TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 180-42504-1

Job Description: Harley Davidson

For:
Groundwater Sciences Corporation
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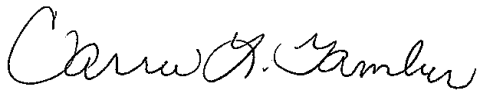
Harrisburg, PA 17110-9307

Attention: Allan Miller



Approved for release.
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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 exceeds the control limits
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits

HPLC/IC

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits
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.
¤	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: 180-42504-1

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 03/28/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

VOLATILES

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

Tetrachloroethane was detected at a level above the curve resulting in a "NQ" result. This data set was the lesser dilution to meet the project requirements. HD-MW-75D-0/1-0 (180-42504-7)

The surrogate recovery for Toluene-d8 (Surr) for the following sample was outside control limits: HD-MW-51D-0/1-0MSD (180-42504-8MSD). The parent sample recoveries were within QC limits.

The laboratory control sample (LCS) for batch 137512 recovered outside control limits for the following analyte: Acetone . This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Several analytes failed the recovery criteria low for the MS/MSD of sample HD-MW-51D-0/1-0 (180-42504-8) in batch 180-137564. 1,4-Dioxane exceeded the RPD limit.

METALS (ICP/MS)

Calcium, Magnesium and Sodium were detected in method blank MB 180-137213/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

ALKALINITY

Bicarbonate Alkalinity as CaCO3 and Total Alkalinity as CaCO3 to pH 4.5 were detected in method blank MB 180-137549/2 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.

IC

Sample HD-CW-18-0/1-0 (4) required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Chloride and Nitrate as N were detected in method blank MB 180-136855/6 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.

Sulfate failed the recovery criteria high for the MSD of sample HD-MW-51D-0/1-0 (180-42504-8) in batch 180-136855.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Client Sample ID: HD-QC7-0/1-2 — Lab Sample ID: 180-42504-1

No Detections.

Client Sample ID: HD-MW-127-0/1-0 — Lab Sample ID: 180-42504-2

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
cis-1,2-Dichloroethene	220		10	2.4	ug/L	10		8260C	Total/NA
1,1,1-Trichloroethane	5.2	J	10	2.9	ug/L	10		8260C	Total/NA
Trichloroethene	98		10	1.4	ug/L	10		8260C	Total/NA
Nitrate as N	2.3	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	110	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	7.6		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	110000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	4200		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	19000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	34000	B	100	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-97-0/1-0 — Lab Sample ID: 180-42504-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	8.2	J	20	5.9	ug/L	20		8260C	Total/NA
cis-1,2-Dichloroethene	310		20	4.7	ug/L	20		8260C	Total/NA
1,1,1-Trichloroethane	16	J	20	5.7	ug/L	20		8260C	Total/NA
Trichloroethene	370		20	2.9	ug/L	20		8260C	Total/NA
Tetrachloroethene	36		20	3.0	ug/L	20		8260C	Total/NA
Nitrate as N	1.9	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	120	B	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	95000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	7200		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	19000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	42000	B	100	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-CW-18-0/1-0 — Lab Sample ID: 180-42504-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.3		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.47	J	1.0	0.14	ug/L	1		8260C	Total/NA
Nitrate as N	0.056	J B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	240	B	5.0	0.98	mg/L	5		300.0	Total/NA
Sulfate	390		5.0	1.1	mg/L	5		300.0	Total/NA
Calcium	120000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	12000		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	50000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	200000	B	100	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

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Client Sample ID: HD-MW-114-0/1-0 — Lab Sample ID: 180-42504-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	6.5	J	10	2.3	ug/L	10		8260C	Total/NA
1,1-Dichloroethene	29		10	3.0	ug/L	10		8260C	Total/NA
trans-1,2-Dichloroethene	4.8	J	10	1.7	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene	1200	E	10	2.4	ug/L	10		8260C	Total/NA
Trichloroethene	720	E	10	1.4	ug/L	10		8260C	Total/NA
Tetrachloroethene	670	E	10	1.5	ug/L	10		8260C	Total/NA
cis-1,2-Dichloroethene - DL	1800		100	24	ug/L	100		8260C	Total/NA
Trichloroethene - DL	1100		100	14	ug/L	100		8260C	Total/NA
Tetrachloroethene - DL	490		100	15	ug/L	100		8260C	Total/NA
Nitrate as N	0.61	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	160	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	69		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	120000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	10000		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	23000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	43000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	200	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	200	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-132-0/1-0 — Lab Sample ID: 180-42504-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	3.0		1.0	0.30	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	59	E	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	36		1.0	0.14	ug/L	1		8260C	Total/NA
1,1-Dichloroethene - DL	11		5.0	1.5	ug/L	5		8260C	Total/NA
cis-1,2-Dichloroethene - DL	230		5.0	1.2	ug/L	5		8260C	Total/NA
Trichloroethene - DL	150		5.0	0.72	ug/L	5		8260C	Total/NA
Nitrate as N	4.9	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	9.0	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	3.2		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	50000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	1900		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	3300	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	5100	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	140	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	140	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

Client Sample ID: HD-MW-75D-0/1-0 — Lab Sample ID: 180-42504-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	98		50	12	ug/L	50		8260C	Total/NA
1,1,1-Trichloroethane	110		50	14	ug/L	50		8260C	Total/NA
Trichloroethene	830		50	7.2	ug/L	50		8260C	Total/NA
Tetrachloroethene	NQ		50	7.4	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene - DL	270	J	500	120	ug/L	500		8260C	Total/NA
Trichloroethene - DL	950		500	72	ug/L	500		8260C	Total/NA
Tetrachloroethene - DL	3400		500	74	ug/L	500		8260C	Total/NA
Nitrate as N	3.2	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	170	B	1.0	0.20	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-MW-75D-0/1-0 (Continued)

Lab Sample ID: 180-42504-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	32		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	91000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	8700		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	20000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	75000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	260	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	260	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

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

Lab Sample ID: 180-42504-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.9		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	6.3		1.0	0.14	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.65	J	1.0	0.15	ug/L	1		8260C	Total/NA
Nitrate as N	0.36	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	5.5	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	7.2	F1	1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	11000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	10000		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	690	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	7000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	21	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	21	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

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

Lab Sample ID: 180-42504-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	29	J	50	15	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene	580		50	12	ug/L	50		8260C	Total/NA
1,1,1-Trichloroethane	95		50	14	ug/L	50		8260C	Total/NA
Trichloroethene	450		50	7.2	ug/L	50		8260C	Total/NA
Tetrachloroethene	120		50	7.4	ug/L	50		8260C	Total/NA
Nitrate as N	2.5	B	0.10	0.0062	mg/L	1		300.0	Total/NA
Chloride	160	B	1.0	0.20	mg/L	1		300.0	Total/NA
Sulfate	55		1.0	0.21	mg/L	1		300.0	Total/NA
Calcium	130000	B	100	2.8	ug/L	1		6020A	Total/NA
Potassium	9700		100	5.8	ug/L	1		6020A	Total/NA
Magnesium	15000	B	100	1.2	ug/L	1		6020A	Total/NA
Sodium	51000	B	100	3.8	ug/L	1		6020A	Total/NA
Total Alkalinity as CaCO3 to pH 4.5	200	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	200	B	5.0	0.41	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Client Sample ID: HD-QC7-0/1-2
Date Collected: 03/27/15 12:00
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/03/15 12:13	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/03/15 12:13	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/03/15 12:13	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/03/15 12:13	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/03/15 12:13	1
Acetone	5.0	U	5.0	2.5	ug/L			04/03/15 12:13	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/03/15 12:13	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/03/15 12:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/03/15 12:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/03/15 12:13	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/03/15 12:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/03/15 12:13	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/03/15 12:13	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/03/15 12:13	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/03/15 12:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/03/15 12:13	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/03/15 12:13	1
Benzene	1.0	U	1.0	0.11	ug/L			04/03/15 12:13	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/03/15 12:13	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/03/15 12:13	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/03/15 12:13	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/03/15 12:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/03/15 12:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/03/15 12:13	1
Toluene	1.0	U	1.0	0.15	ug/L			04/03/15 12:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/03/15 12:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/03/15 12:13	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/03/15 12:13	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/03/15 12:13	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/03/15 12:13	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/03/15 12:13	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/03/15 12:13	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/03/15 12:13	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/03/15 12:13	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/03/15 12:13	1
Styrene	1.0	U	1.0	0.097	ug/L			04/03/15 12:13	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/03/15 12:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/03/15 12:13	1
Acrylonitrile	20	U	20	0.55	ug/L			04/03/15 12:13	1
1,4-Dioxane	200	U	200	34	ug/L			04/03/15 12:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*64 - 135*		*04/03/15 12:13*	*1*
Toluene-d8 (Surr)	*108*		*71 - 118*		*04/03/15 12:13*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 118*		*04/03/15 12:13*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 128*		*04/03/15 12:13*	*1*

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

Client Sample ID: HD-MW-127-0/1-0
Date Collected: 03/27/15 10:45
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	10	U	10	2.8	ug/L			04/04/15 20:47	10
Vinyl chloride	10	U	10	2.3	ug/L			04/04/15 20:47	10
Bromomethane	10	U	10	3.1	ug/L			04/04/15 20:47	10
Chloroethane	10	U	10	2.1	ug/L			04/04/15 20:47	10
1,1-Dichloroethene	**3.8**	**J**	10	3.0	ug/L			04/04/15 20:47	10
Acetone	50	U *	50	25	ug/L			04/04/15 20:47	10
Carbon disulfide	10	U	10	2.1	ug/L			04/04/15 20:47	10
Methylene Chloride	10	U	10	1.3	ug/L			04/04/15 20:47	10
trans-1,2-Dichloroethene	10	U	10	1.7	ug/L			04/04/15 20:47	10
Methyl tert-butyl ether	10	U	10	1.8	ug/L			04/04/15 20:47	10
1,1-Dichloroethane	10	U	10	1.2	ug/L			04/04/15 20:47	10
cis-1,2-Dichloroethene	**220**		10	2.4	ug/L			04/04/15 20:47	10
Bromochloromethane	10	U	10	1.8	ug/L			04/04/15 20:47	10
2-Butanone (MEK)	50	U	50	5.5	ug/L			04/04/15 20:47	10
Chloroform	10	U	10	1.7	ug/L			04/04/15 20:47	10
1,1,1-Trichloroethane	**5.2**	**J**	10	2.9	ug/L			04/04/15 20:47	10
Carbon tetrachloride	10	U	10	1.4	ug/L			04/04/15 20:47	10
Benzene	10	U	10	1.1	ug/L			04/04/15 20:47	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			04/04/15 20:47	10
Trichloroethene	**98**		10	1.4	ug/L			04/04/15 20:47	10
1,2-Dichloropropane	10	U	10	0.95	ug/L			04/04/15 20:47	10
Bromodichloromethane	10	U	10	1.3	ug/L			04/04/15 20:47	10
cis-1,3-Dichloropropene	10	U	10	1.9	ug/L			04/04/15 20:47	10
4-Methyl-2-pentanone (MIBK)	50	U	50	5.3	ug/L			04/04/15 20:47	10
Toluene	10	U	10	1.5	ug/L			04/04/15 20:47	10
trans-1,3-Dichloropropene	10	U	10	1.5	ug/L			04/04/15 20:47	10
1,1,2-Trichloroethane	10	U	10	2.0	ug/L			04/04/15 20:47	10
Tetrachloroethene	10	U	10	1.5	ug/L			04/04/15 20:47	10
2-Hexanone	50	U	50	1.6	ug/L			04/04/15 20:47	10
Dibromochloromethane	10	U	10	1.4	ug/L			04/04/15 20:47	10
1,2-Dibromoethane (EDB)	10	U	10	1.8	ug/L			04/04/15 20:47	10
Chlorobenzene	10	U	10	1.4	ug/L			04/04/15 20:47	10
1,1,1,2-Tetrachloroethane	10	U	10	2.8	ug/L			04/04/15 20:47	10
Ethylbenzene	10	U	10	2.3	ug/L			04/04/15 20:47	10
Xylenes, Total	30	U	30	4.9	ug/L			04/04/15 20:47	10
Styrene	10	U	10	0.97	ug/L			04/04/15 20:47	10
Bromoform	10	U	10	1.9	ug/L			04/04/15 20:47	10
1,1,2,2-Tetrachloroethane	10	U	10	2.0	ug/L			04/04/15 20:47	10
Acrylonitrile	200	U	200	5.5	ug/L			04/04/15 20:47	10
1,4-Dioxane	2000	U	2000	340	ug/L			04/04/15 20:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 135*		*04/04/15 20:47*	*10*
Toluene-d8 (Surr)	*116*		*71 - 118*		*04/04/15 20:47*	*10*
4-Bromofluorobenzene (Surr)	*109*		*70 - 118*		*04/04/15 20:47*	*10*
Dibromofluoromethane (Surr)	*113*		*70 - 128*		*04/04/15 20:47*	*10*

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

Client Sample ID: HD-MW-97-0/1-0
Date Collected: 03/27/15 08:45
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	20	U	20	5.7	ug/L			04/03/15 19:14	20
Vinyl chloride	20	U	20	4.5	ug/L			04/03/15 19:14	20
Bromomethane	20	U	20	6.3	ug/L			04/03/15 19:14	20
Chloroethane	20	U	20	4.3	ug/L			04/03/15 19:14	20
1,1-Dichloroethene	**8.2**	**J**	20	5.9	ug/L			04/03/15 19:14	20
Acetone	100	U	100	50	ug/L			04/03/15 19:14	20
Carbon disulfide	20	U	20	4.2	ug/L			04/03/15 19:14	20
Methylene Chloride	20	U	20	2.5	ug/L			04/03/15 19:14	20
trans-1,2-Dichloroethene	20	U	20	3.4	ug/L			04/03/15 19:14	20
Methyl tert-butyl ether	20	U	20	3.7	ug/L			04/03/15 19:14	20
1,1-Dichloroethane	20	U	20	2.3	ug/L			04/03/15 19:14	20
cis-1,2-Dichloroethene	**310**		20	4.7	ug/L			04/03/15 19:14	20
Bromochloromethane	20	U	20	3.6	ug/L			04/03/15 19:14	20
2-Butanone (MEK)	100	U	100	11	ug/L			04/03/15 19:14	20
Chloroform	20	U	20	3.4	ug/L			04/03/15 19:14	20
1,1,1-Trichloroethane	**16**	**J**	20	5.7	ug/L			04/03/15 19:14	20
Carbon tetrachloride	20	U	20	2.7	ug/L			04/03/15 19:14	20
Benzene	20	U	20	2.1	ug/L			04/03/15 19:14	20
1,2-Dichloroethane	20	U	20	4.2	ug/L			04/03/15 19:14	20
Trichloroethene	**370**		20	2.9	ug/L			04/03/15 19:14	20
1,2-Dichloropropane	20	U	20	1.9	ug/L			04/03/15 19:14	20
Bromodichloromethane	20	U	20	2.6	ug/L			04/03/15 19:14	20
cis-1,3-Dichloropropene	20	U	20	3.7	ug/L			04/03/15 19:14	20
4-Methyl-2-pentanone (MIBK)	100	U	100	11	ug/L			04/03/15 19:14	20
Toluene	20	U	20	3.0	ug/L			04/03/15 19:14	20
trans-1,3-Dichloropropene	20	U	20	3.0	ug/L			04/03/15 19:14	20
1,1,2-Trichloroethane	20	U	20	4.0	ug/L			04/03/15 19:14	20
Tetrachloroethene	**36**		20	3.0	ug/L			04/03/15 19:14	20
2-Hexanone	100	U	100	3.2	ug/L			04/03/15 19:14	20
Dibromochloromethane	20	U	20	2.7	ug/L			04/03/15 19:14	20
1,2-Dibromoethane (EDB)	20	U	20	3.6	ug/L			04/03/15 19:14	20
Chlorobenzene	20	U	20	2.7	ug/L			04/03/15 19:14	20
1,1,1,2-Tetrachloroethane	20	U	20	5.5	ug/L			04/03/15 19:14	20
Ethylbenzene	20	U	20	4.5	ug/L			04/03/15 19:14	20
Xylenes, Total	60	U	60	9.8	ug/L			04/03/15 19:14	20
Styrene	20	U	20	1.9	ug/L			04/03/15 19:14	20
Bromoform	20	U	20	3.8	ug/L			04/03/15 19:14	20
1,1,2,2-Tetrachloroethane	20	U	20	4.0	ug/L			04/03/15 19:14	20
Acrylonitrile	400	U	400	11	ug/L			04/03/15 19:14	20
1,4-Dioxane	4000	U	4000	690	ug/L			04/03/15 19:14	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 135*		*04/03/15 19:14*	*20*
Toluene-d8 (Surr)	*115*		*71 - 118*		*04/03/15 19:14*	*20*
4-Bromofluorobenzene (Surr)	*106*		*70 - 118*		*04/03/15 19:14*	*20*
Dibromofluoromethane (Surr)	*123*		*70 - 128*		*04/03/15 19:14*	*20*

