPRI_00005	Amount Added: 11.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D

Injection Date: 24-Apr-2015 19:35:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD50

Worklist Smp#: 15

Client ID:

Purge Vol: 5.000 mL

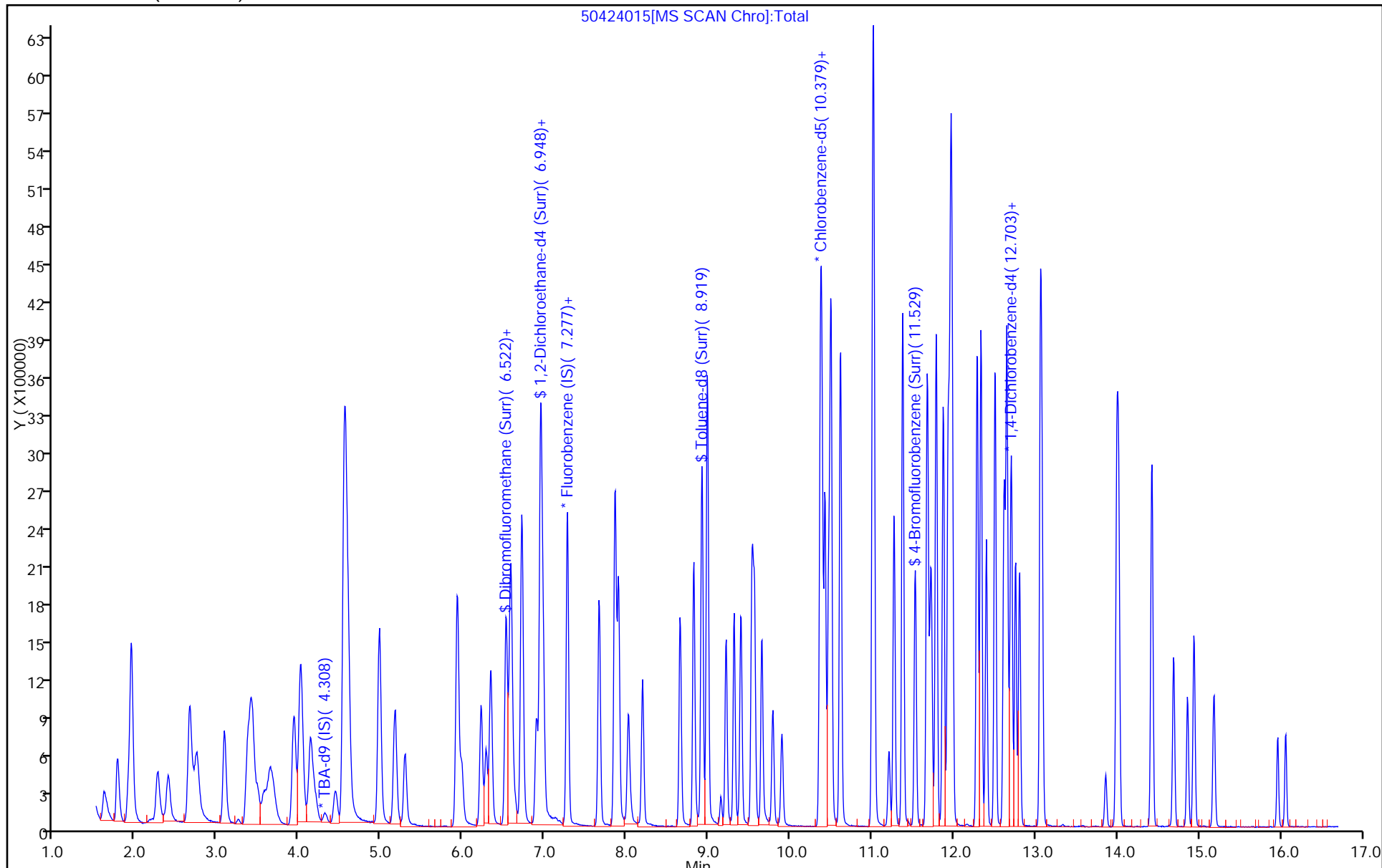
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



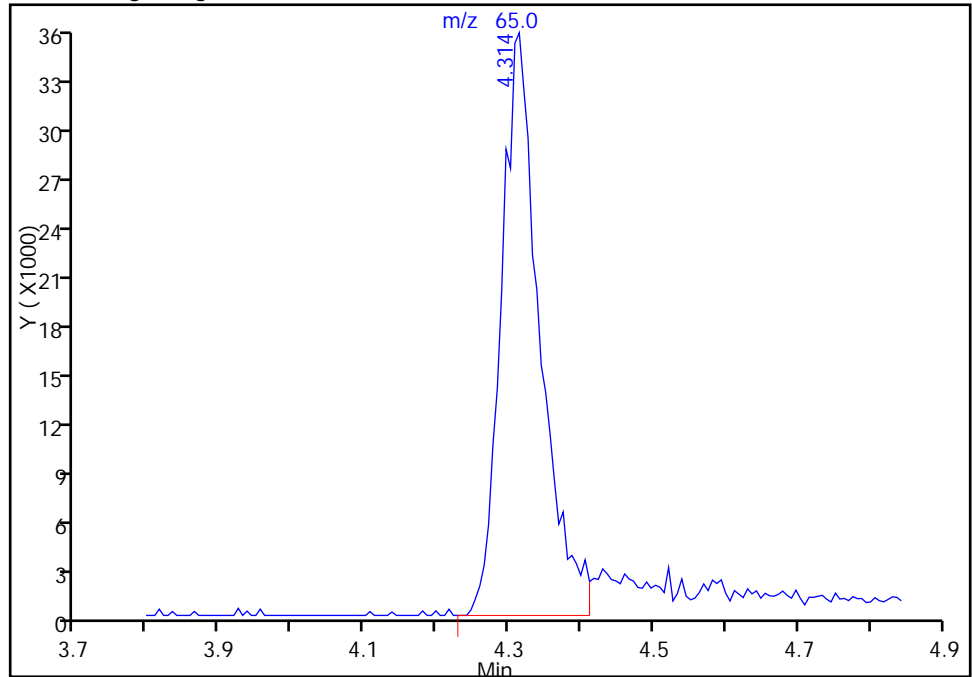
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
Injection Date: 24-Apr-2015 19:35:30 Instrument ID: CHHP5
Lims ID: IC VSTD50
Client ID:
Operator ID: 001562 ALS Bottle#: 10 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

* 1 TBA-d9 (IS), CAS: 25725-11-5

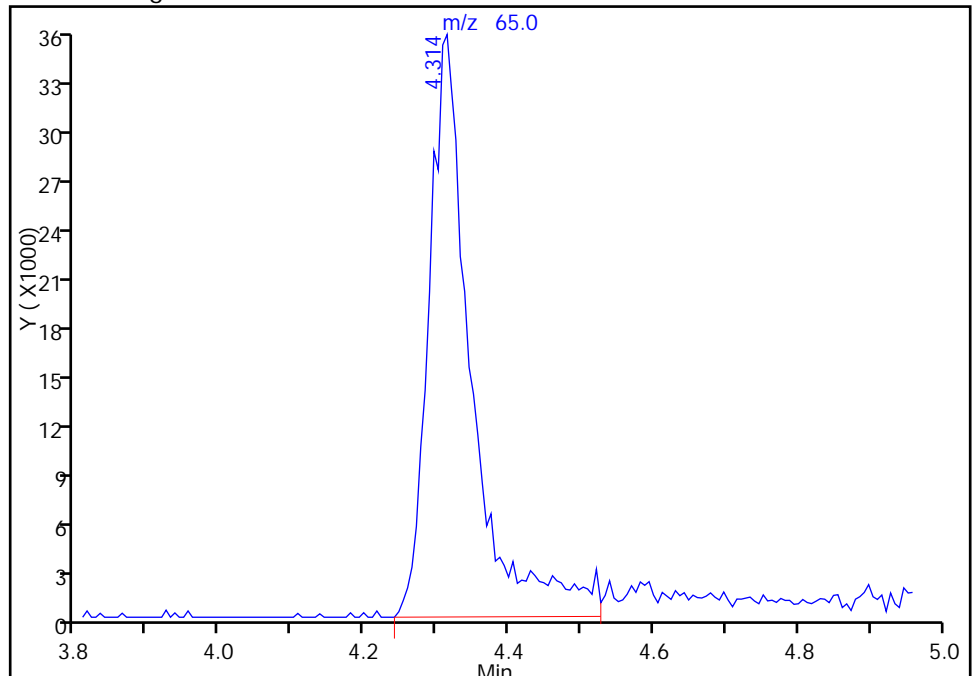
RT: 4.31
Area: 131795
Amount: 1000.0000
Amount Units: ng

Processing Integration Results



RT: 4.31
Area: 145371
Amount: 1000.0000
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 27-Apr-2015 11:01:22
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1 Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56 Calibration End Date: 04/14/2015 18:44 Calibration ID: 23314

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-138461/4	60414004.D
Level 2	IC 180-138461/5	60414005.D
Level 3	ICIS 180-138461/6	60414006.D
Level 4	IC 180-138461/7	60414007.D
Level 5	IC 180-138461/8	60414008.D
Level 6	IC 180-138461/9	60414009.D
Level 7	IC 180-138461/10	60414010.D
Level 8	IC 180-138461/11	60414011.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	0.2943 0.2221	0.2675 0.2530	0.2243 0.2279	0.2571	0.2210	Ave		0.2459			0.1000	10.8		20.0			
Chloromethane	0.3988 0.3369	0.4273 0.3786	0.3918 0.3615	0.3708	0.3951	Ave		0.3826			0.1000	7.1		20.0			
Vinyl chloride	0.4012 0.3257	0.3643 0.3595	0.3508 0.3364	0.3681	0.3701	Ave		0.3595			0.1000	6.4		20.0			
1,3-Butadiene	0.4143 0.3246	0.3905 0.3572	0.3604 0.3284	0.3754	0.3758	Ave		0.3658			0.0100	8.2		20.0			
Bromomethane	0.1111 0.0855	0.1220 0.0930	0.1088 0.0840	0.1070	0.1021	Ave		0.1017			0.0500	13.0		20.0			
Chloroethane	0.1965 0.1367	0.1616 0.1399	0.1513 0.1215	0.1607	0.1591	Ave		0.1534			0.0500	14.6		20.0			
Dichlorofluoromethane	0.3955 0.3206	0.4455 0.3390	0.3697 0.3264	0.3968	0.4011	Ave		0.3743			0.0100	11.6		20.0			
Trichlorofluoromethane	0.3530 0.3029	0.3736 0.3032	0.3295 0.2707	0.3694	0.3560	Ave		0.3323			0.1000	11.1		20.0			
Ethyl ether	0.3587 0.2992	0.3301 0.3175	0.3244 0.2936	0.3406	0.3341	Ave		0.3248			0.0100	6.6		20.0			
Acrolein	0.0344 0.0364	0.0419 0.0396	0.0384 0.0397	0.0385	0.0411	Ave		0.0387			0.0100	6.3		20.0			
1,1-Dichloroethene	0.2769 0.2370	0.2812 0.2572	0.2509 0.2476	0.2644	0.2561	Ave		0.2589			0.1000	5.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2657 0.2376	0.2724 0.2610	0.2436 0.2411	0.2555	0.2491	Ave		0.2532			0.1000	4.9		20.0			
Acetone	0.0979 0.0754	0.0826 0.0831	0.0746 0.0930	0.0877	0.0783	Ave		0.0841			0.0500	9.9		20.0			
Iodomethane	0.3687 0.3333	0.3740 0.3608	0.3514 0.3581	0.3623	0.3603	Ave		0.3586			0.0100	3.4		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.: 180-43257-1

Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56

Calibration End Date: 04/14/2015 18:44

Calibration ID: 23314

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														
Carbon disulfide	0.7080 0.7148	0.7240 0.7821	0.7121 0.7452	0.7529	0.7560	Ave		0.7369			0.1000	3.6	20.0				
Allyl chloride	0.1543 0.1684	0.1797 0.1866	0.1691 0.1844	0.1868	0.1780	Ave		0.1759			0.0100	6.4	20.0				
Methyl acetate	0.2647 0.2628	0.2893 0.2748	0.2826 0.2800	0.2942	0.2906	Ave		0.2799			0.1000	4.2	20.0				
Methylene Chloride	0.4539 0.2909	0.3672 0.3186	0.3345 0.3158	0.3303	0.3252	Ave		0.3421			0.1000	14.6	20.0				
tert-Butyl alcohol	1.2029 1.1616	1.1178 1.0517	1.1390 1.1848	1.1530	1.0832	Ave		1.1368			0.0100	4.5	20.0				
Acrylonitrile	0.1456 0.1374	0.1587 0.1480	0.1522 0.1487	0.1571	0.1539	Ave		0.1502			0.0100	4.6	20.0				
trans-1,2-Dichloroethene	0.3338 0.2713	0.3114 0.2978	0.2883 0.2903	0.2944	0.2989	Ave		0.2983			0.1000	6.1	20.0				
Methyl tert-butyl ether	0.8130 0.8070	0.9122 0.8843	0.8676 0.8574	0.9040	0.8928	Ave		0.8673			0.1000	4.6	20.0				
Hexane	0.4934 0.4479	0.5001 0.4728	0.4410 0.4389	0.4899	0.4757	Ave		0.4699			0.0100	5.2	20.0				
1,1-Dichloroethane	0.6101 0.5226	0.5831 0.5588	0.5527 0.5479	0.5843	0.5750	Ave		0.5668			0.2000	4.8	20.0				
Vinyl acetate	0.5370 0.5918	0.5810 0.6009	0.5469 0.6526	0.6260	0.5851	Ave		0.5902			0.0100	6.4	20.0				
2,2-Dichloropropane	0.2746 0.2444	0.2828 0.2835	0.2691 0.2566	0.2649	0.2895	Ave		0.2707			0.0100	5.6	20.0				
2-Butanone (MEK)	0.1435 0.1346	0.1541 0.1440	0.1438 0.1581	0.1610	0.1498	Ave		0.1486			0.0500	5.9	20.0				
cis-1,2-Dichloroethene	0.3359 0.2890	0.3220 0.3136	0.3205 0.3099	0.3267	0.3260	Ave		0.3180			0.1000	4.5	20.0				
Bromochloromethane	0.1434 0.1279	0.1445 0.1397	0.1388 0.1410	0.1443	0.1414	Ave		0.1401			0.0100	3.8	20.0				
Tetrahydrofuran	0.1511 0.1175	0.1376 0.1239	0.1220 0.1319	0.1313	0.1340	Ave		0.1312			0.0100	8.0	20.0				
Chloroform	0.4989 0.4052	0.4618 0.4483	0.4422 0.4393	0.4550	0.4573	Ave		0.4510			0.2000	5.8	20.0				
1,1,1-Trichloroethane	0.3027 0.2940	0.3232 0.3234	0.2973 0.3139	0.3168	0.3216	Ave		0.3116			0.1000	3.8	20.0				
Cyclohexane	0.6430 0.5704	0.6451 0.6189	0.5936 0.5671	0.6388	0.6178	Ave		0.6119			0.1000	5.1	20.0				
Carbon tetrachloride	0.1970 0.1957	0.1970 0.2196	0.1786 0.2097	0.1950	0.1972	Ave		0.1987			0.1000	6.0	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.: 180-43257-1

Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56

Calibration End Date: 04/14/2015 18:44

Calibration ID: 23314

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	0.3888 0.3446	0.3816 0.3730	0.3677 0.3538	0.3840	0.3843	Ave		0.3722			0.0100	4.3	20.0				
Isobutyl alcohol	0.0085 0.0104	0.0088 0.0116	0.0087 0.0125	0.0107	0.0102	Ave		0.0102			0.0100	14.3	20.0				
Benzene	1.2936 1.0860	1.2562 1.1586	1.2081 1.1185	1.2872	1.2526	Ave		1.2076			0.5000	6.5	20.0				
1,2-Dichloroethane	0.3769 0.3542	0.3987 0.3845	0.3788 0.3915	0.4059	0.3888	Ave		0.3849			0.1000	4.1	20.0				
n-Heptane	0.4057 0.3446	0.3504 0.3554	0.3300 0.3424	0.3810	0.3621	Ave		0.3589			0.0100	6.7	20.0				
Trichloroethene	0.2817 0.2536	0.2787 0.2711	0.2676 0.2649	0.2819	0.2826	Ave		0.2727			0.2000	3.8	20.0				
Methylcyclohexane	0.5431 0.4741	0.5426 0.5095	0.5018 0.4718	0.5253	0.5187	Ave		0.5109			0.1000	5.4	20.0				
1,2-Dichloropropane	0.3715 0.3218	0.3286 0.3461	0.3323 0.3465	0.3437	0.3473	Ave		0.3422			0.1000	4.4	20.0				
1,4-Dioxane	0.0038 0.0038	0.0038 0.0042	0.0033 0.0045	0.0044	0.0034	Ave		0.0039		*	0.0100	10.9	20.0				
Dibromomethane	0.1565 0.1538	0.1652 0.1646	0.1629 0.1677	0.1668	0.1640	Ave		0.1627			0.0100	3.0	20.0				
Bromodichloromethane	0.2552 0.2809	0.2668 0.3039	0.2669 0.3142	0.2924	0.2947	Ave		0.2844			0.2000	7.2	20.0				
cis-1,3-Dichloropropene	0.3554 0.4099	0.3556 0.4263	0.3729 0.4484	0.4125	0.4207	Ave		0.4002			0.2000	8.7	20.0				
4-Methyl-2-pentanone (MIBK)	1.4874 1.5302	1.7982 1.5820	1.7416 1.4507	1.8674	1.7335	Ave		1.6489			0.1000	9.4	20.0				
Toluene	6.2671 4.5788	5.8348 4.5969	5.2666 4.1009	5.5423	5.1875	Ave		5.1719			0.4000	13.9	20.0				
trans-1,3-Dichloropropene	1.1543 1.4198	1.2953 1.4381	1.2832 1.4200	1.4830	1.4571	Ave		1.3688			0.1000	8.3	20.0				
Ethyl methacrylate	1.4777 1.7259	1.6247 1.7072	1.6450 1.6637	1.8923	1.7676	Ave		1.6880			0.0100	7.1	20.0				
1,1,2-Trichloroethane	1.2343 1.0353	1.1578 1.0513	1.1384 1.0016	1.1860	1.1207	Ave		1.1157			0.1000	7.2	20.0				
Tetrachloroethene	1.0253 0.7696	0.9644 0.7948	0.8673 0.7036	0.8945	0.8432	Ave		0.8578			0.2000	12.2	20.0				
1,3-Dichloropropane	2.3222 1.9346	2.2263 1.9328	2.0780 1.8438	2.2926	2.0917	Ave		2.0902			0.0100	8.5	20.0				
2-Hexanone	0.8719 0.9372	0.9918 0.8923	0.9103 0.9275	1.0411	0.9599	Ave		0.9415			0.1000	5.9	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.: 180-43257-1

Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56

Calibration End Date: 04/14/2015 18:44

Calibration ID: 23314

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	0.6016 0.7164	0.6447 0.7608	0.6604 0.7388	0.7192	0.6994	Ave		0.6927			0.1000	7.7	20.0				
1,2-Dibromoethane (EDB)	1.1950 1.0231	1.0638 1.0144	1.0731 0.9725	1.1815	1.0607	Ave		1.0730			0.1000	7.3	20.0				
3-Chlorobenzotrifluoride	1.9136 1.4967	1.9068 1.4992	1.7915 1.2811	1.6744	1.6480	Ave		1.6514			0.0100	13.3	20.0				
Chlorobenzene	3.7849 2.9443	3.5139 2.9726	3.3499 2.7284	3.5505	3.2590	Ave		3.2629			0.5000	11.0	20.0				
4-Chlorobenzotrifluoride	1.9195 1.4594	1.8311 1.4216	1.6074 1.2134	1.5442	1.5653	Ave		1.5702			0.0100	14.3	20.0				
1,1,1,2-Tetrachloroethane	0.8155 0.8636	0.7793 0.9045	0.7575 0.8476	0.8701	0.8820	Ave		0.8400			0.0100	6.1	20.0				
Ethylbenzene	2.1738 1.8202	2.0927 1.8556	1.9611 1.6867	2.1077	1.9774	Ave		1.9594			0.1000	8.4	20.0				
m-Xylene & p-Xylene	2.6405 2.2254	2.5249 2.2697	2.4318 2.0470	2.6276	2.3959	Ave		2.3954			0.1000	8.6	20.0				
o-Xylene	2.5731 2.1825	2.5821 2.2434	2.4172 2.0242	2.5157	2.4242	Ave		2.3703			0.3000	8.5	20.0				
Styrene	3.6924 3.5730	3.9518 3.6372	3.8666 3.3578	4.2209	3.9584	Ave		3.7823			0.3000	7.2	20.0				
Bromoform	0.3557 0.3876	0.2766 0.3971	0.3228 0.4182	0.3599	0.3880	Ave		0.3632			0.1000	12.6	20.0				
2-Chlorobenzotrifluoride	1.9897 1.5196	1.9623 1.5495	1.8134 1.3482	1.6957	1.7387	Ave		1.7021			0.0100	13.1	20.0				
Isopropylbenzene	6.3968 4.8365	6.2568 4.9329	5.7722 4.2576	6.0278	5.6308	Ave		5.5139			0.1000	13.8	20.0				
1,1,2,2-Tetrachloroethane	1.5247 1.4946	1.6719 1.5099	1.5916 1.4285	1.7257	1.5950	Ave		1.5677			0.3000	6.2	20.0				
Bromobenzene	0.8302 0.7726	0.8363 0.8369	0.8221 0.7978	0.8659	0.8251	Ave		0.8234			0.0100	3.4	20.0				
trans-1,4-Dichloro-2-butene	0.2711 0.3042	0.3069 0.3222	0.2773 0.3340	0.3309	0.3151	Ave		0.3077			0.0100	7.5	20.0				
1,2,3-Trichloropropane	0.2735 0.2959	0.3275 0.3175	0.3060 0.3138	0.3438	0.3197	Ave		0.3122			0.0100	6.8	20.0				
N-Propylbenzene	1.0916 0.9489	1.0373 1.0528	1.0398 0.9518	1.0764	1.0676	Ave		1.0333			0.0100	5.3	20.0				
2-Chlorotoluene	0.8657 0.8029	0.9436 0.8840	0.8707 0.8174	0.9187	0.8997	Ave		0.8753			0.0100	5.4	20.0				
3-Chlorotoluene	0.9739 0.8865	1.0514 0.9246	0.9740 0.8616	0.9233	0.9725	Ave		0.9460			0.0100	6.3	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.: 180-43257-1

Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56

Calibration End Date: 04/14/2015 18:44

Calibration ID: 23314

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	2.9965 2.6821	3.1343 2.9518	3.0615 2.6098	3.1746	3.0868	Ave		2.9622			0.0100	7.0	20.0				
4-Chlorotoluene	0.8899 0.8892	0.9564 0.9574	0.9159 0.9079	0.9918	0.9640	Ave		0.9341			0.0100	4.1	20.0				
tert-Butylbenzene	2.5554 2.1877	2.5575 2.4083	2.4343 2.1169	2.5744	2.5217	Ave		2.4195			0.0100	7.3	20.0				
1,2,4-Trimethylbenzene	3.1263 2.7740	3.2825 3.0550	3.2033 2.7141	3.3156	3.2212	Ave		3.0865			0.0100	7.4	20.0				
3,4-Dichlorobenzotrifluoride	0.7768 0.7253	0.8956 0.7824	0.8318 0.6890	0.7525	0.8088	Ave		0.7828			0.0100	8.2	20.0				
sec-Butylbenzene	3.6027 3.2224	3.9284 3.4901	3.7612 3.0050	3.8782	3.7879	Ave		3.5845			0.0100	9.2	20.0				
1,3-Dichlorobenzene	1.7246 1.4974	1.7346 1.6240	1.6537 1.5100	1.7038	1.6768	Ave		1.6406			0.6000	5.6	20.0				
4-Isopropyltoluene	2.9262 2.7039	3.1839 2.9404	3.0638 2.5766	3.1598	3.1135	Ave		2.9585			0.0100	7.4	20.0				
1,4-Dichlorobenzene	1.7223 1.5722	1.7830 1.7146	1.7273 1.5787	1.7999	1.7616	Ave		1.7075			0.5000	5.1	20.0				
2,4-Dichlorobenzotrifluoride	0.9222 0.7395	0.8291 0.8277	0.8085 0.7248	0.7738	0.8241	Ave		0.8062			0.0100	7.7	20.0				
2,5-Dichlorobenzotrifluoride	0.8540 0.8051	0.9105 0.8550	0.9389 0.7457	0.8282	0.8950	Ave		0.8540			0.0100	7.3	20.0				
n-Butylbenzene	2.7312 2.4909	2.9295 2.7780	2.8568 2.4099	2.9732	2.8892	Ave		2.7573			0.0100	7.5	20.0				
1,2-Dichlorobenzene	1.6834 1.4975	1.7521 1.6580	1.6502 1.5318	1.6984	1.6982	Ave		1.6462			0.4000	5.3	20.0				
1,2-Dibromo-3-Chloropropane	0.1151 0.1375	0.1124 0.1615	0.1138 0.1525	0.1319	0.1430	Ave		0.1335			0.0500	13.9	20.0				
1,2,4-Trichlorobenzene	1.2511 1.0857	1.2718 1.2254	1.1909 1.1028	1.2470	1.2231	Ave		1.1997			0.2000	5.8	20.0				
Hexachlorobutadiene	0.3799 0.3289	0.3377 0.3727	0.3456 0.3211	0.3628	0.3685	Ave		0.3522			0.0100	6.2	20.0				
Naphthalene	2.6894 2.8253	3.2602 3.1408	3.2635 2.8113	3.3405	3.2907	Ave		3.0777			0.0100	8.4	20.0				
1,2,3-Trichlorobenzene	1.1424 1.0341	1.1583 1.1599	1.1343 1.0750	1.1495	1.1611	Ave		1.1268			0.0100	4.2	20.0				
2,4,5-Trichlorotoluene	0.5680 0.6502	0.6735 0.7136	0.6484 0.6445	0.6829	0.6978	Ave		0.6599			0.0100	6.8	20.0				
2,3,6-Trichlorotoluene	0.5676 0.5806	0.6254 0.6540	0.6063 0.5808	0.6262	0.6288	Ave		0.6087			0.0100	4.9	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.: 180-43257-1 Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56 Calibration End Date: 04/14/2015 18:44 Calibration ID: 23314

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)	0.2240 0.1985	0.1935 0.2033	0.2069 0.2028	0.2045	0.2147	Ave		0.2060			4.6		20.0				
1,2-Dichloroethane-d4 (Surr)	0.3058 0.2787	0.2910 0.2905	0.2947 0.2970	0.3012	0.3071	Ave		0.2958			3.1		20.0				
Toluene-d8 (Surr)	5.0486 3.7571	4.3508 3.6957	4.4572 3.2657	4.4796	4.2918	Ave		4.1683			13.5		20.0				
4-Bromofluorobenzene (Surr)	1.7834 1.5058	1.5972 1.4685	1.6201 1.3532	1.6887	1.6146	Ave		1.5789			8.5		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.: 180-43257-1 Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56 Calibration End Date: 04/14/2015 18:44 Calibration ID: 23314

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-138461/4	60414004.D
Level 2	IC 180-138461/5	60414005.D
Level 3	ICIS 180-138461/6	60414006.D
Level 4	IC 180-138461/7	60414007.D
Level 5	IC 180-138461/8	60414008.D
Level 6	IC 180-138461/9	60414009.D
Level 7	IC 180-138461/10	60414010.D
Level 8	IC 180-138461/11	60414011.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
Dichlorodifluoromethane	FB	Ave	14070 397377	60703 486834	106791 551019	180006	205142	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	19071 602872	96959 728579	186510 874012	259663	366734	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	19182 582828	82652 691680	166989 813305	257745	343528	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	19809 580879	88605 687270	171583 793841	262872	348808	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	5314 152997	27678 179045	51819 203178	74926	94754	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	9395 244668	36664 269137	72016 293640	112533	147668	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	18912 573607	101071 652302	176030 788998	277891	372233	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Ave	16879 541942	84758 583374	156867 654365	258678	330379	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl ether	FB	Ave	17151 535441	74885 611019	154456 709683	238471	310097	5.00 175	25.0 200	50.0 250	75.0	100
Acrolein	FB	Ave	32923 83657	47536 95204	54861 105507	62900	76212	100 225	125 250	150 275	175	200
1,1-Dichloroethene	FB	Ave	13239 424168	63800 494966	119436 598623	185123	237693	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	12704 425143	61799 502152	115973 582756	178883	231166	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	23401 269884	37480 319762	71017 449617	122817	145423	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	17632 596492	84856 694207	167304 865585	253665	334395	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	33852 1279074	164274 1504982	339036 1801474	527213	701600	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.: 180-43257-1 Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56 Calibration End Date: 04/14/2015 18:44 Calibration ID: 23314

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	7376 301393	40762 359061	80515 445766	130838	165226	5.00 175	25.0 200	50.0 250	75.0	100
Methyl acetate	FB	Ave	63274 2351693	328218 2643710	672639 3383942	1030019	1348333	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Ave	21705 520510	83314 613145	159225 763489	231283	301842	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBA	Ave	13647 556960	77119 661354	147799 926949	237140	307893	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	69640 2459182	360150 2848123	724450 3594577	1100259	1428211	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	15962 485458	70648 573079	137244 701675	206119	277392	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	38872 1443972	206957 1701690	413033 2072633	633049	828571	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	23591 801429	113466 909763	209971 1060945	343032	441474	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	29173 935075	132306 1075363	263144 1324515	409142	533638	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl acetate	FB	Ave	25678 1059045	131821 1156328	260351 1577648	438351	543070	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Ave	13131 437244	64166 545483	128135 620261	185518	268662	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	34308 481747	69926 554110	136965 764316	225417	278094	25.0 350	50.0 400	100 500	150	200
cis-1,2-Dichloroethene	FB	Ave	16063 517052	73065 603471	152579 749244	228773	302570	5.00 175	25.0 200	50.0 250	75.0	100
Bromochloromethane	FB	Ave	6859 228876	32788 268808	66092 340980	101057	131254	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	14449 420585	62423 476877	116139 637802	183816	248697	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	23857 725047	104787 862548	210499 1062114	318643	424444	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	14472 526045	73337 622364	141549 758744	221828	298449	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	30748 1020748	146376 1190890	282577 1370935	447344	573421	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	9419 350143	44706 422601	85035 506942	136581	183039	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	18593 616616	86591 717800	175077 855384	268893	356648	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Ave	10177 465175	49699 560402	103503 756640	186526	237305	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.: 180-43257-1 Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56 Calibration End Date: 04/14/2015 18:44 Calibration ID: 23314

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	61857 1943388	285019 2229443	575171 2703979	901343	1162497	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	18020 633778	90463 739846	180357 946337	284208	360814	5.00 175	25.0 200	50.0 250	75.0	100
n-Heptane	FB	Ave	19401 616563	79497 683853	157110 827800	266810	336019	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	13470 453709	63232 521724	127393 640333	197388	262240	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	25969 848330	123112 980436	238897 1140478	367809	481368	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	17764 575801	74565 665964	158216 837767	240670	322338	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	3668 134487	17314 163298	31761 215420	61093	62707	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	7483 275171	37488 316815	77560 405370	116831	152197	5.00 175	25.0 200	50.0 250	75.0	100
Bromodichloromethane	FB	Ave	12205 502659	60531 584715	127059 759489	204768	273485	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	16996 733526	80677 820321	177534 1083885	288828	390483	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	72970 1270126	169102 1446918	352126 1832031	567987	730684	25.0 350	50.0 400	100 500	150	200
Toluene	CBZ	Ave	61492 1900259	274356 2102163	532421 2589457	842884	1093291	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBZ	Ave	11326 589214	60905 657615	129721 896635	225532	307088	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBZ	Ave	14499 716287	76395 780704	166304 1050486	287785	372527	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBZ	Ave	12111 429658	54442 480774	115089 632465	180364	236187	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBZ	Ave	10060 319386	45345 363465	87678 444266	136044	177702	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBZ	Ave	22785 802871	104685 883858	210069 1164239	348658	440829	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBZ	Ave	42773 777899	93267 816085	184058 1171250	316655	404604	25.0 350	50.0 400	100 500	150	200
Dibromochloromethane	CBZ	Ave	5903 297317	30316 347900	66760 466493	109378	147395	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dibromoethane (EDB)	CBZ	Ave	11725 424603	50019 463863	108487 614096	179683	223548	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorobenzotrifluoride	CBZ	Ave	18776 621160	89658 685560	181114 808898	254644	347323	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.: 180-43257-1 Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56 Calibration End Date: 04/14/2015 18:44 Calibration ID: 23314

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	37137 1221929	165225 1359376	338650 1722800	539973	686840	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorobenzotrifluoride	CBZ	Ave	18834 605670	86100 650099	162498 766170	234841	329897	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	8002 358418	36645 413627	76580 535179	132325	185895	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBZ	Ave	21329 755396	98403 848574	198256 1065041	320537	416747	5.00 175	25.0 200	50.0 250	75.0	100
m-Xylene & p-Xylene	CBZ	Ave	25908 923550	118721 1037911	245845 1292544	399615	504956	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBZ	Ave	25247 905752	121411 1025896	244361 1278165	382587	510911	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBZ	Ave	36229 1482857	185818 1663277	390895 2120226	641919	834255	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBZ	Ave	3490 160861	13008 181576	32637 264054	54733	81780	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorobenzotrifluoride	CBZ	Ave	19523 630648	92270 708590	183319 851308	257887	366442	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBZ	Ave	62764 2007205	294201 2255810	583535 2688403	916714	1186722	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBZ	Ave	14960 620263	78615 690465	160898 901989	262449	336155	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCB	Ave	13579 500932	64513 562246	132157 725643	210262	267300	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,4-Dichloro-2-butene	DCB	Ave	4434 197231	23679 216489	44569 303771	80353	102096	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCB	Ave	4474 191845	25267 213309	49184 285377	83491	103566	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCB	Ave	17854 615214	80022 707328	167139 865655	261383	345870	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCB	Ave	14159 520582	72790 593896	139968 743421	223097	291489	5.00 175	25.0 200	50.0 250	75.0	100
3-Chlorotoluene	DCB	Ave	15930 574790	81106 621207	156576 783588	224211	315051	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCB	Ave	49011 1738995	241788 1983122	492135 2373653	770880	1000023	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCB	Ave	14556 576519	73783 643222	147227 825749	240836	312301	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCB	Ave	41796 1418414	197294 1617941	391306 1925321	625147	816947	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCB	Ave	51135 1798579	253221 2052456	514922 2468483	805128	1043569	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.: 180-43257-1 Analy Batch No.: 138461

SDG No.: _____

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/14/2015 15:56 Calibration End Date: 04/14/2015 18:44 Calibration ID: 23314

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	12706	69087	133711	182735	262018	5.00	25.0	50.0	75.0	100
			470271	525648	626671			175	200	250		
sec-Butylbenzene	DCB	Ave	58927	303047	604612	941742	1227168	5.00	25.0	50.0	75.0	100
			2089295	2344761	2733082			175	200	250		
1,3-Dichlorobenzene	DCB	Ave	28208	133812	265834	413725	543225	5.00	25.0	50.0	75.0	100
			970869	1091047	1373327			175	200	250		
4-Isopropyltoluene	DCB	Ave	47861	245613	492499	767285	1008686	5.00	25.0	50.0	75.0	100
			1753099	1975451	2343380			175	200	250		
1,4-Dichlorobenzene	DCB	Ave	28170	137547	277654	437067	570718	5.00	25.0	50.0	75.0	100
			1019385	1151933	1435845			175	200	250		
2,4-Dichlorobenzotrifluoride	DCB	Ave	15084	63959	129972	187910	266987	5.00	25.0	50.0	75.0	100
			479486	556084	659198			175	200	250		
2,5-Dichlorobenzotrifluoride	DCB	Ave	13969	70240	150922	201098	289956	5.00	25.0	50.0	75.0	100
			522017	574396	678215			175	200	250		
n-Butylbenzene	DCB	Ave	44672	225991	459229	721979	936029	5.00	25.0	50.0	75.0	100
			1615001	1866348	2191823			175	200	250		
1,2-Dichlorobenzene	DCB	Ave	27534	135161	265276	412408	550173	5.00	25.0	50.0	75.0	100
			970949	1113903	1393150			175	200	250		
1,2-Dibromo-3-Chloropropane	DCB	Ave	1882	8672	18298	32029	46320	5.00	25.0	50.0	75.0	100
			89162	108469	138677			175	200	250		
1,2,4-Trichlorobenzene	DCB	Ave	20463	98113	191430	302807	396266	5.00	25.0	50.0	75.0	100
			703946	823275	1003013			175	200	250		
Hexachlorobutadiene	DCB	Ave	6214	26049	55562	88108	119384	5.00	25.0	50.0	75.0	100
			213248	250362	292082			175	200	250		
Naphthalene	DCB	Ave	43989	251500	524609	811164	1066104	5.00	25.0	50.0	75.0	100
			1831806	2110117	2556898			175	200	250		
1,2,3-Trichlorobenzene	DCB	Ave	18686	89355	182332	279139	376170	5.00	25.0	50.0	75.0	100
			670471	779227	977721			175	200	250		
2,4,5-Trichlorotoluene	DCB	Ave	9291	51952	104236	165832	226062	5.00	25.0	50.0	75.0	100
			421566	479387	586146			175	200	250		
2,3,6-Trichlorotoluene	DCB	Ave	9284	48248	97458	152061	203723	5.00	25.0	50.0	75.0	100
			376474	439348	528200			175	200	250		
Dibromofluoromethane (Surr)	FB	Ave	10712	43893	98488	143214	199289	5.00	25.0	50.0	75.0	100
			355133	391141	490232			175	200	250		
1,2-Dichloroethane-d4 (Surr)	FB	Ave	14624	66016	140279	210885	285047	5.00	25.0	50.0	75.0	100
			498685	559084	718093			175	200	250		
Toluene-d8 (Surr)	CBZ	Ave	49536	204580	450598	681270	904513	5.00	25.0	50.0	75.0	100
			1559259	1690024	2062089			175	200	250		
4-Bromofluorobenzene (Surr)	CBZ	Ave	17498	75101	163780	256826	340291	5.00	25.0	50.0	75.0	100
			624926	671542	854434			175	200	250		

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1 Analy Batch No.: 138461
SDG No.: _____
Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 04/14/2015 15:56 Calibration End Date: 04/14/2015 18:44 Calibration ID: 23314

Curve Type Legend:

Ave = Average ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414004.D
 Lims ID: IC VSTD1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 14-Apr-2015 15:56:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD1
 Misc. Info.: 180-0006462-004
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Apr-2015 11:14:35 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: fergusond

Date: 15-Apr-2015 08:26:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.200	4.196	0.004	97	226905	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.254	7.256	-0.002	99	478159	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.369	10.370	-0.001	90	98118	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.723	12.725	-0.002	96	163562	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.518	6.526	-0.008	64	10712	5.00	5.44	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.907	6.909	-0.002	52	14624	5.00	5.17	
\$ 7 Toluene-d8 (Surr)	98	8.909	8.916	-0.007	93	49536	5.00	6.06	
\$ 8 4-Bromofluorobenzene (Surr	95	11.561	11.563	-0.002	82	17498	5.00	5.65	
11 Dichlorodifluoromethane	85	1.578	1.574	0.004	99	14070	5.00	5.98	
12 Chloromethane	50	1.730	1.732	-0.002	94	19071	5.00	5.21	
13 Vinyl chloride	62	1.846	1.860	-0.014	82	19182	5.00	5.58	
14 Butadiene	39	1.907	1.902	0.005	88	19809	5.00	5.66	
15 Bromomethane	94	2.199	2.200	-0.001	78	5314	5.00	5.46	
16 Chloroethane	64	2.332	2.334	-0.002	92	9395	5.00	6.40	
17 Dichlorofluoromethane	67	2.606	2.614	-0.008	95	18912	5.00	5.28	
18 Trichlorofluoromethane	101	2.631	2.657	-0.026	49	16879	5.00	5.31	
20 Ethyl ether	59	3.002	3.009	-0.007	91	17151	5.00	5.52	
21 Acrolein	56	3.172	3.180	-0.008	96	32923	100.0	88.9	M
22 1,1-Dichloroethene	96	3.294	3.308	-0.014	98	13239	5.00	5.35	M
23 1,1,2-Trichloro-1,2,2-trif	101	3.348	3.362	-0.014	72	12704	5.00	5.25	
24 Acetone	43	3.379	3.387	-0.008	99	23401	25.0	29.1	
25 Iodomethane	142	3.494	3.502	-0.008	76	17632	5.00	5.14	
26 Carbon disulfide	76	3.598	3.606	-0.008	98	33852	5.00	4.80	
29 3-Chloro-1-propene	76	3.872	3.873	-0.001	56	7376	5.00	4.38	
30 Methyl acetate	43	3.872	3.885	-0.013	97	63274	25.0	23.6	
31 Methylene Chloride	84	4.078	4.092	-0.014	96	21705	5.00	6.64	
32 2-Methyl-2-propanol	59	4.334	4.336	-0.002	92	13647	50.0	52.9	
33 Acrylonitrile	53	4.456	4.457	-0.001	99	69640	50.0	48.5	
34 trans-1,2-Dichloroethene	96	4.516	4.530	-0.014	80	15962	5.00	5.60	
35 Methyl tert-butyl ether	73	4.529	4.530	-0.001	98	38872	5.00	4.69	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.948	4.950	-0.002	92	23591	5.00	5.25	
37 1,1-Dichloroethane	63	5.155	5.163	-0.008	69	29173	5.00	5.38	
38 Vinyl acetate	43	5.198	5.206	-0.008	96	25678	5.00	4.55	
42 2,2-Dichloropropane	77	5.910	5.905	0.005	58	13131	5.00	5.07	
44 2-Butanone (MEK)	43	5.903	5.905	-0.002	98	34308	25.0	24.1	
43 cis-1,2-Dichloroethene	96	5.910	5.911	-0.001	79	16063	5.00	5.28	
48 Chlorobromomethane	128	6.202	6.203	-0.001	92	6859	5.00	5.12	
49 Tetrahydrofuran	42	6.214	6.215	-0.001	91	14449	10.0	11.5	
50 Chloroform	83	6.341	6.343	-0.002	94	23857	5.00	5.53	
51 1,1,1-Trichloroethane	97	6.500	6.514	-0.014	94	14472	5.00	4.86	
52 Cyclohexane	56	6.579	6.587	-0.007	91	30748	5.00	5.25	
53 Carbon tetrachloride	117	6.676	6.690	-0.014	56	9419	5.00	4.96	M
54 1,1-Dichloropropene	75	6.688	6.696	-0.008	92	18593	5.00	5.22	
55 Isobutyl alcohol	41	6.871	6.872	-0.001	78	10177	125.0	104.6	M
56 Benzene	78	6.913	6.915	-0.002	96	61857	5.00	5.36	
57 1,2-Dichloroethane	62	6.992	6.994	-0.002	94	18020	5.00	4.90	
59 n-Heptane	43	7.278	7.280	-0.002	37	19401	5.00	5.65	
61 Trichloroethene	130	7.643	7.651	-0.008	96	13470	5.00	5.16	
63 Methylcyclohexane	83	7.887	7.894	-0.007	88	25969	5.00	5.32	
64 1,2-Dichloropropane	63	7.917	7.925	-0.008	81	17764	5.00	5.43	
65 1,4-Dioxane	88	7.996	8.004	-0.008	47	3668	100.0	98.4	M
67 Dibromomethane	93	8.014	8.016	-0.002	93	7483	5.00	4.81	
68 Dichlorobromomethane	83	8.203	8.205	-0.002	96	12205	5.00	4.49	
71 cis-1,3-Dichloropropene	75	8.653	8.649	0.004	92	16996	5.00	4.44	
72 4-Methyl-2-pentanone (MIBK)	43	8.793	8.789	0.004	96	72970	25.0	22.6	
73 Toluene	91	8.982	8.983	-0.001	97	61492	5.00	6.06	
74 trans-1,3-Dichloropropene	75	9.219	9.227	-0.008	67	11326	5.00	4.22	
75 Ethyl methacrylate	69	9.280	9.281	-0.001	96	14499	5.00	4.38	
76 1,1,2-Trichloroethane	97	9.426	9.421	0.005	90	12111	5.00	5.53	
77 Tetrachloroethene	164	9.499	9.500	-0.001	96	10060	5.00	5.98	
78 1,3-Dichloropropane	76	9.584	9.586	-0.002	90	22785	5.00	5.55	
79 2-Hexanone	43	9.627	9.628	-0.001	98	42773	25.0	23.2	
81 Chlorodibromomethane	129	9.803	9.799	0.004	82	5903	5.00	4.34	
82 Ethylene Dibromide	107	9.919	9.920	-0.001	96	11725	5.00	5.57	
83 3-Chlorobenzotrifluoride	180	10.363	10.364	-0.001	55	18776	5.00	5.79	
84 Chlorobenzene	112	10.399	10.401	-0.002	92	37137	5.00	5.80	
85 4-Chlorobenzotrifluoride	180	10.454	10.456	-0.002	94	18834	5.00	6.11	
86 1,1,1,2-Tetrachloroethane	131	10.490	10.498	-0.008	40	8002	5.00	4.85	
87 Ethylbenzene	106	10.496	10.498	-0.002	97	21329	5.00	5.55	
88 m-Xylene & p-Xylene	106	10.630	10.632	-0.002	98	25908	5.00	5.51	
89 o-Xylene	106	11.007	11.009	-0.002	97	25247	5.00	5.43	
90 Styrene	104	11.038	11.034	0.004	96	36229	5.00	4.88	
91 Bromoform	173	11.220	11.222	-0.002	34	3490	5.00	4.90	
92 2-Chlorobenzotrifluoride	180	11.281	11.277	0.004	94	19523	5.00	5.84	
93 Isopropylbenzene	105	11.379	11.380	-0.001	96	62764	5.00	5.80	
96 1,1,2,2-Tetrachloroethane	83	11.689	11.691	-0.002	93	14960	5.00	4.86	
95 Bromobenzene	156	11.701	11.703	-0.002	93	13579	5.00	5.04	
97 trans-1,4-Dichloro-2-buten	53	11.719	11.727	-0.008	38	4434	5.00	4.40	
98 1,2,3-Trichloropropane	110	11.744	11.745	-0.001	80	4474	5.00	4.38	
99 N-Propylbenzene	120	11.798	11.800	-0.002	98	17854	5.00	5.28	
100 2-Chlorotoluene	126	11.890	11.885	0.005	94	14159	5.00	4.94	
101 3-Chlorotoluene	126	11.950	11.952	-0.002	97	15930	5.00	5.15	

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	11.981	11.983	-0.002	92	49011	5.00	5.06	
103 4-Chlorotoluene	126	12.017	12.007	0.010	98	14556	5.00	4.76	
104 tert-Butylbenzene	119	12.297	12.293	0.004	93	41796	5.00	5.28	
106 1,2,4-Trimethylbenzene	105	12.358	12.354	0.004	97	51135	5.00	5.06	
107 1,2-dichloro-4-(trifluorom	214	12.388	12.390	-0.002	95	12706	5.00	4.96	
108 sec-Butylbenzene	105	12.522	12.518	0.004	94	58927	5.00	5.03	
109 1,3-Dichlorobenzene	146	12.644	12.640	0.004	94	28208	5.00	5.26	
110 4-Isopropyltoluene	119	12.680	12.676	0.004	96	47861	5.00	4.95	
111 1,4-Dichlorobenzene	146	12.753	12.749	0.004	91	28170	5.00	5.04	
113 2,4-Dichloro-1-(trifluorom	214	12.766	12.761	0.005	92	15084	5.00	5.72	
114 2,5-Dichlorobenzotrifluori	214	12.808	12.804	0.004	94	13969	5.00	5.00	
116 n-Butylbenzene	91	13.088	13.084	0.004	98	44672	5.00	4.95	
117 1,2-Dichlorobenzene	146	13.094	13.102	-0.008	94	27534	5.00	5.11	
118 1,2-Dibromo-3-Chloropropan	75	13.879	13.899	-0.020	0	1882	5.00	4.31	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.031	14.033	-0.002	99	70518	15.0	15.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.451	14.446	0.005	98	49108	10.0	9.98	
122 1,2,4-Trichlorobenzene	180	14.718	14.720	-0.002	92	20463	5.00	5.21	
123 Hexachlorobutadiene	225	14.858	14.866	-0.008	92	6214	5.00	5.39	
124 Naphthalene	128	14.980	14.982	-0.002	97	43989	5.00	4.37	
125 1,2,3-Trichlorobenzene	180	15.205	15.201	0.004	94	18686	5.00	5.07	
126 2,4,5-Trichlorotoluene	159	15.984	15.979	0.005	0	9291	5.00	4.30	
127 2,3,6-Trichlorotoluene	159	16.087	16.083	0.004	89	9284	5.00	4.66	
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	10.9	
S 131 Xylenes, Total	106				0		10.0	10.9	
S 132 1,3-Dichloropropene, Total	1				0		10.0	8.66	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00033	Amount Added: 0.20	Units: uL	
VOA8260VOAPRI_00109	Amount Added: 0.20	Units: uL	
voaWKetpri Re_00004	Amount Added: 0.80	Units: uL	
voaWeemixPRI_00002	Amount Added: 0.20	Units: uL	
VOAACRPRI_00005	Amount Added: 4.00	Units: uL	
voaW VA pri R_00005	Amount Added: 0.20	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414004.D

Injection Date: 14-Apr-2015 15:56:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD1

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

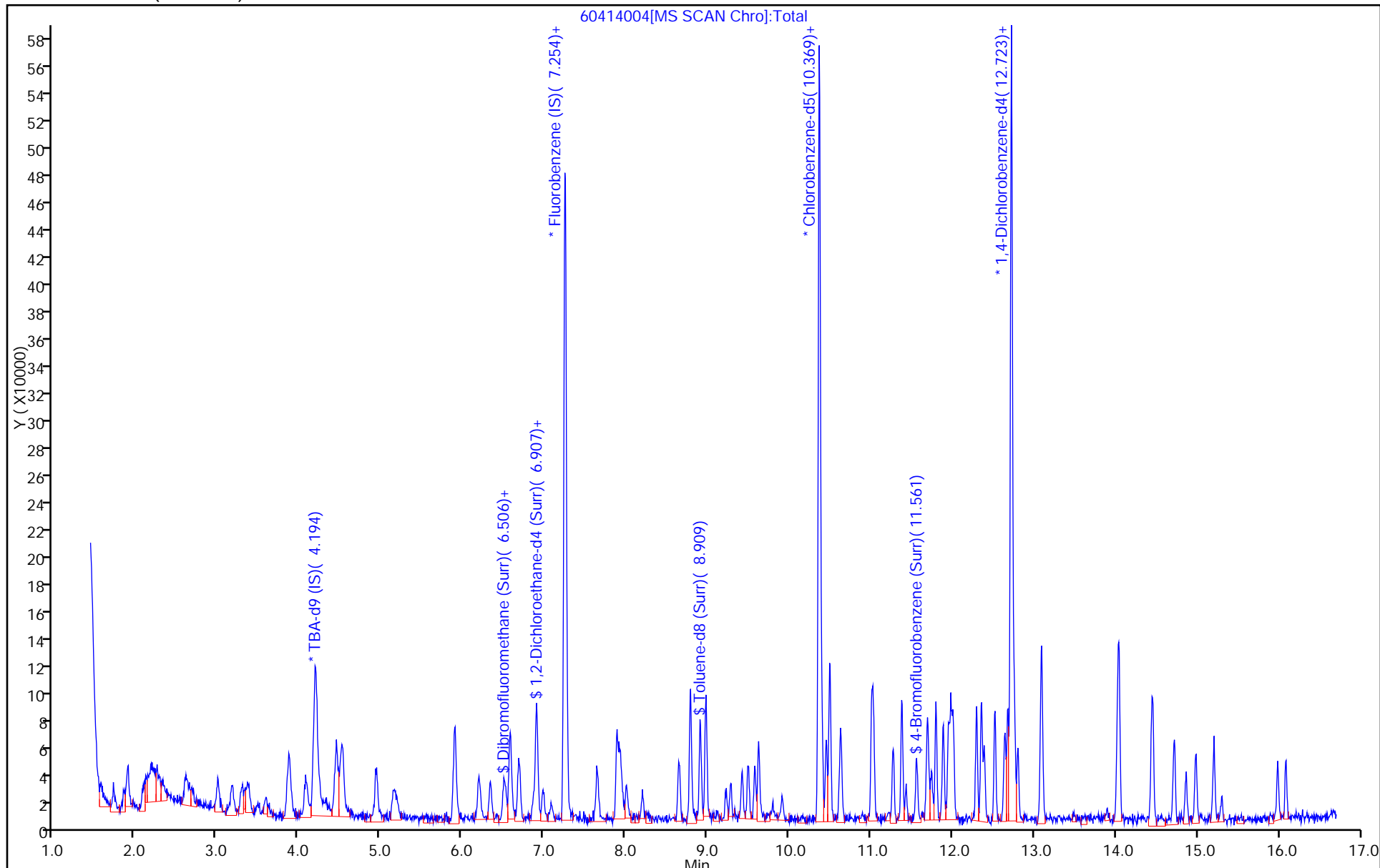
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



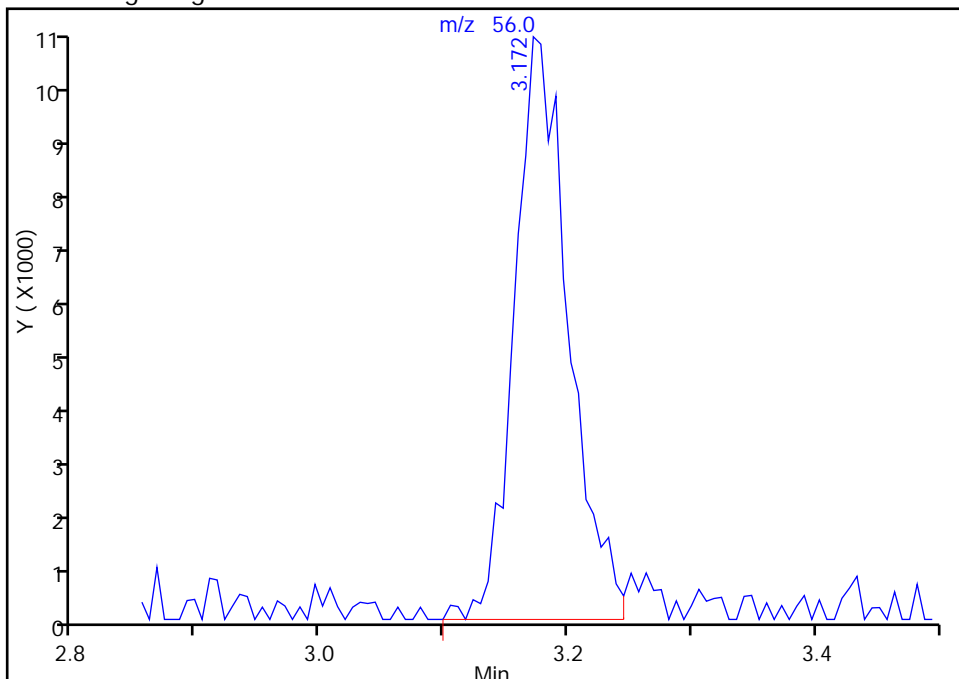
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414004.D
Injection Date: 14-Apr-2015 15:56:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 4
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

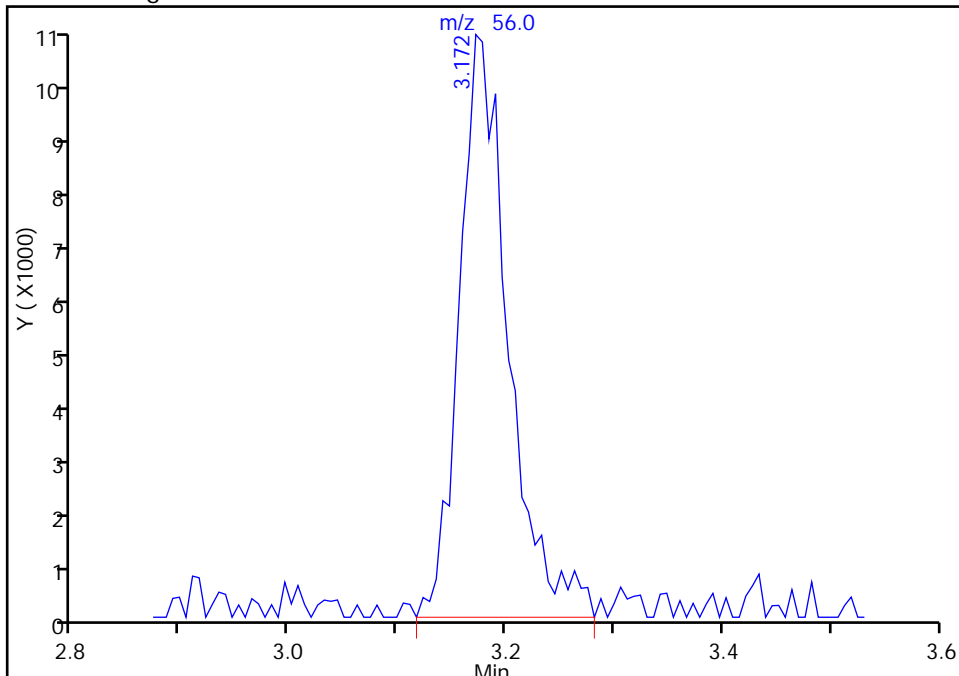
RT: 3.17
Area: 31927
Amount: 86.469923
Amount Units: ng

Processing Integration Results



RT: 3.17
Area: 32923
Amount: 88.867798
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 08:58:30
Audit Action: Manually Integrated
Audit Reason: Peak Tail

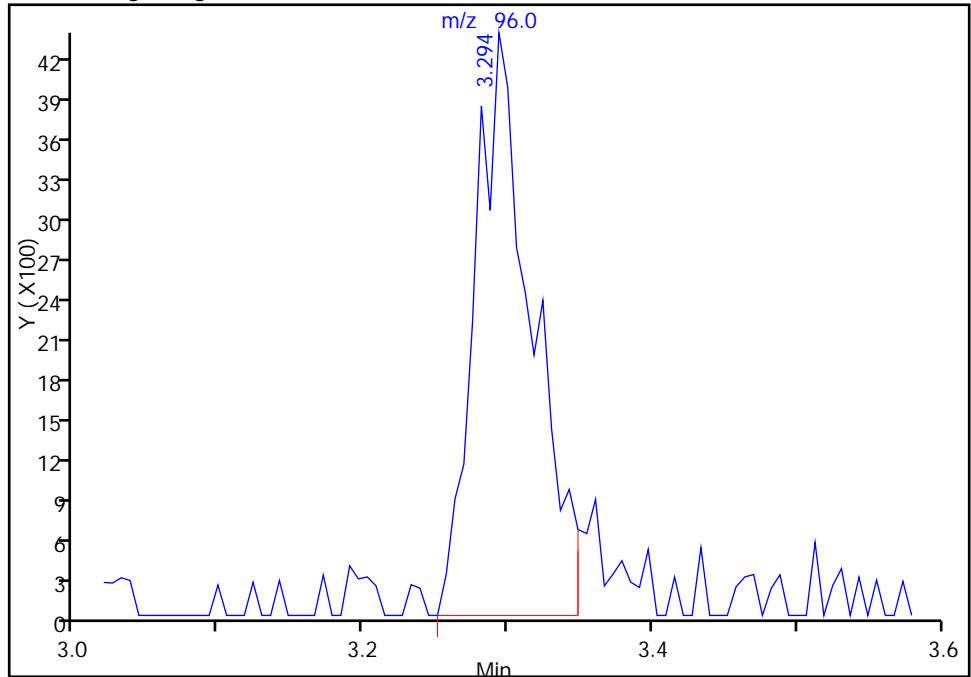
TestAmerica Pittsburgh

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Injection Date: 14-Apr-2015 15:56:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 4
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

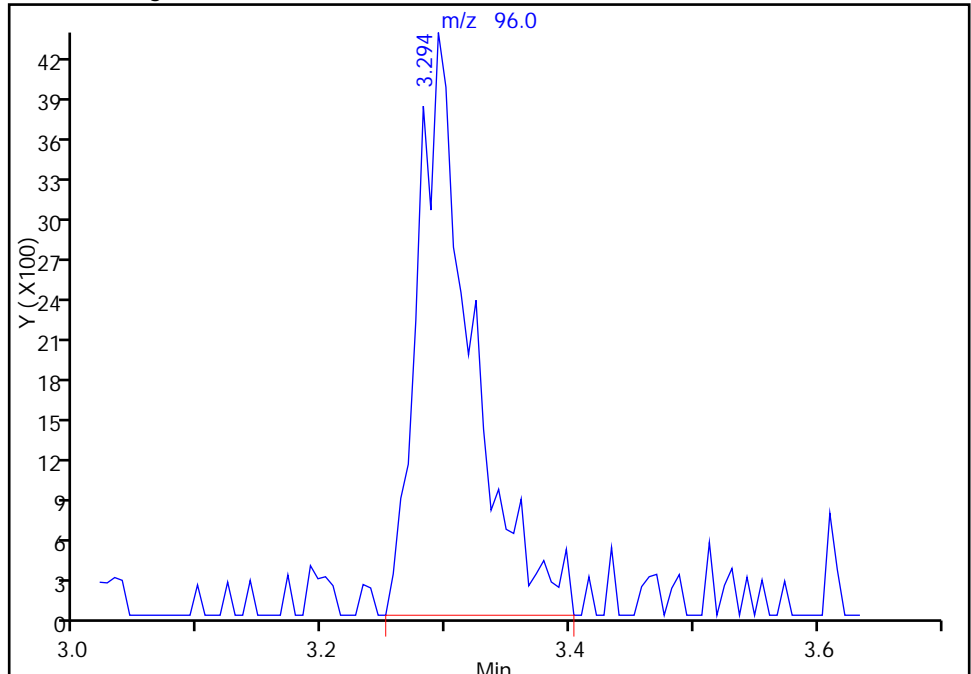
RT: 3.29
Area: 12009
Amount: 4.911062
Amount Units: ng

Processing Integration Results



RT: 3.29
Area: 13239
Amount: 5.346832
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 08:58:30
Audit Action: Manually Integrated
Audit Reason: Peak Tail

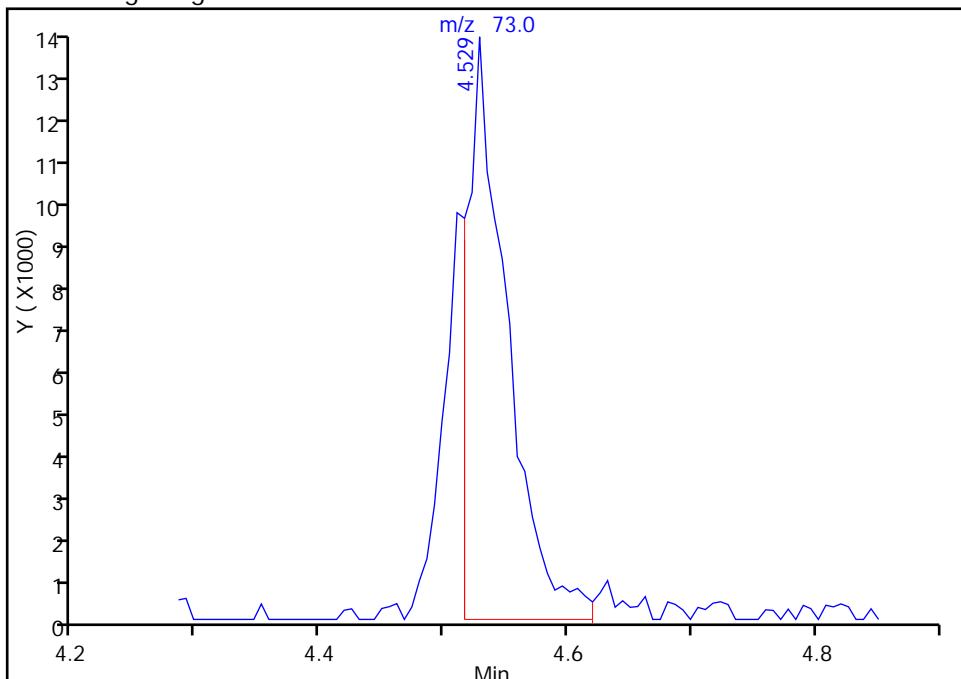
TestAmerica Pittsburgh

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Injection Date: 14-Apr-2015 15:56:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 4
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

35 Methyl tert-butyl ether, CAS: 1634-04-4

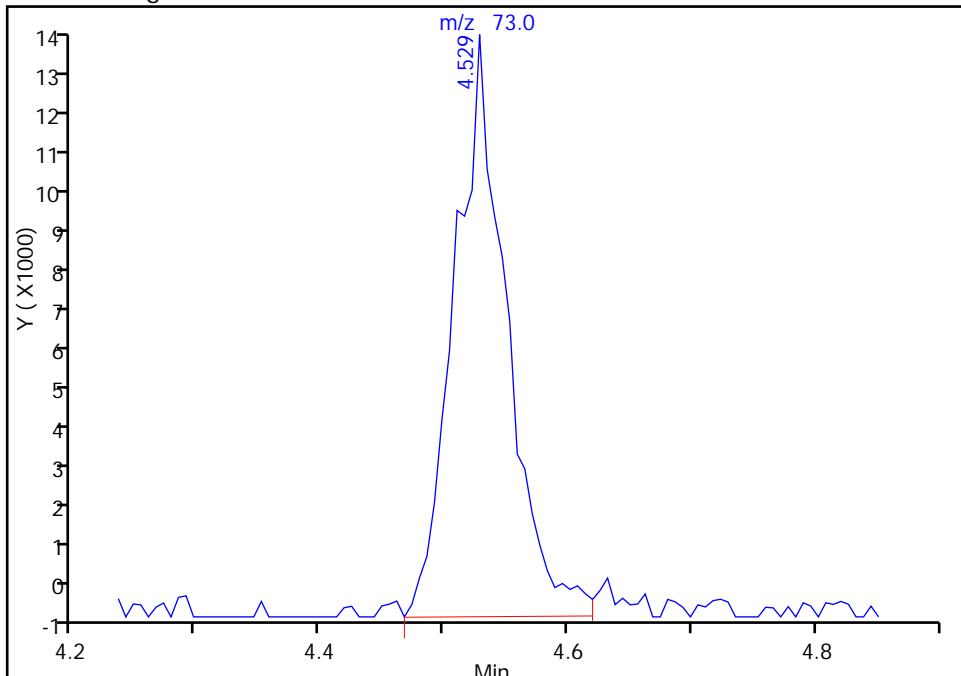
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Area: 29850
Amount: 3.699673
Amount Units: ng

Processing Integration Results



RT: 4.53
Area: 38872
Amount: 4.686857
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 08:58:30
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

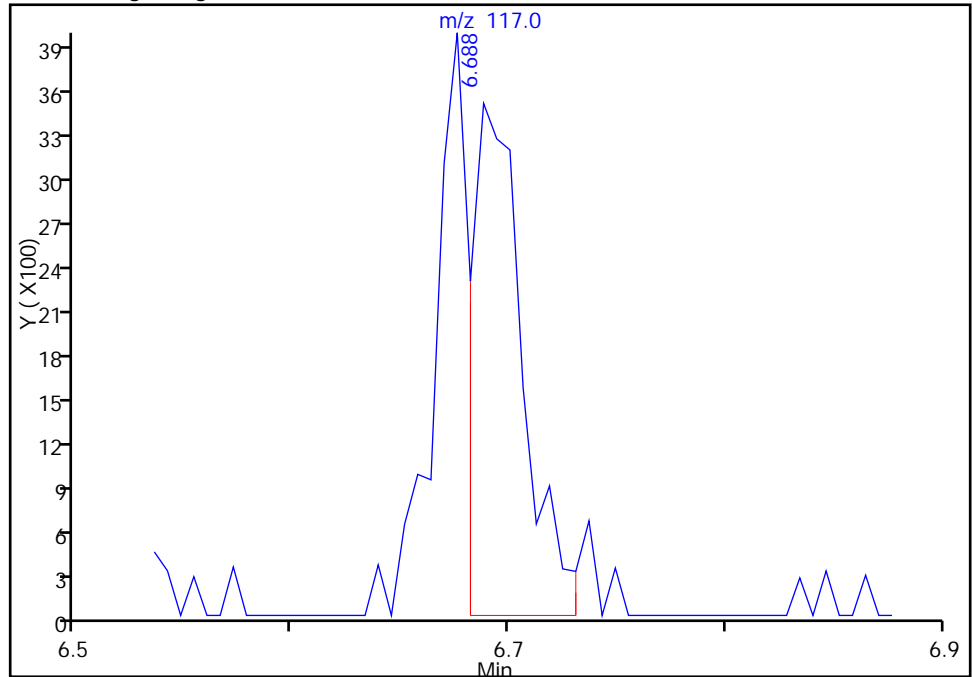
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414004.D
Injection Date: 14-Apr-2015 15:56:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 4
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

53 Carbon tetrachloride, CAS: 56-23-5

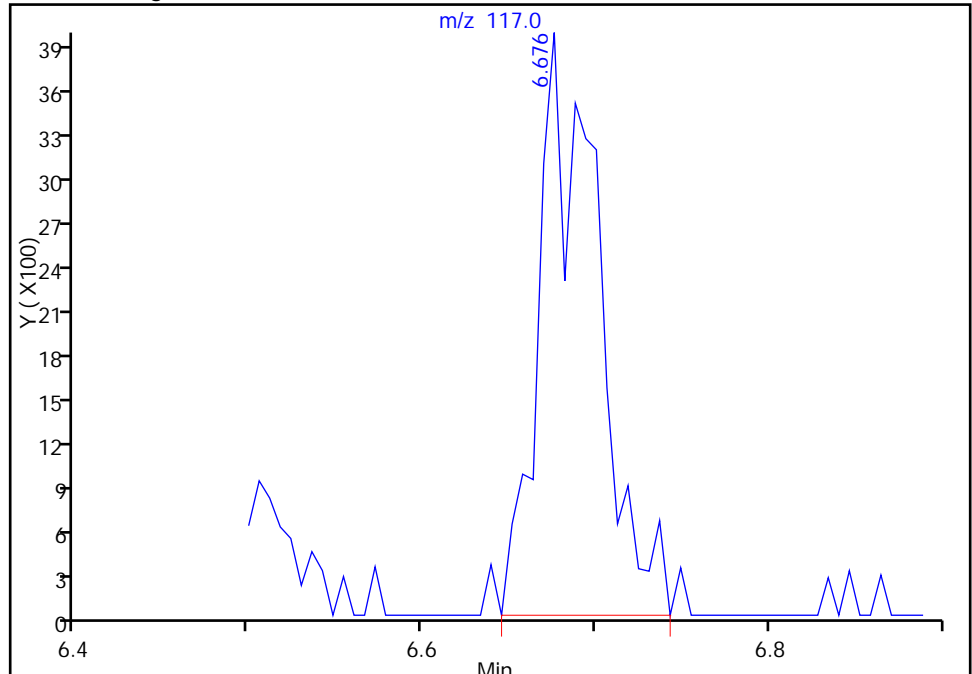
RT: 6.69
Area: 5733
Amount: 5.001604
Amount Units: ng

Processing Integration Results



RT: 6.68
Area: 9419
Amount: 4.955897
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 08:58:30
Audit Action: Manually Integrated
Audit Reason: Split Peak

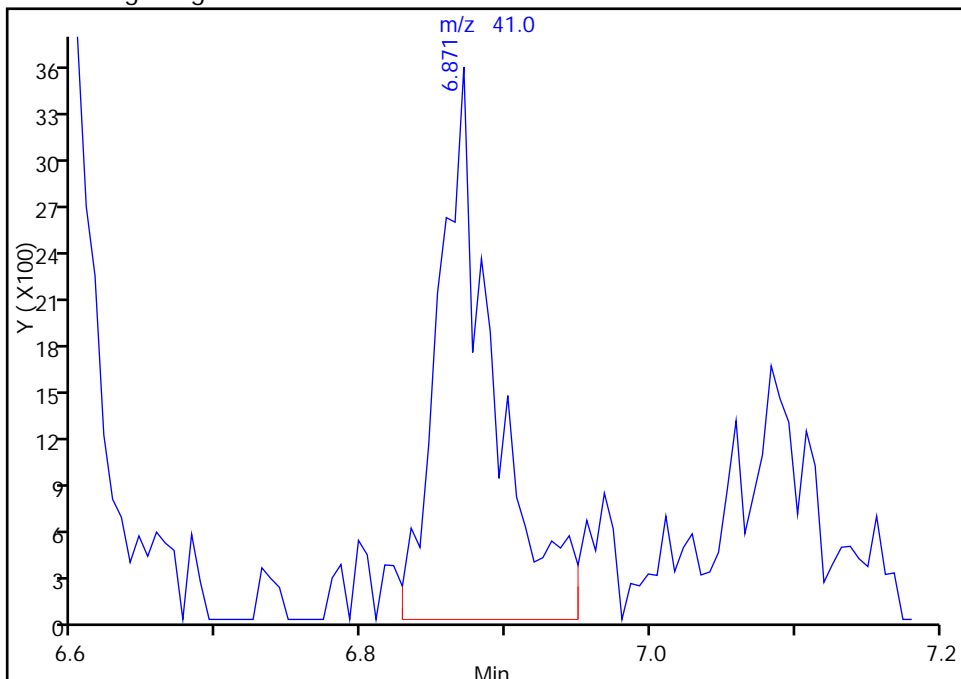
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414004.D
Injection Date: 14-Apr-2015 15:56:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 4
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

55 Isobutyl alcohol, CAS: 78-83-1

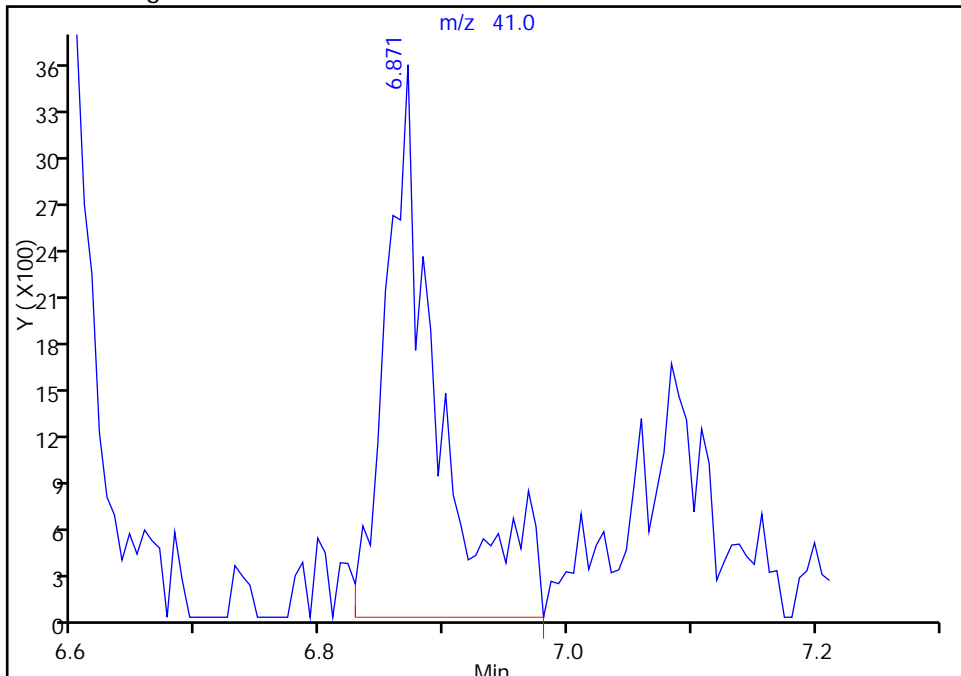
RT: 6.87
Area: 9274
Amount: 69.825613
Amount Units: ng

Processing Integration Results



RT: 6.87
Area: 10177
Amount: 104.5608
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 08:58:30
Audit Action: Manually Integrated
Audit Reason: Peak Tail

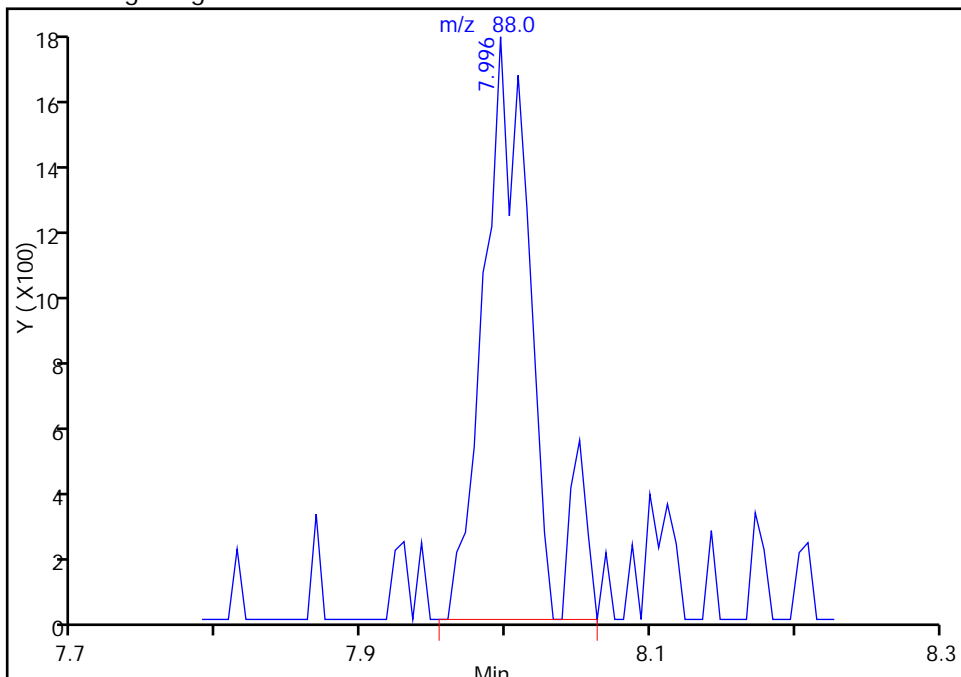
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414004.D
Injection Date: 14-Apr-2015 15:56:30 Instrument ID: CHHP6
Lims ID: IC VSTD1
Client ID:
Operator ID: 001562 ALS Bottle#: 3 Worklist Smp#: 4
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

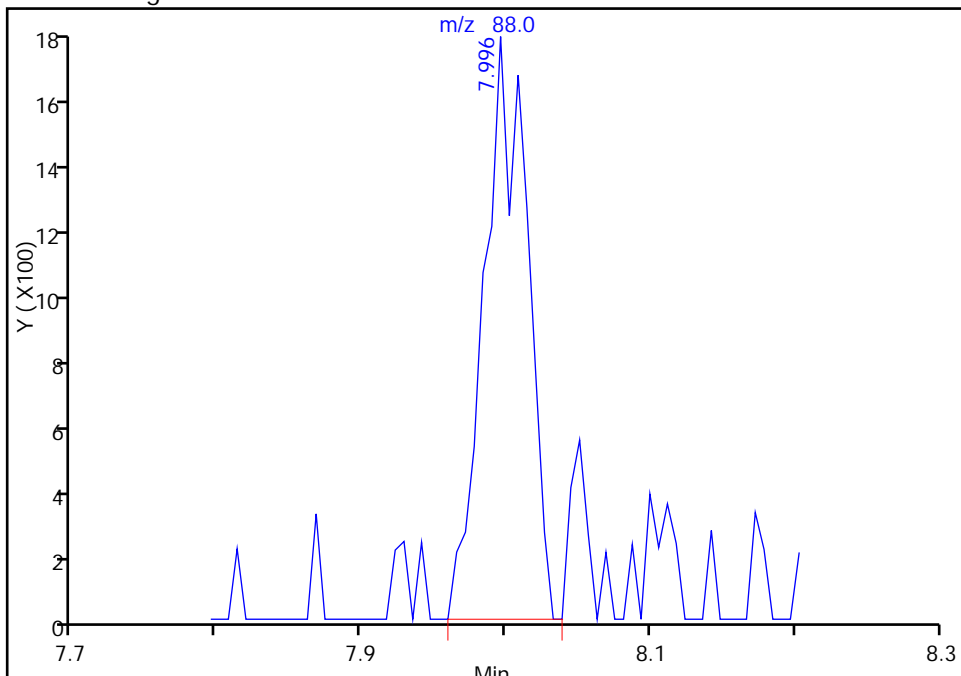
RT: 8.00
Area: 4102
Amount: 146.3874
Amount Units: ng

Processing Integration Results



RT: 8.00
Area: 3668
Amount: 98.398346
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 08:58:30
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414005.D
 Lims ID: IC VSTD5
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 14-Apr-2015 16:20:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD5
 Misc. Info.: 180-0006462-005
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Apr-2015 11:14:45 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: fergusond

Date: 15-Apr-2015 08:11:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.205	4.196	0.009	97	275959	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.259	7.256	0.003	99	453777	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.370	0.003	90	94042	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.725	-0.003	96	154286	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.526	0.003	94	43893	25.0	23.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.909	-0.009	51	66016	25.0	24.6	
\$ 7 Toluene-d8 (Surr)	98	8.913	8.916	-0.003	92	204580	25.0	26.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.563	-0.003	86	75101	25.0	25.3	
11 Dichlorodifluoromethane	85	1.577	1.574	0.003	99	60703	25.0	27.2	
12 Chloromethane	50	1.729	1.732	-0.003	100	96959	25.0	27.9	
13 Vinyl chloride	62	1.857	1.860	-0.003	98	82652	25.0	25.3	
14 Butadiene	39	1.899	1.902	-0.003	95	88605	25.0	26.7	
15 Bromomethane	94	2.197	2.200	-0.003	93	27678	25.0	30.0	
16 Chloroethane	64	2.331	2.334	-0.003	99	36664	25.0	26.3	
17 Dichlorofluoromethane	67	2.611	2.614	-0.003	97	101071	25.0	29.8	
18 Trichlorofluoromethane	101	2.660	2.657	0.003	77	84758	25.0	28.1	
20 Ethyl ether	59	3.006	3.009	-0.003	96	74885	25.0	25.4	
21 Acrolein	56	3.189	3.180	0.009	98	47536	125.0	135.2	
22 1,1-Dichloroethene	96	3.311	3.308	0.003	98	63800	25.0	27.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.353	3.362	-0.009	94	61799	25.0	26.9	
24 Acetone	43	3.377	3.387	-0.010	97	37480	50.0	49.1	
25 Iodomethane	142	3.493	3.502	-0.009	97	84856	25.0	26.1	
26 Carbon disulfide	76	3.590	3.606	-0.016	99	164274	25.0	24.6	
29 3-Chloro-1-propene	76	3.876	3.873	0.003	58	40762	25.0	25.5	
30 Methyl acetate	43	3.876	3.885	-0.009	97	328218	125.0	129.2	
31 Methylene Chloride	84	4.095	4.092	0.003	99	83314	25.0	26.8	
32 2-Methyl-2-propanol	59	4.339	4.336	0.003	97	77119	250.0	245.8	
33 Acrylonitrile	53	4.460	4.457	0.003	100	360150	250.0	264.2	
34 trans-1,2-Dichloroethene	96	4.527	4.530	-0.003	65	70648	25.0	26.1	
35 Methyl tert-butyl ether	73	4.527	4.530	-0.003	96	206957	25.0	26.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.941	4.950	-0.009	91	113466	25.0	26.6	
37 1,1-Dichloroethane	63	5.160	5.163	-0.003	96	132306	25.0	25.7	
38 Vinyl acetate	43	5.196	5.206	-0.010	98	131821	25.0	24.6	
42 2,2-Dichloropropane	77	5.902	5.905	-0.003	62	64166	25.0	26.1	
44 2-Butanone (MEK)	43	5.908	5.905	0.003	63	69926	50.0	51.8	
43 cis-1,2-Dichloroethene	96	5.908	5.911	-0.003	88	73065	25.0	25.3	
48 Chlorobromomethane	128	6.200	6.203	-0.003	94	32788	25.0	25.8	
49 Tetrahydrofuran	42	6.206	6.215	-0.009	93	62423	50.0	52.4	
50 Chloroform	83	6.340	6.343	-0.003	96	104787	25.0	25.6	
51 1,1,1-Trichloroethane	97	6.510	6.514	-0.004	97	73337	25.0	25.9	
52 Cyclohexane	56	6.583	6.587	-0.003	92	146376	25.0	26.4	
53 Carbon tetrachloride	117	6.687	6.690	-0.003	62	44706	25.0	24.8	
54 1,1-Dichloropropene	75	6.699	6.696	0.003	92	86591	25.0	25.6	
55 Isobutyl alcohol	41	6.875	6.872	0.003	90	49699	625.0	538.1	M
56 Benzene	78	6.912	6.915	-0.003	97	285019	25.0	26.0	
57 1,2-Dichloroethane	62	6.991	6.994	-0.003	94	90463	25.0	25.9	
59 n-Heptane	43	7.277	7.280	-0.003	92	79497	25.0	24.4	
61 Trichloroethene	130	7.648	7.651	-0.003	96	63232	25.0	25.5	
63 Methylcyclohexane	83	7.897	7.894	0.003	91	123112	25.0	26.6	
64 1,2-Dichloropropane	63	7.922	7.925	-0.003	96	74565	25.0	24.0	
65 1,4-Dioxane	88	8.001	8.004	-0.003	54	17314	500.0	489.4	
67 Dibromomethane	93	8.019	8.016	0.003	90	37488	25.0	25.4	
68 Dichlorobromomethane	83	8.208	8.205	0.003	99	60531	25.0	23.5	
71 cis-1,3-Dichloropropene	75	8.652	8.649	0.003	93	80677	25.0	22.2	
72 4-Methyl-2-pentanone (MIBK)	43	8.792	8.789	0.003	97	169102	50.0	54.5	
73 Toluene	91	8.986	8.983	0.003	98	274356	25.0	28.2	
74 trans-1,3-Dichloropropene	75	9.230	9.227	0.003	97	60905	25.0	23.7	
75 Ethyl methacrylate	69	9.285	9.281	0.004	91	76395	25.0	24.1	
76 1,1,2-Trichloroethane	97	9.424	9.421	0.003	92	54442	25.0	25.9	
77 Tetrachloroethene	164	9.497	9.500	-0.003	94	45345	25.0	28.1	
78 1,3-Dichloropropane	76	9.583	9.586	-0.003	91	104685	25.0	26.6	
79 2-Hexanone	43	9.625	9.628	-0.003	95	93267	50.0	52.7	
81 Chlorodibromomethane	129	9.802	9.799	0.003	90	30316	25.0	23.3	
82 Ethylene Dibromide	107	9.917	9.920	-0.003	98	50019	25.0	24.8	
83 3-Chlorobenzotrifluoride	180	10.367	10.364	0.003	93	89658	25.0	28.9	
84 Chlorobenzene	112	10.404	10.401	0.003	93	165225	25.0	26.9	
85 4-Chlorobenzotrifluoride	180	10.459	10.456	0.003	96	86100	25.0	29.2	
86 1,1,1,2-Tetrachloroethane	131	10.495	10.498	-0.003	40	36645	25.0	23.2	
87 Ethylbenzene	106	10.501	10.498	0.003	98	98403	25.0	26.7	
88 m-Xylene & p-Xylene	106	10.635	10.632	0.003	97	118721	25.0	26.4	
89 o-Xylene	106	11.012	11.009	0.003	96	121411	25.0	27.2	
90 Styrene	104	11.037	11.034	0.003	96	185818	25.0	26.1	
91 Bromoform	173	11.219	11.222	-0.003	91	13008	25.0	19.0	
92 2-Chlorobenzotrifluoride	180	11.274	11.277	-0.003	96	92270	25.0	28.8	
93 Isopropylbenzene	105	11.383	11.380	0.003	96	294201	25.0	28.4	
96 1,1,2,2-Tetrachloroethane	83	11.687	11.691	-0.004	94	78615	25.0	26.7	
95 Bromobenzene	156	11.700	11.703	-0.003	96	64513	25.0	25.4	
97 trans-1,4-Dichloro-2-buten	53	11.730	11.727	0.003	68	23679	25.0	24.9	
98 1,2,3-Trichloropropane	110	11.748	11.745	0.003	84	25267	25.0	26.2	
99 N-Propylbenzene	120	11.797	11.800	-0.003	99	80022	25.0	25.1	
100 2-Chlorotoluene	126	11.888	11.885	0.003	96	72790	25.0	26.9	
101 3-Chlorotoluene	126	11.949	11.952	-0.003	95	81106	25.0	27.8	

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	11.979	11.983	-0.004	97	241788	25.0	26.5	
103 4-Chlorotoluene	126	12.016	12.007	0.009	98	73783	25.0	25.6	
104 tert-Butylbenzene	119	12.296	12.293	0.003	94	197294	25.0	26.4	
106 1,2,4-Trimethylbenzene	105	12.357	12.354	0.003	97	253221	25.0	26.6	
107 1,2-dichloro-4-(trifluorom	214	12.393	12.390	0.003	97	69087	25.0	28.6	
108 sec-Butylbenzene	105	12.521	12.518	0.003	94	303047	25.0	27.4	
109 1,3-Dichlorobenzene	146	12.643	12.640	0.003	96	133812	25.0	26.4	
110 4-Isopropyltoluene	119	12.679	12.676	0.003	97	245613	25.0	26.9	
111 1,4-Dichlorobenzene	146	12.746	12.749	-0.003	93	137547	25.0	26.1	
113 2,4-Dichloro-1-(trifluorom	214	12.758	12.761	-0.003	97	63959	25.0	25.7	
114 2,5-Dichlorobenzotrifluori	214	12.801	12.804	-0.003	97	70240	25.0	26.7	
116 n-Butylbenzene	91	13.087	13.084	0.003	98	225991	25.0	26.6	
117 1,2-Dichlorobenzene	146	13.099	13.102	-0.003	95	135161	25.0	26.6	
118 1,2-Dibromo-3-Chloropropan	75	13.884	13.899	-0.015	70	8672	25.0	21.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.030	14.033	-0.003	99	365920	75.0	86.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.449	14.446	0.003	99	254662	50.0	54.9	
122 1,2,4-Trichlorobenzene	180	14.717	14.720	-0.003	91	98113	25.0	26.5	
123 Hexachlorobutadiene	225	14.863	14.866	-0.003	97	26049	25.0	24.0	
124 Naphthalene	128	14.979	14.982	-0.003	97	251500	25.0	26.5	
125 1,2,3-Trichlorobenzene	180	15.204	15.201	0.003	95	89355	25.0	25.7	
126 2,4,5-Trichlorotoluene	159	15.982	15.979	0.003	0	51952	25.0	25.5	
127 2,3,6-Trichlorotoluene	159	16.086	16.083	0.003	92	48248	25.0	25.7	
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		50.0	51.4	
S 131 Xylenes, Total	106				0		50.0	53.6	
S 132 1,3-Dichloropropene, Total	1				0		50.0	45.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW VA pri R_00005	Amount Added: 1.00	Units: uL	
VOA8260VOAPRI_00109	Amount Added: 1.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 1.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 1.00	Units: uL	
VOA8260SURRE_00033	Amount Added: 1.00	Units: uL	
VOAACRPRI_00005	Amount Added: 5.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414005.D

Injection Date: 14-Apr-2015 16:20:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD5

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

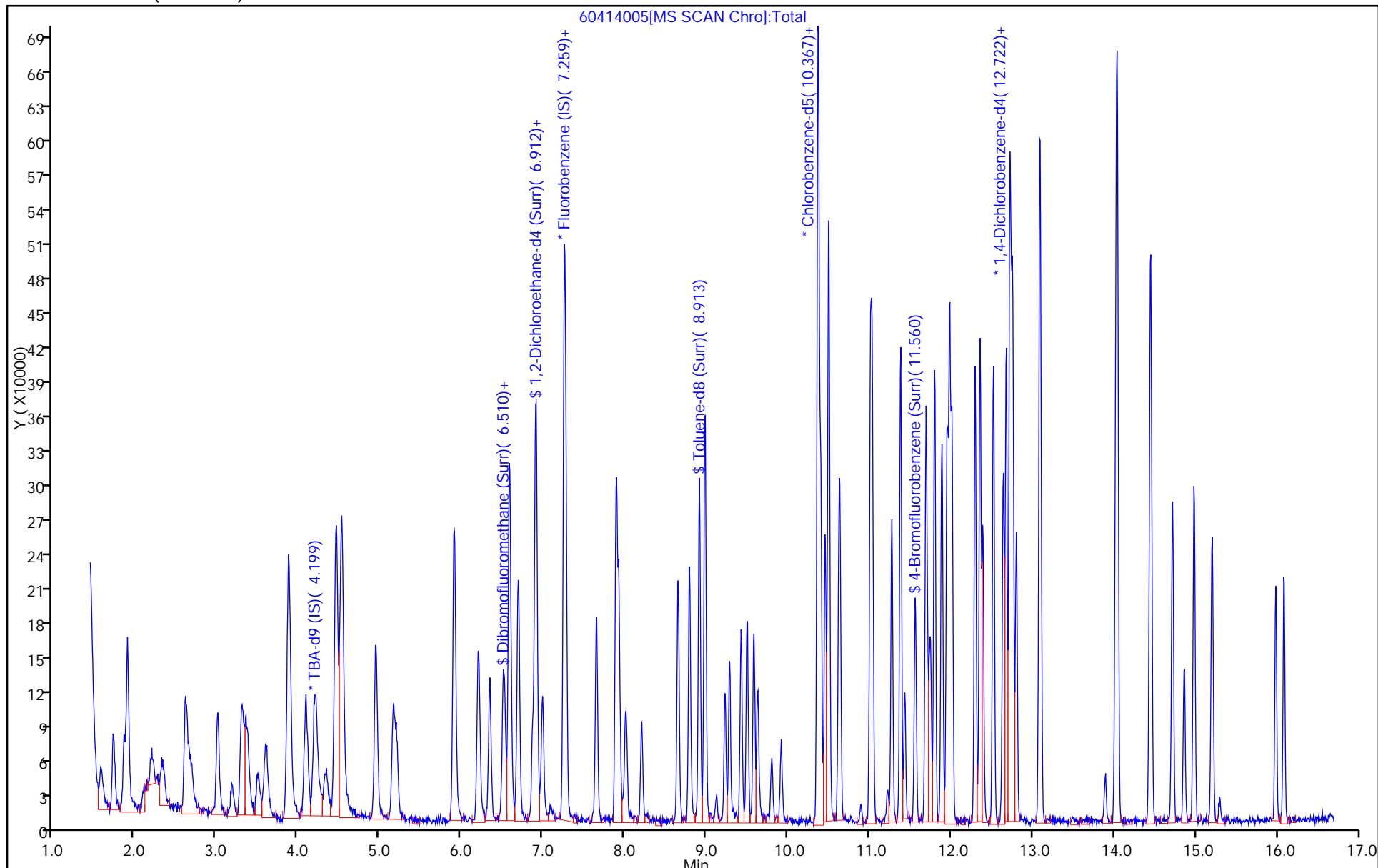
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



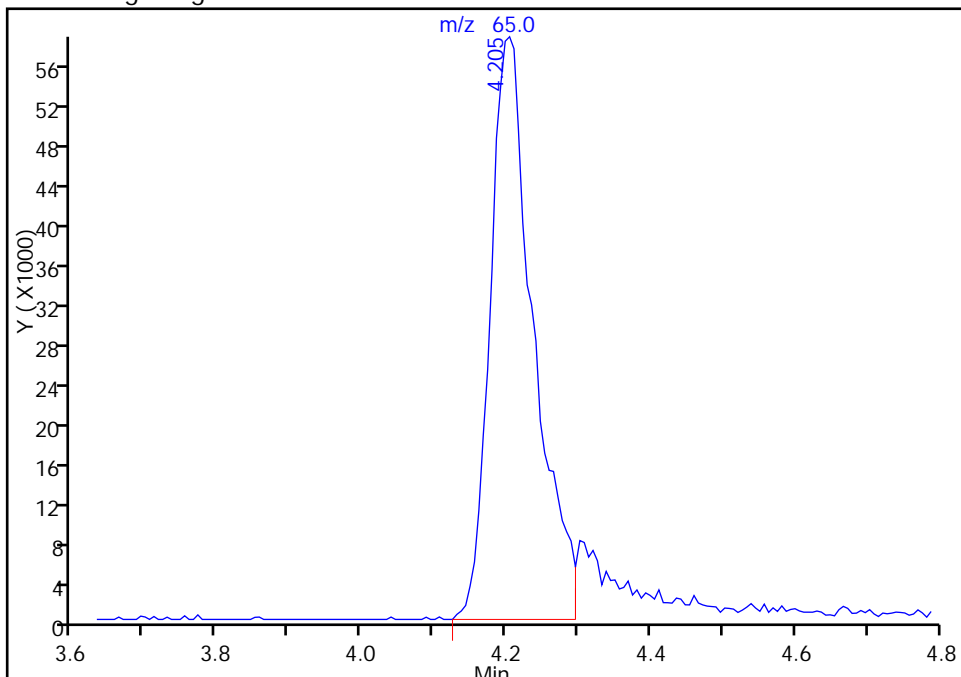
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414005.D
Injection Date: 14-Apr-2015 16:20:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 5
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

* 1 TBA-d9 (IS), CAS: 25725-11-5

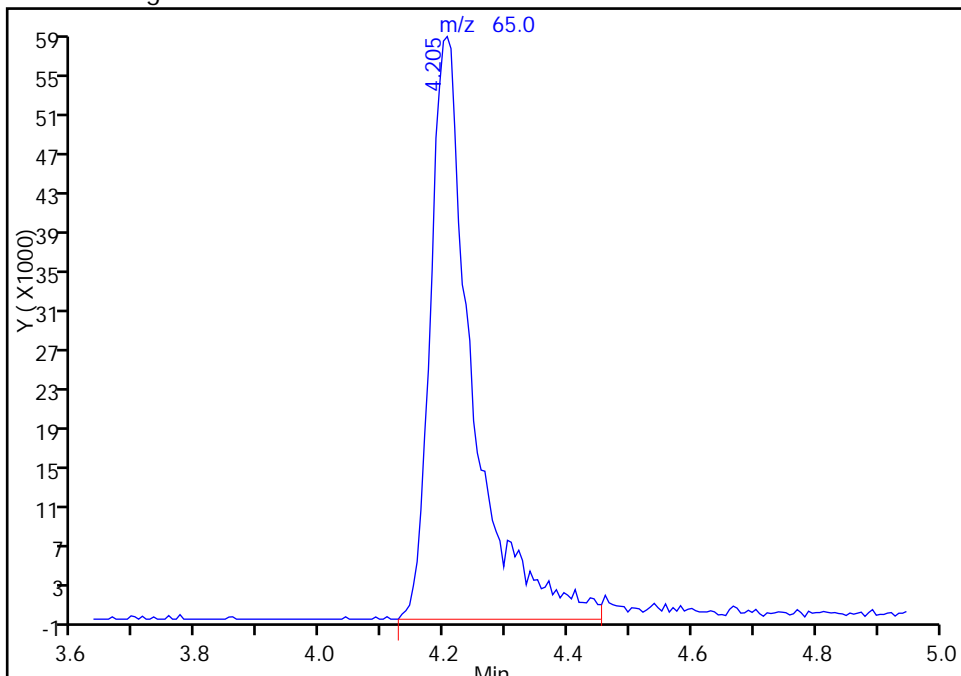
Processing Integration Results

RT: 4.20
Area: 242934
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 4.20
Area: 275959
Amount: 1000.0000
Amount Units: ng



Reviewer: fergusond, 15-Apr-2015 10:49:18
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

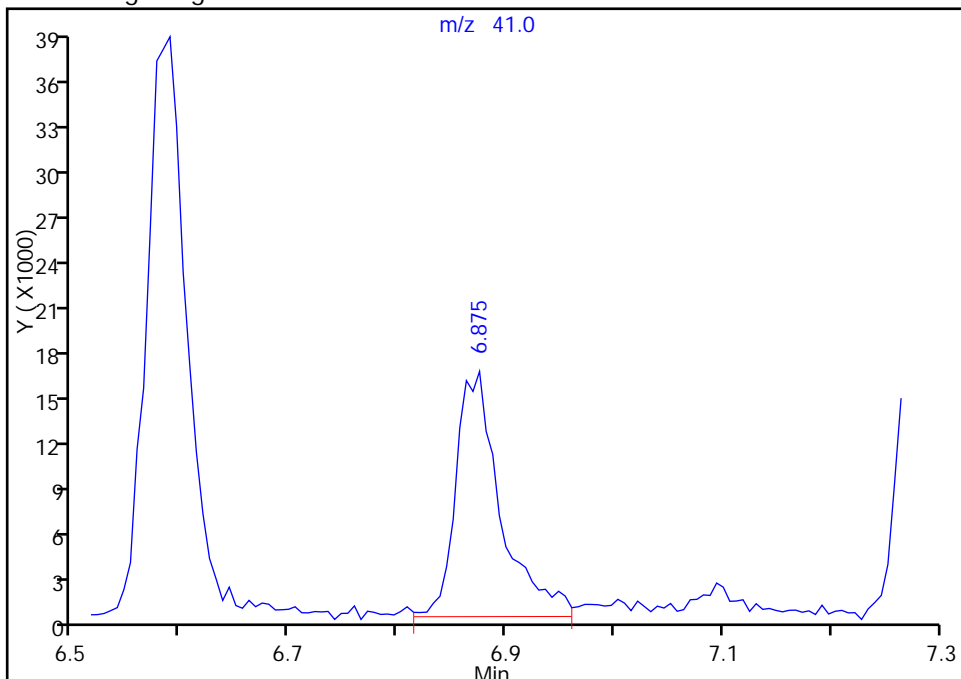
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414005.D
Injection Date: 14-Apr-2015 16:20:30 Instrument ID: CHHP6
Lims ID: IC VSTD5
Client ID:
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 5
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

55 Isobutyl alcohol, CAS: 78-83-1

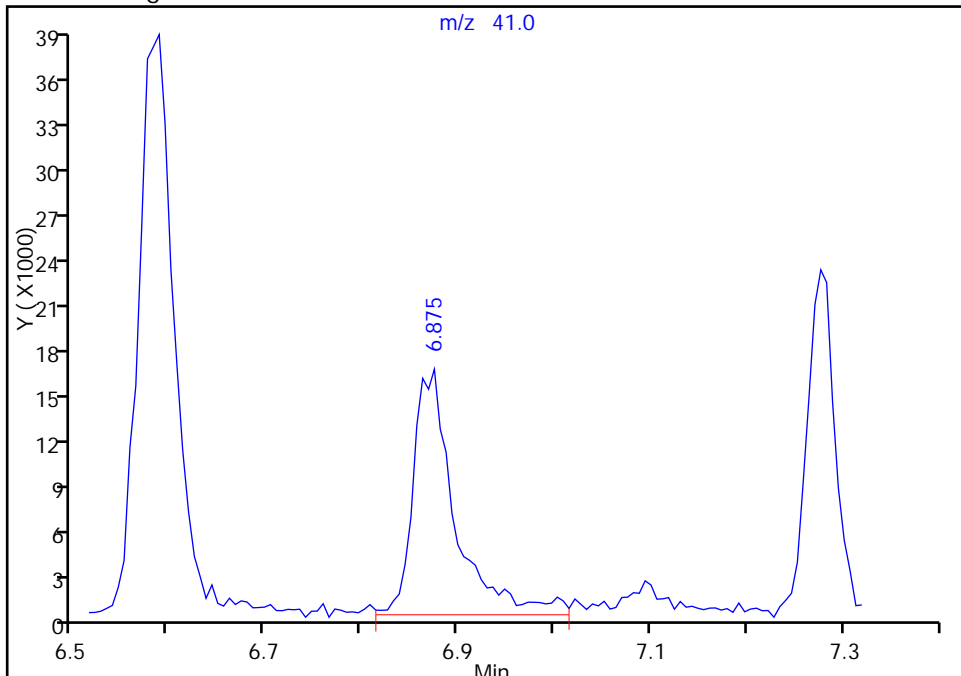
RT: 6.88
Area: 46865
Amount: 528.4499
Amount Units: ng

Processing Integration Results



RT: 6.88
Area: 49699
Amount: 538.0550
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 10:48:45
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414006.D
 Lims ID: ICIS VSTD10
 Client ID:
 Sample Type: ICIS Calib Level: 3
 Inject. Date: 14-Apr-2015 16:44:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: ICIS VSTD10
 Misc. Info.: 180-0006462-006
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Apr-2015 11:14:46 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: fergusond

Date: 15-Apr-2015 08:09:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.196	4.196	0.000	93	259519	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.256	7.256	0.000	98	476079	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.370	10.370	0.000	87	101094	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.725	12.725	0.000	91	160749	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.526	6.526	0.000	60	98488	50.0	50.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.909	6.909	0.000	47	140279	50.0	49.8	
\$ 7 Toluene-d8 (Surr)	98	8.916	8.916	0.000	93	450598	50.0	53.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.563	11.563	0.000	84	163780	50.0	51.3	
11 Dichlorodifluoromethane	85	1.574	1.574	0.000	85	106791	50.0	45.6	
12 Chloromethane	50	1.732	1.732	0.000	96	186510	50.0	51.2	
13 Vinyl chloride	62	1.860	1.860	0.000	99	166989	50.0	48.8	
14 Butadiene	39	1.902	1.902	0.000	95	171583	50.0	49.3	
15 Bromomethane	94	2.200	2.200	0.000	88	51819	50.0	53.5	
16 Chloroethane	64	2.334	2.334	0.000	95	72016	50.0	49.3	
17 Dichlorofluoromethane	67	2.614	2.614	0.000	78	176030	50.0	49.4	
18 Trichlorofluoromethane	101	2.657	2.657	0.000	95	156867	50.0	49.6	
20 Ethyl ether	59	3.009	3.009	0.000	93	154456	50.0	49.9	
21 Acrolein	56	3.180	3.180	0.000	84	54861	150.0	148.7	
22 1,1-Dichloroethene	96	3.308	3.308	0.000	89	119436	50.0	48.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.362	3.362	0.000	93	115973	50.0	48.1	
24 Acetone	43	3.387	3.387	0.000	95	71017	100.0	88.7	
25 Iodomethane	142	3.502	3.502	0.000	96	167304	50.0	49.0	
26 Carbon disulfide	76	3.606	3.606	0.000	100	339036	50.0	48.3	
29 3-Chloro-1-propene	76	3.873	3.873	0.000	62	80515	50.0	48.1	
30 Methyl acetate	43	3.885	3.885	0.000	97	672639	250.0	252.4	
31 Methylene Chloride	84	4.092	4.092	0.000	89	159225	50.0	48.9	
32 2-Methyl-2-propanol	59	4.336	4.336	0.000	61	147799	500.0	501.0	
33 Acrylonitrile	53	4.457	4.457	0.000	99	724450	500.0	506.5	
34 trans-1,2-Dichloroethene	96	4.530	4.530	0.000	63	137244	50.0	48.3	
35 Methyl tert-butyl ether	73	4.530	4.530	0.000	97	413033	50.0	50.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.950	4.950	0.000	88	209971	50.0	46.9	
37 1,1-Dichloroethane	63	5.163	5.163	0.000	84	263144	50.0	48.8	
38 Vinyl acetate	43	5.206	5.206	0.000	97	260351	50.0	46.3	
42 2,2-Dichloropropane	77	5.905	5.905	0.000	59	128135	50.0	49.7	
44 2-Butanone (MEK)	43	5.905	5.905	0.000	63	136965	100.0	96.8	
43 cis-1,2-Dichloroethene	96	5.911	5.911	0.000	86	152579	50.0	50.4	
48 Chlorobromomethane	128	6.203	6.203	0.000	88	66092	50.0	49.5	
49 Tetrahydrofuran	42	6.215	6.215	0.000	90	116139	100.0	93.0	
50 Chloroform	83	6.343	6.343	0.000	97	210499	50.0	49.0	
51 1,1,1-Trichloroethane	97	6.514	6.514	0.000	89	141549	50.0	47.7	
52 Cyclohexane	56	6.587	6.587	0.000	91	282577	50.0	48.5	
53 Carbon tetrachloride	117	6.690	6.690	0.000	55	85035	50.0	44.9	
54 1,1-Dichloropropene	75	6.696	6.696	0.000	92	175077	50.0	49.4	
55 Isobutyl alcohol	41	6.872	6.872	0.000	96	103503	1250.0	1068.1	
56 Benzene	78	6.915	6.915	0.000	90	575171	50.0	50.0	
57 1,2-Dichloroethane	62	6.994	6.994	0.000	95	180357	50.0	49.2	
59 n-Heptane	43	7.280	7.280	0.000	89	157110	50.0	46.0	
61 Trichloroethene	130	7.651	7.651	0.000	95	127393	50.0	49.1	
63 Methylcyclohexane	83	7.894	7.894	0.000	91	238897	50.0	49.1	
64 1,2-Dichloropropane	63	7.925	7.925	0.000	95	158216	50.0	48.6	
65 1,4-Dioxane	88	8.004	8.004	0.000	43	31761	1000.0	855.7	M
67 Dibromomethane	93	8.016	8.016	0.000	88	77560	50.0	50.1	
68 Dichlorobromomethane	83	8.205	8.205	0.000	89	127059	50.0	46.9	
71 cis-1,3-Dichloropropene	75	8.649	8.649	0.000	89	177534	50.0	46.6	
72 4-Methyl-2-pentanone (MIBK)	43	8.789	8.789	0.000	83	352126	100.0	105.6	
73 Toluene	91	8.983	8.983	0.000	98	532421	50.0	50.9	
74 trans-1,3-Dichloropropene	75	9.227	9.227	0.000	95	129721	50.0	46.9	
75 Ethyl methacrylate	69	9.281	9.281	0.000	90	166304	50.0	48.7	
76 1,1,2-Trichloroethane	97	9.421	9.421	0.000	89	115089	50.0	51.0	
77 Tetrachloroethene	164	9.500	9.500	0.000	97	87678	50.0	50.6	
78 1,3-Dichloropropane	76	9.586	9.586	0.000	92	210069	50.0	49.7	
79 2-Hexanone	43	9.628	9.628	0.000	96	184058	100.0	96.7	
81 Chlorodibromomethane	129	9.799	9.799	0.000	88	66760	50.0	47.7	
82 Ethylene Dibromide	107	9.920	9.920	0.000	94	108487	50.0	50.0	
83 3-Chlorobenzotrifluoride	180	10.364	10.364	0.000	82	181114	50.0	54.2	
84 Chlorobenzene	112	10.401	10.401	0.000	92	338650	50.0	51.3	
85 4-Chlorobenzotrifluoride	180	10.456	10.456	0.000	86	162498	50.0	51.2	
86 1,1,1,2-Tetrachloroethane	131	10.498	10.498	0.000	41	76580	50.0	45.1	
87 Ethylbenzene	106	10.498	10.498	0.000	97	198256	50.0	50.0	
88 m-Xylene & p-Xylene	106	10.632	10.632	0.000	98	245845	50.0	50.8	
89 o-Xylene	106	11.009	11.009	0.000	96	244361	50.0	51.0	
90 Styrene	104	11.034	11.034	0.000	95	390895	50.0	51.1	
91 Bromoform	173	11.222	11.222	0.000	82	32637	50.0	44.4	
92 2-Chlorobenzotrifluoride	180	11.277	11.277	0.000	97	183319	50.0	53.3	
93 Isopropylbenzene	105	11.380	11.380	0.000	96	583535	50.0	52.3	
96 1,1,2,2-Tetrachloroethane	83	11.691	11.691	0.000	71	160898	50.0	50.8	
95 Bromobenzene	156	11.703	11.703	0.000	88	132157	50.0	49.9	
97 trans-1,4-Dichloro-2-buten	53	11.727	11.727	0.000	71	44569	50.0	45.1	
98 1,2,3-Trichloropropane	110	11.745	11.745	0.000	71	49184	50.0	49.0	
99 N-Propylbenzene	120	11.800	11.800	0.000	75	167139	50.0	50.3	
100 2-Chlorotoluene	126	11.885	11.885	0.000	95	139968	50.0	49.7	
101 3-Chlorotoluene	126	11.952	11.952	0.000	75	156576	50.0	51.5	

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	11.983	11.983	0.000	94	492135	50.0	51.7	
103 4-Chlorotoluene	126	12.007	12.007	0.000	98	147227	50.0	49.0	
104 tert-Butylbenzene	119	12.293	12.293	0.000	82	391306	50.0	50.3	
106 1,2,4-Trimethylbenzene	105	12.354	12.354	0.000	98	514922	50.0	51.9	
107 1,2-dichloro-4-(trifluorom	214	12.390	12.390	0.000	96	133711	50.0	53.1	
108 sec-Butylbenzene	105	12.518	12.518	0.000	94	604612	50.0	52.5	
109 1,3-Dichlorobenzene	146	12.640	12.640	0.000	87	265834	50.0	50.4	
110 4-Isopropyltoluene	119	12.676	12.676	0.000	79	492499	50.0	51.8	
111 1,4-Dichlorobenzene	146	12.749	12.749	0.000	91	277654	50.0	50.6	
113 2,4-Dichloro-1-(trifluorom	214	12.761	12.761	0.000	70	129972	50.0	50.1	
114 2,5-Dichlorobenzotrifluori	214	12.804	12.804	0.000	96	150922	50.0	55.0	
116 n-Butylbenzene	91	13.084	13.084	0.000	98	459229	50.0	51.8	
117 1,2-Dichlorobenzene	146	13.102	13.102	0.000	95	265276	50.0	50.1	
118 1,2-Dibromo-3-Chloropropan	75	13.893	13.899	-0.006	72	18298	50.0	42.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.033	14.033	0.000	98	712538	150.0	161.5	
121 2,3- & 3,4- Dichlorotoluen	125	14.446	14.446	0.000	99	510812	100.0	105.6	
122 1,2,4-Trichlorobenzene	180	14.720	14.720	0.000	91	191430	50.0	49.6	
123 Hexachlorobutadiene	225	14.866	14.866	0.000	90	55562	50.0	49.1	
124 Naphthalene	128	14.982	14.982	0.000	98	524609	50.0	53.0	
125 1,2,3-Trichlorobenzene	180	15.201	15.201	0.000	94	182332	50.0	50.3	
126 2,4,5-Trichlorotoluene	159	15.979	15.979	0.000	0	104236	50.0	49.1	
127 2,3,6-Trichlorotoluene	159	16.083	16.083	0.000	91	97458	50.0	49.8	
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	98.7	
S 131 Xylenes, Total	106				0		100.0	101.8	
S 132 1,3-Dichloropropene, Total	1				0		100.0	93.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added: 6.00	Units: uL	
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00109	Amount Added: 2.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414006.D

Injection Date: 14-Apr-2015 16:44:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: ICIS VSTD10

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

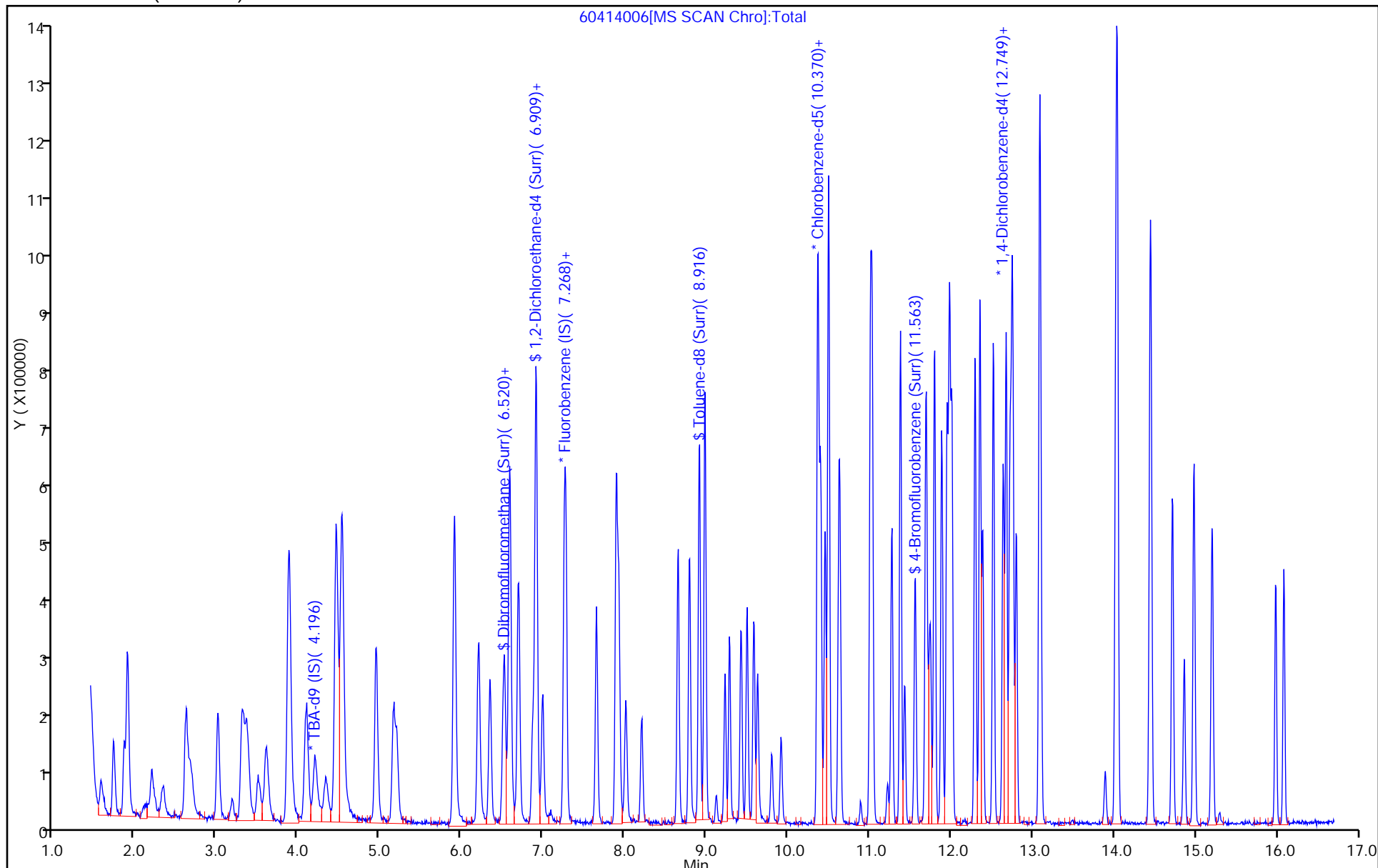
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



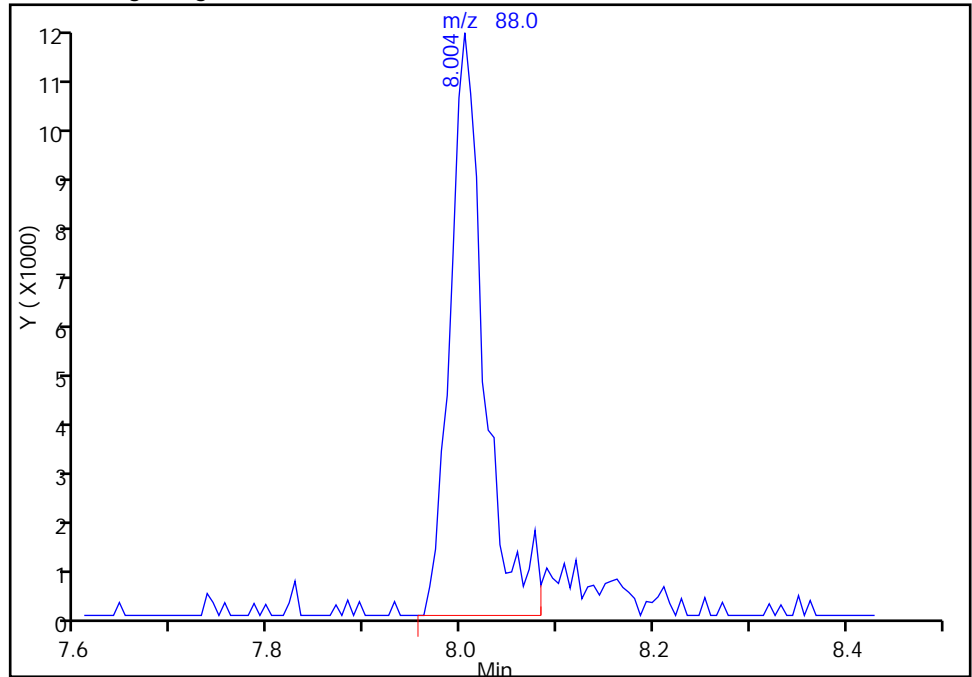
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414006.D
Injection Date: 14-Apr-2015 16:44:30 Instrument ID: CHHP6
Lims ID: ICIS VSTD10
Client ID:
Operator ID: 001562 ALS Bottle#: 5 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

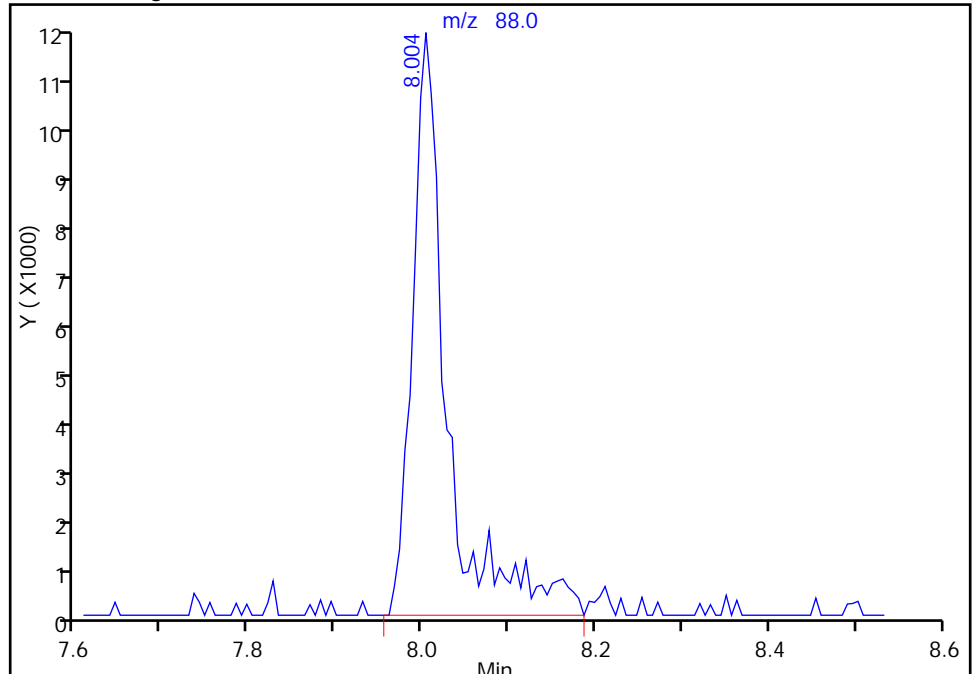
RT: 8.00
Area: 28048
Amount: 1051.6241
Amount Units: ng

Processing Integration Results



RT: 8.00
Area: 31761
Amount: 855.7481
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 08:44:42
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414007.D
 Lims ID: IC VSTD15
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 14-Apr-2015 17:08:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD15
 Misc. Info.: 180-0006462-007
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Apr-2015 11:14:48 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: fergusond

Date: 15-Apr-2015 10:52:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.218	4.218	0.000	97	274229	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.260	7.260	0.000	99	466829	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.368	0.000	89	101388	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.723	12.723	0.000	95	161885	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.530	6.530	0.000	93	143214	75.0	74.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.901	0.000	68	210885	75.0	76.4	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	93	681270	75.0	80.6	
\$ 8 4-Bromofluorobenzene (Surr	95	11.561	11.561	0.000	84	256826	75.0	80.2	
11 Dichlorodifluoromethane	85	1.578	1.578	0.000	99	180006	75.0	78.4	
12 Chloromethane	50	1.730	1.730	0.000	99	259663	75.0	72.7	
13 Vinyl chloride	62	1.864	1.864	0.000	98	257745	75.0	76.8	
14 Butadiene	39	1.906	1.906	0.000	94	262872	75.0	77.0	
15 Bromomethane	94	2.198	2.198	0.000	89	74926	75.0	78.9	
16 Chloroethane	64	2.338	2.338	0.000	99	112533	75.0	78.6	
17 Dichlorofluoromethane	67	2.618	2.618	0.000	98	277891	75.0	79.5	
18 Trichlorofluoromethane	101	2.661	2.661	0.000	98	258678	75.0	83.4	
20 Ethyl ether	59	3.007	3.007	0.000	93	238471	75.0	78.6	
21 Acrolein	56	3.190	3.190	0.000	100	62900	175.0	173.9	
22 1,1-Dichloroethene	96	3.299	3.299	0.000	98	185123	75.0	76.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.360	3.360	0.000	96	178883	75.0	75.7	
24 Acetone	43	3.391	3.391	0.000	99	122817	150.0	156.5	
25 Iodomethane	142	3.500	3.500	0.000	98	253665	75.0	75.8	
26 Carbon disulfide	76	3.591	3.591	0.000	100	527213	75.0	76.6	
29 3-Chloro-1-propene	76	3.877	3.877	0.000	92	130838	75.0	79.7	
30 Methyl acetate	43	3.883	3.883	0.000	98	1030019	375.0	394.2	
31 Methylene Chloride	84	4.084	4.084	0.000	98	231283	75.0	72.4	
32 2-Methyl-2-propanol	59	4.346	4.346	0.000	98	237140	750.0	760.7	
33 Acrylonitrile	53	4.461	4.461	0.000	100	1100259	750.0	784.5	
34 trans-1,2-Dichloroethene	96	4.528	4.528	0.000	65	206119	75.0	74.0	
35 Methyl tert-butyl ether	73	4.534	4.534	0.000	98	633049	75.0	78.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.948	4.948	0.000	91	343032	75.0	78.2	
37 1,1-Dichloroethane	63	5.161	5.161	0.000	96	409142	75.0	77.3	
38 Vinyl acetate	43	5.203	5.203	0.000	97	438351	75.0	79.6	
42 2,2-Dichloropropane	77	5.915	5.915	0.000	59	185518	75.0	73.4	
44 2-Butanone (MEK)	43	5.915	5.915	0.000	97	225417	150.0	162.5	
43 cis-1,2-Dichloroethene	96	5.909	5.909	0.000	83	228773	75.0	77.1	
48 Chlorobromomethane	128	6.201	6.201	0.000	92	101057	75.0	77.2	
49 Tetrahydrofuran	42	6.213	6.213	0.000	91	183816	150.0	150.1	
50 Chloroform	83	6.341	6.341	0.000	97	318643	75.0	75.7	
51 1,1,1-Trichloroethane	97	6.511	6.511	0.000	97	221828	75.0	76.2	
52 Cyclohexane	56	6.590	6.590	0.000	94	447344	75.0	78.3	
53 Carbon tetrachloride	117	6.688	6.688	0.000	93	136581	75.0	73.6	
54 1,1-Dichloropropene	75	6.694	6.694	0.000	94	268893	75.0	77.4	
55 Isobutyl alcohol	41	6.870	6.870	0.000	95	186526	1875.0	1962.9	
56 Benzene	78	6.913	6.913	0.000	98	901343	75.0	79.9	
57 1,2-Dichloroethane	62	6.992	6.992	0.000	95	284208	75.0	79.1	
59 n-Heptane	43	7.278	7.278	0.000	94	266810	75.0	79.6	
61 Trichloroethene	130	7.649	7.649	0.000	97	197388	75.0	77.5	
63 Methylcyclohexane	83	7.892	7.892	0.000	93	367809	75.0	77.1	
64 1,2-Dichloropropane	63	7.923	7.923	0.000	90	240670	75.0	75.3	
65 1,4-Dioxane	88	8.008	8.008	0.000	50	61093	1500.0	1678.7	M
67 Dibromomethane	93	8.014	8.014	0.000	96	116831	75.0	76.9	
68 Dichlorobromomethane	83	8.209	8.209	0.000	98	204768	75.0	77.1	
71 cis-1,3-Dichloropropene	75	8.653	8.653	0.000	92	288828	75.0	77.3	
72 4-Methyl-2-pentanone (MIBK)	43	8.793	8.793	0.000	97	567987	150.0	169.9	
73 Toluene	91	8.981	8.981	0.000	99	842884	75.0	80.4	
74 trans-1,3-Dichloropropene	75	9.231	9.231	0.000	95	225532	75.0	81.3	
75 Ethyl methacrylate	69	9.285	9.285	0.000	92	287785	75.0	84.1	
76 1,1,2-Trichloroethane	97	9.425	9.425	0.000	92	180364	75.0	79.7	
77 Tetrachloroethene	164	9.498	9.498	0.000	95	136044	75.0	78.2	
78 1,3-Dichloropropane	76	9.583	9.583	0.000	93	348658	75.0	82.3	
79 2-Hexanone	43	9.626	9.626	0.000	96	316655	150.0	165.9	
81 Chlorodibromomethane	129	9.802	9.802	0.000	91	109378	75.0	77.9	
82 Ethylene Dibromide	107	9.918	9.918	0.000	98	179683	75.0	82.6	
83 3-Chlorobenzotrifluoride	180	10.368	10.368	0.000	96	254644	75.0	76.0	
84 Chlorobenzene	112	10.399	10.399	0.000	93	539973	75.0	81.6	
85 4-Chlorobenzotrifluoride	180	10.460	10.460	0.000	96	234841	75.0	73.8	
86 1,1,1,2-Tetrachloroethane	131	10.496	10.496	0.000	89	132325	75.0	77.7	
87 Ethylbenzene	106	10.502	10.502	0.000	98	320537	75.0	80.7	
88 m-Xylene & p-Xylene	106	10.630	10.630	0.000	97	399615	75.0	82.3	
89 o-Xylene	106	11.013	11.013	0.000	96	382587	75.0	79.6	
90 Styrene	104	11.031	11.031	0.000	95	641919	75.0	83.7	
91 Bromoform	173	11.220	11.220	0.000	95	54733	75.0	74.3	
92 2-Chlorobenzotrifluoride	180	11.275	11.275	0.000	97	257887	75.0	74.7	
93 Isopropylbenzene	105	11.378	11.378	0.000	96	916714	75.0	82.0	
96 1,1,2,2-Tetrachloroethane	83	11.688	11.688	0.000	96	262449	75.0	82.6	
95 Bromobenzene	156	11.701	11.701	0.000	97	210262	75.0	78.9	
97 trans-1,4-Dichloro-2-buten	53	11.725	11.725	0.000	79	80353	75.0	80.7	
98 1,2,3-Trichloropropane	110	11.749	11.749	0.000	86	83491	75.0	82.6	
99 N-Propylbenzene	120	11.798	11.798	0.000	98	261383	75.0	78.1	
100 2-Chlorotoluene	126	11.889	11.889	0.000	96	223097	75.0	78.7	
101 3-Chlorotoluene	126	11.950	11.950	0.000	95	224211	75.0	73.2	

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	11.980	11.980	0.000	94	770880	75.0	80.4	
103 4-Chlorotoluene	126	12.011	12.011	0.000	98	240836	75.0	79.6	
104 tert-Butylbenzene	119	12.297	12.297	0.000	94	625147	75.0	79.8	
106 1,2,4-Trimethylbenzene	105	12.351	12.351	0.000	97	805128	75.0	80.6	
107 1,2-dichloro-4-(trifluorom	214	12.388	12.388	0.000	98	182735	75.0	72.1	
108 sec-Butylbenzene	105	12.522	12.522	0.000	94	941742	75.0	81.1	
109 1,3-Dichlorobenzene	146	12.643	12.643	0.000	97	413725	75.0	77.9	
110 4-Isopropyltoluene	119	12.680	12.680	0.000	96	767285	75.0	80.1	
111 1,4-Dichlorobenzene	146	12.747	12.747	0.000	92	437067	75.0	79.1	
113 2,4-Dichloro-1-(trifluorom	214	12.759	12.759	0.000	97	187910	75.0	72.0	
114 2,5-Dichlorobenzotrifluori	214	12.802	12.802	0.000	97	201098	75.0	72.7	
116 n-Butylbenzene	91	13.088	13.088	0.000	98	721979	75.0	80.9	
117 1,2-Dichlorobenzene	146	13.100	13.100	0.000	95	412408	75.0	77.4	
118 1,2-Dibromo-3-Chloropropan	75	13.891	13.891	0.000	73	32029	75.0	74.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.037	14.037	0.000	99	994963	225.0	223.9	
121 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	98	737543	150.0	151.4	
122 1,2,4-Trichlorobenzene	180	14.718	14.718	0.000	94	302807	75.0	78.0	
123 Hexachlorobutadiene	225	14.864	14.864	0.000	96	88108	75.0	77.3	
124 Naphthalene	128	14.980	14.980	0.000	98	811164	75.0	81.4	
125 1,2,3-Trichlorobenzene	180	15.205	15.205	0.000	94	279139	75.0	76.5	
126 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	165832	75.0	77.6	
127 2,3,6-Trichlorotoluene	159	16.081	16.081	0.000	94	152061	75.0	77.2	
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		150.0	151.1	
S 131 Xylenes, Total	106				0		150.0	161.9	
S 132 1,3-Dichloropropene, Total	1				0		150.0	158.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added: 7.00	Units: uL	
VOA8260SURR_00033	Amount Added: 3.00	Units: uL	
VOA8260VOAPRI_00109	Amount Added: 3.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 3.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 3.00	Units: uL	
voaW VA pri R_00005	Amount Added: 3.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414007.D

Injection Date: 14-Apr-2015 17:08:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD15

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

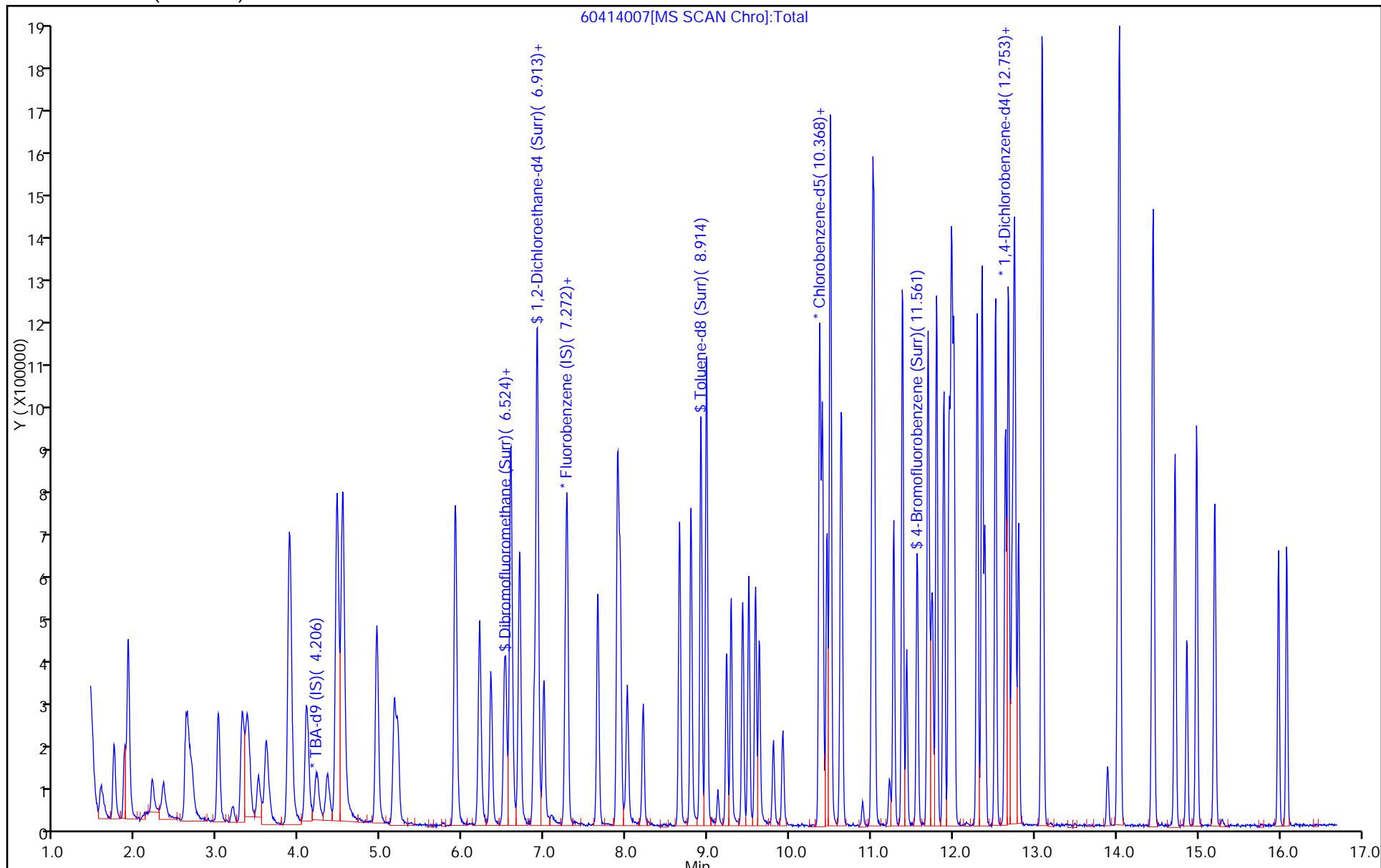
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



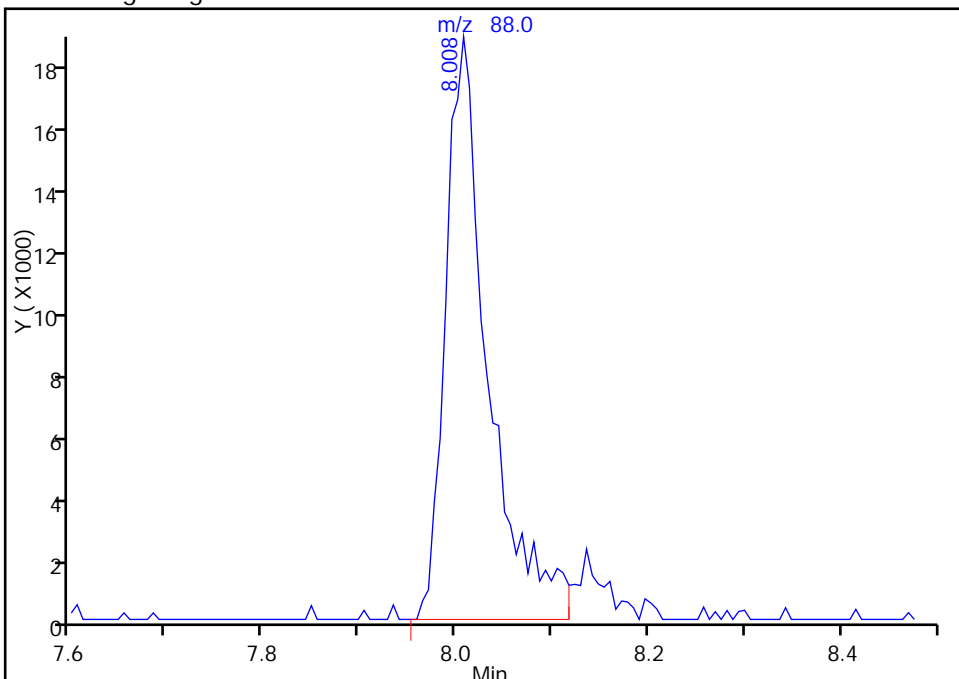
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414007.D
Injection Date: 14-Apr-2015 17:08:30 Instrument ID: CHHP6
Lims ID: IC VSTD15
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

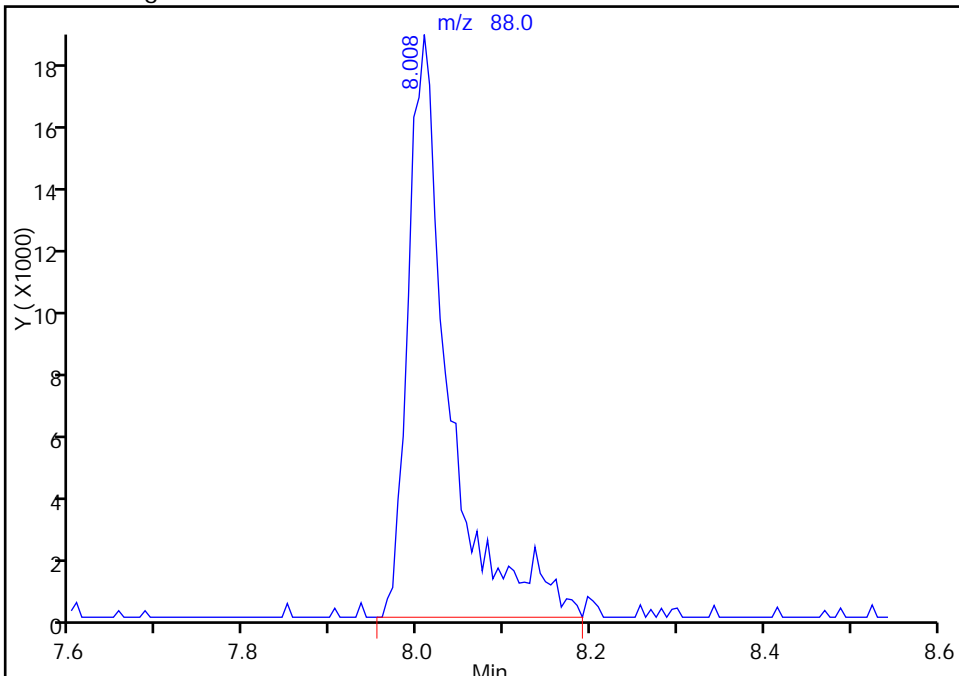
RT: 8.01
Area: 57032
Amount: 1800.2742
Amount Units: ng

Processing Integration Results



RT: 8.01
Area: 61093
Amount: 1678.6665
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 10:52:28
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414008.D
 Lims ID: IC VSTD20
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 14-Apr-2015 17:32:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD20
 Misc. Info.: 180-0006462-008
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Apr-2015 11:44:41 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: fergusond

Date: 15-Apr-2015 11:44:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.199	4.218	-0.019	99	284243	1000.0	1000.0	M
* 2 Fluorobenzene (IS)	96	7.259	7.260	-0.001	96	464046	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.368	0.006	88	105377	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.723	-0.001	91	161986	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.530	-0.001	59	199289	100.0	104.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.901	-0.001	55	285047	100.0	103.8	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	93	904513	100.0	103.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.561	-0.001	83	340291	100.0	102.3	
11 Dichlorodifluoromethane	85	1.571	1.578	-0.007	98	205142	100.0	89.9	
12 Chloromethane	50	1.729	1.730	-0.001	88	366734	100.0	103.3	
13 Vinyl chloride	62	1.863	1.864	-0.001	83	343528	100.0	103.0	
14 Butadiene	39	1.899	1.906	-0.007	92	348808	100.0	102.7	
15 Bromomethane	94	2.191	2.198	-0.007	92	94754	100.0	100.4	
16 Chloroethane	64	2.325	2.338	-0.013	97	147668	100.0	103.7	
17 Dichlorofluoromethane	67	2.611	2.618	-0.007	96	372233	100.0	107.1	
18 Trichlorofluoromethane	101	2.623	2.661	-0.037	57	330379	100.0	107.1	
20 Ethyl ether	59	3.006	3.007	-0.001	92	310097	100.0	102.9	
21 Acrolein	56	3.177	3.190	-0.013	86	76212	200.0	212.0	
22 1,1-Dichloroethene	96	3.305	3.299	0.006	89	237693	100.0	98.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.359	3.360	-0.001	95	231166	100.0	98.4	
24 Acetone	43	3.384	3.391	-0.007	91	145423	200.0	186.4	
25 Iodomethane	142	3.499	3.500	-0.001	96	334395	100.0	100.5	
26 Carbon disulfide	76	3.597	3.591	0.006	100	701600	100.0	102.6	
29 3-Chloro-1-propene	76	3.876	3.877	-0.001	61	165226	100.0	101.2	
30 Methyl acetate	43	3.883	3.883	-0.001	97	1348333	500.0	519.1	
31 Methylene Chloride	84	4.089	4.084	0.005	98	301842	100.0	95.1	
32 2-Methyl-2-propanol	59	4.333	4.346	-0.013	10	307893	1000.0	952.9	
33 Acrylonitrile	53	4.454	4.461	-0.007	99	1428211	1000.0	1024.5	
34 trans-1,2-Dichloroethene	96	4.533	4.528	0.005	67	277392	100.0	100.2	
35 Methyl tert-butyl ether	73	4.533	4.534	-0.001	92	828571	100.0	102.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.947	4.948	-0.001	90	441474	100.0	101.2	
37 1,1-Dichloroethane	63	5.160	5.161	-0.001	97	533638	100.0	101.4	
38 Vinyl acetate	43	5.197	5.203	-0.006	97	543070	100.0	99.1	
43 cis-1,2-Dichloroethene	96	5.908	5.909	-0.001	72	302570	100.0	102.5	
42 2,2-Dichloropropane	77	5.908	5.915	-0.007	59	268662	100.0	106.9	
44 2-Butanone (MEK)	43	5.908	5.915	-0.007	62	278094	200.0	201.6	
48 Chlorobromomethane	128	6.200	6.201	-0.001	88	131254	100.0	100.9	
49 Tetrahydrofuran	42	6.206	6.213	-0.007	91	248697	200.0	204.3	
50 Chloroform	83	6.340	6.341	-0.001	84	424444	100.0	101.4	
51 1,1,1-Trichloroethane	97	6.504	6.511	-0.007	93	298449	100.0	103.2	
52 Cyclohexane	56	6.590	6.590	0.000	77	573421	100.0	101.0	
53 Carbon tetrachloride	117	6.687	6.688	-0.001	73	183039	100.0	99.2	
54 1,1-Dichloropropene	75	6.699	6.694	0.005	94	356648	100.0	103.2	
55 Isobutyl alcohol	41	6.876	6.870	0.006	95	237305	2500.0	2512.3	
56 Benzene	78	6.912	6.913	-0.001	97	1162497	100.0	103.7	
57 1,2-Dichloroethane	62	6.991	6.992	-0.001	94	360814	100.0	101.0	
59 n-Heptane	43	7.277	7.278	-0.001	92	336019	100.0	100.9	
61 Trichloroethene	130	7.654	7.649	0.005	97	262240	100.0	103.6	
63 Methylcyclohexane	83	7.892	7.892	0.000	90	481368	100.0	101.5	
64 1,2-Dichloropropane	63	7.922	7.923	-0.001	91	322338	100.0	101.5	
65 1,4-Dioxane	88	8.007	8.008	-0.001	48	62707	2000.0	1733.3	
67 Dibromomethane	93	8.013	8.014	-0.001	92	152197	100.0	100.8	
68 Dichlorobromomethane	83	8.208	8.209	-0.001	92	273485	100.0	103.6	
71 cis-1,3-Dichloropropene	75	8.652	8.653	-0.001	89	390483	100.0	105.1	
72 4-Methyl-2-pentanone (MIBK)	43	8.792	8.793	-0.001	94	730684	200.0	210.3	
73 Toluene	91	8.980	8.981	-0.001	97	1093291	100.0	100.3	
74 trans-1,3-Dichloropropene	75	9.230	9.231	-0.001	92	307088	100.0	106.4	
75 Ethyl methacrylate	69	9.285	9.285	0.000	89	372527	100.0	104.7	
76 1,1,2-Trichloroethane	97	9.425	9.425	0.000	90	236187	100.0	100.4	
77 Tetrachloroethene	164	9.498	9.498	0.000	92	177702	100.0	98.3	
78 1,3-Dichloropropane	76	9.583	9.583	0.000	93	440829	100.0	100.1	
79 2-Hexanone	43	9.625	9.626	-0.001	95	404604	200.0	203.9	
81 Chlorodibromomethane	129	9.802	9.802	0.000	89	147395	100.0	101.0	
82 Ethylene Dibromide	107	9.917	9.918	-0.001	99	223548	100.0	98.9	
83 3-Chlorobenzotrifluoride	180	10.361	10.368	-0.007	88	347323	100.0	99.8	
84 Chlorobenzene	112	10.398	10.399	-0.001	91	686840	100.0	99.9	
85 4-Chlorobenzotrifluoride	180	10.459	10.460	-0.001	96	329897	100.0	99.7	
86 1,1,1,2-Tetrachloroethane	131	10.501	10.496	0.005	37	185895	100.0	105.0	
87 Ethylbenzene	106	10.501	10.502	-0.001	97	416747	100.0	100.9	
88 m-Xylene & p-Xylene	106	10.629	10.630	-0.001	97	504956	100.0	100.0	
89 o-Xylene	106	11.012	11.013	-0.001	94	510911	100.0	102.3	
90 Styrene	104	11.037	11.031	0.006	95	834255	100.0	104.7	
91 Bromoform	173	11.219	11.220	-0.001	80	81780	100.0	106.8	
92 2-Chlorobenzotrifluoride	180	11.274	11.275	-0.001	97	366442	100.0	102.1	
93 Isopropylbenzene	105	11.383	11.378	0.005	91	1186722	100.0	102.1	
96 1,1,2,2-Tetrachloroethane	83	11.688	11.688	0.000	54	336155	100.0	101.7	
95 Bromobenzene	156	11.700	11.701	-0.001	83	267300	100.0	100.2	
97 trans-1,4-Dichloro-2-buten	53	11.730	11.725	0.005	72	102096	100.0	102.4	
98 1,2,3-Trichloropropane	110	11.748	11.749	-0.001	78	103566	100.0	102.4	
99 N-Propylbenzene	120	11.797	11.798	-0.001	96	345870	100.0	103.3	
100 2-Chlorotoluene	126	11.888	11.889	-0.001	96	291489	100.0	102.8	
101 3-Chlorotoluene	126	11.949	11.950	-0.001	74	315051	100.0	102.8	

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	11.980	11.980	0.000	94	1000023	100.0	104.2	
103 4-Chlorotoluene	126	12.010	12.011	-0.001	98	312301	100.0	103.2	
104 tert-Butylbenzene	119	12.296	12.297	-0.001	82	816947	100.0	104.2	
106 1,2,4-Trimethylbenzene	105	12.357	12.351	0.006	98	1043569	100.0	104.4	
107 1,2-dichloro-4-(trifluorom	214	12.387	12.388	-0.001	94	262018	100.0	103.3	
108 sec-Butylbenzene	105	12.521	12.522	-0.001	95	1227168	100.0	105.7	
109 1,3-Dichlorobenzene	146	12.643	12.643	0.000	95	543225	100.0	102.2	
110 4-Isopropyltoluene	119	12.679	12.680	-0.001	79	1008686	100.0	105.2	
111 1,4-Dichlorobenzene	146	12.746	12.747	-0.001	88	570718	100.0	103.2	
113 2,4-Dichloro-1-(trifluorom	214	12.758	12.759	-0.001	60	266987	100.0	102.2	
114 2,5-Dichlorobenzotrifluori	214	12.801	12.802	-0.001	98	289956	100.0	104.8	
116 n-Butylbenzene	91	13.087	13.088	-0.001	93	936029	100.0	104.8	
117 1,2-Dichlorobenzene	146	13.099	13.100	-0.001	93	550173	100.0	103.2	
118 1,2-Dibromo-3-Chloropropan	75	13.890	13.891	-0.001	77	46320	100.0	107.1	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.037	-0.001	98	1390015	300.0	312.6	
121 2,3- & 3,4- Dichlorotoluen	125	14.449	14.450	-0.001	98	1037390	200.0	212.8	
122 1,2,4-Trichlorobenzene	180	14.717	14.718	-0.001	92	396266	100.0	102.0	
123 Hexachlorobutadiene	225	14.863	14.864	-0.001	95	119384	100.0	104.6	
124 Naphthalene	128	14.979	14.980	-0.001	98	1066104	100.0	106.9	
125 1,2,3-Trichlorobenzene	180	15.204	15.205	-0.001	93	376170	100.0	103.0	
126 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	226062	100.0	105.7	
127 2,3,6-Trichlorotoluene	159	16.086	16.081	0.005	92	203723	100.0	103.3	
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		200.0	202.7	
S 131 Xylenes, Total	106				0		200.0	202.3	
S 132 1,3-Dichloropropene, Total	1				0		200.0	211.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW VA pri R_00005	Amount Added: 4.00	Units: uL	
VOA8260SURR_00033	Amount Added: 4.00	Units: uL	
VOA8260VOAPRI_00109	Amount Added: 4.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 4.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 4.00	Units: uL	
VOAACRPRI_00005	Amount Added: 8.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414008.D

Injection Date: 14-Apr-2015 17:32:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD20

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

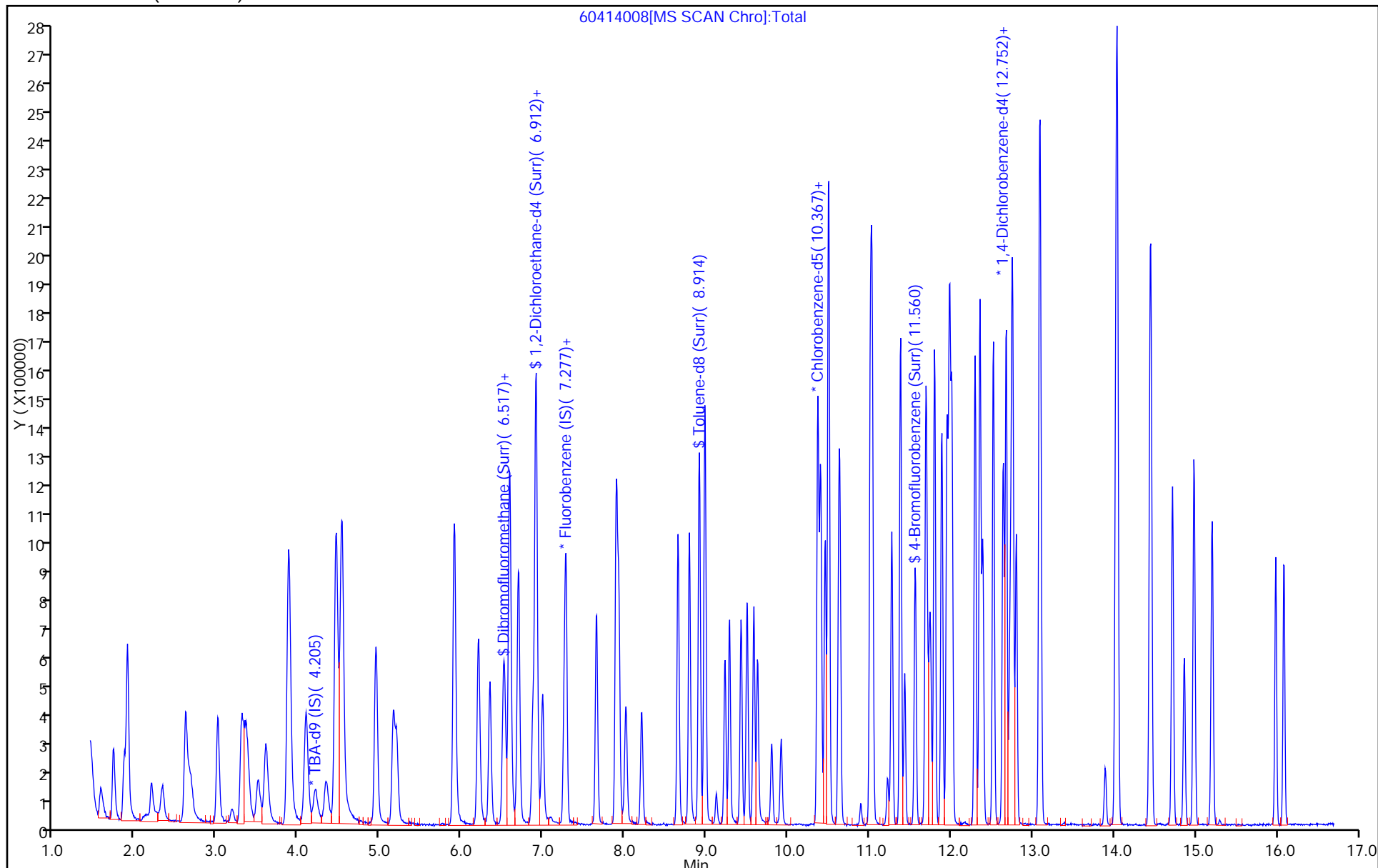
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



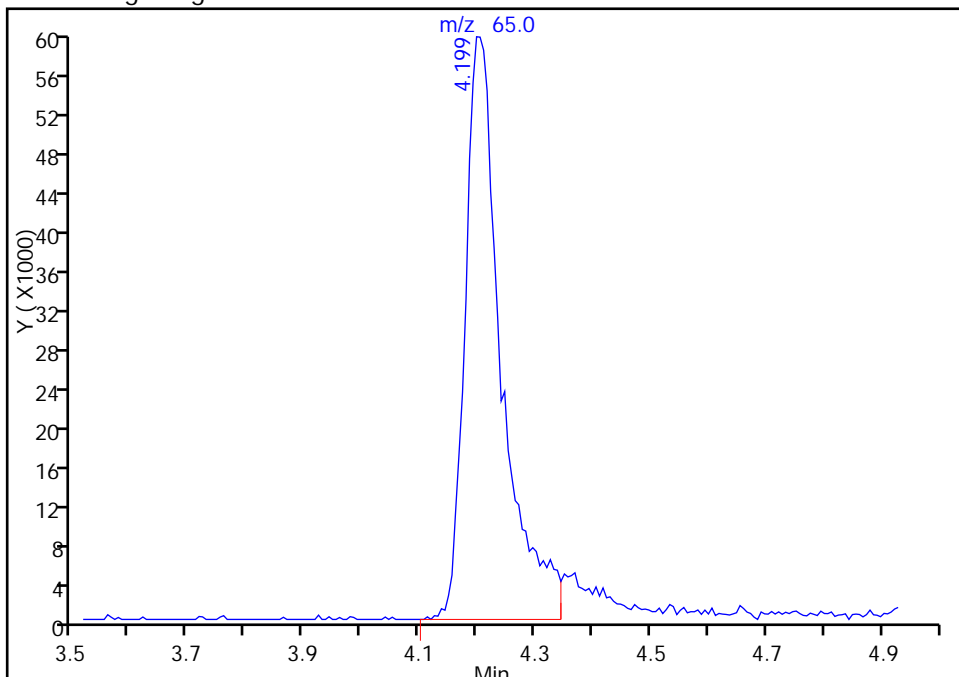
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414008.D
Injection Date: 14-Apr-2015 17:32:30 Instrument ID: CHHP6
Lims ID: IC VSTD20
Client ID:
Operator ID: 001562 ALS Bottle#: 7 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

* 1 TBA-d9 (IS), CAS: 25725-11-5

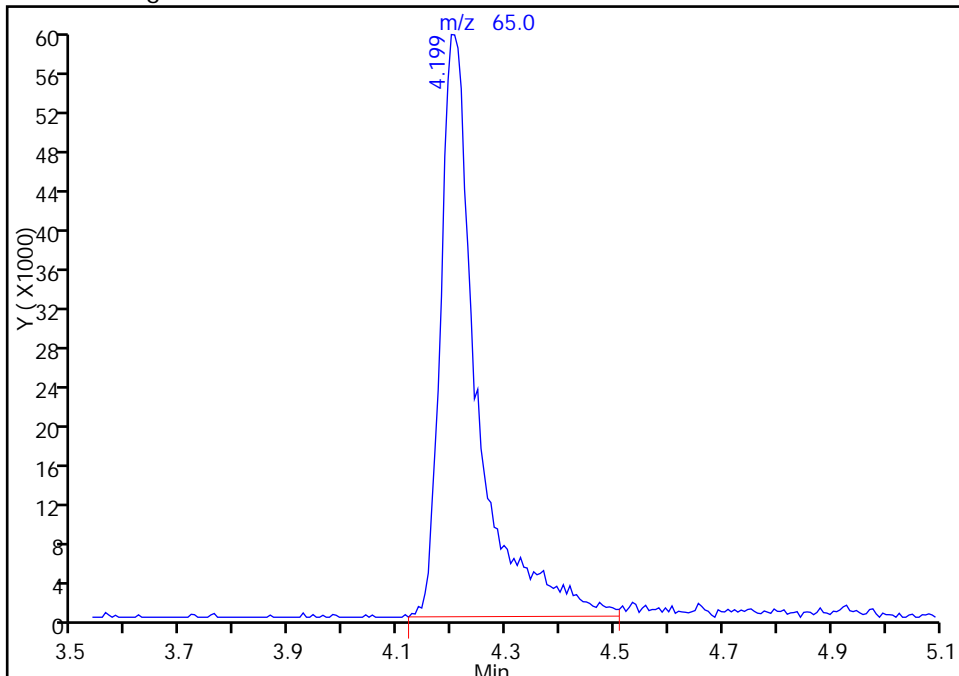
RT: 4.20
Area: 263091
Amount: 1000.0000
Amount Units: ng

Processing Integration Results



RT: 4.20
Area: 284243
Amount: 1000.0000
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 10:55:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414009.D
 Lims ID: IC VSTD35
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 14-Apr-2015 17:56:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD35
 Misc. Info.: 180-0006462-009
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Apr-2015 11:14:51 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: fergusond

Date: 15-Apr-2015 10:57:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.223	4.218	0.005	97	273985	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.258	7.260	-0.002	95	511260	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.367	10.368	-0.001	63	118575	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.721	12.723	-0.002	87	185248	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.528	6.530	-0.002	59	355133	175.0	168.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.905	6.901	0.004	56	498685	175.0	164.9	
\$ 7 Toluene-d8 (Surr)	98	8.913	8.914	-0.001	94	1559259	175.0	157.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.559	11.561	-0.002	85	624926	175.0	166.9	
11 Dichlorodifluoromethane	85	1.570	1.578	-0.008	65	397377	175.0	158.0	
12 Chloromethane	50	1.728	1.730	-0.002	87	602872	175.0	154.1	
13 Vinyl chloride	62	1.862	1.864	-0.002	99	582828	175.0	158.5	
14 Butadiene	39	1.905	1.906	-0.001	92	580879	175.0	155.3	
15 Bromomethane	94	2.191	2.198	-0.007	89	152997	175.0	147.1	
16 Chloroethane	64	2.324	2.338	-0.014	94	244668	175.0	156.0	
17 Dichlorofluoromethane	67	2.610	2.618	-0.008	81	573607	175.0	149.9	
18 Trichlorofluoromethane	101	2.629	2.661	-0.031	65	541942	175.0	159.5	
20 Ethyl ether	59	3.012	3.007	0.005	94	535441	175.0	161.2	
21 Acrolein	56	3.182	3.190	-0.008	72	83657	225.0	211.2	
22 1,1-Dichloroethene	96	3.298	3.299	-0.001	89	424168	175.0	160.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.353	3.360	-0.007	88	425143	175.0	164.2	
24 Acetone	43	3.389	3.391	-0.002	100	269884	350.0	313.9	
25 Iodomethane	142	3.499	3.500	-0.001	96	596492	175.0	162.7	
26 Carbon disulfide	76	3.590	3.591	-0.001	100	1279074	175.0	169.8	
29 3-Chloro-1-propene	76	3.876	3.877	-0.001	62	301393	175.0	167.6	
30 Methyl acetate	43	3.882	3.883	-0.001	97	2351693	875.0	821.8	
31 Methylene Chloride	84	4.089	4.084	0.005	97	520510	175.0	148.8	
32 2-Methyl-2-propanol	59	4.350	4.346	0.004	87	556960	1750.0	1788.2	
33 Acrylonitrile	53	4.460	4.461	-0.001	98	2459182	1750.0	1601.1	
34 trans-1,2-Dichloroethene	96	4.527	4.528	-0.001	71	485458	175.0	159.2	
35 Methyl tert-butyl ether	73	4.533	4.534	-0.001	92	1443972	175.0	162.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.946	4.948	-0.002	90	801429	175.0	166.8	
37 1,1-Dichloroethane	63	5.159	5.161	-0.002	96	935075	175.0	161.3	
38 Vinyl acetate	43	5.202	5.203	-0.001	97	1059045	175.0	175.5	
43 cis-1,2-Dichloroethene	96	5.908	5.909	-0.001	72	517052	175.0	159.0	
42 2,2-Dichloropropane	77	5.908	5.915	-0.007	58	437244	175.0	158.0	
44 2-Butanone (MEK)	43	5.914	5.915	-0.001	69	481747	350.0	317.0	
48 Chlorobromomethane	128	6.200	6.201	-0.001	92	228876	175.0	159.7	
49 Tetrahydrofuran	42	6.212	6.213	-0.001	89	420585	350.0	313.6	
50 Chloroform	83	6.346	6.341	0.005	97	725047	175.0	157.2	
51 1,1,1-Trichloroethane	97	6.510	6.511	-0.001	92	526045	175.0	165.1	
52 Cyclohexane	56	6.589	6.590	-0.001	77	1020748	175.0	163.2	
53 Carbon tetrachloride	117	6.692	6.688	0.004	55	350143	175.0	172.3	
54 1,1-Dichloropropene	75	6.699	6.694	0.004	91	616616	175.0	162.0	
55 Isobutyl alcohol	41	6.875	6.870	0.005	93	465175	4375.0	4469.9	
56 Benzene	78	6.911	6.913	-0.002	90	1943388	175.0	157.4	
57 1,2-Dichloroethane	62	6.991	6.992	-0.002	95	633778	175.0	161.0	
59 n-Heptane	43	7.276	7.278	-0.002	93	616563	175.0	168.0	
61 Trichloroethene	130	7.654	7.649	0.005	96	453709	175.0	162.7	
63 Methylcyclohexane	83	7.897	7.892	0.005	92	848330	175.0	162.4	
64 1,2-Dichloropropane	63	7.927	7.923	0.004	90	575801	175.0	164.5	
65 1,4-Dioxane	88	8.006	8.008	-0.002	57	134487	3500.0	3374.2	M
67 Dibromomethane	93	8.013	8.014	-0.001	90	275171	175.0	165.4	
68 Dichlorobromomethane	83	8.207	8.209	-0.002	98	502659	175.0	172.9	
71 cis-1,3-Dichloropropene	75	8.651	8.653	-0.002	90	733526	175.0	179.2	
72 4-Methyl-2-pentanone (MIBK)	43	8.791	8.793	-0.002	96	1270126	350.0	324.8	
73 Toluene	91	8.980	8.981	-0.001	96	1900259	175.0	154.9	
74 trans-1,3-Dichloropropene	75	9.229	9.231	-0.002	92	589214	175.0	181.5	
75 Ethyl methacrylate	69	9.284	9.285	-0.001	89	716287	175.0	178.9	
76 1,1,2-Trichloroethane	97	9.424	9.425	-0.001	92	429658	175.0	162.4	
77 Tetrachloroethene	164	9.497	9.498	-0.001	85	319386	175.0	157.0	
78 1,3-Dichloropropane	76	9.582	9.583	-0.001	93	802871	175.0	162.0	
79 2-Hexanone	43	9.625	9.626	-0.001	95	777899	350.0	348.4	
81 Chlorodibromomethane	129	9.801	9.802	-0.001	89	297317	175.0	181.0	
82 Ethylene Dibromide	107	9.917	9.918	-0.001	97	424603	175.0	166.9	
83 3-Chlorobenzotrifluoride	180	10.367	10.368	-0.001	75	621160	175.0	158.6	
84 Chlorobenzene	112	10.403	10.399	0.004	91	1221929	175.0	157.9	
85 4-Chlorobenzotrifluoride	180	10.458	10.460	-0.002	89	605670	175.0	162.6	
86 1,1,1,2-Tetrachloroethane	131	10.495	10.496	-0.001	46	358418	175.0	179.9	
87 Ethylbenzene	106	10.501	10.502	-0.001	97	755396	175.0	162.6	
88 m-Xylene & p-Xylene	106	10.628	10.630	-0.002	96	923550	175.0	162.6	
89 o-Xylene	106	11.012	11.013	-0.001	93	905752	175.0	161.1	
90 Styrene	104	11.036	11.031	0.005	94	1482857	175.0	165.3	
91 Bromoform	173	11.225	11.220	0.005	95	160861	175.0	186.7	
92 2-Chlorobenzotrifluoride	180	11.273	11.275	-0.002	96	630648	175.0	156.2	
93 Isopropylbenzene	105	11.383	11.378	0.005	97	2007205	175.0	153.5	
96 1,1,2,2-Tetrachloroethane	83	11.693	11.688	0.005	49	620263	175.0	166.8	
95 Bromobenzene	156	11.699	11.701	-0.002	89	500932	175.0	164.2	
97 trans-1,4-Dichloro-2-buten	53	11.723	11.725	-0.002	74	197231	175.0	173.0	
98 1,2,3-Trichloropropane	110	11.748	11.749	-0.001	78	191845	175.0	165.8	
99 N-Propylbenzene	120	11.796	11.798	-0.002	96	615214	175.0	160.7	
100 2-Chlorotoluene	126	11.888	11.889	-0.001	96	520582	175.0	160.5	
101 3-Chlorotoluene	126	11.955	11.950	0.005	73	574790	175.0	164.0	

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	11.979	11.980	-0.001	95	1738995	175.0	158.5	
103 4-Chlorotoluene	126	12.009	12.011	-0.002	98	576519	175.0	166.6	
104 tert-Butylbenzene	119	12.295	12.297	-0.002	83	1418414	175.0	158.2	
106 1,2,4-Trimethylbenzene	105	12.356	12.351	0.005	98	1798579	175.0	157.3	
107 1,2-dichloro-4-(trifluorom	214	12.393	12.388	0.005	96	470271	175.0	162.2	
108 sec-Butylbenzene	105	12.520	12.522	-0.002	95	2089295	175.0	157.3	
109 1,3-Dichlorobenzene	146	12.642	12.643	-0.001	88	970869	175.0	159.7	
110 4-Isopropyltoluene	119	12.679	12.680	-0.001	89	1753099	175.0	159.9	
111 1,4-Dichlorobenzene	146	12.745	12.747	-0.002	91	1019385	175.0	161.1	
113 2,4-Dichloro-1-(trifluorom	214	12.764	12.759	0.005	73	479486	175.0	160.5	
114 2,5-Dichlorobenzotrifluori	214	12.800	12.802	-0.002	98	522017	175.0	165.0	
116 n-Butylbenzene	91	13.086	13.088	-0.002	93	1615001	175.0	158.1	
117 1,2-Dichlorobenzene	146	13.098	13.100	-0.002	93	970949	175.0	159.2	
118 1,2-Dibromo-3-Chloropropan	75	13.889	13.891	-0.002	76	89162	175.0	180.3	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.035	14.037	-0.002	97	2395199	525.0	471.0	
121 2,3- & 3,4- Dichlorotoluen	125	14.449	14.450	-0.001	98	1777737	350.0	318.9	
122 1,2,4-Trichlorobenzene	180	14.717	14.718	-0.001	93	703946	175.0	158.4	
123 Hexachlorobutadiene	225	14.856	14.864	-0.008	94	213248	175.0	163.4	
124 Naphthalene	128	14.984	14.980	0.004	98	1831806	175.0	160.6	
125 1,2,3-Trichlorobenzene	180	15.203	15.205	-0.002	92	670471	175.0	160.6	
126 2,4,5-Trichlorotoluene	159	15.982	15.983	-0.001	0	421566	175.0	172.4	
127 2,3,6-Trichlorotoluene	159	16.085	16.081	0.004	93	376474	175.0	166.9	
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	318.2	
S 131 Xylenes, Total	106				0		350.0	323.7	
S 132 1,3-Dichloropropene, Total	1				0		350.0	360.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added: 9.00	Units: uL	
VOA8260SURRE_00033	Amount Added: 7.00	Units: uL	
VOA8260VOAPRI_00109	Amount Added: 7.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 7.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 7.00	Units: uL	
voaW VA pri R_00005	Amount Added: 7.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414009.D

Injection Date: 14-Apr-2015 17:56:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD35

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

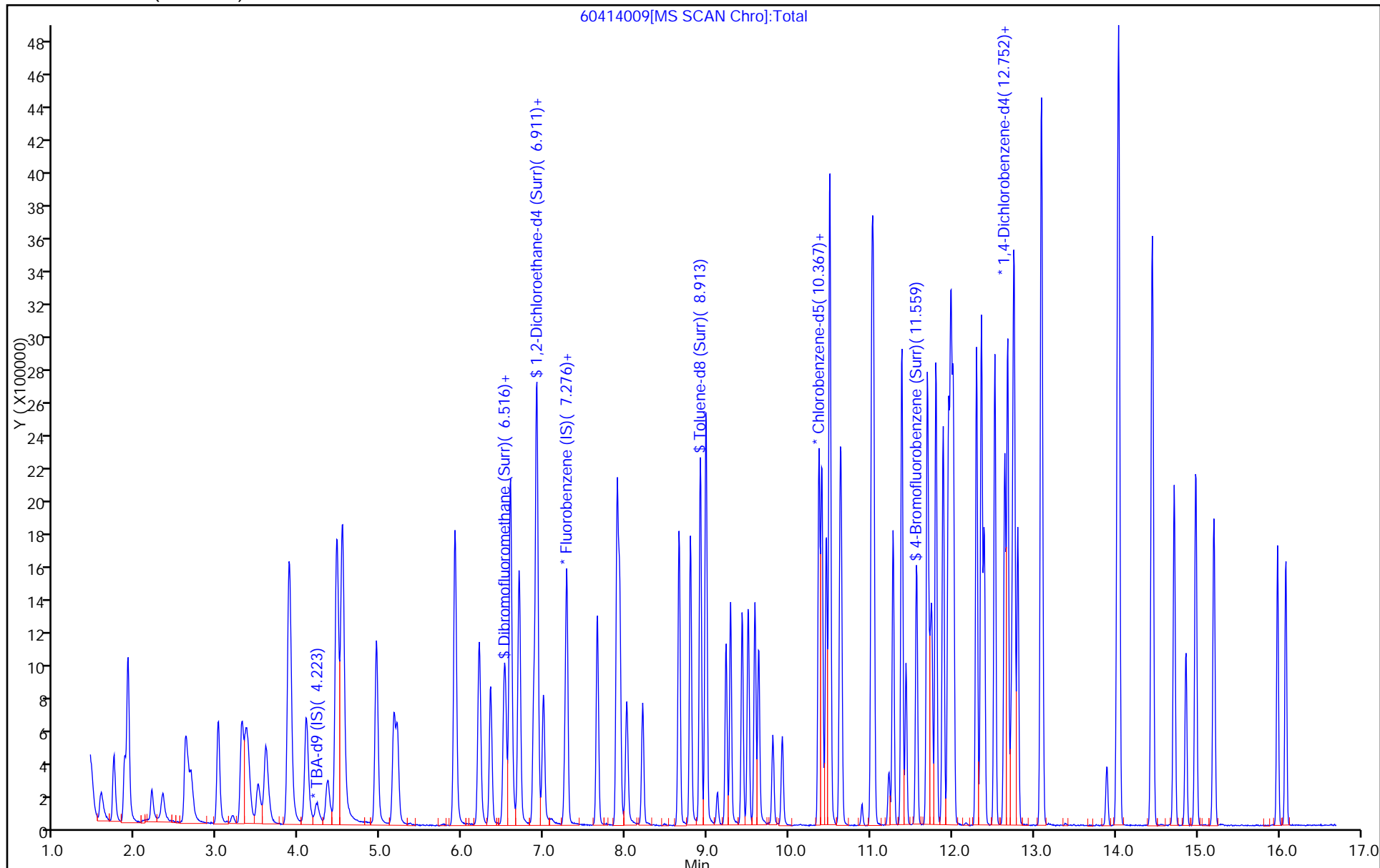
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



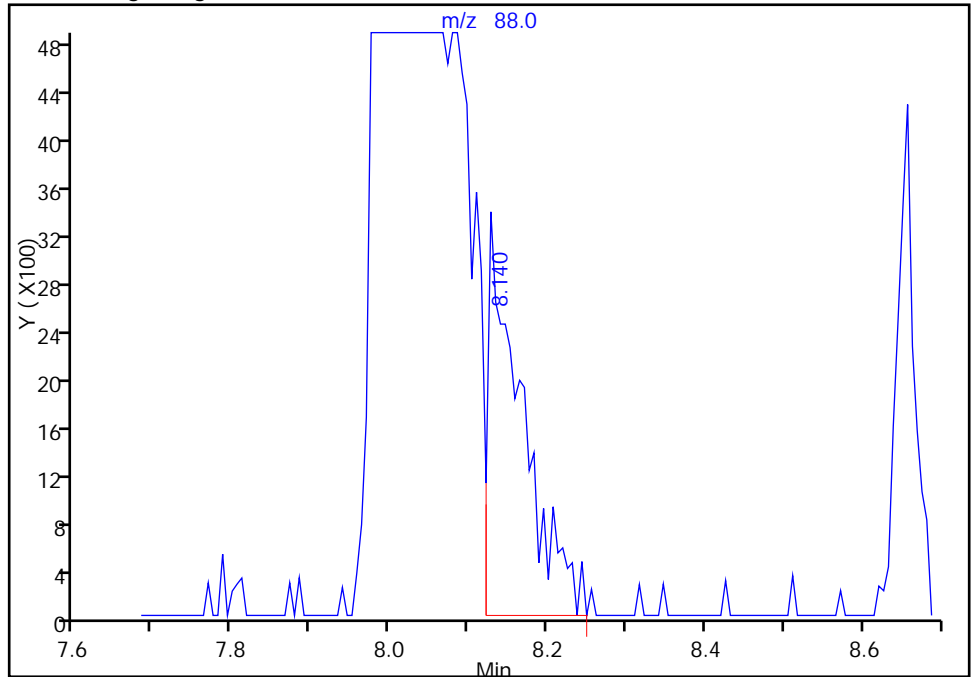
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414009.D
Injection Date: 14-Apr-2015 17:56:30 Instrument ID: CHHP6
Lims ID: IC VSTD35
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

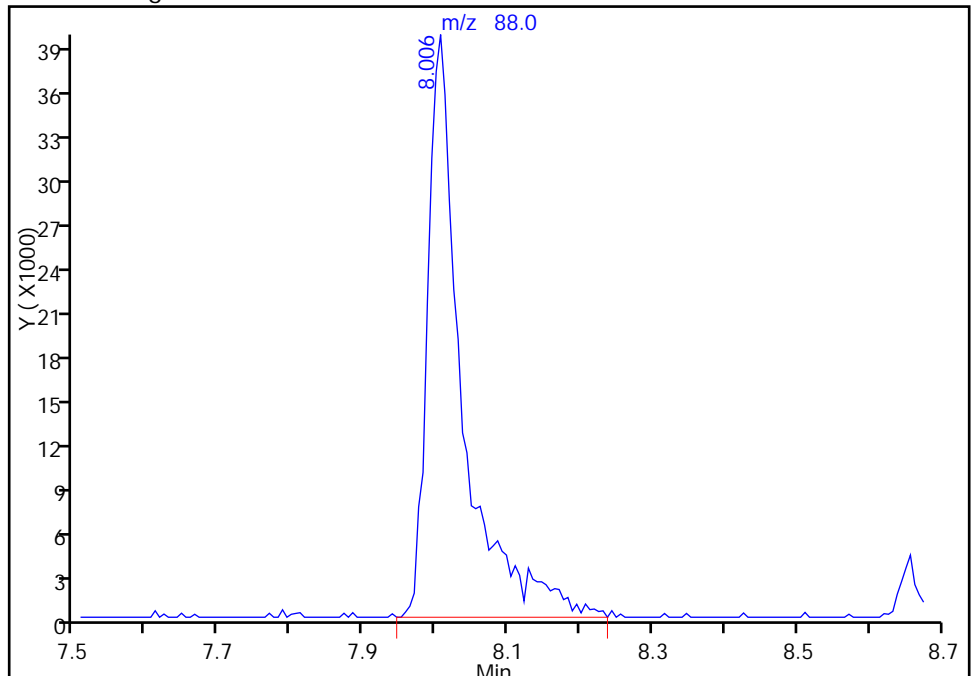
RT: 8.14
Area: 9946
Amount: 283.6415
Amount Units: ng

Processing Integration Results



RT: 8.01
Area: 134487
Amount: 3374.1881
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 10:57:37
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414010.D
 Lims ID: IC VSTD40
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 14-Apr-2015 18:20:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD40
 Misc. Info.: 180-0006462-010
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Apr-2015 11:14:53 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: fergusond

Date: 15-Apr-2015 08:10:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.218	4.218	0.000	98	314419	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.260	7.260	0.000	99	481061	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.375	10.368	0.007	88	114324	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.723	12.723	0.000	93	167958	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.524	6.530	-0.006	94	391141	200.0	197.3	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.901	0.000	77	559084	200.0	196.5	
\$ 7 Toluene-d8 (Surr)	98	8.915	8.914	0.001	93	1690024	200.0	177.3	
\$ 8 4-Bromofluorobenzene (Surr	95	11.561	11.561	0.000	85	671542	200.0	186.0	
11 Dichlorodifluoromethane	85	1.578	1.578	0.000	99	486834	200.0	205.8	
12 Chloromethane	50	1.730	1.730	0.000	99	728579	200.0	197.9	
13 Vinyl chloride	62	1.864	1.864	0.000	99	691680	200.0	200.0	
14 Butadiene	39	1.900	1.906	-0.006	93	687270	200.0	195.3	
15 Bromomethane	94	2.192	2.198	-0.006	91	179045	200.0	183.0	
16 Chloroethane	64	2.320	2.338	-0.018	99	269137	200.0	182.4	
17 Dichlorofluoromethane	67	2.606	2.618	-0.012	97	652302	200.0	181.1	
18 Trichlorofluoromethane	101	2.612	2.661	-0.048	51	583374	200.0	182.5	
20 Ethyl ether	59	3.001	3.007	-0.006	93	611019	200.0	195.5	
21 Acrolein	56	3.184	3.190	-0.006	98	95204	250.0	255.4	
22 1,1-Dichloroethene	96	3.293	3.299	-0.006	98	494966	200.0	198.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.342	3.360	-0.018	96	502152	200.0	206.1	
24 Acetone	43	3.385	3.391	-0.006	100	319762	400.0	395.3	
25 Iodomethane	142	3.494	3.500	-0.006	97	694207	200.0	201.2	
26 Carbon disulfide	76	3.585	3.591	-0.006	100	1504982	200.0	212.3	
29 3-Chloro-1-propene	76	3.871	3.877	-0.006	92	359061	200.0	212.1	
30 Methyl acetate	43	3.877	3.883	-0.006	98	2643710	1000.0	981.8	
31 Methylene Chloride	84	4.078	4.084	-0.006	97	613145	200.0	186.3	
32 2-Methyl-2-propanol	59	4.352	4.346	0.006	97	661354	2000.0	1850.4	
33 Acrylonitrile	53	4.455	4.461	-0.006	97	2848123	2000.0	1970.7	
34 trans-1,2-Dichloroethene	96	4.522	4.528	-0.006	97	573079	200.0	199.7	
35 Methyl tert-butyl ether	73	4.528	4.534	-0.006	98	1701690	200.0	203.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.942	4.948	-0.006	92	909763	200.0	201.2	
37 1,1-Dichloroethane	63	5.155	5.161	-0.006	96	1075363	200.0	197.2	
38 Vinyl acetate	43	5.198	5.203	-0.005	97	1156328	200.0	203.6	
43 cis-1,2-Dichloroethene	96	5.903	5.909	-0.006	85	603471	200.0	197.3	
42 2,2-Dichloropropane	77	5.903	5.915	-0.012	61	545483	200.0	209.5	
44 2-Butanone (MEK)	43	5.903	5.915	-0.012	99	554110	400.0	387.5	
48 Chlorobromomethane	128	6.195	6.201	-0.006	92	268808	200.0	199.4	
49 Tetrahydrofuran	42	6.213	6.213	0.000	91	476877	400.0	377.9	
50 Chloroform	83	6.341	6.341	0.000	96	862548	200.0	198.8	
51 1,1,1-Trichloroethane	97	6.505	6.511	-0.006	97	622364	200.0	207.6	
52 Cyclohexane	56	6.585	6.590	-0.005	93	1190890	200.0	202.3	
53 Carbon tetrachloride	117	6.688	6.688	0.000	96	422601	200.0	221.0	
54 1,1-Dichloropropene	75	6.694	6.694	0.000	94	717800	200.0	200.4	
55 Isobutyl alcohol	41	6.870	6.870	0.000	96	560402	5000.0	5723.0	
56 Benzene	78	6.907	6.913	-0.006	98	2229443	200.0	191.9	
57 1,2-Dichloroethane	62	6.986	6.992	-0.006	95	739846	200.0	199.8	
59 n-Heptane	43	7.278	7.278	0.000	93	683853	200.0	198.0	
61 Trichloroethene	130	7.649	7.649	0.000	98	521724	200.0	198.8	
63 Methylcyclohexane	83	7.893	7.892	0.000	93	980436	200.0	199.5	
64 1,2-Dichloropropane	63	7.923	7.923	0.000	91	665964	200.0	202.3	
65 1,4-Dioxane	88	8.002	8.008	-0.006	52	163298	4000.0	4354.2	M
67 Dibromomethane	93	8.014	8.014	0.000	96	316815	200.0	202.4	
68 Dichlorobromomethane	83	8.209	8.209	0.000	98	584715	200.0	213.7	
71 cis-1,3-Dichloropropene	75	8.653	8.653	0.000	92	820321	200.0	213.0	
72 4-Methyl-2-pentanone (MIBK)	43	8.793	8.793	0.000	96	1446918	400.0	383.8	
73 Toluene	91	8.981	8.981	0.000	97	2102163	200.0	177.8	
74 trans-1,3-Dichloropropene	75	9.225	9.231	-0.006	97	657615	200.0	210.1	
75 Ethyl methacrylate	69	9.280	9.285	-0.005	91	780704	200.0	202.3	
76 1,1,2-Trichloroethane	97	9.426	9.425	0.001	92	480774	200.0	188.5	
77 Tetrachloroethene	164	9.499	9.498	0.001	94	363465	200.0	185.3	
78 1,3-Dichloropropane	76	9.584	9.583	0.001	95	883858	200.0	184.9	
79 2-Hexanone	43	9.626	9.626	0.000	94	816085	400.0	379.1	
81 Chlorodibromomethane	129	9.803	9.802	0.001	90	347900	200.0	219.7	
82 Ethylene Dibromide	107	9.912	9.918	-0.006	99	463863	200.0	189.1	
83 3-Chlorobenzotrifluoride	180	10.362	10.368	-0.006	95	685560	200.0	181.6	
84 Chlorobenzene	112	10.399	10.399	0.000	92	1359376	200.0	182.2	
85 4-Chlorobenzotrifluoride	180	10.454	10.460	-0.006	97	650099	200.0	181.1	
86 1,1,1,2-Tetrachloroethane	131	10.496	10.496	0.000	92	413627	200.0	215.4	
87 Ethylbenzene	106	10.502	10.502	0.000	97	848574	200.0	189.4	
88 m-Xylene & p-Xylene	106	10.630	10.630	0.000	96	1037911	200.0	189.5	
89 o-Xylene	106	11.013	11.013	0.000	95	1025896	200.0	189.3	
90 Styrene	104	11.032	11.031	0.001	95	1663277	200.0	192.3	
91 Bromoform	173	11.226	11.220	0.006	95	181576	200.0	218.6	
92 2-Chlorobenzotrifluoride	180	11.275	11.275	0.000	97	708590	200.0	182.1	
93 Isopropylbenzene	105	11.378	11.378	0.000	97	2255810	200.0	178.9	
96 1,1,2,2-Tetrachloroethane	83	11.689	11.688	0.001	95	690465	200.0	192.6	
95 Bromobenzene	156	11.701	11.701	0.000	97	562246	200.0	203.3	
97 trans-1,4-Dichloro-2-buten	53	11.725	11.725	0.000	85	216489	200.0	209.4	
98 1,2,3-Trichloropropane	110	11.749	11.749	0.000	86	213309	200.0	203.4	
99 N-Propylbenzene	120	11.798	11.798	0.000	97	707328	200.0	203.8	
100 2-Chlorotoluene	126	11.889	11.889	0.000	96	593896	200.0	202.0	
101 3-Chlorotoluene	126	11.950	11.950	0.000	94	621207	200.0	195.5	

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	11.981	11.980	0.001	95	1983122	200.0	199.3	
103 4-Chlorotoluene	126	12.011	12.011	0.000	98	643222	200.0	205.0	
104 tert-Butylbenzene	119	12.297	12.297	0.000	94	1617941	200.0	199.1	
106 1,2,4-Trimethylbenzene	105	12.358	12.351	0.007	97	2052456	200.0	198.0	
107 1,2-dichloro-4-(trifluorom	214	12.388	12.388	0.000	97	525648	200.0	199.9	
108 sec-Butylbenzene	105	12.522	12.522	0.000	95	2344761	200.0	194.7	
109 1,3-Dichlorobenzene	146	12.644	12.643	0.001	96	1091047	200.0	198.0	
110 4-Isopropyltoluene	119	12.680	12.680	0.000	95	1975451	200.0	198.8	
111 1,4-Dichlorobenzene	146	12.747	12.747	0.000	94	1151933	200.0	200.8	
113 2,4-Dichloro-1-(trifluorom	214	12.759	12.759	0.000	94	556084	200.0	205.3	
114 2,5-Dichlorobenzotrifluori	214	12.802	12.802	0.000	98	574396	200.0	200.2	
116 n-Butylbenzene	91	13.088	13.088	0.000	98	1866348	200.0	201.5	
117 1,2-Dichlorobenzene	146	13.100	13.100	0.000	95	1113903	200.0	201.4	
118 1,2-Dibromo-3-Chloropropan	75	13.891	13.891	0.000	77	108469	200.0	242.0	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.037	14.037	0.000	96	2660915	600.0	577.1	
121 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	97	2006949	400.0	397.1	
122 1,2,4-Trichlorobenzene	180	14.718	14.718	0.000	94	823275	200.0	204.3	
123 Hexachlorobutadiene	225	14.864	14.864	0.000	97	250362	200.0	211.6	
124 Naphthalene	128	14.980	14.980	0.000	98	2110117	200.0	204.1	
125 1,2,3-Trichlorobenzene	180	15.205	15.205	0.000	94	779227	200.0	205.9	
126 2,4,5-Trichlorotoluene	159	15.984	15.983	0.001	0	479387	200.0	216.3	
127 2,3,6-Trichlorotoluene	159	16.087	16.081	0.006	93	439348	200.0	214.9	
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	397.0	
S 131 Xylenes, Total	106				0		400.0	378.8	
S 132 1,3-Dichloropropene, Total	1				0		400.0	423.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaW VA pri R_00005	Amount Added: 8.00	Units: uL	
VOA8260SURR_00033	Amount Added: 8.00	Units: uL	
VOA8260VOAPRI_00109	Amount Added: 8.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 8.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 8.00	Units: uL	
VOAACRPRI_00005	Amount Added: 10.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414010.D

Injection Date: 14-Apr-2015 18:20:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD40

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

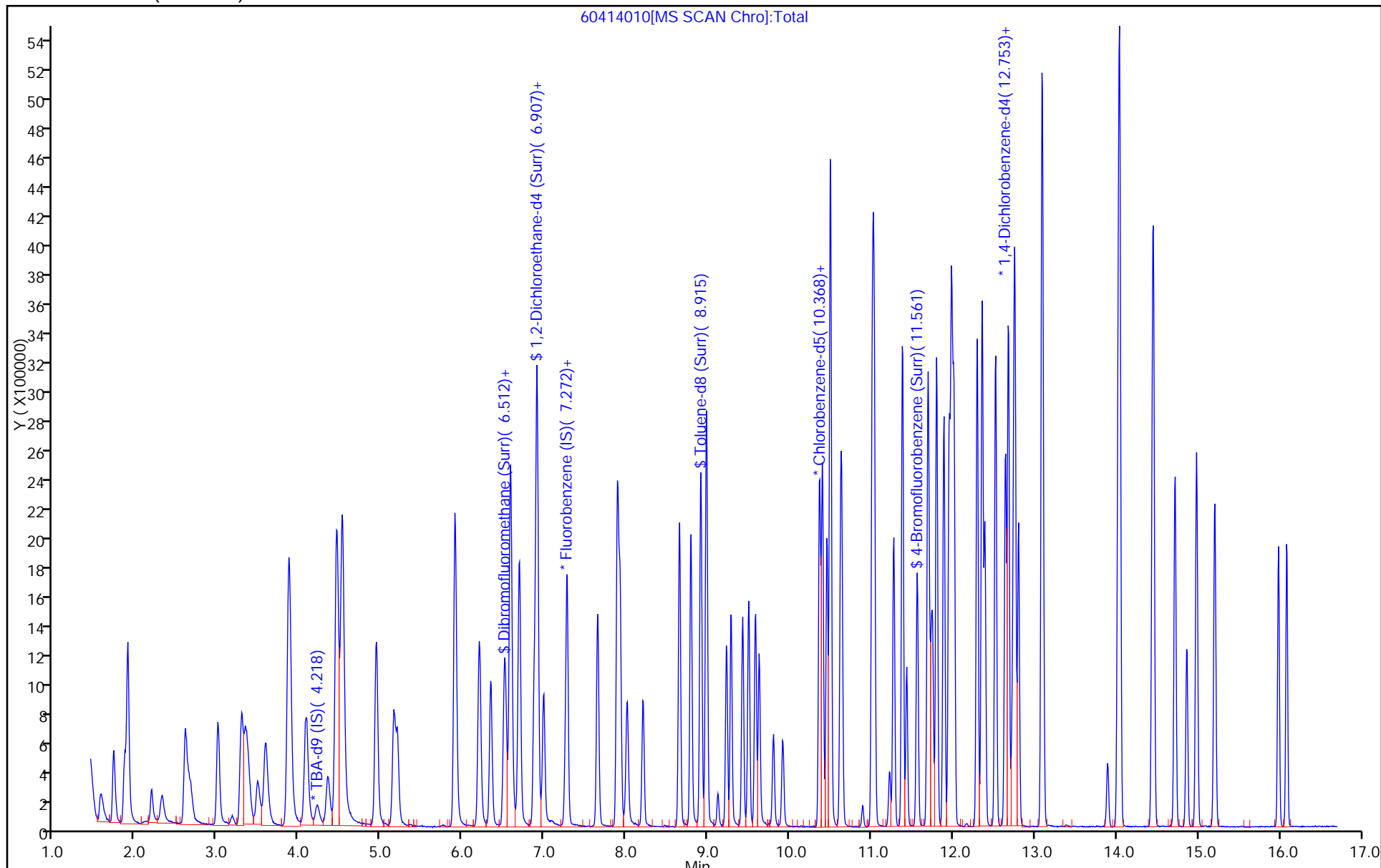
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



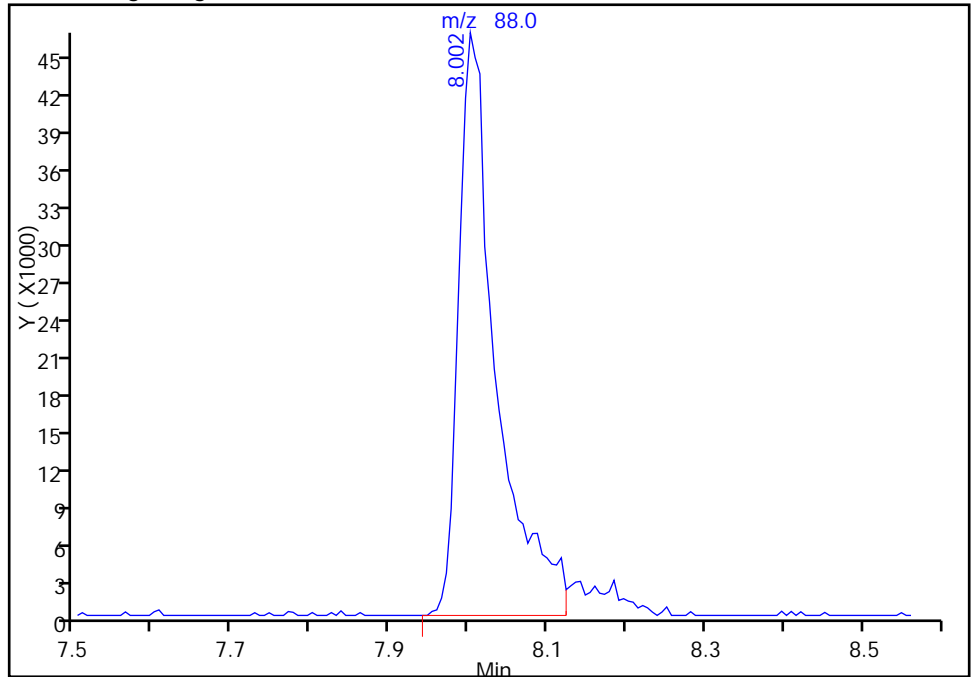
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414010.D
Injection Date: 14-Apr-2015 18:20:30 Instrument ID: CHHP6
Lims ID: IC VSTD40
Client ID:
Operator ID: 001562 ALS Bottle#: 9 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

65 1,4-Dioxane, CAS: 123-91-1

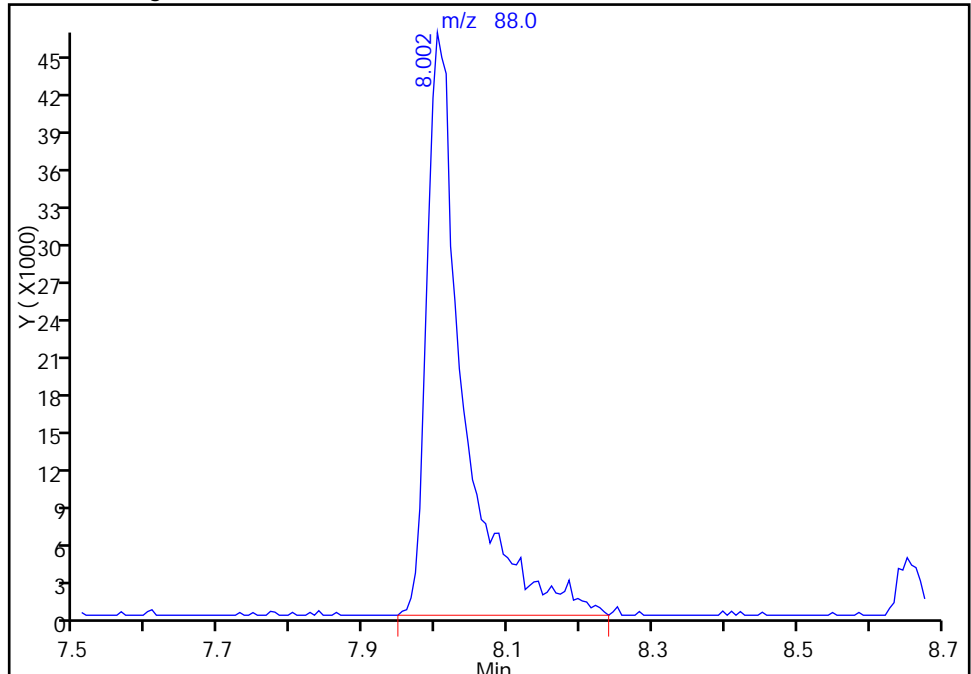
RT: 8.00
Area: 152931
Amount: 4113.3351
Amount Units: ng

Processing Integration Results



RT: 8.00
Area: 163298
Amount: 4354.2316
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 11:00:39
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Lims ID: IC VSTD50
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 14-Apr-2015 18:44:30 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: IC VSTD50
 Misc. Info.: 180-0006462-011
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Apr-2015 11:14:54 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: fergusond

Date: 15-Apr-2015 09:11:52

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	4.218	0.012	99	312938	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.260	7.260	0.000	92	483495	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.375	10.368	0.007	72	126286	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.723	12.723	0.000	84	181900	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.530	6.530	0.000	63	490232	250.0	246.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.907	6.901	0.006	56	718093	250.0	251.1	
\$ 7 Toluene-d8 (Surr)	98	8.915	8.914	0.001	93	2062089	250.0	195.9	
\$ 8 4-Bromofluorobenzene (Surr	95	11.561	11.561	0.000	84	854434	250.0	214.3	
11 Dichlorodifluoromethane	85	1.572	1.578	-0.006	61	551019	250.0	231.7	
12 Chloromethane	50	1.730	1.730	0.000	95	874012	250.0	236.2	
13 Vinyl chloride	62	1.864	1.864	0.000	84	813305	250.0	234.0	
14 Butadiene	39	1.900	1.906	-0.006	93	793841	250.0	224.4	
15 Bromomethane	94	2.199	2.198	0.000	88	203178	250.0	206.6	
16 Chloroethane	64	2.314	2.338	-0.024	99	293640	250.0	198.0	
17 Dichlorofluoromethane	67	2.612	2.618	-0.006	97	788998	250.0	218.0	
18 Trichlorofluoromethane	101	2.643	2.661	-0.017	95	654365	250.0	203.7	
20 Ethyl ether	59	3.008	3.007	0.001	93	709683	250.0	226.0	
21 Acrolein	56	3.178	3.190	-0.012	84	105507	275.0	281.6	
22 1,1-Dichloroethene	96	3.287	3.299	-0.012	97	598623	250.0	239.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.348	3.360	-0.012	87	582756	250.0	238.0	
24 Acetone	43	3.397	3.391	0.006	94	449617	500.0	553.0	
25 Iodomethane	142	3.494	3.500	-0.006	96	865585	250.0	249.6	
26 Carbon disulfide	76	3.592	3.591	0.001	99	1801474	250.0	252.8	
29 3-Chloro-1-propene	76	3.865	3.877	-0.012	70	445766	250.0	262.0	
30 Methyl acetate	43	3.890	3.883	0.007	97	3383942	1250.0	1250.4	
31 Methylene Chloride	84	4.084	4.084	0.000	86	763489	250.0	230.8	
32 2-Methyl-2-propanol	59	4.364	4.346	0.018	96	926949	2500.0	2605.7	
33 Acrylonitrile	53	4.462	4.461	0.001	98	3594577	2500.0	2474.7	
34 trans-1,2-Dichloroethene	96	4.522	4.528	-0.006	75	701675	250.0	243.3	
35 Methyl tert-butyl ether	73	4.535	4.534	0.001	93	2072633	250.0	247.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.942	4.948	-0.006	91	1060945	250.0	233.5	
37 1,1-Dichloroethane	63	5.161	5.161	0.000	84	1324515	250.0	241.7	
38 Vinyl acetate	43	5.204	5.203	0.001	97	1577648	250.0	276.4	
43 cis-1,2-Dichloroethene	96	5.909	5.909	0.000	71	749244	250.0	243.7	
42 2,2-Dichloropropane	77	5.909	5.915	-0.006	58	620261	250.0	237.0	
44 2-Butanone (MEK)	43	5.909	5.915	-0.006	73	764316	500.0	531.9	
48 Chlorobromomethane	128	6.201	6.201	0.000	79	340980	250.0	251.6	
49 Tetrahydrofuran	42	6.214	6.213	0.001	90	637802	500.0	502.9	
50 Chloroform	83	6.347	6.341	0.006	96	1062114	250.0	243.5	
51 1,1,1-Trichloroethane	97	6.512	6.511	0.001	52	758744	250.0	251.8	
52 Cyclohexane	56	6.591	6.590	0.001	78	1370935	250.0	231.7	
53 Carbon tetrachloride	117	6.688	6.688	0.000	72	506942	250.0	263.8	
54 1,1-Dichloropropene	75	6.694	6.694	0.000	90	855384	250.0	237.6	
55 Isobutyl alcohol	41	6.877	6.870	0.007	94	756640	6250.0	7688.1	
56 Benzene	78	6.913	6.913	0.000	97	2703979	250.0	231.6	
57 1,2-Dichloroethane	62	6.992	6.992	0.000	95	946337	250.0	254.3	
59 n-Heptane	43	7.278	7.278	0.000	92	827800	250.0	238.5	
61 Trichloroethene	130	7.649	7.649	0.000	94	640333	250.0	242.8	
63 Methylcyclohexane	83	7.893	7.892	0.001	92	1140478	250.0	230.9	
64 1,2-Dichloropropane	63	7.923	7.923	0.000	91	837767	250.0	253.1	
65 1,4-Dioxane	88	8.008	8.008	0.000	50	215420	5000.0	5715.1	M
67 Dibromomethane	93	8.014	8.014	0.000	95	405370	250.0	257.7	
68 Dichlorobromomethane	83	8.209	8.209	0.000	92	759489	250.0	276.2	
71 cis-1,3-Dichloropropene	75	8.653	8.653	0.000	90	1083885	250.0	280.1	
72 4-Methyl-2-pentanone (MIBK)	43	8.793	8.793	0.000	66	1832031	500.0	439.9	
73 Toluene	91	8.982	8.981	0.001	95	2589457	250.0	198.2	
74 trans-1,3-Dichloropropene	75	9.225	9.231	-0.006	97	896635	250.0	259.3	
75 Ethyl methacrylate	69	9.286	9.285	0.001	91	1050486	250.0	246.4	
76 1,1,2-Trichloroethane	97	9.426	9.425	0.001	93	632465	250.0	224.4	
77 Tetrachloroethene	164	9.499	9.498	0.001	88	444266	250.0	205.0	
78 1,3-Dichloropropane	76	9.584	9.583	0.001	93	1164239	250.0	220.5	
79 2-Hexanone	43	9.626	9.626	0.000	94	1171250	500.0	492.6	
81 Chlorodibromomethane	129	9.803	9.802	0.001	87	466493	250.0	266.6	
82 Ethylene Dibromide	107	9.918	9.918	0.000	99	614096	250.0	226.6	
83 3-Chlorobenzotrifluoride	180	10.363	10.368	-0.005	85	808898	250.0	193.9	
84 Chlorobenzene	112	10.399	10.399	0.000	87	1722800	250.0	209.0	
85 4-Chlorobenzotrifluoride	180	10.454	10.460	-0.006	95	766170	250.0	193.2	
86 1,1,1,2-Tetrachloroethane	131	10.496	10.496	0.000	47	535179	250.0	252.2	
87 Ethylbenzene	106	10.502	10.502	0.000	96	1065041	250.0	215.2	
88 m-Xylene & p-Xylene	106	10.630	10.630	0.000	95	1292544	250.0	213.6	
89 o-Xylene	106	11.013	11.013	0.000	91	1278165	250.0	213.5	
90 Styrene	104	11.032	11.031	0.001	91	2120226	250.0	221.9	
91 Bromoform	173	11.226	11.220	0.006	95	264054	250.0	287.8	
92 2-Chlorobenzotrifluoride	180	11.275	11.275	0.000	96	851308	250.0	198.0	
93 Isopropylbenzene	105	11.378	11.378	0.000	97	2688403	250.0	193.0	
96 1,1,2,2-Tetrachloroethane	83	11.689	11.688	0.001	61	901989	250.0	227.8	
95 Bromobenzene	156	11.701	11.701	0.000	93	725643	250.0	242.3	
97 trans-1,4-Dichloro-2-buten	53	11.725	11.725	0.000	78	303771	250.0	271.3	
98 1,2,3-Trichloropropane	110	11.750	11.749	0.001	80	285377	250.0	251.2	
99 N-Propylbenzene	120	11.798	11.798	0.000	69	865655	250.0	230.3	
100 2-Chlorotoluene	126	11.889	11.889	0.000	96	743421	250.0	233.4	
101 3-Chlorotoluene	126	11.950	11.950	0.000	73	783588	250.0	227.7	

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	11.981	11.980	0.001	94	2373653	250.0	220.3	
103 4-Chlorotoluene	126	12.011	12.011	0.000	97	825749	250.0	243.0	
104 tert-Butylbenzene	119	12.297	12.297	0.000	81	1925321	250.0	218.7	
106 1,2,4-Trimethylbenzene	105	12.358	12.351	0.007	97	2468483	250.0	219.8	
107 1,2-dichloro-4-(trifluorom	214	12.394	12.388	0.006	97	626671	250.0	220.1	
108 sec-Butylbenzene	105	12.522	12.522	0.000	76	2733082	250.0	209.6	
109 1,3-Dichlorobenzene	146	12.644	12.643	0.001	94	1373327	250.0	230.1	
110 4-Isopropyltoluene	119	12.680	12.680	0.000	90	2343380	250.0	217.7	
111 1,4-Dichlorobenzene	146	12.747	12.747	0.000	88	1435845	250.0	231.2	
113 2,4-Dichloro-1-(trifluorom	214	12.765	12.759	0.006	71	659198	250.0	224.7	
114 2,5-Dichlorobenzotrifluori	214	12.802	12.802	0.000	98	678215	250.0	218.3	
116 n-Butylbenzene	91	13.088	13.088	0.000	94	2191823	250.0	218.5	
117 1,2-Dichlorobenzene	146	13.100	13.100	0.000	92	1393150	250.0	232.6	
118 1,2-Dibromo-3-Chloropropan	75	13.897	13.891	0.006	77	138677	250.0	285.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.037	14.037	0.000	95	3104855	750.0	621.7	
121 2,3- & 3,4- Dichlorotoluen	125	14.451	14.450	0.001	96	2384217	500.0	435.6	
122 1,2,4-Trichlorobenzene	180	14.718	14.718	0.000	93	1003013	250.0	229.8	
123 Hexachlorobutadiene	225	14.858	14.864	-0.006	95	292082	250.0	228.0	
124 Naphthalene	128	14.980	14.980	0.000	98	2556898	250.0	228.4	
125 1,2,3-Trichlorobenzene	180	15.205	15.205	0.000	94	977721	250.0	238.5	
126 2,4,5-Trichlorotoluene	159	15.984	15.983	0.001	0	586146	250.0	244.2	
127 2,3,6-Trichlorotoluene	159	16.087	16.081	0.006	93	528200	250.0	238.5	
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		500.0	487.0	
S 131 Xylenes, Total	106				0		500.0	427.1	
S 132 1,3-Dichloropropene, Total	1				0		500.0	539.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added: 11.00	Units: uL	
VOA8260SURR_00033	Amount Added: 10.00	Units: uL	
VOA8260VOAPRI_00109	Amount Added: 10.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 10.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 10.00	Units: uL	
voaW VA pri R_00005	Amount Added: 10.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D

Injection Date: 14-Apr-2015 18:44:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD50

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

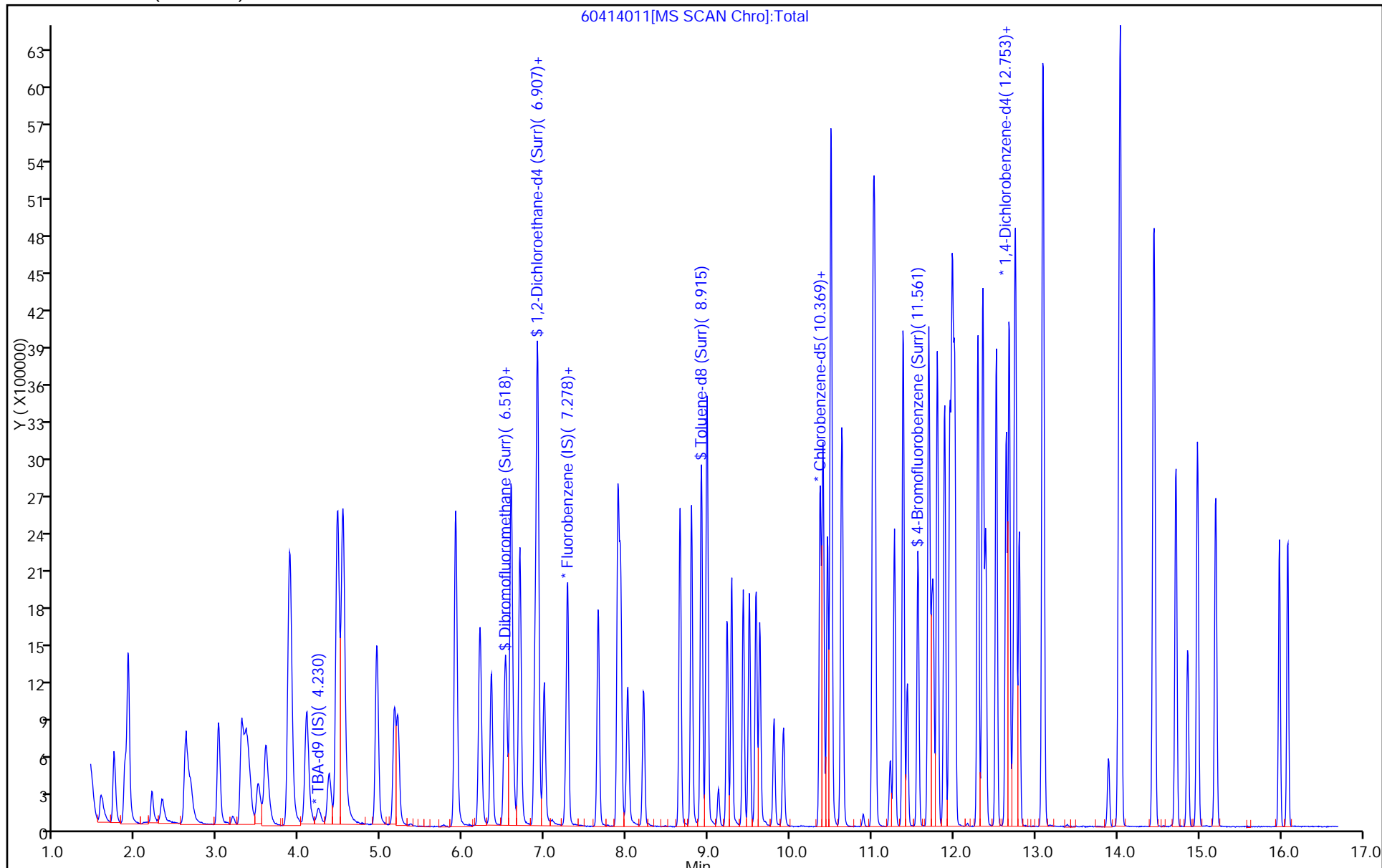
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



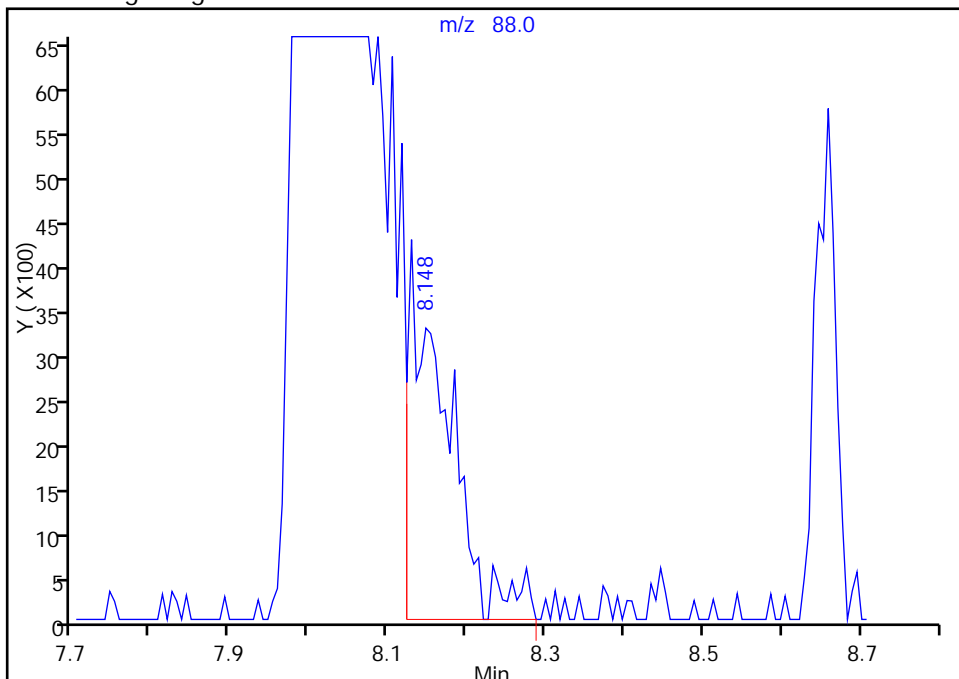
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
Injection Date: 14-Apr-2015 18:44:30 Instrument ID: CHHP6
Lims ID: IC VSTD50
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

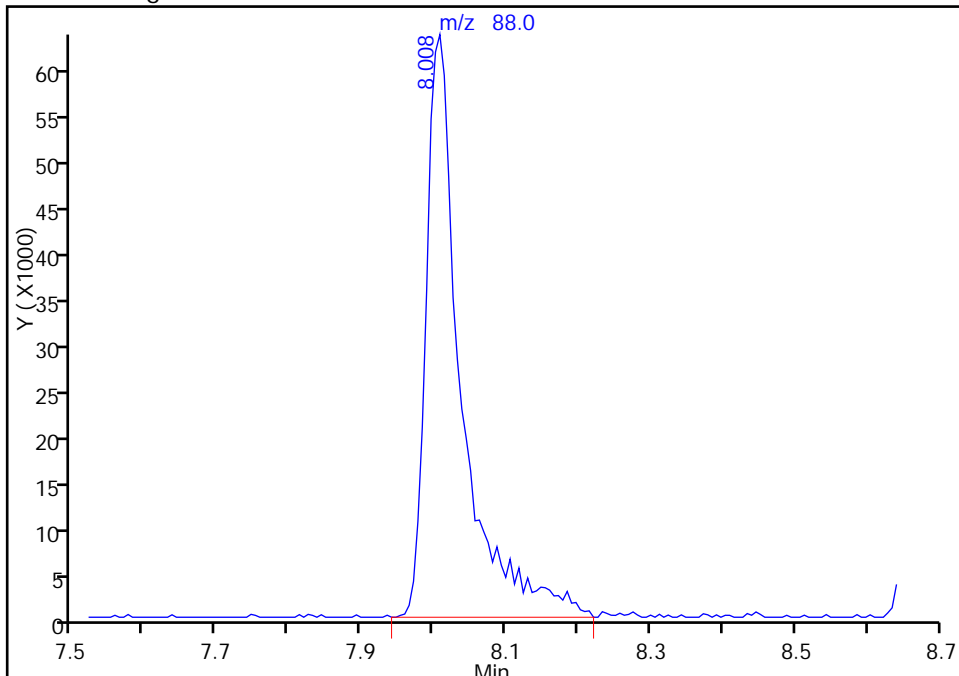
RT: 8.15
Area: 14424
Amount: 519.1161
Amount Units: ng

Processing Integration Results



RT: 8.01
Area: 215420
Amount: 5715.1132
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 15-Apr-2015 09:11:52
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139884/2 Calibration Date: 04/28/2015 12:26
 Instrument ID: CHHP5 Calib Start Date: 03/18/2015 13:31
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/18/2015 16:19
 Lab File ID: 50428002.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	0.1652	0.1443	0.0100	17.5	20.0	-12.7	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 28-Apr-2015 12:26:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0006670-002
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub12
 Method: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 29-Apr-2015 10:32:02 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK021

First Level Reviewer: fergusond

Date: 28-Apr-2015 12:48:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.305	4.305	0.000	0	138984	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.274	0.000	98	443985	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.365	10.365	0.000	89	95200	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.682	0.000	95	149359	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.532	6.532	0.000	78	102191	50.0	50.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.897	6.897	0.000	0	137239	50.0	51.5	
\$ 7 Toluene-d8 (Surr)	98	8.923	8.923	0.000	93	411662	50.0	54.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.533	11.533	0.000	88	138058	50.0	52.3	
11 Dichlorodifluoromethane	85	1.617	1.617	0.000	98	170082	50.0	57.1	
12 Chloromethane	50	1.775	1.775	0.000	99	194472	50.0	54.5	
13 Vinyl chloride	62	1.903	1.903	0.000	98	189734	50.0	57.0	
14 Butadiene	39	1.945	1.945	0.000	98	212346	50.0	55.4	
15 Bromomethane	94	2.249	2.249	0.000	91	102022	50.0	51.1	
16 Chloroethane	64	2.395	2.395	0.000	99	148648	50.0	59.0	
17 Dichlorofluoromethane	67	2.651	2.651	0.000	98	278967	50.0	51.8	
18 Trichlorofluoromethane	101	2.706	2.706	0.000	95	249114	50.0	57.4	
20 Ethyl ether	59	3.089	3.089	0.000	95	133663	50.0	45.6	
21 Acrolein	56	3.247	3.247	0.000	97	36795	150.0	142.9	
22 1,1-Dichloroethene	96	3.369	3.369	0.000	96	124585	50.0	47.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.417	3.417	0.000	94	141895	50.0	51.3	
24 Acetone	43	3.490	3.490	0.000	90	106715	100.0	100.2	
25 Iodomethane	142	3.563	3.563	0.000	98	193046	50.0	50.6	
26 Carbon disulfide	76	3.648	3.648	0.000	100	254103	50.0	49.6	
28 3-Chloro-1-propene	76	3.940	3.940	0.000	88	62372	50.0	44.8	
30 Methyl acetate	43	4.013	4.013	0.000	99	606211	250.0	235.3	
31 Methylene Chloride	84	4.135	4.135	0.000	97	154747	50.0	51.7	
32 2-Methyl-2-propanol	59	4.427	4.427	0.000	80	85533	500.0	573.7	
33 Acrylonitrile	53	4.549	4.549	0.000	100	645501	500.0	521.1	
34 trans-1,2-Dichloroethene	96	4.561	4.561	0.000	97	141396	50.0	53.7	
35 Methyl tert-butyl ether	73	4.591	4.591	0.000	95	310902	50.0	49.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.981	4.981	0.000	95	206484	50.0	49.3	
37 1,1-Dichloroethane	63	5.169	5.169	0.000	97	257206	50.0	51.4	
38 Vinyl acetate	43	5.291	5.291	0.000	97	193652	50.0	49.7	
44 2,2-Dichloropropane	77	5.924	5.924	0.000	61	88242	50.0	56.0	
45 cis-1,2-Dichloroethene	96	5.936	5.936	0.000	82	144381	50.0	52.6	
46 2-Butanone (MEK)	43	5.991	5.991	0.000	100	137611	100.0	97.1	
49 Chlorobromomethane	128	6.228	6.228	0.000	93	63731	50.0	52.2	
51 Tetrahydrofuran	42	6.289	6.289	0.000	89	86305	100.0	91.5	
52 Chloroform	83	6.337	6.337	0.000	95	228382	50.0	52.9	
53 1,1,1-Trichloroethane	97	6.532	6.532	0.000	96	160522	50.0	54.0	
54 Cyclohexane	56	6.587	6.587	0.000	94	256236	50.0	52.8	
56 Carbon tetrachloride	117	6.708	6.708	0.000	78	136671	50.0	55.7	
55 1,1-Dichloropropene	75	6.721	6.721	0.000	92	172694	50.0	50.8	
57 Isobutyl alcohol	41	6.940	6.940	0.000	85	95565	1250.0	1353.1	
58 Benzene	78	6.952	6.952	0.000	99	572704	50.0	53.7	
59 1,2-Dichloroethane	62	6.982	6.982	0.000	96	180375	50.0	52.5	
62 n-Heptane	43	7.280	7.280	0.000	88	174697	50.0	52.4	
64 Trichloroethene	130	7.670	7.670	0.000	97	135847	50.0	53.3	
66 Methylcyclohexane	83	7.864	7.864	0.000	94	211176	50.0	51.1	
67 1,2-Dichloropropane	63	7.901	7.901	0.000	94	138327	50.0	50.2	
68 Dibromomethane	93	8.022	8.022	0.000	96	72875	50.0	51.5	
70 1,4-Dioxane	88	8.053	8.053	0.000	95	21970	1000.0	1072.3	M
71 Dichlorobromomethane	83	8.193	8.193	0.000	98	142306	50.0	52.0	
73 2-Chloroethyl vinyl ether	63	8.521	8.521	0.000	93	128131	100.0	87.3	
74 cis-1,3-Dichloropropene	75	8.655	8.655	0.000	92	151527	50.0	49.9	
75 4-Methyl-2-pentanone (MIBK)	43	8.826	8.826	0.000	99	241426	100.0	99.1	
76 Toluene	91	8.990	8.990	0.000	98	570798	50.0	57.7	
77 trans-1,3-Dichloropropene	75	9.215	9.215	0.000	98	112832	50.0	50.5	
78 Ethyl methacrylate	69	9.318	9.318	0.000	93	113595	50.0	46.7	
79 1,1,2-Trichloroethane	97	9.397	9.397	0.000	95	104058	50.0	53.0	
80 Tetrachloroethene	164	9.531	9.531	0.000	95	100771	50.0	55.6	
81 1,3-Dichloropropane	76	9.562	9.562	0.000	94	192487	50.0	55.2	
82 2-Hexanone	43	9.653	9.653	0.000	97	174682	100.0	98.5	
84 Chlorodibromomethane	129	9.787	9.787	0.000	91	79553	50.0	53.3	
85 Ethylene Dibromide	107	9.902	9.902	0.000	100	96911	50.0	52.7	
86 3-Chlorobenzotrifluoride	180	10.371	10.371	0.000	95	184935	50.0	58.7	
87 Chlorobenzene	112	10.389	10.389	0.000	94	339361	50.0	55.3	
88 4-Chlorobenzotrifluoride	180	10.425	10.425	0.000	94	178457	50.0	59.0	
89 1,1,1,2-Tetrachloroethane	131	10.474	10.474	0.000	92	102872	50.0	55.8	
90 Ethylbenzene	106	10.498	10.498	0.000	98	189317	50.0	56.0	
91 m-Xylene & p-Xylene	106	10.614	10.614	0.000	0	225901	50.0	55.8	
92 o-Xylene	106	11.009	11.009	0.000	95	217857	50.0	55.9	
93 Styrene	104	11.022	11.022	0.000	91	355763	50.0	56.3	
94 Bromoform	173	11.204	11.204	0.000	93	46369	50.0	53.6	
96 2-Chlorobenzotrifluoride	180	11.271	11.271	0.000	97	179928	50.0	59.3	
97 Isopropylbenzene	105	11.381	11.381	0.000	96	548894	50.0	59.2	
99 1,1,2,2-Tetrachloroethane	83	11.673	11.673	0.000	95	150459	50.0	57.5	
100 Bromobenzene	156	11.685	11.685	0.000	96	133549	50.0	49.3	
101 1,2,3-Trichloropropane	110	11.715	11.715	0.000	86	46871	50.0	48.2	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.733	0.000	71	37577	50.0	48.8	
103 N-Propylbenzene	120	11.788	11.788	0.000	99	155370	50.0	49.4	
104 2-Chlorotoluene	126	11.873	11.873	0.000	96	136023	50.0	50.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.934	11.934	0.000	96	151767	50.0	52.2	
106 1,3,5-Trimethylbenzene	105	11.965	11.965	0.000	94	468190	50.0	54.0	
107 4-Chlorotoluene	126	11.983	11.983	0.000	98	153714	50.0	50.9	
108 tert-Butylbenzene	119	12.287	12.287	0.000	93	356197	50.0	49.5	
110 1,2,4-Trimethylbenzene	105	12.336	12.336	0.000	96	457002	50.0	53.1	
111 1,2-dichloro-4-(trifluorom	214	12.403	12.403	0.000	97	129620	50.0	54.3	
112 sec-Butylbenzene	105	12.506	12.506	0.000	95	544967	50.0	53.4	
113 1,3-Dichlorobenzene	146	12.622	12.622	0.000	98	246429	50.0	51.5	
114 4-Isopropyltoluene	119	12.652	12.652	0.000	96	437943	50.0	53.3	
115 1,4-Dichlorobenzene	146	12.707	12.707	0.000	92	254131	50.0	52.4	
116 2,4-Dichloro-1-(trifluorom	214	12.762	12.762	0.000	98	128657	50.0	57.7	
118 2,5-Dichlorobenzotrifluori	214	12.810	12.810	0.000	0	126256	50.0	53.1	
120 n-Butylbenzene	91	13.066	13.066	0.000	98	385169	50.0	54.2	
121 1,2-Dichlorobenzene	146	13.078	13.078	0.000	96	238120	50.0	55.4	
122 1,2-Dibromo-3-Chloropropan	75	13.857	13.857	0.000	75	18866	50.0	52.3	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.009	14.009	0.000	0	452144	150.0	177.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.422	14.422	0.000	0	272341	100.0	118.3	
126 1,2,4-Trichlorobenzene	180	14.690	14.690	0.000	92	93983	50.0	56.3	
127 Hexachlorobutadiene	225	14.860	14.860	0.000	96	48277	50.0	59.6	
128 Naphthalene	128	14.939	14.939	0.000	97	223389	50.0	50.4	
129 1,2,3-Trichlorobenzene	180	15.183	15.183	0.000	94	72923	50.0	55.4	
131 2,4,5-Trichlorotoluene	159	15.968	15.968	0.000	0	26346	50.0	48.0	
130 2,3,6-Trichlorotoluene	159	16.065	16.065	0.000	96	26217	50.0	60.3	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	111.7	
S 134 1,2-Dichloroethene, Total	96				0		100.0	106.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOACEVE(PRI)_00001	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 2.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
VOAACRPRI_00005	Amount Added: 6.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428002.D

Injection Date: 28-Apr-2015 12:26:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

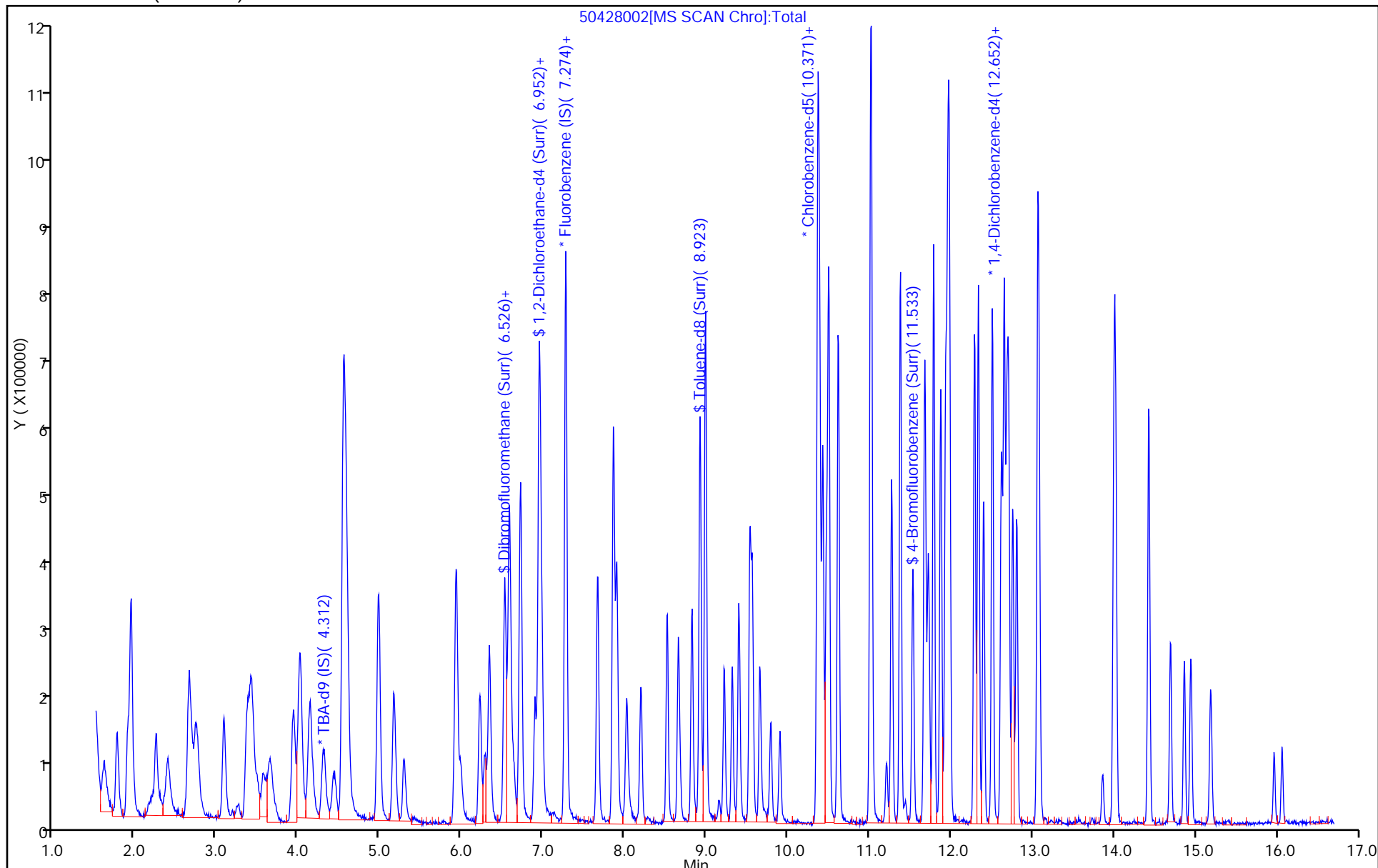
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA_LL_CHHP5

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.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139884/2 Calibration Date: 04/28/2015 12:26
 Instrument ID: CHHP5 Calib Start Date: 04/24/2015 16:47
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/24/2015 19:35
 Lab File ID: 50428002.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	0.3356	0.3831	0.1000	11.4	10.0	14.1	20.0
Chloromethane	Ave	0.4019	0.4380	0.1000	10.9	10.0	9.0	20.0
Vinyl chloride	Ave	0.3749	0.4273	0.1000	11.4	10.0	14.0	20.0
Bromomethane	Ave	0.2247	0.2298	0.0500	10.2	10.0	2.3	20.0
Chloroethane	Ave	0.2837	0.3348	0.0500	11.8	10.0	18.0	20.0
Dichlorofluoromethane	Ave	0.6060	0.6283	0.0100	10.4	10.0	3.7	20.0
Trichlorofluoromethane	Ave	0.4884	0.5611	0.1000	11.5	10.0	14.9	20.0
Ethyl ether	Ave	0.3300	0.3011	0.0100	9.12	10.0	-8.8	20.0
Acrolein	Ave	0.0290	0.0276	0.0100	28.6	30.0	-4.7	20.0
1,1-Dichloroethene	Ave	0.2929	0.2806	0.1000	9.58	10.0	-4.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.3116	0.3196	0.1000	10.3	10.0	2.6	20.0
Acetone	Ave	0.1199	0.1202	0.0500	20.0	20.0	0.2	20.0
Iodomethane	Ave	0.4300	0.4348	0.0100	10.1	10.0	1.1	20.0
Carbon disulfide	Ave	0.5770	0.5723	0.1000	9.92	10.0	-0.8	20.0
Allyl chloride	Ave	0.1567	0.1405	0.0100	8.96	10.0	-10.4	20.0
Methyl acetate	Ave	0.2901	0.2731	0.1000	47.1	50.0	-5.9	20.0
Methylene Chloride	Ave	0.3371	0.3485	0.1000	10.3	10.0	3.4	20.0
tert-Butyl alcohol	Ave	1.073	1.231	0.0100	115	100	14.7	20.0
Acrylonitrile	Ave	0.1395	0.1454	0.0100	104	100	4.2	20.0
trans-1,2-Dichloroethene	Ave	0.2964	0.3185	0.1000	10.7	10.0	7.4	20.0
Methyl tert-butyl ether	Ave	0.7103	0.7003	0.1000	9.86	10.0	-1.4	20.0
Hexane	Ave	0.4716	0.4651	0.0100	9.86	10.0	-1.4	20.0
1,1-Dichloroethane	Ave	0.5632	0.5793	0.2000	10.3	10.0	2.9	20.0
Vinyl acetate	Ave	0.4386	0.4362	0.0100	9.95	10.0	-0.5	20.0
2,2-Dichloropropane	Ave	0.1775	0.1988	0.0100	11.2	10.0	12.0	20.0
cis-1,2-Dichloroethene	Ave	0.3094	0.3252	0.1000	10.5	10.0	5.1	20.0
2-Butanone (MEK)	Ave	0.1596	0.1550	0.0500	19.4	20.0	-2.9	20.0
Bromochloromethane	Ave	0.1376	0.1435	0.0100	10.4	10.0	4.3	20.0
Tetrahydrofuran	Ave	0.1062	0.0972	0.0100	18.3	20.0	-8.5	20.0
Chloroform	Ave	0.4861	0.5144	0.2000	10.6	10.0	5.8	20.0
1,1,1-Trichloroethane	Ave	0.3349	0.3616	0.1000	10.8	10.0	8.0	20.0
Cyclohexane	Ave	0.5461	0.5771	0.1000	10.6	10.0	5.7	20.0
Carbon tetrachloride	Ave	0.2762	0.3078	0.1000	11.1	10.0	11.4	20.0
1,1-Dichloropropene	Ave	0.3830	0.3890	0.0100	10.2	10.0	1.6	20.0
Isobutyl alcohol	Ave	0.0080	0.0086*	0.0100	271	250	8.2	20.0
Benzene	Ave	1.202	1.290	0.5000	10.7	10.0	7.3	20.0
1,2-Dichloroethane	Ave	0.3866	0.4063	0.1000	10.5	10.0	5.1	20.0
n-Heptane	Ave	0.3758	0.3935	0.0100	10.5	10.0	4.7	20.0
Trichloroethene	Ave	0.2868	0.3060	0.2000	10.7	10.0	6.7	20.0
Methylcyclohexane	Ave	0.4657	0.4756	0.1000	10.2	10.0	2.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139884/2 Calibration Date: 04/28/2015 12:26
 Instrument ID: CHHP5 Calib Start Date: 04/24/2015 16:47
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/24/2015 19:35
 Lab File ID: 50428002.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	0.3102	0.3116	0.1000	10.0	10.0	0.4	20.0
Dibromomethane	Ave	0.1592	0.1641	0.0100	10.3	10.0	3.1	20.0
1,4-Dioxane	Ave	0.0023	0.0025*	0.0100	214	200	7.2	20.0
Bromodichloromethane	Ave	0.3084	0.3205	0.2000	10.4	10.0	3.9	20.0
cis-1,3-Dichloropropene	Ave	0.3422	0.3413	0.2000	9.97	10.0	-0.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.279	1.268	0.1000	19.8	20.0	-0.9	20.0
Toluene	Ave	5.195	5.996	0.4000	11.5	10.0	15.4	20.0
trans-1,3-Dichloropropene	Ave	1.173	1.185	0.1000	10.1	10.0	1.1	20.0
Ethyl methacrylate	Ave	1.278	1.193	0.0100	9.34	10.0	-6.6	20.0
1,1,2-Trichloroethane	Ave	1.031	1.093	0.1000	10.6	10.0	6.0	20.0
Tetrachloroethene	Ave	0.9513	1.059	0.2000	11.1	10.0	11.3	20.0
1,3-Dichloropropane	Ave	1.832	2.022	0.0100	11.0	10.0	10.4	20.0
2-Hexanone	Ave	0.9319	0.9175	0.1000	19.7	20.0	-1.5	20.0
Dibromochloromethane	Ave	0.7846	0.8356	0.1000	10.7	10.0	6.5	20.0
1,2-Dibromoethane (EDB)	Ave	0.9667	1.018	0.1000	10.5	10.0	5.3	20.0
3-Chlorobenzotrifluoride	Ave	1.654	1.943	0.0100	11.7	10.0	17.4	20.0
Chlorobenzene	Ave	3.226	3.565	0.5000	11.1	10.0	10.5	20.0
4-Chlorobenzotrifluoride	Ave	1.590	1.875	0.0100	11.8	10.0	17.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9685	1.081	0.0100	11.2	10.0	11.6	20.0
Ethylbenzene	Ave	1.775	1.989	0.1000	11.2	10.0	12.0	20.0
m-Xylene & p-Xylene	Ave	2.126	2.373	0.1000	11.2	10.0	11.6	20.0
o-Xylene	Ave	2.046	2.288	0.3000	11.2	10.0	11.8	20.0
Styrene	Ave	3.318	3.737	0.3000	11.3	10.0	12.6	20.0
Bromoform	Ave	0.4545	0.4871	0.1000	10.7	10.0	7.2	20.0
2-Chlorobenzotrifluoride	Ave	1.593	1.890	0.0100	11.9	10.0	18.6	20.0
Isopropylbenzene	Ave	4.867	5.766	0.1000	11.8	10.0	18.5	20.0
1,1,2,2-Tetrachloroethane	Ave	1.375	1.580	0.3000	11.5	10.0	15.0	20.0
Bromobenzene	Ave	0.9071	0.8942	0.0100	9.86	10.0	-1.4	20.0
1,2,3-Trichloropropane	Ave	0.3253	0.3138	0.0100	9.65	10.0	-3.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2580	0.2516	0.0100	9.75	10.0	-2.5	20.0
N-Propylbenzene	Ave	1.054	1.040	0.0100	9.87	10.0	-1.3	20.0
2-Chlorotoluene	Ave	0.8958	0.9107	0.0100	10.2	10.0	1.7	20.0
3-Chlorotoluene	Ave	0.9724	1.016	0.0100	10.4	10.0	4.5	20.0
1,3,5-Trimethylbenzene	Ave	2.900	3.135	0.0100	10.8	10.0	8.1	20.0
4-Chlorotoluene	Ave	1.012	1.029	0.0100	10.2	10.0	1.7	20.0
tert-Butylbenzene	Ave	2.408	2.385	0.0100	9.91	10.0	-0.9	20.0
1,2,4-Trimethylbenzene	Ave	2.879	3.060	0.0100	10.6	10.0	6.3	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7996	0.8678	0.0100	10.9	10.0	8.5	20.0
sec-Butylbenzene	Ave	3.416	3.649	0.0100	10.7	10.0	6.8	20.0
1,3-Dichlorobenzene	Ave	1.603	1.650	0.6000	10.3	10.0	2.9	20.0
4-Isopropyltoluene	Ave	2.749	2.932	0.0100	10.7	10.0	6.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139884/2 Calibration Date: 04/28/2015 12:26
 Instrument ID: CHHP5 Calib Start Date: 04/24/2015 16:47
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/24/2015 19:35
 Lab File ID: 50428002.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	1.623	1.701	0.5000	10.5	10.0	4.8	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.7468	0.8614	0.0100	11.5	10.0	15.4	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.7964	0.8453	0.0100	10.6	10.0	6.1	20.0
n-Butylbenzene	Ave	2.377	2.579	0.0100	10.8	10.0	8.5	20.0
1,2-Dichlorobenzene	Ave	1.438	1.594	0.4000	11.1	10.0	10.9	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1208	0.1263	0.0500	10.5	10.0	4.6	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	0.8522	1.009	0.0100	35.5	30.0	18.4	20.0
2,3- & 3,4- Dichlorotoluene	Ave	0.7704	0.9117	0.0100	23.7	20.0	18.3	20.0
1,2,4-Trichlorobenzene	Ave	0.5585	0.6292	0.2000	11.3	10.0	12.7	20.0
Hexachlorobutadiene	Ave	0.2710	0.3232	0.0100	11.9	10.0	19.3	20.0
Naphthalene	Lin1		1.496	0.0100	10.1	10.0	0.8	20.0
1,2,3-Trichlorobenzene	Ave	0.4406	0.4882	0.0100	11.1	10.0	10.8	20.0
2,4,5-Trichlorotoluene	Ave	0.1838	0.1764	0.0100	9.60	10.0	-4.0	20.0
2,3,6-Trichlorotoluene	Ave	0.1456	0.1755	0.0100	12.1	10.0	20.6*	20.0
Dibromofluoromethane (Surr)	Ave	0.2269	0.2302		10.1	10.0	1.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2999	0.3091		10.3	10.0	3.1	20.0
Toluene-d8 (Surr)	Ave	3.966	4.324		10.9	10.0	9.0	20.0
4-Bromofluorobenzene (Surr)	Ave	1.386	1.450		10.5	10.0	4.6	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 28-Apr-2015 12:26:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0006670-002
 Operator ID: 001562 Instrument ID: CHHP5
 Sublist: chrom-MSVOA_LL_CHHP5*sub12
 Method: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\MSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 29-Apr-2015 10:32:02 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK021

First Level Reviewer: fergusond

Date: 28-Apr-2015 12:48:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.305	4.305	0.000	0	138984	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.274	7.274	0.000	98	443985	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.365	10.365	0.000	89	95200	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.682	12.682	0.000	95	149359	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.532	6.532	0.000	78	102191	50.0	50.7	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.897	6.897	0.000	0	137239	50.0	51.5	
\$ 7 Toluene-d8 (Surr)	98	8.923	8.923	0.000	93	411662	50.0	54.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.533	11.533	0.000	88	138058	50.0	52.3	
11 Dichlorodifluoromethane	85	1.617	1.617	0.000	98	170082	50.0	57.1	
12 Chloromethane	50	1.775	1.775	0.000	99	194472	50.0	54.5	
13 Vinyl chloride	62	1.903	1.903	0.000	98	189734	50.0	57.0	
14 Butadiene	39	1.945	1.945	0.000	98	212346	50.0	55.4	
15 Bromomethane	94	2.249	2.249	0.000	91	102022	50.0	51.1	
16 Chloroethane	64	2.395	2.395	0.000	99	148648	50.0	59.0	
17 Dichlorofluoromethane	67	2.651	2.651	0.000	98	278967	50.0	51.8	
18 Trichlorofluoromethane	101	2.706	2.706	0.000	95	249114	50.0	57.4	
20 Ethyl ether	59	3.089	3.089	0.000	95	133663	50.0	45.6	
21 Acrolein	56	3.247	3.247	0.000	97	36795	150.0	142.9	
22 1,1-Dichloroethene	96	3.369	3.369	0.000	96	124585	50.0	47.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.417	3.417	0.000	94	141895	50.0	51.3	
24 Acetone	43	3.490	3.490	0.000	90	106715	100.0	100.2	
25 Iodomethane	142	3.563	3.563	0.000	98	193046	50.0	50.6	
26 Carbon disulfide	76	3.648	3.648	0.000	100	254103	50.0	49.6	
28 3-Chloro-1-propene	76	3.940	3.940	0.000	88	62372	50.0	44.8	
30 Methyl acetate	43	4.013	4.013	0.000	99	606211	250.0	235.3	
31 Methylene Chloride	84	4.135	4.135	0.000	97	154747	50.0	51.7	
32 2-Methyl-2-propanol	59	4.427	4.427	0.000	80	85533	500.0	573.7	
33 Acrylonitrile	53	4.549	4.549	0.000	100	645501	500.0	521.1	
34 trans-1,2-Dichloroethene	96	4.561	4.561	0.000	97	141396	50.0	53.7	
35 Methyl tert-butyl ether	73	4.591	4.591	0.000	95	310902	50.0	49.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.981	4.981	0.000	95	206484	50.0	49.3	
37 1,1-Dichloroethane	63	5.169	5.169	0.000	97	257206	50.0	51.4	
38 Vinyl acetate	43	5.291	5.291	0.000	97	193652	50.0	49.7	
44 2,2-Dichloropropane	77	5.924	5.924	0.000	61	88242	50.0	56.0	
45 cis-1,2-Dichloroethene	96	5.936	5.936	0.000	82	144381	50.0	52.6	
46 2-Butanone (MEK)	43	5.991	5.991	0.000	100	137611	100.0	97.1	
49 Chlorobromomethane	128	6.228	6.228	0.000	93	63731	50.0	52.2	
51 Tetrahydrofuran	42	6.289	6.289	0.000	89	86305	100.0	91.5	
52 Chloroform	83	6.337	6.337	0.000	95	228382	50.0	52.9	
53 1,1,1-Trichloroethane	97	6.532	6.532	0.000	96	160522	50.0	54.0	
54 Cyclohexane	56	6.587	6.587	0.000	94	256236	50.0	52.8	
56 Carbon tetrachloride	117	6.708	6.708	0.000	78	136671	50.0	55.7	
55 1,1-Dichloropropene	75	6.721	6.721	0.000	92	172694	50.0	50.8	
57 Isobutyl alcohol	41	6.940	6.940	0.000	85	95565	1250.0	1353.1	
58 Benzene	78	6.952	6.952	0.000	99	572704	50.0	53.7	
59 1,2-Dichloroethane	62	6.982	6.982	0.000	96	180375	50.0	52.5	
62 n-Heptane	43	7.280	7.280	0.000	88	174697	50.0	52.4	
64 Trichloroethene	130	7.670	7.670	0.000	97	135847	50.0	53.3	
66 Methylcyclohexane	83	7.864	7.864	0.000	94	211176	50.0	51.1	
67 1,2-Dichloropropane	63	7.901	7.901	0.000	94	138327	50.0	50.2	
68 Dibromomethane	93	8.022	8.022	0.000	96	72875	50.0	51.5	
70 1,4-Dioxane	88	8.053	8.053	0.000	95	21970	1000.0	1072.3	M
71 Dichlorobromomethane	83	8.193	8.193	0.000	98	142306	50.0	52.0	
73 2-Chloroethyl vinyl ether	63	8.521	8.521	0.000	93	128131	100.0	87.3	
74 cis-1,3-Dichloropropene	75	8.655	8.655	0.000	92	151527	50.0	49.9	
75 4-Methyl-2-pentanone (MIBK)	43	8.826	8.826	0.000	99	241426	100.0	99.1	
76 Toluene	91	8.990	8.990	0.000	98	570798	50.0	57.7	
77 trans-1,3-Dichloropropene	75	9.215	9.215	0.000	98	112832	50.0	50.5	
78 Ethyl methacrylate	69	9.318	9.318	0.000	93	113595	50.0	46.7	
79 1,1,2-Trichloroethane	97	9.397	9.397	0.000	95	104058	50.0	53.0	
80 Tetrachloroethene	164	9.531	9.531	0.000	95	100771	50.0	55.6	
81 1,3-Dichloropropane	76	9.562	9.562	0.000	94	192487	50.0	55.2	
82 2-Hexanone	43	9.653	9.653	0.000	97	174682	100.0	98.5	
84 Chlorodibromomethane	129	9.787	9.787	0.000	91	79553	50.0	53.3	
85 Ethylene Dibromide	107	9.902	9.902	0.000	100	96911	50.0	52.7	
86 3-Chlorobenzotrifluoride	180	10.371	10.371	0.000	95	184935	50.0	58.7	
87 Chlorobenzene	112	10.389	10.389	0.000	94	339361	50.0	55.3	
88 4-Chlorobenzotrifluoride	180	10.425	10.425	0.000	94	178457	50.0	59.0	
89 1,1,1,2-Tetrachloroethane	131	10.474	10.474	0.000	92	102872	50.0	55.8	
90 Ethylbenzene	106	10.498	10.498	0.000	98	189317	50.0	56.0	
91 m-Xylene & p-Xylene	106	10.614	10.614	0.000	0	225901	50.0	55.8	
92 o-Xylene	106	11.009	11.009	0.000	95	217857	50.0	55.9	
93 Styrene	104	11.022	11.022	0.000	91	355763	50.0	56.3	
94 Bromoform	173	11.204	11.204	0.000	93	46369	50.0	53.6	
96 2-Chlorobenzotrifluoride	180	11.271	11.271	0.000	97	179928	50.0	59.3	
97 Isopropylbenzene	105	11.381	11.381	0.000	96	548894	50.0	59.2	
99 1,1,2,2-Tetrachloroethane	83	11.673	11.673	0.000	95	150459	50.0	57.5	
100 Bromobenzene	156	11.685	11.685	0.000	96	133549	50.0	49.3	
101 1,2,3-Trichloropropane	110	11.715	11.715	0.000	86	46871	50.0	48.2	
102 trans-1,4-Dichloro-2-buten	53	11.733	11.733	0.000	71	37577	50.0	48.8	
103 N-Propylbenzene	120	11.788	11.788	0.000	99	155370	50.0	49.4	
104 2-Chlorotoluene	126	11.873	11.873	0.000	96	136023	50.0	50.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
105 3-Chlorotoluene	126	11.934	11.934	0.000	96	151767	50.0	52.2	
106 1,3,5-Trimethylbenzene	105	11.965	11.965	0.000	94	468190	50.0	54.0	
107 4-Chlorotoluene	126	11.983	11.983	0.000	98	153714	50.0	50.9	
108 tert-Butylbenzene	119	12.287	12.287	0.000	93	356197	50.0	49.5	
110 1,2,4-Trimethylbenzene	105	12.336	12.336	0.000	96	457002	50.0	53.1	
111 1,2-dichloro-4-(trifluorom	214	12.403	12.403	0.000	97	129620	50.0	54.3	
112 sec-Butylbenzene	105	12.506	12.506	0.000	95	544967	50.0	53.4	
113 1,3-Dichlorobenzene	146	12.622	12.622	0.000	98	246429	50.0	51.5	
114 4-Isopropyltoluene	119	12.652	12.652	0.000	96	437943	50.0	53.3	
115 1,4-Dichlorobenzene	146	12.707	12.707	0.000	92	254131	50.0	52.4	
116 2,4-Dichloro-1-(trifluorom	214	12.762	12.762	0.000	98	128657	50.0	57.7	
118 2,5-Dichlorobenzotrifluori	214	12.810	12.810	0.000	0	126256	50.0	53.1	
120 n-Butylbenzene	91	13.066	13.066	0.000	98	385169	50.0	54.2	
121 1,2-Dichlorobenzene	146	13.078	13.078	0.000	96	238120	50.0	55.4	
122 1,2-Dibromo-3-Chloropropan	75	13.857	13.857	0.000	75	18866	50.0	52.3	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.009	14.009	0.000	0	452144	150.0	177.6	
125 2,3- & 3,4- Dichlorotoluen	125	14.422	14.422	0.000	0	272341	100.0	118.3	
126 1,2,4-Trichlorobenzene	180	14.690	14.690	0.000	92	93983	50.0	56.3	
127 Hexachlorobutadiene	225	14.860	14.860	0.000	96	48277	50.0	59.6	
128 Naphthalene	128	14.939	14.939	0.000	97	223389	50.0	50.4	
129 1,2,3-Trichlorobenzene	180	15.183	15.183	0.000	94	72923	50.0	55.4	
131 2,4,5-Trichlorotoluene	159	15.968	15.968	0.000	0	26346	50.0	48.0	
130 2,3,6-Trichlorotoluene	159	16.065	16.065	0.000	96	26217	50.0	60.3	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	111.7	
S 134 1,2-Dichloroethene, Total	96				0		100.0	106.3	
S 135 1,3-Dichloropropene, Total	1				0		100.0	100.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOACEVE(PRI)_00001	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 2.00	Units: uL	
voaWketpri Re_00004	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
VOAACRPRI_00005	Amount Added: 6.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428002.D

Injection Date: 28-Apr-2015 12:26:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

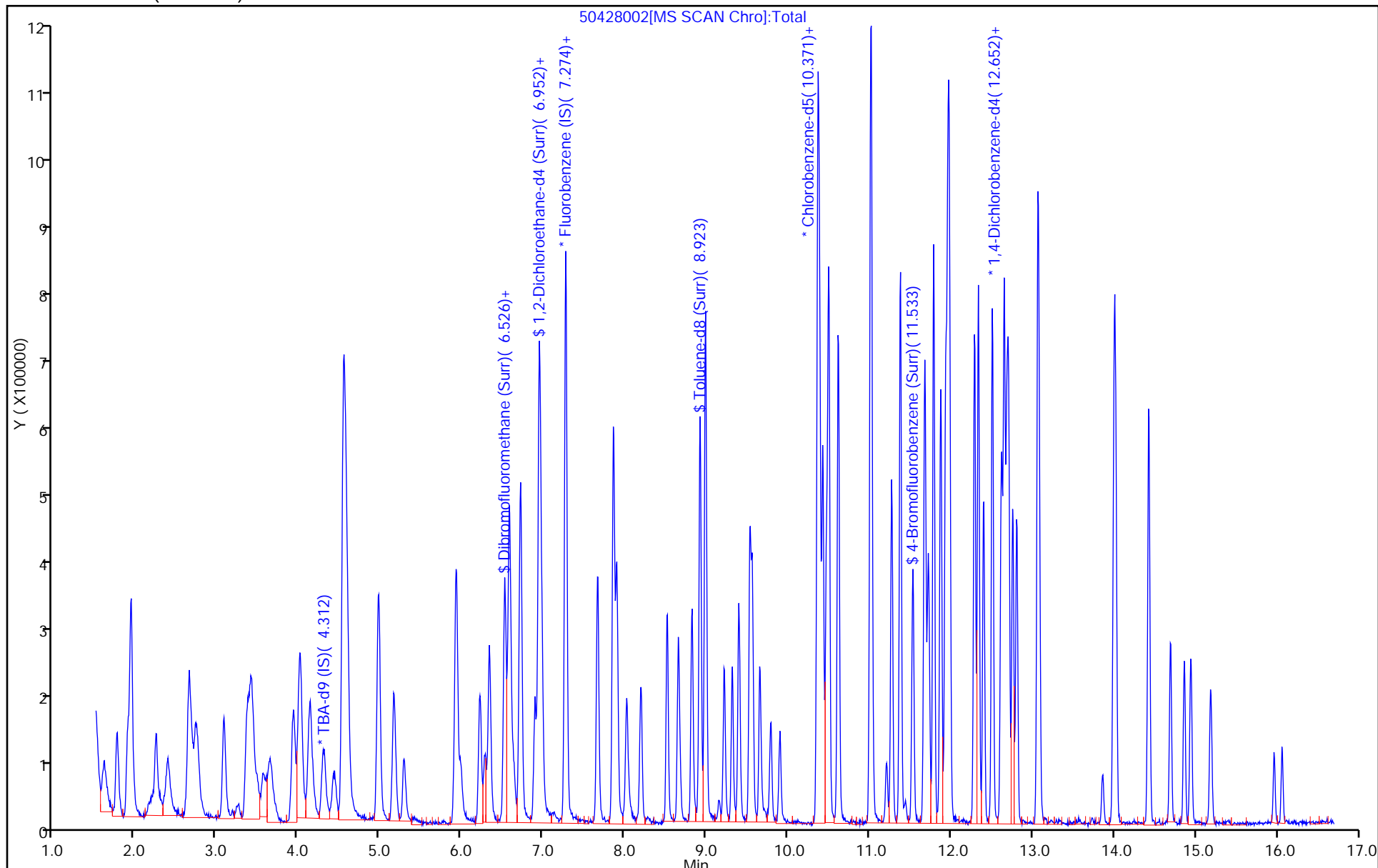
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



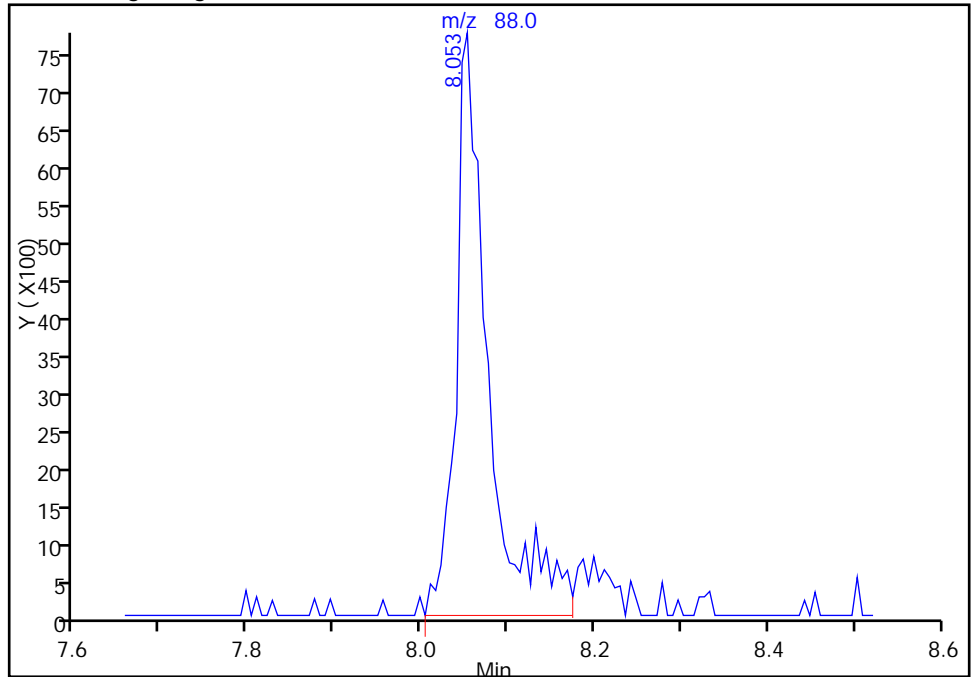
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428002.D
Injection Date: 28-Apr-2015 12:26:30 Instrument ID: CHHP5
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

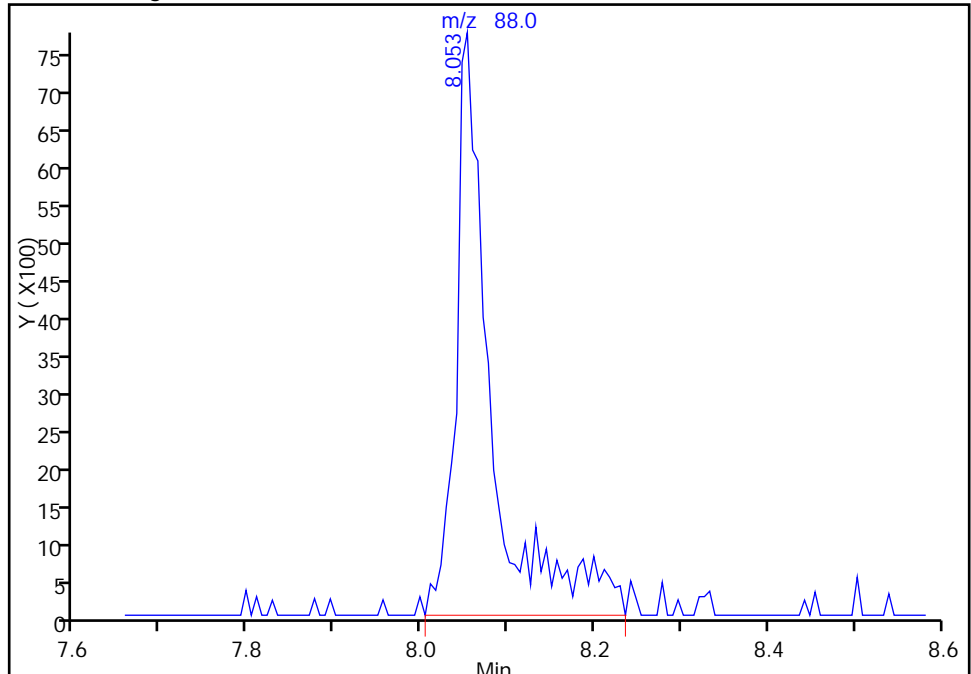
RT: 8.05
Area: 20169
Amount: 984.4272
Amount Units: ng

Processing Integration Results



RT: 8.05
Area: 21970
Amount: 1072.3321
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 28-Apr-2015 12:48:03
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139551/2 Calibration Date: 04/24/2015 11:22
 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: 60424002.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	0.2274	0.0100	23.5	20.0	17.4	20.0
1,3,5-Trichlorobenzene	Ave	1.326			1.00	10.0		

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 24-Apr-2015 11:22:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0006620-002
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub11
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 24-Apr-2015 14:53:31 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK032

First Level Reviewer: fergusond

Date: 24-Apr-2015 11:52:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.205	4.205	0.000	92	123270	1000.0	1000.0	s
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	98	465593	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	89	106272	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	96	168388	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.523	6.523	0.000	93	96660	50.0	50.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.906	0.000	68	142211	50.0	51.6	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	93	452745	50.0	51.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	83	169724	50.0	50.6	
11 Dichlorodifluoromethane	85	1.577	1.577	0.000	99	128698	50.0	56.2	
12 Chloromethane	50	1.735	1.735	0.000	99	177954	50.0	49.9	
13 Vinyl chloride	62	1.863	1.863	0.000	98	168340	50.0	50.3	
14 Butadiene	39	1.906	1.906	0.000	94	182521	50.0	53.6	
15 Bromomethane	94	2.192	2.192	0.000	91	60375	50.0	63.7	
16 Chloroethane	64	2.344	2.344	0.000	99	90585	50.0	63.4	
17 Dichlorofluoromethane	67	2.611	2.611	0.000	99	223412	50.0	64.1	
18 Trichlorofluoromethane	101	2.636	2.636	0.000	88	172947	50.0	55.9	
20 Ethyl ether	59	3.007	3.007	0.000	94	143439	50.0	47.4	
21 Acrolein	56	3.177	3.177	0.000	97	37170	150.0	103.0	
22 1,1-Dichloroethene	96	3.311	3.311	0.000	96	110939	50.0	46.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.366	3.366	0.000	95	114598	50.0	48.6	
24 Acetone	43	3.384	3.384	0.000	99	92508	100.0	118.2	
25 Iodomethane	142	3.500	3.500	0.000	96	176807	50.0	52.9	
26 Carbon disulfide	76	3.603	3.603	0.000	100	250769	50.0	36.5	
29 3-Chloro-1-propene	76	3.877	3.877	0.000	55	60775	50.0	37.1	
30 Methyl acetate	43	3.883	3.883	0.000	97	584480	250.0	224.3	
31 Methylene Chloride	84	4.090	4.090	0.000	96	152278	50.0	47.8	
32 2-Methyl-2-propanol	59	4.333	4.333	0.000	93	73976	500.0	527.9	
33 Acrylonitrile	53	4.461	4.461	0.000	98	643536	500.0	460.1	
34 trans-1,2-Dichloroethene	96	4.528	4.528	0.000	68	130133	50.0	46.9	
35 Methyl tert-butyl ether	73	4.534	4.534	0.000	98	372407	50.0	46.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.947	4.947	0.000	92	210706	50.0	48.1	
37 1,1-Dichloroethane	63	5.160	5.160	0.000	96	246439	50.0	46.7	
38 Vinyl acetate	43	5.197	5.197	0.000	97	217800	50.0	39.6	
43 cis-1,2-Dichloroethene	96	5.902	5.902	0.000	83	149956	50.0	50.6	
42 2,2-Dichloropropane	77	5.902	5.902	0.000	50	67890	50.0	26.9	
44 2-Butanone (MEK)	43	5.909	5.909	0.000	93	160452	100.0	115.9	
48 Chlorobromomethane	128	6.201	6.201	0.000	95	64109	50.0	49.1	
49 Tetrahydrofuran	42	6.207	6.207	0.000	87	100768	100.0	82.5	
50 Chloroform	83	6.347	6.347	0.000	96	214423	50.0	51.1	
51 1,1,1-Trichloroethane	97	6.511	6.511	0.000	96	126374	50.0	43.6	
52 Cyclohexane	56	6.590	6.590	0.000	94	259692	50.0	45.6	
53 Carbon tetrachloride	117	6.687	6.687	0.000	53	75933	50.0	41.0	
54 1,1-Dichloropropene	75	6.699	6.699	0.000	94	178231	50.0	51.4	
55 Isobutyl alcohol	41	6.870	6.870	0.000	89	61760	1250.0	651.7	
56 Benzene	78	6.906	6.906	0.000	98	578104	50.0	51.4	
57 1,2-Dichloroethane	62	6.991	6.991	0.000	96	199035	50.0	55.5	
59 n-Heptane	43	7.277	7.277	0.000	94	166666	50.0	49.9	
61 Trichloroethene	130	7.655	7.655	0.000	97	126153	50.0	49.7	
63 Methylcyclohexane	83	7.892	7.892	0.000	90	227534	50.0	47.8	
64 1,2-Dichloropropane	63	7.928	7.928	0.000	90	156161	50.0	49.0	
65 1,4-Dioxane	88	8.013	8.013	0.000	43	31488	1000.0	867.5	M
67 Dibromomethane	93	8.013	8.013	0.000	95	77797	50.0	51.4	
68 Dichlorobromomethane	83	8.208	8.208	0.000	98	128424	50.0	48.5	
70 2-Chloroethyl vinyl ether	63	8.500	8.500	0.000	91	211752	100.0	117.4	
71 cis-1,3-Dichloropropene	75	8.646	8.646	0.000	92	153130	50.0	41.1	
72 4-Methyl-2-pentanone (MIBK)	43	8.792	8.792	0.000	97	313811	100.0	89.5	
73 Toluene	91	8.981	8.981	0.000	99	600936	50.0	54.7	
74 trans-1,3-Dichloropropene	75	9.224	9.224	0.000	97	104511	50.0	35.9	
75 Ethyl methacrylate	69	9.285	9.285	0.000	91	138478	50.0	38.6	
76 1,1,2-Trichloroethane	97	9.425	9.425	0.000	93	129460	50.0	54.6	
77 Tetrachloroethene	164	9.498	9.498	0.000	94	96813	50.0	53.1	
78 1,3-Dichloropropane	76	9.583	9.583	0.000	94	225364	50.0	50.7	
79 2-Hexanone	43	9.626	9.626	0.000	97	251523	100.0	125.7	
81 Chlorodibromomethane	129	9.802	9.802	0.000	90	69422	50.0	47.2	
82 Ethylene Dibromide	107	9.918	9.918	0.000	99	105907	50.0	46.4	
83 3-Chlorobenzotrifluoride	180	10.368	10.368	0.000	95	172835	50.0	49.2	
84 Chlorobenzene	112	10.404	10.404	0.000	94	389982	50.0	56.2	
85 4-Chlorobenzotrifluoride	180	10.459	10.459	0.000	97	159012	50.0	47.6	
86 1,1,1,2-Tetrachloroethane	131	10.495	10.495	0.000	78	71517	50.0	40.1	
87 Ethylbenzene	106	10.502	10.502	0.000	98	212188	50.0	51.0	
88 m-Xylene & p-Xylene	106	10.629	10.629	0.000	99	269910	50.0	53.0	
89 o-Xylene	106	11.013	11.013	0.000	97	257204	50.0	51.1	
90 Styrene	104	11.037	11.037	0.000	96	420656	50.0	52.3	
91 Bromoform	173	11.219	11.219	0.000	94	31269	50.0	40.5	
92 2-Chlorobenzotrifluoride	180	11.280	11.280	0.000	97	173843	50.0	48.1	
93 Isopropylbenzene	105	11.384	11.384	0.000	97	606061	50.0	51.7	
96 1,1,2,2-Tetrachloroethane	83	11.688	11.688	0.000	96	155975	50.0	46.8	
95 Bromobenzene	156	11.700	11.700	0.000	97	143249	50.0	51.7	
97 trans-1,4-Dichloro-2-buten	53	11.724	11.724	0.000	52	37595	50.0	36.3	
98 1,2,3-Trichloropropane	110	11.749	11.749	0.000	85	53017	50.0	50.4	
99 N-Propylbenzene	120	11.797	11.797	0.000	99	168598	50.0	48.5	
100 2-Chlorotoluene	126	11.889	11.889	0.000	95	149985	50.0	50.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.956	11.956	0.000	96	153478	50.0	48.2	
102 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	97	507695	50.0	50.9	
103 4-Chlorotoluene	126	12.010	12.010	0.000	99	157983	50.0	50.2	
104 tert-Butylbenzene	119	12.296	12.296	0.000	94	409633	50.0	50.3	
106 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	532800	50.0	51.3	
107 1,2-dichloro-4-(trifluorom	214	12.394	12.394	0.000	97	120938	50.0	45.9	
108 sec-Butylbenzene	105	12.521	12.521	0.000	95	612507	50.0	50.7	
109 1,3-Dichlorobenzene	146	12.643	12.643	0.000	96	283916	50.0	51.4	
110 4-Isopropyltoluene	119	12.679	12.679	0.000	96	509272	50.0	51.1	
111 1,4-Dichlorobenzene	146	12.746	12.746	0.000	90	297055	50.0	51.7	
113 2,4-Dichloro-1-(trifluorom	214	12.765	12.765	0.000	92	119044	50.0	43.8	
114 2,5-Dichlorobenzotrifluori	214	12.801	12.801	0.000	98	133455	50.0	46.4	
116 n-Butylbenzene	91	13.087	13.087	0.000	98	474471	50.0	51.1	
117 1,2-Dichlorobenzene	146	13.099	13.099	0.000	95	284412	50.0	51.3	
118 1,2-Dibromo-3-Chloropropan	75	13.896	13.896	0.000	68	15105	50.0	33.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.036	0.000	99	659832	150.0	142.7	
120 1,3,5-Trichlorobenzene	180		14.082				ND	ND	
121 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	98	485716	100.0	95.9	
122 1,2,4-Trichlorobenzene	180	14.717	14.717	0.000	94	195939	50.0	48.5	
123 Hexachlorobutadiene	225	14.863	14.863	0.000	97	57481	50.0	48.5	
124 Naphthalene	128	14.985	14.985	0.000	97	502457	50.0	48.5	
125 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	95	182785	50.0	48.2	
126 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	95630	50.0	43.0	
127 2,3,6-Trichlorotoluene	159	16.086	16.086	0.000	94	90739	50.0	44.3	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
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	
S 131 Xylenes, Total	106				0		100.0	104.1	
S 130 1,2-Dichloroethene, Total	96				0		100.0	97.5	
S 132 1,3-Dichloropropene, Total	1				0		100.0	77.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added: 6.00	Units: uL	
voaWketpri Re_00004	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
voaW2-cle pri_00006	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 2.00	Units: uL	
voaW 135tcb a_00001	Amount Added: 2.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424002.D

Injection Date: 24-Apr-2015 11:22:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

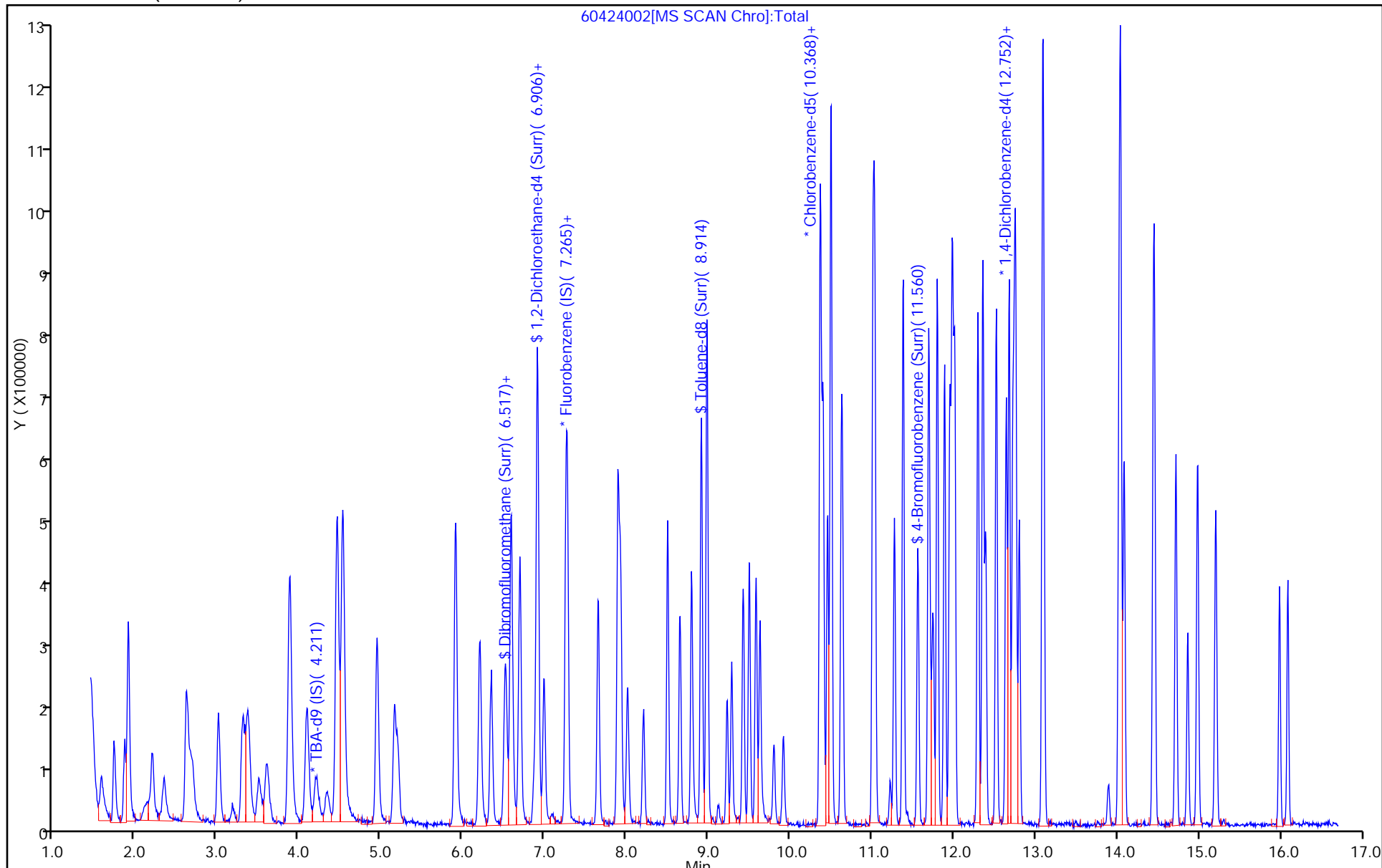
Dil. Factor: 1.0000

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.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139551/2 Calibration Date: 04/24/2015 11:22
 Instrument ID: CHHP6 Calib Start Date: 04/14/2015 15:56
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/14/2015 18:44
 Lab File ID: 60424002.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	0.2459	0.2764	0.1000	11.2	10.0	12.4	20.0
Chloromethane	Ave	0.3826	0.3822	0.1000	9.99	10.0	-0.1	20.0
Vinyl chloride	Ave	0.3595	0.3616	0.1000	10.1	10.0	0.6	20.0
Bromomethane	Ave	0.1017	0.1297	0.0500	12.7	10.0	27.5*	20.0
Chloroethane	Ave	0.1534	0.1946	0.0500	12.7	10.0	26.8*	20.0
Dichlorofluoromethane	Ave	0.3743	0.4798	0.0100	12.8	10.0	28.2*	20.0
Trichlorofluoromethane	Ave	0.3323	0.3715	0.1000	11.2	10.0	11.8	20.0
Ethyl ether	Ave	0.3248	0.3081	0.0100	9.49	10.0	-5.1	20.0
Acrolein	Ave	0.0387	0.0266	0.0100	20.6	30.0	-31.3*	20.0
1,1-Dichloroethene	Ave	0.2589	0.2383	0.1000	9.20	10.0	-8.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2532	0.2461	0.1000	9.72	10.0	-2.8	20.0
Acetone	Ave	0.0841	0.0993	0.0500	23.6	20.0	18.2	20.0
Iodomethane	Ave	0.3586	0.3798	0.0100	10.6	10.0	5.9	20.0
Carbon disulfide	Ave	0.7369	0.5386	0.1000	7.31	10.0	-26.9*	20.0
Allyl chloride	Ave	0.1759	0.1305	0.0100	7.42	10.0	-25.8*	20.0
Methyl acetate	Ave	0.2799	0.2511	0.1000	44.9	50.0	-10.3	20.0
Methylene Chloride	Ave	0.3421	0.3271	0.1000	9.56	10.0	-4.4	20.0
tert-Butyl alcohol	Ave	1.137	1.200	0.0100	106	100	5.6	20.0
Acrylonitrile	Ave	0.1502	0.1382	0.0100	92.0	100	-8.0	20.0
trans-1,2-Dichloroethene	Ave	0.2983	0.2795	0.1000	9.37	10.0	-6.3	20.0
Methyl tert-butyl ether	Ave	0.8673	0.7999	0.1000	9.22	10.0	-7.8	20.0
Hexane	Ave	0.4699	0.4526	0.0100	9.63	10.0	-3.7	20.0
1,1-Dichloroethane	Ave	0.5668	0.5293	0.2000	9.34	10.0	-6.6	20.0
Vinyl acetate	Ave	0.5902	0.4678	0.0100	7.93	10.0	-20.7*	20.0
2,2-Dichloropropane	Ave	0.2707	0.1458	0.0100	5.39	10.0	-46.1*	20.0
cis-1,2-Dichloroethene	Ave	0.3180	0.3221	0.1000	10.1	10.0	1.3	20.0
2-Butanone (MEK)	Ave	0.1486	0.1723	0.0500	23.2	20.0	15.9	20.0
Bromochloromethane	Ave	0.1401	0.1377	0.0100	9.82	10.0	-1.8	20.0
Tetrahydrofuran	Ave	0.1312	0.1082	0.0100	16.5	20.0	-17.5	20.0
Chloroform	Ave	0.4510	0.4605	0.2000	10.2	10.0	2.1	20.0
1,1,1-Trichloroethane	Ave	0.3116	0.2714	0.1000	8.71	10.0	-12.9	20.0
Cyclohexane	Ave	0.6119	0.5578	0.1000	9.12	10.0	-8.8	20.0
Carbon tetrachloride	Ave	0.1987	0.1631	0.1000	8.21	10.0	-17.9	20.0
1,1-Dichloropropene	Ave	0.3722	0.3828	0.0100	10.3	10.0	2.8	20.0
Isobutyl alcohol	Ave	0.0102	0.0053*	0.0100	130	250	-47.9*	20.0
Benzene	Ave	1.208	1.242	0.5000	10.3	10.0	2.8	20.0
1,2-Dichloroethane	Ave	0.3849	0.4275	0.1000	11.1	10.0	11.1	20.0
n-Heptane	Ave	0.3589	0.3580	0.0100	9.97	10.0	-0.3	20.0
Trichloroethene	Ave	0.2727	0.2710	0.2000	9.93	10.0	-0.7	20.0
Methylcyclohexane	Ave	0.5109	0.4887	0.1000	9.57	10.0	-4.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139551/2 Calibration Date: 04/24/2015 11:22
 Instrument ID: CHHP6 Calib Start Date: 04/14/2015 15:56
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/14/2015 18:44
 Lab File ID: 60424002.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	0.3422	0.3354	0.1000	9.80	10.0	-2.0	20.0
1,4-Dioxane	Ave	0.0039	0.0034*	0.0100	173	200	-13.3	20.0
Dibromomethane	Ave	0.1627	0.1671	0.0100	10.3	10.0	2.7	20.0
Bromodichloromethane	Ave	0.2844	0.2758	0.2000	9.70	10.0	-3.0	20.0
cis-1,3-Dichloropropene	Ave	0.4002	0.3289	0.2000	8.22	10.0	-17.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.649	1.476	0.1000	17.9	20.0	-10.5	20.0
Toluene	Ave	5.172	5.655	0.4000	10.9	10.0	9.3	20.0
trans-1,3-Dichloropropene	Ave	1.369	0.9834	0.1000	7.18	10.0	-28.2*	20.0
Ethyl methacrylate	Ave	1.688	1.303	0.0100	7.72	10.0	-22.8*	20.0
1,1,2-Trichloroethane	Ave	1.116	1.218	0.1000	10.9	10.0	9.2	20.0
Tetrachloroethene	Ave	0.8578	0.9110	0.2000	10.6	10.0	6.2	20.0
1,3-Dichloropropane	Ave	2.090	2.121	0.0100	10.1	10.0	1.5	20.0
2-Hexanone	Ave	0.9415	1.183	0.1000	25.1	20.0	25.7*	20.0
Dibromochloromethane	Ave	0.6927	0.6533	0.1000	9.43	10.0	-5.7	20.0
1,2-Dibromoethane (EDB)	Ave	1.073	0.997	0.1000	9.29	10.0	-7.1	20.0
3-Chlorobenzotrifluoride	Ave	1.651	1.626	0.0100	9.85	10.0	-1.5	20.0
Chlorobenzene	Ave	3.263	3.670	0.5000	11.2	10.0	12.5	20.0
4-Chlorobenzotrifluoride	Ave	1.570	1.496	0.0100	9.53	10.0	-4.7	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8400	0.6730	0.0100	8.01	10.0	-19.9	20.0
Ethylbenzene	Ave	1.959	1.997	0.1000	10.2	10.0	1.9	20.0
m-Xylene & p-Xylene	Ave	2.395	2.540	0.1000	10.6	10.0	6.0	20.0
o-Xylene	Ave	2.370	2.420	0.3000	10.2	10.0	2.1	20.0
Styrene	Ave	3.782	3.958	0.3000	10.5	10.0	4.7	20.0
Bromoform	Ave	0.3632	0.2942	0.1000	8.10	10.0	-19.0	20.0
2-Chlorobenzotrifluoride	Ave	1.702	1.636	0.0100	9.61	10.0	-3.9	20.0
Isopropylbenzene	Ave	5.514	5.703	0.1000	10.3	10.0	3.4	20.0
1,1,2,2-Tetrachloroethane	Ave	1.568	1.468	0.3000	9.36	10.0	-6.4	20.0
Bromobenzene	Ave	0.8234	0.8507	0.0100	10.3	10.0	3.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3077	0.2233	0.0100	7.26	10.0	-27.4*	20.0
1,2,3-Trichloropropane	Ave	0.3122	0.3149	0.0100	10.1	10.0	0.8	20.0
N-Propylbenzene	Ave	1.033	1.001	0.0100	9.69	10.0	-3.1	20.0
2-Chlorotoluene	Ave	0.8753	0.8907	0.0100	10.2	10.0	1.8	20.0
3-Chlorotoluene	Ave	0.9460	0.9115	0.0100	9.63	10.0	-3.7	20.0
1,3,5-Trimethylbenzene	Ave	2.962	3.015	0.0100	10.2	10.0	1.8	20.0
4-Chlorotoluene	Ave	0.9341	0.9382	0.0100	10.0	10.0	0.4	20.0
tert-Butylbenzene	Ave	2.420	2.433	0.0100	10.1	10.0	0.5	20.0
1,2,4-Trimethylbenzene	Ave	3.087	3.164	0.0100	10.3	10.0	2.5	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7828	0.7182	0.0100	9.18	10.0	-8.2	20.0
sec-Butylbenzene	Ave	3.584	3.637	0.0100	10.1	10.0	1.5	20.0
1,3-Dichlorobenzene	Ave	1.641	1.686	0.6000	10.3	10.0	2.8	20.0
4-Isopropyltoluene	Ave	2.958	3.024	0.0100	10.2	10.0	2.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139551/2 Calibration Date: 04/24/2015 11:22
 Instrument ID: CHHP6 Calib Start Date: 04/14/2015 15:56
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/14/2015 18:44
 Lab File ID: 60424002.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	1.707	1.764	0.5000	10.3	10.0	3.3	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.8062	0.7070	0.0100	8.77	10.0	-12.3	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8540	0.7925	0.0100	9.28	10.0	-7.2	20.0
n-Butylbenzene	Ave	2.757	2.818	0.0100	10.2	10.0	2.2	20.0
1,2-Dichlorobenzene	Ave	1.646	1.689	0.4000	10.3	10.0	2.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1335	0.0897	0.0500	6.72	10.0	-32.8*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.373	1.306	0.0100	28.5	30.0	-4.8	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.504	1.442	0.0100	19.2	20.0	-4.1	20.0
1,2,4-Trichlorobenzene	Ave	1.200	1.164	0.2000	9.70	10.0	-3.0	20.0
Hexachlorobutadiene	Ave	0.3522	0.3414	0.0100	9.69	10.0	-3.1	20.0
Naphthalene	Ave	3.078	2.984	0.0100	9.70	10.0	-3.0	20.0
1,2,3-Trichlorobenzene	Ave	1.127	1.086	0.0100	9.63	10.0	-3.7	20.0
2,4,5-Trichlorotoluene	Ave	0.6599	0.5679	0.0100	8.61	10.0	-13.9	20.0
2,3,6-Trichlorotoluene	Ave	0.6087	0.5389	0.0100	8.85	10.0	-11.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2060	0.2076		10.1	10.0	0.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2958	0.3054		10.3	10.0	3.3	20.0
Toluene-d8 (Surr)	Ave	4.168	4.260		10.2	10.0	2.2	20.0
4-Bromofluorobenzene (Surr)	Ave	1.579	1.597		10.1	10.0	1.1	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 24-Apr-2015 11:22:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0006620-002
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub11
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 24-Apr-2015 14:53:31 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK032

First Level Reviewer: fergusond

Date: 24-Apr-2015 11:52:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.205	4.205	0.000	92	123270	1000.0	1000.0	s
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	98	465593	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	89	106272	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	96	168388	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.523	6.523	0.000	93	96660	50.0	50.4	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.906	0.000	68	142211	50.0	51.6	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	93	452745	50.0	51.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	83	169724	50.0	50.6	
11 Dichlorodifluoromethane	85	1.577	1.577	0.000	99	128698	50.0	56.2	
12 Chloromethane	50	1.735	1.735	0.000	99	177954	50.0	49.9	
13 Vinyl chloride	62	1.863	1.863	0.000	98	168340	50.0	50.3	
14 Butadiene	39	1.906	1.906	0.000	94	182521	50.0	53.6	
15 Bromomethane	94	2.192	2.192	0.000	91	60375	50.0	63.7	
16 Chloroethane	64	2.344	2.344	0.000	99	90585	50.0	63.4	
17 Dichlorofluoromethane	67	2.611	2.611	0.000	99	223412	50.0	64.1	
18 Trichlorofluoromethane	101	2.636	2.636	0.000	88	172947	50.0	55.9	
20 Ethyl ether	59	3.007	3.007	0.000	94	143439	50.0	47.4	
21 Acrolein	56	3.177	3.177	0.000	97	37170	150.0	103.0	
22 1,1-Dichloroethene	96	3.311	3.311	0.000	96	110939	50.0	46.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.366	3.366	0.000	95	114598	50.0	48.6	
24 Acetone	43	3.384	3.384	0.000	99	92508	100.0	118.2	
25 Iodomethane	142	3.500	3.500	0.000	96	176807	50.0	52.9	
26 Carbon disulfide	76	3.603	3.603	0.000	100	250769	50.0	36.5	
29 3-Chloro-1-propene	76	3.877	3.877	0.000	55	60775	50.0	37.1	
30 Methyl acetate	43	3.883	3.883	0.000	97	584480	250.0	224.3	
31 Methylene Chloride	84	4.090	4.090	0.000	96	152278	50.0	47.8	
32 2-Methyl-2-propanol	59	4.333	4.333	0.000	93	73976	500.0	527.9	
33 Acrylonitrile	53	4.461	4.461	0.000	98	643536	500.0	460.1	
34 trans-1,2-Dichloroethene	96	4.528	4.528	0.000	68	130133	50.0	46.9	
35 Methyl tert-butyl ether	73	4.534	4.534	0.000	98	372407	50.0	46.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.947	4.947	0.000	92	210706	50.0	48.1	
37 1,1-Dichloroethane	63	5.160	5.160	0.000	96	246439	50.0	46.7	
38 Vinyl acetate	43	5.197	5.197	0.000	97	217800	50.0	39.6	
43 cis-1,2-Dichloroethene	96	5.902	5.902	0.000	83	149956	50.0	50.6	
42 2,2-Dichloropropane	77	5.902	5.902	0.000	50	67890	50.0	26.9	
44 2-Butanone (MEK)	43	5.909	5.909	0.000	93	160452	100.0	115.9	
48 Chlorobromomethane	128	6.201	6.201	0.000	95	64109	50.0	49.1	
49 Tetrahydrofuran	42	6.207	6.207	0.000	87	100768	100.0	82.5	
50 Chloroform	83	6.347	6.347	0.000	96	214423	50.0	51.1	
51 1,1,1-Trichloroethane	97	6.511	6.511	0.000	96	126374	50.0	43.6	
52 Cyclohexane	56	6.590	6.590	0.000	94	259692	50.0	45.6	
53 Carbon tetrachloride	117	6.687	6.687	0.000	53	75933	50.0	41.0	
54 1,1-Dichloropropene	75	6.699	6.699	0.000	94	178231	50.0	51.4	
55 Isobutyl alcohol	41	6.870	6.870	0.000	89	61760	1250.0	651.7	
56 Benzene	78	6.906	6.906	0.000	98	578104	50.0	51.4	
57 1,2-Dichloroethane	62	6.991	6.991	0.000	96	199035	50.0	55.5	
59 n-Heptane	43	7.277	7.277	0.000	94	166666	50.0	49.9	
61 Trichloroethene	130	7.655	7.655	0.000	97	126153	50.0	49.7	
63 Methylcyclohexane	83	7.892	7.892	0.000	90	227534	50.0	47.8	
64 1,2-Dichloropropane	63	7.928	7.928	0.000	90	156161	50.0	49.0	
65 1,4-Dioxane	88	8.013	8.013	0.000	43	31488	1000.0	867.5	M
67 Dibromomethane	93	8.013	8.013	0.000	95	77797	50.0	51.4	
68 Dichlorobromomethane	83	8.208	8.208	0.000	98	128424	50.0	48.5	
70 2-Chloroethyl vinyl ether	63	8.500	8.500	0.000	91	211752	100.0	117.4	
71 cis-1,3-Dichloropropene	75	8.646	8.646	0.000	92	153130	50.0	41.1	
72 4-Methyl-2-pentanone (MIBK)	43	8.792	8.792	0.000	97	313811	100.0	89.5	
73 Toluene	91	8.981	8.981	0.000	99	600936	50.0	54.7	
74 trans-1,3-Dichloropropene	75	9.224	9.224	0.000	97	104511	50.0	35.9	
75 Ethyl methacrylate	69	9.285	9.285	0.000	91	138478	50.0	38.6	
76 1,1,2-Trichloroethane	97	9.425	9.425	0.000	93	129460	50.0	54.6	
77 Tetrachloroethene	164	9.498	9.498	0.000	94	96813	50.0	53.1	
78 1,3-Dichloropropane	76	9.583	9.583	0.000	94	225364	50.0	50.7	
79 2-Hexanone	43	9.626	9.626	0.000	97	251523	100.0	125.7	
81 Chlorodibromomethane	129	9.802	9.802	0.000	90	69422	50.0	47.2	
82 Ethylene Dibromide	107	9.918	9.918	0.000	99	105907	50.0	46.4	
83 3-Chlorobenzotrifluoride	180	10.368	10.368	0.000	95	172835	50.0	49.2	
84 Chlorobenzene	112	10.404	10.404	0.000	94	389982	50.0	56.2	
85 4-Chlorobenzotrifluoride	180	10.459	10.459	0.000	97	159012	50.0	47.6	
86 1,1,1,2-Tetrachloroethane	131	10.495	10.495	0.000	78	71517	50.0	40.1	
87 Ethylbenzene	106	10.502	10.502	0.000	98	212188	50.0	51.0	
88 m-Xylene & p-Xylene	106	10.629	10.629	0.000	99	269910	50.0	53.0	
89 o-Xylene	106	11.013	11.013	0.000	97	257204	50.0	51.1	
90 Styrene	104	11.037	11.037	0.000	96	420656	50.0	52.3	
91 Bromoform	173	11.219	11.219	0.000	94	31269	50.0	40.5	
92 2-Chlorobenzotrifluoride	180	11.280	11.280	0.000	97	173843	50.0	48.1	
93 Isopropylbenzene	105	11.384	11.384	0.000	97	606061	50.0	51.7	
96 1,1,2,2-Tetrachloroethane	83	11.688	11.688	0.000	96	155975	50.0	46.8	
95 Bromobenzene	156	11.700	11.700	0.000	97	143249	50.0	51.7	
97 trans-1,4-Dichloro-2-buten	53	11.724	11.724	0.000	52	37595	50.0	36.3	
98 1,2,3-Trichloropropane	110	11.749	11.749	0.000	85	53017	50.0	50.4	
99 N-Propylbenzene	120	11.797	11.797	0.000	99	168598	50.0	48.5	
100 2-Chlorotoluene	126	11.889	11.889	0.000	95	149985	50.0	50.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
101 3-Chlorotoluene	126	11.956	11.956	0.000	96	153478	50.0	48.2	
102 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	97	507695	50.0	50.9	
103 4-Chlorotoluene	126	12.010	12.010	0.000	99	157983	50.0	50.2	
104 tert-Butylbenzene	119	12.296	12.296	0.000	94	409633	50.0	50.3	
106 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	532800	50.0	51.3	
107 1,2-dichloro-4-(trifluorom	214	12.394	12.394	0.000	97	120938	50.0	45.9	
108 sec-Butylbenzene	105	12.521	12.521	0.000	95	612507	50.0	50.7	
109 1,3-Dichlorobenzene	146	12.643	12.643	0.000	96	283916	50.0	51.4	
110 4-Isopropyltoluene	119	12.679	12.679	0.000	96	509272	50.0	51.1	
111 1,4-Dichlorobenzene	146	12.746	12.746	0.000	90	297055	50.0	51.7	
113 2,4-Dichloro-1-(trifluorom	214	12.765	12.765	0.000	92	119044	50.0	43.8	
114 2,5-Dichlorobenzotrifluori	214	12.801	12.801	0.000	98	133455	50.0	46.4	
116 n-Butylbenzene	91	13.087	13.087	0.000	98	474471	50.0	51.1	
117 1,2-Dichlorobenzene	146	13.099	13.099	0.000	95	284412	50.0	51.3	
118 1,2-Dibromo-3-Chloropropan	75	13.896	13.896	0.000	68	15105	50.0	33.6	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.036	0.000	99	659832	150.0	142.7	
120 1,3,5-Trichlorobenzene	180		14.082				ND	ND	
121 2,3- & 3,4- Dichlorotoluen	125	14.450	14.450	0.000	98	485716	100.0	95.9	
122 1,2,4-Trichlorobenzene	180	14.717	14.717	0.000	94	195939	50.0	48.5	
123 Hexachlorobutadiene	225	14.863	14.863	0.000	97	57481	50.0	48.5	
124 Naphthalene	128	14.985	14.985	0.000	97	502457	50.0	48.5	
125 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	95	182785	50.0	48.2	
126 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	95630	50.0	43.0	
127 2,3,6-Trichlorotoluene	159	16.086	16.086	0.000	94	90739	50.0	44.3	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
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	
S 131 Xylenes, Total	106				0		100.0	104.1	
S 130 1,2-Dichloroethene, Total	96				0		100.0	97.5	
S 132 1,3-Dichloropropene, Total	1				0		100.0	77.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

s - Failed ISTD Recovery Test

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added: 6.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
voaW2-cle pri_00006	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 2.00	Units: uL	
voaW 135tcb a_00001	Amount Added: 2.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424002.D

Injection Date: 24-Apr-2015 11:22:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

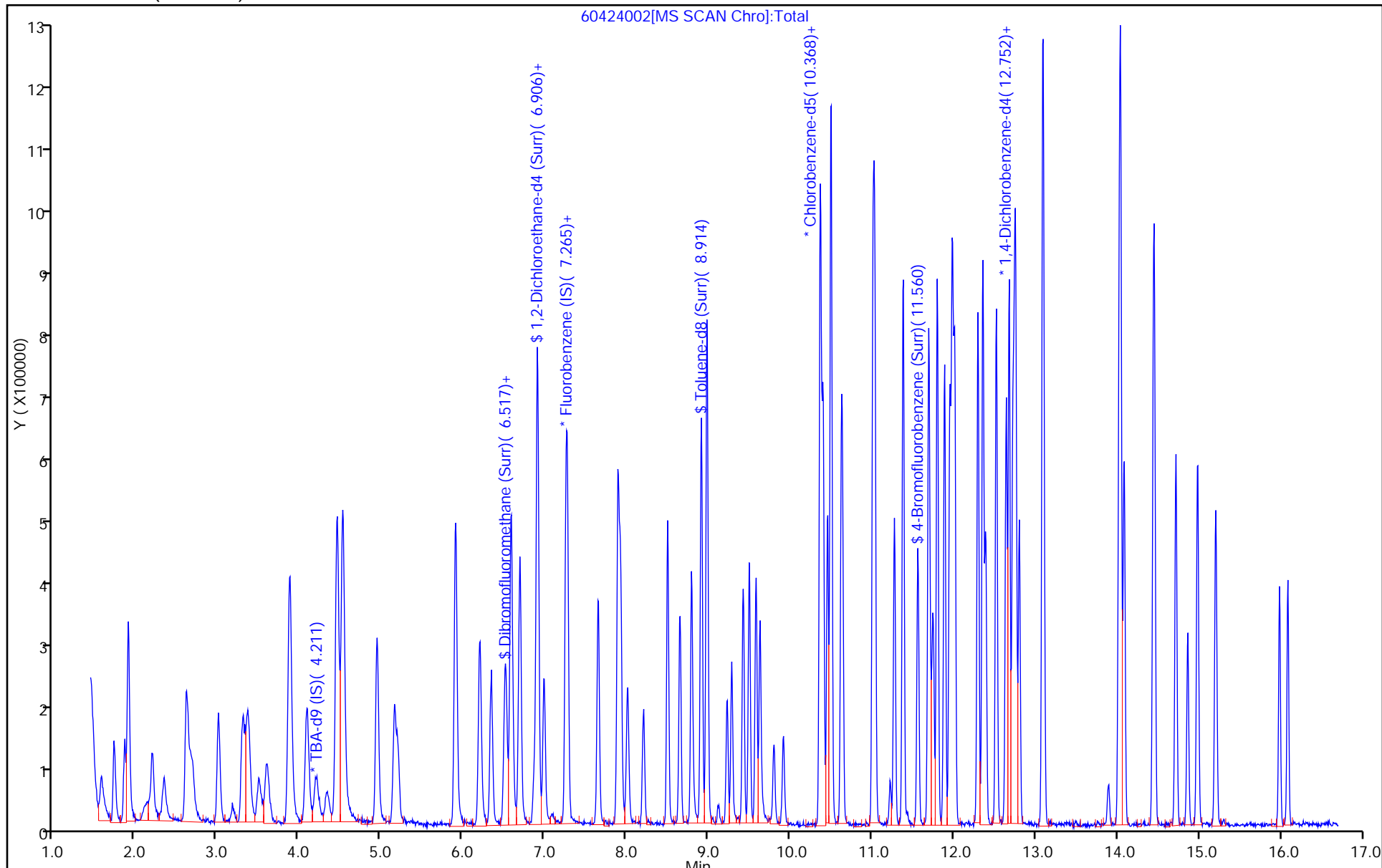
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



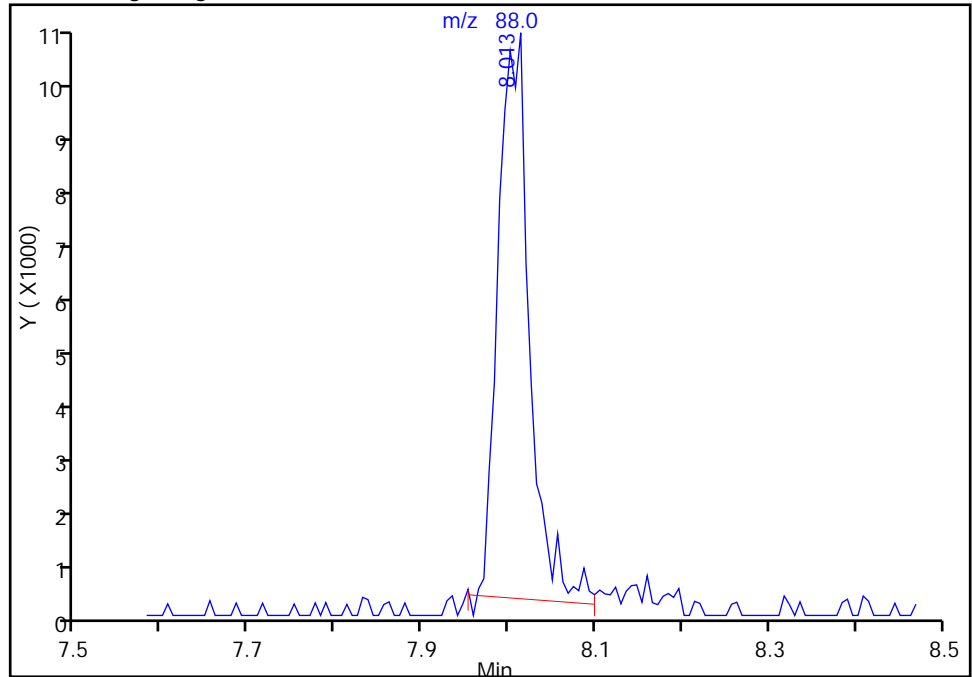
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424002.D
Injection Date: 24-Apr-2015 11:22:30 Instrument ID: CHHP6
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
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

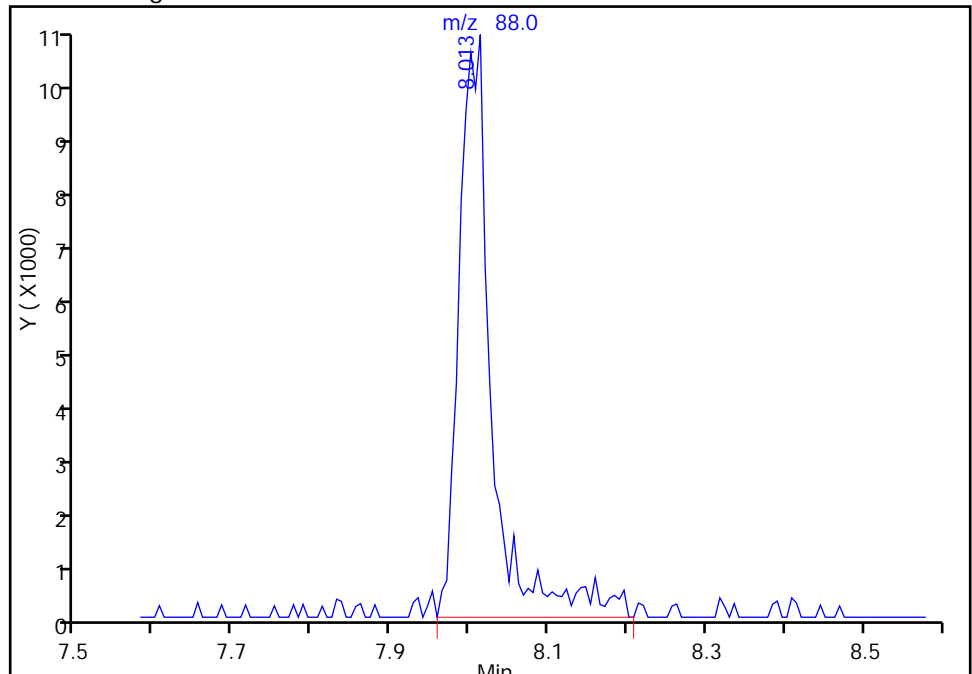
RT: 8.01
Area: 26535
Amount: 731.0439
Amount Units: ng

Processing Integration Results



RT: 8.01
Area: 31488
Amount: 867.4999
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 24-Apr-2015 11:52:57
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139651/2 Calibration Date: 04/25/2015 11:28
 Instrument ID: CHHP6 Calib Start Date: 04/14/2015 15:56
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/14/2015 18:44
 Lab File ID: 60425002.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	0.2459	0.2847	0.1000	11.6	10.0	15.8	20.0
Chloromethane	Ave	0.3826	0.3625	0.1000	9.47	10.0	-5.3	20.0
Vinyl chloride	Ave	0.3595	0.3587	0.1000	9.98	10.0	-0.2	20.0
Bromomethane	Ave	0.1017	0.1414	0.0500	13.9	10.0	39.0*	20.0
Chloroethane	Ave	0.1534	0.1972	0.0500	12.9	10.0	28.5*	20.0
Dichlorofluoromethane	Ave	0.3743	0.4969	0.0100	13.3	10.0	32.7*	20.0
Trichlorofluoromethane	Ave	0.3323	0.3915	0.1000	11.8	10.0	17.8	20.0
Ethyl ether	Ave	0.3248	0.2947	0.0100	9.07	10.0	-9.3	20.0
Acrolein	Ave	0.0387	0.0254	0.0100	19.7	30.0	-34.4*	20.0
1,1-Dichloroethene	Ave	0.2589	0.2456	0.1000	9.49	10.0	-5.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2532	0.2440	0.1000	9.64	10.0	-3.6	20.0
Acetone	Ave	0.0841	0.1003	0.0500	23.9	20.0	19.3	20.0
Iodomethane	Ave	0.3586	0.3396	0.0100	9.47	10.0	-5.3	20.0
Carbon disulfide	Ave	0.7369	0.6042	0.1000	8.20	10.0	-18.0	20.0
Allyl chloride	Ave	0.1759	0.1266	0.0100	7.20	10.0	-28.0*	20.0
Methyl acetate	Ave	0.2799	0.2311	0.1000	41.3	50.0	-17.4	20.0
Methylene Chloride	Ave	0.3421	0.3135	0.1000	9.16	10.0	-8.4	20.0
tert-Butyl alcohol	Ave	1.137	1.150	0.0100	101	100	1.2	20.0
Acrylonitrile	Ave	0.1502	0.1290	0.0100	85.9	100	-14.1	20.0
trans-1,2-Dichloroethene	Ave	0.2983	0.2909	0.1000	9.75	10.0	-2.5	20.0
Methyl tert-butyl ether	Ave	0.8673	0.7312	0.1000	8.43	10.0	-15.7	20.0
Hexane	Ave	0.4699	0.4579	0.0100	9.74	10.0	-2.6	20.0
1,1-Dichloroethane	Ave	0.5668	0.5178	0.2000	9.14	10.0	-8.6	20.0
Vinyl acetate	Ave	0.5902	0.4429	0.0100	7.50	10.0	-25.0*	20.0
2,2-Dichloropropane	Ave	0.2707	0.1240	0.0100	4.58	10.0	-54.2*	20.0
2-Butanone (MEK)	Ave	0.1486	0.1757	0.0500	23.6	20.0	18.2	20.0
cis-1,2-Dichloroethene	Ave	0.3180	0.3146	0.1000	9.89	10.0	-1.1	20.0
Bromochloromethane	Ave	0.1401	0.1369	0.0100	9.76	10.0	-2.4	20.0
Tetrahydrofuran	Ave	0.1312	0.0973	0.0100	14.8	20.0	-25.8*	20.0
Chloroform	Ave	0.4510	0.4336	0.2000	9.61	10.0	-3.9	20.0
1,1,1-Trichloroethane	Ave	0.3116	0.2698	0.1000	8.66	10.0	-13.4	20.0
Cyclohexane	Ave	0.6119	0.5731	0.1000	9.37	10.0	-6.3	20.0
Carbon tetrachloride	Ave	0.1987	0.1611	0.1000	8.11	10.0	-18.9	20.0
1,1-Dichloropropene	Ave	0.3722	0.3867	0.0100	10.4	10.0	3.9	20.0
Isobutyl alcohol	Ave	0.0102	0.0049*	0.0100	119	250	-52.2*	20.0
Benzene	Ave	1.208	1.187	0.5000	9.83	10.0	-1.7	20.0
1,2-Dichloroethane	Ave	0.3849	0.3940	0.1000	10.2	10.0	2.4	20.0
n-Heptane	Ave	0.3589	0.3496	0.0100	9.74	10.0	-2.6	20.0
Trichloroethene	Ave	0.2727	0.2733	0.2000	10.0	10.0	0.2	20.0
Methylcyclohexane	Ave	0.5109	0.5078	0.1000	9.94	10.0	-0.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139651/2 Calibration Date: 04/25/2015 11:28
 Instrument ID: CHHP6 Calib Start Date: 04/14/2015 15:56
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/14/2015 18:44
 Lab File ID: 60425002.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	0.3422	0.2975	0.1000	8.69	10.0	-13.1	20.0
1,4-Dioxane	Ave	0.0039	0.0030*	0.0100	155	200	-22.6*	20.0
Dibromomethane	Ave	0.1627	0.1636	0.0100	10.1	10.0	0.5	20.0
Bromodichloromethane	Ave	0.2844	0.2608	0.2000	9.17	10.0	-8.3	20.0
cis-1,3-Dichloropropene	Ave	0.4002	0.2681	0.2000	6.70	10.0	-33.0*	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.649	1.268	0.1000	15.4	20.0	-23.1*	20.0
Toluene	Ave	5.172	5.573	0.4000	10.8	10.0	7.8	20.0
trans-1,3-Dichloropropene	Ave	1.369	0.8264	0.1000	6.04	10.0	-39.6*	20.0
Ethyl methacrylate	Ave	1.688	1.225	0.0100	7.26	10.0	-27.4*	20.0
1,1,2-Trichloroethane	Ave	1.116	1.072	0.1000	9.61	10.0	-3.9	20.0
Tetrachloroethene	Ave	0.8578	0.9073	0.2000	10.6	10.0	5.8	20.0
1,3-Dichloropropane	Ave	2.090	2.030	0.0100	9.71	10.0	-2.9	20.0
2-Hexanone	Ave	0.9415	1.074	0.1000	22.8	20.0	14.1	20.0
Dibromochloromethane	Ave	0.6927	0.6192	0.1000	8.94	10.0	-10.6	20.0
1,2-Dibromoethane (EDB)	Ave	1.073	0.8924	0.1000	8.32	10.0	-16.8	20.0
3-Chlorobenzotrifluoride	Ave	1.651	1.593	0.0100	9.65	10.0	-3.5	20.0
Chlorobenzene	Ave	3.263	3.464	0.5000	10.6	10.0	6.2	20.0
4-Chlorobenzotrifluoride	Ave	1.570	1.426	0.0100	9.08	10.0	-9.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8400	0.6455	0.0100	7.68	10.0	-23.2*	20.0
Ethylbenzene	Ave	1.959	1.958	0.1000	9.99	10.0	-0.0	20.0
m-Xylene & p-Xylene	Ave	2.395	2.389	0.1000	9.97	10.0	-0.3	20.0
o-Xylene	Ave	2.370	2.421	0.3000	10.2	10.0	2.1	20.0
Styrene	Ave	3.782	3.808	0.3000	10.1	10.0	0.7	20.0
Bromoform	Ave	0.3632	0.2731	0.1000	7.52	10.0	-24.8*	20.0
2-Chlorobenzotrifluoride	Ave	1.702	1.604	0.0100	9.42	10.0	-5.8	20.0
Isopropylbenzene	Ave	5.514	5.803	0.1000	10.5	10.0	5.2	20.0
1,1,2,2-Tetrachloroethane	Ave	1.568	1.407	0.3000	8.97	10.0	-10.3	20.0
Bromobenzene	Ave	0.8234	0.7922	0.0100	9.62	10.0	-3.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3077	0.1996	0.0100	6.49	10.0	-35.1*	20.0
1,2,3-Trichloropropane	Ave	0.3122	0.2825	0.0100	9.05	10.0	-9.5	20.0
N-Propylbenzene	Ave	1.033	0.9829	0.0100	9.51	10.0	-4.9	20.0
2-Chlorotoluene	Ave	0.8753	0.8421	0.0100	9.62	10.0	-3.8	20.0
3-Chlorotoluene	Ave	0.9460	0.8452	0.0100	8.93	10.0	-10.7	20.0
1,3,5-Trimethylbenzene	Ave	2.962	2.909	0.0100	9.82	10.0	-1.8	20.0
4-Chlorotoluene	Ave	0.9341	0.9201	0.0100	9.85	10.0	-1.5	20.0
tert-Butylbenzene	Ave	2.420	2.445	0.0100	10.1	10.0	1.0	20.0
1,2,4-Trimethylbenzene	Ave	3.087	3.027	0.0100	9.81	10.0	-1.9	20.0
3,4-Dichlorobenzotrifluoride	Ave	0.7828	0.6778	0.0100	8.66	10.0	-13.4	20.0
sec-Butylbenzene	Ave	3.584	3.617	0.0100	10.1	10.0	0.9	20.0
1,3-Dichlorobenzene	Ave	1.641	1.607	0.6000	9.79	10.0	-2.1	20.0
4-Isopropyltoluene	Ave	2.958	3.002	0.0100	10.1	10.0	1.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCVIS 180-139651/2 Calibration Date: 04/25/2015 11:28
 Instrument ID: CHHP6 Calib Start Date: 04/14/2015 15:56
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 04/14/2015 18:44
 Lab File ID: 60425002.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	1.707	1.670	0.5000	9.78	10.0	-2.2	20.0
2,4-Dichlorobenzotrifluoride	Ave	0.8062	0.6749	0.0100	8.37	10.0	-16.3	20.0
2,5-Dichlorobenzotrifluoride	Ave	0.8540	0.7548	0.0100	8.84	10.0	-11.6	20.0
n-Butylbenzene	Ave	2.757	2.785	0.0100	10.1	10.0	1.0	20.0
1,2-Dichlorobenzene	Ave	1.646	1.600	0.4000	9.72	10.0	-2.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1335	0.0797	0.0500	5.97	10.0	-40.3*	20.0
2,4- & 2,5- & 2,6-Dichlorotoluene	Ave	1.373	1.267	0.0100	27.7	30.0	-7.7	20.0
2,3- & 3,4- Dichlorotoluene	Ave	1.504	1.371	0.0100	18.2	20.0	-8.9	20.0
1,2,4-Trichlorobenzene	Ave	1.200	1.128	0.2000	9.40	10.0	-6.0	20.0
Hexachlorobutadiene	Ave	0.3522	0.3511	0.0100	9.97	10.0	-0.3	20.0
Naphthalene	Ave	3.078	2.854	0.0100	9.27	10.0	-7.3	20.0
1,2,3-Trichlorobenzene	Ave	1.127	1.023	0.0100	9.08	10.0	-9.2	20.0
2,4,5-Trichlorotoluene	Ave	0.6599	0.5360	0.0100	8.12	10.0	-18.8	20.0
2,3,6-Trichlorotoluene	Ave	0.6087	0.4944	0.0100	8.12	10.0	-18.8	20.0
Dibromofluoromethane (Surr)	Ave	0.2060	0.2042		9.91	10.0	-0.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2958	0.2953		9.98	10.0	-0.2	20.0
Toluene-d8 (Surr)	Ave	4.168	4.146		9.95	10.0	-0.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.579	1.524		9.65	10.0	-3.5	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425002.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 25-Apr-2015 11:28:30 ALS Bottle#: 2 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: CCVIS
 Misc. Info.: 180-0006632-002
 Operator ID: 001562 Instrument ID: CHHP6
 Sublist: chrom-MSVOA_LL_CHHP6*sub5
 Method: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 25-Apr-2015 14:02:46 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: fergusond

Date: 25-Apr-2015 12:19:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.205	4.205	0.000	94	133678	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	98	557206	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.367	10.367	0.000	90	123086	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	97	199855	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.529	0.000	93	113766	50.0	49.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.906	0.000	67	164538	50.0	49.9	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	93	510338	50.0	49.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	84	187552	50.0	48.3	
11 Dichlorodifluoromethane	85	1.577	1.577	0.000	98	158609	50.0	57.9	
12 Chloromethane	50	1.741	1.741	0.000	100	201963	50.0	47.4	
13 Vinyl chloride	62	1.869	1.869	0.000	98	199863	50.0	49.9	
14 Butadiene	39	1.918	1.918	0.000	94	226668	50.0	55.6	
15 Bromomethane	94	2.210	2.210	0.000	90	78760	50.0	69.5	
16 Chloroethane	64	2.356	2.356	0.000	97	109871	50.0	64.3	
17 Dichlorofluoromethane	67	2.629	2.629	0.000	95	276862	50.0	66.4	
18 Trichlorofluoromethane	101	2.654	2.654	0.000	80	218131	50.0	58.9	
20 Ethyl ether	59	3.013	3.013	0.000	94	164216	50.0	45.4	
21 Acrolein	56	3.183	3.183	0.000	98	42487	150.0	98.4	M
22 1,1-Dichloroethene	96	3.305	3.305	0.000	97	136839	50.0	47.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.372	3.372	0.000	92	135960	50.0	48.2	
24 Acetone	43	3.396	3.396	0.000	99	111752	100.0	119.3	
25 Iodomethane	142	3.505	3.505	0.000	97	189237	50.0	47.4	
26 Carbon disulfide	76	3.603	3.603	0.000	100	336642	50.0	41.0	
29 3-Chloro-1-propene	76	3.876	3.876	0.000	89	70553	50.0	36.0	
30 Methyl acetate	43	3.889	3.889	0.000	98	643781	250.0	206.4	
31 Methylene Chloride	84	4.095	4.095	0.000	97	174659	50.0	45.8	
32 2-Methyl-2-propanol	59	4.345	4.345	0.000	88	76877	500.0	505.9	
33 Acrylonitrile	53	4.460	4.460	0.000	98	718899	500.0	429.5	
34 trans-1,2-Dichloroethene	96	4.527	4.527	0.000	74	162066	50.0	48.8	
35 Methyl tert-butyl ether	73	4.533	4.533	0.000	98	407427	50.0	42.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	4.953	4.953	0.000	93	255167	50.0	48.7	
37 1,1-Dichloroethane	63	5.166	5.166	0.000	97	288546	50.0	45.7	
38 Vinyl acetate	43	5.203	5.203	0.000	98	246782	50.0	37.5	
42 2,2-Dichloropropane	77	5.908	5.908	0.000	50	69095	50.0	22.9	
44 2-Butanone (MEK)	43	5.908	5.908	0.000	76	195773	100.0	118.2	
43 cis-1,2-Dichloroethene	96	5.914	5.914	0.000	83	175267	50.0	49.5	
48 Chlorobromomethane	128	6.206	6.206	0.000	94	76255	50.0	48.8	
49 Tetrahydrofuran	42	6.212	6.212	0.000	87	108456	100.0	74.2	
50 Chloroform	83	6.346	6.346	0.000	97	241584	50.0	48.1	
51 1,1,1-Trichloroethane	97	6.511	6.511	0.000	96	150329	50.0	43.3	
52 Cyclohexane	56	6.590	6.590	0.000	95	319307	50.0	46.8	
53 Carbon tetrachloride	117	6.687	6.687	0.000	63	89786	50.0	40.5	
54 1,1-Dichloropropene	75	6.699	6.699	0.000	94	215453	50.0	51.9	
55 Isobutyl alcohol	41	6.876	6.876	0.000	93	67757	1250.0	597.4	
56 Benzene	78	6.912	6.912	0.000	97	661389	50.0	49.1	
57 1,2-Dichloroethane	62	6.991	6.991	0.000	97	219530	50.0	51.2	
59 n-Heptane	43	7.277	7.277	0.000	93	194818	50.0	48.7	
61 Trichloroethene	130	7.654	7.654	0.000	97	152293	50.0	50.1	
63 Methylcyclohexane	83	7.898	7.898	0.000	91	282961	50.0	49.7	
64 1,2-Dichloropropane	63	7.928	7.928	0.000	86	165762	50.0	43.5	
65 1,4-Dioxane	88	8.007	8.007	0.000	41	33639	1000.0	774.4	M
67 Dibromomethane	93	8.013	8.013	0.000	94	91136	50.0	50.3	
68 Dichlorobromomethane	83	8.208	8.208	0.000	97	145336	50.0	45.9	
71 cis-1,3-Dichloropropene	75	8.652	8.652	0.000	92	149382	50.0	33.5	
72 4-Methyl-2-pentanone (MIBK)	43	8.798	8.798	0.000	97	312210	100.0	76.9	
73 Toluene	91	8.980	8.980	0.000	98	685972	50.0	53.9	
74 trans-1,3-Dichloropropene	75	9.230	9.230	0.000	98	101715	50.0	30.2	
75 Ethyl methacrylate	69	9.285	9.285	0.000	91	150797	50.0	36.3	
76 1,1,2-Trichloroethane	97	9.425	9.425	0.000	93	131981	50.0	48.1	
77 Tetrachloroethene	164	9.504	9.504	0.000	95	111670	50.0	52.9	
78 1,3-Dichloropropane	76	9.583	9.583	0.000	94	249877	50.0	48.6	
79 2-Hexanone	43	9.631	9.631	0.000	97	264332	100.0	114.1	
81 Chlorodibromomethane	129	9.808	9.808	0.000	89	76215	50.0	44.7	
82 Ethylene Dibromide	107	9.917	9.917	0.000	99	109846	50.0	41.6	
83 3-Chlorobenzotrifluoride	180	10.367	10.367	0.000	94	196102	50.0	48.2	
84 Chlorobenzene	112	10.404	10.404	0.000	94	426425	50.0	53.1	
85 4-Chlorobenzotrifluoride	180	10.459	10.459	0.000	96	175548	50.0	45.4	
86 1,1,1,2-Tetrachloroethane	131	10.495	10.495	0.000	67	79451	50.0	38.4	
87 Ethylbenzene	106	10.501	10.501	0.000	98	240971	50.0	50.0	
88 m-Xylene & p-Xylene	106	10.635	10.635	0.000	100	294004	50.0	49.9	
89 o-Xylene	106	11.012	11.012	0.000	96	298020	50.0	51.1	
90 Styrene	104	11.031	11.031	0.000	95	468697	50.0	50.3	
91 Bromoform	173	11.225	11.225	0.000	94	33614	50.0	37.6	
92 2-Chlorobenzotrifluoride	180	11.274	11.274	0.000	96	197450	50.0	47.1	
93 Isopropylbenzene	105	11.383	11.383	0.000	96	714226	50.0	52.6	
96 1,1,2,2-Tetrachloroethane	83	11.688	11.688	0.000	95	173123	50.0	44.9	
95 Bromobenzene	156	11.700	11.700	0.000	98	158321	50.0	48.1	
97 trans-1,4-Dichloro-2-buten	53	11.730	11.730	0.000	59	39898	50.0	32.4	
98 1,2,3-Trichloropropane	110	11.748	11.748	0.000	86	56468	50.0	45.2	
99 N-Propylbenzene	120	11.797	11.797	0.000	99	196434	50.0	47.6	
100 2-Chlorotoluene	126	11.888	11.888	0.000	95	168298	50.0	48.1	
101 3-Chlorotoluene	126	11.955	11.955	0.000	98	168917	50.0	44.7	

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	11.986	11.986	0.000	96	581341	50.0	49.1	
103 4-Chlorotoluene	126	12.010	12.010	0.000	99	183894	50.0	49.3	
104 tert-Butylbenzene	119	12.296	12.296	0.000	94	488619	50.0	50.5	
106 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	604968	50.0	49.0	
107 1,2-dichloro-4-(trifluorom	214	12.393	12.393	0.000	97	135457	50.0	43.3	
108 sec-Butylbenzene	105	12.521	12.521	0.000	95	722870	50.0	50.5	
109 1,3-Dichlorobenzene	146	12.643	12.643	0.000	96	321108	50.0	49.0	
110 4-Isopropyltoluene	119	12.679	12.679	0.000	96	599979	50.0	50.7	
111 1,4-Dichlorobenzene	146	12.746	12.746	0.000	90	333713	50.0	48.9	
113 2,4-Dichloro-1-(trifluorom	214	12.764	12.764	0.000	97	134886	50.0	41.9	
114 2,5-Dichlorobenzotrifluori	214	12.801	12.801	0.000	98	150843	50.0	44.2	
116 n-Butylbenzene	91	13.087	13.087	0.000	98	556596	50.0	50.5	
117 1,2-Dichlorobenzene	146	13.099	13.099	0.000	94	319793	50.0	48.6	
118 1,2-Dibromo-3-Chloropropan	75	13.890	13.896	-0.006	67	15924	50.0	29.9	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.036	0.000	99	759684	150.0	138.5	
121 2,3- & 3,4- Dichlorotoluen	125	14.449	14.449	0.000	98	548049	100.0	91.1	
122 1,2,4-Trichlorobenzene	180	14.717	14.717	0.000	93	225346	50.0	47.0	
123 Hexachlorobutadiene	225	14.863	14.863	0.000	96	70170	50.0	49.9	
124 Naphthalene	128	14.979	14.979	0.000	98	570338	50.0	46.4	
125 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	94	204431	50.0	45.4	
126 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	107112	50.0	40.6	
127 2,3,6-Trichlorotoluene	159	16.086	16.086	0.000	94	98804	50.0	40.6	
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	98.2	
S 131 Xylenes, Total	106				0		100.0	100.9	
S 132 1,3-Dichloropropene, Total	1				0		100.0	63.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added: 6.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 2.00	Units: uL	
voaWeemixPRI_00002	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
VOA8260VOAPRI_00112	Amount Added: 2.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425002.D

Injection Date: 25-Apr-2015 11:28:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

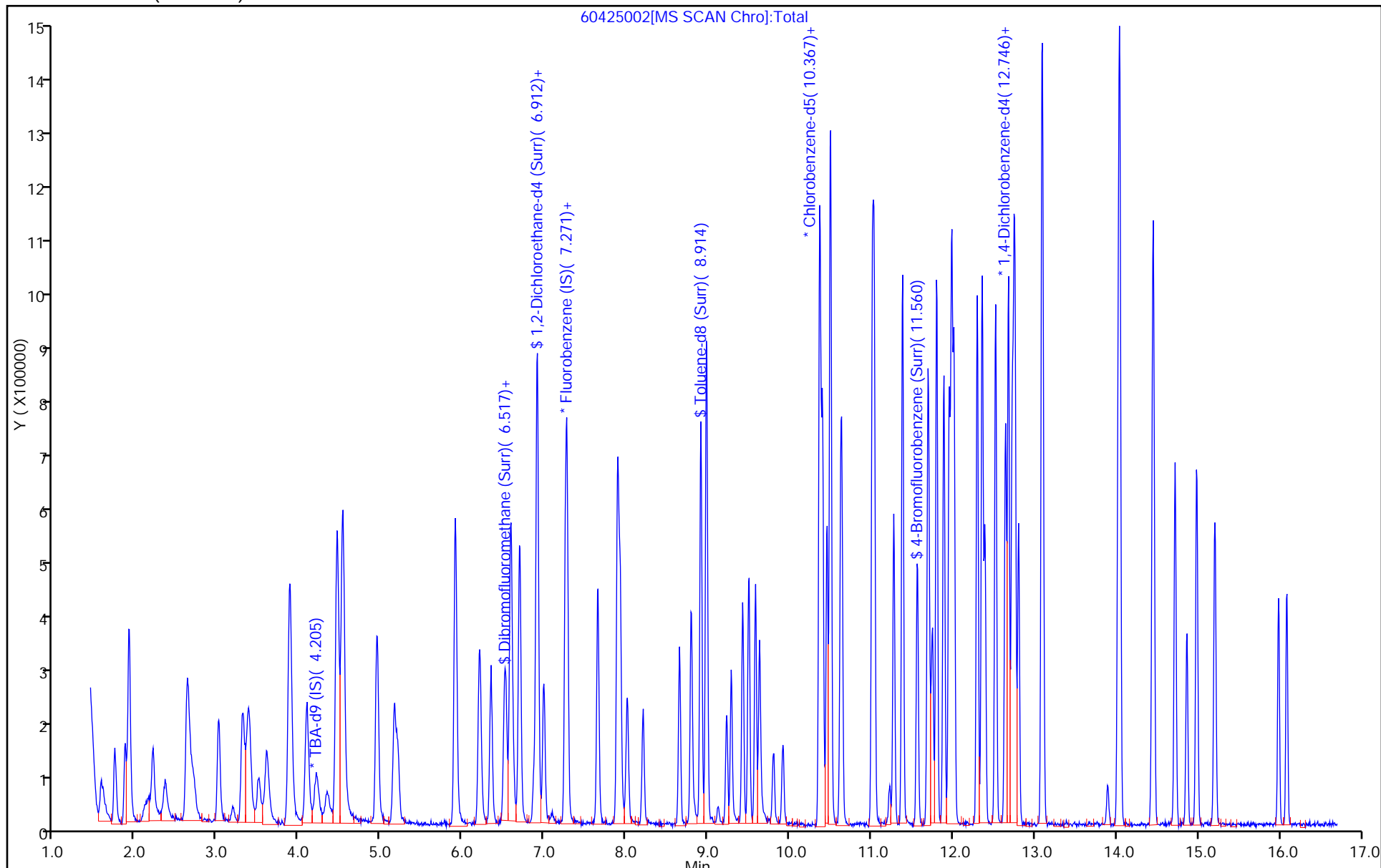
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



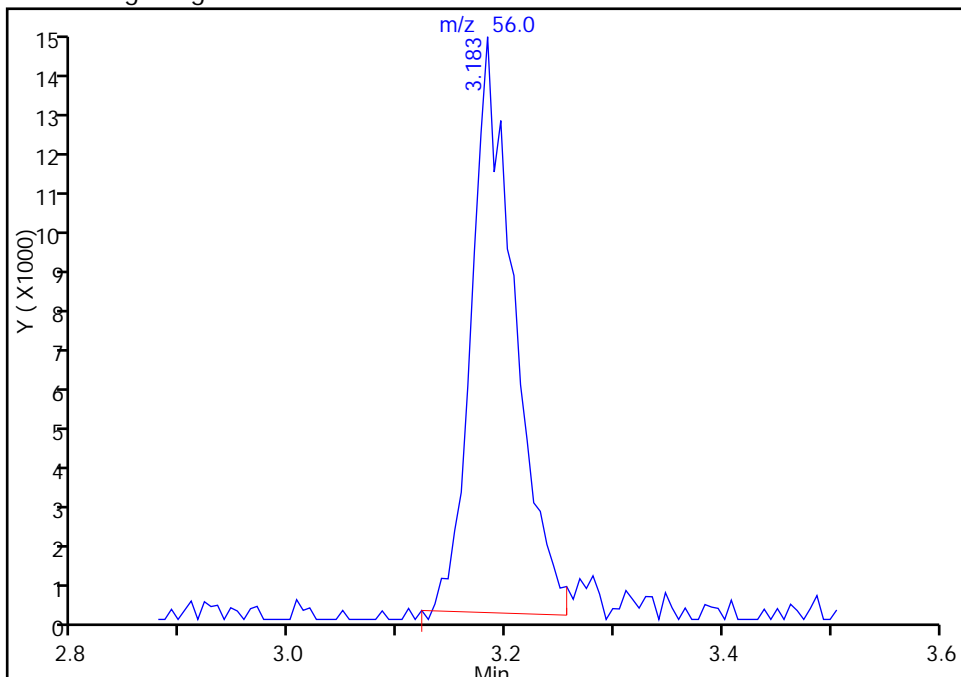
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425002.D
Injection Date: 25-Apr-2015 11:28:30 Instrument ID: CHHP6
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
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

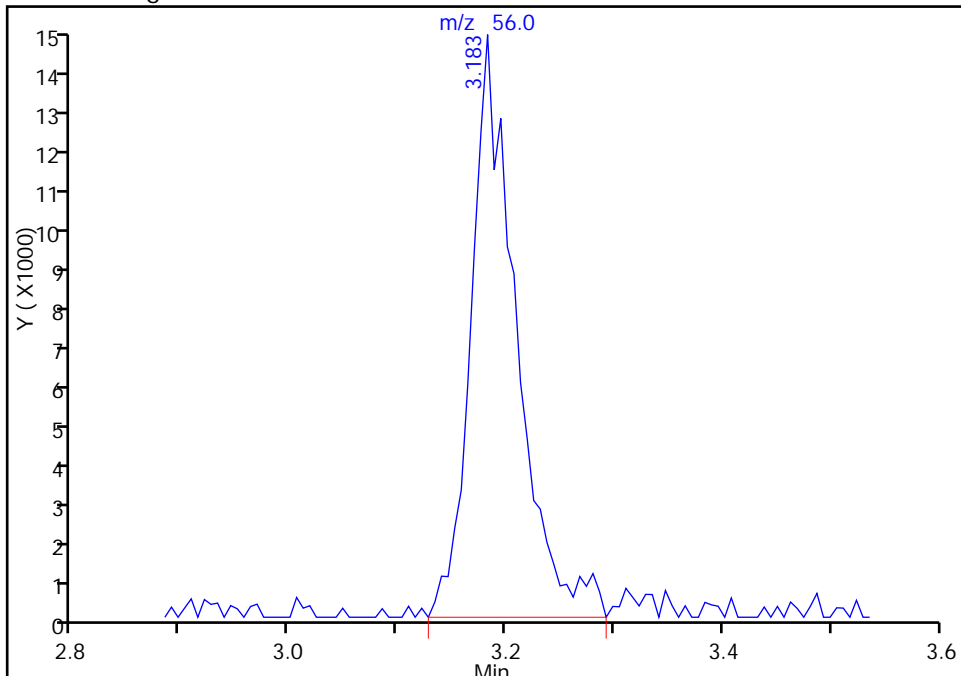
RT: 3.18
Area: 39707
Amount: 91.974756
Amount Units: ng

Processing Integration Results



RT: 3.18
Area: 42487
Amount: 98.414170
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 12:19:31
Audit Action: Manually Integrated
Audit Reason: Baseline

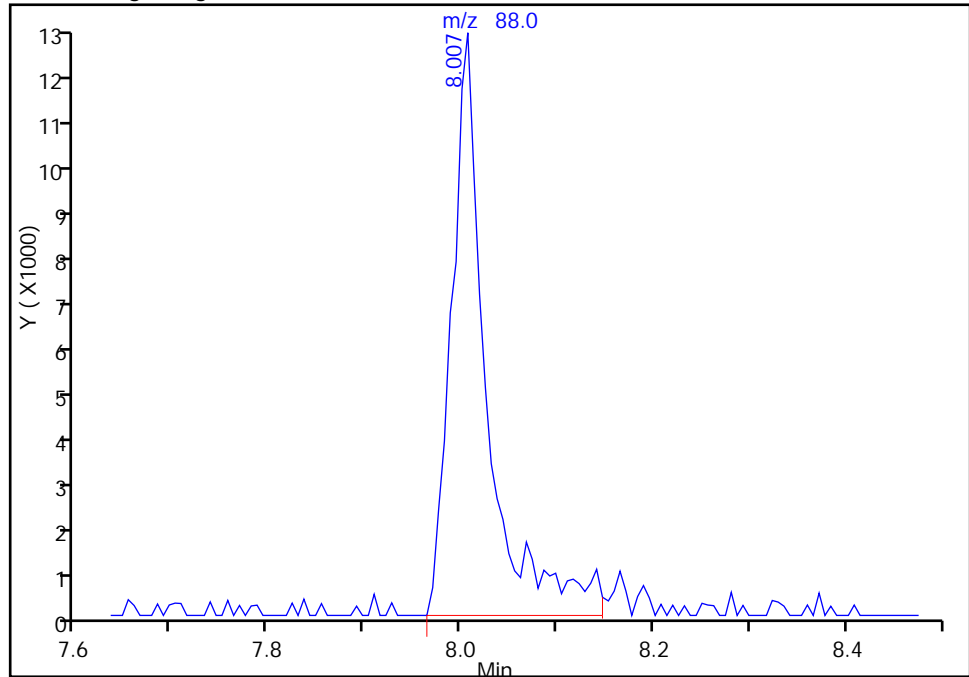
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425002.D
Injection Date: 25-Apr-2015 11:28:30 Instrument ID: CHHP6
Lims ID: CCVIS
Client ID:
Operator ID: 001562 ALS Bottle#: 2 Worklist Smp#: 2
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

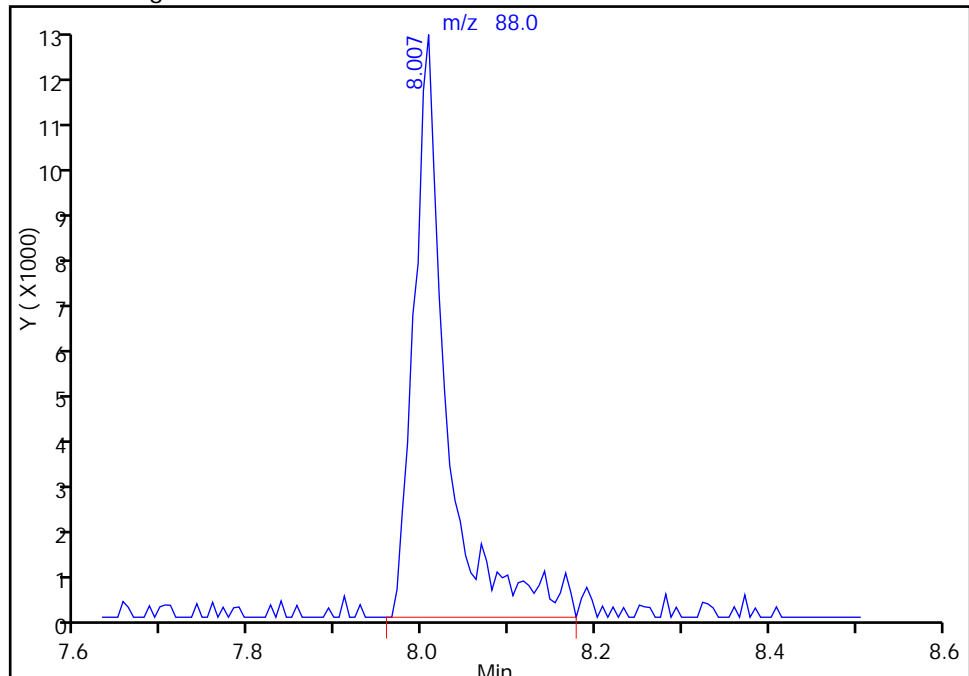
RT: 8.01
Area: 32781
Amount: 754.6355
Amount Units: ng

Processing Integration Results



RT: 8.01
Area: 33639
Amount: 774.3871
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 25-Apr-2015 12:19:31
Audit Action: Manually Integrated
Audit Reason: Peak Tail

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424005.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 24-Apr-2015 10:55:30 ALS Bottle#: 1 Worklist Smp#: 5
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0006617-005
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\MMSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 11:30:06 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
\$ 10 BFB	95	8.328	8.328	0.000	0	195588	NR	NR	

QC Flag Legend

Processing Flags
 NR - Missing Quant Standard

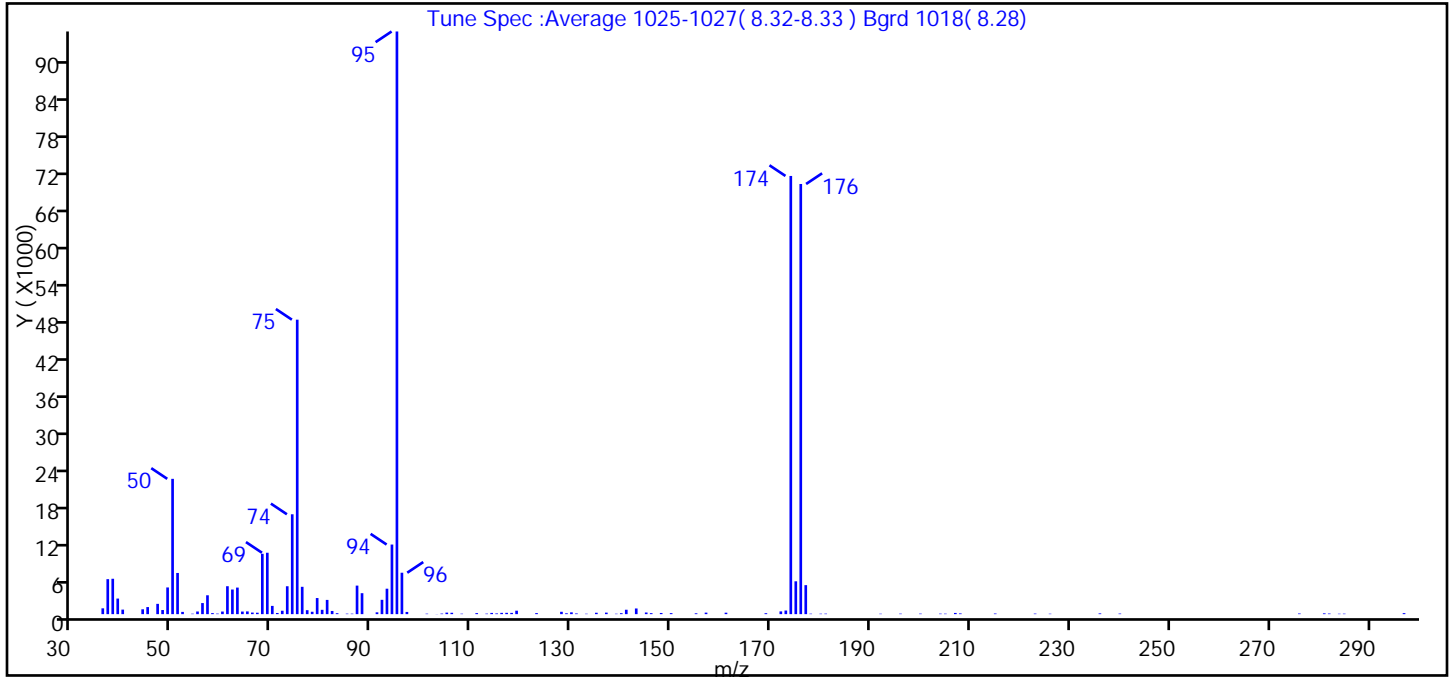
Reagents:

VOABFB25_00060 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424005.D
 Injection Date: 24-Apr-2015 10:55:30 Instrument ID: CHHP5
 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_CHHP5 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	23.2
75	30 to 60% of m/z 95	50.5
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.6 (0.8)
174	50 to 120% of m/z 95	75.2
175	5 to 9% of m/z 174	5.6 (7.5)
176	Greater than 95% but less than 101% of m/z 174	73.8 (98.2)
177	5 to 9% of m/z 176	5.0 (6.7)

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424005.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 24-Apr-2015 10:55:30
Spectrum: Tune Spec :Average 1025-1027(8.32-8.33) Bgrd 1018(8.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 115

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	944	70.00	1339	106.00	223	169.00	152
37.00	5681	71.00	189	108.00	74	172.00	447
38.00	5744	72.00	553	111.00	166	173.00	586
39.00	2530	73.00	4530	113.00	82	174.00	71144
40.00	735	74.00	16214	114.00	201	175.00	5333
44.00	789	75.00	47808	115.00	117	176.00	69840
45.00	1147	76.00	4438	116.00	209	177.00	4709
47.00	1671	77.00	642	117.00	214	178.00	76
48.00	669	78.00	388	118.00	204	180.00	72
49.00	4335	79.00	2615	119.00	558	181.00	81
50.00	21968	80.00	703	123.00	168	192.00	67
51.00	6686	81.00	2311	128.00	382	196.00	80
52.00	365	82.00	515	129.00	140	200.00	84
54.00	72	83.00	154	130.00	294	204.00	81
55.00	429	85.00	80	131.00	114	205.00	76
56.00	1799	86.00	79	133.00	66	207.00	196
57.00	3063	87.00	4633	135.00	226	208.00	118
58.00	168	88.00	3402	137.00	247	215.00	102
59.00	86	91.00	297	139.00	67	223.00	89
60.00	423	92.00	2327	140.00	156	226.00	68
61.00	4535	93.00	4131	141.00	715	236.00	124
62.00	3996	94.00	11300	143.00	920	240.00	94
63.00	4312	95.00	94600	145.00	267	276.00	106
64.00	420	96.00	6725	146.00	163	281.00	128
65.00	444	97.00	358	148.00	190	282.00	99
66.00	257	101.00	76	150.00	165	284.00	67
67.00	233	103.00	21	155.00	137	285.00	76
68.00	9798	104.00	93	157.00	246	297.00	164
69.00	9968	105.00	248	161.00	235		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424005.D

Injection Date: 24-Apr-2015 10:55:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 5

Client ID:

Injection Vol: 5.0 mL

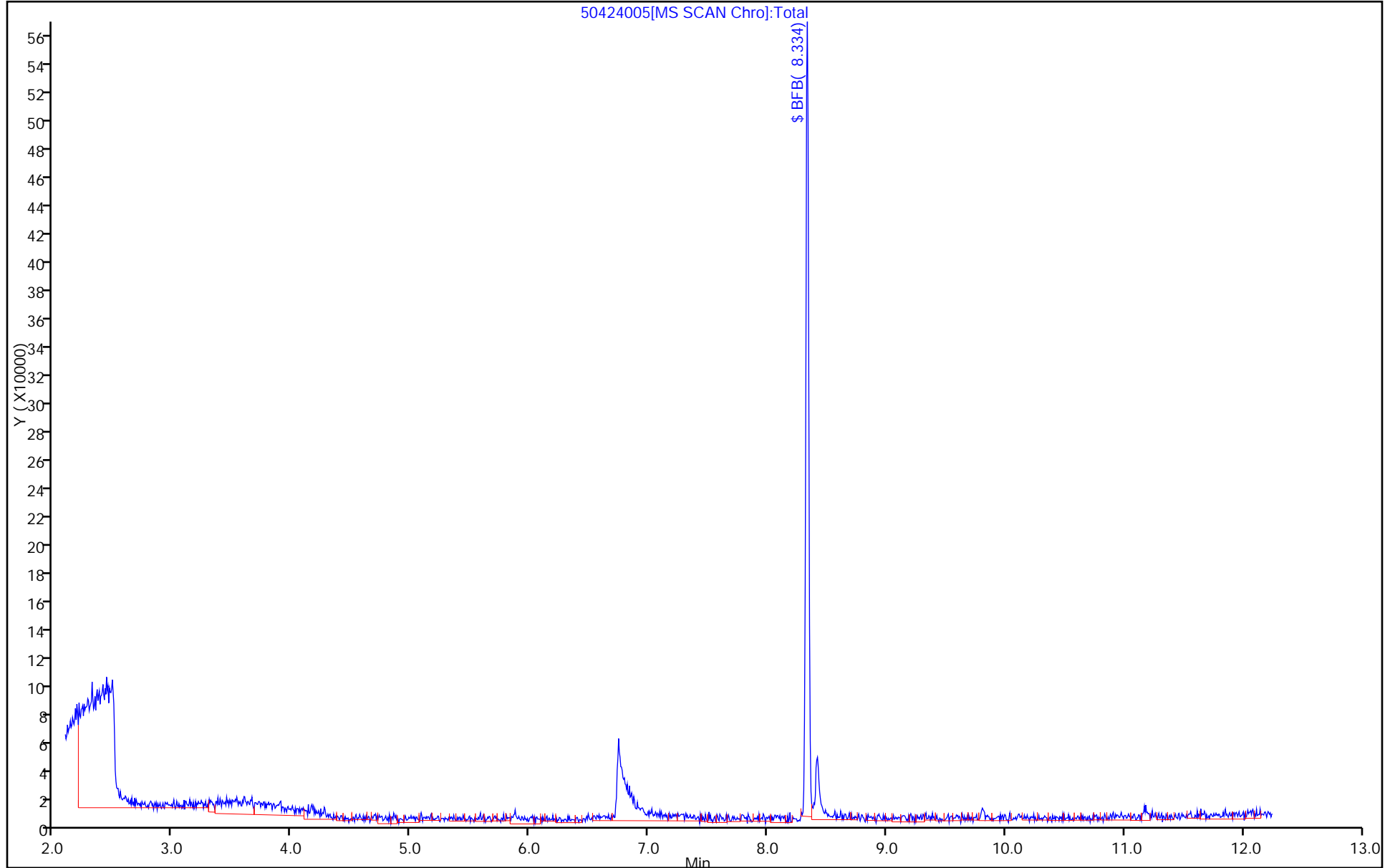
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428003.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 28-Apr-2015 11:46:30 ALS Bottle#: 1 Worklist Smp#: 3
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0006670-003
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\MMSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 29-Apr-2015 10:31:56 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK021

First Level Reviewer: fergusond Date: 28-Apr-2015 12:01:20

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	8.337	8.337	0.000	0	144832	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

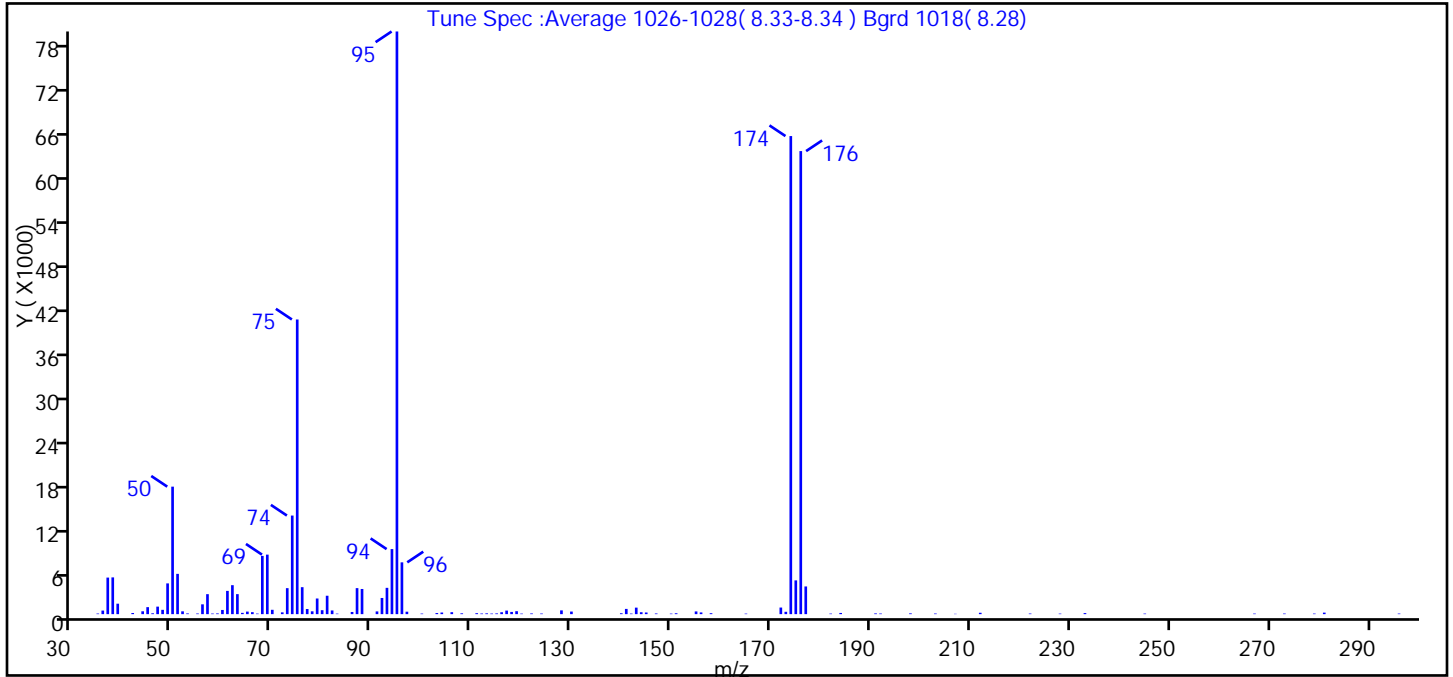
Reagents:

VOABFB25_00060 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428003.D
 Injection Date: 28-Apr-2015 11:46:30 Instrument ID: CHHP5
 Lims ID: BFB
 Client ID:
 Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 3
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Method: MSVOA_LL_CHHP5 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	21.9
75	30 to 60% of m/z 95	50.6
96	5 to 9% of m/z 95	8.9
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	82.0
175	5 to 9% of m/z 174	5.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	79.5 (96.9)
177	5 to 9% of m/z 176	4.8 (6.0)

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428003.D\MSVOA_LL_CHHP5.rslt\spectra.d
Injection Date: 28-Apr-2015 11:46:30
Spectrum: Tune Spec :Average 1026-1028(8.33-8.34) Bgrd 1018(8.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	82	67.00	75	104.00	223	158.00	130
36.00	491	68.00	7996	106.00	268	165.00	71
37.00	5019	69.00	8171	108.00	113	172.00	906
38.00	5046	70.00	596	111.00	131	173.00	324
39.00	1435	72.00	245	112.00	88	174.00	65640
42.00	157	73.00	3569	113.00	109	175.00	4636
44.00	392	74.00	13536	114.00	81	176.00	63576
45.00	961	75.00	40456	115.00	100	177.00	3802
46.00	118	76.00	3702	116.00	263	182.00	76
47.00	1032	77.00	703	117.00	486	184.00	163
48.00	592	78.00	389	118.00	304	191.00	101
49.00	4222	79.00	2148	119.00	405	192.00	85
50.00	17504	80.00	542	120.00	75	198.00	107
51.00	5530	81.00	2527	122.00	98	203.00	86
52.00	387	82.00	508	124.00	84	207.00	45
53.00	98	83.00	69	128.00	517	212.00	188
55.00	88	86.00	297	130.00	356	222.00	84
56.00	1347	87.00	3572	140.00	121	228.00	73
57.00	2743	88.00	3455	141.00	719	233.00	145
58.00	82	91.00	375	142.00	80	245.00	76
59.00	99	92.00	2220	143.00	894	267.00	77
60.00	575	93.00	3611	144.00	263	273.00	81
61.00	3191	94.00	8931	145.00	228	279.00	78
62.00	3977	95.00	80000	147.00	92	281.00	208
63.00	2747	96.00	7112	150.00	74	296.00	81
64.00	177	97.00	336	151.00	121		
65.00	350	100.00	79	155.00	374		
66.00	273	103.00	150	156.00	235		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428003.D

Injection Date: 28-Apr-2015 11:46:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 3

Client ID:

Injection Vol: 5.0 mL

Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414003.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 14-Apr-2015 14:05:30 ALS Bottle#: 1 Worklist Smp#: 3
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0006462-003
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 15-Apr-2015 11:14:33 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK034

First Level Reviewer: fergusond Date: 14-Apr-2015 14:33:26

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	8.351	8.351	0.000	0	162450	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

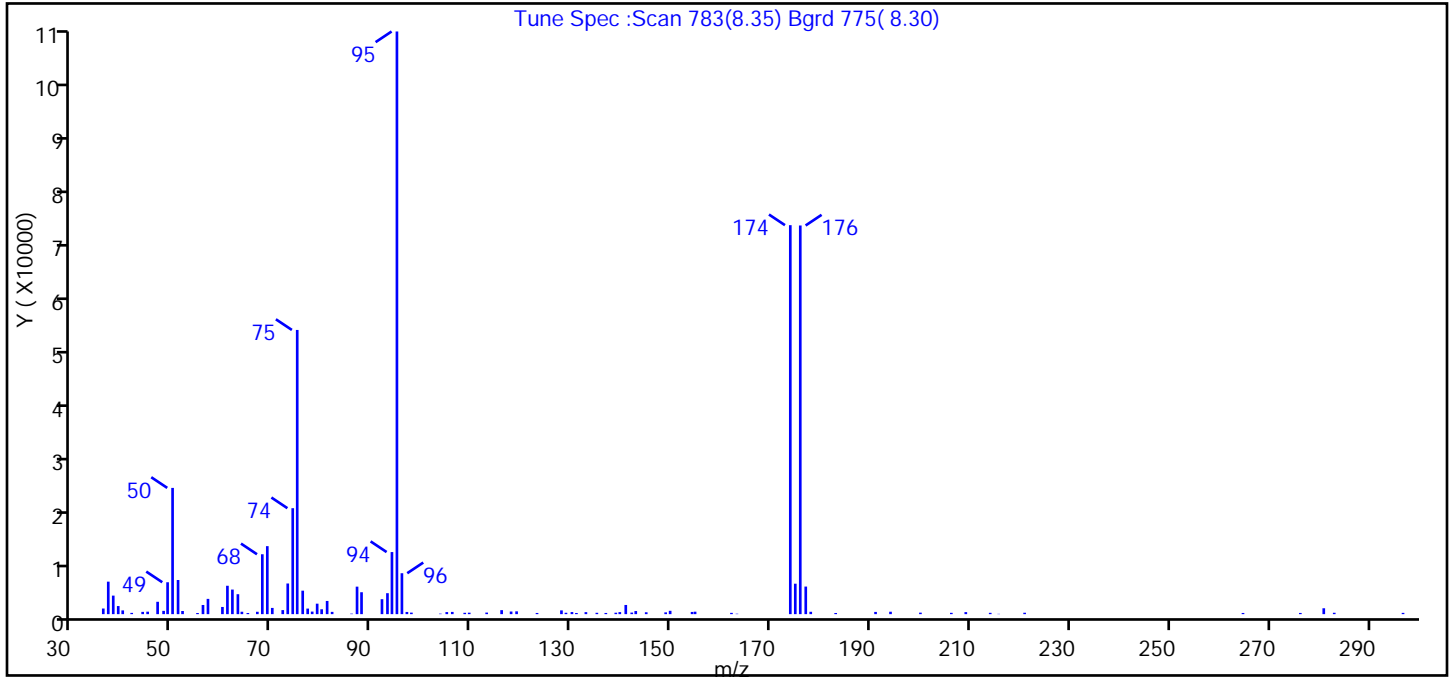
Reagents:

VOABFB25_00060 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414003.D
 Injection Date: 14-Apr-2015 14:05:30 Instrument ID: CHHP6
 Lims ID: BFB
 Client ID:
 Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 3
 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	21.7
75	30 to 60% of m/z 95	48.8
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	66.8
175	5 to 9% of m/z 174	5.2 (7.8)
176	Greater than 95% but less than 101% of m/z 174	66.7 (99.9)
177	5 to 9% of m/z 176	4.7 (7.1)

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414003.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 14-Apr-2015 14:05:30
Spectrum: Tune Spec :Scan 783(8.35) Bgrd 775(8.30)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 96

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	993	68.00	10576	103.70	87	149.80	589
37.10	5738	69.00	12008	105.00	366	154.20	389
38.10	3273	70.00	1099	106.10	394	154.80	433
39.10	1429	72.10	714	108.60	237	162.10	229
40.00	662	73.10	5413	109.50	259	163.20	75
41.80	225	74.10	18712	113.00	278	173.90	68696
44.00	400	75.00	50192	116.00	707	174.90	5376
45.00	436	76.10	4145	117.90	463	175.90	68640
47.00	2182	77.10	983	119.00	495	177.00	4870
48.20	581	78.00	452	123.10	208	178.00	417
49.00	5633	79.00	1849	128.00	665	183.00	204
50.00	22296	79.90	862	128.90	242	191.00	394
51.10	6029	81.00	2328	130.10	369	194.00	427
52.00	555	82.00	402	131.00	203	200.00	266
55.00	202	85.90	90	132.90	355	206.20	235
56.10	1618	87.00	4856	135.10	239	209.10	359
57.10	2696	87.90	3870	136.90	210	214.00	233
60.00	1268	92.00	2641	138.90	252	215.70	51
61.00	5013	93.10	3701	139.70	361	220.90	248
62.00	4340	94.00	10964	140.90	1620	264.70	208
63.10	3521	95.00	102904	142.10	277	276.20	210
63.90	424	96.00	7226	142.90	547	280.90	1037
65.10	202	97.00	387	145.00	333	283.00	244
67.00	418	97.90	273	148.90	313	296.80	226

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414003.D

Injection Date: 14-Apr-2015 14:05:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 3

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\20150424-6620.b\60424004.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 24-Apr-2015 10:42:30 ALS Bottle#: 1 Worklist Smp#: 4
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0006620-004
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 24-Apr-2015 14:53:29 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK032

First Level Reviewer: fergusond Date: 24-Apr-2015 10:54:20

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	8.356	8.356	0.000	0	50621	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

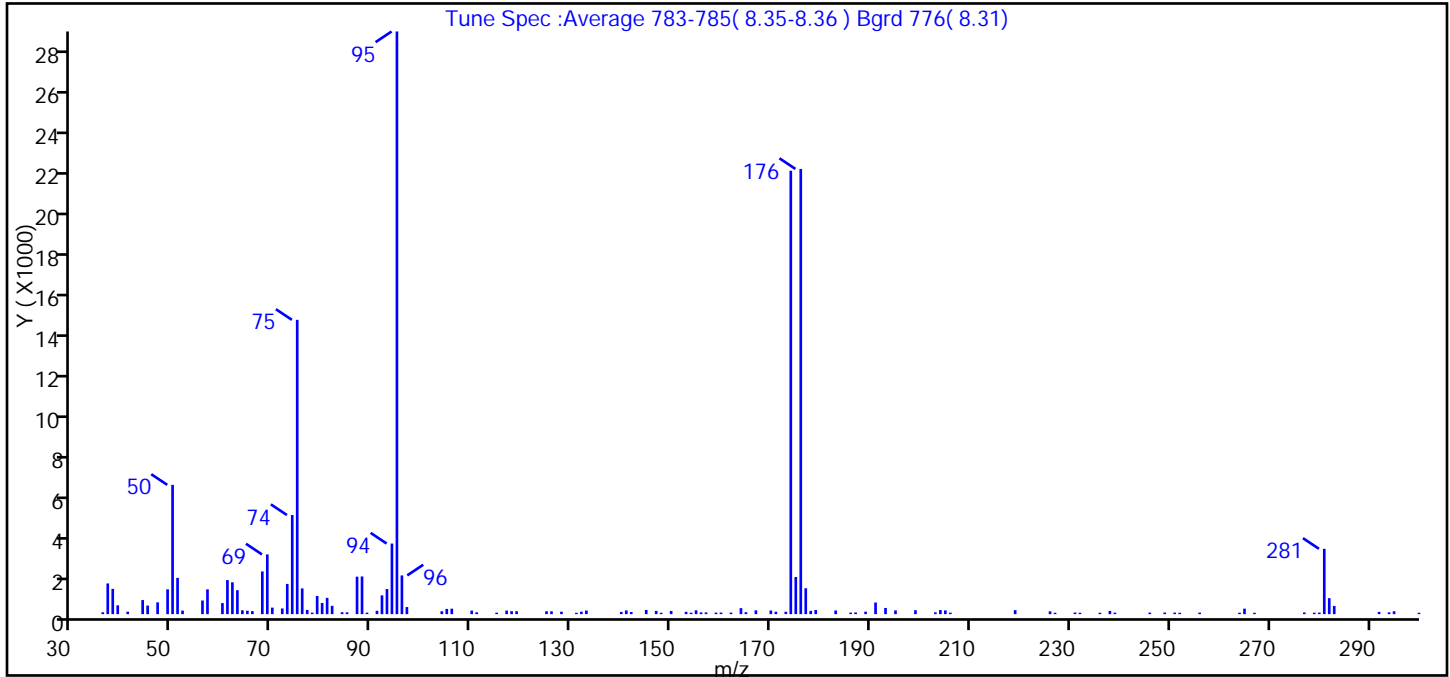
Reagents:

VOABFB25_00060 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424004.D
 Injection Date: 24-Apr-2015 10:42:30 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	22.2
75	30 to 60% of m/z 95	50.5
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	76.1
175	5 to 9% of m/z 174	6.4 (8.4)
176	Greater than 95% but less than 101% of m/z 174	76.4 (100.4)
177	5 to 9% of m/z 176	4.4 (5.8)

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424004.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 24-Apr-2015 10:42:30
Spectrum: Tune Spec :Average 783-785(8.35-8.36) Bgrd 776(8.31)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 128

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	91	80.00	546	142.00	103	199.00	193
37.00	1500	81.00	795	145.00	204	203.00	89
38.00	1235	82.00	406	147.00	159	204.00	200
39.00	431	84.00	94	148.00	67	205.00	182
41.00	121	85.00	87	150.00	155	206.00	74
44.00	688	87.00	1829	153.00	115	207.00	3
45.00	419	88.00	1840	154.00	72	219.00	195
47.00	576	89.00	73	155.00	187	226.00	137
49.00	1213	91.00	164	156.00	87	227.00	69
50.00	6312	92.00	917	157.00	85	231.00	80
51.00	1769	93.00	1225	159.00	76	232.00	69
52.00	172	94.00	3447	160.00	79	236.00	68
56.00	666	95.00	28448	162.00	75	238.00	159
57.00	1210	96.00	1891	164.00	293	239.00	73
60.00	540	97.00	346	165.00	94	246.00	77
61.00	1665	104.00	143	167.00	185	249.00	78
62.00	1554	105.00	255	170.00	178	251.00	75
63.00	1170	106.00	267	171.00	119	252.00	68
64.00	190	110.00	174	173.00	118	256.00	76
65.00	168	111.00	90	174.00	21648	264.00	70
66.00	148	115.00	73	175.00	1814	265.00	269
68.00	2084	117.00	173	176.00	21736	267.00	67
69.00	2916	118.00	146	177.00	1264	277.00	82
70.00	318	119.00	143	178.00	161	279.00	72
72.00	278	125.00	141	179.00	201	280.00	76
73.00	1475	126.00	139	183.00	178	281.00	3190
74.00	4839	128.00	120	186.00	76	282.00	780
75.00	14369	131.00	67	187.00	84	283.00	401
76.00	1256	132.00	120	189.00	122	292.00	108
77.00	207	133.00	176	191.00	569	294.00	87
78.00	75	140.00	108	193.00	302	295.00	140
79.00	888	141.00	182	195.00	183	300.00	68

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424004.D

Injection Date: 24-Apr-2015 10:42:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 mL

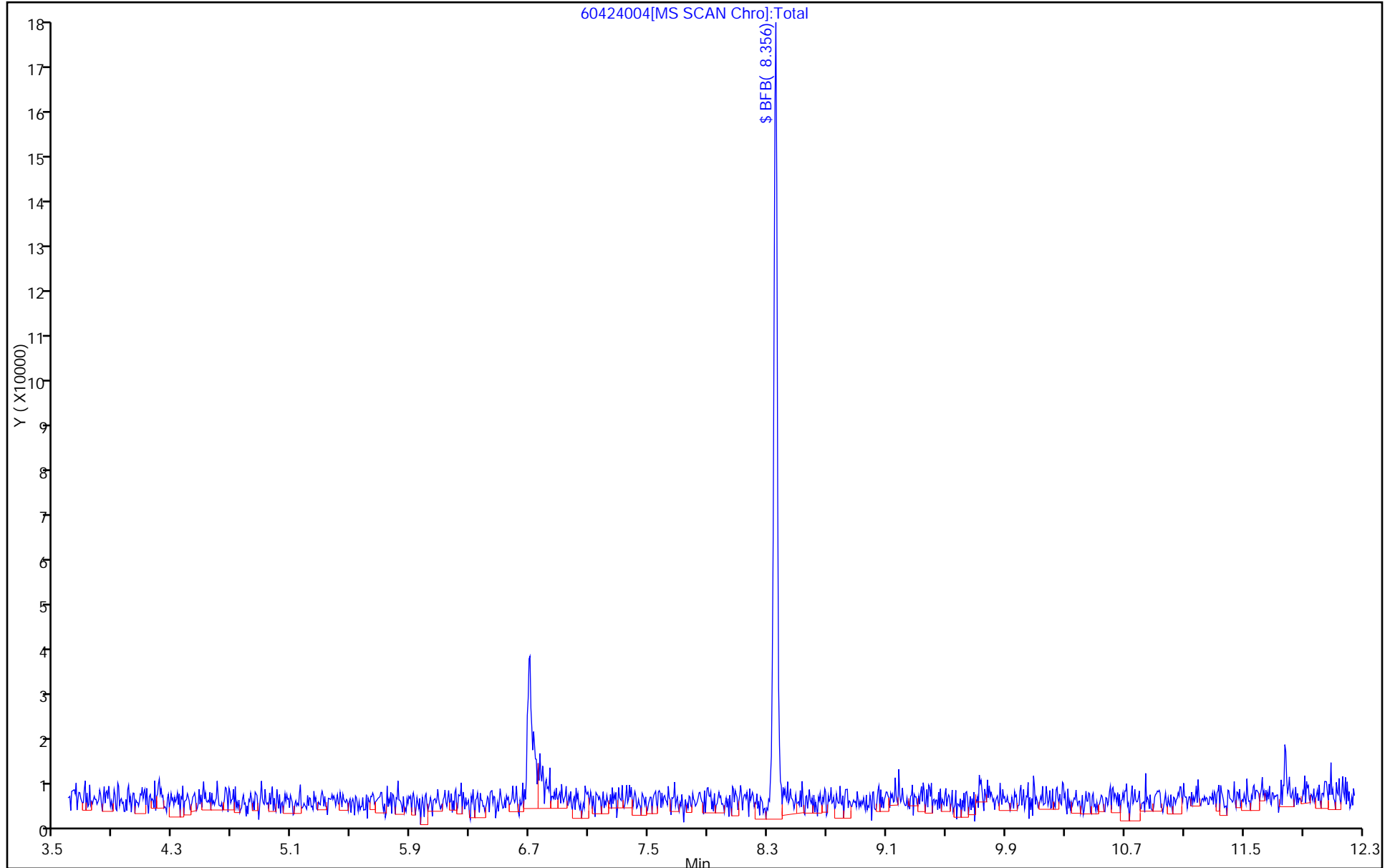
Dil. Factor: 1.0000

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\20150425-6632.b\60425001.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 25-Apr-2015 10:50:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 5.0 mL Dil. Factor: 1.0000
 Sample Info: BFB
 Misc. Info.: 180-0006632-001
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 25-Apr-2015 14:02:45 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: fergusond Date: 25-Apr-2015 11:00:55

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	8.359	8.359	0.000	0	116399	NR	NR	
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QC Flag Legend

Processing Flags

NR - Missing Quant Standard

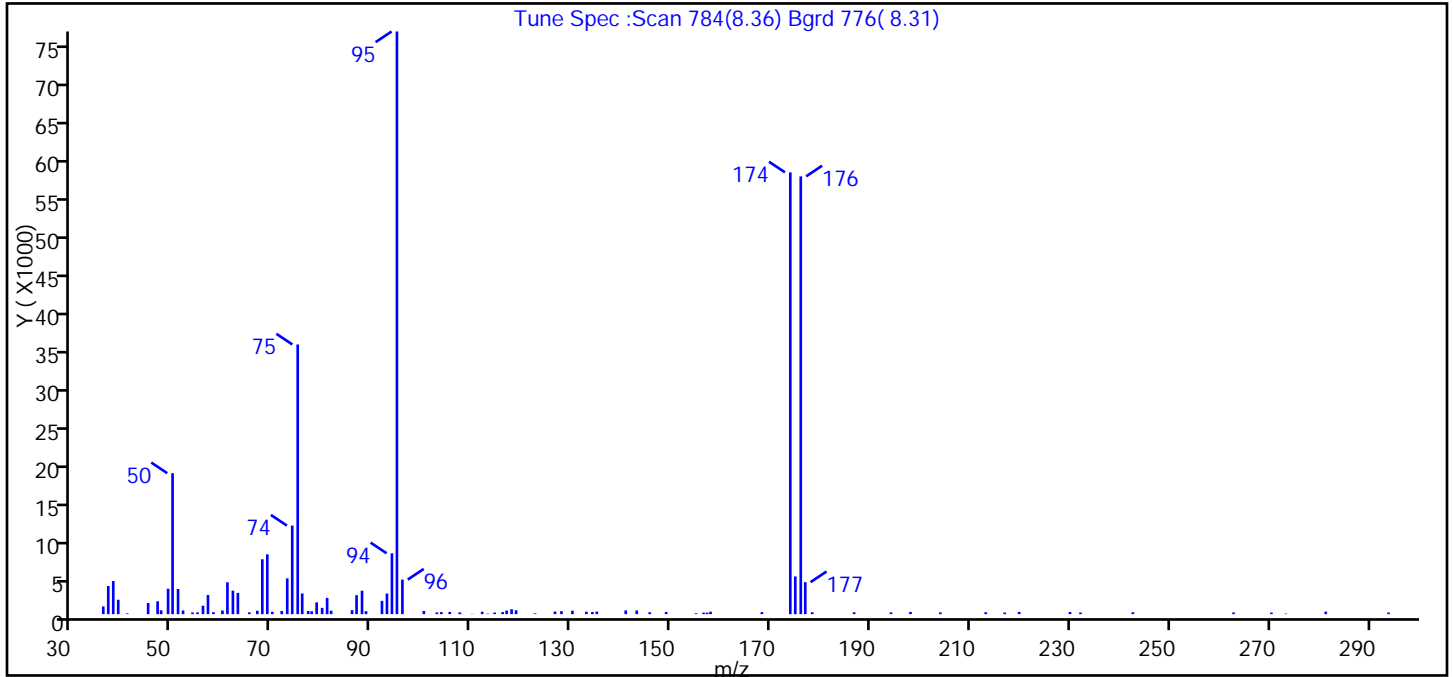
Reagents:

VOABFB25_00060 Amount Added: 1.00 Units: uL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425001.D
 Injection Date: 25-Apr-2015 10:50:30 Instrument ID: CHHP6
 Lims ID: BFB
 Client ID:
 Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 1
 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	24.2
75	30 to 60% of m/z 95	46.3
96	5 to 9% of m/z 95	5.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	75.8
175	5 to 9% of m/z 174	6.5 (8.5)
176	Greater than 95% but less than 101% of m/z 174	75.1 (99.1)
177	5 to 9% of m/z 176	5.5 (7.3)

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425001.D\MSVOA_LL_CHHP6.rslt\spectra.d
Injection Date: 25-Apr-2015 10:50:30
Spectrum: Tune Spec :Scan 784(8.36) Bgrd 776(8.31)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	1014	69.00	7867	105.60	295	157.90	320
37.10	3699	70.00	308	107.60	234	168.20	269
38.10	4358	71.90	409	108.10	26	173.90	58128
39.10	1896	73.00	4703	110.10	36	174.90	4957
39.90	11	74.00	11650	112.10	318	176.00	57600
40.90	92	75.10	35480	113.20	64	176.90	4213
45.10	1461	76.00	2721	114.60	213	178.30	253
47.00	1695	77.20	409	116.20	272	186.70	248
47.70	504	77.90	376	117.00	470	194.10	236
49.10	3347	78.90	1551	118.00	644	198.00	293
50.00	18544	80.00	829	118.90	503	204.00	230
51.10	3306	81.00	2142	122.70	97	213.10	253
52.10	487	81.80	453	126.70	341	216.90	211
54.00	221	86.00	527	128.00	391	219.80	286
55.00	236	86.90	2495	130.20	452	230.00	285
56.10	1110	88.00	3080	133.00	316	232.10	216
57.10	2520	88.80	393	134.20	281	242.60	254
58.20	253	92.00	1754	135.10	336	262.80	220
60.00	478	93.00	2709	140.90	497	270.40	207
61.00	4189	94.00	8006	143.10	486	273.30	73
62.10	3090	95.00	76664	145.70	249	281.30	335
63.10	2800	96.10	4546	149.00	290	293.90	214
65.40	230	100.40	422	155.00	108		
67.00	447	103.00	226	156.50	203		
68.00	7219	103.90	273	157.20	200		

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425001.D

Injection Date: 25-Apr-2015 10:50:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

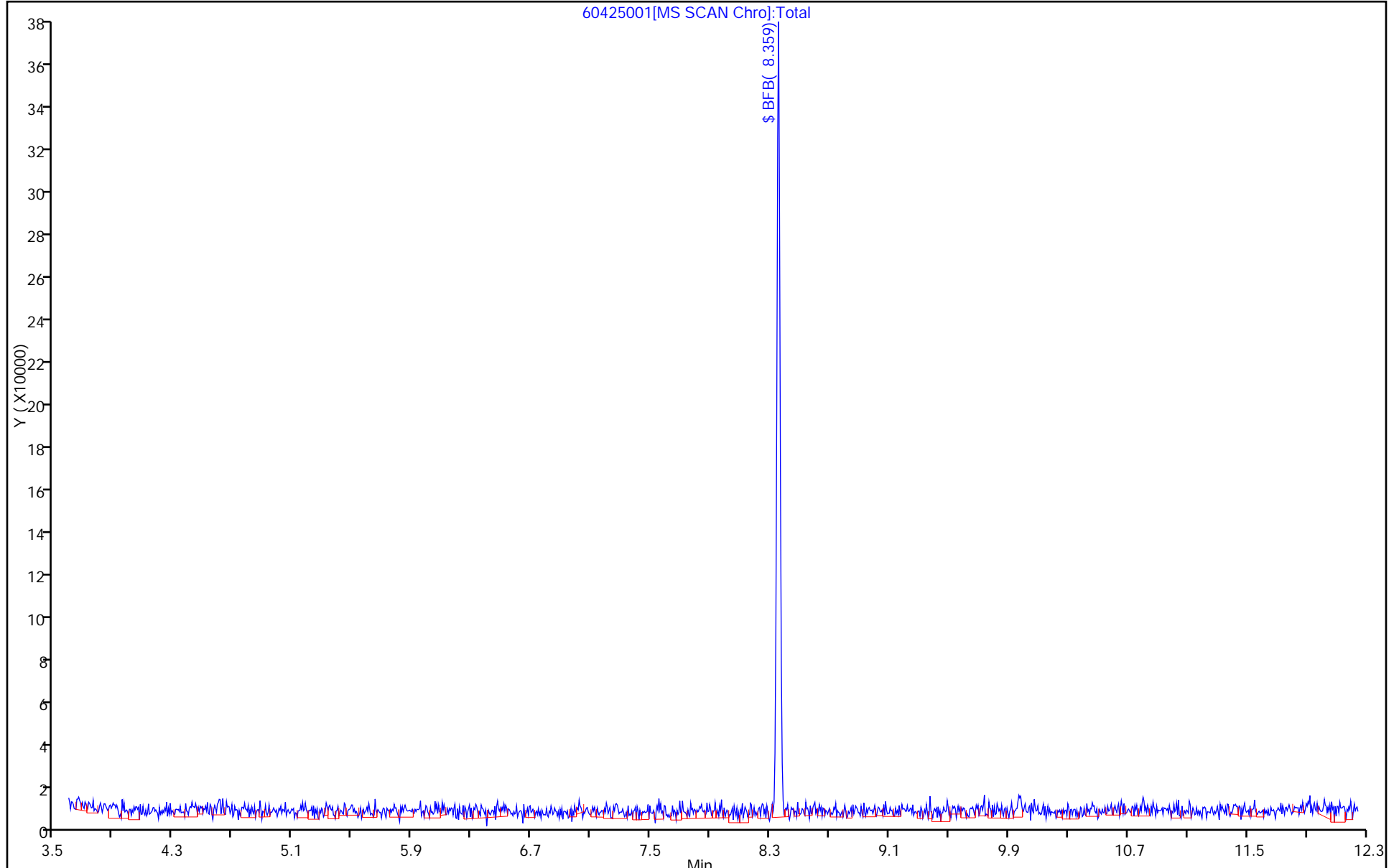
Dil. Factor: 1.0000

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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-139551/6
 Matrix: Water Lab File ID: 60424006.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 12:42
 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.: 139551 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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-139551/6
 Matrix: Water Lab File ID: 60424006.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 12:42
 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.: 139551 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)	97		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	93		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424006.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 24-Apr-2015 12:42:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 180-0006620-006
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 24-Apr-2015 15:00:12 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK032

First Level Reviewer: fergusond Date: 24-Apr-2015 15:00:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.181	4.205	-0.024	91	148706	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	98	556853	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.374	0.000	91	123878	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	98	196479	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.523	6.523	0.000	92	106858	50.0	46.6	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.906	0.000	69	159599	50.0	48.5	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	93	531913	50.0	51.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	85	191898	50.0	49.1	
11 Dichlorodifluoromethane	85		1.577					ND	
12 Chloromethane	50		1.735					ND	
13 Vinyl chloride	62		1.863					ND	
14 Butadiene	39		1.906					ND	
15 Bromomethane	94		2.192					ND	
16 Chloroethane	64		2.344					ND	
17 Dichlorofluoromethane	67		2.611					ND	
18 Trichlorofluoromethane	101		2.636					ND	
19 Ethanol	45		2.888					ND	
20 Ethyl ether	59		3.007					ND	
21 Acrolein	56		3.177					ND	
22 1,1-Dichloroethene	96		3.311					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.366					ND	
24 Acetone	43		3.384					ND	
25 Iodomethane	142		3.500					ND	
26 Carbon disulfide	76		3.603					ND	
27 Isopropyl alcohol	45		3.649					ND	
28 Acetonitrile	40		3.795					ND	
29 3-Chloro-1-propene	76		3.877					ND	
30 Methyl acetate	43		3.883					ND	
31 Methylene Chloride	84	4.072	4.090	-0.018	46	1956		0.5135	M
32 2-Methyl-2-propanol	59		4.333					ND	
33 Acrylonitrile	53		4.461					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		4.528					ND	
35 Methyl tert-butyl ether	73		4.534					ND	
36 Hexane	57		4.947					ND	
37 1,1-Dichloroethane	63		5.160					ND	
38 Vinyl acetate	43		5.197					ND	
40 Isopropyl ether	45		5.255					ND	
39 2-Chloro-1,3-butadiene	53		5.255					ND	
41 Tert-butyl ethyl ether	59		5.735					ND	
42 2,2-Dichloropropane	77		5.902					ND	
43 cis-1,2-Dichloroethene	96		5.902					ND	
44 2-Butanone (MEK)	43		5.909					ND	
45 Propionitrile	54		5.979					ND	
46 Ethyl acetate	43		5.991					ND	
47 Methacrylonitrile	41		6.161					ND	
48 Chlorobromomethane	128		6.201					ND	
49 Tetrahydrofuran	42		6.207					ND	
50 Chloroform	83		6.347					ND	
51 1,1,1-Trichloroethane	97		6.511					ND	
52 Cyclohexane	56		6.590					ND	
53 Carbon tetrachloride	117		6.687					ND	
54 1,1-Dichloropropene	75		6.699					ND	
55 Isobutyl alcohol	41		6.870					ND	
56 Benzene	78		6.906					ND	
57 1,2-Dichloroethane	62		6.991					ND	
148 Isooctane	57		7.074					ND	
58 Tert-amyl methyl ether	73		7.092					ND	
59 n-Heptane	43		7.277					ND	
60 n-Butanol	56		7.579					ND	
61 Trichloroethene	130		7.655					ND	
62 Ethyl acrylate	55		7.767					ND	
63 Methylcyclohexane	83		7.892					ND	
64 1,2-Dichloropropane	63		7.928					ND	
66 Methyl methacrylate	69		7.998					ND	
67 Dibromomethane	93		8.013					ND	
65 1,4-Dioxane	88		8.013					ND	
68 Dichlorobromomethane	83		8.208					ND	
69 2-Nitropropane	41		8.418					ND	
70 2-Chloroethyl vinyl ether	63		8.500					ND	
71 cis-1,3-Dichloropropene	75		8.646					ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.792					ND	
73 Toluene	91	8.987	8.981	0.006	92	4679		0.3652	
74 trans-1,3-Dichloropropene	75		9.224					ND	
75 Ethyl methacrylate	69		9.285					ND	
76 1,1,2-Trichloroethane	97		9.425					ND	
77 Tetrachloroethene	164		9.498					ND	
78 1,3-Dichloropropane	76		9.583					ND	
79 2-Hexanone	43		9.626					ND	
80 n-Butyl acetate	43		9.756					ND	
81 Chlorodibromomethane	129		9.802					ND	
82 Ethylene Dibromide	107		9.918					ND	
83 3-Chlorobenzotrifluoride	180		10.368					ND	
84 Chlorobenzene	112		10.404					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 4-Chlorobenzotrifluoride	180		10.459					ND	
86 1,1,1,2-Tetrachloroethane	131		10.495					ND	
87 Ethylbenzene	106		10.502					ND	
88 m-Xylene & p-Xylene	106		10.629					ND	
89 o-Xylene	106		11.013					ND	
90 Styrene	104		11.037					ND	
91 Bromoform	173		11.219					ND	
92 2-Chlorobenzotrifluoride	180		11.280					ND	
129 Cyclohexanol	57		11.289					ND	
93 Isopropylbenzene	105		11.384					ND	
94 Cyclohexanone	55		11.472					ND	
96 1,1,2,2-Tetrachloroethane	83		11.688					ND	
95 Bromobenzene	156		11.700					ND	
97 trans-1,4-Dichloro-2-buten	53		11.724					ND	
98 1,2,3-Trichloropropane	110		11.749					ND	
99 N-Propylbenzene	120		11.797					ND	
100 2-Chlorotoluene	126		11.889					ND	
101 3-Chlorotoluene	126		11.956					ND	
102 1,3,5-Trimethylbenzene	105		11.986					ND	
103 4-Chlorotoluene	126		12.010					ND	
104 tert-Butylbenzene	119		12.296					ND	
105 Pentachloroethane	167		12.330					ND	
106 1,2,4-Trimethylbenzene	105		12.357					ND	
107 1,2-dichloro-4-(trifluorom	214		12.394					ND	
108 sec-Butylbenzene	105		12.521					ND	
109 1,3-Dichlorobenzene	146		12.643					ND	
110 4-Isopropyltoluene	119		12.679					ND	
111 1,4-Dichlorobenzene	146		12.746					ND	
113 2,4-Dichloro-1-(triflourom	214		12.765					ND	
112 1,2,3-Trimethylbenzene	105		12.768					ND	
114 2,5-Dichlorobenzotrifluori	214		12.801					ND	
115 Benzyl chloride	91		12.853					ND	
116 n-Butylbenzene	91		13.087					ND	
117 1,2-Dichlorobenzene	146		13.099					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.896					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.036					ND	
120 1,3,5-Trichlorobenzene	180		14.082					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.450					ND	
122 1,2,4-Trichlorobenzene	180		14.717					ND	
123 Hexachlorobutadiene	225		14.863					ND	
124 Naphthalene	128		14.985					ND	
125 1,2,3-Trichlorobenzene	180		15.204					ND	
126 2,4,5-Trichlorotoluene	159		15.983					ND	
127 2,3,6-Trichlorotoluene	159		16.086					ND	
128 2-Methylnaphthalene	142		16.126					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\20150424-6620.b\60424006.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

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424006.D

Injection Date: 24-Apr-2015 12:42:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

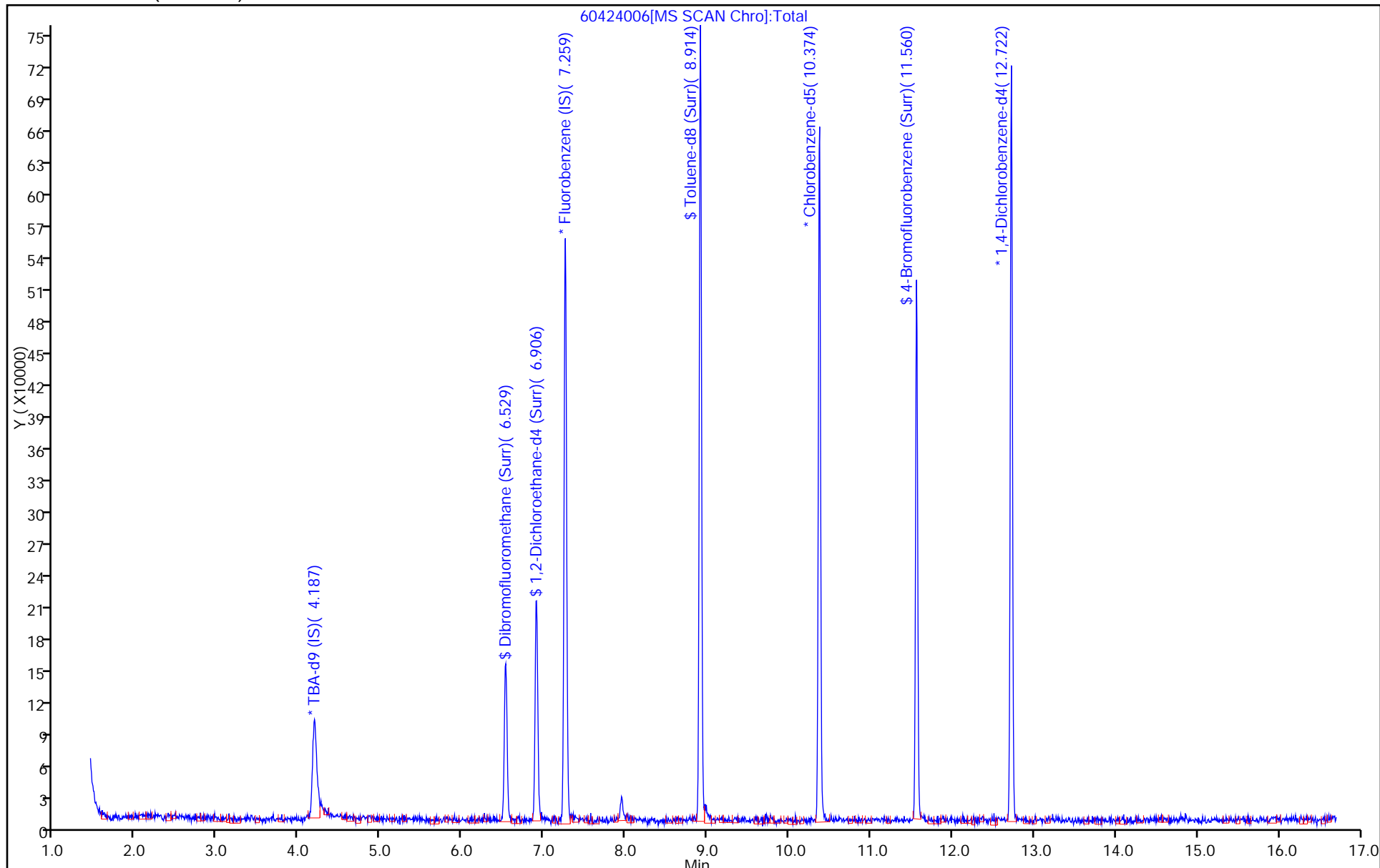
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



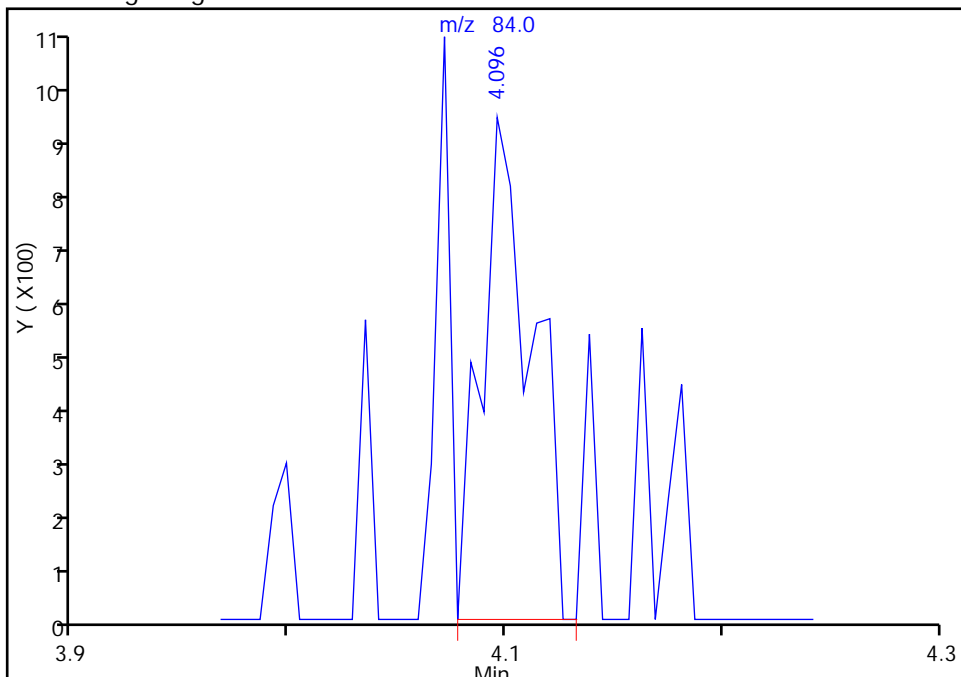
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424006.D
Injection Date: 24-Apr-2015 12:42:30 Instrument ID: CHHP6
Lims ID: MB
Client ID:
Operator ID: 001562 ALS Bottle#: 5 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

31 Methylene Chloride, CAS: 75-09-2

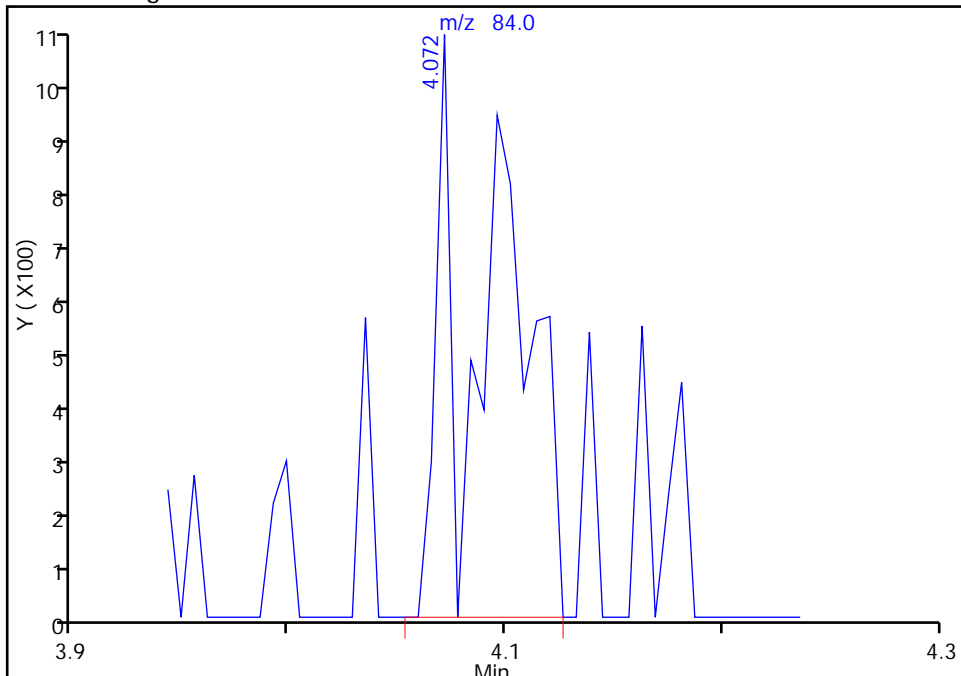
RT: 4.10
Area: 1468
Amount: 0.385353
Amount Units: ng