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

Client Sample ID: HD-CW-18-0/1-0
Date Collected: 03/27/15 09:37
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/03/15 12:54	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/03/15 12:54	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/03/15 12:54	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/03/15 12:54	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/03/15 12:54	1
Acetone	5.0	U	5.0	2.5	ug/L			04/03/15 12:54	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/03/15 12:54	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/03/15 12:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/03/15 12:54	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/03/15 12:54	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/03/15 12:54	1
cis-1,2-Dichloroethene	**4.3**		1.0	0.24	ug/L			04/03/15 12:54	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/03/15 12:54	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/03/15 12:54	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/03/15 12:54	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/03/15 12:54	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/03/15 12:54	1
Benzene	1.0	U	1.0	0.11	ug/L			04/03/15 12:54	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/03/15 12:54	1
Trichloroethene	**0.47**	**J**	1.0	0.14	ug/L			04/03/15 12:54	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/03/15 12:54	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/03/15 12:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/03/15 12:54	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/03/15 12:54	1
Toluene	1.0	U	1.0	0.15	ug/L			04/03/15 12:54	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/03/15 12:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/03/15 12:54	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/03/15 12:54	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/03/15 12:54	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/03/15 12:54	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/03/15 12:54	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/03/15 12:54	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/03/15 12:54	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/03/15 12:54	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/03/15 12:54	1
Styrene	1.0	U	1.0	0.097	ug/L			04/03/15 12:54	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/03/15 12:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/03/15 12:54	1
Acrylonitrile	20	U	20	0.55	ug/L			04/03/15 12:54	1
1,4-Dioxane	200	U	200	34	ug/L			04/03/15 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*64 - 135*		*04/03/15 12:54*	*1*
Toluene-d8 (Surr)	*114*		*71 - 118*		*04/03/15 12:54*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 118*		*04/03/15 12:54*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 128*		*04/03/15 12:54*	*1*

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

Client Sample ID: HD-MW-114-0/1-0
Date Collected: 03/27/15 13:22
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	10	U	10	2.8	ug/L			04/06/15 18:51	10
Vinyl chloride	**6.5**	**J**	10	2.3	ug/L			04/06/15 18:51	10
Bromomethane	10	U	10	3.1	ug/L			04/06/15 18:51	10
Chloroethane	10	U	10	2.1	ug/L			04/06/15 18:51	10
1,1-Dichloroethene	**29**		10	3.0	ug/L			04/06/15 18:51	10
Acetone	50	U	50	25	ug/L			04/06/15 18:51	10
Carbon disulfide	10	U	10	2.1	ug/L			04/06/15 18:51	10
Methylene Chloride	10	U	10	1.3	ug/L			04/06/15 18:51	10
trans-1,2-Dichloroethene	**4.8**	**J**	10	1.7	ug/L			04/06/15 18:51	10
Methyl tert-butyl ether	10	U	10	1.8	ug/L			04/06/15 18:51	10
1,1-Dichloroethane	10	U	10	1.2	ug/L			04/06/15 18:51	10
cis-1,2-Dichloroethene	**1200**	**E**	10	2.4	ug/L			04/06/15 18:51	10
Bromochloromethane	10	U	10	1.8	ug/L			04/06/15 18:51	10
2-Butanone (MEK)	50	U	50	5.5	ug/L			04/06/15 18:51	10
Chloroform	10	U	10	1.7	ug/L			04/06/15 18:51	10
1,1,1-Trichloroethane	10	U	10	2.9	ug/L			04/06/15 18:51	10
Carbon tetrachloride	10	U	10	1.4	ug/L			04/06/15 18:51	10
Benzene	10	U	10	1.1	ug/L			04/06/15 18:51	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			04/06/15 18:51	10
Trichloroethene	**720**	**E**	10	1.4	ug/L			04/06/15 18:51	10
1,2-Dichloropropane	10	U	10	0.95	ug/L			04/06/15 18:51	10
Bromodichloromethane	10	U	10	1.3	ug/L			04/06/15 18:51	10
cis-1,3-Dichloropropene	10	U	10	1.9	ug/L			04/06/15 18:51	10
4-Methyl-2-pentanone (MIBK)	50	U	50	5.3	ug/L			04/06/15 18:51	10
Toluene	10	U	10	1.5	ug/L			04/06/15 18:51	10
trans-1,3-Dichloropropene	10	U	10	1.5	ug/L			04/06/15 18:51	10
1,1,2-Trichloroethane	10	U	10	2.0	ug/L			04/06/15 18:51	10
Tetrachloroethene	**670**	**E**	10	1.5	ug/L			04/06/15 18:51	10
2-Hexanone	50	U	50	1.6	ug/L			04/06/15 18:51	10
Dibromochloromethane	10	U	10	1.4	ug/L			04/06/15 18:51	10
1,2-Dibromoethane (EDB)	10	U	10	1.8	ug/L			04/06/15 18:51	10
Chlorobenzene	10	U	10	1.4	ug/L			04/06/15 18:51	10
1,1,1,2-Tetrachloroethane	10	U	10	2.8	ug/L			04/06/15 18:51	10
Ethylbenzene	10	U	10	2.3	ug/L			04/06/15 18:51	10
Xylenes, Total	30	U	30	4.9	ug/L			04/06/15 18:51	10
Styrene	10	U	10	0.97	ug/L			04/06/15 18:51	10
Bromoform	10	U	10	1.9	ug/L			04/06/15 18:51	10
1,1,2,2-Tetrachloroethane	10	U	10	2.0	ug/L			04/06/15 18:51	10
Acrylonitrile	200	U	200	5.5	ug/L			04/06/15 18:51	10
1,4-Dioxane	2000	U	2000	340	ug/L			04/06/15 18:51	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*64 - 135*		*04/06/15 18:51*	*10*
Toluene-d8 (Surr)	*106*		*71 - 118*		*04/06/15 18:51*	*10*
4-Bromofluorobenzene (Surr)	*99*		*70 - 118*		*04/06/15 18:51*	*10*
Dibromofluoromethane (Surr)	*111*		*70 - 128*		*04/06/15 18:51*	*10*

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

Client Sample ID: HD-MW-132-0/1-0
Date Collected: 03/27/15 12:30
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/06/15 17:29	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/06/15 17:29	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/06/15 17:29	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/06/15 17:29	1
1,1-Dichloroethene	**3.0**		1.0	0.30	ug/L			04/06/15 17:29	1
Acetone	5.0	U	5.0	2.5	ug/L			04/06/15 17:29	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/06/15 17:29	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/06/15 17:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/06/15 17:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/06/15 17:29	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/06/15 17:29	1
cis-1,2-Dichloroethene	**59**	**E**	1.0	0.24	ug/L			04/06/15 17:29	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/06/15 17:29	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/06/15 17:29	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/06/15 17:29	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/06/15 17:29	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/06/15 17:29	1
Benzene	1.0	U	1.0	0.11	ug/L			04/06/15 17:29	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/06/15 17:29	1
Trichloroethene	**36**		1.0	0.14	ug/L			04/06/15 17:29	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/06/15 17:29	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/06/15 17:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/06/15 17:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/06/15 17:29	1
Toluene	1.0	U	1.0	0.15	ug/L			04/06/15 17:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/06/15 17:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/06/15 17:29	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/06/15 17:29	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/06/15 17:29	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/06/15 17:29	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/06/15 17:29	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/06/15 17:29	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/06/15 17:29	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/06/15 17:29	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/06/15 17:29	1
Styrene	1.0	U	1.0	0.097	ug/L			04/06/15 17:29	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/06/15 17:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/06/15 17:29	1
Acrylonitrile	20	U	20	0.55	ug/L			04/06/15 17:29	1
1,4-Dioxane	200	U	200	34	ug/L			04/06/15 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*64 - 135*		*04/06/15 17:29*	*1*
Toluene-d8 (Surr)	*112*		*71 - 118*		*04/06/15 17:29*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*		*04/06/15 17:29*	*1*
Dibromofluoromethane (Surr)	*115*		*70 - 128*		*04/06/15 17:29*	*1*

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

Client Sample ID: HD-MW-75D-0/1-0
Date Collected: 03/27/15 10:33
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	50	U	50	14	ug/L			04/08/15 11:49	50
Vinyl chloride	50	U	50	11	ug/L			04/08/15 11:49	50
Bromomethane	50	U	50	16	ug/L			04/08/15 11:49	50
Chloroethane	50	U	50	11	ug/L			04/08/15 11:49	50
1,1-Dichloroethene	50	U	50	15	ug/L			04/08/15 11:49	50
Acetone	250	U	250	130	ug/L			04/08/15 11:49	50
Carbon disulfide	50	U	50	11	ug/L			04/08/15 11:49	50
Methylene Chloride	50	U	50	6.3	ug/L			04/08/15 11:49	50
trans-1,2-Dichloroethene	50	U	50	8.5	ug/L			04/08/15 11:49	50
Methyl tert-butyl ether	50	U	50	9.2	ug/L			04/08/15 11:49	50
1,1-Dichloroethane	50	U	50	5.8	ug/L			04/08/15 11:49	50
cis-1,2-Dichloroethene	**98**		50	12	ug/L			04/08/15 11:49	50
Bromochloromethane	50	U	50	9.0	ug/L			04/08/15 11:49	50
2-Butanone (MEK)	250	U	250	27	ug/L			04/08/15 11:49	50
Chloroform	50	U	50	8.5	ug/L			04/08/15 11:49	50
1,1,1-Trichloroethane	**110**		50	14	ug/L			04/08/15 11:49	50
Carbon tetrachloride	50	U	50	6.8	ug/L			04/08/15 11:49	50
Benzene	50	U	50	5.3	ug/L			04/08/15 11:49	50
1,2-Dichloroethane	50	U	50	11	ug/L			04/08/15 11:49	50
Trichloroethene	**830**		50	7.2	ug/L			04/08/15 11:49	50
1,2-Dichloropropane	50	U	50	4.7	ug/L			04/08/15 11:49	50
Bromodichloromethane	50	U	50	6.5	ug/L			04/08/15 11:49	50
cis-1,3-Dichloropropene	50	U	50	9.3	ug/L			04/08/15 11:49	50
4-Methyl-2-pentanone (MIBK)	250	U	250	26	ug/L			04/08/15 11:49	50
Toluene	50	U	50	7.5	ug/L			04/08/15 11:49	50
trans-1,3-Dichloropropene	50	U	50	7.4	ug/L			04/08/15 11:49	50
1,1,2-Trichloroethane	50	U	50	10	ug/L			04/08/15 11:49	50
Tetrachloroethene	**NQ**		50	7.4	ug/L			04/08/15 11:49	50
2-Hexanone	250	U	250	8.0	ug/L			04/08/15 11:49	50
Dibromochloromethane	50	U	50	6.8	ug/L			04/08/15 11:49	50
1,2-Dibromoethane (EDB)	50	U	50	9.0	ug/L			04/08/15 11:49	50
Chlorobenzene	50	U	50	6.8	ug/L			04/08/15 11:49	50
1,1,1,2-Tetrachloroethane	50	U	50	14	ug/L			04/08/15 11:49	50
Ethylbenzene	50	U	50	11	ug/L			04/08/15 11:49	50
Xylenes, Total	150	U	150	24	ug/L			04/08/15 11:49	50
Styrene	50	U	50	4.8	ug/L			04/08/15 11:49	50
Bromoform	50	U	50	9.6	ug/L			04/08/15 11:49	50
1,1,2,2-Tetrachloroethane	50	U	50	10	ug/L			04/08/15 11:49	50
Acrylonitrile	1000	U	1000	27	ug/L			04/08/15 11:49	50
1,4-Dioxane	10000	U	10000	1700	ug/L			04/08/15 11:49	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*64 - 135*		*04/08/15 11:49*	*50*
Toluene-d8 (Surr)	*107*		*71 - 118*		*04/08/15 11:49*	*50*
4-Bromofluorobenzene (Surr)	*97*		*70 - 118*		*04/08/15 11:49*	*50*
Dibromofluoromethane (Surr)	*108*		*70 - 128*		*04/08/15 11:49*	*50*

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

Client Sample ID: HD-MW-51D-0/1-0
Date Collected: 03/27/15 13:30
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/06/15 16:08	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/06/15 16:08	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/06/15 16:08	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/06/15 16:08	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/06/15 16:08	1
Acetone	5.0	U	5.0	2.5	ug/L			04/06/15 16:08	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/06/15 16:08	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/06/15 16:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/06/15 16:08	1
Methyl tert-butyl ether	1.0	U F1	1.0	0.18	ug/L			04/06/15 16:08	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/06/15 16:08	1
cis-1,2-Dichloroethene	**2.9**		1.0	0.24	ug/L			04/06/15 16:08	1
Bromochloromethane	1.0	U F1	1.0	0.18	ug/L			04/06/15 16:08	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/06/15 16:08	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/06/15 16:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/06/15 16:08	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/06/15 16:08	1
Benzene	1.0	U	1.0	0.11	ug/L			04/06/15 16:08	1
1,2-Dichloroethane	1.0	U F1	1.0	0.21	ug/L			04/06/15 16:08	1
Trichloroethene	**6.3**		1.0	0.14	ug/L			04/06/15 16:08	1
1,2-Dichloropropane	1.0	U F1	1.0	0.095	ug/L			04/06/15 16:08	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/06/15 16:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/06/15 16:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/06/15 16:08	1
Toluene	1.0	U	1.0	0.15	ug/L			04/06/15 16:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/06/15 16:08	1
1,1,2-Trichloroethane	1.0	U F1	1.0	0.20	ug/L			04/06/15 16:08	1
Tetrachloroethene	**0.65**	**J**	1.0	0.15	ug/L			04/06/15 16:08	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/06/15 16:08	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/06/15 16:08	1
1,2-Dibromoethane (EDB)	1.0	U F1	1.0	0.18	ug/L			04/06/15 16:08	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/06/15 16:08	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/06/15 16:08	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/06/15 16:08	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/06/15 16:08	1
Styrene	1.0	U	1.0	0.097	ug/L			04/06/15 16:08	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/06/15 16:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/06/15 16:08	1
Acrylonitrile	20	U	20	0.55	ug/L			04/06/15 16:08	1
1,4-Dioxane	200	U F2	200	34	ug/L			04/06/15 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*64 - 135*		*04/06/15 16:08*	*1*
Toluene-d8 (Surr)	*111*		*71 - 118*		*04/06/15 16:08*	*1*
4-Bromofluorobenzene (Surr)	*110*		*70 - 118*		*04/06/15 16:08*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 128*		*04/06/15 16:08*	*1*

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

Client Sample ID: HD-MW-50S-0/1-0
Date Collected: 03/27/15 11:40
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	50	U	50	14	ug/L			04/06/15 13:48	50
Vinyl chloride	50	U	50	11	ug/L			04/06/15 13:48	50
Bromomethane	50	U	50	16	ug/L			04/06/15 13:48	50
Chloroethane	50	U	50	11	ug/L			04/06/15 13:48	50
1,1-Dichloroethene	**29**	**J**	50	15	ug/L			04/06/15 13:48	50
Acetone	250	U	250	130	ug/L			04/06/15 13:48	50
Carbon disulfide	50	U	50	11	ug/L			04/06/15 13:48	50
Methylene Chloride	50	U	50	6.3	ug/L			04/06/15 13:48	50
trans-1,2-Dichloroethene	50	U	50	8.5	ug/L			04/06/15 13:48	50
Methyl tert-butyl ether	50	U	50	9.2	ug/L			04/06/15 13:48	50
1,1-Dichloroethane	50	U	50	5.8	ug/L			04/06/15 13:48	50
cis-1,2-Dichloroethene	**580**		50	12	ug/L			04/06/15 13:48	50
Bromochloromethane	50	U	50	9.0	ug/L			04/06/15 13:48	50
2-Butanone (MEK)	250	U	250	27	ug/L			04/06/15 13:48	50
Chloroform	50	U	50	8.5	ug/L			04/06/15 13:48	50
1,1,1-Trichloroethane	**95**		50	14	ug/L			04/06/15 13:48	50
Carbon tetrachloride	50	U	50	6.8	ug/L			04/06/15 13:48	50
Benzene	50	U	50	5.3	ug/L			04/06/15 13:48	50
1,2-Dichloroethane	50	U	50	11	ug/L			04/06/15 13:48	50
Trichloroethene	**450**		50	7.2	ug/L			04/06/15 13:48	50
1,2-Dichloropropane	50	U	50	4.7	ug/L			04/06/15 13:48	50
Bromodichloromethane	50	U	50	6.5	ug/L			04/06/15 13:48	50
cis-1,3-Dichloropropene	50	U	50	9.3	ug/L			04/06/15 13:48	50
4-Methyl-2-pentanone (MIBK)	250	U	250	26	ug/L			04/06/15 13:48	50
Toluene	50	U	50	7.5	ug/L			04/06/15 13:48	50
trans-1,3-Dichloropropene	50	U	50	7.4	ug/L			04/06/15 13:48	50
1,1,2-Trichloroethane	50	U	50	10	ug/L			04/06/15 13:48	50
Tetrachloroethene	**120**		50	7.4	ug/L			04/06/15 13:48	50
2-Hexanone	250	U	250	8.0	ug/L			04/06/15 13:48	50
Dibromochloromethane	50	U	50	6.8	ug/L			04/06/15 13:48	50
1,2-Dibromoethane (EDB)	50	U	50	9.0	ug/L			04/06/15 13:48	50
Chlorobenzene	50	U	50	6.8	ug/L			04/06/15 13:48	50
1,1,1,2-Tetrachloroethane	50	U	50	14	ug/L			04/06/15 13:48	50
Ethylbenzene	50	U	50	11	ug/L			04/06/15 13:48	50
Xylenes, Total	150	U	150	24	ug/L			04/06/15 13:48	50
Styrene	50	U	50	4.8	ug/L			04/06/15 13:48	50
Bromoform	50	U	50	9.6	ug/L			04/06/15 13:48	50
1,1,2,2-Tetrachloroethane	50	U	50	10	ug/L			04/06/15 13:48	50
Acrylonitrile	1000	U	1000	27	ug/L			04/06/15 13:48	50
1,4-Dioxane	10000	U	10000	1700	ug/L			04/06/15 13:48	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*64 - 135*		*04/06/15 13:48*	*50*
Toluene-d8 (Surr)	*110*		*71 - 118*		*04/06/15 13:48*	*50*
4-Bromofluorobenzene (Surr)	*109*		*70 - 118*		*04/06/15 13:48*	*50*
Dibromofluoromethane (Surr)	*111*		*70 - 128*		*04/06/15 13:48*	*50*