Processing Integration Results



RT: 4.07
Area: 1956
Amount: 0.513454
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 24-Apr-2015 15:00:12
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-139651/5
 Matrix: Water Lab File ID: 60425005.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 12:44
 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.: 139651 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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-139651/5
 Matrix: Water Lab File ID: 60425005.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 12:44
 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.: 139651 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)	98		64-135
2037-26-5	Toluene-d8 (Surr)	102		71-118
460-00-4	4-Bromofluorobenzene (Surr)	100		70-118
1868-53-7	Dibromofluoromethane (Surr)	96		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425005.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 25-Apr-2015 12:44:30 ALS Bottle#: 5 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 180-0006632-005
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 25-Apr-2015 14:02:46 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK013

First Level Reviewer: fergusond

Date: 25-Apr-2015 13:11:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.193	4.205	-0.012	85	152834	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	98	583871	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.374	10.367	0.007	89	127079	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	98	211967	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.529	0.000	93	115256	50.0	47.9	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.906	0.000	69	168685	50.0	48.8	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	94	541912	50.0	51.2	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	84	200194	50.0	49.9	
11 Dichlorodifluoromethane	85		1.577					ND	
12 Chloromethane	50		1.741					ND	
13 Vinyl chloride	62		1.869					ND	
14 Butadiene	39		1.918					ND	
15 Bromomethane	94		2.210					ND	
16 Chloroethane	64		2.356					ND	
17 Dichlorofluoromethane	67		2.629					ND	
18 Trichlorofluoromethane	101		2.654					ND	
19 Ethanol	45		2.888					ND	
20 Ethyl ether	59		3.013					ND	
21 Acrolein	56		3.183					ND	
22 1,1-Dichloroethene	96		3.305					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.372					ND	
24 Acetone	43		3.396					ND	
25 Iodomethane	142		3.505					ND	
26 Carbon disulfide	76		3.603					ND	
27 Isopropyl alcohol	45		3.649					ND	
28 Acetonitrile	40		3.795					ND	
29 3-Chloro-1-propene	76		3.876					ND	
30 Methyl acetate	43		3.889					ND	
31 Methylene Chloride	84	4.102	4.095	0.007	29	1782		0.4461	
32 2-Methyl-2-propanol	59		4.345					ND	
33 Acrylonitrile	53		4.460					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		4.527					ND	
35 Methyl tert-butyl ether	73		4.533					ND	
36 Hexane	57		4.953					ND	
37 1,1-Dichloroethane	63		5.166					ND	
38 Vinyl acetate	43		5.203					ND	
40 Isopropyl ether	45		5.255					ND	
39 2-Chloro-1,3-butadiene	53		5.255					ND	
41 Tert-butyl ethyl ether	59		5.735					ND	
42 2,2-Dichloropropane	77		5.908					ND	
44 2-Butanone (MEK)	43		5.908					ND	
43 cis-1,2-Dichloroethene	96		5.914					ND	
45 Propionitrile	54		5.979					ND	
46 Ethyl acetate	43		5.991					ND	
47 Methacrylonitrile	41		6.161					ND	
48 Chlorobromomethane	128		6.206					ND	
49 Tetrahydrofuran	42		6.212					ND	
50 Chloroform	83		6.346					ND	
51 1,1,1-Trichloroethane	97		6.511					ND	
52 Cyclohexane	56		6.590					ND	
53 Carbon tetrachloride	117		6.687					ND	
54 1,1-Dichloropropene	75		6.699					ND	
55 Isobutyl alcohol	41		6.876					ND	
56 Benzene	78		6.912					ND	
57 1,2-Dichloroethane	62		6.991					ND	
148 Isooctane	57		7.074					ND	
58 Tert-amyl methyl ether	73		7.092					ND	
59 n-Heptane	43		7.277					ND	
60 n-Butanol	56		7.579					ND	
61 Trichloroethene	130		7.654					ND	
62 Ethyl acrylate	55		7.767					ND	
63 Methylcyclohexane	83		7.898					ND	
64 1,2-Dichloropropane	63		7.928					ND	
66 Methyl methacrylate	69		7.998					ND	
65 1,4-Dioxane	88		8.007					ND	
67 Dibromomethane	93		8.013					ND	
68 Dichlorobromomethane	83		8.208					ND	
69 2-Nitropropane	41		8.418					ND	
70 2-Chloroethyl vinyl ether	63		8.500					ND	
71 cis-1,3-Dichloropropene	75		8.652					ND	
72 4-Methyl-2-pentanone (MIBK)	43		8.798					ND	
73 Toluene	91	8.987	8.980	0.007	61	6182		0.4703	
74 trans-1,3-Dichloropropene	75		9.230					ND	
75 Ethyl methacrylate	69		9.285					ND	
76 1,1,2-Trichloroethane	97		9.425					ND	
77 Tetrachloroethene	164		9.504					ND	
78 1,3-Dichloropropane	76		9.583					ND	
79 2-Hexanone	43		9.631					ND	
80 n-Butyl acetate	43		9.756					ND	
81 Chlorodibromomethane	129		9.808					ND	
82 Ethylene Dibromide	107		9.917					ND	
83 3-Chlorobenzotrifluoride	180		10.367					ND	
84 Chlorobenzene	112		10.404					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
85 4-Chlorobenzotrifluoride	180		10.459					ND	
86 1,1,1,2-Tetrachloroethane	131		10.495					ND	
87 Ethylbenzene	106		10.501					ND	
88 m-Xylene & p-Xylene	106		10.635					ND	
89 o-Xylene	106		11.012					ND	
90 Styrene	104		11.031					ND	
91 Bromoform	173		11.225					ND	
92 2-Chlorobenzotrifluoride	180		11.274					ND	
129 Cyclohexanol	57		11.289					ND	
93 Isopropylbenzene	105		11.383					ND	
94 Cyclohexanone	55		11.472					ND	
96 1,1,2,2-Tetrachloroethane	83		11.688					ND	
95 Bromobenzene	156		11.700					ND	
97 trans-1,4-Dichloro-2-buten	53		11.730					ND	
98 1,2,3-Trichloropropane	110		11.748					ND	
99 N-Propylbenzene	120		11.797					ND	
100 2-Chlorotoluene	126		11.888					ND	
101 3-Chlorotoluene	126		11.955					ND	
102 1,3,5-Trimethylbenzene	105		11.986					ND	
103 4-Chlorotoluene	126		12.010					ND	
104 tert-Butylbenzene	119		12.296					ND	
105 Pentachloroethane	167		12.330					ND	
106 1,2,4-Trimethylbenzene	105		12.357					ND	
107 1,2-dichloro-4-(trifluorom	214		12.393					ND	
108 sec-Butylbenzene	105		12.521					ND	
109 1,3-Dichlorobenzene	146		12.643					ND	
110 4-Isopropyltoluene	119		12.679					ND	
111 1,4-Dichlorobenzene	146		12.746					ND	
113 2,4-Dichloro-1-(triflourom	214		12.764					ND	
112 1,2,3-Trimethylbenzene	105		12.768					ND	
114 2,5-Dichlorobenzotrifluori	214		12.801					ND	
115 Benzyl chloride	91		12.853					ND	
116 n-Butylbenzene	91		13.087					ND	
117 1,2-Dichlorobenzene	146		13.099					ND	
118 1,2-Dibromo-3-Chloropropan	75		13.896					ND	
119 2,4- & 2,5- & 2,6- Dichlor	125		14.036					ND	
120 1,3,5-Trichlorobenzene	180		14.082					ND	
121 2,3- & 3,4- Dichlorotoluen	125		14.449					ND	
122 1,2,4-Trichlorobenzene	180		14.717					ND	
123 Hexachlorobutadiene	225		14.863					ND	
124 Naphthalene	128		14.979					ND	
125 1,2,3-Trichlorobenzene	180		15.204					ND	
126 2,4,5-Trichlorotoluene	159		15.983					ND	
127 2,3,6-Trichlorotoluene	159		16.086					ND	
128 2-Methylnaphthalene	142		16.126					ND	
144 2,4-Dichlorotoluene	1		0.000					ND	
149 Isopropyl ether TIC	1		0.000					ND	
147 2,6-Dichlorotoluene	1		0.000					ND	
145 2,3-Dichlorotoluene	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
146 3,4-Dichlorotoluene	1		0.000					ND	
151 Tert-amyl methyl ether (TI	1		0.000					ND	

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425005.D

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
143 2,5-Dichlorotoluene	1		0.000						ND
150 Tert-butyl ethyl ether (TI	1		0.000						ND
152 Formaldehyde TIC	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_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425005.D

Injection Date: 25-Apr-2015 12:44:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

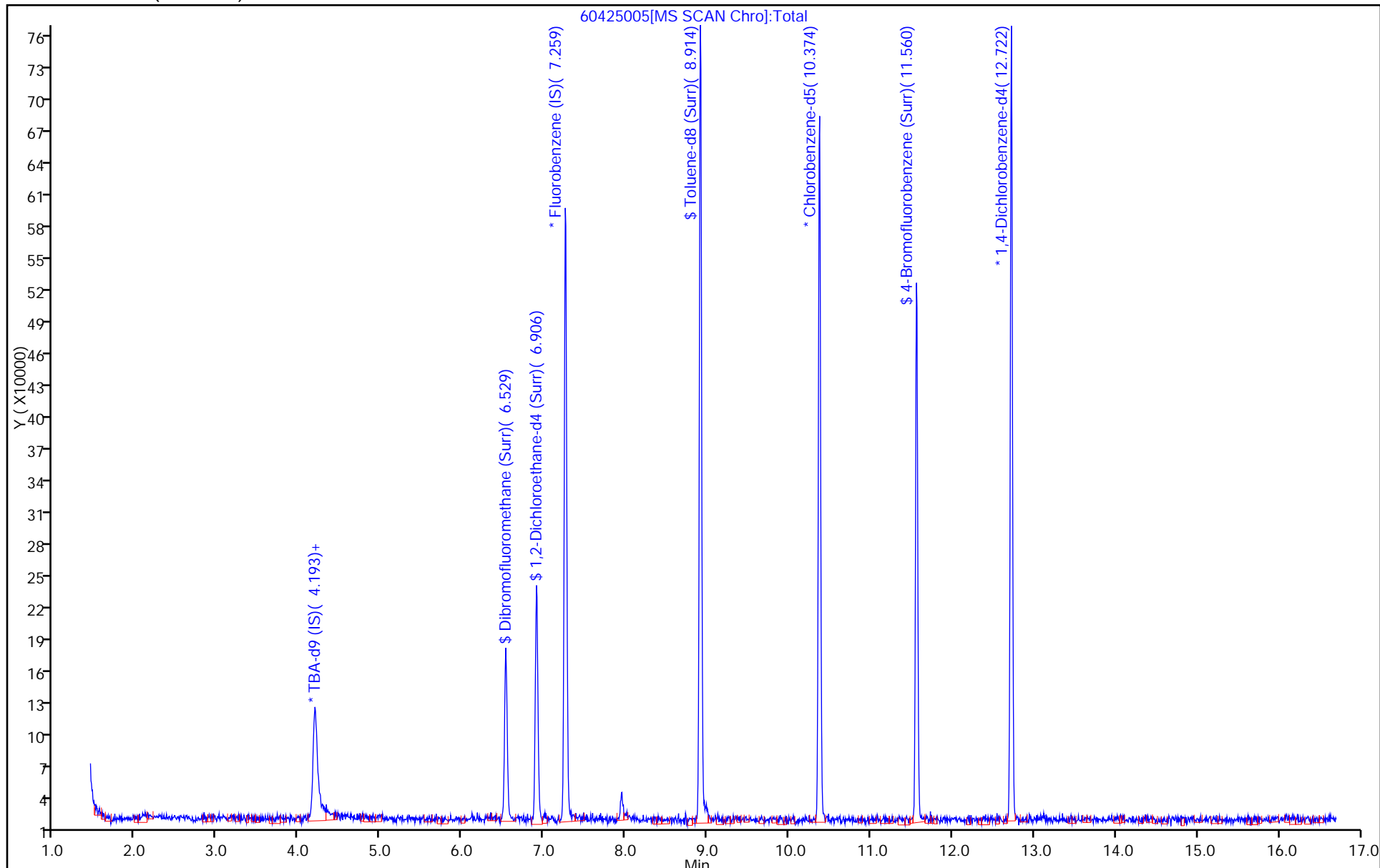
Dil. Factor: 1.0000

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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-139884/4
 Matrix: Water Lab File ID: 50428004.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/28/2015 13:05
 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.: 139884 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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-139884/4
 Matrix: Water Lab File ID: 50428004.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/28/2015 13:05
 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.: 139884 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)	107		64-135
2037-26-5	Toluene-d8 (Surr)	99		71-118
460-00-4	4-Bromofluorobenzene (Surr)	87		70-118
1868-53-7	Dibromofluoromethane (Surr)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428004.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 28-Apr-2015 13:05:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: MB
 Misc. Info.: 180-0006670-004
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\MMSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 29-Apr-2015 10:32:02 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK021

First Level Reviewer: fergusond

Date: 28-Apr-2015 13:23:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.296	4.305	-0.009	0	179704	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.277	7.274	0.003	98	487437	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.361	10.365	-0.004	87	106909	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.685	12.682	0.003	96	131712	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.535	6.532	0.003	93	112423	50.0	50.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.897	0.003	0	156745	50.0	53.6	
\$ 7 Toluene-d8 (Surr)	98	8.925	8.923	0.002	94	421399	50.0	49.7	
\$ 8 4-Bromofluorobenzene (Surr	95	11.535	11.533	0.002	87	128995	50.0	43.5	
11 Dichlorodifluoromethane	85		1.617					ND	
12 Chloromethane	50		1.775					ND	
13 Vinyl chloride	62		1.903					ND	
14 Butadiene	39		1.945					ND	
15 Bromomethane	94		2.249					ND	
16 Chloroethane	64		2.395					ND	
17 Dichlorofluoromethane	67		2.651					ND	
18 Trichlorofluoromethane	101		2.706					ND	
19 Ethanol	45		3.009					ND	
20 Ethyl ether	59		3.089					ND	
21 Acrolein	56		3.247					ND	
22 1,1-Dichloroethene	96		3.369					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.417					ND	
24 Acetone	43		3.490					ND	
25 Iodomethane	142		3.563					ND	
26 Carbon disulfide	76		3.648					ND	
27 Isopropyl alcohol	45		3.782					ND	
29 Acetonitrile	40		3.928					ND	
28 3-Chloro-1-propene	76		3.940					ND	
30 Methyl acetate	43		4.013					ND	
31 Methylene Chloride	84		4.135					ND	
32 2-Methyl-2-propanol	59		4.427					ND	
33 Acrylonitrile	53		4.549					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		4.561					ND	
35 Methyl tert-butyl ether	73		4.591					ND	
36 Hexane	57		4.981					ND	
37 1,1-Dichloroethane	63		5.169					ND	
38 Vinyl acetate	43		5.291					ND	
39 2-Chloro-1,3-butadiene	53		5.296					ND	
41 Isopropyl ether	45		5.327					ND	
40 Isopropyl ether TIC	45		5.409					ND	
42 Tert-butyl ethyl ether	59		5.795					ND	
44 2,2-Dichloropropane	77		5.924					ND	
45 cis-1,2-Dichloroethene	96		5.936					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
46 2-Butanone (MEK)	43		5.991					ND	
47 Propionitrile	54		6.057					ND	
48 Ethyl acetate	43	6.078	6.087	-0.009	2	497		0.3349	
49 Chlorobromomethane	128		6.228					ND	
50 Methacrylonitrile	41		6.239					ND	
51 Tetrahydrofuran	42		6.289					ND	
52 Chloroform	83		6.337					ND	
53 1,1,1-Trichloroethane	97		6.532					ND	
54 Cyclohexane	56		6.587					ND	
56 Carbon tetrachloride	117		6.708					ND	
55 1,1-Dichloropropene	75		6.721					ND	
57 Isobutyl alcohol	41		6.940					ND	
58 Benzene	78		6.952					ND	
59 1,2-Dichloroethane	62		6.982					ND	
61 Tert-amyl methyl ether	73		7.103					ND	
60 Tert-amyl methyl ether (TI	73		7.262					ND	
62 n-Heptane	43	7.295	7.280	0.015	6	95		0.0259	
63 n-Butanol	56		7.651					ND	
64 Trichloroethene	130		7.670					ND	
65 Ethyl acrylate	55		7.815					ND	
66 Methylcyclohexane	83		7.864					ND	
67 1,2-Dichloropropane	63		7.901					ND	
68 Dibromomethane	93		8.022					ND	
69 Methyl methacrylate	69		8.052					ND	
70 1,4-Dioxane	88		8.053					ND	
71 Dichlorobromomethane	83		8.193					ND	
72 2-Nitropropane	41	8.341	8.436	-0.095	55	217		0.4657	
73 2-Chloroethyl vinyl ether	63		8.521					ND	
74 cis-1,3-Dichloropropene	75		8.655					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.826					ND	
76 Toluene	91		8.990					ND	
77 trans-1,3-Dichloropropene	75		9.215					ND	
78 Ethyl methacrylate	69		9.318					ND	
79 1,1,2-Trichloroethane	97		9.397					ND	
80 Tetrachloroethene	164		9.531					ND	
81 1,3-Dichloropropane	76		9.562					ND	
82 2-Hexanone	43		9.653					ND	
83 n-Butyl acetate	43		9.786					ND	
84 Chlorodibromomethane	129		9.787					ND	
85 Ethylene Dibromide	107		9.902					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
86 3-Chlorobenzotrifluoride	180		10.371					ND	
87 Chlorobenzene	112		10.389					ND	
88 4-Chlorobenzotrifluoride	180		10.425					ND	
89 1,1,1,2-Tetrachloroethane	131		10.474					ND	
90 Ethylbenzene	106		10.498					ND	
91 m-Xylene & p-Xylene	106		10.614					ND	
92 o-Xylene	106		11.009					ND	
93 Styrene	104		11.022					ND	
94 Bromoform	173		11.204					ND	
95 Cyclohexanol	57		11.231					ND	
96 2-Chlorobenzotrifluoride	180		11.271					ND	
97 Isopropylbenzene	105		11.381					ND	
98 Cyclohexanone	55		11.477					ND	
99 1,1,2,2-Tetrachloroethane	83		11.673					ND	
100 Bromobenzene	156		11.685					ND	
101 1,2,3-Trichloropropane	110		11.715					ND	
102 trans-1,4-Dichloro-2-buten	53		11.733					ND	
103 N-Propylbenzene	120		11.788					ND	
104 2-Chlorotoluene	126		11.873					ND	
105 3-Chlorotoluene	126		11.934					ND	
106 1,3,5-Trimethylbenzene	105		11.965					ND	
107 4-Chlorotoluene	126		11.983					ND	
108 tert-Butylbenzene	119		12.287					ND	
109 Pentachloroethane	167		12.305					ND	
110 1,2,4-Trimethylbenzene	105		12.336					ND	
111 1,2-dichloro-4-(trifluorom	214		12.403					ND	
112 sec-Butylbenzene	105		12.506					ND	
113 1,3-Dichlorobenzene	146		12.622					ND	
114 4-Isopropyltoluene	119		12.652					ND	
115 1,4-Dichlorobenzene	146		12.707					ND	
117 1,2,3-Trimethylbenzene	105		12.755					ND	
116 2,4-Dichloro-1-(triflourom	214		12.762					ND	
118 2,5-Dichlorobenzotrifluori	214		12.810					ND	
119 Benzyl chloride	91		12.840					ND	
120 n-Butylbenzene	91		13.066					ND	
121 1,2-Dichlorobenzene	146		13.078					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.857					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.009					ND	
124 1,3,5-Trichlorobenzene	180		14.075					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.422					ND	
126 1,2,4-Trichlorobenzene	180		14.690					ND	
127 Hexachlorobutadiene	225		14.860					ND	
128 Naphthalene	128		14.939					ND	
129 1,2,3-Trichlorobenzene	180		15.183					ND	
131 2,4,5-Trichlorotoluene	159		15.968					ND	
130 2,3,6-Trichlorotoluene	159		16.065					ND	
132 2-Methylnaphthalene	142		16.076					ND	
151 Isooctane	57		0.000					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428004.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
146 2,5-Dichlorotoluene	1		0.000						ND
150 2,6-Dichlorotoluene	1		0.000						ND
S 133 Xylenes, Total	106		1.000						ND
S 134 1,2-Dichloroethene, Total	96		1.000						ND
S 135 1,3-Dichloropropene, Total	1		0.000						ND
T 153 1,2 Epoxybutane TIC	42		0.000						ND
T 136 Mesityl oxide TIC	83		0.000						ND
T 137 Tetrahydrofuran TIC	42		0.000						ND
T 138 Methyl n-amyl ketone TIC	43		0.000						ND

Reagents:

VOA8260INT_00031

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR_00033

Amount Added: 2.00

Units: uL

Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428004.D

Injection Date: 28-Apr-2015 13:05:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

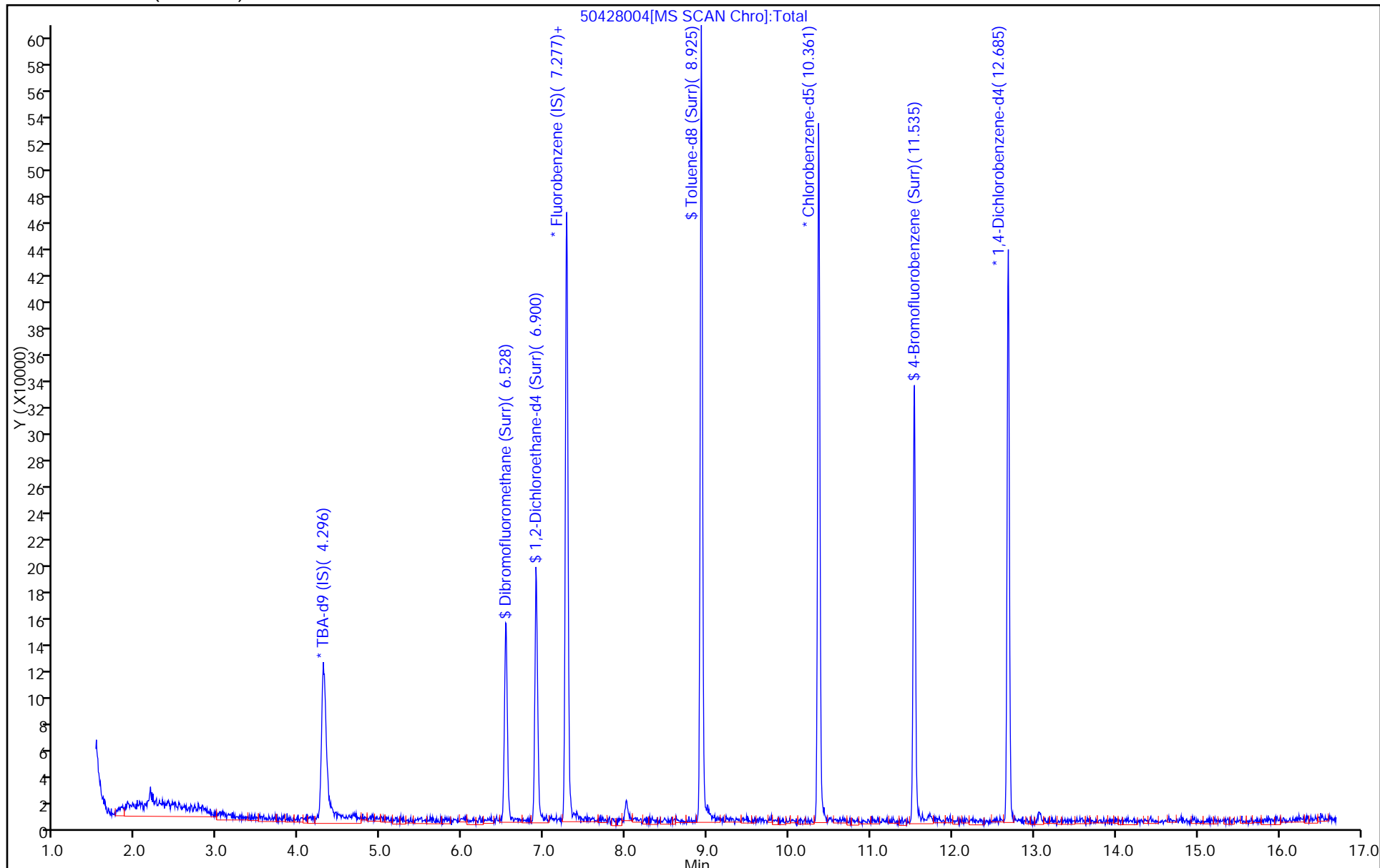
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA_LL_CHHP5

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.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-139551/10
 Matrix: Water Lab File ID: 60424010.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 14:58
 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.: 139551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.1		1.0	0.28
75-01-4	Vinyl chloride	10.4		1.0	0.23
74-83-9	Bromomethane	15.1		1.0	0.31
75-00-3	Chloroethane	12.9		1.0	0.21
75-35-4	1,1-Dichloroethene	10.2		1.0	0.30
67-64-1	Acetone	28.9		5.0	2.5
75-15-0	Carbon disulfide	7.46		1.0	0.21
75-09-2	Methylene Chloride	9.92		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	10.3		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.51		1.0	0.18
75-34-3	1,1-Dichloroethane	10.0		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.24
74-97-5	Bromochloromethane	10.2		1.0	0.18
78-93-3	2-Butanone (MEK)	25.3		5.0	0.55
67-66-3	Chloroform	10.5		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.15		1.0	0.29
56-23-5	Carbon tetrachloride	7.94		1.0	0.14
71-43-2	Benzene	10.8		1.0	0.11
107-06-2	1,2-Dichloroethane	11.0		1.0	0.21
79-01-6	Trichloroethene	10.5		1.0	0.14
78-87-5	1,2-Dichloropropane	9.83		1.0	0.095
75-27-4	Bromodichloromethane	9.14		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	7.57		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	18.7		5.0	0.53
108-88-3	Toluene	11.3		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	6.80		1.0	0.15
79-00-5	1,1,2-Trichloroethane	11.2		1.0	0.20
127-18-4	Tetrachloroethene	10.9		1.0	0.15
591-78-6	2-Hexanone	22.5		5.0	0.16
124-48-1	Dibromochloromethane	8.54		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	8.57		1.0	0.18
108-90-7	Chlorobenzene	11.2		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	7.61		1.0	0.28
100-41-4	Ethylbenzene	10.6		1.0	0.23
1330-20-7	Xylenes, Total	21.1		3.0	0.49
100-42-5	Styrene	10.8		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-139551/10
 Matrix: Water Lab File ID: 60424010.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 14:58
 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.: 139551 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	10.1		1.0	0.20
107-13-1	Acrylonitrile	103		20	0.55
123-91-1	1,4-Dioxane	161	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424010.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 24-Apr-2015 14:58:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 180-0006620-010
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 24-Apr-2015 15:17:27 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK032

First Level Reviewer: fergusond

Date: 24-Apr-2015 15:17:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.206	4.205	0.001	88	137846	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.260	7.259	0.001	99	472279	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.374	-0.006	90	108144	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.723	12.722	0.001	97	169931	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.530	6.523	0.007	93	98766	50.0	50.8	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.901	6.906	-0.005	68	148967	50.0	53.3	
\$ 7 Toluene-d8 (Surr)	98	8.914	8.914	0.000	93	463935	50.0	51.5	
\$ 8 4-Bromofluorobenzene (Surr	95	11.561	11.560	0.001	84	168121	50.0	49.2	
11 Dichlorodifluoromethane	85	1.578	1.577	0.001	99	144780	50.0	62.3	
12 Chloromethane	50	1.736	1.735	0.001	100	182277	50.0	50.4	
13 Vinyl chloride	62	1.864	1.863	0.001	98	175846	50.0	51.8	
14 Butadiene	39	1.918	1.906	0.012	95	201527	50.0	58.3	
15 Bromomethane	94	2.223	2.192	0.031	93	72338	50.0	75.3	
16 Chloroethane	64	2.363	2.344	0.018	98	93146	50.0	64.3	
17 Dichlorofluoromethane	67	2.624	2.611	0.013	97	226760	50.0	64.1	
18 Trichlorofluoromethane	101	2.655	2.636	0.019	81	185353	50.0	59.1	
20 Ethyl ether	59	3.013	3.007	0.006	95	158874	50.0	51.8	
21 Acrolein	56	3.184	3.177	0.007	99	50607	150.0	138.3	
22 1,1-Dichloroethene	96	3.299	3.311	-0.012	97	124424	50.0	50.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.372	3.366	0.006	92	118680	50.0	49.6	
24 Acetone	43	3.385	3.384	0.001	99	114560	100.0	144.3	
25 Iodomethane	142	3.512	3.500	0.012	97	175198	50.0	51.7	
26 Carbon disulfide	76	3.604	3.603	0.001	100	259469	50.0	37.3	
29 3-Chloro-1-propene	76	3.883	3.877	0.006	54	65339	50.0	39.3	
30 Methyl acetate	43	3.889	3.883	0.006	98	663036	250.0	250.8	
31 Methylene Chloride	84	4.090	4.090	0.000	98	160308	50.0	49.6	
32 2-Methyl-2-propanol	59	4.340	4.333	0.007	88	76328	500.0	487.1	
33 Acrylonitrile	53	4.467	4.461	0.006	99	731318	500.0	515.4	
34 trans-1,2-Dichloroethene	96	4.534	4.528	0.006	72	144432	50.0	51.3	
35 Methyl tert-butyl ether	73	4.534	4.534	0.000	97	389710	50.0	47.6	
36 Hexane	57	4.954	4.947	0.007	92	227474	50.0	51.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.167	5.160	0.007	96	267622	50.0	50.0	
38 Vinyl acetate	43	5.203	5.197	0.006	97	199920	50.0	35.9	
43 cis-1,2-Dichloroethene	96	5.915	5.902	0.013	82	156985	50.0	52.3	
42 2,2-Dichloropropane	77	5.909	5.902	0.007	52	65440	50.0	25.6	
44 2-Butanone (MEK)	43	5.915	5.909	0.006	82	177745	100.0	126.6	
48 Chlorobromomethane	128	6.207	6.201	0.006	95	67406	50.0	50.9	
49 Tetrahydrofuran	42	6.213	6.207	0.006	87	119321	100.0	96.3	
50 Chloroform	83	6.347	6.347	0.000	96	224562	50.0	52.7	
51 1,1,1-Trichloroethane	97	6.511	6.511	0.000	96	134657	50.0	45.8	
52 Cyclohexane	56	6.584	6.590	-0.006	92	288145	50.0	49.9	
53 Carbon tetrachloride	117	6.688	6.687	0.001	73	74528	50.0	39.7	
54 1,1-Dichloropropene	75	6.694	6.699	-0.005	94	191944	50.0	54.6	
55 Isobutyl alcohol	41	6.876	6.870	0.006	96	66135	1250.0	687.9	
56 Benzene	78	6.913	6.906	0.007	97	615898	50.0	54.0	
57 1,2-Dichloroethane	62	6.992	6.991	0.001	96	200546	50.0	55.2	
59 n-Heptane	43	7.278	7.277	0.001	93	165600	50.0	48.8	
61 Trichloroethene	130	7.655	7.655	0.000	97	134709	50.0	52.3	
63 Methylcyclohexane	83	7.892	7.892	0.000	93	258567	50.0	53.6	
64 1,2-Dichloropropane	63	7.923	7.928	-0.005	87	158847	50.0	49.1	
65 1,4-Dioxane	88	7.996	8.013	-0.017	86	29652	1000.0	805.4	M
67 Dibromomethane	93	8.014	8.013	0.001	95	84132	50.0	54.7	
68 Dichlorobromomethane	83	8.209	8.208	0.001	97	122688	50.0	45.7	
70 2-Chloroethyl vinyl ether	63	8.501	8.500	0.001	91	200809	100.0	109.7	
71 cis-1,3-Dichloropropene	75	8.653	8.646	0.007	93	143088	50.0	37.9	
72 4-Methyl-2-pentanone (MIBK)	43	8.793	8.792	0.001	98	332631	100.0	93.3	
73 Toluene	91	8.981	8.981	0.000	98	634458	50.0	56.7	
74 trans-1,3-Dichloropropene	75	9.231	9.224	0.007	97	100595	50.0	34.0	
75 Ethyl methacrylate	69	9.286	9.285	0.001	90	142724	50.0	39.1	
76 1,1,2-Trichloroethane	97	9.432	9.425	0.007	90	134722	50.0	55.8	
77 Tetrachloroethene	164	9.498	9.498	0.000	94	101392	50.0	54.6	
78 1,3-Dichloropropane	76	9.584	9.583	0.001	94	237708	50.0	52.6	
79 2-Hexanone	43	9.632	9.626	0.006	97	228913	100.0	112.4	
81 Chlorodibromomethane	129	9.803	9.802	0.001	90	63979	50.0	42.7	
82 Ethylene Dibromide	107	9.918	9.918	0.000	100	99437	50.0	42.8	
83 3-Chlorobenzotrifluoride	180	10.362	10.368	-0.006	95	184045	50.0	51.5	
84 Chlorobenzene	112	10.399	10.404	-0.005	93	395660	50.0	56.1	
85 4-Chlorobenzotrifluoride	180	10.460	10.459	0.001	96	170128	50.0	50.1	
86 1,1,1,2-Tetrachloroethane	131	10.496	10.495	0.001	70	69157	50.0	38.1	
87 Ethylbenzene	106	10.502	10.502	0.000	98	225175	50.0	53.1	
88 m-Xylene & p-Xylene	106	10.630	10.629	0.001	99	277085	50.0	53.5	
89 o-Xylene	106	11.013	11.013	0.000	96	267165	50.0	52.1	
90 Styrene	104	11.031	11.037	-0.006	96	442750	50.0	54.1	
91 Bromoform	173	11.226	11.219	0.007	94	31261	50.0	39.8	
92 2-Chlorobenzotrifluoride	180	11.275	11.280	-0.005	97	181112	50.0	49.2	
93 Isopropylbenzene	105	11.378	11.384	-0.006	96	657996	50.0	55.2	
96 1,1,2,2-Tetrachloroethane	83	11.688	11.688	0.000	95	171905	50.0	50.7	
95 Bromobenzene	156	11.701	11.700	0.001	98	148724	50.0	53.1	
97 trans-1,4-Dichloro-2-buten	53	11.719	11.724	-0.005	64	36953	50.0	35.3	
98 1,2,3-Trichloropropane	110	11.749	11.749	0.000	86	57467	50.0	54.2	
99 N-Propylbenzene	120	11.798	11.797	0.001	99	184522	50.0	52.5	
100 2-Chlorotoluene	126	11.889	11.889	0.000	95	155647	50.0	52.3	
101 3-Chlorotoluene	126	11.950	11.956	-0.006	98	160207	50.0	49.8	

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	11.980	11.986	-0.006	96	534760	50.0	53.1	
103 4-Chlorotoluene	126	12.011	12.010	0.001	99	169801	50.0	53.5	
104 tert-Butylbenzene	119	12.297	12.296	0.001	94	445897	50.0	54.2	
106 1,2,4-Trimethylbenzene	105	12.358	12.357	0.001	97	554403	50.0	52.9	
107 1,2-dichloro-4-(trifluorom	214	12.388	12.394	-0.006	97	129704	50.0	48.8	
108 sec-Butylbenzene	105	12.522	12.521	0.001	95	659681	50.0	54.2	
109 1,3-Dichlorobenzene	146	12.644	12.643	0.001	97	288341	50.0	51.7	
110 4-Isopropyltoluene	119	12.680	12.679	0.001	96	545229	50.0	54.2	
111 1,4-Dichlorobenzene	146	12.747	12.746	0.001	89	304529	50.0	52.5	
113 2,4-Dichloro-1-(trifluorom	214	12.765	12.765	0.000	92	134094	50.0	48.9	
114 2,5-Dichlorobenzotrifluori	214	12.802	12.801	0.001	98	138961	50.0	47.9	
116 n-Butylbenzene	91	13.088	13.087	0.001	98	508509	50.0	54.3	
117 1,2-Dichlorobenzene	146	13.100	13.099	0.001	94	301385	50.0	53.9	
118 1,2-Dibromo-3-Chloropropan	75	13.891	13.896	-0.005	68	14287	50.0	31.5	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.037	14.036	0.001	99	694315	150.0	148.8	
120 1,3,5-Trichlorobenzene	180	14.085	14.082	0.003	96	211284	50.0	46.9	
121 2,3- & 3,4- Dichlorotoluen	125	14.444	14.450	-0.006	99	511277	100.0	100.0	
122 1,2,4-Trichlorobenzene	180	14.718	14.717	0.001	93	202244	50.0	49.6	
123 Hexachlorobutadiene	225	14.858	14.863	-0.005	97	55826	50.0	46.6	
124 Naphthalene	128	14.980	14.985	-0.005	98	548416	50.0	52.4	
125 1,2,3-Trichlorobenzene	180	15.205	15.204	0.001	93	181409	50.0	47.4	
126 2,4,5-Trichlorotoluene	159	15.983	15.983	0.000	0	87486	50.0	39.0	
127 2,3,6-Trichlorotoluene	159	16.087	16.086	0.001	94	86044	50.0	41.6	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
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	
S 131 Xylenes, Total	106				0		100.0	105.6	
S 130 1,2-Dichloroethene, Total	96				0		100.0	103.5	
S 132 1,3-Dichloropropene, Total	1				0		100.0	71.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00113	Amount Added: 2.00	Units: uL	
voaW ee2nd_00001	Amount Added: 2.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
voaW2-cle pri_00006	Amount Added: 2.00	Units: uL	
voaW 135tcb a_00001	Amount Added: 2.00	Units: uL	
VOAACRO2ND_00007	Amount Added: 6.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424010.D

Injection Date: 24-Apr-2015 14:58:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: LCS

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

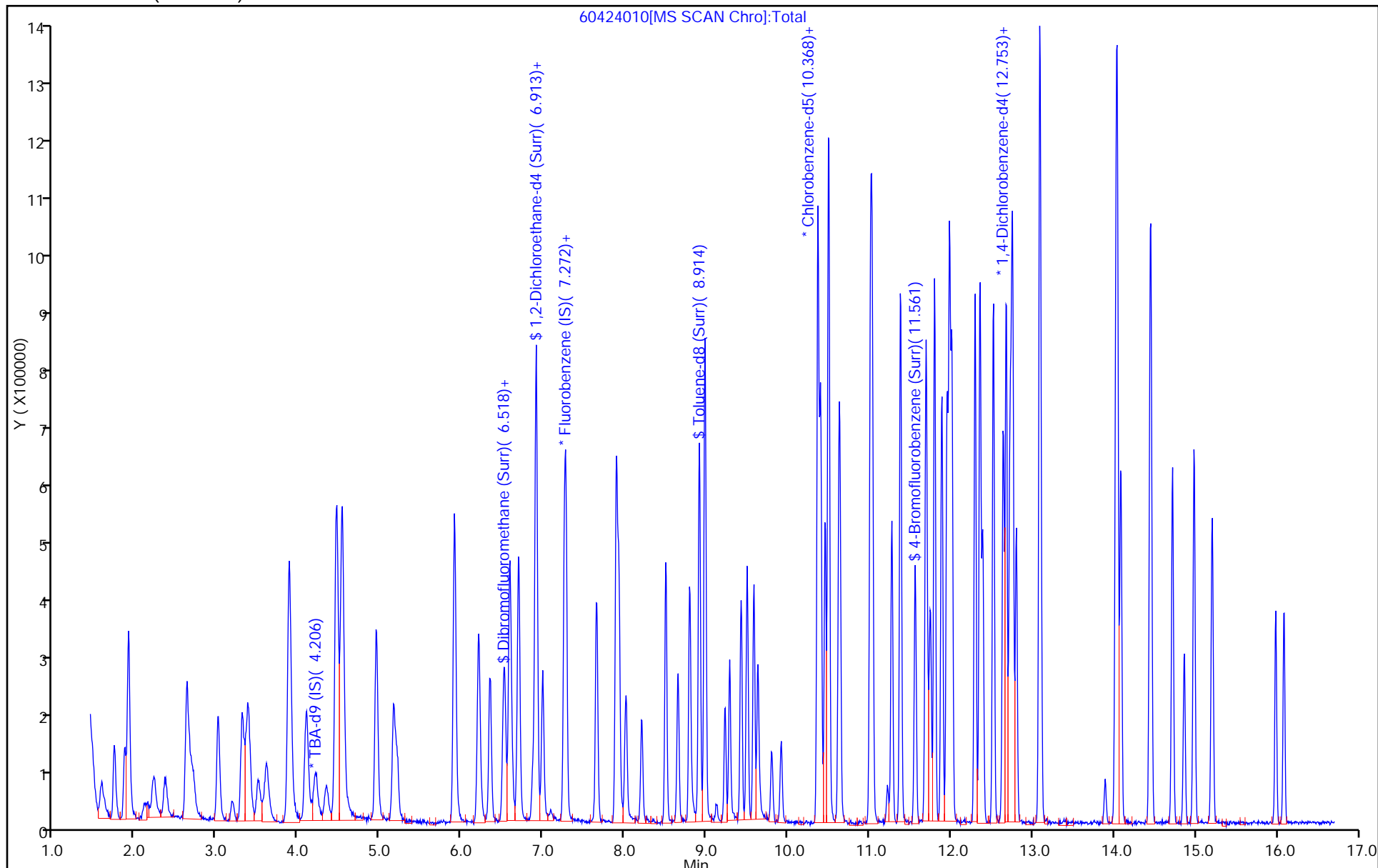
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



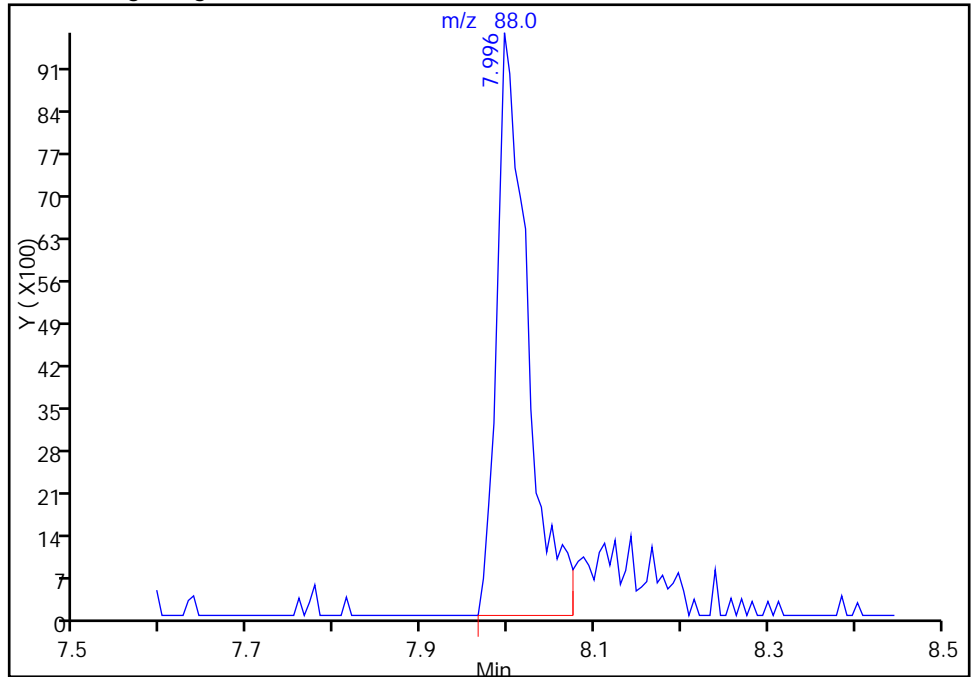
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424010.D
Injection Date: 24-Apr-2015 14:58:30 Instrument ID: CHHP6
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 9 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

65 1,4-Dioxane, CAS: 123-91-1

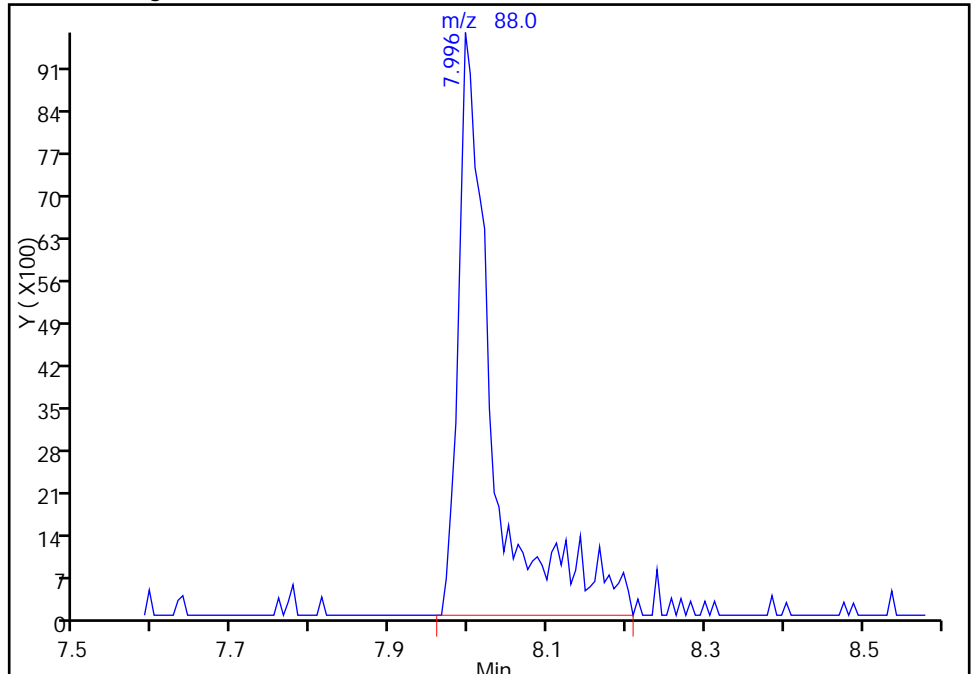
RT: 8.00
Area: 23798
Amount: 646.3573
Amount Units: ng

Processing Integration Results



RT: 8.00
Area: 29652
Amount: 805.3528
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 24-Apr-2015 15:17:27
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-139651/10
 Matrix: Water Lab File ID: 60425010.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 15:11
 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.: 139651 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.3		1.0	0.28
75-01-4	Vinyl chloride	9.88		1.0	0.23
74-83-9	Bromomethane	16.4		1.0	0.31
75-00-3	Chloroethane	13.3		1.0	0.21
75-35-4	1,1-Dichloroethene	9.98		1.0	0.30
67-64-1	Acetone	25.9		5.0	2.5
75-15-0	Carbon disulfide	8.28		1.0	0.21
75-09-2	Methylene Chloride	10.0		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.72		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.2		1.0	0.18
75-34-3	1,1-Dichloroethane	9.91		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10.4		1.0	0.24
74-97-5	Bromochloromethane	10.1		1.0	0.18
78-93-3	2-Butanone (MEK)	25.9		5.0	0.55
67-66-3	Chloroform	10.8		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.99		1.0	0.29
56-23-5	Carbon tetrachloride	8.38		1.0	0.14
71-43-2	Benzene	10.5		1.0	0.11
107-06-2	1,2-Dichloroethane	11.2		1.0	0.21
79-01-6	Trichloroethene	10.4		1.0	0.14
78-87-5	1,2-Dichloropropane	9.77		1.0	0.095
75-27-4	Bromodichloromethane	9.30		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	7.36		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	17.9		5.0	0.53
108-88-3	Toluene	11.4		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	7.03		1.0	0.15
79-00-5	1,1,2-Trichloroethane	11.0		1.0	0.20
127-18-4	Tetrachloroethene	10.8		1.0	0.15
591-78-6	2-Hexanone	27.5		5.0	0.16
124-48-1	Dibromochloromethane	9.24		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.89		1.0	0.18
108-90-7	Chlorobenzene	11.8		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	7.91		1.0	0.28
100-41-4	Ethylbenzene	10.6		1.0	0.23
1330-20-7	Xylenes, Total	21.8		3.0	0.49
100-42-5	Styrene	11.3		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-139651/10
 Matrix: Water Lab File ID: 60425010.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/25/2015 15:11
 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.: 139651 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	10.2		1.0	0.20
107-13-1	Acrylonitrile	103		20	0.55
123-91-1	1,4-Dioxane	188	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	100		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425010.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 25-Apr-2015 15:11:30 ALS Bottle#: 10 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 180-0006632-010
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 27-Apr-2015 08:21:04 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK016

First Level Reviewer: fergusond

Date: 27-Apr-2015 08:21:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.207	4.205	0.002	84	165477	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.255	7.259	-0.004	98	545613	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.370	10.367	0.003	90	118359	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.724	12.722	0.002	95	194106	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.531	6.529	0.002	93	112703	50.0	50.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.902	6.906	-0.004	70	171846	50.0	53.2	
\$ 7 Toluene-d8 (Surr)	98	8.910	8.914	-0.004	93	511263	50.0	51.8	
\$ 8 4-Bromofluorobenzene (Surr	95	11.562	11.560	0.002	83	185309	50.0	49.6	
11 Dichlorodifluoromethane	85	1.573	1.577	-0.004	99	157882	50.0	58.8	
12 Chloromethane	50	1.737	1.741	-0.004	100	215612	50.0	51.6	
13 Vinyl chloride	62	1.859	1.869	-0.010	97	193809	50.0	49.4	
14 Butadiene	39	1.907	1.918	-0.011	95	223892	50.0	56.1	
15 Bromomethane	94	2.199	2.210	-0.011	91	91084	50.0	82.1	
16 Chloroethane	64	2.352	2.356	-0.004	98	111121	50.0	66.4	
17 Dichlorofluoromethane	67	2.619	2.629	-0.010	97	261545	50.0	64.0	
18 Trichlorofluoromethane	101	2.650	2.654	-0.004	90	201883	50.0	55.7	
20 Ethyl ether	59	3.015	3.013	0.002	96	179789	50.0	50.7	
21 Acrolein	56	3.185	3.183	0.002	96	57274	150.0	135.5	
22 1,1-Dichloroethene	96	3.313	3.305	0.008	98	140942	50.0	49.9	
23 1,1,2-Trichloro-1,2,2-trif	101	3.367	3.372	-0.005	96	139515	50.0	50.5	
24 Acetone	43	3.386	3.396	-0.010	95	118705	100.0	129.4	
25 Iodomethane	142	3.507	3.505	0.002	99	206190	50.0	52.7	
26 Carbon disulfide	76	3.599	3.603	-0.004	100	332904	50.0	41.4	
29 3-Chloro-1-propene	76	3.866	3.876	-0.010	89	71561	50.0	37.3	
30 Methyl acetate	43	3.891	3.889	0.002	98	762208	250.0	249.6	
31 Methylene Chloride	84	4.085	4.095	-0.010	97	187336	50.0	50.2	
32 2-Methyl-2-propanol	59	4.335	4.345	-0.010	87	103986	500.0	552.8	
33 Acrylonitrile	53	4.456	4.460	-0.004	98	845122	500.0	515.6	
34 trans-1,2-Dichloroethene	96	4.529	4.527	0.002	96	158194	50.0	48.6	
35 Methyl tert-butyl ether	73	4.536	4.533	0.003	98	482992	50.0	51.0	
36 Hexane	57	4.943	4.953	-0.010	92	253093	50.0	49.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.162	5.166	-0.004	96	306449	50.0	49.5	
38 Vinyl acetate	43	5.205	5.203	0.002	98	276994	50.0	43.0	
42 2,2-Dichloropropane	77	5.910	5.908	0.002	50	79605	50.0	27.0	
44 2-Butanone (MEK)	43	5.910	5.908	0.002	81	210317	100.0	129.7	
43 cis-1,2-Dichloroethene	96	5.910	5.914	-0.004	83	180884	50.0	52.1	
48 Chlorobromomethane	128	6.202	6.206	-0.004	94	76945	50.0	50.3	
49 Tetrahydrofuran	42	6.215	6.212	0.003	89	134424	100.0	93.9	
50 Chloroform	83	6.342	6.346	-0.004	96	265378	50.0	53.9	
51 1,1,1-Trichloroethane	97	6.507	6.511	-0.004	96	152897	50.0	45.0	
52 Cyclohexane	56	6.586	6.590	-0.004	94	314607	50.0	47.1	
53 Carbon tetrachloride	117	6.683	6.687	-0.004	88	90861	50.0	41.9	
54 1,1-Dichloropropene	75	6.701	6.699	0.002	96	215732	50.0	53.1	
55 Isobutyl alcohol	41	6.872	6.876	-0.004	89	88207	1250.0	794.2	
56 Benzene	78	6.914	6.912	0.002	97	690573	50.0	52.4	
57 1,2-Dichloroethane	62	6.993	6.991	0.002	96	235973	50.0	56.2	
59 n-Heptane	43	7.279	7.277	0.002	93	186624	50.0	47.6	
61 Trichloroethene	130	7.650	7.654	-0.004	97	155189	50.0	52.1	
63 Methylcyclohexane	83	7.900	7.898	0.002	93	275033	50.0	49.3	
64 1,2-Dichloropropane	63	7.924	7.928	-0.004	87	182396	50.0	48.8	
65 1,4-Dioxane	88	8.009	8.007	0.002	45	39912	1000.0	938.3	
67 Dibromomethane	93	8.015	8.013	0.002	93	94989	50.0	53.5	
68 Dichlorobromomethane	83	8.204	8.208	-0.004	97	144282	50.0	46.5	
71 cis-1,3-Dichloropropene	75	8.654	8.652	0.002	91	160790	50.0	36.8	
72 4-Methyl-2-pentanone (MIBK)	43	8.794	8.798	-0.004	97	348902	100.0	89.4	
73 Toluene	91	8.983	8.980	0.003	98	698527	50.0	57.1	
74 trans-1,3-Dichloropropene	75	9.232	9.230	0.002	98	113927	50.0	35.2	
75 Ethyl methacrylate	69	9.287	9.285	0.002	90	183223	50.0	45.9	
76 1,1,2-Trichloroethane	97	9.427	9.425	0.002	92	145684	50.0	55.2	
77 Tetrachloroethene	164	9.500	9.504	-0.004	94	109157	50.0	53.8	
78 1,3-Dichloropropane	76	9.585	9.583	0.002	93	271320	50.0	54.8	
79 2-Hexanone	43	9.627	9.631	-0.004	97	306583	100.0	137.6	
81 Chlorodibromomethane	129	9.804	9.808	-0.004	89	75749	50.0	46.2	
82 Ethylene Dibromide	107	9.913	9.917	-0.004	96	125562	50.0	49.4	
83 3-Chlorobenzotrifluoride	180	10.363	10.367	-0.004	94	196177	50.0	50.2	
84 Chlorobenzene	112	10.400	10.404	-0.004	95	454094	50.0	58.8	
85 4-Chlorobenzotrifluoride	180	10.455	10.459	-0.004	96	184892	50.0	49.7	
86 1,1,1,2-Tetrachloroethane	131	10.497	10.495	0.002	74	78608	50.0	39.5	
87 Ethylbenzene	106	10.503	10.501	0.002	98	246879	50.0	53.2	
88 m-Xylene & p-Xylene	106	10.637	10.635	0.002	99	303664	50.0	53.6	
89 o-Xylene	106	11.014	11.012	0.002	97	312189	50.0	55.6	
90 Styrene	104	11.033	11.031	0.002	95	504181	50.0	56.3	
91 Bromoform	173	11.221	11.225	-0.004	94	32268	50.0	37.5	
92 2-Chlorobenzotrifluoride	180	11.276	11.274	0.002	96	201105	50.0	49.9	
93 Isopropylbenzene	105	11.379	11.383	-0.004	97	718567	50.0	55.1	
96 1,1,2,2-Tetrachloroethane	83	11.690	11.688	0.002	96	188932	50.0	50.9	
95 Bromobenzene	156	11.696	11.700	-0.004	97	167800	50.0	52.5	
97 trans-1,4-Dichloro-2-buten	53	11.726	11.730	-0.004	59	42594	50.0	35.7	
98 1,2,3-Trichloropropane	110	11.751	11.748	0.002	85	62641	50.0	51.7	
99 N-Propylbenzene	120	11.799	11.797	0.002	99	198850	50.0	49.6	
100 2-Chlorotoluene	126	11.890	11.888	0.002	95	175487	50.0	51.6	
101 3-Chlorotoluene	126	11.951	11.955	-0.004	96	173316	50.0	47.2	
102 1,3,5-Trimethylbenzene	105	11.982	11.986	-0.004	96	601448	50.0	52.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 4-Chlorotoluene	126	12.012	12.010	0.002	99	185311	50.0	51.1	
104 tert-Butylbenzene	119	12.298	12.296	0.002	94	501058	50.0	53.3	
106 1,2,4-Trimethylbenzene	105	12.353	12.357	-0.004	97	633989	50.0	52.9	
107 1,2-dichloro-4-(trifluorom	214	12.395	12.393	0.002	97	134639	50.0	44.3	
108 sec-Butylbenzene	105	12.517	12.521	-0.004	95	731645	50.0	52.6	
109 1,3-Dichlorobenzene	146	12.645	12.643	0.002	96	335274	50.0	52.6	
110 4-Isopropyltoluene	119	12.681	12.679	0.002	96	601648	50.0	52.4	
111 1,4-Dichlorobenzene	146	12.748	12.746	0.002	90	346374	50.0	52.3	
113 2,4-Dichloro-1-(trifluorom	214	12.760	12.764	-0.004	91	141035	50.0	45.1	
114 2,5-Dichlorobenzotrifluori	214	12.803	12.801	0.002	97	149043	50.0	45.0	
116 n-Butylbenzene	91	13.089	13.087	0.002	98	567682	50.0	53.0	
117 1,2-Dichlorobenzene	146	13.101	13.099	0.002	94	333749	50.0	52.2	
118 1,2-Dibromo-3-Chloropropan	75	13.898	13.896	0.002	68	17715	50.0	34.2	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.038	14.036	0.002	99	775038	150.0	145.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.452	14.449	0.003	98	574391	100.0	98.3	
122 1,2,4-Trichlorobenzene	180	14.719	14.717	0.002	94	229626	50.0	49.3	
123 Hexachlorobutadiene	225	14.865	14.863	0.002	96	63733	50.0	46.6	
124 Naphthalene	128	14.981	14.979	0.002	98	639680	50.0	53.5	
125 1,2,3-Trichlorobenzene	180	15.206	15.204	0.002	96	213957	50.0	48.9	
126 2,4,5-Trichlorotoluene	159	15.985	15.983	0.002	0	97073	50.0	37.9	
127 2,3,6-Trichlorotoluene	159	16.088	16.086	0.002	95	92254	50.0	39.0	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
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	
S 131 Xylenes, Total	106				0		100.0	109.2	
S 130 1,2-Dichloroethene, Total	96				0		100.0	100.7	
S 132 1,3-Dichloropropene, Total	1				0		100.0	72.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

VOA8260VOA2ND_00113	Amount Added: 2.00	Units: uL	
voaW ee2nd_00001	Amount Added: 2.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
VOAACRO2ND_00007	Amount Added: 6.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150425-6632.b\60425010.D

Injection Date: 25-Apr-2015 15:11:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: LCS

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

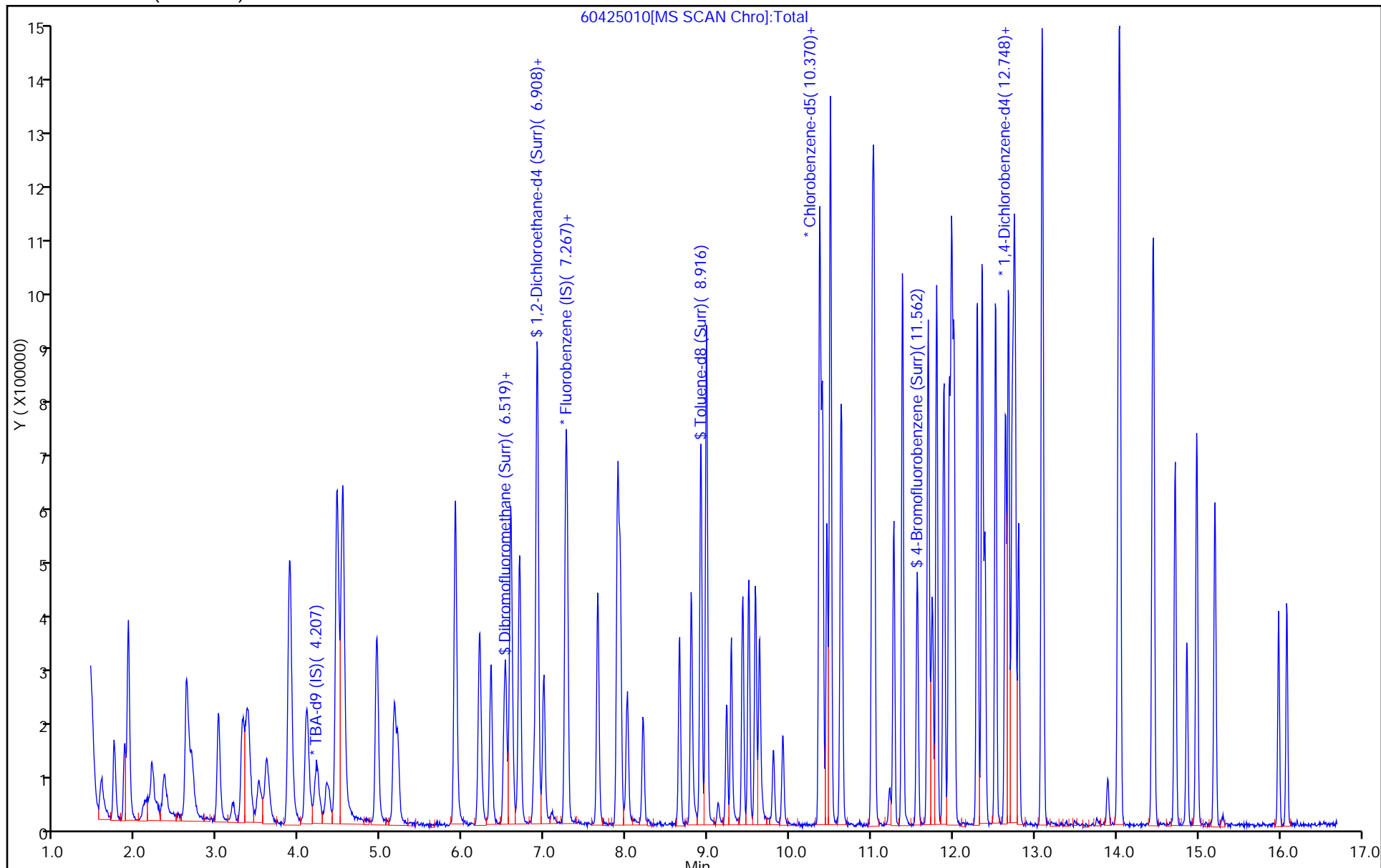
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-139884/7
 Matrix: Water Lab File ID: 50428007.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/28/2015 14:31
 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.: 139884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.80		1.0	0.28
75-01-4	Vinyl chloride	9.25		1.0	0.23
74-83-9	Bromomethane	8.81		1.0	0.31
75-00-3	Chloroethane	8.69		1.0	0.21
75-35-4	1,1-Dichloroethene	8.25		1.0	0.30
67-64-1	Acetone	17.8		5.0	2.5
75-15-0	Carbon disulfide	8.22		1.0	0.21
75-09-2	Methylene Chloride	8.39		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.38		1.0	0.17
1634-04-4	Methyl tert-butyl ether	8.26		1.0	0.18
75-34-3	1,1-Dichloroethane	8.90		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	8.83		1.0	0.24
74-97-5	Bromochloromethane	8.89		1.0	0.18
78-93-3	2-Butanone (MEK)	18.1		5.0	0.55
67-66-3	Chloroform	9.14		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.31		1.0	0.29
56-23-5	Carbon tetrachloride	9.76		1.0	0.14
71-43-2	Benzene	9.70		1.0	0.11
107-06-2	1,2-Dichloroethane	9.22		1.0	0.21
79-01-6	Trichloroethene	8.95		1.0	0.14
78-87-5	1,2-Dichloropropane	9.15		1.0	0.095
75-27-4	Bromodichloromethane	9.06		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	8.81		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	18.5		5.0	0.53
108-88-3	Toluene	10.3		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.29		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.73		1.0	0.20
127-18-4	Tetrachloroethene	10.2		1.0	0.15
591-78-6	2-Hexanone	17.3		5.0	0.16
124-48-1	Dibromochloromethane	10.3		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.58		1.0	0.18
108-90-7	Chlorobenzene	10.2		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.64		1.0	0.28
100-41-4	Ethylbenzene	9.77		1.0	0.23
1330-20-7	Xylenes, Total	20.3		3.0	0.49
100-42-5	Styrene	10.2		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-139884/7
 Matrix: Water Lab File ID: 50428007.D
 Analysis Method: 8260C Date Collected: _____
 Sample wt/vol: 5(mL) Date Analyzed: 04/28/2015 14:31
 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.: 139884 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.81		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.4		1.0	0.20
107-13-1	Acrylonitrile	88.5		20	0.55
123-91-1	1,4-Dioxane	208		200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		64-135
2037-26-5	Toluene-d8 (Surr)	104		71-118
460-00-4	4-Bromofluorobenzene (Surr)	101		70-118
1868-53-7	Dibromofluoromethane (Surr)	96		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428007.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-Apr-2015 14:31:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: LCS
 Misc. Info.: 180-0006670-007
 Operator ID: 001562 Instrument ID: CHHP5
 Method: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\MMSVOA_LL_CHHP5.m
 Limit Group: VOA 8260C ICAL
 Last Update: 29-Apr-2015 10:32:02 Calib Date: 24-Apr-2015 19:35:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP5\20150424-6617.b\50424015.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK021

First Level Reviewer: fergusond

Date: 28-Apr-2015 14:59:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.308	4.305	0.003	0	150722	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.271	7.274	-0.003	97	488449	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.368	10.365	0.003	88	106168	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.679	12.682	-0.003	93	167430	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.532	-0.003	83	106696	50.0	48.1	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.900	6.897	0.003	0	133423	50.0	45.5	
\$ 7 Toluene-d8 (Surr)	98	8.926	8.923	0.003	93	438888	50.0	52.1	
\$ 8 4-Bromofluorobenzene (Surr	95	11.530	11.533	-0.003	88	148790	50.0	50.6	
11 Dichlorodifluoromethane	85	1.620	1.617	0.003	98	139395	50.0	42.5	
12 Chloromethane	50	1.778	1.775	0.003	100	172721	50.0	44.0	
13 Vinyl chloride	62	1.906	1.903	0.003	83	169442	50.0	46.3	
14 Butadiene	39	1.948	1.945	0.003	99	193933	50.0	46.0	
15 Bromomethane	94	2.252	2.249	0.003	92	96746	50.0	44.1	
16 Chloroethane	64	2.404	2.395	0.009	99	120405	50.0	43.4	
17 Dichlorofluoromethane	67	2.660	2.651	0.009	98	267357	50.0	45.2	
18 Trichlorofluoromethane	101	2.721	2.706	0.015	94	216001	50.0	45.3	
20 Ethyl ether	59	3.092	3.089	0.003	94	123931	50.0	38.4	
21 Acrolein	56	3.262	3.247	0.015	99	35296	150.0	124.6	
22 1,1-Dichloroethene	96	3.384	3.369	0.015	88	117997	50.0	41.2	
23 1,1,2-Trichloro-1,2,2-trif	101	3.426	3.417	0.009	93	135321	50.0	44.4	
24 Acetone	43	3.493	3.490	0.003	99	104388	100.0	89.1	
25 Iodomethane	142	3.609	3.563	0.046	97	177310	50.0	42.2	
26 Carbon disulfide	76	3.676	3.648	0.028	100	231678	50.0	41.1	
28 3-Chloro-1-propene	76	3.943	3.940	0.003	87	62865	50.0	41.1	
30 Methyl acetate	43	4.023	4.013	0.010	98	586530	250.0	207.0	
31 Methylene Chloride	84	4.132	4.135	-0.003	93	138115	50.0	41.9	
32 2-Methyl-2-propanol	59	4.442	4.427	0.015	95	81903	500.0	506.6	
33 Acrylonitrile	53	4.552	4.549	0.003	100	602866	500.0	442.4	
34 trans-1,2-Dichloroethene	96	4.564	4.561	0.003	96	135858	50.0	46.9	
35 Methyl tert-butyl ether	73	4.588	4.591	-0.003	95	286556	50.0	41.3	
36 Hexane	57	4.978	4.981	-0.003	95	199250	50.0	43.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.172	5.169	0.003	96	244900	50.0	44.5	
38 Vinyl acetate	43	5.294	5.291	0.003	98	179797	50.0	42.0	
44 2,2-Dichloropropane	77	5.927	5.924	0.003	58	82512	50.0	47.6	
45 cis-1,2-Dichloroethene	96	5.933	5.936	-0.003	83	133506	50.0	44.2	
46 2-Butanone (MEK)	43	5.988	5.991	-0.003	99	141225	100.0	90.6	
49 Chlorobromomethane	128	6.219	6.228	-0.009	93	59789	50.0	44.5	
51 Tetrahydrofuran	42	6.286	6.289	-0.003	89	85441	100.0	82.4	
52 Chloroform	83	6.340	6.337	0.003	95	217112	50.0	45.7	
53 1,1,1-Trichloroethane	97	6.523	6.532	-0.009	94	152314	50.0	46.6	
54 Cyclohexane	56	6.590	6.587	0.003	93	239528	50.0	44.9	
56 Carbon tetrachloride	117	6.724	6.708	0.016	73	131648	50.0	48.8	
55 1,1-Dichloropropene	75	6.730	6.721	0.009	90	172838	50.0	46.2	
57 Isobutyl alcohol	41	6.937	6.940	-0.003	89	96942	1250.0	1247.6	
58 Benzene	78	6.955	6.952	0.003	98	569522	50.0	48.5	
59 1,2-Dichloroethane	62	6.985	6.982	0.003	97	174073	50.0	46.1	
62 n-Heptane	43	7.277	7.280	-0.003	94	172034	50.0	46.9	
64 Trichloroethene	130	7.667	7.670	-0.003	97	125373	50.0	44.8	
66 Methylcyclohexane	83	7.861	7.864	-0.003	95	212465	50.0	46.7	
67 1,2-Dichloropropane	63	7.898	7.901	-0.003	94	138627	50.0	45.7	
68 Dibromomethane	93	8.025	8.022	0.003	95	68367	50.0	43.9	
70 1,4-Dioxane	88	8.056	8.053	0.003	96	23429	1000.0	1039.4	M
71 Dichlorobromomethane	83	8.196	8.193	0.003	98	136427	50.0	45.3	
73 2-Chloroethyl vinyl ether	63	8.518	8.521	-0.003	93	140107	100.0	86.8	
74 cis-1,3-Dichloropropene	75	8.658	8.655	0.003	92	147271	50.0	44.1	
75 4-Methyl-2-pentanone (MIBK)	43	8.822	8.826	-0.004	98	251570	100.0	92.6	
76 Toluene	91	8.993	8.990	0.003	99	569116	50.0	51.6	
77 trans-1,3-Dichloropropene	75	9.218	9.215	0.003	98	115653	50.0	46.4	
78 Ethyl methacrylate	69	9.321	9.318	0.003	90	116060	50.0	42.8	
79 1,1,2-Trichloroethane	97	9.400	9.397	0.003	93	106537	50.0	48.7	
80 Tetrachloroethene	164	9.540	9.531	0.009	95	103422	50.0	51.2	
81 1,3-Dichloropropane	76	9.565	9.562	0.003	96	194533	50.0	50.0	
82 2-Hexanone	43	9.656	9.653	0.003	98	170861	100.0	86.4	
84 Chlorodibromomethane	129	9.796	9.787	0.009	89	85706	50.0	51.4	
85 Ethylene Dibromide	107	9.899	9.902	-0.003	99	98278	50.0	47.9	
86 3-Chlorobenzotrifluoride	180	10.368	10.371	-0.003	94	186558	50.0	53.1	
87 Chlorobenzene	112	10.392	10.389	0.003	93	350222	50.0	51.1	
88 4-Chlorobenzotrifluoride	180	10.428	10.425	0.003	94	182584	50.0	54.1	
89 1,1,1,2-Tetrachloroethane	131	10.471	10.474	-0.003	92	99135	50.0	48.2	
90 Ethylbenzene	106	10.501	10.498	0.003	99	184145	50.0	48.8	
91 m-Xylene & p-Xylene	106	10.617	10.614	0.003	0	231158	50.0	51.2	
92 o-Xylene	106	11.012	11.009	0.003	96	219773	50.0	50.6	
93 Styrene	104	11.025	11.022	0.003	92	361108	50.0	51.2	
94 Bromoform	173	11.213	11.204	0.009	95	47359	50.0	49.1	
96 2-Chlorobenzotrifluoride	180	11.274	11.271	0.003	96	180228	50.0	53.3	
97 Isopropylbenzene	105	11.377	11.381	-0.004	97	547188	50.0	52.9	
99 1,1,2,2-Tetrachloroethane	83	11.669	11.673	-0.004	93	151998	50.0	52.1	
100 Bromobenzene	156	11.682	11.685	-0.003	96	131351	50.0	43.2	
101 1,2,3-Trichloropropane	110	11.718	11.715	0.003	87	45594	50.0	41.9	
102 trans-1,4-Dichloro-2-buten	53	11.730	11.733	-0.003	67	36577	50.0	42.3	
103 N-Propylbenzene	120	11.785	11.788	-0.003	99	158045	50.0	44.8	
104 2-Chlorotoluene	126	11.876	11.873	0.003	96	137843	50.0	46.0	
105 3-Chlorotoluene	126	11.937	11.934	0.003	95	149278	50.0	45.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
106 1,3,5-Trimethylbenzene	105	11.961	11.965	-0.004	94	472186	50.0	48.6	
107 4-Chlorotoluene	126	11.980	11.983	-0.003	98	165000	50.0	48.7	
108 tert-Butylbenzene	119	12.290	12.287	0.003	93	362675	50.0	45.0	
110 1,2,4-Trimethylbenzene	105	12.333	12.336	-0.003	98	463405	50.0	48.1	
111 1,2-dichloro-4-(trifluorom	214	12.400	12.403	-0.003	97	135410	50.0	50.6	
112 sec-Butylbenzene	105	12.509	12.506	0.003	95	547370	50.0	47.9	
113 1,3-Dichlorobenzene	146	12.619	12.622	-0.004	98	246589	50.0	45.9	
114 4-Isopropyltoluene	119	12.655	12.652	0.003	97	448596	50.0	48.7	
115 1,4-Dichlorobenzene	146	12.704	12.707	-0.003	95	255419	50.0	47.0	
116 2,4-Dichloro-1-(trifluorom	214	12.758	12.762	-0.004	98	123942	50.0	49.6	
118 2,5-Dichlorobenzotrifluori	214	12.807	12.810	-0.003	0	134984	50.0	50.6	
120 n-Butylbenzene	91	13.063	13.066	-0.003	98	384961	50.0	48.4	
121 1,2-Dichlorobenzene	146	13.081	13.078	0.003	97	232403	50.0	48.3	
122 1,2-Dibromo-3-Chloropropan	75	13.860	13.857	0.003	76	17785	50.0	44.0	
123 2,4- & 2,5- & 2,6- Dichlor	125	14.012	14.009	0.003	0	442970	150.0	155.2	
125 2,3- & 3,4- Dichlorotoluen	125	14.425	14.422	0.003	0	277249	100.0	107.5	
126 1,2,4-Trichlorobenzene	180	14.693	14.690	0.003	95	90036	50.0	48.1	
127 Hexachlorobutadiene	225	14.863	14.860	0.003	96	46623	50.0	51.4	
128 Naphthalene	128	14.942	14.939	0.003	98	220494	50.0	44.9	
129 1,2,3-Trichlorobenzene	180	15.186	15.183	0.003	94	71169	50.0	48.2	
131 2,4,5-Trichlorotoluene	159	15.958	15.968	-0.010	0	26221	50.0	42.6	
130 2,3,6-Trichlorotoluene	159	16.062	16.065	-0.003	94	26636	50.0	54.6	
149 3,4-Dichlorotoluene	1		0.000				ND	ND	
148 2,3-Dichlorotoluene	1		0.000				ND	ND	
147 2,4-Dichlorotoluene	1		0.000				ND	ND	
146 2,5-Dichlorotoluene	1		0.000				ND	ND	
150 2,6-Dichlorotoluene	1		0.000				ND	ND	
S 133 Xylenes, Total	106				0		100.0	101.8	
S 134 1,2-Dichloroethene, Total	96				0		100.0	91.1	
S 135 1,3-Dichloropropene, Total	1				0		100.0	90.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00113	Amount Added: 2.00	Units: uL	
VOACEVE(PRI)_00001	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	
VOAACRO2ND_00007	Amount Added: 6.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428007.D

Injection Date: 28-Apr-2015 14:31:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: LCS

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

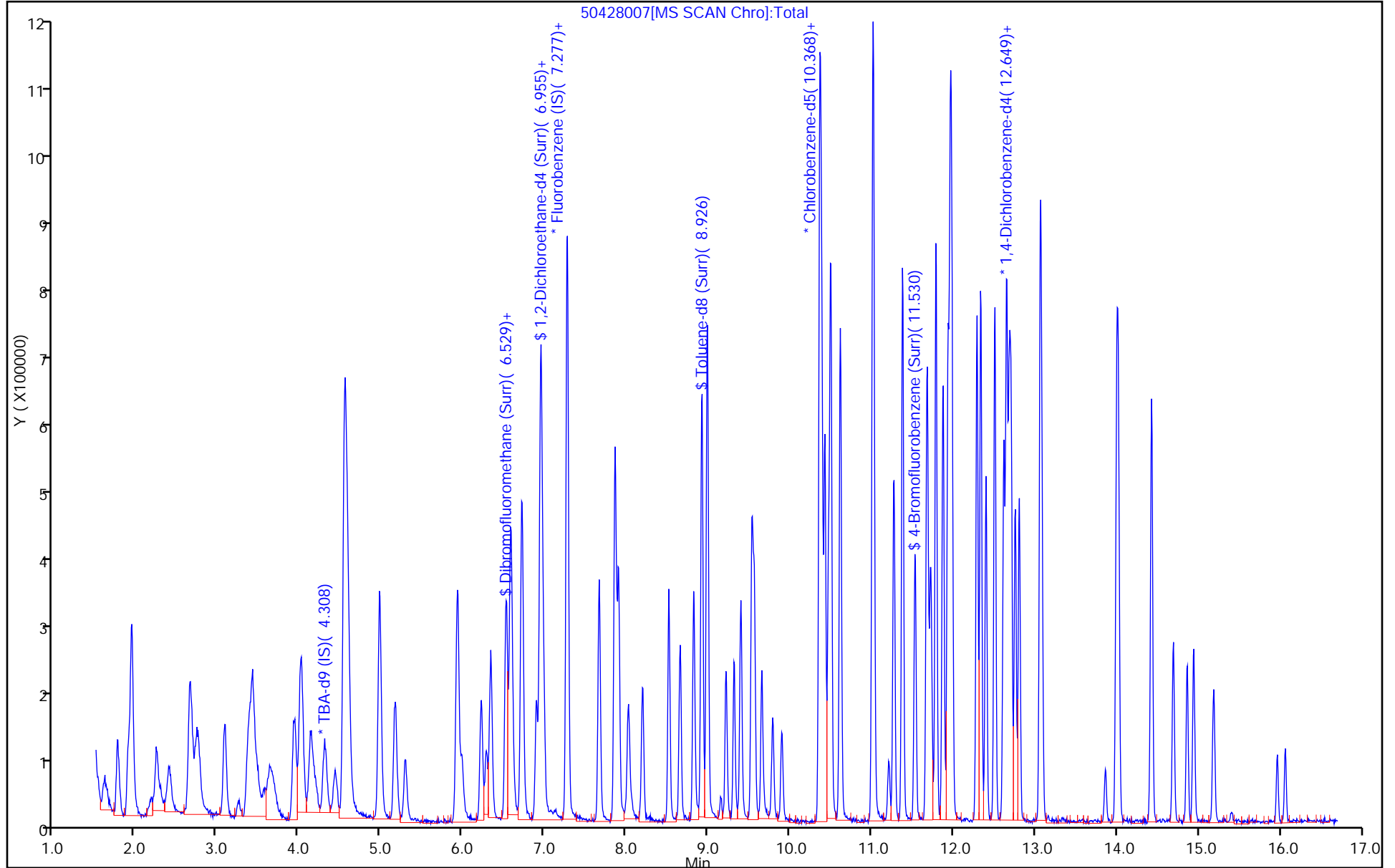
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA_LL_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



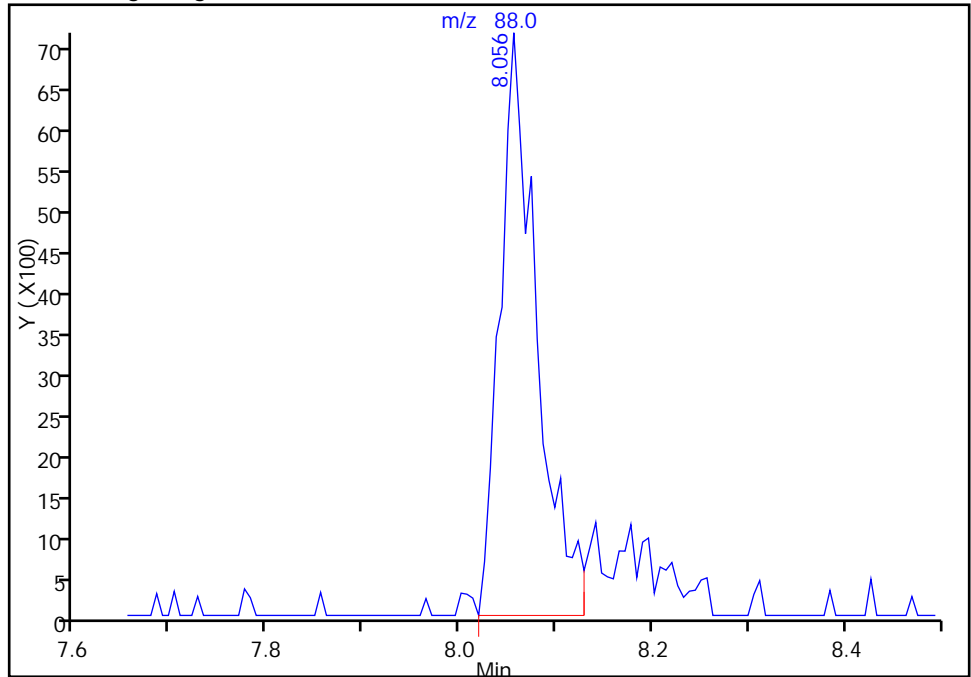
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP5\20150428-6670.b\50428007.D
Injection Date: 28-Apr-2015 14:31:30 Instrument ID: CHHP5
Lims ID: LCS
Client ID:
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP5 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector: MS SCAN

70 1,4-Dioxane, CAS: 123-91-1

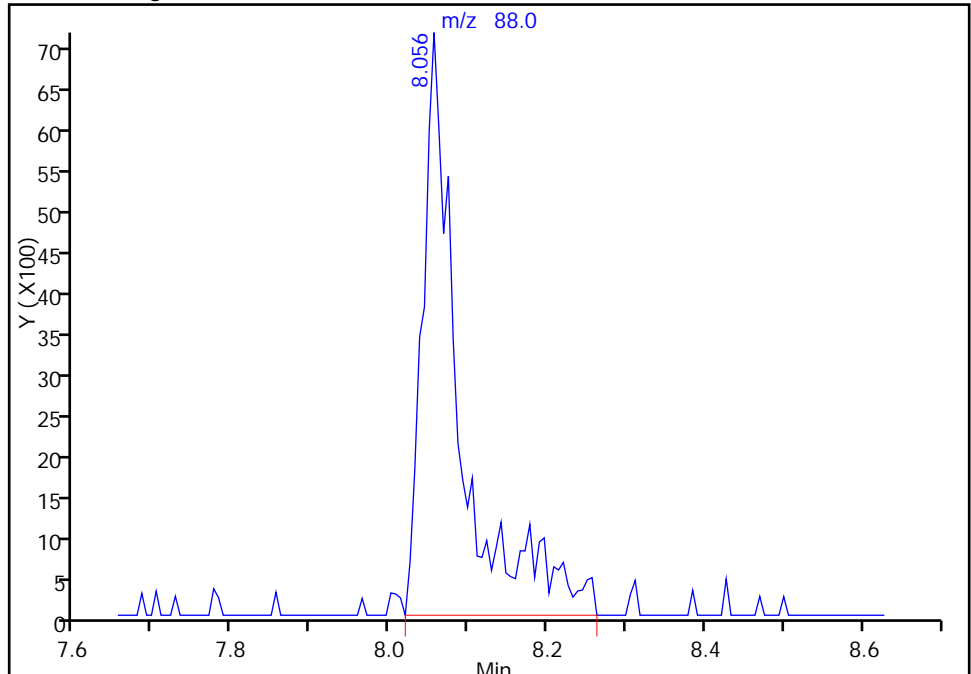
RT: 8.06
Area: 18855
Amount: 836.5172
Amount Units: ng

Processing Integration Results



RT: 8.06
Area: 23429
Amount: 1039.4464
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 28-Apr-2015 14:59:41
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-145A-0/1-0 MS Lab Sample ID: 180-43257-4 MS
 Matrix: Water Lab File ID: 60424011.D
 Analysis Method: 8260C Date Collected: 04/20/2015 11:42
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 15:22
 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.: 139551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.93		1.0	0.28
75-01-4	Vinyl chloride	10.2		1.0	0.23
74-83-9	Bromomethane	14.5		1.0	0.31
75-00-3	Chloroethane	12.2		1.0	0.21
75-35-4	1,1-Dichloroethene	10.0		1.0	0.30
67-64-1	Acetone	29.3		5.0	2.5
75-15-0	Carbon disulfide	7.60		1.0	0.21
75-09-2	Methylene Chloride	9.49		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.94		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.47		1.0	0.18
75-34-3	1,1-Dichloroethane	9.57		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	19.4		1.0	0.24
74-97-5	Bromochloromethane	9.58		1.0	0.18
78-93-3	2-Butanone (MEK)	24.3		5.0	0.55
67-66-3	Chloroform	10.2		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.09		1.0	0.29
56-23-5	Carbon tetrachloride	7.80		1.0	0.14
71-43-2	Benzene	10.2		1.0	0.11
107-06-2	1,2-Dichloroethane	10.8		1.0	0.21
79-01-6	Trichloroethene	20.8		1.0	0.14
78-87-5	1,2-Dichloropropane	9.39		1.0	0.095
75-27-4	Bromodichloromethane	8.90		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	7.24		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	18.4		5.0	0.53
108-88-3	Toluene	11.0		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	6.83		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.5		1.0	0.20
127-18-4	Tetrachloroethene	17.7		1.0	0.15
591-78-6	2-Hexanone	22.5		5.0	0.16
124-48-1	Dibromochloromethane	8.76		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.29		1.0	0.18
108-90-7	Chlorobenzene	11.0		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	7.44		1.0	0.28
100-41-4	Ethylbenzene	10.4		1.0	0.23
1330-20-7	Xylenes, Total	20.2		3.0	0.49
100-42-5	Styrene	10.3		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-145A-0/1-0 MS Lab Sample ID: 180-43257-4 MS
 Matrix: Water Lab File ID: 60424011.D
 Analysis Method: 8260C Date Collected: 04/20/2015 11:42
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 15:22
 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.: 139551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	7.42		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	9.92		1.0	0.20
107-13-1	Acrylonitrile	100		20	0.55
123-91-1	1,4-Dioxane	158	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		64-135
2037-26-5	Toluene-d8 (Surr)	101		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	96		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424011.D
 Lims ID: 180-43257-E-4 MS
 Client ID: HD-MW-145A-0/1-0
 Sample Type: MS
 Inject. Date: 24-Apr-2015 15:22:30 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43257-E-4 MS
 Misc. Info.: 180-0006620-011
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MMSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 24-Apr-2015 15:50:37 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK032

First Level Reviewer: fergusond

Date: 24-Apr-2015 16:06:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.217	4.205	0.012	89	172800	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.258	7.259	-0.001	98	490004	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.374	-0.001	91	109203	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.721	12.722	-0.001	96	178113	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.534	6.523	0.011	92	97287	50.0	48.2	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.905	6.906	-0.001	69	149542	50.0	51.6	
\$ 7 Toluene-d8 (Surr)	98	8.913	8.914	-0.001	94	458755	50.0	50.4	
\$ 8 4-Bromofluorobenzene (Surr	95	11.559	11.560	-0.001	84	169931	50.0	49.3	
11 Dichlorodifluoromethane	85	1.589	1.577	0.011	99	140739	50.0	58.4	
12 Chloromethane	50	1.747	1.735	0.012	99	186246	50.0	49.7	
13 Vinyl chloride	62	1.868	1.863	0.005	98	179416	50.0	50.9	
14 Butadiene	39	1.917	1.906	0.011	96	204000	50.0	56.9	
15 Bromomethane	94	2.215	2.192	0.023	94	72459	50.0	72.7	
16 Chloroethane	64	2.361	2.344	0.017	97	91897	50.0	61.1	
17 Dichlorofluoromethane	67	2.635	2.611	0.024	99	233677	50.0	63.7	
18 Trichlorofluoromethane	101	2.653	2.636	0.017	94	186831	50.0	57.4	
20 Ethyl ether	59	3.018	3.007	0.011	94	153737	50.0	48.3	
21 Acrolein	56	3.195	3.177	0.018	97	49421	150.0	130.2	
22 1,1-Dichloroethene	96	3.310	3.311	-0.001	97	126940	50.0	50.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.377	3.366	0.011	96	121212	50.0	48.8	
24 Acetone	43	3.389	3.384	0.005	100	120833	100.0	146.7	
25 Iodomethane	142	3.511	3.500	0.011	96	176018	50.0	50.1	
26 Carbon disulfide	76	3.608	3.603	0.005	100	274580	50.0	38.0	
29 3-Chloro-1-propene	76	3.876	3.877	-0.001	60	65564	50.0	38.0	
30 Methyl acetate	43	3.894	3.883	0.011	97	674556	250.0	246.0	
31 Methylene Chloride	84	4.101	4.090	0.011	97	159055	50.0	47.4	
32 2-Methyl-2-propanol	59	4.338	4.333	0.005	89	103026	500.0	524.5	
33 Acrylonitrile	53	4.466	4.461	0.005	100	736650	500.0	500.4	
34 trans-1,2-Dichloroethene	96	4.533	4.528	0.005	69	145290	50.0	49.7	
35 Methyl tert-butyl ether	73	4.539	4.534	0.005	98	402540	50.0	47.4	
36 Hexane	57	4.953	4.947	0.006	93	219756	50.0	47.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.166	5.160	0.006	97	265684	50.0	47.8	
38 Vinyl acetate	43	5.208	5.197	0.011	98	226968	50.0	39.2	
43 cis-1,2-Dichloroethene	96	5.914	5.902	0.012	83	302260	50.0	97.0	
42 2,2-Dichloropropane	77	5.914	5.902	0.012	39	69601	50.0	26.2	
44 2-Butanone (MEK)	43	5.914	5.909	0.005	52	177071	100.0	121.6	
48 Chlorobromomethane	128	6.200	6.201	-0.001	94	65781	50.0	47.9	
49 Tetrahydrofuran	42	6.212	6.207	0.005	91	114765	100.0	89.3	
50 Chloroform	83	6.346	6.347	-0.001	98	226397	50.0	51.2	
51 1,1,1-Trichloroethane	97	6.510	6.511	-0.001	97	138838	50.0	45.5	
52 Cyclohexane	56	6.595	6.590	0.005	92	283813	50.0	47.3	
53 Carbon tetrachloride	117	6.693	6.687	0.006	55	75950	50.0	39.0	
54 1,1-Dichloropropene	75	6.699	6.699	0.000	93	189827	50.0	52.0	
55 Isobutyl alcohol	41	6.875	6.870	0.005	93	75854	1250.0	760.5	
56 Benzene	78	6.912	6.906	0.006	97	602197	50.0	50.9	
57 1,2-Dichloroethane	62	6.997	6.991	0.006	96	204163	50.0	54.1	
59 n-Heptane	43	7.283	7.277	0.006	93	167136	50.0	47.5	
61 Trichloroethene	130	7.654	7.655	-0.001	97	277862	50.0	104.0	
63 Methylcyclohexane	83	7.897	7.892	0.005	94	244526	50.0	48.8	
64 1,2-Dichloropropane	63	7.927	7.928	-0.001	94	157519	50.0	47.0	
65 1,4-Dioxane	88	8.013	8.013	0.000	56	30206	1000.0	790.7	M
67 Dibromomethane	93	8.013	8.013	0.000	92	82631	50.0	51.8	
68 Dichlorobromomethane	83	8.207	8.208	-0.001	97	123986	50.0	44.5	
71 cis-1,3-Dichloropropene	75	8.651	8.646	0.005	93	141983	50.0	36.2	
72 4-Methyl-2-pentanone (MIBK)	43	8.797	8.792	0.005	97	331043	100.0	91.9	
73 Toluene	91	8.986	8.981	0.005	99	620507	50.0	54.9	
74 trans-1,3-Dichloropropene	75	9.229	9.224	0.005	96	102166	50.0	34.2	
75 Ethyl methacrylate	69	9.284	9.285	-0.001	91	146478	50.0	39.7	
76 1,1,2-Trichloroethane	97	9.424	9.425	-0.001	92	128010	50.0	52.5	
77 Tetrachloroethene	164	9.503	9.498	0.005	95	166085	50.0	88.6	
78 1,3-Dichloropropane	76	9.582	9.583	-0.001	94	243422	50.0	53.3	
79 2-Hexanone	43	9.631	9.626	0.005	97	231079	100.0	112.4	
81 Chlorodibromomethane	129	9.801	9.802	-0.001	92	66269	50.0	43.8	
82 Ethylene Dibromide	107	9.917	9.918	-0.001	97	108856	50.0	46.4	
83 3-Chlorobenzotrifluoride	180	10.367	10.368	-0.001	95	184788	50.0	51.2	
84 Chlorobenzene	112	10.403	10.404	-0.001	94	390360	50.0	54.8	
85 4-Chlorobenzotrifluoride	180	10.458	10.459	-0.001	97	168808	50.0	49.2	
86 1,1,1,2-Tetrachloroethane	131	10.501	10.495	0.006	64	68277	50.0	37.2	
87 Ethylbenzene	106	10.501	10.502	-0.001	98	222477	50.0	52.0	
88 m-Xylene & p-Xylene	106	10.635	10.629	0.006	99	262803	50.0	50.2	
89 o-Xylene	106	11.012	11.013	-0.001	96	265135	50.0	51.2	
90 Styrene	104	11.036	11.037	-0.001	95	423535	50.0	51.3	
91 Bromoform	173	11.225	11.219	0.006	93	29426	50.0	37.1	
92 2-Chlorobenzotrifluoride	180	11.273	11.280	-0.007	96	190892	50.0	51.3	
93 Isopropylbenzene	105	11.383	11.384	-0.001	96	629227	50.0	52.2	
96 1,1,2,2-Tetrachloroethane	83	11.687	11.688	-0.001	95	169845	50.0	49.6	
95 Bromobenzene	156	11.699	11.700	-0.001	97	148075	50.0	50.5	
97 trans-1,4-Dichloro-2-buten	53	11.724	11.724	0.000	59	36693	50.0	33.5	
98 1,2,3-Trichloropropane	110	11.748	11.749	-0.001	85	55680	50.0	50.1	
99 N-Propylbenzene	120	11.803	11.797	0.006	99	178348	50.0	48.5	
100 2-Chlorotoluene	126	11.888	11.889	-0.001	95	151021	50.0	48.4	
101 3-Chlorotoluene	126	11.955	11.956	-0.001	98	161249	50.0	47.9	
102 1,3,5-Trimethylbenzene	105	11.979	11.986	-0.007	95	528554	50.0	50.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 4-Chlorotoluene	126	12.009	12.010	-0.001	98	168726	50.0	50.7	
104 tert-Butylbenzene	119	12.295	12.296	-0.001	93	435828	50.0	50.6	
106 1,2,4-Trimethylbenzene	105	12.356	12.357	-0.001	98	545457	50.0	49.6	
107 1,2-dichloro-4-(trifluorom	214	12.387	12.394	-0.007	97	126448	50.0	45.3	
108 sec-Butylbenzene	105	12.521	12.521	-0.001	95	652056	50.0	51.1	
109 1,3-Dichlorobenzene	146	12.642	12.643	-0.001	97	293353	50.0	50.2	
110 4-Isopropyltoluene	119	12.679	12.679	0.000	96	530241	50.0	50.3	
111 1,4-Dichlorobenzene	146	12.746	12.746	0.000	91	301216	50.0	49.5	
113 2,4-Dichloro-1-(trifluorom	214	12.764	12.765	-0.001	91	132902	50.0	46.3	
114 2,5-Dichlorobenzotrifluori	214	12.800	12.801	-0.001	97	140606	50.0	46.2	
116 n-Butylbenzene	91	13.086	13.087	-0.001	97	504018	50.0	51.3	
117 1,2-Dichlorobenzene	146	13.098	13.099	-0.001	95	292285	50.0	49.8	
118 1,2-Dibromo-3-Chloropropan	75	13.895	13.896	-0.001	67	16065	50.0	33.8	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.035	14.036	-0.001	99	719393	150.0	147.1	
120 1,3,5-Trichlorobenzene	180	14.084	14.082	0.002	97	204369	50.0	43.3	
121 2,3- & 3,4- Dichlorotoluen	125	14.449	14.450	-0.001	98	522464	100.0	97.5	
122 1,2,4-Trichlorobenzene	180	14.717	14.717	0.000	94	207289	50.0	48.5	
123 Hexachlorobutadiene	225	14.863	14.863	0.000	97	58827	50.0	46.9	
124 Naphthalene	128	14.978	14.985	-0.007	97	564063	50.0	51.4	
125 1,2,3-Trichlorobenzene	180	15.203	15.204	-0.001	95	188955	50.0	47.1	
126 2,4,5-Trichlorotoluene	159	15.982	15.983	-0.001	0	93177	50.0	39.6	
127 2,3,6-Trichlorotoluene	159	16.079	16.086	-0.007	93	88018	50.0	40.6	
143 2,5-Dichlorotoluene	1		0.000				ND	ND	
144 2,4-Dichlorotoluene	1		0.000				ND	ND	
147 2,6-Dichlorotoluene	1		0.000				ND	ND	
146 3,4-Dichlorotoluene	1		0.000				ND	ND	
145 2,3-Dichlorotoluene	1		0.000				ND	ND	
S 131 Xylenes, Total	106				0		100.0	101.4	
S 130 1,2-Dichloroethene, Total	96				0		100.0	146.7	
S 132 1,3-Dichloropropene, Total	1				0		100.0	70.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOAACRO2ND_00007	Amount Added: 6.00	Units: uL	
voaW ee2nd_00001	Amount Added: 2.00	Units: uL	
VOA8260VOA2ND_00113	Amount Added: 2.00	Units: uL	
voaW 135tcb a_00001	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
voaWKetpri Re_00004	Amount Added: 2.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424011.D

Injection Date: 24-Apr-2015 15:22:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-E-4 MS

Worklist Smp#: 11

Client ID: HD-MW-145A-0/1-0

Purge Vol: 5.000 mL

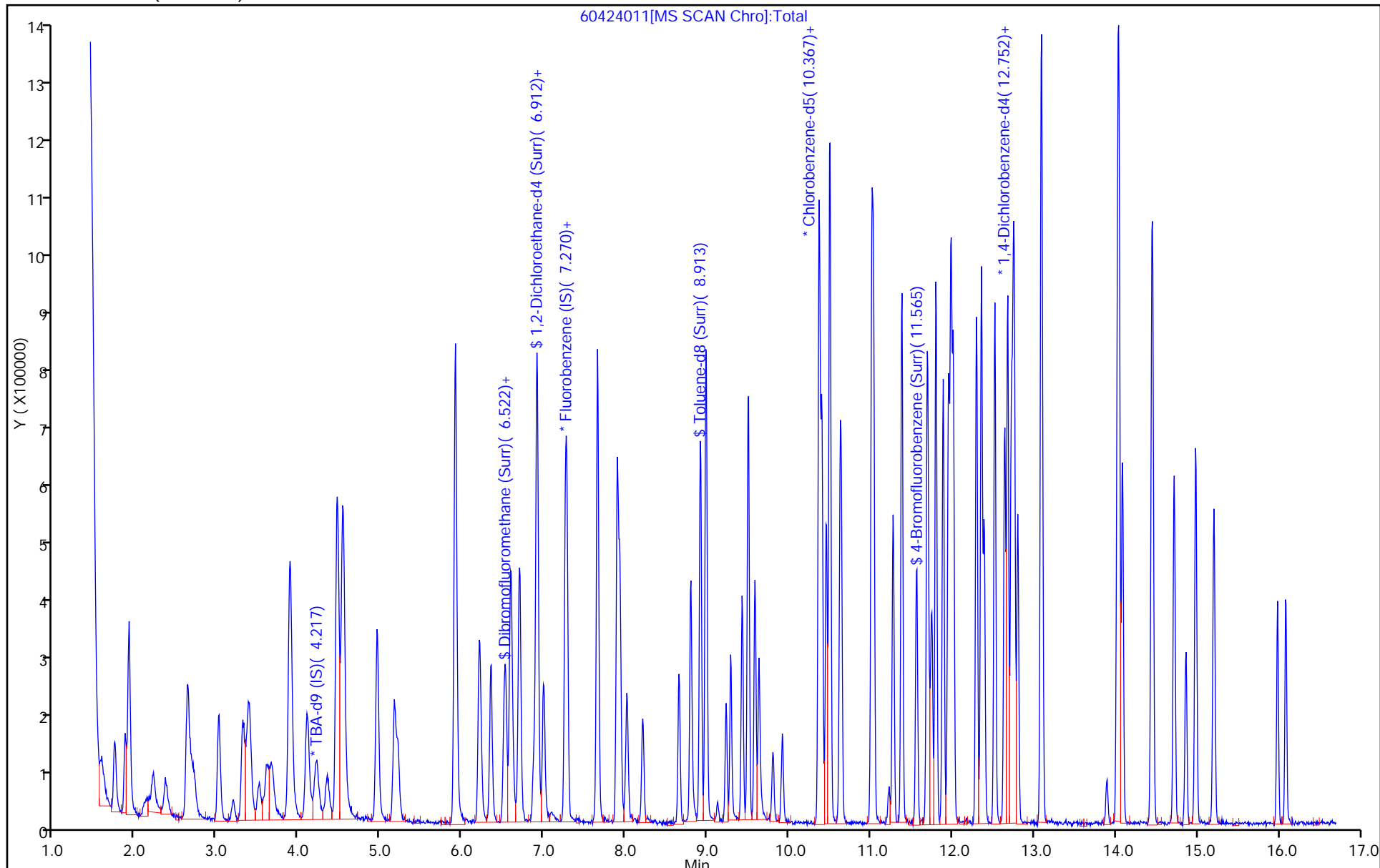
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



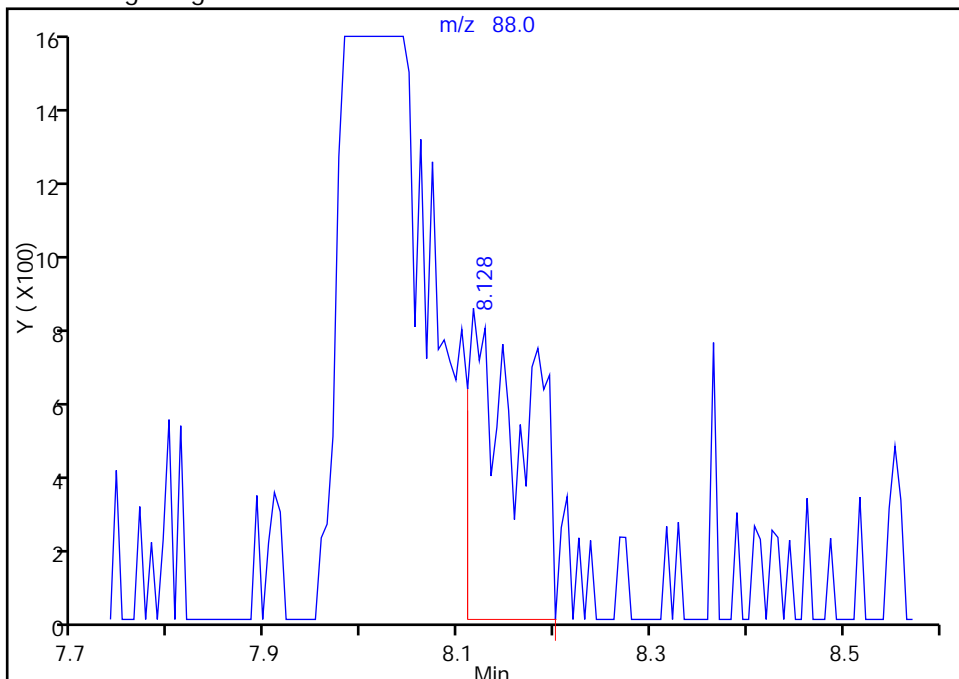
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424011.D
Injection Date: 24-Apr-2015 15:22:30 Instrument ID: CHHP6
Lims ID: 180-43257-E-4 MS
Client ID: HD-MW-145A-0/1-0
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

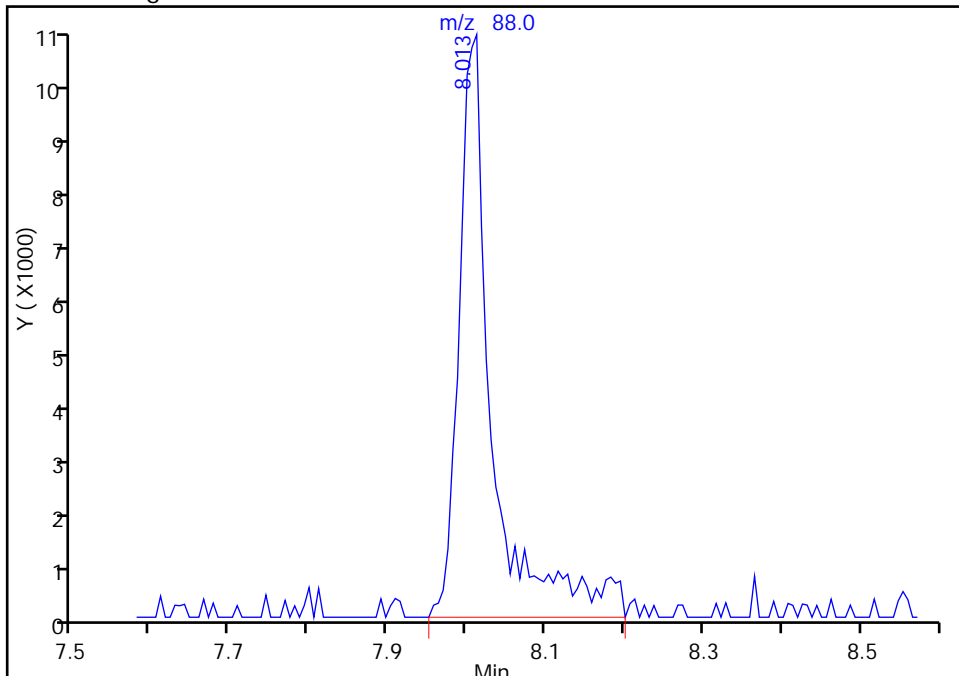
RT: 8.13
Area: 3195
Amount: 83.637692
Amount Units: ng

Processing Integration Results



RT: 8.01
Area: 30206
Amount: 790.7230
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 24-Apr-2015 16:06:22
Audit Action: Manually Integrated
Audit Reason: Peak Tail

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-145A-0/1-0 MSD Lab Sample ID: 180-43257-4 MSD
 Matrix: Water Lab File ID: 60424012.D
 Analysis Method: 8260C Date Collected: 04/20/2015 11:42
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 15:46
 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.: 139551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.34		1.0	0.28
75-01-4	Vinyl chloride	9.45		1.0	0.23
74-83-9	Bromomethane	13.8		1.0	0.31
75-00-3	Chloroethane	11.4		1.0	0.21
75-35-4	1,1-Dichloroethene	9.37		1.0	0.30
67-64-1	Acetone	26.0		5.0	2.5
75-15-0	Carbon disulfide	7.02		1.0	0.21
75-09-2	Methylene Chloride	9.25		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.14		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.46		1.0	0.18
75-34-3	1,1-Dichloroethane	9.31		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	19.0		1.0	0.24
74-97-5	Bromochloromethane	9.16		1.0	0.18
78-93-3	2-Butanone (MEK)	23.6		5.0	0.55
67-66-3	Chloroform	9.74		1.0	0.17
71-55-6	1,1,1-Trichloroethane	8.81		1.0	0.29
56-23-5	Carbon tetrachloride	7.35		1.0	0.14
71-43-2	Benzene	9.74		1.0	0.11
107-06-2	1,2-Dichloroethane	10.4		1.0	0.21
79-01-6	Trichloroethene	19.9		1.0	0.14
78-87-5	1,2-Dichloropropane	9.07		1.0	0.095
75-27-4	Bromodichloromethane	8.61		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	6.98		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	17.5		5.0	0.53
108-88-3	Toluene	10.7		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	6.63		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.4		1.0	0.20
127-18-4	Tetrachloroethene	16.7		1.0	0.15
591-78-6	2-Hexanone	20.4		5.0	0.16
124-48-1	Dibromochloromethane	8.38		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.07		1.0	0.18
108-90-7	Chlorobenzene	10.6		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	7.37		1.0	0.28
100-41-4	Ethylbenzene	9.76		1.0	0.23
1330-20-7	Xylenes, Total	19.4		3.0	0.49
100-42-5	Styrene	9.84		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-145A-0/1-0 MSD Lab Sample ID: 180-43257-4 MSD
 Matrix: Water Lab File ID: 60424012.D
 Analysis Method: 8260C Date Collected: 04/20/2015 11:42
 Sample wt/vol: 5(mL) Date Analyzed: 04/24/2015 15:46
 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.: 139551 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	7.32		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	9.56		1.0	0.20
107-13-1	Acrylonitrile	93.9		20	0.55
123-91-1	1,4-Dioxane	163	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		64-135
2037-26-5	Toluene-d8 (Surr)	100		71-118
460-00-4	4-Bromofluorobenzene (Surr)	97		70-118
1868-53-7	Dibromofluoromethane (Surr)	97		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424012.D
 Lims ID: 180-43257-C-4 MSD
 Client ID: HD-MW-145A-0/1-0
 Sample Type: MSD
 Inject. Date: 24-Apr-2015 15:46:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 180-43257-C-4 MSD
 Misc. Info.: 180-0006620-012
 Operator ID: 001562 Instrument ID: CHHP6
 Method: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\MSVOA_LL_CHHP6.m
 Limit Group: VOA 8260C ICAL
 Last Update: 24-Apr-2015 16:07:59 Calib Date: 14-Apr-2015 18:44:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHHP6\20150414-6462.b\60414011.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK032

First Level Reviewer: fergusond

Date: 24-Apr-2015 16:07:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.217	4.205	0.012	89	166898	1000.0	1000.0	
* 2 Fluorobenzene (IS)	96	7.259	7.259	0.000	98	507303	50.0	50.0	
* 3 Chlorobenzene-d5	119	10.373	10.374	-0.001	90	110772	50.0	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.722	12.722	0.000	96	172629	50.0	50.0	
\$ 5 Dibromofluoromethane (Surr	113	6.529	6.523	0.006	93	101411	50.0	48.5	
\$ 6 1,2-Dichloroethane-d4 (Sur	65	6.906	6.906	0.000	57	144911	50.0	48.3	
\$ 7 Toluene-d8 (Surr)	98	8.913	8.914	-0.001	94	461418	50.0	50.0	
\$ 8 4-Bromofluorobenzene (Surr	95	11.560	11.560	0.000	85	169375	50.0	48.4	
11 Dichlorodifluoromethane	85	1.571	1.577	-0.006	99	130036	50.0	52.1	
12 Chloromethane	50	1.741	1.735	0.006	100	181294	50.0	46.7	
13 Vinyl chloride	62	1.869	1.863	0.006	98	172402	50.0	47.3	
14 Butadiene	39	1.911	1.906	0.005	98	194530	50.0	52.4	
15 Bromomethane	94	2.203	2.192	0.011	94	71054	50.0	68.9	
16 Chloroethane	64	2.355	2.344	0.011	97	88709	50.0	57.0	
17 Dichlorofluoromethane	67	2.629	2.611	0.018	96	222969	50.0	58.7	
18 Trichlorofluoromethane	101	2.660	2.636	0.024	90	174844	50.0	51.9	M
20 Ethyl ether	59	3.012	3.007	0.005	94	158216	50.0	48.0	
21 Acrolein	56	3.195	3.177	0.018	99	54018	150.0	137.4	
22 1,1-Dichloroethene	96	3.310	3.311	-0.001	97	123031	50.0	46.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.377	3.366	0.011	95	120968	50.0	47.1	
24 Acetone	43	3.390	3.384	0.006	100	110778	100.0	129.9	
25 Iodomethane	142	3.505	3.500	0.005	98	170454	50.0	46.8	
26 Carbon disulfide	76	3.603	3.603	-0.001	100	262452	50.0	35.1	
29 3-Chloro-1-propene	76	3.882	3.877	0.005	90	62581	50.0	35.1	
30 Methyl acetate	43	3.888	3.883	0.005	98	656257	250.0	231.1	
31 Methylene Chloride	84	4.101	4.090	0.011	97	160518	50.0	46.3	
32 2-Methyl-2-propanol	59	4.345	4.333	0.012	90	96318	500.0	507.7	
33 Acrylonitrile	53	4.460	4.461	-0.001	100	715550	500.0	469.5	
34 trans-1,2-Dichloroethene	96	4.533	4.528	0.005	87	138295	50.0	45.7	
35 Methyl tert-butyl ether	73	4.539	4.534	0.005	98	416065	50.0	47.3	
36 Hexane	57	4.953	4.947	0.006	92	216668	50.0	45.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
37 1,1-Dichloroethane	63	5.166	5.160	0.006	97	267617	50.0	46.5	
38 Vinyl acetate	43	5.209	5.197	0.012	97	227232	50.0	37.9	
42 2,2-Dichloropropane	77	5.914	5.902	0.012	40	67628	50.0	24.6	
43 cis-1,2-Dichloroethene	96	5.908	5.902	0.006	81	306240	50.0	94.9	
44 2-Butanone (MEK)	43	5.914	5.909	0.005	52	178155	100.0	118.2	
48 Chlorobromomethane	128	6.200	6.201	-0.001	92	65107	50.0	45.8	
49 Tetrahydrofuran	42	6.218	6.207	0.011	89	119379	100.0	89.7	
50 Chloroform	83	6.346	6.347	-0.001	97	222918	50.0	48.7	
51 1,1,1-Trichloroethane	97	6.516	6.511	0.005	97	139261	50.0	44.0	
52 Cyclohexane	56	6.589	6.590	-0.001	93	267385	50.0	43.1	
53 Carbon tetrachloride	117	6.693	6.687	0.006	95	74114	50.0	36.8	
54 1,1-Dichloropropene	75	6.699	6.699	0.000	94	182638	50.0	48.4	
55 Isobutyl alcohol	41	6.869	6.870	-0.001	95	76084	1250.0	736.8	
56 Benzene	78	6.912	6.906	0.006	97	596590	50.0	48.7	
57 1,2-Dichloroethane	62	6.991	6.991	0.000	96	202110	50.0	51.8	
59 n-Heptane	43	7.277	7.277	0.000	90	153434	50.0	42.1	
61 Trichloroethene	130	7.654	7.655	-0.001	97	274668	50.0	99.3	
63 Methylcyclohexane	83	7.897	7.892	0.005	91	230549	50.0	44.5	
64 1,2-Dichloropropane	63	7.928	7.928	0.000	85	157447	50.0	45.3	
67 Dibromomethane	93	8.013	8.013	0.000	96	81538	50.0	49.4	
65 1,4-Dioxane	88	8.001	8.013	-0.012	90	32207	1000.0	814.4	M
68 Dichlorobromomethane	83	8.208	8.208	0.000	97	124172	50.0	43.0	
71 cis-1,3-Dichloropropene	75	8.652	8.646	0.006	92	141639	50.0	34.9	
72 4-Methyl-2-pentanone (MIBK)	43	8.798	8.792	0.006	97	319565	100.0	87.5	
73 Toluene	91	8.986	8.981	0.005	98	612145	50.0	53.4	
74 trans-1,3-Dichloropropene	75	9.230	9.224	0.006	96	100562	50.0	33.2	
75 Ethyl methacrylate	69	9.284	9.285	-0.001	93	152465	50.0	40.8	
76 1,1,2-Trichloroethane	97	9.424	9.425	-0.001	90	129036	50.0	52.2	
77 Tetrachloroethene	164	9.503	9.498	0.005	93	158691	50.0	83.5	
78 1,3-Dichloropropane	76	9.583	9.583	0.000	94	230106	50.0	49.7	
79 2-Hexanone	43	9.631	9.626	0.005	96	212587	100.0	101.9	
81 Chlorodibromomethane	129	9.808	9.802	0.006	90	64272	50.0	41.9	
82 Ethylene Dibromide	107	9.917	9.918	-0.001	97	107785	50.0	45.3	
83 3-Chlorobenzotrifluoride	180	10.361	10.368	-0.007	93	176260	50.0	48.2	
84 Chlorobenzene	112	10.404	10.404	0.000	94	383504	50.0	53.1	
85 4-Chlorobenzotrifluoride	180	10.459	10.459	0.000	95	167476	50.0	48.1	
86 1,1,1,2-Tetrachloroethane	131	10.495	10.495	0.000	74	68621	50.0	36.9	
87 Ethylbenzene	106	10.501	10.502	-0.001	99	211937	50.0	48.8	
88 m-Xylene & p-Xylene	106	10.635	10.629	0.006	99	254104	50.0	47.9	
89 o-Xylene	106	11.012	11.013	-0.001	96	258999	50.0	49.3	
90 Styrene	104	11.030	11.037	-0.007	95	412107	50.0	49.2	
91 Bromoform	173	11.225	11.219	0.006	94	29456	50.0	36.6	
92 2-Chlorobenzotrifluoride	180	11.274	11.280	-0.006	96	184071	50.0	48.8	
93 Isopropylbenzene	105	11.383	11.384	-0.001	96	612590	50.0	50.1	
96 1,1,2,2-Tetrachloroethane	83	11.687	11.688	-0.001	95	166018	50.0	47.8	
95 Bromobenzene	156	11.700	11.700	0.000	97	145866	50.0	51.3	
97 trans-1,4-Dichloro-2-buten	53	11.724	11.724	0.000	64	33309	50.0	31.4	
98 1,2,3-Trichloropropane	110	11.748	11.749	-0.001	86	55507	50.0	51.5	
99 N-Propylbenzene	120	11.803	11.797	0.006	99	166312	50.0	46.6	
100 2-Chlorotoluene	126	11.888	11.889	-0.001	96	148184	50.0	49.0	
101 3-Chlorotoluene	126	11.955	11.956	-0.001	97	160999	50.0	49.3	
102 1,3,5-Trimethylbenzene	105	11.986	11.986	0.000	95	512576	50.0	50.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
103 4-Chlorotoluene	126	12.010	12.010	0.000	99	157614	50.0	48.9	
104 tert-Butylbenzene	119	12.296	12.296	0.000	94	414740	50.0	49.6	
106 1,2,4-Trimethylbenzene	105	12.357	12.357	0.000	98	525399	50.0	49.3	
107 1,2-dichloro-4-(trifluorom	214	12.393	12.394	-0.001	96	125357	50.0	46.4	
108 sec-Butylbenzene	105	12.521	12.521	0.000	95	613426	50.0	49.6	
109 1,3-Dichlorobenzene	146	12.643	12.643	0.000	96	275335	50.0	48.6	
110 4-Isopropyltoluene	119	12.679	12.679	0.000	96	509676	50.0	49.9	
111 1,4-Dichlorobenzene	146	12.752	12.746	0.006	90	292476	50.0	49.6	
113 2,4-Dichloro-1-(trifluorom	214	12.764	12.765	-0.001	93	122267	50.0	43.9	
114 2,5-Dichlorobenzotrifluori	214	12.801	12.801	0.000	98	141112	50.0	47.9	
116 n-Butylbenzene	91	13.087	13.087	0.000	98	477769	50.0	50.2	
117 1,2-Dichlorobenzene	146	13.099	13.099	0.000	94	281357	50.0	49.5	
118 1,2-Dibromo-3-Chloropropan	75	13.890	13.896	-0.006	69	15354	50.0	33.3	
119 2,4- & 2,5- & 2,6- Dichlor	125	14.036	14.036	0.000	99	702816	150.0	148.3	
120 1,3,5-Trichlorobenzene	180	14.084	14.082	0.002	97	203120	50.0	44.4	
121 2,3- & 3,4- Dichlorotoluen	125	14.449	14.450	-0.001	99	516757	100.0	99.5	
122 1,2,4-Trichlorobenzene	180	14.717	14.717	0.000	94	192970	50.0	46.6	
123 Hexachlorobutadiene	225	14.863	14.863	0.000	96	57381	50.0	47.2	
124 Naphthalene	128	14.979	14.985	-0.006	98	552768	50.0	52.0	
125 1,2,3-Trichlorobenzene	180	15.204	15.204	0.000	95	187082	50.0	48.1	
126 2,4,5-Trichlorotoluene	159	15.982	15.983	-0.001	0	92478	50.0	40.6	
127 2,3,6-Trichlorotoluene	159	16.086	16.086	0.000	96	87997	50.0	41.9	
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	140.6	
S 131 Xylenes, Total	106				0		100.0	97.2	
S 132 1,3-Dichloropropene, Total	1				0		100.0	68.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

voaWKetpri Re_00004	Amount Added: 2.00	Units: uL	
voaW VA pri R_00005	Amount Added: 2.00	Units: uL	
voaW 135tcb a_00001	Amount Added: 2.00	Units: uL	
VOA8260VOA2ND_00113	Amount Added: 2.00	Units: uL	
voaW ee2nd_00001	Amount Added: 2.00	Units: uL	
VOAACRO2ND_00007	Amount Added: 6.00	Units: uL	
VOA8260INT_00031	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00033	Amount Added: 2.00	Units: uL	Run Reagent

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424012.D

Injection Date: 24-Apr-2015 15:46:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-43257-C-4 MSD

Worklist Smp#: 12

Client ID: HD-MW-145A-0/1-0

Purge Vol: 5.000 mL

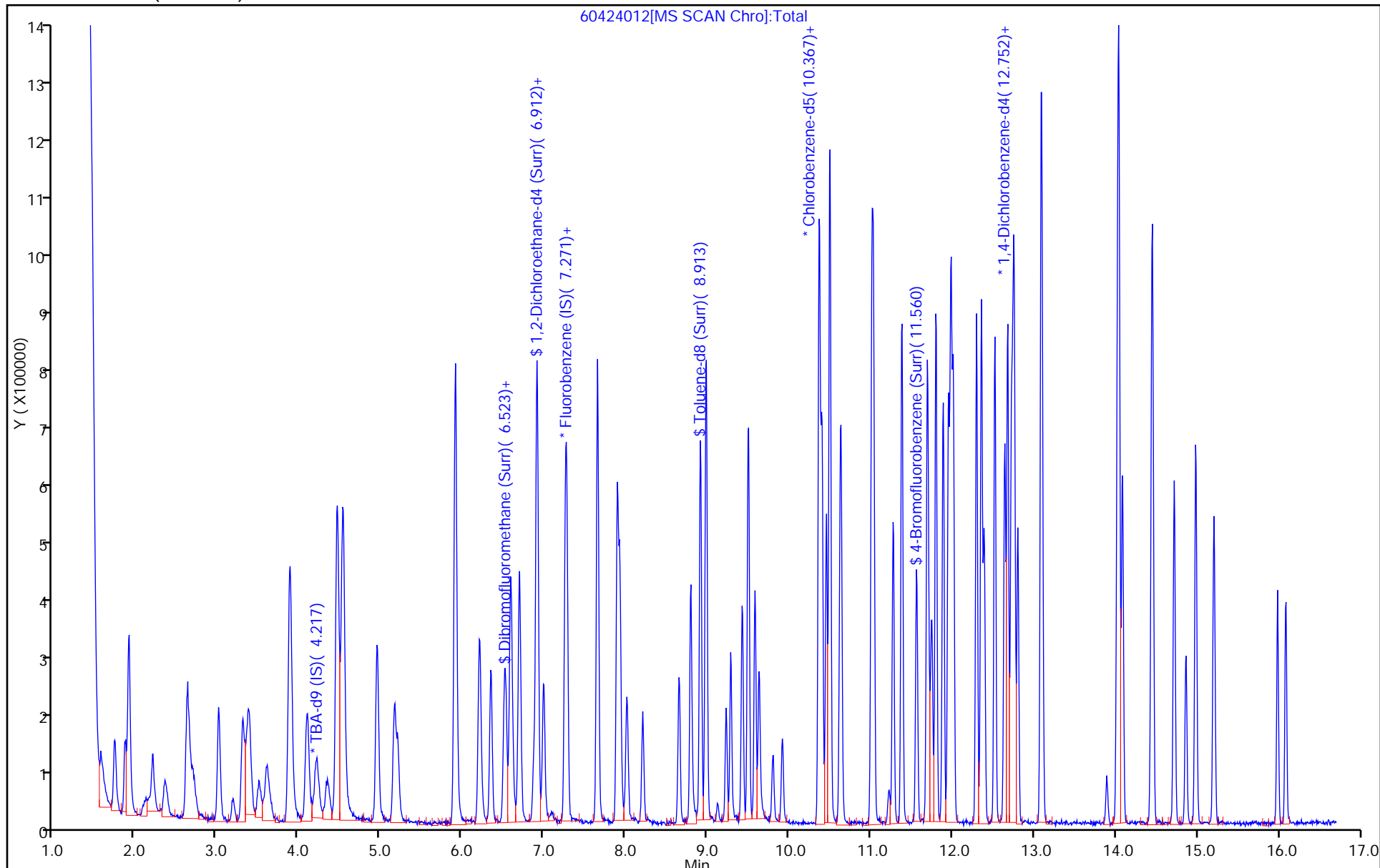
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA_LL_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



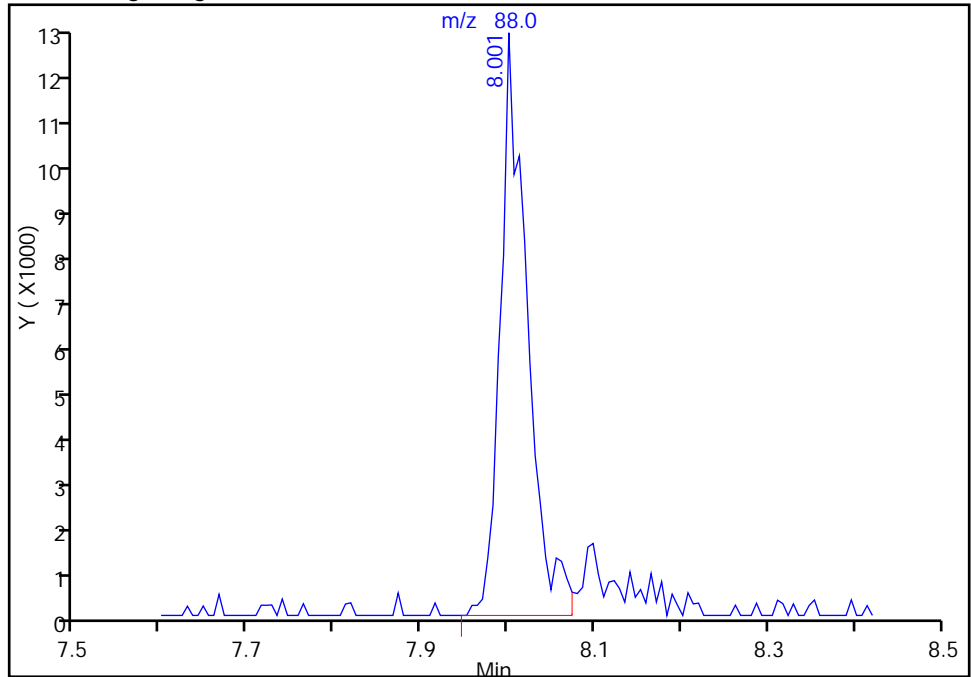
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP6\20150424-6620.b\60424012.D
Injection Date: 24-Apr-2015 15:46:30 Instrument ID: CHHP6
Lims ID: 180-43257-C-4 MSD
Client ID: HD-MW-145A-0/1-0
Operator ID: 001562 ALS Bottle#: 11 Worklist Smp#: 12
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

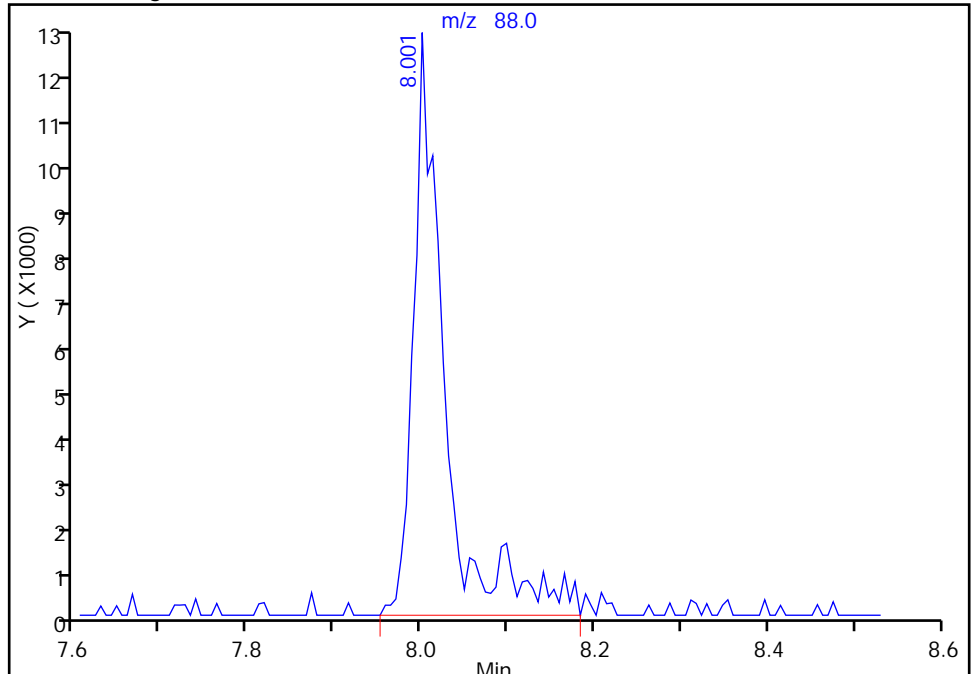
RT: 8.00
Area: 27812
Amount: 703.2271
Amount Units: ng

Processing Integration Results



RT: 8.00
Area: 32207
Amount: 814.3548
Amount Units: ng

Manual Integration Results



Reviewer: fergusond, 24-Apr-2015 16:07:59
Audit Action: Manually Integrated
Audit Reason: Peak Tail

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP6 Start Date: 04/14/2015 14:05

Analysis Batch Number: 138461 End Date: 04/15/2015 16:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-138461/3		04/14/2015 14:05	1	60414003.D	DB-624 0.18 (mm)
IC 180-138461/4		04/14/2015 15:56	1	60414004.D	DB-624 0.18 (mm)
IC 180-138461/5		04/14/2015 16:20	1	60414005.D	DB-624 0.18 (mm)
ICIS 180-138461/6		04/14/2015 16:44	1	60414006.D	DB-624 0.18 (mm)
IC 180-138461/7		04/14/2015 17:08	1	60414007.D	DB-624 0.18 (mm)
IC 180-138461/8		04/14/2015 17:32	1	60414008.D	DB-624 0.18 (mm)
IC 180-138461/9		04/14/2015 17:56	1	60414009.D	DB-624 0.18 (mm)
IC 180-138461/10		04/14/2015 18:20	1	60414010.D	DB-624 0.18 (mm)
IC 180-138461/11		04/14/2015 18:44	1	60414011.D	DB-624 0.18 (mm)
LODV 180-138461/16		04/14/2015 20:43	1		DB-624 0.18 (mm)
ICV 180-138461/17		04/15/2015 16:07	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP5 Start Date: 04/24/2015 10:55Analysis Batch Number: 139541 End Date: 04/27/2015 13:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-139541/5		04/24/2015 10:55	1	50424005.D	DB-624 0.18 (mm)
IC 180-139541/8		04/24/2015 16:47	1	50424008.D	DB-624 0.18 (mm)
IC 180-139541/9		04/24/2015 17:11	1	50424009.D	DB-624 0.18 (mm)
ICIS 180-139541/10		04/24/2015 17:35	1	50424010.D	DB-624 0.18 (mm)
IC 180-139541/11		04/24/2015 17:59	1	50424011.D	DB-624 0.18 (mm)
IC 180-139541/12		04/24/2015 18:23	1	50424012.D	DB-624 0.18 (mm)
IC 180-139541/13		04/24/2015 18:47	1	50424013.D	DB-624 0.18 (mm)
IC 180-139541/14		04/24/2015 19:11	1	50424014.D	DB-624 0.18 (mm)
IC 180-139541/15		04/24/2015 19:35	1	50424015.D	DB-624 0.18 (mm)
ICV 180-139541/20		04/27/2015 13:22	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP6 Start Date: 04/24/2015 10:42Analysis Batch Number: 139551 End Date: 04/24/2015 22:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-139551/4		04/24/2015 10:42	1	60424004.D	DB-624 0.18 (mm)
CCVIS 180-139551/2		04/24/2015 11:22	1	60424002.D	DB-624 0.18 (mm)
ZZZZZ		04/24/2015 11:22	1		DB-624 0.18 (mm)
MB 180-139551/6		04/24/2015 12:42	1	60424006.D	DB-624 0.18 (mm)
180-43257-9	HD-QC1-0/1-2	04/24/2015 14:10	1	60424008.D	DB-624 0.18 (mm)
180-43257-4	HD-MW-145A-0/1-0	04/24/2015 14:34	1	60424009.D	DB-624 0.18 (mm)
LCS 180-139551/10		04/24/2015 14:58	1	60424010.D	DB-624 0.18 (mm)
180-43257-4 MS	HD-MW-145A-0/1-0 MS	04/24/2015 15:22	1	60424011.D	DB-624 0.18 (mm)
180-43257-4 MSD	HD-MW-145A-0/1-0 MSD	04/24/2015 15:46	1	60424012.D	DB-624 0.18 (mm)
ZZZZZ		04/24/2015 16:35	1		DB-624 0.18 (mm)
ZZZZZ		04/24/2015 16:59	10		DB-624 0.18 (mm)
ZZZZZ		04/24/2015 17:23	1		DB-624 0.18 (mm)
ZZZZZ		04/24/2015 18:11	12.5		DB-624 0.18 (mm)
ZZZZZ		04/24/2015 18:35	1		DB-624 0.18 (mm)
ZZZZZ		04/24/2015 18:59	1		DB-624 0.18 (mm)
ZZZZZ		04/24/2015 19:23	1		DB-624 0.18 (mm)
180-43257-1	HD-MW-98S-0/1-0	04/24/2015 19:47	1	60424022.D	DB-624 0.18 (mm)
180-43257-2	HD-MW-98I-0/1-0	04/24/2015 20:11	1	60424023.D	DB-624 0.18 (mm)
ZZZZZ		04/24/2015 20:35	1		DB-624 0.18 (mm)
180-43257-3	HD-MW-99S-0/1-0	04/24/2015 20:59	1	60424025.D	DB-624 0.18 (mm)
ZZZZZ		04/24/2015 21:23	1		DB-624 0.18 (mm)
180-43257-5	HD-MW-93D-0/1-0	04/24/2015 21:47	10	60424027.D	DB-624 0.18 (mm)
180-43257-6	HD-MW-93S-0/1-0	04/24/2015 22:10	2	60424028.D	DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP6 Start Date: 04/25/2015 10:50Analysis Batch Number: 139651 End Date: 04/26/2015 01:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-139651/1		04/25/2015 10:50	1	60425001.D	DB-624 0.18 (mm)
CCVIS 180-139651/2		04/25/2015 11:28	1	60425002.D	DB-624 0.18 (mm)
ZZZZZ		04/25/2015 11:28	1		DB-624 0.18 (mm)
MB 180-139651/5		04/25/2015 12:44	1	60425005.D	DB-624 0.18 (mm)
ZZZZZ		04/25/2015 13:21	1		DB-624 0.18 (mm)
ZZZZZ		04/25/2015 13:44	1		DB-624 0.18 (mm)
ZZZZZ		04/25/2015 14:08	1		DB-624 0.18 (mm)
ZZZZZ		04/25/2015 14:32	1		DB-624 0.18 (mm)
LCS 180-139651/10		04/25/2015 15:11	1	60425010.D	DB-624 0.18 (mm)
ZZZZZ		04/25/2015 15:59	10		DB-624 0.18 (mm)
180-43257-6 DL	HD-MW-93S-0/1-0 DL	04/25/2015 16:23	5	60425013.D	DB-624 0.18 (mm)
180-43257-7 DL	HD-MW-37D-0/1-0 DL	04/25/2015 16:48	40	60425014.D	DB-624 0.18 (mm)
180-43257-8	HD-QC1-0/1-1	04/25/2015 17:12	1	60425015.D	DB-624 0.18 (mm)
ZZZZZ		04/25/2015 17:35	100		DB-624 0.18 (mm)
ZZZZZ		04/25/2015 20:36	1		DB-624 0.18 (mm)
ZZZZZ		04/25/2015 21:00	1		DB-624 0.18 (mm)
ZZZZZ		04/25/2015 21:24	50		DB-624 0.18 (mm)
ZZZZZ		04/25/2015 21:48	1		DB-624 0.18 (mm)
ZZZZZ		04/25/2015 22:12	1		DB-624 0.18 (mm)
ZZZZZ		04/25/2015 22:37	1		DB-624 0.18 (mm)
ZZZZZ		04/26/2015 01:01	1		DB-624 0.18 (mm)
ZZZZZ		04/26/2015 01:25	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica PittsburghJob No.: 180-43257-1

SDG No.: _____

Instrument ID: CHHP5Start Date: 04/28/2015 11:46Analysis Batch Number: 139884End Date: 04/28/2015 22:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-139884/3		04/28/2015 11:46	1	50428003.D	DB-624 0.18 (mm)
CCVIS 180-139884/2		04/28/2015 12:26	1	50428002.D	DB-624 0.18 (mm)
ZZZZZ		04/28/2015 12:26	1		DB-624 0.18 (mm)
MB 180-139884/4		04/28/2015 13:05	1	50428004.D	DB-624 0.18 (mm)
ZZZZZ		04/28/2015 13:42	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 14:06	1		DB-624 0.18 (mm)
LCS 180-139884/7		04/28/2015 14:31	1	50428007.D	DB-624 0.18 (mm)
ZZZZZ		04/28/2015 14:55	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 15:20	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 16:32	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 16:56	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 17:20	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 17:44	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 18:08	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 18:32	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 18:57	100		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 19:21	4		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 19:45	5		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 20:09	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 20:33	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 20:57	5		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 21:21	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 21:46	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 22:10	1		DB-624 0.18 (mm)
ZZZZZ		04/28/2015 22:34	1		DB-624 0.18 (mm)
180-43257-7	HD-MW-37D-0/1-0	04/28/2015 22:58	4	50428028.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.: 180-43257-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: B-ICS2100 B 04-21-2015-5.d
 Lab ID: LCS 180-139181/5 Client ID: _____

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Nitrate as N	2.50	2.57	103	90-110	
Chloride	50.0	51.0	102	90-110	
Sulfate	50.0	50.8	102	90-110	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: B-ICS2100 B 04-21-2015-10.d
 Lab ID: 180-43257-4 MS Client ID: HD-MW-145A-0/1-0 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Nitrate as N	1.25	3.8	5.02	98	80-120	
Chloride	25.0	150	173	90	80-120	4
Sulfate	25.0	38	62.0	97	80-120	

Column to be used to flag recovery and RPD values

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: B-ICS2100 B 04-21-2015-9.d

Lab ID: 180-43257-4 MSD Client ID: HD-MW-145A-0/1-0 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Nitrate as N	1.25	5.06	102	1	20	80-120	
Chloride	25.0	174	94	1	20	80-120	4
Sulfate	25.0	62.8	100	1	20	80-120	

Column to be used to flag recovery and RPD values

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab File ID: B-ICS2100 B 04-21-2015-6.d Lab Sample ID: MB 180-139181/6
 Matrix: Water Date Extracted: _____
 Instrument ID: CHICS2100B Date Analyzed: 04/21/2015 13:41
 Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 180-139181/4	B-ICS2100 B 04-21-2015- 4.d	04/21/2015 13:06
	LCS 180-139181/5	B-ICS2100 B 04-21-2015- 5.d	04/21/2015 13:23
HD-MW-145A-0/1-0 MSD	180-43257-4 MSD	B-ICS2100 B 04-21-2015- 9.d	04/21/2015 14:33
HD-MW-145A-0/1-0 MS	180-43257-4 MS	B-ICS2100 B 04-21-2015- 10.d	04/21/2015 14:50
HD-MW-145A-0/1-0	180-43257-4	B-ICS2100 B 04-21-2015- 11.d	04/21/2015 15:07
HD-MW-98S-0/1-0	180-43257-1	B-ICS2100 B 04-21-2015- 13.d	04/21/2015 15:42
HD-MW-98I-0/1-0	180-43257-2	B-ICS2100 B 04-21-2015- 14.d	04/21/2015 15:59
	CCB 180-139181/16	B-ICS2100 B 04-21-2015- 16.d	04/21/2015 16:34
HD-MW-37D-0/1-0	180-43257-7	B-ICS2100 B 04-21-2015- 25.d	04/21/2015 19:10
	CCB 180-139181/28	B-ICS2100 B 04-21-2015- 28.d	04/21/2015 20:02
HD-MW-99S-0/1-0	180-43257-3	B-ICS2100 B 04-21-2015- 29.d	04/21/2015 20:19
HD-MW-93D-0/1-0	180-43257-5	B-ICS2100 B 04-21-2015- 30.d	04/21/2015 20:36
HD-MW-93S-0/1-0	180-43257-6	B-ICS2100 B 04-21-2015- 31.d	04/21/2015 20:53
HD-QC1-0/1-1	180-43257-8	B-ICS2100 B 04-21-2015- 32.d	04/21/2015 21:11
	CCB 180-139181/40	B-ICS2100 B 04-21-2015- 40.d	04/21/2015 23:29

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-98S-0/1-0 Lab Sample ID: 180-43257-1
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-13.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 13:35
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 15:42
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.7		0.10	0.0062
16887-00-6	Chloride	57		1.0	0.20
14808-79-8	Sulfate	48		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-13.d
 Lims ID: 180-43257-A-1 Lab Sample ID: 180-43257-1
 Client ID: HD-MW-98S-0/1-0
 Sample Type: Client
 Inject. Date: 21-Apr-2015 15:42:00 ALS Bottle#: 0 Worklist Smp#: 13
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-013
 Misc. Info.: 13 180-43257-a-1
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:20 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.925	4.933	-0.008	1522324773	57.1	
3 Sulfate	6.733	6.733	0.000	948105424	48.5	
5 Nitrate as N	8.975	9.000	-0.025	242308556	3.67	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-13.d

Injection Date: 21-Apr-2015 15:42:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-1

Lab Sample ID: 180-43257-1

Worklist Smp#: 13

Client ID: HD-MW-98S-0/1-0

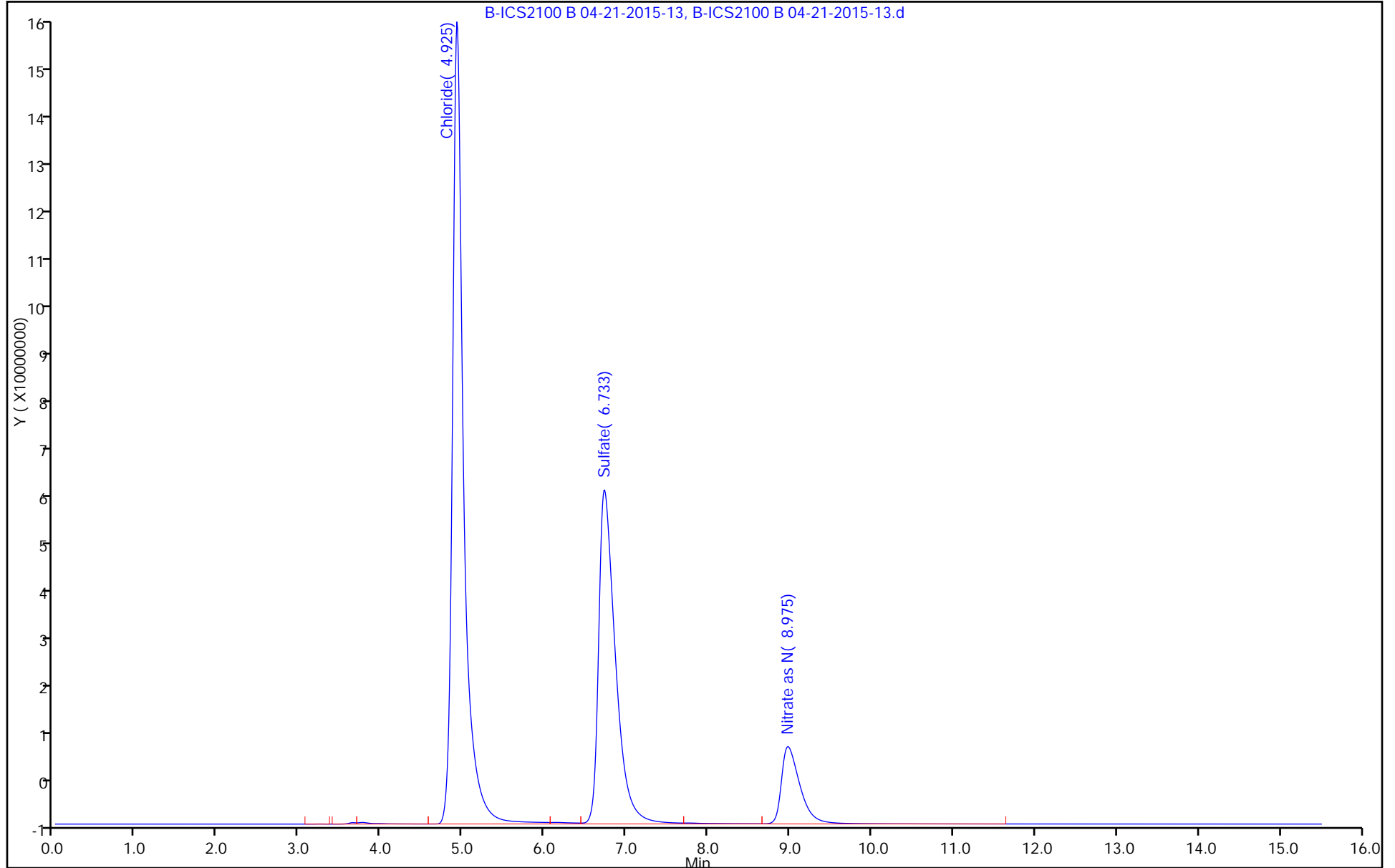
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-98I-0/1-0 Lab Sample ID: 180-43257-2
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-14.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 14:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 15:59
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.4		0.10	0.0062
16887-00-6	Chloride	57		1.0	0.20
14808-79-8	Sulfate	46		1.0	0.21

TestAmerica Pittsburgh
 Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-14.d
 Lims ID: 180-43257-A-2 Lab Sample ID: 180-43257-2
 Client ID: HD-MW-981-0/1-0
 Sample Type: Client
 Inject. Date: 21-Apr-2015 15:59:00 ALS Bottle#: 0 Worklist Smp#: 14
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-014
 Misc. Info.: 14 180-43257-a-2
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:20 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.925	4.933	-0.008	1509041002	56.6	
3 Sulfate	6.733	6.733	0.000	905748539	46.3	
5 Nitrate as N	8.983	9.000	-0.017	225031721	3.41	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-14.d

Injection Date: 21-Apr-2015 15:59:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-2

Lab Sample ID: 180-43257-2

Worklist Smp#: 14

Client ID: HD-MW-98I-0/1-0

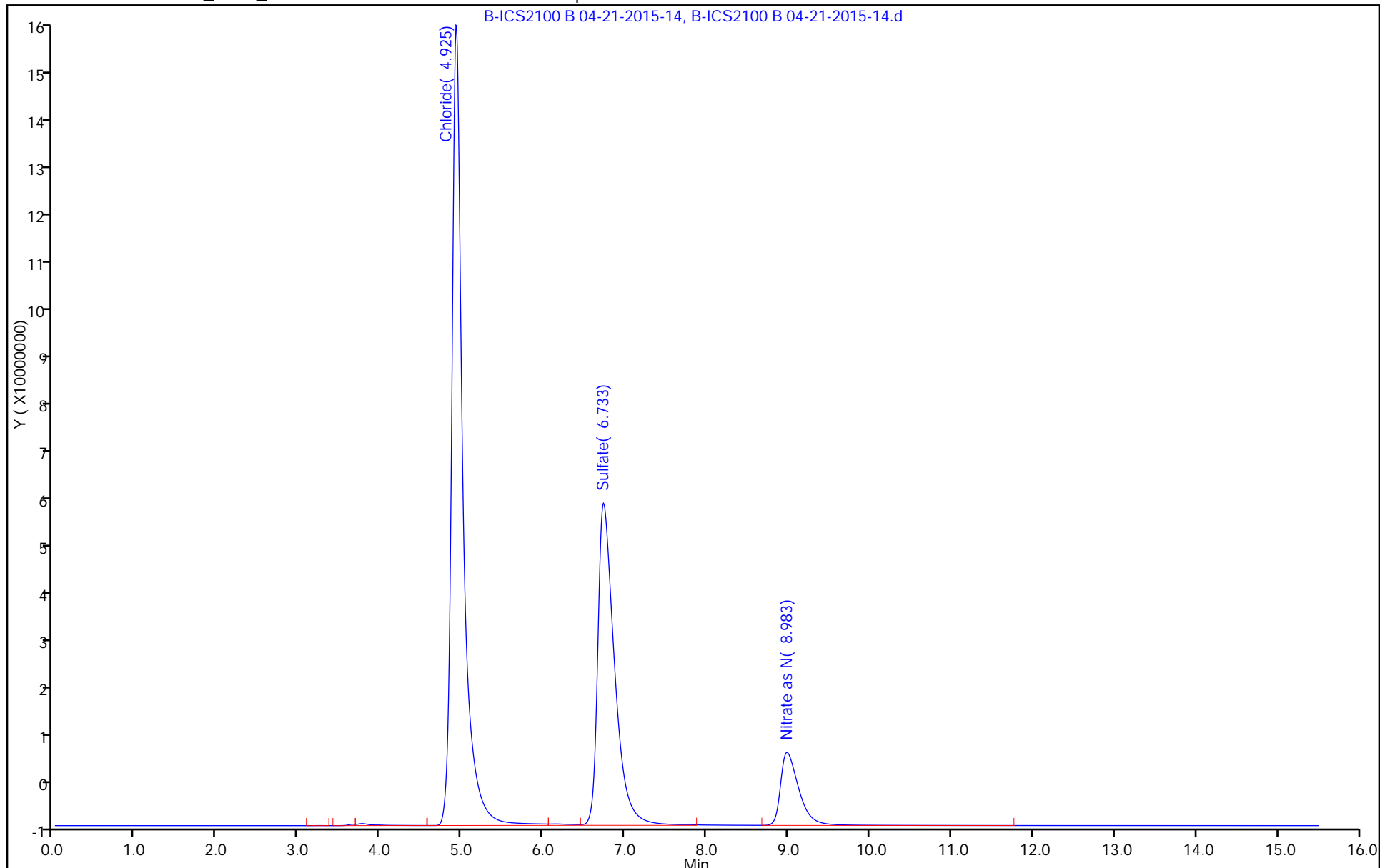
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-99S-0/1-0 Lab Sample ID: 180-43257-3
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-29.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 10:30
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 20:19
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.0		0.10	0.0062
16887-00-6	Chloride	100		1.0	0.20
14808-79-8	Sulfate	31		1.0	0.21

TestAmerica Pittsburgh
 Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-29.d
 Lims ID: 180-43257-A-3 Lab Sample ID: 180-43257-3
 Client ID: HD-MW-99S-0/1-0
 Sample Type: Client
 Inject. Date: 21-Apr-2015 20:19:00 ALS Bottle#: 0 Worklist Smp#: 29
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-029
 Misc. Info.: 29 180-43257-a-3
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 11:23:45 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.925	4.942	-0.017	2797867334	104.9	
3 Sulfate	6.758	6.742	0.016	616126565	31.4	
5 Nitrate as N	8.992	9.000	-0.008	197358683	2.99	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-29.d

Injection Date: 21-Apr-2015 20:19:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-3

Lab Sample ID: 180-43257-3

Worklist Smp#: 29

Client ID: HD-MW-99S-0/1-0

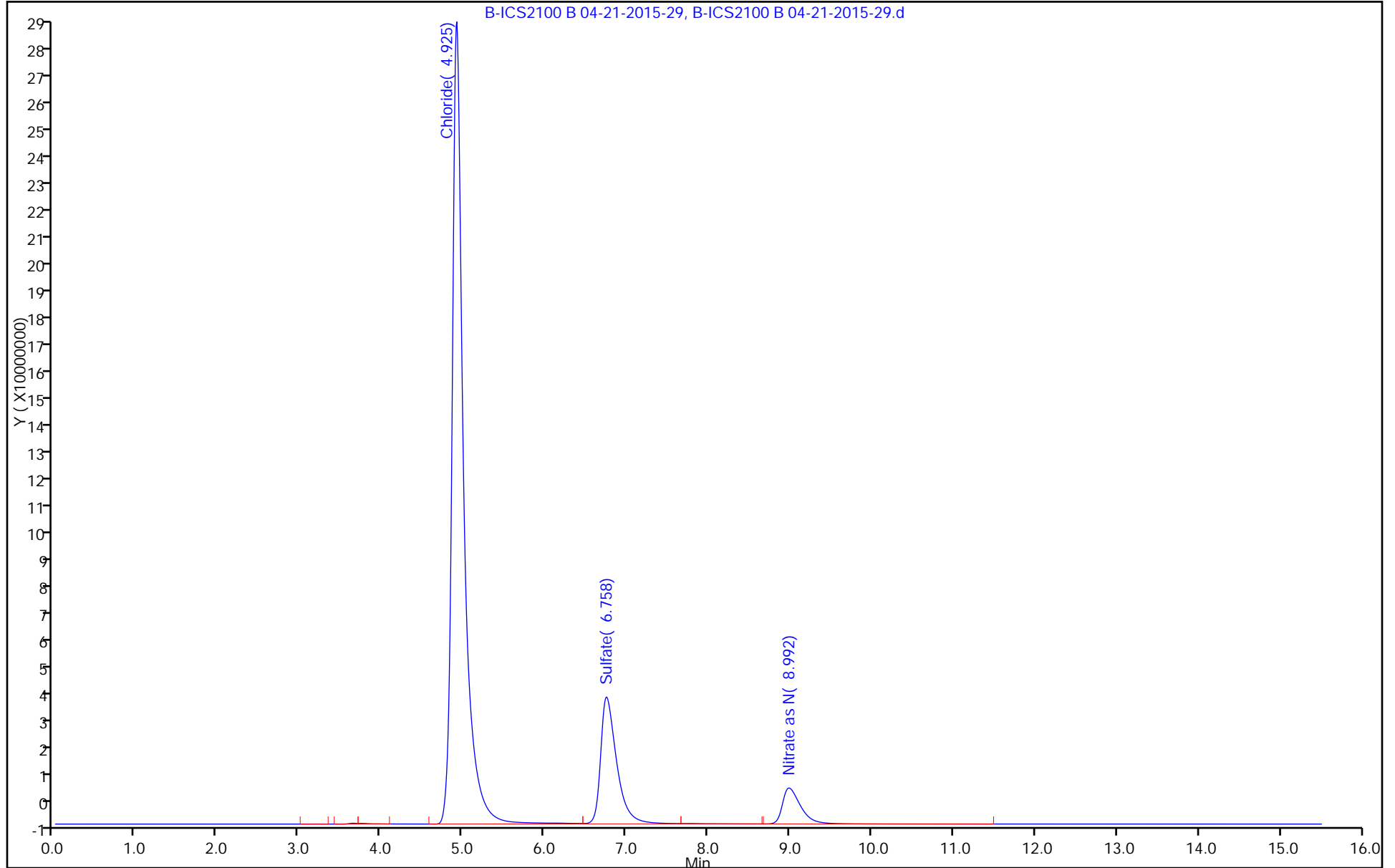
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-145A-0/1-0 Lab Sample ID: 180-43257-4
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-11.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 11:42
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 15:07
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.8		0.10	0.0062
16887-00-6	Chloride	150		1.0	0.20
14808-79-8	Sulfate	38		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-11.d
 Lims ID: 180-43257-A-4 Lab Sample ID: 180-43257-4
 Client ID: HD-MW-145A-0/1-0
 Sample Type: Client
 Inject. Date: 21-Apr-2015 15:07:00 ALS Bottle#: 0 Worklist Smp#: 11
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-011
 Misc. Info.: 11 180-43257-a-4
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:20 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.650	3.667	-0.017	2821415	0.0617	
2 Chloride	4.917	4.933	-0.016	4011890613	150.4	
7 Nitrite as N		5.808			ND	
3 Sulfate	6.750	6.733	0.017	737815881	37.7	
4 Bromide	7.767	7.775	-0.008	195221H	0.2321	
5 Nitrate as N	8.975	9.000	-0.025	250221663	3.79	
6 Orthophosphate as P		12.358			ND	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-11.d

Injection Date: 21-Apr-2015 15:07:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-4

Lab Sample ID: 180-43257-4

Worklist Smp#: 11

Client ID: HD-MW-145A-0/1-0

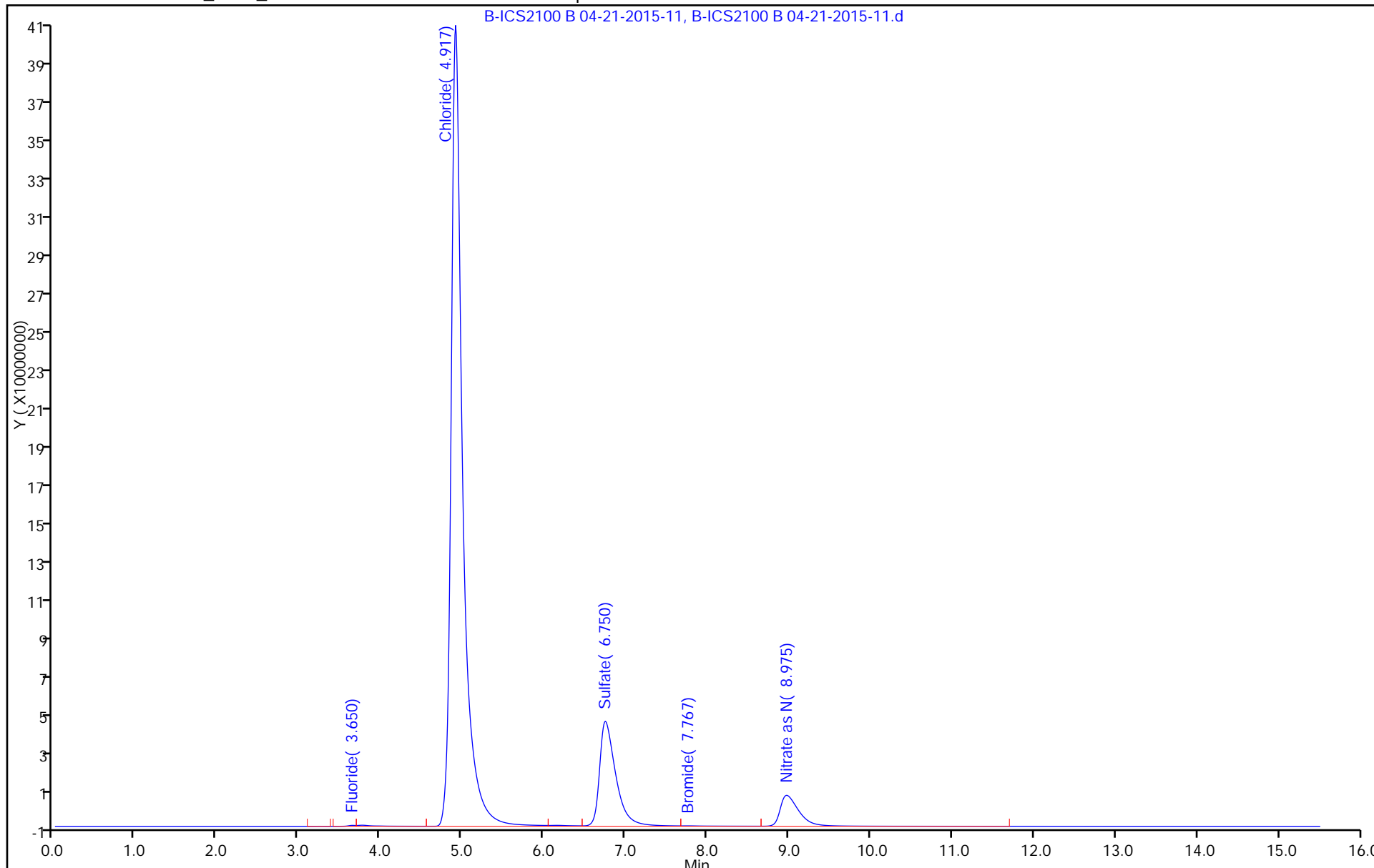
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-93D-0/1-0 Lab Sample ID: 180-43257-5
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-30.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 11:02
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 20:36
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.41		0.10	0.0062
16887-00-6	Chloride	100		1.0	0.20
14808-79-8	Sulfate	31		1.0	0.21

TestAmerica Pittsburgh
 Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-30.d
 Lims ID: 180-43257-A-5 Lab Sample ID: 180-43257-5
 Client ID: HD-MW-93D-0/1-0
 Sample Type: Client
 Inject. Date: 21-Apr-2015 20:36:00 ALS Bottle#: 0 Worklist Smp#: 30
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-030
 Misc. Info.: 30 180-43257-a-5
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 11:23:45 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.925	4.942	-0.017	2786813743	104.5	
3 Sulfate	6.758	6.742	0.016	602939772	30.8	
5 Nitrate as N	9.067	9.000	0.067	26434110	0.4077	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-30.d

Injection Date: 21-Apr-2015 20:36:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-5

Lab Sample ID: 180-43257-5

Worklist Smp#: 30

Client ID: HD-MW-93D-0/1-0

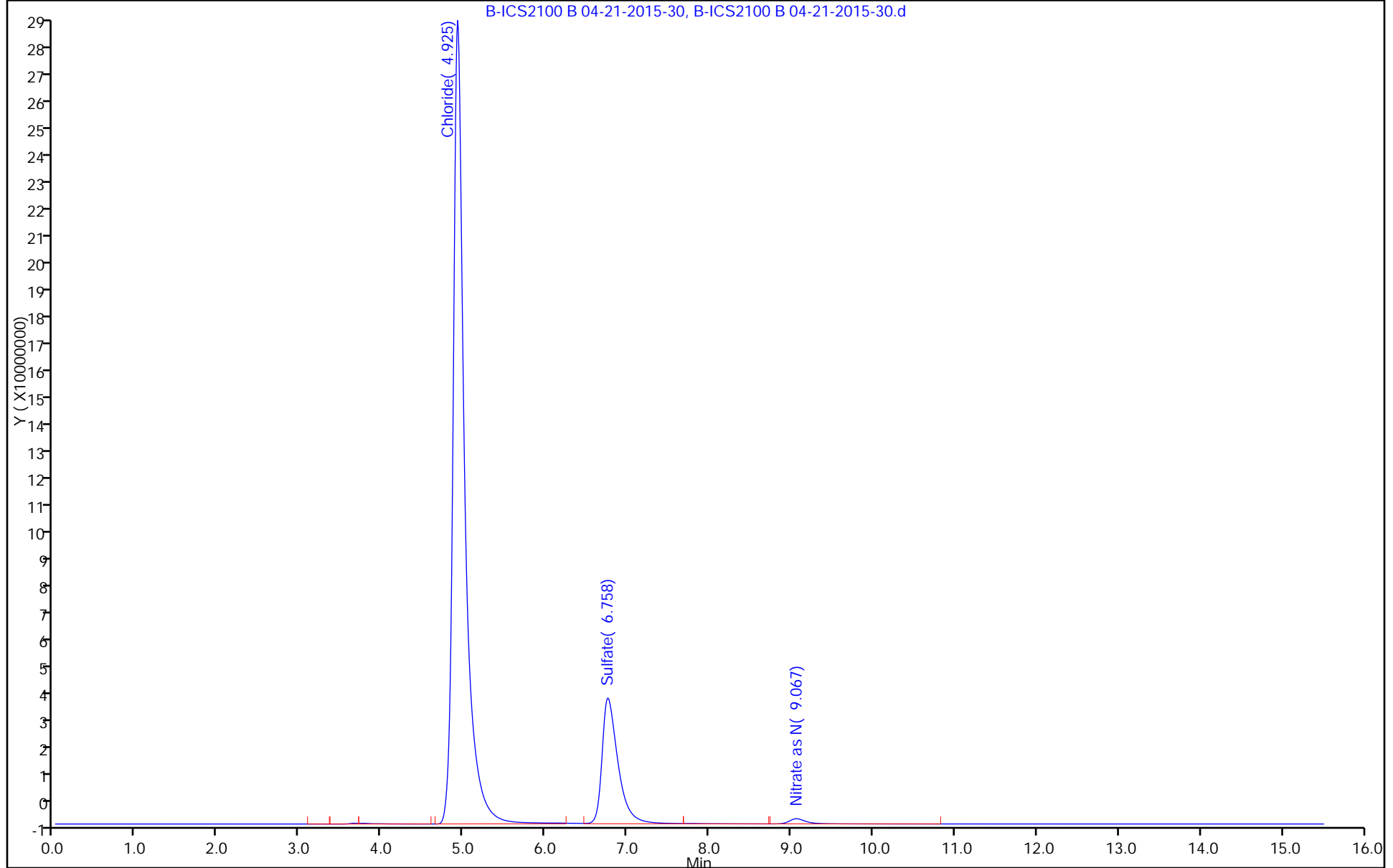
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-93S-0/1-0 Lab Sample ID: 180-43257-6
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-31.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 12:39
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 20:53
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	1.2		0.10	0.0062
16887-00-6	Chloride	170		1.0	0.20
14808-79-8	Sulfate	31		1.0	0.21

TestAmerica Pittsburgh
 Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-31.d
 Lims ID: 180-43257-A-6 Lab Sample ID: 180-43257-6
 Client ID: HD-MW-93S-0/1-0
 Sample Type: Client
 Inject. Date: 21-Apr-2015 20:53:00 ALS Bottle#: 0 Worklist Smp#: 31
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-031
 Misc. Info.: 31 180-43257-a-6
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 11:23:45 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.917	4.942	-0.025	4414072192	165.5	
3 Sulfate	6.758	6.742	0.016	617230677	31.5	
5 Nitrate as N	9.042	9.000	0.042	80494467	1.22	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-31.d

Injection Date: 21-Apr-2015 20:53:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-6

Lab Sample ID: 180-43257-6

Worklist Smp#: 31

Client ID: HD-MW-93S-0/1-0

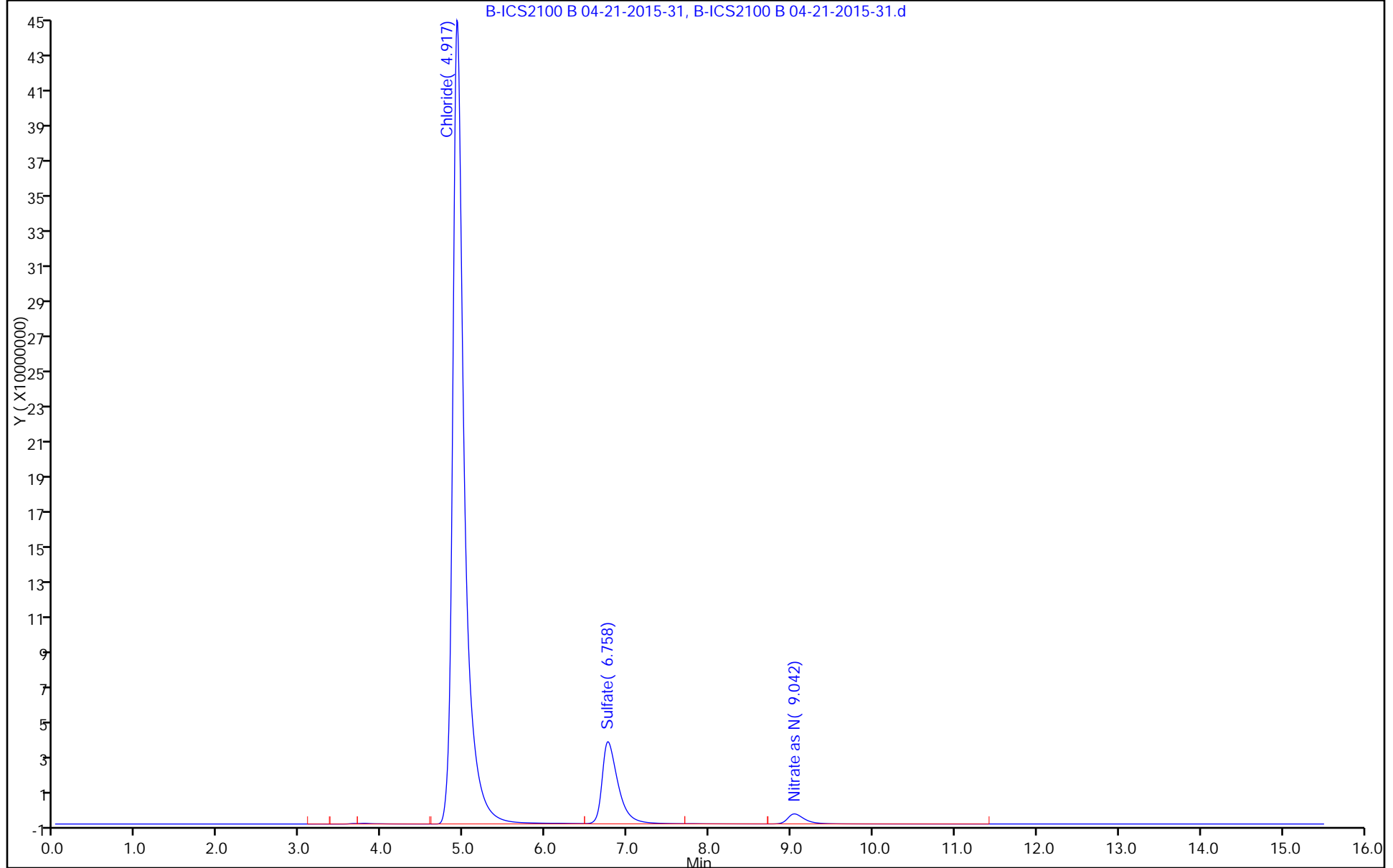
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-37D-0/1-0 Lab Sample ID: 180-43257-7
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-25.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 14:12
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 19:10
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.2		0.10	0.0062
16887-00-6	Chloride	150		1.0	0.20
14808-79-8	Sulfate	39		1.0	0.21

TestAmerica Pittsburgh
 Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-25.d
 Lims ID: 180-43257-A-7 Lab Sample ID: 180-43257-7
 Client ID: HD-MW-37D-0/1-0
 Sample Type: Client
 Inject. Date: 21-Apr-2015 19:10:00 ALS Bottle#: 0 Worklist Smp#: 25
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-025
 Misc. Info.: 25 180-43257-a-7
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 09:01:36 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.917	4.942	-0.025	4089492613	153.3	
3 Sulfate	6.742	6.733	0.009	772401196	39.5	
5 Nitrate as N	8.983	9.008	-0.025	210967221	3.19	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-25.d

Injection Date: 21-Apr-2015 19:10:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-7

Lab Sample ID: 180-43257-7

Worklist Smp#: 25

Client ID: HD-MW-37D-0/1-0

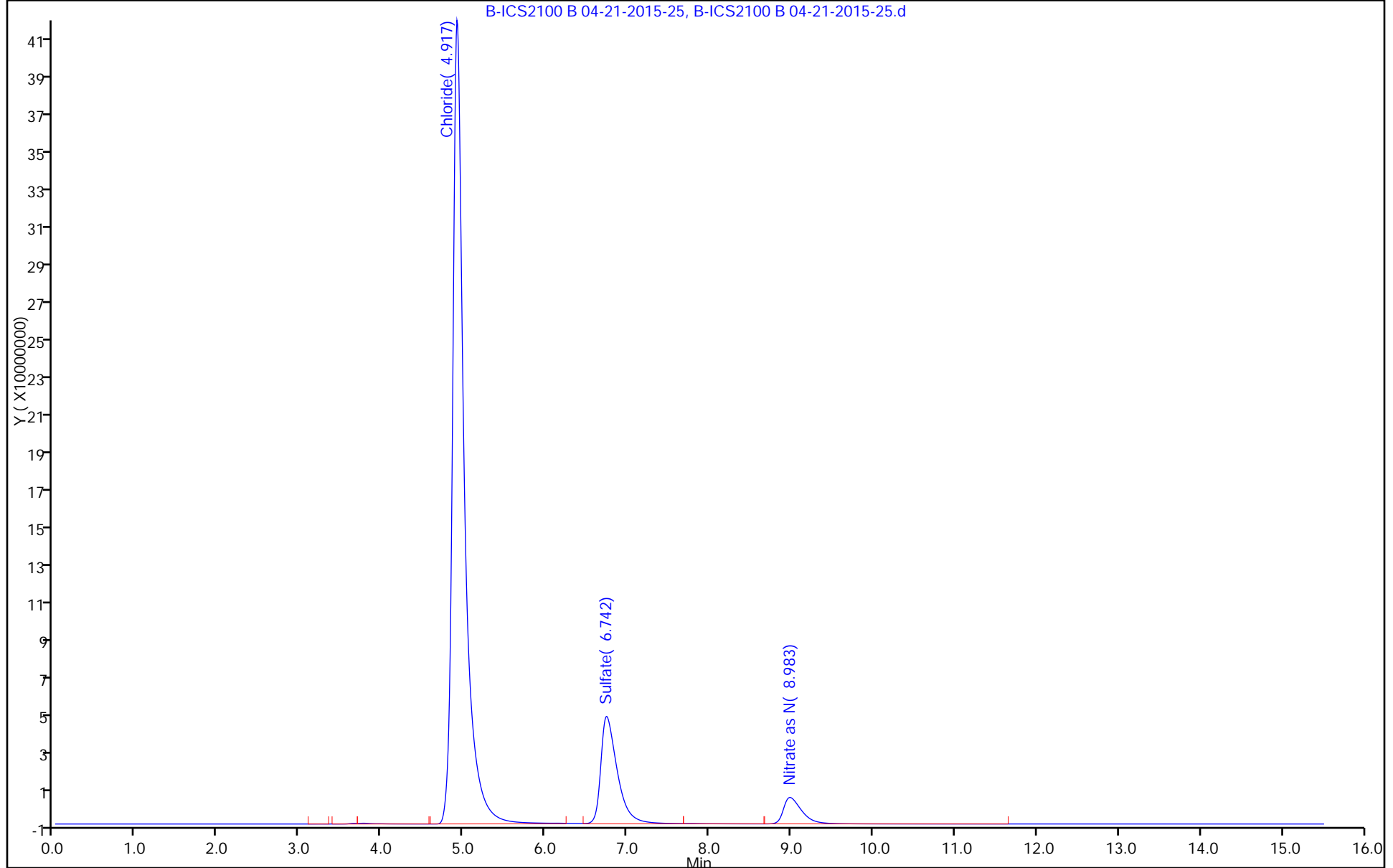
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 180-43257-8
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-32.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 08:00
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 21:11
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.6		0.10	0.0062
16887-00-6	Chloride	57		1.0	0.20
14808-79-8	Sulfate	48		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-32.d
 Lims ID: 180-43257-A-8 Lab Sample ID: 180-43257-8
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 21-Apr-2015 21:11:00 ALS Bottle#: 0 Worklist Smp#: 32
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-032
 Misc. Info.: 32 180-43257-a-8
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 11:23:45 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.933	4.942	-0.009	1524679115	57.2	
3 Sulfate	6.725	6.742	-0.017	944776363	48.3	
5 Nitrate as N	8.975	9.000	-0.025	240000263	3.63	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-32.d

Injection Date: 21-Apr-2015 21:11:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-8

Lab Sample ID: 180-43257-8

Worklist Smp#: 32

Client ID: HD-QC1-0/1-1

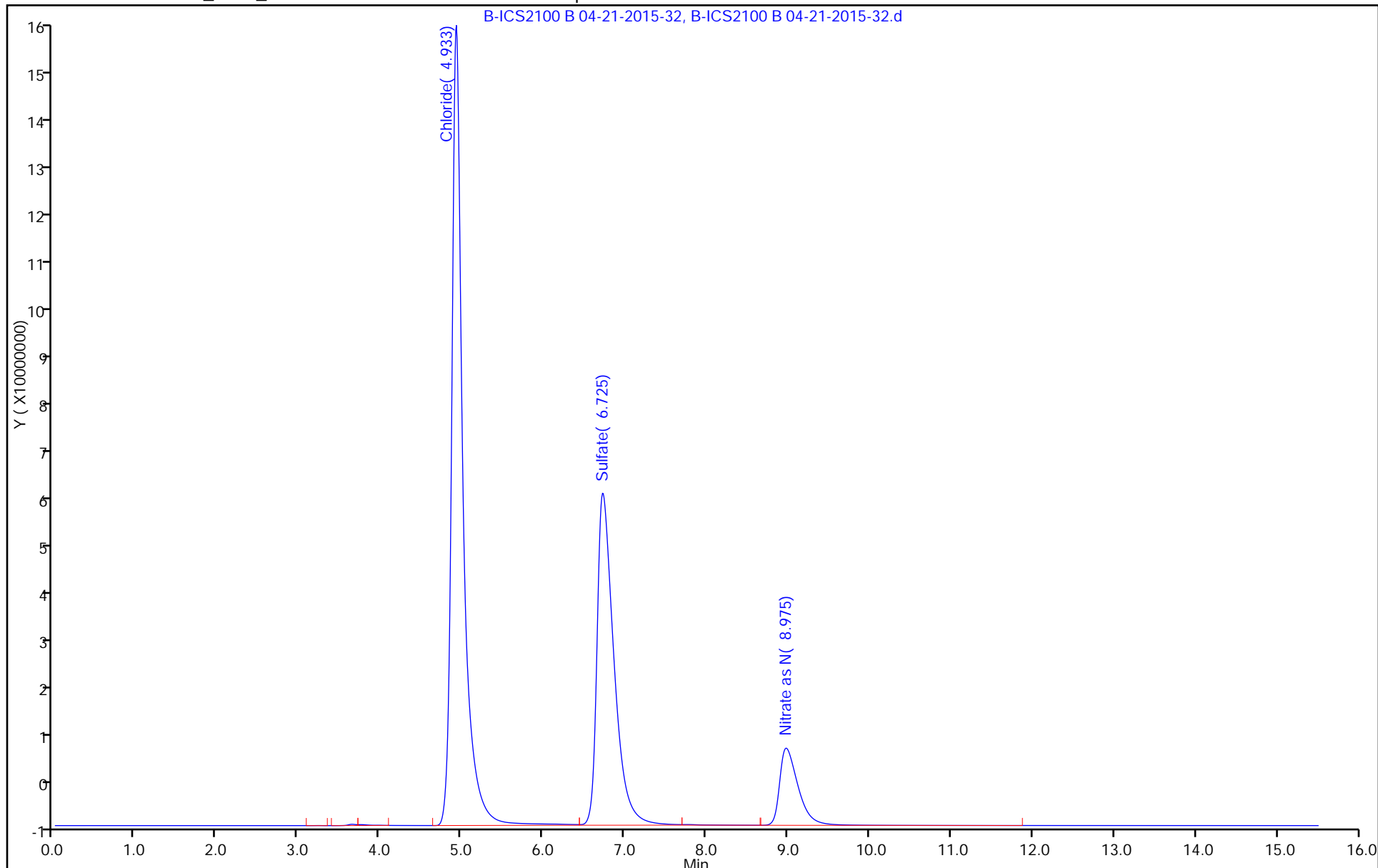
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1 Analy Batch No.: 138618

SDG No.: _____

Instrument ID: CHICS2100B GC Column: AS-18 ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2015 15:44 Calibration End Date: 04/15/2015 17:45 Calibration ID: 23326

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-138618/2	B-ICS2100 B 04-15-2015-2.d
Level 2	IC 180-138618/3	B-ICS2100 B 04-15-2015-3.d
Level 3	ICRT 180-138618/4	B-ICS2100 B 04-15-2015-4.d
Level 4	IC 180-138618/5	B-ICS2100 B 04-15-2015-5.d
Level 5	IC 180-138618/6	B-ICS2100 B 04-15-2015-6.d
Level 6	IC 180-138618/7	B-ICS2100 B 04-15-2015-7.d
Level 7	IC 180-138618/8	B-ICS2100 B 04-15-2015-8.d
Level 8	IC 180-138618/9	B-ICS2100 B 04-15-2015-9.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Fluoride	3.658	3.658	3.658	3.667	3.667	3.667	3.667	3.675			3.308 - 4.008	3.665
Chloride	4.950	4.950	4.942	4.942	4.933	4.933	4.925	4.917			4.592 - 5.292	4.937
Nitrite as N	5.817	5.817	5.817	5.817	5.817	5.817	+++++	+++++			5.567 - 6.067	5.817
Sulfate	6.858	6.850	6.833	6.808	6.750	6.683	6.625	6.575			6.483 - 7.183	6.748
Bromide	7.817	7.817	7.808	7.808	7.783	7.767	7.733	7.717			7.458 - 8.158	7.781
Nitrate as N	9.100	9.100	9.083	9.067	9.017	8.967	8.917	8.875			8.833 - 9.333	9.016
Orthophosphate as P	+++++	+++++	12.633	12.600	12.467	12.317	12.183	12.083			12.133 - 13.133	12.381

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1 Analy Batch No.: 138618

SDG No.: _____

Instrument ID: CHICS2100B GC Column: AS-18 ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2015 15:44 Calibration End Date: 04/15/2015 17:45 Calibration ID: 23326

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-138618/2	B-ICS2100 B 04-15-2015-2.d
Level 2	IC 180-138618/3	B-ICS2100 B 04-15-2015-3.d
Level 3	ICRT 180-138618/4	B-ICS2100 B 04-15-2015-4.d
Level 4	IC 180-138618/5	B-ICS2100 B 04-15-2015-5.d
Level 5	IC 180-138618/6	B-ICS2100 B 04-15-2015-6.d
Level 6	IC 180-138618/7	B-ICS2100 B 04-15-2015-7.d
Level 7	IC 180-138618/8	B-ICS2100 B 04-15-2015-8.d
Level 8	IC 180-138618/9	B-ICS2100 B 04-15-2015-9.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 7	LVL 4 LVL 8		B	M1	M2								
Fluoride	46484040 44488770	41188952 43022992	45611308 42521689	45839580 41976790	Lin2	142149.513	43397203.3							0.9980		0.9950
Chloride	25085564 26660142	26222144 26369330	26666796 26648824	26747431 26853496	Lin2	-1610994.2	26686961.8							1.0000		0.9950
Nitrite as N	76927840 57882564	60781072 54059356	61607114 +++++	61339242 +++++	Lin2	972853.413	57624405.7							0.9980		0.9950
Sulfate	23335222 19577256	20457294 19212636	19964310 19359210	19887329 19477723	Lin2	3912770.84	19478213.4							1.0000		0.9950
Bromide	835850 915403	853785 881845	884616 868328	909169 849773	Lin2	-9816.0251	883383.993							0.9990		0.9950
Nitrate as N	55575600 66453469	60515684 66412101	63992838 67380292	65497209 68126262	Lin2	-571568.42	66232763.7							0.9990		0.9950
Orthophosphate as P	++++ 26468473	++++ 26383080	23630620 26946762	24921352 27192225	Lin2	-1805036.3	27076969.6							1.0000		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.: 180-43257-1 Analy Batch No.: 138618

SDG No.: _____

Instrument ID: CHICS2100B GC Column: AS-18 ID: _____ Heated Purge: (Y/N) N

Calibration Start Date: 04/15/2015 15:44 Calibration End Date: 04/15/2015 17:45 Calibration ID: 23326

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-138618/2	B-ICS2100 B 04-15-2015-2.d
Level 2	IC 180-138618/3	B-ICS2100 B 04-15-2015-3.d
Level 3	ICRT 180-138618/4	B-ICS2100 B 04-15-2015-4.d
Level 4	IC 180-138618/5	B-ICS2100 B 04-15-2015-5.d
Level 5	IC 180-138618/6	B-ICS2100 B 04-15-2015-6.d
Level 6	IC 180-138618/7	B-ICS2100 B 04-15-2015-7.d
Level 7	IC 180-138618/8	B-ICS2100 B 04-15-2015-8.d
Level 8	IC 180-138618/9	B-ICS2100 B 04-15-2015-9.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
		LVL 6	LVL 7	LVL 8			LVL 6	LVL 7	LVL 8		
Fluoride	Lin2	2324202 215114961	10297238 318912666	22805654 419767900	45839580	111221925	0.0500 5.00	0.250 7.50	0.500 10.0	1.00	2.50
Chloride	Lin2	25085564 2636933019	131110722 3997323672	266667960 5370699112	534948618	1333007108	1.00 100	5.00 150	10.0 200	20.0	50.0
Nitrite as N	Lin2	3846392 270296782	15195268 +++++	30803557 +++++	61339242	144706410	0.0500 5.00	0.250 +++++	0.500 +++++	1.00	2.50
Sulfate	Lin2	23335222 1921263587	102286469 2903881535	199643096 3895544554	397746587	978862804	1.00 100	5.00 150	10.0 200	20.0	50.0
Bromide	Lin2	167170 17636894	853785 26049842	1769232 33990920	3636676	9154030	0.200 20.0	1.00 30.0	2.00 40.0	4.00	10.0
Nitrate as N	Lin2	2778780 332060506	15128921 505352191	31996419 681262618	65497209	166133672	0.0500 5.00	0.250 7.50	0.500 10.0	1.00	2.50
Orthophosphate as P	Lin2	++++ 131915399	++++ 202100715	11815310 271922248	24921352	66171182	++++ 5.00	++++ 7.50	0.500 10.0	1.00	2.50

Curve Type Legend:

Lin2 = Linear 1/conc^2 by height

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-2.d
 Lims ID: ic L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 15-Apr-2015 15:44:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006484-002
 Misc. Info.: 3659 ic I2
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 16-Apr-2015 12:08:32 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK011

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.658	3.658	0.000	2324202	0.0500	0.0503	
2 Chloride	4.950	4.942	0.008	25085564	1.00	1.00	
7 Nitrite as N	5.817	5.817	0.000	3846392	0.0500	0.0499	
3 Sulfate	6.858	6.833	0.025	23335222	1.00	1.00	
4 Bromide	7.817	7.808	0.009	167170H	0.2000	0.2004	
5 Nitrate as N	9.100	9.083	0.017	2778780	0.0500	0.0506	
6 Orthophosphate as P	12.667	12.633	0.034	870881	0.0500	0.0988	

Reagents:

ICSTDL2_00171 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-2.d

Injection Date: 15-Apr-2015 15:44:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ic L2

Worklist Smp#: 2

Client ID:

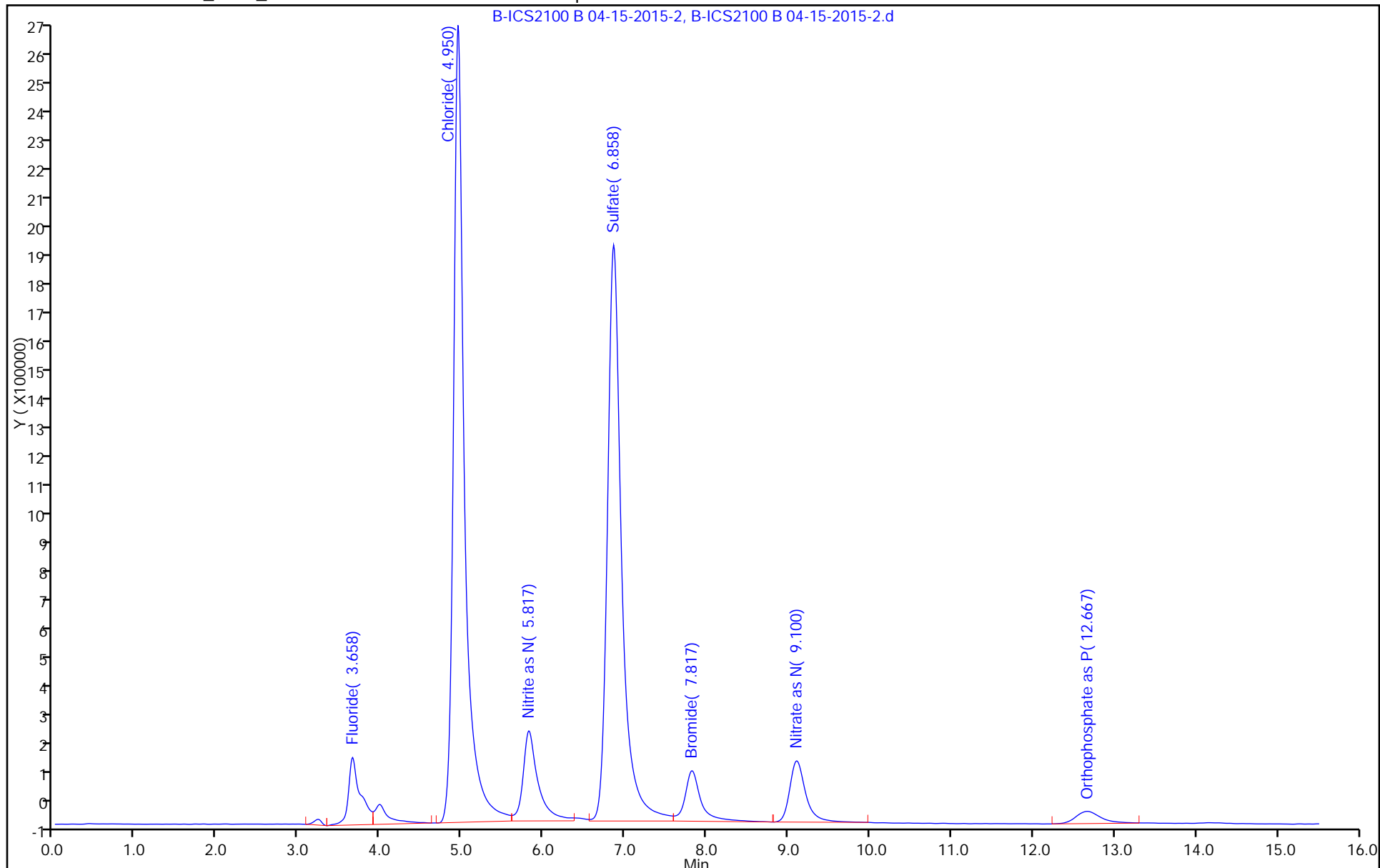
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-3.d
 Lims ID: ic L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 15-Apr-2015 16:01:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006484-003
 Misc. Info.: 27860 ic I3
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 16-Apr-2015 12:08:32 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK011

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.658	3.658	0.000	10297238	0.2500	0.2340	
2 Chloride	4.950	4.942	0.008	131110722	5.00	4.97	
7 Nitrite as N	5.817	5.817	0.000	15195268	0.2500	0.2468	
3 Sulfate	6.850	6.833	0.017	102286469	5.00	5.05	
4 Bromide	7.817	7.808	0.009	853785H	1.00	0.9776	
5 Nitrate as N	9.100	9.083	0.017	15128921	0.2500	0.2371	
6 Orthophosphate as P	12.667	12.633	0.034	5299466	0.2500	0.2624	

Reagents:

ICSTDL3_00209 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-3.d

Injection Date: 15-Apr-2015 16:01:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ic L3

Worklist Smp#: 3

Client ID:

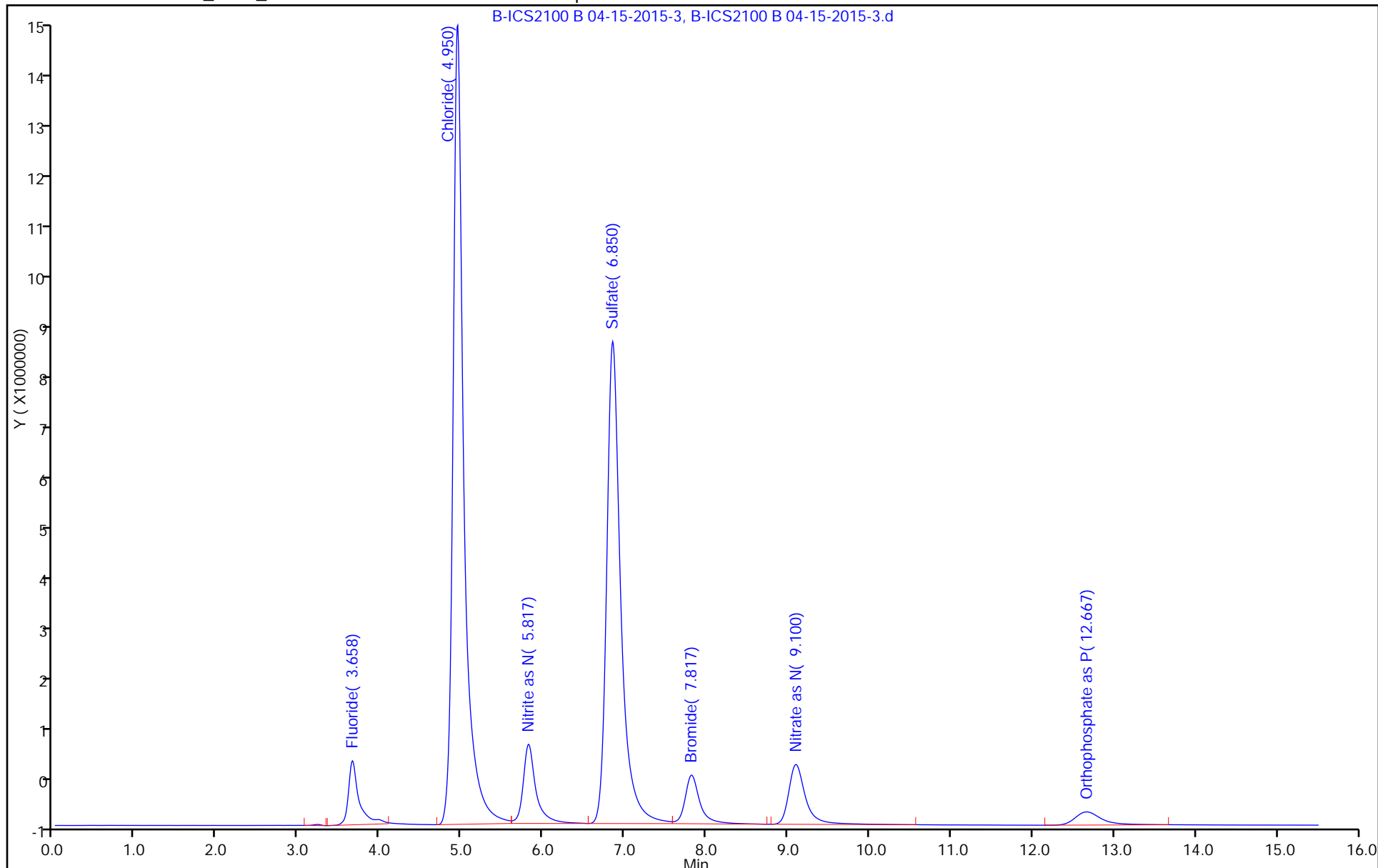
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-4.d
 Lims ID: icrt L4
 Client ID:
 Sample Type: ICRT Calib Level: 4
 Inject. Date: 15-Apr-2015 16:19:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006484-004
 Misc. Info.: 21504 icrt I4
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 16-Apr-2015 12:08:32 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK011

First Level Reviewer: hartmanm Date: 16-Apr-2015 11:57:48

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.658	3.658	0.000	22805654	0.5000	0.5222	
2 Chloride	4.942	4.942	0.000	266667960	10.0	10.1	
7 Nitrite as N	5.817	5.817	0.000	30803557	0.5000	0.5177	
3 Sulfate	6.833	6.833	0.000	199643096	10.0	10.0	
4 Bromide	7.808	7.808	0.000	1769232H	2.00	2.01	
5 Nitrate as N	9.083	9.083	0.000	31996419	0.5000	0.4917	
6 Orthophosphate as P	12.633	12.633	0.000	11815310	0.5000	0.5030	

Reagents:

ICSTDL4_00143 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-4.d

Injection Date: 15-Apr-2015 16:19:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: icrt L4

Worklist Smp#: 4

Client ID:

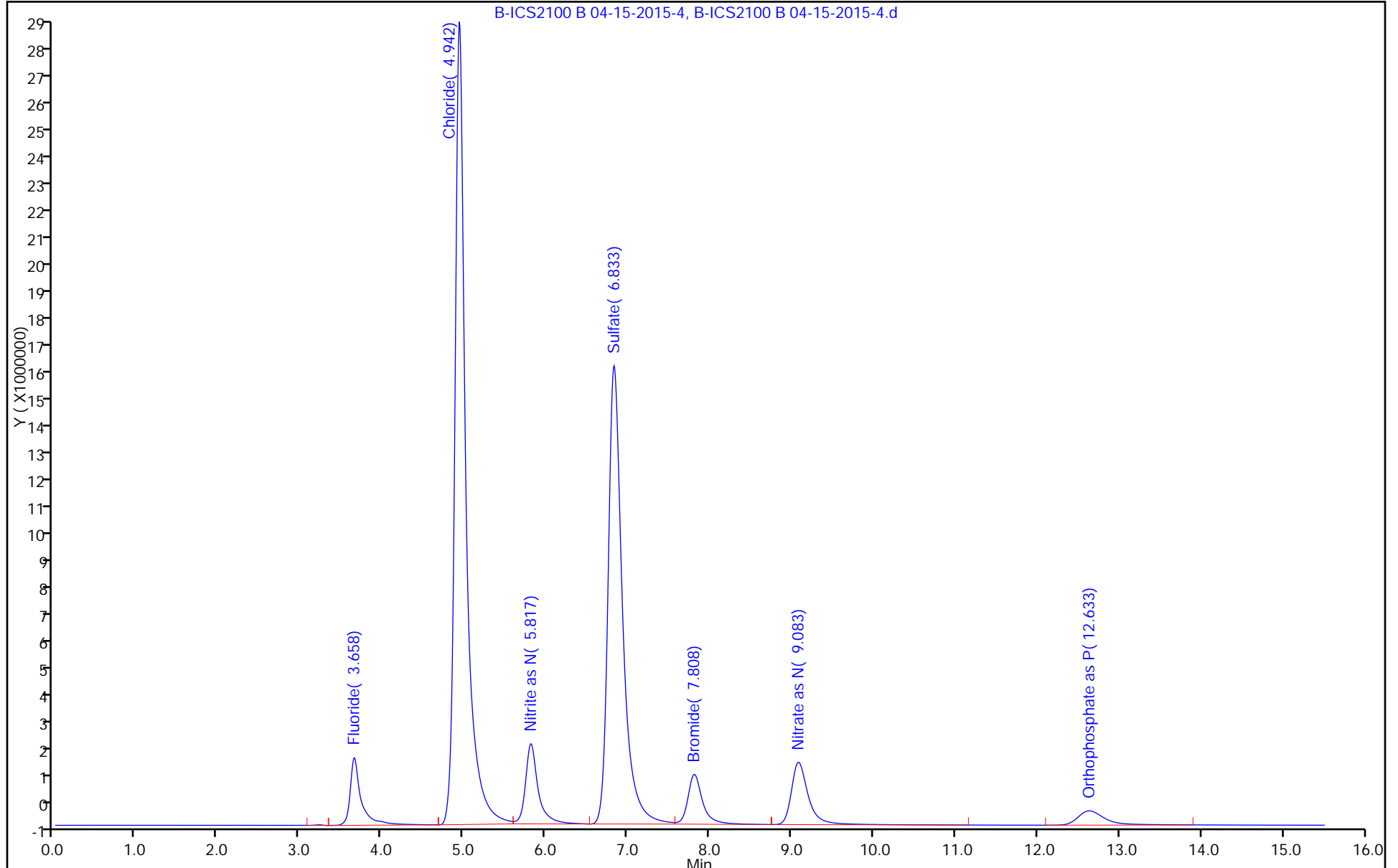
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-5.d
 Lims ID: ic L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 15-Apr-2015 16:36:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006484-005
 Misc. Info.: 13847 ic I5
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 16-Apr-2015 12:08:33 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK011

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.667	3.658	0.009	45839580	1.00	1.05	
2 Chloride	4.942	4.942	0.000	534948618	20.0	20.1	
7 Nitrite as N	5.817	5.817	0.000	61339242	1.00	1.05	
3 Sulfate	6.808	6.833	-0.025	397746587	20.0	20.2	
4 Bromide	7.808	7.808	0.000	3636676H	4.00	4.13	
5 Nitrate as N	9.067	9.083	-0.016	65497209	1.00	1.00	
6 Orthophosphate as P	12.600	12.633	-0.033	24921352	1.00	0.9871	

Reagents:

ICSTDL5_00145

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-5.d

Injection Date: 15-Apr-2015 16:36:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ic L5

Worklist Smp#: 5

Client ID:

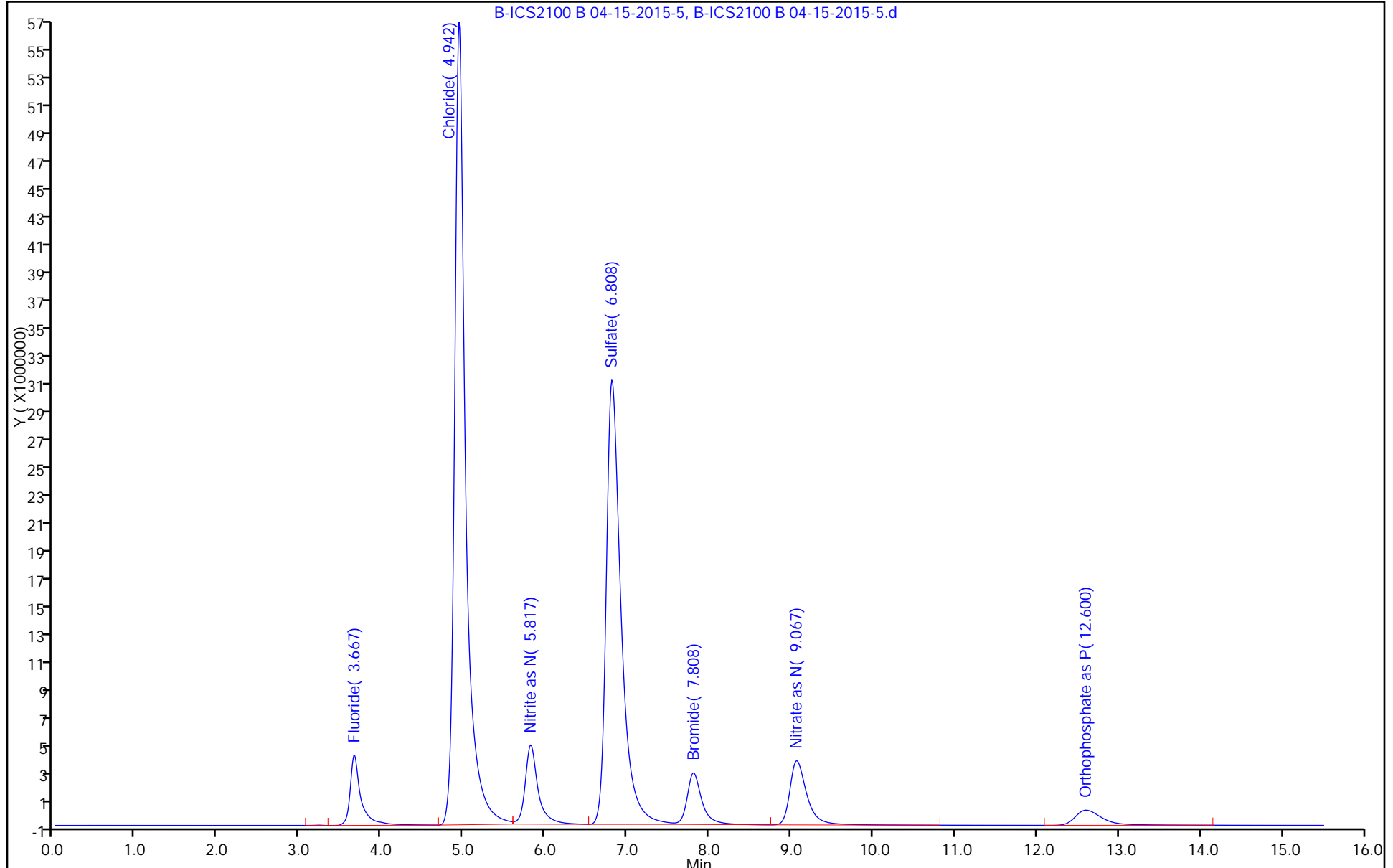
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-6.d
 Lims ID: ic L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 15-Apr-2015 16:53:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006484-006
 Misc. Info.: 10546 ic l6
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 16-Apr-2015 12:08:33 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK011

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.667	3.658	0.009	111221925	2.50	2.56	
2 Chloride	4.933	4.942	-0.009	1333007108	50.0	50.0	
7 Nitrite as N	5.817	5.817	0.000	144706410	2.50	2.49	
3 Sulfate	6.750	6.833	-0.083	978862804	50.0	50.1	
4 Bromide	7.783	7.808	-0.025	9154030H	10.0	10.4	
5 Nitrate as N	9.017	9.083	-0.066	166133672	2.50	2.52	
6 Orthophosphate as P	12.467	12.633	-0.166	66171182	2.50	2.51	

Reagents:

ICSTDL6_00213 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-6.d

Injection Date: 15-Apr-2015 16:53:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ic L6

Worklist Smp#: 6

Client ID:

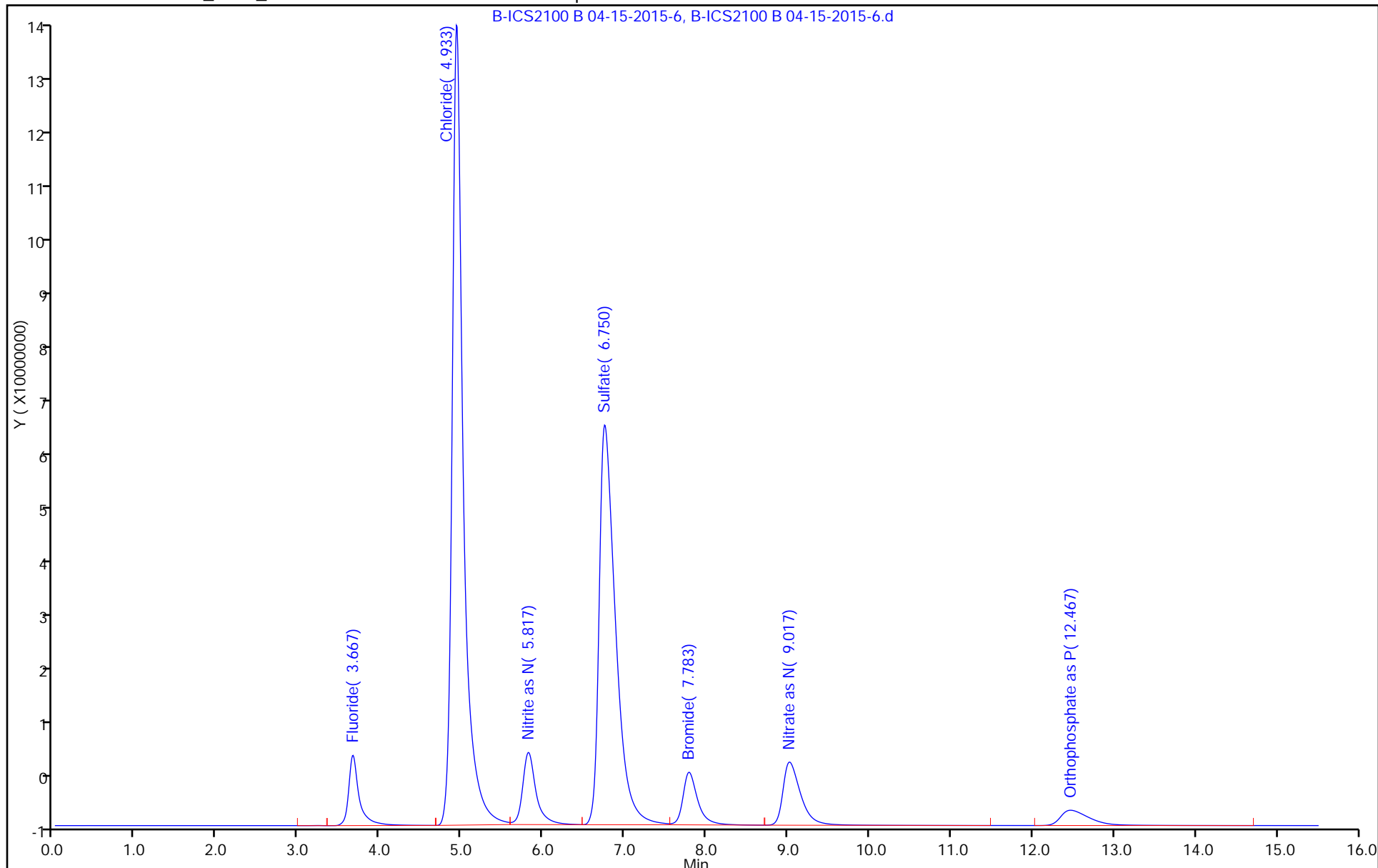
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-7.d
 Lims ID: ic L7
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 15-Apr-2015 17:11:00 ALS Bottle#: 0 Worklist Smp#: 7
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006484-007
 Misc. Info.: 9005 ic I7
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 16-Apr-2015 12:08:34 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK011

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.667	3.658	0.009	215114961	5.00	4.95	
2 Chloride	4.933	4.942	-0.009	2636933019	100.0	98.9	
7 Nitrite as N	5.817	5.817	0.000	270296782	5.00	4.67	
3 Sulfate	6.683	6.833	-0.150	1921263587	100.0	98.4	
4 Bromide	7.767	7.808	-0.041	17636894H	20.0	20.0	
5 Nitrate as N	8.967	9.083	-0.116	332060506	5.00	5.02	
6 Orthophosphate as P	12.317	12.633	-0.316	131915399	5.00	4.94	

Reagents:

ICSTDL7_00141 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-7.d

Injection Date: 15-Apr-2015 17:11:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ic L7

Worklist Smp#: 7

Client ID:

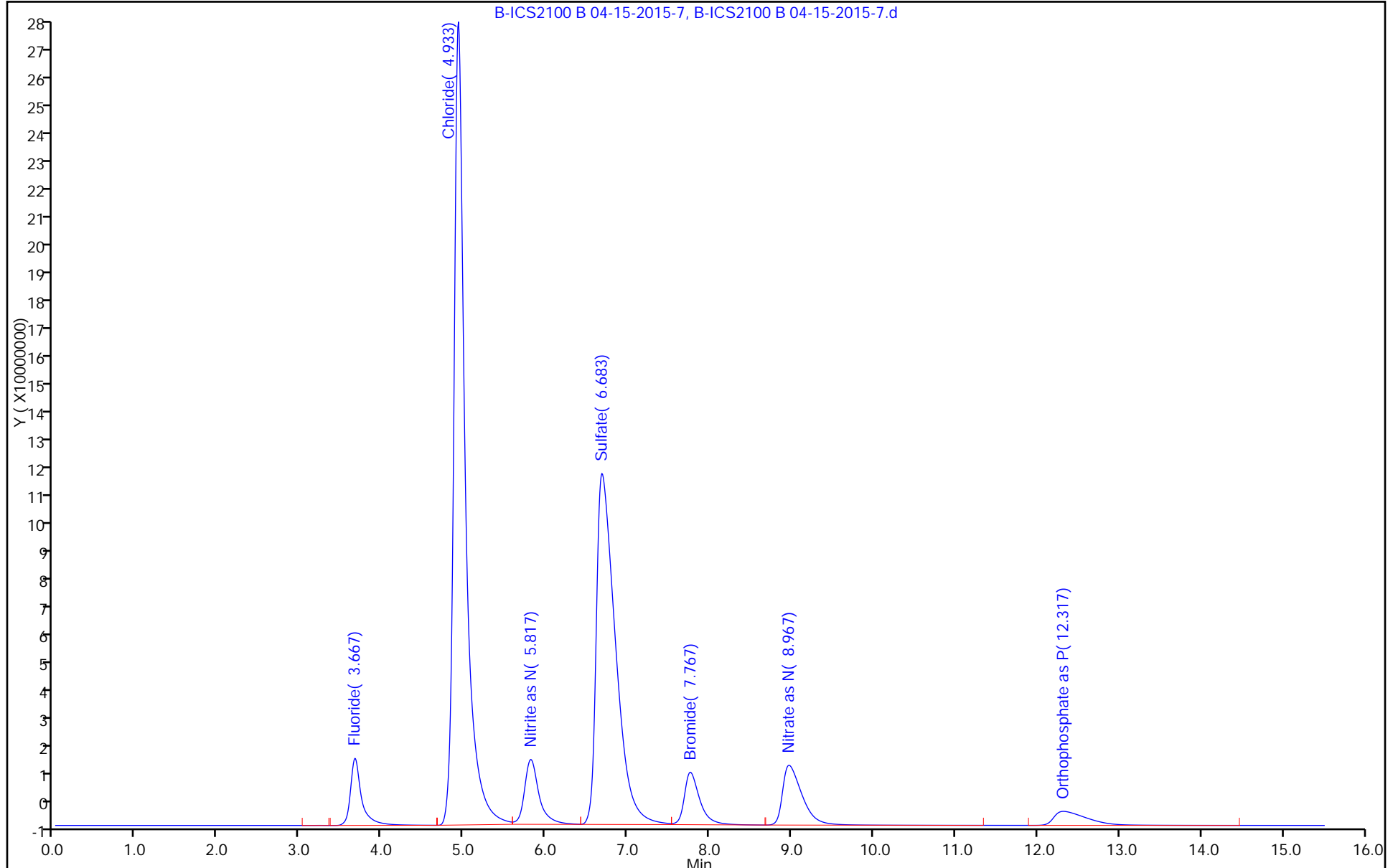
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-8.d
 Lims ID: ic L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 15-Apr-2015 17:28:00 ALS Bottle#: 0 Worklist Smp#: 8
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006484-008
 Misc. Info.: 7430 ic l8
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 16-Apr-2015 12:08:34 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK011

First Level Reviewer: hartmanm Date: 16-Apr-2015 12:00:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.667	3.658	0.009	318912666	7.50	7.35	
2 Chloride	4.925	4.942	-0.017	3997323672	150.0	149.8	
7 Nitrite as N	5.808	5.817	-0.009	362807489	7.50	6.28	
3 Sulfate	6.625	6.833	-0.208	2903881535	150.0	148.9	
4 Bromide	7.733	7.808	-0.075	26049842H	30.0	29.5	
5 Nitrate as N	8.917	9.083	-0.166	505352191	7.50	7.64	
6 Orthophosphate as P	12.183	12.633	-0.450	202100715	7.50	7.53	

Reagents:

ICSTDL8_00112 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-8.d

Injection Date: 15-Apr-2015 17:28:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ic L8

Worklist Smp#: 8

Client ID:

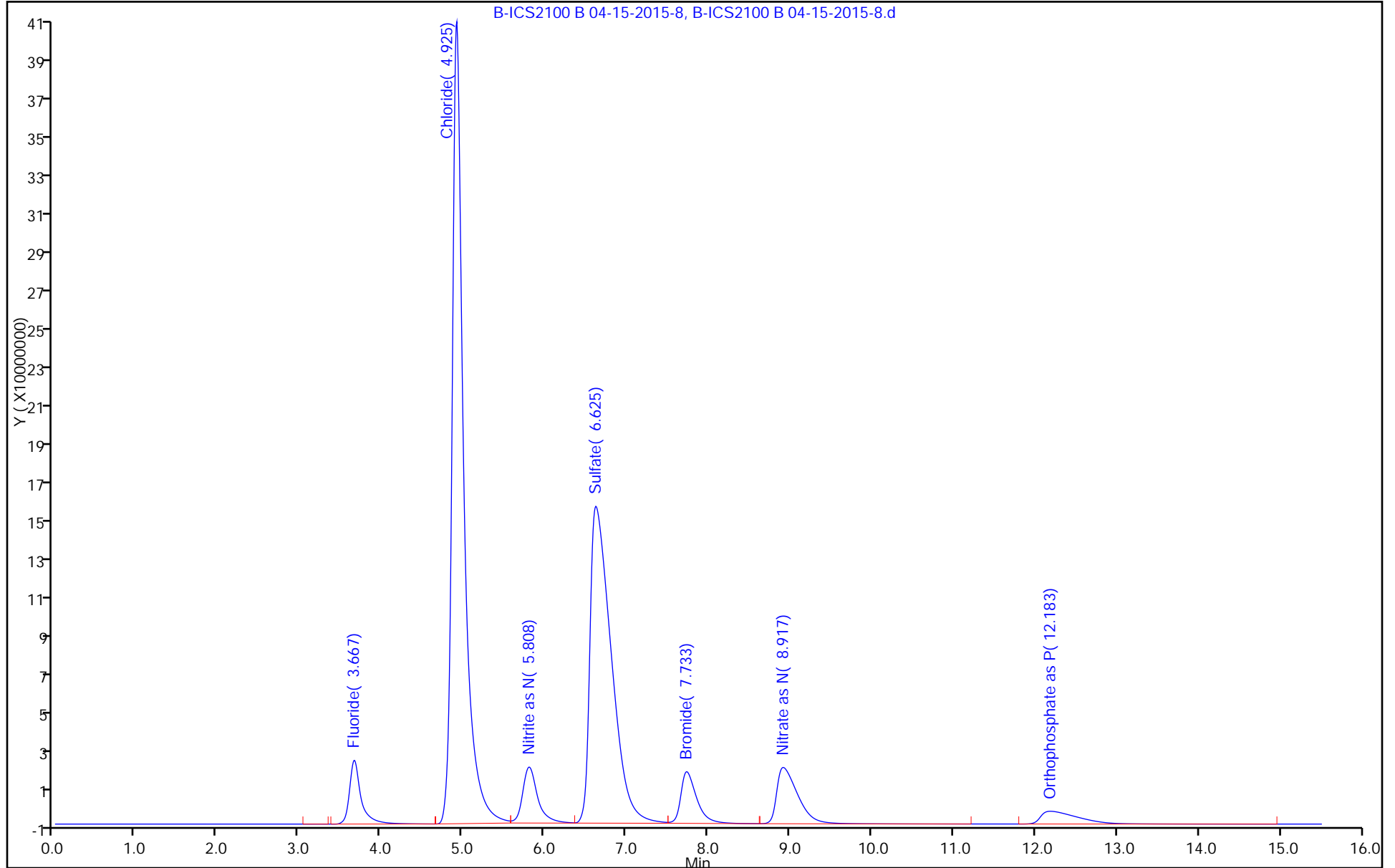
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Lims ID: ic L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 15-Apr-2015 17:45:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006484-009
 Misc. Info.: 4878 ic I9
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 16-Apr-2015 12:08:34 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK011

First Level Reviewer: hartmanm

Date: 16-Apr-2015 11:58:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.675	3.658	0.017	419767900	10.0	9.67	
2 Chloride	4.917	4.942	-0.025	5370699112	200.0	201.3	
7 Nitrite as N	5.808	5.817	-0.009	499624168	10.0	8.65	
3 Sulfate	6.575	6.833	-0.258	3895544554	200.0	199.8	
4 Bromide	7.717	7.808	-0.091	33990920H	40.0	38.5	
5 Nitrate as N	8.875	9.083	-0.208	681262618	10.0	10.3	
6 Orthophosphate as P	12.083	12.633	-0.550	271922248	10.0	10.1	

Reagents:

ICSTDL9_00115

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d

Injection Date: 15-Apr-2015 17:45:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ic L9

Worklist Smp#: 9

Client ID:

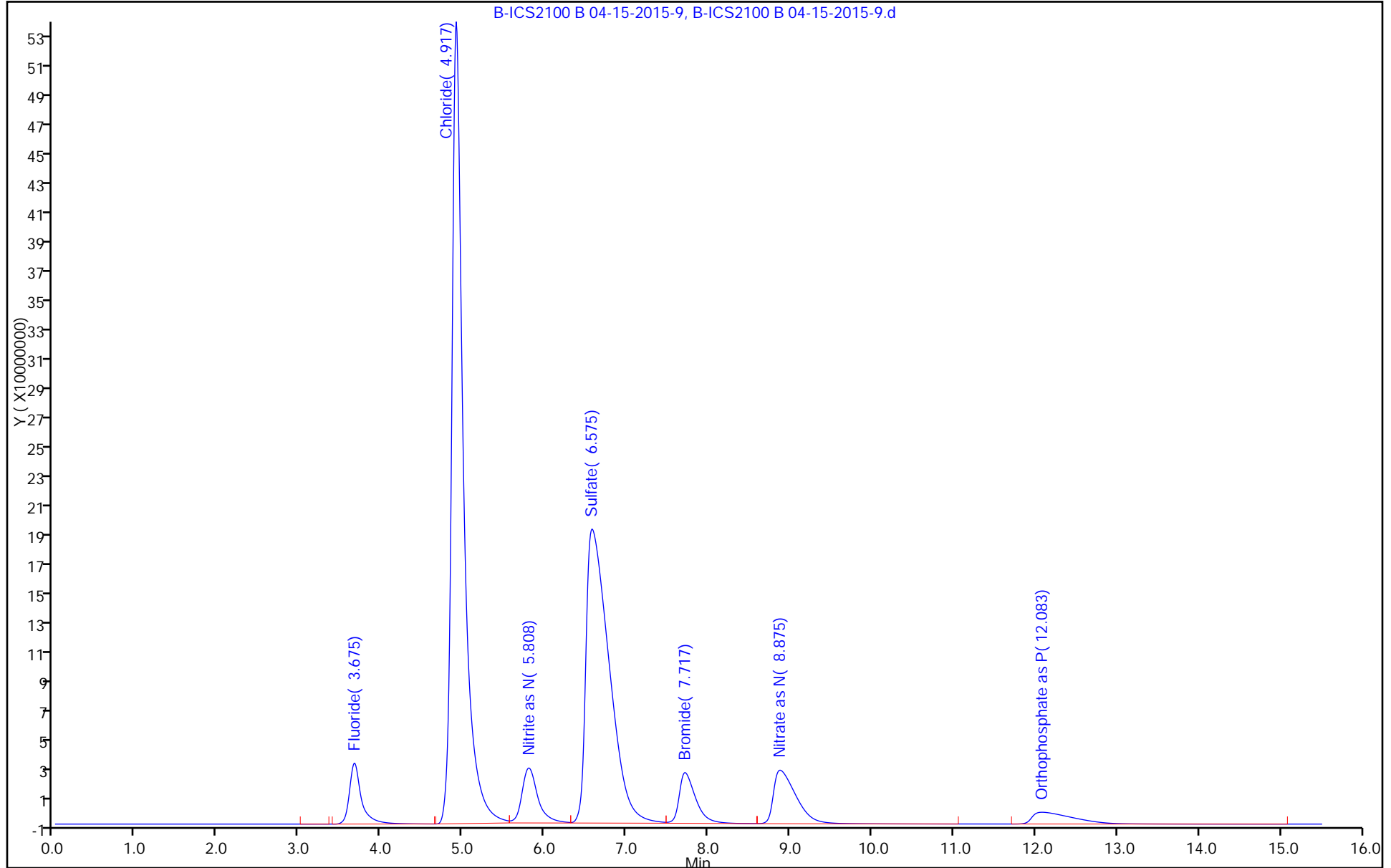
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: ICV 180-139181/2 Calibration Date: 04/21/2015 12:31
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-2.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		43565172		3.01	3.00	0.3	10.0
Chloride	Lin2		25882841		58.3	60.0	-2.9	10.0
Nitrite as N	Lin2	62099531	56664743		2.93	3.00	-2.2	10.0
Sulfate	Lin2		18890365		58.0	60.0	-3.4	10.0
Bromide	Lin2		882574		12.0	12.0	0.0	10.0
Nitrate as N	Lin2		63463139		2.88	3.00	-3.9	10.0
Orthophosphate as P	Lin2		24766565		2.81	3.00	-6.3	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: ICV 180-139181/2 Calibration Date: 04/21/2015 12:31
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-2.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.67	3.31	4.01
Chloride	4.93	4.58	5.28
Nitrite as N	5.80	5.56	6.06
Sulfate	6.73	6.38	7.08
Bromide	7.78	7.43	8.13
Nitrate as N	8.99	8.75	9.25
Orthophosphate as P	12.34	11.81	12.81

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-2.d
 Lims ID: icv
 Client ID:
 Sample Type: ICV
 Inject. Date: 21-Apr-2015 12:31:00 ALS Bottle#: 0 Worklist Smp#: 2
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-002
 Misc. Info.: 2 icv
 Operator ID: Instrument ID: CHICS2100B
 Sublist:
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 17:46:57 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.667	3.658	0.009	130695517	3.00	3.01	
2 Chloride	4.933	4.933	0.000	1552970480	60.0	58.3	
7 Nitrite as N	5.800	5.808	-0.008	170062226	3.00	2.93	
3 Sulfate	6.725	6.733	-0.008	1133421924	60.0	58.0	
4 Bromide	7.775	7.775	0.000	10590891H	12.0	12.0	
5 Nitrate as N	8.992	9.000	-0.008	190389418	3.00	2.88	
6 Orthophosphate as P	12.342	12.308	0.034	74299695	3.00	2.81	

Reagents:

icicv_01249 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-2.d

Injection Date: 21-Apr-2015 12:31:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: icv

Worklist Smp#: 2

Client ID:

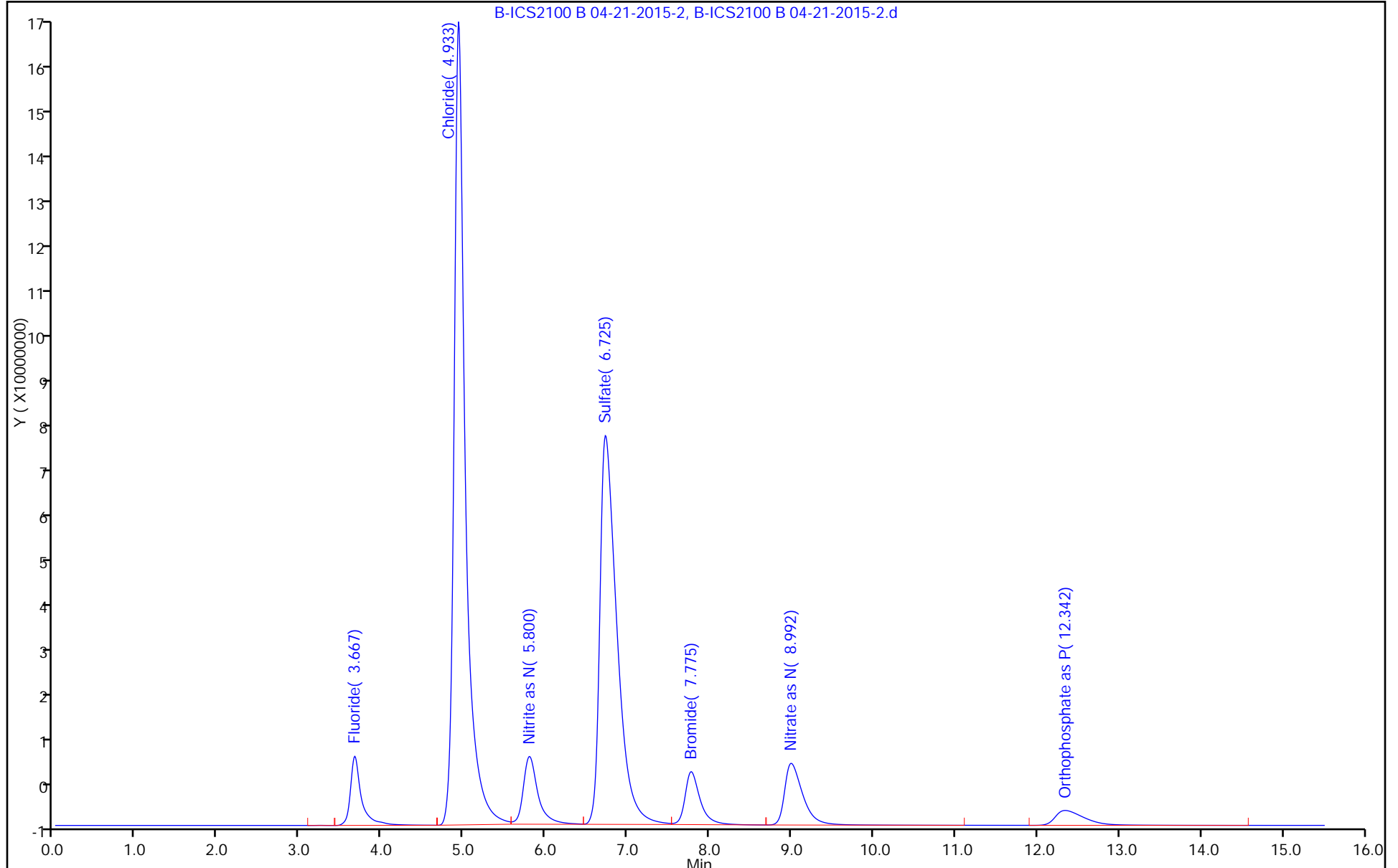
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139181/3 Calibration Date: 04/21/2015 12:49
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-3.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		44682373		2.57	2.50	2.8	10.0
Chloride	Lin2		27153209		50.9	50.0	1.9	10.0
Nitrite as N	Lin2	62099531	59134245		2.55	2.50	1.9	10.0
Sulfate	Lin2		19857766		50.8	50.0	1.5	10.0
Bromide	Lin2		927879		10.5	10.0	5.1	10.0
Nitrate as N	Lin2		67677682		2.56	2.50	2.5	10.0
Orthophosphate as P	Lin2		26371345		2.50	2.50	0.0	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139181/3 Calibration Date: 04/21/2015 12:49
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-3.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.67	3.32	4.02
Chloride	4.93	4.58	5.28
Nitrite as N	5.81	5.56	6.06
Sulfate	6.73	6.38	7.08
Bromide	7.78	7.43	8.13
Nitrate as N	9.00	8.75	9.25
Orthophosphate as P	12.36	11.86	12.86

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-3.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 21-Apr-2015 12:49:00 ALS Bottle#: 0 Worklist Smp#: 3
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-003
 Misc. Info.: 3 ccv
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:20 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.667	3.667	0.000	111705932	2.50	2.57	
2 Chloride	4.933	4.933	0.000	1357660455	50.0	50.9	
7 Nitrite as N	5.808	5.808	0.000	147835613	2.50	2.55	
3 Sulfate	6.733	6.733	0.000	992888295	50.0	50.8	
4 Bromide	7.775	7.775	0.000	9278791H	10.0	10.5	
5 Nitrate as N	9.000	9.000	0.000	169194205	2.50	2.56	
6 Orthophosphate as P	12.358	12.358	0.000	65928363	2.50	2.50	

Reagents:

icccv_01218 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-3.d

Injection Date: 21-Apr-2015 12:49:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ccv

Worklist Smp#: 3

Client ID:

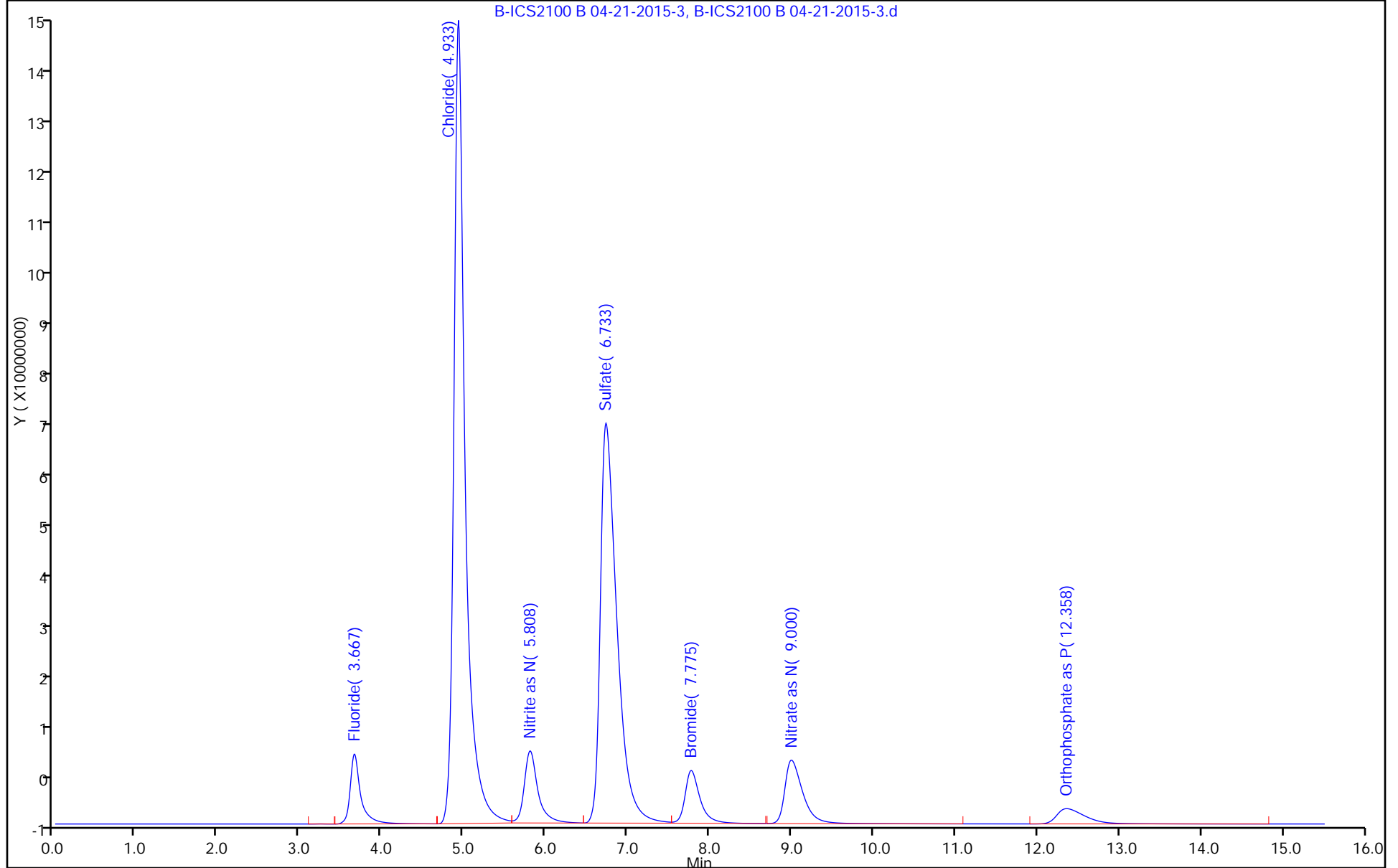
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139181/15 Calibration Date: 04/21/2015 16:17
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-15.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		44545146		2.56	2.50	2.5	10.0
Chloride	Lin2		27121353		50.9	50.0	1.7	10.0
Nitrite as N	Lin2	62099531	58980046		2.54	2.50	1.7	10.0
Sulfate	Lin2		19847007		50.7	50.0	1.5	10.0
Bromide	Lin2		924077		10.5	10.0	4.7	10.0
Nitrate as N	Lin2		67547004		2.56	2.50	2.3	10.0
Orthophosphate as P	Lin2		25994869		2.47	2.50	-1.3	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139181/15 Calibration Date: 04/21/2015 16:17
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-15.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.66	3.31	4.01
Chloride	4.93	4.58	5.28
Nitrite as N	5.81	5.56	6.06
Sulfate	6.73	6.38	7.08
Bromide	7.78	7.43	8.13
Nitrate as N	9.00	8.75	9.25
Orthophosphate as P	12.31	11.81	12.81

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-15.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 21-Apr-2015 16:17:00 ALS Bottle#: 0 Worklist Smp#: 15
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-015
 Misc. Info.: 15 ccv
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:24 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.658	3.658	0.000	111362866	2.50	2.56	
2 Chloride	4.933	4.933	0.000	1356067627	50.0	50.9	
7 Nitrite as N	5.808	5.808	0.000	147450116	2.50	2.54	
3 Sulfate	6.733	6.733	0.000	992350333	50.0	50.7	
4 Bromide	7.775	7.775	0.000	9240774H	10.0	10.5	
5 Nitrate as N	9.000	9.000	0.000	168867509	2.50	2.56	
6 Orthophosphate as P	12.308	12.308	0.000	64987173	2.50	2.47	

Reagents:

icccv_01218 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-15.d

Injection Date: 21-Apr-2015 16:17:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ccv

Worklist Smp#: 15

Client ID:

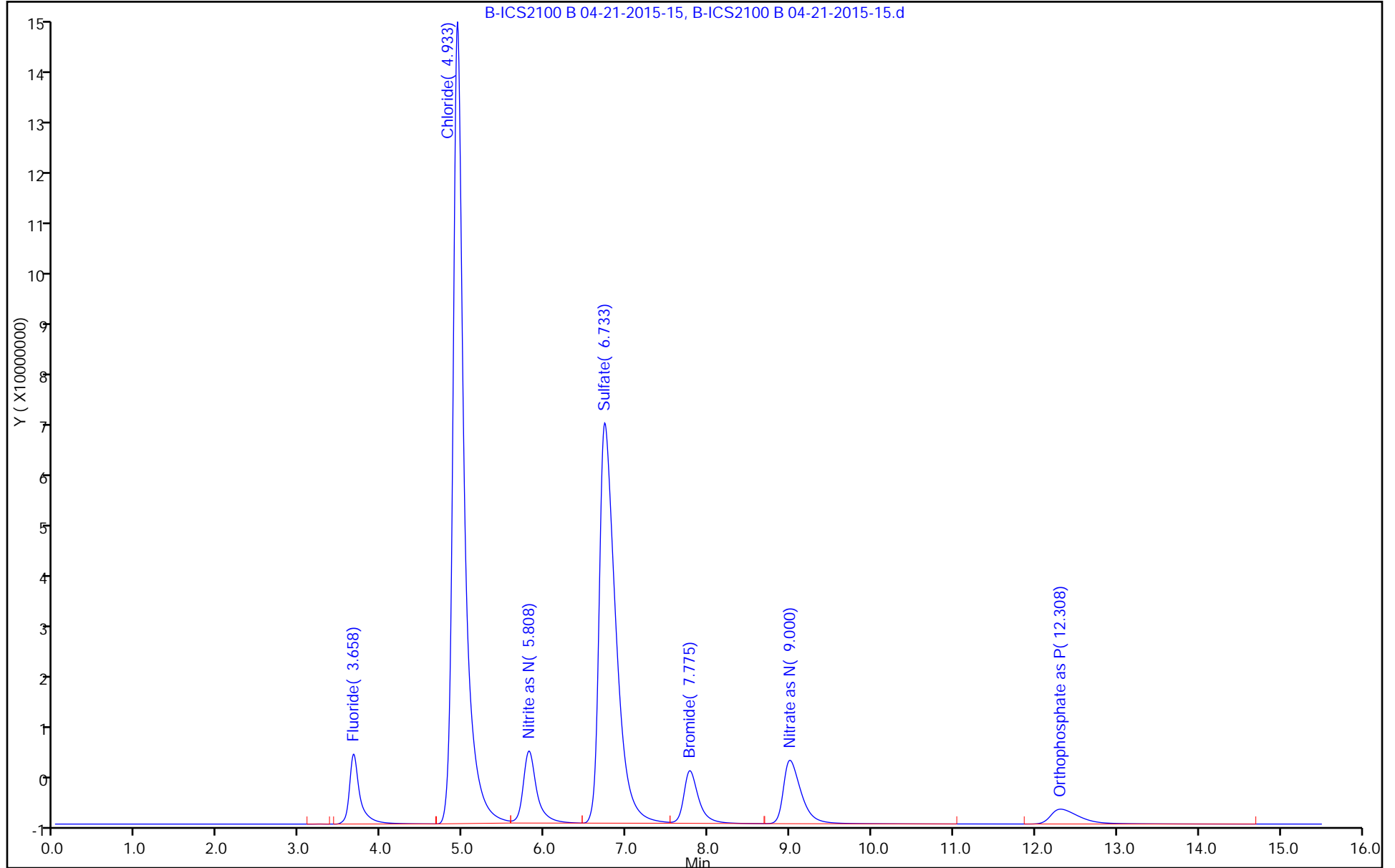
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139181/27 Calibration Date: 04/21/2015 19:44
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-27.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		43720064		2.52	2.50	0.6	10.0
Chloride	Lin2		26736967		50.2	50.0	0.3	10.0
Nitrite as N	Lin2	62099531	58307428		2.51	2.50	0.5	10.0
Sulfate	Lin2		19470687		49.8	50.0	-0.4	10.0
Bromide	Lin2		905934		10.3	10.0	2.7	10.0
Nitrate as N	Lin2		66584946		2.52	2.50	0.9	10.0
Orthophosphate as P	Lin2		23477837		2.23	2.50	-10.6*	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139181/27 Calibration Date: 04/21/2015 19:44
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-27.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.67	3.32	4.02
Chloride	4.94	4.59	5.29
Nitrite as N	5.81	5.56	6.06
Sulfate	6.74	6.39	7.09
Bromide	7.78	7.43	8.13
Nitrate as N	9.00	8.75	9.25
Orthophosphate as P	12.35	11.85	12.85

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-27.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 21-Apr-2015 19:44:00 ALS Bottle#: 0 Worklist Smp#: 27
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-027
 Misc. Info.: 27 ccv
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 11:23:45 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.667	3.667	0.000	109300160	2.50	2.52	
2 Chloride	4.942	4.942	0.000	1336848328	50.0	50.2	
7 Nitrite as N	5.808	5.808	0.000	145768571	2.50	2.51	
3 Sulfate	6.742	6.742	0.000	973534345	50.0	49.8	
4 Bromide	7.783	7.783	0.000	9059338H	10.0	10.3	
5 Nitrate as N	9.000	9.000	0.000	166462366	2.50	2.52	
6 Orthophosphate as P	12.350	12.350	0.000	58694593	2.50	2.23	

Reagents:

icccv_01218 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-27.d

Injection Date: 21-Apr-2015 19:44:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ccv

Worklist Smp#: 27

Client ID:

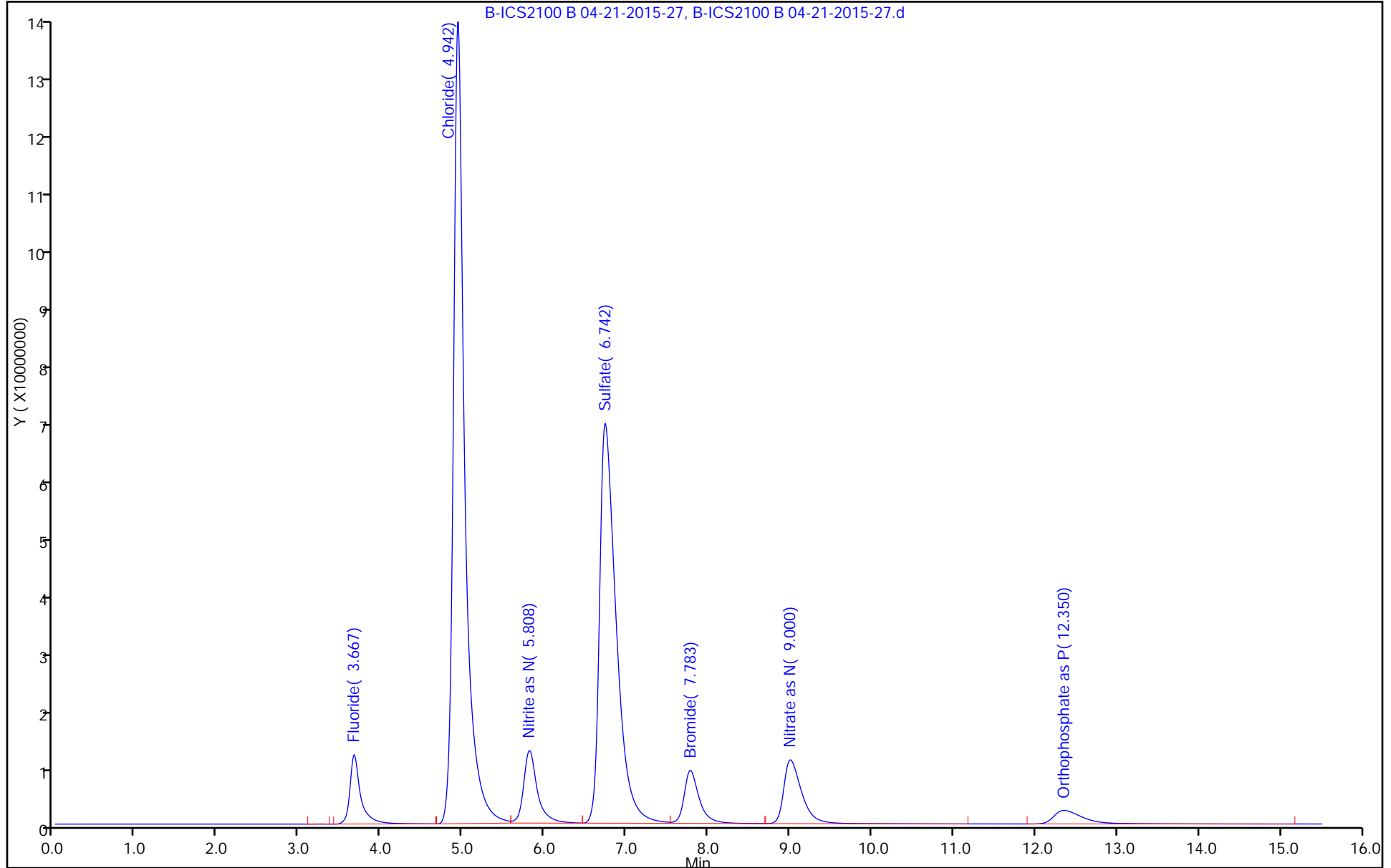
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139181/39 Calibration Date: 04/21/2015 23:12
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-39.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	Lin2		42065714		2.42	2.50	-3.2	10.0
Chloride	Lin2		25884304		48.6	50.0	-2.9	10.0
Nitrite as N	Lin2	62099531	56528460		2.44	2.50	-2.6	10.0
Sulfate	Lin2		18655971		47.7	50.0	-4.6	10.0
Bromide	Lin2		875629		9.92	10.0	-0.8	10.0
Nitrate as N	Lin2		64347354		2.44	2.50	-2.5	10.0
Orthophosphate as P	Lin2		21618426		2.06	2.50	-17.5*	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: CCV 180-139181/39 Calibration Date: 04/21/2015 23:12
 Instrument ID: CHICS2100B Calib Start Date: 04/15/2015 15:44
 GC Column: AS-18 ID: _____ Calib End Date: 04/15/2015 17:45
 Lab File ID: B-ICS2100 B 04-21-2015-39.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.67	3.32	4.02
Chloride	4.94	4.59	5.29
Nitrite as N	5.82	5.57	6.07
Sulfate	6.74	6.39	7.09
Bromide	7.78	7.43	8.13
Nitrate as N	9.01	8.76	9.26
Orthophosphate as P	12.36	11.86	12.86

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-39.d
 Lims ID: ccv
 Client ID:
 Sample Type: CCV
 Inject. Date: 21-Apr-2015 23:12:00 ALS Bottle#: 0 Worklist Smp#: 39
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-039
 Misc. Info.: 30983 ccv
 Operator ID: Instrument ID: CHICS2100B
 Sublist: chrom-300_9056_CHIC2100B*sub1
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 11:23:49 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.667	3.667	0.000	105164285	2.50	2.42	
2 Chloride	4.942	4.942	0.000	1294215215	50.0	48.6	
7 Nitrite as N	5.817	5.817	0.000	141321150	2.50	2.44	
3 Sulfate	6.742	6.742	0.000	932798553	50.0	47.7	
4 Bromide	7.783	7.783	0.000	8756288H	10.0	9.92	
5 Nitrate as N	9.008	9.008	0.000	160868385	2.50	2.44	
6 Orthophosphate as P	12.358	12.358	0.000	54046064	2.50	2.06	

Reagents:

icccv_01218

Amount Added: 1.00

Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-39.d

Injection Date: 21-Apr-2015 23:12:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ccv

Worklist Smp#: 39

Client ID:

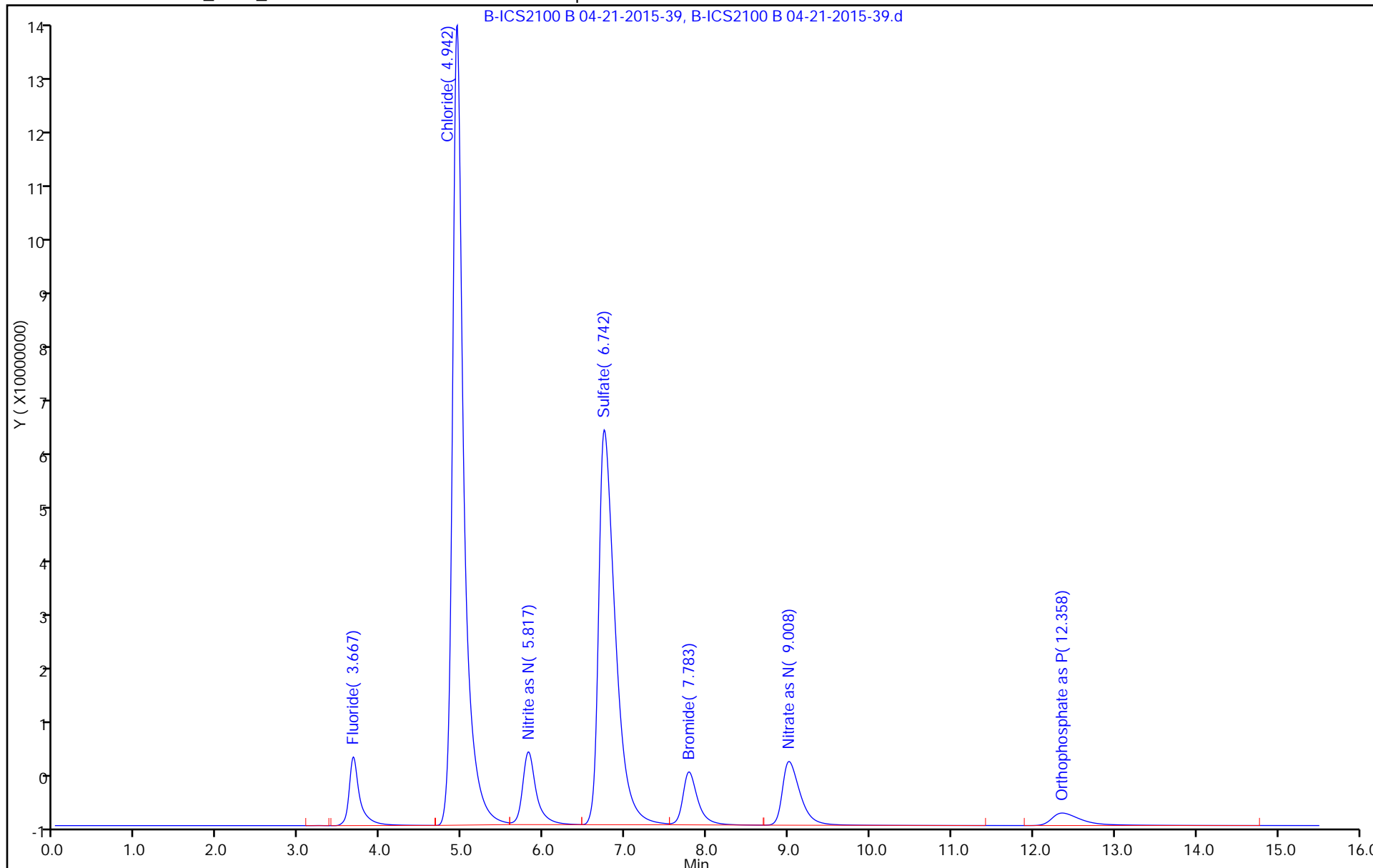
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 180-139181/6
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-6.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 13:41
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 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\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-6.d
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 21-Apr-2015 13:41:00 ALS Bottle#: 0 Worklist Smp#: 6
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-006
 Misc. Info.: 6 MB
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:20 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.642	3.667	-0.025	55922		-0.001987	
2 Chloride	4.942	4.933	0.009	224351		0.0688	
7 Nitrite as N	5.825	5.808	0.017	1464221		0.008527	
3 Sulfate	6.833	6.733	0.100	243340		-0.1884	
4 Bromide		7.775				ND	
5 Nitrate as N		9.000				ND	
6 Orthophosphate as P		12.358				ND	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-6.d

Injection Date: 21-Apr-2015 13:41:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: mb

Worklist Smp#: 6

Client ID:

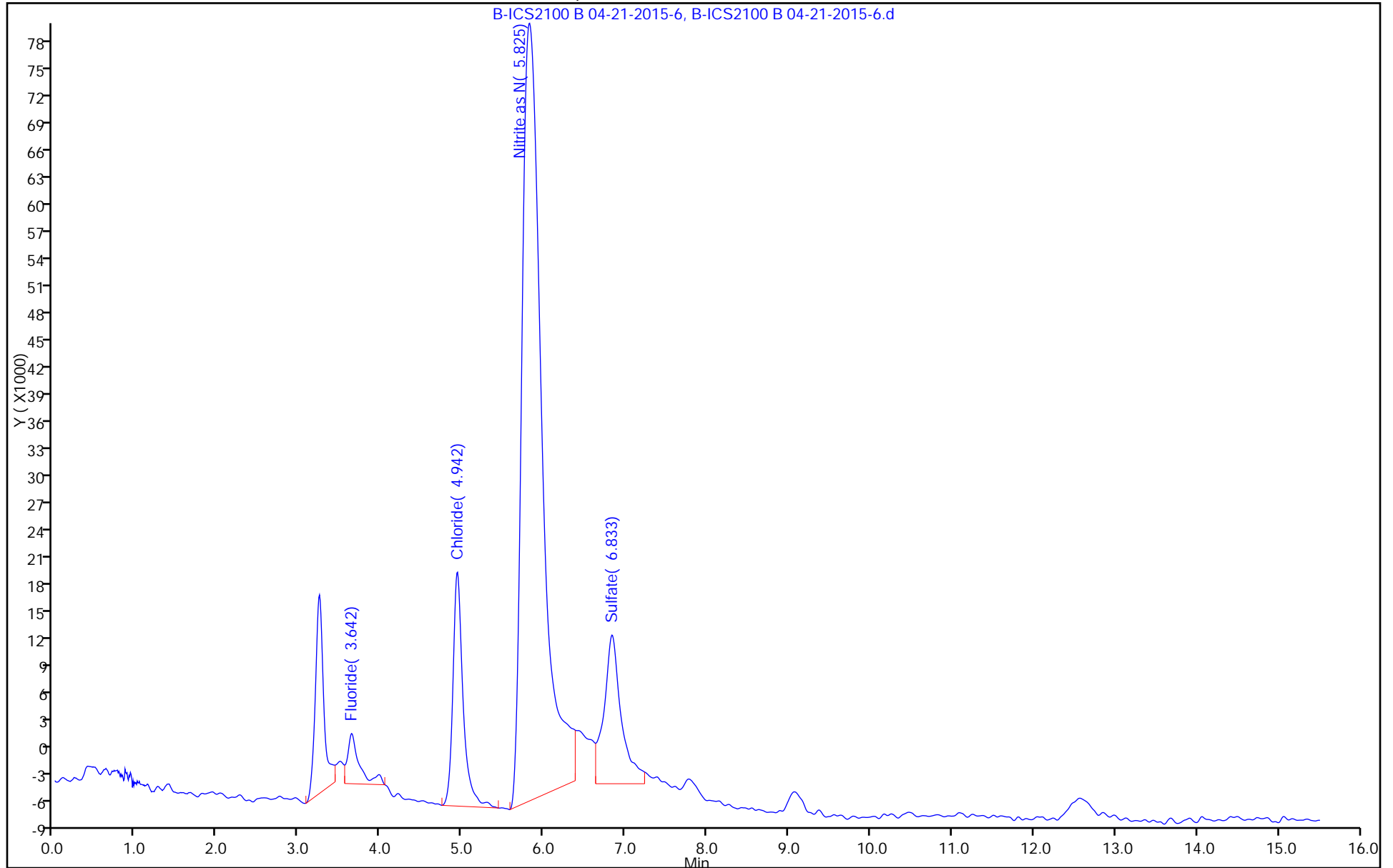
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 180-139181/4
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-4.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 13:06
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.00910	J	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\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-4.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Apr-2015 13:06:00 ALS Bottle#: 0 Worklist Smp#: 4
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-004
 Misc. Info.: 4 ccb
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:20 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.650	3.667	-0.017	68159		-0.001705	
2 Chloride	4.933	4.933	0.000	269203		0.0705	
7 Nitrite as N	5.817	5.808	0.009	1512186		0.009359	
3 Sulfate	6.833	6.733	0.100	385908		-0.1811	
4 Bromide		7.775				ND	
5 Nitrate as N	9.067	9.000	0.067	31334		0.009103	
6 Orthophosphate as P		12.358				ND	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-4.d

Injection Date: 21-Apr-2015 13:06:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ccb

Worklist Smp#: 4

Client ID:

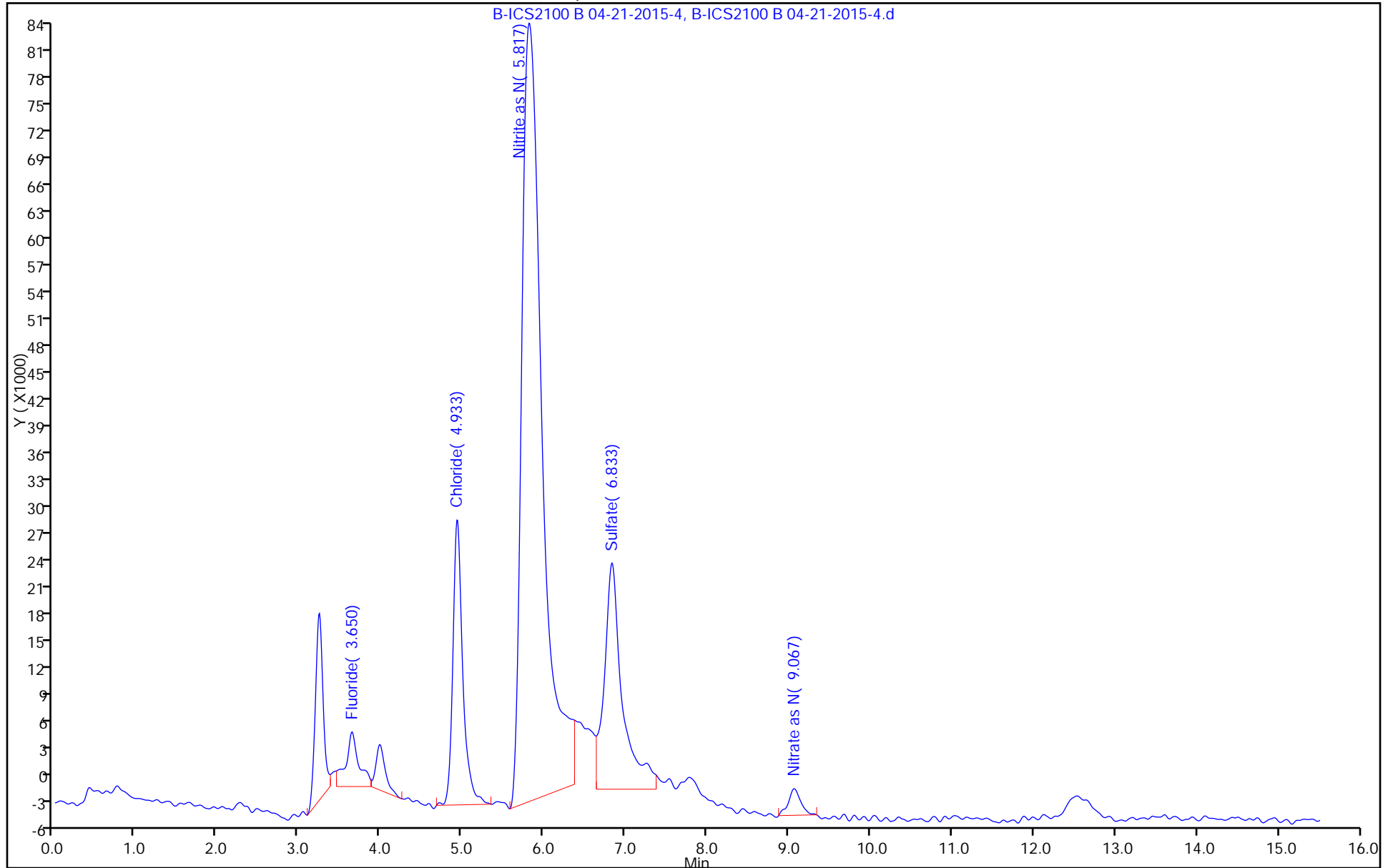
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 180-139181/16
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-16.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 16:34
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.00903	J	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\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-16.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Apr-2015 16:34:00 ALS Bottle#: 0 Worklist Smp#: 16
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-016
 Misc. Info.: 16 ccb
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 09:01:36 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

First Level Reviewer: hartmanm Date: 22-Apr-2015 11:23:39

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.642	3.667	-0.025	26252		-0.002671	
2 Chloride	4.942	4.942	0.000	310314		0.0720	
7 Nitrite as N	5.817	5.817	0.000	1441583		0.008134	
3 Sulfate	6.833	6.733	0.100	1391335		-0.1294	
4 Bromide		7.783				ND	
5 Nitrate as N	9.075	9.008	0.067	26803		0.009034	
6 Orthophosphate as P		12.350				ND	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-16.d

Injection Date: 21-Apr-2015 16:34:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ccb

Worklist Smp#: 16

Client ID:

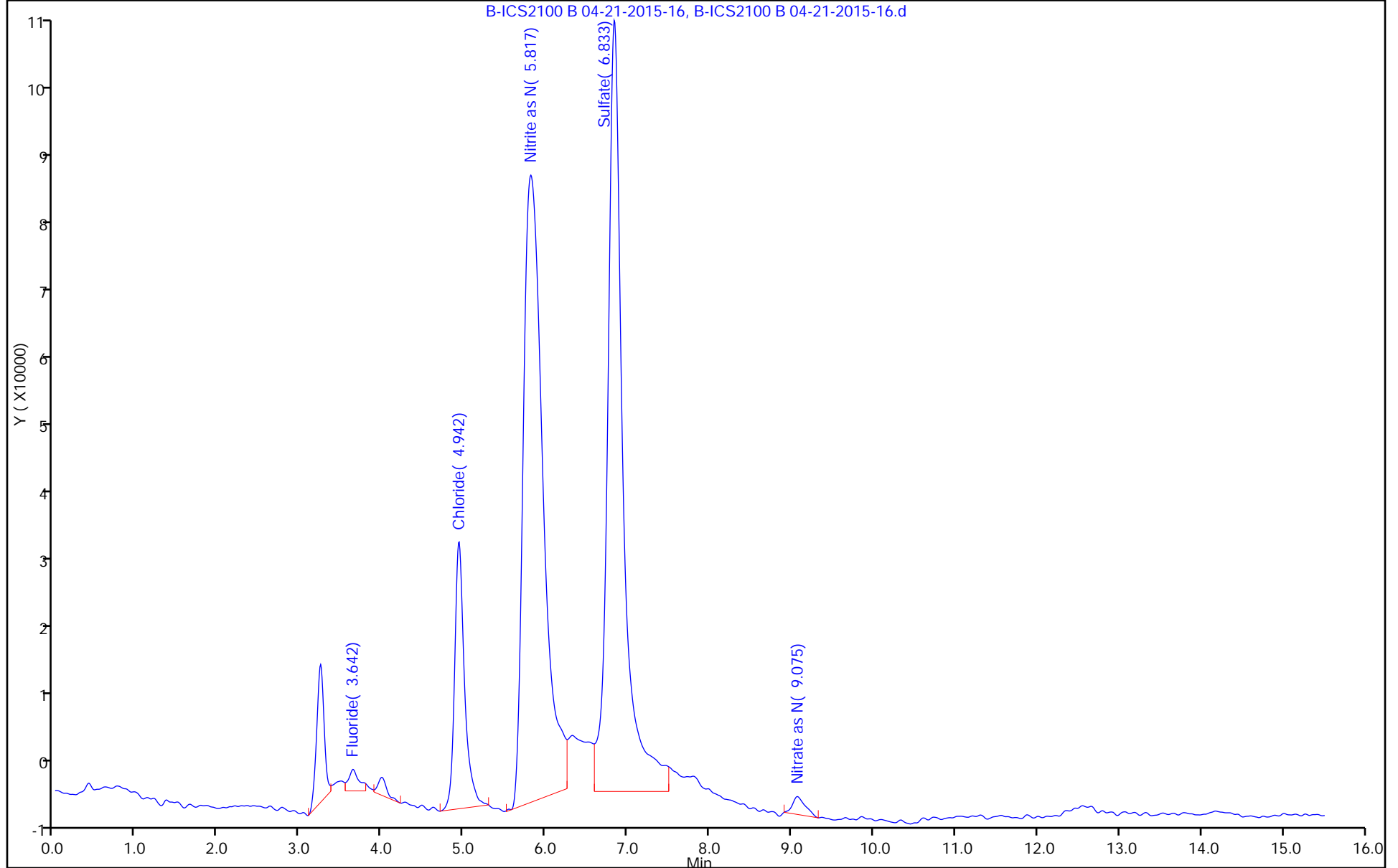
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 180-139181/28
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-28.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 20:02
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 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\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-28.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Apr-2015 20:02:00 ALS Bottle#: 0 Worklist Smp#: 28
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-028
 Misc. Info.: 28 ccb
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 11:23:45 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.650	3.667	-0.017	44398		-0.002252	
2 Chloride	4.942	4.942	0.000	434371		0.0766	
7 Nitrite as N	5.817	5.808	0.009	1493516		0.009035	
3 Sulfate	6.833	6.742	0.091	1016927		-0.1487	
4 Bromide		7.783				ND	
5 Nitrate as N		9.000				ND	
6 Orthophosphate as P		12.350				ND	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-28.d

Injection Date: 21-Apr-2015 20:02:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ccb

Worklist Smp#: 28

Client ID:

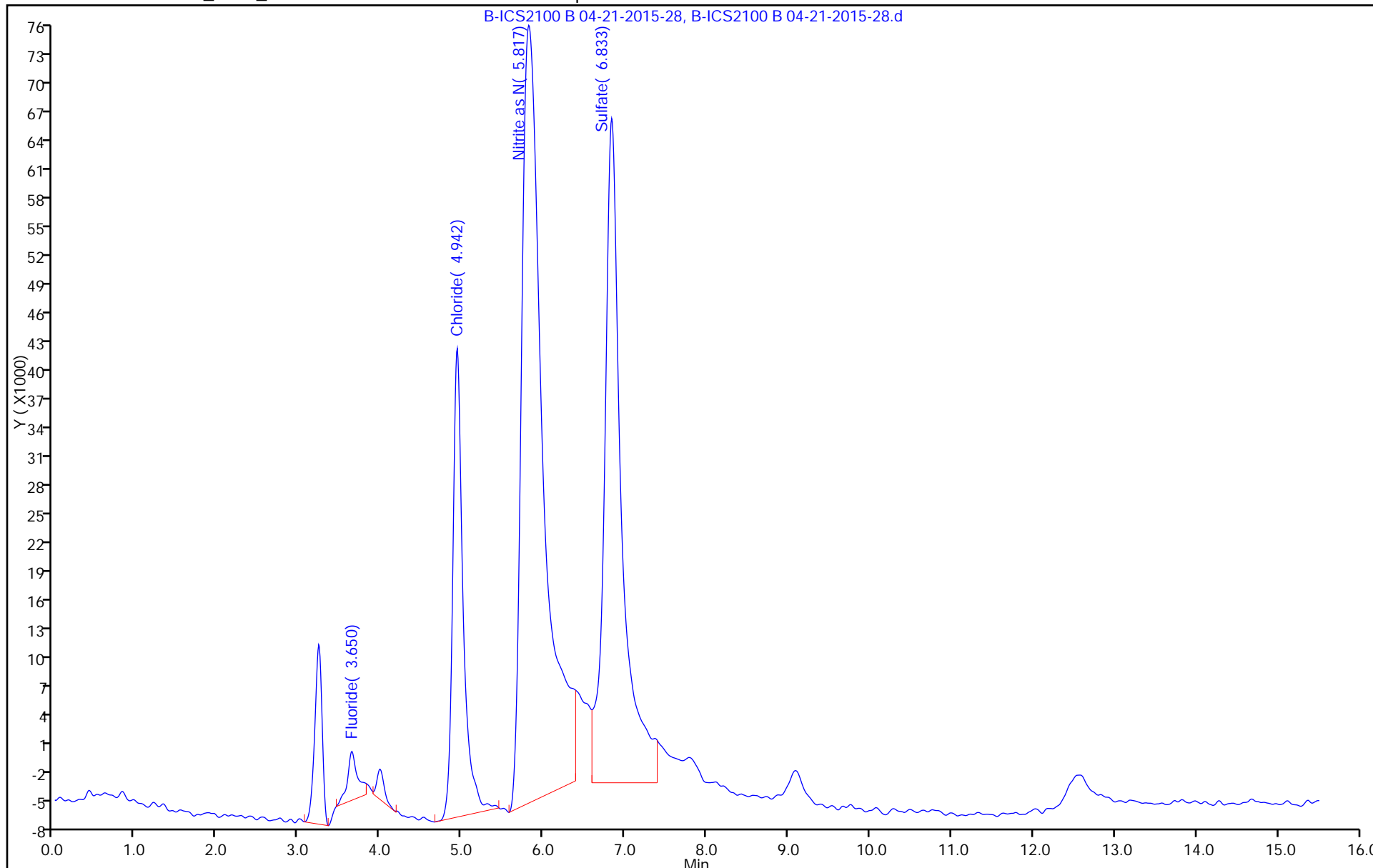
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: CCB 180-139181/40
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-40.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 23:29
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.00905	J	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\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-40.d
 Lims ID: ccb
 Client ID:
 Sample Type: CCB
 Inject. Date: 21-Apr-2015 23:29:00 ALS Bottle#: 0 Worklist Smp#: 40
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-040
 Misc. Info.: 31165 ccb
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 22-Apr-2015 11:23:49 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK049

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.658	3.667	-0.009	175718		0.000774	
2 Chloride	4.942	4.942	0.000	288254		0.0712	
7 Nitrite as N	5.825	5.817	0.008	1499972		0.009147	
3 Sulfate	6.842	6.742	0.100	745836		-0.1626	
4 Bromide		7.783				ND	
5 Nitrate as N	9.075	9.008	0.067	27531		0.009045	
6 Orthophosphate as P		12.358				ND	

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-40.d

Injection Date: 21-Apr-2015 23:29:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: ccb

Worklist Smp#: 40

Client ID:

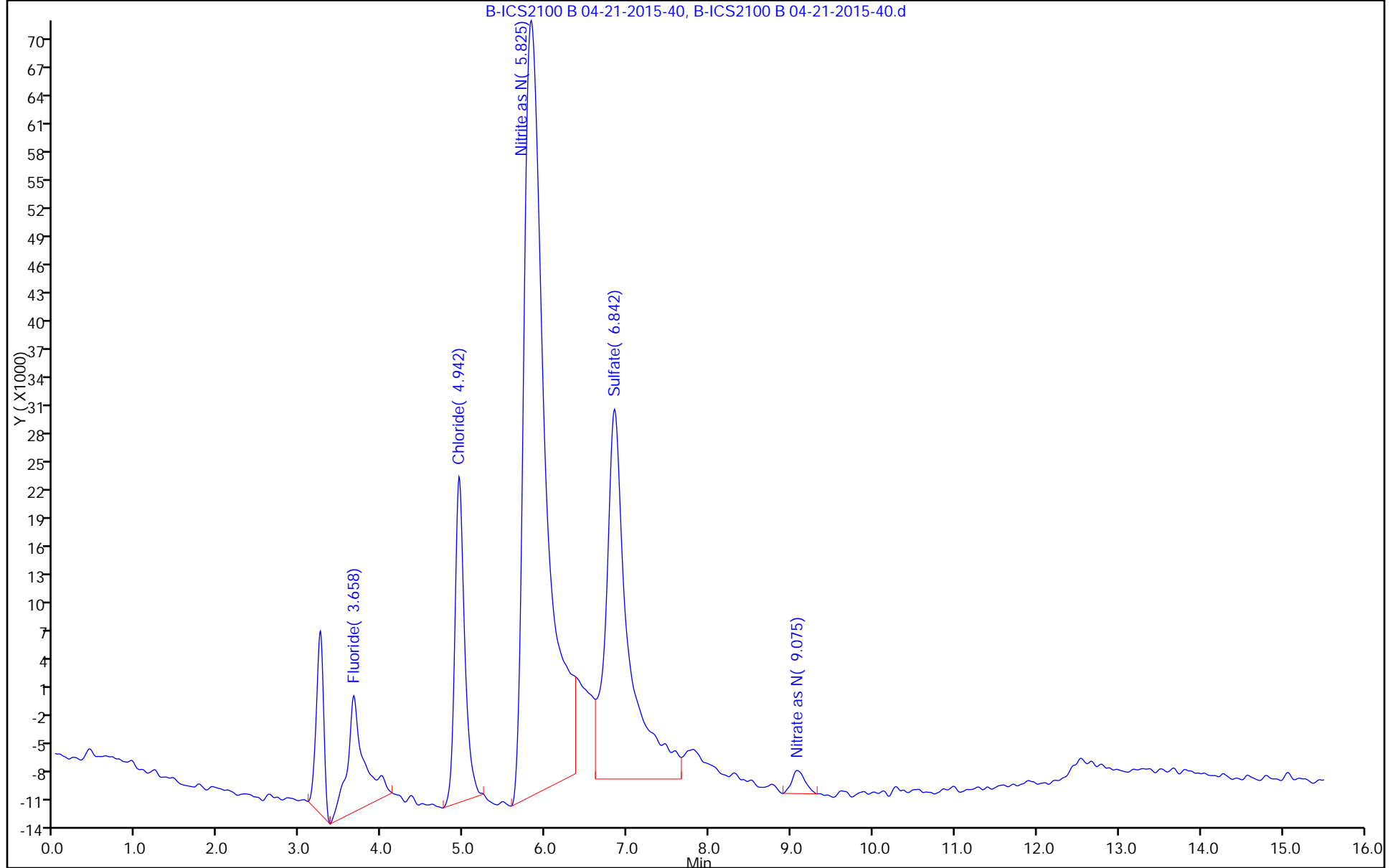
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 180-139181/5
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-5.d
 Analysis Method: 300.0 Date Collected: _____
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 13:23
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.57		0.10	0.0062
16887-00-6	Chloride	51.0		1.0	0.20
14808-79-8	Sulfate	50.8		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-5.d
 Lims ID: lcs
 Client ID:
 Sample Type: LCS
 Inject. Date: 21-Apr-2015 13:23:00 ALS Bottle#: 0 Worklist Smp#: 5
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-005
 Misc. Info.: 5 LCS
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:20 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.667	3.667	0.000	111718846	2.50	2.57	
2 Chloride	4.933	4.933	0.000	1360123105	50.0	51.0	
7 Nitrite as N	5.808	5.808	0.000	148083364	2.50	2.55	
3 Sulfate	6.733	6.733	0.000	993575522	50.0	50.8	
4 Bromide	7.775	7.775	0.000	9303153H	10.0	10.5	
5 Nitrate as N	9.000	9.000	0.000	169463340	2.50	2.57	
6 Orthophosphate as P	12.350	12.358	-0.008	65825990	2.50	2.50	

Reagents:

icccv_01218 Amount Added: 1.00 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-5.d

Injection Date: 21-Apr-2015 13:23:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: lcs

Worklist Smp#: 5

Client ID:

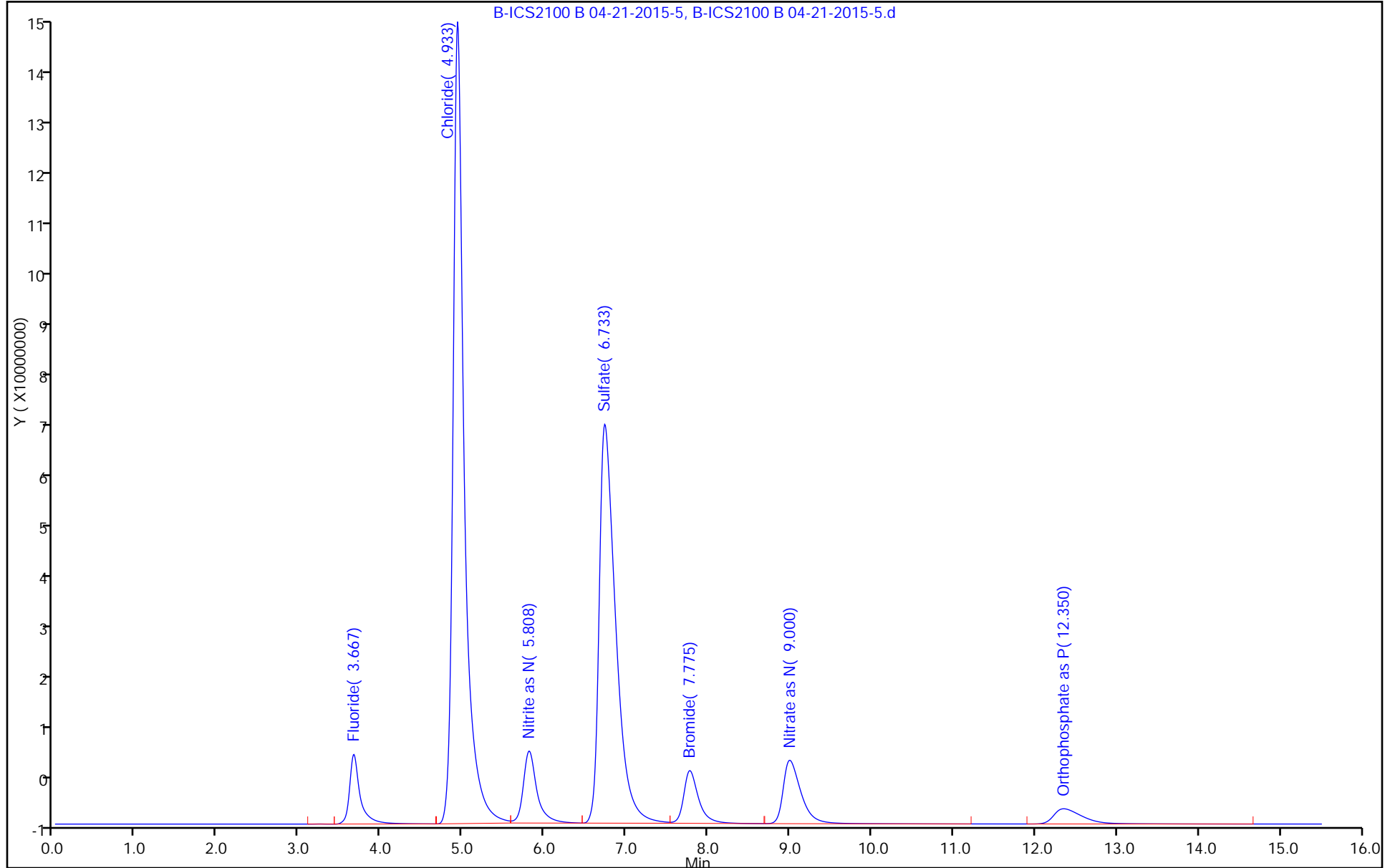
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-145A-0/1-0 MS Lab Sample ID: 180-43257-4 MS
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-10.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 11:42
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 14:50
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	5.02		0.10	0.0062
16887-00-6	Chloride	173		1.0	0.20
14808-79-8	Sulfate	62.0		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-10.d
 Lims ID: 180-43257-A-4 MS
 Client ID: HD-MW-145A-0/1-0
 Sample Type: MS
 Inject. Date: 21-Apr-2015 14:50:00 ALS Bottle#: 0 Worklist Smp#: 10
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-010
 Misc. Info.: 10 180-43257-a-4 ms
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:20 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.658	3.667	-0.009	61245087	1.25	1.41	
2 Chloride	4.917	4.933	-0.016	4611138668	25.0	172.8	
7 Nitrite as N	5.775	5.808	-0.033	84070989	1.25	1.44	
3 Sulfate	6.708	6.733	-0.025	1211595479	25.0	62.0	
4 Bromide	7.783	7.775	0.008	4703088H	5.00	5.34	
5 Nitrate as N	8.942	9.000	-0.058	331614294	1.25	5.02	
6 Orthophosphate as P	12.675	12.358	0.317	26783377	1.25	1.06	

Reagents:

ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL
 ICPRIMARYSTDB_00008 Amount Added: 0.15 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-10.d

Injection Date: 21-Apr-2015 14:50:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-4 MS

Worklist Smp#: 10

Client ID: HD-MW-145A-0/1-0

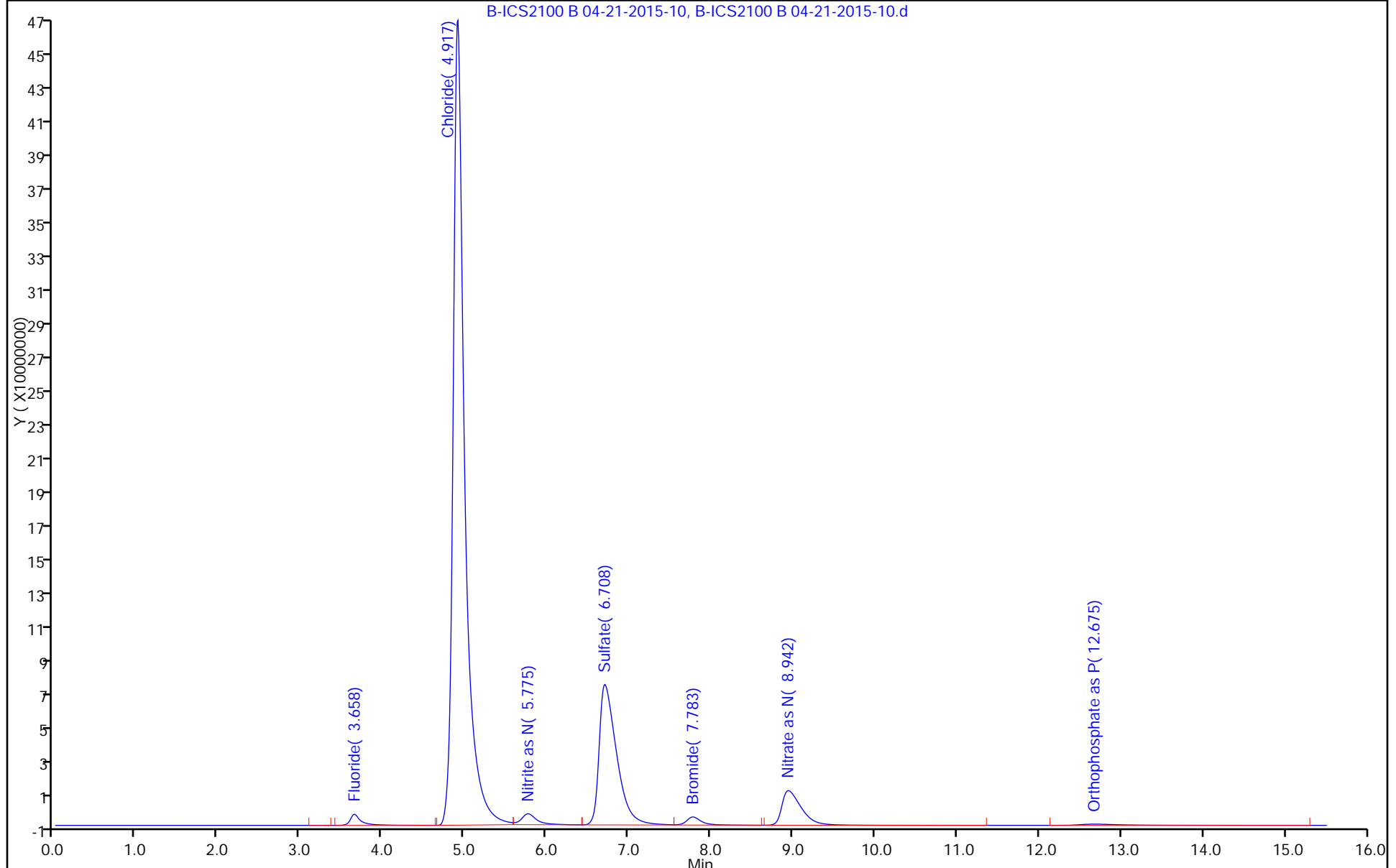
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Client Sample ID: HD-MW-145A-0/1-0 MSD Lab Sample ID: 180-43257-4 MSD
 Matrix: Water Lab File ID: B-ICS2100 B 04-21-2015-9.d
 Analysis Method: 300.0 Date Collected: 04/20/2015 11:42
 Extraction Method: _____ Date Extracted: _____
 Sample wt/vol: 1(mL) Date Analyzed: 04/21/2015 14:33
 Con. Extract Vol.: _____ Dilution Factor: 1
 Injection Volume: 10(uL) GC Column: AS-18 ID: _____
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 139181 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	5.06		0.10	0.0062
16887-00-6	Chloride	174		1.0	0.20
14808-79-8	Sulfate	62.8		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-9.d
 Lims ID: 180-43257-A-4 MSD
 Client ID: HD-MW-145A-0/1-0
 Sample Type: MSD
 Inject. Date: 21-Apr-2015 14:33:00 ALS Bottle#: 0 Worklist Smp#: 9
 Injection Vol: 10.0 ul Dil. Factor: 1.0000
 Sample Info: 180-0006568-009
 Misc. Info.: 9 180-43257-a-4
 Operator ID: Instrument ID: CHICS2100B
 Method: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\300_9056_CHIC2100B.m
 Limit Group: GC Anions ICAL
 Last Update: 21-Apr-2015 19:57:20 Calib Date: 15-Apr-2015 17:45:00
 Integrator: Falcon
 Quant Method: External Standard Quant By: Initial Calibration
 Last ICal File: \\PITCHROM\ChromData\CHICS2100B\20150415-6484.b\B-ICS2100 B 04-15-2015-9.d
 Column 1 : Det: 0008
 Process Host: XAWRK010

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.658	3.667	-0.009	61309687	1.25	1.41	
2 Chloride	4.917	4.933	-0.016	4637960653	25.0	173.9	
7 Nitrite as N	5.775	5.808	-0.033	84461389	1.25	1.45	
3 Sulfate	6.708	6.733	-0.025	1226506346	25.0	62.8	
4 Bromide	7.783	7.775	0.008	4754727H	5.00	5.39	
5 Nitrate as N	8.950	9.000	-0.050	334593496	1.25	5.06	
6 Orthophosphate as P	12.667	12.358	0.309	27336002	1.25	1.08	

Reagents:

ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL
 ICPRIMARYSTDB_00008 Amount Added: 0.15 Units: mL

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHICS2100B\20150421-6568.b\B-ICS2100 B 04-21-2015-9.d

Injection Date: 21-Apr-2015 14:33:00

Instrument ID: CHICS2100B

Operator ID:

Lims ID: 180-43257-A-4 MSD

Worklist Smp#: 9

Client ID: HD-MW-145A-0/1-0

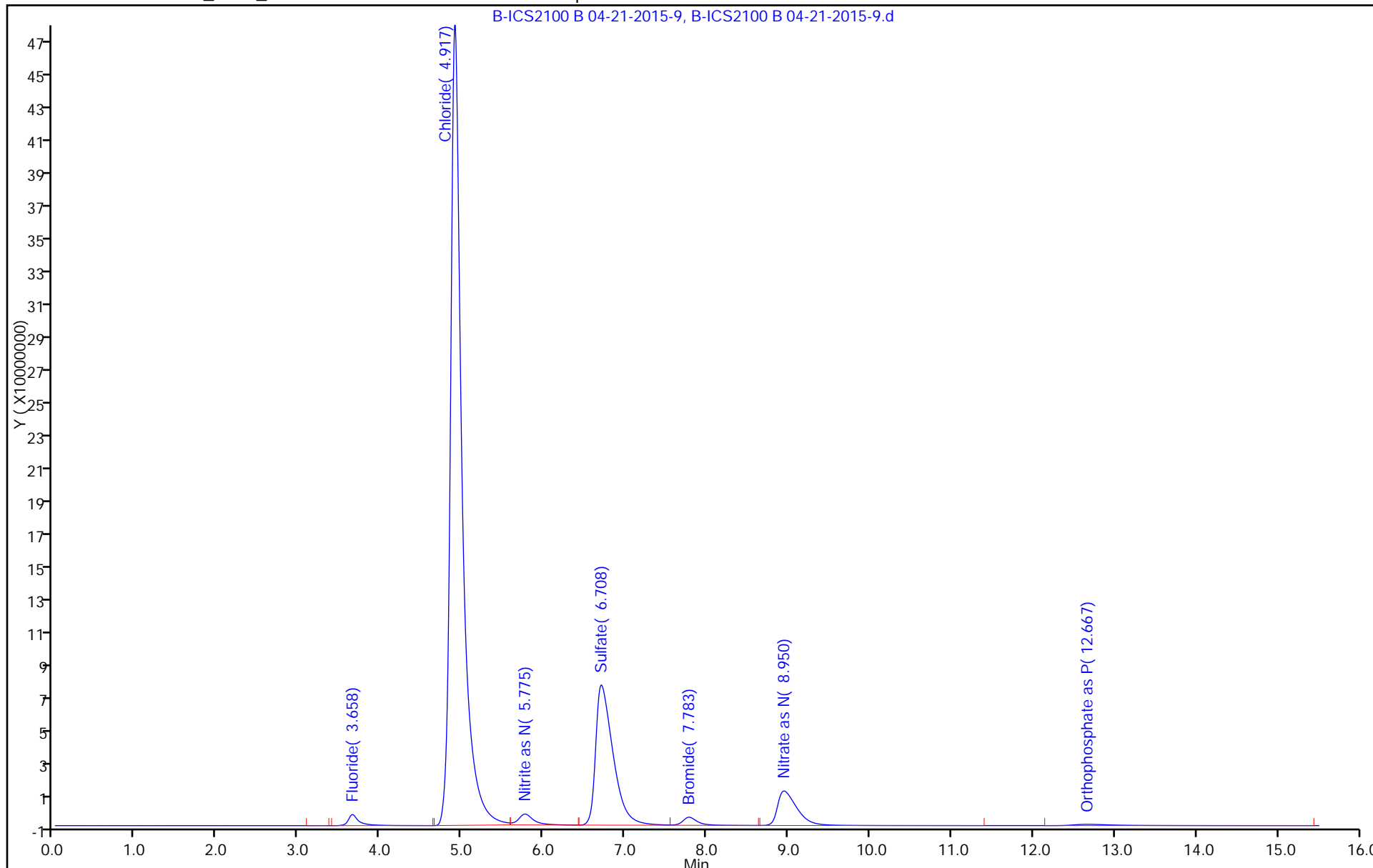
Injection Vol: 10.0 ul

Dil. Factor: 1.0000

ALS Bottle#: 0

Method: 300_9056_CHIC2100B

Limit Group: GC Anions ICAL



HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHICS2100B Start Date: 04/15/2015 14:54

Analysis Batch Number: 138618 End Date: 04/15/2015 19:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/15/2015 14:54	1		AS-18
IC 180-138618/2		04/15/2015 15:44	1	B-ICS2100 B 04-15-2015-2.d	AS-18
IC 180-138618/3		04/15/2015 16:01	1	B-ICS2100 B 04-15-2015-3.d	AS-18
ICRT 180-138618/4		04/15/2015 16:19	1	B-ICS2100 B 04-15-2015-4.d	AS-18
IC 180-138618/5		04/15/2015 16:36	1	B-ICS2100 B 04-15-2015-5.d	AS-18
IC 180-138618/6		04/15/2015 16:53	1	B-ICS2100 B 04-15-2015-6.d	AS-18
IC 180-138618/7		04/15/2015 17:11	1	B-ICS2100 B 04-15-2015-7.d	AS-18
IC 180-138618/8		04/15/2015 17:28	1	B-ICS2100 B 04-15-2015-8.d	AS-18
IC 180-138618/9		04/15/2015 17:45	1	B-ICS2100 B 04-15-2015-9.d	AS-18
ZZZZZ		04/15/2015 18:03	1		AS-18
ZZZZZ		04/15/2015 18:20	1		AS-18
ZZZZZ		04/15/2015 18:37	1		AS-18
ICV 180-138618/13		04/15/2015 18:55	1		AS-18
CCV 180-138618/14		04/15/2015 19:12	1		AS-18

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHICS2100B Start Date: 04/21/2015 12:14

Analysis Batch Number: 139181 End Date: 04/22/2015 01:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/21/2015 12:14	1		AS-18
ICV 180-139181/2		04/21/2015 12:31	1	B-ICS2100 B 04-21-2015-2.d	AS-18
CCV 180-139181/3		04/21/2015 12:49	1	B-ICS2100 B 04-21-2015-3.d	AS-18
CCB 180-139181/4		04/21/2015 13:06	1	B-ICS2100 B 04-21-2015-4.d	AS-18
LCS 180-139181/5		04/21/2015 13:23	1	B-ICS2100 B 04-21-2015-5.d	AS-18
MB 180-139181/6		04/21/2015 13:41	1	B-ICS2100 B 04-21-2015-6.d	AS-18
ZZZZZ		04/21/2015 13:58	2.5		AS-18
ZZZZZ		04/21/2015 14:15	25		AS-18
180-43257-4 MSD	HD-MW-145A-0/1-0 MSD	04/21/2015 14:33	1	B-ICS2100 B 04-21-2015-9.d	AS-18
180-43257-4 MS	HD-MW-145A-0/1-0 MS	04/21/2015 14:50	1	B-ICS2100 B 04-21-2015-10.d	AS-18
180-43257-4	HD-MW-145A-0/1-0	04/21/2015 15:07	1	B-ICS2100 B 04-21-2015-11.d	AS-18
ZZZZZ		04/21/2015 15:25	1		AS-18
180-43257-1	HD-MW-98S-0/1-0	04/21/2015 15:42	1	B-ICS2100 B 04-21-2015-13.d	AS-18
180-43257-2	HD-MW-98I-0/1-0	04/21/2015 15:59	1	B-ICS2100 B 04-21-2015-14.d	AS-18
CCV 180-139181/15		04/21/2015 16:17	1	B-ICS2100 B 04-21-2015-15.d	AS-18
CCB 180-139181/16		04/21/2015 16:34	1	B-ICS2100 B 04-21-2015-16.d	AS-18
ZZZZZ		04/21/2015 16:51	5		AS-18
ZZZZZ		04/21/2015 17:08	50		AS-18
ZZZZZ		04/21/2015 17:26	1		AS-18
ZZZZZ		04/21/2015 17:43	1		AS-18
ZZZZZ		04/21/2015 18:00	1		AS-18
ZZZZZ		04/21/2015 18:18	1		AS-18
ZZZZZ		04/21/2015 18:35	1		AS-18
ZZZZZ		04/21/2015 18:52	10		AS-18
180-43257-7	HD-MW-37D-0/1-0	04/21/2015 19:10	1	B-ICS2100 B 04-21-2015-25.d	AS-18
180-43257-7	HD-MW-37D-0/1-0	04/21/2015 19:27	5	B-ICS2100 B 04-21-2015-26.d	AS-18
CCV 180-139181/27		04/21/2015 19:44	1	B-ICS2100 B 04-21-2015-27.d	AS-18
CCB 180-139181/28		04/21/2015 20:02	1	B-ICS2100 B 04-21-2015-28.d	AS-18
180-43257-3	HD-MW-99S-0/1-0	04/21/2015 20:19	1	B-ICS2100 B 04-21-2015-29.d	AS-18
180-43257-5	HD-MW-93D-0/1-0	04/21/2015 20:36	1	B-ICS2100 B 04-21-2015-30.d	AS-18
180-43257-6	HD-MW-93S-0/1-0	04/21/2015 20:53	1	B-ICS2100 B 04-21-2015-31.d	AS-18
180-43257-8	HD-QC1-0/1-1	04/21/2015 21:11	1	B-ICS2100 B 04-21-2015-32.d	AS-18
ZZZZZ		04/21/2015 21:28	100		AS-18
ZZZZZ		04/21/2015 21:45	1000		AS-18
ZZZZZ		04/21/2015 22:03	10		AS-18
ZZZZZ		04/21/2015 22:20	25		AS-18

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: CHICS2100B Start Date: 04/21/2015 12:14

Analysis Batch Number: 139181 End Date: 04/22/2015 01:13

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/21/2015 22:37	25		AS-18
ZZZZZ		04/21/2015 22:55	1		AS-18
CCV 180-139181/39		04/21/2015 23:12	1	B-ICS2100 B 04-21-2015-39.d	AS-18
CCB 180-139181/40		04/21/2015 23:29	1	B-ICS2100 B 04-21-2015-40.d	AS-18
ZZZZZ		04/21/2015 23:46	1		AS-18
ZZZZZ		04/22/2015 00:04	1		AS-18
ZZZZZ		04/22/2015 00:21	1		AS-18
ZZZZZ		04/22/2015 00:38	1		AS-18
CCV 180-139181/45		04/22/2015 00:55	1		AS-18
CCB 180-139181/46		04/22/2015 01:13	1		AS-18

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-43257-1

SDG No.: _____

Project: Harley Davidson

Client Sample ID	Lab Sample ID
<u>HD-MW-98S-0/1-0</u>	<u>180-43257-1</u>
<u>HD-MW-98I-0/1-0</u>	<u>180-43257-2</u>
<u>HD-MW-99S-0/1-0</u>	<u>180-43257-3</u>
<u>HD-MW-145A-0/1-0</u>	<u>180-43257-4</u>
<u>HD-MW-93D-0/1-0</u>	<u>180-43257-5</u>
<u>HD-MW-93S-0/1-0</u>	<u>180-43257-6</u>
<u>HD-MW-37D-0/1-0</u>	<u>180-43257-7</u>
<u>HD-QC1-0/1-1</u>	<u>180-43257-8</u>

Comments:

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-98S-0/1-0

Lab Sample ID: 180-43257-1

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 13:35

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	110000	500	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	2900	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	15000	500	1.2	ug/L			1	6020A
7440-23-5	Sodium	30000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-98I-0/1-0

Lab Sample ID: 180-43257-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 14:30

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	110000	500	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	2700	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	14000	500	1.2	ug/L			1	6020A
7440-23-5	Sodium	28000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-99S-0/1-0

Lab Sample ID: 180-43257-3

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 10:30

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	94000	500	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	3400	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	16000	500	1.2	ug/L			1	6020A
7440-23-5	Sodium	48000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-145A-0/1-0

Lab Sample ID: 180-43257-4

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 11:42

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	84000	500	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	4900	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	20000	500	1.2	ug/L			1	6020A
7440-23-5	Sodium	74000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-93D-0/1-0

Lab Sample ID: 180-43257-5

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 11:02

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	67000	500	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	4600	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	17000	500	1.2	ug/L			1	6020A
7440-23-5	Sodium	50000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-93S-0/1-0

Lab Sample ID: 180-43257-6

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 12:39

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	67000	500	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	9200	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	21000	500	1.2	ug/L			1	6020A
7440-23-5	Sodium	100000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-MW-37D-0/1-0

Lab Sample ID: 180-43257-7

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 14:12

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	89000	500	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	6400	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	21000	500	1.2	ug/L			1	6020A
7440-23-5	Sodium	69000	500	3.8	ug/L		B	1	6020A

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: HD-QC1-0/1-1

Lab Sample ID: 180-43257-8

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 08:00

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	110000	500	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	2900	500	5.8	ug/L			1	6020A
7439-95-4	Magnesium	12000	500	1.2	ug/L			1	6020A
7440-23-5	Sodium	25000	500	3.8	ug/L		B	1	6020A

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

ICV Source: MICVX_00031 Concentration Units: ug/L

CCV Source: MCCV1X_00074

Analyte	ICV 180-139683/5 04/25/2015 22:05				CCV 180-139683/10 04/25/2015 22:40				CCV 180-139683/22 04/25/2015 23:49			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	39900		40000	100	47900		50000	96	48300		50000	97
Magnesium	41900		40000	105	53600		50000	107	53600		50000	107
Potassium	38400		40000	96	46800		50000	94	46100		50000	92
Sodium	41000		40000	103	52000		50000	104	53000		50000	106

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.: 180-43257-1

SDG No.: _____

ICV Source: MICVX_00031 Concentration Units: ug/L

CCV Source: MCCV1X_00074

Analyte	CCV 180-139683/34 04/26/2015 00:58				CCV 180-139683/46 04/26/2015 02:03				CCV 180-139683/58 04/26/2015 03:16			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	47100		50000	94	46100		50000	92	49600		50000	99
Magnesium	53900		50000	108	54300		50000	109				
Potassium	46200		50000	92	45000		50000	90	53600		50000	107
Sodium	54700		50000	109	55100		50000	110				

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.: 180-43257-1

SDG No.: _____

ICV Source: MICVX_00031 Concentration Units: ug/L

CCV Source: MCCV1X_00074

Analyte	ICV 180-139813/5 04/26/2015 20:20				CCV 180-139813/10 04/26/2015 20:56				CCV 180-139813/22 04/26/2015 22:14			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Magnesium	39200		40000	98	48800		50000	98	48000		50000	96
Sodium	40700		40000	102	50700		50000	101	50400		50000	101
<i>Calcium</i>	38000		40000	95	46400		50000	93	48500		50000	97
<i>Potassium</i>	40200		40000	101	47900		50000	96	51700		50000	103

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.: 180-43257-1

SDG No.: _____

Method: 6020A Instrument ID: X

Lab Sample ID: CRI 180-139683/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	500	445	J	89	70-130
Potassium	500	456	J	91	70-130
Magnesium	500	530		106	70-130
Sodium	500	477	J	95	70-130

Lab Sample ID: CRI 180-139683/88 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	500	432	J	86	70-130
Potassium	500	473	J	95	70-130
Magnesium	500	597		119	70-130
Sodium	500	591		118	70-130

Lab Sample ID: CRI 180-139813/7 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	500	431	J	86	70-130
Potassium	500	509		102	70-130
Magnesium	500	463	J	93	70-130
Sodium	500	474	J	95	70-130

Lab Sample ID: CRI 180-139813/27 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	500	415	J	83	70-130
Potassium	500	430	J	86	70-130

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

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 SDG No.: _____
 Method: 6020A Instrument ID: X
 Lab Sample ID: CRI 180-139813/27 Concentration Units: ug/L
 CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Magnesium	500	454	J	91	70-130
Sodium	500	491	J	98	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.: 180-43257-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 180-139683/6 04/25/2015 22:14		CCB1 180-139683/11 04/25/2015 22:49		CCB2 180-139683/23 04/25/2015 23:58		CCB3 180-139683/35 04/26/2015 01:07	
		Found	C	Found	C	Found	C	Found	C
Calcium	500	500	U	500	U	4.53	J	8.96	J
Magnesium	500	1.40	J	2.60	J	4.66	J	6.15	J
Potassium	500	13.3	J	500	U	500	U	500	U
Sodium	500	500	U	14.5	J	12.6	J	62.8	J

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	CCB4 180-139683/47 04/26/2015 02:12		CCB5 180-139683/59 04/26/2015 03:25					
		Found	C	Found	C	Found	C	Found	C
Calcium	500	500	U	6.62	J				
Magnesium	500	5.88	J	7.56	J				
Potassium	500	500	U	500	U				
Sodium	500	22.0	J	467	J				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICB 180-139813/6 04/26/2015 20:29		CCB1 180-139813/11 04/26/2015 21:05		CCB2 180-139813/23 04/26/2015 22:23		Found	C
		Found	C	Found	C	Found	C		
Magnesium	500	3.94	J	4.14	J	3.58	J		
Sodium	500	10.1	J	20.2	J	30.7	J		
<i>Calcium</i>	500	4.81	J	5.63	J	9.92	J		
<i>Potassium</i>	500	7.34	J	500	U	11.5	J		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
SDG No.: _____
Concentration Units: ug/L Lab Sample ID: MB 180-139272/1-A
Instrument Code: X Batch No.: 139683

CAS No.	Analyte	Concentration	C	Q	Method
7440-70-2	Calcium	3.27	J		6020A
7440-09-7	Potassium	500	U		6020A
7439-95-4	Magnesium	500	U		6020A
7440-23-5	Sodium	8.85	J		6020A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Lab Sample ID: ICSA 180-139683/8

Instrument ID: X

Lab File ID: X50425A.xml

ICS Source: MICSAX_00065

Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Calcium	100000	95360	95
Magnesium	100000	108300	108
Potassium	100000	95020	95
Sodium	100000	102900	103
<i>Aluminum</i>	<i>100000</i>	<i>103700</i>	<i>104</i>
<i>Antimony</i>		<i>0.0420</i>	
<i>Arsenic</i>		<i>0.160</i>	
<i>Barium</i>		<i>0.149</i>	
<i>Beryllium</i>		<i>-0.0270</i>	
<i>Boron</i>		<i>1.49</i>	
<i>Cadmium</i>		<i>1.14</i>	
<i>Chromium</i>		<i>1.36</i>	
<i>Cobalt</i>		<i>0.0940</i>	
<i>Copper</i>		<i>1.40</i>	
<i>Iron</i>	<i>100000</i>	<i>99200</i>	<i>99</i>
<i>Lead</i>		<i>0.150</i>	
<i>Manganese</i>		<i>33.0</i>	
<i>Molybdenum</i>	<i>2000</i>	<i>2157</i>	<i>108</i>
<i>Nickel</i>		<i>0.221</i>	
<i>Selenium</i>		<i>0.215</i>	
<i>Silicon</i>		<i>15.7</i>	
<i>Silver</i>		<i>0.0160</i>	
<i>Strontium</i>		<i>0.670</i>	
<i>Thallium</i>		<i>0.0390</i>	
<i>Tin</i>		<i>-0.686</i>	
<i>Titanium</i>	<i>2000</i>	<i>1957</i>	<i>98</i>
<i>Vanadium</i>		<i>-0.140</i>	
<i>Zinc</i>		<i>2.50</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.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: ICSAB 180-139683/9 Instrument ID: X
 Lab File ID: X50425A.xml ICS Source: MICSABX-2_00001
 Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Calcium	100000	88023	88
Magnesium	100000	104400	104
Potassium	100000	88447	88
Sodium	100000	100707	101
<i>Aluminum</i>	<i>100000</i>	<i>100933</i>	<i>101</i>
<i>Antimony</i>	<i>20.0</i>	<i>19.7</i>	<i>98</i>
<i>Arsenic</i>	<i>20.0</i>	<i>19.9</i>	<i>100</i>
<i>Barium</i>	<i>20.0</i>	<i>19.9</i>	<i>100</i>
<i>Beryllium</i>	<i>20.0</i>	<i>19.3</i>	<i>96</i>
<i>Boron</i>	<i>50.0</i>	<i>52.2</i>	<i>104</i>
<i>Cadmium</i>	<i>20.0</i>	<i>20.6</i>	<i>103</i>
<i>Chromium</i>	<i>20.0</i>	<i>20.1</i>	<i>101</i>
<i>Cobalt</i>	<i>20.0</i>	<i>18.8</i>	<i>94</i>
<i>Copper</i>	<i>20.0</i>	<i>20.7</i>	<i>103</i>
<i>Iron</i>	<i>100000</i>	<i>95373</i>	<i>95</i>
<i>Lead</i>	<i>20.0</i>	<i>19.6</i>	<i>98</i>
<i>Manganese</i>	<i>40.0</i>	<i>47.8</i>	<i>119</i>
<i>Molybdenum</i>	<i>2000</i>	<i>2176</i>	<i>109</i>
<i>Nickel</i>	<i>20.0</i>	<i>18.8</i>	<i>94</i>
<i>Selenium</i>	<i>50.0</i>	<i>51.4</i>	<i>103</i>
<i>Silicon</i>	<i>500</i>	<i>511</i>	<i>102</i>
<i>Silver</i>	<i>20.0</i>	<i>19.3</i>	<i>97</i>
<i>Strontium</i>	<i>25.0</i>	<i>20.3</i>	<i>81</i>
<i>Thallium</i>	<i>20.0</i>	<i>19.0</i>	<i>95</i>
<i>Tin</i>	<i>100</i>	<i>98.7</i>	<i>99</i>
<i>Titanium</i>	<i>2000</i>	<i>1825</i>	<i>91</i>
<i>Vanadium</i>	<i>20.0</i>	<i>18.7</i>	<i>93</i>
<i>Zinc</i>	<i>25.0</i>	<i>21.7</i>	<i>87</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.: 180-43257-1

SDG No.: _____

Lab Sample ID: ICSA 180-139813/8

Instrument ID: X

Lab File ID: X50426A.xml

ICS Source: MICSAX_00065

Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution A	Solution A	
Magnesium	100000	89070	89
Sodium	100000	91190	91
<i>Aluminum</i>	<i>100000</i>	<i>89820</i>	<i>90</i>
<i>Antimony</i>		<i>0.0940</i>	
<i>Arsenic</i>		<i>0.170</i>	
<i>Barium</i>		<i>0.123</i>	
<i>Beryllium</i>		<i>0.0180</i>	
<i>Boron</i>		<i>1.62</i>	
<i>Cadmium</i>		<i>1.30</i>	
<i>Calcium</i>	<i>100000</i>	<i>84120</i>	<i>84</i>
<i>Chromium</i>		<i>1.19</i>	
<i>Cobalt</i>		<i>0.0850</i>	
<i>Copper</i>		<i>1.24</i>	
<i>Iron</i>	<i>100000</i>	<i>87960</i>	<i>88</i>
<i>Lead</i>		<i>0.211</i>	
<i>Manganese</i>		<i>32.3</i>	
<i>Molybdenum</i>	<i>2000</i>	<i>2142</i>	<i>107</i>
<i>Nickel</i>		<i>0.372</i>	
<i>Potassium</i>	<i>100000</i>	<i>84580</i>	<i>85</i>
<i>Selenium</i>		<i>0.0730</i>	
<i>Silicon</i>		<i>16.6</i>	
<i>Silver</i>		<i>0.0040</i>	
<i>Strontium</i>		<i>0.640</i>	
<i>Thallium</i>		<i>-0.0180</i>	
<i>Tin</i>		<i>-0.620</i>	
<i>Titanium</i>	<i>2000</i>	<i>1696</i>	<i>85</i>
<i>Vanadium</i>		<i>0.113</i>	
<i>Zinc</i>		<i>2.11</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.: 180-43257-1
 SDG No.: _____
 Lab Sample ID: ICSAB 180-139813/9 Instrument ID: X
 Lab File ID: X50426A.xml ICS Source: MICSABX-2_00001
 Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Magnesium	100000	92797	93
Sodium	100000	95973	96
<i>Aluminum</i>	<i>100000</i>	<i>93683</i>	<i>94</i>
<i>Antimony</i>	<i>20.0</i>	<i>20.7</i>	<i>103</i>
<i>Arsenic</i>	<i>20.0</i>	<i>19.4</i>	<i>97</i>
<i>Barium</i>	<i>20.0</i>	<i>20.3</i>	<i>102</i>
<i>Beryllium</i>	<i>20.0</i>	<i>20.0</i>	<i>100</i>
<i>Boron</i>	<i>50.0</i>	<i>52.4</i>	<i>105</i>
<i>Cadmium</i>	<i>20.0</i>	<i>21.8</i>	<i>109</i>
<i>Calcium</i>	<i>100000</i>	<i>84393</i>	<i>84</i>
<i>Chromium</i>	<i>20.0</i>	<i>18.3</i>	<i>92</i>
<i>Cobalt</i>	<i>20.0</i>	<i>17.7</i>	<i>88</i>
<i>Copper</i>	<i>20.0</i>	<i>19.7</i>	<i>98</i>
<i>Iron</i>	<i>100000</i>	<i>88597</i>	<i>89</i>
<i>Lead</i>	<i>20.0</i>	<i>20.9</i>	<i>104</i>
<i>Manganese</i>	<i>40.0</i>	<i>47.9</i>	<i>120</i>
<i>Molybdenum</i>	<i>2000</i>	<i>2223</i>	<i>111</i>
<i>Nickel</i>	<i>20.0</i>	<i>18.1</i>	<i>91</i>
<i>Potassium</i>	<i>100000</i>	<i>83840</i>	<i>84</i>
<i>Selenium</i>	<i>50.0</i>	<i>50.0</i>	<i>100</i>
<i>Silicon</i>	<i>500</i>	<i>477</i>	<i>95</i>
<i>Silver</i>	<i>20.0</i>	<i>20.2</i>	<i>101</i>
<i>Strontium</i>	<i>25.0</i>	<i>20.2</i>	<i>81</i>
<i>Thallium</i>	<i>20.0</i>	<i>19.9</i>	<i>100</i>
<i>Tin</i>	<i>100</i>	<i>102</i>	<i>102</i>
<i>Titanium</i>	<i>2000</i>	<i>1701</i>	<i>85</i>
<i>Vanadium</i>	<i>20.0</i>	<i>16.7</i>	<i>84</i>
<i>Zinc</i>	<i>25.0</i>	<i>20.8</i>	<i>83</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-145A-0/1-0 MS

Lab ID: 180-43257-4 MS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

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	134000	84000	50000	100	75-125		6020A
Potassium	49800	4900	50000	90	75-125		6020A
Magnesium	75200	20000	50000	110	75-125		6020A
Sodium	132000	74000	50000	116	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-145A-0/1-0 MSD Lab ID: 180-43257-4 MSD
 Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1
 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	133000	50000	96	75-125	1	20		6020A
Potassium	49900	50000	90	75-125	0	20		6020A
Magnesium	75700	50000	111	75-125	1	20		6020A
Sodium	132000	50000	116	75-125	0	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-145A-0/1-0 PDS

Lab ID: 180-43257-4 PDS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

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	131000	84000	50000	94	75-125		6020A
Potassium	50700	4900	50000	92	75-125		6020A
Magnesium	74800	20000	50000	109	75-125		6020A
Sodium	129000	74000	50000	111	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 180-139272/2-A

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

Sample Matrix: Water

LCS Source: MTAPITMSA_00023

Analyte	Water (ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	50000	47300		95	80	120		6020A
Potassium	50000	44100		88	80	120		6020A
Magnesium	50000	51700		103	80	120		6020A
Sodium	50000	52300		105	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: 180-43257-4

SDG No: _____

Lab Name: TestAmerica Pittsburgh

Job No: 180-43257-1

Matrix: Water

Concentration Units: ug/L

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Difference	Q	Method
Calcium	84000	84200	0.26		6020A
Potassium	4900	4490	7.9		6020A
Magnesium	20000	20300	0.42		6020A
Sodium	74000	72700	1.3		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: 180-43257-1
SDG Number: _____
Matrix: Water Instrument ID: X
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: 180-43257-1
SDG Number: _____
Matrix: Water Instrument ID: X
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: 180-43257-1

SDG No.: _____

Instrument ID: X

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.: 180-43257-1

SDG No.: _____

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-139272/1-A	04/22/2015 10:12	139272		50	50
LCS 180-139272/2-A	04/22/2015 10:12	139272		50	50
180-43257-1	04/22/2015 10:12	139272		50	50
180-43257-2	04/22/2015 10:12	139272		50	50
180-43257-3	04/22/2015 10:12	139272		50	50
180-43257-4	04/22/2015 10:12	139272		50	50
180-43257-4 MS	04/22/2015 10:12	139272		50	50
180-43257-4 MSD	04/22/2015 10:12	139272		50	50
180-43257-5	04/22/2015 10:12	139272		50	50
180-43257-6	04/22/2015 10:12	139272		50	50
180-43257-7	04/22/2015 10:12	139272		50	50
180-43257-8	04/22/2015 10:12	139272		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG No.: _____

Instrument ID: X

Analysis Method: 6020A

Start Date: 04/25/2015 15:17

End Date: 04/26/2015 06:29

Lab Sample Id	D/F	T y p e	Time	Analytes																			
				C a	K	M g	N a																
ITUNE 180-139683/1			15:17																				
STD1 180-139683/2 IC	1		21:48	X	X	X	X																
STD2 180-139683/3 IC	1		21:54	X	X	X	X																
STD3 180-139683/4 IC	1		21:59	X	X	X	X																
ICV 180-139683/5	1		22:05	X	X	X	X																
ICB 180-139683/6	1		22:14	X	X	X	X																
CRI 180-139683/7	1		22:19	X	X	X	X																
ICSA 180-139683/8	1		22:26	X	X	X	X																
ICSAB 180-139683/9	1		22:31	X	X	X	X																
CCV 180-139683/10	1		22:40	X	X	X	X																
CCB1 180-139683/11	1		22:49	X	X	X	X																
ZZZZZZ			22:54																				
ZZZZZZ			22:59																				
ZZZZZZ			23:04																				
ZZZZZZ			23:13																				
ZZZZZZ			23:18																				
ZZZZZZ			23:24																				
ZZZZZZ			23:29																				
ZZZZZZ			23:34																				
ZZZZZZ			23:39																				
ZZZZZZ			23:44																				
CCV 180-139683/22	1		23:49	X	X	X	X																
CCB2 180-139683/23	1		23:58	X	X	X	X																
ZZZZZZ			00:03																				
ZZZZZZ			00:08																				
ZZZZZZ			00:13																				
MB 180-139272/1-A	1	R	00:18	X	X	X	X																
LCS 180-139272/2-A	1	R	00:23	X	X	X	X																
ZZZZZZ			00:33																				
ZZZZZZ			00:38																				
ZZZZZZ			00:43																				
ZZZZZZ			00:48																				
ZZZZZZ			00:53																				
CCV 180-139683/34	1		00:58	X	X	X	X																
CCB3 180-139683/35	1		01:07	X	X	X	X																
180-43257-1	1	T	01:12	X	X	X	X																
180-43257-2	1	T	01:17	X	X	X	X																
180-43257-3	1	T	01:23	X	X	X	X																
180-43257-4	1	T	01:28	X	X	X	X																
180-43257-4 SD	5	T	01:33	X	X	X	X																
180-43257-4 MS	1	T	01:38	X	X	X	X																
180-43257-4 MSD	1	T	01:43	X	X	X	X																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: X Analysis Method: 6020A

Start Date: 04/25/2015 15:17 End Date: 04/26/2015 06:29

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				C a	K	M g	N a																								
180-43257-4 PDS	1	T	01:48	X	X	X	X																								
180-43257-5	1	T	01:53	X	X	X	X																								
180-43257-6	1	T	01:58	X	X	X	X																								
CCV 180-139683/46	1		02:03	X	X	X	X																								
CCB4 180-139683/47	1		02:12	X	X	X	X																								
180-43257-7	1	T	02:18	X	X																										
180-43257-8	1	T	02:23	X	X																										
ZZZZZZ			02:28																												
ZZZZZZ			02:33																												
ZZZZZZ			02:42																												
ZZZZZZ			02:47																												
ZZZZZZ			02:52																												
ZZZZZZ			02:57																												
ZZZZZZ			03:02																												
ZZZZZZ			03:07																												
CCV 180-139683/58	1		03:16	X	X																										
CCB5 180-139683/59	1		03:25	X	X	X	X																								
ZZZZZZ			03:31																												
ZZZZZZ			03:36																												
ZZZZZZ			03:41																												
ZZZZZZ			03:46																												
ZZZZZZ			03:51																												
ZZZZZZ			03:56																												
ZZZZZZ			04:01																												
ZZZZZZ			04:06																												
ZZZZZZ			04:11																												
ZZZZZZ			04:17																												
CCV 180-139683/70			04:26																												
CCB6 180-139683/71			04:35																												
ZZZZZZ			04:40																												
ZZZZZZ			04:45																												
ZZZZZZ			04:50																												
ZZZZZZ			04:55																												
ZZZZZZ			05:00																												
ZZZZZZ			05:05																												
ZZZZZZ			05:15																												
ZZZZZZ			05:20																												
ZZZZZZ			05:25																												
ZZZZZZ			05:30																												
CCV 180-139683/82			05:35																												
CCB7 180-139683/83			05:44																												
ZZZZZZ			05:49																												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: X Analysis Method: 6020A

Start Date: 04/25/2015 15:17 End Date: 04/26/2015 06:29

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				C a	K	M g	N a																								
ZZZZZZ			05:54																												
ZZZZZZ			06:00																												
ZZZZZZ			06:05																												
CRI 180-139683/88	1		06:19	X	X	X	X																								
CCV 180-139683/89			06:24																												
CCB8 180-139683/90			06:29																												

Prep Types:
 R = Total Recoverable
 T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: X Analysis Method: 6020A

Start Date: 04/26/2015 19:45 End Date: 04/27/2015 08:06

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				M g	N a																										
ITUNE 180-139813/1			19:45																												
STD1 180-139813/2 IC	1		20:03	X	X																										
STD2 180-139813/3 IC	1		20:10	X	X																										
STD3 180-139813/4 IC	1		20:15	X	X																										
ICV 180-139813/5	1		20:20	X	X																										
ICB 180-139813/6	1		20:29	X	X																										
CRI 180-139813/7	1		20:34	X	X																										
ICSA 180-139813/8	1		20:39	X	X																										
ICSAB 180-139813/9	1		20:44	X	X																										
CCV 180-139813/10	1		20:56	X	X																										
CCB1 180-139813/11	1		21:05	X	X																										
180-43257-7	1	T	21:10	X	X																										
180-43257-8	1	T	21:15	X	X																										
ZZZZZZ			21:20																												
ZZZZZZ			21:25																												
ZZZZZZ			21:40																												
ZZZZZZ			21:45																												
ZZZZZZ			21:50																												
ZZZZZZ			21:55																												
ZZZZZZ			22:01																												
ZZZZZZ			22:09																												
CCV 180-139813/22	1		22:14	X	X																										
CCB2 180-139813/23	1		22:23	X	X																										
ZZZZZZ			22:28																												
ZZZZZZ			22:33																												
ZZZZZZ			22:42																												
CRI 180-139813/27	1		22:52	X	X																										
ZZZZZZ			22:57																												
ZZZZZZ			23:03																												
ZZZZZZ			23:08																												
ZZZZZZ			23:13																												
ZZZZZZ			23:18																												
CCV 180-139813/33			23:27																												
CCB3 180-139813/34			23:36																												
ZZZZZZ			23:41																												
ZZZZZZ			23:46																												
ZZZZZZ			23:51																												
ZZZZZZ			23:56																												
ZZZZZZ			00:01																												
ZZZZZZ			00:07																												
ZZZZZZ			00:12																												
ZZZZZZ			00:17																												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: X Analysis Method: 6020A

Start Date: 04/26/2015 19:45 End Date: 04/27/2015 08:06

Lab Sample Id	D/F	T y p e	Time	Analytes																											
				M	N																										
ZZZZZZ			00:22																												
ZZZZZZ			00:27																												
CCV 180-139813/45			00:32																												
CCB4 180-139813/46			00:41																												
ZZZZZZ			00:46																												
ZZZZZZ			00:51																												
ZZZZZZ			00:56																												
ZZZZZZ			01:01																												
ZZZZZZ			01:06																												
ZZZZZZ			01:12																												
ZZZZZZ			01:17																												
ZZZZZZ			01:26																												
ZZZZZZ			01:31																												
ZZZZZZ			01:36																												
CCV 180-139813/57			01:41																												
CCB5 180-139813/58			01:50																												
ZZZZZZ			01:55																												
ZZZZZZ			02:01																												
ZZZZZZ			02:06																												
ZZZZZZ			02:11																												
ZZZZZZ			02:16																												
ZZZZZZ			02:21																												
ZZZZZZ			02:26																												
ZZZZZZ			02:31																												
ZZZZZZ			02:36																												
ZZZZZZ			02:41																												
CCV 180-139813/69			02:47																												
CCB6 180-139813/70			02:56																												
ZZZZZZ			03:01																												
ZZZZZZ			03:06																												
ZZZZZZ			03:11																												
ZZZZZZ			03:16																												
ZZZZZZ			03:21																												
ZZZZZZ			03:26																												
ZZZZZZ			03:31																												
ZZZZZZ			03:36																												
ZZZZZZ			03:42																												
ZZZZZZ			03:47																												
CCV 180-139813/81			03:52																												
CCB7 180-139813/82			04:01																												
ZZZZZZ			04:06																												
ZZZZZZ			04:11																												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: X Analysis Method: 6020A

Start Date: 04/26/2015 19:45 End Date: 04/27/2015 08:06

Lab Sample Id	D/F	Type	Time	Analytes																											
				M	N																										
ZZZZZZ			04:16																												
ZZZZZZ			04:26																												
ZZZZZZ			04:31																												
ZZZZZZ			04:36																												
ZZZZZZ			04:41																												
ZZZZZZ			04:46																												
ZZZZZZ			04:51																												
ZZZZZZ			04:56																												
CCV 180-139813/93			05:01																												
CCB8 180-139813/94			05:11																												
ZZZZZZ			05:16																												
ZZZZZZ			05:21																												
ZZZZZZ			05:26																												
ZZZZZZ			05:31																												
ZZZZZZ			05:36																												
ZZZZZZ			05:41																												
ZZZZZZ			05:46																												
ZZZZZZ			05:52																												
ZZZZZZ			05:57																												
ZZZZZZ			06:02																												
CCV 180-139813/105			06:07																												
CCB9 180-139813/106			06:16																												
ZZZZZZ			06:21																												
ZZZZZZ			06:26																												
ZZZZZZ			06:31																												
ZZZZZZ			06:37																												
ZZZZZZ			06:42																												
ZZZZZZ			06:47																												
ZZZZZZ			06:52																												
ZZZZZZ			06:57																												
ZZZZZZ			07:02																												
ZZZZZZ			07:07																												
CCV 180-139813/117			07:12																												
CCB10 180-139813/118			07:22																												
ZZZZZZ			07:27																												
ZZZZZZ			07:32																												
ZZZZZZ			07:37																												
CRI 180-139813/122			07:46																												
CCV 180-139813/123			07:56																												
CCB11 180-139813/124			08:06																												

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Instrument ID: X Analysis Method: 6020A

Start Date: 04/26/2015 19:45 End Date: 04/27/2015 08:06

Lab Sample Id	D/F	Type	Time	Analytes																											
				Mg	Na																										

Prep Types: _____
T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

ICP-MS Instrument ID: X Start Date: 04/25/2015 End Date: 04/26/2015

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 180-139683/2 IC	21:48	100		100		100		100		100	
STD2 180-139683/3 IC	21:54	94		97		94		87		89	
STD3 180-139683/4 IC	21:59	94		91		96		94		95	
ICV 180-139683/5	22:05	96		97		97		91		92	
ICB 180-139683/6	22:14	97		96		101		97		98	
CRI 180-139683/7	22:19	91		98		103		97		99	
ICSA 180-139683/8	22:26	76		80		84		73		80	
ICSAB 180-139683/9	22:31	74		85		79		72		79	
CCV 180-139683/10	22:40	86		90		93		84		87	
CCB1 180-139683/11	22:49	93		96		100		95		98	
CCV 180-139683/22	23:49	78		78		82		74		79	
CCB2 180-139683/23	23:58	91		90		94		87		90	
MB 180-139272/1-A	00:18	84		83		86		81		84	
LCS 180-139272/2-A	00:23	70		68		74		66		71	
CCV 180-139683/34	00:58	77		80		80		71		76	
CCB3 180-139683/35	01:07	89		89		91		84		87	
180-43257-1	01:12	70		70		74		66		72	
180-43257-2	01:17	70		70		72		64		70	
180-43257-3	01:23	69		68		71		63		69	
180-43257-4	01:28	68		68		71		63		69	
180-43257-4 SD	01:33	71		72		74		68		73	
180-43257-4 MS	01:38	63		63		67		59		64	
180-43257-4 MSD	01:43	62		63		67		59		64	
180-43257-4 PDS	01:48	63		62		66		58		63	
180-43257-5	01:53	65		64		68		60		66	
180-43257-6	01:58	63		64		67		59		65	
CCV 180-139683/46	02:03	70		70		70		62		67	
CCB4 180-139683/47	02:12	88		86		89		83		86	
180-43257-7	02:18	63		61		66		59		65	
180-43257-8	02:23	64		63		67		59		65	
CCV 180-139683/58	03:16	71		66		65		57		61	
CCB5 180-139683/59	03:25	91		82		84		82		85	
CRI 180-139683/88	06:19	77		71		67		61		63	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

ICP-MS Instrument ID: X Start Date: 04/25/2015 End Date: 04/26/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-139683/2 IC	21:48	100		100		100					
STD2 180-139683/3 IC	21:54	93		93		101					
STD3 180-139683/4 IC	21:59	96		96		109					
ICV 180-139683/5	22:05	93		93		102					
ICB 180-139683/6	22:14	99		99		103					
CRI 180-139683/7	22:19	99		100		104					
ICSA 180-139683/8	22:26	87		89		98					
ICSAB 180-139683/9	22:31	86		88		95					
CCV 180-139683/10	22:40	92		92		101					
CCB1 180-139683/11	22:49	99		99		102					
CCV 180-139683/22	23:49	86		86		97					
CCB2 180-139683/23	23:58	93		94		109					
MB 180-139272/1-A	00:18	89		90		105					
LCS 180-139272/2-A	00:23	80		82		93					
CCV 180-139683/34	00:58	82		83		92					
CCB3 180-139683/35	01:07	90		91		104					
180-43257-1	01:12	79		81		91					
180-43257-2	01:17	79		80		90					
180-43257-3	01:23	78		79		89					
180-43257-4	01:28	78		80		90					
180-43257-4 SD	01:33	80		81		96					
180-43257-4 MS	01:38	74		77		85					
180-43257-4 MSD	01:43	75		77		84					
180-43257-4 PDS	01:48	74		75		83					
180-43257-5	01:53	74		76		87					
180-43257-6	01:58	74		76		85					
CCV 180-139683/46	02:03	74		76		85					
CCB4 180-139683/47	02:12	93		93		100					
180-43257-7	02:18	74		75		86					
180-43257-8	02:23	74		76		87					
CCV 180-139683/58	03:16			68		72					
CCB5 180-139683/59	03:25	85		86		93					
CRI 180-139683/88	06:19			67		77					

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

ICP-MS Instrument ID: X Start Date: 04/26/2015 End Date: 04/26/2015

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 180-139813/2 IC	20:03	100		100		100		100		100			
STD2 180-139813/3 IC	20:10	90		95		94		86		89			
STD3 180-139813/4 IC	20:15	96		91		96		91		92			
ICV 180-139813/5	20:20	94		92		98		89		92			
ICB 180-139813/6	20:29	97		96		100		94		95			
CRI 180-139813/7	20:34	97		96		100		94		90			
ICSA 180-139813/8	20:39	78		92		83		72		77			
ICSAB 180-139813/9	20:44	73		92		80		68		74			
CCV 180-139813/10	20:56	79		85		89		80		80			
CCB1 180-139813/11	21:05	89		90		94		87		89			
180-43257-7	21:10	79		75		78		69		74			
180-43257-8	21:15	80		76		76		69		73			
CCV 180-139813/22	22:14	80		76		78		70		72			
CCB2 180-139813/23	22:23	88		88		87		81		82			
CRI 180-139813/27	22:52	88		93		87		79		82			

15-IN
 ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
 METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

ICP-MS Instrument ID: X Start Date: 04/26/2015 End Date: 04/26/2015

Lab Sample ID	Time	Internal Standards %RI For:											
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q		
STD1 180-139813/2 IC	20:03	100		100		100							
STD2 180-139813/3 IC	20:10	91		92		85							
STD3 180-139813/4 IC	20:15	93		93		89							
ICV 180-139813/5	20:20	93		93		87							
ICB 180-139813/6	20:29	96		95		91							
CRI 180-139813/7	20:34	96		95		88							
ICSA 180-139813/8	20:39	84		86		80							
ICSAB 180-139813/9	20:44	81		82		75							
CCV 180-139813/10	20:56	88		89		80							
CCB1 180-139813/11	21:05	92		92		88							
180-43257-7	21:10	81		83		77							
180-43257-8	21:15	80		82		77							
CCV 180-139813/22	22:14	78		79		70							
CCB2 180-139813/23	22:23	86		86		83							
CRI 180-139813/27	22:52	85		85		80							

Dilution Corrected Concentrations

STD1 1542085 4/25/2015 9:48:44 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	21:47:51	99.331%	0.001	0.152	-0.137	0.000	0.025	-0.182	0.332
2	21:47:59	101.262%	0.005	0.046	0.248	0.000	0.029	0.356	-0.248
3	21:48:07	99.407%	-0.006	-0.198	-0.111	0.000	-0.053	-0.174	-0.083
X		100.000%	0.000	0.000	-0.000	0.000	-0.000	-0.000	-0.000
σ		1.093%	0.005	0.179	0.215	0.000	0.046	0.309	0.299
%RSD		1.093	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	21:47:51	-0.614	-0.308	0.000	0.707	0.958	0.505	100.845%	-0.169
2	21:47:59	1.224	-0.543	0.000	-2.528	-3.602	-0.374	99.812%	0.208
3	21:48:07	-0.610	0.850	0.000	1.821	2.644	-0.130	99.342%	-0.039
X		-0.000	-0.000	0.000	-0.000	-0.000	0.000	100.000%	-0.000
σ		1.060	0.746	0.000	2.259	3.231	0.454	0.769%	0.191
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.769	0.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:47:51	-0.043	-0.014	0.031	-0.050	-0.268	-0.001	0.006	-0.048
2	21:47:59	0.020	-0.011	-0.006	-0.027	0.722	0.005	0.034	0.061
3	21:48:07	0.023	0.025	-0.026	0.077	-0.454	-0.004	-0.040	-0.013
X		0.000	0.000	0.000	-0.000	0.000	-0.000	0.000	0.000
σ		0.038	0.021	0.029	0.068	0.632	0.005	0.037	0.055
%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	21:47:51	-0.045	0.004	-0.056	-0.007	0.008	0.553	0.000	0.000
2	21:47:59	0.023	-0.020	0.052	-0.015	0.008	-0.739	0.000	0.002
3	21:48:07	0.021	0.015	0.004	0.022	-0.016	0.186	0.000	-0.003
X		0.000	0.000	-0.000	0.000	-0.000	0.000	0.000	0.000
σ		0.039	0.018	0.054	0.020	0.014	0.666	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	21:47:51	98.563%	0.009	0.001	98.691%	0.010	-0.006	0.000	0.011
2	21:47:59	99.444%	0.002	-0.012	100.599%	0.002	0.002	-0.000	-0.007
3	21:48:07	101.994%	-0.011	0.011	100.710%	-0.012	0.004	-0.000	-0.003
X		100.000%	-0.000	0.000	100.000%	0.000	0.000	0.000	-0.000
σ		1.782%	0.010	0.011	1.135%	0.011	0.005	0.000	0.010
%RSD		1.782	0.000	0.000	1.135	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	21:47:51	98.981%	-0.103	0.010	0.026	0.019	0.023	98.926%	99.176%
2	21:47:59	100.285%	0.065	-0.006	-0.013	-0.000	-0.012	99.907%	99.592%
3	21:48:07	100.734%	0.038	-0.003	-0.013	-0.019	-0.012	101.167%	101.231%
X		100.000%	-0.000	0.000	0.000	-0.000	-0.000	100.000%	100.000%
σ		0.911%	0.090	0.008	0.023	0.019	0.020	1.124%	1.086%
%RSD		0.911	0.000	0.000	0.000	0.000	0.000	1.124	1.086
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:47:51	-0.000	0.002	-0.005	0.003	-0.001	98.696%		
2	21:47:59	-0.004	-0.002	0.004	-0.005	0.001	99.994%		
3	21:48:07	0.004	-0.000	0.001	0.001	0.000	101.310%		
X		-0.000	0.000	0.000	0.000	-0.000	100.000%		
σ		0.004	0.002	0.005	0.004	0.001	1.307%		
%RSD		0.000	0.000	0.000	0.000	0.000	1.307		

STD2 1533078

4/25/2015 9:54:53 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	21:54:00	94.970%	200.000	0.751	0.476	0.000	97820.000	97950.000	98330.000
2	21:54:07	92.560%	202.300	0.748	0.557	0.000	101300.000	101300.000	101300.000
3	21:54:15	94.307%	197.700	0.440	0.502	0.000	100800.000	100700.000	100400.000
X		93.946%	200.000	0.646	0.512	0.000	100000.000	100000.000	100000.000
σ		1.245%	2.330	0.178	0.042	0.000	1903.000	1797.000	1504.000
%RSD		1.325	1.165	27.580	8.126	0.000	1.903	1.797	1.504
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:54:00	975.900	7.041	0.000	98750.000	98510.000	98940.000	99.706%	1.605
2	21:54:07	1014.000	6.412	0.000	100500.000	100600.000	100600.000	96.361%	1.676
3	21:54:15	1010.000	6.081	0.000	100700.000	100900.000	100500.000	95.635%	1.979
X		1000.000	6.511	0.000	100000.000	100000.000	100000.000	97.234%	1.754
σ		20.960	0.488	0.000	1087.000	1302.000	918.900	2.171%	0.199
%RSD		2.096	7.487	0.000	1.087	1.302	0.919	2.233	11.340
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:54:00	195.400	195.600	982.600	48950.000	49080.000	197.500	195.300	198.400
2	21:54:07	201.300	201.400	1006.000	50380.000	50930.000	203.600	201.100	200.300
3	21:54:15	203.300	202.900	1011.000	50670.000	49990.000	198.900	203.600	201.300
X		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		4.110	3.876	15.250	921.100	923.200	3.236	4.223	1.467
%RSD		2.055	1.938	1.525	1.842	1.846	1.618	2.111	0.733
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:54:00	197.700	197.500	198.200	197.800	194.600	195.900	0.000	200.700
2	21:54:07	198.400	200.300	199.400	201.100	202.500	195.600	0.000	198.800
3	21:54:15	203.900	202.200	202.400	201.200	203.000	208.600	0.000	200.500
X		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		3.436	2.351	2.161	1.935	4.685	7.418	0.000	1.028
%RSD		1.718	1.176	1.080	0.968	2.343	3.709	0.000	0.514
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:54:00	93.337%	0.228	0.110	87.323%	199.300	198.300	200.100	198.400
2	21:54:07	93.731%	0.164	0.150	86.632%	200.100	200.900	201.700	201.500
3	21:54:15	93.546%	0.086	0.116	86.024%	200.600	200.700	198.200	200.000
X		93.538%	0.159	0.126	86.660%	200.000	200.000	200.000	200.000
σ		0.197%	0.071	0.022	0.650%	0.653	1.443	1.757	1.548
%RSD		0.210	44.650	17.210	0.750	0.327	0.721	0.878	0.774
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:54:00	88.926%	-0.365	0.169	0.144	199.000	201.600	91.989%	91.661%
2	21:54:07	89.036%	-0.450	0.142	0.144	195.700	198.100	92.465%	92.423%
3	21:54:15	89.745%	-0.369	0.111	0.247	205.200	200.300	93.202%	94.431%
X		89.236%	-0.395	0.141	0.178	200.000	200.000	92.552%	92.838%
σ		0.444%	0.048	0.029	0.059	4.817	1.752	0.611%	1.431%
%RSD		0.498	12.220	20.610	33.390	2.408	0.876	0.660	1.541
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:54:00	200.000	200.700	199.300	198.700	199.600	100.605%		
2	21:54:07	199.000	198.400	200.600	199.900	200.000	101.522%		
3	21:54:15	201.000	200.800	200.100	201.400	200.300	100.791%		
X		200.000	200.000	200.000	200.000	200.000	100.973%		
σ		1.011	1.371	0.634	1.309	0.344	0.485%		
%RSD		0.506	0.686	0.317	0.655	0.172	0.480		

STD3 1533079 4/25/2015 9:59:58 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	21:59:05	94.576%	0.331	196.900	198.300	0.000	126.500	129.700	134.300
2	21:59:13	93.695%	0.291	205.500	200.000	0.000	135.300	126.900	127.300
3	21:59:20	94.542%	0.436	197.600	201.600	0.000	132.200	137.400	138.000
X		94.271%	0.353	200.000	200.000	0.000	131.300	131.300	133.200
σ		0.500%	0.075	4.776	1.653	0.000	4.428	5.442	5.438
%RSD		0.530	21.180	2.388	0.826	0.000	3.371	4.144	4.083
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:05	16.070	9847.000	0.000	128.700	139.600	219.300	91.834%	195.700
2	21:59:13	16.010	10050.000	0.000	124.300	155.700	226.200	90.464%	199.300
3	21:59:20	15.940	10100.000	0.000	118.100	154.700	216.600	90.922%	205.000
X		16.000	10000.000	0.000	123.700	150.000	220.700	91.073%	200.000
σ		0.064	135.300	0.000	5.284	9.007	4.968	0.697%	4.702
%RSD		0.400	1.353	0.000	4.272	6.003	2.251	0.766	2.351
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:05	0.518	0.433	1.987	99.330	95.100	0.266	0.320	0.405
2	21:59:13	0.471	0.395	2.021	91.920	97.750	0.287	0.251	0.317
3	21:59:20	0.331	0.384	1.990	87.200	93.190	0.270	0.259	0.396
X		0.440	0.404	1.999	92.820	95.350	0.274	0.277	0.373
σ		0.097	0.025	0.019	6.116	2.287	0.011	0.038	0.049
%RSD		22.090	6.253	0.950	6.590	2.398	3.970	13.660	13.070
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:05	0.507	1.344	1.082	1.945	1.853	1.915	0.000	0.359
2	21:59:13	0.448	1.762	1.369	1.419	1.806	1.289	0.000	0.377
3	21:59:20	0.542	1.327	1.232	1.369	1.308	-0.195	0.000	0.420
X		0.499	1.478	1.228	1.578	1.656	1.003	0.000	0.386
σ		0.048	0.246	0.144	0.319	0.302	1.084	0.000	0.032
%RSD		9.536	16.670	11.690	20.240	18.250	108.100	0.000	8.170
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:05	93.863%	200.700	200.400	92.706%	0.229	0.302	0.383	4.715
2	21:59:13	95.878%	199.800	199.600	93.868%	0.243	0.304	0.457	4.374
3	21:59:20	97.411%	199.500	200.000	93.842%	0.245	0.343	0.387	4.523
X		95.717%	200.000	200.000	93.472%	0.239	0.317	0.409	4.537
σ		1.779%	0.652	0.414	0.664%	0.009	0.023	0.042	0.171
%RSD		1.859	0.326	0.207	0.710	3.777	7.209	10.170	3.762
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:59:05	93.762%	198.300	200.600	200.000	0.380	0.646	93.416%	94.273%
2	21:59:13	95.344%	200.800	199.500	199.400	0.215	0.451	96.894%	96.392%
3	21:59:20	95.860%	200.900	199.800	200.600	0.253	0.497	96.747%	96.618%
X		94.989%	200.000	200.000	200.000	0.282	0.531	95.685%	95.761%
σ		1.093%	1.469	0.578	0.598	0.087	0.102	1.967%	1.294%
%RSD		1.151	0.735	0.289	0.299	30.700	19.180	2.055	1.351
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:59:05	0.310	0.368	0.220	0.330	0.263	108.647%		
2	21:59:13	0.356	0.313	0.233	0.311	0.273	108.801%		
3	21:59:20	0.328	0.282	0.263	0.273	0.261	109.256%		
X		0.331	0.321	0.239	0.305	0.266	108.901%		
σ		0.023	0.043	0.022	0.029	0.007	0.317%		
%RSD		6.927	13.510	9.385	9.411	2.446	0.291		

ICV 1527873 4/25/2015 10:05:06 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	22:04:12	96.647%	75.510	83.640	83.520	0.000	40440.000	39210.000	41270.000
2	22:04:20	95.100%	77.180	82.190	84.770	0.000	41220.000	39990.000	42340.000
3	22:04:28	96.164%	76.540	86.680	84.150	0.000	41420.000	40210.000	42200.000
X		95.970%	95.514%	105.212%	105.186%	0.000	102.566%	99.504%	104.845%
σ		0.792%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.825	1.102	2.726	0.742	0.000	1.263	1.327	1.395
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:12	418.300	3966.000	0.000	38290.000	37460.000	39400.000	97.899%	79.570
2	22:04:20	423.700	4009.000	0.000	38710.000	38020.000	39970.000	96.655%	80.450
3	22:04:28	423.100	4008.000	0.000	38320.000	37550.000	40370.000	96.605%	81.330
X		105.428%	99.856%	0.000	96.100%	94.186%	99.788%	97.053%	100.560%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.733%	n/a
%RSD		0.697	0.603	0.000	0.615	0.795	1.212	0.756	1.095
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:12	80.460	81.250	393.600	19730.000	19050.000	80.880	81.010	81.480
2	22:04:20	80.930	82.490	382.700	20100.000	19580.000	80.690	79.530	81.780
3	22:04:28	81.420	82.510	383.700	20050.000	19230.000	80.090	79.670	81.350
X		101.171%	102.606%	96.662%	99.807%	96.428%	100.689%	100.086%	101.921%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.593	0.880	1.562	1.017	1.390	0.514	1.024	0.271
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:12	81.720	79.860	79.610	81.270	78.950	85.320	0.000	78.830
2	22:04:20	80.860	80.200	77.440	80.450	79.200	80.000	0.000	79.140
3	22:04:28	80.790	81.160	79.420	79.970	81.380	80.050	0.000	78.240
X		101.405%	100.510%	98.528%	100.704%	99.804%	102.241%	0.000	98.417%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.634	0.840	1.522	0.818	1.674	3.737	0.000	0.580
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:12	96.034%	81.220	82.510	90.327%	77.310	77.020	77.700	79.990
2	22:04:20	97.086%	81.670	80.770	90.614%	77.720	77.980	80.560	79.990
3	22:04:28	97.281%	82.090	81.330	90.686%	76.820	77.310	78.130	78.940
X		96.800%	102.076%	101.922%	90.542%	96.605%	96.798%	98.498%	99.549%
σ		0.671%	n/a	n/a	0.190%	n/a	n/a	n/a	n/a
%RSD		0.693	0.536	1.092	0.210	0.581	0.632	1.957	0.766
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:04:12	92.290%	82.750	80.540	80.640	82.200	80.280	91.991%	92.139%
2	22:04:20	91.900%	84.100	79.790	80.630	82.050	82.690	92.282%	93.982%
3	22:04:28	92.583%	80.160	79.460	80.660	81.640	80.420	93.336%	93.923%
X		92.258%	102.921%	99.911%	100.804%	102.455%	101.412%	92.536%	93.348%
σ		0.343%	n/a	n/a	n/a	n/a	n/a	0.708%	1.047%
%RSD		0.372	2.434	0.691	0.020	0.354	1.670	0.765	1.122
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:04:12	81.310	80.530	79.730	77.620	78.790	102.015%		
2	22:04:20	82.040	81.530	81.480	78.750	79.790	101.615%		
3	22:04:28	82.270	81.210	81.220	78.440	79.260	102.407%		
X		102.344%	101.363%	101.015%	97.837%	99.099%	102.012%		
σ		n/a	n/a	n/a	n/a	n/a	0.396%		
%RSD		0.612	0.629	1.171	0.750	0.635	0.388		

ICB 4/25/2015 10:14:15 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	22:13:23	98.325%	-0.054	0.384	0.477	0.000	2.739	1.151	0.834
2	22:13:31	96.786%	-0.088	0.719	0.320	0.000	4.158	0.798	1.750
3	22:13:39	96.401%	-0.051	0.950	0.235	0.000	2.459	0.243	1.628
X		97.171%	-0.065	0.684	0.344	0.000	3.119	0.731	1.404
σ		1.018%	0.021	0.285	0.123	0.000	0.911	0.458	0.497
%RSD		1.048	31.900	41.610	35.760	0.000	29.210	62.640	35.420
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:23	-4.006	4.478	0.000	17.660	-1.361	1.339	96.903%	-0.693
2	22:13:31	-2.601	1.837	0.000	11.390	13.300	-1.529	96.607%	-0.612
3	22:13:39	-3.530	1.018	0.000	10.970	-1.856	-0.016	95.655%	-0.608
X		-3.379	2.444	0.000	13.340	3.361	-0.069	96.388%	-0.638
σ		0.715	1.808	0.000	3.749	8.611	1.435	0.652%	0.048
%RSD		21.150	73.970	0.000	28.110	256.200	2089.000	0.676	7.522
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:23	-0.034	-0.035	-0.001	5.333	5.569	0.003	0.007	-0.117
2	22:13:31	-0.028	-0.031	0.002	4.860	3.781	0.003	-0.021	-0.074
3	22:13:39	0.008	-0.032	0.019	4.143	3.421	0.003	-0.002	-0.125
X		-0.018	-0.032	0.007	4.779	4.257	0.003	-0.005	-0.105
σ		0.023	0.002	0.011	0.599	1.150	0.000	0.014	0.027
%RSD		123.800	7.206	161.700	12.540	27.020	0.356	279.800	26.000
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:23	-0.104	0.006	0.008	0.047	0.056	-1.842	0.000	0.005
2	22:13:31	-0.029	0.043	-0.086	0.043	0.079	0.754	0.000	-0.000
3	22:13:39	-0.097	0.055	-0.040	0.061	0.031	-0.897	0.000	-0.003
X		-0.077	0.035	-0.039	0.050	0.056	-0.662	0.000	0.001
σ		0.041	0.025	0.047	0.009	0.024	1.314	0.000	0.004
%RSD		53.930	73.010	120.600	18.290	43.150	198.600	0.000	526.900
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:23	100.057%	0.221	0.162	95.316%	-0.007	-0.012	-0.000	-0.011
2	22:13:31	101.469%	0.198	0.188	96.409%	-0.013	-0.012	-0.000	-0.015
3	22:13:39	102.716%	0.278	0.224	97.773%	-0.011	-0.019	0.022	-0.020
X		101.414%	0.232	0.191	96.499%	-0.010	-0.014	0.007	-0.015
σ		1.330%	0.041	0.031	1.231%	0.003	0.004	0.013	0.005
%RSD		1.312	17.850	16.120	1.275	30.390	26.790	178.300	31.290
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:23	96.795%	-0.549	-0.014	-0.069	-0.019	0.012	97.919%	97.693%
2	22:13:31	97.405%	-0.719	-0.002	-0.057	-0.019	0.000	98.973%	99.154%
3	22:13:39	98.601%	-0.686	-0.005	-0.087	-0.019	0.012	98.757%	99.595%
X		97.600%	-0.651	-0.007	-0.071	-0.019	0.008	98.550%	98.814%
σ		0.919%	0.090	0.006	0.015	0.000	0.007	0.557%	0.996%
%RSD		0.941	13.780	88.830	21.370	0.000	85.630	0.565	1.008
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:13:23	0.032	0.032	-0.071	-0.063	-0.063	98.301%		
2	22:13:31	0.017	0.041	-0.084	-0.051	-0.064	99.027%		
3	22:13:39	0.015	0.023	-0.089	-0.056	-0.073	111.977%		
X		0.021	0.032	-0.081	-0.057	-0.067	103.102%		
σ		0.009	0.009	0.009	0.006	0.005	7.695%		
%RSD		42.010	27.830	11.490	10.790	8.007	7.463		

CRI 1525173 4/25/2015 10:19:23 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	22:18:31	90.890%	0.996	20.300	20.990	0.000	475.700	505.100	524.000
2	22:18:39	89.825%	0.830	19.440	20.540	0.000	480.900	513.700	542.300
3	22:18:47	91.681%	0.755	21.770	20.410	0.000	473.200	496.800	525.100
X		90.798%	86.038%	410.113%	412.962%	0.000	595.770%	505.165%	530.472%
σ		0.931%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.026	14.330	5.752	1.450	0.000	0.820	1.669	1.936
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:18:31	26.900	496.000	0.000	449.100	420.700	446.800	99.093%	3.631
2	22:18:39	29.590	502.200	0.000	454.100	481.100	435.200	98.383%	3.193
3	22:18:47	28.810	500.700	0.000	465.800	442.000	453.100	97.631%	3.720
X		94.772%	99.930%	0.000	456.318%	447.943%	445.022%	98.369%	70.294%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.731%	n/a
%RSD		4.881	0.653	0.000	1.884	6.842	2.033	0.743	8.032
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:18:31	0.899	1.824	4.393	45.110	43.150	0.430	1.036	1.966
2	22:18:39	1.042	1.940	4.651	45.870	43.480	0.443	0.803	2.006
3	22:18:47	0.986	1.858	4.775	47.510	46.060	0.507	0.978	1.896
X		97.556%	93.689%	92.129%	92.321%	88.462%	92.026%	93.906%	97.812%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		7.356	3.182	4.241	2.660	3.594	8.989	12.930	2.839
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:18:31	1.760	4.934	4.713	0.931	4.696	4.279	0.000	4.442
2	22:18:39	1.888	5.053	4.206	0.912	4.560	4.102	0.000	4.484
3	22:18:47	1.827	5.177	5.335	0.891	4.227	4.317	0.000	4.544
X		91.258%	101.098%	95.026%	91.140%	89.886%	84.652%	0.000	89.801%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		3.513	2.408	11.900	2.228	5.367	2.699	0.000	1.136
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:18:31	102.288%	4.243	4.210	96.280%	0.949	0.979	0.903	0.974
2	22:18:39	101.668%	4.254	4.139	97.117%	0.975	0.851	0.870	1.093
3	22:18:47	103.512%	4.465	4.341	97.249%	1.019	0.944	0.988	0.957
X		102.490%	86.410%	84.604%	96.882%	98.103%	92.447%	92.010%	100.787%
σ		0.938%	n/a	n/a	0.526%	n/a	n/a	n/a	n/a
%RSD		0.916	2.898	2.424	0.542	3.619	7.129	6.636	7.389
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:18:31	97.867%	3.907	1.856	1.663	8.710	9.250	98.555%	99.345%
2	22:18:39	99.208%	3.578	1.779	1.818	9.248	8.368	99.919%	99.856%
3	22:18:47	99.571%	3.589	1.819	1.835	8.803	8.801	99.339%	99.687%
X		98.882%	73.824%	90.898%	88.582%	89.201%	88.064%	99.271%	99.629%
σ		0.898%	n/a	n/a	n/a	n/a	n/a	0.685%	0.260%
%RSD		0.908	5.058	2.106	5.351	3.223	5.005	0.690	0.261
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:18:31	0.850	0.796	0.874	0.818	0.860	112.476%		
2	22:18:39	0.923	0.909	0.907	0.919	0.963	99.686%		
3	22:18:47	1.015	0.943	1.003	1.052	1.006	100.454%		
X		92.932%	88.285%	92.813%	92.946%	94.322%	104.205%		
σ		n/a	n/a	n/a	n/a	n/a	7.173%		
%RSD		8.928	8.697	7.260	12.660	7.977	6.883		

ICSA 1533081 4/25/2015 10:26:26 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	22:25:33	76.822%	-0.117	1.432	15.170	0.000	102000.000	100900.000	106700.000
2	22:25:41	76.441%	0.086	1.501	15.360	0.000	103200.000	101800.000	108300.000
3	22:25:48	75.568%	-0.050	1.529	15.310	0.000	103500.000	103500.000	109900.000
X		76.277%	-0.027	1.487	15.280	0.000	102900.000	102100.000	108300.000
σ		0.643%	0.104	0.050	0.099	0.000	796.400	1328.000	1619.000
%RSD		0.843	384.200	3.346	0.648	0.000	0.774	1.301	1.496
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:25:33	101300.000	18.470	0.000	93190.000	93120.000	93470.000	81.479%	1916.000
2	22:25:41	104000.000	14.660	0.000	95440.000	95700.000	95660.000	79.986%	1969.000
3	22:25:48	105800.000	14.020	0.000	96440.000	97060.000	96960.000	79.767%	1986.000
X		103700.000	15.720	0.000	95020.000	95290.000	95360.000	80.411%	1957.000
σ		2291.000	2.406	0.000	1669.000	2004.000	1764.000	0.932%	36.440
%RSD		2.209	15.310	0.000	1.756	2.103	1.850	1.159	1.862
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:25:33	-0.199	1.243	32.550	97510.000	101300.000	0.081	0.189	0.737
2	22:25:41	-0.282	1.372	33.200	99810.000	102900.000	0.111	0.293	0.849
3	22:25:48	0.061	1.452	33.350	100300.000	104000.000	0.090	0.180	0.741
X		-0.140	1.356	33.040	99200.000	102700.000	0.094	0.221	0.776
σ		0.179	0.106	0.424	1477.000	1371.000	0.016	0.063	0.064
%RSD		127.900	7.809	1.284	1.488	1.335	16.790	28.330	8.190
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:25:33	1.460	2.479	1.066	0.201	0.246	0.889	0.000	0.629
2	22:25:41	1.421	2.344	1.420	0.150	0.185	-0.977	0.000	0.667
3	22:25:48	1.325	2.678	1.611	0.129	0.215	-0.450	0.000	0.714
X		1.402	2.501	1.365	0.160	0.215	-0.179	0.000	0.670
σ		0.070	0.168	0.276	0.037	0.030	0.962	0.000	0.043
%RSD		4.967	6.719	20.240	23.260	14.030	536.800	0.000	6.392
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:25:33	82.434%	2089.000	2148.000	72.851%	0.022	0.032	1.124	0.799
2	22:25:41	84.192%	2068.000	2154.000	73.781%	0.011	0.037	1.312	0.685
3	22:25:48	84.074%	2085.000	2168.000	73.577%	0.016	0.048	0.975	0.644
X		83.567%	2081.000	2157.000	73.403%	0.016	0.039	1.137	0.709
σ		0.982%	10.950	10.070	0.489%	0.005	0.008	0.168	0.081
%RSD		1.176	0.526	0.467	0.666	32.520	20.460	14.810	11.390
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:25:33	79.510%	-0.641	0.047	-0.011	0.027	0.126	86.032%	87.915%
2	22:25:41	79.839%	-0.676	0.035	-0.048	0.184	0.166	87.088%	88.483%
3	22:25:48	80.114%	-0.740	0.042	-0.053	0.139	0.153	86.691%	89.005%
X		79.821%	-0.686	0.042	-0.037	0.116	0.149	86.604%	88.468%
σ		0.302%	0.050	0.006	0.023	0.081	0.020	0.534%	0.545%
%RSD		0.379	7.302	13.990	60.670	69.580	13.680	0.616	0.616
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:25:33	0.050	0.041	0.149	0.156	0.145	99.315%		
2	22:25:41	0.043	0.043	0.130	0.151	0.151	98.119%		
3	22:25:48	0.013	0.032	0.161	0.179	0.155	97.088%		
X		0.035	0.039	0.146	0.162	0.150	98.174%		
σ		0.020	0.006	0.016	0.015	0.005	1.115%		
%RSD		55.770	15.380	10.810	9.022	3.411	1.136		

ICSAB 1541326 4/25/2015 10:31:34 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	22:30:40	74.507%	18.930	51.230	63.800	0.000	99620.000	98330.000	103500.000
2	22:30:48	75.194%	19.250	48.970	63.440	0.000	100200.000	98170.000	103600.000
3	22:30:56	72.731%	19.640	56.330	66.830	0.000	102300.000	100700.000	106100.000
X		74.144%	96.366%	104.352%	129.375%	0.000	100.716%	99.062%	104.376%
σ		1.271%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.715	1.843	7.223	2.880	0.000	1.424	1.424	1.392
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:40	100500.000	503.700	0.000	86890.000	86460.000	85850.000	85.559%	1794.000
2	22:30:48	100400.000	515.500	0.000	88960.000	89530.000	88630.000	84.828%	1826.000
3	22:30:56	101900.000	513.500	0.000	89490.000	89940.000	89590.000	83.624%	1856.000
X		100.953%	102.182%	0.000	88.449%	88.643%	88.026%	84.671%	91.262%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.977%	n/a
%RSD		0.816	1.240	0.000	1.558	2.146	2.207	1.154	1.705
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:40	18.470	19.850	46.420	94330.000	97510.000	19.100	18.200	19.350
2	22:30:48	18.340	20.060	48.020	96230.000	99450.000	18.750	19.050	19.430
3	22:30:56	19.190	20.530	48.870	95560.000	98380.000	18.590	19.250	19.800
X		93.339%	100.742%	238.850%	95.375%	98.447%	94.064%	94.167%	97.622%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.458	1.737	2.609	1.010	0.985	1.364	2.954	1.247
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:40	20.840	21.960	20.910	19.610	50.540	48.930	0.000	20.380
2	22:30:48	20.420	21.790	20.340	19.910	51.590	50.710	0.000	20.490
3	22:30:56	20.780	21.380	22.100	20.300	52.090	51.770	0.000	20.070
X		103.408%	86.846%	84.474%	99.718%	102.812%	100.939%	0.000	101.581%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.099	1.374	4.243	1.733	1.541	2.847	0.000	1.071
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:40	78.265%	2113.000	2176.000	71.476%	18.940	19.140	19.980	22.230
2	22:30:48	78.338%	2131.000	2185.000	71.839%	19.540	18.810	21.320	21.190
3	22:30:56	79.543%	2102.000	2167.000	71.918%	19.560	18.990	20.580	22.310
X		78.715%	105.750%	108.795%	71.744%	96.736%	94.907%	103.136%	109.540%
σ		0.718%	n/a	n/a	0.236%	n/a	n/a	n/a	n/a
%RSD		0.912	0.695	0.426	0.329	1.821	0.884	3.262	2.859
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:30:40	77.946%	98.510	19.860	19.690	20.120	20.160	85.995%	87.633%
2	22:30:48	78.650%	98.350	19.330	19.730	19.560	19.200	86.206%	87.859%
3	22:30:56	78.925%	99.210	19.810	20.000	18.760	20.450	86.599%	87.858%
X		78.507%	98.687%	98.330%	99.022%	97.397%	99.672%	86.267%	87.783%
σ		0.505%	n/a	n/a	n/a	n/a	n/a	0.306%	0.130%
%RSD		0.644	0.462	1.487	0.849	3.513	3.283	0.355	0.148
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:30:40	19.210	18.820	19.390	19.560	19.340	95.246%		
2	22:30:48	19.360	18.970	20.200	19.980	19.760	94.750%		
3	22:30:56	19.530	19.230	20.000	19.480	19.730	94.762%		
X		96.835%	95.034%	99.315%	98.370%	98.042%	94.919%		
σ		n/a	n/a	n/a	n/a	n/a	0.283%		
%RSD		0.837	1.109	2.116	1.342	1.205	0.298		

CCV 1533080 4/25/2015 10:40:41 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	22:39:47	86.459%	90.150	93.360	95.440	0.000	51190.000	49850.000	52540.000
2	22:39:55	85.243%	92.800	96.330	98.820	0.000	51530.000	51430.000	53520.000
3	22:40:03	84.923%	95.370	100.100	101.000	0.000	53220.000	51900.000	54720.000
X		85.542%	92.772%	96.585%	98.414%	0.000	103.959%	102.121%	107.191%
σ		0.810%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.947	2.812	3.483	2.839	0.000	2.096	2.103	2.038
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:47	514.100	4613.000	0.000	45570.000	45020.000	47190.000	90.909%	92.090
2	22:39:55	533.800	4817.000	0.000	47270.000	46640.000	46860.000	88.760%	96.160
3	22:40:03	549.100	4840.000	0.000	47530.000	46600.000	49630.000	89.007%	97.150
X		106.466%	95.133%	0.000	93.573%	92.174%	95.788%	89.559%	95.133%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.176%	n/a
%RSD		3.292	2.621	0.000	2.271	2.014	3.164	1.313	2.817
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:47	95.680	96.710	454.500	23830.000	23260.000	94.620	93.510	93.640
2	22:39:55	99.520	97.990	475.500	24250.000	23540.000	95.410	95.480	93.990
3	22:40:03	97.600	98.540	476.800	24410.000	23790.000	96.690	97.420	97.220
X		97.598%	97.748%	93.781%	96.651%	94.130%	95.575%	95.473%	94.948%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.966	0.962	2.664	1.233	1.136	1.095	2.048	2.077
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:47	92.970	92.990	91.990	94.360	96.550	94.440	0.000	92.250
2	22:39:55	96.170	95.270	93.720	94.890	96.120	97.060	0.000	91.360
3	22:40:03	96.940	94.730	96.250	95.200	97.280	90.760	0.000	90.760
X		95.362%	94.333%	93.986%	94.818%	96.652%	94.091%	0.000	91.459%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.206	1.261	2.279	0.451	0.608	3.362	0.000	0.819
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:47	92.342%	94.590	95.320	83.473%	92.740	91.630	94.660	94.090
2	22:39:55	93.437%	96.180	97.060	83.548%	93.450	93.650	95.120	96.550
3	22:40:03	93.586%	95.280	96.260	83.638%	91.550	92.380	92.400	93.750
X		93.121%	95.349%	96.211%	83.553%	92.581%	92.549%	94.061%	94.798%
σ		0.679%	n/a	n/a	0.083%	n/a	n/a	n/a	n/a
%RSD		0.729	0.837	0.904	0.099	1.036	1.104	1.547	1.610
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:39:47	87.313%	91.450	92.420	93.890	93.420	92.600	91.945%	91.853%
2	22:39:55	86.545%	93.940	94.180	95.710	93.220	93.550	92.485%	92.714%
3	22:40:03	87.613%	93.820	94.520	94.420	94.760	92.650	92.276%	92.254%
X		87.157%	93.074%	93.704%	94.674%	93.800%	92.935%	92.235%	92.273%
σ		0.551%	n/a	n/a	n/a	n/a	n/a	0.272%	0.431%
%RSD		0.632	1.509	1.205	0.989	0.893	0.578	0.295	0.467
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:39:47	92.860	91.730	92.750	92.420	92.340	101.020%		
2	22:39:55	94.630	92.040	93.660	92.560	93.050	100.854%		
3	22:40:03	92.680	91.350	93.710	92.550	92.700	102.123%		
X		93.390%	91.706%	93.375%	92.507%	92.699%	101.332%		
σ		n/a	n/a	n/a	n/a	n/a	0.689%		
%RSD		1.155	0.376	0.581	0.084	0.385	0.680		

CCB1 4/25/2015 10:49:45 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	22:48:54	93.639%	-0.062	0.080	0.385	0.000	15.190	2.557	2.113
2	22:49:02	92.627%	-0.091	0.044	0.283	0.000	14.450	3.168	2.754
3	22:49:09	92.639%	0.008	-0.190	0.244	0.000	13.920	1.825	2.920
X		92.968%	-0.049	-0.022	0.304	0.000	14.520	2.517	2.596
σ		0.581%	0.051	0.147	0.073	0.000	0.638	0.673	0.426
%RSD		0.625	104.400	656.200	23.890	0.000	4.395	26.730	16.420
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:48:54	-3.583	6.078	0.000	1.261	6.004	0.778	96.666%	-0.512
2	22:49:02	-3.902	1.575	0.000	1.060	-2.077	4.705	96.162%	-0.510
3	22:49:09	-3.919	-1.301	0.000	0.787	2.368	0.891	95.591%	-0.770
X		-3.802	2.117	0.000	1.036	2.098	2.125	96.140%	-0.597
σ		0.189	3.719	0.000	0.238	4.047	2.236	0.538%	0.149
%RSD		4.976	175.700	0.000	23.000	192.900	105.200	0.559	25.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:48:54	-0.039	-0.049	-0.017	9.238	8.221	0.008	0.055	-0.053
2	22:49:02	-0.010	-0.033	0.051	9.141	8.356	-0.004	0.045	-0.110
3	22:49:09	0.004	-0.032	0.007	8.665	9.009	0.001	0.112	-0.066
X		-0.015	-0.038	0.014	9.015	8.529	0.002	0.071	-0.076
σ		0.022	0.009	0.035	0.306	0.422	0.006	0.036	0.030
%RSD		146.200	24.450	255.600	3.400	4.945	355.100	50.690	39.050
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:48:54	-0.054	0.020	-0.052	0.040	0.082	-1.730	0.000	-0.002
2	22:49:02	-0.022	0.043	0.008	0.067	0.080	0.688	0.000	0.005
3	22:49:09	-0.055	0.031	-0.054	0.036	0.008	-1.619	0.000	-0.000
X		-0.044	0.032	-0.033	0.048	0.056	-0.887	0.000	0.001
σ		0.019	0.011	0.035	0.017	0.042	1.365	0.000	0.004
%RSD		43.600	36.340	106.600	34.790	74.530	153.900	0.000	490.700
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:48:54	98.233%	0.643	0.598	93.323%	-0.019	-0.018	-0.000	-0.024
2	22:49:02	101.463%	0.504	0.597	96.336%	-0.015	-0.014	-0.000	-0.038
3	22:49:09	101.482%	0.589	0.595	95.994%	-0.007	-0.021	-0.000	-0.038
X		100.393%	0.579	0.597	95.218%	-0.014	-0.018	-0.000	-0.033
σ		1.870%	0.070	0.002	1.650%	0.006	0.003	0.000	0.008
%RSD		1.863	12.110	0.266	1.733	43.560	18.420	8.717	23.930
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:48:54	96.738%	-0.802	0.093	0.025	-0.019	-0.012	97.585%	98.388%
2	22:49:02	97.757%	-0.874	0.107	0.078	-0.019	0.012	99.138%	98.806%
3	22:49:09	98.996%	-0.936	0.132	0.047	-0.019	-0.012	99.594%	100.512%
X		97.830%	-0.871	0.111	0.050	-0.019	-0.004	98.772%	99.235%
σ		1.131%	0.067	0.020	0.027	0.000	0.013	1.054%	1.125%
%RSD		1.156	7.718	17.620	53.310	0.000	351.900	1.067	1.134
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:48:54	0.035	0.055	-0.081	-0.052	-0.076	102.310%		
2	22:49:02	0.034	0.040	-0.087	-0.054	-0.073	101.377%		
3	22:49:09	0.062	0.044	-0.074	-0.054	-0.070	102.840%		
X		0.043	0.046	-0.081	-0.053	-0.073	102.176%		
σ		0.016	0.008	0.006	0.001	0.003	0.741%		
%RSD		36.420	16.950	7.652	2.570	3.834	0.725		

MB 180-138556/1-A 4/25/2015 10:54:50 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	22:53:57	85.680%	-0.083	0.427	0.313	0.000	63.600	-0.010	0.714
2	22:54:05	84.627%	-0.140	0.291	0.192	0.000	56.870	0.218	0.747
3	22:54:12	83.553%	-0.097	0.203	0.348	0.000	55.760	-0.627	0.613
X		84.620%	-0.107	0.307	0.285	0.000	58.740	-0.140	0.691
σ		1.064%	0.030	0.113	0.082	0.000	4.240	0.437	0.069
%RSD		1.257	27.710	36.920	28.850	0.000	7.219	313.000	10.040
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:57	-3.048	5.934	0.000	-14.580	1.021	3.328	87.276%	-0.414
2	22:54:05	-3.160	1.140	0.000	-21.050	-3.153	8.836	86.371%	-0.542
3	22:54:12	-2.489	-0.533	0.000	-10.020	3.247	6.651	85.278%	-0.650
X		-2.899	2.180	0.000	-15.220	0.372	6.271	86.308%	-0.535
σ		0.359	3.356	0.000	5.544	3.249	2.774	1.001%	0.118
%RSD		12.390	153.900	0.000	36.430	874.300	44.220	1.159	22.010
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:57	-0.445	0.084	0.038	7.341	6.713	-0.004	-0.006	-0.018
2	22:54:05	-0.001	0.076	0.014	6.892	6.120	-0.001	0.078	-0.009
3	22:54:12	-0.146	0.071	0.017	6.328	3.992	0.007	0.132	0.017
X		-0.198	0.077	0.023	6.854	5.609	0.001	0.068	-0.003
σ		0.226	0.006	0.013	0.507	1.431	0.005	0.069	0.018
%RSD		114.500	8.268	56.630	7.402	25.510	998.300	102.600	568.400
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:57	-0.038	0.352	0.171	0.022	0.011	-1.881	0.000	-0.007
2	22:54:05	-0.053	0.284	0.102	0.005	0.011	-0.594	0.000	-0.005
3	22:54:12	0.002	0.286	0.242	0.022	0.011	0.863	0.000	0.001
X		-0.029	0.307	0.172	0.016	0.011	-0.537	0.000	-0.004
σ		0.028	0.039	0.070	0.010	0.000	1.373	0.000	0.004
%RSD		96.050	12.590	40.960	60.620	0.378	255.500	0.000	108.200
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:57	90.364%	0.520	0.441	85.563%	-0.005	0.006	-0.000	-0.022
2	22:54:05	91.026%	0.467	0.457	85.542%	-0.002	-0.013	-0.000	-0.042
3	22:54:12	91.407%	0.386	0.452	85.688%	-0.011	-0.011	-0.000	-0.037
X		90.932%	0.458	0.450	85.598%	-0.006	-0.006	-0.000	-0.034
σ		0.528%	0.068	0.008	0.079%	0.005	0.011	0.000	0.011
%RSD		0.580	14.830	1.886	0.092	76.110	183.600	5.036	31.360
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:53:57	87.359%	-0.786	0.078	-0.021	-0.019	0.001	91.620%	92.190%
2	22:54:05	87.426%	-0.759	0.058	-0.012	0.002	0.014	92.791%	93.161%
3	22:54:12	89.346%	-0.777	0.039	-0.009	0.063	-0.012	93.277%	93.694%
X		88.044%	-0.774	0.058	-0.014	0.015	0.001	92.562%	93.015%
σ		1.128%	0.014	0.020	0.006	0.043	0.013	0.852%	0.762%
%RSD		1.282	1.811	33.460	43.290	275.600	1082.000	0.920	0.820
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:53:57	0.052	0.037	-0.074	-0.026	-0.057	108.981%		
2	22:54:05	0.016	0.049	-0.070	-0.062	-0.059	108.335%		
3	22:54:12	0.021	0.033	-0.078	-0.046	-0.064	108.510%		
X		0.030	0.040	-0.074	-0.045	-0.060	108.609%		
σ		0.019	0.008	0.004	0.018	0.004	0.334%		
%RSD		64.700	20.440	5.506	40.220	6.246	0.308		

LCS 180-138556/2-A 4/25/2015 10:59:50 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	22:58:59	76.554%	43.690	941.000	944.300	0.000	48530.000	46270.000	48220.000
2	22:59:07	76.231%	43.930	967.800	973.100	0.000	49000.000	46980.000	49080.000
3	22:59:14	78.069%	45.060	963.400	974.300	0.000	48980.000	46530.000	48870.000
X		76.951%	44.230	957.400	963.900	0.000	48840.000	46590.000	48720.000
σ		0.981%	0.732	14.400	17.000	0.000	263.600	356.900	448.200
%RSD		1.275	1.655	1.504	1.764	0.000	0.540	0.766	0.920
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:58:59	1864.000	8108.000	0.000	41510.000	42470.000	44010.000	73.155%	850.300
2	22:59:07	1878.000	8360.000	0.000	43220.000	44330.000	45600.000	72.521%	883.100
3	22:59:14	1852.000	8321.000	0.000	43620.000	44440.000	46800.000	72.735%	896.100
X		1864.000	8263.000	0.000	42780.000	43740.000	45470.000	72.804%	876.500
σ		12.980	136.100	0.000	1118.000	1109.000	1396.000	0.323%	23.590
%RSD		0.696	1.646	0.000	2.614	2.536	3.071	0.443	2.691
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:58:59	478.600	193.500	461.100	954.700	992.600	472.700	460.500	234.400
2	22:59:07	485.100	196.600	481.200	959.500	988.800	478.200	471.700	238.200
3	22:59:14	485.700	196.000	492.200	964.000	1018.000	475.900	466.200	234.600
X		483.100	195.400	478.200	959.400	999.900	475.600	466.100	235.700
σ		3.978	1.618	15.780	4.671	16.180	2.762	5.572	2.109
%RSD		0.823	0.828	3.300	0.487	1.618	0.581	1.195	0.895
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:58:59	241.300	464.600	466.500	37.060	9.349	9.495	0.000	923.200
2	22:59:07	241.900	465.500	477.100	37.710	10.790	10.950	0.000	925.000
3	22:59:14	241.300	463.300	472.400	38.220	9.621	8.901	0.000	923.700
X		241.500	464.400	472.000	37.670	9.919	9.782	0.000	924.000
σ		0.361	1.116	5.295	0.581	0.764	1.055	0.000	0.917
%RSD		0.149	0.240	1.122	1.543	7.700	10.780	0.000	0.099
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:58:59	77.449%	965.600	975.800	70.003%	45.250	45.290	48.290	85.720
2	22:59:07	78.327%	963.800	983.200	70.690%	45.430	45.660	46.180	83.550
3	22:59:14	79.080%	959.600	977.700	71.313%	46.040	44.780	47.770	84.560
X		78.286%	963.000	978.900	70.669%	45.580	45.240	47.410	84.610
σ		0.817%	3.071	3.845	0.655%	0.415	0.445	1.101	1.083
%RSD		1.043	0.319	0.393	0.927	0.910	0.984	2.323	1.280
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:58:59	75.046%	1868.000	465.300	453.500	1800.000	1797.000	83.544%	85.223%
2	22:59:07	75.745%	1878.000	467.100	458.500	1808.000	1798.000	84.088%	85.870%
3	22:59:14	76.153%	1870.000	465.400	458.100	1796.000	1787.000	84.575%	86.658%
X		75.648%	1872.000	465.900	456.700	1801.000	1794.000	84.069%	85.917%
σ		0.560%	5.304	1.056	2.761	5.796	6.493	0.516%	0.719%
%RSD		0.741	0.283	0.227	0.605	0.322	0.362	0.614	0.837
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:58:59	46.330	45.690	18.940	18.810	18.730	94.720%		
2	22:59:07	46.330	45.700	18.480	18.510	18.680	95.733%		
3	22:59:14	46.270	46.060	19.150	18.400	18.810	96.169%		
X		46.310	45.820	18.860	18.570	18.740	95.541%		
σ		0.033	0.208	0.347	0.214	0.068	0.743%		
%RSD		0.070	0.454	1.839	1.152	0.364	0.778		

LCSD 180-138556/3-A 4/25/2015 11:04:53 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	23:04:00	79.648%	42.640	920.800	951.200	0.000	48110.000	45300.000	47500.000
2	23:04:08	78.759%	45.110	955.600	985.400	0.000	48690.000	46480.000	48830.000
3	23:04:16	77.559%	46.660	986.900	1011.000	0.000	49540.000	46910.000	49380.000
X		78.655%	44.800	954.400	982.600	0.000	48780.000	46230.000	48570.000
σ		1.048%	2.026	33.040	30.120	0.000	717.100	836.100	968.500
%RSD		1.333	4.522	3.462	3.066	0.000	1.470	1.809	1.994
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:04:00	1800.000	8115.000	0.000	42820.000	43340.000	45610.000	73.992%	868.300
2	23:04:08	1834.000	8274.000	0.000	43780.000	43900.000	46880.000	73.197%	884.700
3	23:04:16	1837.000	8477.000	0.000	44360.000	44940.000	47850.000	73.255%	920.200
X		1824.000	8288.000	0.000	43650.000	44060.000	46780.000	73.482%	891.100
σ		20.160	181.600	0.000	778.500	814.100	1125.000	0.443%	26.530
%RSD		1.106	2.191	0.000	1.784	1.848	2.406	0.603	2.977
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:04:00	474.900	191.000	478.400	934.000	989.700	467.900	457.600	237.300
2	23:04:08	479.800	193.500	493.800	938.900	981.400	465.600	458.000	232.100
3	23:04:16	476.100	193.200	502.500	943.800	1007.000	466.900	463.100	234.500
X		477.000	192.600	491.600	938.900	992.600	466.800	459.600	234.700
σ		2.559	1.401	12.180	4.898	12.840	1.153	3.046	2.602
%RSD		0.536	0.727	2.478	0.522	1.294	0.247	0.663	1.109
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:04:00	238.600	469.400	477.300	37.670	10.370	8.866	0.000	946.000
2	23:04:08	239.900	465.900	470.200	37.390	9.111	8.745	0.000	934.700
3	23:04:16	239.600	469.400	474.400	38.460	9.810	8.896	0.000	929.500
X		239.400	468.200	474.000	37.840	9.763	8.836	0.000	936.700
σ		0.665	1.994	3.570	0.557	0.630	0.080	0.000	8.439
%RSD		0.278	0.426	0.753	1.473	6.457	0.904	0.000	0.901
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:04:00	75.711%	985.600	996.800	68.833%	46.440	45.860	48.380	86.360
2	23:04:08	78.006%	971.400	986.000	69.714%	45.980	45.100	46.580	85.960
3	23:04:16	77.837%	978.500	998.000	70.291%	45.950	45.760	47.630	86.360
X		77.184%	978.500	993.600	69.613%	46.120	45.580	47.530	86.230
σ		1.279%	7.111	6.604	0.734%	0.276	0.412	0.902	0.229
%RSD		1.657	0.727	0.665	1.055	0.599	0.904	1.897	0.266
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:04:00	73.811%	1895.000	472.600	463.000	1833.000	1822.000	82.279%	83.891%
2	23:04:08	75.402%	1888.000	464.100	459.300	1810.000	1805.000	82.551%	84.746%
3	23:04:16	75.343%	1890.000	468.000	464.000	1820.000	1801.000	83.733%	86.448%
X		74.852%	1891.000	468.200	462.100	1821.000	1809.000	82.854%	85.029%
σ		0.902%	3.265	4.245	2.478	11.960	11.000	0.773%	1.302%
%RSD		1.205	0.173	0.907	0.536	0.657	0.608	0.933	1.531
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:04:00	47.710	46.270	19.080	18.990	18.950	93.970%		
2	23:04:08	50.740	49.710	20.750	20.790	20.790	86.551%		
3	23:04:16	48.170	47.100	19.350	19.240	19.440	93.208%		
X		48.870	47.690	19.730	19.670	19.730	91.243%		
σ		1.636	1.797	0.897	0.973	0.951	4.081%		
%RSD		3.347	3.768	4.545	4.948	4.823	4.473		

180-42978-B-1-B 4/25/2015 11:13:52 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	23:13:00	76.962%	0.268	41.400	43.610	0.000	38490.000	3807.000	4010.000
2	23:13:08	76.857%	0.177	42.860	44.070	0.000	39320.000	3791.000	4068.000
3	23:13:15	76.158%	0.115	44.180	46.680	0.000	39560.000	3947.000	4096.000
X		76.659%	0.186	42.810	44.780	0.000	39130.000	3848.000	4058.000
σ		0.437%	0.077	1.392	1.658	0.000	561.600	85.720	43.570
%RSD		0.570	41.160	3.251	3.701	0.000	1.435	2.227	1.074
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	167.600	1523.000	0.000	1377.000	18110.000	18390.000	73.349%	0.675
2	23:13:08	166.500	1557.000	0.000	1434.000	19130.000	18990.000	72.651%	1.356
3	23:13:15	171.500	1588.000	0.000	1484.000	19910.000	19720.000	71.895%	1.408
X		168.500	1556.000	0.000	1432.000	19050.000	19040.000	72.632%	1.146
σ		2.617	32.490	0.000	53.440	903.400	665.500	0.727%	0.409
%RSD		1.553	2.088	0.000	3.733	4.742	3.496	1.001	35.700
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	-0.446	2.156	278.600	11.180	40.080	7.621	16.380	1.438
2	23:13:08	-0.411	2.173	289.700	10.830	41.600	7.529	16.730	1.690
3	23:13:15	-0.162	2.326	297.400	10.570	39.540	8.000	16.490	1.540
X		-0.340	2.218	288.600	10.860	40.410	7.717	16.540	1.556
σ		0.155	0.094	9.449	0.305	1.069	0.250	0.178	0.127
%RSD		45.630	4.232	3.274	2.806	2.645	3.240	1.076	8.150
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	1.974	42.770	44.600	0.236	0.110	7.527	0.000	1739.000
2	23:13:08	1.508	40.380	43.680	0.228	0.108	8.139	0.000	1734.000
3	23:13:15	1.846	43.160	44.880	0.218	0.046	5.741	0.000	1720.000
X		1.776	42.100	44.390	0.227	0.088	7.136	0.000	1731.000
σ		0.241	1.506	0.625	0.009	0.037	1.246	0.000	9.936
%RSD		13.550	3.578	1.409	4.009	41.570	17.460	0.000	0.574
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	76.482%	1.302	1.274	69.846%	0.019	-0.002	0.325	0.335
2	23:13:08	78.868%	1.346	1.356	71.111%	-0.016	0.003	0.292	0.372
3	23:13:15	79.365%	1.074	1.144	71.357%	-0.011	-0.008	0.334	0.225
X		78.238%	1.240	1.258	70.771%	-0.003	-0.002	0.317	0.311
σ		1.541%	0.146	0.107	0.811%	0.019	0.006	0.022	0.076
%RSD		1.970	11.740	8.484	1.145	641.400	260.200	7.086	24.540
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	75.170%	2.579	0.169	0.060	116.200	113.100	82.478%	83.952%
2	23:13:08	76.019%	2.582	0.175	0.230	117.500	114.100	82.909%	85.316%
3	23:13:15	76.328%	2.110	0.101	0.111	118.000	111.600	83.184%	85.254%
X		75.839%	2.423	0.148	0.133	117.200	113.000	82.857%	84.841%
σ		0.599%	0.271	0.041	0.087	0.954	1.243	0.356%	0.770%
%RSD		0.790	11.200	27.730	65.300	0.814	1.101	0.429	0.908
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:13:00	0.083	0.139	0.080	0.075	0.083	96.207%		
2	23:13:08	0.117	0.116	0.080	0.100	0.076	97.486%		
3	23:13:15	0.136	0.112	0.075	0.067	0.065	97.783%		
X		0.112	0.122	0.078	0.081	0.075	97.159%		
σ		0.027	0.015	0.003	0.017	0.009	0.838%		
%RSD		23.810	11.970	3.773	21.430	11.780	0.862		

180-42978-B-2-B 4/25/2015 11:18:57 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	23:18:03	77.050%	0.331	19.840	23.550	0.000	24070.000	3181.000	3311.000
2	23:18:11	76.802%	0.379	22.390	23.830	0.000	24540.000	3249.000	3346.000
3	23:18:19	77.698%	0.336	20.330	23.790	0.000	24350.000	3268.000	3358.000
X		77.183%	0.349	20.850	23.730	0.000	24320.000	3233.000	3338.000
σ		0.463%	0.026	1.353	0.152	0.000	239.500	45.810	24.660
%RSD		0.599	7.518	6.489	0.641	0.000	0.985	1.417	0.739
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:03	587.000	1452.000	0.000	631.100	31750.000	32870.000	74.369%	1.119
2	23:18:11	609.600	1483.000	0.000	661.900	33050.000	34120.000	73.681%	1.270
3	23:18:19	614.100	1499.000	0.000	674.600	34120.000	35020.000	72.624%	1.490
X		603.600	1478.000	0.000	655.900	32980.000	34000.000	73.558%	1.293
σ		14.510	23.990	0.000	22.390	1190.000	1077.000	0.879%	0.186
%RSD		2.404	1.623	0.000	3.414	3.609	3.167	1.195	14.410
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:03	-0.526	2.081	598.200	71.840	125.200	12.410	16.010	3.081
2	23:18:11	0.040	1.839	620.800	72.590	127.900	12.180	15.370	3.348
3	23:18:19	0.227	2.032	638.600	74.750	134.000	12.550	16.470	3.296
X		-0.086	1.984	619.200	73.060	129.100	12.380	15.950	3.242
σ		0.392	0.128	20.250	1.510	4.524	0.185	0.551	0.142
%RSD		455.700	6.438	3.270	2.067	3.506	1.493	3.457	4.365
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:03	3.229	41.050	42.150	0.325	0.137	3.545	0.000	1309.000
2	23:18:11	3.480	40.580	41.760	0.384	0.105	4.846	0.000	1320.000
3	23:18:19	3.304	40.830	41.340	0.324	0.135	4.109	0.000	1315.000
X		3.338	40.820	41.750	0.344	0.125	4.167	0.000	1315.000
σ		0.129	0.233	0.405	0.034	0.018	0.652	0.000	5.355
%RSD		3.862	0.571	0.969	9.979	14.050	15.650	0.000	0.407
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:03	79.679%	0.364	0.451	71.920%	-0.027	-0.025	0.446	0.417
2	23:18:11	80.857%	0.500	0.463	73.134%	-0.004	-0.019	0.598	0.532
3	23:18:19	81.982%	0.429	0.379	73.030%	-0.004	0.011	0.708	0.493
X		80.839%	0.431	0.431	72.695%	-0.012	-0.011	0.584	0.481
σ		1.152%	0.068	0.045	0.673%	0.013	0.019	0.131	0.058
%RSD		1.425	15.740	10.500	0.926	115.900	172.000	22.460	12.160
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:03	77.106%	0.296	0.088	0.124	50.580	51.120	84.271%	86.479%
2	23:18:11	77.765%	0.594	0.132	0.007	51.440	49.790	85.483%	87.287%
3	23:18:19	78.567%	0.214	0.044	0.041	51.230	51.030	86.464%	87.653%
X		77.813%	0.368	0.088	0.057	51.080	50.640	85.406%	87.140%
σ		0.732%	0.200	0.044	0.060	0.444	0.743	1.099%	0.600%
%RSD		0.941	54.390	49.770	105.200	0.869	1.467	1.286	0.689
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:18:03	0.030	0.039	0.520	0.505	0.505	100.305%		
2	23:18:11	0.017	0.038	0.543	0.502	0.503	101.395%		
3	23:18:19	0.033	0.043	0.460	0.452	0.470	101.105%		
X		0.027	0.040	0.508	0.486	0.493	100.935%		
σ		0.008	0.003	0.043	0.030	0.019	0.565%		
%RSD		31.550	7.060	8.403	6.099	3.948	0.559		

180-42978-B-3-B 4/25/2015 11:24:03 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	23:23:09	62.727%	2.293	52.660	57.530	0.000	238500.000	25200.000	26310.000
2	23:23:17	62.260%	2.787	52.510	56.760	0.000	239400.000	25680.000	26730.000
3	23:23:25	62.163%	2.361	54.680	60.300	0.000	240900.000	25640.000	26640.000
X		62.383%	2.480	53.280	58.200	0.000	239600.000	25510.000	26560.000
σ		0.301%	0.268	1.215	1.865	0.000	1225.000	268.000	220.400
%RSD		0.483	10.800	2.280	3.204	0.000	0.511	1.050	0.830
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:23:09	6163.000	2671.000	0.000	5030.000	126100.000	124400.000	74.165%	1.751
2	23:23:17	6248.000	2705.000	0.000	5217.000	132600.000	130200.000	72.394%	2.860
3	23:23:25	6295.000	2746.000	0.000	5312.000	134200.000	132500.000	71.784%	1.977
X		6235.000	2707.000	0.000	5186.000	131000.000	129000.000	72.781%	2.196
σ		66.790	37.190	0.000	143.800	4288.000	4160.000	1.237%	0.586
%RSD		1.071	1.374	0.000	2.773	3.274	3.224	1.699	26.690
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:23:09	-0.082	1.915	988.000	2.716	221.100	31.650	67.510	3.275
2	23:23:17	-0.708	1.926	1031.000	2.862	210.900	32.180	71.390	3.619
3	23:23:25	-1.052	1.812	1054.000	2.607	221.000	32.920	70.410	3.342
X		-0.614	1.884	1024.000	2.728	217.700	32.250	69.770	3.412
σ		0.492	0.063	33.400	0.128	5.834	0.634	2.022	0.183
%RSD		80.090	3.341	3.261	4.692	2.680	1.966	2.898	5.350
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:23:09	4.028	79.230	79.340	1.104	1.011	47.240	0.000	13780.000
2	23:23:17	3.803	80.220	80.430	1.126	0.640	52.100	0.000	13960.000
3	23:23:25	3.725	79.130	79.130	1.070	0.676	51.820	0.000	14070.000
X		3.852	79.520	79.630	1.100	0.775	50.390	0.000	13940.000
σ		0.157	0.601	0.698	0.028	0.205	2.731	0.000	146.800
%RSD		4.085	0.756	0.877	2.544	26.370	5.420	0.000	1.053
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:23:09	0.000	0.462	0.387	66.902%	0.171	0.169	2.820	2.533
2	23:23:17	0.000	0.462	0.393	67.040%	0.156	0.162	2.454	2.456
3	23:23:25	0.000	0.347	0.398	67.206%	0.167	0.185	2.544	2.522
X		0.000	0.424	0.392	67.049%	0.165	0.172	2.606	2.504
σ		0.000	0.066	0.005	0.152%	0.008	0.012	0.191	0.042
%RSD		0.000	15.600	1.385	0.227	4.594	7.022	7.312	1.669
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:23:09	72.913%	0.492	0.055	0.173	1140.000	1130.000	87.153%	89.195%
2	23:23:17	73.429%	0.149	0.090	0.149	1134.000	1132.000	87.201%	89.872%
3	23:23:25	73.414%	0.204	0.070	0.177	1146.000	1128.000	86.687%	90.112%
X		73.252%	0.282	0.071	0.167	1140.000	1130.000	87.014%	89.726%
σ		0.294%	0.184	0.017	0.015	5.666	2.142	0.284%	0.475%
%RSD		0.401	65.240	24.400	8.988	0.497	0.190	0.327	0.530
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:23:09	0.149	0.161	5.109	4.408	4.772	93.089%		
2	23:23:17	0.151	0.166	5.308	4.931	4.952	93.166%		
3	23:23:25	0.158	0.160	5.144	4.761	4.851	93.466%		
X		0.153	0.162	5.187	4.700	4.858	93.240%		
σ		0.005	0.003	0.106	0.267	0.090	0.199%		
%RSD		2.973	1.912	2.040	5.675	1.857	0.214		

180-42978-B-4-B 4/25/2015 11:29:05 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	23:28:14	75.059%	-0.031	48.360	48.820	0.000	15060.000	1208.000	1204.000
2	23:28:21	76.539%	-0.061	46.840	49.700	0.000	15140.000	1180.000	1277.000
3	23:28:29	75.313%	-0.003	50.390	51.270	0.000	15420.000	1203.000	1272.000
X		75.637%	-0.032	48.530	49.930	0.000	15210.000	1197.000	1251.000
		0.791%	0.029	1.778	1.242	0.000	188.700	14.520	41.060
		1.046	91.930	3.663	2.488	0.000	1.240	1.213	3.283
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:14	11.540	946.900	0.000	1641.000	10740.000	10690.000	73.815%	0.690
2	23:28:21	12.180	972.800	0.000	1697.000	11150.000	11110.000	72.834%	1.111
3	23:28:29	10.490	1000.000	0.000	1716.000	11370.000	11360.000	72.190%	0.836
X		11.410	973.200	0.000	1685.000	11090.000	11050.000	72.947%	0.879
		0.854	26.550	0.000	39.150	321.800	338.900	0.818%	0.214
		7.490	2.728	0.000	2.324	2.903	3.065	1.122	24.330
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:14	-0.564	2.163	36.060	9.597	28.930	1.646	0.852	0.563
2	23:28:21	-0.129	2.406	37.670	9.906	22.700	1.859	1.081	0.629
3	23:28:29	-0.765	2.150	38.080	10.090	27.270	1.882	0.948	0.511
X		-0.486	2.239	37.270	9.863	26.300	1.796	0.960	0.568
		0.325	0.144	1.066	0.248	3.227	0.130	0.115	0.059
		66.960	6.439	2.861	2.509	12.270	7.233	11.980	10.440
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:14	0.649	4.117	4.412	0.140	0.172	6.399	0.000	948.800
2	23:28:21	0.626	4.427	4.147	0.173	0.172	3.901	0.000	950.900
3	23:28:29	0.672	5.019	4.579	0.166	0.171	2.841	0.000	953.300
X		0.649	4.521	4.379	0.160	0.172	4.380	0.000	951.000
		0.023	0.459	0.218	0.018	0.000	1.827	0.000	2.247
		3.579	10.150	4.973	11.010	0.269	41.710	0.000	0.236
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:14	77.135%	0.357	0.237	70.760%	-0.014	-0.011	0.014	-0.035
2	23:28:21	77.649%	0.251	0.235	71.036%	-0.019	-0.016	0.043	-0.006
3	23:28:29	78.253%	0.257	0.271	71.496%	-0.003	-0.011	0.058	0.028
X		77.679%	0.288	0.248	71.097%	-0.012	-0.013	0.038	-0.005
		0.560%	0.059	0.020	0.372%	0.008	0.003	0.022	0.032
		0.720	20.590	8.027	0.523	66.490	25.950	57.240	693.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:14	75.146%	-0.116	0.068	-0.065	33.990	34.130	82.563%	83.849%
2	23:28:21	76.503%	-0.184	0.024	0.004	34.770	34.370	83.152%	84.193%
3	23:28:29	76.758%	-0.303	0.039	0.067	34.570	32.740	82.610%	85.275%
X		76.136%	-0.201	0.044	0.002	34.450	33.750	82.775%	84.439%
		0.866%	0.095	0.022	0.066	0.403	0.879	0.328%	0.744%
		1.138	47.100	51.180	3163.000	1.169	2.605	0.396	0.881
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:28:14	0.004	0.020	-0.029	0.011	-0.016	99.032%		
2	23:28:21	0.016	0.017	-0.028	0.014	-0.011	98.903%		
3	23:28:29	0.027	0.017	0.008	-0.009	0.000	99.954%		
X		0.015	0.018	-0.016	0.005	-0.009	99.296%		
		0.011	0.002	0.021	0.013	0.008	0.573%		
		74.120	9.872	128.500	236.700	93.890	0.577		