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

Client Sample ID: HD-MW-114-0/1-0
Date Collected: 03/27/15 13:22
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	100	U	100	28	ug/L			04/06/15 18:24	100
Vinyl chloride	100	U	100	23	ug/L			04/06/15 18:24	100
Bromomethane	100	U	100	31	ug/L			04/06/15 18:24	100
Chloroethane	100	U	100	21	ug/L			04/06/15 18:24	100
1,1-Dichloroethene	100	U	100	30	ug/L			04/06/15 18:24	100
Acetone	500	U	500	250	ug/L			04/06/15 18:24	100
Carbon disulfide	100	U	100	21	ug/L			04/06/15 18:24	100
Methylene Chloride	100	U	100	13	ug/L			04/06/15 18:24	100
trans-1,2-Dichloroethene	100	U	100	17	ug/L			04/06/15 18:24	100
Methyl tert-butyl ether	100	U	100	18	ug/L			04/06/15 18:24	100
1,1-Dichloroethane	100	U	100	12	ug/L			04/06/15 18:24	100
cis-1,2-Dichloroethene	**1800**		100	24	ug/L			04/06/15 18:24	100
Bromochloromethane	100	U	100	18	ug/L			04/06/15 18:24	100
2-Butanone (MEK)	500	U	500	55	ug/L			04/06/15 18:24	100
Chloroform	100	U	100	17	ug/L			04/06/15 18:24	100
1,1,1-Trichloroethane	100	U	100	29	ug/L			04/06/15 18:24	100
Carbon tetrachloride	100	U	100	14	ug/L			04/06/15 18:24	100
Benzene	100	U	100	11	ug/L			04/06/15 18:24	100
1,2-Dichloroethane	100	U	100	21	ug/L			04/06/15 18:24	100
Trichloroethene	**1100**		100	14	ug/L			04/06/15 18:24	100
1,2-Dichloropropane	100	U	100	9.5	ug/L			04/06/15 18:24	100
Bromodichloromethane	100	U	100	13	ug/L			04/06/15 18:24	100
cis-1,3-Dichloropropene	100	U	100	19	ug/L			04/06/15 18:24	100
4-Methyl-2-pentanone (MIBK)	500	U	500	53	ug/L			04/06/15 18:24	100
Toluene	100	U	100	15	ug/L			04/06/15 18:24	100
trans-1,3-Dichloropropene	100	U	100	15	ug/L			04/06/15 18:24	100
1,1,2-Trichloroethane	100	U	100	20	ug/L			04/06/15 18:24	100
Tetrachloroethene	**490**		100	15	ug/L			04/06/15 18:24	100
2-Hexanone	500	U	500	16	ug/L			04/06/15 18:24	100
Dibromochloromethane	100	U	100	14	ug/L			04/06/15 18:24	100
1,2-Dibromoethane (EDB)	100	U	100	18	ug/L			04/06/15 18:24	100
Chlorobenzene	100	U	100	14	ug/L			04/06/15 18:24	100
1,1,1,2-Tetrachloroethane	100	U	100	28	ug/L			04/06/15 18:24	100
Ethylbenzene	100	U	100	23	ug/L			04/06/15 18:24	100
Xylenes, Total	300	U	300	49	ug/L			04/06/15 18:24	100
Styrene	100	U	100	9.7	ug/L			04/06/15 18:24	100
Bromoform	100	U	100	19	ug/L			04/06/15 18:24	100
1,1,2,2-Tetrachloroethane	100	U	100	20	ug/L			04/06/15 18:24	100
Acrylonitrile	2000	U	2000	55	ug/L			04/06/15 18:24	100
1,4-Dioxane	20000	U	20000	3400	ug/L			04/06/15 18:24	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 135*		*04/06/15 18:24*	*100*
Toluene-d8 (Surr)	*112*		*71 - 118*		*04/06/15 18:24*	*100*
4-Bromofluorobenzene (Surr)	*105*		*70 - 118*		*04/06/15 18:24*	*100*
Dibromofluoromethane (Surr)	*116*		*70 - 128*		*04/06/15 18:24*	*100*

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

Client Sample ID: HD-MW-132-0/1-0
Date Collected: 03/27/15 12:30
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	5.0	U	5.0	1.4	ug/L			04/03/15 20:08	5
Vinyl chloride	5.0	U	5.0	1.1	ug/L			04/03/15 20:08	5
Bromomethane	5.0	U	5.0	1.6	ug/L			04/03/15 20:08	5
Chloroethane	5.0	U	5.0	1.1	ug/L			04/03/15 20:08	5
1,1-Dichloroethene	**11**		5.0	1.5	ug/L			04/03/15 20:08	5
Acetone	25	U	25	13	ug/L			04/03/15 20:08	5
Carbon disulfide	5.0	U	5.0	1.1	ug/L			04/03/15 20:08	5
Methylene Chloride	5.0	U	5.0	0.63	ug/L			04/03/15 20:08	5
trans-1,2-Dichloroethene	5.0	U	5.0	0.85	ug/L			04/03/15 20:08	5
Methyl tert-butyl ether	5.0	U	5.0	0.92	ug/L			04/03/15 20:08	5
1,1-Dichloroethane	5.0	U	5.0	0.58	ug/L			04/03/15 20:08	5
cis-1,2-Dichloroethene	**230**		5.0	1.2	ug/L			04/03/15 20:08	5
Bromochloromethane	5.0	U	5.0	0.90	ug/L			04/03/15 20:08	5
2-Butanone (MEK)	25	U	25	2.7	ug/L			04/03/15 20:08	5
Chloroform	5.0	U	5.0	0.85	ug/L			04/03/15 20:08	5
1,1,1-Trichloroethane	5.0	U	5.0	1.4	ug/L			04/03/15 20:08	5
Carbon tetrachloride	5.0	U	5.0	0.68	ug/L			04/03/15 20:08	5
Benzene	5.0	U	5.0	0.53	ug/L			04/03/15 20:08	5
1,2-Dichloroethane	5.0	U	5.0	1.1	ug/L			04/03/15 20:08	5
Trichloroethene	**150**		5.0	0.72	ug/L			04/03/15 20:08	5
1,2-Dichloropropane	5.0	U	5.0	0.47	ug/L			04/03/15 20:08	5
Bromodichloromethane	5.0	U	5.0	0.65	ug/L			04/03/15 20:08	5
cis-1,3-Dichloropropene	5.0	U	5.0	0.93	ug/L			04/03/15 20:08	5
4-Methyl-2-pentanone (MIBK)	25	U	25	2.6	ug/L			04/03/15 20:08	5
Toluene	5.0	U	5.0	0.75	ug/L			04/03/15 20:08	5
trans-1,3-Dichloropropene	5.0	U	5.0	0.74	ug/L			04/03/15 20:08	5
1,1,2-Trichloroethane	5.0	U	5.0	1.0	ug/L			04/03/15 20:08	5
Tetrachloroethene	5.0	U	5.0	0.74	ug/L			04/03/15 20:08	5
2-Hexanone	25	U	25	0.80	ug/L			04/03/15 20:08	5
Dibromochloromethane	5.0	U	5.0	0.68	ug/L			04/03/15 20:08	5
1,2-Dibromoethane (EDB)	5.0	U	5.0	0.90	ug/L			04/03/15 20:08	5
Chlorobenzene	5.0	U	5.0	0.68	ug/L			04/03/15 20:08	5
1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.4	ug/L			04/03/15 20:08	5
Ethylbenzene	5.0	U	5.0	1.1	ug/L			04/03/15 20:08	5
Xylenes, Total	15	U	15	2.4	ug/L			04/03/15 20:08	5
Styrene	5.0	U	5.0	0.48	ug/L			04/03/15 20:08	5
Bromoform	5.0	U	5.0	0.96	ug/L			04/03/15 20:08	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.0	ug/L			04/03/15 20:08	5
Acrylonitrile	100	U	100	2.7	ug/L			04/03/15 20:08	5
1,4-Dioxane	1000	U	1000	170	ug/L			04/03/15 20:08	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*64 - 135*		*04/03/15 20:08*	*5*
Toluene-d8 (Surr)	*108*		*71 - 118*		*04/03/15 20:08*	*5*
4-Bromofluorobenzene (Surr)	*100*		*70 - 118*		*04/03/15 20:08*	*5*
Dibromofluoromethane (Surr)	*106*		*70 - 128*		*04/03/15 20:08*	*5*

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

Client Sample ID: HD-MW-75D-0/1-0
Date Collected: 03/27/15 10:33
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	500	U	500	140	ug/L			04/03/15 20:35	500
Vinyl chloride	500	U	500	110	ug/L			04/03/15 20:35	500
Bromomethane	500	U	500	160	ug/L			04/03/15 20:35	500
Chloroethane	500	U	500	110	ug/L			04/03/15 20:35	500
1,1-Dichloroethene	500	U	500	150	ug/L			04/03/15 20:35	500
Acetone	2500	U	2500	1300	ug/L			04/03/15 20:35	500
Carbon disulfide	500	U	500	110	ug/L			04/03/15 20:35	500
Methylene Chloride	500	U	500	63	ug/L			04/03/15 20:35	500
trans-1,2-Dichloroethene	500	U	500	85	ug/L			04/03/15 20:35	500
Methyl tert-butyl ether	500	U	500	92	ug/L			04/03/15 20:35	500
1,1-Dichloroethane	500	U	500	58	ug/L			04/03/15 20:35	500
cis-1,2-Dichloroethene	**270**	**J**	500	120	ug/L			04/03/15 20:35	500
Bromochloromethane	500	U	500	90	ug/L			04/03/15 20:35	500
2-Butanone (MEK)	2500	U	2500	270	ug/L			04/03/15 20:35	500
Chloroform	500	U	500	85	ug/L			04/03/15 20:35	500
1,1,1-Trichloroethane	500	U	500	140	ug/L			04/03/15 20:35	500
Carbon tetrachloride	500	U	500	68	ug/L			04/03/15 20:35	500
Benzene	500	U	500	53	ug/L			04/03/15 20:35	500
1,2-Dichloroethane	500	U	500	110	ug/L			04/03/15 20:35	500
Trichloroethene	**950**		500	72	ug/L			04/03/15 20:35	500
1,2-Dichloropropane	500	U	500	47	ug/L			04/03/15 20:35	500
Bromodichloromethane	500	U	500	65	ug/L			04/03/15 20:35	500
cis-1,3-Dichloropropene	500	U	500	93	ug/L			04/03/15 20:35	500
4-Methyl-2-pentanone (MIBK)	2500	U	2500	260	ug/L			04/03/15 20:35	500
Toluene	500	U	500	75	ug/L			04/03/15 20:35	500
trans-1,3-Dichloropropene	500	U	500	74	ug/L			04/03/15 20:35	500
1,1,2-Trichloroethane	500	U	500	100	ug/L			04/03/15 20:35	500
Tetrachloroethene	**3400**		500	74	ug/L			04/03/15 20:35	500
2-Hexanone	2500	U	2500	80	ug/L			04/03/15 20:35	500
Dibromochloromethane	500	U	500	68	ug/L			04/03/15 20:35	500
1,2-Dibromoethane (EDB)	500	U	500	90	ug/L			04/03/15 20:35	500
Chlorobenzene	500	U	500	68	ug/L			04/03/15 20:35	500
1,1,1,2-Tetrachloroethane	500	U	500	140	ug/L			04/03/15 20:35	500
Ethylbenzene	500	U	500	110	ug/L			04/03/15 20:35	500
Xylenes, Total	1500	U	1500	240	ug/L			04/03/15 20:35	500
Styrene	500	U	500	48	ug/L			04/03/15 20:35	500
Bromoform	500	U	500	96	ug/L			04/03/15 20:35	500
1,1,2,2-Tetrachloroethane	500	U	500	100	ug/L			04/03/15 20:35	500
Acrylonitrile	10000	U	10000	270	ug/L			04/03/15 20:35	500
1,4-Dioxane	100000	U	100000	17000	ug/L			04/03/15 20:35	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 135*		*04/03/15 20:35*	*500*
Toluene-d8 (Surr)	*117*		*71 - 118*		*04/03/15 20:35*	*500*
4-Bromofluorobenzene (Surr)	*108*		*70 - 118*		*04/03/15 20:35*	*500*
Dibromofluoromethane (Surr)	*117*		*70 - 128*		*04/03/15 20:35*	*500*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-127-0/1-0
Date Collected: 03/27/15 10:45
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2.3	B	0.10	0.0062	mg/L			03/28/15 19:56	1
Chloride	110	B	1.0	0.20	mg/L			03/28/15 19:56	1
Sulfate	7.6		1.0	0.21	mg/L			03/28/15 19:56	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-97-0/1-0
Date Collected: 03/27/15 08:45
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	1.9	B	0.10	0.0062	mg/L			03/28/15 21:05	1
Chloride	120	B	1.0	0.20	mg/L			03/28/15 21:05	1
Sulfate	31		1.0	0.21	mg/L			03/28/15 21:05	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-CW-18-0/1-0
Date Collected: 03/27/15 09:37
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.056	J B	0.10	0.0062	mg/L			03/28/15 22:14	1
Chloride	240	B	5.0	0.98	mg/L			03/28/15 22:31	5
Sulfate	390		5.0	1.1	mg/L			03/28/15 22:31	5

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-114-0/1-0
Date Collected: 03/27/15 13:22
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.61	B	0.10	0.0062	mg/L			03/28/15 21:57	1
Chloride	160	B	1.0	0.20	mg/L			03/28/15 21:57	1
Sulfate	69		1.0	0.21	mg/L			03/28/15 21:57	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-132-0/1-0
Date Collected: 03/27/15 12:30
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	4.9	B	0.10	0.0062	mg/L			03/28/15 20:13	1
Chloride	9.0	B	1.0	0.20	mg/L			03/28/15 20:13	1
Sulfate	3.2		1.0	0.21	mg/L			03/28/15 20:13	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-75D-0/1-0
Date Collected: 03/27/15 10:33
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	3.2	B	0.10	0.0062	mg/L			03/28/15 21:22	1
Chloride	170	B	1.0	0.20	mg/L			03/28/15 21:22	1
Sulfate	32		1.0	0.21	mg/L			03/28/15 21:22	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-51D-0/1-0
Date Collected: 03/27/15 13:30
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.36	B	0.10	0.0062	mg/L			03/28/15 13:46	1
Chloride	5.5	B	1.0	0.20	mg/L			03/28/15 13:46	1
Sulfate	7.2	F1	1.0	0.21	mg/L			03/28/15 13:46	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 300.0 - Anions, Ion Chromatography

Client Sample ID: HD-MW-50S-0/1-0
Date Collected: 03/27/15 11:40
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	2.5	B	0.10	0.0062	mg/L			03/28/15 21:39	1
Chloride	160	B	1.0	0.20	mg/L			03/28/15 21:39	1
Sulfate	55		1.0	0.21	mg/L			03/28/15 21:39	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-127-0/1-0
Date Collected: 03/27/15 10:45
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	110000	B	100	2.8	ug/L		04/01/15 09:51	04/09/15 02:35	1
Potassium	4200		100	5.8	ug/L		04/01/15 09:51	04/09/15 02:35	1
Magnesium	19000	B	100	1.2	ug/L		04/01/15 09:51	04/09/15 02:35	1
Sodium	34000	B	100	3.8	ug/L		04/01/15 09:51	04/09/15 02:35	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-97-0/1-0
Date Collected: 03/27/15 08:45
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	95000	B	100	2.8	ug/L		04/01/15 09:51	04/09/15 02:39	1
Potassium	7200		100	5.8	ug/L		04/01/15 09:51	04/09/15 02:39	1
Magnesium	19000	B	100	1.2	ug/L		04/01/15 09:51	04/09/15 02:39	1
Sodium	42000	B	100	3.8	ug/L		04/01/15 09:51	04/09/15 02:39	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-CW-18-0/1-0
Date Collected: 03/27/15 09:37
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000	B	100	2.8	ug/L		04/01/15 09:51	04/09/15 02:43	1
Potassium	12000		100	5.8	ug/L		04/01/15 09:51	04/09/15 02:43	1
Magnesium	50000	B	100	1.2	ug/L		04/01/15 09:51	04/09/15 02:43	1
Sodium	200000	B	100	3.8	ug/L		04/01/15 09:51	04/09/15 02:43	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-114-0/1-0
Date Collected: 03/27/15 13:22
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	120000	B	100	2.8	ug/L		04/01/15 09:51	04/09/15 02:48	1
Potassium	10000		100	5.8	ug/L		04/01/15 09:51	04/09/15 02:48	1
Magnesium	23000	B	100	1.2	ug/L		04/01/15 09:51	04/09/15 02:48	1
Sodium	43000	B	100	3.8	ug/L		04/01/15 09:51	04/09/15 02:48	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-132-0/1-0
Date Collected: 03/27/15 12:30
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	50000	B	100	2.8	ug/L		04/01/15 09:51	04/09/15 02:52	1
Potassium	1900		100	5.8	ug/L		04/01/15 09:51	04/09/15 02:52	1
Magnesium	3300	B	100	1.2	ug/L		04/01/15 09:51	04/09/15 02:52	1
Sodium	5100	B	100	3.8	ug/L		04/01/15 09:51	04/09/15 02:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-75D-0/1-0
Date Collected: 03/27/15 10:33
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	91000	B	100	2.8	ug/L		04/01/15 09:51	04/09/15 03:16	1
Potassium	8700		100	5.8	ug/L		04/01/15 09:51	04/09/15 03:16	1
Magnesium	20000	B	100	1.2	ug/L		04/01/15 09:51	04/09/15 03:16	1
Sodium	75000	B	100	3.8	ug/L		04/01/15 09:51	04/09/15 03:16	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-51D-0/1-0
Date Collected: 03/27/15 13:30
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	11000	B	100	2.8	ug/L		04/01/15 09:51	04/09/15 03:20	1
Potassium	10000		100	5.8	ug/L		04/01/15 09:51	04/09/15 03:20	1
Magnesium	690	B	100	1.2	ug/L		04/01/15 09:51	04/09/15 03:20	1
Sodium	7000	B	100	3.8	ug/L		04/01/15 09:51	04/09/15 03:20	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HD-MW-50S-0/1-0
Date Collected: 03/27/15 11:40
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	130000	B	100	2.8	ug/L		04/01/15 09:51	04/09/15 03:24	1
Potassium	9700		100	5.8	ug/L		04/01/15 09:51	04/09/15 03:24	1
Magnesium	15000	B	100	1.2	ug/L		04/01/15 09:51	04/09/15 03:24	1
Sodium	51000	B	100	3.8	ug/L		04/01/15 09:51	04/09/15 03:24	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

General Chemistry

Client Sample ID: HD-MW-127-0/1-0
Date Collected: 03/27/15 10:45
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-2
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			04/06/15 05:52	1
Bicarbonate Alkalinity as CaCO3	**270**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/06/15 05:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

General Chemistry

Client Sample ID: HD-MW-97-0/1-0
Date Collected: 03/27/15 08:45
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-3
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			04/06/15 05:52	1
Bicarbonate Alkalinity as CaCO3	**220**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/06/15 05:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

General Chemistry

Client Sample ID: HD-CW-18-0/1-0
Date Collected: 03/27/15 09:37
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**300**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Bicarbonate Alkalinity as CaCO3	**300**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/06/15 05:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

General Chemistry

Client Sample ID: HD-MW-114-0/1-0
Date Collected: 03/27/15 13:22
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**200**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Bicarbonate Alkalinity as CaCO3	**200**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/06/15 05:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

General Chemistry

Client Sample ID: HD-MW-132-0/1-0
Date Collected: 03/27/15 12:30
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**140**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Bicarbonate Alkalinity as CaCO3	**140**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/06/15 05:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

General Chemistry

Client Sample ID: HD-MW-75D-0/1-0
Date Collected: 03/27/15 10:33
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**260**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Bicarbonate Alkalinity as CaCO3	**260**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/06/15 05:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

General Chemistry

Client Sample ID: HD-MW-51D-0/1-0
Date Collected: 03/27/15 13:30
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**21**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Bicarbonate Alkalinity as CaCO3	**21**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/06/15 05:52	1

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

General Chemistry

Client Sample ID: HD-MW-50S-0/1-0
Date Collected: 03/27/15 11:40
Date Received: 03/28/15 09:30

Lab Sample ID: 180-42504-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	**200**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Bicarbonate Alkalinity as CaCO3	**200**	**B**	5.0	0.41	mg/L			04/06/15 05:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/06/15 05:52	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	100	2.8	ug/L	6020A

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

Analyte	RL	MDL	Units	Method
Magnesium	100	1.2	ug/L	6020A
Potassium	100	5.8	ug/L	6020A
Sodium	100	3.8	ug/L	6020A

General Chemistry

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

Surrogate Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(64-135)	(71-118)	(70-118)	(70-128)
180-42504-1	HD-QC7-0/1-2	90	108	94	107
180-42504-2	HD-MW-127-0/1-0	96	116	109	113
180-42504-3	HD-MW-97-0/1-0	99	115	106	123
180-42504-4	HD-CW-18-0/1-0	81	114	99	103
180-42504-4 MS	HD-CW-18-0/1-0	80	104	99	94
180-42504-4 MSD	HD-CW-18-0/1-0	91	107	108	102
180-42504-5 - DL	HD-MW-114-0/1-0	97	112	105	116
180-42504-5	HD-MW-114-0/1-0	89	106	99	111
180-42504-6 - DL	HD-MW-132-0/1-0	94	108	100	106
180-42504-6	HD-MW-132-0/1-0	89	112	103	115
180-42504-7 - DL	HD-MW-75D-0/1-0	104	117	108	117
180-42504-7	HD-MW-75D-0/1-0	84	107	97	108
180-42504-8	HD-MW-51D-0/1-0	81	111	110	102
180-42504-8 MS	HD-MW-51D-0/1-0	64	117	86	88
180-42504-8 MSD	HD-MW-51D-0/1-0	66	119 X	98	87
180-42504-9	HD-MW-50S-0/1-0	84	110	109	111
LCS 180-137438/12	Lab Control Sample	90	103	103	101
LCS 180-137512/8	Lab Control Sample	96	103	104	101
LCS 180-137564/13	Lab Control Sample	88	107	95	97
LCS 180-137846/10	Lab Control Sample	97	108	108	110
LCSD 180-137512/9	Lab Control Sample Dup	98	109	102	105
LCSD 180-137846/11	Lab Control Sample Dup	96	100	103	108
MB 180-137438/6	Method Blank	104	117	106	119
MB 180-137512/6	Method Blank	89	108	103	114
MB 180-137564/6	Method Blank	91	114	103	112
MB 180-137846/7	Method Blank	88	111	100	108

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

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

Lab Sample ID: MB 180-137438/6
Matrix: Water
Analysis Batch: 137438

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/03/15 11:46	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/03/15 11:46	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/03/15 11:46	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/03/15 11:46	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/03/15 11:46	1
Acetone	5.0	U	5.0	2.5	ug/L			04/03/15 11:46	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/03/15 11:46	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/03/15 11:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/03/15 11:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/03/15 11:46	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/03/15 11:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/03/15 11:46	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/03/15 11:46	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/03/15 11:46	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/03/15 11:46	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/03/15 11:46	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/03/15 11:46	1
Benzene	1.0	U	1.0	0.11	ug/L			04/03/15 11:46	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/03/15 11:46	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/03/15 11:46	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/03/15 11:46	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/03/15 11:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/03/15 11:46	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/03/15 11:46	1
Toluene	1.0	U	1.0	0.15	ug/L			04/03/15 11:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/03/15 11:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/03/15 11:46	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/03/15 11:46	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/03/15 11:46	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/03/15 11:46	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/03/15 11:46	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/03/15 11:46	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/03/15 11:46	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/03/15 11:46	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/03/15 11:46	1
Styrene	1.0	U	1.0	0.097	ug/L			04/03/15 11:46	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/03/15 11:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/03/15 11:46	1
Acrylonitrile	20	U	20	0.55	ug/L			04/03/15 11:46	1
1,4-Dioxane	200	U	200	34	ug/L			04/03/15 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 135*		*04/03/15 11:46*	*1*
Toluene-d8 (Surr)	*117*		*71 - 118*		*04/03/15 11:46*	*1*
4-Bromofluorobenzene (Surr)	*106*		*70 - 118*		*04/03/15 11:46*	*1*
Dibromofluoromethane (Surr)	*119*		*70 - 128*		*04/03/15 11:46*	*1*

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

Lab Sample ID: LCS 180-137438/12
Matrix: Water
Analysis Batch: 137438

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	9.36		ug/L		94	50 - 139
Vinyl chloride	10.0	9.59		ug/L		96	53 - 138
Bromomethane	10.0	11.9		ug/L		119	33 - 150
Chloroethane	10.0	10.8		ug/L		108	36 - 142
1,1-Dichloroethene	10.0	10.3		ug/L		103	65 - 136
Acetone	20.0	12.9		ug/L		65	22 - 150
Carbon disulfide	10.0	10.4		ug/L		104	54 - 132
Methylene Chloride	10.0	10.9		ug/L		109	63 - 129
trans-1,2-Dichloroethene	10.0	9.81		ug/L		98	73 - 126
Methyl tert-butyl ether	10.0	10.1		ug/L		101	64 - 123
1,1-Dichloroethane	10.0	10.2		ug/L		102	73 - 126
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	70 - 120
Bromochloromethane	10.0	9.71		ug/L		97	70 - 127
2-Butanone (MEK)	20.0	14.4		ug/L		72	39 - 138
Chloroform	10.0	10.4		ug/L		104	72 - 127
1,1,1-Trichloroethane	10.0	10.7		ug/L		107	63 - 133
Carbon tetrachloride	10.0	10.6		ug/L		106	55 - 150
Benzene	10.0	9.58		ug/L		96	80 - 120
1,2-Dichloroethane	10.0	9.10		ug/L		91	68 - 132
Trichloroethene	10.0	9.30		ug/L		93	73 - 120
1,2-Dichloropropane	10.0	9.48		ug/L		95	76 - 124
Bromodichloromethane	10.0	9.81		ug/L		98	66 - 130
cis-1,3-Dichloropropene	10.0	9.37		ug/L		94	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	16.4		ug/L		82	45 - 145
Toluene	10.0	8.88		ug/L		89	80 - 123
trans-1,3-Dichloropropene	10.0	9.17		ug/L		92	65 - 125
1,1,2-Trichloroethane	10.0	9.20		ug/L		92	77 - 127
Tetrachloroethene	10.0	8.89		ug/L		89	70 - 135
2-Hexanone	20.0	15.8		ug/L		79	25 - 132
Dibromochloromethane	10.0	9.31		ug/L		93	60 - 140
1,2-Dibromoethane (EDB)	10.0	9.09		ug/L		91	74 - 123
Chlorobenzene	10.0	9.73		ug/L		97	80 - 120
1,1,1,2-Tetrachloroethane	10.0	8.90		ug/L		89	63 - 140
Ethylbenzene	10.0	8.72		ug/L		87	72 - 126
Xylenes, Total	20.0	17.3		ug/L		87	76 - 128
Styrene	10.0	9.69		ug/L		97	71 - 127
Bromoform	10.0	9.43		ug/L		94	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	62 - 125
1,4-Dioxane	200	169	J	ug/L		84	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*64 - 135*
Toluene-d8 (Surr)	*103*		*71 - 118*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*
Dibromofluoromethane (Surr)	*101*		*70 - 128*

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

Lab Sample ID: 180-42504-4 MS
Matrix: Water
Analysis Batch: 137438

Client Sample ID: HD-CW-18-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	1.0	U	10.0	7.33		ug/L		73	50 - 139
Vinyl chloride	1.0	U	10.0	7.71		ug/L		77	53 - 138
Bromomethane	1.0	U	10.0	11.0		ug/L		110	33 - 150
Chloroethane	1.0	U	10.0	10.4		ug/L		104	36 - 142
1,1-Dichloroethene	1.0	U	10.0	8.84		ug/L		88	65 - 136
Acetone	5.0	U	20.0	10.9		ug/L		54	22 - 150
Carbon disulfide	1.0	U	10.0	10.1		ug/L		101	54 - 132
Methylene Chloride	1.0	U	10.0	9.65		ug/L		97	63 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	9.36		ug/L		94	73 - 126
Methyl tert-butyl ether	1.0	U	10.0	8.98		ug/L		90	64 - 123
1,1-Dichloroethane	1.0	U	10.0	10.2		ug/L		102	73 - 126
cis-1,2-Dichloroethene	4.3		10.0	12.8		ug/L		86	70 - 120
Bromochloromethane	1.0	U	10.0	8.82		ug/L		88	70 - 127
2-Butanone (MEK)	5.0	U	20.0	11.9		ug/L		60	39 - 138
Chloroform	1.0	U	10.0	9.50		ug/L		95	72 - 127
1,1,1-Trichloroethane	1.0	U	10.0	10.2		ug/L		102	63 - 133
Carbon tetrachloride	1.0	U	10.0	9.87		ug/L		99	55 - 150
Benzene	1.0	U	10.0	9.03		ug/L		90	80 - 120
1,2-Dichloroethane	1.0	U	10.0	8.16		ug/L		82	68 - 132
Trichloroethene	0.47	J	10.0	9.52		ug/L		90	73 - 120
1,2-Dichloropropane	1.0	U	10.0	8.85		ug/L		89	76 - 124
Bromodichloromethane	1.0	U	10.0	9.55		ug/L		95	66 - 130
cis-1,3-Dichloropropene	1.0	U	10.0	8.89		ug/L		89	66 - 120
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	15.3		ug/L		77	45 - 145
Toluene	1.0	U	10.0	9.51		ug/L		95	80 - 123
trans-1,3-Dichloropropene	1.0	U	10.0	8.78		ug/L		88	65 - 125
1,1,2-Trichloroethane	1.0	U	10.0	8.65		ug/L		86	77 - 127
Tetrachloroethene	1.0	U	10.0	9.32		ug/L		93	70 - 135
2-Hexanone	5.0	U	20.0	15.0		ug/L		75	25 - 132
Dibromochloromethane	1.0	U	10.0	8.81		ug/L		88	60 - 140
1,2-Dibromoethane (EDB)	1.0	U	10.0	8.39		ug/L		84	74 - 123
Chlorobenzene	1.0	U	10.0	9.79		ug/L		98	80 - 120
1,1,1,2-Tetrachloroethane	1.0	U	10.0	8.84		ug/L		88	63 - 140
Ethylbenzene	1.0	U	10.0	9.36		ug/L		94	72 - 126
Xylenes, Total	3.0	U	20.0	17.8		ug/L		89	76 - 128
Styrene	1.0	U	10.0	10.1		ug/L		101	71 - 127
Bromoform	1.0	U	10.0	8.78		ug/L		88	46 - 150
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.19		ug/L		92	62 - 125
1,4-Dioxane	200	U	200	156	J	ug/L		78	10 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*64 - 135*
Toluene-d8 (Surr)	*104*		*71 - 118*
4-Bromofluorobenzene (Surr)	*99*		*70 - 118*
Dibromofluoromethane (Surr)	*94*		*70 - 128*

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

Lab Sample ID: 180-42504-4 MSD
Matrix: Water
Analysis Batch: 137438

Client Sample ID: HD-CW-18-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane	1.0	U	10.0	9.17		ug/L		92	50 - 139	22	35
Vinyl chloride	1.0	U	10.0	10.1		ug/L		101	53 - 138	26	35
Bromomethane	1.0	U	10.0	11.8		ug/L		118	33 - 150	7	35
Chloroethane	1.0	U	10.0	11.0		ug/L		110	36 - 142	6	35
1,1-Dichloroethene	1.0	U	10.0	10.3		ug/L		103	65 - 136	15	35
Acetone	5.0	U	20.0	14.8		ug/L		74	22 - 150	30	35
Carbon disulfide	1.0	U	10.0	10.4		ug/L		104	54 - 132	4	35
Methylene Chloride	1.0	U	10.0	10.3		ug/L		103	63 - 129	7	35
trans-1,2-Dichloroethene	1.0	U	10.0	9.90		ug/L		99	73 - 126	6	35
Methyl tert-butyl ether	1.0	U	10.0	9.67		ug/L		97	64 - 123	7	35
1,1-Dichloroethane	1.0	U	10.0	10.9		ug/L		109	73 - 126	7	35
cis-1,2-Dichloroethene	4.3		10.0	13.9		ug/L		96	70 - 120	8	35
Bromochloromethane	1.0	U	10.0	9.79		ug/L		98	70 - 127	10	35
2-Butanone (MEK)	5.0	U	20.0	13.1		ug/L		66	39 - 138	10	35
Chloroform	1.0	U	10.0	10.7		ug/L		107	72 - 127	12	35
1,1,1-Trichloroethane	1.0	U	10.0	11.0		ug/L		110	63 - 133	8	35
Carbon tetrachloride	1.0	U	10.0	11.1		ug/L		111	55 - 150	12	35
Benzene	1.0	U	10.0	9.42		ug/L		94	80 - 120	4	32
1,2-Dichloroethane	1.0	U	10.0	8.54		ug/L		85	68 - 132	5	32
Trichloroethene	0.47	J	10.0	10.1		ug/L		96	73 - 120	6	35
1,2-Dichloropropane	1.0	U	10.0	8.94		ug/L		89	76 - 124	1	34
Bromodichloromethane	1.0	U	10.0	9.92		ug/L		99	66 - 130	4	35
cis-1,3-Dichloropropene	1.0	U	10.0	9.31		ug/L		93	66 - 120	5	35
4-Methyl-2-pentanone (MIBK)	5.0	U	20.0	17.0		ug/L		85	45 - 145	10	35
Toluene	1.0	U	10.0	9.18		ug/L		92	80 - 123	4	35
trans-1,3-Dichloropropene	1.0	U	10.0	9.15		ug/L		92	65 - 125	4	35
1,1,2-Trichloroethane	1.0	U	10.0	9.41		ug/L		94	77 - 127	8	35
Tetrachloroethene	1.0	U	10.0	9.48		ug/L		95	70 - 135	2	35
2-Hexanone	5.0	U	20.0	16.8		ug/L		84	25 - 132	11	35
Dibromochloromethane	1.0	U	10.0	9.86		ug/L		99	60 - 140	11	35
1,2-Dibromoethane (EDB)	1.0	U	10.0	9.30		ug/L		93	74 - 123	10	35
Chlorobenzene	1.0	U	10.0	9.84		ug/L		98	80 - 120	0	29
1,1,1,2-Tetrachloroethane	1.0	U	10.0	9.47		ug/L		95	63 - 140	7	34
Ethylbenzene	1.0	U	10.0	9.42		ug/L		94	72 - 126	1	33
Xylenes, Total	3.0	U	20.0	18.0		ug/L		90	76 - 128	1	32
Styrene	1.0	U	10.0	10.4		ug/L		104	71 - 127	2	34
Bromoform	1.0	U	10.0	9.57		ug/L		96	46 - 150	9	35
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.5		ug/L		105	62 - 125	13	35
1,4-Dioxane	200	U	200	205		ug/L		103	10 - 160	27	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*64 - 135*
Toluene-d8 (Surr)	*107*		*71 - 118*
4-Bromofluorobenzene (Surr)	*108*		*70 - 118*
Dibromofluoromethane (Surr)	*102*		*70 - 128*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