180-42978-B-5-B 4/25/2015 11:34:08 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	23:33:17	75.483%	-0.041	14.520	15.900	0.000	5087.000	1851.000	1904.000
2	23:33:25	75.083%	-0.012	15.590	16.190	0.000	5155.000	1788.000	1889.000
3	23:33:32	74.482%	0.037	16.590	17.140	0.000	5161.000	1798.000	1873.000
X		75.016%	-0.005	15.570	16.410	0.000	5134.000	1812.000	1889.000
σ		0.504%	0.039	1.036	0.651	0.000	41.300	33.630	15.730
%RSD		0.672	738.600	6.655	3.969	0.000	0.804	1.856	0.833
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:17	13.960	2897.000	0.000	1370.000	4393.000	4431.000	72.385%	0.403
2	23:33:25	14.510	2971.000	0.000	1408.000	4475.000	4588.000	71.049%	0.811
3	23:33:32	14.770	3050.000	0.000	1442.000	4613.000	4734.000	70.569%	1.070
X		14.420	2973.000	0.000	1407.000	4494.000	4584.000	71.334%	0.761
σ		0.416	76.500	0.000	36.040	110.900	151.800	0.941%	0.336
%RSD		2.886	2.573	0.000	2.563	2.468	3.312	1.320	44.140
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:17	-1.144	1.903	24.460	4.252	15.430	0.968	5.037	0.586
2	23:33:25	-0.304	2.053	25.640	4.310	9.782	1.097	5.005	0.499
3	23:33:32	-0.226	2.032	26.580	4.336	12.800	1.182	5.241	0.457
X		-0.558	1.996	25.560	4.299	12.670	1.082	5.094	0.514
σ		0.509	0.082	1.062	0.043	2.827	0.108	0.128	0.066
%RSD		91.270	4.086	4.155	0.999	22.310	9.949	2.521	12.890
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:17	0.578	7.457	6.554	0.104	-0.016	0.257	0.000	47.660
2	23:33:25	0.601	6.857	7.671	0.090	0.208	1.634	0.000	46.830
3	23:33:32	0.557	7.211	6.701	0.031	0.016	1.544	0.000	46.220
X		0.579	7.175	6.975	0.075	0.069	1.145	0.000	46.900
σ		0.022	0.301	0.607	0.038	0.121	0.771	0.000	0.725
%RSD		3.785	4.202	8.700	51.090	174.800	67.290	0.000	1.547
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:17	74.946%	0.180	0.161	69.447%	-0.013	-0.008	0.179	0.037
2	23:33:25	75.838%	0.152	0.117	69.115%	-0.019	-0.005	0.059	0.065
3	23:33:32	75.977%	0.205	0.133	69.372%	-0.013	-0.013	0.044	0.024
X		75.587%	0.179	0.137	69.311%	-0.015	-0.009	0.094	0.042
σ		0.559%	0.026	0.022	0.174%	0.003	0.004	0.074	0.021
%RSD		0.740	14.710	16.210	0.251	20.470	51.970	78.580	50.450
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:17	74.103%	-0.453	0.007	-0.020	85.240	84.900	81.076%	81.505%
2	23:33:25	75.015%	-0.346	0.006	0.033	85.490	82.620	82.131%	82.753%
3	23:33:32	74.919%	-0.265	0.014	-0.070	86.280	84.360	81.904%	83.711%
X		74.679%	-0.355	0.009	-0.019	85.670	83.960	81.703%	82.657%
σ		0.501%	0.095	0.004	0.052	0.544	1.193	0.555%	1.106%
%RSD		0.671	26.710	48.440	273.400	0.635	1.421	0.679	1.338
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:33:17	0.013	0.032	0.095	0.137	0.123	97.022%		
2	23:33:25	0.031	0.026	0.088	0.131	0.093	97.327%		
3	23:33:32	0.029	0.023	0.129	0.101	0.110	89.823%		
X		0.025	0.027	0.104	0.123	0.109	94.724%		
σ		0.010	0.004	0.022	0.019	0.015	4.247%		
%RSD		40.020	16.430	21.270	15.500	13.930	4.484		

180-42978-B-6-B 4/25/2015 11:39:13 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	23:38:19	70.826%	-0.001	17.070	21.190	0.000	2662.000	4672.000	4945.000
2	23:38:27	74.164%	-0.010	17.660	18.950	0.000	2628.000	4686.000	4858.000
3	23:38:35	71.992%	0.094	19.130	20.980	0.000	2674.000	4804.000	5013.000
X		72.327%	0.028	17.950	20.380	0.000	2655.000	4721.000	4939.000
σ		1.694%	0.057	1.060	1.239	0.000	23.960	72.380	77.880
%RSD		2.342	208.000	5.903	6.079	0.000	0.903	1.533	1.577
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:38:19	28.200	2769.000	0.000	1866.000	10450.000	10490.000	71.047%	1.246
2	23:38:27	26.880	2785.000	0.000	1935.000	10770.000	10900.000	70.190%	0.640
3	23:38:35	28.060	2854.000	0.000	1995.000	11250.000	11260.000	69.053%	0.444
X		27.710	2803.000	0.000	1932.000	10820.000	10880.000	70.097%	0.777
σ		0.722	45.230	0.000	64.570	400.300	385.900	1.001%	0.418
%RSD		2.605	1.614	0.000	3.342	3.699	3.547	1.427	53.860
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:38:19	-0.356	1.780	45.010	5.538	20.260	1.196	9.673	1.919
2	23:38:27	-0.507	2.081	47.310	5.680	24.050	1.109	10.210	1.742
3	23:38:35	-1.732	2.067	48.490	6.357	27.850	1.288	9.858	1.712
X		-0.865	1.976	46.940	5.858	24.050	1.198	9.915	1.791
σ		0.755	0.170	1.772	0.438	3.798	0.089	0.276	0.112
%RSD		87.220	8.614	3.776	7.474	15.790	7.435	2.779	6.252
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:38:19	1.857	20.190	19.600	0.142	0.016	-1.351	0.000	70.140
2	23:38:27	1.999	20.230	20.500	0.099	0.082	0.123	0.000	70.990
3	23:38:35	1.979	22.530	20.670	0.123	0.114	1.444	0.000	71.500
X		1.945	20.980	20.260	0.121	0.071	0.072	0.000	70.880
σ		0.077	1.340	0.575	0.022	0.050	1.398	0.000	0.690
%RSD		3.979	6.388	2.840	18.010	70.370	1938.000	0.000	0.974
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:38:19	74.993%	0.281	0.375	67.938%	-0.016	-0.019	0.304	0.232
2	23:38:27	74.422%	0.361	0.322	68.907%	-0.013	-0.013	0.150	0.222
3	23:38:35	75.381%	0.225	0.312	68.442%	-0.008	-0.013	0.210	0.162
X		74.932%	0.289	0.336	68.429%	-0.012	-0.015	0.221	0.205
σ		0.482%	0.068	0.034	0.485%	0.004	0.003	0.078	0.038
%RSD		0.643	23.620	10.080	0.708	33.480	21.940	35.120	18.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:38:19	73.025%	-0.460	0.028	-0.057	70.920	72.210	80.298%	82.723%
2	23:38:27	73.980%	-0.506	0.046	-0.014	69.650	70.360	81.979%	83.103%
3	23:38:35	74.146%	-0.454	0.038	-0.031	70.960	69.370	81.460%	82.771%
X		73.717%	-0.474	0.037	-0.034	70.510	70.640	81.246%	82.866%
σ		0.605%	0.028	0.009	0.022	0.745	1.443	0.861%	0.207%
%RSD		0.821	6.007	24.840	63.340	1.056	2.043	1.060	0.250
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:38:19	0.062	0.048	1.119	1.023	1.071	100.532%		
2	23:38:27	0.047	0.038	1.114	0.976	1.069	101.330%		
3	23:38:35	0.047	0.044	1.091	0.988	1.065	102.085%		
X		0.052	0.044	1.108	0.995	1.069	101.316%		
σ		0.009	0.005	0.015	0.025	0.003	0.776%		
%RSD		16.480	11.380	1.346	2.463	0.278	0.766		

180-42978-B-6-B SD@5 4/25/2015 11:44:21 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	23:43:27	74.963%	-0.040	3.285	4.034	0.000	538.000	929.000	978.200
2	23:43:35	74.274%	-0.124	3.675	4.513	0.000	554.900	975.900	1005.000
3	23:43:43	74.750%	-0.039	4.574	3.653	0.000	543.700	961.600	1001.000
X		74.662%	-0.068	3.844	4.067	0.000	545.500	955.500	994.700
σ		0.353%	0.049	0.661	0.431	0.000	8.593	24.060	14.380
%RSD		0.472	71.830	17.190	10.610	0.000	1.575	2.518	1.445
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:27	1.408	562.300	0.000	309.800	2203.000	2180.000	73.963%	-0.620
2	23:43:35	2.492	574.700	0.000	331.300	2229.000	2254.000	72.686%	-0.720
3	23:43:43	1.829	580.000	0.000	336.400	2410.000	2285.000	72.081%	-0.690
X		1.910	572.300	0.000	325.800	2281.000	2240.000	72.910%	-0.677
σ		0.546	9.117	0.000	14.120	112.400	53.790	0.961%	0.051
%RSD		28.610	1.593	0.000	4.334	4.928	2.402	1.318	7.556
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:27	-0.740	0.514	9.124	-0.590	4.214	0.243	1.469	0.283
2	23:43:35	-0.346	0.513	9.540	-0.556	1.935	0.251	2.004	0.188
3	23:43:43	-0.268	0.511	9.916	-0.577	3.300	0.292	1.954	0.322
X		-0.452	0.513	9.527	-0.575	3.150	0.262	1.809	0.264
σ		0.253	0.001	0.397	0.017	1.147	0.026	0.296	0.069
%RSD		56.050	0.263	4.162	2.941	36.410	10.080	16.350	26.090
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:27	0.270	3.898	4.053	0.021	0.048	-0.013	0.000	14.440
2	23:43:35	0.491	4.040	4.072	0.014	0.016	1.504	0.000	14.410
3	23:43:43	0.238	4.095	4.523	0.000	0.016	0.042	0.000	14.990
X		0.333	4.011	4.216	0.012	0.027	0.511	0.000	14.610
σ		0.138	0.102	0.266	0.010	0.019	0.861	0.000	0.330
%RSD		41.330	2.531	6.303	88.780	69.840	168.400	0.000	2.260
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:27	74.668%	0.097	0.103	71.976%	-0.019	-0.014	0.043	0.011
2	23:43:35	75.732%	0.113	0.112	72.606%	-0.011	-0.025	0.101	-0.007
3	23:43:43	75.630%	0.139	0.080	72.845%	-0.027	-0.022	0.028	-0.012
X		75.343%	0.117	0.098	72.476%	-0.019	-0.020	0.058	-0.003
σ		0.587%	0.021	0.016	0.449%	0.008	0.006	0.038	0.012
%RSD		0.779	18.040	16.760	0.620	40.800	29.010	66.300	492.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:43:27	75.748%	-0.946	-0.018	-0.081	13.220	13.970	82.570%	83.911%
2	23:43:35	76.434%	-1.073	-0.033	-0.092	14.550	14.260	82.799%	83.977%
3	23:43:43	76.614%	-1.009	-0.033	-0.082	14.690	15.290	82.856%	85.923%
X		76.265%	-1.009	-0.028	-0.085	14.150	14.510	82.742%	84.604%
σ		0.457%	0.064	0.009	0.006	0.813	0.698	0.151%	1.143%
%RSD		0.599	6.308	32.200	7.338	5.741	4.809	0.183	1.351
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:43:27	0.022	0.015	0.222	0.184	0.231	82.514%		
2	23:43:35	0.001	0.015	0.174	0.210	0.229	82.825%		
3	23:43:43	-0.001	0.005	0.208	0.191	0.198	83.916%		
X		0.007	0.011	0.201	0.195	0.219	83.085%		
σ		0.013	0.006	0.025	0.013	0.018	0.736%		
%RSD		180.100	50.010	12.340	6.732	8.345	0.886		

CCV 1533080 4/25/2015 11:49:27 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	23:48:34	77.996%	91.720	92.180	96.590	0.000	52440.000	50670.000	52640.000
2	23:48:41	78.178%	94.770	97.900	99.900	0.000	52350.000	50880.000	53580.000
3	23:48:49	77.340%	96.330	99.540	99.320	0.000	54320.000	52500.000	54570.000
X		77.838%	94.273%	96.540%	98.603%	0.000	106.068%	102.704%	107.194%
σ		0.441%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.566	2.484	4.000	1.789	0.000	2.096	1.948	1.801
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:34	519.800	4531.000	0.000	44660.000	44360.000	46420.000	79.381%	90.100
2	23:48:41	538.600	4686.000	0.000	46490.000	46780.000	48610.000	78.481%	92.870
3	23:48:49	542.800	4715.000	0.000	47200.000	47090.000	49900.000	76.945%	95.570
X		106.749%	92.882%	0.000	92.231%	92.148%	96.618%	78.269%	92.845%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.232%	n/a
%RSD		2.290	2.125	0.000	2.837	3.240	3.650	1.574	2.949
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:34	96.140	96.930	467.700	24010.000	22990.000	95.310	92.970	95.850
2	23:48:41	97.550	98.200	486.200	24620.000	23710.000	98.040	94.070	98.060
3	23:48:49	100.300	100.200	497.000	25210.000	24290.000	98.960	99.470	98.880
X		98.013%	98.457%	96.730%	98.446%	94.651%	97.438%	95.503%	97.595%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.185	1.695	3.059	2.444	2.759	1.949	3.643	1.609
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:34	96.290	94.420	93.890	93.800	92.630	100.700	0.000	91.380
2	23:48:41	96.710	94.750	97.060	94.310	94.830	98.800	0.000	91.790
3	23:48:49	97.630	96.640	96.780	95.770	93.030	94.260	0.000	93.120
X		96.876%	95.270%	95.913%	94.625%	93.498%	97.922%	0.000	92.099%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.711	1.257	1.830	1.081	1.253	3.381	0.000	0.983
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:34	82.015%	92.610	94.310	74.068%	92.830	92.680	92.070	94.630
2	23:48:41	82.073%	94.430	94.970	74.465%	93.570	92.520	94.480	94.020
3	23:48:49	82.478%	93.300	95.870	74.739%	94.070	92.750	93.230	94.480
X		82.189%	93.448%	95.048%	74.424%	93.486%	92.653%	93.262%	94.374%
σ		0.252%	n/a	n/a	0.337%	n/a	n/a	n/a	n/a
%RSD		0.307	0.983	0.823	0.453	0.667	0.127	1.294	0.335
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:48:34	77.958%	92.260	92.470	92.830	94.230	93.320	85.236%	86.092%
2	23:48:41	79.372%	91.830	91.490	95.190	93.650	93.720	85.275%	85.758%
3	23:48:49	78.824%	95.360	94.250	93.000	94.020	94.030	85.944%	86.916%
X		78.718%	93.152%	92.738%	93.671%	93.966%	93.690%	85.485%	86.256%
σ		0.713%	n/a	n/a	n/a	n/a	n/a	0.398%	0.596%
%RSD		0.906	2.070	1.511	1.404	0.314	0.380	0.465	0.691
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:48:34	94.450	93.740	95.520	95.290	94.880	96.732%		
2	23:48:41	95.390	94.350	95.720	95.940	95.380	96.874%		
3	23:48:49	96.140	95.770	95.570	96.280	95.480	96.787%		
X		95.328%	94.621%	95.606%	95.836%	95.249%	96.798%		
σ		n/a	n/a	n/a	n/a	n/a	0.072%		
%RSD		0.889	1.103	0.111	0.525	0.339	0.074		

CCB2 4/25/2015 11:58:34 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	23:57:39	90.832%	-0.128	0.302	0.376	0.000	12.540	4.341	4.049
2	23:57:47	90.382%	-0.027	0.500	0.348	0.000	12.260	2.961	4.401
3	23:57:55	91.314%	-0.098	0.010	0.275	0.000	12.950	3.768	5.515
X		90.842%	-0.084	0.271	0.333	0.000	12.580	3.690	4.655
σ		0.466%	0.052	0.246	0.052	0.000	0.349	0.693	0.765
%RSD		0.513	62.030	90.930	15.620	0.000	2.770	18.790	16.440
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:39	-3.961	6.188	0.000	-23.190	15.840	4.985	90.815%	-0.799
2	23:57:47	-2.442	2.113	0.000	-27.770	28.440	3.436	90.238%	-0.755
3	23:57:55	-2.851	-1.664	0.000	-19.310	1.131	5.175	89.296%	-0.688
X		-3.085	2.213	0.000	-23.420	15.140	4.532	90.116%	-0.747
σ		0.786	3.927	0.000	4.234	13.670	0.954	0.767%	0.056
%RSD		25.480	177.500	0.000	18.080	90.310	21.050	0.851	7.539
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:39	0.021	-0.046	0.021	7.414	6.925	0.004	0.012	-0.108
2	23:57:47	-0.022	-0.038	0.032	6.436	4.414	0.004	0.022	-0.120
3	23:57:55	0.000	-0.026	0.041	6.103	5.970	0.004	0.023	-0.131
X		0.000	-0.037	0.031	6.651	5.770	0.004	0.019	-0.120
σ		0.021	0.010	0.010	0.682	1.267	0.000	0.006	0.011
%RSD		438700.000	27.150	31.480	10.250	21.970	0.859	31.720	9.555
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:39	-0.066	0.136	-0.026	0.070	0.010	-0.764	0.000	0.011
2	23:57:47	-0.000	0.135	0.007	0.039	0.113	0.078	0.000	0.024
3	23:57:55	-0.065	0.070	0.142	0.034	-0.016	-0.883	0.000	0.003
X		-0.044	0.114	0.041	0.047	0.035	-0.523	0.000	0.012
σ		0.038	0.038	0.089	0.019	0.068	0.524	0.000	0.010
%RSD		86.410	33.360	218.400	40.990	192.000	100.100	0.000	83.110
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:39	93.056%	0.251	0.363	86.125%	-0.016	-0.008	-0.000	-0.047
2	23:57:47	93.946%	0.220	0.284	87.224%	-0.016	-0.011	0.012	-0.008
3	23:57:55	94.182%	0.289	0.183	88.089%	0.001	-0.013	-0.000	-0.037
X		93.728%	0.253	0.277	87.146%	-0.010	-0.011	0.004	-0.031
σ		0.594%	0.035	0.091	0.984%	0.010	0.002	0.007	0.020
%RSD		0.634	13.660	32.750	1.129	96.710	22.920	192.500	65.730
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:39	88.939%	-0.886	0.122	0.093	0.002	-0.012	92.687%	92.624%
2	23:57:47	90.856%	-0.973	0.145	0.052	-0.019	0.001	93.563%	94.295%
3	23:57:55	89.909%	-0.897	0.153	0.008	-0.019	0.013	93.219%	94.756%
X		89.901%	-0.919	0.140	0.051	-0.012	0.001	93.156%	93.892%
σ		0.958%	0.047	0.016	0.042	0.012	0.012	0.442%	1.122%
%RSD		1.066	5.158	11.400	82.540	99.760	1377.000	0.474	1.195
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:57:39	0.059	0.053	-0.068	-0.042	-0.063	108.952%		
2	23:57:47	0.067	0.045	-0.080	-0.057	-0.075	108.601%		
3	23:57:55	0.050	0.053	-0.082	-0.073	-0.071	108.809%		
X		0.059	0.050	-0.077	-0.058	-0.070	108.787%		
σ		0.008	0.005	0.008	0.016	0.006	0.177%		
%RSD		14.030	9.566	9.920	27.360	8.611	0.162		

180-42758-A-1-B 4/26/2015 12:03:42 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	00:02:49	80.216%	-0.111	9.174	11.860	0.000	50.100	5.261	6.223	
2	00:02:57	77.907%	-0.145	11.870	12.130	0.000	55.320	6.096	4.413	
3	00:03:05	79.393%	-0.110	11.740	12.640	0.000	51.190	3.073	6.172	
X		79.172%	-0.122	10.930	12.210	0.000	52.200	4.810	5.603	
		σ	1.170%	0.020	1.519	0.395	0.000	2.757	1.561	1.031
		%RSD	1.478	16.190	13.900	3.239	0.000	5.281	32.460	18.400
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:02:49	-3.349	7.367	0.000	-144.000	-4.410	31.040	81.488%	0.174	
2	00:02:57	-3.855	5.140	0.000	-145.600	31.070	31.530	80.369%	0.359	
3	00:03:05	-3.727	2.892	0.000	-147.900	20.250	30.150	79.857%	0.416	
X		-3.644	5.133	0.000	-145.800	15.640	30.910	80.571%	0.316	
		σ	0.263	2.237	0.000	1.961	18.180	0.698	0.834%	0.127
		%RSD	7.219	43.590	0.000	1.345	116.300	2.259	1.035	40.010
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:02:49	-0.368	0.951	0.094	10.200	6.750	-0.001	0.081	0.062	
2	00:02:57	0.096	1.193	0.102	8.424	4.135	-0.001	0.023	-0.089	
3	00:03:05	0.312	1.310	0.085	6.732	5.098	-0.001	0.023	0.015	
X		0.013	1.151	0.094	8.452	5.328	-0.001	0.043	-0.004	
		σ	0.348	0.183	0.008	1.734	1.322	0.000	0.034	0.077
		%RSD	2626.000	15.920	8.859	20.520	24.820	0.699	78.540	1907.000
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:02:49	0.107	0.964	0.936	0.079	0.015	0.985	0.000	0.060	
2	00:02:57	0.211	0.995	0.737	0.068	0.202	-0.612	0.000	0.043	
3	00:03:05	-0.023	1.174	1.122	0.083	0.076	-1.265	0.000	0.046	
X		0.098	1.045	0.932	0.077	0.098	-0.297	0.000	0.050	
		σ	0.117	0.113	0.192	0.008	0.095	1.157	0.000	0.009
		%RSD	119.400	10.840	20.620	10.020	97.370	389.100	0.000	18.350
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:02:49	74.758%	0.205	0.186	70.755%	-0.022	-0.016	-0.000	-0.005	
2	00:02:57	75.828%	0.274	0.277	70.468%	-0.014	-0.013	-0.000	0.001	
3	00:03:05	77.410%	0.182	0.203	71.404%	-0.016	-0.016	0.014	-0.035	
X		75.999%	0.220	0.222	70.876%	-0.017	-0.015	0.005	-0.013	
		σ	1.334%	0.048	0.048	0.479%	0.004	0.002	0.008	0.019
		%RSD	1.755	21.740	21.850	0.676	23.720	11.010	185.900	146.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:02:49	73.481%	-0.446	0.274	0.108	0.152	0.077	81.059%	82.386%	
2	00:02:57	74.262%	-0.563	0.196	0.106	0.150	0.164	81.537%	83.814%	
3	00:03:05	75.547%	-0.478	0.230	0.172	0.290	0.075	82.664%	84.474%	
X		74.430%	-0.495	0.233	0.129	0.197	0.106	81.753%	83.558%	
		σ	1.044%	0.060	0.039	0.038	0.080	0.051	0.824%	1.067%
		%RSD	1.402	12.160	16.780	29.220	40.740	48.290	1.008	1.278
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	00:02:49	0.045	0.069	-0.057	-0.013	-0.040	98.616%			
2	00:02:57	0.036	0.045	-0.079	-0.033	-0.048	99.213%			
3	00:03:05	0.028	0.027	-0.064	-0.041	-0.049	99.911%			
X		0.037	0.047	-0.067	-0.029	-0.046	99.247%			
		σ	0.009	0.021	0.011	0.014	0.005	0.648%		
		%RSD	23.270	44.070	17.100	49.380	11.540	0.653		

180-42758-A-2-B 4/26/2015 12:08:47 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	00:07:53	77.410%	-0.108	10.890	12.170	0.000	34.940	0.332	0.963
2	00:08:01	78.286%	-0.118	11.640	11.900	0.000	35.140	-0.123	1.699
3	00:08:09	80.629%	-0.094	9.929	11.770	0.000	33.490	0.310	1.280
X		78.775%	-0.107	10.820	11.950	0.000	34.520	0.173	1.314
σ		1.664%	0.012	0.857	0.207	0.000	0.901	0.257	0.370
%RSD		2.113	11.350	7.925	1.731	0.000	2.611	148.100	28.130
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:53	-2.741	5.858	0.000	-157.700	20.150	29.130	81.550%	1.714
2	00:08:01	-2.550	2.664	0.000	-156.200	1.351	29.390	79.974%	1.719
3	00:08:09	-2.697	1.735	0.000	-155.000	3.631	28.970	80.357%	1.899
X		-2.663	3.419	0.000	-156.300	8.377	29.170	80.627%	1.777
σ		0.100	2.163	0.000	1.336	10.260	0.210	0.822%	0.105
%RSD		3.753	63.260	0.000	0.855	122.500	0.718	1.020	5.919
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:53	-0.555	1.552	0.078	2.077	1.353	-0.001	0.022	-0.010
2	00:08:01	-1.192	1.802	0.113	2.164	4.342	0.010	0.035	0.082
3	00:08:09	-1.106	1.766	0.093	1.980	2.842	0.005	0.080	0.044
X		-0.951	1.707	0.095	2.074	2.846	0.005	0.046	0.039
σ		0.346	0.135	0.018	0.092	1.495	0.006	0.031	0.047
%RSD		36.350	7.922	18.880	4.439	52.520	120.400	67.030	120.500
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:53	0.093	1.760	1.769	0.102	0.076	0.561	0.000	0.027
2	00:08:01	0.130	1.602	1.643	0.040	0.045	1.745	0.000	0.017
3	00:08:09	0.136	1.807	1.651	0.024	0.135	-0.322	0.000	0.023
X		0.120	1.723	1.688	0.055	0.085	0.662	0.000	0.023
σ		0.023	0.107	0.071	0.041	0.046	1.037	0.000	0.005
%RSD		19.240	6.220	4.199	74.320	53.930	156.800	0.000	21.220
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:53	77.309%	0.165	0.097	71.389%	-0.019	-0.025	-0.000	-0.012
2	00:08:01	77.888%	0.051	0.122	71.973%	-0.014	-0.014	-0.000	-0.041
3	00:08:09	78.503%	0.110	0.173	72.333%	-0.017	-0.017	-0.000	-0.035
X		77.900%	0.109	0.131	71.898%	-0.016	-0.018	-0.000	-0.029
σ		0.597%	0.057	0.039	0.476%	0.003	0.006	0.000	0.016
%RSD		0.767	52.090	29.890	0.662	15.710	31.780	5.855	52.650
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:07:53	75.554%	-0.339	0.060	0.070	0.053	0.075	82.016%	84.694%
2	00:08:01	76.135%	-0.458	0.082	0.074	0.005	0.032	82.582%	84.891%
3	00:08:09	76.820%	-0.434	0.039	0.025	-0.019	0.060	82.790%	85.651%
X		76.170%	-0.410	0.060	0.056	0.013	0.056	82.463%	85.079%
σ		0.634%	0.063	0.022	0.027	0.036	0.022	0.401%	0.506%
%RSD		0.832	15.300	35.660	48.860	281.900	39.880	0.486	0.594
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:07:53	0.009	0.009	-0.068	-0.055	-0.061	98.471%		
2	00:08:01	0.032	0.008	-0.053	-0.014	-0.047	99.544%		
3	00:08:09	0.014	0.010	-0.069	-0.026	-0.052	99.830%		
X		0.018	0.009	-0.063	-0.032	-0.053	99.281%		
σ		0.012	0.001	0.009	0.021	0.007	0.716%		
%RSD		65.530	12.140	13.910	67.080	13.480	0.721		

180-42758-A-13-B 4/26/2015 12:13:50 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	00:12:57	75.935%	-0.107	13.000	12.990	0.000	253.600	2.426	3.343
2	00:13:04	78.250%	-0.082	10.590	12.010	0.000	252.600	1.701	2.393
3	00:13:12	77.691%	-0.154	11.290	12.120	0.000	259.000	1.724	2.973
X		77.292%	-0.114	11.630	12.370	0.000	255.100	1.950	2.903
σ		1.208%	0.036	1.239	0.538	0.000	3.464	0.412	0.479
%RSD		1.563	31.930	10.660	4.345	0.000	1.358	21.120	16.490
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:57	-3.807	26.790	0.000	-152.500	43.030	58.280	82.005%	0.968
2	00:13:04	-2.480	23.740	0.000	-148.500	36.600	61.050	81.078%	1.086
3	00:13:12	-2.543	23.040	0.000	-143.100	63.520	58.950	80.363%	0.960
X		-2.943	24.520	0.000	-148.000	47.710	59.430	81.149%	1.005
σ		0.748	1.994	0.000	4.707	14.060	1.441	0.824%	0.070
%RSD		25.430	8.134	0.000	3.180	29.460	2.425	1.015	7.011
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:57	-0.483	1.592	0.082	-0.073	0.865	0.010	-0.001	0.102
2	00:13:04	-1.329	1.607	0.057	0.022	-2.001	0.019	0.011	-0.024
3	00:13:12	0.029	1.711	0.097	-0.126	-0.531	0.013	0.092	0.036
X		-0.594	1.637	0.079	-0.059	-0.555	0.014	0.034	0.038
σ		0.686	0.065	0.020	0.075	1.433	0.004	0.051	0.063
%RSD		115.400	3.969	25.350	127.300	258.000	30.520	149.300	165.900
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:57	0.085	3.688	3.311	0.076	0.076	2.519	0.000	0.131
2	00:13:04	0.144	4.122	3.967	0.085	0.075	1.142	0.000	0.165
3	00:13:12	0.171	3.757	3.980	0.098	0.075	-0.260	0.000	0.125
X		0.134	3.856	3.753	0.087	0.075	1.134	0.000	0.140
σ		0.044	0.233	0.383	0.011	0.001	1.390	0.000	0.022
%RSD		32.910	6.049	10.190	12.770	0.685	122.500	0.000	15.450
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:57	76.607%	0.070	0.049	71.302%	-0.011	-0.019	-0.000	0.488
2	00:13:04	77.985%	0.120	0.090	72.097%	-0.016	-0.022	-0.000	0.426
3	00:13:12	77.940%	0.059	0.011	72.863%	-0.019	-0.014	-0.000	0.543
X		77.511%	0.083	0.050	72.087%	-0.016	-0.018	-0.000	0.486
σ		0.783%	0.032	0.040	0.780%	0.004	0.004	0.000	0.058
%RSD		1.010	38.890	79.320	1.083	26.520	23.070	6.722	12.010
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:12:57	75.017%	22.720	0.053	-0.043	0.149	0.294	81.772%	83.382%
2	00:13:04	75.528%	22.650	0.068	-0.049	0.219	0.147	82.799%	84.276%
3	00:13:12	76.307%	23.000	0.051	-0.018	0.169	0.103	84.014%	84.736%
X		75.617%	22.790	0.057	-0.036	0.179	0.181	82.862%	84.131%
σ		0.650%	0.188	0.009	0.017	0.036	0.100	1.122%	0.688%
%RSD		0.859	0.826	15.910	45.420	20.070	55.360	1.354	0.818
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:12:57	-0.002	0.004	-0.081	-0.050	-0.064	98.406%		
2	00:13:04	-0.001	-0.004	-0.072	-0.048	-0.063	91.093%		
3	00:13:12	0.002	-0.002	-0.066	-0.026	-0.057	98.925%		
X		-0.000	-0.001	-0.073	-0.041	-0.061	96.141%		
σ		0.002	0.004	0.008	0.014	0.004	4.380%		
%RSD		1335.000	537.300	10.510	32.870	6.767	4.556		

MB 180-139272/1-A 4/26/2015 12:18:55 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	00:18:01	84.076%	-0.115	0.196	0.270	0.000	9.321	0.243	0.456	
2	00:18:09	84.282%	-0.090	-0.219	0.094	0.000	7.082	-0.185	-0.044	
3	00:18:17	82.028%	-0.147	-0.094	0.302	0.000	10.130	0.276	1.556	
X		83.462%	-0.117	-0.039	0.222	0.000	8.845	0.112	0.656	
		σ	1.246%	0.029	0.213	0.112	0.000	1.580	0.257	0.819
		%RSD	1.493	24.520	544.500	50.630	0.000	17.860	230.300	124.800
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:18:01	-3.569	3.410	0.000	-86.380	-3.187	2.753	83.973%	-0.851	
2	00:18:09	-2.562	-0.164	0.000	-84.720	11.860	5.179	82.893%	-0.826	
3	00:18:17	-2.459	-1.419	0.000	-82.520	-2.441	1.885	82.459%	-0.848	
X		-2.863	0.609	0.000	-84.540	2.076	3.272	83.108%	-0.842	
		σ	0.613	2.506	0.000	1.934	8.479	1.707	0.780%	0.014
		%RSD	21.420	411.600	0.000	2.288	408.400	52.170	0.938	1.652
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:18:01	-0.063	0.043	-0.027	-2.060	-3.281	-0.001	-0.015	-0.155	
2	00:18:09	0.070	0.033	-0.047	-2.015	-3.045	0.002	0.062	-0.066	
3	00:18:17	-0.133	0.023	-0.027	-1.880	-3.272	0.007	0.029	-0.083	
X		-0.042	0.033	-0.033	-1.985	-3.199	0.002	0.026	-0.101	
		σ	0.103	0.010	0.012	0.094	0.134	0.004	0.039	0.047
		%RSD	246.300	30.420	34.870	4.724	4.174	164.300	150.300	46.800
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:18:01	-0.020	0.218	0.198	-0.013	-0.016	-0.500	0.000	0.001	
2	00:18:09	-0.061	0.202	0.117	-0.017	0.040	0.033	0.000	-0.004	
3	00:18:17	-0.093	0.086	-0.011	-0.020	-0.016	0.269	0.000	-0.004	
X		-0.058	0.169	0.101	-0.017	0.003	-0.066	0.000	-0.003	
		σ	0.036	0.072	0.105	0.003	0.032	0.394	0.000	0.003
		%RSD	63.020	42.560	103.800	19.090	1243.000	597.000	0.000	131.400
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:18:01	84.423%	-0.012	0.006	80.153%	-0.022	-0.015	-0.000	-0.047	
2	00:18:09	86.392%	0.011	0.043	81.074%	-0.013	-0.007	0.013	-0.047	
3	00:18:17	87.056%	-0.005	0.014	81.214%	-0.008	-0.017	-0.000	-0.036	
X		85.957%	-0.002	0.021	80.814%	-0.014	-0.013	0.004	-0.043	
		σ	1.369%	0.012	0.019	0.576%	0.007	0.005	0.008	0.006
		%RSD	1.593	564.300	92.570	0.713	49.060	39.920	191.800	13.870
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:18:01	82.645%	-1.048	-0.046	-0.105	0.003	0.002	88.694%	89.328%	
2	00:18:09	83.978%	-1.071	-0.039	-0.095	0.003	-0.012	88.432%	89.895%	
3	00:18:17	84.472%	-1.096	-0.028	-0.095	-0.019	-0.012	89.771%	90.357%	
X		83.698%	-1.072	-0.038	-0.098	-0.004	-0.007	88.966%	89.860%	
		σ	0.945%	0.024	0.009	0.005	0.013	0.008	0.710%	0.516%
		%RSD	1.129	2.255	22.950	5.530	295.800	108.700	0.798	0.574
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	00:18:01	-0.006	-0.007	-0.089	-0.061	-0.080	104.449%			
2	00:18:09	-0.008	-0.012	-0.091	-0.073	-0.079	105.310%			
3	00:18:17	-0.008	-0.010	-0.098	-0.055	-0.077	105.412%			
X		-0.007	-0.010	-0.093	-0.063	-0.079	105.057%			
		σ	0.001	0.003	0.004	0.009	0.001	0.529%		
		%RSD	14.330	26.530	4.733	14.910	1.531	0.503		

LCS 180-139272/2-A 4/26/2015 12:23:58 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	00:23:06	70.255%	47.130	995.300	1022.000	0.000	51250.000	48460.000	50550.000
2	00:23:14	69.466%	48.940	1023.000	1053.000	0.000	52550.000	49610.000	52280.000
3	00:23:21	69.740%	48.910	1039.000	1067.000	0.000	53050.000	50390.000	52350.000
X		69.820%	48.330	1019.000	1047.000	0.000	52280.000	49490.000	51730.000
σ		0.401%	1.040	22.140	22.650	0.000	931.700	971.500	1022.000
%RSD		0.574	2.152	2.172	2.163	0.000	1.782	1.963	1.976
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:06	1947.000	8392.000	0.000	42960.000	44170.000	45850.000	68.837%	886.400
2	00:23:14	1993.000	8715.000	0.000	44330.000	44670.000	47510.000	68.030%	919.100
3	00:23:21	2001.000	8764.000	0.000	44980.000	46030.000	48550.000	67.863%	937.800
X		1980.000	8623.000	0.000	44090.000	44960.000	47300.000	68.244%	914.400
σ		28.960	202.200	0.000	1033.000	963.700	1363.000	0.521%	26.040
%RSD		1.462	2.345	0.000	2.344	2.144	2.882	0.763	2.847
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:06	486.700	193.800	489.200	945.800	996.000	473.900	470.300	239.800
2	00:23:14	499.800	200.000	506.900	973.600	1015.000	483.500	479.500	239.400
3	00:23:21	502.100	201.500	519.200	973.300	1040.000	487.500	482.300	240.300
X		496.200	198.500	505.100	964.200	1017.000	481.600	477.300	239.900
σ		8.325	4.068	15.080	15.960	22.190	7.025	6.291	0.444
%RSD		1.678	2.050	2.986	1.655	2.182	1.459	1.318	0.185
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:06	241.700	474.500	479.400	39.280	9.223	10.130	0.000	960.800
2	00:23:14	248.200	486.800	482.600	38.760	9.242	10.420	0.000	954.800
3	00:23:21	247.900	482.000	483.600	39.760	10.130	10.060	0.000	951.100
X		245.900	481.100	481.900	39.270	9.533	10.200	0.000	955.600
σ		3.666	6.182	2.199	0.497	0.521	0.194	0.000	4.860
%RSD		1.491	1.285	0.456	1.265	5.460	1.902	0.000	0.509
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:06	72.314%	1002.000	1022.000	65.652%	48.120	46.450	47.000	88.650
2	00:23:14	73.843%	1000.000	1023.000	66.395%	47.920	46.870	48.500	87.940
3	00:23:21	74.907%	999.800	1027.000	66.777%	47.230	47.110	49.820	88.270
X		73.688%	1001.000	1024.000	66.275%	47.760	46.810	48.440	88.280
σ		1.303%	0.928	2.716	0.572%	0.469	0.334	1.410	0.351
%RSD		1.768	0.093	0.265	0.863	0.983	0.715	2.911	0.398
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:06	69.979%	1960.000	488.000	482.800	1882.000	1861.000	79.301%	81.643%
2	00:23:14	71.163%	1962.000	489.000	483.100	1883.000	1861.000	79.638%	83.084%
3	00:23:21	71.059%	1967.000	484.900	481.400	1882.000	1873.000	81.126%	82.481%
X		70.734%	1963.000	487.300	482.500	1882.000	1865.000	80.022%	82.403%
σ		0.656%	3.761	2.123	0.907	0.728	6.976	0.971%	0.723%
%RSD		0.927	0.192	0.436	0.188	0.039	0.374	1.213	0.878
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:23:06	48.850	47.660	20.130	19.640	19.710	91.701%		
2	00:23:14	49.380	47.920	20.640	19.610	19.870	92.978%		
3	00:23:21	49.760	48.200	19.750	19.820	19.740	93.651%		
X		49.330	47.930	20.170	19.690	19.770	92.777%		
σ		0.457	0.269	0.447	0.114	0.087	0.990%		
%RSD		0.925	0.561	2.217	0.577	0.442	1.068		

180-43252-J-12-A 4/26/2015 12:33:05 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	00:32:12	78.135%	-0.109	12.050	12.040	0.000	25.490	1.134	0.934	
2	00:32:20	76.538%	-0.107	10.170	12.240	0.000	29.910	0.694	2.161	
3	00:32:27	76.877%	-0.080	12.320	12.340	0.000	27.930	1.926	0.420	
X		77.183%	-0.099	11.510	12.210	0.000	27.780	1.251	1.172	
		σ	0.841%	0.016	1.172	0.152	0.000	2.215	0.624	0.895
		%RSD	1.090	16.360	10.180	1.243	0.000	7.974	49.900	76.340
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:32:12	-3.580	11.520	0.000	-131.200	17.880	28.750	73.167%	0.203	
2	00:32:20	-2.738	9.089	0.000	-130.100	-7.378	30.370	71.607%	0.230	
3	00:32:27	-3.112	6.404	0.000	-130.800	1.282	26.090	71.196%	0.970	
X		-3.143	9.006	0.000	-130.700	3.929	28.400	71.990%	0.468	
		σ	0.422	2.561	0.000	0.539	12.840	2.159	1.040%	0.435
		%RSD	13.410	28.440	0.000	0.412	326.700	7.600	1.445	93.090
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:32:12	-0.818	2.054	0.142	1.242	0.860	0.014	0.041	-0.017	
2	00:32:20	0.053	1.965	0.144	0.987	2.244	0.008	0.017	-0.010	
3	00:32:27	-0.538	2.235	0.135	0.620	0.414	0.012	0.005	-0.010	
X		-0.435	2.085	0.140	0.949	1.172	0.011	0.021	-0.012	
		σ	0.445	0.138	0.005	0.313	0.954	0.003	0.019	0.004
		%RSD	102.300	6.606	3.348	32.960	81.370	25.850	89.280	30.330
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:32:12	-0.021	1.168	1.175	0.065	0.016	0.043	0.000	0.002	
2	00:32:20	0.035	1.287	1.073	0.054	0.079	1.229	0.000	0.008	
3	00:32:27	0.099	1.059	1.219	0.088	0.047	-0.774	0.000	-0.007	
X		0.038	1.171	1.156	0.069	0.047	0.166	0.000	0.001	
		σ	0.060	0.114	0.075	0.017	1.007	0.000	0.008	
		%RSD	158.200	9.764	6.511	25.070	66.630	606.200	0.000	681.500
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:32:12	75.640%	0.961	1.038	70.522%	-0.024	-0.005	-0.000	0.030	
2	00:32:20	77.065%	0.821	0.727	71.824%	-0.019	-0.011	-0.000	0.017	
3	00:32:27	77.294%	0.786	0.749	71.587%	-0.019	-0.016	-0.000	-0.000	
X		76.667%	0.856	0.838	71.311%	-0.021	-0.011	-0.000	0.016	
		σ	0.896%	0.092	0.174	0.693%	0.003	0.006	0.000	0.015
		%RSD	1.169	10.760	20.720	0.972	14.500	54.610	4.936	96.470
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:32:12	74.117%	1.247	0.019	-0.047	-0.019	0.032	81.843%	83.677%	
2	00:32:20	75.514%	0.811	0.033	-0.033	-0.019	0.032	83.042%	84.366%	
3	00:32:27	75.431%	0.828	0.052	-0.054	0.005	0.046	82.221%	84.224%	
X		75.021%	0.962	0.035	-0.045	-0.011	0.037	82.369%	84.089%	
		σ	0.783%	0.247	0.017	0.011	0.014	0.008	0.613%	0.363%
		%RSD	1.044	25.680	49.000	24.490	126.700	22.500	0.744	0.432
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	00:32:12	0.023	0.056	-0.062	-0.038	-0.058	99.149%			
2	00:32:20	0.025	0.047	-0.073	-0.048	-0.057	99.658%			
3	00:32:27	0.025	0.028	-0.058	-0.049	-0.058	100.640%			
X		0.024	0.044	-0.064	-0.045	-0.058	99.815%			
		σ	0.001	0.014	0.008	0.006	0.001	0.758%		
		%RSD	3.363	32.830	12.110	13.060	0.874	0.759		

180-43279-A-1-A 4/26/2015 12:38:07 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	00:37:15	61.241%	-0.052	82.020	86.040	0.000	998900.000	36410.000	38450.000
2	00:37:22	59.305%	-0.083	87.650	92.110	0.000	1049000.000	38770.000	40450.000
3	00:37:30	58.892%	-0.083	86.290	90.220	0.000	1064000.000	39140.000	41020.000
X		59.813%	-0.073	85.320	89.460	0.000	1037000.000	38110.000	39970.000
σ		1.254%	0.018	2.939	3.105	0.000	33990.000	1478.000	1349.000
%RSD		2.097	24.450	3.445	3.470	0.000	3.277	3.878	3.374
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:15	0.903	4902.000	0.000	19580.000	327300.000	330800.000	64.088%	6.499
2	00:37:22	1.133	5122.000	0.000	20270.000	344000.000	345000.000	62.047%	7.805
3	00:37:30	0.502	5128.000	0.000	20670.000	349600.000	352300.000	61.981%	7.253
X		0.846	5051.000	0.000	20170.000	340300.000	342700.000	62.705%	7.186
σ		0.320	128.800	0.000	553.800	11600.000	10910.000	1.198%	0.656
%RSD		37.770	2.551	0.000	2.745	3.409	3.184	1.910	9.127
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:15	-0.120	1.732	1992.000	8462.000	8615.000	1.814	2.363	1.113
2	00:37:22	0.689	1.797	2063.000	8771.000	8855.000	1.988	2.802	1.294
3	00:37:30	-0.196	1.978	2106.000	8770.000	9049.000	1.808	2.562	1.226
X		0.124	1.835	2054.000	8667.000	8840.000	1.870	2.575	1.211
σ		0.490	0.127	57.540	178.000	217.200	0.103	0.220	0.091
%RSD		394.600	6.936	2.802	2.054	2.457	5.487	8.536	7.533
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:15	0.863	3.825	2.472	4.364	0.813	12.420	0.000	2484.000
2	00:37:22	1.153	3.903	3.880	4.330	0.781	8.727	0.000	2496.000
3	00:37:30	0.865	3.921	4.007	4.166	0.702	11.200	0.000	2465.000
X		0.960	3.883	3.453	4.287	0.765	10.780	0.000	2482.000
σ		0.167	0.051	0.852	0.106	0.057	1.883	0.000	15.810
%RSD		17.380	1.320	24.680	2.476	7.467	17.470	0.000	0.637
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:15	67.077%	15.100	15.670	57.220%	0.005	-0.008	-0.000	-0.019
2	00:37:22	67.437%	15.220	15.210	57.485%	-0.004	0.023	-0.000	0.008
3	00:37:30	68.266%	15.400	15.840	57.784%	0.021	0.006	0.017	-0.040
X		67.593%	15.240	15.570	57.496%	0.007	0.007	0.005	-0.017
σ		0.610%	0.151	0.328	0.282%	0.013	0.015	0.010	0.024
%RSD		0.902	0.993	2.106	0.491	175.000	220.100	185.200	141.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:37:15	64.159%	-0.034	0.275	0.134	886.800	866.200	73.126%	76.041%
2	00:37:22	64.608%	-0.181	0.155	0.189	880.600	868.000	73.860%	76.381%
3	00:37:30	64.686%	-0.283	0.213	0.145	886.900	870.800	74.159%	76.837%
X		64.484%	-0.166	0.215	0.156	884.800	868.400	73.715%	76.420%
σ		0.285%	0.125	0.060	0.029	3.596	2.340	0.531%	0.399%
%RSD		0.441	75.420	27.850	18.570	0.406	0.270	0.721	0.523
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:37:15	0.019	0.024	-0.049	0.024	-0.022	81.338%		
2	00:37:22	0.048	0.029	-0.053	-0.013	-0.026	82.490%		
3	00:37:30	0.037	0.021	-0.048	-0.028	-0.037	82.981%		
X		0.035	0.025	-0.050	-0.005	-0.028	82.270%		
σ		0.015	0.004	0.003	0.027	0.008	0.843%		
%RSD		42.820	16.970	5.039	488.700	28.150	1.025		

180-43279-A-2-A 4/26/2015 12:43:13 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	00:42:19	60.667%	-0.097	51.260	61.910	0.000	451000.000	58060.000	61630.000	
2	00:42:27	60.990%	-0.063	56.750	64.040	0.000	452900.000	58450.000	61640.000	
3	00:42:35	60.939%	-0.132	57.870	62.400	0.000	464300.000	60470.000	62770.000	
X		60.865%	-0.098	55.290	62.780	0.000	456100.000	58990.000	62020.000	
		σ	0.174%	0.035	3.534	1.117	0.000	7193.000	1297.000	655.500
		%RSD	0.285	35.480	6.391	1.779	0.000	1.577	2.198	1.057
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:42:19	3.899	12310.000	0.000	97920.000	204900.000	208000.000	64.579%	12.910	
2	00:42:27	5.097	12550.000	0.000	99430.000	211400.000	215100.000	64.680%	12.290	
3	00:42:35	3.624	12620.000	0.000	101200.000	214000.000	220600.000	64.086%	14.640	
X		4.207	12490.000	0.000	99520.000	210100.000	214500.000	64.448%	13.280	
		σ	0.783	161.500	0.000	1645.000	4682.000	6325.000	0.318%	1.221
		%RSD	18.620	1.293	0.000	1.653	2.229	2.948	0.493	9.196
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:42:19	0.166	3.085	2637.000	94810.000	95360.000	7.233	17.910	0.956	
2	00:42:27	-0.316	3.012	2713.000	95850.000	97150.000	7.289	17.240	0.747	
3	00:42:35	0.426	2.913	2777.000	95660.000	95560.000	7.593	17.710	0.749	
X		0.092	3.003	2709.000	95440.000	96020.000	7.372	17.620	0.817	
		σ	0.377	0.086	70.270	554.000	981.200	0.194	0.343	0.120
		%RSD	409.100	2.866	2.594	0.580	1.022	2.627	1.946	14.660
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:42:19	0.580	7.362	6.632	8.347	1.321	20.800	0.000	2769.000	
2	00:42:27	0.739	7.881	7.675	9.036	1.384	20.140	0.000	2796.000	
3	00:42:35	0.694	7.748	6.867	8.714	0.881	23.300	0.000	2756.000	
X		0.671	7.664	7.058	8.699	1.195	21.410	0.000	2773.000	
		σ	0.082	0.270	0.547	0.345	0.274	1.667	0.000	20.170
		%RSD	12.190	3.518	7.748	3.967	22.920	7.784	0.000	0.727
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:42:19	69.166%	11.740	12.170	59.133%	-0.017	-0.018	0.017	-0.006	
2	00:42:27	69.611%	10.770	11.740	60.237%	-0.008	-0.008	0.033	0.007	
3	00:42:35	71.217%	11.310	11.620	60.929%	-0.006	-0.005	0.033	-0.007	
X		69.998%	11.270	11.840	60.099%	-0.010	-0.011	0.028	-0.002	
		σ	1.079%	0.488	0.291	0.906%	0.006	0.007	0.009	0.008
		%RSD	1.541	4.325	2.458	1.507	59.450	62.680	34.250	324.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:42:19	65.627%	-0.532	0.258	0.264	505.300	496.100	75.597%	77.184%	
2	00:42:27	66.246%	-0.578	0.247	0.205	518.200	505.400	75.930%	77.942%	
3	00:42:35	67.285%	-0.560	0.277	0.104	509.800	501.000	76.396%	78.419%	
X		66.386%	-0.557	0.260	0.191	511.100	500.800	75.975%	77.848%	
		σ	0.838%	0.023	0.015	0.081	6.565	4.645	0.402%	0.623%
		%RSD	1.262	4.083	5.865	42.140	1.284	0.927	0.528	0.800
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	00:42:19	0.010	0.008	-0.055	-0.016	-0.040	82.509%			
2	00:42:27	0.016	0.009	-0.043	-0.019	-0.042	83.666%			
3	00:42:35	0.003	0.001	-0.026	-0.037	-0.032	84.336%			
X		0.009	0.006	-0.041	-0.024	-0.038	83.504%			
		σ	0.006	0.004	0.015	0.012	0.005	0.924%		
		%RSD	67.830	77.360	36.180	47.660	13.750	1.107		

180-43279-B-4-A 4/26/2015 12:48:18 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	00:47:25	66.187%	-0.020	16.100	25.290	0.000	128900.000	59140.000	61200.000
2	00:47:33	65.996%	0.055	18.980	26.030	0.000	130300.000	60310.000	63210.000
3	00:47:41	66.919%	0.020	16.240	25.510	0.000	128700.000	59120.000	61570.000
X		66.367%	0.019	17.110	25.610	0.000	129300.000	59520.000	61990.000
σ		0.487%	0.038	1.622	0.378	0.000	884.800	681.400	1068.000
%RSD		0.734	202.300	9.482	1.474	0.000	0.684	1.145	1.723
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:25	26.560	17870.000	0.000	1898.000	121000.000	122800.000	69.961%	17.310
2	00:47:33	25.950	18540.000	0.000	1981.000	125700.000	128300.000	68.656%	15.830
3	00:47:41	24.980	18300.000	0.000	1975.000	126600.000	129200.000	69.023%	14.510
X		25.830	18240.000	0.000	1951.000	124400.000	126800.000	69.213%	15.880
σ		0.799	336.600	0.000	46.500	3024.000	3487.000	0.673%	1.403
%RSD		3.095	1.846	0.000	2.383	2.431	2.751	0.972	8.835
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:25	2.926	5.128	20000.000	237700.000	232900.000	4.073	0.983	3.275
2	00:47:33	1.770	5.157	20690.000	244100.000	240400.000	4.538	1.098	3.236
3	00:47:41	2.323	5.624	20900.000	245500.000	238800.000	4.423	0.948	3.194
X		2.339	5.303	20530.000	242400.000	237400.000	4.345	1.010	3.235
σ		0.578	0.278	468.500	4159.000	3962.000	0.242	0.079	0.040
%RSD		24.710	5.250	2.282	1.716	1.669	5.578	7.798	1.246
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:25	3.513	7.259	7.189	41.880	1.183	7.255	0.000	773.700
2	00:47:33	3.422	6.938	6.606	42.690	1.281	10.520	0.000	772.000
3	00:47:41	3.419	7.513	7.397	42.860	1.239	12.650	0.000	773.900
X		3.452	7.236	7.064	42.470	1.234	10.140	0.000	773.200
σ		0.053	0.288	0.410	0.523	0.049	2.716	0.000	1.066
%RSD		1.550	3.978	5.802	1.231	3.955	26.780	0.000	0.138
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:25	72.378%	0.280	0.422	62.643%	-0.003	-0.019	0.032	0.044
2	00:47:33	73.056%	0.372	0.364	63.274%	-0.021	-0.019	0.080	0.062
3	00:47:41	73.590%	0.360	0.456	63.448%	-0.021	-0.019	0.128	0.049
X		73.008%	0.337	0.414	63.122%	-0.015	-0.019	0.080	0.052
σ		0.607%	0.050	0.046	0.424%	0.010	0.000	0.048	0.009
%RSD		0.832	14.710	11.210	0.672	69.000	0.322	59.720	17.780
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:25	67.925%	-0.867	0.132	0.078	394.100	384.500	77.999%	79.749%
2	00:47:33	69.190%	-0.612	0.146	0.034	381.800	383.300	78.510%	80.326%
3	00:47:41	69.552%	-0.773	0.220	0.062	389.900	380.000	79.501%	81.159%
X		68.889%	-0.751	0.166	0.058	388.600	382.600	78.670%	80.411%
σ		0.854%	0.129	0.047	0.022	6.241	2.293	0.764%	0.709%
%RSD		1.240	17.240	28.460	38.730	1.606	0.599	0.971	0.882
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:47:25	0.006	-0.005	-0.014	0.014	0.002	88.127%		
2	00:47:33	0.006	-0.004	-0.000	0.010	-0.003	89.064%		
3	00:47:41	-0.004	-0.004	-0.040	0.018	0.000	89.119%		
X		0.003	-0.004	-0.018	0.014	-0.000	88.770%		
σ		0.006	0.001	0.020	0.004	0.003	0.558%		
%RSD		223.600	21.610	109.900	29.230	1567.000	0.628		

180-43279-A-3-A 4/26/2015 12:53:23 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	00:52:31	60.169%	-0.143	174.600	176.100	0.000	1068000.000	15840.000	16440.000
2	00:52:39	60.881%	-0.121	168.300	178.800	0.000	1086000.000	16010.000	16660.000
3	00:52:47	59.038%	-0.047	171.800	185.400	0.000	1106000.000	16200.000	16960.000
X		60.029%	-0.104	171.600	180.100	0.000	1087000.000	16020.000	16690.000
σ		0.929%	0.050	3.175	4.807	0.000	18750.000	177.500	257.300
%RSD		1.548	48.600	1.851	2.669	0.000	1.725	1.108	1.542
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:31	3.882	9957.000	0.000	86760.000	101100.000	104400.000	65.713%	7.372
2	00:52:39	3.290	10190.000	0.000	89470.000	106100.000	108500.000	64.972%	6.456
3	00:52:47	2.766	10670.000	0.000	92220.000	110900.000	111500.000	63.978%	7.328
X		3.313	10270.000	0.000	89490.000	106000.000	108100.000	64.888%	7.052
σ		0.558	364.400	0.000	2733.000	4936.000	3519.000	0.870%	0.517
%RSD		16.850	3.547	0.000	3.054	4.654	3.255	1.341	7.324
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:31	0.615	1.446	612.400	7412.000	7180.000	0.513	7.556	1.146
2	00:52:39	0.042	1.599	634.600	7555.000	7280.000	0.501	8.369	1.283
3	00:52:47	1.708	1.494	659.300	7548.000	7311.000	0.572	8.103	1.255
X		0.788	1.513	635.400	7505.000	7257.000	0.529	8.009	1.228
σ		0.846	0.078	23.430	80.260	68.410	0.038	0.414	0.073
%RSD		107.400	5.172	3.688	1.070	0.943	7.198	5.174	5.908
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:31	1.156	7.028	7.103	3.196	0.765	11.510	0.000	1420.000
2	00:52:39	1.219	7.587	6.629	3.310	0.913	11.670	0.000	1440.000
3	00:52:47	1.262	7.058	6.710	3.330	0.835	12.800	0.000	1430.000
X		1.212	7.224	6.814	3.279	0.838	11.990	0.000	1430.000
σ		0.053	0.314	0.254	0.072	0.074	0.705	0.000	10.180
%RSD		4.402	4.351	3.725	2.211	8.849	5.876	0.000	0.712
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:31	67.875%	49.040	49.720	58.337%	-0.008	-0.021	0.034	-0.013
2	00:52:39	67.532%	51.200	49.430	58.899%	-0.005	0.015	0.034	0.007
3	00:52:47	68.606%	48.350	49.980	59.142%	-0.014	-0.008	0.034	-0.007
X		68.004%	49.530	49.710	58.793%	-0.009	-0.005	0.034	-0.004
σ		0.549%	1.485	0.277	0.413%	0.005	0.019	0.000	0.010
%RSD		0.807	2.999	0.558	0.702	53.990	387.900	1.123	258.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:52:31	64.372%	-0.670	3.840	3.876	106.900	100.500	73.969%	76.099%
2	00:52:39	65.422%	-0.446	3.956	3.800	105.000	103.400	75.027%	75.779%
3	00:52:47	66.034%	-0.687	4.115	3.871	105.400	104.800	74.741%	77.036%
X		65.276%	-0.601	3.971	3.849	105.800	102.900	74.579%	76.305%
σ		0.840%	0.134	0.138	0.042	1.019	2.195	0.547%	0.654%
%RSD		1.287	22.330	3.477	1.093	0.963	2.134	0.734	0.857
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:52:31	-0.003	-0.003	0.113	0.099	0.097	82.758%		
2	00:52:39	-0.001	-0.006	0.114	0.083	0.090	83.367%		
3	00:52:47	-0.001	-0.012	0.081	0.047	0.090	83.834%		
X		-0.002	-0.007	0.103	0.077	0.092	83.320%		
σ		0.001	0.005	0.018	0.027	0.004	0.540%		
%RSD		65.080	62.320	17.990	34.620	4.169	0.648		

CCV 1533080 4/26/2015 12:58:29 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	00:57:36	76.967%	88.790	88.240	94.850	0.000	55190.000	51910.000	54330.000
2	00:57:44	77.035%	91.300	94.470	97.440	0.000	54620.000	51490.000	54210.000
3	00:57:52	77.691%	91.950	95.560	94.780	0.000	54150.000	51370.000	53080.000
X		77.231%	90.680%	92.758%	95.690%	0.000	109.309%	103.182%	107.748%
σ		0.400%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.518	1.841	4.259	1.581	0.000	0.950	0.542	1.276
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:36	547.700	4598.000	0.000	44820.000	43290.000	45500.000	81.519%	86.540
2	00:57:44	559.500	4759.000	0.000	46470.000	45050.000	47390.000	79.746%	89.780
3	00:57:52	544.100	4787.000	0.000	47420.000	46160.000	48310.000	79.539%	92.300
X		110.083%	94.289%	0.000	92.477%	89.664%	94.134%	80.268%	89.540%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.088%	n/a
%RSD		1.463	2.169	0.000	2.848	3.230	3.040	1.356	3.223
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:36	94.190	93.310	462.300	23590.000	22260.000	91.370	90.900	92.400
2	00:57:44	96.540	94.940	486.200	24290.000	22640.000	93.400	95.830	94.570
3	00:57:52	96.400	96.950	491.700	24190.000	22670.000	93.420	94.460	93.580
X		95.709%	95.066%	96.008%	96.086%	90.099%	92.731%	93.731%	93.517%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.376	1.917	3.259	1.576	1.003	1.272	2.713	1.165
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:36	93.820	92.160	91.460	91.990	94.010	89.360	0.000	91.870
2	00:57:44	94.360	91.640	91.330	92.980	95.870	98.840	0.000	92.480
3	00:57:52	95.480	92.600	93.500	93.700	94.670	90.400	0.000	92.380
X		94.554%	92.134%	92.095%	92.889%	94.851%	92.867%	0.000	92.242%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.897	0.522	1.321	0.924	0.996	5.600	0.000	0.353
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:36	79.369%	93.790	93.980	70.648%	93.470	92.980	93.570	93.750
2	00:57:44	79.472%	95.110	95.520	70.802%	93.410	93.090	94.240	95.080
3	00:57:52	80.215%	96.750	96.340	71.393%	94.300	93.010	94.920	94.290
X		79.686%	95.218%	95.278%	70.947%	93.728%	93.030%	94.242%	94.372%
σ		0.462%	n/a	n/a	0.393%	n/a	n/a	n/a	n/a
%RSD		0.579	1.558	1.260	0.554	0.532	0.062	0.717	0.709
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:36	74.773%	92.530	92.840	93.950	95.690	96.200	81.913%	82.494%
2	00:57:44	75.416%	92.120	93.040	93.310	96.130	97.470	82.587%	83.672%
3	00:57:52	76.269%	92.200	94.600	93.500	97.030	96.630	82.179%	83.597%
X		75.486%	92.282%	93.491%	93.588%	96.283%	96.765%	82.226%	83.254%
σ		0.750%	n/a	n/a	n/a	n/a	n/a	0.339%	0.659%
%RSD		0.994	0.233	1.029	0.351	0.708	0.667	0.413	0.792
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:57:36	95.030	95.420	94.140	95.870	94.960	91.640%		
2	00:57:44	97.660	95.160	97.450	95.800	96.230	91.779%		
3	00:57:52	97.020	94.670	96.290	95.870	96.150	92.083%		
X		96.572%	95.086%	95.956%	95.846%	95.782%	91.834%		
σ		n/a	n/a	n/a	n/a	n/a	0.226%		
%RSD		1.423	0.402	1.750	0.042	0.744	0.247		

CCB3 4/26/2015 1:07:38 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	01:06:45	88.472%	-0.095	1.218	0.824	0.000	61.260	4.853	9.778
2	01:06:53	87.865%	-0.054	0.788	0.607	0.000	64.680	4.689	4.202
3	01:07:01	89.701%	0.006	0.463	0.475	0.000	62.500	4.233	4.475
X		88.679%	-0.047	0.823	0.635	0.000	62.810	4.592	6.152
σ		0.935%	0.051	0.379	0.176	0.000	1.731	0.322	3.144
%RSD		1.054	106.900	46.010	27.730	0.000	2.756	7.005	51.100
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:45	-4.043	3.683	0.000	-15.940	3.039	9.134	89.939%	-0.711
2	01:06:53	-2.950	0.370	0.000	-5.684	20.170	9.226	89.363%	-0.818
3	01:07:01	-2.468	-1.458	0.000	-9.048	25.010	8.520	88.907%	-0.751
X		-3.154	0.865	0.000	-10.220	16.070	8.960	89.403%	-0.760
σ		0.807	2.606	0.000	5.226	11.540	0.384	0.517%	0.054
%RSD		25.590	301.300	0.000	51.120	71.830	4.285	0.579	7.059
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:45	0.028	-0.043	0.074	7.875	6.689	0.001	-0.017	-0.081
2	01:06:53	-0.013	-0.023	0.070	7.578	6.710	0.009	-0.017	-0.073
3	01:07:01	0.003	-0.038	0.070	6.797	4.750	0.006	-0.007	-0.094
X		0.006	-0.034	0.071	7.417	6.050	0.005	-0.014	-0.083
σ		0.020	0.010	0.002	0.557	1.126	0.004	0.006	0.011
%RSD		343.100	30.020	3.292	7.512	18.610	70.710	41.000	12.780
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:45	-0.018	0.046	0.063	0.073	0.064	0.773	0.000	0.006
2	01:06:53	-0.033	0.019	-0.040	0.021	0.090	1.201	0.000	0.025
3	01:07:01	-0.020	0.058	-0.025	0.023	0.166	-0.492	0.000	0.008
X		-0.024	0.041	-0.000	0.039	0.106	0.494	0.000	0.013
σ		0.008	0.020	0.056	0.029	0.053	0.880	0.000	0.010
%RSD		35.190	48.830	20720.000	74.510	49.860	178.200	0.000	77.540
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:45	89.963%	0.195	0.268	83.204%	-0.004	-0.005	-0.000	-0.026
2	01:06:53	90.929%	0.207	0.274	83.818%	-0.009	0.007	0.025	-0.037
3	01:07:01	93.223%	0.317	0.286	85.383%	-0.002	-0.020	-0.000	-0.022
X		91.372%	0.240	0.276	84.135%	-0.005	-0.006	0.008	-0.028
σ		1.675%	0.067	0.009	1.124%	0.003	0.013	0.015	0.008
%RSD		1.833	28.090	3.217	1.335	64.900	216.400	182.700	27.080
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:45	85.892%	-0.956	0.071	0.086	0.024	0.001	89.356%	90.015%
2	01:06:53	87.157%	-1.007	0.055	0.036	0.002	0.040	89.906%	90.419%
3	01:07:01	87.743%	-0.982	0.102	0.030	0.002	-0.012	90.710%	91.715%
X		86.930%	-0.982	0.076	0.051	0.009	0.010	89.991%	90.716%
σ		0.946%	0.026	0.024	0.031	0.013	0.027	0.681%	0.888%
%RSD		1.088	2.636	31.080	60.170	132.100	268.100	0.757	0.979
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:06:45	0.049	0.062	-0.089	-0.059	-0.070	103.530%		
2	01:06:53	0.053	0.046	-0.093	-0.054	-0.066	104.468%		
3	01:07:01	0.045	0.045	-0.087	-0.059	-0.070	104.730%		
X		0.049	0.051	-0.090	-0.057	-0.069	104.243%		
σ		0.004	0.010	0.003	0.003	0.002	0.631%		
%RSD		8.949	18.580	3.541	4.660	2.941	0.605		

180-43257-B-1-A 4/26/2015 1:12:46 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	01:11:55	70.222%	-0.080	33.470	33.500	0.000	29890.000	13860.000	14270.000	
2	01:12:02	70.357%	-0.120	33.960	35.740	0.000	30320.000	13890.000	14740.000	
3	01:12:10	70.611%	-0.100	33.530	34.380	0.000	30000.000	13820.000	14480.000	
X		70.397%	-0.100	33.650	34.540	0.000	30070.000	13860.000	14500.000	
		σ	0.197%	0.020	0.268	1.128	0.000	222.000	34.580	236.500
		%RSD	0.280	20.110	0.796	3.267	0.000	0.738	0.250	1.631
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:11:55	5.680	4247.000	0.000	2838.000	106400.000	108600.000	70.763%	2.567	
2	01:12:02	4.275	4345.000	0.000	2946.000	110300.000	113100.000	70.088%	1.856	
3	01:12:10	2.536	4317.000	0.000	2942.000	111300.000	113800.000	70.384%	2.888	
X		4.163	4303.000	0.000	2909.000	109300.000	111800.000	70.412%	2.437	
		σ	1.575	49.970	0.000	61.140	2585.000	2812.000	0.338%	0.528
		%RSD	37.830	1.161	0.000	2.102	2.365	2.515	0.481	21.660
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:11:55	-0.005	2.560	1.199	34.570	205.800	0.186	0.727	0.821	
2	01:12:02	-1.076	2.610	1.385	32.890	203.600	0.143	0.549	0.824	
3	01:12:10	-0.475	2.758	1.138	30.890	219.400	0.146	0.791	0.734	
X		-0.519	2.643	1.241	32.780	209.600	0.159	0.689	0.793	
		σ	0.537	0.103	0.128	1.845	8.579	0.024	0.125	0.051
		%RSD	103.400	3.889	10.350	5.627	4.093	15.240	18.190	6.430
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:11:55	0.747	1.960	1.709	0.718	1.137	2.372	0.000	218.300	
2	01:12:02	0.693	2.252	1.945	0.853	1.527	0.270	0.000	223.800	
3	01:12:10	0.745	1.936	1.943	0.758	1.161	3.575	0.000	220.700	
X		0.728	2.049	1.866	0.777	1.275	2.072	0.000	220.900	
		σ	0.031	0.176	0.136	0.069	1.673	0.000	2.788	
		%RSD	4.240	8.582	7.270	8.926	17.160	80.720	0.000	1.262
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:11:55	73.157%	1.168	1.102	64.834%	-0.010	-0.019	-0.000	-0.016	
2	01:12:02	73.748%	0.840	1.080	65.984%	-0.013	-0.022	0.031	-0.010	
3	01:12:10	74.117%	1.087	1.125	65.827%	-0.010	-0.019	0.015	-0.004	
X		73.674%	1.031	1.102	65.548%	-0.011	-0.020	0.015	-0.010	
		σ	0.484%	0.171	0.023	0.624%	0.002	0.002	0.015	0.006
		%RSD	0.657	16.550	2.062	0.952	15.950	8.925	102.900	57.360
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:11:55	70.739%	-0.600	0.294	0.169	41.700	40.540	78.856%	79.841%	
2	01:12:02	72.112%	-0.627	0.264	0.198	41.560	39.280	78.797%	80.998%	
3	01:12:10	72.605%	-0.619	0.282	0.150	40.990	40.130	80.319%	81.757%	
X		71.819%	-0.615	0.280	0.172	41.420	39.980	79.324%	80.865%	
		σ	0.967%	0.014	0.015	0.024	0.380	0.641	0.862%	0.965%
		%RSD	1.346	2.324	5.406	13.960	0.917	1.604	1.087	1.193
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	01:11:55	0.056	0.057	-0.009	-0.008	-0.012	90.551%			
2	01:12:02	0.061	0.042	0.016	0.013	-0.001	91.280%			
3	01:12:10	0.038	0.024	-0.008	0.015	0.006	91.897%			
X		0.052	0.041	-0.001	0.007	-0.002	91.243%			
		σ	0.012	0.016	0.014	0.013	0.009	0.674%		
		%RSD	23.970	40.360	2777.000	180.800	419.100	0.738		

180-43257-B-2-A 4/26/2015 1:17:54 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	01:17:01	70.923%	-0.091	30.130	32.770	0.000	27270.000	13480.000	13950.000
2	01:17:09	70.232%	-0.120	31.920	34.950	0.000	27680.000	13620.000	14180.000
3	01:17:16	69.255%	-0.089	34.700	34.060	0.000	27840.000	13980.000	14570.000
X		70.137%	-0.100	32.250	33.930	0.000	27600.000	13690.000	14230.000
σ		0.838%	0.018	2.303	1.095	0.000	296.000	260.600	314.100
%RSD		1.195	17.580	7.139	3.227	0.000	1.072	1.903	2.207
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:01	8.330	4468.000	0.000	2634.000	102000.000	104000.000	70.896%	2.069
2	01:17:09	8.636	4584.000	0.000	2705.000	104800.000	107900.000	70.211%	1.824
3	01:17:16	8.818	4683.000	0.000	2784.000	109500.000	111200.000	68.773%	2.417
X		8.595	4579.000	0.000	2707.000	105400.000	107700.000	69.960%	2.103
σ		0.247	107.600	0.000	74.980	3760.000	3604.000	1.084%	0.298
%RSD		2.869	2.349	0.000	2.769	3.566	3.347	1.549	14.180
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:01	-0.465	2.716	10.920	30.270	202.100	0.175	0.834	0.616
2	01:17:09	-1.472	2.892	11.460	31.820	201.800	0.132	0.723	0.693
3	01:17:16	-0.450	2.904	11.900	31.410	210.300	0.117	0.612	0.684
X		-0.796	2.838	11.430	31.170	204.700	0.141	0.723	0.664
σ		0.586	0.105	0.492	0.802	4.805	0.030	0.111	0.042
%RSD		73.600	3.711	4.308	2.572	2.347	21.120	15.350	6.308
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:01	0.706	3.104	3.082	0.776	1.051	3.026	0.000	224.400
2	01:17:09	0.855	2.659	3.086	0.808	0.654	0.920	0.000	226.800
3	01:17:16	0.583	3.156	3.167	0.913	0.950	4.450	0.000	223.700
X		0.715	2.973	3.112	0.833	0.885	2.799	0.000	224.900
σ		0.136	0.273	0.048	0.072	0.207	1.776	0.000	1.611
%RSD		19.030	9.191	1.548	8.589	23.350	63.460	0.000	0.716
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:01	71.931%	0.590	0.929	64.166%	-0.027	-0.009	-0.000	-0.015
2	01:17:09	71.791%	0.891	0.798	64.481%	-0.021	-0.019	0.015	-0.022
3	01:17:16	72.790%	0.762	0.841	64.489%	-0.021	-0.016	0.031	-0.016
X		72.171%	0.748	0.856	64.379%	-0.023	-0.015	0.015	-0.018
σ		0.541%	0.151	0.067	0.184%	0.003	0.005	0.016	0.004
%RSD		0.750	20.210	7.793	0.286	14.480	32.480	102.600	20.370
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:01	70.310%	-0.983	0.164	0.187	45.050	45.000	78.684%	78.891%
2	01:17:09	70.166%	-0.791	0.164	0.142	46.010	43.600	78.993%	81.240%
3	01:17:16	70.610%	-0.886	0.175	0.129	44.930	44.800	79.258%	80.749%
X		70.362%	-0.887	0.167	0.153	45.330	44.470	78.978%	80.293%
σ		0.227%	0.096	0.006	0.031	0.595	0.759	0.287%	1.239%
%RSD		0.322	10.790	3.872	20.300	1.313	1.707	0.364	1.543
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:17:01	0.018	0.003	0.084	0.097	0.077	89.689%		
2	01:17:09	0.021	0.007	0.084	0.089	0.068	90.785%		
3	01:17:16	0.003	0.010	0.041	0.076	0.060	90.780%		
X		0.014	0.007	0.070	0.087	0.068	90.418%		
σ		0.009	0.004	0.025	0.011	0.009	0.631%		
%RSD		66.210	52.210	35.830	12.220	12.680	0.698		

180-43257-B-3-A 4/26/2015 1:23:02 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	01:22:09	68.908%	-0.098	34.950	37.160	0.000	47480.000	15510.000	16190.000
2	01:22:16	69.196%	-0.109	35.110	37.730	0.000	47800.000	15820.000	16480.000
3	01:22:24	69.308%	-0.150	34.050	38.630	0.000	48730.000	15730.000	16470.000
X		69.138%	-0.119	34.700	37.840	0.000	48000.000	15690.000	16380.000
σ		0.206%	0.027	0.571	0.739	0.000	652.700	156.600	160.300
%RSD		0.299	22.830	1.644	1.953	0.000	1.360	0.998	0.979
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:09	21.760	4652.000	0.000	3283.000	89640.000	90780.000	69.140%	2.091
2	01:22:16	19.460	4701.000	0.000	3416.000	91990.000	94070.000	68.061%	2.567
3	01:22:24	20.720	4804.000	0.000	3502.000	93810.000	96090.000	67.460%	1.796
X		20.650	4719.000	0.000	3400.000	91810.000	93650.000	68.220%	2.151
σ		1.153	77.200	0.000	110.200	2091.000	2682.000	0.851%	0.389
%RSD		5.586	1.636	0.000	3.242	2.278	2.864	1.248	18.070
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:09	-0.195	5.047	9.080	55.310	221.400	0.154	0.459	0.633
2	01:22:16	-0.827	4.833	9.498	55.500	203.300	0.151	0.486	0.662
3	01:22:24	0.267	4.871	9.568	55.890	209.800	0.168	0.464	0.628
X		-0.252	4.917	9.382	55.560	211.500	0.158	0.470	0.641
σ		0.549	0.114	0.264	0.297	9.176	0.009	0.014	0.018
%RSD		218.100	2.323	2.814	0.534	4.339	5.960	3.063	2.853
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:09	0.536	6.929	7.722	0.579	0.326	2.130	0.000	189.200
2	01:22:16	0.582	7.380	7.604	0.642	0.152	1.834	0.000	186.300
3	01:22:24	0.549	7.178	8.296	0.626	0.289	2.019	0.000	191.800
X		0.556	7.162	7.874	0.616	0.256	1.995	0.000	189.100
σ		0.023	0.226	0.370	0.033	0.092	0.149	0.000	2.737
%RSD		4.179	3.158	4.702	5.300	35.850	7.481	0.000	1.447
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:09	70.047%	1.939	1.933	62.248%	-0.021	-0.019	-0.000	-0.034
2	01:22:16	72.127%	2.282	1.946	63.832%	-0.015	-0.022	-0.000	-0.028
3	01:22:24	71.591%	1.971	1.918	63.695%	-0.015	-0.015	-0.000	-0.021
X		71.255%	2.064	1.932	63.258%	-0.017	-0.019	-0.000	-0.028
σ		1.080%	0.190	0.014	0.877%	0.003	0.003	0.000	0.006
%RSD		1.516	9.192	0.713	1.387	19.330	16.880	11.840	22.850
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:22:09	68.702%	-0.880	0.003	-0.030	40.910	42.450	76.635%	78.626%
2	01:22:16	69.761%	-0.880	0.002	-0.020	41.120	40.900	78.104%	78.834%
3	01:22:24	69.198%	-0.977	0.053	-0.007	41.370	41.200	78.734%	80.666%
X		69.220%	-0.912	0.020	-0.019	41.130	41.520	77.824%	79.376%
σ		0.530%	0.056	0.029	0.011	0.232	0.824	1.077%	1.122%
%RSD		0.766	6.137	149.100	59.470	0.563	1.985	1.384	1.414
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:22:09	0.000	-0.008	-0.036	-0.014	-0.018	88.206%		
2	01:22:16	-0.000	-0.000	-0.025	0.007	-0.005	89.155%		
3	01:22:24	0.004	0.003	-0.004	0.017	-0.005	89.795%		
X		0.001	-0.002	-0.022	0.004	-0.009	89.052%		
σ		0.002	0.006	0.017	0.016	0.007	0.799%		
%RSD		172.700	305.500	76.410	454.300	77.050	0.897		

180-43257-B-4-A 4/26/2015 1:28:07 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	01:27:15	67.821%	-0.149	46.270	46.930	0.000	72360.000	19030.000	19860.000
2	01:27:22	67.478%	-0.065	50.500	48.530	0.000	73950.000	19590.000	20320.000
3	01:27:30	67.324%	-0.044	46.550	50.160	0.000	74480.000	19470.000	20480.000
X		67.541%	-0.086	47.770	48.540	0.000	73600.000	19370.000	20220.000
σ		0.255%	0.056	2.363	1.614	0.000	1103.000	293.500	322.900
%RSD		0.377	64.720	4.945	3.324	0.000	1.499	1.515	1.597
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:27:15	49.930	3720.000	0.000	4758.000	80910.000	81930.000	68.328%	2.666
2	01:27:22	52.620	3810.000	0.000	4872.000	82630.000	84390.000	67.440%	2.829
3	01:27:30	51.560	3881.000	0.000	4981.000	85100.000	86940.000	66.619%	2.934
X		51.370	3803.000	0.000	4870.000	82880.000	84420.000	67.463%	2.810
σ		1.355	80.890	0.000	111.200	2103.000	2501.000	0.855%	0.135
%RSD		2.638	2.127	0.000	2.284	2.537	2.963	1.267	4.814
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:27:15	0.500	7.125	7.345	237.000	382.800	0.268	0.784	2.428
2	01:27:22	-1.064	7.535	7.633	241.500	394.700	0.211	0.653	2.436
3	01:27:30	-0.643	7.589	7.639	242.300	380.400	0.239	0.685	2.233
X		-0.402	7.416	7.539	240.200	386.000	0.239	0.707	2.366
σ		0.809	0.254	0.168	2.865	7.659	0.029	0.069	0.115
%RSD		201.100	3.424	2.231	1.192	1.984	12.010	9.684	4.850
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:27:15	2.643	3.759	3.396	0.717	0.740	1.349	0.000	194.200
2	01:27:22	2.642	3.579	3.707	0.661	0.801	2.252	0.000	194.100
3	01:27:30	2.433	4.007	3.971	0.597	0.461	1.701	0.000	193.100
X		2.573	3.782	3.691	0.659	0.668	1.767	0.000	193.800
σ		0.121	0.215	0.288	0.060	0.181	0.455	0.000	0.612
%RSD		4.710	5.687	7.803	9.125	27.140	25.760	0.000	0.316
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:27:15	69.977%	8.177	8.036	62.492%	0.419	0.429	0.016	-0.008
2	01:27:22	71.140%	8.075	7.652	62.988%	0.428	0.398	0.016	-0.034
3	01:27:30	71.336%	7.969	8.222	63.451%	0.403	0.375	0.016	-0.008
X		70.818%	8.073	7.970	62.977%	0.417	0.400	0.016	-0.017
σ		0.735%	0.104	0.291	0.480%	0.013	0.027	0.000	0.015
%RSD		1.037	1.292	3.645	0.762	3.091	6.824	0.548	88.380
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:27:15	68.636%	-1.024	0.075	-0.012	39.840	40.540	77.572%	79.593%
2	01:27:22	69.034%	-1.055	0.066	0.011	40.600	39.590	77.837%	79.862%
3	01:27:30	68.795%	-0.968	0.070	0.011	40.220	39.160	79.626%	80.507%
X		68.821%	-1.015	0.071	0.003	40.220	39.760	78.345%	79.987%
σ		0.200%	0.044	0.005	0.013	0.380	0.705	1.117%	0.470%
%RSD		0.291	4.342	6.494	426.000	0.945	1.772	1.426	0.587
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:27:15	-0.008	-0.007	0.057	0.047	0.055	90.082%		
2	01:27:22	0.011	0.000	0.060	0.044	0.053	90.641%		
3	01:27:30	0.006	0.002	0.054	0.068	0.048	90.215%		
X		0.003	-0.002	0.057	0.053	0.052	90.313%		
σ		0.010	0.005	0.003	0.013	0.004	0.292%		
%RSD		341.000	309.200	5.835	25.400	7.202	0.323		

180-43257-B-4-A SD@5 4/26/2015 1:33:10 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	01:32:17	71.371%	-0.131	9.698	9.195	0.000	14360.000	3924.000	4018.000	
2	01:32:25	71.740%	-0.141	9.885	9.352	0.000	14560.000	3831.000	4039.000	
3	01:32:33	70.808%	-0.071	10.580	9.907	0.000	14660.000	3957.000	4125.000	
X		71.306%	-0.114	10.050	9.485	0.000	14530.000	3904.000	4061.000	
		σ	0.469%	0.038	0.464	0.374	0.000	151.500	65.260	56.590
		%RSD	0.658	33.250	4.617	3.945	0.000	1.043	1.671	1.394
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:32:17	7.581	775.400	0.000	874.700	16250.000	16260.000	73.295%	-0.406	
2	01:32:25	6.762	789.700	0.000	900.100	16580.000	16960.000	71.489%	-0.201	
3	01:32:33	9.002	805.100	0.000	917.400	17190.000	17290.000	71.239%	-0.144	
X		7.782	790.000	0.000	897.400	16670.000	16840.000	72.008%	-0.250	
		σ	1.134	14.850	0.000	21.480	476.900	524.200	1.122%	0.138
		%RSD	14.570	1.879	0.000	2.394	2.860	3.113	1.558	55.020
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:32:17	0.045	1.582	1.378	46.450	69.570	0.033	0.204	0.384	
2	01:32:25	-0.461	1.561	1.455	46.150	80.570	0.036	0.121	0.352	
3	01:32:33	0.066	1.681	1.426	47.160	71.360	0.046	0.018	0.350	
X		-0.117	1.608	1.419	46.590	73.830	0.038	0.114	0.362	
		σ	0.298	0.064	0.039	5.018	5.906	0.007	0.093	0.019
		%RSD	255.400	3.983	2.722	1.113	7.999	17.500	81.650	5.294
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:32:17	0.393	1.758	1.693	0.042	0.049	0.378	0.000	38.570	
2	01:32:25	0.470	1.710	1.609	0.043	0.082	-0.322	0.000	38.310	
3	01:32:33	0.513	1.617	1.400	0.070	0.081	0.177	0.000	38.710	
X		0.459	1.695	1.567	0.052	0.071	0.078	0.000	38.530	
		σ	0.061	0.072	0.151	0.016	0.019	0.360	0.000	0.202
		%RSD	13.300	4.246	9.613	30.800	27.200	463.700	0.000	0.523
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:32:17	74.233%	1.513	1.591	67.903%	0.056	0.067	-0.000	-0.047	
2	01:32:25	73.307%	1.704	1.528	68.087%	0.045	0.111	0.015	-0.041	
3	01:32:33	74.418%	1.311	1.598	68.062%	0.053	0.037	-0.000	-0.047	
X		73.986%	1.509	1.572	68.017%	0.051	0.071	0.005	-0.045	
		σ	0.595%	0.197	0.039	0.100%	0.006	0.037	0.009	0.003
		%RSD	0.804	13.030	2.456	0.147	11.410	52.020	189.900	7.769
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:32:17	72.732%	-1.166	-0.012	-0.079	8.664	7.907	79.560%	80.278%	
2	01:32:25	73.160%	-1.215	-0.048	-0.080	7.609	8.161	79.998%	81.517%	
3	01:32:33	73.693%	-1.250	-0.001	-0.097	7.432	7.864	80.596%	81.690%	
X		73.195%	-1.211	-0.020	-0.085	7.902	7.977	80.051%	81.161%	
		σ	0.481%	0.042	0.025	0.010	0.666	0.160	0.520%	0.770%
		%RSD	0.658	3.473	122.100	11.530	8.433	2.009	0.650	0.949
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	01:32:17	-0.014	-0.011	-0.040	-0.017	-0.037	96.176%			
2	01:32:25	-0.009	-0.007	-0.031	-0.030	-0.036	96.529%			
3	01:32:33	-0.012	-0.008	-0.056	-0.032	-0.048	96.506%			
X		-0.012	-0.009	-0.042	-0.026	-0.041	96.404%			
		σ	0.003	0.002	0.013	0.008	0.007	0.198%		
		%RSD	23.860	26.390	29.990	31.870	17.100	0.205		

180-43257-B-4-B MS 4/26/2015 1:38:15 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	01:37:22	62.602%	46.560	1068.000	1061.000	0.000	131000.000	71330.000	75170.000
2	01:37:29	62.577%	48.660	1064.000	1078.000	0.000	132500.000	71720.000	75240.000
3	01:37:37	63.902%	48.980	1066.000	1087.000	0.000	131400.000	72120.000	75140.000
X		63.027%	48.070	1066.000	1076.000	0.000	131600.000	71720.000	75190.000
σ		0.758%	1.317	1.816	13.330	0.000	743.800	396.200	53.060
%RSD		1.203	2.741	0.170	1.239	0.000	0.565	0.552	0.071
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:22	2144.000	12760.000	0.000	49020.000	127600.000	131400.000	62.445%	885.800
2	01:37:29	2178.000	12880.000	0.000	49980.000	131300.000	134200.000	62.410%	915.800
3	01:37:37	2147.000	13100.000	0.000	50540.000	132500.000	136900.000	62.633%	932.700
X		2157.000	12910.000	0.000	49840.000	130500.000	134200.000	62.496%	911.400
σ		18.810	172.100	0.000	769.100	2577.000	2716.000	0.120%	23.750
%RSD		0.872	1.333	0.000	1.543	1.976	2.025	0.192	2.606
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:22	493.700	201.200	491.400	1208.000	1377.000	470.000	463.100	238.000
2	01:37:29	492.600	202.800	503.800	1216.000	1411.000	476.100	467.000	238.800
3	01:37:37	493.300	202.000	510.400	1215.000	1435.000	477.700	470.100	240.800
X		493.200	202.000	501.900	1213.000	1408.000	474.600	466.800	239.200
σ		0.562	0.819	9.667	4.576	29.190	4.054	3.512	1.480
%RSD		0.114	0.406	1.926	0.377	2.073	0.854	0.752	0.619
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:22	244.500	460.300	465.200	37.260	11.020	10.740	0.000	1143.000
2	01:37:29	240.900	453.900	462.400	38.250	10.020	10.380	0.000	1151.000
3	01:37:37	243.100	457.500	470.500	38.450	9.470	9.576	0.000	1149.000
X		242.800	457.200	466.000	37.990	10.170	10.230	0.000	1148.000
σ		1.825	3.206	4.129	0.639	0.784	0.598	0.000	4.577
%RSD		0.752	0.701	0.886	1.683	7.707	5.841	0.000	0.399
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:22	66.511%	1003.000	1025.000	58.405%	47.420	47.540	47.880	87.590
2	01:37:29	66.626%	1009.000	1022.000	59.133%	48.030	46.900	49.140	88.060
3	01:37:37	67.591%	1003.000	1030.000	59.455%	46.850	45.940	48.420	88.310
X		66.910%	1005.000	1026.000	58.998%	47.430	46.790	48.480	87.990
σ		0.593%	3.281	4.196	0.538%	0.592	0.805	0.632	0.366
%RSD		0.887	0.326	0.409	0.912	1.249	1.720	1.304	0.416
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:37:22	63.536%	1956.000	480.700	481.600	1900.000	1884.000	73.978%	75.516%
2	01:37:29	63.822%	1962.000	485.200	475.400	1908.000	1891.000	74.261%	76.382%
3	01:37:37	64.607%	1953.000	485.200	478.100	1909.000	1907.000	74.495%	77.771%
X		63.988%	1957.000	483.700	478.400	1906.000	1894.000	74.245%	76.556%
σ		0.555%	4.815	2.629	3.106	5.164	12.270	0.259%	1.138%
%RSD		0.867	0.246	0.544	0.649	0.271	0.648	0.349	1.486
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:37:22	48.710	47.480	20.220	20.060	20.000	83.809%		
2	01:37:29	48.890	47.610	19.610	19.980	19.830	84.956%		
3	01:37:37	48.970	48.110	20.100	20.070	20.120	85.392%		
X		48.850	47.730	19.980	20.040	19.980	84.719%		
σ		0.132	0.332	0.320	0.050	0.145	0.818%		
%RSD		0.271	0.696	1.604	0.251	0.724	0.965		

180-43257-B-4-C MSD 4/26/2015 1:43:20 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	01:42:28	62.742%	47.360	1073.000	1094.000	0.000	129900.000	71480.000	74760.000
2	01:42:36	61.631%	50.190	1121.000	1143.000	0.000	131000.000	71780.000	75570.000
3	01:42:44	60.925%	53.250	1145.000	1165.000	0.000	134000.000	73510.000	76670.000
X		61.766%	50.270	1113.000	1134.000	0.000	131600.000	72250.000	75660.000
σ		0.916%	2.944	36.690	36.190	0.000	2154.000	1098.000	959.400
%RSD		1.483	5.857	3.297	3.191	0.000	1.637	1.519	1.268
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:28	2186.000	12760.000	0.000	49190.000	127300.000	130600.000	62.405%	901.100
2	01:42:36	2210.000	13060.000	0.000	49780.000	129000.000	132000.000	63.002%	904.000
3	01:42:44	2227.000	13290.000	0.000	50860.000	131900.000	135300.000	62.506%	932.400
X		2208.000	13030.000	0.000	49940.000	129400.000	132600.000	62.638%	912.500
σ		20.840	267.600	0.000	842.800	2349.000	2402.000	0.320%	17.270
%RSD		0.944	2.053	0.000	1.688	1.815	1.811	0.510	1.892
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:28	504.200	206.600	505.400	1229.000	1408.000	480.100	464.600	240.900
2	01:42:36	494.300	202.500	515.200	1217.000	1378.000	472.100	460.000	235.600
3	01:42:44	502.800	206.300	524.300	1249.000	1428.000	483.500	473.700	243.200
X		500.400	205.100	514.900	1232.000	1405.000	478.500	466.100	239.900
σ		5.342	2.313	9.464	16.450	25.070	5.868	6.953	3.882
%RSD		1.067	1.127	1.838	1.336	1.784	1.226	1.492	1.618
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:28	245.400	466.600	470.500	39.620	9.534	13.320	0.000	1151.000
2	01:42:36	241.800	464.200	467.300	38.150	10.070	9.740	0.000	1147.000
3	01:42:44	246.100	467.600	473.000	39.050	10.670	11.530	0.000	1135.000
X		244.400	466.200	470.200	38.940	10.090	11.530	0.000	1145.000
σ		2.271	1.727	2.859	0.741	0.566	1.790	0.000	8.248
%RSD		0.929	0.371	0.608	1.904	5.611	15.520	0.000	0.721
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:28	65.684%	999.400	1026.000	58.336%	46.880	47.290	47.980	87.090
2	01:42:36	67.272%	986.800	1015.000	58.883%	48.130	47.120	49.470	86.330
3	01:42:44	67.593%	996.300	1030.000	58.816%	48.080	47.170	49.170	87.910
X		66.850%	994.200	1023.000	58.678%	47.700	47.190	48.880	87.110
σ		1.022%	6.575	7.768	0.299%	0.707	0.090	0.787	0.789
%RSD		1.529	0.661	0.759	0.509	1.482	0.192	1.610	0.906
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:28	63.584%	1930.000	475.400	475.200	1899.000	1900.000	74.270%	76.641%
2	01:42:36	64.183%	1940.000	478.000	472.100	1916.000	1900.000	74.406%	76.593%
3	01:42:44	64.684%	1931.000	473.200	472.200	1912.000	1882.000	75.470%	76.831%
X		64.150%	1934.000	475.500	473.100	1909.000	1894.000	74.715%	76.688%
σ		0.551%	5.639	2.397	1.760	9.048	10.340	0.657%	0.126%
%RSD		0.858	0.292	0.504	0.372	0.474	0.546	0.880	0.165
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:42:28	48.770	48.680	20.100	19.700	19.960	83.108%		
2	01:42:36	49.450	47.390	19.620	20.000	19.980	85.054%		
3	01:42:44	49.080	48.730	20.020	19.910	19.880	84.915%		
X		49.100	48.270	19.910	19.870	19.940	84.359%		
σ		0.341	0.760	0.256	0.155	0.056	1.086%		
%RSD		0.695	1.574	1.286	0.781	0.283	1.287		

180-43257-B-4-A PDS 4/26/2015 1:48:26 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	01:47:33	63.109%	49.160	1064.000	1093.000	0.000	127900.000	71570.000	74190.000	
2	01:47:41	63.081%	49.540	1087.000	1094.000	0.000	129100.000	72060.000	74990.000	
3	01:47:49	62.248%	52.970	1106.000	1133.000	0.000	129600.000	72120.000	75170.000	
X		62.813%	50.560	1086.000	1107.000	0.000	128900.000	71910.000	74780.000	
		σ	0.489%	2.099	20.740	22.970	0.000	885.800	303.300	521.400
		%RSD	0.779	4.151	1.910	2.075	0.000	0.687	0.422	0.697
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:47:33	2214.000	13440.000	0.000	49840.000	125100.000	128200.000	62.675%	969.700	
2	01:47:41	2187.000	13270.000	0.000	50680.000	129000.000	130800.000	62.009%	981.600	
3	01:47:49	2212.000	13720.000	0.000	51440.000	131100.000	134600.000	62.114%	1004.000	
X		2204.000	13470.000	0.000	50650.000	128400.000	131200.000	62.266%	985.000	
		σ	14.790	224.100	0.000	797.200	3011.000	3185.000	0.358%	17.290
		%RSD	0.671	1.663	0.000	1.574	2.345	2.427	0.575	1.756
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:47:33	501.100	205.300	514.200	1210.000	1357.000	484.000	469.700	239.900	
2	01:47:41	503.400	207.700	523.000	1211.000	1329.000	484.900	480.600	241.000	
3	01:47:49	510.000	206.800	533.800	1221.000	1397.000	484.200	474.300	242.300	
X		504.800	206.600	523.700	1214.000	1361.000	484.400	474.900	241.000	
		σ	4.584	1.199	9.823	6.451	34.210	0.503	5.425	1.206
		%RSD	0.908	0.580	1.876	0.531	2.513	0.104	1.142	0.500
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:47:33	244.300	475.100	471.700	38.550	10.990	14.700	0.000	1143.000	
2	01:47:41	249.200	473.800	478.400	38.260	9.949	9.627	0.000	1148.000	
3	01:47:49	248.100	480.400	471.400	38.990	9.119	10.750	0.000	1146.000	
X		247.200	476.400	473.800	38.600	10.020	11.690	0.000	1146.000	
		σ	2.585	3.520	3.945	0.366	0.939	2.662	0.000	2.752
		%RSD	1.046	0.739	0.833	0.948	9.372	22.770	0.000	0.240
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:47:33	65.419%	1067.000	1095.000	56.901%	45.040	43.380	50.660	91.060	
2	01:47:41	66.746%	1060.000	1097.000	57.780%	44.560	43.600	50.160	92.200	
3	01:47:49	66.970%	1069.000	1091.000	58.290%	43.520	44.170	51.330	91.630	
X		66.378%	1065.000	1094.000	57.657%	44.370	43.720	50.720	91.630	
		σ	0.838%	4.895	3.197	0.703%	0.780	0.406	0.587	0.573
		%RSD	1.263	0.459	0.292	1.219	1.758	0.930	1.158	0.625
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:47:33	62.906%	2062.000	506.400	501.800	1943.000	1913.000	72.239%	74.253%	
2	01:47:41	63.199%	2078.000	508.300	503.900	1949.000	1925.000	73.569%	75.620%	
3	01:47:49	63.704%	2071.000	506.700	502.600	1939.000	1921.000	74.713%	75.270%	
X		63.269%	2070.000	507.100	502.700	1944.000	1920.000	73.507%	75.048%	
		σ	0.404%	7.877	1.029	1.072	4.774	5.955	1.238%	0.710%
		%RSD	0.638	0.381	0.203	0.213	0.246	0.310	1.685	0.946
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	01:47:33	51.020	48.990	20.120	20.060	19.970	82.334%			
2	01:47:41	50.170	49.600	20.760	19.940	20.360	82.668%			
3	01:47:49	51.160	49.320	20.530	20.400	20.310	82.967%			
X		50.780	49.300	20.470	20.130	20.220	82.656%			
		σ	0.538	0.302	0.322	0.238	0.212	0.317%		
		%RSD	1.060	0.613	1.575	1.183	1.047	0.383		

180-43257-B-5-A 4/26/2015 1:53:31 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	01:52:39	63.516%	-0.046	63.270	61.060	0.000	49910.000	16240.000	16680.000	
2	01:52:47	66.294%	-0.095	60.640	59.720	0.000	49090.000	15920.000	16750.000	
3	01:52:55	65.360%	-0.061	59.270	62.260	0.000	49680.000	16290.000	17220.000	
X		65.057%	-0.067	61.060	61.010	0.000	49560.000	16150.000	16880.000	
		σ	1.414%	0.025	2.033	1.269	0.000	419.400	200.100	297.300
		%RSD	2.173	37.060	3.330	2.080	0.000	0.846	1.239	1.761
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:52:39	11.480	3603.000	0.000	4531.000	61310.000	65350.000	64.511%	2.344	
2	01:52:47	10.840	3870.000	0.000	4620.000	63020.000	68100.000	64.490%	2.825	
3	01:52:55	13.950	3923.000	0.000	4713.000	64900.000	68970.000	64.034%	2.309	
X		12.090	3799.000	0.000	4621.000	63080.000	67480.000	64.345%	2.492	
		σ	1.643	171.600	0.000	90.830	1793.000	1886.000	0.270%	0.288
		%RSD	13.580	4.518	0.000	1.966	2.842	2.796	0.419	11.570
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:52:39	0.329	2.504	215.100	41.270	139.100	0.311	0.888	0.387	
2	01:52:47	-1.064	2.499	220.400	39.620	144.000	0.370	1.317	0.263	
3	01:52:55	0.950	2.558	227.200	40.410	138.800	0.287	1.140	0.292	
X		0.071	2.520	220.900	40.430	140.600	0.323	1.115	0.314	
		σ	1.032	0.033	6.069	0.826	2.908	0.043	0.216	0.065
		%RSD	1443.000	1.295	2.748	2.044	2.068	13.330	19.350	20.690
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:52:39	0.491	6.392	5.779	0.587	0.129	0.961	0.000	167.200	
2	01:52:47	0.505	6.040	6.333	0.541	0.020	1.332	0.000	165.000	
3	01:52:55	0.416	6.508	7.403	0.611	0.127	0.677	0.000	166.300	
X		0.470	6.314	6.505	0.580	0.092	0.990	0.000	166.200	
		σ	0.048	0.244	0.826	0.036	0.328	0.000	1.138	
		%RSD	10.210	3.861	12.700	6.126	68.090	33.170	0.000	0.685
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:52:39	66.729%	4.611	4.245	59.504%	-0.021	-0.012	0.051	0.122	
2	01:52:47	68.011%	3.784	3.672	60.291%	-0.024	-0.008	-0.000	0.042	
3	01:52:55	68.024%	3.301	2.788	60.744%	-0.018	-0.018	0.016	0.086	
X		67.588%	3.899	3.568	60.179%	-0.021	-0.013	0.022	0.083	
		σ	0.744%	0.662	0.734	0.627%	0.003	0.005	0.026	0.040
		%RSD	1.100	16.990	20.570	1.043	14.680	40.360	117.600	48.140
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:52:39	65.710%	4.676	1.821	1.760	37.550	35.840	73.511%	75.793%	
2	01:52:47	64.818%	3.419	1.517	1.496	37.190	35.980	74.790%	76.284%	
3	01:52:55	66.578%	2.868	1.174	1.149	35.860	37.420	74.762%	77.223%	
X		65.702%	3.654	1.504	1.468	36.870	36.410	74.354%	76.433%	
		σ	0.880%	0.927	0.324	0.306	0.894	0.873	0.731%	0.727%
		%RSD	1.340	25.370	21.520	20.860	2.424	2.398	0.983	0.951
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	01:52:39	0.148	0.179	0.049	0.081	0.049	86.207%			
2	01:52:47	0.111	0.131	0.056	0.047	0.050	86.485%			
3	01:52:55	0.092	0.100	0.082	0.048	0.065	87.202%			
X		0.117	0.137	0.062	0.059	0.054	86.632%			
		σ	0.029	0.040	0.017	0.019	0.009	0.513%		
		%RSD	24.700	28.910	28.050	33.070	16.280	0.593		

180-43257-B-6-A 4/26/2015 1:58:39 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	01:57:45	64.705%	-0.092	60.550	61.180	0.000	103000.000	19540.000	20130.000	
2	01:57:53	63.628%	-0.080	57.900	62.730	0.000	104000.000	19590.000	20630.000	
3	01:58:01	61.933%	-0.122	60.640	65.560	0.000	106500.000	20400.000	21030.000	
X		63.422%	-0.098	59.700	63.150	0.000	104500.000	19840.000	20600.000	
		σ	1.397%	0.022	1.552	2.222	0.000	1818.000	485.200	451.000
		%RSD	2.203	22.270	2.600	3.518	0.000	1.739	2.446	2.190
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:57:45	37.140	4348.000	0.000	9057.000	61090.000	65140.000	64.065%	1.854	
2	01:57:53	41.160	4425.000	0.000	9224.000	62430.000	66850.000	63.514%	1.331	
3	01:58:01	39.100	4485.000	0.000	9243.000	63020.000	67870.000	62.780%	1.605	
X		39.130	4419.000	0.000	9174.000	62180.000	66620.000	63.453%	1.597	
		σ	2.011	68.680	0.000	102.500	992.800	1378.000	0.645%	0.262
		%RSD	5.139	1.554	0.000	1.117	1.597	2.068	1.016	16.380
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:57:45	-0.797	7.118	2.382	33.120	131.500	0.234	0.824	0.453	
2	01:57:53	0.762	7.208	2.444	33.700	134.800	0.189	0.696	0.336	
3	01:58:01	-0.533	7.037	2.598	33.910	130.200	0.205	0.759	0.451	
X		-0.189	7.121	2.475	33.580	132.200	0.209	0.760	0.413	
		σ	0.835	0.085	0.111	0.409	2.359	0.023	0.064	0.067
		%RSD	440.800	1.199	4.502	1.217	1.785	10.820	8.406	16.170
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:57:45	0.496	5.185	4.732	0.713	0.421	0.293	0.000	146.200	
2	01:57:53	0.961	4.720	5.449	0.699	0.778	2.854	0.000	144.300	
3	01:58:01	0.645	5.049	4.894	0.663	0.490	1.363	0.000	144.900	
X		0.700	4.985	5.025	0.692	0.563	1.503	0.000	145.100	
		σ	0.237	0.239	0.376	0.026	0.189	1.286	0.000	0.948
		%RSD	33.880	4.792	7.486	3.747	33.600	85.570	0.000	0.654
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:57:45	66.149%	1.625	1.631	58.700%	-0.011	-0.015	0.017	0.022	
2	01:57:53	67.217%	1.448	1.688	58.582%	-0.014	-0.022	0.034	0.001	
3	01:58:01	67.310%	1.505	1.580	58.832%	-0.017	-0.025	-0.001	0.008	
X		66.892%	1.526	1.633	58.705%	-0.014	-0.020	0.017	0.010	
		σ	0.645%	0.090	0.054	0.125%	0.003	0.005	0.017	0.011
		%RSD	0.964	5.893	3.281	0.213	22.360	25.330	102.800	105.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	01:57:45	64.497%	0.666	0.756	0.572	39.610	39.250	73.471%	75.391%	
2	01:57:53	64.966%	0.568	0.818	0.824	39.900	38.740	73.616%	75.631%	
3	01:58:01	64.922%	0.263	0.727	0.623	38.800	39.630	74.344%	75.412%	
X		64.795%	0.499	0.767	0.673	39.430	39.210	73.810%	75.478%	
		σ	0.259%	0.210	0.046	0.133	0.569	0.446	0.468%	0.133%
		%RSD	0.400	42.150	6.009	19.730	1.443	1.138	0.634	0.176
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	01:57:45	0.020	0.037	0.070	0.110	0.077	84.407%			
2	01:57:53	0.013	0.026	0.092	0.057	0.066	84.972%			
3	01:58:01	0.038	0.023	0.063	0.051	0.057	85.567%			
X		0.024	0.029	0.075	0.073	0.067	84.982%			
		σ	0.013	0.007	0.015	0.033	0.010	0.580%		
		%RSD	54.080	24.530	20.330	44.820	14.790	0.683		

CCV 1533080 4/26/2015 2:03:44 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	02:02:51	71.183%	88.310	91.340	90.730	0.000	53960.000	50890.000	52790.000
2	02:02:59	69.722%	90.400	91.780	93.420	0.000	55330.000	52730.000	54260.000
3	02:03:07	68.933%	90.970	98.890	96.400	0.000	55860.000	53240.000	55750.000
X		69.946%	89.895%	94.003%	93.519%	0.000	110.100%	104.575%	108.532%
σ		1.142%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.632	1.554	4.505	3.032	0.000	1.784	2.363	2.723
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:51	543.100	4478.000	0.000	43860.000	42850.000	44510.000	71.511%	85.480
2	02:02:59	549.800	4673.000	0.000	45300.000	44160.000	46600.000	69.261%	90.330
3	02:03:07	563.200	4688.000	0.000	45750.000	45110.000	47050.000	69.717%	94.140
X		110.408%	92.259%	0.000	89.938%	88.077%	92.108%	70.163%	89.981%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.189%	n/a
%RSD		1.850	2.539	0.000	2.198	2.584	2.939	1.695	4.828
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:51	93.010	93.560	469.600	23590.000	22390.000	90.690	89.790	90.130
2	02:02:59	96.780	96.180	493.900	24620.000	23290.000	94.270	93.290	94.690
3	02:03:07	95.780	96.190	497.300	24550.000	23100.000	94.110	94.850	96.010
X		95.189%	95.310%	97.388%	97.018%	91.704%	93.023%	92.644%	93.609%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.052	1.593	3.103	2.358	2.078	2.176	2.794	3.298
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:51	90.400	89.100	90.020	91.020	89.690	94.620	0.000	92.300
2	02:02:59	94.540	96.660	95.470	92.680	94.850	96.220	0.000	91.250
3	02:03:07	95.450	92.110	94.040	93.020	92.930	95.140	0.000	93.480
X		93.462%	92.622%	93.177%	92.242%	92.491%	95.328%	0.000	92.344%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.876	4.108	3.029	1.162	2.822	0.857	0.000	1.209
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:51	70.024%	94.250	94.650	61.917%	93.230	93.230	93.640	95.600
2	02:02:59	70.199%	94.450	95.600	62.208%	93.390	92.840	94.340	95.120
3	02:03:07	70.323%	96.860	97.700	63.000%	92.420	93.930	95.090	92.100
X		70.182%	95.187%	95.982%	62.375%	93.012%	93.335%	94.356%	94.275%
σ		0.150%	n/a	n/a	0.561%	n/a	n/a	n/a	n/a
%RSD		0.214	1.526	1.623	0.899	0.562	0.593	0.770	2.009
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:02:51	66.141%	94.120	93.020	94.070	93.780	94.320	73.108%	75.129%
2	02:02:59	67.373%	94.220	92.560	92.430	92.520	93.120	74.513%	76.337%
3	02:03:07	68.666%	92.730	93.370	92.300	93.150	95.660	75.650%	76.320%
X		67.393%	93.689%	92.984%	92.931%	93.149%	94.364%	74.424%	75.929%
σ		1.262%	n/a	n/a	n/a	n/a	n/a	1.273%	0.693%
%RSD		1.873	0.888	0.437	1.062	0.676	1.348	1.711	0.913
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:02:51	96.330	94.620	95.900	95.240	96.120	84.828%		
2	02:02:59	96.360	96.170	96.040	96.750	96.390	84.713%		
3	02:03:07	96.810	95.540	97.710	95.320	96.300	85.236%		
X		96.497%	95.444%	96.548%	95.769%	96.270%	84.926%		
σ		n/a	n/a	n/a	n/a	n/a	0.274%		
%RSD		0.279	0.815	1.043	0.889	0.143	0.323		

CCB4 4/26/2015 2:12:54 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	02:12:01	89.299%	-0.001	1.052	0.829	0.000	21.150	5.330	7.479	
2	02:12:09	86.340%	-0.043	0.819	0.808	0.000	22.750	9.793	6.270	
3	02:12:17	86.722%	-0.028	1.662	0.838	0.000	22.050	5.917	3.888	
X		87.454%	-0.024	1.178	0.825	0.000	21.990	7.014	5.879	
		σ	1.610%	0.021	0.435	0.015	0.802	2.425	1.827	
		%RSD	1.841	89.660	36.950	1.847	0.000	3.647	34.580	31.080
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:12:01	-3.977	-3.409	0.000	-101.900	3.369	0.227	87.183%	-0.791	
2	02:12:09	-2.790	-4.875	0.000	-95.300	18.880	3.828	84.806%	-0.739	
3	02:12:17	-3.377	-7.189	0.000	-101.800	-0.396	3.584	85.504%	-0.741	
X		-3.382	-5.158	0.000	-99.650	7.284	2.546	85.831%	-0.757	
		σ	0.594	1.906	0.000	3.766	10.220	2.012	1.222%	0.029
		%RSD	17.550	36.950	0.000	3.779	140.300	79.020	1.423	3.870
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:12:01	0.041	-0.022	0.058	6.828	8.344	0.001	0.036	-0.150	
2	02:12:09	0.014	-0.035	0.053	6.475	4.080	0.012	-0.016	-0.071	
3	02:12:17	-0.062	-0.043	0.049	6.360	4.682	0.009	-0.016	-0.121	
X		-0.002	-0.033	0.054	6.554	5.702	0.007	0.002	-0.114	
		σ	0.053	0.011	0.005	0.244	2.308	0.005	0.030	0.040
		%RSD	2283.000	32.790	8.988	3.721	40.470	72.860	1974.000	35.330
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:12:01	-0.113	0.093	0.018	0.038	0.093	-0.853	0.000	0.036	
2	02:12:09	-0.096	0.179	-0.016	0.093	0.065	-0.615	0.000	0.025	
3	02:12:17	-0.043	0.009	0.158	0.049	0.038	-0.700	0.000	0.030	
X		-0.084	0.094	0.053	0.060	0.065	-0.723	0.000	0.031	
		σ	0.036	0.085	0.092	0.029	0.121	0.000	0.006	
		%RSD	43.430	90.530	173.300	48.770	42.060	16.720	0.000	18.590
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:12:01	88.124%	0.274	0.282	82.060%	-0.011	-0.005	-0.000	-0.011	
2	02:12:09	89.419%	0.315	0.296	83.099%	-0.002	-0.008	0.012	-0.006	
3	02:12:17	89.857%	0.261	0.276	83.882%	-0.013	-0.003	0.025	-0.027	
X		89.134%	0.283	0.285	83.014%	-0.009	-0.005	0.012	-0.014	
		σ	0.901%	0.028	0.011	0.914%	0.006	0.002	0.013	0.011
		%RSD	1.011	9.961	3.729	1.101	70.320	44.790	103.300	75.310
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:12:01	85.613%	-0.955	0.064	0.067	0.002	0.027	91.879%	91.852%	
2	02:12:09	85.669%	-0.933	0.121	0.038	0.002	0.014	92.947%	93.699%	
3	02:12:17	86.801%	-0.795	0.106	0.003	0.002	0.014	93.058%	92.534%	
X		86.028%	-0.894	0.097	0.036	0.002	0.018	92.628%	92.695%	
		σ	0.670%	0.087	0.030	0.032	0.008	0.651%	0.934%	
		%RSD	0.779	9.701	30.880	89.430	6.379	41.290	0.703	1.007
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	02:12:01	0.044	0.048	-0.069	-0.063	-0.072	99.347%			
2	02:12:09	0.059	0.049	-0.069	-0.056	-0.066	100.030%			
3	02:12:17	0.040	0.052	-0.082	-0.051	-0.066	99.699%			
X		0.048	0.050	-0.073	-0.057	-0.068	99.692%			
		σ	0.010	0.002	0.008	0.006	0.004	0.341%		
		%RSD	21.070	4.172	10.320	10.820	5.343	0.343		

180-43257-B-7-A 4/26/2015 2:18:02 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	02:17:11	62.711%	-0.067	51.570	49.580	0.000	84380.000	24940.000	25520.000
2	02:17:18	62.506%	-0.111	50.420	51.000	0.000	85460.000	25100.000	26260.000
3	02:17:26	63.821%	-0.157	50.380	49.500	0.000	85030.000	25080.000	26470.000
X		63.012%	-0.112	50.790	50.030	0.000	84960.000	25040.000	26080.000
σ		0.708%	0.045	0.674	0.845	0.000	542.700	86.150	499.900
%RSD		1.123	40.510	1.326	1.689	0.000	0.639	0.344	1.916
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:17:11	158.800	4067.000	0.000	6288.000	85400.000	87130.000	61.603%	4.228
2	02:17:18	162.300	4061.000	0.000	6416.000	89200.000	89760.000	60.407%	3.404
3	02:17:26	148.900	4114.000	0.000	6531.000	88550.000	91050.000	60.720%	4.814
X		156.700	4081.000	0.000	6412.000	87720.000	89310.000	60.910%	4.149
σ		6.946	29.040	0.000	121.500	2034.000	1996.000	0.620%	0.708
%RSD		4.434	0.712	0.000	1.894	2.319	2.235	1.019	17.070
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:17:11	0.045	6.221	32.020	318.100	454.800	0.423	1.571	0.758
2	02:17:18	0.485	6.514	33.770	325.300	472.100	0.465	1.596	0.951
3	02:17:26	0.046	6.391	34.040	324.200	468.600	0.395	1.602	0.598
X		0.192	6.375	33.280	322.500	465.100	0.428	1.589	0.769
σ		0.254	0.147	1.098	3.846	9.156	0.035	0.017	0.177
%RSD		132.000	2.301	3.299	1.193	1.968	8.263	1.042	22.980
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:17:11	0.848	8.676	7.840	0.619	0.505	1.305	0.000	191.700
2	02:17:18	1.064	8.510	9.021	0.748	0.573	2.174	0.000	191.600
3	02:17:26	1.046	9.175	9.307	0.744	0.643	-0.013	0.000	193.300
X		0.986	8.787	8.723	0.704	0.574	1.155	0.000	192.200
σ		0.120	0.346	0.778	0.073	0.069	1.101	0.000	0.940
%RSD		12.170	3.937	8.916	10.430	12.050	95.300	0.000	0.489
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:17:11	65.182%	2.429	2.479	58.022%	-0.011	0.013	-0.000	0.015
2	02:17:18	66.569%	2.414	2.507	58.423%	0.008	-0.001	-0.000	0.015
3	02:17:26	66.956%	2.356	2.403	59.463%	-0.021	-0.012	0.068	-0.033
X		66.236%	2.400	2.463	58.636%	-0.008	-0.000	0.022	-0.001
σ		0.932%	0.039	0.054	0.744%	0.015	0.012	0.040	0.028
%RSD		1.408	1.608	2.185	1.269	186.700	66590.000	176.900	2873.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:17:11	63.930%	-0.239	0.958	0.894	55.740	55.420	73.283%	75.132%
2	02:17:18	64.397%	-0.431	0.898	0.876	57.160	55.820	72.924%	75.992%
3	02:17:26	65.562%	-0.388	0.809	0.827	56.280	52.890	74.647%	75.066%
X		64.630%	-0.352	0.888	0.866	56.390	54.710	73.618%	75.396%
σ		0.841%	0.101	0.075	0.035	0.716	1.589	0.909%	0.517%
%RSD		1.301	28.620	8.422	4.038	1.270	2.905	1.235	0.685
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:17:11	0.080	0.081	0.405	0.442	0.444	84.640%		
2	02:17:18	0.058	0.059	0.458	0.436	0.440	85.525%		
3	02:17:26	0.058	0.070	0.453	0.384	0.407	86.391%		
X		0.066	0.070	0.439	0.421	0.430	85.519%		
σ		0.013	0.011	0.030	0.032	0.020	0.876%		
%RSD		19.330	15.920	6.727	7.631	4.657	1.024		

180-43257-B-8-A 4/26/2015 2:23:07 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	02:22:13	63.630%	-0.024	36.560	36.740	0.000	30480.000	14000.000	14510.000	
2	02:22:21	65.058%	-0.104	34.400	37.250	0.000	30580.000	14220.000	14730.000	
3	02:22:29	63.560%	-0.046	36.940	39.180	0.000	31300.000	14370.000	15060.000	
X		64.083%	-0.058	35.970	37.730	0.000	30790.000	14200.000	14770.000	
		σ	0.846%	0.041	1.369	1.287	0.000	449.700	185.700	272.100
		%RSD	1.319	70.830	3.807	3.411	0.000	1.461	1.308	1.843
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:22:13	10.470	4167.000	0.000	2756.000	105000.000	107500.000	64.063%	2.247	
2	02:22:21	9.736	4238.000	0.000	2864.000	110300.000	112600.000	62.855%	2.094	
3	02:22:29	12.690	4370.000	0.000	2955.000	113600.000	115600.000	62.438%	2.208	
X		10.960	4258.000	0.000	2858.000	109600.000	111900.000	63.119%	2.183	
		σ	1.539	102.900	0.000	99.350	4347.000	4060.000	0.844%	0.079
		%RSD	14.030	2.416	0.000	3.476	3.966	3.628	1.337	3.632
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:22:13	-1.321	3.120	1.119	33.710	223.300	0.127	0.624	0.750	
2	02:22:21	-0.670	3.309	1.242	33.430	211.700	0.208	0.714	0.764	
3	02:22:29	-0.689	3.467	1.359	33.200	219.300	0.160	0.731	0.640	
X		-0.893	3.299	1.240	33.450	218.100	0.165	0.690	0.718	
		σ	0.371	0.174	0.120	0.256	5.905	0.041	0.058	0.068
		%RSD	41.510	5.273	9.682	0.764	2.707	24.580	8.339	9.467
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:22:13	0.755	2.346	2.468	0.894	0.602	2.534	0.000	225.500	
2	02:22:21	0.766	2.422	2.691	0.821	1.243	2.542	0.000	225.600	
3	02:22:29	0.759	2.203	1.974	0.984	0.956	0.979	0.000	226.300	
X		0.760	2.324	2.378	0.900	0.934	2.018	0.000	225.800	
		σ	0.006	0.111	0.367	0.082	0.321	0.900	0.000	0.470
		%RSD	0.763	4.766	15.450	9.074	34.370	44.600	0.000	0.208
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:22:13	66.310%	1.066	1.028	58.895%	-0.014	-0.018	0.017	-0.019	
2	02:22:21	67.760%	1.030	1.230	59.230%	-0.011	-0.018	0.034	-0.027	
3	02:22:29	67.845%	1.135	1.159	59.816%	-0.021	-0.018	-0.001	-0.007	
X		67.305%	1.077	1.139	59.314%	-0.015	-0.018	0.017	-0.018	
		σ	0.863%	0.053	0.103	0.466%	0.005	0.000	0.017	0.010
		%RSD	1.282	4.965	9.004	0.785	31.320	0.373	102.300	57.480
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:22:13	64.459%	-0.655	0.183	0.145	39.530	42.120	73.967%	75.548%	
2	02:22:21	65.715%	-0.751	0.183	0.147	39.060	42.070	74.254%	75.846%	
3	02:22:29	66.110%	-0.538	0.182	0.139	42.330	40.020	74.716%	76.295%	
X		65.428%	-0.648	0.182	0.144	40.310	41.400	74.312%	75.896%	
		σ	0.862%	0.107	0.001	0.004	1.767	1.195	0.378%	0.376%
		%RSD	1.318	16.510	0.415	2.838	4.384	2.885	0.509	0.495
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	02:22:13	0.007	0.016	0.021	-0.012	-0.000	85.908%			
2	02:22:21	0.021	0.011	-0.017	-0.001	-0.010	86.561%			
3	02:22:29	0.000	0.015	-0.020	0.063	0.019	86.912%			
X		0.009	0.014	-0.005	0.016	0.003	86.460%			
		σ	0.011	0.002	0.023	0.041	0.015	0.509%		
		%RSD	112.100	17.530	436.100	248.300	527.500	0.589		

180-42886-C-2-A 4/26/2015 2:28:13 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	02:27:19	34.329%	1.000	4580.000	4981.000	0.000	12650000.000	1517000.000	1587000.000	
2	02:27:27	33.238%	0.573	4853.000	5297.000	0.000	13090000.000	1581000.000	1656000.000	
3	02:27:35	34.574%	0.809	4767.000	5119.000	0.000	12840000.000	1564000.000	1630000.000	
X		34.047%	0.794	4733.000	5132.000	0.000	12860000.000	1554000.000	1624000.000	
		σ	0.711%	0.214	139.800	158.200	0.000	218600.000	32930.000	34470.000
		%RSD	2.089	26.960	2.954	3.082	0.000	1.700	2.119	2.122
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:27:19	2230.000	5035.000	0.000	312400.000	318700.000	334000.000	47.165%	60.690	
2	02:27:27	2345.000	5501.000	0.000	322200.000	327900.000	345700.000	46.895%	66.370	
3	02:27:35	2319.000	5242.000	0.000	326100.000	337000.000	353500.000	46.938%	65.850	
X		2298.000	5259.000	0.000	320200.000	327900.000	344400.000	46.999%	64.310	
		σ	60.680	233.500	0.000	7075.000	9137.000	9808.000	0.145%	3.139
		%RSD	2.641	4.440	0.000	2.209	2.787	2.848	0.308	4.881
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:27:19	5.788	8.228	84.220	3158.000	3525.000	1.118	2.750	10.820	
2	02:27:27	5.892	9.288	87.280	3163.000	3631.000	1.112	3.273	11.270	
3	02:27:35	4.379	8.752	88.490	3210.000	3591.000	1.213	3.158	11.130	
X		5.353	8.756	86.660	3177.000	3582.000	1.148	3.060	11.070	
		σ	0.845	0.530	2.199	28.730	53.830	0.056	0.275	0.231
		%RSD	15.790	6.050	2.537	0.904	1.503	4.905	8.982	2.087
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:27:19	8.849	21.120	20.000	4.407	2.240	639.500	0.000	6698.000	
2	02:27:27	9.667	20.310	20.800	4.634	1.426	652.000	0.000	6511.000	
3	02:27:35	9.291	20.700	20.110	4.554	2.448	647.900	0.000	6694.000	
X		9.269	20.710	20.300	4.532	2.038	646.400	0.000	6634.000	
		σ	0.410	0.406	0.434	0.115	6.348	0.000	107.000	
		%RSD	4.420	1.960	2.136	2.542	26.510	0.982	1.612	
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:27:19	53.730%	11.090	11.140	42.834%	0.058	0.042	0.022	0.086	
2	02:27:27	55.492%	11.210	11.860	43.201%	0.032	0.038	0.090	0.015	
3	02:27:35	54.509%	11.530	11.360	43.334%	0.070	0.055	0.067	0.067	
X		54.577%	11.280	11.450	43.123%	0.053	0.045	0.060	0.056	
		σ	0.883%	0.224	0.371	0.259%	0.019	0.009	0.034	0.037
		%RSD	1.618	1.986	3.238	0.600	36.010	19.900	57.520	66.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:27:19	50.333%	-0.001	0.754	0.905	13.810	13.580	60.243%	62.657%	
2	02:27:27	50.576%	0.079	0.926	0.994	13.460	13.380	61.055%	62.440%	
3	02:27:35	51.056%	-0.050	1.082	1.054	13.450	13.440	61.454%	62.774%	
X		50.655%	0.009	0.921	0.984	13.570	13.470	60.917%	62.624%	
		σ	0.368%	0.065	0.164	0.075	0.207	0.103	0.617%	0.169%
		%RSD	0.727	705.600	17.800	7.641	1.522	0.768	1.013	0.271
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	02:27:19	0.016	0.030	7.864	7.306	7.584	62.117%			
2	02:27:27	0.035	0.036	7.991	7.649	7.831	62.496%			
3	02:27:35	0.021	0.046	7.630	7.332	7.642	62.570%			
X		0.024	0.037	7.828	7.429	7.686	62.394%			
		σ	0.010	0.008	0.183	0.191	0.129	0.243%		
		%RSD	41.880	21.290	2.341	2.575	1.678	0.389		

180-42886-C-3-A 4/26/2015 2:33:21 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	02:32:27	37.047%	0.951	4894.000	5333.000	0.000	13250000.000	1609000.000	1671000.000	
2	02:32:35	36.077%	0.787	5046.000	5522.000	0.000	13720000.000	1664000.000	1727000.000	
3	02:32:43	35.608%	0.859	5174.000	5629.000	0.000	13830000.000	1679000.000	1740000.000	
X		36.244%	0.866	5038.000	5495.000	0.000	13600000.000	1651000.000	1713000.000	
		σ	0.734%	0.083	140.400	149.600	0.000	305900.000	36550.000	36950.000
		%RSD	2.024	9.537	2.786	2.723	0.000	2.250	2.214	2.158
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:32:27	2.524	313.300	0.000	350300.000	330600.000	369400.000	52.520%	3.957	
2	02:32:35	3.297	321.300	0.000	363500.000	345800.000	385400.000	50.977%	4.069	
3	02:32:43	1.769	319.500	0.000	362600.000	349700.000	383400.000	50.981%	4.410	
X		2.530	318.100	0.000	358800.000	342000.000	379400.000	51.493%	4.146	
		σ	0.764	4.219	0.000	7391.000	10110.000	8715.000	0.890%	0.236
		%RSD	30.190	1.327	0.000	2.060	2.957	2.297	1.728	5.695
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:32:27	-1.059	4.380	55.140	-7.241	632.300	0.543	0.859	3.802	
2	02:32:35	-0.278	4.750	57.470	-8.189	661.300	0.525	1.051	4.207	
3	02:32:43	-0.516	5.114	56.340	-8.743	682.100	0.505	1.002	4.831	
X		-0.618	4.748	56.320	-8.058	658.600	0.524	0.971	4.280	
		σ	0.400	0.367	1.162	0.760	24.980	0.019	0.100	0.518
		%RSD	64.820	7.730	2.064	9.429	3.793	3.573	10.260	12.110
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:32:27	0.635	2.849	2.835	4.091	4.136	443.300	0.000	7306.000	
2	02:32:35	0.747	3.226	1.910	4.087	4.252	441.100	0.000	7275.000	
3	02:32:43	0.752	2.628	2.981	4.246	2.902	465.200	0.000	7363.000	
X		0.711	2.901	2.575	4.141	3.763	449.900	0.000	7315.000	
		σ	0.066	0.302	0.581	0.091	13.340	0.000	44.620	
		%RSD	9.314	10.420	22.570	2.189	19.870	2.965	0.000	0.610
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:32:27	51.585%	11.960	12.960	40.984%	-0.000	-0.016	0.047	-0.029	
2	02:32:35	52.481%	12.020	12.220	41.290%	-0.022	-0.016	0.023	-0.028	
3	02:32:43	51.814%	11.450	12.440	41.215%	-0.018	0.008	-0.000	0.008	
X		51.960%	11.810	12.540	41.163%	-0.014	-0.008	0.023	-0.016	
		σ	0.465%	0.316	0.383	0.160%	0.012	0.013	0.024	0.021
		%RSD	0.896	2.679	3.056	0.388	86.040	172.500	101.800	130.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:32:27	48.760%	-0.756	0.722	0.767	9.565	9.617	57.559%	59.541%	
2	02:32:35	48.022%	-0.758	0.912	0.819	9.873	9.750	57.992%	59.697%	
3	02:32:43	48.543%	-0.673	0.879	0.678	9.256	9.283	58.288%	60.520%	
X		48.442%	-0.729	0.838	0.755	9.565	9.550	57.946%	59.919%	
		σ	0.379%	0.049	0.102	0.308	0.241	0.367%	0.526%	
		%RSD	0.783	6.677	12.130	9.488	3.222	2.518	0.633	0.877
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	02:32:27	0.003	0.003	-0.052	0.010	-0.018	57.903%			
2	02:32:35	0.024	-0.008	-0.034	0.018	-0.018	58.081%			
3	02:32:43	-0.012	0.004	-0.035	0.001	-0.022	58.853%			
X		0.005	-0.000	-0.040	0.010	-0.019	58.279%			
		σ	0.018	0.007	0.010	0.009	0.002	0.505%		
		%RSD	366.400	4343.000	25.750	91.420	12.750	0.866		

MB 180-139581/1-A 4/26/2015 2:42:25 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	02:41:33	73.933%	-0.057	5.222	5.994	0.000	1282.000	42.680	41.130
2	02:41:41	74.806%	-0.124	5.845	5.745	0.000	1381.000	72.730	57.340
3	02:41:49	72.383%	-0.093	5.174	5.441	0.000	1453.000	75.290	78.910
X		73.707%	-0.091	5.414	5.727	0.000	1372.000	63.570	59.130
σ		1.227%	0.034	0.375	0.277	0.000	86.160	18.130	18.950
%RSD		1.665	36.990	6.924	4.838	0.000	6.281	28.520	32.050
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:33	-2.309	2.185	0.000	-1.042	11.980	26.410	71.922%	-0.421
2	02:41:41	-2.679	-2.061	0.000	-0.158	19.830	24.670	70.927%	-0.440
3	02:41:49	-2.174	-71.980	0.000	5.792	0.696	19.780	69.880%	-0.348
X		-2.387	-23.950	0.000	1.531	10.840	23.620	70.910%	-0.403
σ		0.262	41.640	0.000	3.717	9.618	3.435	1.021%	0.048
%RSD		10.960	173.900	0.000	242.800	88.770	14.540	1.440	11.990
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:33	-0.081	0.470	0.082	-0.588	0.029	-0.001	0.007	0.837
2	02:41:41	-0.351	0.500	0.066	-1.017	-1.590	-0.001	-0.045	0.598
3	02:41:49	-0.311	0.412	0.098	-0.969	-2.674	-0.004	-0.058	0.631
X		-0.248	0.461	0.082	-0.858	-1.412	-0.002	-0.032	0.689
σ		0.146	0.044	0.016	0.235	1.360	0.002	0.035	0.130
%RSD		58.830	9.611	19.100	27.390	96.350	114.000	107.700	18.820
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:33	-0.075	0.378	0.011	0.000	0.787	4.709	0.000	0.192
2	02:41:41	0.012	0.115	0.055	0.007	0.643	2.811	0.000	0.193
3	02:41:49	-0.046	0.256	0.187	0.011	0.878	6.666	0.000	0.308
X		-0.037	0.250	0.085	0.006	0.769	4.729	0.000	0.231
σ		0.044	0.132	0.092	0.005	0.119	1.928	0.000	0.066
%RSD		121.500	52.710	108.400	89.350	15.420	40.770	0.000	28.750
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:33	67.361%	0.056	0.100	61.716%	-0.018	-0.022	-0.000	0.000
2	02:41:41	68.332%	0.134	0.111	62.478%	-0.018	-0.009	-0.000	0.013
3	02:41:49	69.433%	0.152	0.080	62.468%	-0.012	-0.022	-0.001	0.013
X		68.376%	0.114	0.097	62.220%	-0.016	-0.017	-0.000	0.009
σ		1.037%	0.051	0.016	0.437%	0.003	0.007	0.000	0.007
%RSD		1.517	44.410	16.270	0.702	21.710	43.160	8.590	83.970
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:33	65.502%	0.480	-0.016	-0.075	-0.019	-0.012	71.559%	72.203%
2	02:41:41	65.825%	0.366	-0.016	-0.075	-0.019	0.005	71.657%	71.928%
3	02:41:49	66.344%	0.158	-0.017	-0.081	-0.019	-0.012	72.136%	72.455%
X		65.890%	0.335	-0.016	-0.077	-0.019	-0.006	71.784%	72.195%
σ		0.424%	0.164	0.000	0.004	0.000	0.010	0.309%	0.264%
%RSD		0.644	48.880	1.507	4.985	0.000	160.300	0.430	0.365
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:41:33	0.001	0.010	-0.087	-0.049	-0.069	83.911%		
2	02:41:41	-0.012	0.001	-0.095	-0.048	-0.078	83.451%		
3	02:41:49	-0.007	0.000	-0.090	-0.066	-0.081	83.230%		
X		-0.006	0.004	-0.091	-0.054	-0.076	83.531%		
σ		0.006	0.006	0.004	0.010	0.006	0.347%		
%RSD		109.100	150.400	4.364	18.590	7.667	0.416		

LCS 180-139581/2-A 4/26/2015 2:47:30 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	02:46:36	73.297%	40.790	831.200	840.100	0.000	59180.000	50880.000	52400.000
2	02:46:44	74.408%	42.510	832.700	843.300	0.000	58540.000	50620.000	53100.000
3	02:46:52	74.259%	41.350	857.000	846.500	0.000	58910.000	51780.000	53880.000
X		73.988%	41.550	840.300	843.300	0.000	58880.000	51090.000	53130.000
σ		0.603%	0.878	14.480	3.206	0.000	321.300	610.100	742.700
%RSD		0.815	2.113	1.723	0.380	0.000	0.546	1.194	1.398
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:36	2146.000	6213.000	0.000	46110.000	41490.000	43360.000	66.253%	829.600
2	02:46:44	2192.000	6234.000	0.000	47580.000	42460.000	44710.000	65.409%	848.800
3	02:46:52	2199.000	6209.000	0.000	48390.000	43240.000	45330.000	65.416%	867.500
X		2179.000	6219.000	0.000	47360.000	42400.000	44470.000	65.692%	848.700
σ		29.050	13.330	0.000	1155.000	874.500	1004.000	0.485%	18.970
%RSD		1.333	0.214	0.000	2.439	2.063	2.258	0.738	2.236
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:36	461.600	184.500	437.000	887.200	952.100	452.100	446.600	227.800
2	02:46:44	470.100	186.900	446.300	901.200	958.300	457.400	447.100	229.400
3	02:46:52	465.800	185.500	457.500	887.200	942.400	454.300	441.200	225.700
X		465.800	185.600	446.900	891.900	951.000	454.600	445.000	227.600
σ		4.228	1.228	10.290	8.065	8.011	2.629	3.252	1.876
%RSD		0.908	0.662	2.302	0.904	0.842	0.578	0.731	0.824
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:36	225.500	419.100	424.300	35.670	10.870	19.970	0.000	890.300
2	02:46:44	229.500	427.300	425.900	35.910	11.230	12.720	0.000	890.200
3	02:46:52	228.800	428.700	420.800	35.980	10.110	17.220	0.000	889.300
X		227.900	425.100	423.700	35.850	10.730	16.640	0.000	890.000
σ		2.121	5.166	2.630	0.164	0.573	3.663	0.000	0.566
%RSD		0.931	1.215	0.621	0.458	5.340	22.020	0.000	0.064
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:36	62.304%	912.600	936.700	55.965%	43.370	43.600	43.690	81.640
2	02:46:44	62.976%	918.200	936.700	56.724%	43.390	42.700	44.280	80.700
3	02:46:52	63.546%	916.800	930.100	57.221%	44.390	44.700	46.420	81.330
X		62.942%	915.900	934.500	56.637%	43.720	43.670	44.800	81.220
σ		0.622%	2.914	3.800	0.632%	0.581	1.001	1.433	0.476
%RSD		0.988	0.318	0.407	1.117	1.329	2.292	3.198	0.586
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:36	61.070%	1810.000	432.300	428.600	1736.000	1728.000	69.942%	69.491%
2	02:46:44	61.365%	1821.000	429.800	431.200	1754.000	1769.000	69.896%	71.117%
3	02:46:52	61.242%	1829.000	437.800	435.600	1772.000	1765.000	70.090%	71.522%
X		61.225%	1820.000	433.300	431.800	1754.000	1754.000	69.976%	70.710%
σ		0.148%	9.676	4.072	3.525	18.130	22.620	0.101%	1.075%
%RSD		0.242	0.532	0.940	0.817	1.034	1.290	0.145	1.520
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:46:36	46.070	45.140	18.480	18.390	18.460	74.489%		
2	02:46:44	46.520	45.580	18.540	18.840	18.510	74.818%		
3	02:46:52	45.590	45.270	18.070	19.150	18.510	75.664%		
X		46.060	45.330	18.370	18.790	18.490	74.990%		
σ		0.461	0.228	0.255	0.381	0.027	0.606%		
%RSD		1.001	0.502	1.386	2.027	0.149	0.808		

180-43187-A-3-B 4/26/2015 2:52:33 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	02:51:41	70.028%	4.399	39.950	46.080	0.000	3619.000	24990.000	25880.000
2	02:51:49	68.897%	5.119	41.120	44.780	0.000	3683.000	25670.000	25970.000
3	02:51:57	69.040%	4.128	41.100	44.090	0.000	3662.000	25750.000	26400.000
X		69.322%	4.549	40.720	44.980	0.000	3654.000	25470.000	26090.000
σ		0.616%	0.512	0.671	1.010	0.000	32.660	417.800	280.300
%RSD		0.888	11.260	1.649	2.246	0.000	0.894	1.640	1.074
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:41	27540.000	2353.000	0.000	-77.740	32130.000	33730.000	113.360%	39730.000
2	02:51:49	28030.000	2414.000	0.000	-79.950	32410.000	34400.000	114.118%	39940.000
3	02:51:57	28420.000	2411.000	0.000	-82.030	32460.000	36500.000	113.548%	40930.000
X		28000.000	2393.000	0.000	-79.900	32330.000	34880.000	113.675%	40200.000
σ		442.000	34.080	0.000	2.143	178.700	1444.000	0.395%	636.800
%RSD		1.579	1.425	0.000	2.682	0.553	4.141	0.347	1.584
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:41	17330.000	6832.000	16660.000	161100.000	158900.000	17.390	245.800	29.150
2	02:51:49	17510.000	6865.000	16960.000	161400.000	159600.000	16.750	247.500	28.320
3	02:51:57	17480.000	6868.000	17210.000	161000.000	158300.000	17.250	242.900	28.810
X		17440.000	6855.000	16940.000	161200.000	158900.000	17.130	245.400	28.760
σ		93.930	20.270	272.600	214.600	630.500	0.339	2.328	0.416
%RSD		0.539	0.296	1.609	0.133	0.397	1.977	0.949	1.445
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:41	37.220	101.900	88.400	3.279	2.975	-2.670	0.000	128.100
2	02:51:49	38.430	103.200	91.820	2.950	4.144	-0.511	0.000	129.400
3	02:51:57	37.100	102.500	89.030	3.162	2.988	2.165	0.000	126.800
X		37.580	102.500	89.750	3.131	3.369	-0.339	0.000	128.100
σ		0.732	0.671	1.816	0.167	0.672	2.422	0.000	1.278
%RSD		1.949	0.655	2.024	5.321	19.930	714.600	0.000	0.998
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:41	0.000	158.600	144.000	53.782%	32.390	29.500	15.400	11.980
2	02:51:49	0.000	157.200	142.300	53.637%	31.360	28.190	14.650	11.150
3	02:51:57	0.000	156.600	141.100	54.266%	30.730	28.380	14.610	11.450
X		0.000	157.500	142.500	53.895%	31.500	28.690	14.890	11.530
σ		0.000	1.001	1.477	0.329%	0.840	0.707	0.447	0.422
%RSD		0.000	0.636	1.037	0.611	2.666	2.465	3.002	3.658
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:51:41	58.429%	509.300	3.076	4.457	323.900	318.500	75.214%	80.653%
2	02:51:49	58.866%	512.400	3.073	4.297	319.600	319.600	75.528%	81.397%
3	02:51:57	59.738%	503.200	3.000	3.430	322.300	321.200	75.335%	81.154%
X		59.011%	508.300	3.050	4.062	321.900	319.800	75.359%	81.068%
σ		0.666%	4.683	0.043	0.553	2.145	1.397	0.158%	0.379%
%RSD		1.129	0.921	1.417	13.610	0.666	0.437	0.210	0.468
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:51:41	0.155	0.163	135.700	70.200	92.860	73.217%		
2	02:51:49	0.158	0.151	136.200	69.520	92.950	73.244%		
3	02:51:57	0.173	0.125	135.900	69.250	92.180	73.561%		
X		0.162	0.146	135.900	69.660	92.660	73.341%		
σ		0.010	0.019	0.257	0.487	0.416	0.191%		
%RSD		6.007	13.190	0.189	0.700	0.449	0.261		

180-43187-A-4-B 4/26/2015 2:57:38 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	02:56:46	69.468%	8.271	30.790	33.500	0.000	1526.000	6765.000	6921.000
2	02:56:53	69.552%	8.373	32.990	34.110	0.000	1538.000	6756.000	6872.000
3	02:57:01	69.193%	8.407	31.790	33.100	0.000	1548.000	6845.000	6983.000
X		69.404%	8.350	31.860	33.570	0.000	1538.000	6788.000	6925.000
σ		0.188%	0.070	1.105	0.510	0.000	11.100	49.080	55.640
%RSD		0.271	0.843	3.469	1.519	0.000	0.722	0.723	0.803
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:46	35340.000	2570.000	0.000	333.700	23160.000	24060.000	110.795%	33070.000
2	02:56:53	35750.000	2573.000	0.000	333.600	23180.000	24380.000	112.036%	33370.000
3	02:57:01	35700.000	2650.000	0.000	339.000	23600.000	24700.000	112.385%	33480.000
X		35600.000	2598.000	0.000	335.400	23310.000	24380.000	111.739%	33310.000
σ		223.400	45.740	0.000	3.126	249.900	321.400	0.836%	209.200
%RSD		0.628	1.761	0.000	0.932	1.072	1.318	0.748	0.628
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:46	16030.000	6528.000	22200.000	222600.000	220100.000	100.900	437.400	160.300
2	02:56:53	15820.000	6461.000	22300.000	221700.000	220500.000	99.110	439.100	162.100
3	02:57:01	15770.000	6474.000	22430.000	221700.000	223300.000	100.400	442.100	162.600
X		15870.000	6488.000	22310.000	222000.000	221300.000	100.100	439.500	161.700
σ		134.600	35.410	116.600	486.700	1771.000	0.923	2.386	1.216
%RSD		0.848	0.546	0.523	0.219	0.800	0.921	0.543	0.752
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:46	177.100	630.100	626.800	16.390	5.331	4.615	0.000	174.300
2	02:56:53	172.400	619.200	631.900	16.930	4.804	8.187	0.000	173.400
3	02:57:01	176.600	626.500	633.300	16.920	4.111	-2.962	0.000	173.600
X		175.400	625.300	630.700	16.750	4.749	3.280	0.000	173.800
σ		2.583	5.558	3.405	0.310	0.612	5.693	0.000	0.469
%RSD		1.473	0.889	0.540	1.848	12.890	173.600	0.000	0.270
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:46	0.000	107.000	96.840	52.081%	27.790	15.250	13.110	9.166
2	02:56:53	0.000	112.300	96.320	51.819%	27.000	15.050	11.620	9.002
3	02:57:01	0.000	111.700	97.670	51.499%	26.400	15.030	11.760	8.810
X		0.000	110.300	96.940	51.799%	27.060	15.110	12.160	8.993
σ		0.000	2.934	0.679	0.291%	0.697	0.122	0.823	0.178
%RSD		0.000	2.659	0.701	0.563	2.576	0.804	6.766	1.978
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:46	57.074%	373.300	6.815	8.449	328.600	318.100	73.551%	76.791%
2	02:56:53	56.354%	376.700	7.010	7.670	329.300	326.000	74.035%	77.961%
3	02:57:01	57.512%	368.700	7.133	7.908	317.900	315.800	74.495%	77.772%
X		56.980%	372.900	6.986	8.009	325.200	320.000	74.027%	77.508%
σ		0.585%	4.000	0.160	0.399	6.380	5.362	0.472%	0.628%
%RSD		1.026	1.073	2.295	4.987	1.962	1.676	0.637	0.810
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:56:46	0.340	0.377	139.000	91.590	108.000	68.839%		
2	02:56:53	0.410	0.392	143.800	88.920	108.300	69.650%		
3	02:57:01	0.369	0.361	140.800	89.680	108.100	69.937%		
X		0.373	0.377	141.200	90.070	108.100	69.475%		
σ		0.035	0.016	2.424	1.376	0.183	0.569%		
%RSD		9.349	4.123	1.717	1.528	0.169	0.820		

180-43187-A-5-B 4/26/2015 3:02:41 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	03:01:50	74.024%	7.122	8.965	10.510	0.000	772.100	1415.000	1466.000
2	03:01:58	71.559%	6.753	10.640	11.210	0.000	809.900	1467.000	1505.000
3	03:02:05	73.307%	7.030	10.190	10.550	0.000	818.800	1438.000	1447.000
X		72.963%	6.969	9.930	10.760	0.000	800.300	1440.000	1473.000
σ		1.268%	0.192	0.866	0.390	0.000	24.780	25.690	29.120
%RSD		1.738	2.754	8.724	3.625	0.000	3.096	1.783	1.977
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:50	33580.000	3633.000	0.000	1527.000	1980.000	2104.000	75.019%	1016.000
2	03:01:58	33470.000	3712.000	0.000	1592.000	2177.000	2201.000	73.544%	1043.000
3	03:02:05	33350.000	3711.000	0.000	1580.000	2115.000	2174.000	74.163%	1042.000
X		33460.000	3686.000	0.000	1566.000	2091.000	2160.000	74.242%	1034.000
σ		113.700	45.200	0.000	34.830	100.300	49.960	0.741%	15.380
%RSD		0.340	1.226	0.000	2.224	4.796	2.313	0.998	1.487
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:50	799.600	323.400	1986.000	119900.000	116700.000	146.300	210.400	114.400
2	03:01:58	810.200	331.800	2067.000	122100.000	119800.000	149.100	218.500	117.700
3	03:02:05	815.200	329.200	2056.000	121100.000	118200.000	149.000	213.800	117.400
X		808.300	328.100	2036.000	121000.000	118200.000	148.100	214.200	116.500
σ		7.933	4.261	43.980	1076.000	1529.000	1.583	4.040	1.849
%RSD		0.981	1.299	2.160	0.889	1.293	1.069	1.886	1.588
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:50	118.200	399.600	411.700	32.410	2.963	7.078	0.000	132.000
2	03:01:58	120.400	411.600	411.300	33.430	3.814	3.455	0.000	136.400
3	03:02:05	120.900	409.800	407.400	33.230	3.550	11.870	0.000	134.600
X		119.800	407.000	410.200	33.020	3.442	7.468	0.000	134.300
σ		1.445	6.504	2.403	0.538	0.436	4.221	0.000	2.206
%RSD		1.206	1.598	0.586	1.628	12.670	56.530	0.000	1.643
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:50	0.000	4.503	4.191	55.623%	0.685	0.577	1.079	1.276
2	03:01:58	0.000	4.811	3.956	55.106%	0.608	0.578	0.863	1.323
3	03:02:05	0.000	4.598	4.098	55.625%	0.497	0.450	0.817	1.220
X		0.000	4.638	4.082	55.452%	0.597	0.535	0.920	1.273
σ		0.000	0.158	0.118	0.299%	0.094	0.074	0.140	0.051
%RSD		0.000	3.402	2.891	0.540	15.830	13.780	15.180	4.045
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:01:50	58.362%	39.720	1.223	1.321	179.900	182.000	74.356%	77.518%
2	03:01:58	59.415%	38.000	1.376	1.264	176.300	176.000	74.754%	77.847%
3	03:02:05	60.055%	37.640	1.402	1.385	181.000	179.100	74.483%	78.789%
X		59.278%	38.450	1.334	1.323	179.000	179.000	74.531%	78.051%
σ		0.855%	1.110	0.097	0.061	2.440	3.002	0.203%	0.660%
%RSD		1.442	2.887	7.249	4.582	1.363	1.677	0.273	0.845
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:01:50	1.091	0.862	33.680	30.250	32.070	72.684%		
2	03:01:58	0.915	0.911	33.260	30.220	31.730	73.123%		
3	03:02:05	0.898	0.978	33.170	30.090	32.050	73.883%		
X		0.968	0.917	33.370	30.190	31.950	73.230%		
σ		0.107	0.058	0.273	0.086	0.190	0.606%		
%RSD		11.030	6.332	0.819	0.285	0.596	0.828		

180-43187-A-6-B 4/26/2015 3:07:46 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	03:06:53	69.465%	5.776	30.410	31.980	0.000	3958.000	15150.000	15500.000
2	03:07:01	69.939%	5.816	31.440	32.170	0.000	4015.000	15270.000	15330.000
3	03:07:08	70.030%	6.291	32.020	33.570	0.000	3957.000	15200.000	15360.000
X		69.811%	5.961	31.290	32.580	0.000	3977.000	15200.000	15390.000
σ		0.303%	0.287	0.813	0.869	0.000	33.150	60.660	92.600
%RSD		0.434	4.810	2.600	2.668	0.000	0.834	0.399	0.602
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:06:53	35940.000	2108.000	0.000	17.070	34030.000	38120.000	116.315%	27630.000
2	03:07:01	36060.000	2116.000	0.000	18.560	34560.000	38610.000	116.949%	27990.000
3	03:07:08	36050.000	2150.000	0.000	17.860	35170.000	38610.000	118.042%	27930.000
X		36020.000	2124.000	0.000	17.830	34590.000	38450.000	117.102%	27850.000
σ		69.880	22.240	0.000	0.743	569.500	282.300	0.874%	194.200
%RSD		0.194	1.047	0.000	4.164	1.646	0.734	0.746	0.697
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:06:53	12560.000	5630.000	28120.000	198000.000	196500.000	26.770	277.500	44.480
2	03:07:01	12690.000	5640.000	28470.000	201200.000	196900.000	27.040	272.700	43.350
3	03:07:08	12600.000	5597.000	28360.000	199300.000	198000.000	26.760	272.900	44.810
X		12620.000	5622.000	28320.000	199500.000	197100.000	26.860	274.300	44.210
σ		66.240	22.470	183.300	1570.000	774.000	0.158	2.710	0.765
%RSD		0.525	0.400	0.647	0.787	0.393	0.588	0.988	1.729
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:06:53	52.030	114.400	112.100	6.284	4.414	0.147	0.000	479.500
2	03:07:01	51.290	113.900	108.000	6.283	3.574	5.638	0.000	474.800
3	03:07:08	50.850	114.200	106.200	6.084	4.868	7.578	0.000	482.000
X		51.390	114.200	108.800	6.217	4.285	4.454	0.000	478.800
σ		0.593	0.258	3.026	0.116	0.657	3.854	0.000	3.643
%RSD		1.155	0.226	2.782	1.859	15.330	86.530	0.000	0.761
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:06:53	0.000	84.430	76.840	50.070%	18.740	14.530	9.077	6.938
2	03:07:01	0.000	85.220	74.270	50.873%	18.590	14.560	8.696	7.024
3	03:07:08	0.000	84.810	76.100	50.511%	18.200	14.840	8.268	7.073
X		0.000	84.820	75.740	50.485%	18.510	14.640	8.680	7.012
σ		0.000	0.395	1.322	0.403%	0.276	0.173	0.405	0.068
%RSD		0.000	0.465	1.745	0.797	1.493	1.183	4.663	0.976
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:06:53	55.341%	306.300	3.005	3.538	305.100	300.200	72.924%	76.669%
2	03:07:01	55.203%	307.100	3.195	3.456	302.700	301.200	72.468%	76.313%
3	03:07:08	55.027%	307.700	3.212	3.325	304.300	302.700	73.013%	77.470%
X		55.190%	307.000	3.137	3.439	304.000	301.400	72.802%	76.817%
σ		0.157%	0.715	0.115	0.107	1.218	1.277	0.293%	0.593%
%RSD		0.285	0.233	3.671	3.120	0.401	0.424	0.402	0.772
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:06:53	0.129	0.197	89.070	54.830	68.760	67.218%		
2	03:07:01	0.168	0.183	87.520	55.520	68.370	67.947%		
3	03:07:08	0.186	0.183	88.290	53.940	68.280	67.698%		
X		0.161	0.188	88.290	54.760	68.470	67.621%		
σ		0.029	0.008	0.776	0.796	0.254	0.370%		
%RSD		18.030	4.430	0.879	1.453	0.371	0.548		

CCV 1533080 4/26/2015 3:16:48 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	03:15:56	71.056%	92.030	91.260	92.900	0.000	64070.000	58190.000	60210.000
2	03:16:03	72.988%	89.170	93.760	90.490	0.000	63150.000	57440.000	58690.000
3	03:16:11	69.737%	93.770	94.500	94.320	0.000	65340.000	58240.000	61270.000
X		71.260%	91.658%	93.172%	92.573%	0.000	128.374%	115.910%	120.114%
σ		1.635%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.295	2.534	1.820	2.091	0.000	1.718	0.778	2.160
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:56	650.100	5332.000	0.000	53190.000	46300.000	48890.000	66.238%	111.200
2	03:16:03	635.300	5392.000	0.000	53190.000	47200.000	49660.000	66.541%	109.300
3	03:16:11	655.500	5422.000	0.000	54280.000	47690.000	50170.000	65.545%	110.800
X		129.386%	107.636%	0.000	107.107%	94.134%	99.143%	66.108%	110.442%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.511%	n/a
%RSD		1.615	0.850	0.000	1.181	1.500	1.302	0.773	0.910
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:56	100.700	96.570	517.100	25490.000	23230.000	95.750	96.950	98.740
2	03:16:03	98.430	98.170	506.800	25760.000	23310.000	96.580	95.910	95.970
3	03:16:11	99.690	99.800	519.100	25800.000	23140.000	96.690	97.060	97.730
X		99.598%	98.180%	102.867%	102.729%	92.901%	96.342%	96.641%	97.482%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.134	1.644	1.278	0.665	0.369	0.534	0.655	1.441
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:56	96.670	92.320	91.190	93.450	98.270	92.630	0.000	90.950
2	03:16:03	97.700	91.200	90.650	92.970	96.800	96.790	0.000	90.730
3	03:16:11	95.240	93.350	91.160	94.720	97.900	100.900	0.000	91.600
X		96.535%	92.290%	90.999%	93.714%	97.654%	96.778%	0.000	91.095%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.274	1.163	0.336	0.964	0.783	4.282	0.000	0.497
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:56	64.502%	90.730	92.410	56.550%	93.380	93.830	95.740	96.010
2	03:16:03	64.728%	94.460	93.950	56.544%	93.630	93.450	94.990	95.360
3	03:16:11	65.765%	93.960	94.600	57.762%	94.100	93.230	91.350	95.330
X		64.998%	93.046%	93.651%	56.952%	93.703%	93.507%	94.030%	95.570%
σ		0.673%	n/a	n/a	0.702%	n/a	n/a	n/a	n/a
%RSD		1.036	2.175	1.202	1.232	0.389	0.326	2.498	0.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:56	61.146%	93.380	92.200	92.880	98.700	92.450	67.071%	67.199%
2	03:16:03	61.043%	92.380	92.800	94.850	91.970	96.770	67.828%	67.976%
3	03:16:11	61.617%	92.480	93.550	94.200	92.160	97.760	67.721%	68.356%
X		61.269%	92.745%	92.849%	93.976%	94.275%	95.660%	67.540%	67.844%
σ		0.306%	n/a	n/a	n/a	n/a	n/a	0.409%	0.589%
%RSD		0.499	0.596	0.728	1.067	4.063	2.954	0.606	0.869
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:15:56	99.780	98.220	100.200	99.180	98.990	71.036%		
2	03:16:03	99.770	97.440	99.310	99.680	99.190	71.797%		
3	03:16:11	99.690	97.500	98.090	97.850	98.640	72.767%		
X		99.746%	97.724%	99.193%	98.904%	98.942%	71.867%		
σ		n/a	n/a	n/a	n/a	n/a	0.868%		
%RSD		0.048	0.444	1.059	0.953	0.283	1.208		

CCB5 4/26/2015 3:25:58 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	03:25:04	92.597%	-0.122	2.715	1.793	0.000	458.300	9.296	7.212
2	03:25:11	90.132%	-0.057	1.515	2.334	0.000	468.900	5.933	7.088
3	03:25:19	90.997%	-0.074	1.730	1.620	0.000	473.900	8.228	8.387
X		91.242%	-0.084	1.987	1.916	0.000	467.100	7.819	7.562
		1.250%	0.033	0.640	0.373	0.000	7.968	1.719	0.717
		1.370	39.610	32.200	19.440	0.000	1.706	21.980	9.480
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:04	-3.933	-2.293	0.000	-63.010	1.888	7.234	83.424%	-0.155
2	03:25:11	-3.011	-5.434	0.000	-60.660	11.290	7.254	81.922%	-0.422
3	03:25:19	-3.796	-6.351	0.000	-56.260	13.840	5.380	81.787%	0.004
X		-3.580	-4.693	0.000	-59.980	9.005	6.623	82.378%	-0.191
		0.498	2.129	0.000	3.427	6.294	1.076	0.909%	0.216
		13.910	45.360	0.000	5.714	69.890	16.250	1.103	112.800
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:04	-0.028	-0.000	0.333	9.889	7.627	0.004	-0.003	0.204
2	03:25:11	-0.020	0.010	0.336	9.630	7.044	0.018	0.020	0.176
3	03:25:19	-0.001	0.017	0.265	9.147	6.312	0.002	-0.003	0.204
X		-0.017	0.009	0.311	9.555	6.995	0.008	0.005	0.195
		0.014	0.008	0.040	0.377	0.659	0.009	0.013	0.016
		85.350	97.580	12.860	3.943	9.421	109.400	282.700	8.315
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:04	-0.082	0.090	0.031	0.070	0.128	0.888	0.000	0.028
2	03:25:11	-0.017	0.047	0.161	0.054	0.214	-0.288	0.000	0.033
3	03:25:19	-0.091	0.104	-0.026	0.093	0.069	-1.243	0.000	0.024
X		-0.063	0.081	0.055	0.072	0.137	-0.214	0.000	0.028
		0.041	0.030	0.096	0.019	0.073	1.067	0.000	0.005
		64.240	37.310	173.400	26.780	52.990	498.200	0.000	16.150
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:04	82.617%	0.365	0.390	81.916%	-0.006	-0.007	-0.001	-0.021
2	03:25:11	83.782%	0.361	0.226	82.381%	-0.011	-0.005	-0.001	-0.021
3	03:25:19	85.020%	0.241	0.271	82.716%	0.007	0.002	-0.001	-0.042
X		83.806%	0.322	0.296	82.338%	-0.003	-0.003	-0.001	-0.028
		1.202%	0.070	0.085	0.402%	0.009	0.005	0.000	0.012
		1.434	21.770	28.640	0.488	302.900	147.500	6.193	43.430
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:04	83.813%	-0.962	0.106	0.063	-0.019	0.002	84.283%	85.088%
2	03:25:11	85.164%	-0.892	0.093	0.051	-0.019	0.029	85.581%	86.139%
3	03:25:19	85.864%	-0.896	0.113	0.059	0.003	-0.012	85.251%	85.911%
X		84.947%	-0.917	0.104	0.058	-0.012	0.006	85.038%	85.713%
		1.042%	0.039	0.010	0.006	0.013	0.020	0.674%	0.553%
		1.227	4.270	9.645	11.230	109.300	320.700	0.793	0.645
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:25:04	0.082	0.065	-0.058	-0.051	-0.062	91.629%		
2	03:25:11	0.071	0.066	-0.075	-0.054	-0.066	92.618%		
3	03:25:19	0.052	0.062	-0.064	-0.031	-0.062	93.294%		
X		0.068	0.064	-0.066	-0.045	-0.063	92.514%		
		0.015	0.002	0.009	0.013	0.002	0.838%		
		22.250	3.486	13.160	28.110	3.223	0.905		

180-43187-A-7-B 4/26/2015 3:31:05 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	03:30:11	75.247%	7.987	9.092	10.160	0.000	659.000	1347.000	1382.000
2	03:30:19	73.558%	8.021	10.030	10.630	0.000	628.800	1360.000	1358.000
3	03:30:27	76.704%	8.558	8.958	9.998	0.000	593.500	1322.000	1383.000
X		75.170%	8.189	9.360	10.260	0.000	627.100	1343.000	1374.000
σ		1.574%	0.320	0.584	0.329	0.000	32.800	19.140	14.170
%RSD		2.094	3.908	6.240	3.202	0.000	5.230	1.425	1.031
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:30:11	31790.000	3390.000	0.000	1871.000	1515.000	1465.000	78.212%	471.900
2	03:30:19	31930.000	3478.000	0.000	1899.000	1577.000	1555.000	78.566%	488.500
3	03:30:27	30900.000	3361.000	0.000	1889.000	1622.000	1552.000	79.065%	498.200
X		31540.000	3410.000	0.000	1887.000	1572.000	1524.000	78.614%	486.200
σ		557.000	60.960	0.000	13.990	53.370	51.000	0.428%	13.310
%RSD		1.766	1.788	0.000	0.742	3.396	3.347	0.545	2.737
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:30:11	395.800	177.300	206.200	110700.000	106100.000	166.500	250.600	203.800
2	03:30:19	396.100	178.100	212.700	111100.000	110000.000	166.600	256.700	203.900
3	03:30:27	391.000	175.400	215.600	109200.000	106600.000	160.600	248.600	198.700
X		394.300	176.900	211.500	110400.000	107600.000	164.600	252.000	202.100
σ		2.853	1.384	4.814	985.600	2125.000	3.450	4.187	2.950
%RSD		0.724	0.782	2.276	0.893	1.976	2.096	1.662	1.459
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:30:11	207.200	525.900	523.300	25.910	4.368	9.733	0.000	80.990
2	03:30:19	208.800	525.400	524.800	25.610	4.354	2.688	0.000	82.050
3	03:30:27	202.600	517.500	528.100	25.420	4.552	7.087	0.000	82.590
X		206.200	522.900	525.400	25.650	4.425	6.502	0.000	81.880
σ		3.195	4.717	2.462	0.248	0.110	3.559	0.000	0.812
%RSD		1.550	0.902	0.469	0.968	2.488	54.730	0.000	0.992
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:30:11	0.000	4.129	4.008	59.753%	0.152	0.160	0.765	1.414
2	03:30:19	0.000	4.093	4.015	59.121%	0.185	0.124	0.857	1.462
3	03:30:27	0.000	4.016	4.072	59.305%	0.226	0.148	0.716	1.252
X		0.000	4.080	4.032	59.393%	0.188	0.144	0.779	1.376
σ		0.000	0.058	0.035	0.325%	0.037	0.018	0.072	0.110
%RSD		0.000	1.421	0.875	0.547	19.670	12.650	9.216	8.012
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:30:11	63.821%	35.750	1.466	1.298	149.400	147.300	78.494%	80.365%
2	03:30:19	63.571%	38.230	1.303	1.384	151.800	152.100	78.800%	81.768%
3	03:30:27	63.650%	36.750	1.314	1.161	151.500	148.600	79.472%	81.445%
X		63.681%	36.910	1.361	1.281	150.900	149.300	78.922%	81.193%
σ		0.128%	1.250	0.091	0.113	1.340	2.501	0.500%	0.735%
%RSD		0.201	3.388	6.699	8.780	0.888	1.675	0.634	0.905
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:30:11	1.115	1.053	38.370	35.130	36.720	77.817%		
2	03:30:19	1.077	1.083	39.110	35.560	37.360	77.501%		
3	03:30:27	1.124	1.062	38.380	35.170	37.270	77.880%		
X		1.105	1.066	38.620	35.280	37.120	77.733%		
σ		0.025	0.015	0.428	0.236	0.346	0.203%		
%RSD		2.266	1.450	1.109	0.668	0.932	0.261		

180-43187-A-8-B 4/26/2015 3:36:11 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	03:35:17	67.909%	5.694	48.830	48.540	0.000	7775.000	22440.000	23150.000
2	03:35:25	68.827%	6.087	47.850	50.410	0.000	7555.000	22050.000	22470.000
3	03:35:33	67.948%	5.857	46.440	51.280	0.000	7725.000	22260.000	22930.000
X		68.228%	5.879	47.700	50.080	0.000	7685.000	22250.000	22850.000
σ		0.519%	0.197	1.202	1.396	0.000	115.400	198.600	349.100
%RSD		0.760	3.356	2.520	2.789	0.000	1.501	0.893	1.528
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:35:17	34910.000	2824.000	0.000	7.751	47720.000	51230.000	114.401%	50590.000
2	03:35:25	35150.000	2781.000	0.000	10.310	48140.000	52660.000	115.863%	52310.000
3	03:35:33	35710.000	2846.000	0.000	9.628	49270.000	52940.000	115.781%	52160.000
X		35250.000	2817.000	0.000	9.230	48380.000	52280.000	115.349%	51690.000
σ		411.200	32.960	0.000	1.326	798.400	917.200	0.821%	949.600
%RSD		1.166	1.170	0.000	14.360	1.650	1.754	0.712	1.837
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:35:17	22330.000	8885.000	18660.000	200400.000	199500.000	26.440	338.400	54.460
2	03:35:25	22300.000	8966.000	19110.000	201100.000	199200.000	26.350	337.800	53.820
3	03:35:33	22390.000	8912.000	19320.000	199700.000	198300.000	26.290	335.100	53.210
X		22340.000	8921.000	19030.000	200400.000	199000.000	26.360	337.100	53.830
σ		46.660	40.990	334.200	703.900	644.300	0.075	1.776	0.627
%RSD		0.209	0.460	1.756	0.351	0.324	0.284	0.527	1.165
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:35:17	64.700	184.500	174.800	6.356	5.668	3.872	0.000	703.900
2	03:35:25	63.760	183.200	172.000	6.483	5.097	4.049	0.000	710.000
3	03:35:33	66.130	186.300	173.200	6.682	4.712	-4.531	0.000	716.300
X		64.860	184.700	173.300	6.507	5.159	1.130	0.000	710.100
σ		1.192	1.531	1.401	0.164	0.481	4.903	0.000	6.237
%RSD		1.838	0.829	0.809	2.522	9.319	433.900	0.000	0.878
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:35:17	0.000	199.300	183.600	50.433%	43.530	33.530	21.470	17.890
2	03:35:25	0.000	201.100	186.200	50.633%	42.530	33.020	19.680	19.150
3	03:35:33	0.000	203.100	180.800	50.517%	41.620	32.020	20.040	17.850
X		0.000	201.200	183.500	50.528%	42.560	32.860	20.390	18.300
σ		0.000	1.914	2.691	0.100%	0.954	0.767	0.950	0.743
%RSD		0.000	0.951	1.466	0.199	2.242	2.336	4.659	4.061
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:35:17	55.218%	824.900	4.762	6.093	479.100	471.800	74.388%	81.048%
2	03:35:25	55.855%	825.100	4.451	5.667	471.000	464.200	75.430%	81.916%
3	03:35:33	56.366%	822.200	4.630	5.604	467.400	473.200	75.773%	81.806%
X		55.813%	824.100	4.614	5.788	472.500	469.700	75.197%	81.590%
σ		0.575%	1.651	0.156	0.266	6.000	4.824	0.722%	0.472%
%RSD		1.031	0.200	3.390	4.597	1.270	1.027	0.960	0.579
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:35:17	0.244	0.207	217.800	126.800	162.000	68.767%		
2	03:35:25	0.245	0.213	218.700	129.800	163.800	69.057%		
3	03:35:33	0.273	0.213	217.500	128.200	162.600	69.513%		
X		0.254	0.211	218.000	128.300	162.800	69.112%		
σ		0.016	0.003	0.592	1.539	0.931	0.376%		
%RSD		6.467	1.500	0.272	1.200	0.572	0.544		

180-43135-B-1-A 4/26/2015 3:41:16 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	03:40:23	72.646%	1.740	19.250	20.730	0.000	735.700	10210.000	10550.000
2	03:40:31	72.810%	1.494	18.720	20.710	0.000	727.200	10380.000	10790.000
3	03:40:39	72.857%	1.831	20.380	20.070	0.000	737.900	10350.000	10790.000
X		72.771%	1.689	19.450	20.500	0.000	733.600	10310.000	10710.000
σ		0.111%	0.175	0.846	0.377	0.000	5.652	94.540	134.100
%RSD		0.153	10.340	4.349	1.838	0.000	0.771	0.917	1.252
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:23	35610.000	2578.000	0.000	4502.000	4652.000	4567.000	67.154%	662.200
2	03:40:31	35790.000	2533.000	0.000	4531.000	4698.000	4704.000	66.891%	675.000
3	03:40:39	35530.000	2644.000	0.000	4618.000	4764.000	4757.000	67.496%	672.300
X		35640.000	2585.000	0.000	4550.000	4705.000	4676.000	67.181%	669.800
σ		132.300	55.720	0.000	60.350	56.100	98.190	0.304%	6.727
%RSD		0.371	2.155	0.000	1.326	1.192	2.100	0.452	1.004
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:23	47.330	96.660	1328.000	74110.000	69720.000	40.480	73.210	100.700
2	03:40:31	48.420	97.420	1360.000	75290.000	70020.000	41.070	73.350	100.200
3	03:40:39	49.970	97.470	1365.000	75330.000	70590.000	41.150	76.820	99.710
X		48.570	97.180	1351.000	74910.000	70110.000	40.900	74.460	100.200
σ		1.328	0.455	19.920	695.500	444.600	0.366	2.048	0.487
%RSD		2.735	0.468	1.474	0.928	0.634	0.896	2.751	0.486
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:23	100.500	1044.000	1053.000	34.600	3.426	3.067	0.000	34.830
2	03:40:31	100.200	1034.000	1052.000	34.010	3.263	3.052	0.000	34.090
3	03:40:39	102.800	1045.000	1052.000	33.420	3.110	6.663	0.000	34.500
X		101.200	1041.000	1052.000	34.010	3.266	4.261	0.000	34.470
σ		1.453	6.145	0.247	0.588	0.158	2.081	0.000	0.369
%RSD		1.436	0.590	0.024	1.729	4.832	48.830	0.000	1.069
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:23	0.000	1.825	1.770	57.221%	0.732	0.638	8.896	9.378
2	03:40:31	0.000	1.525	1.485	58.699%	0.517	0.555	8.229	9.243
3	03:40:39	0.000	1.424	1.421	58.297%	0.569	0.448	8.329	9.036
X		0.000	1.592	1.559	58.072%	0.606	0.547	8.485	9.219
σ		0.000	0.209	0.186	0.764%	0.112	0.095	0.360	0.172
%RSD		0.000	13.110	11.920	1.315	18.520	17.400	4.238	1.869
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:23	60.739%	41.860	1.217	1.028	194.500	186.300	69.462%	70.941%
2	03:40:31	62.493%	41.780	1.238	1.177	196.000	193.600	71.270%	71.351%
3	03:40:39	62.177%	40.750	1.088	1.065	192.200	193.500	71.662%	72.211%
X		61.803%	41.460	1.181	1.090	194.200	191.100	70.798%	71.501%
σ		0.935%	0.618	0.081	0.078	1.951	4.227	1.173%	0.648%
%RSD		1.513	1.491	6.850	7.145	1.004	2.211	1.657	0.907
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:40:23	0.627	0.580	157.000	146.100	151.300	75.511%		
2	03:40:31	0.527	0.585	157.500	146.600	151.400	75.818%		
3	03:40:39	0.624	0.624	157.200	145.000	151.500	76.690%		
X		0.593	0.596	157.200	145.900	151.400	76.006%		
σ		0.057	0.024	0.216	0.830	0.068	0.612%		
%RSD		9.566	4.084	0.137	0.569	0.045	0.805		

180-43135-B-1-A SD@5 4/26/2015 3:46:24 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	03:45:32	71.125%	0.176	5.404	5.330	0.000	380.800	2129.000	2242.000
2	03:45:39	71.209%	0.394	6.127	6.018	0.000	382.000	2171.000	2210.000
3	03:45:47	71.107%	0.434	5.954	5.281	0.000	379.500	2137.000	2185.000
X		71.147%	0.335	5.828	5.543	0.000	380.800	2146.000	2212.000
σ		0.054%	0.139	0.378	0.412	0.000	1.258	22.270	28.530
%RSD		0.076	41.420	6.484	7.431	0.000	0.330	1.038	1.290
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:45:32	6672.000	476.800	0.000	894.700	857.300	915.100	69.444%	125.700
2	03:45:39	6758.000	528.100	0.000	936.400	889.600	956.200	68.974%	133.200
3	03:45:47	6813.000	537.500	0.000	938.800	935.700	949.300	69.823%	129.300
X		6747.000	514.100	0.000	923.300	894.200	940.200	69.414%	129.400
σ		71.290	32.710	0.000	24.810	39.410	22.030	0.425%	3.760
%RSD		1.057	6.362	0.000	2.687	4.408	2.343	0.612	2.905
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:45:32	9.545	19.360	250.200	14660.000	13070.000	7.958	14.320	19.950
2	03:45:39	10.490	20.160	257.900	15080.000	13640.000	8.500	15.840	20.790
3	03:45:47	11.000	19.750	258.400	14540.000	13380.000	8.223	14.070	19.730
X		10.350	19.760	255.500	14760.000	13360.000	8.227	14.740	20.160
σ		0.737	0.398	4.599	284.400	285.300	0.271	0.959	0.562
%RSD		7.126	2.012	1.800	1.926	2.135	3.293	6.503	2.790
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:45:32	19.850	208.300	211.800	6.410	0.638	0.416	0.000	6.405
2	03:45:39	20.300	204.400	207.000	6.747	0.635	-0.218	0.000	6.492
3	03:45:47	19.950	202.500	202.800	6.187	0.410	1.257	0.000	6.353
X		20.030	205.100	207.200	6.448	0.561	0.485	0.000	6.417
σ		0.236	2.936	4.516	0.282	0.131	0.740	0.000	0.070
%RSD		1.178	1.432	2.180	4.372	23.330	152.500	0.000	1.088
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:45:32	64.712%	0.429	0.362	60.571%	0.104	0.069	1.906	1.831
2	03:45:39	65.239%	0.293	0.303	60.998%	0.072	0.051	1.623	2.066
3	03:45:47	66.630%	0.318	0.366	61.707%	0.074	0.044	2.042	1.818
X		65.527%	0.347	0.344	61.092%	0.083	0.055	1.857	1.905
σ		0.991%	0.073	0.035	0.574%	0.018	0.013	0.214	0.139
%RSD		1.512	20.920	10.240	0.939	21.750	23.650	11.520	7.311
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:45:32	63.658%	7.592	0.214	0.087	39.110	38.950	70.231%	70.974%
2	03:45:39	64.813%	6.830	0.178	0.140	41.150	38.710	71.040%	71.986%
3	03:45:47	65.613%	7.461	0.278	0.131	38.860	39.060	71.385%	71.608%
X		64.695%	7.294	0.224	0.119	39.700	38.910	70.885%	71.523%
σ		0.983%	0.407	0.051	0.028	1.257	0.178	0.592%	0.511%
%RSD		1.519	5.585	22.620	23.840	3.165	0.457	0.835	0.715
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:45:32	0.110	0.110	31.220	28.480	29.420	78.752%		
2	03:45:39	0.124	0.106	30.510	28.200	29.430	79.158%		
3	03:45:47	0.152	0.121	30.620	28.220	29.280	80.227%		
X		0.129	0.113	30.780	28.300	29.380	79.379%		
σ		0.021	0.008	0.381	0.159	0.086	0.762%		
%RSD		16.510	6.929	1.238	0.562	0.292	0.960		

180-43135-B-1-B MS 4/26/2015 3:51:32 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	03:50:39	70.010%	41.020	841.900	838.900	0.000	54480.000	59770.000	62610.000
2	03:50:47	67.502%	44.600	904.000	888.300	0.000	54560.000	60340.000	62720.000
3	03:50:55	67.456%	44.260	879.200	894.400	0.000	55750.000	61070.000	63750.000
X		68.323%	43.290	875.000	873.800	0.000	54930.000	60390.000	63020.000
σ		1.461%	1.980	31.290	30.420	0.000	710.900	652.200	628.100
%RSD		2.139	4.573	3.576	3.481	0.000	1.294	1.080	0.997
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:39	54740.000	7248.000	0.000	52020.000	46680.000	49820.000	63.743%	1821.000
2	03:50:47	55170.000	7318.000	0.000	52140.000	48030.000	49850.000	64.279%	1818.000
3	03:50:55	56130.000	7381.000	0.000	52960.000	49180.000	51250.000	62.991%	1854.000
X		55350.000	7316.000	0.000	52370.000	47970.000	50310.000	63.671%	1831.000
σ		708.900	66.170	0.000	513.000	1253.000	817.000	0.647%	19.680
%RSD		1.281	0.905	0.000	0.979	2.613	1.624	1.016	1.075
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:39	507.400	286.800	1738.000	78890.000	74930.000	485.300	520.000	339.700
2	03:50:47	503.900	281.300	1768.000	78750.000	73910.000	477.700	507.100	330.300
3	03:50:55	505.800	285.900	1809.000	79260.000	75490.000	481.800	516.300	336.300
X		505.700	284.700	1772.000	78970.000	74780.000	481.600	514.500	335.400
σ		1.789	2.914	35.620	262.600	802.200	3.784	6.644	4.734
%RSD		0.354	1.024	2.011	0.333	1.073	0.786	1.291	1.411
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:39	351.000	1457.000	1455.000	73.220	12.110	12.970	0.000	988.400
2	03:50:47	336.800	1421.000	1420.000	71.480	11.280	12.700	0.000	976.800
3	03:50:55	344.800	1430.000	1451.000	72.590	13.730	11.530	0.000	987.600
X		344.200	1436.000	1442.000	72.430	12.370	12.400	0.000	984.200
σ		7.082	18.900	19.160	0.883	1.246	0.764	0.000	6.474
%RSD		2.058	1.316	1.329	1.218	10.070	6.159	0.000	0.658
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:39	0.000	922.600	941.500	51.544%	42.960	43.010	49.750	87.920
2	03:50:47	0.000	922.600	927.200	52.735%	43.890	42.750	49.500	88.990
3	03:50:55	0.000	923.400	928.700	52.723%	43.370	43.140	52.500	86.330
X		0.000	922.900	932.500	52.334%	43.410	42.970	50.580	87.740
σ		0.000	0.475	7.854	0.684%	0.465	0.197	1.662	1.340
%RSD		0.000	0.051	0.842	1.307	1.072	0.458	3.286	1.528
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:39	56.248%	1761.000	359.700	360.900	1900.000	1884.000	67.265%	67.455%
2	03:50:47	56.432%	1785.000	366.500	363.000	1897.000	1891.000	68.175%	69.036%
3	03:50:55	57.419%	1762.000	360.900	358.800	1898.000	1875.000	68.109%	69.589%
X		56.700%	1769.000	362.300	360.900	1898.000	1883.000	67.850%	68.694%
σ		0.630%	13.800	3.609	2.121	1.392	7.535	0.507%	1.107%
%RSD		1.111	0.780	0.996	0.588	0.073	0.400	0.748	1.612
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:50:39	44.350	43.780	210.200	196.900	204.100	70.444%		
2	03:50:47	45.430	44.580	213.200	200.400	207.300	69.791%		
3	03:50:55	45.520	44.240	212.600	198.300	206.400	71.162%		
X		45.100	44.200	212.000	198.500	205.900	70.466%		
σ		0.654	0.404	1.585	1.737	1.657	0.686%		
%RSD		1.449	0.914	0.748	0.875	0.805	0.973		

180-43135-B-1-C MSD 4/26/2015 3:56:37 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	03:55:45	67.812%	43.040	869.500	880.900	0.000	54910.000	60520.000	63220.000
2	03:55:53	67.626%	43.100	892.400	894.400	0.000	55280.000	59520.000	62970.000
3	03:56:01	65.855%	44.890	909.200	922.600	0.000	55960.000	61290.000	63900.000
X		67.098%	43.680	890.300	899.300	0.000	55380.000	60440.000	63360.000
		1.080%	1.051	19.940	21.270	0.000	532.400	888.500	481.700
		1.610	2.405	2.240	2.365	0.000	0.961	1.470	0.760
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:45	51920.000	7037.000	0.000	51030.000	46520.000	48670.000	63.427%	1731.000
2	03:55:53	51850.000	7039.000	0.000	51840.000	47250.000	49650.000	63.637%	1789.000
3	03:56:01	52260.000	7168.000	0.000	52460.000	48500.000	51220.000	62.466%	1812.000
X		52010.000	7081.000	0.000	51770.000	47420.000	49850.000	63.177%	1777.000
		220.900	75.140	0.000	717.300	1002.000	1286.000	0.624%	41.870
		0.425	1.061	0.000	1.385	2.114	2.580	0.988	2.356
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:45	509.500	281.900	1719.000	77260.000	71640.000	490.500	524.200	329.500
2	03:55:53	513.500	281.300	1759.000	76730.000	71720.000	483.500	510.700	321.500
3	03:56:01	522.100	287.200	1796.000	76560.000	72270.000	486.700	526.300	329.300
X		515.000	283.500	1758.000	76850.000	71880.000	486.900	520.400	326.800
		6.433	3.271	38.650	368.400	341.600	3.515	8.429	4.536
		1.249	1.154	2.198	0.479	0.475	0.722	1.620	1.388
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:45	329.200	1430.000	1435.000	70.750	10.220	11.370	0.000	1006.000
2	03:55:53	331.800	1423.000	1429.000	71.390	12.360	10.350	0.000	1011.000
3	03:56:01	330.200	1427.000	1436.000	70.880	10.990	12.630	0.000	1008.000
X		330.400	1427.000	1433.000	71.010	11.190	11.450	0.000	1008.000
		1.308	3.943	4.096	0.340	1.084	1.144	0.000	2.470
		0.396	0.276	0.286	0.479	9.690	9.989	0.000	0.245
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:45	0.000	941.600	950.600	51.491%	43.970	43.650	51.960	89.910
2	03:55:53	0.000	951.500	957.700	51.623%	45.080	44.300	53.740	89.530
3	03:56:01	0.000	941.300	956.200	52.316%	43.510	43.780	51.450	89.270
X		0.000	944.800	954.800	51.810%	44.190	43.910	52.380	89.570
		0.000	5.806	3.725	0.443%	0.810	0.344	1.204	0.320
		0.000	0.615	0.390	0.855	1.833	0.784	2.299	0.357
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:45	55.774%	1792.000	376.800	374.000	1919.000	1899.000	66.855%	68.529%
2	03:55:53	55.989%	1804.000	379.600	379.400	1948.000	1929.000	66.324%	67.906%
3	03:56:01	55.758%	1833.000	376.600	381.500	1920.000	1931.000	67.497%	69.196%
X		55.840%	1810.000	377.700	378.300	1929.000	1920.000	66.892%	68.544%
		0.129%	21.010	1.694	3.857	16.560	17.800	0.587%	0.645%
		0.231	1.161	0.449	1.020	0.858	0.927	0.878	0.941
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:55:45	46.060	45.060	212.200	196.700	205.700	70.049%		
2	03:55:53	46.230	45.100	211.100	198.800	206.400	70.160%		
3	03:56:01	46.010	44.880	214.200	197.300	205.900	70.552%		
X		46.100	45.010	212.500	197.600	206.000	70.254%		
		0.112	0.116	1.545	1.089	0.339	0.264%		
		0.243	0.257	0.727	0.551	0.165	0.376		

180-43135-B-1-A PDS 4/26/2015 4:01:48 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	04:00:54	66.369%	49.250	983.600	995.100	0.000	64520.000	68150.000	70550.000	
2	04:01:02	65.575%	48.530	1014.000	1025.000	0.000	65550.000	67320.000	70170.000	
3	04:01:10	63.927%	50.210	1049.000	1052.000	0.000	67330.000	68980.000	71830.000	
X		65.290%	49.330	1015.000	1024.000	0.000	65800.000	68150.000	70850.000	
		σ	1.246%	0.841	32.860	28.670	0.000	1420.000	831.300	868.000
		%RSD	1.908	1.704	3.236	2.799	0.000	2.158	1.220	1.225
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:00:54	36310.000	13500.000	0.000	56580.000	53290.000	55060.000	61.991%	1589.000	
2	04:01:02	36390.000	13440.000	0.000	57160.000	53940.000	56630.000	61.803%	1639.000	
3	04:01:10	36620.000	13760.000	0.000	57340.000	54710.000	57590.000	61.395%	1658.000	
X		36440.000	13570.000	0.000	57030.000	53980.000	56430.000	61.730%	1629.000	
		σ	161.900	167.800	0.000	398.500	710.200	1279.000	0.305%	35.420
		%RSD	0.444	1.237	0.000	0.699	1.316	2.267	0.494	2.175
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:00:54	563.100	292.400	1748.000	72190.000	66780.000	550.100	575.000	351.900	
2	04:01:02	566.000	292.700	1796.000	71130.000	68020.000	543.300	573.400	348.300	
3	04:01:10	565.000	298.900	1828.000	71790.000	68030.000	552.100	573.400	351.600	
X		564.700	294.700	1791.000	71700.000	67610.000	548.500	573.900	350.600	
		σ	1.505	3.678	40.500	535.600	718.800	4.643	0.956	1.977
		%RSD	0.267	1.248	2.262	0.747	1.063	0.847	0.167	0.564
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:00:54	356.300	1480.000	1511.000	74.000	13.010	6.998	0.000	1112.000	
2	04:01:02	357.900	1485.000	1509.000	74.740	12.600	14.960	0.000	1117.000	
3	04:01:10	357.600	1483.000	1499.000	74.010	14.110	13.690	0.000	1126.000	
X		357.300	1483.000	1506.000	74.250	13.240	11.880	0.000	1118.000	
		σ	0.881	2.265	6.756	0.423	0.781	4.277	0.000	7.226
		%RSD	0.247	0.153	0.449	0.570	5.900	35.990	0.000	0.646
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:00:54	0.000	1150.000	1159.000	51.005%	45.560	46.110	60.370	103.200	
2	04:01:02	0.000	1143.000	1158.000	51.543%	45.120	45.920	58.450	102.600	
3	04:01:10	0.000	1150.000	1168.000	51.218%	45.980	45.600	58.770	103.400	
X		0.000	1148.000	1162.000	51.255%	45.550	45.880	59.200	103.100	
		σ	0.000	4.133	5.627	0.271%	0.431	0.258	1.027	0.437
		%RSD	0.000	0.360	0.484	0.529	0.947	0.562	1.735	0.424
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:00:54	55.175%	2183.000	519.400	517.200	2134.000	2140.000	66.207%	67.099%	
2	04:01:02	55.852%	2186.000	519.000	520.500	2135.000	2132.000	66.989%	67.670%	
3	04:01:10	55.991%	2186.000	516.200	519.100	2147.000	2140.000	67.238%	68.129%	
X		55.673%	2185.000	518.200	519.000	2139.000	2137.000	66.811%	67.632%	
		σ	0.437%	1.533	1.733	1.669	7.087	4.361	0.538%	0.516%
		%RSD	0.784	0.070	0.334	0.322	0.331	0.204	0.806	0.763
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	04:00:54	51.550	51.120	174.500	165.000	170.400	69.430%			
2	04:01:02	52.240	51.430	174.000	165.400	169.400	70.143%			
3	04:01:10	53.130	51.190	175.700	163.800	170.100	70.686%			
X		52.310	51.250	174.700	164.700	170.000	70.086%			
		σ	0.789	0.158	0.867	0.842	0.492	0.630%		
		%RSD	1.509	0.309	0.496	0.511	0.290	0.899		

180-43135-A-2-C 4/26/2015 4:06:53 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	04:06:02	69.083%	2.401	25.750	29.540	0.000	718.700	11800.000	12000.000
2	04:06:09	68.505%	2.217	30.410	29.410	0.000	732.200	11540.000	12080.000
3	04:06:17	69.129%	2.236	27.680	30.060	0.000	718.000	11630.000	12020.000
X		68.906%	2.285	27.950	29.670	0.000	723.000	11660.000	12040.000
σ		0.347%	0.101	2.341	0.340	0.000	7.974	131.800	41.390
%RSD		0.504	4.426	8.376	1.147	0.000	1.103	1.131	0.344
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:06:02	38070.000	6843.000	0.000	3895.000	44810.000	46630.000	63.776%	820.900
2	04:06:09	39090.000	6977.000	0.000	3873.000	45040.000	47660.000	63.665%	837.200
3	04:06:17	38870.000	6896.000	0.000	3928.000	46650.000	48950.000	62.810%	857.800
X		38680.000	6905.000	0.000	3899.000	45500.000	47750.000	63.417%	838.600
σ		536.700	66.990	0.000	28.110	997.700	1159.000	0.529%	18.510
%RSD		1.388	0.970	0.000	0.721	2.193	2.428	0.834	2.207
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:06:02	55.350	106.400	964.400	69900.000	66310.000	56.430	94.110	121.800
2	04:06:09	54.010	106.600	986.200	70220.000	65660.000	56.020	92.690	121.400
3	04:06:17	55.500	107.800	1011.000	70860.000	66490.000	56.900	93.730	121.900
X		54.950	106.900	987.300	70330.000	66150.000	56.450	93.510	121.700
σ		0.824	0.741	23.400	490.900	436.800	0.443	0.736	0.278
%RSD		1.500	0.693	2.370	0.698	0.660	0.786	0.787	0.229
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:06:02	121.600	614.500	623.900	32.370	2.877	5.390	0.000	207.600
2	04:06:09	121.000	618.900	619.400	32.420	3.756	3.002	0.000	205.500
3	04:06:17	123.000	619.200	627.900	33.480	4.073	6.055	0.000	208.300
X		121.900	617.500	623.800	32.760	3.569	4.816	0.000	207.100
σ		1.051	2.624	4.256	0.624	0.619	1.606	0.000	1.462
%RSD		0.863	0.425	0.682	1.904	17.350	33.340	0.000	0.706
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:06:02	0.000	8.291	8.648	54.019%	1.461	1.512	2.396	3.171
2	04:06:09	0.000	7.819	7.705	54.798%	1.269	1.354	2.633	3.509
3	04:06:17	0.000	7.805	7.112	54.638%	1.521	1.353	2.513	3.220
X		0.000	7.972	7.822	54.485%	1.417	1.406	2.514	3.300
σ		0.000	0.277	0.775	0.412%	0.131	0.092	0.119	0.183
%RSD		0.000	3.472	9.905	0.755	9.268	6.527	4.725	5.533
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:06:02	57.977%	44.210	3.220	2.914	223.500	218.500	67.787%	68.487%
2	04:06:09	59.220%	42.360	2.910	2.711	226.900	221.700	68.615%	68.703%
3	04:06:17	58.891%	43.030	2.836	2.601	218.000	217.800	68.651%	69.750%
X		58.696%	43.200	2.989	2.742	222.800	219.300	68.351%	68.980%
σ		0.644%	0.935	0.204	0.159	4.488	2.083	0.489%	0.676%
%RSD		1.098	2.164	6.830	5.787	2.014	0.950	0.715	0.980
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:06:02	0.550	0.533	150.900	138.000	145.200	73.506%		
2	04:06:09	0.532	0.509	151.300	139.200	145.100	74.339%		
3	04:06:17	0.468	0.461	140.700	130.600	135.300	80.335%		
X		0.517	0.501	147.600	135.900	141.800	76.060%		
σ		0.043	0.037	6.032	4.628	5.673	3.726%		
%RSD		8.412	7.336	4.086	3.404	4.000	4.899		

180-43135-A-3-C 4/26/2015 4:11:56 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	04:11:04	76.404%	2.457	19.390	20.900	0.000	3127.000	10560.000	10900.000
2	04:11:12	72.328%	2.665	22.330	23.310	0.000	3257.000	10860.000	11350.000
3	04:11:20	74.929%	2.603	20.480	22.840	0.000	3187.000	10750.000	11100.000
X		74.554%	2.575	20.730	22.350	0.000	3190.000	10720.000	11120.000
σ		2.064%	0.107	1.489	1.277	0.000	65.270	155.200	227.000
%RSD		2.768	4.142	7.179	5.712	0.000	2.046	1.447	2.042
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:04	31760.000	2574.000	0.000	4106.000	8221.000	8567.000	71.019%	591.300
2	04:11:12	33470.000	2664.000	0.000	4216.000	8701.000	8857.000	70.237%	599.300
3	04:11:20	32490.000	2662.000	0.000	4238.000	8841.000	8918.000	69.704%	608.900
X		32570.000	2633.000	0.000	4187.000	8588.000	8781.000	70.320%	599.800
σ		861.500	50.970	0.000	70.980	325.300	187.500	0.661%	8.832
%RSD		2.645	1.936	0.000	1.695	3.788	2.136	0.940	1.473
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:04	46.090	169.200	1144.000	65600.000	62310.000	62.230	89.720	157.400
2	04:11:12	43.820	170.900	1170.000	66730.000	62570.000	62.320	91.460	162.400
3	04:11:20	47.150	171.200	1192.000	67460.000	63350.000	63.590	90.180	163.600
X		45.690	170.400	1169.000	66600.000	62740.000	62.710	90.450	161.100
σ		1.700	1.052	24.100	939.400	542.300	0.760	0.902	3.298
%RSD		3.720	0.617	2.062	1.411	0.864	1.211	0.997	2.047
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:04	159.200	1045.000	1053.000	51.810	4.978	3.682	0.000	58.080
2	04:11:12	164.300	1071.000	1062.000	52.720	5.442	5.635	0.000	59.070
3	04:11:20	163.000	1058.000	1075.000	52.340	5.906	6.877	0.000	58.450
X		162.200	1058.000	1063.000	52.290	5.442	5.398	0.000	58.530
σ		2.664	13.140	11.150	0.458	0.464	1.611	0.000	0.499
%RSD		1.643	1.242	1.049	0.876	8.523	29.840	0.000	0.853
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:04	0.000	20.320	21.090	59.024%	1.423	1.259	7.523	8.134
2	04:11:12	0.000	20.090	21.200	59.201%	1.316	1.391	6.909	8.285
3	04:11:20	0.000	20.240	21.160	59.919%	1.328	1.301	6.772	7.900
X		0.000	20.220	21.150	59.381%	1.356	1.317	7.068	8.106
σ		0.000	0.116	0.055	0.474%	0.059	0.067	0.400	0.194
%RSD		0.000	0.575	0.260	0.798	4.330	5.102	5.658	2.391
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:04	62.035%	42.310	2.022	1.854	427.300	411.500	71.734%	72.123%
2	04:11:12	63.289%	42.850	1.673	1.744	413.200	422.000	71.840%	72.164%
3	04:11:20	63.585%	41.600	1.968	1.750	415.400	410.900	73.310%	73.901%
X		62.970%	42.250	1.888	1.783	418.600	414.800	72.295%	72.729%
σ		0.823%	0.629	0.188	0.062	7.588	6.253	0.881%	1.015%
%RSD		1.306	1.488	9.957	3.479	1.813	1.507	1.219	1.396
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:11:04	0.632	0.613	283.300	261.600	273.800	77.723%		
2	04:11:12	0.631	0.578	289.700	267.700	278.200	77.656%		
3	04:11:20	0.572	0.620	288.400	262.800	277.500	78.446%		
X		0.612	0.604	287.100	264.000	276.500	77.942%		
σ		0.035	0.023	3.404	3.256	2.349	0.438%		
%RSD		5.673	3.737	1.185	1.233	0.850	0.562		