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

Lab Sample ID: MB 180-137512/6
Matrix: Water
Analysis Batch: 137512

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/04/15 15:41	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/04/15 15:41	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/04/15 15:41	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/04/15 15:41	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/04/15 15:41	1
Acetone	5.0	U	5.0	2.5	ug/L			04/04/15 15:41	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/04/15 15:41	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/04/15 15:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/04/15 15:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/04/15 15:41	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/04/15 15:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/04/15 15:41	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/04/15 15:41	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/04/15 15:41	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/04/15 15:41	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/04/15 15:41	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/04/15 15:41	1
Benzene	1.0	U	1.0	0.11	ug/L			04/04/15 15:41	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/04/15 15:41	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/04/15 15:41	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/04/15 15:41	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/04/15 15:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/04/15 15:41	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/04/15 15:41	1
Toluene	1.0	U	1.0	0.15	ug/L			04/04/15 15:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/04/15 15:41	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/04/15 15:41	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/04/15 15:41	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/04/15 15:41	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/04/15 15:41	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/04/15 15:41	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/04/15 15:41	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/04/15 15:41	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/04/15 15:41	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/04/15 15:41	1
Styrene	1.0	U	1.0	0.097	ug/L			04/04/15 15:41	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/04/15 15:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/04/15 15:41	1
Acrylonitrile	20	U	20	0.55	ug/L			04/04/15 15:41	1
1,4-Dioxane	200	U	200	34	ug/L			04/04/15 15:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*64 - 135*		*04/04/15 15:41*	*1*
Toluene-d8 (Surr)	*108*		*71 - 118*		*04/04/15 15:41*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*		*04/04/15 15:41*	*1*
Dibromofluoromethane (Surr)	*114*		*70 - 128*		*04/04/15 15:41*	*1*

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

Lab Sample ID: LCS 180-137512/8
Matrix: Water
Analysis Batch: 137512

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	7.81		ug/L		78	50 - 139
Vinyl chloride	10.0	8.15		ug/L		81	53 - 138
Bromomethane	10.0	11.9		ug/L		119	33 - 150
Chloroethane	10.0	9.96		ug/L		100	36 - 142
1,1-Dichloroethene	10.0	10.4		ug/L		104	65 - 136
Acetone	20.0	32.8	*	ug/L		164	22 - 150
Carbon disulfide	10.0	11.1		ug/L		111	54 - 132
Methylene Chloride	10.0	11.3		ug/L		113	63 - 129
trans-1,2-Dichloroethene	10.0	9.54		ug/L		95	73 - 126
Methyl tert-butyl ether	10.0	11.7		ug/L		117	64 - 123
1,1-Dichloroethane	10.0	10.3		ug/L		103	73 - 126
cis-1,2-Dichloroethene	10.0	10.2		ug/L		102	70 - 120
Bromochloromethane	10.0	10.4		ug/L		104	70 - 127
2-Butanone (MEK)	20.0	21.7		ug/L		109	39 - 138
Chloroform	10.0	10.4		ug/L		104	72 - 127
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	63 - 133
Carbon tetrachloride	10.0	9.88		ug/L		99	55 - 150
Benzene	10.0	10.1		ug/L		101	80 - 120
1,2-Dichloroethane	10.0	9.76		ug/L		98	68 - 132
Trichloroethene	10.0	8.78		ug/L		88	73 - 120
1,2-Dichloropropane	10.0	9.51		ug/L		95	76 - 124
Bromodichloromethane	10.0	9.88		ug/L		99	66 - 130
cis-1,3-Dichloropropene	10.0	9.20		ug/L		92	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	19.2		ug/L		96	45 - 145
Toluene	10.0	8.87		ug/L		89	80 - 123
trans-1,3-Dichloropropene	10.0	8.58		ug/L		86	65 - 125
1,1,2-Trichloroethane	10.0	9.68		ug/L		97	77 - 127
Tetrachloroethene	10.0	7.43		ug/L		74	70 - 135
2-Hexanone	20.0	24.3		ug/L		121	25 - 132
Dibromochloromethane	10.0	9.69		ug/L		97	60 - 140
1,2-Dibromoethane (EDB)	10.0	10.0		ug/L		100	74 - 123
Chlorobenzene	10.0	9.61		ug/L		96	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.47		ug/L		95	63 - 140
Ethylbenzene	10.0	8.13		ug/L		81	72 - 126
Xylenes, Total	20.0	16.7		ug/L		84	76 - 128
Styrene	10.0	9.95		ug/L		99	71 - 127
Bromoform	10.0	10.2		ug/L		102	46 - 150
1,1,2,2-Tetrachloroethane	10.0	11.1		ug/L		111	62 - 125
1,4-Dioxane	200	197	J	ug/L		98	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 135*
Toluene-d8 (Surr)	*103*		*71 - 118*
4-Bromofluorobenzene (Surr)	*104*		*70 - 118*
Dibromofluoromethane (Surr)	*101*		*70 - 128*

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

Lab Sample ID: LCSD 180-137512/9
Matrix: Water
Analysis Batch: 137512

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane			10.0	8.38		ug/L		84	50 - 139	7	35
Vinyl chloride			10.0	8.38		ug/L		84	53 - 138	3	35
Bromomethane			10.0	11.6		ug/L		116	33 - 150	3	35
Chloroethane			10.0	9.68		ug/L		97	36 - 142	3	35
1,1-Dichloroethene			10.0	11.0		ug/L		110	65 - 136	5	35
Acetone			20.0	27.9		ug/L		140	22 - 150	16	35
Carbon disulfide			10.0	11.2		ug/L		112	54 - 132	1	35
Methylene Chloride			10.0	11.8		ug/L		118	63 - 129	4	35
trans-1,2-Dichloroethene			10.0	10.1		ug/L		101	73 - 126	6	35
Methyl tert-butyl ether			10.0	11.2		ug/L		112	64 - 123	4	35
1,1-Dichloroethane			10.0	11.1		ug/L		111	73 - 126	7	35
cis-1,2-Dichloroethene			10.0	10.7		ug/L		107	70 - 120	5	35
Bromochloromethane			10.0	10.9		ug/L		109	70 - 127	4	35
2-Butanone (MEK)			20.0	20.8		ug/L		104	39 - 138	4	35
Chloroform			10.0	10.5		ug/L		105	72 - 127	1	35
1,1,1-Trichloroethane			10.0	10.7		ug/L		107	63 - 133	5	35
Carbon tetrachloride			10.0	10.3		ug/L		103	55 - 150	4	35
Benzene			10.0	10.7		ug/L		107	80 - 120	6	32
1,2-Dichloroethane			10.0	9.70		ug/L		97	68 - 132	1	32
Trichloroethene			10.0	9.67		ug/L		97	73 - 120	10	35
1,2-Dichloropropane			10.0	9.74		ug/L		97	76 - 124	2	34
Bromodichloromethane			10.0	10.3		ug/L		103	66 - 130	4	35
cis-1,3-Dichloropropene			10.0	9.96		ug/L		100	66 - 120	8	35
4-Methyl-2-pentanone (MIBK)			20.0	20.1		ug/L		100	45 - 145	4	35
Toluene			10.0	9.79		ug/L		98	80 - 123	10	35
trans-1,3-Dichloropropene			10.0	9.43		ug/L		94	65 - 125	9	35
1,1,2-Trichloroethane			10.0	10.1		ug/L		101	77 - 127	4	35
Tetrachloroethene			10.0	8.14		ug/L		81	70 - 135	9	35
2-Hexanone			20.0	25.7		ug/L		128	25 - 132	6	35
Dibromochloromethane			10.0	9.92		ug/L		99	60 - 140	2	35
1,2-Dibromoethane (EDB)			10.0	9.93		ug/L		99	74 - 123	1	35
Chlorobenzene			10.0	9.97		ug/L		100	80 - 120	4	29
1,1,1,2-Tetrachloroethane			10.0	9.65		ug/L		97	63 - 140	2	34
Ethylbenzene			10.0	8.61		ug/L		86	72 - 126	6	33
Xylenes, Total			20.0	17.4		ug/L		87	76 - 128	4	32
Styrene			10.0	10.0		ug/L		100	71 - 127	1	34
Bromoform			10.0	9.81		ug/L		98	46 - 150	4	35
1,1,2,2-Tetrachloroethane			10.0	10.6		ug/L		106	62 - 125	4	35
1,4-Dioxane			200	201		ug/L		101	10 - 160	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 135*
Toluene-d8 (Surr)	*109*		*71 - 118*
4-Bromofluorobenzene (Surr)	*102*		*70 - 118*
Dibromofluoromethane (Surr)	*105*		*70 - 128*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

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

Lab Sample ID: MB 180-137564/6
Matrix: Water
Analysis Batch: 137564

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/06/15 11:09	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/06/15 11:09	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/06/15 11:09	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/06/15 11:09	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/06/15 11:09	1
Acetone	5.0	U	5.0	2.5	ug/L			04/06/15 11:09	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/06/15 11:09	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/06/15 11:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/06/15 11:09	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/06/15 11:09	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/06/15 11:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/06/15 11:09	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/06/15 11:09	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/06/15 11:09	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/06/15 11:09	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/06/15 11:09	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/06/15 11:09	1
Benzene	1.0	U	1.0	0.11	ug/L			04/06/15 11:09	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/06/15 11:09	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/06/15 11:09	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/06/15 11:09	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/06/15 11:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/06/15 11:09	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/06/15 11:09	1
Toluene	1.0	U	1.0	0.15	ug/L			04/06/15 11:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/06/15 11:09	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/06/15 11:09	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/06/15 11:09	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/06/15 11:09	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/06/15 11:09	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/06/15 11:09	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/06/15 11:09	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/06/15 11:09	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/06/15 11:09	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/06/15 11:09	1
Styrene	1.0	U	1.0	0.097	ug/L			04/06/15 11:09	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/06/15 11:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/06/15 11:09	1
Acrylonitrile	20	U	20	0.55	ug/L			04/06/15 11:09	1
1,4-Dioxane	200	U	200	34	ug/L			04/06/15 11:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*64 - 135*		*04/06/15 11:09*	*1*
Toluene-d8 (Surr)	*114*		*71 - 118*		*04/06/15 11:09*	*1*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*		*04/06/15 11:09*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 128*		*04/06/15 11:09*	*1*

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

Lab Sample ID: LCS 180-137564/13
Matrix: Water
Analysis Batch: 137564

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	8.50		ug/L		85	50 - 139
Vinyl chloride	10.0	7.89		ug/L		79	53 - 138
Bromomethane	10.0	11.6		ug/L		116	33 - 150
Chloroethane	10.0	9.76		ug/L		98	36 - 142
1,1-Dichloroethene	10.0	10.4		ug/L		104	65 - 136
Acetone	10.0	5.10		ug/L		51	22 - 150
Carbon disulfide	10.0	9.55		ug/L		95	54 - 132
Methylene Chloride	10.0	9.25		ug/L		92	63 - 129
trans-1,2-Dichloroethene	10.0	9.30		ug/L		93	73 - 126
Methyl tert-butyl ether	10.0	10.2		ug/L		102	64 - 123
1,1-Dichloroethane	10.0	9.48		ug/L		95	73 - 126
cis-1,2-Dichloroethene	10.0	9.68		ug/L		97	70 - 120
Bromochloromethane	10.0	9.14		ug/L		91	70 - 127
2-Butanone (MEK)	10.0	6.55		ug/L		66	39 - 138
Chloroform	10.0	9.32		ug/L		93	72 - 127
1,1,1-Trichloroethane	10.0	9.82		ug/L		98	63 - 133
Carbon tetrachloride	10.0	10.1		ug/L		101	55 - 150
Benzene	10.0	8.92		ug/L		89	80 - 120
1,2-Dichloroethane	10.0	8.87		ug/L		89	68 - 132
Trichloroethene	10.0	8.88		ug/L		89	73 - 120
1,2-Dichloropropane	10.0	8.87		ug/L		89	76 - 124
Bromodichloromethane	10.0	9.32		ug/L		93	66 - 130
cis-1,3-Dichloropropene	10.0	8.93		ug/L		89	66 - 120
4-Methyl-2-pentanone (MIBK)	10.0	8.82		ug/L		88	45 - 145
Toluene	10.0	9.32		ug/L		93	80 - 123
trans-1,3-Dichloropropene	10.0	9.63		ug/L		96	65 - 125
1,1,2-Trichloroethane	10.0	9.08		ug/L		91	77 - 127
Tetrachloroethene	10.0	8.12		ug/L		81	70 - 135
2-Hexanone	10.0	8.49		ug/L		85	25 - 132
Dibromochloromethane	10.0	9.40		ug/L		94	60 - 140
1,2-Dibromoethane (EDB)	10.0	8.99		ug/L		90	74 - 123
Chlorobenzene	10.0	9.63		ug/L		96	80 - 120
1,1,1,2-Tetrachloroethane	10.0	9.12		ug/L		91	63 - 140
Ethylbenzene	10.0	8.70		ug/L		87	72 - 126
Xylenes, Total	20.0	16.8		ug/L		84	76 - 128
Styrene	10.0	9.66		ug/L		97	71 - 127
Bromoform	10.0	9.32		ug/L		93	46 - 150
1,1,2,2-Tetrachloroethane	10.0	9.80		ug/L		98	62 - 125
1,4-Dioxane	200	85.3	J	ug/L		43	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*64 - 135*
Toluene-d8 (Surr)	*107*		*71 - 118*
4-Bromofluorobenzene (Surr)	*95*		*70 - 118*
Dibromofluoromethane (Surr)	*97*		*70 - 128*

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

Lab Sample ID: 180-42504-8 MS
Matrix: Water
Analysis Batch: 137564

Client Sample ID: HD-MW-51D-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	1.0	U	10.0	7.88		ug/L		79	50 - 139
Vinyl chloride	1.0	U	10.0	7.60		ug/L		76	53 - 138
Bromomethane	1.0	U	10.0	8.10		ug/L		81	33 - 150
Chloroethane	1.0	U	10.0	7.09		ug/L		71	36 - 142
1,1-Dichloroethene	1.0	U	10.0	7.82		ug/L		78	65 - 136
Acetone	5.0	U	10.0	3.66	J	ug/L		37	22 - 150
Carbon disulfide	1.0	U	10.0	9.61		ug/L		96	54 - 132
Methylene Chloride	1.0	U	10.0	8.49		ug/L		85	63 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	9.92		ug/L		99	73 - 126
Methyl tert-butyl ether	1.0	U F1	10.0	6.33	F1	ug/L		63	64 - 123
1,1-Dichloroethane	1.0	U	10.0	10.0		ug/L		100	73 - 126
cis-1,2-Dichloroethene	2.9		10.0	13.1		ug/L		103	70 - 120
Bromochloromethane	1.0	U F1	10.0	7.00		ug/L		70	70 - 127
2-Butanone (MEK)	5.0	U	10.0	6.12		ug/L		61	39 - 138
Chloroform	1.0	U	10.0	9.10		ug/L		91	72 - 127
1,1,1-Trichloroethane	1.0	U	10.0	10.3		ug/L		103	63 - 133
Carbon tetrachloride	1.0	U	10.0	10.3		ug/L		103	55 - 150
Benzene	1.0	U	10.0	9.09		ug/L		91	80 - 120
1,2-Dichloroethane	1.0	U F1	10.0	6.08	F1	ug/L		61	68 - 132
Trichloroethene	6.3		10.0	16.0		ug/L		97	73 - 120
1,2-Dichloropropane	1.0	U F1	10.0	7.41	F1	ug/L		74	76 - 124
Bromodichloromethane	1.0	U	10.0	7.93		ug/L		79	66 - 130
cis-1,3-Dichloropropene	1.0	U	10.0	7.07		ug/L		71	66 - 120
4-Methyl-2-pentanone (MIBK)	5.0	U	10.0	9.70		ug/L		97	45 - 145
Toluene	1.0	U	10.0	10.9		ug/L		109	80 - 123
trans-1,3-Dichloropropene	1.0	U	10.0	7.10		ug/L		71	65 - 125
1,1,2-Trichloroethane	1.0	U F1	10.0	7.00	F1	ug/L		70	77 - 127
Tetrachloroethene	0.65	J	10.0	11.2		ug/L		105	70 - 135
2-Hexanone	5.0	U	10.0	8.48		ug/L		85	25 - 132
Dibromochloromethane	1.0	U	10.0	7.18		ug/L		72	60 - 140
1,2-Dibromoethane (EDB)	1.0	U F1	10.0	6.08	F1	ug/L		61	74 - 123
Chlorobenzene	1.0	U	10.0	9.83		ug/L		98	80 - 120
1,1,1,2-Tetrachloroethane	1.0	U	10.0	9.01		ug/L		90	63 - 140
Ethylbenzene	1.0	U	10.0	9.41		ug/L		94	72 - 126
Xylenes, Total	3.0	U	20.0	18.3		ug/L		91	76 - 128
Styrene	1.0	U	10.0	9.18		ug/L		92	71 - 127
Bromoform	1.0	U	10.0	6.27		ug/L		63	46 - 150
1,1,2,2-Tetrachloroethane	1.0	U	10.0	6.61		ug/L		66	62 - 125
1,4-Dioxane	200	U F2	200	70.4	J	ug/L		35	10 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*64*		*64 - 135*
Toluene-d8 (Surr)	*117*		*71 - 118*
4-Bromofluorobenzene (Surr)	*86*		*70 - 118*
Dibromofluoromethane (Surr)	*88*		*70 - 128*

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

Lab Sample ID: 180-42504-8 MSD
Matrix: Water
Analysis Batch: 137564

Client Sample ID: HD-MW-51D-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
Chloromethane	1.0	U	10.0	7.73		ug/L		77	50 - 139	2	35
Vinyl chloride	1.0	U	10.0	7.68		ug/L		77	53 - 138	1	35
Bromomethane	1.0	U	10.0	11.1		ug/L		111	33 - 150	31	35
Chloroethane	1.0	U	10.0	9.53		ug/L		95	36 - 142	29	35
1,1-Dichloroethene	1.0	U	10.0	9.95		ug/L		99	65 - 136	24	35
Acetone	5.0	U	10.0	4.71	J	ug/L		47	22 - 150	25	35
Carbon disulfide	1.0	U	10.0	9.74		ug/L		97	54 - 132	1	35
Methylene Chloride	1.0	U	10.0	8.31		ug/L		83	63 - 129	2	35
trans-1,2-Dichloroethene	1.0	U	10.0	9.04		ug/L		90	73 - 126	9	35
Methyl tert-butyl ether	1.0	U F1	10.0	6.31	F1	ug/L		63	64 - 123	0	35
1,1-Dichloroethane	1.0	U	10.0	9.57		ug/L		96	73 - 126	4	35
cis-1,2-Dichloroethene	2.9		10.0	12.7		ug/L		99	70 - 120	3	35
Bromochloromethane	1.0	U F1	10.0	6.87	F1	ug/L		69	70 - 127	2	35
2-Butanone (MEK)	5.0	U	10.0	6.54		ug/L		65	39 - 138	7	35
Chloroform	1.0	U	10.0	8.96		ug/L		90	72 - 127	2	35
1,1,1-Trichloroethane	1.0	U	10.0	9.79		ug/L		98	63 - 133	5	35
Carbon tetrachloride	1.0	U	10.0	9.80		ug/L		98	55 - 150	5	35
Benzene	1.0	U	10.0	8.75		ug/L		87	80 - 120	4	32
1,2-Dichloroethane	1.0	U F1	10.0	6.06	F1	ug/L		61	68 - 132	0	32
Trichloroethene	6.3		10.0	15.7		ug/L		94	73 - 120	2	35
1,2-Dichloropropane	1.0	U F1	10.0	7.51	F1	ug/L		75	76 - 124	1	34
Bromodichloromethane	1.0	U	10.0	7.39		ug/L		74	66 - 130	7	35
cis-1,3-Dichloropropene	1.0	U	10.0	7.12		ug/L		71	66 - 120	1	35
4-Methyl-2-pentanone (MIBK)	5.0	U	10.0	9.86		ug/L		99	45 - 145	2	35
Toluene	1.0	U	10.0	10.2		ug/L		102	80 - 123	7	35
trans-1,3-Dichloropropene	1.0	U	10.0	7.19		ug/L		72	65 - 125	1	35
1,1,2-Trichloroethane	1.0	U F1	10.0	6.92	F1	ug/L		69	77 - 127	1	35
Tetrachloroethene	0.65	J	10.0	10.3		ug/L		97	70 - 135	8	35
2-Hexanone	5.0	U	10.0	9.10		ug/L		91	25 - 132	7	35
Dibromochloromethane	1.0	U	10.0	6.85		ug/L		69	60 - 140	5	35
1,2-Dibromoethane (EDB)	1.0	U F1	10.0	6.04	F1	ug/L		60	74 - 123	1	35
Chlorobenzene	1.0	U	10.0	9.53		ug/L		95	80 - 120	3	29
1,1,1,2-Tetrachloroethane	1.0	U	10.0	8.84		ug/L		88	63 - 140	2	34
Ethylbenzene	1.0	U	10.0	9.19		ug/L		92	72 - 126	2	33
Xylenes, Total	3.0	U	20.0	18.1		ug/L		90	76 - 128	1	32
Styrene	1.0	U	10.0	8.94		ug/L		89	71 - 127	3	34
Bromoform	1.0	U	10.0	6.15		ug/L		61	46 - 150	2	35
1,1,2,2-Tetrachloroethane	1.0	U	10.0	6.93		ug/L		69	62 - 125	5	35
1,4-Dioxane	200	U F2	200	141	J F2	ug/L		70	10 - 160	66	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*66*		*64 - 135*
Toluene-d8 (Surr)	*119*	*X*	*71 - 118*
4-Bromofluorobenzene (Surr)	*98*		*70 - 118*
Dibromofluoromethane (Surr)	*87*		*70 - 128*

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

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

Lab Sample ID: MB 180-137846/7
Matrix: Water
Analysis Batch: 137846

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.28	ug/L			04/08/15 11:22	1
Vinyl chloride	1.0	U	1.0	0.23	ug/L			04/08/15 11:22	1
Bromomethane	1.0	U	1.0	0.31	ug/L			04/08/15 11:22	1
Chloroethane	1.0	U	1.0	0.21	ug/L			04/08/15 11:22	1
1,1-Dichloroethene	1.0	U	1.0	0.30	ug/L			04/08/15 11:22	1
Acetone	5.0	U	5.0	2.5	ug/L			04/08/15 11:22	1
Carbon disulfide	1.0	U	1.0	0.21	ug/L			04/08/15 11:22	1
Methylene Chloride	1.0	U	1.0	0.13	ug/L			04/08/15 11:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/08/15 11:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.18	ug/L			04/08/15 11:22	1
1,1-Dichloroethane	1.0	U	1.0	0.12	ug/L			04/08/15 11:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			04/08/15 11:22	1
Bromochloromethane	1.0	U	1.0	0.18	ug/L			04/08/15 11:22	1
2-Butanone (MEK)	5.0	U	5.0	0.55	ug/L			04/08/15 11:22	1
Chloroform	1.0	U	1.0	0.17	ug/L			04/08/15 11:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.29	ug/L			04/08/15 11:22	1
Carbon tetrachloride	1.0	U	1.0	0.14	ug/L			04/08/15 11:22	1
Benzene	1.0	U	1.0	0.11	ug/L			04/08/15 11:22	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			04/08/15 11:22	1
Trichloroethene	1.0	U	1.0	0.14	ug/L			04/08/15 11:22	1
1,2-Dichloropropane	1.0	U	1.0	0.095	ug/L			04/08/15 11:22	1
Bromodichloromethane	1.0	U	1.0	0.13	ug/L			04/08/15 11:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/08/15 11:22	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	0.53	ug/L			04/08/15 11:22	1
Toluene	1.0	U	1.0	0.15	ug/L			04/08/15 11:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.15	ug/L			04/08/15 11:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.20	ug/L			04/08/15 11:22	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			04/08/15 11:22	1
2-Hexanone	5.0	U	5.0	0.16	ug/L			04/08/15 11:22	1
Dibromochloromethane	1.0	U	1.0	0.14	ug/L			04/08/15 11:22	1
1,2-Dibromoethane (EDB)	1.0	U	1.0	0.18	ug/L			04/08/15 11:22	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			04/08/15 11:22	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.28	ug/L			04/08/15 11:22	1
Ethylbenzene	1.0	U	1.0	0.23	ug/L			04/08/15 11:22	1
Xylenes, Total	3.0	U	3.0	0.49	ug/L			04/08/15 11:22	1
Styrene	1.0	U	1.0	0.097	ug/L			04/08/15 11:22	1
Bromoform	1.0	U	1.0	0.19	ug/L			04/08/15 11:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.20	ug/L			04/08/15 11:22	1
Acrylonitrile	20	U	20	0.55	ug/L			04/08/15 11:22	1
1,4-Dioxane	200	U	200	34	ug/L			04/08/15 11:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*64 - 135*		*04/08/15 11:22*	*1*
Toluene-d8 (Surr)	*111*		*71 - 118*		*04/08/15 11:22*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 118*		*04/08/15 11:22*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 128*		*04/08/15 11:22*	*1*

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

Lab Sample ID: LCS 180-137846/10
Matrix: Water
Analysis Batch: 137846

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	9.72		ug/L		97	50 - 139
Vinyl chloride	10.0	9.48		ug/L		95	53 - 138
Bromomethane	10.0	12.7		ug/L		127	33 - 150
Chloroethane	10.0	10.9		ug/L		109	36 - 142
1,1-Dichloroethene	10.0	9.60		ug/L		96	65 - 136
Acetone	20.0	16.5		ug/L		83	22 - 150
Carbon disulfide	10.0	9.26		ug/L		93	54 - 132
Methylene Chloride	10.0	9.69		ug/L		97	63 - 129
trans-1,2-Dichloroethene	10.0	9.68		ug/L		97	73 - 126
Methyl tert-butyl ether	10.0	9.39		ug/L		94	64 - 123
1,1-Dichloroethane	10.0	10.4		ug/L		104	73 - 126
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	70 - 120
Bromochloromethane	10.0	9.74		ug/L		97	70 - 127
2-Butanone (MEK)	20.0	16.6		ug/L		83	39 - 138
Chloroform	10.0	10.7		ug/L		107	72 - 127
1,1,1-Trichloroethane	10.0	10.8		ug/L		108	63 - 133
Carbon tetrachloride	10.0	10.5		ug/L		105	55 - 150
Benzene	10.0	9.59		ug/L		96	80 - 120
1,2-Dichloroethane	10.0	8.88		ug/L		89	68 - 132
Trichloroethene	10.0	9.93		ug/L		99	73 - 120
1,2-Dichloropropane	10.0	9.09		ug/L		91	76 - 124
Bromodichloromethane	10.0	10.4		ug/L		104	66 - 130
cis-1,3-Dichloropropene	10.0	9.46		ug/L		95	66 - 120
4-Methyl-2-pentanone (MIBK)	20.0	18.4		ug/L		92	45 - 145
Toluene	10.0	9.72		ug/L		97	80 - 123
trans-1,3-Dichloropropene	10.0	9.70		ug/L		97	65 - 125
1,1,2-Trichloroethane	10.0	9.96		ug/L		100	77 - 127
Tetrachloroethene	10.0	10.3		ug/L		103	70 - 135
2-Hexanone	20.0	17.6		ug/L		88	25 - 132
Dibromochloromethane	10.0	10.1		ug/L		101	60 - 140
1,2-Dibromoethane (EDB)	10.0	9.46		ug/L		95	74 - 123
Chlorobenzene	10.0	9.98		ug/L		100	80 - 120
1,1,1,2-Tetrachloroethane	10.0	10.3		ug/L		103	63 - 140
Ethylbenzene	10.0	9.10		ug/L		91	72 - 126
Xylenes, Total	20.0	18.6		ug/L		93	76 - 128
Styrene	10.0	9.90		ug/L		99	71 - 127
Bromoform	10.0	10.2		ug/L		102	46 - 150
1,1,2,2-Tetrachloroethane	10.0	10.4		ug/L		104	62 - 125
1,4-Dioxane	200	136	J	ug/L		68	10 - 160

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 135*
Toluene-d8 (Surr)	*108*		*71 - 118*
4-Bromofluorobenzene (Surr)	*108*		*70 - 118*
Dibromofluoromethane (Surr)	*110*		*70 - 128*

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

Lab Sample ID: LCSD 180-137846/11
Matrix: Water
Analysis Batch: 137846

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloromethane			10.0	10.9		ug/L		109	50 - 139	11	35
Vinyl chloride			10.0	10.3		ug/L		103	53 - 138	9	35
Bromomethane			10.0	13.0		ug/L		130	33 - 150	3	35
Chloroethane			10.0	11.6		ug/L		116	36 - 142	6	35
1,1-Dichloroethene			10.0	10.4		ug/L		104	65 - 136	8	35
Acetone			20.0	19.6		ug/L		98	22 - 150	17	35
Carbon disulfide			10.0	9.82		ug/L		98	54 - 132	6	35
Methylene Chloride			10.0	10.2		ug/L		102	63 - 129	5	35
trans-1,2-Dichloroethene			10.0	10.2		ug/L		102	73 - 126	5	35
Methyl tert-butyl ether			10.0	9.23		ug/L		92	64 - 123	2	35
1,1-Dichloroethane			10.0	10.1		ug/L		101	73 - 126	2	35
cis-1,2-Dichloroethene			10.0	9.82		ug/L		98	70 - 120	7	35
Bromochloromethane			10.0	10.6		ug/L		106	70 - 127	8	35
2-Butanone (MEK)			20.0	14.3		ug/L		72	39 - 138	15	35
Chloroform			10.0	10.7		ug/L		107	72 - 127	0	35
1,1,1-Trichloroethane			10.0	10.7		ug/L		107	63 - 133	1	35
Carbon tetrachloride			10.0	10.4		ug/L		104	55 - 150	1	35
Benzene			10.0	9.54		ug/L		95	80 - 120	0	32
1,2-Dichloroethane			10.0	8.50		ug/L		85	68 - 132	4	32
Trichloroethene			10.0	9.36		ug/L		94	73 - 120	6	35
1,2-Dichloropropane			10.0	8.90		ug/L		89	76 - 124	2	34
Bromodichloromethane			10.0	9.91		ug/L		99	66 - 130	4	35
cis-1,3-Dichloropropene			10.0	9.01		ug/L		90	66 - 120	5	35
4-Methyl-2-pentanone (MIBK)			20.0	16.3		ug/L		81	45 - 145	12	35
Toluene			10.0	8.72		ug/L		87	80 - 123	11	35
trans-1,3-Dichloropropene			10.0	8.40		ug/L		84	65 - 125	14	35
1,1,2-Trichloroethane			10.0	8.83		ug/L		88	77 - 127	12	35
Tetrachloroethene			10.0	9.11		ug/L		91	70 - 135	12	35
2-Hexanone			20.0	14.3		ug/L		72	25 - 132	21	35
Dibromochloromethane			10.0	9.37		ug/L		94	60 - 140	8	35
1,2-Dibromoethane (EDB)			10.0	9.01		ug/L		90	74 - 123	5	35
Chlorobenzene			10.0	9.39		ug/L		94	80 - 120	6	29
1,1,1,2-Tetrachloroethane			10.0	9.89		ug/L		99	63 - 140	4	34
Ethylbenzene			10.0	8.61		ug/L		86	72 - 126	6	33
Xylenes, Total			20.0	17.6		ug/L		88	76 - 128	5	32
Styrene			10.0	9.86		ug/L		99	71 - 127	0	34
Bromoform			10.0	9.21		ug/L		92	46 - 150	10	35
1,1,2,2-Tetrachloroethane			10.0	9.94		ug/L		99	62 - 125	4	35
1,4-Dioxane			200	160	J	ug/L		80	10 - 160	16	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 135*
Toluene-d8 (Surr)	*100*		*71 - 118*
4-Bromofluorobenzene (Surr)	*103*		*70 - 118*
Dibromofluoromethane (Surr)	*108*		*70 - 128*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 180-136855/6
Matrix: Water
Analysis Batch: 136855

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0303	J	0.10	0.0062	mg/L			03/28/15 12:24	1
Chloride	0.375	J	1.0	0.20	mg/L			03/28/15 12:24	1
Sulfate	1.0	U	1.0	0.21	mg/L			03/28/15 12:24	1

Lab Sample ID: LCS 180-136855/5
Matrix: Water
Analysis Batch: 136855

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.50	2.61		mg/L		104	90 - 110
Chloride	50.0	49.8		mg/L		100	90 - 110
Sulfate	50.0	49.8		mg/L		100	90 - 110

Lab Sample ID: 180-42504-6 MS
Matrix: Water
Analysis Batch: 136855

Client Sample ID: HD-MW-132-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	4.9	B	1.25	6.16		mg/L		98	80 - 120
Chloride	9.0	B	25.0	33.5		mg/L		98	80 - 120
Sulfate	3.2		25.0	27.9		mg/L		99	80 - 120

Lab Sample ID: 180-42504-6 MSD
Matrix: Water
Analysis Batch: 136855

Client Sample ID: HD-MW-132-0/1-0
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	4.9	B	1.25	6.22		mg/L		103	80 - 120	1	20
Chloride	9.0	B	25.0	33.9		mg/L		100	80 - 120	1	20
Sulfate	3.2		25.0	28.1		mg/L		100	80 - 120	1	20

Lab Sample ID: 180-42504-8 MS
Matrix: Water
Analysis Batch: 136855

Client Sample ID: HD-MW-51D-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.36	B	1.25	1.75		mg/L		111	80 - 120
Chloride	5.5	B	25.0	31.7		mg/L		105	80 - 120
Sulfate	7.2	F1	25.0	33.8		mg/L		107	80 - 120

Lab Sample ID: 180-42504-8 MSD
Matrix: Water
Analysis Batch: 136855

Client Sample ID: HD-MW-51D-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	0.36	B	1.25	1.74		mg/L		111	80 - 120	0	20
Chloride	5.5	B	25.0	33.8		mg/L		113	80 - 120	6	20
Sulfate	7.2	F1	25.0	40.7	F1	mg/L		134	80 - 120	18	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 180-137213/1-A
Matrix: Water
Analysis Batch: 138082

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 137213

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	7.33	J	100	2.8	ug/L		04/01/15 09:51	04/09/15 02:18	1
Potassium	100	U	100	5.8	ug/L		04/01/15 09:51	04/09/15 02:18	1
Magnesium	2.82	J	100	1.2	ug/L		04/01/15 09:51	04/09/15 02:18	1
Sodium	38.6	J	100	3.8	ug/L		04/01/15 09:51	04/09/15 02:18	1

Lab Sample ID: LCS 180-137213/2-A
Matrix: Water
Analysis Batch: 138082

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 137213

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	50000	51000		ug/L		102	80 - 120
Potassium	50000	49900		ug/L		100	80 - 120
Magnesium	50000	44700		ug/L		89	80 - 120
Sodium	50000	48200		ug/L		96	80 - 120

Lab Sample ID: LCSD 180-137213/3-A
Matrix: Water
Analysis Batch: 138082

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 137213

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	50000	49800		ug/L		100	80 - 120	2	20
Potassium	50000	48700		ug/L		97	80 - 120	2	20
Magnesium	50000	43900		ug/L		88	80 - 120	2	20
Sodium	50000	47300		ug/L		95	80 - 120	2	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-137549/2
Matrix: Water
Analysis Batch: 137549

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	4.12	J	5.0	0.41	mg/L			04/06/15 05:52	1
Bicarbonate Alkalinity as CaCO3	4.12	J	5.0	0.41	mg/L			04/06/15 05:52	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	0.41	mg/L			04/06/15 05:52	1

Lab Sample ID: LCS 180-137549/1
Matrix: Water
Analysis Batch: 137549

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3 to pH 4.5	250	266		mg/L		106	80 - 120

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 180-42504-9 DU
Matrix: Water
Analysis Batch: 137549