180-43135-B-4-A 4/26/2015 4:17:01 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	04:16:07	73.629%	1.906	15.740	17.720	0.000	2921.000	14140.000	14540.000
2	04:16:15	75.351%	2.316	14.890	17.930	0.000	2904.000	14120.000	14490.000
3	04:16:23	74.494%	2.166	18.860	18.180	0.000	2947.000	14000.000	14410.000
X		74.491%	2.129	16.500	17.940	0.000	2924.000	14090.000	14480.000
σ		0.861%	0.208	2.091	0.231	0.000	21.600	78.150	67.190
%RSD		1.156	9.748	12.670	1.289	0.000	0.739	0.555	0.464
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:16:07	31930.000	2625.000	0.000	3853.000	12980.000	13150.000	69.929%	594.800
2	04:16:15	31960.000	2676.000	0.000	4021.000	13550.000	13490.000	69.322%	613.300
3	04:16:23	32300.000	2643.000	0.000	3894.000	13670.000	13660.000	69.993%	619.300
X		32060.000	2648.000	0.000	3922.000	13400.000	13440.000	69.748%	609.100
σ		206.900	25.590	0.000	87.800	370.400	257.900	0.370%	12.760
%RSD		0.646	0.966	0.000	2.239	2.765	1.920	0.531	2.096
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:16:07	48.850	108.400	1169.000	63890.000	59880.000	42.040	79.200	141.500
2	04:16:15	46.230	108.100	1198.000	64220.000	60660.000	42.650	78.260	143.100
3	04:16:23	46.160	106.800	1205.000	64270.000	60810.000	42.370	80.300	139.400
X		47.080	107.800	1191.000	64130.000	60450.000	42.350	79.250	141.300
σ		1.537	0.870	19.430	208.600	501.600	0.302	1.023	1.855
%RSD		3.264	0.807	1.632	0.325	0.830	0.713	1.291	1.312
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:16:07	142.700	939.200	940.200	33.860	4.726	1.130	0.000	48.790
2	04:16:15	142.200	954.300	950.000	33.760	4.755	5.377	0.000	49.710
3	04:16:23	141.800	946.700	956.500	34.160	5.443	4.732	0.000	49.810
X		142.200	946.700	948.900	33.930	4.975	3.746	0.000	49.430
σ		0.414	7.540	8.212	0.205	0.406	2.289	0.000	0.561
%RSD		0.291	0.796	0.865	0.605	8.154	61.100	0.000	1.135
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:16:07	0.000	6.012	6.516	58.613%	1.298	1.366	7.590	7.671
2	04:16:15	0.000	6.079	6.448	59.130%	1.255	1.198	6.637	8.194
3	04:16:23	0.000	6.139	6.274	59.325%	1.307	1.262	7.228	8.185
X		0.000	6.077	6.413	59.023%	1.287	1.275	7.152	8.016
σ		0.000	0.064	0.125	0.368%	0.028	0.085	0.481	0.299
%RSD		0.000	1.047	1.947	0.623	2.180	6.664	6.728	3.736
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:16:07	62.087%	49.130	1.493	1.431	195.600	193.600	71.529%	71.177%
2	04:16:15	62.179%	50.520	1.385	1.450	197.500	190.400	72.861%	72.863%
3	04:16:23	62.471%	49.390	1.411	1.444	193.800	194.500	73.007%	72.689%
X		62.246%	49.680	1.429	1.442	195.600	192.900	72.466%	72.243%
σ		0.200%	0.740	0.056	0.010	1.823	2.158	0.814%	0.928%
%RSD		0.322	1.489	3.942	0.684	0.932	1.119	1.124	1.284
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:16:07	0.547	0.551	209.400	194.800	203.300	76.389%		
2	04:16:15	0.572	0.592	213.200	197.100	205.800	77.154%		
3	04:16:23	0.556	0.583	210.200	195.500	203.800	78.317%		
X		0.558	0.575	210.900	195.800	204.300	77.287%		
σ		0.013	0.022	1.974	1.135	1.284	0.971%		
%RSD		2.280	3.795	0.936	0.580	0.628	1.256		

CCV 1533080 4/26/2015 4:26:06 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	04:25:15	71.563%	90.470	93.030	91.160	0.000	62420.000	58190.000	59670.000
2	04:25:23	71.788%	93.450	88.020	91.210	0.000	63400.000	58020.000	60350.000
3	04:25:30	70.578%	95.950	99.390	94.850	0.000	63390.000	58370.000	60920.000
X		71.310%	93.290%	93.481%	92.406%	0.000	126.140%	116.387%	120.631%
σ		0.644%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.902	2.944	6.091	2.291	0.000	0.889	0.301	1.039
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:15	645.300	5126.000	0.000	49790.000	44940.000	46590.000	69.445%	94.130
2	04:25:23	657.000	5227.000	0.000	51100.000	45930.000	48220.000	68.743%	94.220
3	04:25:30	639.000	5329.000	0.000	52060.000	46770.000	48860.000	68.398%	97.390
X		129.416%	104.555%	0.000	101.964%	91.760%	95.780%	68.862%	95.248%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.534%	n/a
%RSD		1.408	1.942	0.000	2.237	2.004	2.437	0.775	1.952
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:15	98.450	96.680	485.400	25100.000	22840.000	95.600	95.230	96.880
2	04:25:23	100.000	97.380	507.700	25370.000	23060.000	95.760	94.140	99.070
3	04:25:30	100.600	98.180	504.100	25310.000	23100.000	95.310	94.800	95.730
X		99.683%	97.412%	99.813%	101.033%	92.002%	95.559%	94.726%	97.225%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.103	0.770	2.392	0.566	0.621	0.238	0.578	1.743
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:15	94.580	93.160	91.910	92.320	95.360	103.400	0.000	92.210
2	04:25:23	95.480	92.110	91.190	91.750	93.400	100.600	0.000	93.700
3	04:25:30	92.970	90.890	88.510	91.540	95.010	94.980	0.000	90.780
X		94.345%	92.054%	90.539%	91.871%	94.591%	99.656%	0.000	92.230%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.346	1.234	1.977	0.437	1.102	4.289	0.000	1.588
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:15	66.038%	91.740	94.380	58.366%	93.200	95.250	96.510	94.910
2	04:25:23	66.340%	92.850	93.620	58.463%	94.040	94.080	96.380	96.930
3	04:25:30	67.044%	92.320	95.660	58.931%	93.500	93.290	97.410	95.360
X		66.474%	92.306%	94.552%	58.587%	93.580%	94.210%	96.769%	95.733%
σ		0.516%	n/a	n/a	0.302%	n/a	n/a	n/a	n/a
%RSD		0.776	0.602	1.094	0.515	0.451	1.047	0.578	1.106
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:15	62.507%	91.450	92.670	93.360	95.960	94.660	68.115%	68.815%
2	04:25:23	61.878%	95.860	94.350	95.790	97.170	97.420	68.740%	68.987%
3	04:25:30	62.532%	93.810	92.550	92.750	96.440	95.010	69.235%	70.029%
X		62.306%	93.709%	93.189%	93.967%	96.522%	95.695%	68.697%	69.277%
σ		0.371%	n/a	n/a	n/a	n/a	n/a	0.561%	0.657%
%RSD		0.595	2.356	1.079	1.711	0.634	1.570	0.817	0.948
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:25:15	95.620	93.690	96.210	94.980	95.840	75.626%		
2	04:25:23	95.840	94.610	96.640	95.450	95.770	76.094%		
3	04:25:30	95.690	94.780	97.100	95.080	96.030	75.988%		
X		95.714%	94.362%	96.652%	95.168%	95.879%	75.902%		
σ		n/a	n/a	n/a	n/a	n/a	0.245%		
%RSD		0.119	0.619	0.464	0.258	0.141	0.323		

CCB6 4/26/2015 4:35:13 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	04:34:20	87.895%	-0.086	2.120	2.011	0.000	164.800	9.545	13.620
2	04:34:27	88.075%	-0.078	2.065	2.208	0.000	166.800	9.374	11.900
3	04:34:35	88.476%	0.001	1.610	1.527	0.000	168.900	11.050	10.010
X		88.148%	-0.054	1.932	1.915	0.000	166.800	9.991	11.840
σ		0.298%	0.048	0.280	0.350	0.000	2.080	0.924	1.802
%RSD		0.338	88.350	14.500	18.300	0.000	1.247	9.249	15.220
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:20	-3.175	-0.215	0.000	-68.910	-7.296	9.247	90.682%	-0.543
2	04:34:27	-2.661	-2.934	0.000	-71.390	-1.401	5.843	89.898%	-0.604
3	04:34:35	-2.987	-6.192	0.000	-65.920	5.869	6.083	88.851%	-0.229
X		-2.941	-3.114	0.000	-68.740	-0.943	7.058	89.810%	-0.459
σ		0.260	2.993	0.000	2.739	6.594	1.900	0.919%	0.201
%RSD		8.837	96.110	0.000	3.985	699.600	26.920	1.023	43.870
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:20	0.117	0.045	0.277	10.820	11.530	0.016	0.044	-0.058
2	04:34:27	0.096	0.020	0.280	10.320	10.960	0.024	0.023	-0.010
3	04:34:35	0.058	0.032	0.343	9.803	8.489	0.011	0.003	0.003
X		0.090	0.032	0.300	10.310	10.330	0.017	0.023	-0.022
σ		0.030	0.013	0.037	0.506	1.617	0.006	0.020	0.032
%RSD		33.400	39.570	12.440	4.908	15.660	36.610	85.760	149.900
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:20	-0.034	0.127	-0.040	0.044	0.011	0.581	0.000	0.044
2	04:34:27	-0.086	0.114	-0.057	0.058	0.063	0.831	0.000	0.054
3	04:34:35	-0.040	0.047	-0.073	0.086	0.037	1.069	0.000	0.048
X		-0.053	0.096	-0.057	0.063	0.037	0.827	0.000	0.049
σ		0.028	0.043	0.017	0.021	0.026	0.244	0.000	0.005
%RSD		53.570	44.960	29.700	34.190	71.600	29.500	0.000	10.630
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:20	89.770%	0.268	0.203	83.743%	0.009	-0.010	0.038	-0.037
2	04:34:27	90.352%	0.142	0.249	83.553%	-0.018	-0.003	0.012	-0.027
3	04:34:35	90.808%	0.170	0.228	84.292%	0.002	-0.008	0.012	-0.027
X		90.310%	0.193	0.227	83.863%	-0.002	-0.007	0.021	-0.030
σ		0.520%	0.066	0.023	0.384%	0.014	0.004	0.015	0.006
%RSD		0.576	34.370	10.000	0.457	695.800	53.410	71.920	19.210
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:34:20	85.621%	-1.022	0.138	-0.017	0.026	0.002	82.753%	82.820%
2	04:34:27	86.325%	-1.025	0.147	0.040	-0.019	0.029	84.052%	84.162%
3	04:34:35	87.755%	-1.065	0.113	-0.001	-0.019	0.002	84.236%	84.210%
X		86.567%	-1.038	0.133	0.007	-0.004	0.011	83.680%	83.731%
σ		1.087%	0.024	0.017	0.029	0.026	0.015	0.808%	0.789%
%RSD		1.256	2.304	13.090	407.900	634.900	143.000	0.966	0.942
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:34:20	0.112	0.088	-0.074	-0.051	-0.067	83.049%		
2	04:34:27	0.073	0.089	-0.049	-0.037	-0.044	83.848%		
3	04:34:35	0.062	0.071	-0.070	-0.049	-0.060	84.731%		
X		0.082	0.083	-0.064	-0.046	-0.057	83.876%		
σ		0.026	0.010	0.014	0.008	0.012	0.841%		
%RSD		31.680	12.340	21.140	16.620	20.930	1.003		

180-43135-A-5-D 4/26/2015 4:40:21 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	04:39:27	59.548%	1.857	18.000	20.690	0.000	3289.000	717800.000	745500.000
2	04:39:35	58.889%	1.904	18.880	20.200	0.000	3330.000	722600.000	740500.000
3	04:39:43	59.711%	1.981	19.110	21.250	0.000	3347.000	722800.000	746500.000
X		59.383%	1.914	18.660	20.710	0.000	3322.000	721100.000	744200.000
σ		0.436%	0.063	0.585	0.527	0.000	30.070	2786.000	3194.000
%RSD		0.734	3.278	3.136	2.546	0.000	0.905	0.386	0.429
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:39:27	42380.000	3046.000	0.000	5195.000	1106000.000	1092000.000	57.370%	1827.000
2	04:39:35	42890.000	2956.000	0.000	5244.000	1121000.000	1117000.000	58.027%	1835.000
3	04:39:43	43330.000	2969.000	0.000	5285.000	1148000.000	1139000.000	57.037%	1876.000
X		42870.000	2990.000	0.000	5241.000	1125000.000	1116000.000	57.478%	1846.000
σ		478.400	48.850	0.000	44.820	21260.000	23830.000	0.504%	26.060
%RSD		1.116	1.634	0.000	0.855	1.890	2.135	0.877	1.412
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:39:27	176.400	414.000	4844.000	89560.000	86720.000	26.880	62.380	89.480
2	04:39:35	173.400	410.100	4907.000	90370.000	86480.000	26.770	62.320	89.640
3	04:39:43	180.100	417.800	5006.000	89860.000	87860.000	26.340	62.110	88.950
X		176.600	414.000	4919.000	89930.000	87020.000	26.660	62.270	89.360
σ		3.374	3.809	81.880	409.700	740.100	0.286	0.142	0.361
%RSD		1.911	0.920	1.664	0.456	0.851	1.071	0.228	0.404
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:39:27	91.540	530.500	531.300	19.440	1.991	2.977	0.000	360.400
2	04:39:35	92.050	527.000	535.500	20.070	1.507	-0.419	0.000	361.600
3	04:39:43	92.670	533.200	536.200	20.280	2.632	2.367	0.000	365.300
X		92.090	530.200	534.300	19.930	2.043	1.642	0.000	362.400
σ		0.569	3.084	2.671	0.437	0.564	1.811	0.000	2.571
%RSD		0.618	0.582	0.500	2.193	27.620	110.300	0.000	0.709
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:39:27	0.000	14.060	13.690	45.613%	0.337	0.411	2.378	3.275
2	04:39:35	0.000	13.520	14.980	45.589%	0.330	0.377	2.281	3.694
3	04:39:43	0.000	13.590	13.980	45.214%	0.408	0.435	2.203	3.610
X		0.000	13.720	14.220	45.472%	0.358	0.407	2.287	3.527
σ		0.000	0.298	0.677	0.224%	0.043	0.029	0.088	0.222
%RSD		0.000	2.172	4.763	0.492	12.100	7.139	3.836	6.283
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:39:27	49.845%	50.800	1.211	0.960	417.600	413.900	60.893%	62.295%
2	04:39:35	50.872%	51.990	1.233	1.153	414.800	408.300	61.457%	62.872%
3	04:39:43	49.931%	51.700	1.075	1.004	415.700	416.200	61.685%	62.118%
X		50.216%	51.490	1.173	1.039	416.000	412.800	61.345%	62.428%
σ		0.570%	0.619	0.086	0.101	1.427	4.051	0.408%	0.395%
%RSD		1.134	1.202	7.305	9.720	0.343	0.981	0.665	0.632
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:39:27	0.594	0.607	253.600	233.400	243.800	61.176%		
2	04:39:35	0.526	0.543	253.900	233.700	244.000	61.775%		
3	04:39:43	0.586	0.558	253.200	235.500	245.800	61.737%		
X		0.569	0.569	253.600	234.200	244.500	61.563%		
σ		0.037	0.034	0.375	1.163	1.115	0.335%		
%RSD		6.519	5.900	0.148	0.497	0.456	0.544		

180-43135-A-6-B 4/26/2015 4:45:23 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	04:44:32	59.862%	3.907	14.790	19.100	0.000	1317.000	138900.000	149800.000
2	04:44:40	60.017%	3.861	18.000	19.200	0.000	1329.000	139100.000	147200.000
3	04:44:48	59.340%	4.121	19.090	21.090	0.000	1344.000	140100.000	147900.000
X		59.740%	3.963	17.290	19.800	0.000	1330.000	139400.000	148300.000
σ		0.355%	0.139	2.238	1.124	0.000	13.390	651.100	1378.000
%RSD		0.594	3.502	12.940	5.677	0.000	1.007	0.467	0.929
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:32	110400.000	3095.000	0.000	15950.000	179200.000	194200.000	58.758%	4929.000
2	04:44:40	111700.000	3168.000	0.000	16280.000	186000.000	199600.000	58.647%	5048.000
3	04:44:48	109700.000	3204.000	0.000	16520.000	187200.000	201100.000	58.650%	5113.000
X		110600.000	3156.000	0.000	16250.000	184100.000	198300.000	58.685%	5030.000
σ		1009.000	55.560	0.000	286.200	4323.000	3597.000	0.063%	93.320
%RSD		0.913	1.761	0.000	1.761	2.348	1.814	0.108	1.855
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:32	361.700	201.000	2374.000	158900.000	154700.000	66.040	166.100	259.500
2	04:44:40	371.500	203.700	2460.000	156800.000	156200.000	65.810	169.400	257.000
3	04:44:48	364.900	201.400	2479.000	157900.000	157500.000	66.630	166.500	258.500
X		366.100	202.000	2438.000	157900.000	156200.000	66.160	167.400	258.300
σ		5.003	1.426	56.220	1025.000	1403.000	0.424	1.786	1.257
%RSD		1.367	0.706	2.306	0.649	0.899	0.641	1.067	0.487
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:32	261.500	601.500	593.000	22.800	3.967	3.533	0.000	173.200
2	04:44:40	266.900	597.500	598.700	22.320	4.129	6.768	0.000	172.400
3	04:44:48	261.500	587.900	611.500	22.780	4.423	4.799	0.000	173.000
X		263.300	595.700	601.100	22.630	4.173	5.033	0.000	172.900
σ		3.109	6.990	9.448	0.270	0.231	1.630	0.000	0.431
%RSD		1.181	1.173	1.572	1.194	5.533	32.390	0.000	0.249
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:32	0.000	9.166	8.798	46.380%	0.696	0.640	1.677	3.343
2	04:44:40	0.000	8.342	8.980	46.891%	0.667	0.627	1.392	3.376
3	04:44:48	0.000	8.528	8.472	46.651%	0.733	0.586	1.519	3.270
X		0.000	8.678	8.750	46.640%	0.699	0.617	1.529	3.329
σ		0.000	0.432	0.257	0.256%	0.033	0.028	0.143	0.054
%RSD		0.000	4.979	2.939	0.548	4.729	4.511	9.342	1.627
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:32	50.680%	85.350	1.682	1.640	784.800	772.400	64.857%	65.380%
2	04:44:40	51.516%	86.790	1.672	1.775	775.700	771.500	65.626%	66.530%
3	04:44:48	50.705%	87.680	1.554	1.541	782.800	776.800	66.201%	65.522%
X		50.967%	86.610	1.636	1.652	781.100	773.600	65.561%	65.811%
σ		0.476%	1.179	0.072	0.118	4.776	2.859	0.674%	0.627%
%RSD		0.933	1.361	4.374	7.124	0.611	0.370	1.029	0.953
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:44:32	1.177	1.120	515.500	478.500	501.200	64.725%		
2	04:44:40	1.088	1.135	518.900	479.700	505.700	64.754%		
3	04:44:48	1.131	1.058	516.100	475.900	503.100	65.597%		
X		1.132	1.104	516.800	478.000	503.300	65.025%		
σ		0.044	0.041	1.806	1.973	2.283	0.495%		
%RSD		3.921	3.690	0.349	0.413	0.454	0.762		

180-43135-A-7-B 4/26/2015 4:50:26 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	04:49:34	70.720%	4.882	21.700	26.420	0.000	1510.000	13870.000	14440.000
2	04:49:42	68.008%	4.950	21.260	29.640	0.000	1547.000	14260.000	14820.000
3	04:49:50	67.780%	5.435	24.210	28.520	0.000	1586.000	14540.000	14860.000
X		68.836%	5.089	22.390	28.190	0.000	1548.000	14230.000	14710.000
σ		1.635%	0.301	1.595	1.637	0.000	37.550	336.000	233.500
%RSD		2.376	5.925	7.124	5.806	0.000	2.426	2.362	1.588
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:34	53230.000	2979.000	0.000	5352.000	14140.000	14250.000	63.983%	1156.000
2	04:49:42	55320.000	2956.000	0.000	5371.000	14230.000	14400.000	64.130%	1199.000
3	04:49:50	55720.000	3061.000	0.000	5394.000	14410.000	14660.000	64.112%	1208.000
X		54760.000	2998.000	0.000	5372.000	14260.000	14440.000	64.075%	1187.000
σ		1337.000	55.310	0.000	20.750	138.800	203.900	0.080%	27.470
%RSD		2.441	1.845	0.000	0.386	0.973	1.412	0.125	2.314
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:34	100.300	231.200	2291.000	111500.000	108700.000	73.890	131.400	326.200
2	04:49:42	104.000	236.500	2301.000	110900.000	106900.000	73.540	133.800	324.000
3	04:49:50	102.400	236.100	2371.000	111200.000	108200.000	73.330	135.400	320.000
X		102.200	234.600	2321.000	111200.000	107900.000	73.590	133.500	323.400
σ		1.888	2.925	43.520	326.100	894.500	0.286	1.997	3.150
%RSD		1.847	1.247	1.875	0.293	0.829	0.389	1.495	0.974
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:34	324.700	1774.000	1766.000	93.120	11.490	11.060	0.000	117.800
2	04:49:42	327.400	1781.000	1779.000	93.760	10.790	7.567	0.000	117.600
3	04:49:50	322.600	1772.000	1797.000	93.000	9.404	9.232	0.000	119.500
X		324.900	1776.000	1781.000	93.300	10.560	9.285	0.000	118.300
σ		2.404	4.719	15.900	0.407	1.062	1.746	0.000	1.030
%RSD		0.740	0.266	0.893	0.436	10.060	18.800	0.000	0.871
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:34	0.000	5.431	5.684	53.775%	2.072	2.140	13.070	13.400
2	04:49:42	0.000	5.386	5.021	54.396%	2.120	2.065	12.510	13.490
3	04:49:50	0.000	5.957	5.358	54.268%	2.072	2.103	13.100	13.740
X		0.000	5.591	5.354	54.146%	2.088	2.102	12.900	13.540
σ		0.000	0.317	0.332	0.328%	0.028	0.038	0.332	0.178
%RSD		0.000	5.676	6.194	0.605	1.322	1.790	2.575	1.313
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:34	57.227%	65.330	2.761	2.862	479.700	474.100	66.961%	68.608%
2	04:49:42	57.392%	66.600	2.718	2.713	470.500	472.500	68.175%	69.208%
3	04:49:50	58.544%	63.940	2.979	2.758	473.600	472.700	67.868%	69.459%
X		57.721%	65.290	2.819	2.777	474.600	473.100	67.668%	69.092%
σ		0.717%	1.330	0.140	0.076	4.629	0.883	0.631%	0.438%
%RSD		1.243	2.037	4.957	2.750	0.975	0.187	0.933	0.633
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:49:34	2.406	2.234	470.600	435.000	455.400	71.430%		
2	04:49:42	2.427	2.277	467.000	435.800	454.400	71.997%		
3	04:49:50	2.368	2.171	467.800	437.700	455.100	72.243%		
X		2.400	2.227	468.500	436.100	454.900	71.890%		
σ		0.030	0.053	1.865	1.385	0.511	0.417%		
%RSD		1.247	2.391	0.398	0.318	0.112	0.580		

180-43135-A-8-B 4/26/2015 4:55:34 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	04:54:41	68.157%	5.942	18.540	19.400	0.000	1486.000	13670.000	13870.000
2	04:54:48	69.679%	6.981	18.300	20.100	0.000	1479.000	13610.000	13860.000
3	04:54:56	70.264%	6.480	17.340	19.120	0.000	1424.000	13380.000	13580.000
X		69.367%	6.468	18.060	19.540	0.000	1463.000	13550.000	13770.000
σ		1.088%	0.520	0.636	0.504	0.000	33.940	156.300	165.000
%RSD		1.568	8.038	3.523	2.581	0.000	2.320	1.154	1.198
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:41	53450.000	2990.000	0.000	4785.000	19650.000	20180.000	65.275%	673.100
2	04:54:48	53710.000	2991.000	0.000	4919.000	20640.000	20840.000	64.842%	703.300
3	04:54:56	52710.000	3070.000	0.000	4879.000	20510.000	20940.000	64.945%	713.900
X		53290.000	3017.000	0.000	4861.000	20270.000	20650.000	65.021%	696.800
σ		517.500	45.550	0.000	68.910	536.200	412.400	0.226%	21.180
%RSD		0.971	1.510	0.000	1.418	2.646	1.997	0.348	3.040
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:41	79.130	160.100	1574.000	91800.000	86750.000	73.400	140.000	352.100
2	04:54:48	80.810	165.900	1629.000	93910.000	89270.000	75.060	138.800	355.500
3	04:54:56	80.210	162.500	1641.000	93380.000	89270.000	74.960	139.100	352.200
X		80.050	162.900	1615.000	93030.000	88430.000	74.470	139.300	353.200
σ		0.854	2.910	35.840	1099.000	1457.000	0.933	0.646	1.913
%RSD		1.067	1.787	2.220	1.182	1.648	1.253	0.464	0.542
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:41	356.200	1097.000	1103.000	49.860	19.720	23.610	0.000	185.600
2	04:54:48	356.700	1102.000	1115.000	47.730	19.400	17.980	0.000	186.900
3	04:54:56	356.300	1106.000	1107.000	47.660	20.030	24.630	0.000	188.800
X		356.400	1102.000	1109.000	48.410	19.720	22.080	0.000	187.100
σ		0.263	4.533	6.327	1.250	0.315	3.582	0.000	1.611
%RSD		0.074	0.412	0.571	2.581	1.597	16.220	0.000	0.861
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:41	0.000	7.480	8.370	53.875%	3.052	2.931	4.729	6.087
2	04:54:48	0.000	7.839	7.936	54.049%	2.984	2.735	5.246	6.061
3	04:54:56	0.000	8.154	7.531	54.476%	3.009	2.792	5.447	5.647
X		0.000	7.824	7.945	54.133%	3.015	2.820	5.140	5.932
σ		0.000	0.337	0.420	0.309%	0.034	0.101	0.370	0.247
%RSD		0.000	4.306	5.280	0.571	1.143	3.573	7.205	4.159
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:41	57.088%	57.010	3.188	2.917	522.900	520.300	67.959%	68.134%
2	04:54:48	57.420%	58.500	3.295	2.872	525.000	518.900	69.312%	68.790%
3	04:54:56	58.291%	56.230	2.862	3.281	516.300	518.200	68.633%	68.853%
X		57.600%	57.250	3.115	3.023	521.400	519.100	68.634%	68.592%
σ		0.621%	1.155	0.226	0.224	4.553	1.082	0.676%	0.398%
%RSD		1.079	2.017	7.246	7.415	0.873	0.208	0.986	0.580
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:54:41	0.948	0.856	370.400	345.000	360.100	71.329%		
2	04:54:48	0.891	0.879	372.800	347.700	360.900	71.946%		
3	04:54:56	1.014	0.863	371.000	342.700	360.200	72.355%		
X		0.951	0.866	371.400	345.100	360.400	71.877%		
σ		0.062	0.012	1.262	2.464	0.480	0.516%		
%RSD		6.506	1.336	0.340	0.714	0.133	0.718		

180-43135-B-9-D 4/26/2015 5:00:42 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	04:59:48	61.756%	4.363	58.350	63.820	0.000	2168.000	51710.000	53130.000
2	04:59:56	61.863%	4.948	59.090	64.180	0.000	2180.000	52510.000	54080.000
3	05:00:04	58.743%	5.557	64.500	66.840	0.000	2259.000	54010.000	55770.000
X		60.787%	4.956	60.650	64.950	0.000	2202.000	52740.000	54330.000
σ		1.771%	0.597	3.354	1.650	0.000	49.400	1166.000	1340.000
%RSD		2.914	12.040	5.530	2.541	0.000	2.243	2.212	2.467
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:48	131300.000	5607.000	0.000	9924.000	106100.000	111700.000	60.950%	3402.000
2	04:59:56	130500.000	5538.000	0.000	10000.000	108800.000	115900.000	60.169%	3466.000
3	05:00:04	137100.000	5647.000	0.000	10180.000	110000.000	116700.000	59.382%	3571.000
X		133000.000	5598.000	0.000	10030.000	108300.000	114800.000	60.167%	3480.000
σ		3565.000	55.260	0.000	128.200	2012.000	2666.000	0.784%	85.330
%RSD		2.681	0.987	0.000	1.277	1.859	2.324	1.303	2.452
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:48	222.200	244.200	1296.000	116800.000	113600.000	49.760	129.500	115.900
2	04:59:56	223.600	247.700	1343.000	119900.000	114800.000	49.380	131.300	117.700
3	05:00:04	232.100	251.700	1351.000	121700.000	117200.000	51.500	133.000	117.200
X		226.000	247.900	1330.000	119500.000	115200.000	50.210	131.300	117.000
σ		5.370	3.785	29.610	2490.000	1817.000	1.126	1.766	0.927
%RSD		2.376	1.527	2.226	2.084	1.577	2.243	1.345	0.793
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:48	121.200	631.600	641.300	34.380	3.970	2.734	0.000	451.900
2	04:59:56	119.300	644.700	645.600	35.050	4.224	2.384	0.000	453.100
3	05:00:04	122.300	637.600	643.700	35.130	4.455	6.432	0.000	450.200
X		120.900	638.000	643.500	34.850	4.217	3.850	0.000	451.700
σ		1.514	6.563	2.184	0.415	0.242	2.243	0.000	1.469
%RSD		1.252	1.029	0.339	1.192	5.747	58.260	0.000	0.325
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:48	0.000	9.026	9.603	47.898%	0.429	0.488	1.892	2.633
2	04:59:56	0.000	9.678	9.234	47.773%	0.553	0.391	1.951	2.947
3	05:00:04	0.000	9.018	8.807	48.110%	0.533	0.550	1.826	2.745
X		0.000	9.241	9.215	47.927%	0.505	0.476	1.890	2.775
σ		0.000	0.379	0.398	0.171%	0.067	0.080	0.063	0.159
%RSD		0.000	4.100	4.323	0.356	13.170	16.800	3.332	5.737
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:59:48	51.840%	44.050	1.637	1.431	776.200	779.500	64.610%	64.768%
2	04:59:56	51.237%	44.870	1.435	1.537	781.400	784.100	65.243%	65.578%
3	05:00:04	51.798%	45.550	1.693	1.407	795.800	785.400	65.157%	65.347%
X		51.625%	44.820	1.588	1.458	784.500	783.000	65.003%	65.231%
σ		0.336%	0.752	0.136	0.069	10.170	3.089	0.343%	0.417%
%RSD		0.652	1.677	8.552	4.760	1.296	0.395	0.528	0.640
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:59:48	0.989	1.024	259.700	238.300	250.000	65.503%		
2	04:59:56	1.030	0.918	260.100	238.700	251.900	65.814%		
3	05:00:04	0.966	1.013	263.200	237.300	252.700	65.696%		
X		0.995	0.985	261.000	238.100	251.500	65.671%		
σ		0.032	0.058	1.882	0.765	1.368	0.157%		
%RSD		3.265	5.930	0.721	0.321	0.544	0.239		

180-43135-A-10-B 4/26/2015 5:05:50 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	05:04:56	66.135%	5.330	41.700	47.630	0.000	992.000	27510.000	28190.000
2	05:05:04	69.380%	5.001	40.270	45.290	0.000	958.200	27260.000	27960.000
3	05:05:12	68.490%	5.367	43.400	46.340	0.000	969.100	26660.000	27540.000
X		68.002%	5.232	41.790	46.420	0.000	973.100	27140.000	27900.000
σ		1.677%	0.202	1.569	1.174	0.000	17.250	438.400	330.400
%RSD		2.466	3.852	3.753	2.529	0.000	1.773	1.615	1.184
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:04:56	145800.000	2664.000	0.000	7355.000	10490.000	10560.000	67.835%	3313.000
2	05:05:04	141400.000	2602.000	0.000	7416.000	10580.000	10690.000	68.313%	3442.000
3	05:05:12	139500.000	2598.000	0.000	7385.000	10870.000	10860.000	68.093%	3468.000
X		142200.000	2621.000	0.000	7386.000	10650.000	10700.000	68.080%	3408.000
σ		3260.000	37.060	0.000	30.240	197.600	151.000	0.239%	82.960
%RSD		2.292	1.414	0.000	0.409	1.856	1.411	0.351	2.434
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:04:56	241.800	235.400	2459.000	169400.000	162600.000	106.400	159.500	66.430
2	05:05:04	242.200	232.000	2490.000	167900.000	162400.000	106.100	161.100	66.650
3	05:05:12	236.000	230.600	2536.000	168700.000	163000.000	106.300	164.100	67.980
X		240.000	232.700	2495.000	168700.000	162700.000	106.300	161.500	67.020
σ		3.504	2.487	39.220	708.300	331.400	0.136	2.381	0.835
%RSD		1.460	1.069	1.572	0.420	0.204	0.128	1.474	1.246
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:04:56	69.080	377.900	384.600	50.900	4.928	3.458	0.000	95.070
2	05:05:04	68.060	378.800	386.000	52.360	4.521	3.611	0.000	97.650
3	05:05:12	70.040	382.400	384.600	51.570	4.572	4.195	0.000	96.020
X		69.060	379.700	385.100	51.610	4.674	3.755	0.000	96.250
σ		0.990	2.377	0.778	0.728	0.221	0.389	0.000	1.306
%RSD		1.433	0.626	0.202	1.411	4.737	10.360	0.000	1.357
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:04:56	0.000	6.317	6.512	52.991%	0.389	0.311	1.223	1.403
2	05:05:04	0.000	6.707	6.495	52.731%	0.337	0.334	0.790	1.781
3	05:05:12	0.000	6.517	5.859	52.650%	0.383	0.380	0.751	1.371
X		0.000	6.514	6.289	52.791%	0.369	0.342	0.922	1.518
σ		0.000	0.195	0.372	0.178%	0.029	0.035	0.262	0.228
%RSD		0.000	2.999	5.915	0.337	7.761	10.380	28.450	15.010
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:04:56	56.012%	36.950	0.876	0.776	589.800	597.600	68.452%	68.998%
2	05:05:04	56.057%	36.690	0.770	0.630	591.600	580.800	69.975%	69.668%
3	05:05:12	56.071%	36.300	1.003	0.789	589.600	591.900	68.746%	69.666%
X		56.047%	36.650	0.883	0.732	590.300	590.100	69.058%	69.444%
σ		0.031%	0.325	0.117	0.088	1.129	8.567	0.808%	0.386%
%RSD		0.055	0.887	13.210	12.060	0.191	1.452	1.170	0.556
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:04:56	1.033	0.959	202.700	186.200	194.800	67.979%		
2	05:05:04	1.086	1.071	204.000	184.600	194.300	68.827%		
3	05:05:12	1.118	0.977	204.200	185.900	194.600	68.518%		
X		1.079	1.002	203.600	185.600	194.600	68.441%		
σ		0.043	0.060	0.798	0.821	0.278	0.430%		
%RSD		3.983	6.026	0.392	0.442	0.143	0.628		

MB 180-138863/1-A 4/26/2015 5:15:00 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	05:14:06	85.998%	-0.051	1.936	0.976	0.000	98.900	0.063	1.238
2	05:14:14	87.656%	-0.110	0.842	0.891	0.000	100.900	0.510	1.771
3	05:14:22	86.738%	-0.077	0.711	0.816	0.000	99.030	0.307	0.751
X		86.797%	-0.079	1.163	0.894	0.000	99.620	0.293	1.253
σ		0.830%	0.030	0.672	0.080	0.000	1.141	0.224	0.510
%RSD		0.957	37.350	57.840	8.934	0.000	1.145	76.270	40.730
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:14:06	-1.224	3.019	0.000	-51.750	10.450	6.044	77.651%	-0.116
2	05:14:14	-2.746	-1.545	0.000	-46.900	-6.939	5.782	76.197%	-0.048
3	05:14:22	-3.015	-4.146	0.000	-41.340	2.929	4.784	75.125%	-0.240
X		-2.329	-0.891	0.000	-46.660	2.146	5.536	76.324%	-0.135
σ		0.966	3.627	0.000	5.209	8.720	0.665	1.268%	0.097
%RSD		41.470	407.300	0.000	11.160	406.300	12.010	1.661	72.290
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:14:06	-0.066	0.089	0.159	10.490	8.630	-0.004	0.024	-0.108
2	05:14:14	-0.140	0.057	0.166	8.905	10.770	0.002	-0.023	-0.130
3	05:14:22	0.232	0.075	0.115	7.330	5.364	0.008	0.025	-0.061
X		0.009	0.073	0.147	8.909	8.254	0.002	0.008	-0.099
σ		0.197	0.016	0.028	1.581	2.721	0.006	0.027	0.035
%RSD		2315.000	21.990	18.910	17.750	32.970	284.500	322.900	35.520
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:14:06	-0.144	0.071	0.042	-0.009	0.074	-0.725	0.000	-0.004
2	05:14:14	-0.126	0.103	-0.054	0.017	0.014	-0.336	0.000	-0.007
3	05:14:22	-0.135	0.149	0.004	-0.015	0.014	0.792	0.000	0.001
X		-0.135	0.108	-0.003	-0.002	0.034	-0.089	0.000	-0.003
σ		0.009	0.040	0.049	0.017	0.035	0.788	0.000	0.004
%RSD		6.542	36.780	1761.000	714.500	103.000	880.300	0.000	132.700
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:14:06	80.689%	-0.018	-0.006	74.620%	-0.024	-0.022	0.028	-0.030
2	05:14:14	81.596%	0.014	-0.027	75.256%	-0.019	-0.014	-0.001	-0.041
3	05:14:22	83.003%	-0.011	0.028	75.635%	-0.019	-0.006	-0.001	-0.047
X		81.763%	-0.005	-0.002	75.170%	-0.021	-0.014	0.009	-0.039
σ		1.166%	0.017	0.028	0.513%	0.003	0.008	0.016	0.009
%RSD		1.426	345.700	1815.000	0.683	13.680	57.360	183.900	22.220
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:14:06	77.088%	-1.242	-0.037	-0.114	0.005	-0.012	77.236%	77.132%
2	05:14:14	78.469%	-1.270	-0.045	-0.098	-0.019	0.003	77.112%	77.453%
3	05:14:22	78.377%	-1.283	-0.026	-0.114	-0.019	-0.012	78.584%	78.604%
X		77.978%	-1.265	-0.036	-0.108	-0.011	-0.007	77.644%	77.730%
σ		0.772%	0.021	0.009	0.009	0.014	0.008	0.816%	0.774%
%RSD		0.990	1.640	26.290	8.423	130.200	127.500	1.051	0.995
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:14:06	-0.001	-0.003	-0.080	-0.057	-0.070	83.861%		
2	05:14:14	-0.007	-0.004	-0.082	-0.060	-0.071	83.972%		
3	05:14:22	-0.001	-0.001	-0.087	-0.052	-0.070	84.241%		
X		-0.003	-0.003	-0.083	-0.056	-0.070	84.025%		
σ		0.004	0.002	0.004	0.004	0.001	0.195%		
%RSD		109.400	61.370	4.840	7.755	1.324	0.232		

LCS 180-138863/2-A 4/26/2015 5:20:08 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	05:19:14	65.891%	43.600	903.100	887.300	0.000	58490.000	52670.000	54130.000	
2	05:19:22	64.477%	43.960	914.300	929.700	0.000	59560.000	54120.000	56460.000	
3	05:19:30	61.658%	47.660	972.600	966.900	0.000	61700.000	55420.000	57940.000	
X		64.009%	45.070	930.000	927.900	0.000	59920.000	54070.000	56180.000	
		σ	2.155%	2.247	37.330	39.810	0.000	1633.000	1374.000	1919.000
		%RSD	3.367	4.985	4.013	4.290	0.000	2.726	2.540	3.417
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:19:14	2230.000	9348.000	0.000	44640.000	41220.000	42630.000	60.947%	832.400	
2	05:19:22	2331.000	9564.000	0.000	45710.000	41540.000	43900.000	60.606%	860.500	
3	05:19:30	2423.000	9706.000	0.000	46300.000	43080.000	44960.000	59.410%	879.100	
X		2328.000	9539.000	0.000	45550.000	41950.000	43830.000	60.321%	857.400	
		σ	96.510	180.200	0.000	839.800	995.700	1162.000	0.807%	23.480
		%RSD	4.146	1.889	0.000	1.844	2.374	2.652	1.338	2.739
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:19:14	470.700	185.400	429.200	920.100	1009.000	458.800	457.100	233.600	
2	05:19:22	484.700	190.400	443.000	942.300	987.100	464.200	466.400	234.900	
3	05:19:30	478.600	190.100	453.500	946.100	1007.000	472.700	469.800	240.000	
X		478.000	188.600	441.900	936.100	1001.000	465.200	464.400	236.100	
		σ	7.017	2.810	12.190	14.050	12.310	7.000	6.567	3.394
		%RSD	1.468	1.490	2.758	1.500	1.229	1.505	1.414	1.437
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:19:14	234.700	438.900	442.400	37.070	8.815	11.950	0.000	926.100	
2	05:19:22	240.500	445.100	445.200	38.430	10.140	10.350	0.000	944.100	
3	05:19:30	238.800	441.900	439.400	37.510	10.170	9.436	0.000	928.700	
X		238.000	442.000	442.300	37.670	9.709	10.580	0.000	933.000	
		σ	3.011	3.119	2.909	0.694	0.774	1.274	0.000	9.722
		%RSD	1.265	0.706	0.658	1.841	7.971	12.040	0.000	1.042
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:19:14	54.569%	981.300	1002.000	47.723%	48.800	48.350	48.190	86.960	
2	05:19:22	54.023%	986.900	1017.000	47.618%	47.500	48.550	47.590	87.570	
3	05:19:30	55.693%	985.500	1007.000	48.471%	47.190	48.200	50.930	87.860	
X		54.762%	984.500	1009.000	47.937%	47.830	48.360	48.900	87.460	
		σ	0.852%	2.921	7.768	0.465%	0.859	0.177	1.779	0.461
		%RSD	1.555	0.297	0.770	0.970	1.795	0.365	3.638	0.527
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:19:14	51.288%	1941.000	473.800	472.100	1901.000	1896.000	58.049%	59.393%	
2	05:19:22	51.408%	1936.000	476.700	475.300	1913.000	1900.000	58.702%	60.130%	
3	05:19:30	51.659%	1942.000	474.500	471.400	1893.000	1901.000	59.525%	59.608%	
X		51.452%	1940.000	475.000	472.900	1902.000	1899.000	58.759%	59.710%	
		σ	0.189%	3.103	1.514	2.090	10.240	2.641	0.740%	0.379%
		%RSD	0.368	0.160	0.319	0.442	0.538	0.139	1.259	0.635
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	05:19:14	50.520	48.980	20.050	20.390	20.110	63.749%			
2	05:19:22	50.410	48.960	19.960	20.130	20.060	64.499%			
3	05:19:30	49.730	49.940	20.260	20.460	20.140	64.682%			
X		50.220	49.290	20.090	20.320	20.100	64.310%			
		σ	0.429	0.561	0.152	0.171	0.038	0.494%		
		%RSD	0.855	1.139	0.754	0.839	0.188	0.769		

180-42895-C-8-A 4/26/2015 5:25:18 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	05:24:25	67.943%	0.038	14.320	13.840	0.000	5358.000	586.500	580.700
2	05:24:33	66.521%	0.128	12.490	13.910	0.000	5435.000	599.800	589.100
3	05:24:41	67.932%	-0.004	11.190	12.880	0.000	5403.000	604.700	594.800
X		67.465%	0.054	12.670	13.540	0.000	5398.000	597.000	588.200
σ		0.818%	0.067	1.571	0.578	0.000	38.690	9.413	7.080
%RSD		1.212	124.100	12.400	4.266	0.000	0.717	1.577	1.204
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:24:25	74.630	4493.000	0.000	536.000	2094.000	2241.000	58.080%	4.114
2	05:24:33	73.530	4644.000	0.000	545.200	2266.000	2343.000	57.752%	2.938
3	05:24:41	73.760	4741.000	0.000	550.400	2236.000	2344.000	57.268%	2.870
X		73.970	4626.000	0.000	543.800	2199.000	2309.000	57.700%	3.307
σ		0.583	125.000	0.000	7.304	91.930	58.870	0.408%	0.699
%RSD		0.789	2.702	0.000	1.343	4.181	2.549	0.708	21.150
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:24:25	-0.304	3.081	107.200	162.100	164.700	3.732	1.915	0.133
2	05:24:33	0.505	3.346	111.700	159.500	159.500	3.569	2.522	0.261
3	05:24:41	-3.641	3.341	113.200	165.200	156.000	3.698	1.978	0.211
X		-1.147	3.256	110.700	162.300	160.000	3.666	2.138	0.202
σ		2.197	0.152	3.146	2.832	4.379	0.086	0.334	0.064
%RSD		191.600	4.665	2.843	1.745	2.736	2.354	15.620	31.940
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:24:25	0.086	7.030	6.924	0.707	0.026	2.903	0.000	6.101
2	05:24:33	0.147	7.732	7.194	0.720	0.026	2.794	0.000	5.952
3	05:24:41	0.266	6.716	6.289	0.587	0.110	1.286	0.000	6.129
X		0.166	7.159	6.802	0.671	0.054	2.328	0.000	6.061
σ		0.091	0.520	0.465	0.074	0.049	0.904	0.000	0.095
%RSD		54.790	7.263	6.833	10.980	89.450	38.820	0.000	1.570
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:24:25	56.178%	3.449	3.345	50.586%	-0.016	-0.021	0.020	0.126
2	05:24:33	55.931%	2.399	2.688	50.963%	-0.023	0.007	0.102	0.100
3	05:24:41	56.537%	1.892	2.092	51.075%	-0.016	-0.025	0.020	0.042
X		56.215%	2.580	2.708	50.875%	-0.018	-0.013	0.047	0.089
σ		0.304%	0.794	0.627	0.256%	0.004	0.017	0.047	0.043
%RSD		0.542	30.770	23.140	0.503	23.380	132.200	99.890	47.640
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:24:25	53.774%	3.665	0.118	0.057	16.740	16.150	59.303%	60.344%
2	05:24:33	54.259%	2.678	0.068	-0.027	17.680	16.170	59.570%	60.021%
3	05:24:41	54.345%	2.048	0.116	0.070	17.620	17.450	60.448%	60.844%
X		54.126%	2.797	0.100	0.034	17.340	16.590	59.774%	60.403%
σ		0.308%	0.815	0.028	0.053	0.525	0.747	0.599%	0.414%
%RSD		0.569	29.140	28.200	156.800	3.029	4.503	1.002	0.686
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:24:25	0.165	0.157	0.032	0.036	0.026	68.559%		
2	05:24:33	0.140	0.127	0.055	0.042	0.048	69.652%		
3	05:24:41	0.149	0.133	0.055	0.055	0.053	69.847%		
X		0.152	0.139	0.047	0.044	0.042	69.352%		
σ		0.013	0.016	0.013	0.010	0.014	0.694%		
%RSD		8.404	11.310	27.950	21.990	34.330	1.001		

180-42895-C-8-A SD@5 4/26/2015 5:30:26 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	05:29:33	70.809%	-0.061	3.472	3.567	0.000	1166.000	120.500	118.500
2	05:29:40	69.309%	-0.048	3.129	3.621	0.000	1182.000	117.900	122.400
3	05:29:48	68.568%	-0.098	3.742	3.970	0.000	1176.000	139.400	113.400
X		69.562%	-0.069	3.448	3.719	0.000	1175.000	125.900	118.100
		1.141%	0.026	0.307	0.219	0.000	8.194	11.760	4.518
		1.641	37.570	8.916	5.875	0.000	0.698	9.334	3.826
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:29:33	13.300	925.200	0.000	87.120	429.700	447.100	61.837%	0.019
2	05:29:40	14.370	943.800	0.000	84.020	436.100	465.300	61.220%	-0.223
3	05:29:48	15.140	940.800	0.000	91.260	409.200	462.600	60.434%	-0.085
X		14.270	936.600	0.000	87.460	425.000	458.300	61.164%	-0.096
		0.923	10.000	0.000	3.632	14.070	9.851	0.703%	0.122
		6.467	1.068	0.000	4.153	3.311	2.149	1.150	126.600
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:29:33	-0.906	0.879	21.100	31.470	31.020	0.762	0.590	0.040
2	05:29:40	-0.524	0.857	21.750	31.560	30.460	0.843	0.394	-0.014
3	05:29:48	-0.465	0.836	21.980	30.930	29.860	0.711	0.368	0.059
X		-0.632	0.858	21.610	31.320	30.450	0.772	0.451	0.028
		0.240	0.021	0.460	0.336	0.580	0.066	0.122	0.038
		37.910	2.487	2.128	1.074	1.906	8.607	26.960	132.900
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:29:33	0.057	1.378	1.548	0.153	0.024	0.240	0.000	1.169
2	05:29:40	-0.043	1.572	1.379	0.101	0.023	0.616	0.000	1.183
3	05:29:48	-0.064	1.343	1.416	0.127	0.102	-2.766	0.000	1.151
X		-0.017	1.431	1.448	0.127	0.050	-0.637	0.000	1.168
		0.065	0.123	0.089	0.026	0.046	1.854	0.000	0.016
		383.400	8.607	6.157	20.430	91.550	291.000	0.000	1.385
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:29:33	59.613%	0.599	0.563	54.607%	-0.027	-0.021	-0.001	-0.001
2	05:29:40	60.784%	0.511	0.534	55.236%	-0.020	-0.003	0.018	0.006
3	05:29:48	60.621%	0.457	0.495	54.993%	-0.020	-0.021	-0.001	-0.017
X		60.339%	0.522	0.531	54.945%	-0.022	-0.015	0.006	-0.004
		0.634%	0.071	0.034	0.317%	0.004	0.011	0.011	0.012
		1.051	13.660	6.428	0.577	17.670	70.230	188.800	315.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:29:33	57.617%	-0.505	0.025	-0.025	3.330	3.282	62.272%	62.428%
2	05:29:40	57.930%	-0.330	-0.021	-0.089	3.772	3.768	62.875%	63.395%
3	05:29:48	58.276%	-0.421	-0.026	-0.033	3.150	3.751	62.426%	62.913%
X		57.941%	-0.419	-0.007	-0.049	3.418	3.600	62.524%	62.912%
		0.330%	0.088	0.028	0.035	0.320	0.276	0.313%	0.484%
		0.569	20.930	385.500	71.020	9.369	7.655	0.501	0.769
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:29:33	0.027	0.020	-0.062	-0.050	-0.046	71.106%		
2	05:29:40	0.031	0.022	-0.041	-0.013	-0.037	71.895%		
3	05:29:48	0.021	0.031	-0.069	-0.041	-0.052	72.236%		
X		0.026	0.024	-0.057	-0.035	-0.045	71.746%		
		0.005	0.006	0.014	0.019	0.008	0.580%		
		18.830	23.330	24.940	55.520	16.890	0.808		

CCV 1533080 4/26/2015 5:35:32 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	05:34:39	66.989%	90.280	91.420	88.650	0.000	65860.000	60260.000	63220.000
2	05:34:47	67.073%	94.780	91.430	90.540	0.000	65540.000	60980.000	63830.000
3	05:34:55	68.262%	94.180	91.540	91.020	0.000	66220.000	61680.000	64200.000
X		67.442%	93.081%	91.463%	90.072%	0.000	131.746%	121.950%	127.502%
σ		0.712%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.056	2.622	0.073	1.391	0.000	0.521	1.163	0.779
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	693.600	5221.000	0.000	50550.000	43540.000	46100.000	62.358%	91.680
2	05:34:47	697.900	5270.000	0.000	51580.000	45360.000	47710.000	62.039%	92.220
3	05:34:55	700.400	5333.000	0.000	52150.000	45890.000	48300.000	61.753%	96.880
X		139.462%	105.496%	0.000	102.856%	89.855%	94.741%	62.050%	93.595%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.303%	n/a
%RSD		0.495	1.071	0.000	1.571	2.742	2.410	0.488	3.057
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	103.500	101.000	474.300	25870.000	23900.000	99.590	99.930	99.500
2	05:34:47	102.600	99.550	490.500	25770.000	23470.000	99.630	98.920	98.650
3	05:34:55	107.300	102.600	499.000	26400.000	24160.000	100.200	100.600	100.500
X		104.463%	101.054%	97.582%	104.041%	95.378%	99.794%	99.825%	99.544%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.365	1.513	2.568	1.296	1.464	0.313	0.864	0.919
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	100.300	92.890	91.980	93.400	93.580	92.820	0.000	90.290
2	05:34:47	98.960	88.270	91.270	94.410	95.360	96.920	0.000	92.770
3	05:34:55	100.100	94.250	91.490	94.750	92.610	100.600	0.000	94.130
X		99.810%	91.802%	91.578%	94.186%	93.850%	96.795%	0.000	92.397%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.743	3.416	0.395	0.746	1.484	4.041	0.000	2.104
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	61.203%	93.880	95.430	53.446%	94.150	94.840	95.200	94.620
2	05:34:47	61.377%	95.730	95.390	54.253%	93.920	95.030	93.840	95.330
3	05:34:55	61.425%	97.090	97.010	54.579%	92.580	94.700	94.330	95.220
X		61.335%	95.567%	95.945%	54.093%	93.549%	94.859%	94.455%	95.054%
σ		0.117%	n/a	n/a	0.584%	n/a	n/a	n/a	n/a
%RSD		0.191	1.686	0.961	1.079	0.908	0.177	0.729	0.404
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	56.711%	93.950	92.460	93.050	97.310	96.600	62.106%	63.103%
2	05:34:47	57.676%	95.330	92.170	93.500	95.450	98.310	63.316%	63.677%
3	05:34:55	57.668%	95.110	93.550	95.070	94.710	97.720	63.721%	63.338%
X		57.352%	94.797%	92.726%	93.873%	95.823%	97.544%	63.048%	63.373%
σ		0.555%	n/a	n/a	n/a	n/a	n/a	0.840%	0.289%
%RSD		0.967	0.779	0.783	1.130	1.398	0.895	1.333	0.456
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:34:39	96.820	96.100	97.130	97.170	97.020	68.507%		
2	05:34:47	98.860	96.300	97.660	96.860	97.500	68.655%		
3	05:34:55	97.480	95.460	97.070	97.560	96.760	69.131%		
X		97.721%	95.954%	97.285%	97.196%	97.094%	68.764%		
σ		n/a	n/a	n/a	n/a	n/a	0.326%		
%RSD		1.069	0.457	0.335	0.359	0.386	0.474		

CCB7 4/26/2015 5:44:41 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	05:43:48	95.286%	-0.057	2.065	1.140	0.000	78.430	12.520	11.130
2	05:43:56	94.779%	-0.034	2.081	0.899	0.000	75.840	11.590	13.580
3	05:44:04	92.388%	0.039	0.986	1.567	0.000	78.130	13.390	11.530
X		94.151%	-0.018	1.711	1.202	0.000	77.470	12.500	12.080
σ		1.548%	0.050	0.628	0.338	0.000	1.417	0.902	1.311
%RSD		1.644	284.700	36.710	28.140	0.000	1.829	7.214	10.850
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:48	-3.402	1.587	0.000	-35.130	-6.944	11.260	87.095%	-0.391
2	05:43:56	-2.956	-1.345	0.000	-32.730	1.341	13.550	86.657%	-0.521
3	05:44:04	-2.212	-3.475	0.000	-32.250	9.524	9.476	86.521%	-0.588
X		-2.856	-1.078	0.000	-33.370	1.307	11.430	86.758%	-0.500
σ		0.601	2.542	0.000	1.543	8.234	2.043	0.300%	0.100
%RSD		21.040	235.800	0.000	4.624	630.100	17.870	0.346	20.050
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:48	0.144	0.041	0.321	11.580	10.060	0.027	0.059	-0.111
2	05:43:56	0.168	0.037	0.402	11.570	8.728	0.025	-0.016	-0.078
3	05:44:04	0.161	0.059	0.336	10.700	7.387	0.017	0.048	-0.091
X		0.158	0.046	0.353	11.280	8.725	0.023	0.031	-0.093
σ		0.013	0.012	0.043	0.505	1.336	0.005	0.040	0.017
%RSD		7.994	25.590	12.160	4.479	15.310	23.440	132.400	17.830
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:48	-0.095	0.026	0.011	0.043	0.068	0.011	0.000	0.049
2	05:43:56	-0.087	0.210	-0.103	0.045	0.067	-0.515	0.000	0.032
3	05:44:04	-0.041	0.025	0.075	0.057	0.067	0.392	0.000	0.060
X		-0.074	0.087	-0.006	0.048	0.068	-0.037	0.000	0.047
σ		0.029	0.106	0.090	0.007	0.000	0.455	0.000	0.014
%RSD		39.580	122.000	1553.000	15.530	0.651	1221.000	0.000	29.780
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:48	84.736%	0.119	0.178	82.779%	-0.011	-0.007	0.040	-0.020
2	05:43:56	85.688%	0.210	0.197	82.095%	-0.015	-0.012	-0.001	-0.025
3	05:44:04	86.082%	0.261	0.235	83.790%	0.008	0.005	0.013	-0.025
X		85.502%	0.196	0.203	82.888%	-0.006	-0.005	0.017	-0.023
σ		0.692%	0.072	0.029	0.853%	0.012	0.009	0.020	0.003
%RSD		0.809	36.650	14.290	1.029	202.900	194.200	118.700	13.950
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:48	80.058%	-0.969	0.123	0.075	-0.019	0.030	85.526%	85.103%
2	05:43:56	79.885%	-0.893	0.124	0.004	0.049	0.030	84.753%	85.530%
3	05:44:04	81.400%	-0.957	0.077	0.017	0.071	-0.012	84.700%	85.464%
X		80.448%	-0.939	0.108	0.032	0.034	0.016	84.993%	85.366%
σ		0.830%	0.041	0.027	0.038	0.047	0.024	0.462%	0.230%
%RSD		1.031	4.335	24.560	118.300	138.200	148.500	0.544	0.269
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:43:48	0.091	0.099	-0.083	-0.058	-0.063	85.810%		
2	05:43:56	0.102	0.065	-0.073	-0.041	-0.060	85.611%		
3	05:44:04	0.049	0.069	-0.070	-0.030	-0.062	86.164%		
X		0.081	0.078	-0.075	-0.043	-0.061	85.862%		
σ		0.028	0.019	0.007	0.014	0.001	0.280%		
%RSD		34.930	24.230	8.793	33.060	2.071	0.326		

180-42895-C-8-B MS 4/26/2015 5:49:52 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	05:48:58	68.145%	42.060	845.700	854.000	0.000	64950.000	55870.000	56790.000
2	05:49:06	65.841%	43.020	925.700	893.800	0.000	66710.000	55250.000	58360.000
3	05:49:14	65.563%	43.620	908.900	902.600	0.000	68880.000	58060.000	59590.000
X		66.516%	42.900	893.400	883.500	0.000	66850.000	56400.000	58250.000
σ		1.417%	0.786	42.190	25.880	0.000	1968.000	1475.000	1403.000
%RSD		2.131	1.831	4.723	2.930	0.000	2.945	2.616	2.408
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:58	2468.000	13750.000	0.000	48820.000	45710.000	47340.000	55.770%	893.700
2	05:49:06	2477.000	14290.000	0.000	49170.000	46730.000	48680.000	55.775%	900.000
3	05:49:14	2559.000	14560.000	0.000	50050.000	48610.000	50440.000	54.296%	941.900
X		2501.000	14200.000	0.000	49350.000	47010.000	48820.000	55.280%	911.900
σ		50.020	416.400	0.000	635.100	1472.000	1556.000	0.853%	26.200
%RSD		2.000	2.933	0.000	1.287	3.130	3.188	1.542	2.873
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:58	499.600	195.000	568.200	1104.000	1174.000	480.900	471.600	239.800
2	05:49:06	496.600	195.300	573.100	1100.000	1165.000	484.600	475.900	241.400
3	05:49:14	518.800	203.600	595.200	1105.000	1209.000	486.500	490.200	246.100
X		505.000	198.000	578.800	1103.000	1183.000	484.000	479.300	242.400
σ		12.080	4.899	14.410	2.748	23.110	2.875	9.757	3.301
%RSD		2.392	2.474	2.489	0.249	1.954	0.594	2.036	1.362
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:58	239.100	449.600	447.100	37.020	8.998	11.840	0.000	912.100
2	05:49:06	238.200	443.200	447.800	37.220	9.365	8.716	0.000	899.800
3	05:49:14	247.100	447.100	448.300	37.890	8.668	9.576	0.000	902.300
X		241.500	446.600	447.800	37.370	9.010	10.040	0.000	904.700
σ		4.859	3.205	0.566	0.454	0.349	1.615	0.000	6.504
%RSD		2.012	0.718	0.127	1.214	3.870	16.080	0.000	0.719
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:58	54.967%	967.500	968.500	48.478%	45.840	46.070	46.280	84.650
2	05:49:06	56.161%	949.900	978.100	48.804%	46.070	46.340	46.340	84.880
3	05:49:14	56.810%	954.000	979.900	49.024%	47.230	45.710	45.800	86.060
X		55.979%	957.100	975.500	48.769%	46.380	46.040	46.140	85.200
σ		0.935%	9.214	6.120	0.275%	0.742	0.314	0.295	0.756
%RSD		1.670	0.963	0.627	0.563	1.599	0.681	0.640	0.887
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:58	51.413%	1884.000	463.400	463.300	1859.000	1854.000	58.483%	59.667%
2	05:49:06	52.268%	1873.000	454.600	459.100	1855.000	1839.000	60.021%	60.487%
3	05:49:14	52.524%	1884.000	455.000	459.100	1858.000	1862.000	60.022%	60.747%
X		52.068%	1880.000	457.700	460.500	1857.000	1852.000	59.508%	60.300%
σ		0.582%	6.409	4.969	2.387	2.170	11.620	0.888%	0.564%
%RSD		1.118	0.341	1.086	0.518	0.117	0.627	1.493	0.936
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:48:58	48.190	47.600	19.980	19.430	19.670	64.720%		
2	05:49:06	48.590	47.270	19.460	19.940	19.530	65.633%		
3	05:49:14	48.190	47.830	20.220	19.420	19.690	65.758%		
X		48.320	47.560	19.890	19.600	19.630	65.370%		
σ		0.232	0.282	0.389	0.294	0.088	0.567%		
%RSD		0.480	0.593	1.957	1.503	0.449	0.867		

180-42895-C-8-C MSD 4/26/2015 5:54:57 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	05:54:06	65.869%	45.540	942.900	937.200	0.000	67760.000	58180.000	60120.000
2	05:54:14	64.942%	47.120	974.400	965.500	0.000	68130.000	56800.000	60150.000
3	05:54:22	65.952%	46.670	959.700	961.700	0.000	68860.000	58600.000	60460.000
X		65.588%	46.450	959.000	954.800	0.000	68250.000	57860.000	60240.000
σ		0.561%	0.812	15.750	15.370	0.000	557.500	940.500	187.900
%RSD		0.855	1.749	1.643	1.610	0.000	0.817	1.626	0.312
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:06	2598.000	14370.000	0.000	51020.000	47790.000	50060.000	56.220%	944.600
2	05:54:14	2624.000	15060.000	0.000	50920.000	49020.000	50760.000	55.845%	961.700
3	05:54:22	2608.000	14600.000	0.000	50680.000	49230.000	51740.000	55.679%	971.100
X		2610.000	14670.000	0.000	50880.000	48680.000	50850.000	55.915%	959.100
σ		12.900	351.100	0.000	177.500	780.500	841.900	0.277%	13.450
%RSD		0.494	2.393	0.000	0.349	1.603	1.656	0.495	1.402
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:06	517.900	205.800	589.500	1131.000	1225.000	491.600	493.100	248.400
2	05:54:14	518.400	204.800	600.900	1121.000	1196.000	488.700	487.700	246.900
3	05:54:22	522.200	204.600	612.300	1130.000	1183.000	498.300	486.900	244.400
X		519.500	205.000	600.900	1127.000	1201.000	492.900	489.200	246.600
σ		2.358	0.625	11.400	5.390	21.130	4.928	3.388	1.988
%RSD		0.454	0.305	1.898	0.478	1.759	1.000	0.693	0.806
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:06	245.100	459.000	471.600	39.340	10.030	11.710	0.000	943.900
2	05:54:14	246.300	467.300	459.100	38.370	9.780	10.450	0.000	931.300
3	05:54:22	247.400	460.900	458.200	38.930	9.409	13.000	0.000	927.900
X		246.300	462.400	463.000	38.880	9.740	11.720	0.000	934.400
σ		1.186	4.363	7.513	0.485	0.312	1.274	0.000	8.435
%RSD		0.481	0.944	1.623	1.248	3.205	10.870	0.000	0.903
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:06	55.511%	989.700	1018.000	48.391%	47.550	48.370	48.680	88.510
2	05:54:14	56.549%	979.900	1002.000	48.981%	48.840	48.400	50.050	87.980
3	05:54:22	57.204%	990.000	1016.000	49.438%	47.440	48.510	50.760	87.290
X		56.421%	986.500	1012.000	48.937%	47.940	48.430	49.830	87.920
σ		0.854%	5.727	8.782	0.525%	0.778	0.073	1.058	0.612
%RSD		1.513	0.581	0.868	1.073	1.623	0.151	2.122	0.696
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:06	51.729%	1967.000	473.600	476.200	1906.000	1920.000	59.084%	59.732%
2	05:54:14	52.287%	1949.000	476.100	475.700	1904.000	1905.000	60.382%	60.873%
3	05:54:22	53.050%	1934.000	468.700	469.300	1906.000	1903.000	59.964%	61.274%
X		52.355%	1950.000	472.800	473.700	1905.000	1909.000	59.810%	60.626%
σ		0.663%	16.330	3.755	3.844	0.894	9.423	0.662%	0.800%
%RSD		1.266	0.837	0.794	0.811	0.047	0.494	1.108	1.319
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:54:06	49.430	49.090	20.060	20.370	20.260	65.072%		
2	05:54:14	50.450	48.750	20.290	20.480	20.360	65.276%		
3	05:54:22	50.050	48.850	20.330	20.170	20.220	66.127%		
X		49.980	48.900	20.230	20.340	20.280	65.492%		
σ		0.515	0.178	0.148	0.159	0.075	0.560%		
%RSD		1.030	0.363	0.729	0.781	0.369	0.855		

180-42895-C-8-A PDS 4/26/2015 6:00:05 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	05:59:12	64.186%	47.280	992.400	1003.000	0.000	73930.000	62750.000	64410.000
2	05:59:20	63.947%	50.450	1022.000	1021.000	0.000	74170.000	63800.000	66360.000
3	05:59:27	64.306%	50.790	1010.000	1026.000	0.000	73970.000	63130.000	65250.000
X		64.147%	49.510	1008.000	1017.000	0.000	74020.000	63230.000	65340.000
σ		0.183%	1.934	14.980	11.840	0.000	129.500	533.600	981.000
%RSD		0.285	3.907	1.486	1.164	0.000	0.175	0.844	1.501
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:59:12	2718.000	15280.000	0.000	53910.000	50490.000	53030.000	56.467%	1011.000
2	05:59:20	2814.000	15390.000	0.000	54180.000	52070.000	54770.000	55.539%	1031.000
3	05:59:27	2741.000	15910.000	0.000	55960.000	53070.000	55540.000	55.115%	1069.000
X		2758.000	15530.000	0.000	54690.000	51880.000	54450.000	55.707%	1037.000
σ		50.140	338.200	0.000	1114.000	1301.000	1287.000	0.692%	29.310
%RSD		1.818	2.178	0.000	2.038	2.509	2.363	1.242	2.827
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:59:12	531.900	209.400	602.700	1162.000	1255.000	521.000	508.400	259.300
2	05:59:20	546.300	215.800	622.900	1180.000	1266.000	520.300	512.300	260.900
3	05:59:27	552.600	214.900	635.500	1191.000	1278.000	529.300	521.000	263.400
X		543.600	213.300	620.400	1178.000	1266.000	523.600	513.900	261.200
σ		10.610	3.465	16.560	14.460	11.730	5.023	6.430	2.027
%RSD		1.951	1.624	2.670	1.228	0.927	0.959	1.251	0.776
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:59:12	255.900	483.100	479.500	39.890	9.599	8.828	0.000	992.800
2	05:59:20	263.100	485.600	487.600	39.880	10.510	9.752	0.000	977.600
3	05:59:27	263.700	483.300	490.200	40.800	9.305	13.130	0.000	985.900
X		260.900	484.000	485.800	40.190	9.804	10.570	0.000	985.400
σ		4.355	1.379	5.582	0.528	0.626	2.266	0.000	7.590
%RSD		1.669	0.285	1.149	1.314	6.384	21.440	0.000	0.770
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:59:12	54.784%	1070.000	1102.000	48.169%	46.140	46.960	51.760	94.060
2	05:59:20	56.009%	1084.000	1104.000	48.799%	45.090	46.080	49.960	94.060
3	05:59:27	55.490%	1079.000	1104.000	48.842%	45.340	46.700	52.120	95.190
X		55.428%	1078.000	1103.000	48.603%	45.520	46.580	51.280	94.440
σ		0.615%	7.100	0.910	0.377%	0.546	0.456	1.157	0.652
%RSD		1.109	0.659	0.082	0.775	1.199	0.978	2.257	0.690
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:59:12	51.913%	2122.000	512.700	512.700	1995.000	2000.000	58.864%	59.890%
2	05:59:20	52.465%	2121.000	514.900	513.900	1998.000	1993.000	59.857%	60.274%
3	05:59:27	52.182%	2144.000	519.600	519.700	2006.000	2010.000	59.702%	60.398%
X		52.187%	2129.000	515.700	515.400	2000.000	2001.000	59.474%	60.187%
σ		0.276%	12.800	3.491	3.707	6.046	8.686	0.534%	0.265%
%RSD		0.529	0.601	0.677	0.719	0.302	0.434	0.899	0.440
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:59:12	53.060	51.140	21.190	20.990	21.040	64.719%		
2	05:59:20	52.900	51.810	21.080	21.570	20.890	65.070%		
3	05:59:27	53.500	51.360	21.470	21.280	21.260	65.307%		
X		53.150	51.440	21.240	21.280	21.060	65.032%		
σ		0.313	0.345	0.198	0.290	0.187	0.296%		
%RSD		0.590	0.671	0.933	1.364	0.890	0.455		

180-42895-D-8-A 4/26/2015 6:05:13 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	06:04:20	68.257%	0.140	14.760	15.500	0.000	5413.000	606.900	586.100
2	06:04:28	67.858%	-0.024	13.510	15.350	0.000	5409.000	581.800	624.500
3	06:04:35	68.907%	0.014	14.800	13.940	0.000	5367.000	576.000	613.200
X		68.341%	0.043	14.360	14.930	0.000	5396.000	588.200	607.900
σ		0.529%	0.086	0.734	0.863	0.000	25.390	16.410	19.730
%RSD		0.775	197.700	5.112	5.780	0.000	0.471	2.790	3.246
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:04:20	31.120	4431.000	0.000	580.800	2149.000	2318.000	59.002%	2.625
2	06:04:28	31.440	4574.000	0.000	572.300	2251.000	2362.000	57.729%	2.906
3	06:04:35	33.520	4587.000	0.000	601.200	2312.000	2371.000	57.641%	2.677
X		32.030	4531.000	0.000	584.800	2237.000	2350.000	58.124%	2.736
σ		1.301	86.340	0.000	14.870	82.450	28.260	0.762%	0.149
%RSD		4.062	1.906	0.000	2.543	3.685	1.202	1.311	5.465
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:04:20	-0.830	3.992	106.300	35.880	35.640	3.620	2.907	0.471
2	06:04:28	-1.414	4.342	110.100	35.370	36.950	3.515	2.806	0.518
3	06:04:35	-1.665	4.235	111.700	35.640	36.530	3.649	2.510	0.589
X		-1.303	4.190	109.400	35.630	36.370	3.595	2.741	0.526
σ		0.429	0.180	2.769	0.256	0.673	0.070	0.206	0.060
%RSD		32.910	4.289	2.532	0.719	1.849	1.952	7.523	11.320
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:04:20	0.568	6.716	7.638	0.716	0.315	-3.378	0.000	6.034
2	06:04:28	0.401	7.304	7.461	0.588	0.109	3.077	0.000	5.913
3	06:04:35	0.515	6.994	7.650	0.737	0.397	2.175	0.000	5.883
X		0.495	7.005	7.583	0.680	0.274	0.625	0.000	5.943
σ		0.085	0.294	0.106	0.081	0.149	3.496	0.000	0.080
%RSD		17.200	4.203	1.399	11.840	54.240	559.700	0.000	1.350
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:04:20	57.284%	4.148	3.857	52.265%	-0.005	-0.021	0.121	0.188
2	06:04:28	57.270%	2.994	3.260	52.391%	-0.027	-0.021	0.059	0.128
3	06:04:35	57.945%	3.006	2.881	52.544%	-0.013	-0.017	0.079	0.143
X		57.500%	3.383	3.333	52.400%	-0.015	-0.020	0.086	0.153
σ		0.386%	0.663	0.492	0.140%	0.011	0.002	0.031	0.031
%RSD		0.671	19.590	14.770	0.266	74.050	11.130	36.320	20.350
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:04:20	54.537%	4.943	0.168	0.106	16.040	16.380	61.307%	60.622%
2	06:04:28	55.641%	3.800	0.133	0.051	15.340	16.020	61.071%	62.224%
3	06:04:35	55.787%	2.950	0.080	-0.022	15.890	15.650	61.158%	61.997%
X		55.321%	3.898	0.127	0.045	15.760	16.020	61.179%	61.614%
σ		0.683%	1.000	0.044	0.064	0.370	0.361	0.119%	0.867%
%RSD		1.235	25.660	34.950	142.600	2.345	2.256	0.195	1.407
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:04:20	0.176	0.174	-0.034	-0.022	-0.036	70.383%		
2	06:04:28	0.179	0.167	-0.071	-0.023	-0.047	70.940%		
3	06:04:35	0.176	0.158	-0.038	-0.040	-0.037	71.436%		
X		0.177	0.167	-0.048	-0.028	-0.040	70.920%		
σ		0.002	0.008	0.021	0.010	0.006	0.527%		
%RSD		1.067	4.890	43.410	36.200	15.220	0.743		

CRI 1525173 4/26/2015 6:19:31 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	06:18:39	77.224%	0.887	17.430	18.790	0.000	587.800	573.500	583.200
2	06:18:47	77.143%	0.824	19.020	19.370	0.000	585.800	571.800	592.800
3	06:18:54	77.324%	0.940	19.540	19.020	0.000	600.500	591.900	614.100
X		77.231%	88.347%	373.292%	381.222%	0.000	739.242%	579.054%	596.696%
σ		0.091%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.117	6.579	5.890	1.540	0.000	1.351	1.923	2.657
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:18:39	36.100	480.700	0.000	463.400	405.100	420.600	71.265%	2.813
2	06:18:47	35.990	489.400	0.000	471.200	451.500	431.800	71.261%	3.681
3	06:18:54	31.930	494.400	0.000	483.600	419.200	443.500	70.604%	2.766
X		115.581%	97.634%	0.000	472.719%	425.254%	432.001%	71.044%	61.733%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.380%	n/a
%RSD		6.855	1.415	0.000	2.150	5.601	2.648	0.536	16.690
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:18:39	1.119	1.948	4.244	44.240	37.800	0.424	0.968	1.749
2	06:18:47	0.888	1.773	4.602	43.130	43.260	0.462	1.108	1.884
3	06:18:54	1.005	1.939	4.633	45.010	44.850	0.560	1.147	2.155
X		100.392%	94.334%	89.859%	88.254%	83.940%	96.376%	107.408%	96.462%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		11.500	5.245	4.803	2.138	8.807	14.500	8.771	10.700
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:18:39	1.781	3.874	4.665	0.853	5.320	2.366	0.000	4.538
2	06:18:47	1.988	4.552	4.801	0.788	3.855	4.886	0.000	4.745
3	06:18:54	1.846	5.026	5.026	0.846	4.459	4.127	0.000	4.424
X		93.579%	89.688%	96.614%	82.887%	90.891%	75.863%	0.000	91.381%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		5.665	12.910	3.781	4.302	16.200	34.090	0.000	3.571
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:18:39	65.374%	4.359	4.574	60.594%	0.913	0.930	1.134	0.968
2	06:18:47	68.501%	4.302	4.491	61.064%	0.859	1.034	1.027	0.996
3	06:18:54	67.670%	4.487	4.660	61.491%	1.041	0.945	0.962	1.090
X		67.181%	87.658%	91.505%	61.050%	93.743%	96.956%	104.061%	101.767%
σ		1.620%	n/a	n/a	0.448%	n/a	n/a	n/a	n/a
%RSD		2.411	2.156	1.850	0.734	9.960	5.770	8.346	6.278
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:18:39	62.989%	4.265	1.734	1.750	9.349	8.563	66.579%	65.947%
2	06:18:47	62.962%	3.832	1.846	1.847	8.794	8.592	66.707%	66.897%
3	06:18:54	63.998%	4.206	1.893	1.732	9.331	10.230	67.853%	68.112%
X		63.316%	82.024%	91.225%	88.822%	91.579%	91.287%	67.047%	66.985%
σ		0.590%	n/a	n/a	n/a	n/a	n/a	0.702%	1.085%
%RSD		0.933	5.729	4.482	3.498	3.442	10.470	1.046	1.620
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:18:39	0.860	0.847	0.861	0.950	0.876	76.211%		
2	06:18:47	0.913	0.881	0.863	0.828	0.880	76.669%		
3	06:18:54	1.004	0.905	0.871	0.815	0.865	77.807%		
X		92.549%	87.729%	86.539%	86.409%	87.340%	76.896%		
σ		n/a	n/a	n/a	n/a	n/a	0.822%		
%RSD		7.882	3.330	0.618	8.595	0.895	1.069		

CCV 1533080 4/26/2015 6:24:39 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	06:23:45	72.356%	90.110	88.470	87.950	0.000	64780.000	60810.000	62420.000
2	06:23:53	71.183%	91.430	94.270	89.360	0.000	66550.000	60880.000	64040.000
3	06:24:00	72.788%	92.370	92.110	89.900	0.000	64420.000	60470.000	63530.000
X		72.109%	91.301%	91.614%	89.071%	0.000	130.499%	121.440%	126.658%
σ		0.830%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.151	1.242	3.200	1.135	0.000	1.744	0.365	1.308
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:45	697.300	5153.000	0.000	50690.000	44130.000	45950.000	64.894%	95.760
2	06:23:53	709.000	5202.000	0.000	51330.000	45030.000	47780.000	64.441%	94.660
3	06:24:00	691.800	5246.000	0.000	52250.000	45480.000	48520.000	64.062%	102.900
X		139.873%	104.004%	0.000	102.846%	89.759%	94.837%	64.466%	97.764%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.416%	n/a
%RSD		1.253	0.894	0.000	1.519	1.523	2.788	0.646	4.561
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:45	103.900	99.130	486.300	25590.000	23650.000	98.540	97.600	98.350
2	06:23:53	105.100	102.600	498.800	26130.000	23880.000	99.200	99.540	99.490
3	06:24:00	104.400	102.600	502.800	25950.000	24310.000	99.120	101.500	98.450
X		104.488%	101.437%	99.189%	103.554%	95.781%	98.952%	99.543%	98.764%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.575	1.973	1.734	1.072	1.395	0.364	1.951	0.639
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:45	98.480	92.680	90.310	93.840	97.330	92.100	0.000	92.110
2	06:23:53	97.620	92.150	94.130	93.960	95.210	97.810	0.000	92.530
3	06:24:00	97.740	91.140	90.190	92.960	96.730	97.830	0.000	91.310
X		97.944%	91.989%	91.542%	93.588%	96.423%	95.912%	0.000	91.983%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.476	0.849	2.447	0.582	1.135	3.446	0.000	0.672
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:45	63.908%	92.380	94.310	56.188%	93.950	93.180	92.600	94.710
2	06:23:53	63.488%	95.310	96.430	56.324%	94.210	94.130	93.780	96.040
3	06:24:00	64.218%	94.030	95.360	56.892%	94.360	94.370	94.850	96.240
X		63.871%	93.903%	95.368%	56.468%	94.173%	93.893%	93.746%	95.664%
σ		0.366%	n/a	n/a	0.374%	n/a	n/a	n/a	n/a
%RSD		0.573	1.564	1.111	0.662	0.218	0.673	1.204	0.871
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:45	60.451%	93.920	90.090	90.550	100.400	93.550	64.691%	65.032%
2	06:23:53	59.731%	92.560	93.460	94.940	92.950	99.070	64.503%	65.204%
3	06:24:00	59.548%	95.140	93.500	95.040	95.530	96.610	65.509%	65.648%
X		59.910%	93.874%	92.350%	93.511%	96.293%	96.409%	64.901%	65.295%
σ		0.478%	n/a	n/a	n/a	n/a	n/a	0.535%	0.318%
%RSD		0.797	1.378	2.116	2.739	3.928	2.869	0.824	0.486
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:23:45	93.210	91.940	92.760	93.760	92.530	73.512%		
2	06:23:53	94.410	93.190	94.050	93.400	93.340	73.417%		
3	06:24:00	94.520	93.500	93.480	94.460	93.570	72.890%		
X		94.049%	92.876%	93.429%	93.873%	93.148%	73.273%		
σ		n/a	n/a	n/a	n/a	n/a	0.335%		
%RSD		0.770	0.887	0.689	0.573	0.586	0.457		

CCB8 4/26/2015 6:29:47 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	06:28:53	87.654%	0.003	1.584	2.022	0.000	75.470	17.750	20.650
2	06:29:01	86.729%	0.029	2.262	2.168	0.000	73.460	21.440	20.330
3	06:29:08	85.826%	0.048	3.205	2.053	0.000	78.110	15.570	15.190
X		86.736%	0.027	2.350	2.081	0.000	75.680	18.250	18.720
		0.914%	0.023	0.814	0.077	0.000	2.333	2.971	3.066
		1.054	85.390	34.630	3.690	0.000	3.082	16.280	16.380
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:28:53	-1.226	6.362	0.000	-18.090	10.680	26.200	79.169%	-0.280
2	06:29:01	-0.778	2.678	0.000	-22.960	16.150	21.770	78.628%	-0.348
3	06:29:08	-2.156	-0.227	0.000	-26.580	26.290	20.960	78.699%	-0.644
X		-1.387	2.937	0.000	-22.550	17.700	22.980	78.832%	-0.424
		0.703	3.302	0.000	4.259	7.922	2.820	0.294%	0.193
		50.710	112.400	0.000	18.890	44.740	12.270	0.373	45.630
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:28:53	0.171	0.045	0.516	34.650	39.010	0.032	0.136	-0.063
2	06:29:01	0.120	0.025	0.446	29.740	27.980	0.029	0.124	-0.094
3	06:29:08	-0.007	0.036	0.534	24.610	23.620	0.043	0.158	-0.073
X		0.095	0.035	0.499	29.670	30.200	0.035	0.139	-0.077
		0.092	0.010	0.046	5.022	7.933	0.007	0.017	0.016
		96.840	28.460	9.283	16.930	26.270	20.790	12.370	21.100
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:28:53	-0.029	0.140	0.016	0.185	0.216	0.240	0.000	0.044
2	06:29:01	-0.080	0.109	-0.023	0.180	0.098	0.723	0.000	0.072
3	06:29:08	-0.055	0.138	-0.023	0.149	0.155	0.405	0.000	0.038
X		-0.055	0.129	-0.010	0.171	0.156	0.456	0.000	0.051
		0.025	0.018	0.023	0.020	0.059	0.246	0.000	0.018
		46.110	13.610	228.200	11.480	37.510	53.920	0.000	35.020
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:28:53	83.800%	0.921	1.033	82.128%	0.015	0.006	0.013	0.019
2	06:29:01	85.469%	0.905	0.761	83.235%	-0.008	0.010	-0.001	-0.004
3	06:29:08	85.673%	0.627	0.629	83.603%	-0.006	-0.010	0.026	0.001
X		84.981%	0.818	0.808	82.988%	0.000	0.002	0.013	0.005
		1.028%	0.165	0.206	0.768%	0.013	0.011	0.013	0.012
		1.209	20.180	25.540	0.925	4195.000	501.300	103.800	223.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:28:53	80.292%	-0.221	0.371	0.242	0.074	0.074	80.086%	80.102%
2	06:29:01	81.810%	-0.316	0.299	0.276	0.096	0.059	80.840%	80.524%
3	06:29:08	81.865%	-0.665	0.284	0.225	0.050	0.002	81.642%	80.517%
X		81.322%	-0.401	0.318	0.248	0.073	0.045	80.856%	80.381%
		0.893%	0.234	0.047	0.026	0.023	0.038	0.778%	0.242%
		1.098	58.340	14.750	10.600	31.540	83.660	0.962	0.301
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:28:53	0.281	0.300	-0.058	-0.027	-0.039	86.234%		
2	06:29:01	0.223	0.217	-0.068	-0.052	-0.056	86.770%		
3	06:29:08	0.151	0.173	-0.053	-0.053	-0.055	87.263%		
X		0.218	0.230	-0.060	-0.044	-0.050	86.756%		
		0.065	0.065	0.008	0.015	0.010	0.515%		
		29.830	28.160	12.680	33.700	19.230	0.594		

Performance Report

Sample details

Sample name : ITUNE

Acquired at : 4/25/2015 3:17:24 PM

Report name : EPA ILM05.2 / 6020A 2.1 [8/10/2014 1:06:06 PM]

Mass Calibration verification

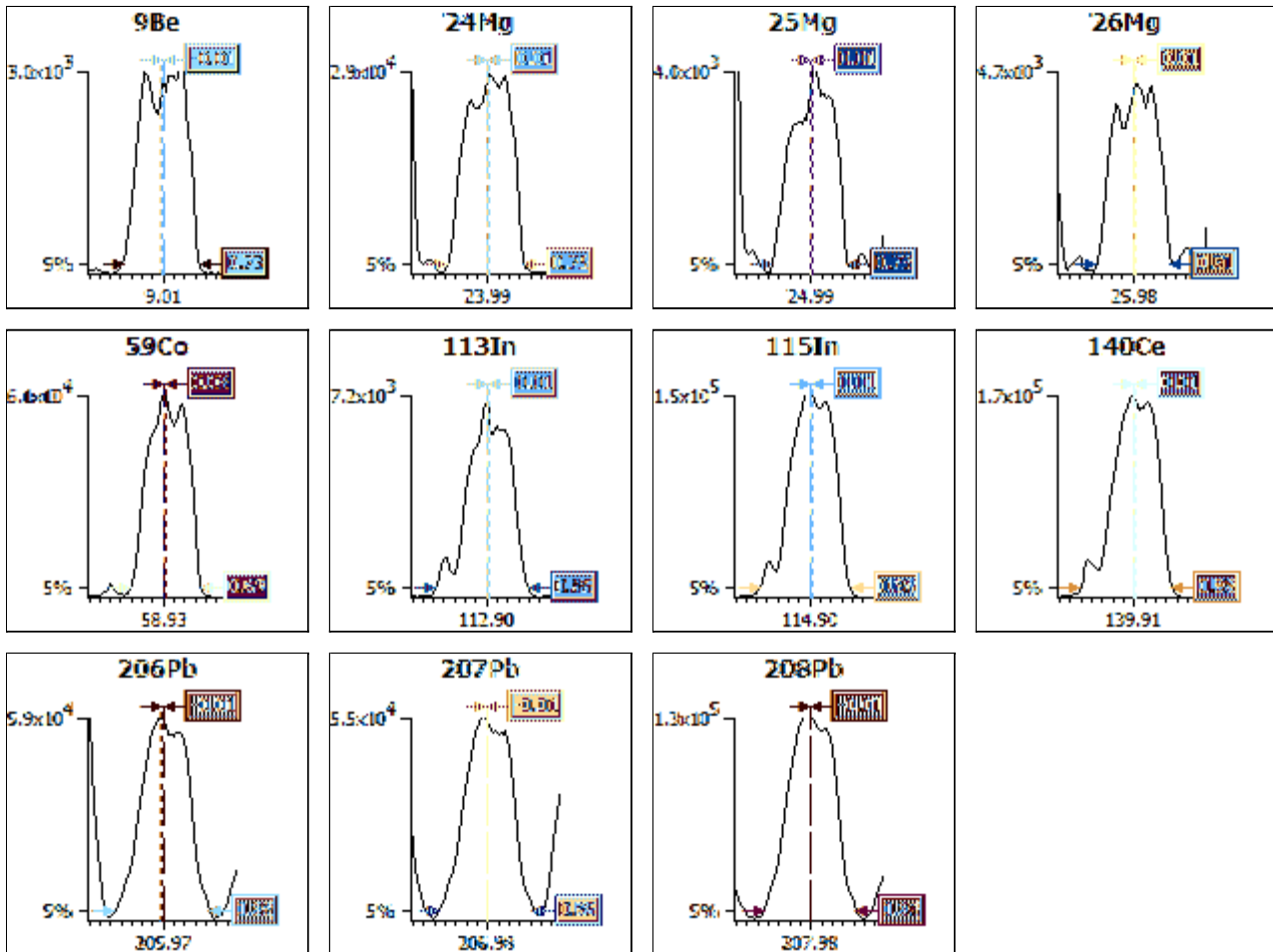
Acquisition parameters

Sweeps : 50

Dwell : 1.0 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	0.40	0.10	0.73	-0.01
24Mg	0.90	0.40	0.10	0.75	0.01
25Mg	0.90	0.40	0.10	0.73	0.01
26Mg	0.90	0.40	0.10	0.71	0.01
59Co	0.90	0.40	0.10	0.69	0.03
113In	0.90	0.40	0.10	0.86	0.01
115In	0.90	0.40	0.10	0.86	0.01
140Ce	0.90	0.40	0.10	0.88	0.01
206Pb	0.90	0.40	0.10	0.88	-0.01
207Pb	0.90	0.40	0.10	0.86	-0.01
208Pb	0.90	0.40	0.10	0.86	-0.01

Sample details

Sample name : ITUNE

Acquired at : 4/25/2015 3:17:24 PM

Report name : EPA ILM05.2 / 6020A 2.1 [8/10/2014 1:06:06 PM]

Tune conditions

Major		Minor		Global		Add. Gases	
Extraction	-157	Lens 2	-48.6	Standard resolution	n/a	CCT1	0.00
Lens 1	-0.6	Lens 3	-182.7	High resolution	n/a	CCT2	0.00
Focus	21.0	Forward power	1404	Analogue Detector	n/a		
D1	-29.8	Horizontal	50	PC Detector	n/a		
Pole Bias	-9.0	Vertical	358				
Hexapole Bias	-10.0	D2	-121				
Nebuliser	0.86	DA	-80.0				
Sampling Depth	200	Cool	14.0				
		Auxiliary	0.80				

Sensitivity and stability results**Acquisition parameters**

Sweeps : 180

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	59Co	113In	115In
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%	5.0%	5.0%
	Countrate	-	>100	>500	>150	>150	>500	>500	>10000
1	3:18:11 PM	71	3061	27428	3735	4344	59270	6693	155192
2	3:19:23 PM	75	3026	27397	3668	4225	59234	6660	156249
3	3:20:36 PM	71	3052	27373	3651	4270	59446	6625	156138
4	3:21:47 PM	75	3013	27227	3714	4275	59052	6695	155356
5	3:23:00 PM	69	2993	27164	3597	4287	58897	6624	155759
x		72	3029	27318	3673	4280	59180	6659	155739
σ		2.57	28.01	115.37	54.47	42.49	211.08	34.63	465.29
%RSD		3.569	0.925	0.422	1.483	0.993	0.357	0.520	0.299

Run	Time	140Ce	156Ce O	206Pb	207Pb	208Pb	220Bkg
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	5.0%	-	5.0%	5.0%	5.0%	-
	Countrate	>10000	-	>1000	>1000	>5000	-
1	3:18:11 PM	170331	2320	59766	53383	128382	0
2	3:19:23 PM	171373	2337	59574	53692	128994	0
3	3:20:36 PM	170967	2294	59286	52976	127630	0
4	3:21:47 PM	170445	2349	59766	53464	127736	0
5	3:23:00 PM	171238	2362	59147	53019	127264	0
x		170871	2332	59508	53307	128001	0
σ		466.06	26.52	281.44	304.37	685.93	0.06
%RSD		0.273	1.137	0.473	0.571	0.536	50.000

Ratio results

Run	Time	156Ce O/140Ce	
Ratio limits			<0.0600
1	3:18:11 PM	0	
2	3:19:23 PM	0	
3	3:20:36 PM	0	
4	3:21:47 PM	0	
5	3:23:00 PM	0	
x		0.0136	
σ		0.00	
%RSD		1.1186	

Result : The performance report passed.

Dilution Corrected Concentrations

STD1 1542085 4/26/2015 8:03:52 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	20:03:00	100.094%	0.014	-0.317	0.085	0.000	-1.522	-0.452	-0.726
2	20:03:07	100.147%	0.014	0.568	-0.079	0.000	0.033	0.319	0.866
3	20:03:15	99.759%	-0.029	-0.251	-0.006	0.000	1.490	0.133	-0.140
X		100.000%	-0.000	-0.000	-0.000	0.000	-0.000	0.000	0.000
σ		0.210%	0.025	0.493	0.083	0.000	1.506	0.402	0.805
%RSD		0.210	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	20:03:00	-0.159	0.157	0.000	-3.687	-5.067	-1.712	100.200%	-0.019
2	20:03:07	0.062	0.094	0.000	4.482	5.564	3.197	99.829%	0.037
3	20:03:15	0.097	-0.251	0.000	-0.795	-0.497	-1.485	99.971%	-0.018
X		-0.000	-0.000	0.000	0.000	0.000	0.000	100.000%	-0.000
σ		0.139	0.220	0.000	4.142	5.333	2.771	0.187%	0.032
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.187	0.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:03:00	0.011	-0.010	-0.006	0.007	-0.920	0.003	-0.030	-0.022
2	20:03:07	0.064	0.009	-0.005	0.118	0.593	0.003	0.004	0.009
3	20:03:15	-0.074	0.001	0.010	-0.125	0.327	-0.006	0.027	0.013
X		-0.000	-0.000	0.000	-0.000	-0.000	-0.000	-0.000	0.000
σ		0.070	0.009	0.009	0.122	0.808	0.005	0.029	0.019
%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	20:03:00	0.056	0.046	0.122	0.014	-0.033	0.287	0.000	0.007
2	20:03:07	0.026	-0.048	-0.017	-0.009	0.033	-0.530	0.000	-0.004
3	20:03:15	-0.083	0.002	-0.105	-0.005	-0.000	0.243	0.000	-0.004
X		0.000	0.000	0.000	0.000	-0.000	0.000	0.000	-0.000
σ		0.073	0.047	0.114	0.012	0.033	0.459	0.000	0.006
%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	20:03:00	97.082%	-0.021	0.011	98.906%	0.017	-0.003	0.000	-0.010
2	20:03:07	101.118%	-0.022	-0.014	99.851%	-0.004	0.009	0.000	0.009
3	20:03:15	101.801%	0.043	0.003	101.242%	-0.013	-0.007	-0.000	0.002
X		100.000%	-0.000	0.000	100.000%	-0.000	0.000	-0.000	0.000
σ		2.550%	0.038	0.013	1.175%	0.015	0.008	0.000	0.010
%RSD		2.550	0.000	0.000	1.175	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	20:03:00	98.909%	-0.056	-0.005	0.019	0.018	0.006	99.051%	99.244%
2	20:03:07	100.228%	0.071	0.015	-0.012	-0.009	0.005	100.610%	100.532%
3	20:03:15	100.863%	-0.015	-0.011	-0.007	-0.009	-0.011	100.339%	100.224%
X		100.000%	-0.000	0.000	0.000	-0.000	0.000	100.000%	100.000%
σ		0.997%	0.064	0.014	0.017	0.016	0.009	0.833%	0.672%
%RSD		0.997	0.000	0.000	0.000	0.000	0.000	0.833	0.672
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:03:00	0.022	0.023	0.002	-0.007	0.002	99.601%		
2	20:03:07	0.007	-0.009	0.005	0.012	-0.001	99.859%		
3	20:03:15	-0.029	-0.014	-0.007	-0.004	-0.001	100.540%		
X		-0.000	-0.000	0.000	0.000	0.000	100.000%		
σ		0.026	0.020	0.006	0.010	0.001	0.485%		
%RSD		0.000	0.000	0.000	0.000	0.000	0.485		

STD2 1533078 4/26/2015 8:10:22 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	20:09:30	90.625%	199.400	0.788	0.634	0.000	97900.000	97330.000	97480.000
2	20:09:38	90.407%	197.300	0.403	0.990	0.000	100300.000	100900.000	100700.000
3	20:09:46	88.502%	203.300	0.391	1.071	0.000	101800.000	101800.000	101800.000
X		89.845%	200.000	0.528	0.899	0.000	100000.000	100000.000	100000.000
σ		1.168%	3.025	0.226	0.232	0.000	1957.000	2354.000	2256.000
%RSD		1.300	1.513	42.870	25.870	0.000	1.957	2.354	2.256
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:30	964.600	8.492	0.000	98540.000	98490.000	98500.000	97.323%	2.093
2	20:09:38	1007.000	7.451	0.000	100900.000	100600.000	100700.000	94.415%	1.554
3	20:09:46	1029.000	7.149	0.000	100500.000	100900.000	100800.000	94.173%	1.731
X		1000.000	7.697	0.000	100000.000	100000.000	100000.000	95.304%	1.793
σ		32.520	0.704	0.000	1279.000	1316.000	1301.000	1.753%	0.275
%RSD		3.252	9.150	0.000	1.279	1.316	1.301	1.839	15.320
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:30	196.800	196.100	983.700	48950.000	49600.000	196.300	198.900	197.700
2	20:09:38	202.200	202.100	1008.000	50350.000	49920.000	202.100	198.600	200.500
3	20:09:46	200.900	201.800	1009.000	50700.000	50480.000	201.600	202.500	201.800
X		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		2.822	3.402	14.090	922.700	446.200	3.184	2.206	2.053
%RSD		1.411	1.701	1.409	1.845	0.892	1.592	1.103	1.027
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:30	198.100	195.800	195.700	198.800	196.800	199.900	0.000	199.700
2	20:09:38	198.100	200.100	201.600	198.500	200.200	196.900	0.000	199.200
3	20:09:46	203.800	204.100	202.600	202.700	203.000	203.200	0.000	201.100
X		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		3.298	4.133	3.730	2.303	3.119	3.132	0.000	1.011
%RSD		1.649	2.066	1.865	1.152	1.560	1.566	0.000	0.505
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:30	94.022%	0.159	0.103	86.185%	200.700	198.300	201.300	199.500
2	20:09:38	95.226%	0.209	0.154	86.229%	200.100	199.600	199.000	200.600
3	20:09:46	93.821%	0.128	0.150	85.532%	199.200	202.100	199.700	199.800
X		94.356%	0.165	0.136	85.982%	200.000	200.000	200.000	200.000
σ		0.760%	0.041	0.029	0.391%	0.758	1.967	1.157	0.582
%RSD		0.806	24.870	21.020	0.454	0.379	0.984	0.579	0.291
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:09:30	88.361%	-0.460	0.197	0.169	202.000	200.900	90.667%	90.741%
2	20:09:38	89.080%	-0.002	0.232	0.140	199.500	200.400	92.104%	92.597%
3	20:09:46	88.352%	-0.371	0.172	0.129	198.500	198.800	91.491%	92.817%
X		88.597%	-0.278	0.200	0.146	200.000	200.000	91.421%	92.052%
σ		0.418%	0.243	0.030	0.021	1.803	1.090	0.721%	1.141%
%RSD		0.471	87.390	15.150	14.360	0.902	0.545	0.789	1.239
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:09:30	198.600	199.000	198.100	199.700	199.400	85.619%		
2	20:09:38	199.300	199.500	200.800	198.900	199.800	85.649%		
3	20:09:46	202.200	201.500	201.100	201.400	200.800	84.476%		
X		200.000	200.000	200.000	200.000	200.000	85.248%		
σ		1.924	1.323	1.633	1.310	0.763	0.668%		
%RSD		0.962	0.661	0.816	0.655	0.381	0.784		

STD3 1533079 4/26/2015 8:15:25 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	20:14:33	96.129%	0.516	198.100	198.300	0.000	150.600	143.400	136.800
2	20:14:41	96.131%	0.425	202.800	199.100	0.000	156.200	148.000	137.900
3	20:14:49	94.971%	0.340	199.000	202.700	0.000	154.500	148.200	141.400
X		95.744%	0.427	200.000	200.000	0.000	153.800	146.500	138.700
σ		0.669%	0.088	2.484	2.348	0.000	2.885	2.720	2.393
%RSD		0.699	20.600	1.242	1.174	0.000	1.877	1.856	1.726
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:14:33	13.980	9923.000	0.000	133.200	155.100	244.800	91.534%	196.100
2	20:14:41	13.640	9873.000	0.000	135.800	193.100	238.100	90.117%	202.500
3	20:14:49	14.370	10200.000	0.000	131.200	142.700	246.600	90.329%	201.400
X		14.000	10000.000	0.000	133.400	163.600	243.100	90.660%	200.000
σ		0.368	178.900	0.000	2.272	26.240	4.490	0.764%	3.425
%RSD		2.629	1.789	0.000	1.703	16.040	1.847	0.843	1.712
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:14:33	0.317	0.420	1.909	115.000	109.700	0.309	0.598	0.525
2	20:14:41	0.471	0.414	2.070	107.900	114.100	0.307	0.559	0.406
3	20:14:49	0.424	0.379	2.044	104.100	107.300	0.293	0.530	0.531
X		0.404	0.405	2.008	109.000	110.400	0.303	0.562	0.487
σ		0.079	0.022	0.086	5.512	3.449	0.009	0.034	0.071
%RSD		19.520	5.445	4.300	5.056	3.125	2.879	5.990	14.490
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:14:33	0.685	1.488	1.445	2.129	2.056	4.685	0.000	0.427
2	20:14:41	0.692	1.367	1.152	1.734	1.774	2.307	0.000	0.376
3	20:14:49	0.601	1.789	1.511	1.571	1.411	2.567	0.000	0.480
X		0.660	1.548	1.369	1.811	1.747	3.186	0.000	0.427
σ		0.051	0.218	0.191	0.287	0.323	1.304	0.000	0.052
%RSD		7.678	14.060	13.950	15.830	18.500	40.940	0.000	12.160
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:14:33	94.220%	199.100	201.500	89.572%	0.314	0.385	0.370	4.709
2	20:14:41	96.857%	201.200	197.200	92.061%	0.293	0.308	0.345	4.679
3	20:14:49	97.537%	199.700	201.400	91.296%	0.288	0.342	0.500	5.103
X		96.205%	200.000	200.000	90.976%	0.298	0.345	0.405	4.830
σ		1.752%	1.078	2.462	1.275%	0.014	0.039	0.083	0.236
%RSD		1.821	0.539	1.231	1.401	4.674	11.180	20.580	4.893
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:14:33	90.411%	200.500	199.900	198.700	0.612	0.487	91.307%	91.949%
2	20:14:41	92.299%	199.100	200.300	200.100	0.512	0.668	93.444%	92.431%
3	20:14:49	92.589%	200.400	199.800	201.300	0.250	0.490	94.546%	94.055%
X		91.766%	200.000	200.000	200.000	0.458	0.548	93.099%	92.811%
σ		1.182%	0.751	0.292	1.294	0.187	0.103	1.647%	1.103%
%RSD		1.289	0.375	0.146	0.647	40.770	18.870	1.769	1.189
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:14:33	0.348	0.307	0.327	0.309	0.317	87.960%		
2	20:14:41	0.297	0.299	0.331	0.300	0.313	88.465%		
3	20:14:49	0.278	0.280	0.327	0.378	0.335	89.968%		
X		0.308	0.295	0.328	0.329	0.322	88.797%		
σ		0.036	0.014	0.002	0.042	0.012	1.044%		
%RSD		11.730	4.785	0.669	12.870	3.756	1.176		

ICV 1527873 4/26/2015 8:20:30 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	20:19:38	95.716%	72.250	81.230	81.310	0.000	40080.000	39350.000	38690.000
2	20:19:45	94.263%	78.040	86.350	84.570	0.000	41180.000	39890.000	39820.000
3	20:19:53	93.301%	78.690	84.980	85.950	0.000	40780.000	39830.000	38940.000
X		94.427%	95.409%	105.232%	104.928%	0.000	101.702%	99.222%	97.877%
σ		1.216%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.288	4.644	3.144	2.840	0.000	1.366	0.753	1.507
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:38	409.200	4037.000	0.000	39920.000	38930.000	37530.000	92.223%	81.780
2	20:19:45	414.400	4109.000	0.000	39960.000	38890.000	38030.000	92.600%	81.350
3	20:19:53	414.000	4182.000	0.000	40820.000	40270.000	38530.000	92.216%	82.360
X		103.133%	102.734%	0.000	100.585%	98.415%	95.075%	92.346%	102.288%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.220%	n/a
%RSD		0.704	1.766	0.000	1.255	1.989	1.310	0.238	0.620
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:38	81.930	83.440	382.500	19940.000	19110.000	80.160	79.110	80.250
2	20:19:45	83.790	82.880	389.600	20200.000	19360.000	80.480	80.400	81.650
3	20:19:53	84.400	84.760	394.200	20610.000	19670.000	80.940	82.440	81.930
X		104.216%	104.616%	97.195%	101.254%	96.889%	100.660%	100.814%	101.598%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.546	1.156	1.523	1.681	1.455	0.487	2.086	1.111
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:38	80.380	83.060	80.390	80.870	81.490	80.230	0.000	75.930
2	20:19:45	80.490	82.050	81.420	79.770	78.050	81.160	0.000	77.580
3	20:19:53	81.930	81.090	80.170	80.930	82.100	76.030	0.000	78.100
X		101.166%	102.579%	100.825%	100.657%	100.684%	98.926%	0.000	96.499%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.065	1.202	0.828	0.812	2.717	3.449	0.000	1.468
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:38	98.009%	79.220	82.230	88.898%	77.410	77.450	77.050	81.250
2	20:19:45	98.385%	80.960	81.610	89.500%	77.140	78.120	77.770	78.810
3	20:19:53	98.096%	79.850	82.580	89.632%	77.440	76.810	76.470	79.720
X		98.163%	100.014%	102.674%	89.344%	96.664%	96.823%	96.372%	99.908%
σ		0.197%	n/a	n/a	0.391%	n/a	n/a	n/a	n/a
%RSD		0.200	1.104	0.599	0.438	0.215	0.841	0.840	1.546
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:38	91.500%	80.230	77.990	79.030	80.570	80.770	91.946%	92.720%
2	20:19:45	92.259%	80.030	79.010	78.740	81.720	79.130	93.316%	93.376%
3	20:19:53	92.512%	80.590	78.870	79.520	77.450	76.990	93.004%	93.670%
X		92.090%	100.357%	98.279%	98.873%	99.891%	98.710%	92.755%	93.255%
σ		0.526%	n/a	n/a	n/a	n/a	n/a	0.718%	0.486%
%RSD		0.572	0.351	0.705	0.496	2.765	2.401	0.774	0.521
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:19:38	82.310	80.210	80.670	78.290	79.240	86.706%		
2	20:19:45	82.690	80.620	82.720	79.140	80.400	86.872%		
3	20:19:53	82.970	82.900	82.220	79.910	81.000	86.450%		
X		103.324%	101.550%	102.338%	98.888%	100.267%	86.676%		
σ		n/a	n/a	n/a	n/a	n/a	0.213%		
%RSD		0.404	1.782	1.307	1.025	1.114	0.245		

ICB 4/26/2015 8:29:42 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	20:28:49	98.096%	0.028	0.565	0.310	0.000	7.961	1.385	2.287
2	20:28:57	95.622%	0.089	0.511	0.311	0.000	11.360	2.095	3.615
3	20:29:04	96.232%	0.014	-0.305	0.566	0.000	10.890	2.514	5.907
X		96.650%	0.044	0.257	0.396	0.000	10.070	1.998	3.936
σ		1.289%	0.040	0.487	0.147	0.000	1.844	0.571	1.832
%RSD		1.333	91.250	189.600	37.230	0.000	18.300	28.580	46.530
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:49	-0.483	4.675	0.000	-0.461	6.484	5.351	97.614%	-0.468
2	20:28:57	-0.415	1.821	0.000	9.424	16.590	5.036	95.945%	-0.464
3	20:29:04	-0.208	1.592	0.000	13.060	-8.079	4.034	94.696%	-0.377
X		-0.369	2.696	0.000	7.341	4.997	4.807	96.085%	-0.436
σ		0.143	1.718	0.000	6.997	12.400	0.688	1.464%	0.052
%RSD		38.770	63.720	0.000	95.320	248.100	14.310	1.523	11.880
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:49	0.089	-0.015	-0.057	5.553	6.170	0.000	0.107	-0.083
2	20:28:57	0.102	-0.018	-0.066	6.273	5.719	0.006	-0.039	-0.107
3	20:29:04	0.065	0.018	-0.054	6.072	6.608	-0.003	0.062	-0.077
X		0.085	-0.005	-0.059	5.966	6.166	0.001	0.043	-0.089
σ		0.019	0.020	0.006	0.371	0.444	0.005	0.075	0.016
%RSD		21.740	393.700	10.190	6.225	7.209	373.600	173.000	17.890
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:49	-0.025	-0.041	-0.055	0.025	0.138	0.859	0.000	-0.007
2	20:28:57	0.021	0.013	-0.056	0.075	0.170	-0.216	0.000	0.003
3	20:29:04	-0.043	-0.092	0.058	0.010	0.069	-1.819	0.000	0.017
X		-0.016	-0.040	-0.018	0.037	0.126	-0.392	0.000	0.004
σ		0.033	0.053	0.066	0.034	0.052	1.348	0.000	0.012
%RSD		210.400	130.800	375.200	92.600	41.190	343.600	0.000	269.700
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:49	98.756%	0.343	0.226	93.861%	-0.044	-0.004	-0.000	-0.037
2	20:28:57	100.475%	0.241	0.199	94.294%	-0.023	-0.030	-0.000	-0.030
3	20:29:04	100.329%	0.163	0.211	94.751%	-0.002	-0.027	-0.000	-0.030
X		99.854%	0.249	0.212	94.302%	-0.023	-0.021	-0.000	-0.032
σ		0.953%	0.090	0.013	0.445%	0.021	0.014	0.000	0.004
%RSD		0.955	36.190	6.312	0.472	92.650	70.030	5.764	12.220
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:28:49	94.185%	-0.632	-0.043	-0.075	-0.007	0.023	95.170%	94.105%
2	20:28:57	94.904%	-0.554	-0.034	-0.075	-0.036	0.023	96.322%	94.595%
3	20:29:04	95.828%	-0.762	-0.039	-0.076	0.020	-0.011	96.513%	97.207%
X		94.972%	-0.649	-0.038	-0.075	-0.008	0.012	96.002%	95.303%
σ		0.824%	0.105	0.004	0.000	0.028	0.020	0.727%	1.667%
%RSD		0.867	16.200	11.460	0.485	357.300	165.600	0.757	1.750
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:28:49	-0.066	-0.034	-0.011	-0.021	-0.029	90.736%		
2	20:28:57	-0.049	-0.041	-0.042	-0.021	-0.032	91.079%		
3	20:29:04	-0.047	-0.033	-0.018	-0.031	-0.024	90.882%		
X		-0.054	-0.036	-0.024	-0.025	-0.028	90.899%		
σ		0.011	0.005	0.016	0.006	0.004	0.172%		
%RSD		19.620	12.520	68.730	24.270	14.760	0.189		

CRI 1525173 4/26/2015 8:34:50 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	20:33:58	97.713%	0.818	19.040	19.020	0.000	469.500	462.800	454.500
2	20:34:06	96.885%	0.845	17.880	19.740	0.000	475.700	482.500	462.000
3	20:34:14	95.909%	0.974	19.560	20.370	0.000	477.600	460.300	472.200
X		96.836%	87.912%	376.547%	394.191%	0.000	592.877%	468.522%	462.902%
σ		0.903%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.933	9.508	4.579	3.437	0.000	0.891	2.591	1.916
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:33:58	28.350	453.700	0.000	495.800	438.600	407.900	98.206%	4.497
2	20:34:06	31.160	470.100	0.000	519.600	430.000	441.700	95.170%	3.452
3	20:34:14	31.660	469.900	0.000	510.500	490.100	444.400	95.432%	4.198
X		101.298%	92.909%	0.000	508.638%	452.880%	431.350%	96.269%	80.980%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.682%	n/a
%RSD		5.880	2.017	0.000	2.361	7.172	4.711	1.748	13.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:33:58	0.960	1.904	4.433	48.070	48.560	0.538	1.014	1.939
2	20:34:06	0.779	1.808	4.305	49.230	50.860	0.448	0.759	2.087
3	20:34:14	0.950	1.941	4.542	49.890	48.660	0.474	1.007	1.885
X		89.605%	94.221%	88.529%	98.132%	98.717%	97.337%	92.680%	98.527%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		11.330	3.636	2.678	1.883	2.628	9.510	15.670	5.315
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:33:58	1.963	5.084	4.861	0.976	4.478	2.725	0.000	4.517
2	20:34:06	1.826	4.791	5.546	0.961	5.581	6.172	0.000	4.503
3	20:34:14	2.179	4.861	4.737	0.983	5.282	5.994	0.000	4.320
X		99.465%	98.243%	100.957%	97.317%	102.273%	99.265%	0.000	88.936%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		8.932	3.111	8.627	1.184	11.160	39.100	0.000	2.470
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:33:58	98.692%	4.484	4.176	92.017%	1.031	0.942	0.963	1.014
2	20:34:06	100.341%	4.086	4.494	94.154%	1.045	0.873	0.903	1.006
3	20:34:14	100.084%	4.332	4.136	94.341%	1.001	0.889	0.842	1.244
X		99.706%	86.011%	85.372%	93.504%	102.542%	90.127%	90.267%	108.793%
σ		0.887%	n/a	n/a	1.291%	n/a	n/a	n/a	n/a
%RSD		0.890	4.675	4.603	1.381	2.199	3.995	6.748	12.450
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:33:58	87.696%	3.365	1.871	1.655	10.490	9.514	95.174%	94.472%
2	20:34:06	90.235%	3.486	2.002	1.816	9.683	9.563	95.231%	94.484%
3	20:34:14	91.652%	3.648	1.837	1.576	10.050	10.200	96.108%	96.510%
X		89.861%	69.994%	95.154%	84.111%	100.725%	97.599%	95.504%	95.155%
σ		2.004%	n/a	n/a	n/a	n/a	n/a	0.524%	1.173%
%RSD		2.230	4.063	4.587	7.283	4.011	3.937	0.548	1.233
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:33:58	0.703	0.748	0.943	0.916	0.951	87.802%		
2	20:34:06	0.829	0.905	0.941	0.971	0.993	88.255%		
3	20:34:14	0.935	0.793	0.934	0.942	0.978	88.540%		
X		82.234%	81.533%	93.906%	94.293%	97.369%	88.199%		
σ		n/a	n/a	n/a	n/a	n/a	0.372%		
%RSD		14.090	9.879	0.516	2.932	2.174	0.422		

ICSA 1533081 4/26/2015 8:39:58 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	20:39:06	77.846%	0.021	1.499	21.120	0.000	89790.000	87810.000	88200.000
2	20:39:14	78.521%	0.008	1.015	22.060	0.000	91240.000	89600.000	89150.000
3	20:39:22	76.322%	0.025	2.347	22.180	0.000	92550.000	89510.000	89850.000
X		77.563%	0.018	1.620	21.790	0.000	91190.000	88970.000	89070.000
σ		1.126%	0.009	0.674	0.576	0.000	1379.000	1012.000	826.700
%RSD		1.452	51.240	41.600	2.645	0.000	1.512	1.137	0.928
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:06	88820.000	18.290	0.000	83010.000	80580.000	81750.000	93.533%	1655.000
2	20:39:14	89850.000	15.560	0.000	85280.000	84120.000	84480.000	91.201%	1708.000
3	20:39:22	90800.000	15.890	0.000	85450.000	86420.000	86130.000	90.468%	1726.000
X		89820.000	16.580	0.000	84580.000	83710.000	84120.000	91.734%	1696.000
σ		991.900	1.490	0.000	1361.000	2937.000	2212.000	1.601%	36.630
%RSD		1.104	8.986	0.000	1.609	3.509	2.629	1.745	2.159
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:06	0.166	1.138	31.170	86370.000	89410.000	0.102	0.221	0.677
2	20:39:14	0.152	1.199	32.550	88320.000	90670.000	0.077	0.461	0.629
3	20:39:22	0.021	1.219	33.220	89190.000	90730.000	0.077	0.434	0.715
X		0.113	1.185	32.310	87960.000	90270.000	0.085	0.372	0.674
σ		0.080	0.042	1.043	1440.000	745.300	0.014	0.131	0.043
%RSD		71.020	3.559	3.228	1.637	0.826	16.670	35.340	6.426
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:06	1.225	1.975	1.634	0.173	0.046	-0.094	0.000	0.641
2	20:39:14	1.137	2.182	1.330	0.178	0.046	1.806	0.000	0.647
3	20:39:22	1.342	2.176	1.975	0.160	0.125	-0.656	0.000	0.631
X		1.235	2.111	1.646	0.170	0.073	0.352	0.000	0.640
σ		0.103	0.118	0.323	0.009	0.045	1.290	0.000	0.008
%RSD		8.355	5.589	19.590	5.469	62.610	366.500	0.000	1.289
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:06	82.087%	2067.000	2143.000	72.041%	-0.000	0.031	1.144	0.872
2	20:39:14	82.346%	2072.000	2145.000	71.486%	-0.004	0.026	1.390	0.853
3	20:39:22	83.411%	2039.000	2136.000	71.380%	0.016	0.010	1.372	0.872
X		82.614%	2060.000	2142.000	71.636%	0.004	0.022	1.302	0.865
σ		0.702%	17.950	4.637	0.355%	0.010	0.011	0.137	0.011
%RSD		0.850	0.871	0.217	0.496	270.200	49.550	10.530	1.242
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:39:06	76.587%	-0.651	0.081	0.026	0.065	0.191	83.790%	84.771%
2	20:39:14	77.591%	-0.641	0.128	-0.021	0.196	0.069	84.629%	85.808%
3	20:39:22	77.419%	-0.566	0.074	-0.036	0.164	0.109	84.428%	86.414%
X		77.199%	-0.620	0.094	-0.010	0.142	0.123	84.282%	85.664%
σ		0.537%	0.046	0.030	0.032	0.068	0.062	0.438%	0.831%
%RSD		0.696	7.501	31.410	318.100	48.320	50.530	0.519	0.970
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:39:06	-0.030	-0.012	0.182	0.214	0.204	81.567%		
2	20:39:14	0.005	-0.012	0.245	0.165	0.207	80.048%		
3	20:39:22	-0.051	-0.028	0.241	0.206	0.222	79.167%		
X		-0.025	-0.018	0.222	0.195	0.211	80.261%		
σ		0.028	0.009	0.035	0.027	0.010	1.214%		
%RSD		110.800	51.670	15.900	13.700	4.668	1.512		

IC SAB 1541326 4/26/2015 8:44:24 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	20:43:32	72.454%	19.780	52.230	74.230	0.000	95780.000	92850.000	92220.000
2	20:43:40	73.403%	19.850	54.350	71.390	0.000	96220.000	93490.000	92630.000
3	20:43:48	73.730%	20.290	50.650	72.660	0.000	95920.000	92230.000	93540.000
X		73.196%	99.865%	104.817%	145.521%	0.000	95.973%	92.857%	92.794%
σ		0.663%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.905	1.392	3.543	1.959	0.000	0.231	0.676	0.730
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:32	93710.000	475.600	0.000	82690.000	82570.000	82460.000	92.450%	1662.000
2	20:43:40	93750.000	478.100	0.000	84280.000	84400.000	84850.000	91.460%	1711.000
3	20:43:48	93590.000	477.300	0.000	84550.000	85370.000	85870.000	91.001%	1731.000
X		93.683%	95.400%	0.000	83.840%	84.112%	84.392%	91.637%	85.064%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.741%	n/a
%RSD		0.090	0.259	0.000	1.200	1.692	2.074	0.808	2.094
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:32	16.210	17.860	47.130	87780.000	91050.000	17.690	18.470	18.850
2	20:43:40	16.890	18.240	47.540	88270.000	92190.000	17.500	18.020	18.600
3	20:43:48	17.080	18.830	49.130	89740.000	92330.000	17.860	17.950	18.830
X		83.644%	91.562%	239.678%	88.595%	91.858%	88.426%	90.727%	93.807%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.739	2.674	2.209	1.152	0.764	1.023	1.544	0.736
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:32	20.200	20.880	21.700	19.360	49.430	56.520	0.000	20.320
2	20:43:40	19.050	20.940	21.240	19.550	49.910	49.220	0.000	20.470
3	20:43:48	19.780	20.570	20.270	19.290	50.660	51.430	0.000	19.780
X		98.389%	83.200%	84.277%	96.998%	99.996%	104.772%	0.000	100.957%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.958	0.953	3.470	0.707	1.246	7.147	0.000	1.804
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:32	79.037%	2144.000	2226.000	68.223%	20.540	20.230	21.940	22.650
2	20:43:40	79.724%	2139.000	2228.000	68.631%	19.650	19.940	22.270	23.870
3	20:43:48	80.725%	2126.000	2215.000	68.400%	20.550	20.100	21.160	22.840
X		79.829%	106.817%	111.146%	68.418%	101.237%	100.443%	108.937%	115.609%
σ		0.849%	n/a	n/a	0.205%	n/a	n/a	n/a	n/a
%RSD		1.063	0.442	0.313	0.299	2.538	0.699	2.606	2.852
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:43:32	73.568%	102.300	20.890	20.300	20.500	20.380	81.747%	82.147%
2	20:43:40	74.708%	101.000	20.340	20.780	20.770	19.850	80.809%	82.040%
3	20:43:48	73.586%	102.300	20.830	21.480	21.110	20.780	81.522%	83.153%
X		73.954%	101.850%	103.434%	104.261%	103.981%	101.677%	81.359%	82.447%
σ		0.653%	n/a	n/a	n/a	n/a	n/a	0.489%	0.614%
%RSD		0.883	0.735	1.469	2.854	1.474	2.296	0.601	0.745
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:43:32	20.480	19.930	21.130	20.720	20.600	74.957%		
2	20:43:40	20.080	19.880	21.450	20.800	21.170	74.541%		
3	20:43:48	20.790	19.980	21.110	20.660	20.910	74.530%		
X		102.248%	99.665%	106.149%	103.649%	104.454%	74.676%		
σ		n/a	n/a	n/a	n/a	n/a	0.243%		
%RSD		1.738	0.246	0.903	0.345	1.367	0.326		

CCV 1533080 4/26/2015 8:56:21 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	20:55:29	79.791%	95.480	97.730	100.300	0.000	49470.000	47960.000	47630.000
2	20:55:37	78.609%	97.500	101.800	103.000	0.000	51170.000	49710.000	48480.000
3	20:55:45	78.278%	98.560	102.600	102.600	0.000	51350.000	50210.000	50150.000
X		78.893%	97.179%	100.706%	101.975%	0.000	101.326%	98.582%	97.506%
σ		0.795%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.008	1.611	2.594	1.420	0.000	2.054	2.397	2.632
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:29	483.400	4738.000	0.000	47110.000	46640.000	45040.000	85.759%	92.650
2	20:55:37	501.500	4892.000	0.000	48300.000	48330.000	46690.000	83.677%	95.750
3	20:55:45	512.000	4908.000	0.000	48210.000	48570.000	47340.000	84.062%	97.920
X		99.796%	96.916%	0.000	95.741%	95.692%	92.711%	84.499%	95.440%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.108%	n/a
%RSD		2.905	1.941	0.000	1.381	2.198	2.552	1.311	2.774
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:29	92.530	93.990	463.500	23560.000	23120.000	93.020	95.320	95.640
2	20:55:37	95.380	97.480	473.900	24310.000	23490.000	94.810	97.320	95.470
3	20:55:45	97.360	97.900	481.200	24340.000	22970.000	95.390	93.180	96.090
X		95.090%	96.458%	94.576%	96.272%	92.765%	94.407%	95.273%	95.736%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.550	2.223	1.885	1.827	1.166	1.307	2.171	0.334
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:29	94.630	95.450	96.060	94.580	94.310	93.190	0.000	93.770
2	20:55:37	98.260	96.570	96.560	94.200	96.890	94.560	0.000	93.560
3	20:55:45	95.410	98.820	97.130	93.370	95.000	84.610	0.000	93.050
X		96.103%	96.946%	96.583%	94.051%	95.400%	90.785%	0.000	93.461%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.989	1.772	0.551	0.659	1.398	5.941	0.000	0.394
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:29	87.700%	95.550	97.200	79.634%	94.490	94.450	94.030	96.850
2	20:55:37	88.370%	96.840	96.770	80.257%	94.190	95.120	95.450	99.490
3	20:55:45	90.509%	94.610	95.640	79.708%	94.200	95.190	95.880	100.100
X		88.860%	95.666%	96.538%	79.867%	94.291%	94.920%	95.123%	98.812%
σ		1.467%	n/a	n/a	0.340%	n/a	n/a	n/a	n/a
%RSD		1.651	1.173	0.837	0.426	0.180	0.430	1.019	1.746
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:55:29	79.368%	93.480	94.770	94.970	96.930	94.450	87.679%	88.683%
2	20:55:37	80.789%	93.040	95.520	94.360	95.550	95.260	87.800%	88.962%
3	20:55:45	80.169%	95.970	95.250	95.200	96.710	94.680	88.397%	88.883%
X		80.108%	94.163%	95.180%	94.842%	96.394%	94.799%	87.959%	88.843%
σ		0.713%	n/a	n/a	n/a	n/a	n/a	0.384%	0.144%
%RSD		0.890	1.680	0.400	0.461	0.770	0.443	0.437	0.162
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	20:55:29	96.680	96.540	97.170	97.300	97.330	80.611%		
2	20:55:37	97.700	95.790	99.430	97.250	98.010	80.325%		
3	20:55:45	98.050	97.040	98.900	97.250	98.150	80.274%		
X		97.476%	96.457%	98.499%	97.265%	97.829%	80.403%		
σ		n/a	n/a	n/a	n/a	n/a	0.182%		
%RSD		0.727	0.649	1.202	0.030	0.451	0.226		

CCB1 4/26/2015 9:05:28 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	21:04:35	86.780%	0.048	-0.240	0.423	0.000	21.130	3.023	4.212
2	21:04:43	89.634%	0.020	-0.301	0.167	0.000	17.880	3.357	5.079
3	21:04:51	89.782%	-0.068	-1.095	0.204	0.000	21.550	3.549	3.126
X		88.732%	0.000	-0.545	0.265	0.000	20.190	3.310	4.139
		1.692%	0.061	0.477	0.139	0.000	2.007	0.267	0.979
		1.907	28090.000	87.430	52.280	0.000	9.944	8.052	23.650
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:04:35	-0.801	3.044	0.000	-3.901	10.070	4.863	89.857%	-0.181
2	21:04:43	-0.082	0.163	0.000	0.337	18.710	6.361	89.361%	-0.298
3	21:04:51	-0.537	-1.329	0.000	-2.635	1.767	5.657	89.740%	-0.300
X		-0.473	0.626	0.000	-2.066	10.180	5.627	89.653%	-0.260
		0.364	2.223	0.000	2.175	8.472	0.749	0.259%	0.068
		76.870	355.200	0.000	105.300	83.220	13.320	0.289	26.250
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:04:35	0.035	-0.016	0.026	9.606	10.300	0.001	-0.066	-0.038
2	21:04:43	0.034	0.006	0.031	9.537	6.367	-0.009	0.067	-0.080
3	21:04:51	0.050	-0.020	-0.063	8.981	8.053	-0.002	0.067	-0.064
X		0.040	-0.010	-0.002	9.375	8.240	-0.003	0.023	-0.061
		0.009	0.014	0.053	0.343	1.974	0.005	0.077	0.021
		23.150	137.800	2550.000	3.653	23.960	143.500	338.600	34.870
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:04:35	-0.006	-0.056	0.009	0.045	0.149	-0.410	0.000	0.004
2	21:04:43	0.063	0.097	0.056	0.064	0.039	0.076	0.000	0.008
3	21:04:51	0.003	0.021	-0.039	0.088	0.113	1.607	0.000	0.008
X		0.020	0.021	0.009	0.065	0.100	0.424	0.000	0.007
		0.037	0.076	0.048	0.021	0.056	1.053	0.000	0.002
		188.000	366.500	559.300	32.590	55.800	248.100	0.000	30.750
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:04:35	93.121%	0.625	0.611	86.003%	-0.024	-0.026	0.036	-0.022
2	21:04:43	94.031%	0.595	0.679	87.384%	-0.018	-0.012	-0.000	-0.015
3	21:04:51	93.223%	0.564	0.515	88.239%	-0.031	-0.009	0.017	0.007
X		93.458%	0.595	0.602	87.209%	-0.024	-0.016	0.018	-0.010
		0.498%	0.030	0.083	1.128%	0.007	0.009	0.018	0.015
		0.533	5.056	13.710	1.294	27.360	57.510	103.400	148.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:04:35	87.932%	-0.805	0.129	0.069	-0.006	0.025	91.972%	91.004%
2	21:04:43	89.396%	-0.805	0.098	0.033	0.023	-0.011	92.024%	91.799%
3	21:04:51	89.844%	-0.775	0.059	-0.033	0.083	0.007	91.121%	91.605%
X		89.057%	-0.795	0.095	0.023	0.033	0.007	91.705%	91.469%
		1.000%	0.017	0.035	0.052	0.045	0.018	0.507%	0.415%
		1.123	2.188	36.880	225.800	135.400	252.100	0.553	0.453
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:04:35	-0.037	-0.034	-0.019	-0.017	-0.029	86.893%		
2	21:04:43	-0.030	-0.030	-0.020	-0.031	-0.029	88.199%		
3	21:04:51	-0.048	-0.019	-0.017	-0.020	-0.030	88.121%		
X		-0.038	-0.028	-0.018	-0.023	-0.029	87.737%		
		0.009	0.008	0.002	0.008	0.001	0.732%		
		23.540	28.910	9.364	33.130	1.969	0.835		

180-43257-B-7-A 4/26/2015 9:10:33 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	21:09:42	78.518%	-0.015	46.750	48.210	0.000	68010.000	20810.000	20640.000
2	21:09:50	79.165%	-0.083	46.420	48.970	0.000	68310.000	20870.000	20690.000
3	21:09:57	79.745%	-0.029	46.520	46.890	0.000	69230.000	20840.000	20720.000
X		79.143%	-0.042	46.560	48.030	0.000	68520.000	20840.000	20680.000
σ		0.614%	0.036	0.168	1.052	0.000	633.700	31.200	39.360
%RSD		0.776	85.490	0.360	2.191	0.000	0.925	0.150	0.190
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:42	129.500	3867.000	0.000	6335.000	85940.000	88370.000	75.532%	5.592
2	21:09:50	126.900	3891.000	0.000	6444.000	89390.000	91360.000	74.339%	4.972
3	21:09:57	127.300	3882.000	0.000	6504.000	91210.000	92640.000	74.199%	4.874
X		127.900	3880.000	0.000	6428.000	88850.000	90790.000	74.690%	5.146
σ		1.400	12.140	0.000	85.730	2675.000	2194.000	0.733%	0.389
%RSD		1.095	0.313	0.000	1.334	3.010	2.416	0.981	7.566
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:42	-0.892	5.620	28.940	320.300	524.800	0.424	1.681	1.045
2	21:09:50	-0.680	5.847	30.350	322.200	499.000	0.450	2.031	1.172
3	21:09:57	-0.356	5.928	30.860	323.000	500.700	0.414	2.104	1.072
X		-0.642	5.798	30.050	321.800	508.200	0.429	1.939	1.097
σ		0.270	0.159	0.991	1.411	14.440	0.019	0.226	0.067
%RSD		42.010	2.749	3.298	0.438	2.841	4.341	11.670	6.091
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:42	1.247	7.939	8.751	0.632	0.583	2.197	0.000	193.800
2	21:09:50	1.194	8.735	9.180	0.710	0.800	3.197	0.000	193.600
3	21:09:57	1.199	9.676	9.556	0.879	0.662	2.629	0.000	192.400
X		1.213	8.784	9.163	0.740	0.682	2.674	0.000	193.300
σ		0.029	0.869	0.403	0.127	0.110	0.501	0.000	0.762
%RSD		2.418	9.897	4.395	17.090	16.160	18.740	0.000	0.394
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:42	76.917%	3.353	2.994	68.444%	0.002	-0.005	-0.001	0.088
2	21:09:50	77.635%	2.681	3.233	69.586%	-0.006	-0.010	-0.000	0.096
3	21:09:57	78.682%	3.009	2.884	70.067%	-0.035	-0.006	-0.001	0.060
X		77.745%	3.014	3.037	69.366%	-0.013	-0.007	-0.000	0.081
σ		0.888%	0.336	0.179	0.833%	0.019	0.003	0.000	0.019
%RSD		1.142	11.140	5.877	1.201	149.000	36.390	18.870	23.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:09:42	73.176%	2.312	1.194	1.130	53.670	56.860	80.287%	82.595%
2	21:09:50	73.484%	1.570	1.152	1.051	56.520	55.880	81.326%	82.642%
3	21:09:57	74.055%	1.356	1.046	0.995	56.690	54.010	81.777%	84.086%
X		73.572%	1.746	1.131	1.059	55.620	55.580	81.130%	83.108%
σ		0.446%	0.502	0.076	0.068	1.696	1.446	0.764%	0.848%
%RSD		0.606	28.730	6.733	6.392	3.049	2.602	0.942	1.020
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:09:42	-0.016	0.019	0.502	0.526	0.512	75.574%		
2	21:09:50	-0.026	0.032	0.552	0.547	0.487	76.732%		
3	21:09:57	-0.007	-0.016	0.540	0.515	0.498	77.741%		
X		-0.016	0.011	0.531	0.529	0.499	76.682%		
σ		0.010	0.025	0.026	0.016	0.012	1.084%		
%RSD		59.180	218.800	4.959	3.036	2.442	1.414		

180-43257-B-8-A 4/26/2015 9:15:38 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	21:14:45	79.690%	0.026	33.040	34.900	0.000	24740.000	11630.000	11310.000
2	21:14:52	81.229%	-0.064	31.280	32.950	0.000	24440.000	11670.000	11600.000
3	21:15:00	79.480%	-0.006	36.260	35.430	0.000	25110.000	11720.000	11660.000
X		80.133%	-0.015	33.530	34.420	0.000	24760.000	11670.000	11530.000
σ		0.955%	0.046	2.525	1.306	0.000	340.000	45.070	190.400
%RSD		1.192	315.500	7.530	3.794	0.000	1.373	0.386	1.652
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:45	14.340	4084.000	0.000	2879.000	112700.000	111200.000	76.521%	4.040
2	21:14:52	11.360	4060.000	0.000	2893.000	114200.000	114300.000	76.318%	3.491
3	21:15:00	11.760	4201.000	0.000	2985.000	118400.000	117900.000	74.725%	3.795
X		12.490	4115.000	0.000	2919.000	115100.000	114500.000	75.855%	3.775
σ		1.616	75.380	0.000	57.210	2962.000	3337.000	0.984%	0.275
%RSD		12.940	1.832	0.000	1.960	2.573	2.915	1.297	7.289
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:45	-1.747	3.149	1.192	42.050	282.100	0.205	0.933	0.790
2	21:14:52	-1.542	2.961	1.281	41.090	282.400	0.166	0.595	0.671
3	21:15:00	-0.502	3.352	1.298	41.740	302.400	0.149	0.991	0.846
X		-1.264	3.154	1.257	41.630	289.000	0.174	0.840	0.769
σ		0.668	0.196	0.057	0.489	11.660	0.029	0.214	0.089
%RSD		52.820	6.201	4.541	1.174	4.033	16.490	25.420	11.590
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:45	1.024	2.337	2.697	0.818	0.769	4.621	0.000	229.800
2	21:14:52	0.944	2.338	3.070	0.723	0.757	4.052	0.000	228.000
3	21:15:00	1.076	2.784	2.273	0.873	1.114	4.788	0.000	226.000
X		1.015	2.486	2.680	0.805	0.880	4.487	0.000	227.900
σ		0.067	0.258	0.399	0.076	0.203	0.385	0.000	1.890
%RSD		6.557	10.360	14.880	9.420	23.040	8.589	0.000	0.829
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:45	75.286%	1.301	1.345	68.440%	-0.031	-0.018	0.022	0.116
2	21:14:52	76.815%	1.513	1.196	69.171%	-0.006	-0.014	0.044	0.026
3	21:15:00	76.876%	1.524	1.437	69.302%	-0.027	-0.023	0.022	0.026
X		76.326%	1.446	1.326	68.971%	-0.021	-0.018	0.029	0.056
σ		0.901%	0.126	0.122	0.464%	0.013	0.004	0.013	0.052
%RSD		1.181	8.692	9.182	0.673	61.960	23.860	43.610	93.250
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:14:45	72.178%	0.588	0.354	0.254	41.120	40.120	79.926%	81.254%
2	21:14:52	72.723%	0.564	0.310	0.267	40.790	40.940	80.775%	81.935%
3	21:15:00	72.820%	0.455	0.362	0.283	40.090	39.500	80.138%	81.804%
X		72.574%	0.536	0.342	0.268	40.670	40.190	80.280%	81.664%
σ		0.346%	0.071	0.028	0.015	0.526	0.724	0.442%	0.361%
%RSD		0.477	13.220	8.228	5.475	1.292	1.802	0.550	0.442
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:14:45	-0.058	-0.048	0.094	0.060	0.051	76.604%		
2	21:14:52	-0.090	-0.057	0.053	0.059	0.073	77.362%		
3	21:15:00	-0.064	-0.055	0.081	0.071	0.078	77.770%		
X		-0.071	-0.053	0.076	0.063	0.067	77.245%		
σ		0.017	0.005	0.021	0.006	0.014	0.591%		
%RSD		24.210	8.545	27.530	10.110	21.380	0.766		

180-42886-C-2-A@10 4/26/2015 9:20:44 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	21:19:51	66.790%	0.019	402.600	416.200	0.000	967500.000	113600.000	112800.000	
2	21:19:58	66.875%	0.071	404.400	432.800	0.000	970700.000	113700.000	112600.000	
3	21:20:06	69.733%	0.072	380.700	414.100	0.000	967200.000	112100.000	110800.000	
X		67.799%	0.054	395.900	421.000	0.000	968500.000	113200.000	112100.000	
		σ	1.675%	0.030	13.200	10.240	0.000	1940.000	875.700	1077.000
		%RSD	2.471	56.660	3.335	2.432	0.000	0.200	0.774	0.962
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:19:51	163.700	480.300	0.000	30330.000	32710.000	31130.000	75.959%	5.557	
2	21:19:58	161.600	490.400	0.000	31060.000	33700.000	32280.000	75.112%	6.983	
3	21:20:06	162.400	486.700	0.000	31860.000	34180.000	32940.000	75.040%	5.776	
X		162.600	485.800	0.000	31080.000	33530.000	32120.000	75.370%	6.106	
		σ	1.059	5.098	0.000	765.600	750.600	917.000	0.511%	0.768
		%RSD	0.651	1.049	0.000	2.463	2.239	2.855	0.678	12.580
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:19:51	0.278	1.014	7.937	286.300	349.100	0.129	0.219	1.109	
2	21:19:58	0.207	1.054	7.921	286.300	363.000	0.157	0.397	1.247	
3	21:20:06	-0.154	1.105	8.253	290.700	377.100	0.122	0.446	1.020	
X		0.110	1.057	8.037	287.800	363.100	0.136	0.354	1.125	
		σ	0.231	0.046	0.187	2.543	13.990	0.018	0.119	0.114
		%RSD	209.800	4.305	2.332	0.884	3.852	13.480	33.650	10.140
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:19:51	1.201	3.392	3.596	0.288	0.144	67.100	0.000	629.800	
2	21:19:58	1.063	3.382	4.088	0.195	0.276	60.990	0.000	632.200	
3	21:20:06	1.218	3.728	3.711	0.316	0.055	72.010	0.000	637.200	
X		1.161	3.501	3.798	0.267	0.158	66.700	0.000	633.100	
		σ	0.085	0.197	0.257	0.064	0.111	5.523	0.000	3.796
		%RSD	7.347	5.628	6.778	23.900	70.310	8.280	0.000	0.600
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:19:51	76.173%	1.456	1.333	66.489%	-0.022	0.009	0.023	0.000	
2	21:19:58	76.577%	1.354	1.207	67.017%	-0.030	-0.027	0.045	-0.019	
3	21:20:06	76.673%	1.086	1.167	67.530%	-0.035	-0.014	0.022	-0.001	
X		76.474%	1.299	1.236	67.012%	-0.029	-0.010	0.030	-0.006	
		σ	0.265%	0.191	0.087	0.520%	0.007	0.018	0.013	0.011
		%RSD	0.347	14.710	7.007	0.777	22.810	176.800	43.510	167.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	21:19:51	70.864%	-0.691	0.063	0.046	1.258	1.416	79.093%	80.089%	
2	21:19:58	71.937%	-0.867	0.067	0.060	1.744	1.253	79.274%	80.477%	
3	21:20:06	72.148%	-0.731	0.119	0.092	1.206	1.483	79.650%	79.926%	
X		71.650%	-0.763	0.083	0.066	1.403	1.384	79.339%	80.164%	
		σ	0.689%	0.093	0.031	0.024	0.297	0.118	0.284%	0.283%
		%RSD	0.961	12.130	37.890	35.860	21.170	8.544	0.358	0.353
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	21:19:51	-0.089	-0.064	0.690	0.717	0.722	71.233%			
2	21:19:58	-0.089	-0.070	0.785	0.746	0.732	71.828%			
3	21:20:06	-0.068	-0.064	0.817	0.760	0.779	72.114%			
X		-0.082	-0.066	0.764	0.741	0.745	71.725%			
		σ	0.012	0.004	0.066	0.022	0.030	0.449%		
		%RSD	15.150	5.671	8.621	2.945	4.059	0.627		

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4/26/2015 9:25:49 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	21:24:55	69.343%	0.213	408.400	429.100	0.000	998600.000	114500.000	114300.000
2	21:25:03	70.094%	0.208	415.900	443.000	0.000	1007000.000	117800.000	115800.000
3	21:25:11	68.480%	0.141	428.600	452.500	0.000	1017000.000	120100.000	122000.000
X		69.306%	0.187	417.600	441.500	0.000	1008000.000	117500.000	117400.000
σ		0.807%	0.040	10.220	11.800	0.000	9268.000	2792.000	4115.000
%RSD		1.165	21.400	2.448	2.673	0.000	0.920	2.376	3.506
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:24:55	1.586	35.330	0.000	32460.000	33290.000	32380.000	77.227%	0.214
2	21:25:03	1.361	30.640	0.000	33000.000	35030.000	33470.000	76.913%	0.288
3	21:25:11	1.188	29.460	0.000	33460.000	35530.000	33910.000	76.241%	0.437
X		1.378	31.810	0.000	32970.000	34620.000	33250.000	76.794%	0.313
σ		0.200	3.104	0.000	502.400	1180.000	783.800	0.504%	0.113
%RSD		14.490	9.759	0.000	1.524	3.408	2.357	0.656	36.240
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:24:55	-0.447	0.684	5.090	2.324	94.720	0.056	0.215	0.310
2	21:25:03	-0.281	0.681	5.071	2.136	82.900	0.067	0.137	0.335
3	21:25:11	0.463	0.760	5.359	1.767	81.260	0.041	0.375	0.511
X		-0.088	0.708	5.173	2.076	86.290	0.055	0.243	0.385
σ		0.484	0.045	0.161	0.283	7.348	0.013	0.122	0.110
%RSD		548.800	6.358	3.114	13.640	8.516	24.260	50.050	28.420
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:24:55	0.518	1.927	1.998	0.171	0.099	48.060	0.000	647.500
2	21:25:03	0.471	1.676	1.702	0.152	0.276	47.680	0.000	654.400
3	21:25:11	0.602	1.999	2.467	0.128	0.187	43.970	0.000	659.200
X		0.530	1.868	2.056	0.150	0.187	46.570	0.000	653.700
σ		0.067	0.170	0.386	0.021	0.088	2.261	0.000	5.899
%RSD		12.550	9.078	18.780	14.220	47.100	4.856	0.000	0.902
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:24:55	75.748%	1.483	0.976	65.646%	-0.030	-0.022	-0.000	-0.037
2	21:25:03	76.019%	1.432	1.477	66.452%	-0.005	-0.031	-0.000	-0.037
3	21:25:11	76.600%	1.237	1.351	66.832%	-0.043	-0.018	-0.000	-0.018
X		76.122%	1.384	1.268	66.310%	-0.026	-0.024	-0.000	-0.031
σ		0.435%	0.130	0.261	0.606%	0.019	0.007	0.000	0.011
%RSD		0.572	9.363	20.540	0.914	75.110	28.860	6.205	34.410
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:24:55	70.546%	-0.990	0.052	0.013	1.159	0.904	78.225%	79.593%
2	21:25:03	70.873%	-0.911	0.069	-0.012	1.188	1.006	78.903%	80.392%
3	21:25:11	71.494%	-0.964	0.115	-0.021	0.537	0.894	78.841%	80.299%
X		70.971%	-0.955	0.079	-0.006	0.961	0.935	78.656%	80.095%
σ		0.481%	0.040	0.033	0.018	0.367	0.062	0.375%	0.437%
%RSD		0.678	4.200	41.840	274.800	38.230	6.637	0.476	0.546
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:24:55	-0.092	-0.068	-0.016	0.002	-0.001	70.529%		
2	21:25:03	-0.086	-0.076	0.004	-0.002	-0.005	70.683%		
3	21:25:11	-0.080	-0.071	-0.001	0.014	0.009	72.198%		
X		-0.086	-0.071	-0.005	0.005	0.001	71.136%		
σ		0.006	0.004	0.010	0.008	0.008	0.922%		
%RSD		7.077	5.609	225.500	173.900	659.800	1.297		

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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	21:39:42	70.274%	44.540	969.500	984.300	0.000	46840.000	42840.000	42250.000
2	21:39:50	69.822%	46.220	1008.000	1020.000	0.000	48120.000	44570.000	44180.000
3	21:39:58	70.277%	46.540	1003.000	1008.000	0.000	48520.000	44260.000	43970.000
X		70.124%	45.770	993.300	1004.000	0.000	47820.000	43890.000	43470.000
σ		0.262%	1.071	20.810	18.090	0.000	878.800	923.000	1058.000
%RSD		0.373	2.339	2.095	1.802	0.000	1.838	2.103	2.434
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:39:42	1690.000	5831.000	0.000	43670.000	43130.000	41830.000	70.219%	832.900
2	21:39:50	1748.000	5931.000	0.000	44330.000	44730.000	43410.000	69.029%	844.200
3	21:39:58	1738.000	5863.000	0.000	43930.000	44860.000	44070.000	69.383%	867.000
X		1725.000	5875.000	0.000	43970.000	44240.000	43110.000	69.544%	848.000
σ		31.000	51.130	0.000	333.300	960.000	1153.000	0.611%	17.360
%RSD		1.797	0.870	0.000	0.758	2.170	2.674	0.879	2.047
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:39:42	441.200	180.100	419.300	884.200	971.800	434.700	432.700	219.000
2	21:39:50	453.000	184.100	436.100	901.900	987.900	444.700	442.300	224.600
3	21:39:58	448.500	183.300	442.300	888.600	985.200	444.300	437.500	221.100
X		447.600	182.500	432.500	891.600	981.600	441.200	437.500	221.600
σ		5.949	2.097	11.920	9.242	8.655	5.641	4.787	2.845
%RSD		1.329	1.149	2.755	1.037	0.882	1.279	1.094	1.284
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:39:42	222.700	430.100	429.200	35.940	10.420	9.953	0.000	875.900
2	21:39:50	225.700	447.500	443.200	35.910	8.571	8.383	0.000	876.700
3	21:39:58	225.700	435.800	436.500	35.370	9.146	7.931	0.000	874.300
X		224.700	437.800	436.300	35.740	9.378	8.756	0.000	875.600
σ		1.702	8.860	6.997	0.318	0.945	1.061	0.000	1.228
%RSD		0.757	2.024	1.604	0.890	10.080	12.120	0.000	0.140
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:39:42	72.013%	908.200	936.300	64.390%	44.750	44.690	44.830	83.850
2	21:39:50	72.571%	918.600	937.500	64.885%	44.420	43.990	45.070	81.760
3	21:39:58	73.321%	926.000	937.000	64.599%	43.960	43.430	43.850	81.260
X		72.635%	917.600	936.900	64.625%	44.370	44.040	44.580	82.290
σ		0.656%	8.906	0.574	0.249%	0.398	0.630	0.650	1.373
%RSD		0.903	0.971	0.061	0.385	0.896	1.430	1.458	1.668
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:39:42	67.367%	1799.000	435.900	430.400	1709.000	1689.000	75.798%	78.336%
2	21:39:50	68.850%	1776.000	430.300	423.400	1716.000	1676.000	76.540%	78.519%
3	21:39:58	69.525%	1763.000	427.700	425.700	1715.000	1679.000	77.630%	78.939%
X		68.581%	1779.000	431.300	426.500	1714.000	1681.000	76.656%	78.598%
σ		1.104%	18.000	4.182	3.601	3.684	6.799	0.921%	0.309%
%RSD		1.610	1.012	0.970	0.844	0.215	0.405	1.202	0.393
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:39:42	46.490	44.970	18.360	18.650	18.640	70.835%		
2	21:39:50	46.310	45.530	18.520	19.060	18.570	71.874%		
3	21:39:58	46.610	45.870	18.680	19.150	18.710	71.218%		
X		46.470	45.460	18.520	18.960	18.640	71.309%		
σ		0.148	0.455	0.163	0.266	0.071	0.525%		
%RSD		0.319	1.001	0.878	1.405	0.379	0.737		

180-43187-A-3-B 4/26/2015 9:45:41 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	21:44:49	73.499%	4.518	43.330	43.620	0.000	3368.000	22390.000	21940.000
2	21:44:56	73.995%	4.569	42.700	46.350	0.000	3373.000	22380.000	21640.000
3	21:45:04	75.230%	4.363	39.290	46.960	0.000	3358.000	22190.000	21560.000
X		74.241%	4.483	41.770	45.640	0.000	3367.000	22320.000	21710.000
σ		0.891%	0.108	2.172	1.781	0.000	7.498	112.400	198.100
%RSD		1.201	2.398	5.199	3.902	0.000	0.223	0.504	0.912
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:44:49	21630.000	2202.000	0.000	-65.670	35630.000	34710.000	113.375%	41570.000
2	21:44:56	21230.000	2275.000	0.000	-75.740	35940.000	34730.000	116.864%	41220.000
3	21:45:04	21220.000	2199.000	0.000	-78.430	36200.000	35490.000	116.948%	42050.000
X		21360.000	2225.000	0.000	-73.280	35920.000	34980.000	115.729%	41610.000
σ		232.300	43.100	0.000	6.731	284.700	439.700	2.039%	416.100
%RSD		1.088	1.937	0.000	9.185	0.793	1.257	1.762	1.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:44:49	14880.000	6502.000	16170.000	153900.000	149600.000	17.590	252.400	30.410
2	21:44:56	15020.000	6379.000	15960.000	153300.000	147200.000	17.080	249.100	29.500
3	21:45:04	15050.000	6482.000	16390.000	153700.000	148200.000	17.640	245.800	29.520
X		14980.000	6454.000	16180.000	153600.000	148300.000	17.440	249.100	29.810
σ		92.700	65.940	215.100	300.500	1216.000	0.307	3.295	0.518
%RSD		0.619	1.022	1.330	0.196	0.820	1.759	1.323	1.737
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:44:49	40.580	113.700	99.700	3.462	4.157	-8.379	0.000	129.800
2	21:44:56	39.620	109.800	90.990	3.097	2.619	-1.283	0.000	129.300
3	21:45:04	39.600	111.700	95.860	3.268	2.816	1.216	0.000	131.900
X		39.930	111.700	95.520	3.276	3.197	-2.815	0.000	130.300
σ		0.556	1.954	4.365	0.183	0.837	4.978	0.000	1.391
%RSD		1.392	1.749	4.570	5.573	26.180	176.800	0.000	1.067
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:44:49	0.000	161.000	146.400	63.978%	37.770	32.850	18.410	11.950
2	21:44:56	0.000	161.300	143.800	64.585%	35.760	30.550	18.050	12.090
3	21:45:04	0.000	161.400	145.800	65.001%	35.640	30.220	16.360	11.500
X		0.000	161.200	145.300	64.521%	36.390	31.210	17.610	11.850
σ		0.000	0.211	1.369	0.514%	1.196	1.433	1.096	0.309
%RSD		0.000	0.131	0.942	0.797	3.286	4.592	6.227	2.606
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:44:49	67.289%	511.400	3.210	4.999	320.400	317.900	86.023%	93.445%
2	21:44:56	69.230%	499.200	3.538	4.478	316.400	310.900	87.180%	93.573%
3	21:45:04	69.166%	504.300	2.957	4.026	319.500	313.700	87.110%	94.067%
X		68.561%	504.900	3.235	4.501	318.800	314.200	86.771%	93.695%
σ		1.103%	6.112	0.292	0.487	2.065	3.531	0.649%	0.328%
%RSD		1.608	1.210	9.011	10.820	0.648	1.124	0.748	0.350
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:44:49	0.194	0.116	138.400	70.430	93.760	72.533%		
2	21:44:56	0.136	0.105	136.200	69.800	93.070	73.772%		
3	21:45:04	0.156	0.103	137.800	72.100	94.050	73.200%		
X		0.162	0.108	137.500	70.780	93.620	73.168%		
σ		0.029	0.007	1.132	1.189	0.502	0.620%		
%RSD		18.210	6.668	0.823	1.679	0.536	0.848		

180-43187-A-4-B 4/26/2015 9:50:47 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	21:49:53	76.681%	8.426	29.170	32.360	0.000	1219.000	5771.000	5741.000
2	21:50:01	81.278%	7.646	25.870	29.860	0.000	1164.000	5703.000	5496.000
3	21:50:09	75.720%	8.570	30.270	31.980	0.000	1218.000	5949.000	5851.000
X		77.893%	8.214	28.440	31.400	0.000	1200.000	5808.000	5696.000
σ		2.971%	0.497	2.290	1.345	0.000	31.480	127.200	182.100
%RSD		3.814	6.049	8.053	4.284	0.000	2.623	2.190	3.196
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:49:53	26500.000	2290.000	0.000	342.100	26140.000	24930.000	117.526%	34440.000
2	21:50:01	25660.000	2221.000	0.000	332.000	26030.000	25050.000	120.519%	34720.000
3	21:50:09	26480.000	2332.000	0.000	341.000	26250.000	25120.000	119.632%	34830.000
X		26210.000	2281.000	0.000	338.400	26140.000	25030.000	119.226%	34660.000
σ		482.700	55.790	0.000	5.523	108.000	98.870	1.537%	199.200
%RSD		1.842	2.446	0.000	1.632	0.413	0.395	1.290	0.575
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:49:53	13480.000	6041.000	21350.000	209300.000	205200.000	100.400	445.600	166.400
2	21:50:01	13370.000	6007.000	21220.000	208900.000	205300.000	99.990	438.100	158.700
3	21:50:09	13560.000	6078.000	21480.000	207700.000	203600.000	99.650	450.900	163.400
X		13470.000	6042.000	21350.000	208600.000	204700.000	100.000	444.900	162.800
σ		96.540	35.740	127.600	853.200	963.000	0.381	6.414	3.860
%RSD		0.717	0.592	0.598	0.409	0.471	0.381	1.442	2.371
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:49:53	176.600	677.300	668.000	17.240	4.943	2.248	0.000	177.200
2	21:50:01	177.400	667.400	671.500	17.250	4.343	3.994	0.000	176.100
3	21:50:09	177.300	669.200	670.300	18.030	4.001	-1.257	0.000	179.200
X		177.100	671.300	669.900	17.510	4.429	1.662	0.000	177.500
σ		0.396	5.306	1.791	0.458	0.477	2.674	0.000	1.563
%RSD		0.223	0.790	0.267	2.615	10.770	160.900	0.000	0.881
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:49:53	0.000	110.400	98.200	62.750%	33.220	17.330	17.280	8.731
2	21:50:01	0.000	109.300	95.730	62.964%	31.530	16.870	16.410	8.648
3	21:50:09	0.000	112.900	98.210	63.196%	30.720	16.610	14.870	9.147
X		0.000	110.900	97.380	62.970%	31.830	16.940	16.190	8.842
σ		0.000	1.827	1.428	0.223%	1.277	0.365	1.217	0.267
%RSD		0.000	1.648	1.466	0.355	4.012	2.157	7.519	3.022
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:49:53	66.164%	366.900	7.012	8.245	316.300	308.900	85.612%	90.211%
2	21:50:01	66.423%	372.600	7.470	8.511	326.700	312.300	85.526%	90.856%
3	21:50:09	67.100%	373.600	7.067	8.103	317.500	316.900	86.207%	90.801%
X		66.563%	371.000	7.183	8.287	320.200	312.700	85.782%	90.623%
σ		0.483%	3.610	0.250	0.207	5.725	4.024	0.371%	0.358%
%RSD		0.726	0.973	3.483	2.500	1.788	1.287	0.432	0.395
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:49:53	0.326	0.288	142.900	91.310	109.500	69.014%		
2	21:50:01	0.384	0.307	144.500	91.090	108.900	69.231%		
3	21:50:09	0.334	0.307	141.700	91.020	108.600	69.722%		
X		0.348	0.301	143.000	91.140	109.000	69.322%		
σ		0.032	0.011	1.410	0.152	0.446	0.362%		
%RSD		9.082	3.578	0.986	0.167	0.409	0.523		

180-43187-A-5-B 4/26/2015 9:55:55 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	21:55:01	81.478%	7.078	6.346	8.964	0.000	335.100	1177.000	1166.000
2	21:55:09	81.146%	7.195	7.255	8.470	0.000	331.700	1214.000	1181.000
3	21:55:17	83.779%	7.182	6.889	8.176	0.000	328.000	1169.000	1162.000
X		82.134%	7.151	6.830	8.537	0.000	331.600	1187.000	1170.000
σ		1.434%	0.064	0.458	0.398	0.000	3.556	23.930	10.380
%RSD		1.746	0.891	6.701	4.663	0.000	1.072	2.016	0.888
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:55:01	23840.000	3169.000	0.000	1414.000	2313.000	2088.000	86.965%	1023.000
2	21:55:09	23620.000	3213.000	0.000	1422.000	2243.000	2100.000	88.193%	1024.000
3	21:55:17	23780.000	3200.000	0.000	1416.000	2314.000	2094.000	88.363%	1054.000
X		23750.000	3194.000	0.000	1418.000	2290.000	2094.000	87.840%	1034.000
σ		113.300	22.360	0.000	4.302	40.570	6.188	0.763%	17.540
%RSD		0.477	0.700	0.000	0.303	1.771	0.296	0.868	1.697
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:55:01	759.000	313.800	1819.000	107700.000	111800.000	140.900	202.500	110.900
2	21:55:09	756.700	312.300	1839.000	108700.000	111800.000	141.000	202.700	113.200
3	21:55:17	755.000	316.300	1842.000	108200.000	111600.000	143.600	206.100	113.700
X		756.900	314.100	1834.000	108200.000	111700.000	141.800	203.800	112.600
σ		2.007	1.990	12.510	501.600	123.600	1.510	2.033	1.468
%RSD		0.265	0.633	0.682	0.464	0.111	1.064	0.998	1.304
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:55:01	114.000	412.300	420.900	33.990	3.612	0.966	0.000	134.400
2	21:55:09	114.600	425.100	427.800	33.130	3.577	8.379	0.000	134.800
3	21:55:17	115.700	419.900	417.400	32.980	3.506	1.720	0.000	134.100
X		114.800	419.100	422.000	33.370	3.565	3.688	0.000	134.400
σ		0.873	6.413	5.293	0.545	0.054	4.079	0.000	0.345
%RSD		0.761	1.530	1.254	1.633	1.520	110.600	0.000	0.256
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:55:01	0.000	4.997	4.620	66.390%	0.861	0.670	0.841	1.229
2	21:55:09	0.000	4.463	4.414	66.867%	0.680	0.550	0.924	1.335
3	21:55:17	0.000	4.447	4.167	67.573%	0.592	0.571	0.762	1.043
X		0.000	4.635	4.400	66.944%	0.711	0.597	0.842	1.202
σ		0.000	0.313	0.227	0.595%	0.137	0.064	0.081	0.148
%RSD		0.000	6.751	5.153	0.889	19.300	10.680	9.605	12.270
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:55:01	69.209%	38.060	1.253	1.433	175.200	175.100	85.965%	88.356%
2	21:55:09	70.067%	38.600	1.507	1.269	180.800	175.100	85.980%	90.293%
3	21:55:17	69.638%	37.320	1.316	1.241	175.500	176.900	87.015%	90.722%
X		69.638%	37.990	1.358	1.314	177.200	175.700	86.320%	89.790%
σ		0.429%	0.646	0.132	0.104	3.135	1.024	0.602%	1.261%
%RSD		0.616	1.700	9.742	7.901	1.770	0.583	0.698	1.405
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	21:55:01	0.831	0.897	33.920	30.320	32.500	71.393%		
2	21:55:09	0.944	0.900	33.840	30.230	32.170	72.235%		
3	21:55:17	0.925	0.853	34.170	30.470	32.420	72.499%		
X		0.900	0.883	33.980	30.340	32.360	72.042%		
σ		0.060	0.026	0.173	0.117	0.169	0.578%		
%RSD		6.706	2.959	0.508	0.385	0.523	0.802		

180-43187-A-6-B 4/26/2015 10:01:03 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	22:00:10	75.902%	5.835	31.600	32.820	0.000	3509.000	13310.000	12900.000
2	22:00:18	75.629%	6.123	30.470	33.730	0.000	3450.000	13390.000	13040.000
3	22:00:26	75.576%	6.754	29.870	33.310	0.000	3532.000	13340.000	12820.000
X		75.702%	6.237	30.640	33.290	0.000	3497.000	13350.000	12920.000
σ		0.175%	0.470	0.880	0.455	0.000	42.140	39.020	112.700
%RSD		0.231	7.537	2.871	1.368	0.000	1.205	0.292	0.872
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:00:10	27280.000	1991.000	0.000	18.620	37370.000	36980.000	128.262%	28470.000
2	22:00:18	27690.000	2028.000	0.000	14.340	38550.000	37750.000	129.933%	28810.000
3	22:00:26	27800.000	2090.000	0.000	14.290	38690.000	37920.000	129.533%	28920.000
X		27590.000	2036.000	0.000	15.750	38200.000	37550.000	129.242%	28730.000
σ		272.200	50.230	0.000	2.484	724.000	499.800	0.872%	234.200
%RSD		0.987	2.467	0.000	15.770	1.895	1.331	0.675	0.815
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:00:10	10610.000	5183.000	26660.000	186300.000	182300.000	26.320	271.900	44.990
2	22:00:18	10560.000	5155.000	26890.000	186500.000	182900.000	26.330	277.800	44.350
3	22:00:26	10590.000	5215.000	27030.000	185100.000	183400.000	27.600	274.700	44.310
X		10590.000	5184.000	26860.000	186000.000	182900.000	26.750	274.800	44.550
σ		27.640	30.230	187.900	782.900	570.800	0.734	2.962	0.384
%RSD		0.261	0.583	0.700	0.421	0.312	2.743	1.078	0.862
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:00:10	52.970	123.200	112.900	6.086	3.337	-8.417	0.000	486.900
2	22:00:18	52.000	123.200	112.400	5.850	4.513	2.016	0.000	484.400
3	22:00:26	51.250	121.400	112.800	6.225	4.776	0.349	0.000	480.200
X		52.070	122.600	112.700	6.053	4.209	-2.018	0.000	483.800
σ		0.859	1.027	0.257	0.190	0.766	5.605	0.000	3.383
%RSD		1.649	0.838	0.228	3.131	18.210	277.800	0.000	0.699
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:00:10	0.000	87.380	79.360	61.146%	22.290	16.520	10.980	6.601
2	22:00:18	0.000	86.400	78.030	61.977%	20.870	15.250	11.230	7.417
3	22:00:26	0.000	88.650	77.030	62.605%	20.460	15.570	11.210	6.449
X		0.000	87.470	78.140	61.909%	21.210	15.780	11.140	6.823
σ		0.000	1.128	1.170	0.732%	0.962	0.664	0.138	0.521
%RSD		0.000	1.290	1.497	1.182	4.538	4.209	1.237	7.628
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:00:10	64.381%	305.900	3.407	3.839	302.700	293.100	84.294%	89.094%
2	22:00:18	65.745%	302.900	3.243	3.318	294.600	296.300	85.448%	90.702%
3	22:00:26	66.658%	301.400	3.001	3.782	306.500	296.600	85.798%	90.903%
X		65.595%	303.400	3.217	3.646	301.200	295.300	85.180%	90.233%
σ		1.146%	2.294	0.204	0.286	6.112	1.942	0.787%	0.992%
%RSD		1.747	0.756	6.347	7.832	2.029	0.658	0.924	1.099
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:00:10	0.086	0.126	88.630	55.090	68.850	67.178%		
2	22:00:18	0.083	0.084	90.300	57.130	69.970	67.157%		
3	22:00:26	0.105	0.125	90.590	55.480	69.450	68.394%		
X		0.092	0.112	89.840	55.900	69.420	67.576%		
σ		0.012	0.024	1.061	1.083	0.559	0.708%		
%RSD		13.230	21.620	1.182	1.937	0.805	1.048		

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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	22:09:16	84.448%	-0.007	-0.047	0.884	0.000	60.510	-2.552	0.178
X		84.448%	-0.007	-0.047	0.884	0.000	60.510	-2.552	0.178
σ		n/a	0.000	0.000	0.000	0.000	0.000	0.000	0.000
%RSD		n/a	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	22:09:16	2.737	8.288	0.000	-2.711	39.930	12.200	82.073%	4.863
X		2.737	8.288	0.000	-2.711	39.930	12.200	82.073%	4.863
σ		0.000	0.000	0.000	0.000	0.000	0.000	n/a	0.000
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	n/a	0.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:16	0.398	0.581	3.522	12.640	11.140	0.013	-0.151	0.062
X		0.398	0.581	3.522	12.640	11.140	0.013	-0.151	0.062
σ		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
%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	22:09:16	0.099	0.195	0.876	0.026	-0.033	-1.238	0.000	0.011
X		0.099	0.195	0.876	0.026	-0.033	-1.238	0.000	0.011
σ		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
%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	22:09:16	81.327%	0.225	0.126	75.200%	0.082	0.008	0.125	0.005
X		81.327%	0.225	0.126	75.200%	0.082	0.008	0.125	0.005
σ		n/a	0.000	0.000	n/a	0.000	0.000	0.000	0.000
%RSD		n/a	0.000	0.000	n/a	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	22:09:16	77.107%	-0.802	-0.052	-0.104	0.100	0.030	81.090%	81.388%
X		77.107%	-0.802	-0.052	-0.104	0.100	0.030	81.090%	81.388%
σ		n/a	0.000	0.000	0.000	0.000	0.000	n/a	n/a
%RSD		n/a	0.000	0.000	0.000	0.000	0.000	n/a	n/a
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:09:16	-0.076	-0.059	0.020	0.046	0.019	78.234%		
X		-0.076	-0.059	0.020	0.046	0.019	78.234%		
σ		0.000	0.000	0.000	0.000	0.000	n/a		
%RSD		0.000	0.000	0.000	0.000	0.000	n/a		

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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	22:13:18	80.865%	89.910	93.250	96.050	0.000	50670.000	48050.000	47210.000
2	22:13:26	80.439%	91.260	94.640	98.390	0.000	49430.000	47870.000	47300.000
3	22:13:34	78.363%	95.720	97.130	101.000	0.000	51200.000	49420.000	49440.000
X		79.889%	92.296%	95.008%	98.470%	0.000	100.868%	96.896%	95.966%
σ		1.338%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.675	3.295	2.067	2.500	0.000	1.801	1.754	2.627
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:18	484.700	4924.000	0.000	50800.000	48870.000	47440.000	76.193%	105.000
2	22:13:26	495.500	4948.000	0.000	52240.000	50010.000	49210.000	74.997%	107.700
3	22:13:34	498.200	5037.000	0.000	51910.000	50670.000	48890.000	75.189%	106.700
X		98.562%	99.397%	0.000	103.298%	99.702%	97.026%	75.460%	106.468%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.643%	n/a
%RSD		1.451	1.201	0.000	1.458	1.823	1.946	0.852	1.298
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:18	94.570	95.160	485.000	24170.000	23490.000	95.190	94.170	97.110
2	22:13:26	97.850	97.050	497.600	24540.000	23500.000	96.200	96.120	96.620
3	22:13:34	96.720	96.570	496.100	24490.000	23190.000	95.740	95.650	95.540
X		96.379%	96.259%	98.580%	97.604%	93.564%	95.711%	95.312%	96.423%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.725	1.021	1.396	0.819	0.755	0.529	1.065	0.834
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:18	97.270	97.900	93.730	96.570	101.500	94.470	0.000	92.400
2	22:13:26	95.870	97.440	98.100	96.350	100.600	97.100	0.000	94.700
3	22:13:34	96.990	95.330	96.320	97.050	95.180	96.400	0.000	93.740
X		96.712%	96.889%	96.050%	96.654%	99.087%	95.989%	0.000	93.613%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.767	1.418	2.291	0.372	3.445	1.419	0.000	1.231
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:18	77.461%	90.620	92.990	69.554%	94.870	94.770	94.920	96.420
2	22:13:26	77.411%	94.490	95.170	69.013%	95.530	94.100	92.390	96.870
3	22:13:34	78.819%	94.890	95.260	69.845%	92.850	94.260	93.290	96.460
X		77.897%	93.333%	94.471%	69.471%	94.416%	94.378%	93.533%	96.586%
σ		0.799%	n/a	n/a	0.422%	n/a	n/a	n/a	n/a
%RSD		1.026	2.529	1.363	0.608	1.481	0.366	1.369	0.256
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:13:18	71.557%	91.600	92.800	94.070	94.660	95.350	77.610%	78.550%
2	22:13:26	72.124%	93.270	93.700	92.890	94.260	94.770	78.718%	78.788%
3	22:13:34	73.353%	92.810	92.180	91.760	95.040	93.460	78.359%	78.804%
X		72.344%	92.558%	92.893%	92.905%	94.655%	94.528%	78.229%	78.714%
σ		0.918%	n/a	n/a	n/a	n/a	n/a	0.565%	0.142%
%RSD		1.269	0.931	0.824	1.243	0.412	1.022	0.722	0.181
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:13:18	99.910	98.400	101.800	100.700	100.700	69.130%		
2	22:13:26	99.970	98.350	100.900	99.890	100.200	69.793%		
3	22:13:34	99.350	98.160	99.100	99.880	99.320	70.647%		
X		99.743%	98.303%	100.607%	100.153%	100.103%	69.857%		
σ		n/a	n/a	n/a	n/a	n/a	0.761%		
%RSD		0.345	0.130	1.378	0.461	0.722	1.089		

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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	22:22:29	86.906%	-0.003	0.574	0.419	0.000	30.730	2.198	1.804
2	22:22:37	87.849%	-0.015	1.083	0.112	0.000	30.570	1.523	4.574
3	22:22:45	90.084%	0.048	0.084	0.543	0.000	30.670	1.706	4.367
X		88.279%	0.010	0.580	0.358	0.000	30.660	1.809	3.582
σ		1.632%	0.034	0.500	0.222	0.000	0.080	0.349	1.543
%RSD		1.849	327.700	86.130	61.910	0.000	0.260	19.300	43.080
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:29	0.342	7.888	0.000	9.656	24.410	9.984	88.360%	-0.021
2	22:22:37	-0.403	3.083	0.000	7.939	11.000	9.068	88.034%	-0.262
3	22:22:45	0.451	0.295	0.000	16.790	28.860	10.700	86.905%	-0.225
X		0.130	3.755	0.000	11.460	21.420	9.918	87.767%	-0.169
σ		0.464	3.841	0.000	4.695	9.297	0.819	0.763%	0.130
%RSD		357.100	102.300	0.000	40.960	43.400	8.254	0.870	76.800
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:29	0.098	0.031	0.248	9.905	9.958	-0.005	-0.031	-0.074
2	22:22:37	0.080	0.027	0.239	9.867	12.510	0.001	-0.088	-0.053
3	22:22:45	0.063	-0.003	0.204	9.273	5.565	0.005	-0.087	-0.064
X		0.080	0.018	0.230	9.682	9.343	0.000	-0.068	-0.063
σ		0.017	0.019	0.023	0.355	3.511	0.005	0.032	0.010
%RSD		21.820	101.900	10.190	3.664	37.580	3917.000	47.450	16.080
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:29	-0.051	-0.058	0.077	0.081	0.085	1.162	0.000	0.014
2	22:22:37	0.010	-0.062	0.122	0.066	0.121	0.733	0.000	0.017
3	22:22:45	-0.021	0.139	0.072	0.110	0.235	0.358	0.000	0.009
X		-0.021	0.006	0.090	0.086	0.147	0.751	0.000	0.014
σ		0.030	0.115	0.028	0.023	0.079	0.402	0.000	0.004
%RSD		146.300	1941.000	30.410	26.390	53.410	53.590	0.000	30.310
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:29	84.488%	0.396	0.324	80.081%	-0.029	-0.025	-0.001	-0.029
2	22:22:37	87.100%	0.309	0.339	80.785%	-0.026	-0.021	0.019	0.019
3	22:22:45	88.018%	0.429	0.323	80.963%	-0.015	-0.014	-0.001	0.002
X		86.535%	0.378	0.328	80.610%	-0.023	-0.020	0.006	-0.003
σ		1.831%	0.062	0.009	0.467%	0.007	0.006	0.011	0.024
%RSD		2.116	16.510	2.722	0.579	30.670	28.180	189.300	925.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:22:29	81.693%	-0.821	0.072	0.105	-0.036	0.067	85.476%	85.723%
2	22:22:37	82.180%	-0.919	0.149	0.082	-0.036	0.047	85.489%	86.210%
3	22:22:45	83.287%	-0.932	0.141	0.101	0.122	0.008	86.976%	87.102%
X		82.387%	-0.891	0.120	0.096	0.017	0.041	85.980%	86.345%
σ		0.817%	0.061	0.042	0.012	0.091	0.030	0.863%	0.699%
%RSD		0.992	6.844	35.160	12.570	543.300	73.200	1.003	0.810
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:22:29	-0.036	0.005	-0.007	0.004	-0.017	82.158%		
2	22:22:37	-0.023	-0.001	-0.018	-0.000	-0.017	82.601%		
3	22:22:45	-0.045	-0.014	-0.028	-0.008	-0.015	82.887%		
X		-0.034	-0.003	-0.018	-0.001	-0.016	82.549%		
σ		0.011	0.010	0.010	0.006	0.001	0.367%		
%RSD		32.250	316.800	58.890	439.800	6.712	0.445		

180-43187-A-7-B 4/26/2015 10:28:31 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	22:27:39	92.141%	7.957	6.261	8.014	0.000	311.500	1090.000	1057.000
2	22:27:47	88.315%	8.212	5.956	9.080	0.000	310.700	1099.000	1078.000
3	22:27:54	88.524%	8.608	6.739	8.086	0.000	317.000	1078.000	1057.000
X		89.660%	8.259	6.319	8.393	0.000	313.000	1089.000	1064.000
σ		2.152%	0.328	0.395	0.596	0.000	3.439	10.870	12.000
%RSD		2.400	3.969	6.244	7.096	0.000	1.099	0.999	1.128
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:39	22320.000	2892.000	0.000	1807.000	1554.000	1432.000	94.913%	458.500
2	22:27:47	22640.000	3004.000	0.000	1814.000	1562.000	1492.000	94.696%	478.900
3	22:27:54	22830.000	3005.000	0.000	1839.000	1577.000	1531.000	93.715%	477.200
X		22600.000	2967.000	0.000	1820.000	1564.000	1485.000	94.441%	471.500
σ		260.100	65.100	0.000	16.920	11.910	50.030	0.638%	11.290
%RSD		1.151	2.194	0.000	0.930	0.762	3.369	0.676	2.394
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:39	367.500	167.200	196.400	99550.000	101500.000	155.400	244.800	194.000
2	22:27:47	367.300	169.000	199.900	99790.000	102200.000	157.600	242.700	194.500
3	22:27:54	370.200	170.400	201.900	101200.000	104000.000	156.200	238.400	195.100
X		368.400	168.900	199.400	100200.000	102600.000	156.400	242.000	194.500
σ		1.619	1.595	2.811	861.900	1323.000	1.115	3.253	0.569
%RSD		0.440	0.945	1.410	0.861	1.290	0.713	1.345	0.292
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:39	202.000	535.000	538.500	27.070	4.343	3.718	0.000	83.300
2	22:27:47	198.900	534.800	538.000	26.050	4.317	6.772	0.000	84.230
3	22:27:54	198.900	535.100	543.100	25.980	4.618	6.987	0.000	82.990
X		199.900	535.000	539.800	26.370	4.426	5.826	0.000	83.510
σ		1.744	0.127	2.809	0.607	0.167	1.828	0.000	0.642
%RSD		0.872	0.024	0.520	2.303	3.767	31.380	0.000	0.769
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:39	0.000	3.882	4.111	71.569%	0.179	0.167	0.627	1.634
2	22:27:47	0.000	4.024	3.905	72.331%	0.188	0.178	0.967	1.400
3	22:27:54	0.000	4.143	4.186	72.576%	0.180	0.218	0.833	1.537
X		0.000	4.017	4.067	72.159%	0.182	0.188	0.809	1.524
σ		0.000	0.131	0.146	0.525%	0.005	0.027	0.171	0.117
%RSD		0.000	3.255	3.582	0.728	2.980	14.460	21.140	7.697
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:27:39	74.575%	36.480	1.530	1.480	148.300	146.600	90.792%	94.764%
2	22:27:47	74.912%	36.680	1.305	1.380	152.200	148.600	91.446%	94.356%
3	22:27:54	75.459%	36.360	1.242	1.396	152.000	141.900	90.714%	95.063%
X		74.982%	36.510	1.359	1.419	150.800	145.700	90.984%	94.728%
σ		0.446%	0.160	0.152	0.054	2.218	3.404	0.402%	0.355%
%RSD		0.595	0.439	11.160	3.797	1.470	2.337	0.442	0.375
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:27:39	1.041	0.944	39.690	36.190	37.570	75.448%		
2	22:27:47	1.068	1.103	39.690	35.930	37.520	75.855%		
3	22:27:54	0.985	1.024	39.660	36.250	37.520	76.404%		
X		1.032	1.024	39.680	36.120	37.540	75.902%		
σ		0.042	0.079	0.020	0.168	0.029	0.480%		
%RSD		4.113	7.759	0.050	0.466	0.077	0.632		

180-43187-A-8-B 4/26/2015 10:33:37 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	22:32:43	78.965%	5.978	48.650	49.450	0.000	6265.000	19790.000	19340.000
2	22:32:51	78.570%	6.634	43.930	51.520	0.000	6432.000	19680.000	19420.000
3	22:32:59	77.462%	5.781	49.480	52.950	0.000	6189.000	20210.000	19820.000
X		78.332%	6.131	47.350	51.310	0.000	6295.000	19890.000	19530.000
σ		0.779%	0.447	2.991	1.759	0.000	124.000	282.200	258.100
%RSD		0.995	7.282	6.317	3.428	0.000	1.969	1.418	1.322
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:43	28310.000	2885.000	0.000	70.040	56540.000	58240.000	117.812%	58010.000
2	22:32:51	28310.000	2828.000	0.000	75.380	58070.000	59340.000	118.094%	58670.000
3	22:32:59	28460.000	2836.000	0.000	71.860	58280.000	59400.000	119.080%	58510.000
X		28360.000	2850.000	0.000	72.430	57630.000	58990.000	118.328%	58400.000
σ		85.310	30.940	0.000	2.717	951.900	653.600	0.666%	344.300
%RSD		0.301	1.086	0.000	3.752	1.652	1.108	0.563	0.590
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:43	20020.000	8688.000	19400.000	199600.000	194100.000	27.660	357.200	57.970
2	22:32:51	20130.000	8696.000	19470.000	199700.000	194500.000	27.070	351.400	56.370
3	22:32:59	20280.000	8726.000	19530.000	200400.000	196900.000	27.820	358.400	57.370
X		20150.000	8703.000	19470.000	199900.000	195200.000	27.520	355.700	57.230
σ		129.200	19.610	64.090	465.800	1518.000	0.393	3.777	0.807
%RSD		0.642	0.225	0.329	0.233	0.778	1.428	1.062	1.410
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:43	71.780	204.400	182.500	6.672	6.254	-9.759	0.000	723.200
2	22:32:51	68.980	203.500	186.600	6.953	4.420	-7.327	0.000	720.900
3	22:32:59	68.980	202.400	186.700	6.925	4.788	-2.515	0.000	718.200
X		69.910	203.400	185.200	6.850	5.154	-6.534	0.000	720.700
σ		1.617	1.021	2.418	0.155	0.971	3.687	0.000	2.480
%RSD		2.312	0.502	1.305	2.255	18.830	56.430	0.000	0.344
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:43	0.000	204.900	185.600	60.561%	48.470	35.800	26.040	18.870
2	22:32:51	0.000	205.600	186.500	61.110%	46.750	35.380	23.360	18.480
3	22:32:59	0.000	204.800	187.900	61.349%	45.810	35.100	22.000	19.860
X		0.000	205.100	186.700	61.007%	47.010	35.420	23.800	19.070
σ		0.000	0.443	1.173	0.404%	1.346	0.351	2.054	0.713
%RSD		0.000	0.216	0.629	0.663	2.863	0.992	8.630	3.737
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:43	63.931%	806.800	4.748	6.229	473.400	459.700	83.023%	90.864%
2	22:32:51	64.378%	818.600	4.778	6.448	467.600	460.000	84.672%	91.643%
3	22:32:59	64.754%	826.700	4.532	6.150	468.600	452.200	86.388%	92.911%
X		64.354%	817.400	4.686	6.276	469.900	457.300	84.695%	91.806%
σ		0.412%	10.010	0.134	0.154	3.056	4.456	1.683%	1.033%
%RSD		0.640	1.225	2.867	2.455	0.650	0.974	1.987	1.125
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:32:43	0.186	0.179	224.800	129.900	165.700	63.947%		
2	22:32:51	0.156	0.129	221.700	128.500	164.000	64.681%		
3	22:32:59	0.214	0.143	220.600	127.600	164.000	65.920%		
X		0.185	0.150	222.400	128.600	164.500	64.849%		
σ		0.029	0.025	2.145	1.177	1.004	0.997%		
%RSD		15.620	16.930	0.964	0.915	0.610	1.538		

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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	22:41:49	84.453%	-0.018	-0.468	0.050	0.000	35.630	-2.319	-0.684
2	22:41:57	84.562%	0.096	0.160	0.314	0.000	37.160	-2.552	-1.729
3	22:42:05	84.413%	0.003	-1.028	0.349	0.000	36.620	-1.627	-1.202
X		84.476%	0.027	-0.445	0.238	0.000	36.470	-2.166	-1.205
σ		0.077%	0.061	0.594	0.164	0.000	0.773	0.482	0.523
%RSD		0.091	222.600	133.400	68.790	0.000	2.118	22.230	43.390
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:49	0.310	7.688	0.000	-16.650	14.510	13.060	81.789%	5.341
2	22:41:57	-1.137	3.299	0.000	-16.020	43.600	8.511	82.060%	5.223
3	22:42:05	0.352	1.305	0.000	-12.200	14.590	9.922	81.665%	4.530
X		-0.158	4.097	0.000	-14.960	24.230	10.500	81.838%	5.031
σ		0.848	3.265	0.000	2.410	16.770	2.330	0.202%	0.438
%RSD		535.500	79.700	0.000	16.110	69.210	22.190	0.247	8.712
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:49	0.113	0.321	0.878	3.182	4.550	-0.002	-0.137	0.066
2	22:41:57	0.362	0.303	0.717	2.659	2.979	0.005	-0.181	0.060
3	22:42:05	0.566	0.253	0.632	2.505	3.594	-0.002	-0.064	0.001
X		0.347	0.292	0.742	2.782	3.708	0.001	-0.128	0.043
σ		0.227	0.035	0.125	0.355	0.791	0.004	0.059	0.036
%RSD		65.350	12.030	16.840	12.770	21.340	605.000	46.230	83.940
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:49	0.042	0.190	0.253	0.025	0.007	-0.016	0.000	-0.010
2	22:41:57	0.041	0.232	0.040	0.008	0.007	0.519	0.000	-0.006
3	22:42:05	0.106	0.292	0.100	0.007	-0.033	-0.445	0.000	0.018
X		0.063	0.238	0.131	0.013	-0.006	0.019	0.000	0.000
σ		0.037	0.051	0.110	0.010	0.024	0.483	0.000	0.016
%RSD		59.200	21.530	83.990	76.570	377.100	2538.000	0.000	3258.000
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:49	83.123%	0.257	0.161	75.897%	0.217	0.110	0.083	-0.011
2	22:41:57	83.006%	0.268	0.191	76.002%	0.166	0.060	0.082	-0.020
3	22:42:05	84.418%	0.241	0.085	76.753%	0.156	0.070	0.101	-0.012
X		83.516%	0.255	0.146	76.217%	0.180	0.080	0.089	-0.015
σ		0.784%	0.014	0.055	0.467%	0.033	0.026	0.010	0.005
%RSD		0.938	5.438	37.440	0.613	18.160	32.830	11.730	33.130
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:41:49	76.676%	-0.734	-0.019	-0.065	-0.036	0.051	80.691%	82.696%
2	22:41:57	78.354%	-0.655	0.013	-0.089	-0.002	0.029	82.488%	83.484%
3	22:42:05	79.939%	-0.765	-0.037	-0.030	-0.036	0.009	83.015%	83.803%
X		78.323%	-0.718	-0.014	-0.062	-0.025	0.030	82.064%	83.328%
σ		1.632%	0.057	0.025	0.030	0.019	0.021	1.218%	0.570%
%RSD		2.083	7.910	174.700	47.900	78.170	70.250	1.485	0.684
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:41:49	-0.090	-0.079	0.010	-0.018	-0.008	77.526%		
2	22:41:57	-0.099	-0.077	0.002	0.006	0.007	78.551%		
3	22:42:05	-0.093	-0.070	-0.002	0.029	0.003	79.192%		
X		-0.094	-0.075	0.003	0.006	0.001	78.423%		
σ		0.004	0.004	0.006	0.023	0.008	0.841%		
%RSD		4.684	5.859	187.100	398.900	1135.000	1.072		

CRI 1525173 4/26/2015 10:52:52 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	22:51:58	89.583%	0.862	19.110	18.080	0.000	485.200	422.000	464.500
2	22:52:06	86.515%	0.930	19.320	19.830	0.000	487.900	449.600	441.300
3	22:52:14	87.068%	0.893	16.740	19.760	0.000	498.500	480.800	456.000
X		87.722%	89.495%	367.839%	384.497%	0.000	613.187%	450.764%	453.918%
σ		1.635%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.864	3.816	7.802	5.172	0.000	1.436	6.525	2.587
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:58	32.450	449.600	0.000	426.400	376.400	392.700	93.718%	4.660
2	22:52:06	30.530	458.400	0.000	438.600	479.800	430.400	92.378%	4.882
3	22:52:14	30.140	447.600	0.000	424.600	394.200	423.100	93.333%	5.687
X		103.468%	90.374%	0.000	429.831%	416.787%	415.428%	93.143%	101.523%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.690%	n/a
%RSD		3.994	1.268	0.000	1.772	13.270	4.818	0.741	10.640
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:58	1.353	2.024	4.357	45.680	50.480	0.476	0.784	1.838
2	22:52:06	1.199	1.941	4.586	46.810	54.490	0.456	0.828	1.712
3	22:52:14	1.135	1.993	4.520	47.470	47.960	0.431	0.928	1.845
X		122.902%	99.295%	89.755%	93.307%	101.953%	90.888%	84.667%	89.918%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		9.118	2.125	2.629	1.941	6.461	4.955	8.762	4.171
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:58	1.928	4.589	4.287	0.928	4.378	6.135	0.000	4.829
2	22:52:06	2.122	4.515	4.767	0.932	4.730	4.402	0.000	4.698
3	22:52:14	2.173	4.944	4.547	0.971	4.729	3.440	0.000	4.782
X		103.719%	93.647%	90.673%	94.376%	92.250%	93.183%	0.000	95.387%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		6.245	4.894	5.293	2.502	4.404	29.310	0.000	1.395
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:58	86.017%	4.626	4.334	78.953%	1.023	1.051	0.895	1.035
2	22:52:06	87.147%	4.850	4.367	79.091%	1.023	1.047	0.733	1.013
3	22:52:14	86.891%	4.673	4.866	80.066%	1.000	0.938	1.005	0.959
X		86.685%	94.326%	90.446%	79.370%	101.522%	101.209%	87.746%	100.232%
σ		0.592%	n/a	n/a	0.607%	n/a	n/a	n/a	n/a
%RSD		0.683	2.513	6.587	0.765	1.299	6.387	15.600	3.869
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:51:58	80.406%	3.833	1.770	1.783	10.280	9.738	84.458%	84.917%
2	22:52:06	80.833%	3.367	1.846	1.373	9.735	9.976	84.281%	85.264%
3	22:52:14	83.391%	3.386	1.711	1.689	9.285	9.710	84.854%	86.061%
X		81.543%	70.570%	88.783%	80.748%	97.652%	98.083%	84.531%	85.414%
σ		1.614%	n/a	n/a	n/a	n/a	n/a	0.293%	0.586%
%RSD		1.980	7.475	3.812	13.300	5.079	1.492	0.347	0.687
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	22:51:58	0.808	0.785	0.992	0.950	0.973	79.157%		
2	22:52:06	0.691	0.817	0.939	0.991	0.964	80.584%		
3	22:52:14	0.832	0.888	1.009	0.991	0.962	80.809%		
X		77.701%	83.002%	97.982%	97.708%	96.607%	80.183%		
σ		n/a	n/a	n/a	n/a	n/a	0.896%		
%RSD		9.726	6.327	3.686	2.444	0.590	1.117		

LCS 180-139029/2-A 4/26/2015 10:57:57 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	22:57:03	81.601%	41.900	908.000	913.000	0.000	46530.000	43620.000	44050.000	
2	22:57:11	80.004%	43.860	924.800	952.500	0.000	46590.000	43070.000	43270.000	
3	22:57:19	81.329%	42.790	926.200	943.900	0.000	46130.000	43540.000	44040.000	
X		80.978%	42.850	919.700	936.400	0.000	46410.000	43410.000	43790.000	
		σ	0.855%	0.981	10.100	20.800	0.000	249.600	297.700	447.700
		%RSD	1.056	2.290	1.098	2.221	0.000	0.538	0.686	1.022
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:57:03	1747.000	8591.000	0.000	45600.000	45650.000	44710.000	72.593%	889.000	
2	22:57:11	1737.000	8751.000	0.000	46790.000	47190.000	45710.000	72.852%	900.500	
3	22:57:19	1733.000	8741.000	0.000	47360.000	48630.000	46780.000	72.251%	927.000	
X		1739.000	8694.000	0.000	46580.000	47160.000	45730.000	72.565%	905.500	
		σ	7.182	89.880	0.000	899.700	1489.000	1038.000	0.301%	19.520
		%RSD	0.413	1.034	0.000	1.931	3.158	2.269	0.415	2.156
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:57:03	467.000	186.300	438.700	907.500	1002.000	455.700	451.300	234.600	
2	22:57:11	460.800	186.100	447.400	909.000	987.800	454.300	448.900	232.100	
3	22:57:19	462.800	187.600	460.600	919.400	1033.000	456.600	443.700	230.000	
X		463.500	186.700	448.900	912.000	1008.000	455.500	448.000	232.300	
		σ	3.142	0.778	11.040	6.459	23.100	1.125	3.905	2.321
		%RSD	0.678	0.417	2.460	0.708	2.293	0.247	0.872	0.999
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:57:03	230.900	526.500	512.400	38.500	10.040	10.790	0.000	937.100	
2	22:57:11	234.200	520.800	510.200	37.740	9.487	11.570	0.000	933.800	
3	22:57:19	230.800	511.900	515.400	38.240	9.910	11.650	0.000	941.100	
X		232.000	519.800	512.700	38.160	9.811	11.340	0.000	937.300	
		σ	1.935	7.355	2.643	0.386	0.288	0.477	0.000	3.702
		%RSD	0.834	1.415	0.516	1.012	2.934	4.209	0.000	0.395
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:57:03	71.270%	997.500	1012.000	63.426%	46.990	46.770	48.470	88.110	
2	22:57:11	72.440%	984.900	1014.000	63.938%	48.390	48.450	47.400	88.170	
3	22:57:19	71.682%	993.100	1021.000	64.057%	47.540	46.620	47.450	88.870	
X		71.797%	991.800	1016.000	63.807%	47.640	47.280	47.770	88.380	
		σ	0.594%	6.399	4.223	0.335%	0.704	1.019	0.603	0.424
		%RSD	0.827	0.645	0.416	0.525	1.479	2.156	1.261	0.479
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	22:57:03	66.399%	1904.000	474.600	472.200	1845.000	1838.000	74.707%	76.288%	
2	22:57:11	66.834%	1899.000	474.200	468.900	1881.000	1841.000	75.140%	76.722%	
3	22:57:19	67.606%	1876.000	470.800	464.000	1855.000	1813.000	75.419%	76.433%	
X		66.946%	1893.000	473.200	468.400	1860.000	1831.000	75.089%	76.481%	
		σ	0.611%	14.830	2.101	4.116	18.390	15.300	0.359%	0.221%
		%RSD	0.913	0.783	0.444	0.879	0.988	0.836	0.478	0.289
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	22:57:03	49.430	48.360	20.240	19.940	20.010	68.731%			
2	22:57:11	49.220	48.880	19.760	19.860	19.970	69.111%			
3	22:57:19	49.050	48.040	20.070	20.030	19.890	69.829%			
X		49.230	48.430	20.020	19.940	19.960	69.224%			
		σ	0.193	0.424	0.244	0.086	0.060	0.558%		
		%RSD	0.391	0.876	1.217	0.434	0.302	0.806		

180-43164-F-1-A 4/26/2015 11:03:02 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	23:02:09	80.943%	0.034	9.691	13.250	0.000	3214.000	3155.000	3149.000
2	23:02:17	79.955%	-0.007	10.580	12.000	0.000	3234.000	3221.000	3150.000
3	23:02:25	79.562%	-0.017	10.040	11.780	0.000	3287.000	3245.000	3195.000
X		80.153%	0.003	10.100	12.340	0.000	3245.000	3207.000	3164.000
σ		0.712%	0.027	0.446	0.795	0.000	37.790	46.760	26.440
%RSD		0.888	862.400	4.415	6.438	0.000	1.164	1.458	0.835
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:09	94.710	2452.000	0.000	1024.000	48810.000	47800.000	75.138%	5.161
2	23:02:17	99.650	2494.000	0.000	1055.000	51530.000	49890.000	74.226%	5.017
3	23:02:25	98.050	2521.000	0.000	1044.000	51660.000	50430.000	73.669%	6.151
X		97.470	2489.000	0.000	1041.000	50670.000	49370.000	74.344%	5.443
σ		2.517	34.410	0.000	16.010	1609.000	1386.000	0.742%	0.618
%RSD		2.582	1.382	0.000	1.538	3.176	2.806	0.998	11.340
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:09	-0.079	1.775	6.966	101.200	232.400	0.101	0.151	0.777
2	23:02:17	-1.973	1.823	7.775	102.100	212.700	0.101	0.150	0.613
3	23:02:25	-0.922	1.920	7.561	103.900	222.500	0.177	0.233	0.814
X		-0.991	1.839	7.434	102.400	222.500	0.126	0.178	0.734
σ		0.949	0.074	0.419	1.337	9.816	0.043	0.048	0.107
%RSD		95.720	4.014	5.640	1.305	4.411	34.350	26.780	14.590
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:09	0.780	5.346	4.685	0.511	0.153	1.319	0.000	193.400
2	23:02:17	0.911	4.791	4.927	0.595	0.242	2.701	0.000	193.800
3	23:02:25	0.813	5.363	4.916	0.680	0.241	2.890	0.000	194.300
X		0.835	5.166	4.843	0.595	0.212	2.303	0.000	193.800
σ		0.068	0.325	0.137	0.085	0.051	0.858	0.000	0.432
%RSD		8.136	6.298	2.819	14.270	24.070	37.250	0.000	0.223
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:09	71.496%	4.392	4.357	65.014%	-0.030	-0.022	-0.001	0.115
2	23:02:17	73.289%	3.526	3.501	65.565%	-0.038	-0.012	-0.001	0.077
3	23:02:25	73.844%	2.723	2.651	66.379%	-0.009	-0.013	-0.001	0.085
X		72.876%	3.547	3.503	65.653%	-0.026	-0.016	-0.001	0.092
σ		1.227%	0.835	0.853	0.687%	0.015	0.005	0.000	0.020
%RSD		1.684	23.530	24.340	1.046	59.790	33.090	3.564	21.630
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:02:09	68.555%	4.061	0.074	0.112	15.040	15.730	74.862%	75.909%
2	23:02:17	68.456%	3.791	0.086	0.043	15.540	15.820	76.540%	76.425%
3	23:02:25	69.427%	3.026	0.096	0.091	16.410	14.930	76.965%	77.519%
X		68.812%	3.626	0.086	0.082	15.670	15.490	76.123%	76.618%
σ		0.534%	0.536	0.011	0.035	0.693	0.489	1.112%	0.822%
%RSD		0.776	14.790	13.020	43.120	4.426	3.153	1.461	1.073
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:02:09	0.013	0.056	0.092	0.106	0.096	72.000%		
2	23:02:17	0.031	0.027	0.106	0.091	0.090	72.567%		
3	23:02:25	-0.000	0.009	0.117	0.104	0.104	72.776%		
X		0.015	0.031	0.105	0.100	0.097	72.448%		
σ		0.016	0.024	0.013	0.008	0.007	0.402%		
%RSD		106.400	78.320	12.010	7.648	7.482	0.555		