Client Sample ID: HD-MW-50S-0/1-0
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	200	B		198		mg/L				3	20
Bicarbonate Alkalinity as CaCO3	200	B		198		mg/L				3	20
Carbonate Alkalinity as CaCO3	5.0	U		5.0	U	mg/L				NC	20

GC/MS VOA

Analysis Batch: 137438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-1	HD-QC7-0/1-2	Total/NA	Water	8260C	
180-42504-3	HD-MW-97-0/1-0	Total/NA	Water	8260C	
180-42504-4	HD-CW-18-0/1-0	Total/NA	Water	8260C	
180-42504-4 MS	HD-CW-18-0/1-0	Total/NA	Water	8260C	
180-42504-4 MSD	HD-CW-18-0/1-0	Total/NA	Water	8260C	
180-42504-6 - DL	HD-MW-132-0/1-0	Total/NA	Water	8260C	
180-42504-7 - DL	HD-MW-75D-0/1-0	Total/NA	Water	8260C	
LCS 180-137438/12	Lab Control Sample	Total/NA	Water	8260C	
MB 180-137438/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 137512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-2	HD-MW-127-0/1-0	Total/NA	Water	8260C	
LCS 180-137512/8	Lab Control Sample	Total/NA	Water	8260C	
LCSD 180-137512/9	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 180-137512/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 137564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-5 - DL	HD-MW-114-0/1-0	Total/NA	Water	8260C	
180-42504-5	HD-MW-114-0/1-0	Total/NA	Water	8260C	
180-42504-6	HD-MW-132-0/1-0	Total/NA	Water	8260C	
180-42504-8	HD-MW-51D-0/1-0	Total/NA	Water	8260C	
180-42504-8 MS	HD-MW-51D-0/1-0	Total/NA	Water	8260C	
180-42504-8 MSD	HD-MW-51D-0/1-0	Total/NA	Water	8260C	
180-42504-9	HD-MW-50S-0/1-0	Total/NA	Water	8260C	
LCS 180-137564/13	Lab Control Sample	Total/NA	Water	8260C	
MB 180-137564/6	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 137846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-7	HD-MW-75D-0/1-0	Total/NA	Water	8260C	
LCS 180-137846/10	Lab Control Sample	Total/NA	Water	8260C	
LCSD 180-137846/11	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 180-137846/7	Method Blank	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 136855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-2	HD-MW-127-0/1-0	Total/NA	Water	300.0	
180-42504-3	HD-MW-97-0/1-0	Total/NA	Water	300.0	
180-42504-4	HD-CW-18-0/1-0	Total/NA	Water	300.0	
180-42504-4	HD-CW-18-0/1-0	Total/NA	Water	300.0	
180-42504-5	HD-MW-114-0/1-0	Total/NA	Water	300.0	
180-42504-6	HD-MW-132-0/1-0	Total/NA	Water	300.0	
180-42504-6 MS	HD-MW-132-0/1-0	Total/NA	Water	300.0	
180-42504-6 MSD	HD-MW-132-0/1-0	Total/NA	Water	300.0	
180-42504-7	HD-MW-75D-0/1-0	Total/NA	Water	300.0	
180-42504-8	HD-MW-51D-0/1-0	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 136855 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-8 MS	HD-MW-51D-0/1-0	Total/NA	Water	300.0	
180-42504-8 MSD	HD-MW-51D-0/1-0	Total/NA	Water	300.0	
180-42504-9	HD-MW-50S-0/1-0	Total/NA	Water	300.0	
LCS 180-136855/5	Lab Control Sample	Total/NA	Water	300.0	
MB 180-136855/6	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 137213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-2	HD-MW-127-0/1-0	Total/NA	Water	3005A	
180-42504-3	HD-MW-97-0/1-0	Total/NA	Water	3005A	
180-42504-4	HD-CW-18-0/1-0	Total/NA	Water	3005A	
180-42504-5	HD-MW-114-0/1-0	Total/NA	Water	3005A	
180-42504-6	HD-MW-132-0/1-0	Total/NA	Water	3005A	
180-42504-6 SD	HD-MW-132-0/1-0	Total/NA	Water	3005A	
180-42504-7	HD-MW-75D-0/1-0	Total/NA	Water	3005A	
180-42504-8	HD-MW-51D-0/1-0	Total/NA	Water	3005A	
180-42504-9	HD-MW-50S-0/1-0	Total/NA	Water	3005A	
LCS 180-137213/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 180-137213/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 180-137213/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 138082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-2	HD-MW-127-0/1-0	Total/NA	Water	6020A	137213
180-42504-3	HD-MW-97-0/1-0	Total/NA	Water	6020A	137213
180-42504-4	HD-CW-18-0/1-0	Total/NA	Water	6020A	137213
180-42504-5	HD-MW-114-0/1-0	Total/NA	Water	6020A	137213
180-42504-6	HD-MW-132-0/1-0	Total/NA	Water	6020A	137213
180-42504-6 SD	HD-MW-132-0/1-0	Total/NA	Water	6020A	137213
180-42504-7	HD-MW-75D-0/1-0	Total/NA	Water	6020A	137213
180-42504-8	HD-MW-51D-0/1-0	Total/NA	Water	6020A	137213
180-42504-9	HD-MW-50S-0/1-0	Total/NA	Water	6020A	137213
CRI 180-138082/65	DL		Water	6020A	
CRI 180-138082/8	DL		Water	6020A	
ICSA 180-138082/9	ICS		Water	6020A	
ICSAB 180-138082/10	ICS		Water	6020A	
LCS 180-137213/2-A	Lab Control Sample	Total Recoverable	Water	6020A	137213
LCSD 180-137213/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020A	137213
MB 180-137213/1-A	Method Blank	Total Recoverable	Water	6020A	137213

General Chemistry

Analysis Batch: 137549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-2	HD-MW-127-0/1-0	Total/NA	Water	SM 2320B	
180-42504-3	HD-MW-97-0/1-0	Total/NA	Water	SM 2320B	
180-42504-4	HD-CW-18-0/1-0	Total/NA	Water	SM 2320B	
180-42504-5	HD-MW-114-0/1-0	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 137549 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-42504-6	HD-MW-132-0/1-0	Total/NA	Water	SM 2320B	
180-42504-7	HD-MW-75D-0/1-0	Total/NA	Water	SM 2320B	
180-42504-8	HD-MW-51D-0/1-0	Total/NA	Water	SM 2320B	
180-42504-9	HD-MW-50S-0/1-0	Total/NA	Water	SM 2320B	
180-42504-9 DU	HD-MW-50S-0/1-0	Total/NA	Water	SM 2320B	
LCS 180-137549/1	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 180-137549/2	Method Blank	Total/NA	Water	SM 2320B	

Client Sample ID: HD-QC7-0/1-2

Lab Sample ID: 180-42504-1

Date Collected: 03/27/15 12:00

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	20 mL	20 mL	137438	04/03/15 12:13	PJJ	TAL PIT
	Instrument ID: CHHP7									

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

Lab Sample ID: 180-42504-2

Date Collected: 03/27/15 10:45

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	20 mL	20 mL	137512	04/04/15 20:47	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	300.0		1	1 mL		136855	03/28/15 19:56	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137213	04/01/15 09:51	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	138082	04/09/15 02:35	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137549	04/06/15 05:52	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-MW-97-0/1-0

Lab Sample ID: 180-42504-3

Date Collected: 03/27/15 08:45

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		20	20 mL	20 mL	137438	04/03/15 19:14	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	300.0		1	1 mL		136855	03/28/15 21:05	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137213	04/01/15 09:51	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	138082	04/09/15 02:39	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137549	04/06/15 05:52	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-CW-18-0/1-0

Lab Sample ID: 180-42504-4

Date Collected: 03/27/15 09:37

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	20 mL	20 mL	137438	04/03/15 12:54	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	300.0		1	1 mL		136855	03/28/15 22:14	MJH	TAL PIT
	Instrument ID: CHIC2100A									

Client Sample ID: HD-CW-18-0/1-0

Lab Sample ID: 180-42504-4

Date Collected: 03/27/15 09:37

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	1 mL		136855	03/28/15 22:31	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137213	04/01/15 09:51	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	138082	04/09/15 02:43	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137549	04/06/15 05:52	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42504-5

Date Collected: 03/27/15 13:22

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	100	20 mL	20 mL	137564	04/06/15 18:24	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	8260C		10	20 mL	20 mL	137564	04/06/15 18:51	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	300.0		1	1 mL		136855	03/28/15 21:57	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137213	04/01/15 09:51	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	138082	04/09/15 02:48	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137549	04/06/15 05:52	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42504-6

Date Collected: 03/27/15 12:30

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	5	20 mL	20 mL	137438	04/03/15 20:08	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	8260C		1	20 mL	20 mL	137564	04/06/15 17:29	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	300.0		1	1 mL		136855	03/28/15 20:13	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137213	04/01/15 09:51	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	138082	04/09/15 02:52	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137549	04/06/15 05:52	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: HD-MW-75D-0/1-0

Lab Sample ID: 180-42504-7

Date Collected: 03/27/15 10:33

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	500	20 mL	20 mL	137438	04/03/15 20:35	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	8260C		50	20 mL	20 mL	137846	04/08/15 11:49	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	300.0		1	1 mL		136855	03/28/15 21:22	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137213	04/01/15 09:51	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	138082	04/09/15 03:16	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137549	04/06/15 05:52	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42504-8

Date Collected: 03/27/15 13:30

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	20 mL	20 mL	137564	04/06/15 16:08	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	300.0		1	1 mL		136855	03/28/15 13:46	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137213	04/01/15 09:51	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	138082	04/09/15 03:20	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137549	04/06/15 05:52	CLL	TAL PIT
	Instrument ID: NOEQUIP									

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

Lab Sample ID: 180-42504-9

Date Collected: 03/27/15 11:40

Matrix: Water

Date Received: 03/28/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	20 mL	20 mL	137564	04/06/15 13:48	PJJ	TAL PIT
	Instrument ID: CHHP7									
Total/NA	Analysis	300.0		1	1 mL		136855	03/28/15 21:39	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Prep	3005A			50 mL	50 mL	137213	04/01/15 09:51	AB1	TAL PIT
Total/NA	Analysis	6020A		1	50 mL	50 mL	138082	04/09/15 03:24	WTR	TAL PIT
	Instrument ID: X									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	137549	04/06/15 05:52	CLL	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

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

Analyst References:

Lab: TAL PIT

Batch Type: Prep

AB1 = Ashwin Baikadi

Batch Type: Analysis

CLL = Cheryl Loheyde

MJH = Matthew Hartman

PJJ = Patrick Journet

WTR = Bill Reinheimer

Certification Summary

Client: Groundwater Sciences Corporation
Project/Site: Harley Davidson

TestAmerica Job ID: 180-42504-1

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: 180-42504-1

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: 180-42504-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-42504-1	HD-QC7-0/1-2	Water	03/27/15 12:00	03/28/15 09:30
180-42504-2	HD-MW-127-0/1-0	Water	03/27/15 10:45	03/28/15 09:30
180-42504-3	HD-MW-97-0/1-0	Water	03/27/15 08:45	03/28/15 09:30
180-42504-4	HD-CW-18-0/1-0	Water	03/27/15 09:37	03/28/15 09:30
180-42504-5	HD-MW-114-0/1-0	Water	03/27/15 13:22	03/28/15 09:30
180-42504-6	HD-MW-132-0/1-0	Water	03/27/15 12:30	03/28/15 09:30
180-42504-7	HD-MW-75D-0/1-0	Water	03/27/15 10:33	03/28/15 09:30
180-42504-8	HD-MW-51D-0/1-0	Water	03/27/15 13:30	03/28/15 09:30
180-42504-9	HD-MW-50S-0/1-0	Water	03/27/15 11:40	03/28/15 09:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 136928

Lab Sample ID: IC 180-136928/3 Client Sample ID:

Date Analyzed: 03/30/15 10:57 Lab File ID: 7033003.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.93	Poor chromatography	journetp	03/30/15 11:35
Chloromethane	2.09	Poor chromatography	journetp	03/30/15 11:35
Vinyl chloride	2.17	Poor chromatography	journetp	03/30/15 11:35
Bromomethane	2.50	Poor chromatography	journetp	03/30/15 11:35
1,1-Dichloroethene	3.46	Poor chromatography	journetp	03/30/15 11:35
1,1,2-Trichloro-1,2,2-trifluoroethane	3.64	Poor chromatography	journetp	03/30/15 11:35
Acetone	3.87	Poor chromatography	journetp	03/30/15 11:35
Allyl chloride	4.06	Poor chromatography	journetp	03/30/15 11:35
Methylene Chloride	4.32	Poor chromatography	journetp	03/30/15 11:35
Methyl acetate	4.36	Poor chromatography	journetp	03/30/15 11:35
Acrylonitrile	4.87	Poor chromatography	journetp	03/30/15 11:35
Methyl tert-butyl ether	4.90	Poor chromatography	journetp	03/30/15 11:35
Hexane	5.12	Poor chromatography	journetp	03/30/15 11:35
Vinyl acetate	5.12	Poor chromatography	journetp	03/30/15 11:35
1,1-Dichloroethane	5.33	Poor chromatography	journetp	03/30/15 11:35
2,2-Dichloropropane	6.08	Poor chromatography	journetp	03/30/15 11:35
Chloroform	6.50	Poor chromatography	journetp	03/30/15 11:35
1,1,1-Trichloroethane	6.67	Poor chromatography	journetp	03/30/15 11:35
Cyclohexane	6.72	Poor chromatography	journetp	03/30/15 11:35
Tetrahydrofuran	6.73	Poor chromatography	journetp	03/30/15 11:35
1,1-Dichloropropene	6.86	Poor chromatography	journetp	03/30/15 11:35
1,2-Dichloroethane	7.13	Poor chromatography	journetp	03/30/15 11:35
Isobutyl alcohol	7.21	Poor chromatography	journetp	03/30/15 11:35
n-Heptane	7.39	Poor chromatography	journetp	03/30/15 11:35
Trichloroethene	7.80	Poor chromatography	journetp	03/30/15 11:35
Dibromomethane	8.15	Poor chromatography	journetp	03/30/15 11:35
1,4-Dioxane	8.21	Poor chromatography	journetp	03/30/15 11:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 136928

Lab Sample ID: IC 180-136928/4 Client Sample ID:

Date Analyzed: 03/30/15 11:28 Lab File ID: 7033004.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.20	Poor chromatography	journetp	03/30/15 12:11
Carbon disulfide	3.75	Poor chromatography	journetp	03/30/15 12:11
Acetone	3.87	Poor chromatography	journetp	03/30/15 12:11
Allyl chloride	4.11	Poor chromatography	journetp	03/30/15 12:11
tert-Butyl alcohol	4.73	Poor chromatography	journetp	03/30/15 12:11
Acrylonitrile	4.82	Poor chromatography	journetp	03/30/15 12:11
Chloroform	6.51	Poor chromatography	journetp	03/30/15 12:11
1,4-Dioxane	8.21	Poor chromatography	journetp	03/30/15 12:11

Lab Sample ID: ICIS 180-136928/5 Client Sample ID:

Date Analyzed: 03/30/15 11:55 Lab File ID: 7033005.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.76	Poor chromatography	journetp	03/30/15 12:42
1,4-Dioxane	8.21	Poor chromatography	journetp	03/30/15 15:32

Lab Sample ID: IC 180-136928/6 Client Sample ID:

Date Analyzed: 03/30/15 12:23 Lab File ID: 7033006.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.73	Poor chromatography	journetp	03/30/15 13:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 136928

Lab Sample ID: IC 180-136928/7 Client Sample ID:

Date Analyzed: 03/30/15 13:05 Lab File ID: 7033007.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.76	Poor chromatography	journetp	03/30/15 13:53
tert-Butyl alcohol	4.74	Poor chromatography	journetp	03/30/15 16:20
1,2,4-Trichlorobenzene	14.80	Poor chromatography	journetp	03/30/15 16:20

Lab Sample ID: IC 180-136928/8 Client Sample ID:

Date Analyzed: 03/30/15 13:32 Lab File ID: 7033008.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.73	Poor chromatography	journetp	03/30/15 14:17
tert-Butyl alcohol	4.74	Poor chromatography	journetp	03/30/15 14:17

Lab Sample ID: IC 180-136928/10 Client Sample ID:

Date Analyzed: 03/30/15 14:36 Lab File ID: 7033010.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.75	Poor chromatography	journetp	03/30/15 15:30
Allyl chloride	4.08	Poor chromatography	journetp	03/30/15 15:30
Acrylonitrile	4.84	Poor chromatography	journetp	03/30/15 15:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 137438

Lab Sample ID: CCVIS 180-137438/3 Client Sample ID:

Date Analyzed: 04/03/15 10:07 Lab File ID: 7040302.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	3.32	Poor chromatography	journetp	04/03/15 10:53
Acetone	3.80	Poor chromatography	journetp	04/03/15 10:53
Carbon disulfide	3.83	Poor chromatography	journetp	04/03/15 10:53
Acrylonitrile	4.82	Poor chromatography	journetp	04/03/15 10:53
1,4-Dioxane	8.19	Poor chromatography	journetp	04/03/15 10:53

Lab Sample ID: MB 180-137438/6 Client Sample ID:

Date Analyzed: 04/03/15 11:46 Lab File ID: 7040306.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorobenzene-d5	10.47	Poor chromatography	journetp	04/03/15 12:57

Lab Sample ID: 180-42504-4 Client Sample ID: HD-CW-18-0/1-0

Date Analyzed: 04/03/15 12:54 Lab File ID: 7040308.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.13	Poor chromatography	journetp	04/03/15 13:54

Lab Sample ID: 180-42504-4 MS Client Sample ID: HD-CW-18-0/1-0 MS

Date Analyzed: 04/03/15 14:16 Lab File ID: 7040311.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.00	Poor chromatography	journetp	04/04/15 13:18
Carbon disulfide	3.80	Poor chromatography	journetp	04/03/15 15:40
1,4-Dioxane	8.18	Poor chromatography	journetp	04/04/15 12:21