180-43164-F-2-A 4/26/2015 11:08:05 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	23:07:12	78.282%	-0.104	6.844	8.592	0.000	2952.000	3136.000	3052.000	
2	23:07:20	75.185%	-0.018	7.135	9.696	0.000	3116.000	3245.000	3226.000	
3	23:07:28	78.029%	-0.092	7.176	8.291	0.000	3042.000	3197.000	3162.000	
X		77.166%	-0.071	7.052	8.859	0.000	3037.000	3193.000	3147.000	
		σ	1.720%	0.047	0.181	0.740	0.000	81.930	54.980	88.060
		%RSD	2.228	65.290	2.572	8.351	0.000	2.698	1.722	2.799
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:07:12	94.490	2380.000	0.000	903.900	46620.000	45270.000	74.950%	3.424	
2	23:07:20	102.200	2489.000	0.000	964.700	49100.000	47830.000	73.347%	3.587	
3	23:07:28	105.400	2482.000	0.000	979.900	51910.000	49540.000	72.735%	7.713	
X		100.700	2450.000	0.000	949.500	49210.000	47550.000	73.678%	4.908	
		σ	5.624	61.160	0.000	40.210	2644.000	2148.000	1.144%	2.431
		%RSD	5.585	2.496	0.000	4.234	5.372	4.518	1.553	49.520
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:07:12	-1.404	2.184	4.250	216.300	316.100	0.086	0.234	0.734	
2	23:07:20	-1.111	2.286	4.425	222.200	359.300	0.119	0.321	0.754	
3	23:07:28	0.025	2.261	4.319	221.000	316.400	0.091	0.158	0.706	
X		-0.830	2.244	4.331	219.800	330.600	0.099	0.237	0.732	
		σ	0.755	0.053	0.088	3.114	24.840	0.018	0.082	0.024
		%RSD	90.900	2.348	2.035	1.417	7.513	17.820	34.420	3.265
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:07:12	0.968	8.355	7.525	0.478	0.013	1.734	0.000	189.600	
2	23:07:20	0.838	8.277	6.847	0.477	0.153	2.827	0.000	188.500	
3	23:07:28	0.692	7.544	6.950	0.616	0.246	4.343	0.000	190.000	
X		0.833	8.059	7.107	0.523	0.137	2.968	0.000	189.400	
		σ	0.138	0.447	0.365	0.080	0.117	1.310	0.000	0.793
		%RSD	16.570	5.551	5.142	15.340	85.320	44.140	0.000	0.419
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:07:12	71.290%	0.808	0.905	64.512%	-0.034	-0.017	-0.001	0.012	
2	23:07:20	72.208%	0.731	0.793	64.907%	-0.025	-0.031	0.047	-0.027	
3	23:07:28	72.159%	0.786	0.663	64.998%	-0.034	-0.036	0.023	0.020	
X		71.886%	0.775	0.787	64.806%	-0.031	-0.028	0.023	0.001	
		σ	0.516%	0.040	0.121	0.258%	0.005	0.010	0.024	0.025
		%RSD	0.718	5.124	15.390	0.399	16.040	35.320	102.600	1879.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:07:12	67.463%	0.458	0.070	-0.041	16.030	16.490	73.857%	75.623%	
2	23:07:20	68.884%	0.267	0.012	-0.034	14.810	15.210	75.358%	77.329%	
3	23:07:28	69.387%	-0.010	0.011	-0.018	15.900	15.590	75.000%	77.071%	
X		68.578%	0.238	0.031	-0.031	15.580	15.770	74.739%	76.674%	
		σ	0.998%	0.235	0.034	0.012	0.670	0.656	0.784%	0.920%
		%RSD	1.455	98.760	108.800	38.890	4.299	4.162	1.049	1.199
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	23:07:12	-0.055	-0.034	0.136	0.137	0.127	71.440%			
2	23:07:20	-0.071	-0.055	0.142	0.140	0.129	71.947%			
3	23:07:28	-0.053	-0.044	0.132	0.116	0.114	73.001%			
X		-0.059	-0.044	0.137	0.131	0.123	72.129%			
		σ	0.010	0.011	0.005	0.013	0.008	0.796%		
		%RSD	16.640	23.850	3.765	9.901	6.548	1.104		

180-43164-F-3-A 4/26/2015 11:13:10 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	23:12:17	78.104%	-0.115	7.697	8.763	0.000	2905.000	3047.000	2999.000	
2	23:12:24	75.695%	-0.100	6.213	8.333	0.000	2987.000	3056.000	3056.000	
3	23:12:32	77.568%	-0.035	4.333	9.070	0.000	2966.000	3139.000	3036.000	
X		77.122%	-0.083	6.081	8.722	0.000	2952.000	3081.000	3030.000	
		σ	1.265%	0.042	1.686	0.370	0.000	42.400	50.720	28.920
		%RSD	1.640	50.980	27.720	4.243	0.000	1.436	1.646	0.954
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:12:17	93.180	2379.000	0.000	884.000	46890.000	45700.000	75.064%	3.525	
2	23:12:24	88.060	2419.000	0.000	914.500	48880.000	47540.000	73.530%	3.285	
3	23:12:32	92.440	2467.000	0.000	928.400	50880.000	49140.000	72.509%	3.599	
X		91.230	2422.000	0.000	909.000	48880.000	47460.000	73.701%	3.470	
		σ	2.768	43.830	0.000	22.710	1998.000	1719.000	1.286%	0.164
		%RSD	3.034	1.810	0.000	2.499	4.088	3.621	1.745	4.739
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:12:17	-1.604	2.161	3.293	82.200	183.900	0.098	0.447	0.521	
2	23:12:24	-1.359	2.400	3.461	83.180	192.700	0.099	0.303	0.505	
3	23:12:32	-1.518	2.361	3.668	85.070	194.400	0.116	0.225	0.623	
X		-1.494	2.307	3.474	83.480	190.300	0.104	0.325	0.549	
		σ	0.125	0.128	0.188	1.462	5.627	0.010	0.113	0.064
		%RSD	8.339	5.566	5.408	1.752	2.956	9.718	34.690	11.590
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:12:17	0.723	2.998	3.125	0.544	0.060	3.859	0.000	188.600	
2	23:12:24	0.700	3.628	3.436	0.437	0.245	1.830	0.000	186.100	
3	23:12:32	0.619	3.536	2.945	0.484	0.013	1.602	0.000	187.000	
X		0.680	3.387	3.169	0.488	0.106	2.430	0.000	187.200	
		σ	0.055	0.341	0.248	0.054	1.243	0.000	1.259	
		%RSD	8.037	10.050	7.841	10.970	115.400	51.140	0.672	
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:12:17	70.851%	0.433	0.328	64.918%	-0.047	0.002	-0.000	0.011	
2	23:12:24	72.164%	0.386	0.300	65.036%	-0.047	-0.017	-0.001	0.020	
3	23:12:32	72.182%	0.304	0.282	65.060%	-0.021	-0.031	-0.001	-0.027	
X		71.732%	0.374	0.303	65.005%	-0.038	-0.015	-0.001	0.001	
		σ	0.763%	0.065	0.023	0.076%	0.015	0.016	0.000	0.025
		%RSD	1.064	17.490	7.672	0.117	39.090	105.300	10.890	1997.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	23:12:17	68.434%	-0.482	0.037	0.001	14.570	16.040	75.287%	76.431%	
2	23:12:24	68.780%	-0.517	0.024	-0.034	16.060	15.530	76.555%	76.988%	
3	23:12:32	69.089%	-0.521	0.011	-0.060	13.650	16.010	76.521%	77.339%	
X		68.768%	-0.507	0.024	-0.031	14.760	15.860	76.121%	76.919%	
		σ	0.327%	0.022	0.013	0.030	1.214	0.284	0.723%	0.458%
		%RSD	0.476	4.256	53.040	97.450	8.224	1.789	0.949	0.595
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	23:12:17	-0.077	-0.060	0.087	0.109	0.088	72.634%			
2	23:12:24	-0.083	-0.057	0.105	0.107	0.097	73.284%			
3	23:12:32	-0.081	-0.068	0.128	0.121	0.116	74.625%			
X		-0.080	-0.062	0.107	0.112	0.100	73.515%			
		σ	0.003	0.006	0.021	0.008	0.014	1.015%		
		%RSD	3.936	9.676	19.450	6.946	14.350	1.381		

180-43164-F-4-A 4/26/2015 11:18:16 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	23:17:23	75.354%	-0.111	6.251	8.266	0.000	3373.000	3302.000	3290.000
2	23:17:31	75.791%	-0.066	6.671	7.871	0.000	3474.000	3436.000	3412.000
3	23:17:39	74.957%	-0.006	7.243	8.023	0.000	3492.000	3467.000	3337.000
X		75.367%	-0.061	6.722	8.053	0.000	3446.000	3402.000	3347.000
σ		0.417%	0.053	0.498	0.200	0.000	63.700	87.940	61.570
%RSD		0.554	87.010	7.405	2.477	0.000	1.848	2.585	1.840
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:17:23	52.590	2247.000	0.000	913.800	46130.000	45030.000	74.218%	3.067
2	23:17:31	54.770	2325.000	0.000	992.600	49470.000	47630.000	71.875%	2.295
3	23:17:39	54.300	2356.000	0.000	986.800	50550.000	48670.000	71.789%	2.933
X		53.890	2309.000	0.000	964.400	48720.000	47110.000	72.628%	2.765
σ		1.148	56.330	0.000	43.920	2300.000	1876.000	1.378%	0.413
%RSD		2.130	2.439	0.000	4.554	4.722	3.982	1.898	14.930
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:17:23	-0.914	2.173	1.422	56.710	156.900	0.063	0.803	9.563
2	23:17:31	-1.850	2.093	1.434	59.320	157.200	0.024	1.238	9.318
3	23:17:39	0.384	2.221	1.495	58.950	162.100	0.052	1.312	9.514
X		-0.793	2.163	1.451	58.330	158.700	0.046	1.118	9.465
σ		1.122	0.065	0.039	1.413	2.936	0.020	0.275	0.129
%RSD		141.400	2.990	2.687	2.423	1.849	43.950	24.600	1.367
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:17:23	9.506	18.810	19.630	0.565	0.346	-1.652	0.000	196.000
2	23:17:31	8.964	19.790	19.330	0.408	0.108	-1.463	0.000	192.900
3	23:17:39	10.040	21.580	20.840	0.462	0.061	3.255	0.000	195.200
X		9.505	20.060	19.930	0.479	0.172	0.046	0.000	194.700
σ		0.540	1.405	0.799	0.080	0.153	2.780	0.000	1.609
%RSD		5.683	7.007	4.006	16.630	88.860	5986.000	0.000	0.827
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:17:23	70.145%	0.323	0.251	64.909%	-0.025	-0.003	-0.000	-0.027
2	23:17:31	71.583%	0.292	0.258	64.889%	-0.025	-0.012	0.047	-0.008
3	23:17:39	70.813%	0.391	0.198	64.918%	-0.043	-0.022	-0.001	-0.009
X		70.847%	0.335	0.236	64.906%	-0.031	-0.012	0.015	-0.015
σ		0.720%	0.051	0.033	0.015%	0.010	0.009	0.027	0.011
%RSD		1.016	15.150	13.930	0.023	32.340	75.200	179.200	74.280
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:17:23	68.534%	-0.587	0.012	-0.042	13.850	13.840	75.257%	76.611%
2	23:17:31	68.499%	-0.358	-0.006	-0.042	14.040	13.810	75.690%	76.447%
3	23:17:39	69.542%	-0.545	0.011	-0.043	14.230	14.600	76.040%	77.710%
X		68.859%	-0.497	0.006	-0.043	14.040	14.090	75.662%	76.923%
σ		0.592%	0.122	0.010	0.001	0.189	0.450	0.392%	0.687%
%RSD		0.860	24.490	184.900	1.410	1.347	3.193	0.518	0.893
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:17:23	-0.080	-0.057	2.200	1.909	1.988	73.340%		
2	23:17:31	-0.093	-0.065	1.908	1.938	1.904	74.379%		
3	23:17:39	-0.093	-0.068	1.945	1.963	1.884	74.171%		
X		-0.088	-0.063	2.017	1.937	1.925	73.963%		
σ		0.007	0.006	0.159	0.027	0.055	0.550%		
%RSD		8.032	9.372	7.891	1.384	2.878	0.743		

CCV 1533080 4/26/2015 11:27:20 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	23:26:27	73.462%	96.180	92.480	96.950	0.000	50200.000	47700.000	47590.000
2	23:26:35	73.912%	96.940	91.180	102.200	0.000	51550.000	49290.000	48510.000
3	23:26:43	74.367%	93.560	95.220	99.190	0.000	51610.000	48920.000	48920.000
X		73.914%	95.560%	92.961%	99.455%	0.000	102.242%	97.270%	96.677%
σ		0.453%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.613	1.857	2.220	2.666	0.000	1.564	1.709	1.416
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:27	496.700	4790.000	0.000	47610.000	46450.000	44790.000	74.838%	88.200
2	23:26:35	510.600	4859.000	0.000	48770.000	48020.000	46470.000	73.622%	91.390
3	23:26:43	505.900	4915.000	0.000	49600.000	48230.000	47190.000	73.479%	97.660
X		100.882%	97.089%	0.000	97.324%	95.135%	92.296%	73.979%	92.418%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.747%	n/a
%RSD		1.399	1.289	0.000	2.051	2.041	2.671	1.009	5.208
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:27	92.670	94.650	462.500	23740.000	22800.000	90.130	93.370	93.780
2	23:26:35	95.150	95.570	476.200	24090.000	22950.000	95.090	95.990	95.270
3	23:26:43	95.440	95.940	483.900	24140.000	23410.000	95.470	95.730	96.800
X		94.418%	95.388%	94.837%	95.956%	92.207%	93.563%	95.030%	95.286%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.614	0.692	2.285	0.904	1.388	3.184	1.517	1.586
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:27	94.760	95.510	90.680	93.990	98.120	89.130	0.000	92.620
2	23:26:35	94.880	97.180	97.110	94.430	95.810	97.640	0.000	94.130
3	23:26:43	95.040	99.350	95.290	94.400	95.220	101.100	0.000	91.920
X		94.891%	97.345%	94.363%	94.272%	96.383%	95.967%	0.000	92.889%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.151	1.977	3.512	0.256	1.590	6.431	0.000	1.216
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:27	74.780%	93.620	93.340	66.807%	93.740	94.150	91.440	96.020
2	23:26:35	74.824%	96.200	96.450	67.066%	94.770	95.100	92.270	96.680
3	23:26:43	75.312%	95.130	98.370	67.212%	92.520	94.130	94.530	95.140
X		74.972%	94.981%	96.053%	67.028%	93.676%	94.460%	92.747%	95.944%
σ		0.295%	n/a	n/a	0.205%	n/a	n/a	n/a	n/a
%RSD		0.394	1.368	2.640	0.306	1.207	0.590	1.721	0.806
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:26:27	69.406%	89.950	90.770	91.840	94.050	94.790	75.906%	76.861%
2	23:26:35	70.314%	93.080	92.650	92.560	94.380	93.100	76.331%	77.226%
3	23:26:43	70.051%	92.820	92.850	93.930	94.040	92.830	76.804%	77.297%
X		69.924%	91.952%	92.092%	92.777%	94.159%	93.575%	76.347%	77.128%
σ		0.467%	n/a	n/a	n/a	n/a	n/a	0.449%	0.234%
%RSD		0.668	1.888	1.244	1.146	0.208	1.134	0.588	0.303
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:26:27	96.740	94.790	97.080	94.910	95.720	71.487%		
2	23:26:35	97.460	95.580	97.910	95.860	96.770	71.266%		
3	23:26:43	97.670	95.490	96.670	95.750	96.170	71.576%		
X		97.292%	95.288%	97.220%	95.506%	96.218%	71.443%		
σ		n/a	n/a	n/a	n/a	n/a	0.160%		
%RSD		0.502	0.457	0.651	0.540	0.549	0.223		

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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	23:35:33	84.088%	-0.006	-0.320	0.496	0.000	27.970	3.995	5.574
2	23:35:41	83.093%	-0.057	-0.084	0.187	0.000	29.000	2.520	3.655
3	23:35:49	80.768%	-0.053	-0.538	0.521	0.000	28.150	4.907	6.695
X		82.650%	-0.039	-0.314	0.402	0.000	28.370	3.807	5.308
σ		1.704%	0.028	0.227	0.186	0.000	0.548	1.205	1.537
%RSD		2.061	72.380	72.210	46.360	0.000	1.932	31.640	28.960
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:33	2.372	5.938	0.000	-42.780	24.940	8.439	85.078%	-0.499
2	23:35:41	3.444	2.654	0.000	-32.710	15.550	9.398	83.070%	-0.204
3	23:35:49	2.904	0.142	0.000	-40.620	20.400	9.328	83.926%	-0.464
X		2.907	2.911	0.000	-38.710	20.300	9.055	84.025%	-0.389
σ		0.536	2.906	0.000	5.300	4.694	0.535	1.008%	0.161
%RSD		18.440	99.830	0.000	13.690	23.120	5.904	1.199	41.440
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:33	0.222	0.018	0.184	8.410	11.040	0.035	-0.043	-0.084
2	23:35:41	0.108	0.049	0.097	8.320	14.900	-0.002	-0.083	-0.033
3	23:35:49	0.235	0.018	0.124	7.784	8.719	0.005	-0.141	0.004
X		0.188	0.028	0.135	8.171	11.550	0.013	-0.089	-0.038
σ		0.070	0.018	0.044	0.338	3.124	0.020	0.049	0.044
%RSD		36.950	62.310	33.040	4.141	27.040	155.600	55.080	117.400
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:33	0.053	-0.080	-0.001	0.029	0.082	2.270	0.000	0.001
2	23:35:41	0.034	0.066	0.086	0.062	0.159	-2.497	0.000	0.028
3	23:35:49	-0.010	0.081	-0.078	0.061	0.081	-0.854	0.000	0.035
X		0.026	0.023	0.002	0.051	0.107	-0.360	0.000	0.022
σ		0.032	0.089	0.082	0.019	0.045	2.421	0.000	0.018
%RSD		124.300	394.600	3380.000	36.800	41.970	671.800	0.000	83.300
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:33	88.668%	0.271	0.301	80.949%	-0.026	-0.017	-0.001	0.003
2	23:35:41	89.136%	0.269	0.256	82.075%	-0.026	-0.010	0.038	-0.021
3	23:35:49	90.465%	0.384	0.272	83.090%	-0.016	-0.022	-0.001	-0.006
X		89.423%	0.308	0.276	82.038%	-0.023	-0.016	0.012	-0.008
σ		0.932%	0.066	0.023	1.071%	0.006	0.006	0.022	0.012
%RSD		1.042	21.420	8.287	1.305	25.200	35.100	181.300	152.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:35:33	81.690%	-0.749	0.125	0.077	-0.036	0.048	82.298%	83.219%
2	23:35:41	83.294%	-0.888	0.122	0.074	-0.003	0.009	82.447%	83.729%
3	23:35:49	84.407%	-0.953	0.094	0.036	-0.036	-0.011	83.434%	83.959%
X		83.130%	-0.863	0.113	0.063	-0.025	0.015	82.726%	83.636%
σ		1.366%	0.104	0.017	0.023	0.019	0.030	0.618%	0.378%
%RSD		1.643	12.030	15.180	36.440	74.500	195.600	0.746	0.452
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:35:33	-0.015	-0.006	-0.017	0.001	-0.018	81.152%		
2	23:35:41	-0.026	-0.011	-0.024	-0.018	-0.025	80.493%		
3	23:35:49	0.017	-0.021	0.024	-0.023	-0.014	81.555%		
X		-0.008	-0.013	-0.005	-0.013	-0.019	81.067%		
σ		0.023	0.008	0.026	0.012	0.005	0.536%		
%RSD		276.500	59.670	469.800	92.030	28.310	0.661		

180-43164-F-5-A 4/26/2015 11:41:35 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	23:40:41	74.116%	-0.074	5.034	7.297	0.000	3488.000	3230.000	3345.000
2	23:40:49	73.243%	-0.013	4.959	7.692	0.000	3631.000	3444.000	3348.000
3	23:40:57	73.712%	-0.038	6.358	9.007	0.000	3648.000	3462.000	3370.000
X		73.690%	-0.042	5.450	7.999	0.000	3589.000	3379.000	3354.000
σ		0.437%	0.031	0.787	0.895	0.000	88.130	129.200	13.470
%RSD		0.593	73.840	14.440	11.190	0.000	2.456	3.825	0.402
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:41	65.130	2300.000	0.000	952.500	47550.000	45900.000	69.962%	3.756
2	23:40:49	69.130	2389.000	0.000	1001.000	49240.000	48100.000	67.779%	4.294
3	23:40:57	67.060	2404.000	0.000	1029.000	51790.000	50320.000	67.167%	5.457
X		67.110	2364.000	0.000	994.100	49530.000	48110.000	68.303%	4.502
σ		1.999	56.250	0.000	38.670	2132.000	2209.000	1.469%	0.869
%RSD		2.978	2.379	0.000	3.890	4.305	4.591	2.151	19.310
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:41	-0.533	1.584	1.547	74.720	186.500	0.054	0.035	3.215
2	23:40:49	-0.697	1.718	1.584	75.060	179.900	0.094	0.076	3.346
3	23:40:57	-0.653	1.741	1.575	72.480	179.100	0.098	0.181	3.454
X		-0.628	1.681	1.569	74.090	181.900	0.082	0.097	3.339
σ		0.084	0.085	0.019	1.403	4.064	0.024	0.075	0.120
%RSD		13.460	5.030	1.219	1.893	2.235	29.590	77.290	3.581
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:41	3.447	7.925	9.483	0.642	0.357	2.006	0.000	199.000
2	23:40:49	3.306	9.207	7.885	0.606	0.114	1.121	0.000	200.500
3	23:40:57	4.010	8.426	8.250	0.577	0.305	2.518	0.000	198.100
X		3.588	8.519	8.540	0.608	0.259	1.882	0.000	199.200
σ		0.372	0.647	0.838	0.033	0.128	0.707	0.000	1.230
%RSD		10.380	7.589	9.807	5.401	49.490	37.550	0.000	0.617
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:41	68.681%	0.451	0.462	62.144%	-0.029	-0.016	-0.001	-0.007
2	23:40:49	68.856%	0.462	0.313	62.916%	-0.029	-0.021	-0.001	-0.008
3	23:40:57	70.639%	0.270	0.388	63.362%	-0.038	-0.031	-0.001	-0.017
X		69.392%	0.394	0.388	62.807%	-0.032	-0.023	-0.001	-0.011
σ		1.083%	0.108	0.074	0.616%	0.005	0.007	0.000	0.006
%RSD		1.561	27.370	19.110	0.981	16.430	33.120	4.242	54.680
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:40:41	65.274%	-0.389	0.340	0.328	13.590	14.360	73.308%	74.203%
2	23:40:49	67.687%	-0.263	0.226	0.219	14.910	14.260	74.179%	75.135%
3	23:40:57	67.120%	-0.477	0.291	0.220	15.780	12.990	75.056%	76.181%
X		66.694%	-0.376	0.286	0.256	14.760	13.870	74.181%	75.173%
σ		1.261%	0.108	0.057	0.063	1.103	0.764	0.874%	0.990%
%RSD		1.891	28.680	19.970	24.530	7.475	5.509	1.179	1.316
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:40:41	0.028	0.025	0.150	0.122	0.120	70.625%		
2	23:40:49	-0.011	0.019	0.106	0.094	0.115	71.200%		
3	23:40:57	-0.033	-0.009	0.096	0.167	0.111	71.731%		
X		-0.005	0.011	0.117	0.128	0.116	71.185%		
σ		0.031	0.018	0.029	0.037	0.005	0.553%		
%RSD		611.400	161.000	24.560	28.820	4.055	0.777		

180-43164-F-6-A 4/26/2015 11:46:40 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	23:45:48	72.319%	-0.132	6.440	8.174	0.000	3676.000	3450.000	3406.000
2	23:45:55	75.639%	-0.077	7.784	7.493	0.000	3590.000	3420.000	3466.000
3	23:46:03	73.491%	-0.121	5.498	8.102	0.000	3657.000	3467.000	3359.000
X		73.816%	-0.110	6.574	7.923	0.000	3641.000	3445.000	3410.000
σ		1.684%	0.029	1.149	0.374	0.000	45.100	23.940	53.350
%RSD		2.281	26.390	17.470	4.716	0.000	1.239	0.695	1.564
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:48	63.780	2367.000	0.000	984.800	48590.000	47250.000	70.613%	3.828
2	23:45:55	60.900	2383.000	0.000	1024.000	51300.000	49940.000	69.742%	2.924
3	23:46:03	61.410	2452.000	0.000	1032.000	52260.000	50670.000	69.362%	4.103
X		62.030	2401.000	0.000	1013.000	50720.000	49290.000	69.906%	3.619
σ		1.538	44.940	0.000	25.070	1900.000	1804.000	0.642%	0.617
%RSD		2.480	1.872	0.000	2.474	3.746	3.660	0.918	17.050
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:48	-0.913	1.361	5.454	78.500	185.700	0.078	0.050	4.830
2	23:45:55	-0.246	1.549	5.518	78.360	179.000	0.116	0.171	4.748
3	23:46:03	0.268	1.594	5.607	79.670	175.600	0.079	0.122	4.735
X		-0.297	1.501	5.526	78.850	180.100	0.091	0.114	4.771
σ		0.592	0.124	0.077	0.719	5.171	0.022	0.061	0.052
%RSD		199.400	8.239	1.385	0.912	2.871	23.670	53.480	1.089
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:48	4.858	5.363	5.727	0.461	0.305	0.321	0.000	202.400
2	23:45:55	4.638	5.959	6.329	0.575	0.015	0.620	0.000	202.100
3	23:46:03	4.925	6.874	6.020	0.456	0.159	1.460	0.000	203.600
X		4.807	6.065	6.025	0.497	0.160	0.801	0.000	202.700
σ		0.150	0.761	0.301	0.067	0.145	0.590	0.000	0.815
%RSD		3.125	12.550	4.999	13.500	90.950	73.750	0.000	0.402
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:48	69.486%	0.159	0.215	62.678%	-0.034	-0.026	-0.001	-0.017
2	23:45:55	70.546%	0.228	0.283	63.250%	-0.038	-0.031	-0.001	0.022
3	23:46:03	70.137%	0.214	0.212	63.408%	-0.034	-0.026	0.047	-0.008
X		70.056%	0.200	0.236	63.112%	-0.035	-0.027	0.015	-0.001
σ		0.535%	0.036	0.040	0.384%	0.003	0.003	0.028	0.020
%RSD		0.763	18.010	16.970	0.609	7.347	9.959	179.500	1977.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:48	66.439%	-0.747	0.142	0.057	15.070	15.770	74.110%	74.965%
2	23:45:55	66.753%	-0.664	0.014	0.082	15.160	14.960	74.427%	76.518%
3	23:46:03	67.876%	-0.601	0.057	0.001	15.340	15.740	75.078%	75.895%
X		67.023%	-0.671	0.071	0.047	15.190	15.490	74.538%	75.793%
σ		0.755%	0.073	0.065	0.041	0.133	0.459	0.494%	0.781%
%RSD		1.126	10.900	91.620	88.150	0.877	2.962	0.662	1.031
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:45:48	-0.064	-0.051	0.143	0.127	0.129	71.979%		
2	23:45:55	-0.086	-0.055	0.110	0.159	0.115	72.904%		
3	23:46:03	-0.065	-0.048	0.159	0.151	0.133	72.927%		
X		-0.072	-0.051	0.137	0.146	0.126	72.603%		
σ		0.013	0.004	0.025	0.017	0.009	0.541%		
%RSD		17.510	7.506	18.500	11.370	7.483	0.745		

180-42893-D-7-A@10 4/26/2015 11:51:46 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	23:50:54	64.519%	0.135	277.300	295.200	0.000	919300.000	104300.000	102300.000
2	23:51:01	65.223%	-0.057	282.500	295.900	0.000	920800.000	106200.000	106200.000
3	23:51:09	61.855%	0.136	288.600	316.600	0.000	960800.000	110000.000	108700.000
X		63.866%	0.071	282.800	302.600	0.000	933600.000	106800.000	105700.000
σ		1.777%	0.111	5.641	12.150	0.000	23550.000	2887.000	3212.000
%RSD		2.782	155.400	1.995	4.015	0.000	2.522	2.703	3.038
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:54	2.006	196.200	0.000	29150.000	31130.000	29940.000	71.195%	0.140
2	23:51:01	4.316	189.300	0.000	29800.000	32230.000	31300.000	70.336%	0.265
3	23:51:09	3.932	196.700	0.000	30040.000	33990.000	31880.000	70.176%	-0.230
X		3.418	194.100	0.000	29660.000	32450.000	31040.000	70.569%	0.058
σ		1.238	4.152	0.000	458.700	1441.000	998.400	0.548%	0.257
%RSD		36.210	2.139	0.000	1.546	4.442	3.217	0.777	440.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:54	1.654	0.558	0.291	0.216	76.790	0.053	0.166	0.418
2	23:51:01	2.933	0.599	0.273	0.715	81.140	0.040	0.063	0.568
3	23:51:09	3.546	0.559	0.245	0.903	69.590	0.020	0.046	0.387
X		2.711	0.572	0.270	0.611	75.840	0.038	0.092	0.458
σ		0.965	0.023	0.023	0.355	5.833	0.017	0.065	0.097
%RSD		35.600	4.076	8.573	58.070	7.691	44.060	70.720	21.170
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:54	0.481	2.431	2.560	1.513	0.634	30.030	0.000	609.700
2	23:51:01	0.641	2.236	1.886	1.298	0.200	27.170	0.000	603.200
3	23:51:09	0.437	2.402	2.452	1.396	0.710	30.040	0.000	600.800
X		0.520	2.356	2.299	1.402	0.515	29.080	0.000	604.500
σ		0.107	0.105	0.362	0.108	0.275	1.651	0.000	4.622
%RSD		20.660	4.475	15.740	7.686	53.460	5.679	0.000	0.765
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:54	70.508%	5.782	5.721	61.914%	-0.038	-0.026	0.049	-0.017
2	23:51:01	72.775%	5.243	5.749	62.786%	-0.034	-0.026	0.048	-0.008
3	23:51:09	73.272%	4.384	5.340	63.408%	-0.034	-0.026	-0.001	-0.037
X		72.185%	5.136	5.603	62.703%	-0.035	-0.026	0.032	-0.020
σ		1.473%	0.705	0.229	0.751%	0.002	0.000	0.028	0.015
%RSD		2.041	13.730	4.084	1.197	6.971	0.859	88.080	72.410
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:54	65.991%	-0.969	0.309	0.367	4.302	5.364	74.629%	76.244%
2	23:51:01	67.550%	-1.008	0.345	0.408	5.089	4.929	75.516%	77.734%
3	23:51:09	68.584%	-1.023	0.345	0.401	5.276	4.479	76.536%	78.081%
X		67.375%	-1.000	0.333	0.392	4.889	4.924	75.560%	77.353%
σ		1.305%	0.028	0.020	0.022	0.517	0.443	0.954%	0.976%
%RSD		1.937	2.757	6.144	5.640	10.580	8.992	1.263	1.262
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:50:54	-0.082	-0.074	0.009	0.035	0.022	68.747%		
2	23:51:01	-0.095	-0.067	0.032	0.065	0.021	69.662%		
3	23:51:09	-0.083	-0.068	0.012	0.055	0.027	70.694%		
X		-0.087	-0.070	0.018	0.052	0.023	69.701%		
σ		0.007	0.004	0.013	0.015	0.004	0.974%		
%RSD		8.494	5.338	71.590	29.560	15.380	1.397		

180-42893-D-8-A@10 4/26/2015 11:56:51 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	23:55:58	66.397%	0.046	302.600	324.100	0.000	847400.000	90880.000	89780.000
2	23:56:06	65.612%	0.063	314.900	331.900	0.000	872600.000	92880.000	92490.000
3	23:56:14	67.017%	0.005	312.900	336.000	0.000	862800.000	92290.000	91850.000
X		66.342%	0.038	310.100	330.600	0.000	860900.000	92020.000	91370.000
σ		0.704%	0.030	6.561	6.057	0.000	12720.000	1030.000	1412.000
%RSD		1.061	78.700	2.116	1.832	0.000	1.477	1.120	1.546
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:58	2.417	355.200	0.000	21820.000	42660.000	41660.000	74.264%	0.359
2	23:56:06	3.558	365.100	0.000	22350.000	46000.000	43430.000	73.180%	0.374
3	23:56:14	4.439	356.400	0.000	22300.000	44940.000	43960.000	73.284%	0.299
X		3.472	358.900	0.000	22160.000	44540.000	43020.000	73.576%	0.344
σ		1.014	5.393	0.000	293.900	1710.000	1203.000	0.598%	0.039
%RSD		29.200	1.503	0.000	1.327	3.839	2.796	0.813	11.450
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:58	1.483	0.539	0.469	-0.148	97.730	0.165	0.496	0.363
2	23:56:06	0.986	0.543	0.469	-0.320	98.250	0.130	0.386	0.328
3	23:56:14	1.030	0.739	0.445	-0.229	114.000	0.183	0.355	0.454
X		1.166	0.607	0.461	-0.232	103.300	0.159	0.412	0.382
σ		0.276	0.114	0.013	0.086	9.234	0.027	0.074	0.065
%RSD		23.620	18.830	2.923	36.960	8.937	16.700	18.020	17.130
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:58	0.459	1.714	1.795	5.338	0.613	25.810	0.000	822.700
2	23:56:06	0.264	2.393	1.951	5.213	0.612	31.410	0.000	819.100
3	23:56:14	0.777	2.120	2.168	5.345	0.619	35.100	0.000	837.200
X		0.500	2.076	1.971	5.299	0.615	30.770	0.000	826.400
σ		0.259	0.342	0.187	0.074	0.003	4.678	0.000	9.567
%RSD		51.830	16.470	9.501	1.397	0.564	15.200	0.000	1.158
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:58	72.499%	7.642	7.427	62.549%	-0.020	-0.011	-0.000	-0.027
2	23:56:06	73.045%	7.556	7.921	62.553%	-0.043	-0.040	-0.001	-0.027
3	23:56:14	72.037%	7.168	7.708	62.987%	-0.043	-0.016	-0.001	-0.027
X		72.527%	7.455	7.685	62.697%	-0.035	-0.023	-0.001	-0.027
σ		0.505%	0.253	0.248	0.252%	0.013	0.015	0.000	0.000
%RSD		0.696	3.389	3.223	0.402	37.110	67.520	14.360	0.312
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:55:58	66.609%	-0.962	0.414	0.345	7.075	6.525	75.347%	77.341%
2	23:56:06	67.539%	-1.113	0.295	0.477	6.395	7.247	75.887%	77.375%
3	23:56:14	67.790%	-0.999	0.381	0.303	6.747	6.546	76.133%	78.132%
X		67.313%	-1.025	0.363	0.375	6.739	6.773	75.789%	77.616%
σ		0.622%	0.079	0.061	0.091	0.340	0.411	0.402%	0.447%
%RSD		0.925	7.712	16.910	24.280	5.043	6.067	0.530	0.576
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:55:58	-0.089	-0.074	0.051	0.016	0.024	70.419%		
2	23:56:06	-0.086	-0.074	-0.004	0.012	0.004	70.173%		
3	23:56:14	-0.089	-0.065	-0.004	-0.002	0.006	70.332%		
X		-0.088	-0.071	0.015	0.008	0.011	70.308%		
σ		0.002	0.005	0.032	0.009	0.011	0.125%		
%RSD		2.101	7.486	218.800	108.500	96.880	0.177		

180-42893-D-9-A@10 4/27/2015 12:01:59 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	00:01:06	65.251%	0.078	274.900	291.200	0.000	953500.000	105700.000	105100.000
2	00:01:14	66.998%	0.096	278.300	288.000	0.000	925700.000	105000.000	104200.000
3	00:01:22	65.440%	0.063	288.000	307.900	0.000	937500.000	108000.000	106700.000
X		65.897%	0.079	280.400	295.700	0.000	938900.000	106200.000	105300.000
σ		0.959%	0.017	6.817	10.690	0.000	13950.000	1562.000	1265.000
%RSD		1.455	20.930	2.431	3.616	0.000	1.486	1.471	1.201
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:06	1.820	260.900	0.000	30520.000	32370.000	30500.000	74.013%	0.145
2	00:01:14	2.079	250.000	0.000	31240.000	33220.000	31500.000	73.385%	0.152
3	00:01:22	2.533	257.600	0.000	32050.000	34710.000	32880.000	71.581%	-0.051
X		2.144	256.100	0.000	31270.000	33440.000	31630.000	72.993%	0.082
σ		0.361	5.583	0.000	765.700	1186.000	1191.000	1.263%	0.116
%RSD		16.830	2.179	0.000	2.449	3.547	3.766	1.730	141.100
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:06	1.901	0.659	0.104	-0.914	75.850	0.055	-0.027	0.193
2	00:01:14	1.416	0.777	0.117	-1.038	72.170	0.019	-0.010	0.108
3	00:01:22	1.388	0.657	0.108	-1.205	73.510	0.028	0.061	0.192
X		1.568	0.698	0.110	-1.053	73.840	0.034	0.008	0.164
σ		0.289	0.069	0.006	0.146	1.863	0.019	0.046	0.049
%RSD		18.400	9.874	5.898	13.880	2.523	55.050	571.200	29.800
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:06	0.192	0.918	0.822	2.812	0.813	19.110	0.000	638.200
2	00:01:14	0.204	0.578	1.362	2.704	0.899	20.790	0.000	633.900
3	00:01:22	0.158	0.931	1.289	2.678	0.857	18.120	0.000	637.400
X		0.184	0.809	1.158	2.731	0.856	19.340	0.000	636.500
σ		0.024	0.200	0.293	0.071	0.043	1.353	0.000	2.288
%RSD		12.970	24.760	25.300	2.616	5.027	6.993	0.000	0.359
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:06	70.918%	4.915	4.983	61.414%	-0.038	-0.026	-0.001	-0.017
2	00:01:14	71.917%	4.722	5.150	62.193%	-0.033	-0.016	-0.001	-0.037
3	00:01:22	72.045%	5.250	5.347	62.267%	-0.025	-0.035	0.024	-0.027
X		71.627%	4.962	5.160	61.958%	-0.032	-0.026	0.008	-0.027
σ		0.617%	0.267	0.182	0.472%	0.007	0.010	0.014	0.010
%RSD		0.862	5.380	3.531	0.762	21.240	37.260	185.800	36.740
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:01:06	66.058%	-1.023	0.801	0.693	5.684	5.943	74.504%	75.893%
2	00:01:14	66.967%	-1.006	0.713	0.899	5.438	5.524	76.096%	77.149%
3	00:01:22	67.550%	-1.008	0.758	0.582	6.495	5.461	75.205%	76.631%
X		66.859%	-1.012	0.758	0.725	5.872	5.642	75.268%	76.558%
σ		0.752%	0.010	0.044	0.161	0.553	0.262	0.798%	0.631%
%RSD		1.124	0.939	5.826	22.190	9.419	4.641	1.060	0.825
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:01:06	-0.099	-0.077	-0.027	-0.000	-0.006	67.788%		
2	00:01:14	-0.089	-0.073	-0.007	0.044	-0.000	68.865%		
3	00:01:22	-0.095	-0.071	-0.011	-0.005	-0.014	68.796%		
X		-0.094	-0.074	-0.015	0.013	-0.007	68.483%		
σ		0.005	0.003	0.010	0.027	0.007	0.603%		
%RSD		5.229	3.752	70.370	214.100	100.400	0.881		

180-42893-D-9-A SD@50 4/27/2015 12:07:04 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	00:06:11	77.198%	0.068	53.030	56.710	0.000	188200.000	20330.000	19710.000
2	00:06:19	75.339%	0.063	55.960	57.780	0.000	190000.000	20980.000	20690.000
3	00:06:26	75.763%	-0.077	57.350	60.760	0.000	190000.000	20880.000	20620.000
X		76.100%	0.018	55.450	58.420	0.000	189400.000	20730.000	20340.000
σ		0.974%	0.082	2.208	2.099	0.000	1036.000	351.000	545.500
%RSD		1.280	459.100	3.981	3.593	0.000	0.547	1.693	2.682
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:11	1.925	51.470	0.000	6247.000	6592.000	6012.000	81.248%	-0.259
2	00:06:19	0.861	51.140	0.000	6297.000	6811.000	6315.000	79.783%	-0.386
3	00:06:26	1.037	51.360	0.000	6505.000	7118.000	6365.000	80.057%	-0.320
X		1.274	51.320	0.000	6349.000	6840.000	6230.000	80.363%	-0.321
σ		0.571	0.167	0.000	136.700	264.500	190.800	0.779%	0.063
%RSD		44.790	0.325	0.000	2.153	3.867	3.062	0.970	19.680
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:11	0.055	0.186	0.040	-0.997	15.020	0.002	-0.134	0.064
2	00:06:19	-0.064	0.210	0.007	-0.790	12.550	0.002	-0.164	0.100
3	00:06:26	-0.174	0.233	0.014	-0.884	15.020	0.020	-0.119	0.098
X		-0.061	0.210	0.020	-0.890	14.200	0.008	-0.139	0.088
σ		0.115	0.023	0.017	0.104	1.427	0.010	0.023	0.020
%RSD		188.000	11.160	86.210	11.650	10.050	126.600	16.450	23.070
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:11	0.221	0.658	0.455	0.513	0.010	6.362	0.000	126.900
2	00:06:19	0.266	0.213	0.775	0.570	0.308	5.060	0.000	122.900
3	00:06:26	0.014	0.363	0.409	0.502	0.094	3.179	0.000	125.100
X		0.167	0.411	0.546	0.528	0.137	4.867	0.000	124.900
σ		0.135	0.227	0.199	0.036	0.154	1.600	0.000	2.017
%RSD		80.680	55.130	36.480	6.897	112.100	32.870	0.000	1.614
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:11	76.568%	1.170	1.081	68.668%	-0.014	-0.018	-0.001	-0.037
2	00:06:19	78.537%	0.968	0.950	69.486%	-0.027	-0.014	0.066	-0.037
3	00:06:26	79.430%	1.119	0.913	70.475%	-0.031	-0.023	0.021	-0.037
X		78.178%	1.086	0.981	69.543%	-0.024	-0.019	0.029	-0.037
σ		1.464%	0.105	0.088	0.905%	0.009	0.004	0.034	0.000
%RSD		1.873	9.673	8.988	1.301	36.360	23.940	117.300	0.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:11	72.977%	-1.058	0.118	0.114	1.446	1.009	79.402%	79.700%
2	00:06:19	73.437%	-1.021	0.179	0.032	1.012	0.956	80.745%	80.431%
3	00:06:26	74.276%	-1.024	0.097	0.150	1.183	0.828	79.972%	82.100%
X		73.563%	-1.034	0.131	0.099	1.214	0.931	80.039%	80.744%
σ		0.659%	0.021	0.043	0.060	0.219	0.093	0.674%	1.231%
%RSD		0.895	2.000	32.620	61.010	18.050	9.966	0.842	1.524
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:06:11	-0.084	-0.081	0.005	0.000	0.004	74.423%		
2	00:06:19	-0.096	-0.075	0.008	-0.009	-0.009	75.483%		
3	00:06:26	-0.099	-0.076	0.023	-0.021	-0.004	75.255%		
X		-0.093	-0.077	0.012	-0.010	-0.003	75.054%		
σ		0.008	0.003	0.010	0.011	0.007	0.558%		
%RSD		8.591	4.216	81.360	108.400	216.500	0.744		

180-42893-D-9-B MS@10 4/27/2015 12:12:07 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	00:11:15	64.536%	4.984	368.400	384.700	0.000	949600.000	109800.000	110800.000
2	00:11:23	65.309%	5.083	374.100	384.400	0.000	949500.000	111700.000	111300.000
3	00:11:31	65.259%	4.980	378.100	389.800	0.000	956100.000	111900.000	111000.000
X		65.035%	5.015	373.500	386.300	0.000	951700.000	111200.000	111000.000
σ		0.433%	0.059	4.906	3.067	0.000	3772.000	1132.000	221.500
%RSD		0.666	1.169	1.313	0.794	0.000	0.396	1.018	0.200
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:15	195.200	1181.000	0.000	35960.000	37200.000	35320.000	71.992%	82.960
2	00:11:23	196.200	1198.000	0.000	36670.000	37840.000	36300.000	71.487%	87.120
3	00:11:31	195.500	1241.000	0.000	37720.000	39620.000	37370.000	69.844%	88.530
X		195.700	1206.000	0.000	36780.000	38220.000	36330.000	71.108%	86.200
σ		0.525	30.880	0.000	887.200	1252.000	1025.000	1.123%	2.895
%RSD		0.268	2.560	0.000	2.412	3.276	2.821	1.579	3.358
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:15	45.520	18.120	40.990	82.020	154.700	42.280	42.080	20.310
2	00:11:23	47.190	18.420	42.140	82.990	168.800	43.060	41.850	22.060
3	00:11:31	47.280	18.640	43.920	83.890	155.200	43.010	43.490	22.160
X		46.660	18.390	42.350	82.970	159.600	42.780	42.470	21.510
σ		0.989	0.265	1.476	0.937	8.003	0.441	0.890	1.041
%RSD		2.119	1.441	3.485	1.129	5.015	1.030	2.095	4.842
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:15	21.710	49.630	49.480	6.007	1.849	30.370	0.000	729.100
2	00:11:23	23.350	54.210	50.940	6.477	1.078	25.720	0.000	738.400
3	00:11:31	22.390	50.970	54.000	6.519	1.876	25.160	0.000	725.700
X		22.480	51.600	51.470	6.334	1.601	27.080	0.000	731.100
σ		0.821	2.352	2.310	0.284	0.453	2.860	0.000	6.567
%RSD		3.651	4.558	4.488	4.484	28.300	10.560	0.000	0.898
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:15	69.076%	103.200	104.000	60.041%	4.259	4.262	4.814	8.913
2	00:11:23	69.129%	103.100	103.800	60.565%	4.529	4.369	4.449	8.882
3	00:11:31	70.802%	101.100	103.500	61.305%	4.390	4.177	4.908	9.069
X		69.669%	102.500	103.800	60.637%	4.393	4.269	4.724	8.955
σ		0.981%	1.175	0.261	0.635%	0.135	0.096	0.242	0.100
%RSD		1.409	1.146	0.252	1.047	3.064	2.252	5.127	1.116
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:15	64.724%	177.800	48.390	47.800	182.000	184.300	72.922%	73.909%
2	00:11:23	65.240%	181.200	47.050	47.470	188.700	182.200	73.351%	74.623%
3	00:11:31	65.657%	178.800	47.180	47.460	186.000	186.200	74.502%	75.836%
X		65.207%	179.300	47.540	47.580	185.600	184.200	73.592%	74.789%
σ		0.467%	1.730	0.742	0.191	3.364	2.018	0.817%	0.974%
%RSD		0.717	0.965	1.561	0.402	1.813	1.095	1.110	1.303
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:11:15	4.435	4.449	1.893	1.968	1.864	67.180%		
2	00:11:23	4.492	4.478	2.002	2.059	1.923	67.517%		
3	00:11:31	4.764	4.588	1.855	1.842	1.880	68.488%		
X		4.564	4.505	1.916	1.956	1.889	67.728%		
σ		0.176	0.073	0.076	0.109	0.030	0.679%		
%RSD		3.858	1.626	3.988	5.546	1.603	1.003		

180-42893-D-9-C MSD@10

4/27/2015 12:17:10 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	00:16:18	64.612%	4.896	378.400	391.000	0.000	965300.000	112900.000	114200.000	
2	00:16:26	62.328%	4.225	392.100	410.900	0.000	995700.000	114900.000	113700.000	
3	00:16:34	62.707%	4.897	409.000	414.400	0.000	1010000.000	117500.000	116800.000	
X		63.216%	4.673	393.200	405.500	0.000	990500.000	115100.000	114900.000	
		σ	1.224%	0.388	15.340	12.630	0.000	22970.000	2311.000	1646.000
		%RSD	1.936	8.297	3.902	3.116	0.000	2.319	2.008	1.433
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:16:18	195.700	1185.000	0.000	35630.000	37700.000	35910.000	72.551%	84.830	
2	00:16:26	199.700	1219.000	0.000	36440.000	38760.000	36880.000	72.107%	85.660	
3	00:16:34	209.900	1254.000	0.000	37450.000	40450.000	37750.000	71.225%	89.960	
X		201.700	1219.000	0.000	36510.000	38970.000	36850.000	71.961%	86.820	
		σ	7.308	34.550	0.000	908.400	1386.000	920.900	0.675%	2.757
		%RSD	3.623	2.834	0.000	2.488	3.557	2.499	0.938	3.175
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:16:18	45.440	18.390	40.250	81.700	166.700	42.700	43.810	21.780	
2	00:16:26	47.490	18.290	42.300	83.080	164.800	42.680	43.760	21.630	
3	00:16:34	47.570	18.990	42.250	82.410	167.900	44.120	43.500	21.620	
X		46.830	18.560	41.600	82.390	166.500	43.170	43.690	21.680	
		σ	1.207	0.382	1.172	0.691	1.560	0.826	0.165	0.086
		%RSD	2.578	2.060	2.816	0.838	0.937	1.914	0.378	0.396
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:16:18	21.520	45.590	44.770	6.688	1.616	38.250	0.000	755.100	
2	00:16:26	22.300	46.150	43.300	6.551	1.691	36.330	0.000	748.300	
3	00:16:34	22.590	45.130	43.920	6.401	1.586	38.040	0.000	739.700	
X		22.140	45.620	44.000	6.547	1.631	37.540	0.000	747.700	
		σ	0.556	0.509	0.738	0.144	0.055	1.053	0.000	7.733
		%RSD	2.512	1.115	1.678	2.194	3.345	2.805	0.000	1.034
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:16:18	68.493%	106.400	106.600	60.386%	4.440	4.291	4.657	8.335	
2	00:16:26	69.739%	102.500	106.400	60.884%	4.382	4.408	5.427	8.715	
3	00:16:34	70.596%	103.000	104.900	61.176%	4.415	4.583	4.535	8.950	
X		69.609%	104.000	105.900	60.815%	4.412	4.427	4.873	8.666	
		σ	1.057%	2.108	0.922	0.400%	0.029	0.147	0.484	0.310
		%RSD	1.519	2.027	0.870	0.657	0.651	3.320	9.929	3.580
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	00:16:18	64.647%	187.800	47.110	47.040	187.600	184.600	74.552%	76.181%	
2	00:16:26	65.923%	185.500	48.450	46.520	185.100	191.200	74.631%	76.552%	
3	00:16:34	66.305%	183.200	48.380	47.450	187.200	186.300	74.280%	76.119%	
X		65.625%	185.500	47.980	47.000	186.600	187.400	74.488%	76.284%	
		σ	0.868%	2.283	0.752	0.463	1.353	3.432	0.184%	0.234%
		%RSD	1.323	1.231	1.567	0.986	0.725	1.832	0.247	0.307
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	00:16:18	4.623	4.555	1.882	2.077	1.917	68.528%			
2	00:16:26	4.533	4.603	2.139	1.860	1.924	69.659%			
3	00:16:34	5.047	4.710	2.033	2.143	1.937	69.200%			
X		4.734	4.623	2.018	2.027	1.926	69.129%			
		σ	0.275	0.079	0.130	0.148	0.010	0.569%		
		%RSD	5.797	1.719	6.422	7.286	0.538	0.823		

180-42893-D-9-A PDS@10

4/27/2015 12:22:12 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	00:21:21	65.179%	4.542	372.800	387.000	0.000	924200.000	107000.000	107200.000
2	00:21:29	64.267%	5.060	374.200	400.300	0.000	960300.000	112100.000	110500.000
3	00:21:36	63.062%	5.494	401.400	410.400	0.000	966400.000	111700.000	112700.000
X		64.170%	5.032	382.800	399.200	0.000	950300.000	110300.000	110100.000
σ		1.062%	0.476	16.150	11.730	0.000	22820.000	2816.000	2785.000
%RSD		1.654	9.467	4.220	2.938	0.000	2.401	2.553	2.529
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:21	210.100	1307.000	0.000	35020.000	36360.000	34590.000	73.271%	92.450
2	00:21:29	215.300	1352.000	0.000	35460.000	38010.000	35890.000	71.946%	99.910
3	00:21:36	218.100	1383.000	0.000	36530.000	38620.000	36600.000	70.881%	103.000
X		214.500	1347.000	0.000	35670.000	37660.000	35690.000	72.033%	98.470
σ		4.067	38.200	0.000	776.700	1170.000	1021.000	1.198%	5.444
%RSD		1.896	2.836	0.000	2.178	3.107	2.860	1.662	5.528
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:21	48.670	19.380	44.070	90.440	179.200	47.250	46.330	23.560
2	00:21:29	50.540	19.600	45.070	91.970	175.600	47.580	46.580	23.740
3	00:21:36	50.190	19.860	45.380	92.700	168.000	47.800	47.810	24.240
X		49.800	19.620	44.840	91.700	174.300	47.540	46.910	23.850
σ		0.991	0.239	0.685	1.155	5.718	0.275	0.793	0.351
%RSD		1.990	1.218	1.527	1.259	3.281	0.578	1.690	1.473
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:21	25.440	49.230	48.320	7.092	1.739	23.150	0.000	795.400
2	00:21:29	24.510	48.350	49.910	6.716	1.771	18.230	0.000	790.500
3	00:21:36	24.890	52.110	50.560	7.025	1.197	20.140	0.000	791.400
X		24.950	49.900	49.600	6.944	1.569	20.500	0.000	792.400
σ		0.468	1.968	1.149	0.200	0.322	2.482	0.000	2.559
%RSD		1.876	3.944	2.316	2.883	20.550	12.100	0.000	0.323
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:21	62.197%	122.100	124.600	60.213%	4.402	4.506	5.143	9.418
2	00:21:29	63.423%	123.500	122.500	60.823%	4.430	4.326	4.857	9.598
3	00:21:36	64.159%	122.800	123.200	61.268%	4.301	4.284	4.281	9.381
X		63.260%	122.800	123.400	60.768%	4.378	4.372	4.760	9.466
σ		0.991%	0.660	1.076	0.529%	0.068	0.118	0.439	0.117
%RSD		1.567	0.537	0.872	0.871	1.556	2.698	9.229	1.231
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:21:21	65.072%	213.700	55.220	54.220	201.600	193.200	73.316%	74.558%
2	00:21:29	65.969%	212.900	55.300	54.770	197.500	201.900	74.118%	75.332%
3	00:21:36	65.851%	214.000	54.350	55.190	198.300	196.800	74.532%	75.312%
X		65.631%	213.500	54.960	54.720	199.100	197.300	73.989%	75.067%
σ		0.487%	0.577	0.527	0.486	2.155	4.398	0.618%	0.441%
%RSD		0.743	0.270	0.958	0.887	1.082	2.229	0.836	0.588
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:21:21	5.144	5.087	1.918	2.038	1.964	67.118%		
2	00:21:29	5.009	4.888	2.094	1.983	2.044	67.702%		
3	00:21:36	4.890	4.852	2.041	1.973	2.058	67.253%		
X		5.014	4.943	2.018	1.998	2.022	67.358%		
σ		0.127	0.127	0.090	0.035	0.050	0.306%		
%RSD		2.535	2.558	4.476	1.749	2.492	0.454		

180-42893-D-10-A@10 4/27/2015 12:27:15 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	00:26:24	65.353%	-0.017	300.000	314.200	0.000	973500.000	108000.000	109100.000
2	00:26:31	66.732%	-0.021	305.500	316.000	0.000	980400.000	109300.000	108900.000
3	00:26:39	64.673%	-0.015	313.000	329.300	0.000	999900.000	113000.000	112400.000
X		65.586%	-0.017	306.200	319.800	0.000	984600.000	110100.000	110100.000
		1.049%	0.003	6.555	8.254	0.000	13710.000	2551.000	1925.000
		1.600	17.170	2.141	2.581	0.000	1.392	2.317	1.748
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:24	2.510	277.200	0.000	30360.000	32210.000	30620.000	74.232%	0.431
2	00:26:31	3.161	278.400	0.000	31100.000	33360.000	32080.000	72.922%	0.341
3	00:26:39	2.321	283.700	0.000	31570.000	34520.000	32740.000	72.106%	0.501
X		2.664	279.800	0.000	31010.000	33360.000	31810.000	73.087%	0.425
		0.441	3.458	0.000	607.600	1152.000	1085.000	1.072%	0.080
		16.540	1.236	0.000	1.960	3.454	3.411	1.467	18.920
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:24	2.524	0.777	0.123	-0.570	80.390	0.019	-0.043	0.246
2	00:26:31	2.436	0.683	0.075	-1.035	66.980	0.051	-0.109	0.379
3	00:26:39	2.358	0.821	0.156	-0.785	77.990	0.040	0.059	0.262
X		2.439	0.760	0.118	-0.797	75.120	0.037	-0.031	0.296
		0.083	0.070	0.041	0.233	7.154	0.016	0.085	0.073
		3.418	9.260	34.690	29.190	9.524	44.470	274.200	24.610
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:24	0.393	1.284	0.764	3.317	0.770	33.710	0.000	644.300
2	00:26:31	0.293	1.311	1.230	3.190	0.857	30.980	0.000	639.300
3	00:26:39	0.206	0.778	0.866	3.297	0.666	29.360	0.000	642.900
X		0.297	1.124	0.953	3.268	0.764	31.350	0.000	642.200
		0.093	0.300	0.245	0.068	0.096	2.197	0.000	2.578
		31.370	26.680	25.690	2.096	12.500	7.010	0.000	0.401
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:24	70.413%	6.525	6.699	61.136%	-0.038	-0.016	-0.001	0.052
2	00:26:31	71.548%	6.520	6.841	61.537%	-0.033	-0.021	0.048	0.051
3	00:26:39	72.286%	6.176	6.142	62.387%	-0.047	-0.026	0.024	0.088
X		71.416%	6.407	6.561	61.687%	-0.039	-0.021	0.024	0.064
		0.944%	0.200	0.369	0.639%	0.007	0.005	0.024	0.021
		1.322	3.122	5.631	1.036	17.630	24.240	102.700	33.090
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:24	65.732%	2.607	0.851	0.787	5.644	6.377	73.872%	75.175%
2	00:26:31	66.939%	1.688	0.607	0.709	5.165	5.626	75.147%	76.183%
3	00:26:39	67.754%	1.298	0.688	0.753	4.645	5.826	74.910%	76.869%
X		66.809%	1.864	0.715	0.750	5.151	5.943	74.643%	76.076%
		1.017%	0.672	0.124	0.039	0.500	0.389	0.678%	0.852%
		1.523	36.030	17.360	5.166	9.700	6.545	0.908	1.120
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:26:24	-0.033	-0.037	0.101	0.161	0.122	67.369%		
2	00:26:31	-0.063	-0.052	0.112	0.149	0.091	68.335%		
3	00:26:39	-0.076	-0.058	0.095	0.112	0.112	68.608%		
X		-0.057	-0.049	0.103	0.141	0.108	68.104%		
		0.022	0.011	0.009	0.026	0.015	0.651%		
		38.930	22.360	8.302	18.110	14.230	0.956		

CCV 1533080 4/27/2015 12:32:20 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	00:31:27	77.070%	86.430	93.810	97.290	0.000	51530.000	48590.000	47620.000
2	00:31:34	74.470%	93.690	97.790	102.700	0.000	54790.000	50340.000	49650.000
3	00:31:42	74.848%	93.600	98.470	102.800	0.000	55020.000	50910.000	50570.000
X		75.463%	91.241%	96.689%	100.929%	0.000	107.559%	99.897%	98.561%
σ		1.404%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.861	4.563	2.607	3.121	0.000	3.635	2.423	3.066
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:27	510.300	4748.000	0.000	48190.000	44880.000	43920.000	76.372%	88.250
2	00:31:34	516.000	5017.000	0.000	49440.000	47180.000	45890.000	74.944%	91.300
3	00:31:42	536.300	5022.000	0.000	50650.000	48590.000	46550.000	72.672%	95.360
X		104.172%	98.575%	0.000	98.852%	93.768%	90.905%	74.662%	91.635%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.866%	n/a
%RSD		2.620	3.185	0.000	2.483	4.001	3.002	2.499	3.894
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:27	91.040	91.200	448.400	23250.000	22200.000	90.600	90.600	91.300
2	00:31:34	93.540	91.660	468.700	23810.000	22450.000	91.130	92.540	92.540
3	00:31:42	96.360	95.520	478.500	24440.000	23020.000	91.170	94.650	94.720
X		93.648%	92.794%	93.040%	95.348%	90.242%	90.966%	92.597%	92.855%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.844	2.552	3.302	2.504	1.862	0.352	2.192	1.864
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:27	90.920	95.510	91.370	92.890	95.350	96.300	0.000	93.920
2	00:31:34	92.820	93.190	93.350	92.130	95.640	94.360	0.000	92.240
3	00:31:42	94.130	95.200	92.400	95.950	92.490	89.600	0.000	95.900
X		92.626%	94.630%	92.373%	93.657%	94.492%	93.420%	0.000	94.020%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.741	1.331	1.067	2.161	1.843	3.694	0.000	1.948
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:27	71.862%	93.470	97.520	63.927%	95.000	94.670	95.280	98.850
2	00:31:34	73.766%	93.910	96.720	64.627%	92.900	94.650	94.720	95.760
3	00:31:42	73.123%	96.980	97.340	65.256%	95.120	93.250	93.190	95.640
X		72.917%	94.787%	97.191%	64.603%	94.341%	94.189%	94.394%	96.751%
σ		0.968%	n/a	n/a	0.665%	n/a	n/a	n/a	n/a
%RSD		1.328	2.014	0.434	1.029	1.327	0.863	1.149	1.883
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:27	66.713%	93.670	93.500	94.550	96.920	94.910	75.156%	75.826%
2	00:31:34	67.999%	92.880	96.170	92.770	90.510	93.110	75.315%	75.461%
3	00:31:42	69.041%	93.290	93.240	93.800	94.510	94.810	75.785%	77.420%
X		67.918%	93.278%	94.306%	93.709%	93.981%	94.276%	75.419%	76.236%
σ		1.166%	n/a	n/a	n/a	n/a	n/a	0.327%	1.041%
%RSD		1.717	0.422	1.719	0.953	3.445	1.071	0.434	1.366
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:31:27	99.340	96.400	97.920	97.160	97.990	68.328%		
2	00:31:34	97.100	95.410	98.740	96.950	96.660	69.697%		
3	00:31:42	97.370	95.790	97.890	97.790	97.350	70.257%		
X		97.936%	95.865%	98.183%	97.301%	97.331%	69.427%		
σ		n/a	n/a	n/a	n/a	n/a	0.993%		
%RSD		1.253	0.519	0.490	0.449	0.683	1.430		

CCB4 4/27/2015 12:41:27 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	00:40:34	88.346%	0.004	-0.006	0.679	0.000	153.000	9.491	7.617
2	00:40:42	88.006%	0.005	0.204	0.722	0.000	161.700	5.643	8.653
3	00:40:50	89.421%	-0.087	0.034	0.961	0.000	160.500	7.502	9.528
X		88.591%	-0.026	0.077	0.788	0.000	158.400	7.545	8.600
σ		0.739%	0.053	0.111	0.152	0.000	4.723	1.924	0.957
%RSD		0.834	201.500	144.300	19.310	0.000	2.981	25.510	11.130
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:34	2.140	0.915	0.000	-53.060	8.972	8.709	88.682%	-0.386
2	00:40:42	2.098	-2.827	0.000	-54.060	21.140	8.724	88.173%	-0.536
3	00:40:50	2.123	-5.410	0.000	-56.760	24.490	7.928	88.251%	-0.263
X		2.120	-2.441	0.000	-54.630	18.200	8.453	88.369%	-0.395
σ		0.021	3.180	0.000	1.915	8.163	0.455	0.274%	0.137
%RSD		0.975	130.300	0.000	3.506	44.860	5.386	0.310	34.650
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:34	0.048	0.007	0.157	8.095	8.067	0.001	-0.047	0.011
2	00:40:42	0.151	0.024	0.104	8.136	11.820	-0.005	-0.143	-0.022
3	00:40:50	0.066	0.026	0.076	7.767	8.328	0.008	-0.103	0.042
X		0.088	0.019	0.113	7.999	9.404	0.001	-0.098	0.010
σ		0.055	0.011	0.041	0.202	2.093	0.007	0.048	0.032
%RSD		62.480	55.870	36.550	2.530	22.260	583.800	49.350	316.800
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:34	0.040	-0.104	0.079	0.045	0.236	0.734	0.000	0.025
2	00:40:42	-0.043	-0.145	-0.007	0.109	0.194	-1.006	0.000	0.017
3	00:40:50	-0.023	-0.106	-0.131	0.064	0.194	1.408	0.000	0.005
X		-0.009	-0.118	-0.019	0.073	0.208	0.378	0.000	0.016
σ		0.043	0.023	0.105	0.032	0.024	1.245	0.000	0.010
%RSD		499.200	19.720	540.900	44.640	11.600	329.100	0.000	64.650
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:34	87.241%	0.284	0.336	81.724%	-0.009	-0.003	-0.001	-0.037
2	00:40:42	89.019%	0.291	0.333	81.818%	-0.030	-0.033	-0.001	-0.021
3	00:40:50	89.177%	0.313	0.352	82.111%	-0.026	-0.014	-0.001	-0.014
X		88.479%	0.296	0.340	81.884%	-0.022	-0.017	-0.001	-0.024
σ		1.075%	0.015	0.011	0.202%	0.011	0.015	0.000	0.012
%RSD		1.215	5.008	3.094	0.246	52.360	90.630	1.192	48.470
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:34	83.659%	-0.773	0.139	0.155	0.026	0.119	90.787%	90.478%
2	00:40:42	84.284%	-0.785	0.112	0.049	-0.005	-0.011	89.436%	91.250%
3	00:40:50	85.797%	-0.785	0.129	0.046	-0.005	0.044	90.998%	92.565%
X		84.580%	-0.781	0.127	0.083	0.005	0.051	90.407%	91.431%
σ		1.099%	0.007	0.013	0.062	0.018	0.065	0.847%	1.055%
%RSD		1.299	0.878	10.460	74.770	343.200	128.400	0.937	1.154
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:40:34	-0.017	-0.016	-0.020	-0.017	-0.022	88.690%		
2	00:40:42	-0.043	0.001	-0.023	-0.014	-0.028	88.927%		
3	00:40:50	-0.033	-0.009	-0.017	-0.021	-0.022	89.105%		
X		-0.031	-0.008	-0.020	-0.017	-0.024	88.907%		
σ		0.013	0.008	0.003	0.004	0.004	0.208%		
%RSD		41.360	105.400	15.540	20.700	14.530	0.234		

180-42893-D-11-A@10

4/27/2015 12:46:33 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	00:45:41	66.639%	0.230	277.800	300.200	0.000	999700.000	112100.000	110600.000
2	00:45:48	64.911%	0.160	285.800	313.500	0.000	1019000.000	116600.000	115600.000
3	00:45:56	64.768%	0.161	306.100	315.800	0.000	1027000.000	116400.000	115600.000
X		65.439%	0.184	289.900	309.800	0.000	1015000.000	115000.000	113900.000
σ		1.041%	0.040	14.580	8.408	0.000	13860.000	2536.000	2896.000
%RSD		1.591	21.730	5.029	2.714	0.000	1.366	2.205	2.543
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:41	2.393	250.900	0.000	31580.000	32280.000	30940.000	71.515%	-0.163
2	00:45:48	3.253	255.400	0.000	31900.000	32950.000	31750.000	71.138%	0.103
3	00:45:56	2.502	256.300	0.000	32510.000	34420.000	32950.000	69.968%	-0.075
X		2.716	254.200	0.000	32000.000	33220.000	31880.000	70.874%	-0.045
σ		0.468	2.891	0.000	473.000	1092.000	1010.000	0.806%	0.136
%RSD		17.240	1.137	0.000	1.478	3.287	3.167	1.138	301.500
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:41	1.429	0.680	0.127	4.044	86.730	0.048	0.012	0.447
2	00:45:48	2.675	0.688	0.141	3.819	97.040	0.036	0.215	0.422
3	00:45:56	2.173	0.727	0.146	3.253	86.020	0.028	0.202	0.493
X		2.092	0.698	0.138	3.705	89.930	0.038	0.143	0.454
σ		0.627	0.025	0.010	0.408	6.163	0.010	0.114	0.036
%RSD		29.950	3.618	7.010	11.000	6.853	26.780	79.740	7.914
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:41	0.210	0.669	1.064	2.332	0.913	26.720	0.000	621.400
2	00:45:48	0.274	1.161	0.993	2.624	0.722	22.020	0.000	620.000
3	00:45:56	0.148	0.674	1.141	2.481	0.673	23.460	0.000	623.100
X		0.211	0.835	1.066	2.479	0.769	24.070	0.000	621.500
σ		0.063	0.283	0.074	0.146	0.127	2.405	0.000	1.555
%RSD		29.800	33.860	6.946	5.881	16.480	9.992	0.000	0.250
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:41	71.118%	4.580	4.934	60.584%	-0.033	-0.030	0.024	-0.027
2	00:45:48	71.435%	4.857	4.759	61.676%	-0.029	-0.021	-0.001	0.012
3	00:45:56	72.118%	4.808	4.861	62.348%	-0.016	-0.026	-0.001	-0.017
X		71.557%	4.749	4.851	61.536%	-0.026	-0.026	0.008	-0.011
σ		0.511%	0.148	0.088	0.890%	0.009	0.005	0.014	0.020
%RSD		0.714	3.116	1.810	1.447	35.250	18.310	186.400	188.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:41	65.716%	-0.546	0.827	0.753	5.940	5.194	73.159%	74.879%
2	00:45:48	67.099%	-0.508	0.815	0.701	4.576	5.997	74.196%	75.566%
3	00:45:56	67.898%	-0.496	0.618	0.787	6.546	6.341	74.351%	76.528%
X		66.904%	-0.517	0.753	0.747	5.687	5.844	73.902%	75.658%
σ		1.104%	0.026	0.117	0.044	1.009	0.589	0.648%	0.829%
%RSD		1.651	5.051	15.530	5.839	17.740	10.080	0.877	1.095
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:45:41	-0.023	0.002	-0.002	0.018	-0.004	67.309%		
2	00:45:48	-0.024	-0.005	-0.006	0.045	0.010	68.187%		
3	00:45:56	-0.043	-0.012	0.006	0.022	0.005	68.403%		
X		-0.030	-0.005	-0.001	0.028	0.004	67.966%		
σ		0.012	0.007	0.006	0.014	0.007	0.579%		
%RSD		39.350	142.700	669.900	50.730	190.800	0.852		

180-42893-D-12-A@10 4/27/2015 12:51:35 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	00:50:44	68.018%	0.131	300.900	325.000	0.000	974500.000	109600.000	109400.000
2	00:50:51	67.073%	0.148	315.600	333.200	0.000	992300.000	111400.000	111900.000
3	00:50:59	67.141%	0.070	323.600	337.500	0.000	991000.000	112600.000	112600.000
X		67.410%	0.116	313.400	331.900	0.000	985900.000	111200.000	111300.000
σ		0.527%	0.041	11.490	6.343	0.000	9930.000	1545.000	1651.000
%RSD		0.782	35.510	3.666	1.911	0.000	1.007	1.389	1.483
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:50:44	1.920	259.400	0.000	30230.000	32980.000	31010.000	75.266%	-0.083
2	00:50:51	2.079	262.900	0.000	31370.000	33670.000	32150.000	74.384%	0.141
3	00:50:59	2.820	268.900	0.000	31940.000	33760.000	32920.000	74.206%	0.432
X		2.273	263.800	0.000	31180.000	33470.000	32020.000	74.619%	0.163
σ		0.480	4.837	0.000	869.000	429.000	960.300	0.568%	0.258
%RSD		21.130	1.834	0.000	2.787	1.281	2.999	0.761	157.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:50:44	2.296	0.722	0.138	0.856	80.960	0.035	0.021	0.308
2	00:50:51	2.596	0.685	0.163	0.542	77.980	0.039	0.006	0.335
3	00:50:59	3.005	0.769	0.129	0.245	83.250	0.023	0.234	0.293
X		2.632	0.725	0.143	0.547	80.730	0.032	0.087	0.312
σ		0.356	0.042	0.018	0.306	2.639	0.008	0.128	0.022
%RSD		13.520	5.814	12.250	55.870	3.269	25.850	146.900	6.908
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:50:44	0.227	0.888	1.070	3.145	0.767	16.190	0.000	636.500
2	00:50:51	0.216	0.649	0.738	3.123	0.858	18.000	0.000	633.000
3	00:50:59	0.336	0.689	0.799	3.313	0.892	20.330	0.000	633.500
X		0.260	0.742	0.869	3.194	0.839	18.170	0.000	634.400
σ		0.067	0.128	0.177	0.104	0.065	2.075	0.000	1.866
%RSD		25.670	17.230	20.310	3.261	7.695	11.420	0.000	0.294
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:50:44	70.389%	5.692	5.355	61.148%	-0.029	-0.025	-0.001	-0.037
2	00:50:51	70.991%	5.207	5.543	61.537%	-0.024	-0.026	0.049	0.003
3	00:50:59	72.365%	5.192	5.257	61.996%	-0.020	-0.011	-0.001	-0.037
X		71.248%	5.364	5.385	61.560%	-0.024	-0.021	0.016	-0.023
σ		1.013%	0.285	0.145	0.425%	0.004	0.008	0.028	0.023
%RSD		1.421	5.304	2.693	0.690	18.160	39.610	179.600	96.940
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:50:44	65.681%	-0.860	0.781	0.743	6.662	5.110	73.607%	75.391%
2	00:50:51	66.059%	-0.615	0.828	0.818	6.083	6.052	74.062%	75.996%
3	00:50:59	66.551%	-0.652	0.807	0.634	6.285	6.237	75.186%	76.296%
X		66.097%	-0.709	0.805	0.732	6.343	5.800	74.285%	75.894%
σ		0.436%	0.132	0.023	0.092	0.294	0.604	0.812%	0.461%
%RSD		0.660	18.600	2.877	12.600	4.628	10.420	1.094	0.608
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:50:44	-0.065	-0.060	-0.022	-0.004	-0.025	66.492%		
2	00:50:51	-0.082	-0.057	0.003	0.024	0.003	66.527%		
3	00:50:59	-0.072	-0.048	0.002	0.018	-0.012	67.698%		
X		-0.073	-0.055	-0.006	0.012	-0.011	66.906%		
σ		0.008	0.006	0.014	0.015	0.014	0.687%		
%RSD		11.460	11.370	247.400	118.400	119.800	1.026		

180-42893-D-18-A@10 4/27/2015 12:56:43 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	00:55:50	68.541%	0.077	323.600	341.600	0.000	993400.000	112000.000	113300.000
2	00:55:58	65.134%	0.092	347.100	365.100	0.000	1064000.000	120800.000	118500.000
3	00:56:05	66.033%	0.194	340.200	362.500	0.000	1051000.000	119800.000	117600.000
X		66.569%	0.121	336.900	356.400	0.000	1036000.000	117500.000	116500.000
		1.766%	0.064	12.070	12.910	0.000	37520.000	4814.000	2749.000
		2.652	52.730	3.583	3.621	0.000	3.621	4.097	2.360
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:55:50	2.399	181.500	0.000	32450.000	33720.000	32390.000	74.508%	0.067
2	00:55:58	1.598	189.200	0.000	33130.000	35450.000	33360.000	74.196%	0.251
3	00:56:05	2.058	187.900	0.000	33590.000	35580.000	33860.000	73.831%	0.546
X		2.018	186.200	0.000	33060.000	34920.000	33200.000	74.179%	0.288
		0.402	4.108	0.000	572.200	1041.000	749.100	0.339%	0.242
		19.920	2.207	0.000	1.731	2.982	2.256	0.457	83.780
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:55:50	3.526	0.780	0.103	-0.718	92.370	0.031	0.006	0.363
2	00:55:58	3.293	0.827	0.089	-0.652	78.610	0.043	-0.126	0.249
3	00:56:05	2.181	0.845	0.122	-0.836	79.490	0.043	0.006	0.243
X		3.000	0.817	0.105	-0.735	83.490	0.039	-0.038	0.285
		0.719	0.034	0.017	0.093	7.701	0.007	0.076	0.067
		23.970	4.131	15.850	12.640	9.224	17.560	199.800	23.600
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:55:50	0.242	0.362	0.863	3.063	0.580	31.850	0.000	656.800
2	00:55:58	0.339	0.814	0.714	3.380	1.039	32.250	0.000	651.400
3	00:56:05	0.140	0.430	1.166	3.011	0.571	34.150	0.000	651.600
X		0.240	0.535	0.915	3.151	0.730	32.750	0.000	653.200
		0.099	0.244	0.230	0.200	0.267	1.228	0.000	3.058
		41.330	45.480	25.190	6.337	36.640	3.751	0.000	0.468
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:55:50	70.450%	5.416	5.282	60.820%	-0.033	-0.011	-0.001	-0.007
2	00:55:58	71.670%	5.245	5.119	62.043%	-0.042	-0.026	-0.001	-0.037
3	00:56:05	72.005%	4.962	5.399	62.467%	-0.020	-0.021	-0.001	-0.027
X		71.375%	5.208	5.267	61.776%	-0.032	-0.019	-0.001	-0.024
		0.818%	0.229	0.140	0.855%	0.011	0.008	0.000	0.015
		1.146	4.395	2.665	1.384	35.280	39.410	3.882	63.940
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:55:50	66.220%	-0.820	0.704	0.595	5.263	5.207	74.220%	74.996%
2	00:55:58	67.193%	-0.933	0.662	0.881	5.347	5.483	75.013%	75.643%
3	00:56:05	67.193%	-0.838	0.812	0.732	5.254	5.873	75.570%	76.625%
X		66.869%	-0.864	0.726	0.736	5.288	5.521	74.934%	75.754%
		0.561%	0.060	0.077	0.143	0.051	0.335	0.678%	0.820%
		0.840	7.004	10.670	19.420	0.966	6.059	0.905	1.083
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:55:50	-0.075	-0.070	0.003	-0.014	-0.010	67.098%		
2	00:55:58	-0.072	-0.067	-0.015	-0.028	-0.018	68.048%		
3	00:56:05	-0.086	-0.074	-0.003	0.008	0.001	68.357%		
X		-0.078	-0.070	-0.005	-0.011	-0.009	67.834%		
		0.007	0.003	0.009	0.018	0.010	0.656%		
		8.867	4.932	180.000	164.300	108.600	0.967		

180-42893-D-19-A@10 4/27/2015 1:01:51 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	01:00:58	67.516%	0.107	366.700	373.200	0.000	945700.000	107800.000	106000.000
2	01:01:05	68.233%	0.091	356.000	387.500	0.000	977800.000	108600.000	108500.000
3	01:01:13	68.354%	0.103	360.000	383.300	0.000	969700.000	109400.000	113300.000
X		68.034%	0.100	360.900	381.300	0.000	964400.000	108600.000	109300.000
σ		0.453%	0.008	5.379	7.362	0.000	16680.000	800.900	3727.000
%RSD		0.666	8.386	1.490	1.931	0.000	1.729	0.738	3.411
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:58	3.794	123.800	0.000	30640.000	31320.000	29850.000	75.934%	0.053
2	01:01:05	2.853	121.200	0.000	31020.000	32000.000	30700.000	75.205%	0.274
3	01:01:13	4.327	119.000	0.000	31670.000	33190.000	31290.000	74.683%	0.353
X		3.658	121.400	0.000	31110.000	32170.000	30620.000	75.274%	0.227
σ		0.746	2.411	0.000	521.600	945.600	725.300	0.629%	0.155
%RSD		20.400	1.987	0.000	1.677	2.939	2.369	0.835	68.480
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:58	0.555	0.819	0.266	-0.265	70.210	0.163	0.425	0.238
2	01:01:05	-0.482	0.887	0.412	-0.595	86.180	0.167	0.279	0.360
3	01:01:13	-0.558	0.955	0.279	-0.480	69.790	0.165	0.217	0.421
X		-0.161	0.887	0.319	-0.447	75.390	0.165	0.307	0.340
σ		0.622	0.068	0.081	0.167	9.342	0.002	0.107	0.093
%RSD		385.300	7.671	25.360	37.480	12.390	1.257	34.880	27.440
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:58	0.322	6.422	5.980	0.785	1.457	19.270	0.000	590.100
2	01:01:05	0.394	5.995	5.801	0.885	1.626	18.520	0.000	592.800
3	01:01:13	0.212	6.702	6.587	0.778	1.403	20.840	0.000	602.700
X		0.309	6.373	6.123	0.816	1.495	19.540	0.000	595.200
σ		0.092	0.356	0.412	0.060	0.116	1.182	0.000	6.658
%RSD		29.570	5.587	6.721	7.330	7.757	6.050	0.000	1.119
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:58	71.191%	4.990	4.336	62.178%	-0.033	-0.035	0.048	-0.027
2	01:01:05	72.432%	4.531	4.371	63.150%	-0.043	-0.026	0.048	-0.008
3	01:01:13	72.060%	4.315	4.339	62.876%	-0.029	-0.035	0.048	0.011
X		71.894%	4.612	4.349	62.735%	-0.035	-0.032	0.048	-0.008
σ		0.637%	0.345	0.020	0.501%	0.007	0.005	0.000	0.019
%RSD		0.886	7.471	0.453	0.799	19.480	16.870	0.991	247.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:00:58	66.442%	-0.918	0.816	0.759	6.883	5.804	74.662%	75.157%
2	01:01:05	67.569%	-1.050	0.978	0.842	5.450	5.747	74.804%	75.857%
3	01:01:13	67.844%	-0.768	0.824	0.881	6.103	5.245	75.181%	77.061%
X		67.285%	-0.912	0.873	0.828	6.145	5.599	74.882%	76.025%
σ		0.743%	0.141	0.091	0.062	0.718	0.307	0.269%	0.963%
%RSD		1.104	15.450	10.470	7.517	11.680	5.489	0.359	1.267
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:00:58	-0.082	-0.048	0.546	0.496	0.524	67.027%		
2	01:01:05	-0.089	-0.075	0.543	0.550	0.530	68.334%		
3	01:01:13	-0.082	-0.059	0.588	0.517	0.557	67.845%		
X		-0.084	-0.061	0.559	0.521	0.537	67.735%		
σ		0.004	0.014	0.025	0.027	0.018	0.660%		
%RSD		4.586	23.050	4.444	5.191	3.363	0.975		

180-42893-D-20-A@10

4/27/2015 1:06:59 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	01:06:05	67.452%	0.159	320.400	338.200	0.000	1034000.000	116400.000	114700.000
2	01:06:13	67.050%	0.188	331.600	344.900	0.000	1057000.000	118200.000	116900.000
3	01:06:21	66.586%	0.085	339.200	358.800	0.000	1041000.000	117300.000	121300.000
X		67.029%	0.144	330.400	347.300	0.000	1044000.000	117300.000	117600.000
σ		0.434%	0.053	9.447	10.520	0.000	11730.000	911.500	3337.000
%RSD		0.647	36.770	2.859	3.030	0.000	1.123	0.777	2.837
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:05	2.635	168.600	0.000	33150.000	33430.000	31790.000	75.133%	0.133
2	01:06:13	8.296	168.400	0.000	33710.000	34100.000	32730.000	74.634%	-0.221
3	01:06:21	2.885	172.100	0.000	34080.000	34920.000	33560.000	74.303%	-0.003
X		4.606	169.700	0.000	33650.000	34150.000	32690.000	74.690%	-0.030
σ		3.199	2.090	0.000	467.500	742.800	887.900	0.418%	0.178
%RSD		69.450	1.232	0.000	1.390	2.175	2.716	0.560	587.100
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:05	2.212	0.859	0.144	-0.759	75.590	0.063	0.006	0.266
2	01:06:13	2.441	0.947	0.148	-0.719	86.460	0.027	0.053	0.240
3	01:06:21	1.763	0.815	0.156	-1.036	82.680	0.047	0.120	0.463
X		2.139	0.874	0.149	-0.838	81.580	0.045	0.060	0.323
σ		0.345	0.067	0.006	0.173	5.521	0.018	0.057	0.122
%RSD		16.130	7.700	4.069	20.590	6.768	39.850	95.420	37.730
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:05	0.193	0.998	1.237	1.389	0.874	39.830	0.000	653.400
2	01:06:13	0.274	0.856	0.909	1.253	0.755	43.510	0.000	632.800
3	01:06:21	0.251	0.957	0.804	1.445	0.525	38.400	0.000	637.800
X		0.240	0.937	0.983	1.362	0.718	40.580	0.000	641.300
σ		0.042	0.073	0.226	0.099	0.177	2.635	0.000	10.750
%RSD		17.430	7.826	22.990	7.259	24.700	6.494	0.000	1.676
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:05	69.088%	4.700	5.176	60.874%	-0.042	-0.025	-0.001	-0.037
2	01:06:13	72.025%	4.849	4.952	61.695%	-0.011	-0.026	-0.001	-0.017
3	01:06:21	71.720%	5.202	5.108	62.387%	-0.034	-0.021	-0.001	-0.027
X		70.944%	4.917	5.078	61.652%	-0.029	-0.024	-0.001	-0.027
σ		1.615%	0.258	0.115	0.757%	0.016	0.003	0.000	0.010
%RSD		2.276	5.237	2.264	1.228	56.840	10.570	6.839	36.620
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:06:05	65.447%	-0.999	0.481	0.434	5.519	6.202	73.383%	74.727%
2	01:06:13	66.200%	-0.981	0.545	0.331	5.468	5.499	73.827%	74.983%
3	01:06:21	67.834%	-0.936	0.494	0.451	4.946	5.576	74.808%	75.820%
X		66.494%	-0.972	0.507	0.405	5.311	5.759	74.006%	75.177%
σ		1.221%	0.033	0.034	0.065	0.317	0.386	0.729%	0.572%
%RSD		1.836	3.354	6.721	15.970	5.968	6.695	0.985	0.760
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:06:05	-0.079	-0.072	-0.002	0.037	0.002	67.016%		
2	01:06:13	-0.095	-0.071	0.011	0.038	0.009	66.652%		
3	01:06:21	-0.095	-0.078	-0.006	-0.018	0.000	67.106%		
X		-0.090	-0.074	0.001	0.019	0.004	66.925%		
σ		0.010	0.004	0.009	0.032	0.004	0.240%		
%RSD		10.670	4.995	696.800	171.900	119.400	0.359		

180-42893-D-21-A@10 4/27/2015 1:12:07 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	01:11:13	68.090%	0.105	286.600	298.200	0.000	957200.000	106400.000	105300.000
2	01:11:21	67.372%	0.238	293.300	313.800	0.000	978100.000	110900.000	108100.000
3	01:11:29	68.577%	-0.013	291.600	310.900	0.000	984600.000	109900.000	109600.000
X		68.013%	0.110	290.500	307.600	0.000	973300.000	109100.000	107700.000
σ		0.606%	0.125	3.465	8.300	0.000	14340.000	2353.000	2196.000
%RSD		0.891	114.200	1.193	2.698	0.000	1.473	2.157	2.039
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:13	3.056	180.000	0.000	29740.000	30700.000	29210.000	76.524%	-0.022
2	01:11:21	2.160	182.300	0.000	31070.000	32280.000	30560.000	75.287%	-0.154
3	01:11:29	2.816	177.200	0.000	30930.000	33050.000	31110.000	74.722%	0.281
X		2.677	179.800	0.000	30580.000	32010.000	30290.000	75.511%	0.035
σ		0.464	2.539	0.000	731.600	1198.000	978.500	0.921%	0.223
%RSD		17.330	1.412	0.000	2.392	3.744	3.230	1.220	642.300
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:13	3.228	0.875	0.132	-0.889	69.640	0.038	0.033	0.299
2	01:11:21	2.654	0.869	0.127	-0.884	82.260	0.039	0.086	0.391
3	01:11:29	2.671	0.830	0.182	-1.061	70.280	0.042	-0.078	0.284
X		2.851	0.858	0.147	-0.945	74.060	0.040	0.014	0.325
σ		0.327	0.024	0.031	0.101	7.109	0.002	0.084	0.058
%RSD		11.450	2.853	20.840	10.670	9.599	6.047	617.900	17.990
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:13	0.196	0.937	1.036	3.043	0.891	22.000	0.000	587.400
2	01:11:21	0.301	0.958	0.947	3.252	0.624	23.770	0.000	599.300
3	01:11:29	0.235	0.731	0.991	3.237	0.519	24.800	0.000	585.700
X		0.244	0.875	0.992	3.177	0.678	23.520	0.000	590.800
σ		0.053	0.126	0.045	0.117	0.192	1.420	0.000	7.434
%RSD		21.690	14.370	4.509	3.666	28.290	6.038	0.000	1.258
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:13	71.743%	5.433	5.121	61.200%	-0.033	-0.021	-0.000	-0.007
2	01:11:21	70.590%	4.901	5.618	61.360%	-0.038	-0.016	-0.001	-0.017
3	01:11:29	72.696%	5.828	5.183	61.610%	-0.029	-0.016	-0.001	-0.027
X		71.676%	5.387	5.307	61.390%	-0.033	-0.017	-0.001	-0.017
σ		1.055%	0.465	0.271	0.207%	0.005	0.003	0.000	0.010
%RSD		1.472	8.637	5.109	0.337	13.690	15.600	11.610	58.930
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:11:13	65.630%	-0.870	0.731	0.781	4.821	5.785	73.058%	74.102%
2	01:11:21	66.393%	-0.853	0.760	0.603	6.147	5.232	73.933%	74.971%
3	01:11:29	65.856%	-0.893	0.708	0.864	5.738	5.449	74.347%	75.467%
X		65.960%	-0.872	0.733	0.749	5.569	5.489	73.779%	74.847%
σ		0.392%	0.020	0.026	0.133	0.679	0.278	0.658%	0.691%
%RSD		0.595	2.298	3.575	17.800	12.190	5.073	0.892	0.923
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:11:13	-0.085	-0.068	-0.009	-0.003	-0.010	65.076%		
2	01:11:21	-0.089	-0.071	-0.022	-0.013	-0.019	65.725%		
3	01:11:29	-0.095	-0.074	-0.018	0.000	-0.009	66.591%		
X		-0.090	-0.071	-0.016	-0.005	-0.012	65.797%		
σ		0.005	0.003	0.007	0.007	0.006	0.760%		
%RSD		5.848	4.151	41.740	128.600	47.480	1.155		

180-42893-D-22-A@10 4/27/2015 1:17:15 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	01:16:23	68.550%	0.051	327.800	351.200	0.000	977800.000	111300.000	110300.000
2	01:16:30	71.044%	0.141	329.800	347.000	0.000	970600.000	110600.000	115200.000
3	01:16:38	66.520%	0.125	358.200	377.000	0.000	1015000.000	115400.000	114200.000
X		68.705%	0.106	338.600	358.400	0.000	987800.000	112400.000	113200.000
σ		2.266%	0.048	17.030	16.240	0.000	23870.000	2594.000	2553.000
%RSD		3.298	45.260	5.029	4.532	0.000	2.416	2.308	2.255
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:16:23	2.168	182.100	0.000	30170.000	31950.000	29960.000	75.998%	0.017
2	01:16:30	2.676	175.700	0.000	30830.000	32840.000	31080.000	75.432%	0.058
3	01:16:38	1.887	182.300	0.000	31680.000	33780.000	32240.000	74.341%	-0.183
X		2.243	180.000	0.000	30890.000	32860.000	31090.000	75.257%	-0.036
σ		0.400	3.776	0.000	756.800	913.800	1137.000	0.842%	0.129
%RSD		17.830	2.097	0.000	2.450	2.781	3.657	1.119	360.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:16:23	1.476	0.817	0.546	-1.187	78.360	0.023	-0.046	0.344
2	01:16:30	2.454	0.927	0.502	-1.212	70.490	0.027	0.136	0.294
3	01:16:38	2.432	0.985	0.541	-1.239	94.140	0.019	0.086	0.356
X		2.121	0.910	0.530	-1.213	81.000	0.023	0.059	0.332
σ		0.559	0.085	0.024	0.026	12.040	0.004	0.094	0.033
%RSD		26.340	9.381	4.555	2.168	14.870	17.410	159.800	9.898
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:16:23	0.362	0.692	0.795	1.649	0.908	23.250	0.000	619.700
2	01:16:30	0.401	0.912	0.889	1.832	0.721	26.640	0.000	624.300
3	01:16:38	0.434	0.829	0.796	1.476	0.658	24.560	0.000	609.900
X		0.399	0.811	0.827	1.652	0.762	24.820	0.000	618.000
σ		0.036	0.111	0.054	0.178	0.130	1.709	0.000	7.312
%RSD		9.042	13.720	6.512	10.770	17.010	6.884	0.000	1.183
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:16:23	70.247%	3.041	2.819	61.598%	-0.020	-0.030	-0.001	-0.037
2	01:16:30	70.256%	3.390	3.295	61.938%	-0.042	-0.011	0.024	-0.027
3	01:16:38	72.624%	3.147	3.264	62.545%	-0.034	-0.026	-0.001	-0.027
X		71.042%	3.193	3.126	62.027%	-0.032	-0.023	0.008	-0.030
σ		1.370%	0.179	0.266	0.480%	0.011	0.010	0.014	0.006
%RSD		1.928	5.612	8.509	0.773	35.930	43.960	185.900	18.610
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:16:23	66.514%	-0.971	0.416	0.418	4.731	4.268	73.577%	75.131%
2	01:16:30	67.360%	-0.944	0.397	0.455	5.095	4.700	74.295%	76.211%
3	01:16:38	66.695%	-0.994	0.331	0.362	4.911	4.267	75.078%	76.028%
X		66.856%	-0.970	0.381	0.411	4.913	4.412	74.317%	75.790%
σ		0.445%	0.025	0.045	0.047	0.182	0.250	0.751%	0.578%
%RSD		0.666	2.592	11.680	11.320	3.707	5.665	1.010	0.763
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:16:23	-0.089	-0.081	0.015	0.005	-0.002	66.577%		
2	01:16:30	-0.095	-0.078	-0.031	0.005	-0.010	67.141%		
3	01:16:38	-0.092	-0.079	-0.006	-0.014	-0.018	67.702%		
X		-0.092	-0.079	-0.007	-0.001	-0.010	67.140%		
σ		0.003	0.001	0.023	0.011	0.008	0.563%		
%RSD		3.644	1.730	322.600	735.100	77.550	0.838		

MB 180-139030/1-A 4/27/2015 1:26:22 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	01:25:31	78.819%	-0.015	0.853	1.704	0.000	357.200	2.326	1.986
2	01:25:38	80.812%	0.023	2.609	1.655	0.000	336.900	1.781	1.388
3	01:25:46	78.782%	-0.015	1.080	1.690	0.000	340.400	-0.795	0.187
X		79.471%	-0.002	1.514	1.683	0.000	344.800	1.104	1.187
σ		1.161%	0.022	0.955	0.025	0.000	10.830	1.667	0.916
%RSD		1.461	894.200	63.090	1.478	0.000	3.141	151.000	77.170
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:31	0.527	6.045	0.000	10.700	23.120	13.430	80.007%	-0.420
2	01:25:38	-0.280	3.112	0.000	19.240	-8.688	13.850	79.790%	-0.520
3	01:25:46	0.276	-0.307	0.000	10.610	0.927	10.910	79.313%	-0.451
X		0.175	2.950	0.000	13.520	5.118	12.730	79.703%	-0.464
σ		0.413	3.179	0.000	4.956	16.310	1.590	0.355%	0.051
%RSD		236.500	107.800	0.000	36.670	318.700	12.490	0.446	11.030
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:31	0.163	0.247	-0.013	-1.040	-1.617	-0.009	-0.072	0.116
2	01:25:38	0.320	0.228	-0.036	-0.983	1.955	-0.005	-0.148	0.183
3	01:25:46	-0.226	0.198	-0.022	-1.078	1.319	0.002	-0.118	0.098
X		0.085	0.224	-0.024	-1.034	0.552	-0.004	-0.113	0.133
σ		0.281	0.025	0.012	0.048	1.905	0.006	0.039	0.045
%RSD		329.300	11.010	48.890	4.630	344.900	148.800	34.340	33.680
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:31	0.087	0.042	0.172	0.021	0.361	-0.049	0.000	0.008
2	01:25:38	0.005	-0.026	0.143	-0.012	0.141	-2.284	0.000	0.012
3	01:25:46	0.029	0.154	0.171	-0.007	0.228	0.894	0.000	-0.001
X		0.040	0.056	0.162	0.000	0.243	-0.479	0.000	0.006
σ		0.042	0.091	0.016	0.018	0.111	1.632	0.000	0.007
%RSD		104.500	160.800	10.140	4076.000	45.450	340.400	0.000	113.500
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:31	76.004%	0.037	0.026	70.081%	-0.019	-0.018	-0.000	-0.037
2	01:25:38	76.391%	0.050	-0.006	70.188%	-0.019	-0.031	-0.001	-0.010
3	01:25:46	76.792%	0.049	0.082	70.135%	-0.019	-0.019	-0.001	-0.037
X		76.396%	0.045	0.034	70.135%	-0.019	-0.023	-0.001	-0.028
σ		0.394%	0.007	0.045	0.053%	0.000	0.007	0.000	0.016
%RSD		0.516	15.990	130.800	0.076	0.600	32.520	16.270	56.110
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:31	72.428%	-0.987	-0.010	-0.079	0.036	0.054	78.383%	78.709%
2	01:25:38	72.411%	-1.017	-0.022	-0.103	0.071	0.118	78.174%	79.611%
3	01:25:46	73.961%	-1.051	-0.040	-0.031	-0.000	0.032	78.111%	79.722%
X		72.933%	-1.018	-0.024	-0.071	0.035	0.068	78.223%	79.347%
σ		0.890%	0.032	0.015	0.036	0.036	0.045	0.142%	0.556%
%RSD		1.221	3.128	63.510	51.160	101.200	66.260	0.182	0.700
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:25:31	-0.072	-0.065	-0.029	-0.017	-0.036	76.519%		
2	01:25:38	-0.087	-0.059	-0.018	-0.021	-0.030	76.272%		
3	01:25:46	-0.081	-0.060	-0.018	-0.021	-0.029	75.961%		
X		-0.080	-0.061	-0.022	-0.020	-0.032	76.250%		
σ		0.007	0.003	0.006	0.002	0.003	0.279%		
%RSD		9.229	5.331	29.060	11.590	10.800	0.367		

LCS 180-139030/2-A 4/27/2015 1:31:28 AM

User Pre-dilution: 1.000

Run	Time	6Li ppb	9Be ppb	10B ppb	11B ppb	13C ppb	23Na ppb	25Mg ppb	26Mg ppb
1	01:30:35	69.380%	47.650	1033.000	1037.000	0.000	52990.000	47970.000	47850.000
2	01:30:43	71.587%	47.580	1006.000	1023.000	0.000	52470.000	48050.000	46870.000
3	01:30:51	69.964%	49.370	1056.000	1058.000	0.000	53930.000	49490.000	48160.000
X		70.310%	48.200	1032.000	1039.000	0.000	53130.000	48500.000	47630.000
σ		1.144%	1.012	25.390	17.510	0.000	740.200	854.800	676.100
%RSD		1.627	2.100	2.461	1.685	0.000	1.393	1.762	1.420
Run	Time	27Al ppb	28Si ppb	37Cl ppb	39K ppb	43Ca ppb	44Ca ppb	45Sc ppb	47Ti ppb
1	01:30:35	1955.000	9119.000	0.000	47250.000	44320.000	43130.000	68.584%	852.000
2	01:30:43	1926.000	9101.000	0.000	48450.000	46920.000	44820.000	67.782%	876.700
3	01:30:51	1975.000	9267.000	0.000	48830.000	48360.000	45550.000	67.547%	910.200
X		1952.000	9162.000	0.000	48180.000	46540.000	44500.000	67.971%	879.600
σ		25.050	91.370	0.000	825.700	2050.000	1238.000	0.544%	29.170
%RSD		1.283	0.997	0.000	1.714	4.405	2.781	0.800	3.316
Run	Time	51V ppb	52Cr ppb	55Mn ppb	56Fe ppb	57Fe ppb	59Co ppb	60Ni ppb	63Cu ppb
1	01:30:35	452.200	184.100	421.600	888.300	958.600	443.600	450.000	227.400
2	01:30:43	449.600	183.200	437.500	885.100	980.600	443.500	447.000	224.700
3	01:30:51	462.800	187.100	456.100	910.900	947.300	451.100	446.800	231.300
X		454.900	184.800	438.400	894.700	962.200	446.100	447.900	227.800
σ		6.962	2.033	17.310	14.070	16.890	4.359	1.781	3.303
%RSD		1.531	1.100	3.949	1.573	1.756	0.977	0.398	1.450
Run	Time	65Cu ppb	66Zn ppb	68Zn ppb	75As ppb	78Se ppb	82Se ppb	83Kr ppb	88Sr ppb
1	01:30:35	231.600	457.700	458.400	39.140	9.761	8.222	0.000	936.500
2	01:30:43	228.300	454.900	450.400	37.880	9.858	11.200	0.000	921.900
3	01:30:51	233.200	461.900	447.200	37.180	8.372	10.400	0.000	924.400
X		231.000	458.200	452.000	38.070	9.331	9.941	0.000	927.600
σ		2.518	3.524	5.771	0.989	0.831	1.541	0.000	7.793
%RSD		1.090	0.769	1.277	2.598	8.910	15.500	0.000	0.840
Run	Time	89Y ppb	95Mo ppb	98Mo ppb	103Rh ppb	107Ag ppb	109Ag ppb	111Cd ppb	114Cd ppb
1	01:30:35	63.892%	984.400	999.300	56.946%	48.240	46.930	49.400	87.850
2	01:30:43	65.967%	976.300	1007.000	57.548%	47.540	47.520	47.740	86.730
3	01:30:51	66.196%	975.000	1000.000	57.715%	46.760	47.430	47.880	87.610
X		65.351%	978.600	1002.000	57.403%	47.510	47.290	48.340	87.390
σ		1.269%	5.079	4.025	0.404%	0.740	0.320	0.923	0.590
%RSD		1.943	0.519	0.402	0.704	1.558	0.676	1.909	0.676
Run	Time	115In ppb	118Sn ppb	121Sb ppb	123Sb ppb	135Ba ppb	137Ba ppb	159Tb ppb	165Ho ppb
1	01:30:35	60.511%	1870.000	466.100	468.900	1849.000	1810.000	69.112%	70.677%
2	01:30:43	60.854%	1886.000	470.800	466.600	1839.000	1840.000	69.689%	71.678%
3	01:30:51	61.407%	1894.000	472.800	470.900	1840.000	1824.000	70.717%	72.063%
X		60.924%	1883.000	469.900	468.800	1843.000	1825.000	69.840%	71.473%
σ		0.452%	12.070	3.439	2.140	5.428	15.440	0.813%	0.715%
%RSD		0.742	0.641	0.732	0.457	0.295	0.846	1.164	1.001
Run	Time	203Tl ppb	205Tl ppb	206Pb ppb	207Pb ppb	208Pb ppb	209Bi ppb		
1	01:30:35	48.710	48.130	20.060	20.000	20.010	63.205%		
2	01:30:43	49.990	48.350	20.260	19.360	19.730	63.987%		
3	01:30:51	49.200	48.520	20.210	19.700	19.840	64.395%		
X		49.300	48.330	20.170	19.690	19.860	63.862%		
σ		0.647	0.197	0.106	0.318	0.142	0.605%		
%RSD		1.312	0.407	0.527	1.615	0.716	0.947		

180-42903-H-1-A@10 4/27/2015 1:36:33 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	01:35:40	65.411%	0.090	369.300	387.200	0.000	981000.000	109900.000	110300.000
2	01:35:48	64.077%	0.165	384.200	398.400	0.000	1009000.000	112200.000	112200.000
3	01:35:55	65.357%	0.037	387.600	398.000	0.000	987700.000	112600.000	111600.000
X		64.948%	0.097	380.400	394.500	0.000	992500.000	111600.000	111400.000
σ		0.755%	0.064	9.755	6.352	0.000	14400.000	1447.000	979.500
%RSD		1.163	66.000	2.564	1.610	0.000	1.451	1.297	0.879
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:40	40.930	242.900	0.000	29860.000	32030.000	30390.000	72.037%	1.581
2	01:35:48	40.460	246.400	0.000	29770.000	32630.000	31500.000	70.541%	1.516
3	01:35:55	41.520	246.700	0.000	30780.000	33900.000	32070.000	71.249%	2.058
X		40.970	245.300	0.000	30140.000	32850.000	31320.000	71.275%	1.718
σ		0.530	2.078	0.000	558.000	956.800	856.100	0.748%	0.296
%RSD		1.295	0.847	0.000	1.851	2.912	2.734	1.050	17.220
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:40	0.474	0.943	2.021	20.320	98.910	0.077	0.030	0.621
2	01:35:48	0.225	1.004	2.239	20.420	96.830	0.053	0.118	0.803
3	01:35:55	0.868	0.948	2.025	20.540	106.200	0.036	0.096	0.734
X		0.523	0.965	2.095	20.420	100.600	0.056	0.081	0.720
σ		0.324	0.034	0.125	0.109	4.908	0.021	0.046	0.092
%RSD		62.050	3.525	5.954	0.536	4.877	37.220	56.370	12.770
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:40	0.638	5.824	5.602	0.318	0.498	19.980	0.000	604.700
2	01:35:48	0.603	5.803	5.183	0.287	0.689	19.470	0.000	612.300
3	01:35:55	0.730	5.795	5.320	0.370	0.767	26.690	0.000	601.700
X		0.657	5.807	5.369	0.325	0.652	22.050	0.000	606.200
σ		0.066	0.015	0.214	0.042	0.138	4.026	0.000	5.439
%RSD		9.988	0.259	3.981	12.900	21.220	18.260	0.000	0.897
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:40	68.928%	4.945	5.498	60.322%	-0.028	-0.030	0.075	0.064
2	01:35:48	69.805%	5.115	4.418	61.063%	-0.038	-0.016	0.049	0.033
3	01:35:55	71.615%	3.853	4.092	61.858%	-0.033	-0.007	0.024	0.041
X		70.116%	4.638	4.669	61.081%	-0.033	-0.017	0.049	0.046
σ		1.370%	0.685	0.736	0.768%	0.005	0.012	0.025	0.016
%RSD		1.954	14.770	15.760	1.258	14.170	68.390	51.710	34.770
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:35:40	64.835%	3.184	0.329	0.187	5.044	5.415	73.288%	75.048%
2	01:35:48	65.600%	2.277	0.234	0.263	6.214	5.669	74.343%	75.471%
3	01:35:55	66.859%	1.757	0.229	0.266	4.921	5.172	74.476%	74.814%
X		65.765%	2.406	0.264	0.238	5.393	5.419	74.036%	75.111%
σ		1.022%	0.723	0.056	0.045	0.714	0.249	0.651%	0.333%
%RSD		1.554	30.030	21.310	18.800	13.230	4.590	0.879	0.444
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:35:40	0.013	-0.000	0.063	0.101	0.087	65.410%		
2	01:35:48	-0.042	-0.005	0.136	0.121	0.094	66.853%		
3	01:35:55	-0.049	-0.007	0.073	0.098	0.079	66.987%		
X		-0.026	-0.004	0.091	0.106	0.087	66.417%		
σ		0.034	0.004	0.039	0.013	0.007	0.874%		
%RSD		131.500	91.980	43.310	11.950	8.345	1.317		

CCV 1533080 4/27/2015 1:41:38 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	01:40:46	77.365%	92.360	98.560	97.690	0.000	52370.000	48660.000	47420.000
2	01:40:54	77.372%	91.450	91.670	98.450	0.000	53410.000	50000.000	48990.000
3	01:41:02	74.642%	98.250	105.600	101.300	0.000	55640.000	51280.000	50270.000
X		76.460%	94.019%	98.601%	99.159%	0.000	107.614%	99.966%	97.787%
σ		1.574%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.058	3.923	7.046	1.942	0.000	3.108	2.621	2.915
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:46	504.700	4790.000	0.000	48920.000	46080.000	44650.000	76.996%	90.380
2	01:40:54	520.700	4882.000	0.000	50240.000	47110.000	45660.000	75.517%	92.450
3	01:41:02	536.800	5034.000	0.000	50880.000	48890.000	47200.000	73.777%	94.900
X		104.146%	98.036%	0.000	100.031%	94.720%	91.676%	75.430%	92.578%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.611%	n/a
%RSD		3.083	2.517	0.000	1.997	3.000	2.794	2.136	2.443
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:46	90.530	90.020	451.600	23170.000	21650.000	89.310	87.760	90.540
2	01:40:54	93.010	92.540	465.200	23650.000	22100.000	89.210	90.980	93.210
3	01:41:02	94.960	95.280	479.900	24500.000	22910.000	93.240	95.600	93.990
X		92.834%	92.612%	93.111%	95.094%	88.872%	90.589%	91.447%	92.581%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.390	2.838	3.040	2.822	2.875	2.536	4.312	1.956
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:46	91.570	95.440	92.340	94.300	94.460	96.350	0.000	94.790
2	01:40:54	94.420	92.290	89.950	93.260	91.240	98.810	0.000	94.760
3	01:41:02	93.160	98.410	90.780	95.830	95.590	84.870	0.000	95.370
X		93.051%	95.378%	91.024%	94.467%	93.762%	93.347%	0.000	94.971%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.536	3.212	1.331	1.369	2.405	7.970	0.000	0.361
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:46	71.055%	93.190	95.540	63.979%	95.510	95.670	94.520	98.180
2	01:40:54	72.597%	96.210	96.580	64.152%	96.080	95.090	94.550	97.320
3	01:41:02	71.264%	98.390	100.200	65.117%	94.640	94.240	91.220	95.960
X		71.639%	95.929%	97.444%	64.416%	95.409%	95.000%	93.433%	97.153%
σ		0.837%	n/a	n/a	0.613%	n/a	n/a	n/a	n/a
%RSD		1.168	2.724	2.518	0.952	0.761	0.756	2.048	1.150
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:40:46	67.188%	93.790	92.680	94.360	98.840	93.680	74.813%	76.270%
2	01:40:54	67.580%	95.550	94.400	92.420	96.680	95.640	75.593%	75.846%
3	01:41:02	69.266%	93.450	91.240	94.480	96.110	94.710	75.203%	77.855%
X		68.011%	94.264%	92.773%	93.752%	97.211%	94.674%	75.203%	76.657%
σ		1.104%	n/a	n/a	n/a	n/a	n/a	0.390%	1.059%
%RSD		1.623	1.194	1.704	1.236	1.484	1.033	0.519	1.382
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:40:46	97.990	95.770	97.860	98.460	98.300	69.944%		
2	01:40:54	99.460	96.530	99.240	97.580	98.040	70.366%		
3	01:41:02	97.970	95.350	96.430	96.540	96.990	70.912%		
X		98.476%	95.883%	97.843%	97.527%	97.775%	70.408%		
σ		n/a	n/a	n/a	n/a	n/a	0.485%		
%RSD		0.866	0.628	1.436	0.984	0.704	0.689		

CCB5 4/27/2015 1:50:48 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	01:49:56	87.917%	-0.095	1.215	1.140	0.000	214.000	9.180	7.232
2	01:50:03	88.413%	0.043	1.330	1.132	0.000	218.400	13.800	9.075
3	01:50:11	87.466%	-0.034	1.436	1.433	0.000	218.500	8.379	9.779
X		87.932%	-0.029	1.327	1.235	0.000	217.000	10.450	8.695
σ		0.474%	0.069	0.110	0.172	0.000	2.587	2.929	1.316
%RSD		0.539	242.800	8.302	13.900	0.000	1.192	28.010	15.130
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:56	2.443	1.167	0.000	-38.620	16.470	16.550	87.423%	-0.289
2	01:50:03	2.883	-2.832	0.000	-32.930	34.350	12.040	86.511%	-0.440
3	01:50:11	3.149	-4.103	0.000	-34.260	27.190	10.740	86.821%	-0.318
X		2.825	-1.923	0.000	-35.270	26.000	13.110	86.918%	-0.349
σ		0.357	2.750	0.000	2.979	9.001	3.052	0.464%	0.080
%RSD		12.630	143.100	0.000	8.447	34.610	23.280	0.533	22.960
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:56	0.112	0.025	0.137	10.390	11.810	0.005	-0.072	0.169
2	01:50:03	0.120	-0.014	0.137	9.855	8.938	0.008	-0.141	0.149
3	01:50:11	0.052	0.004	0.132	8.975	10.640	0.008	-0.100	0.174
X		0.095	0.005	0.135	9.741	10.460	0.007	-0.104	0.164
σ		0.037	0.020	0.003	0.716	1.444	0.002	0.035	0.013
%RSD		39.370	378.500	2.043	7.354	13.800	28.260	33.440	8.157
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:56	-0.061	-0.180	0.001	0.068	0.400	0.944	0.000	0.030
2	01:50:03	0.002	-0.097	-0.100	0.064	0.321	-1.047	0.000	0.054
3	01:50:11	0.054	0.002	0.102	0.067	0.279	0.131	0.000	0.026
X		-0.002	-0.092	0.001	0.067	0.333	0.009	0.000	0.037
σ		0.058	0.091	0.101	0.002	0.062	1.001	0.000	0.015
%RSD		3038.000	99.270	10200.000	3.236	18.460	10690.000	0.000	42.080
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:56	84.930%	0.508	0.499	80.675%	-0.016	-0.007	-0.001	-0.014
2	01:50:03	85.270%	0.368	0.452	81.494%	-0.026	-0.014	0.037	0.008
3	01:50:11	86.220%	0.401	0.318	81.042%	-0.019	0.008	-0.001	-0.022
X		85.473%	0.426	0.423	81.071%	-0.020	-0.004	0.012	-0.009
σ		0.668%	0.073	0.094	0.410%	0.005	0.011	0.022	0.016
%RSD		0.782	17.220	22.130	0.506	26.770	251.700	182.100	171.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:56	85.293%	-0.840	0.141	0.089	-0.036	0.008	88.730%	89.252%
2	01:50:03	86.915%	-0.791	0.102	0.030	0.025	0.062	90.849%	90.776%
3	01:50:11	86.925%	-0.717	0.102	0.092	0.025	0.026	90.276%	91.494%
X		86.377%	-0.783	0.115	0.070	0.005	0.032	89.952%	90.507%
σ		0.940%	0.062	0.022	0.035	0.035	0.028	1.096%	1.145%
%RSD		1.088	7.901	19.270	49.260	771.200	86.790	1.219	1.265
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:49:56	0.013	0.027	-0.002	-0.023	-0.013	84.346%		
2	01:50:03	-0.008	0.024	-0.018	-0.027	-0.029	84.167%		
3	01:50:11	-0.049	0.004	-0.006	0.002	-0.012	85.211%		
X		-0.015	0.018	-0.009	-0.016	-0.018	84.575%		
σ		0.031	0.012	0.009	0.016	0.010	0.559%		
%RSD		212.500	67.800	101.500	99.230	52.590	0.660		

180-42903-I-1-A@10 4/27/2015 1:55:56 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	01:55:02	65.143%	0.024	375.100	391.700	0.000	1032000.000	116900.000	120900.000
2	01:55:10	65.377%	0.104	375.900	402.900	0.000	1043000.000	117900.000	116000.000
3	01:55:18	64.512%	0.067	383.600	411.300	0.000	1066000.000	120700.000	120600.000
X		65.011%	0.065	378.200	402.000	0.000	1047000.000	118500.000	119100.000
σ		0.448%	0.040	4.668	9.835	0.000	17420.000	1979.000	2766.000
%RSD		0.689	61.200	1.234	2.447	0.000	1.664	1.670	2.321
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	3.713	157.500	0.000	31510.000	32810.000	31200.000	69.887%	0.117
2	01:55:10	3.505	159.900	0.000	31630.000	34430.000	32460.000	70.151%	0.229
3	01:55:18	3.062	159.500	0.000	32200.000	34860.000	33120.000	69.029%	0.516
X		3.426	159.000	0.000	31780.000	34030.000	32260.000	69.689%	0.287
σ		0.333	1.309	0.000	370.200	1083.000	971.900	0.587%	0.205
%RSD		9.708	0.823	0.000	1.165	3.182	3.013	0.842	71.500
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	0.201	0.641	0.762	5.100	84.630	0.016	0.018	0.780
2	01:55:10	-0.165	0.701	0.694	4.898	89.650	0.028	0.084	0.721
3	01:55:18	0.138	0.772	0.818	4.097	79.630	0.008	0.070	0.551
X		0.058	0.704	0.758	4.698	84.640	0.018	0.057	0.684
σ		0.196	0.065	0.062	0.531	5.013	0.010	0.035	0.119
%RSD		338.200	9.280	8.190	11.290	5.923	58.610	60.930	17.370
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	0.311	2.464	2.145	0.404	0.600	31.860	0.000	624.100
2	01:55:10	0.396	2.327	2.434	0.416	0.684	30.820	0.000	624.400
3	01:55:18	0.582	2.547	2.387	0.448	0.829	30.340	0.000	625.500
X		0.429	2.446	2.322	0.423	0.704	31.010	0.000	624.700
σ		0.138	0.111	0.155	0.023	0.116	0.778	0.000	0.759
%RSD		32.180	4.537	6.665	5.413	16.440	2.510	0.000	0.121
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	68.902%	2.221	2.424	59.771%	-0.024	-0.030	0.025	0.024
2	01:55:10	70.564%	2.253	2.277	60.413%	-0.019	-0.011	0.024	0.043
3	01:55:18	70.779%	2.408	2.028	61.212%	-0.020	-0.021	0.024	0.003
X		70.081%	2.294	2.243	60.465%	-0.021	-0.021	0.024	0.023
σ		1.027%	0.100	0.200	0.722%	0.002	0.010	0.000	0.020
%RSD		1.465	4.345	8.920	1.194	11.540	47.560	1.394	86.920
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:02	64.267%	-0.574	0.372	0.271	5.118	5.214	72.995%	73.776%
2	01:55:10	65.389%	-0.554	0.313	0.157	5.748	4.703	73.601%	74.625%
3	01:55:18	66.425%	-0.790	0.250	0.197	5.722	4.642	75.117%	75.290%
X		65.360%	-0.639	0.312	0.208	5.529	4.853	73.904%	74.563%
σ		1.079%	0.131	0.061	0.057	0.357	0.314	1.093%	0.759%
%RSD		1.651	20.450	19.620	27.590	6.448	6.473	1.479	1.018
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:55:02	-0.014	0.018	-0.009	0.001	0.000	65.524%		
2	01:55:10	-0.011	-0.002	-0.014	0.024	0.017	66.099%		
3	01:55:18	-0.052	-0.009	0.002	0.028	0.000	67.231%		
X		-0.026	0.002	-0.007	0.018	0.006	66.285%		
σ		0.023	0.014	0.008	0.014	0.010	0.869%		
%RSD		89.170	609.600	122.500	82.130	165.400	1.310		

180-42903-H-2-A@10 4/27/2015 2:01:01 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	02:00:08	67.060%	0.122	370.700	393.000	0.000	995800.000	112800.000	112700.000	
2	02:00:16	65.790%	0.155	390.400	404.100	0.000	1016000.000	115700.000	114400.000	
3	02:00:23	67.456%	0.120	387.400	404.900	0.000	1004000.000	113800.000	112700.000	
X		66.769%	0.133	382.800	400.700	0.000	1005000.000	114100.000	113300.000	
		σ	0.870%	10.630	6.680	0.000	10180.000	1464.000	957.400	
		%RSD	1.304	2.777	1.667	0.000	1.013	1.283	0.845	
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:00:08	20.720	187.600	0.000	29980.000	32330.000	30140.000	74.808%	0.029	
2	02:00:16	18.920	190.700	0.000	30950.000	33540.000	31390.000	73.538%	0.296	
3	02:00:23	18.190	183.500	0.000	30710.000	33550.000	32050.000	73.676%	0.076	
X		19.280	187.300	0.000	30550.000	33140.000	31190.000	74.007%	0.134	
		σ	1.300	3.595	502.400	698.700	971.400	0.697%	0.143	
		%RSD	6.744	1.920	0.000	1.645	2.108	3.114	0.942	106.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:00:08	-0.139	0.602	1.816	9.077	86.540	0.023	0.038	0.753	
2	02:00:16	-0.591	0.675	1.752	8.829	98.140	0.003	0.106	0.671	
3	02:00:23	-0.214	0.685	1.874	9.418	86.830	0.015	0.139	0.769	
X		-0.315	0.654	1.814	9.108	90.500	0.014	0.095	0.731	
		σ	0.242	0.045	0.061	0.296	6.615	0.010	0.052	
		%RSD	76.950	6.882	3.353	3.251	7.309	72.090	54.280	7.176
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:00:08	0.490	2.966	2.668	0.324	0.532	39.930	0.000	612.100	
2	02:00:16	0.491	2.511	3.648	0.341	0.903	41.880	0.000	609.000	
3	02:00:23	0.603	2.921	3.092	0.381	0.763	41.650	0.000	613.400	
X		0.528	2.799	3.136	0.349	0.733	41.150	0.000	611.500	
		σ	0.065	0.251	0.491	0.030	0.187	1.070	2.260	
		%RSD	12.340	8.947	15.660	8.464	25.520	2.599	0.370	
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:00:08	70.421%	2.200	2.033	61.149%	-0.020	-0.030	0.024	0.022	
2	02:00:16	71.493%	2.054	1.905	62.000%	-0.024	-0.021	0.048	0.051	
3	02:00:23	71.374%	2.158	2.107	61.829%	-0.038	-0.026	0.073	0.022	
X		71.096%	2.137	2.015	61.659%	-0.027	-0.026	0.048	0.032	
		σ	0.588%	0.075	0.102	0.450%	0.010	0.005	0.017	
		%RSD	0.826	3.507	5.073	0.730	34.930	18.470	52.880	
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:00:08	66.258%	-0.842	0.194	0.313	4.815	5.640	73.691%	75.104%	
2	02:00:16	66.786%	-0.877	0.242	0.266	5.499	5.017	74.394%	75.181%	
3	02:00:23	66.988%	-0.836	0.242	0.143	5.808	5.114	73.995%	76.336%	
X		66.677%	-0.852	0.226	0.241	5.374	5.257	74.027%	75.541%	
		σ	0.377%	0.022	0.028	0.088	0.508	0.335	0.690%	
		%RSD	0.565	2.629	12.310	36.520	9.451	6.375	0.476	0.914
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	02:00:08	-0.069	-0.048	0.044	0.051	0.041	67.092%			
2	02:00:16	-0.072	-0.055	0.085	0.037	0.039	67.280%			
3	02:00:23	-0.039	-0.056	0.052	0.042	0.043	66.997%			
X		-0.060	-0.053	0.060	0.043	0.041	67.123%			
		σ	0.018	0.004	0.022	0.007	0.002	0.144%		
		%RSD	30.430	8.462	35.940	16.570	4.193	0.215		

180-42903-I-2-A@10

4/27/2015 2:06:07 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	02:05:14	66.662%	0.190	396.900	407.800	0.000	1024000.000	115200.000	119200.000	
2	02:05:22	68.044%	0.234	377.600	408.200	0.000	1019000.000	117000.000	114700.000	
3	02:05:29	66.783%	0.255	397.600	420.600	0.000	1060000.000	119200.000	122500.000	
X		67.163%	0.226	390.700	412.200	0.000	1034000.000	117100.000	118800.000	
		σ	0.765%	0.033	11.360	7.279	0.000	22830.000	1998.000	3895.000
		%RSD	1.140	14.630	2.909	1.766	0.000	2.207	1.706	3.279
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:05:14	1.321	154.900	0.000	31550.000	33600.000	31670.000	74.182%	0.215	
2	02:05:22	1.699	153.800	0.000	31680.000	33630.000	32380.000	74.282%	0.358	
3	02:05:29	3.349	152.500	0.000	32580.000	35220.000	33320.000	72.617%	0.124	
X		2.123	153.700	0.000	31940.000	34150.000	32460.000	73.694%	0.233	
		σ	1.078	1.175	0.000	562.400	929.300	824.800	0.934%	0.118
		%RSD	50.800	0.765	0.000	1.761	2.721	2.541	1.267	50.790
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:05:14	0.162	0.822	0.398	-0.609	78.400	0.015	0.025	0.811	
2	02:05:22	0.952	0.898	0.520	-0.618	99.610	0.015	0.156	0.541	
3	02:05:29	-0.097	0.865	0.534	-0.813	92.060	0.040	-0.024	0.553	
X		0.339	0.862	0.484	-0.680	90.020	0.023	0.052	0.635	
		σ	0.546	0.038	0.075	0.115	10.750	0.014	0.093	0.153
		%RSD	161.300	4.451	15.450	16.940	11.940	60.190	178.800	24.050
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:05:14	0.322	1.813	2.248	0.334	0.494	96.400	0.000	634.600	
2	02:05:22	0.292	2.083	2.598	0.379	0.912	100.900	0.000	631.200	
3	02:05:29	0.320	1.998	2.121	0.314	0.625	89.150	0.000	633.100	
X		0.311	1.965	2.322	0.342	0.677	95.500	0.000	633.000	
		σ	0.016	0.138	0.247	0.033	0.214	5.940	0.000	1.717
		%RSD	5.294	7.037	10.640	9.781	31.580	6.220	0.000	0.271
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:05:14	69.137%	2.189	1.903	60.558%	-0.033	-0.011	0.025	0.014	
2	02:05:22	70.369%	1.925	2.283	61.314%	-0.024	-0.011	0.024	-0.007	
3	02:05:29	71.296%	2.308	2.261	61.450%	-0.020	-0.021	-0.001	-0.017	
X		70.267%	2.141	2.149	61.107%	-0.026	-0.014	0.016	-0.003	
		σ	1.083%	0.196	0.213	0.480%	0.007	0.006	0.014	0.016
		%RSD	1.541	9.151	9.930	0.786	26.670	41.350	89.540	463.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:05:14	64.605%	-0.864	0.207	0.179	5.411	5.924	73.150%	73.683%	
2	02:05:22	65.634%	-0.902	0.164	0.184	5.130	5.362	73.127%	74.820%	
3	02:05:29	66.419%	-0.971	0.175	0.101	5.762	5.526	72.788%	74.288%	
X		65.553%	-0.912	0.182	0.155	5.434	5.604	73.022%	74.264%	
		σ	0.910%	0.054	0.022	0.046	0.317	0.289	0.203%	0.569%
		%RSD	1.388	5.949	12.190	29.810	5.831	5.160	0.277	0.766
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	02:05:14	-0.078	-0.054	-0.009	-0.018	-0.013	65.563%			
2	02:05:22	-0.078	-0.055	-0.000	0.006	-0.010	65.488%			
3	02:05:29	-0.075	-0.046	-0.022	-0.018	-0.009	65.889%			
X		-0.077	-0.052	-0.010	-0.010	-0.011	65.647%			
		σ	0.002	0.005	0.011	0.014	0.002	0.213%		
		%RSD	2.447	10.170	103.100	136.200	19.410	0.325		

180-42903-H-3-A@10 4/27/2015 2:11:12 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	02:10:18	67.732%	0.132	372.300	384.300	0.000	1006000.000	113600.000	111600.000	
2	02:10:26	67.757%	0.132	379.100	398.200	0.000	1009000.000	115500.000	118300.000	
3	02:10:34	66.982%	0.031	388.600	412.100	0.000	1033000.000	116000.000	114800.000	
X		67.490%	0.098	380.000	398.200	0.000	1016000.000	115000.000	114900.000	
		σ	0.440%	0.058	8.188	13.900	0.000	14520.000	1297.000	3305.000
		%RSD	0.652	59.240	2.155	3.490	0.000	1.429	1.128	2.877
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:10:18	1.585	152.800	0.000	30190.000	31140.000	29930.000	75.374%	0.272	
2	02:10:26	2.589	151.400	0.000	31140.000	32800.000	31310.000	73.907%	0.219	
3	02:10:34	2.737	150.200	0.000	31420.000	33790.000	32120.000	73.308%	0.190	
X		2.304	151.500	0.000	30920.000	32580.000	31120.000	74.196%	0.227	
		σ	0.627	1.325	0.000	641.800	1338.000	1109.000	1.063%	0.042
		%RSD	27.210	0.875	0.000	2.076	4.109	3.562	1.433	18.480
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:10:18	0.575	0.876	0.430	1.375	79.060	0.023	0.038	0.525	
2	02:10:26	0.963	0.873	0.439	1.203	81.930	0.011	0.091	0.572	
3	02:10:34	0.951	0.911	0.484	1.249	87.700	0.023	-0.009	0.617	
X		0.829	0.886	0.451	1.275	82.890	0.019	0.040	0.571	
		σ	0.221	0.021	0.029	0.089	4.400	0.007	0.050	0.046
		%RSD	26.610	2.372	6.350	6.998	5.308	35.620	124.000	8.045
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:10:18	0.491	2.706	1.563	0.381	0.916	39.970	0.000	610.100	
2	02:10:26	0.522	2.880	2.638	0.297	1.014	38.730	0.000	617.800	
3	02:10:34	0.558	2.140	2.758	0.334	0.627	43.000	0.000	609.000	
X		0.524	2.575	2.320	0.337	0.852	40.570	0.000	612.300	
		σ	0.034	0.387	0.658	0.042	0.201	2.195	0.000	4.819
		%RSD	6.401	15.020	28.380	12.380	23.630	5.410	0.000	0.787
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:10:18	69.620%	2.177	1.950	59.908%	-0.042	-0.015	0.025	-0.027	
2	02:10:26	69.759%	1.915	1.950	60.664%	-0.029	-0.016	0.049	0.003	
3	02:10:34	70.851%	2.146	1.870	61.388%	-0.029	-0.040	0.049	0.013	
X		70.077%	2.079	1.923	60.653%	-0.033	-0.024	0.041	-0.003	
		σ	0.674%	0.143	0.046	0.740%	0.008	0.014	0.014	0.021
		%RSD	0.962	6.871	2.406	1.220	23.890	59.990	34.710	602.800
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:10:18	65.023%	-0.997	0.219	0.169	5.355	5.363	71.831%	73.532%	
2	02:10:26	65.337%	-0.901	0.191	0.122	5.485	4.851	73.411%	73.965%	
3	02:10:34	65.482%	-0.859	0.132	0.121	5.262	5.451	74.101%	74.364%	
X		65.281%	-0.919	0.180	0.137	5.367	5.222	73.114%	73.954%	
		σ	0.235%	0.071	0.044	0.027	0.112	0.324	1.164%	0.416%
		%RSD	0.360	7.717	24.530	19.870	2.080	6.211	1.592	0.563
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	02:10:18	-0.075	-0.064	-0.000	0.040	0.014	64.989%			
2	02:10:26	-0.078	-0.056	0.013	0.011	0.014	64.410%			
3	02:10:34	-0.088	-0.064	-0.000	0.039	0.010	65.352%			
X		-0.080	-0.061	0.004	0.030	0.013	64.917%			
		σ	0.007	0.004	0.008	0.016	0.002	0.475%		
		%RSD	8.926	6.965	181.700	53.810	19.530	0.732		

180-42903-I-3-A@10 4/27/2015 2:16:20 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	02:15:28	66.692%	0.085	366.100	385.400	0.000	1000000.000	111200.000	110300.000
2	02:15:36	67.001%	0.044	372.500	389.500	0.000	987300.000	111300.000	110000.000
3	02:15:43	67.681%	0.016	366.500	397.000	0.000	986400.000	110200.000	109200.000
X		67.125%	0.048	368.400	390.600	0.000	991300.000	110900.000	109800.000
σ		0.506%	0.035	3.605	5.906	0.000	7561.000	647.100	596.100
%RSD		0.754	72.020	0.979	1.512	0.000	0.763	0.584	0.543
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:15:28	18.450	186.100	0.000	29530.000	31180.000	29870.000	74.777%	0.136
2	02:15:36	17.950	188.800	0.000	30190.000	32220.000	30600.000	74.053%	0.289
3	02:15:43	19.160	184.600	0.000	30260.000	32890.000	31580.000	73.905%	0.545
X		18.520	186.500	0.000	30000.000	32100.000	30680.000	74.245%	0.324
σ		0.610	2.160	0.000	401.600	859.400	860.300	0.467%	0.207
%RSD		3.294	1.158	0.000	1.339	2.677	2.804	0.629	63.810
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:15:28	-0.369	0.782	1.604	7.603	88.460	0.015	0.092	0.747
2	02:15:36	0.400	0.900	1.718	8.595	89.090	0.027	0.023	0.651
3	02:15:43	0.739	0.901	1.803	8.230	88.870	0.043	0.073	0.822
X		0.257	0.861	1.708	8.143	88.810	0.028	0.062	0.740
σ		0.568	0.068	0.100	0.502	0.324	0.014	0.036	0.086
%RSD		221.300	7.938	5.836	6.163	0.364	48.920	56.830	11.600
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:15:28	0.361	2.922	2.598	0.225	0.498	22.890	0.000	612.200
2	02:15:36	0.591	2.656	2.610	0.268	0.906	27.140	0.000	593.500
3	02:15:43	0.704	2.441	2.399	0.283	0.859	26.960	0.000	594.300
X		0.552	2.673	2.536	0.259	0.755	25.660	0.000	600.000
σ		0.175	0.241	0.118	0.030	0.223	2.407	0.000	10.560
%RSD		31.700	9.008	4.657	11.620	29.590	9.378	0.000	1.761
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:15:28	68.185%	2.174	1.892	59.786%	-0.033	-0.020	0.025	0.004
2	02:15:36	70.967%	2.116	1.914	61.358%	-0.024	-0.025	-0.001	0.013
3	02:15:43	70.996%	1.802	1.807	61.301%	-0.042	0.003	0.024	0.022
X		70.050%	2.031	1.871	60.815%	-0.033	-0.014	0.016	0.013
σ		1.615%	0.200	0.057	0.892%	0.009	0.015	0.014	0.009
%RSD		2.305	9.863	3.027	1.467	27.720	109.600	90.070	70.240
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:15:28	64.346%	-0.895	0.129	0.098	4.485	5.163	73.008%	73.417%
2	02:15:36	65.177%	-0.954	0.152	0.185	4.753	5.232	73.402%	74.725%
3	02:15:43	66.276%	-1.013	0.136	0.163	5.426	5.518	73.849%	74.417%
X		65.266%	-0.954	0.139	0.149	4.888	5.304	73.420%	74.186%
σ		0.968%	0.059	0.012	0.045	0.485	0.188	0.421%	0.684%
%RSD		1.483	6.198	8.646	30.400	9.916	3.549	0.573	0.922
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:15:28	-0.085	-0.069	0.052	0.026	0.036	64.539%		
2	02:15:36	-0.092	-0.055	0.068	0.087	0.060	65.339%		
3	02:15:43	-0.079	-0.065	0.075	0.019	0.041	66.248%		
X		-0.085	-0.063	0.065	0.044	0.045	65.375%		
σ		0.007	0.007	0.012	0.037	0.013	0.855%		
%RSD		7.845	11.430	17.900	84.640	27.620	1.308		

180-42903-H-4-A@10 4/27/2015 2:21:28 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	02:20:36	67.698%	0.236	379.700	396.400	0.000	1020000.000	116000.000	120500.000	
2	02:20:44	67.421%	0.056	384.700	410.300	0.000	1035000.000	117300.000	123400.000	
3	02:20:52	66.115%	0.154	400.100	424.600	0.000	1060000.000	118800.000	123200.000	
X		67.078%	0.148	388.200	410.400	0.000	1038000.000	117400.000	122400.000	
		σ	0.845%	0.090	10.630	14.130	0.000	20200.000	1384.000	1625.000
		%RSD	1.260	60.860	2.739	3.442	0.000	1.946	1.179	1.328
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:20:36	31.400	224.400	0.000	31050.000	32870.000	31160.000	76.067%	0.475	
2	02:20:44	31.650	225.400	0.000	31400.000	33920.000	32540.000	74.942%	0.564	
3	02:20:52	34.300	227.100	0.000	31780.000	34540.000	33020.000	74.258%	0.647	
X		32.450	225.600	0.000	31410.000	33780.000	32240.000	75.089%	0.562	
		σ	1.606	1.395	0.000	368.100	845.500	964.800	0.914%	0.086
		%RSD	4.949	0.618	0.000	1.172	2.503	2.993	1.217	15.370
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:20:36	0.083	0.839	1.645	15.790	101.000	0.054	0.021	0.684	
2	02:20:44	0.339	0.896	1.948	15.540	89.830	0.039	0.071	0.771	
3	02:20:52	0.534	1.066	1.988	15.670	97.780	0.011	0.005	0.699	
X		0.319	0.934	1.860	15.670	96.210	0.035	0.032	0.718	
		σ	0.226	0.119	0.188	0.126	5.756	0.022	0.034	0.046
		%RSD	71.030	12.690	10.080	0.802	5.983	63.050	106.200	6.419
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:20:36	0.575	2.574	2.808	0.330	0.583	30.610	0.000	637.000	
2	02:20:44	0.662	2.958	2.823	0.273	0.907	24.040	0.000	625.400	
3	02:20:52	0.749	3.242	2.605	0.271	0.760	29.680	0.000	632.500	
X		0.662	2.925	2.745	0.291	0.750	28.110	0.000	631.600	
		σ	0.087	0.335	0.122	0.033	3.557	0.000	5.864	
		%RSD	13.100	11.450	4.444	11.480	21.610	12.650	0.928	
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:20:36	69.483%	1.987	2.086	60.051%	-0.038	-0.035	0.025	0.014	
2	02:20:44	70.613%	2.062	1.961	60.609%	-0.038	-0.030	0.024	0.013	
3	02:20:52	71.485%	1.995	2.137	61.260%	-0.047	-0.016	0.049	0.003	
X		70.527%	2.015	2.062	60.640%	-0.041	-0.027	0.033	0.010	
		σ	1.004%	0.041	0.091	0.605%	0.005	0.010	0.014	0.006
		%RSD	1.423	2.038	4.391	0.998	13.120	37.110	43.120	61.260
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	02:20:36	64.985%	-0.931	0.225	0.115	5.059	5.505	72.547%	74.102%	
2	02:20:44	65.671%	-1.086	0.202	0.165	5.229	5.203	73.620%	74.360%	
3	02:20:52	65.964%	-1.141	0.182	0.084	5.462	5.004	74.381%	75.080%	
X		65.540%	-1.053	0.203	0.121	5.250	5.237	73.516%	74.514%	
		σ	0.502%	0.109	0.022	0.041	0.202	0.252	0.922%	0.507%
		%RSD	0.767	10.340	10.650	33.780	3.852	4.810	1.254	0.680
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	02:20:36	-0.088	-0.064	0.042	0.044	0.046	65.322%			
2	02:20:44	-0.085	-0.064	0.115	0.065	0.059	66.758%			
3	02:20:52	-0.095	-0.067	0.033	0.043	0.024	66.219%			
X		-0.090	-0.065	0.063	0.051	0.043	66.100%			
		σ	0.005	0.002	0.045	0.013	0.018	0.726%		
		%RSD	5.692	2.564	71.420	25.160	40.700	1.098		

180-42903-I-4-A@10 4/27/2015 2:26:36 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	02:25:44	67.697%	0.210	374.500	398.200	0.000	1021000.000	114800.000	112600.000
2	02:25:51	66.658%	0.150	392.500	410.300	0.000	1040000.000	118500.000	122700.000
3	02:25:59	66.149%	0.127	397.400	425.500	0.000	1068000.000	118900.000	124700.000
X		66.835%	0.162	388.100	411.300	0.000	1043000.000	117400.000	120000.000
σ		0.789%	0.043	12.030	13.660	0.000	23300.000	2258.000	6495.000
%RSD		1.180	26.340	3.101	3.320	0.000	2.234	1.923	5.412
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:25:44	3.641	163.000	0.000	31220.000	32120.000	30890.000	75.390%	-0.084
2	02:25:51	2.921	162.800	0.000	31610.000	33720.000	32050.000	74.406%	0.537
3	02:25:59	3.815	159.500	0.000	31630.000	33720.000	32700.000	74.446%	0.032
X		3.459	161.800	0.000	31480.000	33190.000	31880.000	74.747%	0.162
σ		0.474	1.950	0.000	228.100	927.800	917.200	0.557%	0.330
%RSD		13.710	1.205	0.000	0.725	2.796	2.877	0.746	203.900
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:25:44	-0.586	0.836	0.450	0.160	87.940	0.015	0.122	0.731
2	02:25:51	-0.240	0.920	0.443	-0.022	88.920	0.007	0.023	0.631
3	02:25:59	0.394	0.929	0.416	0.402	99.250	0.011	-0.060	0.655
X		-0.144	0.895	0.436	0.180	92.040	0.011	0.028	0.672
σ		0.497	0.051	0.018	0.213	6.266	0.004	0.091	0.052
%RSD		345.000	5.735	4.192	118.300	6.808	35.610	325.200	7.728
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:25:44	0.581	2.767	2.364	0.212	1.208	33.780	0.000	625.100
2	02:25:51	0.541	2.633	2.551	0.264	0.579	34.370	0.000	623.300
3	02:25:59	0.465	2.458	2.434	0.278	1.047	29.480	0.000	623.600
X		0.529	2.619	2.450	0.251	0.945	32.540	0.000	624.000
σ		0.059	0.155	0.094	0.035	0.327	2.667	0.000	0.988
%RSD		11.140	5.910	3.855	13.800	34.590	8.194	0.000	0.158
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:25:44	69.053%	2.212	1.867	60.123%	-0.024	-0.035	0.126	-0.006
2	02:25:51	70.572%	1.801	2.085	60.780%	-0.038	-0.025	0.049	0.013
3	02:25:59	70.834%	2.125	2.007	60.908%	-0.024	-0.025	0.049	-0.027
X		70.153%	2.046	1.986	60.604%	-0.028	-0.029	0.075	-0.007
σ		0.961%	0.217	0.111	0.421%	0.008	0.006	0.044	0.020
%RSD		1.371	10.600	5.569	0.695	28.300	19.490	59.300	292.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:25:44	64.587%	-1.116	0.148	0.062	5.403	5.772	72.208%	72.796%
2	02:25:51	65.894%	-0.936	0.138	0.210	5.172	5.251	72.639%	73.153%
3	02:25:59	65.628%	-0.946	0.177	0.219	5.465	5.416	73.573%	74.512%
X		65.370%	-0.999	0.154	0.163	5.347	5.480	72.807%	73.487%
σ		0.691%	0.101	0.020	0.088	0.155	0.266	0.697%	0.905%
%RSD		1.057	10.130	13.110	53.980	2.892	4.858	0.958	1.232
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:25:44	-0.088	-0.075	-0.025	-0.017	-0.021	64.218%		
2	02:25:51	-0.085	-0.075	-0.021	-0.013	-0.014	64.307%		
3	02:25:59	-0.092	-0.072	-0.017	-0.003	-0.011	64.608%		
X		-0.088	-0.074	-0.021	-0.011	-0.015	64.378%		
σ		0.003	0.002	0.004	0.007	0.005	0.204%		
%RSD		3.934	2.197	19.850	65.280	30.520	0.317		

180-42903-H-5-A@10 4/27/2015 2:31:44 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	02:30:50	68.813%	0.203	368.500	383.600	0.000	1013000.000	113800.000	114700.000
2	02:30:58	66.048%	0.180	396.700	401.200	0.000	1045000.000	117100.000	116100.000
3	02:31:05	69.274%	0.175	382.900	397.400	0.000	1017000.000	113900.000	113100.000
X		68.045%	0.186	382.700	394.100	0.000	1025000.000	114900.000	114700.000
σ		1.745%	0.015	14.130	9.301	0.000	17460.000	1888.000	1532.000
%RSD		2.565	7.996	3.691	2.360	0.000	1.703	1.643	1.337
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:50	19.710	195.200	0.000	30380.000	31590.000	30330.000	75.759%	0.055
2	02:30:58	19.860	199.600	0.000	31460.000	33310.000	31420.000	74.239%	0.034
3	02:31:05	18.750	194.600	0.000	32150.000	34560.000	32170.000	74.626%	0.174
X		19.440	196.400	0.000	31330.000	33150.000	31310.000	74.875%	0.088
σ		0.602	2.747	0.000	891.800	1494.000	925.400	0.790%	0.075
%RSD		3.097	1.398	0.000	2.847	4.507	2.956	1.055	86.060
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:50	-0.215	0.888	1.560	6.686	90.990	0.046	0.053	0.559
2	02:30:58	0.074	0.940	1.387	7.123	102.100	0.027	0.073	0.718
3	02:31:05	0.080	0.996	1.504	6.707	83.310	0.023	0.071	0.666
X		-0.020	0.941	1.484	6.839	92.120	0.032	0.066	0.648
σ		0.169	0.054	0.088	0.247	9.433	0.012	0.011	0.081
%RSD		826.100	5.710	5.941	3.607	10.240	38.880	16.700	12.490
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:50	0.487	2.133	2.495	0.323	0.956	39.590	0.000	608.900
2	02:30:58	0.542	2.833	2.476	0.289	1.100	35.090	0.000	620.700
3	02:31:05	0.463	2.689	2.444	0.282	0.903	33.710	0.000	612.900
X		0.497	2.552	2.472	0.298	0.986	36.130	0.000	614.200
σ		0.041	0.369	0.025	0.022	0.102	3.074	0.000	6.021
%RSD		8.215	14.480	1.031	7.339	10.340	8.507	0.000	0.980
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:50	70.206%	1.910	2.220	59.586%	-0.023	-0.025	-0.001	0.014
2	02:30:58	70.433%	2.264	2.061	59.920%	-0.038	-0.040	-0.001	-0.017
3	02:31:05	71.136%	2.022	1.970	60.810%	-0.038	-0.030	0.024	0.023
X		70.592%	2.066	2.084	60.105%	-0.033	-0.032	0.008	0.007
σ		0.485%	0.181	0.126	0.633%	0.008	0.008	0.014	0.021
%RSD		0.687	8.765	6.057	1.053	24.930	23.890	185.500	298.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:50	64.125%	-1.015	0.170	0.145	5.325	5.744	71.642%	73.332%
2	02:30:58	64.831%	-1.062	0.141	0.097	5.399	5.442	73.187%	72.627%
3	02:31:05	65.181%	-1.041	0.068	0.051	5.461	5.310	73.163%	73.804%
X		64.713%	-1.039	0.126	0.098	5.395	5.498	72.664%	73.255%
σ		0.538%	0.024	0.052	0.047	0.068	0.222	0.885%	0.592%
%RSD		0.831	2.265	41.360	48.210	1.267	4.045	1.219	0.809
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:30:50	-0.085	-0.073	0.032	0.037	0.025	63.315%		
2	02:30:58	-0.085	-0.073	0.023	0.017	0.018	63.735%		
3	02:31:05	-0.092	-0.073	0.039	0.002	0.026	64.347%		
X		-0.087	-0.073	0.031	0.018	0.023	63.799%		
σ		0.004	0.000	0.008	0.018	0.004	0.519%		
%RSD		4.689	0.093	26.460	95.090	18.580	0.814		

180-42903-I-5-A@10

4/27/2015 2:36:52 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	02:35:57	69.053%	0.214	379.500	401.100	0.000	1030000.000	116500.000	115900.000
2	02:36:05	67.270%	0.108	382.600	413.900	0.000	1056000.000	119400.000	117100.000
3	02:36:13	66.179%	-0.032	413.800	430.300	0.000	1072000.000	121600.000	121900.000
X		67.501%	0.097	392.000	415.100	0.000	1053000.000	119100.000	118300.000
σ		1.451%	0.124	18.970	14.610	0.000	21150.000	2555.000	3188.000
%RSD		2.150	127.900	4.840	3.520	0.000	2.010	2.145	2.695
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:57	4.474	163.000	0.000	31520.000	33160.000	31010.000	75.906%	0.371
2	02:36:05	4.203	162.500	0.000	32010.000	34600.000	32270.000	74.942%	0.063
3	02:36:13	4.300	164.900	0.000	32360.000	34890.000	33440.000	74.326%	-0.183
X		4.326	163.500	0.000	31960.000	34220.000	32240.000	75.058%	0.084
σ		0.138	1.306	0.000	422.300	925.000	1215.000	0.797%	0.278
%RSD		3.186	0.799	0.000	1.321	2.703	3.769	1.061	331.600
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:57	0.523	0.917	0.572	-0.477	86.450	0.011	0.038	0.740
2	02:36:05	-0.295	0.883	0.532	-0.717	76.930	0.027	0.122	0.534
3	02:36:13	0.556	0.918	0.537	-0.515	89.640	0.003	0.137	0.691
X		0.262	0.906	0.547	-0.569	84.340	0.014	0.099	0.655
σ		0.482	0.020	0.022	0.129	6.615	0.012	0.053	0.108
%RSD		184.400	2.243	3.963	22.670	7.844	88.680	53.970	16.460
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:57	0.528	2.224	3.135	0.277	0.872	52.580	0.000	639.500
2	02:36:05	0.667	2.544	2.469	0.411	0.679	54.470	0.000	639.200
3	02:36:13	0.549	2.636	1.888	0.241	0.665	50.200	0.000	632.600
X		0.582	2.468	2.497	0.310	0.739	52.420	0.000	637.100
σ		0.075	0.217	0.624	0.090	0.116	2.138	0.000	3.887
%RSD		12.920	8.772	25.000	28.930	15.670	4.078	0.000	0.610
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:57	69.082%	2.052	2.308	59.145%	-0.033	-0.025	-0.000	-0.006
2	02:36:05	69.701%	2.209	2.222	59.687%	-0.028	-0.025	-0.001	-0.017
3	02:36:13	71.665%	1.959	2.259	60.656%	-0.033	-0.035	0.049	0.003
X		70.149%	2.073	2.263	59.829%	-0.031	-0.028	0.016	-0.007
σ		1.348%	0.126	0.043	0.766%	0.003	0.006	0.028	0.010
%RSD		1.922	6.085	1.908	1.280	8.727	20.540	179.200	143.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:57	63.598%	-1.136	0.165	0.092	5.062	5.806	71.915%	72.486%
2	02:36:05	64.827%	-1.095	0.160	0.169	5.324	4.833	73.101%	73.250%
3	02:36:13	66.668%	-1.057	0.148	0.110	4.516	5.725	72.767%	74.806%
X		65.031%	-1.096	0.158	0.123	4.967	5.455	72.594%	73.514%
σ		1.545%	0.039	0.008	0.040	0.412	0.540	0.611%	1.182%
%RSD		2.376	3.581	5.364	32.720	8.296	9.896	0.842	1.608
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:35:57	-0.095	-0.073	0.006	0.018	-0.008	62.796%		
2	02:36:05	-0.092	-0.075	0.000	0.002	-0.004	64.322%		
3	02:36:13	-0.092	-0.082	0.022	0.040	0.011	64.634%		
X		-0.093	-0.077	0.009	0.020	-0.000	63.917%		
σ		0.002	0.005	0.011	0.019	0.010	0.984%		
%RSD		2.082	6.121	116.800	96.740	2525.000	1.539		

180-42903-H-6-A@10 4/27/2015 2:41:57 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	02:41:05	66.594%	0.085	369.900	403.300	0.000	1013000.000	112700.000	112200.000
2	02:41:13	67.039%	0.201	381.300	401.700	0.000	1031000.000	115700.000	119600.000
3	02:41:21	67.203%	0.291	381.900	406.900	0.000	1031000.000	116700.000	113800.000
X		66.945%	0.192	377.700	404.000	0.000	1025000.000	115000.000	115200.000
σ		0.315%	0.103	6.747	2.668	0.000	10700.000	2095.000	3904.000
%RSD		0.470	53.700	1.786	0.660	0.000	1.044	1.821	3.389
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:05	32.570	217.000	0.000	30210.000	31960.000	30330.000	76.508%	0.258
2	02:41:13	32.970	215.300	0.000	30470.000	32280.000	31020.000	75.947%	0.300
3	02:41:21	32.440	218.000	0.000	31280.000	33800.000	32110.000	74.409%	0.465
X		32.660	216.700	0.000	30650.000	32680.000	31160.000	75.621%	0.341
σ		0.275	1.393	0.000	558.100	983.700	895.200	1.087%	0.109
%RSD		0.841	0.643	0.000	1.821	3.010	2.873	1.437	32.040
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:05	0.995	0.845	1.886	13.550	90.310	0.030	0.100	0.832
2	02:41:13	0.019	0.754	1.890	13.680	97.280	0.054	0.118	0.861
3	02:41:21	-0.053	0.939	2.095	13.210	83.150	0.043	0.070	0.669
X		0.320	0.846	1.957	13.480	90.250	0.042	0.096	0.787
σ		0.585	0.093	0.120	0.244	7.065	0.012	0.024	0.104
%RSD		182.500	10.960	6.114	1.810	7.828	28.010	25.110	13.190
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:05	0.459	2.502	3.102	0.317	1.047	25.840	0.000	609.500
2	02:41:13	0.423	2.772	2.798	0.361	0.389	24.200	0.000	610.900
3	02:41:21	0.596	2.983	2.867	0.240	1.357	27.150	0.000	608.000
X		0.492	2.753	2.922	0.306	0.931	25.730	0.000	609.500
σ		0.091	0.241	0.160	0.062	0.494	1.476	0.000	1.455
%RSD		18.530	8.758	5.459	20.110	53.070	5.736	0.000	0.239
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:05	70.250%	1.651	2.070	60.418%	-0.019	-0.016	0.149	-0.017
2	02:41:13	70.430%	1.770	1.799	61.038%	-0.042	-0.035	0.049	-0.017
3	02:41:21	72.147%	1.834	1.687	61.886%	-0.038	-0.026	-0.001	0.041
X		70.942%	1.752	1.852	61.114%	-0.033	-0.026	0.066	0.003
σ		1.047%	0.093	0.197	0.737%	0.012	0.010	0.076	0.034
%RSD		1.476	5.304	10.620	1.206	36.970	38.410	115.600	1293.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:41:05	65.778%	-1.108	0.125	0.005	5.646	4.906	72.577%	74.163%
2	02:41:13	65.470%	-1.043	0.100	0.130	5.591	5.052	73.530%	73.798%
3	02:41:21	66.873%	-1.154	0.116	0.047	4.482	4.850	73.739%	75.832%
X		66.040%	-1.101	0.114	0.061	5.240	4.936	73.282%	74.598%
σ		0.737%	0.056	0.013	0.064	0.657	0.104	0.619%	1.085%
%RSD		1.116	5.076	11.250	104.400	12.530	2.104	0.845	1.454
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:41:05	-0.088	-0.075	0.080	0.048	0.054	65.516%		
2	02:41:13	-0.085	-0.076	0.093	0.048	0.057	65.609%		
3	02:41:21	-0.095	-0.075	0.054	0.095	0.062	65.937%		
X		-0.090	-0.076	0.076	0.064	0.058	65.687%		
σ		0.005	0.001	0.020	0.027	0.004	0.221%		
%RSD		5.792	1.064	26.200	42.020	6.536	0.337		

CCV 1533080 4/27/2015 2:47:00 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	02:46:08	77.081%	92.310	101.200	96.310	0.000	56800.000	52760.000	52200.000
2	02:46:16	78.978%	88.040	95.010	96.240	0.000	55950.000	51600.000	50950.000
3	02:46:24	75.737%	93.590	100.800	100.900	0.000	58080.000	53230.000	51980.000
X		77.265%	91.312%	99.018%	97.819%	0.000	113.892%	105.060%	103.413%
σ		1.628%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.107	3.181	3.513	2.726	0.000	1.884	1.603	1.292
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:08	570.500	4935.000	0.000	50940.000	45630.000	44150.000	76.228%	88.770
2	02:46:16	565.200	5073.000	0.000	52470.000	48170.000	46470.000	73.925%	95.440
3	02:46:24	579.500	5164.000	0.000	52810.000	48400.000	47340.000	73.143%	95.580
X		114.344%	101.153%	0.000	104.140%	94.796%	91.977%	74.432%	93.261%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.603%	n/a
%RSD		1.260	2.282	0.000	1.913	3.241	3.596	2.154	4.175
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:08	92.710	92.340	450.600	23890.000	22130.000	90.660	90.030	91.040
2	02:46:16	95.410	93.350	473.300	24460.000	22750.000	93.240	90.230	95.660
3	02:46:24	95.060	95.220	482.300	24290.000	22750.000	93.890	94.550	94.360
X		94.392%	93.638%	93.744%	96.855%	90.176%	92.598%	91.606%	93.688%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.553	1.562	3.485	1.224	1.576	1.844	2.791	2.542
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:08	95.440	94.380	92.520	95.200	96.110	100.500	0.000	98.740
2	02:46:16	94.040	96.750	97.840	95.520	98.750	101.900	0.000	97.210
3	02:46:24	93.030	95.470	90.840	94.430	96.500	97.220	0.000	96.710
X		94.169%	95.532%	93.734%	95.047%	97.120%	99.883%	0.000	97.555%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.288	1.237	3.896	0.589	1.471	2.417	0.000	1.085
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:08	67.414%	94.720	96.210	62.417%	95.650	95.360	94.420	96.610
2	02:46:16	68.540%	95.840	98.630	62.541%	96.000	97.020	95.770	98.750
3	02:46:24	69.978%	95.520	97.800	64.028%	95.190	94.120	98.060	97.160
X		68.644%	95.360%	97.544%	62.995%	95.615%	95.501%	96.085%	97.509%
σ		1.285%	n/a	n/a	0.897%	n/a	n/a	n/a	n/a
%RSD		1.873	0.609	1.260	1.423	0.425	1.520	1.913	1.141
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:46:08	65.672%	93.500	92.770	94.820	95.860	96.620	72.407%	72.986%
2	02:46:16	67.247%	92.800	93.720	94.120	100.200	97.010	73.491%	74.520%
3	02:46:24	66.966%	91.150	94.180	93.580	95.270	95.920	73.885%	74.473%
X		66.628%	92.482%	93.558%	94.176%	97.099%	96.519%	73.261%	73.993%
σ		0.840%	n/a	n/a	n/a	n/a	n/a	0.766%	0.873%
%RSD		1.261	1.304	0.769	0.660	2.752	0.574	1.045	1.179
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:46:08	98.370	95.750	98.620	97.170	97.700	66.901%		
2	02:46:16	98.560	97.030	98.710	97.570	98.200	67.494%		
3	02:46:24	97.830	97.180	99.810	98.580	98.530	67.453%		
X		98.257%	96.654%	99.049%	97.771%	98.141%	67.283%		
σ		n/a	n/a	n/a	n/a	n/a	0.331%		
%RSD		0.385	0.817	0.666	0.742	0.426	0.492		

CCB6 4/27/2015 2:56:10 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	02:55:18	90.557%	-0.021	1.248	1.539	0.000	389.400	12.650	13.830
2	02:55:26	92.009%	-0.014	1.001	1.498	0.000	377.800	20.940	13.080
3	02:55:34	91.972%	0.043	1.003	0.912	0.000	380.700	16.060	15.600
X		91.513%	0.003	1.084	1.317	0.000	382.600	16.550	14.170
σ		0.828%	0.035	0.142	0.351	0.000	6.032	4.169	1.295
%RSD		0.904	1203.000	13.090	26.640	0.000	1.577	25.190	9.139
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:55:18	2.109	1.288	0.000	-46.420	22.060	10.650	94.629%	-0.150
2	02:55:26	2.234	-2.280	0.000	-43.390	41.170	7.929	94.517%	-0.348
3	02:55:34	3.204	-4.668	0.000	-47.150	23.980	10.680	94.096%	-0.431
X		2.516	-1.887	0.000	-45.650	29.070	9.755	94.414%	-0.310
σ		0.600	2.997	0.000	1.992	10.530	1.581	0.281%	0.145
%RSD		23.830	158.800	0.000	4.364	36.210	16.210	0.298	46.720
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:55:18	0.230	0.040	0.079	8.775	11.240	0.004	-0.133	0.268
2	02:55:26	0.142	0.028	0.116	8.884	8.437	0.023	-0.133	0.261
3	02:55:34	0.063	0.022	0.119	8.625	9.300	0.020	-0.053	0.230
X		0.145	0.030	0.105	8.761	9.659	0.016	-0.106	0.253
σ		0.083	0.009	0.022	0.130	1.435	0.010	0.046	0.020
%RSD		57.480	30.630	20.970	1.483	14.860	65.320	43.130	7.901
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:55:18	0.045	-0.070	-0.034	0.061	0.236	0.136	0.000	0.046
2	02:55:26	-0.015	-0.168	-0.133	0.048	0.388	1.984	0.000	0.058
3	02:55:34	-0.015	-0.168	-0.010	0.081	0.349	0.590	0.000	0.061
X		0.005	-0.136	-0.059	0.063	0.324	0.903	0.000	0.055
σ		0.035	0.057	0.065	0.016	0.079	0.964	0.000	0.008
%RSD		696.100	41.690	109.900	25.530	24.270	106.700	0.000	14.550
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:55:18	85.400%	0.149	0.227	84.435%	-0.023	-0.025	-0.001	-0.021
2	02:55:26	86.097%	0.203	0.239	84.850%	-0.020	-0.036	0.019	-0.029
3	02:55:34	86.345%	0.269	0.130	84.997%	-0.013	0.001	-0.001	-0.005
X		85.948%	0.207	0.199	84.760%	-0.018	-0.020	0.006	-0.018
σ		0.490%	0.060	0.060	0.292%	0.005	0.019	0.011	0.012
%RSD		0.570	29.020	30.280	0.344	27.730	93.160	191.500	66.050
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:55:18	80.374%	-0.823	0.184	0.063	-0.036	0.047	87.260%	87.484%
2	02:55:26	81.886%	-0.953	0.081	0.003	0.028	0.066	87.176%	88.457%
3	02:55:34	81.965%	-0.892	0.035	0.060	-0.004	0.027	87.896%	88.632%
X		81.409%	-0.889	0.100	0.042	-0.004	0.047	87.444%	88.191%
σ		0.897%	0.065	0.077	0.034	0.032	0.019	0.394%	0.618%
%RSD		1.101	7.307	76.520	80.400	786.700	41.150	0.450	0.701
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:55:18	-0.024	-0.025	-0.007	-0.011	-0.012	81.082%		
2	02:55:26	-0.030	0.004	-0.014	0.008	-0.013	81.804%		
3	02:55:34	-0.012	0.002	-0.000	-0.008	-0.024	82.140%		
X		-0.022	-0.006	-0.007	-0.004	-0.016	81.675%		
σ		0.010	0.016	0.007	0.010	0.007	0.540%		
%RSD		43.400	255.300	95.730	281.400	41.350	0.662		

180-42903-I-6-A@10 4/27/2015 3:01:18 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	03:00:24	66.754%	0.163	364.100	388.600	0.000	1046000.000	117300.000	121600.000
2	03:00:32	65.674%	0.089	377.000	398.400	0.000	1079000.000	121200.000	120600.000
3	03:00:40	67.237%	0.200	375.200	397.800	0.000	1073000.000	122100.000	122000.000
X		66.555%	0.151	372.100	394.900	0.000	1066000.000	120200.000	121400.000
σ		0.800%	0.056	7.026	5.481	0.000	17920.000	2556.000	716.100
%RSD		1.202	37.380	1.888	1.388	0.000	1.681	2.127	0.590
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:00:24	2.676	146.700	0.000	31790.000	33330.000	31550.000	71.032%	0.067
2	03:00:32	3.412	149.100	0.000	31960.000	34420.000	32350.000	70.765%	0.221
3	03:00:40	2.840	146.100	0.000	32670.000	35270.000	33050.000	69.949%	0.347
X		2.976	147.300	0.000	32140.000	34340.000	32320.000	70.582%	0.211
σ		0.386	1.616	0.000	467.800	973.900	752.500	0.564%	0.140
%RSD		12.980	1.097	0.000	1.455	2.836	2.329	0.800	66.310
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:00:24	-0.553	0.679	0.550	3.335	89.850	0.033	-0.001	0.737
2	03:00:32	0.105	0.770	0.450	3.007	98.260	0.024	-0.070	1.008
3	03:00:40	-0.821	0.797	0.515	2.563	94.110	0.025	0.176	0.785
X		-0.423	0.749	0.505	2.968	94.070	0.027	0.035	0.843
σ		0.477	0.062	0.051	0.388	4.205	0.005	0.127	0.145
%RSD		112.700	8.264	10.090	13.060	4.470	17.230	361.600	17.170
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:00:24	0.715	2.640	2.074	0.428	0.802	29.360	0.000	626.700
2	03:00:32	0.492	2.431	2.509	0.276	0.602	28.760	0.000	628.300
3	03:00:40	0.550	2.455	1.959	0.273	0.655	31.140	0.000	643.700
X		0.586	2.509	2.181	0.325	0.686	29.750	0.000	632.900
σ		0.116	0.114	0.290	0.089	0.104	1.237	0.000	9.394
%RSD		19.760	4.556	13.290	27.230	15.120	4.156	0.000	1.484
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:00:24	67.778%	2.297	2.118	58.312%	-0.004	-0.025	0.025	-0.006
2	03:00:32	68.406%	2.206	1.934	59.442%	-0.023	-0.030	0.051	-0.026
3	03:00:40	68.028%	2.395	2.149	59.233%	-0.028	-0.020	0.101	-0.006
X		68.071%	2.299	2.067	58.996%	-0.018	-0.025	0.059	-0.013
σ		0.316%	0.094	0.116	0.601%	0.013	0.005	0.039	0.012
%RSD		0.464	4.101	5.613	1.019	69.530	20.000	65.590	92.230
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:00:24	63.477%	-0.788	0.272	0.305	5.524	5.128	70.181%	71.094%
2	03:00:32	63.800%	-0.891	0.330	0.092	4.937	5.129	70.465%	71.868%
3	03:00:40	64.155%	-1.015	0.327	0.290	5.354	5.184	71.913%	72.976%
X		63.811%	-0.898	0.310	0.229	5.272	5.147	70.853%	71.979%
σ		0.339%	0.114	0.033	0.119	0.302	0.032	0.929%	0.946%
%RSD		0.531	12.660	10.530	51.980	5.730	0.622	1.311	1.314
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:00:24	-0.046	-0.010	0.006	0.003	0.003	62.822%		
2	03:00:32	-0.018	-0.006	0.010	0.012	0.007	63.109%		
3	03:00:40	-0.004	-0.048	-0.012	-0.012	-0.008	63.256%		
X		-0.022	-0.021	0.002	0.001	0.000	63.062%		
σ		0.021	0.024	0.012	0.012	0.008	0.220%		
%RSD		94.240	110.000	783.200	1184.000	1763.000	0.349		

180-42903-H-7-A@10 4/27/2015 3:06:20 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	03:05:29	67.693%	0.119	382.800	399.100	0.000	1030000.000	116400.000	114000.000
2	03:05:36	68.749%	0.242	371.800	394.900	0.000	1029000.000	117000.000	122400.000
3	03:05:44	67.182%	0.109	385.300	416.900	0.000	1048000.000	118200.000	117800.000
X		67.875%	0.157	379.900	403.700	0.000	1035000.000	117200.000	118100.000
σ		0.799%	0.074	7.204	11.700	0.000	10540.000	930.300	4204.000
%RSD		1.177	47.260	1.896	2.899	0.000	1.018	0.794	3.560
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:29	44.310	241.600	0.000	30390.000	31470.000	30330.000	75.555%	0.554
2	03:05:36	48.950	249.300	0.000	31420.000	33630.000	31980.000	73.710%	0.585
3	03:05:44	45.640	254.500	0.000	31800.000	34250.000	32380.000	74.173%	0.613
X		46.300	248.400	0.000	31200.000	33110.000	31560.000	74.480%	0.584
σ		2.390	6.493	0.000	727.200	1456.000	1087.000	0.960%	0.030
%RSD		5.162	2.614	0.000	2.331	4.397	3.445	1.288	5.078
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:29	0.378	0.793	1.987	25.740	118.200	0.039	0.071	0.754
2	03:05:36	-0.143	0.866	2.171	25.200	110.700	0.035	-0.043	0.769
3	03:05:44	0.364	0.845	2.189	25.040	106.700	0.043	0.007	0.810
X		0.199	0.835	2.116	25.330	111.800	0.039	0.012	0.778
σ		0.297	0.038	0.112	0.366	5.860	0.004	0.057	0.029
%RSD		148.800	4.527	5.275	1.446	5.239	10.230	493.000	3.742
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:29	0.691	2.152	2.101	0.396	1.013	31.110	0.000	619.700
2	03:05:36	0.628	2.584	2.487	0.347	0.716	29.360	0.000	613.400
3	03:05:44	0.680	2.834	2.639	0.364	0.722	36.180	0.000	625.500
X		0.666	2.523	2.409	0.369	0.817	32.220	0.000	619.500
σ		0.033	0.345	0.277	0.025	0.170	3.539	0.000	6.040
%RSD		5.005	13.680	11.500	6.818	20.770	10.980	0.000	0.975
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:29	69.378%	1.639	1.802	60.000%	-0.042	-0.005	0.025	0.014
2	03:05:36	71.322%	1.771	2.025	61.122%	-0.019	-0.040	0.099	0.043
3	03:05:44	70.453%	1.903	2.022	60.808%	-0.033	-0.011	0.049	0.003
X		70.385%	1.771	1.950	60.643%	-0.032	-0.019	0.057	0.020
σ		0.973%	0.132	0.128	0.579%	0.012	0.019	0.038	0.021
%RSD		1.383	7.449	6.557	0.954	36.410	98.930	65.990	105.500
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:29	64.608%	-1.072	0.148	0.062	5.633	4.818	72.379%	73.455%
2	03:05:36	65.394%	-1.031	0.216	0.256	5.797	5.554	73.267%	74.649%
3	03:05:44	66.548%	-0.993	0.161	0.153	4.836	5.942	73.911%	75.177%
X		65.517%	-1.032	0.175	0.157	5.422	5.438	73.186%	74.427%
σ		0.976%	0.040	0.036	0.097	0.514	0.571	0.770%	0.882%
%RSD		1.489	3.832	20.760	61.960	9.488	10.500	1.052	1.185
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:05:29	-0.082	-0.056	0.038	0.054	0.053	65.003%		
2	03:05:36	-0.078	-0.055	0.056	0.044	0.050	64.914%		
3	03:05:44	-0.092	-0.062	0.041	0.057	0.060	65.904%		
X		-0.084	-0.058	0.045	0.052	0.054	65.274%		
σ		0.007	0.004	0.009	0.007	0.005	0.548%		
%RSD		8.543	6.782	20.320	12.860	9.207	0.839		

180-42903-I-7-A@10 4/27/2015 3:11:26 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	03:10:33	67.032%	0.214	370.000	391.200	0.000	1025000.000	115200.000	114400.000	
2	03:10:41	67.573%	0.029	383.000	396.600	0.000	1016000.000	116100.000	114400.000	
3	03:10:48	67.694%	0.054	379.200	404.100	0.000	1027000.000	114800.000	114400.000	
X		67.433%	0.099	377.400	397.300	0.000	1022000.000	115400.000	114400.000	
		σ	0.353%	0.100	6.658	6.459	0.000	5835.000	668.900	50.520
		%RSD	0.523	101.100	1.764	1.626	0.000	0.571	0.580	0.044
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:10:33	6.104	158.600	0.000	30420.000	31840.000	30360.000	75.764%	0.621	
2	03:10:41	5.562	158.300	0.000	31280.000	32650.000	31300.000	74.928%	-0.080	
3	03:10:48	5.514	156.000	0.000	31730.000	33920.000	32160.000	74.193%	0.360	
X		5.727	157.600	0.000	31140.000	32800.000	31270.000	74.962%	0.300	
		σ	0.328	1.415	0.000	668.100	1052.000	901.700	0.786%	0.354
		%RSD	5.719	0.898	0.000	2.145	3.206	2.883	1.048	118.000
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:10:33	0.105	0.855	0.739	1.581	80.970	0.011	0.087	0.681	
2	03:10:41	-0.024	0.811	0.736	1.765	82.460	0.043	0.155	0.821	
3	03:10:48	-0.628	0.803	0.735	1.243	81.330	0.027	0.087	0.801	
X		-0.183	0.823	0.736	1.530	81.590	0.027	0.110	0.768	
		σ	0.391	0.028	0.002	0.265	0.078	0.016	0.039	0.076
		%RSD	214.400	3.395	0.290	17.310	0.956	59.130	35.390	9.850
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:10:33	0.528	1.547	1.239	0.347	0.776	30.700	0.000	608.100	
2	03:10:41	0.517	1.621	1.352	0.370	1.104	34.150	0.000	608.000	
3	03:10:48	0.623	1.771	1.635	0.363	1.083	34.790	0.000	604.100	
X		0.556	1.646	1.409	0.360	0.988	33.210	0.000	606.700	
		σ	0.058	0.115	0.204	0.012	0.184	2.197	2.304	
		%RSD	10.490	6.956	14.470	3.408	18.600	6.615	0.000	0.380
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:10:33	69.233%	2.087	1.978	60.452%	-0.033	-0.030	-0.001	-0.016	
2	03:10:41	69.852%	2.121	2.093	60.371%	-0.038	-0.030	-0.001	0.022	
3	03:10:48	71.877%	1.960	2.087	61.339%	-0.038	-0.035	-0.001	0.003	
X		70.321%	2.056	2.052	60.721%	-0.036	-0.032	-0.001	0.003	
		σ	1.383%	0.085	0.065	0.537%	0.003	0.003	0.000	0.019
		%RSD	1.966	4.148	3.155	0.884	7.584	8.986	2.060	672.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:10:33	64.648%	-1.050	0.181	0.034	4.883	4.769	72.376%	73.625%	
2	03:10:41	66.312%	-1.002	0.130	0.137	5.781	5.778	72.404%	72.871%	
3	03:10:48	66.171%	-1.120	0.169	0.173	5.121	5.146	72.631%	74.169%	
X		65.710%	-1.058	0.160	0.115	5.262	5.231	72.471%	73.555%	
		σ	0.922%	0.059	0.026	0.072	0.465	0.510	0.139%	0.652%
		%RSD	1.404	5.594	16.490	62.660	8.841	9.752	0.192	0.886
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	03:10:33	-0.092	-0.065	-0.047	0.002	-0.028	63.525%			
2	03:10:41	-0.095	-0.066	-0.013	-0.003	-0.012	64.694%			
3	03:10:48	-0.088	-0.061	-0.013	-0.018	-0.008	65.646%			
X		-0.092	-0.064	-0.024	-0.006	-0.016	64.622%			
		σ	0.003	0.003	0.020	0.011	0.010	1.062%		
		%RSD	3.661	4.323	80.750	166.800	64.720	1.644		

180-42903-H-8-A@10 4/27/2015 3:16:31 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	03:15:38	68.287%	0.142	362.100	381.200	0.000	982700.000	111800.000	108800.000
2	03:15:46	67.309%	0.225	369.900	387.600	0.000	1015000.000	114700.000	117400.000
3	03:15:53	66.483%	0.257	370.100	398.200	0.000	1021000.000	114900.000	112200.000
X		67.360%	0.208	367.400	389.000	0.000	1007000.000	113800.000	112800.000
σ		0.903%	0.059	4.579	8.570	0.000	20860.000	1763.000	4364.000
%RSD		1.341	28.510	1.247	2.203	0.000	2.072	1.550	3.869
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:38	30.220	219.200	0.000	29520.000	30600.000	29060.000	75.549%	0.660
2	03:15:46	30.980	216.800	0.000	30080.000	31910.000	30220.000	74.634%	0.353
3	03:15:53	34.330	216.700	0.000	30860.000	32250.000	30900.000	74.401%	0.285
X		31.840	217.500	0.000	30150.000	31590.000	30060.000	74.861%	0.433
σ		2.187	1.400	0.000	670.600	872.400	926.300	0.607%	0.200
%RSD		6.869	0.644	0.000	2.224	2.762	3.082	0.810	46.190
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:38	0.203	0.848	2.077	13.320	101.400	0.039	0.235	0.804
2	03:15:46	0.066	0.902	1.826	13.900	94.110	0.039	0.225	0.958
3	03:15:53	-0.541	0.951	1.944	14.010	104.300	0.043	0.205	0.906
X		-0.091	0.900	1.949	13.740	99.960	0.040	0.222	0.890
σ		0.396	0.051	0.126	0.369	5.271	0.002	0.016	0.078
%RSD		435.700	5.702	6.454	2.683	5.273	5.699	7.006	8.787
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:38	0.789	2.147	1.844	0.260	0.915	52.000	0.000	589.700
2	03:15:46	0.525	2.478	2.410	0.316	1.075	46.960	0.000	603.200
3	03:15:53	0.429	2.007	2.543	0.319	0.486	49.750	0.000	591.100
X		0.581	2.211	2.265	0.298	0.825	49.570	0.000	594.700
σ		0.186	0.242	0.371	0.033	0.305	2.525	0.000	7.465
%RSD		32.090	10.960	16.390	11.060	36.960	5.093	0.000	1.255
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:38	69.640%	1.623	1.867	59.874%	-0.038	-0.000	0.025	-0.006
2	03:15:46	68.426%	1.926	1.608	59.386%	-0.005	-0.020	0.050	0.004
3	03:15:53	70.476%	1.911	2.016	60.256%	-0.047	-0.035	-0.001	0.043
X		69.514%	1.820	1.831	59.838%	-0.030	-0.018	0.025	0.014
σ		1.031%	0.171	0.206	0.436%	0.022	0.018	0.025	0.026
%RSD		1.483	9.388	11.270	0.729	74.850	95.110	102.300	190.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:15:38	63.706%	-1.091	0.132	0.248	5.572	5.073	70.797%	71.724%
2	03:15:46	64.378%	-1.082	0.176	0.063	5.412	4.511	71.017%	72.015%
3	03:15:53	65.472%	-0.988	0.113	0.104	4.541	5.756	72.167%	72.591%
X		64.519%	-1.054	0.140	0.138	5.175	5.113	71.327%	72.110%
σ		0.892%	0.057	0.032	0.097	0.555	0.623	0.736%	0.441%
%RSD		1.382	5.425	22.880	70.260	10.730	12.180	1.032	0.612
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:15:38	-0.088	-0.064	0.042	0.038	0.025	62.551%		
2	03:15:46	-0.088	-0.069	0.062	0.046	0.021	63.696%		
3	03:15:53	-0.095	-0.060	0.040	0.007	0.049	63.536%		
X		-0.090	-0.065	0.048	0.030	0.032	63.261%		
σ		0.004	0.004	0.012	0.020	0.015	0.620%		
%RSD		4.506	6.790	25.160	67.410	48.000	0.980		

180-42903-I-8-A@10 4/27/2015 3:21:36 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	03:20:44	68.172%	0.104	332.800	354.700	0.000	901500.000	94810.000	94560.000	
2	03:20:52	68.651%	0.179	334.400	353.600	0.000	905700.000	98080.000	98130.000	
3	03:20:59	69.060%	0.240	325.200	353.800	0.000	917300.000	99790.000	97310.000	
X		68.628%	0.174	330.800	354.000	0.000	908200.000	97560.000	96670.000	
		σ	0.445%	0.068	4.906	0.553	0.000	8162.000	2533.000	1868.000
		%RSD	0.648	39.010	1.483	0.156	0.000	0.899	2.596	1.932
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:20:44	4.517	140.500	0.000	27750.000	27290.000	25510.000	76.062%	0.228	
2	03:20:52	4.127	145.900	0.000	28660.000	27920.000	26650.000	74.119%	0.071	
3	03:20:59	4.692	141.800	0.000	28540.000	28140.000	27130.000	73.589%	0.478	
X		4.445	142.700	0.000	28310.000	27780.000	26430.000	74.590%	0.259	
		σ	0.289	2.826	0.000	492.200	443.000	832.300	1.302%	0.205
		%RSD	6.508	1.980	0.000	1.738	1.595	3.149	1.745	79.060
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:20:44	-0.298	0.902	0.612	0.382	70.320	0.019	0.217	0.574	
2	03:20:52	0.174	0.998	0.721	0.330	80.090	0.015	0.141	0.625	
3	03:20:59	0.105	0.859	0.791	0.164	76.380	0.031	-0.009	0.677	
X		-0.006	0.920	0.708	0.292	75.600	0.022	0.117	0.626	
		σ	0.255	0.071	0.090	0.114	4.931	0.008	0.115	0.051
		%RSD	4102.000	7.730	12.770	38.940	6.523	38.660	98.510	8.217
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:20:44	0.364	1.950	1.781	0.276	0.869	53.450	0.000	512.900	
2	03:20:52	0.510	1.247	1.477	0.303	0.635	50.910	0.000	517.500	
3	03:20:59	0.282	1.974	0.963	0.276	1.104	49.890	0.000	511.600	
X		0.385	1.724	1.407	0.285	0.869	51.420	0.000	514.000	
		σ	0.115	0.413	0.413	0.016	0.235	1.831	0.000	3.113
		%RSD	29.870	23.960	29.370	5.496	27.000	3.562	0.000	0.606
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:20:44	69.376%	1.495	1.760	59.796%	-0.009	-0.025	0.025	-0.006	
2	03:20:52	69.495%	1.550	1.838	59.977%	-0.033	-0.030	-0.001	-0.007	
3	03:20:59	70.285%	1.702	1.642	59.807%	-0.042	-0.025	-0.001	-0.026	
X		69.718%	1.583	1.747	59.860%	-0.028	-0.027	0.008	-0.013	
		σ	0.494%	0.107	0.099	0.101%	0.017	0.003	0.015	0.012
		%RSD	0.709	6.782	5.674	0.169	60.010	11.010	185.500	88.310
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:20:44	63.942%	-1.092	0.191	0.137	3.526	4.227	70.603%	72.363%	
2	03:20:52	65.523%	-1.151	0.113	0.167	4.357	4.475	71.644%	72.458%	
3	03:20:59	64.007%	-0.959	0.111	0.036	3.942	4.893	71.523%	73.322%	
X		64.491%	-1.067	0.138	0.113	3.942	4.531	71.257%	72.714%	
		σ	0.895%	0.098	0.045	0.069	0.415	0.336	0.569%	0.529%
		%RSD	1.388	9.202	32.860	60.610	10.540	7.423	0.799	0.727
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	03:20:44	-0.092	-0.069	-0.025	-0.022	-0.025	62.640%			
2	03:20:52	-0.092	-0.070	-0.007	0.003	-0.021	63.291%			
3	03:20:59	-0.088	-0.069	-0.034	0.002	-0.027	63.388%			
X		-0.090	-0.069	-0.022	-0.006	-0.024	63.106%			
		σ	0.002	0.001	0.013	0.014	0.003	0.407%		
		%RSD	2.198	1.261	60.750	249.200	11.520	0.645		

180-42903-H-9-A@10 4/27/2015 3:26:44 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	03:25:52	68.334%	0.065	371.100	389.900	0.000	1035000.000	116400.000	115900.000
2	03:26:00	69.309%	0.074	375.900	392.700	0.000	1049000.000	119600.000	115100.000
3	03:26:07	66.559%	0.191	395.000	416.500	0.000	1069000.000	121100.000	120500.000
X		68.067%	0.110	380.700	399.700	0.000	1051000.000	119000.000	117200.000
σ		1.394%	0.070	12.650	14.620	0.000	17330.000	2399.000	2921.000
%RSD		2.048	63.930	3.322	3.659	0.000	1.649	2.015	2.492
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:52	71.410	294.300	0.000	30960.000	31580.000	30800.000	75.355%	1.090
2	03:26:00	70.930	302.000	0.000	32020.000	32980.000	32100.000	74.056%	1.049
3	03:26:07	70.220	303.400	0.000	32250.000	34230.000	32790.000	73.223%	0.886
X		70.860	299.900	0.000	31740.000	32930.000	31890.000	74.212%	1.008
σ		0.600	4.918	0.000	686.600	1322.000	1011.000	1.074%	0.108
%RSD		0.847	1.640	0.000	2.163	4.014	3.169	1.448	10.720
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:52	0.424	0.838	3.297	32.200	114.500	0.047	0.123	1.144
2	03:26:00	-0.614	0.888	3.361	32.000	123.900	0.047	0.092	0.831
3	03:26:07	-0.141	0.955	3.440	31.550	116.900	0.016	0.027	0.960
X		-0.110	0.894	3.366	31.920	118.400	0.037	0.081	0.978
σ		0.519	0.059	0.072	0.331	4.864	0.018	0.049	0.157
%RSD		471.800	6.562	2.129	1.038	4.108	49.900	60.660	16.090
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:52	0.724	2.933	2.218	0.316	0.786	27.330	0.000	625.700
2	03:26:00	0.637	2.935	3.064	0.319	0.493	27.930	0.000	626.900
3	03:26:07	0.630	2.641	2.863	0.316	0.929	24.860	0.000	623.600
X		0.664	2.836	2.715	0.317	0.736	26.710	0.000	625.400
σ		0.052	0.169	0.442	0.002	0.222	1.626	0.000	1.707
%RSD		7.870	5.964	16.280	0.508	30.220	6.087	0.000	0.273
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:52	68.220%	1.859	2.013	58.146%	-0.042	-0.030	-0.001	-0.006
2	03:26:00	69.335%	1.618	2.047	59.417%	-0.028	-0.010	0.025	-0.006
3	03:26:07	69.039%	1.798	1.761	59.438%	-0.019	-0.035	-0.001	-0.037
X		68.864%	1.758	1.941	59.000%	-0.030	-0.025	0.008	-0.016
σ		0.578%	0.125	0.156	0.740%	0.012	0.013	0.015	0.018
%RSD		0.839	7.122	8.061	1.254	39.760	52.890	184.800	109.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:52	63.608%	-0.912	0.159	0.019	6.373	6.296	69.918%	70.766%
2	03:26:00	63.832%	-1.058	0.151	0.083	5.697	5.585	70.476%	71.811%
3	03:26:07	64.306%	-0.960	0.110	0.100	7.235	5.400	70.357%	72.041%
X		63.916%	-0.977	0.140	0.067	6.435	5.761	70.250%	71.539%
σ		0.356%	0.074	0.026	0.043	0.771	0.473	0.294%	0.680%
%RSD		0.557	7.624	18.640	63.430	11.980	8.213	0.418	0.950
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:25:52	-0.091	-0.073	0.121	0.095	0.102	61.190%		
2	03:26:00	-0.091	-0.073	0.146	0.063	0.103	61.991%		
3	03:26:07	-0.088	-0.064	0.126	0.112	0.118	62.619%		
X		-0.090	-0.070	0.131	0.090	0.107	61.933%		
σ		0.002	0.005	0.013	0.025	0.009	0.716%		
%RSD		2.192	7.170	9.946	27.320	8.242	1.156		

180-42903-I-9-A@10 4/27/2015 3:31:50 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	03:30:58	70.409%	0.082	360.100	381.500	0.000	1014000.000	114100.000	113900.000	
2	03:31:06	68.451%	0.167	380.400	400.800	0.000	1056000.000	118200.000	118600.000	
3	03:31:14	68.402%	0.039	380.700	403.600	0.000	1061000.000	120200.000	125900.000	
X		69.087%	0.096	373.700	395.300	0.000	1044000.000	117500.000	119400.000	
		σ	1.145%	0.065	11.800	12.030	0.000	26200.000	3139.000	6070.000
		%RSD	1.657	67.870	3.159	3.043	0.000	2.510	2.671	5.082
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:30:58	4.413	151.900	0.000	30960.000	31920.000	30250.000	75.639%	0.162	
2	03:31:06	5.107	154.600	0.000	31760.000	33560.000	31540.000	73.724%	0.148	
3	03:31:14	5.320	154.400	0.000	32320.000	33770.000	32260.000	73.822%	-0.216	
X		4.947	153.700	0.000	31680.000	33080.000	31350.000	74.395%	0.032	
		σ	0.474	1.511	0.000	682.800	1011.000	1016.000	1.079%	0.215
		%RSD	9.585	0.983	0.000	2.156	3.058	3.241	1.450	679.500
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:30:58	0.228	0.857	0.744	0.486	101.400	0.027	0.253	0.790	
2	03:31:06	0.534	0.892	0.841	0.548	92.700	0.024	0.179	0.783	
3	03:31:14	0.355	0.989	0.885	0.540	88.450	0.023	0.293	0.726	
X		0.372	0.913	0.823	0.525	94.190	0.025	0.242	0.766	
		σ	0.154	0.068	0.072	6.610	0.002	0.058	0.035	
		%RSD	41.260	7.466	8.761	6.433	7.018	8.040	23.790	4.552
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:30:58	0.431	1.458	2.225	0.324	0.637	33.720	0.000	613.300	
2	03:31:06	0.570	1.914	1.888	0.289	1.183	37.340	0.000	629.500	
3	03:31:14	0.410	1.886	1.694	0.298	0.588	37.130	0.000	615.600	
X		0.470	1.753	1.936	0.303	0.803	36.060	0.000	619.500	
		σ	0.087	0.255	0.268	0.018	0.330	2.033	8.794	
		%RSD	18.470	14.570	13.860	5.941	41.140	5.638	1.420	
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:30:58	68.722%	2.194	1.848	58.126%	-0.023	-0.025	-0.001	-0.005	
2	03:31:06	67.883%	1.904	1.925	58.416%	-0.037	-0.030	0.025	-0.016	
3	03:31:14	69.471%	1.912	1.845	59.236%	-0.028	-0.030	0.025	0.024	
X		68.692%	2.004	1.873	58.593%	-0.029	-0.028	0.016	0.001	
		σ	0.795%	0.165	0.045	0.576%	0.007	0.003	0.015	0.021
		%RSD	1.157	8.243	2.415	0.982	24.950	10.830	89.610	2789.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:30:58	62.563%	-0.985	0.129	0.002	4.247	4.896	69.539%	70.163%	
2	03:31:06	63.407%	-1.113	0.159	0.093	5.147	5.184	70.741%	71.021%	
3	03:31:14	64.916%	-1.117	0.089	0.053	4.657	5.187	70.222%	71.491%	
X		63.629%	-1.072	0.126	0.049	4.684	5.089	70.167%	70.892%	
		σ	1.192%	0.075	0.035	0.045	0.451	0.167	0.603%	0.673%
		%RSD	1.873	6.967	27.920	92.050	9.626	3.288	0.859	0.949
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	03:30:58	-0.095	-0.072	-0.020	-0.006	-0.021	61.139%			
2	03:31:06	-0.095	-0.078	-0.002	0.013	-0.009	62.502%			
3	03:31:14	-0.091	-0.078	0.016	0.009	-0.005	61.729%			
X		-0.094	-0.076	-0.002	0.005	-0.012	61.790%			
		σ	0.002	0.004	0.018	0.010	0.008	0.684%		
		%RSD	2.207	4.676	892.200	193.000	72.390	1.106		

180-42903-H-10-A@10

4/27/2015 3:36:58 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	03:36:04	69.847%	0.197	371.600	392.500	0.000	1047000.000	119000.000	122700.000	
2	03:36:12	67.117%	0.187	399.900	421.300	0.000	1095000.000	123300.000	127800.000	
3	03:36:20	64.140%	0.288	424.600	442.900	0.000	1130000.000	127600.000	125700.000	
X		67.035%	0.224	398.700	418.900	0.000	1091000.000	123300.000	125400.000	
		σ	2.855%	0.055	26.520	25.290	0.000	41600.000	4308.000	2548.000
		%RSD	4.258	24.660	6.653	6.038	0.000	3.814	3.494	2.032
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:36:04	71.020	297.600	0.000	32460.000	32570.000	31390.000	75.150%	0.311	
2	03:36:12	73.760	305.300	0.000	33060.000	34410.000	32360.000	73.803%	1.237	
3	03:36:20	73.530	313.900	0.000	33520.000	34590.000	33480.000	73.077%	0.522	
X		72.770	305.600	0.000	33010.000	33860.000	32410.000	74.010%	0.690	
		σ	1.516	8.158	0.000	530.500	1116.000	1049.000	1.052%	0.485
		%RSD	2.083	2.670	0.000	1.607	3.297	3.236	1.421	70.330
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:36:04	-0.395	0.994	3.287	29.800	124.600	0.043	0.125	1.146	
2	03:36:12	0.190	0.982	3.416	30.490	114.200	0.020	0.095	1.222	
3	03:36:20	0.160	1.175	3.470	29.640	120.300	0.048	-0.023	1.182	
X		-0.015	1.050	3.391	29.980	119.700	0.037	0.066	1.183	
		σ	0.329	0.108	0.094	0.450	5.205	0.015	0.078	0.038
		%RSD	2200.000	10.300	2.774	1.500	4.349	41.250	119.200	3.216
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:36:04	1.046	3.397	3.091	0.273	0.599	29.250	0.000	635.100	
2	03:36:12	0.811	2.898	2.815	0.344	0.549	32.440	0.000	641.100	
3	03:36:20	0.683	3.509	2.445	0.387	0.737	30.490	0.000	643.400	
X		0.847	3.268	2.784	0.335	0.628	30.730	0.000	639.900	
		σ	0.185	0.326	0.324	0.058	0.098	1.610	0.000	4.316
		%RSD	21.790	9.962	11.640	17.320	15.520	5.239	0.000	0.675
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:36:04	67.514%	1.997	1.984	57.695%	-0.028	-0.025	-0.001	0.005	
2	03:36:12	68.043%	1.625	1.844	59.042%	-0.037	-0.040	0.025	0.004	
3	03:36:20	68.946%	1.919	1.840	59.272%	-0.033	-0.025	0.076	-0.026	
X		68.167%	1.847	1.889	58.670%	-0.033	-0.030	0.033	-0.006	
		σ	0.724%	0.196	0.082	0.852%	0.005	0.009	0.039	0.018
		%RSD	1.062	10.630	4.336	1.452	15.100	29.300	116.300	314.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:36:04	62.837%	-1.032	0.107	0.057	6.231	5.361	70.568%	70.403%	
2	03:36:12	63.428%	-1.124	0.159	0.047	4.696	6.090	71.036%	72.135%	
3	03:36:20	64.056%	-1.181	0.163	0.127	6.132	5.829	71.372%	71.890%	
X		63.440%	-1.112	0.143	0.077	5.686	5.760	70.992%	71.476%	
		σ	0.609%	0.075	0.031	0.044	0.859	0.369	0.404%	0.937%
		%RSD	0.961	6.756	21.800	56.870	15.110	6.409	0.569	1.311
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	03:36:04	-0.091	-0.075	0.151	0.109	0.126	61.669%			
2	03:36:12	-0.092	-0.081	0.086	0.062	0.079	62.760%			
3	03:36:20	-0.099	-0.078	0.166	0.107	0.133	62.752%			
X		-0.094	-0.078	0.134	0.093	0.113	62.394%			
		σ	0.004	0.003	0.043	0.027	0.029	0.627%		
		%RSD	4.385	3.883	31.690	28.570	25.870	1.005		

180-42903-H-10-A SD@50

4/27/2015 3:42:06 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	03:41:12	74.859%	0.018	77.280	82.890	0.000	219500.000	23520.000	23120.000
2	03:41:20	75.350%	-0.042	78.090	80.920	0.000	216500.000	23050.000	22620.000
3	03:41:27	76.593%	0.070	80.110	81.180	0.000	212600.000	23200.000	22800.000
X		75.601%	0.016	78.490	81.660	0.000	216200.000	23260.000	22850.000
		0.894%	0.056	1.460	1.067	0.000	3474.000	237.700	251.800
		1.183	360.700	1.860	1.307	0.000	1.607	1.022	1.102
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:12	26.030	69.820	0.000	6543.000	6543.000	6079.000	80.178%	0.081
2	03:41:20	24.130	66.810	0.000	6761.000	6959.000	6312.000	79.497%	0.020
3	03:41:27	23.030	61.270	0.000	6823.000	6920.000	6479.000	79.161%	-0.045
X		24.400	65.970	0.000	6709.000	6807.000	6290.000	79.612%	0.019
		1.516	4.341	0.000	147.000	229.600	201.000	0.518%	0.063
		6.212	6.581	0.000	2.191	3.372	3.196	0.651	334.600
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:12	-0.533	0.301	2.114	325.800	320.800	0.025	-0.070	0.644
2	03:41:20	0.417	0.291	2.017	327.700	342.200	0.010	-0.023	0.610
3	03:41:27	-0.172	0.340	2.186	332.600	342.800	0.014	0.054	0.752
X		-0.096	0.311	2.106	328.700	335.300	0.016	-0.013	0.669
		0.480	0.026	0.085	3.529	12.560	0.008	0.063	0.074
		499.800	8.252	4.036	1.074	3.745	47.820	488.600	11.100
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:12	0.314	0.641	0.677	0.064	0.730	6.012	0.000	124.500
2	03:41:20	0.469	0.621	0.755	0.046	0.281	7.301	0.000	125.600
3	03:41:27	0.206	0.726	0.736	0.058	0.585	5.998	0.000	123.700
X		0.329	0.662	0.723	0.056	0.532	6.437	0.000	124.600
		0.132	0.056	0.041	0.010	0.229	0.749	0.000	0.955
		40.050	8.440	5.673	17.120	43.090	11.630	0.000	0.767
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:12	73.492%	0.410	0.452	64.979%	-0.043	-0.026	0.023	-0.037
2	03:41:20	73.716%	0.368	0.435	64.932%	-0.025	-0.031	-0.001	-0.027
3	03:41:27	75.286%	0.361	0.394	65.765%	-0.034	-0.031	-0.001	-0.018
X		74.165%	0.380	0.427	65.225%	-0.034	-0.029	0.007	-0.027
		0.977%	0.026	0.030	0.468%	0.009	0.003	0.014	0.009
		1.318	6.902	7.068	0.717	25.510	9.230	187.300	33.420
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:41:12	68.957%	-1.106	-0.001	-0.043	0.974	1.362	74.875%	75.419%
2	03:41:20	68.619%	-1.022	-0.043	0.009	1.054	1.279	74.416%	75.320%
3	03:41:27	71.269%	-1.062	-0.009	-0.070	0.910	1.304	76.387%	76.855%
X		69.615%	-1.064	-0.018	-0.034	0.979	1.315	75.226%	75.865%
		1.442%	0.042	0.023	0.040	0.072	0.043	1.031%	0.859%
		2.071	3.944	129.700	116.500	7.383	3.237	1.371	1.132
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:41:12	-0.099	-0.082	0.005	0.030	0.008	69.308%		
2	03:41:20	-0.099	-0.078	-0.011	0.026	0.002	69.389%		
3	03:41:27	-0.099	-0.081	-0.003	0.017	-0.008	69.290%		
X		-0.099	-0.080	-0.003	0.024	0.001	69.329%		
		0.000	0.002	0.008	0.007	0.008	0.053%		
		0.000	2.547	254.400	28.410	1139.000	0.076		

180-42903-H-10-B MS@10

4/27/2015 3:47:14 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	03:46:20	67.025%	5.301	484.900	491.300	0.000	1057000.000	126500.000	131600.000	
2	03:46:28	66.611%	5.414	491.700	503.600	0.000	1081000.000	125700.000	132000.000	
3	03:46:36	66.864%	5.013	483.500	512.900	0.000	1076000.000	126000.000	132300.000	
X		66.834%	5.242	486.700	502.600	0.000	1072000.000	126000.000	132000.000	
		σ	0.209%	0.207	4.414	10.870	0.000	12790.000	403.700	384.600
		%RSD	0.312	3.948	0.907	2.163	0.000	1.193	0.320	0.291
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:46:20	347.300	1375.000	0.000	36590.000	36810.000	35290.000	73.119%	87.210	
2	03:46:28	339.600	1406.000	0.000	37710.000	38540.000	36920.000	72.022%	89.740	
3	03:46:36	345.700	1395.000	0.000	37590.000	39520.000	37660.000	71.921%	94.680	
X		344.200	1392.000	0.000	37300.000	38290.000	36620.000	72.354%	90.550	
		σ	4.098	15.560	0.000	616.400	1370.000	1213.000	0.664%	3.799
		%RSD	1.191	1.118	0.000	1.653	3.579	3.312	0.918	4.196
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:46:20	45.130	18.540	44.160	125.500	234.000	44.100	46.380	23.170	
2	03:46:28	47.090	19.360	46.140	128.600	233.000	45.300	44.280	23.840	
3	03:46:36	49.080	19.170	47.320	130.000	222.800	44.860	45.820	24.120	
X		47.100	19.030	45.870	128.000	229.900	44.760	45.500	23.710	
		σ	1.975	0.429	1.597	2.309	6.216	0.606	1.087	0.486
		%RSD	4.193	2.252	3.481	1.803	2.703	1.353	2.390	2.048
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:46:20	23.870	45.590	46.560	4.209	1.351	38.410	0.000	724.400	
2	03:46:28	24.550	48.310	49.310	4.228	1.840	39.030	0.000	735.300	
3	03:46:36	24.250	47.460	48.550	4.287	1.734	37.650	0.000	729.300	
X		24.220	47.120	48.140	4.241	1.642	38.360	0.000	729.700	
		σ	0.339	1.391	1.419	0.041	0.257	0.693	0.000	5.462
		%RSD	1.398	2.951	2.947	0.957	15.660	1.807	0.000	0.749
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:46:20	66.623%	102.700	105.200	57.463%	4.806	4.693	4.391	9.052	
2	03:46:28	67.209%	102.900	106.200	57.663%	4.712	4.892	5.102	8.888	
3	03:46:36	67.563%	101.500	105.400	57.644%	4.512	4.597	5.153	9.060	
X		67.132%	102.400	105.600	57.590%	4.676	4.727	4.882	9.000	
		σ	0.475%	0.722	0.511	0.111%	0.150	0.151	0.426	0.097
		%RSD	0.708	0.706	0.484	0.192	3.211	3.188	8.721	1.074
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	03:46:20	62.656%	187.800	48.030	48.330	198.900	197.900	69.537%	70.606%	
2	03:46:28	62.451%	193.500	48.950	48.160	202.400	195.500	69.668%	70.592%	
3	03:46:36	62.972%	193.000	48.550	49.150	202.300	198.700	69.181%	71.233%	
X		62.693%	191.400	48.510	48.550	201.200	197.400	69.462%	70.811%	
		σ	0.262%	3.139	0.459	0.530	1.958	1.633	0.252%	0.366%
		%RSD	0.418	1.639	0.946	1.091	0.973	0.827	0.363	0.517
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	03:46:20	5.039	4.727	2.344	2.115	2.180	61.323%			
2	03:46:28	4.908	4.903	2.101	2.193	2.167	61.129%			
3	03:46:36	5.114	4.735	2.122	2.034	2.044	62.379%			
X		5.020	4.788	2.189	2.114	2.130	61.611%			
		σ	0.104	0.100	0.135	0.079	0.075	0.672%		
		%RSD	2.070	2.078	6.145	3.744	3.529	1.091		

CCV 1533080 4/27/2015 3:52:19 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	03:51:26	75.159%	92.960	102.100	99.070	0.000	60380.000	54510.000	53920.000
2	03:51:34	71.503%	100.500	106.200	108.100	0.000	62020.000	56850.000	56160.000
3	03:51:41	70.943%	99.570	103.800	106.300	0.000	63750.000	57280.000	57320.000
X		72.535%	97.677%	104.078%	104.506%	0.000	124.102%	112.427%	111.596%
σ		2.290%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		3.157	4.213	1.975	4.590	0.000	2.716	2.655	3.094
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:26	593.400	5122.000	0.000	51560.000	46720.000	45130.000	73.714%	93.600
2	03:51:34	613.000	5417.000	0.000	53140.000	48810.000	47070.000	71.603%	96.750
3	03:51:41	630.000	5367.000	0.000	54160.000	49350.000	47680.000	71.447%	97.940
X		122.427%	106.042%	0.000	105.906%	96.586%	93.257%	72.255%	96.099%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.266%	n/a
%RSD		2.992	2.976	0.000	2.472	2.877	2.853	1.752	2.336
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:26	92.980	91.710	460.700	23320.000	21710.000	89.630	89.410	93.660
2	03:51:34	98.390	94.510	478.900	24400.000	22610.000	93.010	93.980	95.420
3	03:51:41	97.890	96.680	487.200	24760.000	23120.000	93.940	93.430	95.670
X		96.418%	94.301%	95.118%	96.648%	89.919%	92.197%	92.275%	94.917%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.104	2.638	2.853	3.100	3.169	2.462	2.710	1.158
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:26	90.740	94.170	89.700	94.050	96.450	100.600	0.000	93.790
2	03:51:34	95.160	93.750	91.590	94.100	97.160	92.940	0.000	94.350
3	03:51:41	94.660	96.650	91.660	92.670	96.140	88.530	0.000	92.270
X		93.520%	94.858%	90.983%	93.607%	96.585%	94.013%	0.000	93.469%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		2.592	1.653	1.221	0.869	0.538	6.480	0.000	1.151
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:26	69.852%	95.260	97.080	61.026%	94.050	95.000	94.920	94.280
2	03:51:34	71.206%	95.630	96.400	61.896%	94.190	94.240	93.400	93.840
3	03:51:41	71.793%	97.300	97.570	61.871%	95.440	93.760	91.720	94.290
X		70.950%	96.064%	97.015%	61.598%	94.560%	94.334%	93.346%	94.139%
σ		0.995%	n/a	n/a	0.496%	n/a	n/a	n/a	n/a
%RSD		1.403	1.131	0.606	0.804	0.809	0.661	1.714	0.276
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:26	65.063%	92.530	93.720	91.500	97.350	96.100	70.515%	71.618%
2	03:51:34	66.242%	93.240	94.170	92.860	93.630	95.080	71.592%	72.087%
3	03:51:41	66.951%	94.290	91.740	92.950	97.650	96.940	72.432%	73.836%
X		66.085%	93.354%	93.212%	92.439%	96.212%	96.042%	71.513%	72.514%
σ		0.954%	n/a	n/a	n/a	n/a	n/a	0.961%	1.169%
%RSD		1.443	0.949	1.385	0.881	2.330	0.967	1.344	1.612
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:51:26	97.480	96.840	98.510	97.390	97.820	64.655%		
2	03:51:34	99.000	96.380	98.540	97.660	97.720	65.351%		
3	03:51:41	98.990	97.340	99.330	99.310	99.150	65.211%		
X		98.489%	96.854%	98.795%	98.121%	98.231%	65.072%		
σ		n/a	n/a	n/a	n/a	n/a	0.368%		
%RSD		0.889	0.492	0.472	1.061	0.816	0.566		

CCB7 4/27/2015 4:01:31 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	04:00:37	93.796%	-0.027	1.509	1.819	0.000	536.000	18.800	18.950
2	04:00:45	93.553%	-0.064	0.760	1.455	0.000	554.500	23.340	20.070
3	04:00:52	89.517%	0.089	1.287	1.533	0.000	585.000	25.250	24.120
X		92.289%	-0.001	1.185	1.602	0.000	558.500	22.470	21.050
		2.403%	0.080	0.385	0.192	0.000	24.710	3.312	2.718
		2.604	14820.000	32.470	11.970	0.000	4.425	14.740	12.920
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:00:37	2.711	0.362	0.000	-7.259	37.050	21.010	91.603%	-0.220
2	04:00:45	3.498	-1.916	0.000	-0.588	36.310	15.840	90.444%	-0.243
3	04:00:52	3.751	-2.549	0.000	-5.312	23.100	21.580	90.349%	-0.154
X		3.320	-1.368	0.000	-4.387	32.150	19.480	90.799%	-0.206
		0.542	1.531	0.000	3.431	7.847	3.161	0.698%	0.046
		16.330	111.900	0.000	78.210	24.400	16.230	0.769	22.530
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:00:37	0.170	0.039	0.208	10.130	9.928	0.030	-0.062	0.544
2	04:00:45	0.252	0.025	0.224	10.540	10.890	0.027	-0.171	0.406
3	04:00:52	0.052	0.053	0.148	10.730	12.950	0.037	-0.102	0.479
X		0.158	0.039	0.193	10.470	11.260	0.032	-0.112	0.477
		0.100	0.014	0.040	0.307	1.546	0.005	0.055	0.069
		63.580	35.580	20.840	2.935	13.740	16.160	49.140	14.430
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:00:37	0.019	-0.063	-0.003	0.080	0.241	2.009	0.000	0.117
2	04:00:45	-0.021	-0.182	0.048	0.084	0.358	0.859	0.000	0.116
3	04:00:52	0.041	-0.101	-0.026	0.064	0.597	-1.451	0.000	0.129
X		0.013	-0.116	0.006	0.076	0.399	0.472	0.000	0.121
		0.032	0.061	0.038	0.011	0.181	1.762	0.000	0.007
		243.300	52.670	616.800	13.960	45.460	373.100	0.000	6.183
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:00:37	84.039%	0.378	0.307	83.649%	-0.012	0.001	0.019	0.012
2	04:00:45	84.604%	0.341	0.228	84.508%	-0.002	-0.021	0.058	0.011
3	04:00:52	83.947%	0.275	0.249	84.746%	0.001	0.008	0.057	-0.013
X		84.197%	0.331	0.261	84.301%	-0.004	-0.004	0.045	0.004
		0.356%	0.052	0.041	0.577%	0.007	0.016	0.022	0.014
		0.423	15.820	15.660	0.685	160.000	400.300	49.930	399.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:00:37	79.972%	-0.980	0.138	0.065	-0.003	0.068	85.177%	85.004%
2	04:00:45	80.365%	-0.822	0.137	0.086	-0.003	0.048	85.596%	86.241%
3	04:00:52	80.840%	-0.895	0.089	0.034	-0.004	0.028	85.641%	85.960%
X		80.392%	-0.899	0.122	0.062	-0.003	0.048	85.471%	85.735%
		0.435%	0.079	0.028	0.026	0.000	0.020	0.256%	0.649%
		0.541	8.793	23.280	42.510	4.054	41.350	0.299	0.757
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:00:37	-0.036	0.004	0.002	0.022	-0.007	78.872%		
2	04:00:45	-0.019	0.010	0.016	-0.002	0.003	78.560%		
3	04:00:52	-0.011	0.004	-0.009	0.005	-0.008	79.223%		
X		-0.022	0.006	0.003	0.008	-0.004	78.885%		
		0.013	0.004	0.013	0.012	0.006	0.332%		
		57.530	62.640	448.400	144.600	164.100	0.421		

180-42903-H-10-C MSD@10

4/27/2015 4:06:42 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	04:05:48	67.179%	5.080	466.900	479.500	0.000	1056000.000	127500.000	132100.000	
2	04:05:56	64.978%	4.759	493.600	506.800	0.000	1100000.000	132500.000	133800.000	
3	04:06:04	65.783%	5.338	503.300	510.400	0.000	1094000.000	131300.000	135300.000	
X		65.980%	5.059	487.900	498.900	0.000	1083000.000	130400.000	133800.000	
		σ	1.113%	0.290	18.860	16.910	0.000	24100.000	2594.000	1609.000
		%RSD	1.687	5.731	3.865	3.389	0.000	2.224	1.989	1.203
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:05:48	343.100	1381.000	0.000	37500.000	37790.000	35820.000	69.673%	89.440	
2	04:05:56	355.700	1398.000	0.000	38350.000	39100.000	36940.000	68.833%	92.840	
3	04:06:04	358.500	1432.000	0.000	38900.000	39410.000	37970.000	68.212%	90.620	
X		352.400	1404.000	0.000	38250.000	38770.000	36910.000	68.906%	90.970	
		σ	8.185	26.030	0.000	702.100	859.400	1076.000	0.733%	1.726
		%RSD	2.322	1.854	0.000	1.836	2.217	2.916	1.064	1.898
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:05:48	46.650	18.970	45.170	136.000	222.700	44.040	44.900	24.520	
2	04:05:56	47.780	19.270	46.570	136.900	255.400	44.760	45.660	24.540	
3	04:06:04	49.240	20.000	47.280	135.800	228.800	46.530	45.730	24.790	
X		47.890	19.410	46.340	136.200	235.600	45.110	45.430	24.620	
		σ	1.297	0.532	1.073	0.582	17.360	1.283	0.460	0.150
		%RSD	2.709	2.740	2.316	0.427	7.368	2.843	1.012	0.609
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:05:48	23.560	47.000	47.950	4.377	2.797	54.870	0.000	729.000	
2	04:05:56	25.400	48.390	46.340	4.090	1.900	57.040	0.000	722.900	
3	04:06:04	23.230	49.670	48.020	4.437	1.912	59.520	0.000	730.700	
X		24.060	48.350	47.440	4.301	2.203	57.140	0.000	727.500	
		σ	1.169	1.336	0.947	0.186	0.514	2.328	0.000	4.108
		%RSD	4.858	2.764	1.996	4.317	23.350	4.074	0.000	0.565
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:05:48	65.711%	99.950	105.800	56.520%	4.887	4.798	4.757	8.719	
2	04:05:56	67.665%	98.390	103.200	57.592%	4.639	4.588	4.918	8.950	
3	04:06:04	67.328%	100.300	102.800	57.397%	4.585	4.597	5.488	8.897	
X		66.902%	99.550	103.900	57.169%	4.704	4.661	5.054	8.855	
		σ	1.044%	1.022	1.636	0.571%	0.161	0.119	0.384	0.121
		%RSD	1.561	1.027	1.574	0.999	3.419	2.558	7.594	1.366
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:05:48	61.614%	188.000	48.350	49.050	200.800	194.600	68.333%	69.370%	
2	04:05:56	61.990%	189.900	47.830	48.850	201.800	194.300	68.860%	69.487%	
3	04:06:04	62.257%	190.200	47.710	48.000	194.500	197.300	69.185%	69.894%	
X		61.954%	189.400	47.970	48.640	199.100	195.400	68.793%	69.583%	
		σ	0.323%	1.219	0.341	0.559	3.940	1.652	0.430%	0.275%
		%RSD	0.521	0.644	0.711	1.149	1.979	0.846	0.626	0.395
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	04:05:48	4.687	4.902	1.964	2.227	2.109	60.070%			
2	04:05:56	4.934	4.917	2.236	2.072	2.103	60.207%			
3	04:06:04	4.867	4.907	2.384	2.072	2.190	60.670%			
X		4.829	4.908	2.194	2.124	2.134	60.315%			
		σ	0.128	0.008	0.213	0.089	0.048	0.314%		
		%RSD	2.649	0.156	9.704	4.213	2.257	0.521		

180-42903-H-10-A PDS@10

4/27/2015 4:11:50 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	04:10:56	66.568%	5.510	477.100	507.700	0.000	1029000.000	122700.000	121900.000	
2	04:11:04	65.932%	5.459	490.300	521.200	0.000	1089000.000	127100.000	129800.000	
3	04:11:12	67.149%	5.787	503.800	512.600	0.000	1048000.000	125200.000	129400.000	
X		66.550%	5.585	490.400	513.800	0.000	1055000.000	125000.000	127000.000	
		σ	0.609%	0.177	13.310	6.854	0.000	30440.000	2207.000	4471.000
		%RSD	0.915	3.160	2.715	1.334	0.000	2.884	1.765	3.520
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:10:56	314.300	1436.000	0.000	37080.000	36590.000	35440.000	72.950%	99.960	
2	04:11:04	318.500	1483.000	0.000	37930.000	38540.000	36710.000	71.618%	108.300	
3	04:11:12	304.200	1491.000	0.000	39090.000	40570.000	37790.000	71.131%	107.400	
X		312.300	1470.000	0.000	38030.000	38570.000	36650.000	71.900%	105.200	
		σ	7.345	29.660	0.000	1010.000	1990.000	1174.000	0.942%	4.586
		%RSD	2.352	2.017	0.000	2.656	5.158	3.204	1.310	4.359
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:10:56	47.930	19.690	46.260	122.500	230.800	46.180	46.730	24.630	
2	04:11:04	49.110	19.600	47.240	122.300	221.100	45.450	46.400	24.390	
3	04:11:12	50.680	19.500	49.130	122.800	229.300	45.680	46.260	24.330	
X		49.240	19.600	47.540	122.600	227.000	45.770	46.460	24.450	
		σ	1.384	0.095	1.456	0.265	5.202	0.373	0.242	0.158
		%RSD	2.810	0.485	3.062	0.216	2.291	0.815	0.520	0.647
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:10:56	23.190	50.640	47.740	4.339	1.386	28.400	0.000	733.800	
2	04:11:04	23.890	48.080	46.710	3.963	1.487	32.700	0.000	709.500	
3	04:11:12	24.010	49.040	50.020	4.060	2.338	33.680	0.000	722.400	
X		23.700	49.250	48.160	4.121	1.737	31.590	0.000	721.900	
		σ	0.445	1.296	1.698	0.195	0.523	2.807	0.000	12.120
		%RSD	1.879	2.631	3.525	4.734	30.120	8.883	0.000	1.679
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:10:56	64.562%	116.800	121.000	56.479%	4.680	4.203	4.886	9.740	
2	04:11:04	67.758%	114.400	120.300	57.191%	4.526	4.565	5.197	9.856	
3	04:11:12	67.244%	114.500	119.700	57.323%	4.421	4.344	5.100	9.652	
X		66.521%	115.200	120.300	56.998%	4.542	4.370	5.061	9.749	
		σ	1.716%	1.345	0.639	0.454%	0.130	0.183	0.159	0.103
		%RSD	2.580	1.168	0.531	0.796	2.866	4.176	3.144	1.051
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:10:56	60.697%	219.000	55.430	54.840	201.000	202.000	68.109%	69.237%	
2	04:11:04	61.939%	217.500	54.160	55.110	202.800	201.200	68.858%	69.557%	
3	04:11:12	62.179%	215.300	54.190	54.800	213.200	206.100	69.112%	70.004%	
X		61.605%	217.300	54.590	54.920	205.700	203.100	68.693%	69.600%	
		σ	0.795%	1.877	0.726	0.167	6.548	2.615	0.522%	0.385%
		%RSD	1.291	0.864	1.331	0.303	3.184	1.288	0.760	0.554
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	04:10:56	4.798	5.059	2.081	2.374	2.139	59.612%			
2	04:11:04	5.270	5.060	2.139	2.140	2.212	60.467%			
3	04:11:12	5.116	4.844	2.098	2.229	2.063	60.846%			
X		5.061	4.988	2.106	2.248	2.138	60.308%			
		σ	0.241	0.124	0.030	0.118	0.074	0.632%		
		%RSD	4.755	2.494	1.423	5.245	3.481	1.048		

180-42903-I-10-A@10 4/27/2015 4:16:55 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	04:16:02	67.542%	0.185	391.600	399.700	0.000	1054000.000	119600.000	118600.000	
2	04:16:10	66.805%	0.215	394.700	408.400	0.000	1058000.000	121000.000	125000.000	
3	04:16:18	67.822%	0.299	392.800	406.200	0.000	1084000.000	122000.000	128200.000	
X		67.390%	0.233	393.000	404.800	0.000	1065000.000	120800.000	123900.000	
		σ	0.525%	0.059	1.564	4.514	0.000	16040.000	1213.000	4889.000
		%RSD	0.779	25.470	0.398	1.115	0.000	1.506	1.004	3.945
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:16:02	2.697	154.100	0.000	32410.000	32670.000	31390.000	72.661%	0.124	
2	04:16:10	3.379	151.400	0.000	32800.000	34030.000	32300.000	72.009%	0.243	
3	04:16:18	3.830	154.800	0.000	33530.000	34210.000	32800.000	71.636%	0.509	
X		3.302	153.400	0.000	32910.000	33640.000	32160.000	72.102%	0.292	
		σ	0.570	1.821	0.000	567.600	840.900	716.900	0.519%	0.198
		%RSD	17.270	1.187	0.000	1.725	2.500	2.229	0.720	67.690
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:16:02	-0.281	0.852	0.648	2.543	88.910	0.028	0.031	0.951	
2	04:16:10	0.187	0.829	0.624	2.503	103.100	0.053	-0.037	1.029	
3	04:16:18	0.376	0.793	0.741	2.424	79.240	0.012	-0.036	1.095	
X		0.094	0.824	0.671	2.490	90.430	0.031	-0.014	1.025	
		σ	0.338	0.030	0.062	0.061	12.030	0.021	0.039	0.072
		%RSD	359.100	3.630	9.185	2.447	13.300	66.670	277.800	7.048
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:16:02	0.566	2.717	3.926	0.339	1.294	54.450	0.000	623.900	
2	04:16:10	0.593	3.527	3.104	0.334	1.243	55.770	0.000	625.400	
3	04:16:18	0.349	2.986	2.808	0.365	1.000	53.810	0.000	629.700	
X		0.503	3.077	3.279	0.346	1.179	54.680	0.000	626.300	
		σ	0.134	0.413	0.579	0.017	1.000	0.000	2.996	
		%RSD	26.640	13.410	17.660	4.973	13.320	1.830	0.478	
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:16:02	67.270%	2.977	2.600	57.342%	-0.032	-0.035	-0.001	0.090	
2	04:16:10	67.563%	2.576	2.974	58.084%	-0.037	-0.035	-0.001	0.026	
3	04:16:18	67.468%	2.447	2.762	57.896%	-0.047	-0.020	-0.001	0.047	
X		67.434%	2.667	2.779	57.774%	-0.039	-0.030	-0.001	0.054	
		σ	0.150%	0.277	0.187	0.386%	0.007	0.009	0.000	0.032
		%RSD	0.222	10.380	6.736	0.667	19.150	29.900	2.664	59.880
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:16:02	61.869%	1.809	0.473	0.505	4.307	4.867	68.324%	68.919%	
2	04:16:10	62.541%	1.072	0.474	0.386	5.002	5.214	68.895%	69.706%	
3	04:16:18	62.083%	0.722	0.552	0.389	7.110	4.954	69.145%	69.040%	
X		62.164%	1.201	0.500	0.427	5.473	5.011	68.788%	69.222%	
		σ	0.343%	0.555	0.045	0.068	1.460	0.181	0.421%	0.424%
		%RSD	0.552	46.240	9.097	15.880	26.670	3.609	0.611	0.613
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	04:16:02	-0.065	-0.048	0.004	0.010	-0.006	59.937%			
2	04:16:10	-0.051	-0.038	-0.001	-0.016	-0.014	60.548%			
3	04:16:18	-0.074	-0.049	-0.029	0.003	-0.025	62.154%			
X		-0.063	-0.045	-0.009	-0.001	-0.015	60.880%			
		σ	0.011	0.006	0.018	0.014	0.010	1.145%		
		%RSD	18.000	14.020	208.500	1643.000	64.370	1.880		

MB 180-139027/1-A 4/27/2015 4:26:02 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	04:25:10	88.704%	-0.017	2.119	2.607	0.000	507.600	1.615	1.341
2	04:25:18	87.555%	-0.034	2.513	2.060	0.000	511.800	0.188	3.371
3	04:25:25	88.136%	-0.006	1.274	2.014	0.000	507.700	-0.469	2.218
X		88.132%	-0.019	1.969	2.227	0.000	509.000	0.445	2.310
σ		0.574%	0.014	0.633	0.330	0.000	2.386	1.065	1.018
%RSD		0.652	76.690	32.150	14.810	0.000	0.469	239.600	44.080
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:10	0.163	2.210	0.000	-11.170	19.120	10.020	91.450%	-0.072
2	04:25:18	0.226	0.274	0.000	-4.594	1.777	11.020	89.715%	-0.270
3	04:25:25	0.631	-2.527	0.000	-4.757	25.270	12.110	89.594%	-0.449
X		0.340	-0.014	0.000	-6.841	15.390	11.050	90.253%	-0.264
σ		0.254	2.382	0.000	3.752	12.180	1.043	1.038%	0.188
%RSD		74.590	16580.000	0.000	54.840	79.160	9.438	1.151	71.370
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:10	0.080	0.040	-0.046	-0.783	0.228	-0.005	-0.074	0.373
2	04:25:18	0.135	0.102	-0.034	-0.683	-0.899	0.008	-0.128	0.428
3	04:25:25	-0.090	0.071	-0.056	-0.831	-0.899	0.001	-0.142	0.461
X		0.042	0.071	-0.046	-0.766	-0.523	0.001	-0.115	0.421
σ		0.117	0.031	0.011	0.076	0.651	0.007	0.036	0.044
%RSD		280.100	43.530	24.600	9.869	124.300	532.100	31.230	10.490
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:10	0.074	0.285	0.307	-0.023	0.207	2.480	0.000	0.011
2	04:25:18	0.055	0.372	0.183	0.007	0.650	2.081	0.000	0.011
3	04:25:25	0.128	0.127	0.285	-0.015	0.528	1.522	0.000	0.010
X		0.086	0.261	0.258	-0.010	0.462	2.028	0.000	0.011
σ		0.038	0.125	0.066	0.015	0.229	0.481	0.000	0.000
%RSD		44.480	47.640	25.650	147.900	49.500	23.730	0.000	0.710
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:10	81.738%	0.160	0.252	78.729%	-0.032	-0.036	-0.001	-0.003
2	04:25:18	82.031%	0.113	0.216	78.574%	-0.043	-0.032	-0.001	-0.020
3	04:25:25	82.368%	0.158	0.192	79.512%	-0.018	-0.036	-0.001	-0.020
X		82.046%	0.144	0.220	78.938%	-0.031	-0.035	-0.001	-0.014
σ		0.316%	0.027	0.031	0.502%	0.013	0.002	0.000	0.010
%RSD		0.385	18.730	13.890	0.637	40.980	6.577	5.963	67.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:25:10	77.335%	-0.758	0.025	-0.035	0.099	0.030	82.090%	82.733%
2	04:25:18	77.383%	-0.657	0.013	-0.036	-0.002	0.029	83.342%	84.041%
3	04:25:25	77.429%	-0.860	-0.014	-0.020	-0.002	0.070	82.640%	83.461%
X		77.383%	-0.758	0.008	-0.030	0.031	0.043	82.690%	83.412%
σ		0.047%	0.101	0.020	0.009	0.058	0.023	0.627%	0.655%
%RSD		0.061	13.340	245.900	28.720	185.600	54.160	0.759	0.786
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:25:10	-0.081	-0.063	-0.037	-0.034	-0.035	78.000%		
2	04:25:18	-0.070	-0.068	-0.019	0.014	-0.016	77.766%		
3	04:25:25	-0.093	-0.063	-0.015	-0.017	-0.015	76.729%		
X		-0.081	-0.065	-0.024	-0.012	-0.022	77.498%		
σ		0.011	0.003	0.012	0.024	0.011	0.676%		
%RSD		14.080	4.384	49.300	200.400	50.660	0.872		

LCS 180-139027/2-A 4/27/2015 4:31:10 AM

User Pre-dilution: 1.000

Run	Time	6Li ppb	9Be ppb	10B ppb	11B ppb	13C ppb	23Na ppb	25Mg ppb	26Mg ppb
1	04:30:16	69.697%	50.840	1036.000	1040.000	0.000	57140.000	52690.000	51280.000
2	04:30:24	70.246%	50.170	1056.000	1060.000	0.000	57830.000	52480.000	52330.000
3	04:30:31	72.286%	46.650	1059.000	1044.000	0.000	56470.000	51400.000	50470.000
X		70.743%	49.220	1050.000	1048.000	0.000	57150.000	52190.000	51360.000
σ		1.364%	2.252	12.340	10.290	0.000	681.200	693.800	933.600
%RSD		1.928	4.576	1.174	0.982	0.000	1.192	1.329	1.818
Run	Time	27Al ppb	28Si ppb	37Cl ppb	39K ppb	43Ca ppb	44Ca ppb	45Sc ppb	47Ti ppb
1	04:30:16	2244.000	9566.000	0.000	49980.000	45870.000	43820.000	65.856%	879.200
2	04:30:24	2222.000	9709.000	0.000	51530.000	47740.000	45180.000	65.038%	913.100
3	04:30:31	2179.000	9697.000	0.000	51970.000	48300.000	45800.000	65.325%	933.800
X		2215.000	9657.000	0.000	51160.000	47300.000	44940.000	65.406%	908.700
σ		32.880	79.100	0.000	1045.000	1273.000	1012.000	0.415%	27.570
%RSD		1.484	0.819	0.000	2.042	2.692	2.252	0.635	3.034
Run	Time	51V ppb	52Cr ppb	55Mn ppb	56Fe ppb	57Fe ppb	59Co ppb	60Ni ppb	63Cu ppb
1	04:30:16	472.100	188.400	434.000	907.700	970.100	459.500	454.400	232.000
2	04:30:24	478.700	192.800	449.400	927.100	946.000	457.800	468.300	236.100
3	04:30:31	476.000	193.900	454.300	911.800	997.700	460.900	460.300	234.000
X		475.600	191.700	445.900	915.500	971.300	459.400	461.000	234.100
σ		3.302	2.906	10.600	10.230	25.890	1.556	6.952	2.049
%RSD		0.694	1.516	2.377	1.117	2.665	0.339	1.508	0.876
Run	Time	65Cu ppb	66Zn ppb	68Zn ppb	75As ppb	78Se ppb	82Se ppb	83Kr ppb	88Sr ppb
1	04:30:16	239.400	455.400	443.900	37.800	11.240	12.980	0.000	936.600
2	04:30:24	243.100	459.900	453.200	38.020	9.522	11.550	0.000	934.000
3	04:30:31	233.700	453.300	442.600	38.520	10.040	13.260	0.000	931.300
X		238.700	456.200	446.600	38.110	10.270	12.600	0.000	933.900
σ		4.724	3.359	5.767	0.366	0.883	0.920	0.000	2.647
%RSD		1.979	0.736	1.291	0.960	8.599	7.304	0.000	0.283
Run	Time	89Y ppb	95Mo ppb	98Mo ppb	103Rh ppb	107Ag ppb	109Ag ppb	111Cd ppb	114Cd ppb
1	04:30:16	62.537%	970.600	992.600	55.244%	46.850	47.830	47.900	88.220
2	04:30:24	62.490%	979.500	997.200	55.170%	47.700	47.560	48.850	87.750
3	04:30:31	63.407%	975.800	1007.000	55.122%	47.870	47.180	48.730	87.870
X		62.811%	975.300	999.100	55.179%	47.480	47.520	48.490	87.950
σ		0.516%	4.459	7.600	0.061%	0.546	0.327	0.515	0.243
%RSD		0.822	0.457	0.761	0.111	1.149	0.688	1.062	0.277
Run	Time	115In ppb	118Sn ppb	121Sb ppb	123Sb ppb	135Ba ppb	137Ba ppb	159Tb ppb	165Ho ppb
1	04:30:16	57.887%	1880.000	467.000	469.200	1879.000	1859.000	64.852%	65.793%
2	04:30:24	58.039%	1883.000	470.400	469.600	1888.000	1879.000	65.258%	66.198%
3	04:30:31	58.938%	1866.000	465.600	462.600	1856.000	1868.000	66.154%	67.063%
X		58.288%	1876.000	467.700	467.100	1874.000	1868.000	65.421%	66.351%
σ		0.568%	8.933	2.465	3.954	16.500	10.160	0.666%	0.649%
%RSD		0.975	0.476	0.527	0.846	0.880	0.544	1.018	0.978
Run	Time	203Tl ppb	205Tl ppb	206Pb ppb	207Pb ppb	208Pb ppb	209Bi ppb		
1	04:30:16	49.450	48.790	21.190	20.770	20.650	57.478%		
2	04:30:24	49.540	49.120	20.660	20.720	20.230	58.543%		
3	04:30:31	49.470	48.530	20.170	20.250	20.100	59.156%		
X		49.480	48.810	20.670	20.580	20.330	58.392%		
σ		0.047	0.298	0.512	0.284	0.286	0.849%		
%RSD		0.096	0.610	2.477	1.378	1.406	1.454		

180-42943-C-1-A 4/27/2015 4:36:18 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	04:35:24	78.785%	-0.015	11.140	10.670	0.000	4550.000	7.729	9.107
2	04:35:31	77.940%	0.043	10.600	10.660	0.000	4620.000	14.500	11.900
3	04:35:39	77.630%	0.089	10.120	10.830	0.000	4631.000	9.327	8.402
X		78.119%	0.039	10.620	10.720	0.000	4601.000	10.520	9.802
σ		0.598%	0.052	0.511	0.092	0.000	43.950	3.540	1.848
%RSD		0.765	134.600	4.811	0.861	0.000	0.955	33.650	18.860
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:35:24	413.600	12810.000	0.000	1562.000	39100.000	37270.000	68.988%	3.080
2	04:35:31	432.900	13030.000	0.000	1614.000	40330.000	38960.000	67.651%	3.947
3	04:35:39	424.800	13230.000	0.000	1612.000	41610.000	39880.000	66.886%	3.519
X		423.800	13020.000	0.000	1596.000	40350.000	38710.000	67.842%	3.515
σ		9.716	209.400	0.000	29.130	1251.000	1324.000	1.064%	0.433
%RSD		2.293	1.608	0.000	1.825	3.100	3.420	1.568	12.330
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:35:24	7.825	7.479	0.774	25.990	136.200	0.109	3.003	0.679
2	04:35:31	6.931	7.537	0.891	24.480	135.300	0.061	3.000	0.991
3	04:35:39	4.360	7.491	0.927	24.150	125.300	0.093	2.670	1.035
X		6.372	7.502	0.864	24.870	132.200	0.088	2.891	0.902
σ		1.799	0.031	0.080	0.979	6.050	0.024	0.191	0.194
%RSD		28.230	0.408	9.259	3.936	4.575	27.580	6.615	21.520
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:35:24	0.750	3.802	3.201	1.630	0.442	4.878	0.000	134.800
2	04:35:31	1.067	3.771	4.152	1.670	0.384	3.004	0.000	133.900
3	04:35:39	0.663	4.633	4.863	1.647	0.442	3.407	0.000	135.500
X		0.827	4.069	4.072	1.649	0.422	3.763	0.000	134.800
σ		0.212	0.489	0.834	0.020	0.033	0.986	0.000	0.782
%RSD		25.690	12.010	20.470	1.197	7.930	26.210	0.000	0.580
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:35:24	62.299%	4.024	4.114	55.821%	-0.012	0.041	0.082	0.328
2	04:35:31	63.671%	3.171	3.372	56.390%	0.003	0.007	0.106	0.166
3	04:35:39	62.830%	2.989	2.781	56.983%	-0.007	0.028	0.026	0.167
X		62.933%	3.395	3.422	56.398%	-0.006	0.025	0.071	0.220
σ		0.692%	0.553	0.668	0.581%	0.007	0.017	0.041	0.093
%RSD		1.100	16.280	19.520	1.030	132.400	66.770	57.420	42.290
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:35:24	58.861%	3.846	0.363	0.337	15.800	16.930	66.124%	67.125%
2	04:35:31	61.223%	2.580	0.224	0.275	16.640	16.000	65.706%	66.882%
3	04:35:39	60.608%	2.298	0.254	0.287	17.570	16.030	66.197%	67.496%
X		60.231%	2.908	0.281	0.300	16.670	16.320	66.009%	67.168%
σ		1.225%	0.824	0.073	0.033	0.884	0.531	0.265%	0.309%
%RSD		2.034	28.340	26.120	10.990	5.302	3.253	0.401	0.460
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:35:24	0.002	0.017	0.173	0.124	0.152	62.184%		
2	04:35:31	-0.021	0.014	0.165	0.161	0.159	63.125%		
3	04:35:39	-0.014	0.000	0.152	0.175	0.158	63.184%		
X		-0.011	0.010	0.163	0.153	0.156	62.831%		
σ		0.012	0.009	0.011	0.027	0.004	0.561%		
%RSD		107.400	84.630	6.539	17.400	2.653	0.893		

180-42943-D-1-A 4/27/2015 4:41:25 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	04:40:31	79.664%	-0.128	7.059	8.332	0.000	4294.000	5.529	1.577	
2	04:40:39	79.246%	0.006	6.660	7.914	0.000	4374.000	4.636	3.829	
3	04:40:47	79.570%	-0.017	5.360	7.902	0.000	4402.000	7.775	4.628	
X		79.493%	-0.046	6.360	8.050	0.000	4357.000	5.980	3.345	
		σ	0.219%	0.071	0.888	0.245	0.000	56.370	1.617	1.582
		%RSD	0.276	153.600	13.970	3.037	0.000	1.294	27.040	47.290
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:40:31	394.300	12030.000	0.000	1458.000	33730.000	32980.000	70.027%	2.488	
2	04:40:39	389.900	12380.000	0.000	1545.000	35550.000	34810.000	68.231%	2.651	
3	04:40:47	390.300	12870.000	0.000	1560.000	36160.000	35460.000	67.848%	2.038	
X		391.500	12430.000	0.000	1521.000	35150.000	34410.000	68.702%	2.392	
		σ	2.428	422.200	0.000	54.970	1260.000	1.164%	0.318	
		%RSD	0.620	3.397	0.000	3.614	3.585	3.732	1.694	13.280
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:40:31	7.288	3.927	0.904	9.511	116.900	0.043	0.329	0.824	
2	04:40:39	5.563	4.060	0.959	9.574	92.740	0.013	0.155	0.971	
3	04:40:47	6.829	4.184	0.823	9.920	99.440	0.031	0.452	0.839	
X		6.560	4.057	0.895	9.669	103.000	0.029	0.312	0.878	
		σ	0.894	0.128	0.068	0.220	12.470	0.015	0.149	0.081
		%RSD	13.620	3.158	7.590	2.279	12.110	51.850	47.770	9.210
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:40:31	0.725	1.877	1.808	1.604	0.227	3.209	0.000	125.000	
2	04:40:39	0.705	1.974	1.854	1.287	0.435	0.327	0.000	126.100	
3	04:40:47	1.048	2.029	2.017	1.401	0.231	0.723	0.000	127.900	
X		0.826	1.960	1.893	1.431	0.297	1.420	0.000	126.300	
		σ	0.193	0.077	0.110	0.119	1.562	0.000	1.477	
		%RSD	23.320	3.925	5.788	11.240	39.910	110.000	0.000	1.169
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:40:31	63.015%	1.276	1.192	56.085%	-0.042	-0.029	0.027	0.007	
2	04:40:39	63.712%	1.229	1.393	56.893%	-0.032	-0.035	-0.001	0.007	
3	04:40:47	62.528%	1.340	1.317	56.584%	-0.032	-0.024	-0.001	-0.005	
X		63.085%	1.282	1.301	56.521%	-0.035	-0.030	0.009	0.003	
		σ	0.595%	0.056	0.101	0.407%	0.006	0.005	0.016	0.007
		%RSD	0.943	4.363	7.775	0.721	16.050	17.750	184.900	209.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:40:31	59.007%	0.128	0.198	0.208	15.110	15.480	65.977%	66.958%	
2	04:40:39	59.807%	0.121	0.258	0.145	14.770	15.030	66.505%	68.343%	
3	04:40:47	60.972%	-0.114	0.162	0.131	15.790	15.800	66.896%	66.842%	
X		59.929%	0.045	0.206	0.161	15.220	15.430	66.459%	67.381%	
		σ	0.988%	0.138	0.049	0.041	0.521	0.387	0.461%	0.835%
		%RSD	1.649	306.700	23.590	25.400	3.420	2.505	0.694	1.240
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	04:40:31	-0.066	-0.048	0.021	0.014	0.014	61.951%			
2	04:40:39	-0.067	-0.047	0.045	0.057	0.032	63.378%			
3	04:40:47	-0.070	-0.035	0.041	0.067	0.024	63.384%			
X		-0.068	-0.043	0.036	0.046	0.023	62.904%			
		σ	0.002	0.007	0.013	0.028	0.009	0.825%		
		%RSD	3.285	16.290	37.100	61.680	40.560	1.312		

180-42943-C-2-A 4/27/2015 4:46:33 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	04:45:39	74.849%	0.006	9.548	12.470	0.000	8360.000	2486.000	2480.000
2	04:45:47	77.985%	-0.013	10.370	12.470	0.000	8304.000	2438.000	2418.000
3	04:45:55	78.407%	0.064	9.621	12.180	0.000	8308.000	2462.000	2448.000
X		77.080%	0.019	9.845	12.380	0.000	8324.000	2462.000	2449.000
σ		1.944%	0.040	0.453	0.168	0.000	31.250	23.830	30.700
%RSD		2.522	212.300	4.605	1.356	0.000	0.375	0.968	1.254
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:39	19.600	2993.000	0.000	320.500	985.300	982.500	67.785%	1.407
2	04:45:47	18.600	3017.000	0.000	328.900	1036.000	1036.000	67.092%	1.030
3	04:45:55	20.560	3096.000	0.000	350.700	1066.000	1022.000	65.841%	0.574
X		19.590	3035.000	0.000	333.300	1029.000	1013.000	66.906%	1.004
σ		0.981	53.780	0.000	15.610	40.600	27.570	0.985%	0.417
%RSD		5.007	1.772	0.000	4.682	3.945	2.721	1.472	41.590
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:39	-1.546	3.250	1784.000	9148.000	8568.000	71.490	37.750	0.646
2	04:45:47	-1.331	3.240	1850.000	9016.000	8655.000	71.460	40.200	0.736
3	04:45:55	0.684	3.172	1898.000	9427.000	8684.000	72.770	36.030	0.777
X		-0.731	3.221	1844.000	9197.000	8636.000	71.910	38.000	0.719
σ		1.230	0.042	57.290	209.900	60.430	0.746	2.094	0.067
%RSD		168.300	1.312	3.106	2.282	0.700	1.037	5.512	9.283
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:39	0.780	7.497	7.564	0.541	0.595	4.984	0.000	18.380
2	04:45:47	0.532	6.894	6.954	0.562	0.541	4.017	0.000	18.670
3	04:45:55	0.457	6.653	6.783	0.522	0.598	1.659	0.000	18.770
X		0.590	7.015	7.101	0.541	0.578	3.553	0.000	18.610
σ		0.169	0.435	0.411	0.020	0.032	1.710	0.000	0.204
%RSD		28.650	6.195	5.782	3.626	5.552	48.130	0.000	1.095
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:39	63.245%	0.577	0.354	56.129%	-0.027	-0.029	0.054	0.051
2	04:45:47	63.703%	0.289	0.390	56.711%	-0.037	-0.003	0.107	0.049
3	04:45:55	63.453%	0.353	0.380	56.661%	-0.032	-0.024	0.107	0.060
X		63.467%	0.406	0.375	56.500%	-0.032	-0.019	0.089	0.054
σ		0.230%	0.151	0.019	0.322%	0.005	0.014	0.030	0.006
%RSD		0.362	37.230	4.952	0.571	15.920	72.970	33.980	11.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:39	59.211%	-0.488	0.004	-0.020	41.480	38.710	65.325%	67.027%
2	04:45:47	60.617%	-0.401	0.031	0.055	36.810	39.030	66.440%	67.294%
3	04:45:55	60.411%	-0.398	0.059	0.036	40.090	39.030	66.677%	68.279%
X		60.080%	-0.429	0.031	0.023	39.460	38.920	66.147%	67.533%
σ		0.760%	0.051	0.027	0.039	2.394	0.184	0.722%	0.659%
%RSD		1.264	11.930	87.290	166.700	6.067	0.472	1.091	0.976
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:45:39	0.144	0.167	0.016	0.029	0.013	61.637%		
2	04:45:47	0.084	0.152	0.025	0.018	0.019	62.362%		
3	04:45:55	0.168	0.132	0.002	-0.002	-0.019	62.839%		
X		0.132	0.150	0.014	0.015	0.004	62.279%		
σ		0.043	0.017	0.012	0.016	0.020	0.605%		
%RSD		32.690	11.460	80.760	104.500	480.100	0.971		

180-42943-D-2-A 4/27/2015 4:51:41 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	04:50:47	74.588%	0.007	10.700	11.580	0.000	8339.000	2477.000	2425.000
2	04:50:55	75.162%	-0.030	8.555	12.240	0.000	8518.000	2493.000	2443.000
3	04:51:03	77.254%	0.113	9.873	12.140	0.000	8440.000	2470.000	2404.000
X		75.668%	0.030	9.709	11.990	0.000	8432.000	2480.000	2424.000
σ		1.403%	0.074	1.082	0.356	0.000	90.040	11.850	19.240
%RSD		1.855	245.300	11.140	2.970	0.000	1.068	0.478	0.794
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:47	24.500	2966.000	0.000	315.800	1087.000	974.600	68.307%	2.176
2	04:50:55	22.580	3005.000	0.000	325.200	1017.000	998.800	66.997%	1.072
3	04:51:03	24.110	3025.000	0.000	334.000	1096.000	1072.000	66.320%	1.817
X		23.730	2998.000	0.000	325.000	1067.000	1015.000	67.208%	1.689
σ		1.014	30.290	0.000	9.101	43.090	50.840	1.010%	0.563
%RSD		4.271	1.010	0.000	2.801	4.038	5.008	1.503	33.350
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:47	-0.898	5.321	1754.000	9577.000	9017.000	69.120	37.290	14.670
2	04:50:55	-2.354	5.558	1806.000	9762.000	9158.000	70.860	39.270	14.500
3	04:51:03	-0.368	5.836	1865.000	9834.000	9294.000	69.150	38.600	14.420
X		-1.207	5.572	1808.000	9724.000	9156.000	69.710	38.390	14.530
σ		1.028	0.258	55.310	132.600	138.500	0.996	1.004	0.130
%RSD		85.230	4.627	3.059	1.363	1.512	1.429	2.615	0.892
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:47	14.650	7.927	8.468	0.622	0.641	3.968	0.000	19.260
2	04:50:55	15.240	7.670	7.507	0.713	0.648	4.497	0.000	19.850
3	04:51:03	15.020	7.244	8.549	0.703	0.276	1.555	0.000	18.550
X		14.970	7.614	8.175	0.679	0.522	3.340	0.000	19.220
σ		0.299	0.345	0.579	0.050	0.213	1.569	0.000	0.653
%RSD		2.000	4.535	7.087	7.343	40.750	46.960	0.000	3.399
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:47	63.941%	0.511	0.641	55.991%	-0.032	0.003	0.054	0.052
2	04:50:55	63.366%	0.624	0.732	56.089%	-0.012	-0.014	0.053	0.093
3	04:51:03	64.925%	0.547	0.735	57.263%	-0.008	-0.004	0.132	0.017
X		64.077%	0.560	0.703	56.448%	-0.017	-0.005	0.080	0.054
σ		0.788%	0.058	0.053	0.708%	0.013	0.008	0.045	0.038
%RSD		1.230	10.300	7.568	1.254	74.740	173.700	56.440	71.120
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:47	58.865%	-0.279	0.227	0.119	41.000	38.490	65.691%	66.685%
2	04:50:55	60.386%	-0.420	0.221	0.134	39.550	39.440	65.710%	66.970%
3	04:51:03	61.232%	-0.246	0.168	0.130	36.350	39.370	66.276%	67.661%
X		60.161%	-0.315	0.205	0.128	38.960	39.100	65.893%	67.105%
σ		1.199%	0.093	0.032	0.008	2.378	0.529	0.333%	0.502%
%RSD		1.994	29.400	15.750	5.928	6.103	1.354	0.505	0.748
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:50:47	0.207	0.150	0.070	0.139	0.097	62.107%		
2	04:50:55	0.148	0.148	0.064	0.132	0.090	62.687%		
3	04:51:03	0.110	0.139	0.068	0.165	0.108	63.178%		
X		0.155	0.146	0.067	0.146	0.098	62.657%		
σ		0.049	0.006	0.003	0.018	0.009	0.536%		
%RSD		31.590	4.115	4.158	12.060	9.289	0.856		

180-42943-C-4-A 4/27/2015 4:56:49 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	04:55:56	77.817%	-0.114	12.900	14.930	0.000	4798.000	1372.000	1307.000	
2	04:56:04	76.827%	-0.056	13.940	15.300	0.000	4947.000	1359.000	1366.000	
3	04:56:12	77.330%	-0.114	13.530	15.800	0.000	4958.000	1361.000	1353.000	
X		77.325%	-0.095	13.460	15.350	0.000	4901.000	1364.000	1342.000	
		σ	0.495%	0.033	0.524	0.439	0.000	89.610	7.359	31.100
		%RSD	0.640	35.280	3.895	2.863	0.000	1.828	0.539	2.317
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:55:56	12.850	19330.000	0.000	1549.000	8603.000	8442.000	68.903%	4.096	
2	04:56:04	16.180	19520.000	0.000	1575.000	9390.000	8750.000	68.506%	3.420	
3	04:56:12	14.010	19960.000	0.000	1622.000	9239.000	8997.000	67.910%	3.337	
X		14.340	19600.000	0.000	1582.000	9077.000	8729.000	68.440%	3.618	
		σ	1.693	327.100	0.000	36.910	417.600	278.100	0.500%	0.416
		%RSD	11.810	1.668	0.000	2.333	4.600	3.186	0.730	11.510
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:55:56	-4.264	4.156	69.980	336.100	364.200	0.056	0.226	1.703	
2	04:56:04	-2.143	4.229	72.090	339.800	356.000	0.078	0.064	1.716	
3	04:56:12	-2.389	4.070	73.810	343.500	382.100	0.061	0.316	1.598	
X		-2.932	4.152	71.960	339.800	367.400	0.065	0.202	1.672	
		σ	1.160	0.079	1.917	3.746	13.350	0.012	0.128	0.064
		%RSD	39.560	1.908	2.664	1.102	3.634	17.860	63.140	3.843
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:55:56	1.727	5.223	4.800	0.153	0.383	-1.953	0.000	50.850	
2	04:56:04	2.061	5.289	4.598	0.170	0.279	2.336	0.000	51.310	
3	04:56:12	1.814	4.167	4.731	0.161	0.069	0.308	0.000	51.670	
X		1.867	4.893	4.710	0.161	0.244	0.230	0.000	51.280	
		σ	0.173	0.630	0.102	0.008	0.160	2.145	0.000	0.410
		%RSD	9.262	12.870	2.172	5.154	65.610	931.100	0.000	0.800
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:55:56	63.442%	0.147	0.191	57.389%	-0.027	-0.040	-0.001	-0.026	
2	04:56:04	63.514%	0.146	0.208	58.222%	-0.047	-0.019	-0.001	0.038	
3	04:56:12	65.076%	0.311	0.090	58.456%	-0.028	-0.040	-0.001	0.016	
X		64.011%	0.201	0.163	58.022%	-0.034	-0.033	-0.001	0.009	
		σ	0.923%	0.095	0.064	0.560%	0.011	0.012	0.000	0.032
		%RSD	1.442	47.300	39.240	0.966	33.090	36.120	9.774	345.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	04:55:56	60.024%	-0.807	-0.011	-0.071	20.290	21.280	67.656%	67.858%	
2	04:56:04	60.664%	-0.742	-0.012	-0.033	21.030	22.520	68.154%	68.669%	
3	04:56:12	62.112%	-0.800	-0.020	-0.025	22.850	21.670	68.173%	69.535%	
X		60.933%	-0.783	-0.014	-0.043	21.390	21.820	67.995%	68.687%	
		σ	1.069%	0.036	0.005	0.024	1.317	0.636	0.293%	0.839%
		%RSD	1.755	4.560	34.460	57.330	6.156	2.913	0.431	1.221
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	04:55:56	-0.074	-0.072	0.075	0.051	0.053	63.780%			
2	04:56:04	-0.088	-0.062	0.057	0.031	0.023	64.507%			
3	04:56:12	-0.071	-0.061	0.068	0.058	0.057	65.423%			
X		-0.078	-0.065	0.067	0.047	0.044	64.570%			
		σ	0.009	0.006	0.009	0.014	0.018	0.824%		
		%RSD	11.680	9.439	14.130	30.570	41.000	1.276		

CCV 1533080 4/27/2015 5:01:57 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	05:01:03	70.439%	94.800	105.600	95.210	0.000	59000.000	53670.000	53330.000
2	05:01:11	68.596%	102.000	98.240	104.200	0.000	60520.000	54840.000	54730.000
3	05:01:19	69.368%	98.960	96.020	100.700	0.000	59440.000	54970.000	53910.000
X		69.468%	98.583%	99.956%	100.024%	0.000	119.309%	108.991%	107.981%
σ		0.926%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.333	3.659	5.024	4.531	0.000	1.305	1.315	1.301
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:03	584.500	5051.000	0.000	50550.000	46090.000	44890.000	67.881%	90.080
2	05:01:11	590.400	5185.000	0.000	51840.000	48920.000	46540.000	66.948%	100.200
3	05:01:19	592.500	5311.000	0.000	52680.000	48810.000	47090.000	67.015%	99.220
X		117.831%	103.647%	0.000	103.382%	95.881%	92.347%	67.281%	96.516%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.521%	n/a
%RSD		0.701	2.501	0.000	2.072	3.339	2.475	0.774	5.797
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:03	96.580	95.350	459.300	24270.000	22950.000	94.060	92.360	95.270
2	05:01:11	97.950	95.220	475.800	24350.000	23090.000	95.060	94.650	96.920
3	05:01:19	96.640	95.180	482.000	24460.000	23240.000	95.130	95.440	96.990
X		97.056%	95.249%	94.475%	97.442%	92.379%	94.748%	94.151%	96.395%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.800	0.095	2.479	0.404	0.645	0.629	1.702	1.008
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:03	96.580	93.990	92.700	97.820	101.100	90.740	0.000	98.760
2	05:01:11	95.480	97.750	94.480	96.860	101.500	94.940	0.000	98.710
3	05:01:19	96.670	94.460	95.210	97.730	99.620	98.610	0.000	97.530
X		96.243%	95.400%	94.128%	97.470%	100.768%	94.766%	0.000	98.330%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.690	2.149	1.372	0.544	1.008	4.156	0.000	0.708
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:03	62.760%	93.470	97.390	57.456%	93.600	94.670	94.210	95.720
2	05:01:11	63.265%	95.330	99.280	57.421%	93.370	94.850	94.510	95.800
3	05:01:19	63.535%	99.960	99.640	58.212%	96.470	93.640	96.960	96.180
X		63.187%	96.255%	98.769%	57.696%	94.477%	94.388%	95.225%	95.903%
σ		0.393%	n/a	n/a	0.447%	n/a	n/a	n/a	n/a
%RSD		0.622	3.472	1.225	0.775	1.827	0.697	1.582	0.256
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:03	60.904%	93.140	91.960	94.810	97.040	95.810	67.850%	68.657%
2	05:01:11	61.361%	94.230	92.710	93.150	95.330	95.430	67.512%	67.488%
3	05:01:19	61.452%	93.760	93.960	92.570	92.690	96.560	67.807%	69.022%
X		61.239%	93.709%	92.876%	93.508%	95.017%	95.933%	67.723%	68.389%
σ		0.294%	n/a	n/a	n/a	n/a	n/a	0.184%	0.801%
%RSD		0.480	0.584	1.091	1.242	2.305	0.602	0.272	1.172
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:01:03	100.500	96.660	98.940	98.430	98.850	61.467%		
2	05:01:11	99.830	97.350	99.450	98.220	99.280	61.964%		
3	05:01:19	100.100	98.030	98.760	100.200	99.240	62.271%		
X		100.131%	97.346%	99.051%	98.941%	99.122%	61.901%		
σ		n/a	n/a	n/a	n/a	n/a	0.406%		
%RSD		0.339	0.705	0.359	1.082	0.242	0.656		

CCB8 4/27/2015 5:11:10 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	05:10:17	87.963%	-0.085	0.877	0.923	0.000	413.100	26.490	24.590
2	05:10:25	86.290%	-0.072	1.210	1.243	0.000	419.000	27.530	30.480
3	05:10:33	84.790%	0.044	0.223	1.344	0.000	429.500	33.390	31.050
X		86.348%	-0.038	0.770	1.170	0.000	420.600	29.140	28.700
	σ	1.587%	0.071	0.502	0.219	0.000	8.313	3.719	3.577
	%RSD	1.838	187.000	65.200	18.750	0.000	1.977	12.770	12.460
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:10:17	4.471	2.994	0.000	-41.270	11.180	26.920	90.937%	-0.216
2	05:10:25	2.940	-0.183	0.000	-40.820	26.350	25.720	90.455%	-0.332
3	05:10:33	3.086	-2.226	0.000	-40.190	21.710	27.440	89.929%	-0.271
X		3.499	0.195	0.000	-40.760	19.750	26.690	90.440%	-0.273
	σ	0.845	2.630	0.000	0.539	7.774	0.880	0.504%	0.058
	%RSD	24.160	1350.000	0.000	1.323	39.370	3.298	0.557	21.250
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:10:17	0.076	0.080	0.169	11.830	13.820	0.028	-0.102	0.470
2	05:10:25	0.065	0.074	0.183	12.000	12.050	0.031	-0.198	0.515
3	05:10:33	0.367	0.058	0.157	12.390	10.350	0.037	-0.047	0.499
X		0.170	0.071	0.170	12.070	12.070	0.032	-0.116	0.495
	σ	0.171	0.012	0.013	0.287	1.734	0.005	0.076	0.023
	%RSD	101.100	16.690	7.675	2.375	14.370	15.730	65.980	4.576
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:10:17	0.063	-0.019	0.085	0.081	0.245	-1.173	0.000	0.140
2	05:10:25	-0.042	-0.002	0.031	0.059	0.124	-1.352	0.000	0.108
3	05:10:33	0.020	-0.162	0.224	0.104	0.279	0.102	0.000	0.107
X		0.014	-0.061	0.113	0.082	0.216	-0.807	0.000	0.118
	σ	0.053	0.088	0.099	0.023	0.082	0.793	0.000	0.019
	%RSD	386.600	143.800	87.740	27.620	37.930	98.220	0.000	15.630
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:10:17	82.695%	0.238	0.316	88.558%	-0.014	-0.004	0.037	-0.013
2	05:10:25	84.484%	0.288	0.284	89.567%	-0.011	-0.004	0.056	-0.005
3	05:10:33	84.987%	0.309	0.165	89.267%	-0.001	0.035	0.018	0.002
X		84.055%	0.279	0.255	89.131%	-0.008	0.009	0.037	-0.005
	σ	1.204%	0.037	0.080	0.518%	0.007	0.023	0.019	0.008
	%RSD	1.433	13.140	31.330	0.581	79.660	248.800	50.930	139.300
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:10:17	81.687%	-0.995	0.124	0.062	0.028	0.066	85.668%	85.388%
2	05:10:25	82.064%	-0.979	0.092	0.097	-0.004	0.047	85.117%	85.911%
3	05:10:33	83.150%	-0.940	0.100	0.087	0.059	0.219	85.859%	86.016%
X		82.300%	-0.971	0.105	0.082	0.028	0.111	85.548%	85.772%
	σ	0.759%	0.028	0.017	0.018	0.032	0.094	0.385%	0.336%
	%RSD	0.923	2.918	15.680	22.420	112.600	84.790	0.450	0.392
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:10:17	-0.022	0.002	-0.030	0.018	-0.011	78.870%		
2	05:10:25	0.042	0.007	0.029	0.041	0.020	79.450%		
3	05:10:33	0.007	0.011	-0.010	0.013	-0.015	80.242%		
X		0.009	0.006	-0.004	0.024	-0.002	79.521%		
	σ	0.032	0.005	0.030	0.015	0.019	0.689%		
	%RSD	356.200	71.890	859.900	63.210	942.400	0.866		

180-42943-D-4-A 4/27/2015 5:16:20 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	05:15:27	79.012%	0.051	17.090	18.210	0.000	6024.000	1698.000	1709.000	
2	05:15:34	78.523%	-0.093	15.710	17.140	0.000	6019.000	1753.000	1711.000	
3	05:15:42	78.302%	-0.025	16.590	18.190	0.000	6094.000	1837.000	1797.000	
X		78.612%	-0.023	16.460	17.850	0.000	6046.000	1763.000	1739.000	
		σ	0.363%	0.072	0.702	0.613	0.000	42.220	70.090	50.250
		%RSD	0.462	318.800	4.264	3.433	0.000	0.698	3.976	2.890
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:15:27	8.021	26230.000	0.000	2085.000	12700.000	11890.000	70.029%	5.512	
2	05:15:34	8.503	27500.000	0.000	2161.000	13180.000	12410.000	68.844%	6.708	
3	05:15:42	7.435	27710.000	0.000	2244.000	13590.000	12830.000	68.274%	5.004	
X		7.987	27150.000	0.000	2163.000	13160.000	12380.000	69.049%	5.741	
		σ	0.535	799.800	0.000	79.370	442.000	475.000	0.895%	0.875
		%RSD	6.699	2.946	0.000	3.669	3.359	3.838	1.297	15.240
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:15:27	-3.593	4.226	108.000	3340.000	3129.000	0.025	-0.083	1.083	
2	05:15:34	-4.973	3.946	113.000	3345.000	3142.000	0.034	0.061	1.061	
3	05:15:42	-3.769	4.222	115.400	3366.000	3179.000	0.043	-0.028	1.182	
X		-4.112	4.131	112.100	3350.000	3150.000	0.034	-0.017	1.109	
		σ	0.751	0.161	3.781	14.080	26.050	0.009	0.073	0.064
		%RSD	18.260	3.889	3.371	0.420	0.827	25.660	433.900	5.815
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:15:27	0.798	3.422	3.835	0.313	0.326	1.810	0.000	76.820	
2	05:15:34	0.868	3.561	3.412	0.274	0.171	3.721	0.000	77.400	
3	05:15:42	0.922	4.291	2.990	0.304	0.221	1.126	0.000	78.510	
X		0.863	3.758	3.412	0.297	0.239	2.219	0.000	77.580	
		σ	0.062	0.467	0.422	0.021	1.345	0.000	0.863	
		%RSD	7.226	12.420	12.380	6.921	33.130	60.620	1.112	
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:15:27	64.225%	0.144	0.322	58.474%	-0.028	-0.025	0.053	0.017	
2	05:15:34	65.035%	0.218	0.194	59.056%	-0.037	-0.025	-0.001	0.025	
3	05:15:42	65.691%	0.140	0.295	59.604%	-0.038	-0.030	0.103	0.057	
X		64.984%	0.168	0.270	59.045%	-0.034	-0.026	0.052	0.033	
		σ	0.734%	0.044	0.068	0.566%	0.006	0.003	0.021	
		%RSD	1.130	26.230	25.020	0.958	16.760	11.500	100.200	63.470
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:15:27	60.383%	-0.421	0.388	0.327	91.060	89.560	66.636%	67.924%	
2	05:15:34	62.931%	-0.455	0.243	0.273	90.910	88.860	67.669%	68.351%	
3	05:15:42	62.442%	-0.529	0.204	0.181	89.630	85.960	68.449%	69.165%	
X		61.919%	-0.468	0.278	0.260	90.530	88.130	67.585%	68.480%	
		σ	1.352%	0.055	0.097	0.788	1.907	0.909%	0.630%	
		%RSD	2.183	11.800	34.930	28.290	0.870	2.164	1.346	0.920
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	05:15:27	0.041	0.046	0.027	0.056	0.035	64.033%			
2	05:15:34	0.016	0.017	0.026	0.074	0.037	64.682%			
3	05:15:42	0.015	-0.015	0.017	0.064	0.044	65.012%			
X		0.024	0.016	0.024	0.064	0.038	64.576%			
		σ	0.015	0.030	0.005	0.005	0.498%			
		%RSD	62.450	188.600	23.090	14.230	12.310	0.771		

180-42943-C-6-A 4/27/2015 5:21:28 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	05:20:35	78.948%	-0.116	16.360	16.940	0.000	333.000	1.958	4.509
2	05:20:42	79.889%	-0.051	16.140	17.370	0.000	332.500	-0.352	3.551
3	05:20:50	78.888%	-0.071	14.800	16.730	0.000	333.900	1.513	2.452
X		79.241%	-0.079	15.770	17.010	0.000	333.100	1.040	3.504
σ		0.561%	0.033	0.845	0.325	0.000	0.684	1.226	1.029
%RSD		0.708	41.820	5.361	1.909	0.000	0.205	117.900	29.370
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:20:35	1.751	28.360	0.000	-20.210	26.990	63.330	70.168%	0.114
2	05:20:42	0.602	23.370	0.000	-21.180	27.840	67.370	69.222%	0.280
3	05:20:50	1.873	20.690	0.000	-16.100	43.900	68.570	68.440%	0.409
X		1.409	24.140	0.000	-19.160	32.910	66.420	69.277%	0.268
σ		0.702	3.892	0.000	2.700	9.527	2.744	0.865%	0.148
%RSD		49.800	16.120	0.000	14.090	28.950	4.131	1.249	55.150
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:20:35	-2.437	3.437	0.445	7.469	8.354	0.008	-0.065	0.772
2	05:20:42	-4.486	3.624	0.380	6.499	12.980	0.021	-0.064	0.757
3	05:20:50	-1.826	3.607	0.383	5.838	4.006	0.022	-0.044	0.882
X		-2.916	3.556	0.403	6.602	8.446	0.017	-0.058	0.803
σ		1.393	0.103	0.036	0.820	4.487	0.008	0.012	0.068
%RSD		47.780	2.905	9.028	12.430	53.120	44.500	20.310	8.484
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:20:35	0.662	0.889	1.459	0.064	0.223	3.346	0.000	-0.005
2	05:20:42	0.518	1.419	1.180	0.059	0.172	-1.910	0.000	0.022
3	05:20:50	0.689	1.571	1.850	0.120	0.174	3.223	0.000	0.011
X		0.623	1.293	1.496	0.081	0.190	1.553	0.000	0.009
σ		0.092	0.358	0.337	0.034	0.029	3.000	0.000	0.013
%RSD		14.810	27.670	22.500	41.970	15.310	193.100	0.000	146.000
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:20:35	64.202%	0.052	0.072	57.987%	-0.032	-0.040	-0.001	-0.015
2	05:20:42	64.489%	0.051	0.098	59.197%	-0.028	-0.025	-0.001	-0.037
3	05:20:50	63.831%	0.144	0.109	58.881%	-0.042	-0.030	-0.001	-0.005
X		64.174%	0.082	0.093	58.688%	-0.034	-0.032	-0.001	-0.019
σ		0.330%	0.054	0.019	0.628%	0.007	0.008	0.000	0.016
%RSD		0.515	64.970	20.730	1.069	21.570	24.790	6.359	84.120
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:20:35	60.888%	-0.708	0.016	0.006	0.469	0.597	66.972%	68.804%
2	05:20:42	61.090%	-0.734	0.043	-0.023	0.424	0.643	67.687%	68.510%
3	05:20:50	62.167%	-0.789	0.082	0.060	0.542	0.461	68.178%	68.740%
X		61.381%	-0.744	0.047	0.014	0.479	0.567	67.612%	68.685%
σ		0.688%	0.041	0.033	0.042	0.059	0.095	0.606%	0.154%
%RSD		1.120	5.535	70.450	299.900	12.430	16.690	0.897	0.225
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:20:35	-0.067	-0.049	0.018	0.017	0.003	63.928%		
2	05:20:42	-0.078	-0.060	-0.004	0.065	0.015	64.373%		
3	05:20:50	-0.064	-0.059	-0.004	0.006	0.005	65.299%		
X		-0.070	-0.056	0.003	0.029	0.008	64.533%		
σ		0.007	0.006	0.013	0.031	0.007	0.700%		
%RSD		10.170	11.570	375.300	107.000	85.890	1.084		

180-42943-C-5-A 4/27/2015 5:26:34 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	05:25:42	78.403%	0.131	6.377	7.885	0.000	4831.000	984.700	951.300
2	05:25:50	77.848%	0.043	7.198	8.526	0.000	4939.000	974.400	978.700
3	05:25:58	75.918%	0.084	7.747	8.731	0.000	5058.000	1003.000	985.400
X		77.389%	0.086	7.107	8.381	0.000	4943.000	987.200	971.800
σ		1.305%	0.044	0.690	0.441	0.000	113.300	14.240	18.040
%RSD		1.686	50.960	9.701	5.266	0.000	2.291	1.443	1.856
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:42	55.910	4149.000	0.000	937.300	1975.000	1921.000	70.552%	1.249
2	05:25:50	59.760	4359.000	0.000	963.600	2151.000	2027.000	68.441%	0.487
3	05:25:58	54.300	4494.000	0.000	997.300	2069.000	2058.000	67.882%	1.207
X		56.660	4334.000	0.000	966.100	2065.000	2002.000	68.958%	0.981
σ		2.804	173.700	0.000	30.090	88.090	71.550	1.408%	0.429
%RSD		4.950	4.008	0.000	3.115	4.266	3.574	2.042	43.680
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:42	-2.906	3.646	11.900	2.895	5.758	0.920	1.272	0.750
2	05:25:50	-2.100	3.902	12.370	2.790	7.806	0.889	1.038	0.637
3	05:25:58	-2.453	3.978	12.790	2.310	15.950	0.787	1.320	0.607
X		-2.486	3.842	12.350	2.665	9.837	0.865	1.210	0.664
σ		0.404	0.174	0.448	0.312	5.390	0.070	0.151	0.075
%RSD		16.250	4.529	3.629	11.720	54.790	8.073	12.470	11.360
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:42	0.641	8.338	8.576	0.164	0.123	2.373	0.000	9.733
2	05:25:50	0.469	8.359	9.203	0.103	0.174	-0.529	0.000	9.819
3	05:25:58	0.294	9.085	9.623	0.159	0.331	1.273	0.000	9.711
X		0.468	8.594	9.134	0.142	0.209	1.039	0.000	9.754
σ		0.173	0.425	0.527	0.034	0.108	1.465	0.000	0.057
%RSD		37.030	4.947	5.771	23.800	51.840	141.000	0.000	0.583
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:42	62.850%	-0.010	0.004	58.004%	-0.037	-0.024	0.053	0.017
2	05:25:50	64.089%	0.052	0.101	58.162%	-0.032	-0.025	0.078	0.110
3	05:25:58	63.735%	0.099	0.062	57.823%	-0.013	-0.035	0.052	-0.005
X		63.558%	0.047	0.056	57.996%	-0.028	-0.028	0.061	0.041
σ		0.638%	0.055	0.049	0.170%	0.013	0.006	0.015	0.061
%RSD		1.004	115.400	87.110	0.293	46.690	21.360	24.070	149.400
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:42	60.140%	-0.843	0.088	-0.012	24.380	23.610	66.479%	67.305%
2	05:25:50	62.076%	-0.742	-0.033	0.051	23.520	23.890	67.891%	68.506%
3	05:25:58	61.581%	-0.819	0.015	-0.015	23.590	25.840	67.611%	69.304%
X		61.266%	-0.801	0.023	0.008	23.830	24.450	67.327%	68.371%
σ		1.006%	0.053	0.061	0.037	0.478	1.216	0.748%	1.006%
%RSD		1.641	6.567	263.500	461.800	2.007	4.973	1.111	1.472
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:25:42	-0.067	-0.032	-0.020	0.057	0.006	62.986%		
2	05:25:50	-0.046	-0.027	0.001	0.007	-0.006	63.789%		
3	05:25:58	-0.040	-0.047	-0.034	0.050	-0.006	64.447%		
X		-0.051	-0.035	-0.018	0.038	-0.002	63.741%		
σ		0.014	0.011	0.018	0.027	0.007	0.732%		
%RSD		27.770	30.590	99.580	70.970	325.800	1.148		

180-42943-C-5-A SD@5 4/27/2015 5:31:39 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	05:30:47	76.724%	0.093	2.940	2.580	0.000	1223.000	202.700	195.600	
2	05:30:55	75.706%	0.004	2.149	2.137	0.000	1245.000	210.800	197.000	
3	05:31:03	74.144%	0.008	1.441	2.580	0.000	1257.000	196.700	203.700	
X		75.525%	0.035	2.177	2.432	0.000	1241.000	203.400	198.800	
		σ	1.299%	0.050	0.750	0.256	0.000	17.020	7.063	4.364
		%RSD	1.721	143.000	34.440	10.510	0.000	1.371	3.473	2.196
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:30:47	16.370	869.100	0.000	160.400	432.400	427.800	71.577%	-0.126	
2	05:30:55	15.810	884.900	0.000	171.400	440.500	423.200	70.042%	0.077	
3	05:31:03	16.050	899.800	0.000	169.900	482.100	421.900	69.924%	-0.228	
X		16.080	884.600	0.000	167.300	451.600	424.300	70.515%	-0.092	
		σ	0.284	15.360	0.000	5.989	26.650	3.110	0.922%	0.156
		%RSD	1.766	1.737	0.000	3.581	5.900	0.733	1.308	168.400
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:30:47	-0.094	1.083	2.552	-0.513	-0.318	0.179	0.156	0.459	
2	05:30:55	-1.793	1.071	2.449	-0.405	0.469	0.190	0.038	0.405	
3	05:31:03	-1.314	0.986	2.570	-0.274	0.835	0.147	0.125	0.438	
X		-1.067	1.047	2.523	-0.398	0.329	0.172	0.106	0.434	
		σ	0.876	0.053	0.065	0.120	0.589	0.022	0.061	0.027
		%RSD	82.110	5.056	2.588	30.110	179.300	12.830	57.360	6.298
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:30:47	0.182	1.871	1.943	0.024	0.166	-1.606	0.000	1.845	
2	05:30:55	0.279	2.281	2.255	-0.012	0.167	-1.338	0.000	1.877	
3	05:31:03	0.225	1.786	2.042	0.019	0.166	2.164	0.000	2.072	
X		0.229	1.980	2.080	0.010	0.166	-0.260	0.000	1.931	
		σ	0.048	0.265	0.160	0.020	0.001	2.104	0.000	0.123
		%RSD	21.190	13.380	7.681	194.000	0.415	809.200	0.000	6.360
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:30:47	66.414%	0.004	0.020	60.305%	-0.033	-0.030	-0.001	-0.026	
2	05:30:55	66.402%	0.033	0.001	61.164%	-0.019	-0.020	-0.001	-0.037	
3	05:31:03	67.009%	0.092	0.010	61.244%	-0.042	-0.011	-0.001	-0.027	
X		66.608%	0.043	0.011	60.904%	-0.032	-0.020	-0.001	-0.030	
		σ	0.347%	0.045	0.010	0.521%	0.012	0.010	0.000	0.006
		%RSD	0.521	104.000	91.490	0.855	36.990	47.910	4.392	19.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	05:30:47	63.839%	-1.169	-0.015	-0.073	5.705	5.102	69.117%	69.938%	
2	05:30:55	63.636%	-1.169	-0.041	-0.092	4.981	5.032	69.276%	70.135%	
3	05:31:03	64.425%	-1.126	-0.041	-0.074	3.895	5.352	69.556%	70.375%	
X		63.967%	-1.155	-0.032	-0.079	4.860	5.162	69.316%	70.149%	
		σ	0.409%	0.025	0.015	0.010	0.911	0.169	0.222%	0.219%
		%RSD	0.640	2.145	47.730	13.180	18.750	3.263	0.321	0.312
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	05:30:47	-0.088	-0.069	-0.009	-0.027	-0.015	65.469%			
2	05:30:55	-0.092	-0.067	-0.005	-0.009	-0.011	66.059%			
3	05:31:03	-0.082	-0.075	0.007	0.000	-0.010	66.701%			
X		-0.087	-0.070	-0.002	-0.012	-0.012	66.076%			
		σ	0.005	0.004	0.008	0.014	0.003	0.616%		
		%RSD	5.824	6.188	386.800	119.300	23.160	0.933		

180-42943-C-5-B MS 4/27/2015 5:36:44 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	05:35:52	70.858%	46.380	980.700	985.000	0.000	58590.000	50380.000	50260.000
2	05:35:59	70.463%	48.000	1024.000	1024.000	0.000	58620.000	50260.000	50400.000
3	05:36:07	71.704%	47.930	998.700	989.800	0.000	59200.000	50580.000	50050.000
X		71.009%	47.440	1001.000	999.700	0.000	58800.000	50410.000	50240.000
σ		0.634%	0.916	21.700	21.450	0.000	348.300	159.700	178.200
%RSD		0.893	1.932	2.167	2.145	0.000	0.592	0.317	0.355
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:35:52	2135.000	13420.000	0.000	47800.000	46920.000	45240.000	65.424%	875.200
2	05:35:59	2137.000	13630.000	0.000	49000.000	47780.000	46480.000	65.300%	882.700
3	05:36:07	2144.000	13490.000	0.000	48310.000	49230.000	47520.000	64.295%	920.700
X		2139.000	13510.000	0.000	48370.000	47980.000	46420.000	65.006%	892.900
σ		4.754	106.800	0.000	600.400	1170.000	1144.000	0.619%	24.430
%RSD		0.222	0.790	0.000	1.241	2.439	2.464	0.952	2.736
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:35:52	455.600	184.500	440.400	898.000	999.900	446.500	453.900	230.900
2	05:35:59	462.200	186.300	453.300	892.400	960.600	449.800	445.600	228.600
3	05:36:07	463.800	188.200	464.800	912.400	1013.000	458.200	458.500	234.600
X		460.500	186.300	452.800	900.900	991.200	451.500	452.700	231.400
σ		4.366	1.820	12.230	10.290	27.290	6.006	6.577	3.011
%RSD		0.948	0.977	2.701	1.143	2.753	1.330	1.453	1.301
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:35:52	234.000	456.200	439.900	38.220	8.904	9.050	0.000	945.700
2	05:35:59	233.400	453.000	451.100	37.310	10.670	6.680	0.000	954.500
3	05:36:07	235.200	465.400	455.300	37.600	9.781	12.040	0.000	962.400
X		234.200	458.200	448.800	37.710	9.786	9.258	0.000	954.200
σ		0.939	6.460	7.975	0.467	0.885	2.688	0.000	8.347
%RSD		0.401	1.410	1.777	1.237	9.038	29.030	0.000	0.875
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:35:52	60.700%	976.100	1010.000	53.193%	48.610	47.040	46.280	87.760
2	05:35:59	60.550%	991.400	1009.000	53.576%	48.140	47.930	48.420	88.000
3	05:36:07	60.988%	986.000	1013.000	53.656%	47.620	47.200	47.460	90.760
X		60.746%	984.500	1011.000	53.475%	48.120	47.390	47.390	88.840
σ		0.222%	7.767	2.389	0.248%	0.493	0.473	1.071	1.666
%RSD		0.366	0.789	0.236	0.463	1.025	0.997	2.260	1.876
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:35:52	56.300%	1888.000	465.200	471.700	1902.000	1898.000	63.653%	64.236%
2	05:35:59	57.150%	1881.000	468.400	468.800	1899.000	1885.000	64.755%	66.616%
3	05:36:07	56.837%	1905.000	475.800	468.000	1904.000	1889.000	65.463%	66.061%
X		56.762%	1891.000	469.800	469.500	1902.000	1891.000	64.624%	65.638%
σ		0.430%	12.630	5.448	1.962	2.436	6.736	0.912%	1.245%
%RSD		0.757	0.668	1.160	0.418	0.128	0.356	1.411	1.897
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:35:52	48.490	48.090	20.320	21.000	20.310	57.870%		
2	05:35:59	49.390	47.650	20.240	20.060	20.080	58.503%		
3	05:36:07	49.170	47.720	20.340	20.110	20.130	59.438%		
X		49.020	47.820	20.300	20.390	20.170	58.604%		
σ		0.465	0.233	0.052	0.531	0.119	0.789%		
%RSD		0.949	0.486	0.256	2.603	0.590	1.346		

180-42943-D-5-C MSD 4/27/2015 5:41:50 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	05:40:58	74.164%	47.050	1010.000	1027.000	0.000	60580.000	51700.000	50700.000
2	05:41:06	74.237%	47.350	1019.000	1054.000	0.000	59030.000	50610.000	50350.000
3	05:41:13	75.548%	48.520	1026.000	1036.000	0.000	59000.000	51600.000	50270.000
X		74.650%	47.640	1018.000	1039.000	0.000	59530.000	51300.000	50440.000
σ		0.779%	0.780	8.033	13.760	0.000	901.200	604.500	228.600
%RSD		1.044	1.638	0.789	1.325	0.000	1.514	1.178	0.453
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:40:58	2130.000	14240.000	0.000	51260.000	49010.000	47410.000	67.694%	913.900
2	05:41:06	2186.000	14170.000	0.000	52040.000	51340.000	48600.000	67.608%	940.100
3	05:41:13	2194.000	14260.000	0.000	51950.000	51110.000	49160.000	67.144%	938.600
X		2170.000	14220.000	0.000	51750.000	50480.000	48390.000	67.482%	930.800
σ		34.510	48.950	0.000	422.300	1286.000	894.600	0.296%	14.700
%RSD		1.591	0.344	0.000	0.816	2.548	1.849	0.438	1.579
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:40:58	458.000	186.100	457.300	895.900	1011.000	452.600	449.900	229.800
2	05:41:06	465.200	187.500	467.500	896.100	1012.000	458.000	452.400	234.000
3	05:41:13	468.900	186.400	476.200	899.400	1061.000	456.100	462.900	234.600
X		464.000	186.700	467.000	897.200	1028.000	455.500	455.100	232.800
σ		5.562	0.705	9.441	1.993	28.800	2.732	6.882	2.628
%RSD		1.199	0.378	2.022	0.222	2.802	0.600	1.512	1.129
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:40:58	234.800	457.100	447.100	38.230	10.210	10.390	0.000	967.000
2	05:41:06	236.900	456.400	450.900	39.160	9.201	12.770	0.000	965.100
3	05:41:13	232.900	457.500	453.700	38.070	9.139	12.190	0.000	945.700
X		234.900	457.000	450.600	38.490	9.517	11.780	0.000	959.300
σ		2.016	0.545	3.288	0.586	0.600	1.238	0.000	11.770
%RSD		0.859	0.119	0.730	1.523	6.308	10.510	0.000	1.227
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:40:58	61.350%	1007.000	1039.000	54.054%	48.910	48.580	47.950	88.190
2	05:41:06	61.739%	1001.000	1031.000	54.329%	48.550	48.180	49.040	88.300
3	05:41:13	62.891%	1004.000	1032.000	54.490%	48.890	48.460	48.340	89.540
X		61.993%	1004.000	1034.000	54.291%	48.780	48.410	48.440	88.680
σ		0.801%	3.114	4.096	0.220%	0.204	0.209	0.553	0.753
%RSD		1.292	0.310	0.396	0.406	0.418	0.431	1.143	0.849
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:40:58	57.018%	1931.000	476.300	475.700	1914.000	1930.000	64.783%	65.182%
2	05:41:06	57.701%	1922.000	478.100	478.300	1920.000	1914.000	64.970%	65.387%
3	05:41:13	57.502%	1951.000	479.700	476.400	1938.000	1917.000	66.455%	66.636%
X		57.407%	1935.000	478.000	476.800	1924.000	1920.000	65.403%	65.735%
σ		0.351%	14.810	1.733	1.333	12.570	8.243	0.916%	0.787%
%RSD		0.612	0.765	0.363	0.280	0.653	0.429	1.401	1.198
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:40:58	50.710	49.470	20.990	20.420	20.580	58.758%		
2	05:41:06	51.410	50.070	21.390	20.900	20.650	59.163%		
3	05:41:13	50.250	49.940	20.930	20.270	20.290	59.561%		
X		50.790	49.820	21.100	20.530	20.510	59.161%		
σ		0.585	0.318	0.248	0.330	0.190	0.402%		
%RSD		1.152	0.638	1.176	1.609	0.928	0.679		

180-42943-C-5-A PDS 4/27/2015 5:46:58 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	05:46:04	73.387%	49.720	1065.000	1093.000	0.000	60800.000	53370.000	54020.000
2	05:46:12	71.046%	51.850	1122.000	1131.000	0.000	63390.000	55430.000	53780.000
3	05:46:19	73.514%	51.320	1106.000	1122.000	0.000	62570.000	54750.000	53710.000
X		72.649%	50.960	1098.000	1115.000	0.000	62250.000	54520.000	53840.000
σ		1.390%	1.107	29.210	19.530	0.000	1325.000	1052.000	159.300
%RSD		1.913	2.172	2.661	1.752	0.000	2.128	1.930	0.296
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:46:04	2283.000	14930.000	0.000	53180.000	51590.000	50370.000	67.921%	1015.000
2	05:46:12	2280.000	15450.000	0.000	54940.000	53200.000	51760.000	66.763%	1019.000
3	05:46:19	2295.000	15350.000	0.000	54570.000	53250.000	52530.000	67.429%	1047.000
X		2286.000	15240.000	0.000	54230.000	52680.000	51550.000	67.371%	1027.000
σ		7.974	277.000	0.000	928.900	940.900	1098.000	0.581%	17.590
%RSD		0.349	1.818	0.000	1.713	1.786	2.129	0.862	1.713
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:46:04	485.600	199.700	481.400	933.900	1047.000	474.000	470.200	240.500
2	05:46:12	489.400	204.500	498.700	957.900	1060.000	476.400	483.200	241.600
3	05:46:19	499.600	203.100	501.200	968.900	982.400	480.900	481.000	246.900
X		491.500	202.400	493.700	953.600	1030.000	477.100	478.100	243.000
σ		7.229	2.457	10.780	17.860	41.380	3.484	6.966	3.432
%RSD		1.471	1.214	2.183	1.873	4.019	0.730	1.457	1.412
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:46:04	243.300	483.200	473.500	39.440	11.240	12.640	0.000	1008.000
2	05:46:12	245.500	488.600	486.400	39.420	9.937	12.450	0.000	997.700
3	05:46:19	246.600	484.900	486.700	40.090	10.260	13.430	0.000	1023.000
X		245.100	485.600	482.200	39.650	10.480	12.840	0.000	1009.000
σ		1.677	2.750	7.523	0.385	0.682	0.521	0.000	12.530
%RSD		0.684	0.566	1.560	0.971	6.505	4.057	0.000	1.241
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:46:04	61.547%	1119.000	1134.000	54.489%	46.660	46.200	50.070	100.100
2	05:46:12	62.946%	1113.000	1144.000	54.287%	46.140	47.030	51.060	98.430
3	05:46:19	61.887%	1129.000	1147.000	54.476%	46.210	44.990	52.360	97.030
X		62.127%	1120.000	1142.000	54.417%	46.340	46.070	51.160	98.510
σ		0.729%	7.933	6.368	0.113%	0.282	1.026	1.150	1.525
%RSD		1.174	0.708	0.558	0.208	0.608	2.227	2.248	1.548
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:46:04	57.142%	2133.000	525.100	523.800	2034.000	2031.000	65.284%	66.194%
2	05:46:12	57.552%	2155.000	531.400	527.500	2032.000	2022.000	65.368%	66.196%
3	05:46:19	58.619%	2126.000	519.900	523.800	2026.000	2013.000	66.283%	66.860%
X		57.771%	2138.000	525.500	525.000	2031.000	2022.000	65.645%	66.416%
σ		0.762%	15.170	5.795	2.146	3.994	8.961	0.554%	0.384%
%RSD		1.320	0.710	1.103	0.409	0.197	0.443	0.844	0.578
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:46:04	52.890	52.540	21.820	21.940	21.620	58.892%		
2	05:46:12	53.660	51.830	21.780	21.270	21.550	59.295%		
3	05:46:19	53.130	52.360	21.050	21.860	21.550	59.726%		
X		53.230	52.240	21.550	21.690	21.570	59.304%		
σ		0.397	0.372	0.434	0.368	0.041	0.417%		
%RSD		0.746	0.713	2.014	1.698	0.192	0.703		

180-42943-D-6-A 4/27/2015 5:52:06 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	05:51:12	79.047%	-0.016	19.400	23.390	0.000	230.400	6.272	6.391
2	05:51:19	78.662%	-0.060	19.280	23.510	0.000	231.400	4.535	5.484
3	05:51:27	79.777%	-0.095	20.470	22.420	0.000	235.400	4.575	7.101
X		79.162%	-0.057	19.720	23.110	0.000	232.400	5.127	6.325
σ		0.567%	0.039	0.651	0.597	0.000	2.667	0.991	0.811
%RSD		0.716	69.430	3.303	2.585	0.000	1.148	19.340	12.820
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:12	5.095	37.620	0.000	-5.461	72.900	96.070	70.897%	2.298
2	05:51:19	3.826	32.800	0.000	-5.071	46.030	89.370	70.339%	2.855
3	05:51:27	4.211	29.940	0.000	-0.817	36.970	88.700	68.776%	2.468
X		4.377	33.450	0.000	-3.783	51.970	91.380	70.004%	2.541
σ		0.651	3.882	0.000	2.576	18.690	4.073	1.100%	0.286
%RSD		14.860	11.600	0.000	68.100	35.960	4.457	1.571	11.240
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:12	-1.731	4.210	0.583	4.709	8.359	0.030	-0.029	0.303
2	05:51:19	-1.948	4.201	0.580	4.516	2.719	0.017	-0.066	0.396
3	05:51:27	-2.182	4.508	0.572	4.319	3.594	0.026	0.099	0.356
X		-1.954	4.307	0.578	4.515	4.891	0.024	0.001	0.352
σ		0.225	0.175	0.006	0.195	3.036	0.007	0.087	0.047
%RSD		11.530	4.053	0.982	4.321	62.070	27.670	8517.000	13.240
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:12	0.289	5.684	6.045	0.082	0.019	0.549	0.000	0.094
2	05:51:19	0.136	5.991	6.241	0.117	0.069	-1.075	0.000	0.080
3	05:51:27	0.386	6.415	5.652	0.103	0.070	2.070	0.000	0.060
X		0.270	6.030	5.979	0.101	0.053	0.515	0.000	0.078
σ		0.126	0.367	0.300	0.018	0.029	1.572	0.000	0.017
%RSD		46.670	6.086	5.020	17.400	55.420	305.600	0.000	22.370
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:12	62.537%	4.177	4.046	58.156%	-0.042	-0.030	-0.000	0.115
2	05:51:19	64.754%	3.427	3.250	59.050%	-0.033	-0.014	-0.001	0.111
3	05:51:27	64.054%	2.795	2.791	59.385%	-0.033	-0.030	0.025	0.047
X		63.781%	3.466	3.362	58.864%	-0.036	-0.025	0.008	0.091
σ		1.133%	0.692	0.635	0.635%	0.005	0.009	0.015	0.038
%RSD		1.777	19.960	18.870	1.079	15.240	35.830	185.000	42.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:12	59.956%	4.707	1.219	1.229	0.135	0.118	65.883%	67.782%
2	05:51:19	61.363%	3.602	0.874	0.772	0.006	0.243	66.186%	68.732%
3	05:51:27	62.282%	2.601	0.511	0.511	0.129	0.138	68.229%	68.762%
X		61.201%	3.637	0.868	0.837	0.090	0.166	66.766%	68.425%
σ		1.172%	1.054	0.354	0.363	0.073	0.067	1.276%	0.557%
%RSD		1.914	28.980	40.790	43.410	80.550	40.370	1.912	0.815
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:51:12	0.092	0.116	0.120	0.101	0.069	63.349%		
2	05:51:19	0.066	0.065	0.049	0.051	0.046	63.915%		
3	05:51:27	0.030	0.045	0.083	0.021	0.063	64.189%		
X		0.063	0.075	0.084	0.058	0.059	63.817%		
σ		0.031	0.037	0.036	0.040	0.012	0.428%		
%RSD		49.440	48.420	42.390	69.590	19.490	0.671		

180-42943-C-7-A 4/27/2015 5:57:14 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	05:56:20	76.465%	0.036	9.997	12.760	0.000	4713.000	1285.000	1260.000
2	05:56:27	74.666%	0.054	9.973	13.150	0.000	4928.000	1277.000	1280.000
3	05:56:35	75.119%	-0.064	9.979	13.340	0.000	4946.000	1304.000	1320.000
X		75.417%	0.009	9.983	13.080	0.000	4862.000	1289.000	1287.000
σ		0.935%	0.064	0.013	0.296	0.000	129.700	13.940	30.480
%RSD		1.240	749.300	0.128	2.260	0.000	2.667	1.081	2.369
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:20	16.840	5787.000	0.000	867.800	4704.000	4398.000	70.937%	11.740
2	05:56:27	19.110	5992.000	0.000	892.800	4889.000	4576.000	69.382%	11.940
3	05:56:35	17.840	6153.000	0.000	943.600	5002.000	4746.000	67.754%	11.570
X		17.930	5977.000	0.000	901.400	4865.000	4573.000	69.358%	11.750
σ		1.138	183.100	0.000	38.650	150.400	174.100	1.591%	0.185
%RSD		6.347	3.063	0.000	4.287	3.091	3.807	2.294	1.572
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:20	-1.326	3.684	78.110	15010.000	14380.000	1.860	3.658	0.211
2	05:56:27	-0.847	3.857	83.120	15420.000	14690.000	1.819	3.606	0.243
3	05:56:35	-2.785	3.717	84.930	15950.000	14880.000	1.860	3.770	0.241
X		-1.653	3.753	82.050	15460.000	14650.000	1.846	3.678	0.232
σ		1.010	0.092	3.530	475.000	251.700	0.023	0.084	0.018
%RSD		61.110	2.445	4.303	3.073	1.718	1.267	2.281	7.668
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:20	0.289	2.164	1.699	13.780	0.019	3.839	0.000	8.733
2	05:56:27	0.223	1.912	1.894	13.770	0.071	4.658	0.000	9.217
3	05:56:35	0.158	1.348	1.120	14.150	0.281	2.404	0.000	9.479
X		0.224	1.808	1.571	13.900	0.124	3.633	0.000	9.143
σ		0.065	0.418	0.403	0.219	0.139	1.141	0.000	0.379
%RSD		29.230	23.100	25.640	1.573	112.100	31.400	0.000	4.143
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:20	62.365%	1.945	2.222	56.676%	-0.032	-0.035	-0.001	0.030
2	05:56:27	63.097%	2.188	2.065	58.265%	-0.008	-0.040	-0.001	0.050
3	05:56:35	63.282%	2.144	1.866	57.930%	-0.027	-0.025	-0.001	0.006
X		62.915%	2.092	2.051	57.624%	-0.022	-0.033	-0.001	0.029
σ		0.485%	0.130	0.178	0.838%	0.013	0.008	0.000	0.022
%RSD		0.770	6.196	8.693	1.453	56.880	23.930	6.706	76.830
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:20	58.869%	0.384	0.263	0.198	2.034	2.270	66.270%	66.866%
2	05:56:27	59.914%	0.379	0.187	0.202	2.510	2.973	67.213%	68.057%
3	05:56:35	60.782%	0.112	0.211	0.083	2.497	2.936	66.722%	67.190%
X		59.855%	0.291	0.220	0.161	2.347	2.726	66.735%	67.371%
σ		0.958%	0.156	0.039	0.068	0.271	0.396	0.472%	0.616%
%RSD		1.600	53.470	17.650	41.910	11.560	14.520	0.707	0.914
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:56:20	-0.024	-0.005	-0.007	0.003	-0.015	62.661%		
2	05:56:27	-0.024	-0.029	-0.012	-0.027	-0.029	63.077%		
3	05:56:35	-0.057	-0.033	0.005	0.012	-0.004	64.258%		
X		-0.035	-0.022	-0.004	-0.004	-0.016	63.332%		
σ		0.019	0.015	0.009	0.020	0.012	0.828%		
%RSD		54.290	68.110	194.100	504.100	78.520	1.308		

180-42943-D-7-A 4/27/2015 6:02:22 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	06:01:29	76.893%	0.103	10.780	12.310	0.000	4750.000	1271.000	1259.000
2	06:01:37	74.370%	0.067	11.130	12.910	0.000	4974.000	1356.000	1288.000
3	06:01:45	75.983%	0.049	9.140	11.390	0.000	4937.000	1390.000	1304.000
X		75.749%	0.073	10.350	12.200	0.000	4887.000	1339.000	1284.000
σ		1.278%	0.028	1.063	0.768	0.000	120.200	61.550	22.610
%RSD		1.687	37.740	10.270	6.296	0.000	2.459	4.596	1.761
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:29	22.620	5824.000	0.000	871.300	4816.000	4505.000	70.948%	12.190
2	06:01:37	24.410	6130.000	0.000	913.600	4959.000	4707.000	69.218%	11.160
3	06:01:45	24.490	5991.000	0.000	918.900	5097.000	4867.000	68.494%	10.970
X		23.840	5982.000	0.000	901.300	4957.000	4693.000	69.553%	11.440
σ		1.055	153.100	0.000	26.070	140.600	181.000	1.261%	0.658
%RSD		4.426	2.559	0.000	2.893	2.836	3.856	1.813	5.747
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:29	-2.308	3.452	80.070	15240.000	14520.000	2.029	4.245	0.394
2	06:01:37	-0.925	3.670	82.390	15560.000	14660.000	1.857	4.746	0.325
3	06:01:45	0.125	3.771	84.680	15620.000	14820.000	1.939	4.048	0.390
X		-1.036	3.631	82.380	15470.000	14670.000	1.942	4.346	0.370
σ		1.220	0.163	2.307	204.600	149.600	0.086	0.360	0.039
%RSD		117.800	4.479	2.801	1.322	1.020	4.445	8.280	10.550
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:29	0.149	3.831	3.877	13.270	0.375	2.798	0.000	9.276
2	06:01:37	0.328	4.119	3.738	13.510	0.224	5.306	0.000	9.192
3	06:01:45	0.221	3.890	4.664	13.450	0.172	5.993	0.000	9.365
X		0.233	3.947	4.093	13.410	0.257	4.699	0.000	9.278
σ		0.090	0.153	0.499	0.124	0.106	1.682	0.000	0.086
%RSD		38.920	3.863	12.200	0.921	41.230	35.790	0.000	0.929
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:29	64.440%	1.806	1.720	57.371%	-0.037	-0.024	0.053	-0.015
2	06:01:37	64.426%	1.928	1.737	58.477%	-0.028	-0.030	-0.001	-0.005
3	06:01:45	64.925%	1.590	1.781	57.964%	-0.032	-0.014	0.026	-0.005
X		64.597%	1.775	1.746	57.937%	-0.032	-0.023	0.026	-0.008
σ		0.284%	0.172	0.031	0.554%	0.005	0.008	0.027	0.006
%RSD		0.440	9.666	1.802	0.955	14.660	34.990	102.600	73.940
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:01:29	59.808%	-0.295	0.067	0.096	2.642	3.106	67.092%	66.934%
2	06:01:37	61.024%	-0.512	0.064	-0.004	2.736	2.820	67.153%	67.192%
3	06:01:45	60.725%	-0.380	0.065	0.025	2.949	3.175	67.452%	68.492%
X		60.519%	-0.395	0.065	0.039	2.775	3.034	67.232%	67.539%
σ		0.633%	0.109	0.001	0.051	0.157	0.189	0.193%	0.835%
%RSD		1.047	27.630	2.000	131.500	5.666	6.214	0.286	1.236
Run	Time	203TI	205TI	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:01:29	-0.056	-0.035	0.086	0.072	0.047	62.952%		
2	06:01:37	-0.060	-0.044	0.071	0.046	0.052	63.687%		
3	06:01:45	-0.060	-0.036	0.035	0.065	0.044	64.454%		
X		-0.059	-0.038	0.064	0.061	0.048	63.698%		
σ		0.002	0.005	0.026	0.013	0.004	0.751%		
%RSD		4.164	13.270	40.740	21.680	9.163	1.179		

CCV 1533080 4/27/2015 6:07:27 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	06:06:34	72.058%	95.580	95.800	98.590	0.000	57140.000	52600.000	51960.000
2	06:06:42	71.944%	98.340	98.260	101.500	0.000	58740.000	54390.000	53440.000
3	06:06:49	74.359%	93.180	92.770	97.440	0.000	57280.000	53800.000	52760.000
X		72.787%	95.699%	95.608%	99.172%	0.000	115.444%	107.196%	105.446%
σ		1.362%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.872	2.698	2.875	2.101	0.000	1.536	1.700	1.404
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:06:34	553.200	5116.000	0.000	49830.000	46050.000	44400.000	71.552%	92.100
2	06:06:42	591.600	5210.000	0.000	51630.000	48700.000	46840.000	69.031%	97.080
3	06:06:49	581.100	5143.000	0.000	52800.000	49290.000	47990.000	68.492%	97.610
X		115.064%	103.124%	0.000	102.839%	96.030%	92.815%	69.692%	95.598%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.633%	n/a
%RSD		3.449	0.931	0.000	2.911	3.597	3.952	2.343	3.182
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:06:34	90.730	90.600	444.000	23200.000	21810.000	88.710	88.020	90.170
2	06:06:42	94.050	95.390	478.500	24190.000	22720.000	92.430	95.110	95.730
3	06:06:49	96.110	94.750	482.200	24240.000	22710.000	92.790	94.860	94.690
X		93.630%	93.577%	93.647%	95.501%	89.648%	91.311%	92.662%	93.531%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		2.899	2.779	4.499	2.463	2.334	2.474	4.338	3.160
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:06:34	91.800	94.760	88.520	93.900	94.870	93.530	0.000	95.580
2	06:06:42	94.780	93.920	94.150	96.250	100.700	99.460	0.000	95.880
3	06:06:49	94.360	92.870	93.300	95.060	97.330	94.390	0.000	96.410
X		93.647%	93.850%	91.990%	95.069%	97.620%	95.794%	0.000	95.958%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.720	1.012	3.298	1.240	2.977	3.346	0.000	0.440
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:06:34	65.186%	93.850	96.160	58.050%	95.390	94.070	95.750	96.180
2	06:06:42	64.116%	97.270	99.310	58.464%	95.160	95.230	95.470	98.260
3	06:06:49	66.096%	96.470	98.960	59.181%	95.600	93.140	98.550	97.550
X		65.132%	95.866%	98.146%	58.565%	95.381%	94.149%	96.591%	97.330%
σ		0.992%	n/a	n/a	0.572%	n/a	n/a	n/a	n/a
%RSD		1.522	1.868	1.759	0.977	0.230	1.109	1.766	1.086
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:06:34	61.121%	93.760	93.100	92.920	96.850	95.540	67.084%	67.594%
2	06:06:42	60.935%	93.520	94.580	92.630	96.630	96.290	67.995%	69.144%
3	06:06:49	61.110%	94.530	94.300	96.000	96.370	94.320	68.085%	69.537%
X		61.055%	93.939%	93.994%	93.854%	96.617%	95.383%	67.721%	68.759%
σ		0.105%	n/a	n/a	n/a	n/a	n/a	0.554%	1.027%
%RSD		0.172	0.560	0.837	1.990	0.249	1.040	0.818	1.494
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:06:34	99.500	98.890	101.300	102.000	100.800	60.594%		
2	06:06:42	101.800	98.370	100.500	99.780	100.100	60.995%		
3	06:06:49	99.440	97.660	99.970	99.120	99.270	62.073%		
X		100.237%	98.308%	100.602%	100.305%	100.072%	61.221%		
σ		n/a	n/a	n/a	n/a	n/a	0.765%		
%RSD		1.327	0.632	0.670	1.515	0.776	1.249		

CCB9 4/27/2015 6:16:37 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	06:15:43	89.889%	-0.039	1.142	1.655	0.000	322.900	37.920	38.090
2	06:15:51	87.386%	-0.054	1.777	1.394	0.000	311.100	30.610	38.660
3	06:15:59	86.854%	0.038	1.393	1.028	0.000	315.700	35.450	41.030
X		88.043%	-0.018	1.437	1.359	0.000	316.600	34.660	39.260
σ		1.621%	0.049	0.320	0.315	0.000	5.926	3.720	1.561
%RSD		1.841	268.000	22.280	23.160	0.000	1.872	10.730	3.976
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:15:43	2.728	5.905	0.000	2.150	34.630	31.580	84.009%	-0.560
2	06:15:51	3.882	4.183	0.000	3.509	35.190	35.180	83.340%	-0.045
3	06:15:59	2.943	2.268	0.000	15.310	42.420	28.910	81.373%	-0.326
X		3.184	4.118	0.000	6.989	37.410	31.890	82.907%	-0.310
σ		0.614	1.819	0.000	7.236	4.343	3.146	1.370%	0.258
%RSD		19.280	44.180	0.000	103.500	11.610	9.865	1.653	83.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:15:43	0.180	0.111	0.314	16.310	18.270	0.037	-0.095	0.231
2	06:15:51	0.260	0.089	0.255	17.070	17.460	0.051	-0.065	0.279
3	06:15:59	-0.079	0.106	0.286	17.030	19.360	0.052	-0.048	0.197
X		0.120	0.102	0.285	16.800	18.360	0.046	-0.069	0.235
σ		0.177	0.011	0.029	0.428	0.954	0.009	0.024	0.041
%RSD		147.500	11.220	10.310	2.547	5.194	18.310	34.430	17.470
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:15:43	-0.036	-0.087	0.013	0.086	0.254	0.715	0.000	0.117
2	06:15:51	0.107	-0.065	0.076	0.073	0.090	1.484	0.000	0.176
3	06:15:59	0.110	0.067	0.151	0.143	0.173	1.168	0.000	0.154
X		0.060	-0.029	0.080	0.101	0.172	1.122	0.000	0.149
σ		0.083	0.083	0.069	0.037	0.082	0.386	0.000	0.030
%RSD		138.400	292.000	86.270	37.110	47.610	34.430	0.000	20.150
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:15:43	81.508%	0.310	0.298	80.785%	0.006	0.009	0.019	0.049
2	06:15:51	81.518%	0.226	0.266	82.132%	-0.005	0.019	0.018	-0.014
3	06:15:59	81.966%	0.353	0.265	82.182%	0.012	0.004	0.076	0.025
X		81.664%	0.296	0.276	81.700%	0.004	0.011	0.038	0.020
σ		0.261%	0.064	0.019	0.793%	0.009	0.008	0.033	0.031
%RSD		0.320	21.700	6.811	0.970	214.700	70.900	87.590	156.600
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:15:43	83.387%	-0.983	0.095	0.138	-0.004	0.028	83.966%	85.369%
2	06:15:51	84.186%	-0.868	0.144	0.099	0.216	0.084	86.133%	86.187%
3	06:15:59	84.302%	-0.877	0.098	0.091	-0.005	0.158	87.614%	86.975%
X		83.958%	-0.909	0.112	0.109	0.069	0.090	85.904%	86.177%
σ		0.498%	0.064	0.027	0.025	0.127	0.066	1.835%	0.803%
%RSD		0.593	7.050	24.470	22.650	183.700	72.710	2.136	0.932
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:15:43	-0.041	0.016	0.017	0.004	-0.005	81.771%		
2	06:15:51	0.010	0.008	0.041	0.043	0.018	85.219%		
3	06:15:59	-0.014	-0.008	0.037	0.013	0.007	85.175%		
X		-0.015	0.005	0.032	0.020	0.007	84.055%		
σ		0.025	0.012	0.013	0.020	0.012	1.978%		
%RSD		168.300	219.700	40.520	100.500	178.300	2.353		

180-42943-C-8-A 4/27/2015 6:21:45 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	06:20:53	80.598%	0.231	10.110	11.210	0.000	21090.000	1690.000	1626.000
2	06:21:00	76.645%	0.139	10.590	10.920	0.000	21790.000	1706.000	1664.000
3	06:21:08	77.324%	0.283	9.403	12.930	0.000	21940.000	1730.000	1721.000
X		78.189%	0.217	10.030	11.690	0.000	21600.000	1709.000	1670.000
σ		2.114%	0.073	0.595	1.085	0.000	455.300	19.910	47.950
%RSD		2.703	33.620	5.931	9.286	0.000	2.107	1.165	2.870
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:20:53	93.990	5661.000	0.000	2107.000	3085.000	3086.000	70.553%	1.363
2	06:21:00	97.130	5867.000	0.000	2155.000	3374.000	3168.000	69.648%	1.428
3	06:21:08	98.990	5938.000	0.000	2202.000	3395.000	3287.000	68.073%	1.241
X		96.700	5822.000	0.000	2154.000	3285.000	3180.000	69.425%	1.344
σ		2.527	144.000	0.000	47.450	173.100	101.100	1.255%	0.095
%RSD		2.613	2.473	0.000	2.203	5.269	3.180	1.808	7.071
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:20:53	-4.543	3.285	73.460	16.620	22.650	3.145	4.807	1.234
2	06:21:00	-4.557	3.542	75.950	13.570	26.840	3.278	4.464	1.208
3	06:21:08	-2.155	3.982	78.620	13.390	21.170	3.326	4.920	1.208
X		-3.752	3.603	76.010	14.530	23.550	3.250	4.730	1.216
σ		1.383	0.353	2.584	1.817	2.937	0.094	0.238	0.015
%RSD		36.860	9.787	3.399	12.510	12.470	2.890	5.022	1.224
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:20:53	1.199	16.070	16.940	0.236	0.333	-0.261	0.000	35.960
2	06:21:00	1.408	17.540	16.180	0.129	0.224	2.921	0.000	35.100
3	06:21:08	0.932	17.820	16.580	0.173	0.276	5.021	0.000	35.090
X		1.180	17.140	16.570	0.179	0.277	2.560	0.000	35.380
σ		0.239	0.943	0.380	0.054	0.054	2.659	0.000	0.500
%RSD		20.250	5.503	2.292	29.890	19.610	103.900	0.000	1.412
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:20:53	62.656%	0.227	0.251	57.207%	0.260	0.345	0.134	0.050
2	06:21:00	64.222%	0.346	0.256	58.045%	0.266	0.346	0.053	0.050
3	06:21:08	64.623%	0.299	0.325	57.561%	0.282	0.305	0.026	0.028
X		63.834%	0.291	0.277	57.604%	0.269	0.332	0.071	0.043
σ		1.040%	0.060	0.041	0.421%	0.011	0.024	0.056	0.013
%RSD		1.629	20.510	14.860	0.731	4.225	7.091	79.270	30.110
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:20:53	59.820%	-0.068	0.223	0.322	132.400	138.600	65.493%	67.071%
2	06:21:00	60.130%	-0.134	0.383	0.251	137.200	135.800	66.401%	67.204%
3	06:21:08	60.547%	-0.329	0.199	0.132	137.300	133.600	66.591%	67.415%
X		60.166%	-0.177	0.268	0.235	135.600	136.000	66.162%	67.230%
σ		0.365%	0.136	0.100	0.096	2.773	2.509	0.587%	0.174%
%RSD		0.607	76.870	37.390	40.740	2.045	1.845	0.887	0.258
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:20:53	0.067	0.062	0.034	0.004	0.014	61.838%		
2	06:21:00	0.026	0.026	0.020	0.023	0.011	62.874%		
3	06:21:08	0.026	0.018	-0.007	0.042	0.009	63.030%		
X		0.040	0.035	0.016	0.023	0.011	62.581%		
σ		0.024	0.023	0.021	0.019	0.002	0.648%		
%RSD		60.770	66.140	134.700	84.440	19.690	1.036		

180-42943-D-8-A 4/27/2015 6:26:50 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	06:25:59	78.571%	0.387	10.350	11.210	0.000	21060.000	1650.000	1634.000	
2	06:26:06	78.963%	0.173	9.613	11.090	0.000	21250.000	1686.000	1666.000	
3	06:26:14	77.563%	0.315	10.820	11.530	0.000	21910.000	1798.000	1690.000	
X		78.366%	0.292	10.260	11.280	0.000	21410.000	1711.000	1663.000	
		σ	0.722%	0.109	0.607	0.231	0.000	449.200	76.950	28.370
		%RSD	0.921	37.320	5.915	2.044	0.000	2.099	4.496	1.705
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:25:59	102.300	5660.000	0.000	2041.000	3428.000	3042.000	73.764%	1.746	
2	06:26:06	105.900	5653.000	0.000	2114.000	3449.000	3208.000	71.022%	1.199	
3	06:26:14	111.200	5831.000	0.000	2197.000	3602.000	3362.000	67.719%	1.212	
X		106.400	5715.000	0.000	2117.000	3493.000	3204.000	70.835%	1.386	
		σ	4.469	100.400	0.000	77.990	94.750	160.100	3.027%	0.312
		%RSD	4.199	1.758	0.000	3.683	2.713	4.999	4.273	22.550
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:25:59	-3.363	3.475	71.720	12.140	23.340	3.234	4.536	0.923	
2	06:26:06	-0.075	3.555	75.800	13.160	20.890	3.118	4.537	0.977	
3	06:26:14	-3.509	4.030	79.760	13.270	27.140	3.442	5.038	1.062	
X		-2.316	3.686	75.760	12.860	23.790	3.265	4.703	0.988	
		σ	1.942	0.300	4.021	0.625	3.146	0.164	0.290	0.070
		%RSD	83.840	8.134	5.308	4.859	13.230	5.029	6.155	7.099
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:25:59	1.091	16.290	16.580	0.086	0.070	1.275	0.000	35.990	
2	06:26:06	0.900	17.120	14.550	0.096	0.121	4.716	0.000	34.430	
3	06:26:14	0.997	16.750	17.420	0.143	0.227	1.964	0.000	36.050	
X		0.996	16.720	16.180	0.108	0.139	2.651	0.000	35.490	
		σ	0.096	0.417	1.473	0.030	0.080	1.821	0.000	0.920
		%RSD	9.614	2.492	9.101	27.770	57.410	68.660	0.000	2.593
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:25:59	62.432%	0.117	0.123	57.344%	-0.037	-0.019	-0.000	-0.037	
2	06:26:06	63.953%	0.209	0.171	57.218%	-0.032	-0.030	0.053	0.082	
3	06:26:14	63.677%	0.161	0.130	58.184%	-0.042	-0.019	0.026	0.017	
X		63.354%	0.162	0.141	57.582%	-0.037	-0.023	0.026	0.021	
		σ	0.810%	0.046	0.026	0.525%	0.005	0.006	0.027	0.059
		%RSD	1.279	28.260	18.300	0.912	13.350	26.360	102.200	288.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:25:59	60.287%	-0.467	0.017	0.007	134.700	132.700	66.128%	68.311%	
2	06:26:06	60.502%	-0.599	0.080	0.065	134.200	136.600	66.188%	67.619%	
3	06:26:14	60.967%	-0.546	0.086	-0.013	131.400	138.000	66.761%	68.100%	
X		60.585%	-0.537	0.061	0.020	133.400	135.800	66.359%	68.010%	
		σ	0.348%	0.066	0.038	0.041	1.767	2.723	0.349%	0.355%
		%RSD	0.574	12.380	62.520	207.900	1.324	2.006	0.526	0.522
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	06:25:59	-0.074	-0.053	0.033	0.023	0.023	62.998%			
2	06:26:06	-0.024	-0.034	0.059	0.027	0.021	63.308%			
3	06:26:14	-0.074	-0.038	0.032	0.027	0.005	63.306%			
X		-0.057	-0.041	0.041	0.026	0.016	63.204%			
		σ	0.029	0.010	0.015	0.003	0.010	0.179%		
		%RSD	49.750	24.000	36.800	10.430	62.510	0.282		

180-42943-D-5-A 4/27/2015 6:31:58 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	06:31:05	75.579%	0.155	6.930	9.298	0.000	4917.000	1031.000	987.200	
2	06:31:12	75.540%	0.086	7.170	9.920	0.000	4984.000	1022.000	989.500	
3	06:31:20	75.127%	-0.099	7.615	8.936	0.000	4928.000	1003.000	1010.000	
X		75.416%	0.047	7.239	9.385	0.000	4943.000	1019.000	995.600	
		σ	0.250%	0.132	0.347	0.498	0.000	35.730	14.120	12.600
		%RSD	0.332	279.600	4.799	5.306	0.000	0.723	1.386	1.266
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:31:05	73.430	4222.000	0.000	933.000	2080.000	1946.000	70.793%	1.016	
2	06:31:12	76.080	4370.000	0.000	966.400	2195.000	2026.000	69.227%	1.364	
3	06:31:20	74.440	4417.000	0.000	993.500	2089.000	2078.000	68.537%	0.837	
X		74.650	4336.000	0.000	964.300	2121.000	2017.000	69.519%	1.072	
		σ	1.336	101.900	0.000	30.300	64.160	66.590	1.156%	0.268
		%RSD	1.789	2.351	0.000	3.142	3.025	3.302	1.663	24.990
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:31:05	-1.693	4.361	11.650	3.949	7.216	0.878	1.390	0.245	
2	06:31:12	-1.960	4.627	12.310	4.371	5.439	0.954	1.170	0.282	
3	06:31:20	-1.883	4.438	12.390	4.239	6.249	0.795	1.410	0.234	
X		-1.845	4.476	12.120	4.186	6.301	0.876	1.323	0.254	
		σ	0.138	0.137	0.404	0.216	0.890	0.080	0.133	0.025
		%RSD	7.453	3.056	3.333	5.162	14.120	9.092	10.080	9.941
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:31:05	0.287	6.389	4.912	0.136	0.070	2.654	0.000	10.410	
2	06:31:12	0.369	5.248	5.912	0.113	0.069	0.019	0.000	10.060	
3	06:31:20	0.452	5.922	5.331	0.113	0.172	0.904	0.000	10.080	
X		0.369	5.853	5.385	0.121	0.104	1.192	0.000	10.180	
		σ	0.083	0.574	0.502	0.013	0.059	1.341	0.000	0.197
		%RSD	22.420	9.799	9.327	10.920	56.720	112.500	0.000	1.934
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:31:05	63.186%	0.038	0.093	57.506%	-0.027	-0.035	-0.001	0.006	
2	06:31:12	64.370%	0.128	0.176	58.607%	-0.032	-0.019	0.105	0.038	
3	06:31:20	64.658%	0.143	0.080	58.856%	-0.018	-0.025	0.026	0.016	
X		64.072%	0.103	0.116	58.323%	-0.026	-0.026	0.043	0.020	
		σ	0.780%	0.057	0.053	0.719%	0.007	0.008	0.055	0.016
		%RSD	1.217	55.490	45.190	1.232	27.810	29.750	126.900	81.320
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	06:31:05	60.698%	-0.706	0.016	0.006	33.830	31.440	66.608%	67.820%	
2	06:31:12	60.847%	-0.626	-0.026	-0.023	31.470	31.410	67.374%	68.786%	
3	06:31:20	61.840%	-0.717	0.049	-0.005	31.650	32.510	67.738%	67.498%	
X		61.128%	-0.683	0.013	-0.007	32.320	31.790	67.240%	68.035%	
		σ	0.621%	0.050	0.037	0.015	1.312	0.629	0.577%	0.670%
		%RSD	1.015	7.254	282.300	199.200	4.060	1.977	0.858	0.985
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	06:31:05	-0.049	-0.029	0.015	-0.022	0.005	63.507%			
2	06:31:12	-0.053	-0.031	-0.012	0.051	0.015	63.653%			
3	06:31:20	-0.043	-0.036	-0.017	0.007	-0.010	64.560%			
X		-0.048	-0.032	-0.005	0.012	0.003	63.907%			
		σ	0.005	0.003	0.017	0.037	0.013	0.570%		
		%RSD	10.410	10.610	355.100	308.900	374.100	0.892		

180-42943-D-5-A SD@5 4/27/2015 6:37:06 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	06:36:13	76.092%	0.014	2.360	2.657	0.000	1124.000	184.700	190.200
2	06:36:21	76.004%	-0.101	2.132	2.465	0.000	1130.000	202.100	205.100
3	06:36:28	73.414%	-0.037	1.397	2.907	0.000	1144.000	203.900	210.000
X		75.170%	-0.041	1.963	2.676	0.000	1133.000	196.900	201.800
σ		1.521%	0.058	0.504	0.222	0.000	10.420	10.600	10.300
%RSD		2.024	139.800	25.650	8.277	0.000	0.920	5.385	5.104
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:36:13	14.560	871.100	0.000	155.600	351.000	409.400	72.294%	-0.317
2	06:36:21	14.790	860.100	0.000	163.800	468.000	408.700	71.584%	-0.388
3	06:36:28	14.820	905.700	0.000	174.300	484.700	437.700	71.006%	-0.273
X		14.720	879.000	0.000	164.600	434.600	418.600	71.628%	-0.326
σ		0.146	23.820	0.000	9.381	72.880	16.570	0.645%	0.058
%RSD		0.992	2.710	0.000	5.700	16.770	3.958	0.901	17.890
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:36:13	-1.342	1.290	2.388	-0.518	0.747	0.140	0.101	0.114
2	06:36:21	-0.922	1.086	2.263	-0.314	1.126	0.161	0.188	0.141
3	06:36:28	-1.538	1.284	2.450	-0.286	3.357	0.192	0.157	0.281
X		-1.267	1.220	2.367	-0.373	1.743	0.164	0.149	0.179
σ		0.315	0.116	0.095	0.126	1.411	0.026	0.044	0.090
%RSD		24.830	9.513	4.029	33.940	80.910	15.790	29.560	50.220
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:36:13	0.089	1.152	1.031	0.019	0.264	-3.820	0.000	2.054
2	06:36:21	0.089	1.403	1.262	0.034	0.115	1.201	0.000	1.862
3	06:36:28	0.025	1.009	0.752	0.003	0.016	-0.033	0.000	2.039
X		0.068	1.188	1.015	0.018	0.132	-0.884	0.000	1.985
σ		0.037	0.199	0.256	0.015	0.125	2.617	0.000	0.107
%RSD		54.500	16.790	25.170	83.620	94.850	295.900	0.000	5.367
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:36:13	66.527%	0.078	0.057	60.900%	-0.042	-0.025	-0.001	-0.037
2	06:36:21	67.291%	0.003	-0.009	61.525%	-0.024	-0.035	0.050	-0.026
3	06:36:28	66.899%	0.091	0.056	61.829%	-0.047	-0.035	0.075	-0.037
X		66.905%	0.058	0.035	61.418%	-0.038	-0.032	0.041	-0.033
σ		0.382%	0.048	0.037	0.474%	0.012	0.006	0.038	0.006
%RSD		0.571	82.590	108.000	0.771	32.200	18.070	92.840	17.570
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:36:13	63.499%	-1.045	-0.034	-0.073	5.476	6.503	69.216%	69.102%
2	06:36:21	64.184%	-1.070	-0.021	-0.083	6.232	5.820	69.610%	69.797%
3	06:36:28	64.068%	-0.948	-0.035	-0.037	7.835	6.129	69.875%	69.527%
X		63.917%	-1.021	-0.030	-0.064	6.514	6.151	69.567%	69.475%
σ		0.367%	0.065	0.008	0.024	1.205	0.342	0.332%	0.350%
%RSD		0.574	6.339	24.930	37.660	18.490	5.561	0.477	0.504
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:36:13	-0.092	-0.069	-0.009	-0.023	-0.018	65.570%		
2	06:36:21	-0.088	-0.065	-0.018	-0.028	-0.032	66.137%		
3	06:36:28	-0.078	-0.062	-0.039	-0.037	-0.031	66.397%		
X		-0.086	-0.066	-0.022	-0.029	-0.027	66.035%		
σ		0.007	0.003	0.015	0.007	0.008	0.423%		
%RSD		8.115	5.263	70.870	25.070	28.320	0.640		

180-42943-D-5-B MS 4/27/2015 6:42:14 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	06:41:21	69.893%	47.850	993.300	1011.000	0.000	60760.000	51660.000	51340.000
2	06:41:28	73.339%	45.020	963.100	1003.000	0.000	57640.000	49670.000	48400.000
3	06:41:36	72.198%	46.620	994.300	1010.000	0.000	59430.000	51030.000	50540.000
X		71.810%	46.500	983.600	1008.000	0.000	59280.000	50790.000	50090.000
σ		1.755%	1.420	17.780	4.439	0.000	1565.000	1016.000	1522.000
%RSD		2.445	3.054	1.807	0.441	0.000	2.640	2.001	3.039
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:41:21	2189.000	13460.000	0.000	47970.000	46500.000	44800.000	65.701%	848.200
2	06:41:28	2107.000	13950.000	0.000	49900.000	48730.000	46880.000	65.606%	879.100
3	06:41:36	2193.000	13750.000	0.000	50250.000	49430.000	47650.000	64.505%	902.900
X		2163.000	13720.000	0.000	49380.000	48220.000	46440.000	65.271%	876.700
σ		48.330	244.700	0.000	1232.000	1532.000	1471.000	0.665%	27.440
%RSD		2.234	1.784	0.000	2.496	3.177	3.167	1.019	3.130
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:41:21	464.700	185.100	425.100	888.400	998.700	453.200	452.500	232.300
2	06:41:28	462.100	187.300	446.700	894.900	991.800	454.100	452.000	231.900
3	06:41:36	472.100	189.300	457.300	905.700	1051.000	458.100	457.600	229.900
X		466.300	187.200	443.000	896.300	1014.000	455.100	454.000	231.300
σ		5.156	2.063	16.430	8.766	32.250	2.611	3.139	1.301
%RSD		1.106	1.102	3.708	0.978	3.181	0.574	0.691	0.563
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:41:21	233.200	457.900	447.500	37.480	10.960	9.968	0.000	954.300
2	06:41:28	233.100	455.800	447.400	37.470	10.750	9.610	0.000	948.200
3	06:41:36	235.300	460.900	449.700	37.410	11.660	14.280	0.000	951.000
X		233.900	458.200	448.200	37.450	11.120	11.290	0.000	951.200
σ		1.231	2.547	1.304	0.038	0.475	2.601	0.000	3.044
%RSD		0.526	0.556	0.291	0.102	4.272	23.050	0.000	0.320
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:41:21	60.732%	990.600	1018.000	53.129%	47.460	48.200	45.610	91.100
2	06:41:28	61.489%	980.300	1017.000	54.379%	48.480	46.500	47.760	88.270
3	06:41:36	61.887%	990.600	1015.000	54.230%	48.520	47.660	48.610	88.110
X		61.369%	987.200	1016.000	53.913%	48.150	47.450	47.330	89.160
σ		0.586%	5.943	1.619	0.683%	0.602	0.871	1.546	1.686
%RSD		0.956	0.602	0.159	1.266	1.250	1.836	3.267	1.891
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:41:21	56.468%	1897.000	469.400	472.800	1902.000	1880.000	64.198%	65.091%
2	06:41:28	56.719%	1914.000	476.600	476.200	1911.000	1890.000	64.796%	65.474%
3	06:41:36	57.113%	1891.000	470.100	470.200	1925.000	1907.000	64.002%	66.323%
X		56.766%	1901.000	472.000	473.100	1913.000	1892.000	64.332%	65.629%
σ		0.325%	11.950	3.925	2.998	11.480	13.450	0.414%	0.630%
%RSD		0.573	0.629	0.831	0.634	0.600	0.711	0.643	0.960
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:41:21	49.260	48.860	20.070	20.180	19.980	58.385%		
2	06:41:28	50.040	48.540	19.860	19.950	20.040	59.057%		
3	06:41:36	50.210	49.150	21.160	20.420	20.520	58.952%		
X		49.840	48.850	20.370	20.190	20.180	58.798%		
σ		0.504	0.307	0.697	0.234	0.298	0.361%		
%RSD		1.011	0.628	3.424	1.157	1.475	0.614		

180-42943-C-5-C MSD 4/27/2015 6:47:22 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	06:46:30	69.942%	48.680	1033.000	1057.000	0.000	60500.000	52880.000	51880.000
2	06:46:38	71.620%	48.160	1040.000	1032.000	0.000	59110.000	51360.000	50400.000
3	06:46:46	72.728%	48.140	1035.000	1036.000	0.000	59440.000	51890.000	50780.000
X		71.430%	48.330	1036.000	1042.000	0.000	59680.000	52040.000	51020.000
σ		1.403%	0.308	3.329	13.800	0.000	725.600	772.300	766.800
%RSD		1.964	0.638	0.321	1.325	0.000	1.216	1.484	1.503
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:30	2196.000	13750.000	0.000	48680.000	48860.000	46760.000	65.537%	893.700
2	06:46:38	2150.000	13660.000	0.000	49480.000	48840.000	47840.000	64.994%	920.500
3	06:46:46	2154.000	13860.000	0.000	50340.000	50560.000	48670.000	65.118%	933.100
X		2167.000	13760.000	0.000	49500.000	49420.000	47760.000	65.216%	915.800
σ		25.580	99.720	0.000	827.300	989.300	956.100	0.284%	20.140
%RSD		1.180	0.725	0.000	1.671	2.002	2.002	0.436	2.200
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:30	468.800	187.200	448.100	909.600	1014.000	461.200	470.900	237.700
2	06:46:38	466.400	188.800	460.200	896.000	979.500	451.800	456.800	231.700
3	06:46:46	469.500	186.200	464.200	894.900	1006.000	459.500	452.200	230.500
X		468.200	187.400	457.500	900.100	999.700	457.500	460.000	233.300
σ		1.600	1.323	8.370	8.188	17.950	4.997	9.733	3.880
%RSD		0.342	0.706	1.829	0.910	1.795	1.092	2.116	1.663
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:30	239.700	468.300	453.500	38.120	9.735	10.360	0.000	956.300
2	06:46:38	234.400	457.200	450.300	38.670	9.585	8.770	0.000	950.900
3	06:46:46	238.200	455.400	445.500	39.300	10.480	11.920	0.000	945.800
X		237.400	460.300	449.800	38.700	9.934	10.350	0.000	951.000
σ		2.716	6.996	3.993	0.590	0.481	1.577	0.000	5.228
%RSD		1.144	1.520	0.888	1.524	4.838	15.240	0.000	0.550
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:30	60.561%	999.300	1020.000	53.990%	48.240	49.570	48.130	90.590
2	06:46:38	61.965%	997.200	1026.000	53.366%	48.540	48.450	48.030	91.180
3	06:46:46	61.637%	998.100	1024.000	53.945%	48.970	48.470	48.520	88.570
X		61.388%	998.200	1023.000	53.767%	48.580	48.830	48.230	90.110
σ		0.734%	1.082	3.126	0.348%	0.368	0.644	0.260	1.368
%RSD		1.196	0.108	0.305	0.647	0.757	1.320	0.540	1.518
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:30	56.217%	1935.000	478.100	474.600	1930.000	1907.000	64.000%	65.031%
2	06:46:38	57.210%	1920.000	476.800	473.200	1954.000	1886.000	65.360%	66.186%
3	06:46:46	57.534%	1903.000	470.700	472.500	1918.000	1886.000	64.626%	65.508%
X		56.987%	1919.000	475.200	473.400	1934.000	1893.000	64.662%	65.575%
σ		0.686%	15.910	3.988	1.060	17.920	12.170	0.681%	0.580%
%RSD		1.204	0.829	0.839	0.224	0.927	0.643	1.053	0.885
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:46:30	49.560	48.610	20.700	20.210	20.370	57.531%		
2	06:46:38	49.220	48.340	20.590	20.450	20.510	58.348%		
3	06:46:46	49.190	48.750	20.330	21.170	20.670	58.845%		
X		49.320	48.570	20.540	20.610	20.520	58.241%		
σ		0.209	0.213	0.187	0.498	0.147	0.663%		
%RSD		0.423	0.438	0.912	2.416	0.717	1.139		

180-42943-D-5-A PDS 4/27/2015 6:52:27 AM

User Pre-dilution: 1.000

Run	Time	6Li ppb	9Be ppb	10B ppb	11B ppb	13C ppb	23Na ppb	25Mg ppb	26Mg ppb
1	06:51:35	73.308%	49.330	1075.000	1070.000	0.000	60910.000	53930.000	53370.000
2	06:51:42	71.397%	51.050	1100.000	1109.000	0.000	63370.000	55440.000	54640.000
3	06:51:50	71.005%	50.840	1107.000	1116.000	0.000	63480.000	55680.000	54580.000
X		71.903%	50.410	1094.000	1099.000	0.000	62590.000	55020.000	54200.000
σ		1.232%	0.938	16.690	24.870	0.000	1453.000	947.900	714.900
%RSD		1.714	1.860	1.525	2.263	0.000	2.321	1.723	1.319
Run	Time	27Al ppb	28Si ppb	37Cl ppb	39K ppb	43Ca ppb	44Ca ppb	45Sc ppb	47Ti ppb
1	06:51:35	2246.000	14200.000	0.000	52820.000	51560.000	49910.000	65.412%	1010.000
2	06:51:42	2294.000	14470.000	0.000	54050.000	54120.000	51260.000	64.203%	1033.000
3	06:51:50	2333.000	14760.000	0.000	55210.000	54150.000	52940.000	63.542%	1056.000
X		2291.000	14470.000	0.000	54030.000	53280.000	51370.000	64.386%	1033.000
σ		43.710	278.500	0.000	1195.000	1489.000	1520.000	0.948%	23.210
%RSD		1.908	1.924	0.000	2.212	2.795	2.959	1.473	2.247
Run	Time	51V ppb	52Cr ppb	55Mn ppb	56Fe ppb	57Fe ppb	59Co ppb	60Ni ppb	63Cu ppb
1	06:51:35	484.500	193.300	464.200	928.000	1034.000	472.800	471.000	242.300
2	06:51:42	497.800	195.600	479.300	960.600	1086.000	482.500	480.800	248.100
3	06:51:50	500.100	200.000	491.900	954.600	1050.000	483.000	485.000	247.300
X		494.100	196.300	478.500	947.700	1057.000	479.500	478.900	245.900
σ		8.387	3.386	13.870	17.340	26.740	5.771	7.195	3.182
%RSD		1.697	1.725	2.899	1.830	2.531	1.204	1.502	1.294
Run	Time	65Cu ppb	66Zn ppb	68Zn ppb	75As ppb	78Se ppb	82Se ppb	83Kr ppb	88Sr ppb
1	06:51:35	242.200	475.400	481.900	39.860	10.280	11.110	0.000	1007.000
2	06:51:42	252.500	487.400	487.700	41.060	10.280	14.840	0.000	1017.000
3	06:51:50	245.800	487.600	491.400	39.890	10.270	10.760	0.000	1011.000
X		246.900	483.500	487.000	40.270	10.280	12.240	0.000	1011.000
σ		5.230	6.960	4.794	0.688	0.006	2.264	0.000	4.848
%RSD		2.119	1.440	0.984	1.709	0.054	18.500	0.000	0.479
Run	Time	89Y ppb	95Mo ppb	98Mo ppb	103Rh ppb	107Ag ppb	109Ag ppb	111Cd ppb	114Cd ppb
1	06:51:35	60.175%	1133.000	1167.000	52.782%	46.400	46.580	51.670	98.330
2	06:51:42	60.552%	1132.000	1162.000	53.451%	46.800	45.950	51.250	96.940
3	06:51:50	60.808%	1135.000	1171.000	53.479%	46.670	46.210	52.280	101.100
X		60.512%	1133.000	1167.000	53.237%	46.620	46.250	51.730	98.780
σ		0.318%	1.424	4.327	0.394%	0.203	0.317	0.521	2.107
%RSD		0.526	0.126	0.371	0.740	0.436	0.686	1.007	2.133
Run	Time	115In ppb	118Sn ppb	121Sb ppb	123Sb ppb	135Ba ppb	137Ba ppb	159Tb ppb	165Ho ppb
1	06:51:35	55.768%	2181.000	534.300	532.900	2030.000	2007.000	63.714%	63.704%
2	06:51:42	56.242%	2170.000	532.500	537.400	2032.000	2003.000	63.877%	64.912%
3	06:51:50	56.274%	2186.000	539.300	540.500	2052.000	2013.000	64.301%	65.365%
X		56.095%	2179.000	535.400	536.900	2038.000	2007.000	63.964%	64.660%
σ		0.283%	8.033	3.514	3.798	12.040	5.315	0.303%	0.859%
%RSD		0.505	0.369	0.656	0.707	0.591	0.265	0.474	1.328
Run	Time	203Tl ppb	205Tl ppb	206Pb ppb	207Pb ppb	208Pb ppb	209Bi ppb		
1	06:51:35	52.350	52.010	21.670	21.500	21.500	57.525%		
2	06:51:42	52.750	52.390	21.220	21.640	21.500	57.924%		
3	06:51:50	52.330	51.940	21.390	21.260	21.400	58.216%		
X		52.470	52.110	21.430	21.470	21.470	57.888%		
σ		0.235	0.241	0.229	0.188	0.055	0.347%		
%RSD		0.448	0.463	1.070	0.878	0.257	0.599		

180-42943-C-9-A 4/27/2015 6:57:33 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	06:56:41	76.154%	-0.009	16.650	19.630	0.000	4051.000	1005.000	962.600
2	06:56:49	76.392%	0.140	15.890	19.310	0.000	4209.000	1017.000	976.600
3	06:56:56	75.570%	0.027	15.780	18.430	0.000	4232.000	1039.000	1036.000
X		76.039%	0.053	16.110	19.120	0.000	4164.000	1020.000	991.700
σ		0.423%	0.077	0.474	0.617	0.000	98.860	17.390	38.950
%RSD		0.556	146.700	2.940	3.226	0.000	2.374	1.705	3.927
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:56:41	8.062	13180.000	0.000	1681.000	6093.000	5916.000	68.929%	7.360
2	06:56:49	9.406	13450.000	0.000	1744.000	6472.000	6278.000	66.575%	7.242
3	06:56:56	9.663	13460.000	0.000	1764.000	6643.000	6336.000	66.003%	5.768
X		9.044	13370.000	0.000	1730.000	6403.000	6177.000	67.169%	6.790
σ		0.860	160.200	0.000	43.260	281.200	227.300	1.551%	0.887
%RSD		9.511	1.198	0.000	2.501	4.392	3.680	2.309	13.070
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:56:41	-5.039	4.885	46.080	1590.000	1501.000	0.069	0.263	0.496
2	06:56:49	-3.926	5.133	49.230	1609.000	1557.000	0.040	0.181	0.737
3	06:56:56	-3.910	5.591	49.850	1635.000	1598.000	0.044	0.198	0.570
X		-4.292	5.203	48.390	1611.000	1552.000	0.051	0.214	0.601
σ		0.647	0.358	2.022	22.940	48.490	0.016	0.043	0.123
%RSD		15.070	6.884	4.178	1.424	3.125	30.840	20.120	20.520
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:56:41	0.540	4.019	3.581	0.170	0.228	1.680	0.000	34.720
2	06:56:49	0.706	3.825	5.035	0.245	0.019	1.975	0.000	34.890
3	06:56:56	0.560	3.891	4.436	0.136	0.070	2.521	0.000	34.460
X		0.602	3.912	4.350	0.184	0.106	2.058	0.000	34.690
σ		0.091	0.098	0.731	0.056	0.109	0.427	0.000	0.219
%RSD		15.060	2.511	16.800	30.270	102.900	20.750	0.000	0.631
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:56:41	63.030%	4.672	4.454	57.759%	-0.022	-0.009	-0.001	0.039
2	06:56:49	63.044%	3.124	3.802	57.685%	-0.037	-0.030	0.053	0.134
3	06:56:56	64.939%	2.990	2.948	58.575%	-0.032	-0.030	0.026	0.060
X		63.671%	3.595	3.735	58.006%	-0.031	-0.023	0.026	0.078
σ		1.098%	0.935	0.755	0.494%	0.008	0.012	0.027	0.050
%RSD		1.725	26.010	20.230	0.852	24.600	53.760	102.300	64.140
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:56:41	59.734%	4.189	1.108	0.918	17.070	16.150	66.608%	66.532%
2	06:56:49	60.759%	3.561	0.852	0.709	17.980	15.330	67.202%	66.972%
3	06:56:56	60.403%	2.694	0.647	0.713	18.280	16.360	67.293%	68.023%
X		60.299%	3.481	0.869	0.780	17.780	15.950	67.034%	67.176%
σ		0.520%	0.751	0.231	0.119	0.630	0.543	0.372%	0.766%
%RSD		0.863	21.560	26.580	15.310	3.542	3.406	0.555	1.141
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:56:41	0.152	0.132	0.047	0.098	0.053	62.629%		
2	06:56:49	0.056	0.120	0.023	0.037	0.030	63.779%		
3	06:56:56	0.014	0.049	0.023	0.037	0.030	63.729%		
X		0.074	0.100	0.031	0.057	0.037	63.379%		
σ		0.071	0.045	0.014	0.035	0.013	0.650%		
%RSD		95.720	44.440	44.080	61.970	35.720	1.025		

180-42943-D-9-A 4/27/2015 7:02:38 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	07:01:45	77.669%	-0.103	12.320	13.330	0.000	4534.000	1099.000	1089.000
2	07:01:53	79.345%	-0.028	9.780	12.640	0.000	4377.000	1077.000	1043.000
3	07:02:01	76.782%	-0.022	12.410	13.580	0.000	4521.000	1075.000	1096.000
X		77.932%	-0.051	11.500	13.180	0.000	4477.000	1084.000	1076.000
σ		1.302%	0.045	1.495	0.487	0.000	87.110	13.520	28.950
%RSD		1.671	88.940	12.990	3.694	0.000	1.946	1.248	2.691
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:01:45	9.398	13080.000	0.000	1763.000	6299.000	6260.000	64.721%	6.683
2	07:01:53	7.961	13820.000	0.000	1729.000	6560.000	6352.000	67.424%	6.228
3	07:02:01	7.210	14630.000	0.000	1804.000	6983.000	6514.000	65.716%	7.346
X		8.190	13840.000	0.000	1765.000	6614.000	6375.000	65.954%	6.752
σ		1.111	774.300	0.000	37.820	345.000	128.700	1.367%	0.562
%RSD		13.570	5.593	0.000	2.142	5.216	2.019	2.072	8.325
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:01:45	-5.011	5.302	48.160	1821.000	1726.000	0.032	0.075	0.809
2	07:01:53	-2.132	5.449	52.110	1738.000	1716.000	0.087	0.028	0.637
3	07:02:01	-3.108	5.521	53.920	1811.000	1667.000	0.022	-0.023	0.821
X		-3.417	5.424	51.390	1790.000	1703.000	0.047	0.027	0.756
σ		1.464	0.112	2.946	45.570	31.280	0.035	0.049	0.103
%RSD		42.860	2.061	5.732	2.546	1.836	74.310	184.400	13.610
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:01:45	1.027	3.955	3.636	0.185	0.231	0.402	0.000	36.290
2	07:01:53	0.932	3.357	3.877	0.123	0.171	0.138	0.000	36.070
3	07:02:01	0.819	3.900	3.911	0.221	0.172	2.868	0.000	35.970
X		0.926	3.738	3.808	0.177	0.191	1.136	0.000	36.110
σ		0.104	0.330	0.150	0.050	0.034	1.506	0.000	0.164
%RSD		11.250	8.841	3.942	28.070	17.940	132.500	0.000	0.453
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:01:45	63.456%	1.065	0.889	58.018%	-0.027	-0.030	-0.001	0.017
2	07:01:53	65.334%	0.879	0.919	58.021%	-0.023	-0.030	0.026	0.016
3	07:02:01	65.816%	0.926	0.741	59.273%	-0.028	-0.035	-0.001	0.027
X		64.869%	0.957	0.850	58.437%	-0.026	-0.031	0.008	0.020
σ		1.247%	0.097	0.095	0.724%	0.003	0.003	0.015	0.006
%RSD		1.922	10.100	11.180	1.239	11.050	9.657	185.300	28.860
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:01:45	60.625%	0.689	0.191	0.209	15.710	17.040	66.914%	67.059%
2	07:01:53	61.361%	0.468	0.250	0.196	15.520	17.360	67.723%	67.550%
3	07:02:01	61.582%	0.427	0.228	0.109	16.270	14.590	68.287%	69.048%
X		61.189%	0.528	0.223	0.171	15.830	16.330	67.641%	67.886%
σ		0.501%	0.141	0.030	0.054	0.386	1.515	0.690%	1.036%
%RSD		0.819	26.670	13.350	31.820	2.438	9.282	1.021	1.526
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:01:45	-0.063	-0.040	0.073	0.048	0.050	62.593%		
2	07:01:53	-0.046	-0.030	0.083	0.094	0.061	64.468%		
3	07:02:01	-0.043	-0.030	0.048	0.055	0.036	64.528%		
X		-0.051	-0.034	0.068	0.065	0.049	63.863%		
σ		0.011	0.006	0.018	0.025	0.013	1.100%		
%RSD		20.800	17.810	26.470	37.700	25.900	1.723		

180-42943-C-10-A 4/27/2015 7:07:46 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	07:06:52	81.411%	-0.043	9.986	11.000	0.000	2115.000	339.100	335.000
2	07:07:00	79.621%	-0.017	13.300	11.650	0.000	2129.000	362.800	333.800
3	07:07:07	80.177%	0.080	11.650	11.680	0.000	2163.000	352.600	344.400
X		80.403%	0.006	11.650	11.440	0.000	2135.000	351.500	337.700
σ		0.916%	0.065	1.660	0.387	0.000	24.630	11.880	5.823
%RSD		1.139	999.900	14.250	3.381	0.000	1.153	3.380	1.724
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:06:52	94.950	5949.000	0.000	879.100	2226.000	2133.000	70.160%	0.725
2	07:07:00	98.690	6335.000	0.000	913.000	2270.000	2224.000	69.585%	2.085
3	07:07:07	105.600	6365.000	0.000	935.600	2323.000	2247.000	68.085%	2.422
X		99.740	6216.000	0.000	909.200	2273.000	2201.000	69.277%	1.744
σ		5.397	231.800	0.000	28.480	48.830	60.060	1.071%	0.898
%RSD		5.411	3.729	0.000	3.132	2.148	2.729	1.546	51.490
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:06:52	-3.300	4.650	11.470	245.600	247.800	0.141	1.250	3.224
2	07:07:00	-3.543	4.881	11.860	248.000	248.300	0.098	1.130	2.982
3	07:07:07	-1.858	5.047	12.550	247.100	252.700	0.155	0.852	3.036
X		-2.900	4.860	11.960	246.900	249.600	0.132	1.077	3.081
σ		0.911	0.200	0.545	1.209	2.682	0.030	0.205	0.127
%RSD		31.400	4.105	4.555	0.490	1.075	22.500	18.990	4.123
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:06:52	3.363	19.740	18.690	0.509	0.018	4.582	0.000	5.417
2	07:07:00	3.487	19.700	18.480	0.426	0.223	1.128	0.000	5.064
3	07:07:07	3.778	19.480	18.410	0.401	0.119	1.126	0.000	5.199
X		3.543	19.640	18.530	0.445	0.120	2.279	0.000	5.227
σ		0.213	0.141	0.145	0.056	0.103	1.995	0.000	0.179
%RSD		6.012	0.716	0.783	12.650	85.360	87.550	0.000	3.416
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:06:52	63.894%	0.683	0.580	58.930%	-0.028	-0.030	0.026	0.016
2	07:07:00	64.359%	0.496	0.406	58.894%	-0.037	-0.020	0.026	0.048
3	07:07:07	65.723%	0.427	0.597	59.703%	-0.038	-0.030	0.051	0.015
X		64.659%	0.535	0.527	59.176%	-0.034	-0.026	0.034	0.027
σ		0.950%	0.133	0.106	0.457%	0.006	0.006	0.015	0.018
%RSD		1.470	24.780	20.030	0.773	16.380	22.500	42.780	69.340
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:06:52	61.111%	-0.011	0.134	0.015	3.174	3.549	66.177%	67.399%
2	07:07:00	61.444%	-0.067	0.070	0.090	3.285	2.910	68.391%	68.563%
3	07:07:07	62.361%	-0.266	0.116	0.069	3.261	3.189	68.186%	68.325%
X		61.639%	-0.115	0.107	0.058	3.240	3.216	67.585%	68.096%
σ		0.647%	0.134	0.033	0.039	0.058	0.321	1.223%	0.615%
%RSD		1.050	116.800	30.810	66.320	1.805	9.969	1.810	0.903
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:06:52	-0.088	-0.039	0.205	0.128	0.146	64.276%		
2	07:07:00	-0.075	-0.051	0.197	0.212	0.182	65.088%		
3	07:07:07	-0.075	-0.042	0.140	0.205	0.165	65.729%		
X		-0.079	-0.044	0.181	0.182	0.164	65.031%		
σ		0.008	0.006	0.036	0.047	0.018	0.728%		
%RSD		9.879	14.000	19.680	25.650	10.970	1.119		

CCV 1533080 4/27/2015 7:12:54 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	07:12:00	76.762%	93.140	92.570	94.330	0.000	56030.000	52110.000	51850.000
2	07:12:07	73.889%	98.450	102.300	98.740	0.000	58380.000	57320.000	55240.000
3	07:12:15	75.344%	96.820	101.700	100.400	0.000	58800.000	55780.000	54030.000
X		75.332%	96.135%	98.883%	97.824%	0.000	115.467%	110.139%	107.417%
σ		1.437%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.907	2.832	5.536	3.206	0.000	2.588	4.864	3.199
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:12:00	555.600	5003.000	0.000	51650.000	46850.000	45070.000	70.492%	92.890
2	07:12:07	601.200	5070.000	0.000	52500.000	49250.000	47150.000	67.929%	97.130
3	07:12:15	592.200	5168.000	0.000	54340.000	50640.000	48790.000	67.424%	95.150
X		116.596%	101.603%	0.000	105.660%	97.826%	94.011%	68.615%	95.055%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.645%	n/a
%RSD		4.144	1.632	0.000	2.609	3.921	3.968	2.397	2.232
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:12:00	94.290	93.480	456.800	23920.000	22560.000	93.600	96.480	95.050
2	07:12:07	99.820	99.020	478.500	24690.000	22900.000	94.500	92.680	96.900
3	07:12:15	102.100	100.100	491.200	24990.000	23240.000	96.450	96.010	97.570
X		98.738%	97.523%	95.101%	98.138%	91.602%	94.851%	95.059%	96.505%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		4.069	3.631	3.657	2.259	1.487	1.537	2.181	1.349
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:12:00	96.020	92.460	95.250	98.530	104.200	98.180	0.000	96.920
2	07:12:07	98.000	94.990	90.070	97.710	96.330	97.700	0.000	97.900
3	07:12:15	98.440	97.110	93.410	98.840	96.950	93.570	0.000	97.710
X		97.484%	94.855%	92.911%	98.360%	99.170%	96.484%	0.000	97.509%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.322	2.457	2.825	0.591	4.429	2.631	0.000	0.532
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:12:00	63.374%	95.660	97.430	58.538%	94.780	95.540	95.760	97.320
2	07:12:07	62.453%	97.930	98.700	56.640%	94.960	95.250	97.640	97.110
3	07:12:15	64.901%	96.950	99.960	59.311%	94.060	96.740	95.040	97.590
X		63.576%	96.847%	98.697%	58.163%	94.603%	95.844%	96.146%	97.341%
σ		1.236%	n/a	n/a	1.374%	n/a	n/a	n/a	n/a
%RSD		1.945	1.172	1.283	2.363	0.504	0.821	1.394	0.244
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:12:00	61.175%	92.490	93.550	93.650	98.330	91.500	67.120%	67.635%
2	07:12:07	59.164%	95.250	92.880	95.880	92.950	100.100	64.497%	64.245%
3	07:12:15	61.568%	94.590	95.580	94.080	96.260	97.000	68.619%	68.466%
X		60.636%	94.111%	93.999%	94.538%	95.849%	96.196%	66.745%	66.782%
σ		1.289%	n/a	n/a	n/a	n/a	n/a	2.087%	2.236%
%RSD		2.126	1.530	1.498	1.254	2.834	4.525	3.126	3.349
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:12:00	99.260	97.820	99.620	98.840	99.780	61.387%		
2	07:12:07	99.970	99.700	99.380	98.930	99.490	56.230%		
3	07:12:15	100.200	98.330	99.460	99.900	99.380	61.492%		
X		99.817%	98.617%	99.486%	99.223%	99.549%	59.703%		
σ		n/a	n/a	n/a	n/a	n/a	3.008%		
%RSD		0.497	0.984	0.124	0.589	0.206	5.038		

CCB10 4/27/2015 7:22:06 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	07:21:14	97.847%	-0.079	1.479	1.449	0.000	222.100	34.790	30.530
2	07:21:22	100.192%	-0.073	0.921	1.224	0.000	231.800	39.170	37.690
3	07:21:30	99.711%	-0.011	0.639	0.563	0.000	235.400	37.530	36.980
X		99.250%	-0.054	1.013	1.079	0.000	229.800	37.160	35.070
σ		1.239%	0.038	0.427	0.461	0.000	6.844	2.213	3.946
%RSD		1.248	69.170	42.150	42.700	0.000	2.979	5.956	11.250
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:14	2.306	4.554	0.000	-10.160	25.560	26.720	94.112%	-0.147
2	07:21:22	2.830	1.932	0.000	-12.010	24.250	28.690	93.660%	-0.259
3	07:21:30	3.366	0.023	0.000	-7.440	33.040	30.420	92.590%	-0.341
X		2.834	2.169	0.000	-9.872	27.620	28.610	93.454%	-0.249
σ		0.530	2.275	0.000	2.301	4.740	1.855	0.782%	0.097
%RSD		18.710	104.900	0.000	23.310	17.160	6.483	0.836	39.100
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:14	0.100	0.071	0.181	15.610	14.750	0.064	-0.068	0.101
2	07:21:22	0.275	0.104	0.179	15.490	13.650	0.057	-0.147	0.008
3	07:21:30	0.232	0.114	0.171	15.730	16.530	0.029	-0.133	0.133
X		0.202	0.096	0.177	15.610	14.980	0.050	-0.116	0.081
σ		0.091	0.022	0.005	0.117	1.450	0.018	0.042	0.065
%RSD		45.020	23.230	2.988	0.752	9.682	36.650	36.340	80.840
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:14	-0.007	-0.036	0.163	0.067	0.117	1.340	0.000	0.150
2	07:21:22	0.023	-0.037	0.082	0.074	0.228	1.132	0.000	0.148
3	07:21:30	-0.007	-0.113	0.130	0.077	0.041	-0.544	0.000	0.124
X		0.003	-0.062	0.125	0.073	0.129	0.643	0.000	0.141
σ		0.017	0.044	0.041	0.005	0.094	1.033	0.000	0.015
%RSD		543.200	71.460	32.820	7.533	73.160	160.700	0.000	10.440
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:14	88.339%	0.318	0.341	86.025%	-0.023	-0.004	0.018	0.010
2	07:21:22	89.239%	0.453	0.362	87.444%	0.033	0.010	0.037	0.032
3	07:21:30	90.195%	0.225	0.378	88.109%	0.012	0.035	0.073	0.024
X		89.258%	0.332	0.361	87.193%	0.007	0.014	0.043	0.022
σ		0.928%	0.115	0.019	1.064%	0.028	0.019	0.028	0.011
%RSD		1.040	34.520	5.139	1.221	393.600	141.000	65.390	50.120
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:14	82.758%	-0.578	0.111	0.066	0.027	0.084	88.728%	89.107%
2	07:21:22	84.715%	-0.636	0.187	0.076	0.026	0.119	89.091%	89.711%
3	07:21:30	85.330%	-0.791	0.095	0.026	0.056	0.081	91.001%	92.049%
X		84.268%	-0.668	0.131	0.056	0.036	0.095	89.607%	90.289%
σ		1.343%	0.110	0.049	0.027	0.017	0.022	1.221%	1.554%
%RSD		1.594	16.510	37.660	47.570	46.590	22.740	1.363	1.721
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:21:14	0.047	0.016	-0.005	-0.001	0.003	84.711%		
2	07:21:22	-0.001	0.011	-0.005	0.021	-0.002	84.904%		
3	07:21:30	0.016	0.025	0.065	0.027	0.012	85.947%		
X		0.021	0.017	0.018	0.016	0.005	85.188%		
σ		0.024	0.007	0.041	0.015	0.007	0.665%		
%RSD		118.000	40.890	223.300	95.430	150.600	0.781		

180-42943-D-10-A 4/27/2015 7:27:14 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	07:26:22	80.579%	0.078	7.689	11.870	0.000	2309.000	291.400	292.400
2	07:26:29	81.536%	0.064	10.190	11.280	0.000	2331.000	296.300	291.300
3	07:26:37	81.906%	-0.012	9.407	11.330	0.000	2324.000	295.200	291.100
X		81.340%	0.044	9.094	11.490	0.000	2322.000	294.300	291.600
σ		0.685%	0.049	1.277	0.328	0.000	11.270	2.582	0.665
%RSD		0.842	111.300	14.050	2.851	0.000	0.485	0.877	0.228
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:26:22	76.800	5780.000	0.000	862.200	2309.000	2025.000	69.453%	3.479
2	07:26:29	75.970	6032.000	0.000	906.900	2136.000	2096.000	67.937%	1.837
3	07:26:37	75.230	6027.000	0.000	889.400	2273.000	2101.000	68.329%	2.254
X		76.000	5946.000	0.000	886.200	2239.000	2074.000	68.573%	2.523
σ		0.788	144.000	0.000	22.550	91.270	42.710	0.787%	0.854
%RSD		1.037	2.422	0.000	2.544	4.076	2.059	1.148	33.840
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:26:22	-3.575	4.013	10.250	128.700	117.700	0.117	1.053	1.374
2	07:26:29	-1.619	4.048	10.510	131.200	138.300	0.119	0.817	1.403
3	07:26:37	-3.482	4.045	10.610	128.300	143.800	0.135	1.082	1.334
X		-2.892	4.035	10.460	129.400	133.300	0.124	0.984	1.371
σ		1.104	0.019	0.185	1.581	13.760	0.010	0.145	0.035
%RSD		38.160	0.482	1.773	1.221	10.320	8.257	14.780	2.530
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:26:22	1.113	9.258	9.046	0.495	0.333	0.694	0.000	5.078
2	07:26:29	1.490	9.571	9.868	0.500	0.178	3.964	0.000	5.308
3	07:26:37	1.368	9.257	9.378	0.573	0.281	3.099	0.000	5.140
X		1.324	9.362	9.431	0.523	0.264	2.586	0.000	5.175
σ		0.193	0.181	0.414	0.044	0.079	1.694	0.000	0.119
%RSD		14.540	1.931	4.387	8.322	29.960	65.520	0.000	2.306
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:26:22	62.795%	0.493	0.465	57.763%	-0.032	0.018	0.053	0.007
2	07:26:29	62.560%	0.433	0.429	57.302%	-0.032	-0.014	-0.001	-0.015
3	07:26:37	63.134%	0.365	0.384	58.064%	-0.047	-0.019	-0.001	0.038
X		62.830%	0.430	0.426	57.710%	-0.037	-0.005	0.017	0.010
σ		0.289%	0.064	0.040	0.384%	0.009	0.020	0.031	0.027
%RSD		0.460	14.850	9.491	0.665	22.980	386.300	178.900	265.100
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:26:22	59.904%	-0.046	0.308	0.311	1.893	1.795	65.622%	65.968%
2	07:26:29	59.583%	-0.231	0.267	0.175	2.064	1.613	66.150%	66.795%
3	07:26:37	60.587%	-0.295	0.240	0.084	1.907	1.945	66.931%	67.210%
X		60.025%	-0.191	0.271	0.190	1.955	1.784	66.234%	66.658%
σ		0.513%	0.129	0.034	0.115	0.095	0.167	0.658%	0.632%
%RSD		0.855	67.920	12.550	60.260	4.853	9.332	0.994	0.948
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:26:22	0.059	0.043	0.038	0.058	0.028	62.504%		
2	07:26:29	-0.003	0.028	0.032	0.012	0.006	63.621%		
3	07:26:37	-0.039	0.010	0.019	0.017	-0.007	63.645%		
X		0.006	0.027	0.030	0.029	0.009	63.256%		
σ		0.050	0.017	0.010	0.025	0.018	0.652%		
%RSD		882.900	61.190	33.130	86.390	198.200	1.030		

180-42943-C-11-A 4/27/2015 7:32:22 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	07:31:30	78.069%	0.233	9.899	11.340	0.000	20770.000	1672.000	1652.000
2	07:31:37	77.261%	0.147	9.566	11.350	0.000	21380.000	1692.000	1711.000
3	07:31:45	78.777%	0.218	9.716	11.380	0.000	21190.000	1664.000	1656.000
X		78.036%	0.200	9.727	11.360	0.000	21120.000	1676.000	1673.000
σ		0.758%	0.046	0.167	0.019	0.000	312.100	13.990	33.040
%RSD		0.972	23.060	1.717	0.163	0.000	1.478	0.835	1.975
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:30	91.610	5429.000	0.000	2016.000	3148.000	3014.000	69.199%	0.474
2	07:31:37	97.590	5684.000	0.000	2127.000	3266.000	3158.000	67.558%	1.653
3	07:31:45	91.880	5601.000	0.000	2125.000	3401.000	3259.000	67.967%	1.599
X		93.690	5571.000	0.000	2089.000	3272.000	3144.000	68.241%	1.242
σ		3.378	130.100	0.000	63.630	126.100	123.300	0.854%	0.665
%RSD		3.606	2.336	0.000	3.046	3.855	3.921	1.252	53.590
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:30	-2.631	3.855	73.420	7.375	22.300	3.215	3.994	1.196
2	07:31:37	-2.108	4.103	76.170	7.340	19.180	3.127	5.088	1.107
3	07:31:45	-4.146	3.831	77.810	7.351	12.490	3.194	4.846	1.205
X		-2.962	3.930	75.800	7.355	17.990	3.179	4.643	1.169
σ		1.059	0.151	2.219	0.018	5.012	0.046	0.574	0.054
%RSD		35.740	3.835	2.928	0.240	27.860	1.442	12.370	4.606
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:30	1.272	15.910	17.050	0.139	0.019	3.006	0.000	34.540
2	07:31:37	1.408	17.360	18.590	0.172	0.072	3.225	0.000	34.580
3	07:31:45	1.230	17.450	15.770	0.132	0.071	1.964	0.000	34.770
X		1.303	16.910	17.140	0.148	0.054	2.732	0.000	34.630
σ		0.093	0.866	1.413	0.022	0.030	0.673	0.000	0.125
%RSD		7.143	5.121	8.245	14.650	55.530	24.650	0.000	0.362
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:30	62.229%	0.292	0.183	57.238%	-0.027	-0.024	-0.001	-0.004
2	07:31:37	62.879%	0.085	0.182	57.159%	-0.027	-0.024	0.026	0.039
3	07:31:45	63.599%	0.255	0.150	57.911%	-0.032	-0.030	-0.001	-0.004
X		62.902%	0.211	0.172	57.436%	-0.029	-0.026	0.008	0.010
σ		0.685%	0.110	0.019	0.413%	0.003	0.003	0.016	0.025
%RSD		1.089	52.300	10.920	0.720	10.290	12.030	185.400	241.200
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:31:30	59.053%	-0.582	0.083	0.009	139.600	131.300	65.967%	66.117%
2	07:31:37	60.154%	-0.311	0.088	-0.032	134.500	134.200	66.289%	66.463%
3	07:31:45	60.542%	-0.729	0.030	0.026	134.100	134.000	67.368%	67.862%
X		59.916%	-0.541	0.067	0.001	136.100	133.200	66.541%	66.814%
σ		0.772%	0.212	0.032	0.030	3.068	1.580	0.734%	0.924%
%RSD		1.289	39.160	47.390	2584.000	2.255	1.186	1.103	1.383
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:31:30	-0.052	-0.023	0.075	0.074	0.074	61.711%		
2	07:31:37	-0.034	-0.036	0.100	0.063	0.066	62.799%		
3	07:31:45	-0.067	-0.026	0.116	0.091	0.098	63.307%		
X		-0.051	-0.029	0.097	0.076	0.079	62.606%		
σ		0.016	0.007	0.021	0.014	0.017	0.815%		
%RSD		31.830	23.500	21.210	18.910	21.050	1.302		

180-42943-D-11-A 4/27/2015 7:37:30 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	07:36:38	77.481%	0.395	10.070	10.610	0.000	21060.000	1720.000	1648.000	
2	07:36:45	77.893%	0.201	9.091	10.490	0.000	21750.000	1704.000	1699.000	
3	07:36:53	76.139%	0.406	9.195	10.860	0.000	22190.000	1780.000	1720.000	
X		77.171%	0.334	9.451	10.650	0.000	21670.000	1735.000	1689.000	
		σ	0.917%	0.115	0.536	0.190	0.000	570.800	39.770	36.820
		%RSD	1.189	34.590	5.673	1.782	0.000	2.634	2.293	2.180
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	07:36:38	104.000	5483.000	0.000	2011.000	3440.000	3073.000	70.690%	0.829	
2	07:36:45	103.000	5369.000	0.000	2055.000	3324.000	3237.000	69.019%	1.215	
3	07:36:53	107.100	5633.000	0.000	2116.000	3604.000	3309.000	68.251%	1.511	
X		104.700	5495.000	0.000	2061.000	3456.000	3206.000	69.320%	1.185	
		σ	2.148	132.400	0.000	52.640	140.600	1.247%	0.342	
		%RSD	2.051	2.409	0.000	2.554	4.067	3.770	1.799	28.880
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	07:36:38	-3.672	3.852	72.950	5.073	15.420	3.083	4.260	0.991	
2	07:36:45	-3.560	3.950	76.580	5.442	14.830	3.312	4.567	0.851	
3	07:36:53	-4.150	4.179	79.430	5.075	8.917	3.243	4.646	0.718	
X		-3.794	3.994	76.320	5.197	13.050	3.212	4.491	0.853	
		σ	0.313	0.168	3.249	0.212	3.594	0.118	0.204	0.136
		%RSD	8.253	4.200	4.257	4.088	27.530	3.658	4.543	16.000
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	07:36:38	0.986	17.000	17.280	0.135	0.018	-0.388	0.000	34.590	
2	07:36:45	0.904	15.400	16.230	0.074	0.017	4.127	0.000	35.010	
3	07:36:53	1.171	16.420	16.420	0.091	0.069	4.256	0.000	35.420	
X		1.020	16.270	16.640	0.100	0.035	2.665	0.000	35.000	
		σ	0.136	0.812	0.558	0.032	2.645	0.000	0.415	
		%RSD	13.370	4.990	3.355	31.680	84.480	99.250	0.000	1.185
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	07:36:38	63.578%	0.146	0.209	57.751%	-0.023	0.007	0.026	-0.004	
2	07:36:45	65.447%	0.128	0.119	57.813%	-0.023	-0.019	0.106	0.038	
3	07:36:53	65.140%	0.051	0.149	57.754%	-0.032	-0.035	0.026	-0.026	
X		64.722%	0.109	0.159	57.773%	-0.026	-0.016	0.053	0.003	
		σ	1.002%	0.050	0.046	0.035%	0.006	0.021	0.046	0.032
		%RSD	1.548	46.310	28.720	0.061	21.840	133.800	87.240	1279.000
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho	
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	
1	07:36:38	60.445%	-0.692	0.094	0.065	136.300	134.800	66.477%	67.623%	
2	07:36:45	61.067%	-0.861	0.016	-0.042	136.000	134.700	66.419%	67.693%	
3	07:36:53	60.681%	-0.730	0.023	0.054	138.300	139.100	67.814%	68.212%	
X		60.731%	-0.761	0.044	0.026	136.900	136.200	66.903%	67.843%	
		σ	0.314%	0.089	0.043	0.059	1.286	2.500	0.789%	0.322%
		%RSD	0.517	11.630	97.060	231.100	0.940	1.835	1.180	0.475
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi			
		ppb	ppb	ppb	ppb	ppb	ppb			
1	07:36:38	-0.063	-0.045	-0.002	0.018	0.007	62.611%			
2	07:36:45	-0.070	-0.038	-0.016	0.008	-0.009	62.909%			
3	07:36:53	-0.063	-0.047	0.015	-0.007	0.003	63.350%			
X		-0.066	-0.043	-0.001	0.006	0.001	62.957%			
		σ	0.004	0.005	0.015	0.013	0.009	0.372%		
		%RSD	6.227	11.140	1243.000	204.900	1446.000	0.590		

CRI 1525173 4/27/2015 7:46:42 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	07:45:50	86.547%	1.031	15.960	18.790	0.000	597.900	509.200	485.700
2	07:45:58	88.119%	0.820	16.510	17.540	0.000	600.800	487.800	486.100
3	07:46:06	88.008%	0.911	18.220	18.020	0.000	604.900	510.800	471.200
X		87.558%	92.064%	337.978%	362.370%	0.000	751.536%	502.605%	481.008%
σ		0.877%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.002	11.500	6.953	3.494	0.000	0.584	2.553	1.766
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:45:50	31.280	442.500	0.000	420.900	434.300	407.700	84.069%	4.827
2	07:45:58	35.670	433.400	0.000	430.700	457.300	415.100	82.575%	4.537
3	07:46:06	32.420	426.100	0.000	431.500	437.600	436.200	82.220%	4.658
X		110.409%	86.807%	0.000	427.711%	443.078%	419.663%	82.955%	93.480%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.981%	n/a
%RSD		6.878	1.894	0.000	1.374	2.813	3.523	1.183	3.114
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:45:50	1.361	2.007	4.121	44.610	45.630	0.496	1.060	2.156
2	07:45:58	0.768	1.834	4.331	46.990	49.790	0.441	0.979	1.707
3	07:46:06	0.680	1.912	4.448	45.860	44.460	0.395	0.757	2.158
X		93.621%	95.885%	85.997%	91.638%	93.259%	88.825%	93.224%	100.354%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		39.620	4.524	3.854	2.598	6.007	11.380	16.860	12.950
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:45:50	2.011	5.122	4.830	0.903	4.481	5.250	0.000	4.786
2	07:45:58	2.039	4.740	4.527	0.960	4.535	5.880	0.000	4.773
3	07:46:06	2.170	4.361	5.779	0.969	3.458	3.587	0.000	4.699
X		103.659%	94.828%	100.905%	94.426%	83.165%	98.112%	0.000	95.057%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		4.082	8.022	12.950	3.785	14.590	24.150	0.000	0.982
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:45:50	68.266%	4.421	4.267	63.641%	0.950	0.981	0.827	1.100
2	07:45:58	68.477%	4.026	4.403	64.661%	0.989	1.052	0.721	1.029
3	07:46:06	69.575%	4.728	4.016	64.522%	1.030	1.010	0.906	1.095
X		68.773%	87.838%	84.571%	64.275%	98.968%	101.449%	81.796%	107.467%
σ		0.703%	n/a	n/a	0.553%	n/a	n/a	n/a	n/a
%RSD		1.022	8.011	4.645	0.861	4.042	3.522	11.400	3.655
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:45:50	66.219%	3.460	1.889	1.782	11.070	9.885	71.126%	70.741%
2	07:45:58	66.911%	3.361	1.726	1.608	9.856	9.943	70.868%	71.779%
3	07:46:06	67.714%	3.835	1.681	1.616	10.120	10.370	71.187%	71.660%
X		66.948%	71.040%	88.257%	83.419%	103.488%	100.672%	71.060%	71.393%
σ		0.748%	n/a	n/a	n/a	n/a	n/a	0.169%	0.568%
%RSD		1.117	7.036	6.198	5.880	6.180	2.649	0.238	0.795
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:45:50	0.780	0.696	1.099	1.078	1.007	63.880%		
2	07:45:58	0.728	0.808	0.974	1.099	0.996	63.437%		
3	07:46:06	0.840	0.821	1.161	1.149	1.080	64.246%		
X		78.253%	77.535%	107.799%	110.857%	102.781%	63.854%		
σ		n/a	n/a	n/a	n/a	n/a	0.405%		
%RSD		7.179	8.866	8.843	3.269	4.441	0.635		

CCV 1533080 4/27/2015 7:56:56 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	07:56:04	78.642%	92.810	98.210	98.990	0.000	59020.000	55760.000	53610.000
2	07:56:12	76.242%	95.670	99.740	105.400	0.000	59000.000	57140.000	56100.000
3	07:56:20	78.355%	93.550	98.500	99.060	0.000	57650.000	53810.000	53830.000
X		77.746%	94.011%	98.815%	101.151%	0.000	117.118%	111.142%	109.032%
σ		1.311%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.686	1.580	0.822	3.647	0.000	1.343	3.013	2.522
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:04	591.800	5229.000	0.000	53150.000	47630.000	46090.000	74.042%	92.170
2	07:56:12	613.100	5343.000	0.000	54740.000	49270.000	47560.000	73.881%	95.170
3	07:56:20	606.000	5340.000	0.000	54810.000	50670.000	48040.000	73.079%	95.450
X		120.728%	106.079%	0.000	108.463%	98.376%	94.459%	73.667%	94.260%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.516%	n/a
%RSD		1.794	1.226	0.000	1.734	3.092	2.150	0.700	1.929
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:04	96.670	95.250	468.400	24330.000	22900.000	95.510	95.070	95.660
2	07:56:12	99.430	97.090	476.900	24440.000	22890.000	94.980	95.820	95.570
3	07:56:20	99.560	97.370	488.300	24820.000	23070.000	94.020	94.640	96.170
X		98.554%	96.569%	95.575%	98.106%	91.817%	94.836%	95.176%	95.801%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.653	1.195	2.087	1.047	0.419	0.800	0.627	0.337
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:04	95.400	95.600	91.020	98.050	95.300	90.610	0.000	97.590
2	07:56:12	95.680	94.210	93.650	98.390	99.120	102.100	0.000	99.030
3	07:56:20	97.290	96.260	89.380	97.460	100.900	98.160	0.000	97.290
X		96.122%	95.359%	91.349%	97.966%	98.449%	96.948%	0.000	97.972%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.059	1.097	2.361	0.482	2.919	6.012	0.000	0.951
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:04	67.674%	97.960	98.590	60.935%	94.880	95.160	97.250	98.060
2	07:56:12	66.272%	96.730	99.210	61.112%	96.180	94.270	92.570	96.620
3	07:56:20	66.897%	98.420	97.780	60.980%	96.190	96.350	95.780	96.960
X		66.947%	97.705%	98.528%	61.009%	95.752%	95.262%	95.199%	97.214%
σ		0.702%	n/a	n/a	0.092%	n/a	n/a	n/a	n/a
%RSD		1.049	0.893	0.727	0.151	0.788	1.096	2.513	0.775
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:56:04	63.808%	92.890	94.010	91.500	100.400	98.750	68.974%	69.910%
2	07:56:12	64.847%	96.380	94.010	93.780	97.420	98.650	70.045%	70.476%
3	07:56:20	64.585%	95.430	93.990	93.950	94.000	94.180	69.793%	70.810%
X		64.413%	94.901%	94.004%	93.078%	97.258%	97.191%	69.604%	70.398%
σ		0.540%	n/a	n/a	n/a	n/a	n/a	0.560%	0.455%
%RSD		0.839	1.900	0.012	1.469	3.272	2.688	0.804	0.646
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	07:56:04	94.940	92.540	95.440	94.810	94.890	64.744%		
2	07:56:12	95.610	93.790	96.120	94.480	94.990	64.517%		
3	07:56:20	97.120	95.860	97.340	96.800	96.430	64.398%		
X		95.892%	94.065%	96.297%	95.363%	95.437%	64.553%		
σ		n/a	n/a	n/a	n/a	n/a	0.176%		
%RSD		1.166	1.778	0.999	1.318	0.904	0.273		

CCB11 4/27/2015 8:06:08 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	08:05:16	100.581%	-0.021	0.615	0.634	0.000	211.400	34.860	40.760
2	08:05:23	99.230%	0.043	0.772	0.832	0.000	218.200	39.950	40.430
3	08:05:31	98.232%	-0.008	0.681	0.716	0.000	215.500	41.220	42.040
X		99.347%	0.004	0.690	0.727	0.000	215.000	38.680	41.080
σ		1.179%	0.034	0.079	0.100	0.000	3.420	3.368	0.850
%RSD		1.187	772.800	11.420	13.720	0.000	1.590	8.708	2.069
Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:05:16	2.709	4.098	0.000	-12.360	40.750	27.490	100.981%	-0.237
2	08:05:23	4.082	2.945	0.000	-8.586	34.090	26.660	99.860%	-0.366
3	08:05:31	2.954	2.162	0.000	-9.490	50.910	28.880	99.525%	-0.311
X		3.248	3.069	0.000	-10.150	41.920	27.680	100.122%	-0.304
σ		0.732	0.974	0.000	1.972	8.467	1.119	0.762%	0.065
%RSD		22.530	31.750	0.000	19.430	20.200	4.044	0.761	21.280
Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:05:16	0.124	0.061	0.323	17.060	18.780	0.036	-0.113	0.038
2	08:05:23	-0.004	0.076	0.295	16.470	17.050	0.048	-0.025	0.068
3	08:05:31	0.031	0.047	0.249	16.510	19.950	0.069	-0.038	0.093
X		0.050	0.061	0.289	16.680	18.600	0.051	-0.059	0.066
σ		0.066	0.014	0.038	0.332	1.463	0.017	0.048	0.027
%RSD		132.200	23.490	13.000	1.987	7.866	32.760	81.240	41.280
Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:05:16	0.092	-0.123	0.161	0.094	0.113	1.130	0.000	0.128
2	08:05:23	0.054	-0.123	-0.047	0.128	0.003	0.927	0.000	0.134
3	08:05:31	0.006	-0.013	-0.025	0.116	0.111	-0.011	0.000	0.152
X		0.051	-0.087	0.030	0.113	0.076	0.682	0.000	0.138
σ		0.043	0.063	0.115	0.017	0.063	0.609	0.000	0.013
%RSD		84.490	73.250	385.900	15.250	83.210	89.290	0.000	9.104
Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:05:16	89.653%	0.348	0.279	85.962%	-0.004	0.006	0.018	0.000
2	08:05:23	90.571%	0.353	0.314	87.287%	0.006	0.048	0.018	0.008
3	08:05:31	91.195%	0.267	0.320	87.388%	0.002	0.009	0.017	0.036
X		90.473%	0.323	0.304	86.879%	0.001	0.021	0.018	0.015
σ		0.776%	0.048	0.022	0.796%	0.005	0.023	0.000	0.019
%RSD		0.857	15.000	7.210	0.916	381.300	111.500	1.100	127.900
Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:05:16	87.422%	-0.858	0.171	0.120	0.026	0.064	86.526%	86.551%
2	08:05:23	87.625%	-0.900	0.215	0.065	0.025	0.100	87.043%	86.828%
3	08:05:31	88.912%	-0.753	0.037	0.022	-0.036	0.026	88.451%	86.736%
X		87.987%	-0.837	0.141	0.069	0.005	0.063	87.340%	86.705%
σ		0.808%	0.076	0.093	0.049	0.035	0.037	0.996%	0.141%
%RSD		0.919	9.059	65.880	71.680	688.200	59.070	1.141	0.163
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	08:05:16	0.021	0.030	-0.001	-0.008	0.001	82.335%		
2	08:05:23	0.010	0.037	0.003	0.026	0.001	82.628%		
3	08:05:31	0.005	0.026	0.050	0.045	0.027	82.443%		
X		0.012	0.031	0.017	0.021	0.010	82.468%		
σ		0.008	0.006	0.028	0.027	0.015	0.148%		
%RSD		70.670	18.050	162.600	125.600	152.400	0.179		

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Batch Number: 139272 Batch Start Date: 04/22/15 11:20 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 04/22/15 15:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTCPMS 00020	MTAPITTMISA 00023	MTAPITTMSC 00029	
MB 180-139272/1		3005A, 6020A		50 mL	50 mL				
LCS 180-139272/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-43257-B-1	HD-MW-98S-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43257-B-2	HD-MW-98I-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43257-B-3	HD-MW-99S-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43257-B-4	HD-MW-145A-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43257-B-4 MS	HD-MW-145A-0/1-0	3005A, 6020A	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-43257-B-4 MSD	HD-MW-145A-0/1-0	3005A, 6020A	T	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-43257-B-5	HD-MW-93D-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43257-B-6	HD-MW-93S-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43257-B-7	HD-MW-37D-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-43257-B-8	HD-QC1-0/1-1	3005A, 6020A	T	50 mL	50 mL				

Batch Notes	
Batch Comment	Metals D4
First End time	15:20
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	11:20
ID number of the thermometer	IP2-14 CF=0.0 F4
Digestion Tube/Cup Lot #	1408268
Uncorrected Temperature	95 Celsius

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.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Batch Number: 139272 Batch Start Date: 04/22/15 11:20 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 04/22/15 15:20

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: 180-43257-1

SDG No.: _____

Project: Harley Davidson

Client Sample ID	Lab Sample ID
<u>HD-MW-98S-0/1-0</u>	<u>180-43257-1</u>
<u>HD-MW-98I-0/1-0</u>	<u>180-43257-2</u>
<u>HD-MW-99S-0/1-0</u>	<u>180-43257-3</u>
<u>HD-MW-145A-0/1-0</u>	<u>180-43257-4</u>
<u>HD-MW-93D-0/1-0</u>	<u>180-43257-5</u>
<u>HD-MW-93S-0/1-0</u>	<u>180-43257-6</u>
<u>HD-MW-37D-0/1-0</u>	<u>180-43257-7</u>
<u>HD-QC1-0/1-1</u>	<u>180-43257-8</u>

Comments:

1B-IN
 INORGANIC ANALYSIS DATA SHEET
 GENERAL CHEMISTRY

Client Sample ID: HD-MW-98S-0/1-0

Lab Sample ID: 180-43257-1

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 13:35

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	300	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	300	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-98I-0/1-0

Lab Sample ID: 180-43257-2

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 14:30

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	320	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	320	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-99S-0/1-0

Lab Sample ID: 180-43257-3

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 10:30

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	270	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	270	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-145A-0/1-0

Lab Sample ID: 180-43257-4

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 11:42

Reporting Basis: WET

Date Received: 04/21/2015 09:15

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-93D-0/1-0

Lab Sample ID: 180-43257-5

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 11:02

Reporting Basis: WET

Date Received: 04/21/2015 09:15

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-93S-0/1-0

Lab Sample ID: 180-43257-6

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 12:39

Reporting Basis: WET

Date Received: 04/21/2015 09:15

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-37D-0/1-0

Lab Sample ID: 180-43257-7

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 14:12

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	250	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	250	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-QC1-0/1-1

Lab Sample ID: 180-43257-8

Lab Name: TestAmerica Pittsburgh

Job No.: 180-43257-1

SDG ID.: _____

Matrix: Water

Date Sampled: 04/20/2015 08:00

Reporting Basis: WET

Date Received: 04/21/2015 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	310	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	310	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.: 180-43257-1
 SDG No.: _____
 Analyst: CLL Batch Start Date: 04/23/2015
 Reporting Units: mg/L Analytical Batch No.: 139318

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
12	CCV	05:00	Total Alkalinity as CaCO3 to pH 4.5	136	125	109	80-120		WALK125PPMCCV_00083
13	CCB	05:00	Total Alkalinity as CaCO3 to pH 4.5	2.06				J	
			Bicarbonate Alkalinity as CaCO3	2.06				J	
			Carbonate Alkalinity as CaCO3	5.0				U	

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

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 139318 Date: 04/23/2015 05:00							
SM 2320B	MB 180-139318/2	Total Alkalinity as CaCO3 to pH 4.5	2.06	J	mg/L	5.0	1
SM 2320B	MB 180-139318/2	Bicarbonate Alkalinity as CaCO3	2.06	J	mg/L	5.0	1
SM 2320B	MB 180-139318/2	Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 139318 Date: 04/23/2015 05:00								
SM 2320B	HD-MW-145A-0/1-0	180-43257-4	Total Alkalinity as CaCO3 to pH 4.5	220	mg/L			
SM 2320B	HD-MW-145A-0/1-0	180-43257-4 DU	Total Alkalinity as CaCO3 to pH 4.5	231	mg/L	3	20	
SM 2320B	HD-MW-145A-0/1-0	180-43257-4	Bicarbonate Alkalinity as CaCO3	220	mg/L			
SM 2320B	HD-MW-145A-0/1-0	180-43257-4 DU	Bicarbonate Alkalinity as CaCO3	231	mg/L	3	20	
SM 2320B	HD-MW-145A-0/1-0	180-43257-4	Carbonate Alkalinity as CaCO3	5.0	mg/L			U
SM 2320B	HD-MW-145A-0/1-0	180-43257-4 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.: 180-43257-1

SDG No.: _____

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 139318 Date: 04/23/2015 05:00			LCS Source: WALK250PPMPi_00092								
SM 2320B	LCS 180-139318/1	Total Alkalinity as CaCO3 to pH 4.5	272		mg/L	250	109	80-120			

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

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-43257-1
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: 180-43257-1
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.: 180-43257-1
 SDG No.: _____
 Instrument ID: NOEQUIP Analysis Method: SM 2320B
 Start Date: 04/23/2015 05:00 End Date: 04/23/2015 05:00

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																									
LCS 180-139318/1	1	T	05:00	X																											
MB 180-139318/2	1	T	05:00	X	X	X																									
180-43257-1	1	T	05:00	X	X	X																									
180-43257-2	1	T	05:00	X	X	X																									
180-43257-3	1	T	05:00	X	X	X																									
180-43257-4	1	T	05:00	X	X	X																									
180-43257-4 DU	1	T	05:00	X	X	X																									
180-43257-5	1	T	05:00	X	X	X																									
180-43257-6	1	T	05:00	X	X	X																									
180-43257-7	1	T	05:00	X	X	X																									
180-43257-8	1	T	05:00	X	X	X																									
CCV 180-139318/12	1		05:00	X																											
CCB 180-139318/13	1		05:00	X	X	X																									
ZZZZZZ			05:00																												
ZZZZZZ			05:00																												
ZZZZZZ			05:00																												
ZZZZZZ			05:00																												
CCV 180-139318/18			05:00																												
CCB 180-139318/19			05:00																												

Prep Types: _____
 T = Total/NA

Lab # 042315ALK

Analyst: Chahyde
Reviewed By: SeetRC
pH Meter ID: Accumet XL SW #94102132
pH 4 Start: 4.01

Date: 4-23-15
Date: ew
AD Batch: 139318
pH 4 End: 4.03

Job Number(s): 43257 - 43307

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 = 1/2T	0	2P	0
P < 1/2T	0	2P	T-2P	P > 1/2T	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	10.52	50	6.7	13.2	0.0206	271.92				
MB	5.52		0	0.1		2.06				
180-43257-1	7.05		0	14.6		300.76				
2	7.09		0	15.7		323.42				
3	7.30		0	12.9		265.74				
4	7.38		0	10.9		224.54				
4X	7.38		0	11.2		230.72				
5	7.68		0	10.2		210.12				
6	7.63		0	10.1		208.06				
7	7.38		0	12.3		253.38				
8	7.17		0	14.9		306.94				
CU	10.34		3.2	6.6		135.96				
CLB	5.56		0	0.1		2.06				
180-43307-1	7.15		0	10.6		218.36				
1X	7.16		0	10.4		214.24				
2	5.80					CU 23 15				
3	7.16		0	13.1		269.86				
CU	10.39		3.1	6.6		135.96				
CLB	5.62		0	0.1		2.06				

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-43257-1

SDG No.: _____

Batch Number: 139318 Batch Start Date: 04/23/15 05:00 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 180-139318/1		SM 2320B		50 mL	10.52 SU	0 mL	6.7 mL	6.7 mL	0 mL
MB 180-139318/2		SM 2320B		50 mL	5.52 SU	0 mL	0 mL	0 mL	0 mL
180-43257-A-1	HD-MW-98S-0/1-0	SM 2320B	T	50 mL	7.05 SU	0 mL	0 mL	0 mL	0 mL
180-43257-A-2	HD-MW-98I-0/1-0	SM 2320B	T	50 mL	7.09 SU	0 mL	0 mL	0 mL	0 mL
180-43257-A-3	HD-MW-99S-0/1-0	SM 2320B	T	50 mL	7.30 SU	0 mL	0 mL	0 mL	0 mL
180-43257-A-4	HD-MW-145A-0/1-0	SM 2320B	T	50 mL	7.38 SU	0 mL	0 mL	0 mL	0 mL
180-43257-A-4 DU	HD-MW-145A-0/1-0	SM 2320B	T	50 mL	7.38 SU	0 mL	0 mL	0 mL	0 mL
180-43257-A-5	HD-MW-93D-0/1-0	SM 2320B	T	50 mL	7.68 SU	0 mL	0 mL	0 mL	0 mL
180-43257-A-6	HD-MW-93S-0/1-0	SM 2320B	T	50 mL	7.63 SU	0 mL	0 mL	0 mL	0 mL
180-43257-A-7	HD-MW-37D-0/1-0	SM 2320B	T	50 mL	7.38 SU	0 mL	0 mL	0 mL	0 mL
180-43257-A-8	HD-QC1-0/1-1	SM 2320B	T	50 mL	7.17 SU	0 mL	0 mL	0 mL	0 mL
CCV 180-139318/12		SM 2320B		50 mL	10.34 SU	0 mL	3.2 mL	3.2 mL	0 mL
CCB 180-139318/13		SM 2320B		50 mL	5.56 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 180-139318/1		SM 2320B		6.5 mL	6.5 mL	Case 4	267.8 mg/L	4.12 mg/L	0 mg/L
MB 180-139318/2		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.06 mg/L
180-43257-A-1	HD-MW-98S-0/1-0	SM 2320B	T	14.6 mL	14.6 mL	Case 1	0 mg/L	0 mg/L	300.76 mg/L
180-43257-A-2	HD-MW-98I-0/1-0	SM 2320B	T	15.7 mL	15.7 mL	Case 1	0 mg/L	0 mg/L	323.42 mg/L
180-43257-A-3	HD-MW-99S-0/1-0	SM 2320B	T	12.9 mL	12.9 mL	Case 1	0 mg/L	0 mg/L	265.74 mg/L
180-43257-A-4	HD-MW-145A-0/1-0	SM 2320B	T	10.9 mL	10.9 mL	Case 1	0 mg/L	0 mg/L	224.54 mg/L
180-43257-A-4 DU	HD-MW-145A-0/1-0	SM 2320B	T	11.2 mL	11.2 mL	Case 1	0 mg/L	0 mg/L	230.72 mg/L
180-43257-A-5	HD-MW-93D-0/1-0	SM 2320B	T	10.2 mL	10.2 mL	Case 1	0 mg/L	0 mg/L	210.12 mg/L
180-43257-A-6	HD-MW-93S-0/1-0	SM 2320B	T	10.1 mL	10.1 mL	Case 1	0 mg/L	0 mg/L	208.06 mg/L
180-43257-A-7	HD-MW-37D-0/1-0	SM 2320B	T	12.3 mL	12.3 mL	Case 1	0 mg/L	0 mg/L	253.38 mg/L
180-43257-A-8	HD-QC1-0/1-1	SM 2320B	T	14.9 mL	14.9 mL	Case 1	0 mg/L	0 mg/L	306.94 mg/L
CCV 180-139318/12		SM 2320B		3.4 mL	3.4 mL	Case 2	131.84 mg/L	0 mg/L	4.12 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.: 180-43257-1

SDG No.: _____

Batch Number: 139318 Batch Start Date: 04/23/15 05:00 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
CCB 180-139318/13		SM 2320B		0.1 mL	0.1 mL	Case 1	0 mg/L	0 mg/L	2.06 mg/L

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	WALK125PPMCCV 00083	WALK250PPMPi 00092
LCS 180-139318/1		SM 2320B		138.02 mg/L	271.92 mg/L	50 mL		50 mL
MB 180-139318/2		SM 2320B		0 mg/L	2.06 mg/L	50 mL		
180-43257-A-1	HD-MW-98S-0/1-0	SM 2320B	T	0 mg/L	300.76 mg/L	50 mL		
180-43257-A-2	HD-MW-98I-0/1-0	SM 2320B	T	0 mg/L	323.42 mg/L	50 mL		
180-43257-A-3	HD-MW-99S-0/1-0	SM 2320B	T	0 mg/L	265.74 mg/L	50 mL		
180-43257-A-4	HD-MW-145A-0/1-0	SM 2320B	T	0 mg/L	224.54 mg/L	50 mL		
180-43257-A-4 DU	HD-MW-145A-0/1-0	SM 2320B	T	0 mg/L	230.72 mg/L	50 mL		
180-43257-A-5	HD-MW-93D-0/1-0	SM 2320B	T	0 mg/L	210.12 mg/L	50 mL		
180-43257-A-6	HD-MW-93S-0/1-0	SM 2320B	T	0 mg/L	208.06 mg/L	50 mL		
180-43257-A-7	HD-MW-37D-0/1-0	SM 2320B	T	0 mg/L	253.38 mg/L	50 mL		
180-43257-A-8	HD-QC1-0/1-1	SM 2320B	T	0 mg/L	306.94 mg/L	50 mL		
CCV 180-139318/12		SM 2320B		65.92 mg/L	135.96 mg/L	50 mL	50 mL	
CCB 180-139318/13		SM 2320B		0 mg/L	2.06 mg/L	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.: 180-43257-1

SDG No.: _____

Batch Number: 139318 Batch Start Date: 04/23/15 05:00 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 2320B Batch End Date: _____

Batch Notes	
Batch Comment	PH 4 START: C4.01 PH 4 END: 4.03
pH Buffer 1 ID	1179927
pH Buffer 2 ID	1282792
pH Buffer 3 ID	1524103
pH Buffer 4 ID	1500550
pH Buffer 5 ID	1511948
Sulfuric Acid Lot Number	1504514
Sulfuric Acid Vendor	ricca
Nominal Amount Used	50 mL
Normality of first Titrant	.0206 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

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Chain of Custody Record

Client Contact
 Groundwater Sciences Corporation
 2601 Market Place St. Suite 310
 Harrisburg, PA 17110
 Phone (717) 901-8180
 FAX (717) 657-1611

Project Manager: Jennifer S. Reese
Tel/Fax: 717-901-8181 / (717) 657-1611

Site: Harley-Davidson, York PA
Quote # 18000557

Site Contact: Jennifer S. Reese
Lab Contact: Carrie Gamber

Date Submitted: 4/20/15
Carrier: FEDEX
COC No.: TAP2015041201
Job No.: 19072-1630095
Container No.:
SDG No.:

Analysis Turnaround Time
 Calendar (C) or Work Days (W)
 TAT if different from Below Standard
 2 weeks
 1 week
 5 days
 1 day

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	Alkalinity (Carb/Bicarb), SO4, CL, NO3	Total Na, Ca, K, and Mg (SW846 6020A)
HD-MW-98S-0/1-0	4/20/15	13:35	Groundwater	Water	5	X	X	X
HD-MW-98L-0/1-0	4/20/15	14:30	Groundwater	Water	5	X	X	X
HD-MW-99S-0/1-0	4/20/15	10:30	Groundwater	Water	5	X	X	X
HD-MW-145A-0/1-0	4/20/15	11:42	Groundwater	Water	5	X	X	X
HD-MW-93D-0/1-0	4/20/15	11:02	Groundwater	Water	5	X	X	X
HD-MW-93S-0/1-0	4/20/15	12:39	Groundwater	Water	5	X	X	X
HD-MW-37D-0/1-0	4/20/15	14:12	Groundwater	Water	5	X	X	X
HD-MW-145A-0/1-0 MS	4/20/15	11:42	Groundwater	Water	5	X	X	X
HD-MW-145A-0/1-0 MSD	4/20/15	11:42	Groundwater	Water	5	X	X	X
HD-QC1-0/1-1	4/20/15	8:00	Groundwater	Water	5	X	X	X
HD-QC1-0/1-2	4/20/15	12:00	Trip Blank	Water	2	X		

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab For Months

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Uplifted

Special Instructions/QC Requirements & Comments: CLP Like Deliverables



Relinquished by (Print and Sign): *WBC* Company: GSC Date/Time: 4/20/15 1522

Relinquished by: *JA* Company: TA Date/Time: 4/20/15 1700

Relinquished by: *AP* Company: TAP Date/Time: 4-21-15 9:15

ORIGIN ID: KPPQ (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1008 WEST 9TH AVE
UNITED STATES US

KING OF PRUSSIA, PA 19406

TO SAMPLE RECEIPT - PITTSBURGH
TEST AMERICA - PITTSBURGH
301 ALPHA DR

PITTSBURGH PA 15238
REF: (412) 969-7058

DEPT:

DEPT:

SHIP DATE:
ACTWGT: 902g
CAD: 84902g

BILL RECIPIENT

180-43257 Waybill

R 197
N 199



337 17/8F76/EE '9

Uncorrected temp
Thermometer ID
Initials
CF
PT-M-SR-001 effective 7/26/13

FedEx
Express

13C2265121511

TUE - 21 APR AA
STANDARD OVERNIGHT

TRK# 7734 1267 5666
0201

EV AGCA

15238
PA-US
PIT



Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-43257-1

Login Number: 43257
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	