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 137438

Lab Sample ID: LCS 180-137438/12 Client Sample ID:

Date Analyzed: 04/03/15 14:44 Lab File ID: 7040312.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.84	Poor chromatography	journetp	04/03/15 15:42
1,4-Dioxane	8.19	Poor chromatography	journetp	04/03/15 15:42

Lab Sample ID: 180-42504-4 MSD Client Sample ID: HD-CW-18-0/1-0 MSD

Date Analyzed: 04/03/15 15:11 Lab File ID: 7040313.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.81	Poor chromatography	journetp	04/03/15 15:45

Lab Sample ID: 180-42504-3 Client Sample ID: HD-MW-97-0/1-0

Date Analyzed: 04/03/15 19:14 Lab File ID: 7040322.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.66	Poor chromatography	journetp	04/04/15 11:47
1,1,1-Trichloroethane	6.70	Poor chromatography	journetp	04/04/15 11:47

Lab Sample ID: 180-42504-6 DL Client Sample ID: HD-MW-132-0/1-0 DL

Date Analyzed: 04/03/15 20:08 Lab File ID: 7040324.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.68	Poor chromatography	journetp	04/04/15 11:49

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 137438

Lab Sample ID: 180-42504-7 DL Client Sample ID: HD-MW-75D-0/1-0 DL

Date Analyzed: 04/03/15 20:35 Lab File ID: 7040325.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.13	Poor chromatography	journetp	04/04/15 11:50
1,1,1-Trichloroethane	6.69	Poor chromatography	journetp	04/04/15 12:03

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 137512

Lab Sample ID: CCVIS 180-137512/3 Client Sample ID:

Date Analyzed: 04/04/15 14:19 Lab File ID: 7040403.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	3.31	Poor chromatography	journetp	04/04/15 15:22
Acrolein	3.48	Poor chromatography	journetp	04/04/15 15:22
1,1-Dichloroethene	3.52	Poor chromatography	journetp	04/04/15 15:22
Acetone	3.83	Poor chromatography	journetp	04/04/15 15:22
Carbon disulfide	3.83	Poor chromatography	journetp	04/04/15 15:22
Acrylonitrile	4.80	Poor chromatography	journetp	04/04/15 15:22
Vinyl acetate	5.15	Poor chromatography	journetp	04/04/15 15:22
2-Butanone (MEK)	6.19	Poor chromatography	journetp	04/04/15 15:22
1,4-Dioxane	8.18	Poor chromatography	journetp	04/04/15 15:22

Lab Sample ID: LCS 180-137512/8 Client Sample ID:

Date Analyzed: 04/04/15 16:44 Lab File ID: 7040408.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.84	Poor chromatography	journetp	04/06/15 08:47
Acrylonitrile	4.81	Poor chromatography	journetp	04/06/15 08:47

Lab Sample ID: LCSD 180-137512/9 Client Sample ID:

Date Analyzed: 04/04/15 17:11 Lab File ID: 7040409.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.02	Poor chromatography	journetp	04/06/15 08:52
Carbon disulfide	3.84	Poor chromatography	journetp	04/06/15 08:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 137512

Lab Sample ID: 180-42504-2 Client Sample ID: HD-MW-127-0/1-0

Date Analyzed: 04/04/15 20:47 Lab File ID: 7040417.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.61	Poor chromatography	journetp	04/06/15 08:57
1,1,1-Trichloroethane	6.69	Poor chromatography	journetp	04/06/15 08:57

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 137564

Lab Sample ID: CCVIS 180-137564/3 Client Sample ID:

Date Analyzed: 04/06/15 09:40 Lab File ID: 7040603.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.01	Poor chromatography	journetp	04/06/15 10:42
Methylene Chloride	4.32	Poor chromatography	journetp	04/06/15 10:42

Lab Sample ID: 180-42504-9 Client Sample ID: HD-MW-50S-0/1-0

Date Analyzed: 04/06/15 13:48 Lab File ID: 7040611.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.61	Poor chromatography	journetp	04/06/15 14:21
1,1,1-Trichloroethane	6.70	Poor chromatography	journetp	04/06/15 14:21

Lab Sample ID: 180-42504-8 MS Client Sample ID: HD-MW-51D-0/1-0 MS

Date Analyzed: 04/06/15 14:18 Lab File ID: 7040612.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.78	Poor chromatography	journetp	04/06/15 14:54
Carbon disulfide	3.90	Poor chromatography	journetp	04/06/15 14:54
TBA-d9 (IS)	4.68	Poor chromatography	journetp	04/07/15 11:18
Acrylonitrile	4.80	Poor chromatography	journetp	04/06/15 14:54
1,4-Dioxane	8.18	Poor chromatography	journetp	04/06/15 14:54

Lab Sample ID: LCS 180-137564/13 Client Sample ID:

Date Analyzed: 04/06/15 14:45 Lab File ID: 7040613.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.78	Poor chromatography	journetp	04/06/15 15:21
Carbon disulfide	3.89	Poor chromatography	journetp	04/06/15 15:21
Methyl tert-butyl ether	4.84	Poor chromatography	journetp	04/06/15 15:21

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 137564

Lab Sample ID: 180-42504-8 MSD Client Sample ID: HD-MW-51D-0/1-0 MSD

Date Analyzed: 04/06/15 15:12 Lab File ID: 7040614.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	2.22	Poor chromatography	journetp	04/06/15 15:44
Acetone	3.77	Poor chromatography	journetp	04/06/15 15:44
Acrylonitrile	4.79	Poor chromatography	journetp	04/06/15 15:44
Methyl tert-butyl ether	4.84	Poor chromatography	journetp	04/06/15 15:44
2-Butanone (MEK)	6.19	Poor chromatography	journetp	04/06/15 15:44
1,4-Dioxane	8.19	Poor chromatography	journetp	04/06/15 15:44

Lab Sample ID: 180-42504-5 Client Sample ID: HD-MW-114-0/1-0

Date Analyzed: 04/06/15 18:51 Lab File ID: 7040622.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethene	3.65	Poor chromatography	journetp	04/07/15 08:46
trans-1,2-Dichloroethene	4.84	Poor chromatography	journetp	04/07/15 08:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 137846

Lab Sample ID: CCVIS 180-137846/3 Client Sample ID:

Date Analyzed: 04/08/15 09:26 Lab File ID: 7040803.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.06	Poor chromatography	journetp	04/08/15 10:15
Acrolein	3.53	Poor chromatography	journetp	04/08/15 10:15
1,1,2-Trichloro-1,2,2-trifluoroethane	3.65	Poor chromatography	journetp	04/08/15 10:15
Acetone	3.86	Poor chromatography	journetp	04/08/15 10:15
Acrylonitrile	4.82	Poor chromatography	journetp	04/08/15 10:15
tert-Butyl alcohol	4.98	Poor chromatography	journetp	04/08/15 10:15

Lab Sample ID: MB 180-137846/7 Client Sample ID:

Date Analyzed: 04/08/15 11:22 Lab File ID: 7040807.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TBA-d9 (IS)	4.63	Poor chromatography	journetp	04/08/15 11:56

Lab Sample ID: 180-42504-7 Client Sample ID: HD-MW-75D-0/1-0

Date Analyzed: 04/08/15 11:49 Lab File ID: 7040808.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.14	Poor chromatography	journetp	04/08/15 12:27
1,1,1-Trichloroethane	6.70	Poor chromatography	journetp	04/08/15 12:27

Lab Sample ID: LCSD 180-137846/11 Client Sample ID:

Date Analyzed: 04/08/15 13:25 Lab File ID: 7040811.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.84	Poor chromatography	journetp	04/08/15 14:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHIC2100A Analysis Batch Number: 135876

Lab Sample ID: IC 180-135876/2 Client Sample ID:

Date Analyzed: 03/18/15 11:27 Lab File ID: A-ICS2100 A 03-18-2015-2.d GC Column: AS-18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	3.01	Baseline	hartmanm	03/18/15 13:48
Chloride	4.03	Baseline	hartmanm	03/18/15 18:15
Nitrite as N	4.69	Baseline	hartmanm	03/18/15 18:15
Sulfate	5.56	Baseline	hartmanm	03/18/15 18:15
Bromide	6.23	Baseline	hartmanm	03/18/15 18:15
Nitrate as N	7.22	Baseline	hartmanm	03/18/15 18:15

Lab Sample ID: IC 180-135876/3 Client Sample ID:

Date Analyzed: 03/18/15 11:43 Lab File ID: A-ICS2100 A 03-18-2015-3.d GC Column: AS-18 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.99	Split Peak	hartmanm	03/18/15 13:51

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
icccv_01202	03/28/15	03/27/15	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_01232	03/28/15	03/27/15	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_00160	03/18/15	03/17/15	DI Water, Lot SUPER Q	5 mL	ICSTDL6_00206	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_00206	03/18/15	03/17/15	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
ICSTDL3_00200	03/18/15	03/17/15	DI Water, Lot SUPER Q	5 mL	ICSTDL6_00206	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_00206	03/18/15	03/17/15	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.: 180-42504-1

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_00135	03/18/15	03/17/15	DI Water, Lot na	5 mL	ICSTDL7_00135	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_00135	03/18/15	03/17/15	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_00136	03/18/15	03/17/15	DI Water, Lot SUPER Q	5 mL	ICSTDL7_00135	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_00135	03/18/15	03/17/15	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.: 180-42504-1

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_00201	03/18/15	03/04/15	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_00132	03/18/15	03/04/15	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_00102	03/19/15	03/04/15	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

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_00107	03/19/15	03/04/15	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
							Sulfate	200 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_00073	04/19/15	02/19/15	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
MCRIX_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_00068	04/12/15	03/12/15	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_00006	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Mn	0.0225 ppm
							Ni	0.02 ppm
							Zn	0.025 ppm
					MMSICSAB-1_00007	0.2 mL	Ba	0.02 ppm
							Be	0.02 ppm
							Pb	0.02 ppm
							Sr	0.025 ppm
							Tl	0.02 ppm
							V	0.02 ppm
					MMSICSAB-2_00006	0.2 mL	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_00006	09/01/15	Inorganic Ventures, Lot G2-MEB463151			(Purchased Reagent)		Ag	2 ppm
							As	2 ppm
							Cd	2 ppm
							Co	2 ppm
							Cr	2 ppm
							Cu	2 ppm
							Mn	2.25 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_00064	04/12/15	03/12/15	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.: 180-42504-1

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_00030	04/05/15	03/05/15	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_00042	04/19/15	02/19/15	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
MTAPITTICPMS_00020	07/01/15	INORGANIC VENTURES, Lot H2-MEB532047			(Purchased Reagent)		Ag	5 ug/mL
							Al	200 ug/mL
							As	4 ug/mL
							B	100 ug/mL
							Ba	200 ug/mL
							Be	5 ug/mL
							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.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MTAPITTMSA_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
MTAPITTMSC_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_00030	04/10/15	03/10/15	Methanol, Lot 85233	10 mL	VOA8260INTRES_00091	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_00091	07/31/19	Restek, Lot A0104742			(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_00017	06/27/15	06/27/14	Methanol, Lot 62345	100 mL	VOA8260SURRES_00046	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_00046	02/01/18	Restek, Lot A093505			(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_00108	04/06/15	03/30/15	Methanol, Lot 85233	10 mL	VOA8260GAS2ND_00090	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00107	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

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_00090	11/30/15		Restek, Lot A0108226		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00107	04/19/15	03/19/15	Methanol, Lot 85233	10 mL	VOA8260MEGA2_00011	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

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_00011	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
VOA8260VOA2ND_00110	04/14/15	04/07/15	Methanol, Lot 85233	10 mL	VOA8260GAS2ND_00092	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00107	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,4-Dioxane	500 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS2ND_00092	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_00107	04/19/15	03/19/15	Methanol, Lot 85233	10 mL	VOA8260MEGA2_00011	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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	200 ug/mL
							cis-1,3-Dichloropropene	200 ug/mL
							Dibromochloromethane	200 ug/mL
							Ethylbenzene	200 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylene Chloride	200 ug/mL
							Styrene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							Trichloroethene	200 ug/mL
							Xylenes, Total	400 ug/mL
..VOA8260MEGA2_00011	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_00108	04/06/15	03/30/15	Methanol, Lot 85233	10 mL	VOA8260GAS1ST_00092	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00092	09/30/16		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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	200 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	200 ug/mL
							1,1,2-Trichloroethane	200 ug/mL
							1,1-Dichloroethane	200 ug/mL
							1,1-Dichloroethene	200 ug/mL
							1,1-Dichloropropene	200 ug/mL
							1,2,3-Trichlorobenzene	200 ug/mL
							1,2,3-Trichloropropane	200 ug/mL
							1,2,4-Trichlorobenzene	200 ug/mL
							1,2,4-Trimethylbenzene	200 ug/mL
							1,2-Dibromo-3-Chloropropane	200 ug/mL
							1,2-Dibromoethane (EDB)	200 ug/mL
							1,2-Dichlorobenzene	200 ug/mL
							1,2-Dichloroethane	200 ug/mL
							1,2-Dichloropropane	200 ug/mL
							1,3,5-Trimethylbenzene	200 ug/mL
							1,3-Dichlorobenzene	200 ug/mL
							1,3-Dichloropropane	200 ug/mL
							1,4-Dichlorobenzene	200 ug/mL
							1,4-Dioxane	4000 ug/mL
							2,2-Dichloropropane	200 ug/mL
							2-Chlorotoluene	200 ug/mL
							2-Methyl-2-propanol	2000 ug/mL
							3-Chloro-1-propene	200 ug/mL
							4-Chlorotoluene	200 ug/mL
							4-Isopropyltoluene	200 ug/mL
							Acrylonitrile	2000 ug/mL
							Benzene	200 ug/mL
							Bromobenzene	200 ug/mL
							Bromochloromethane	200 ug/mL
							Bromodichloromethane	200 ug/mL
							Bromoform	200 ug/mL
							Carbon disulfide	200 ug/mL
							Carbon tetrachloride	200 ug/mL
							Chlorobenzene	200 ug/mL
							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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isobutyl alcohol	5000 ug/mL
							Isopropylbenzene	200 ug/mL
							m-Xylene & p-Xylene	200 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl tert-butyl ether	200 ug/mL
							Methylcyclohexane	200 ug/mL
							Methylene Chloride	200 ug/mL
							n-Butylbenzene	200 ug/mL
							n-Heptane	200 ug/mL
							N-Propylbenzene	200 ug/mL
							Naphthalene	200 ug/mL
							o-Xylene	200 ug/mL
							sec-Butylbenzene	200 ug/mL
							Styrene	200 ug/mL
							tert-Butylbenzene	200 ug/mL
							Tetrachloroethene	200 ug/mL
							Tetrahydrofuran	400 ug/mL
							Toluene	200 ug/mL
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							trans-1,4-Dichloro-2-butene	200 ug/mL
							Trichloroethene	200 ug/mL
..VOA8260KET1ST_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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,4-Dichloro-2-butene	2000 ug/mL
							Trichloroethene	2000 ug/mL
VOA8260VOAPRI_00108	04/06/15	03/30/15	Methanol, Lot 85233	10 mL	VOA8260VOAPRI_00106	1.25 mL	Xylenes, Total	50 ug/mL
.VOA8260VOAPRI_00106	04/19/15	03/19/15	Methanol, Lot 85233	10 mL	VOA8260MEGA1_00014	1 mL	Xylenes, Total	400 ug/mL
..VOA8260MEGA1_00014	02/28/16	Restek, Lot A093581			(Purchased Reagent)		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
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00106	1.25 mL	1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,4-Dioxane	500 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromochloromethane	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylene Chloride	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS1ST_00094	01/31/18	Restek, Lot A0108198			(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00106	04/19/15	03/19/15	Methanol, Lot 85233	10 mL	VOA8260MEGA1_00014	1 mL	1,1,1,2-Tetrachloroethane	200 ug/mL
							1,1,1-Trichloroethane	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							trans-1,2-Dichloroethene	200 ug/mL
							trans-1,3-Dichloropropene	200 ug/mL
							Trichloroethene	200 ug/mL
							Xylenes, Total	400 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-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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
VOAACRPRI_00003	03/31/15	03/03/15	Methanol, Lot 85233	100 mL	VOAACRORES_00064	0.125 mL	Acrolein	25 ug/mL
.VOAACRORES_00064	03/31/15		Restek, Lot A0107338		(Purchased Reagent)		Acrolein	20000 ug/mL
VOAVAPRI_00005	04/13/15	03/13/15	Methanol, Lot 85233	50 mL	VOA8260VARES_00050	0.25 mL	Vinyl acetate	25 ug/mL
.VOA8260VARES_00050	07/31/15		Restek, Lot A0108225		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
voaWKet2 Rest_00002	04/16/15	03/16/15	Methanol, Lot 85233	50 mL	VOA8260KET2ND_00042	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_00042	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
.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

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	IC Spike
Part Number:	**SM-606-005 Solution A**
Lot Number:	**1427624**
Matrix:	H_2O
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.

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

Angel Sellers,
Quality Manager

Reagent

ICPRIMARYSTDB_00008

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

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_2O

Certified Value:

NO_2 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

Angel Sellers,
Quality Manager

Reagent

ICSECONDSTD1_00005

INORGANIC VENTURES™
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

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).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

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 $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty (±) = 2 [$\Sigma(s_i)^2$]$^{1/2}$ 2 = the coverage factor.

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

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

5.0 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 ± 4°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: 1 MAR 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

INORGANIC VENTURES™

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CERTIFICATE OF ANALYSIS

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."

ACCREDITED Testing Laboratory Certificate 863.01

ACCREDITED Reference Material Producer Certificate 863.02

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.

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

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

($\bar{x}$) = mean

x_i = individual results

n = number of measurements

2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = 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 TRACEBILITY 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.

s	Al		M	Dy	< 0.000100	O	Li	0.002000	M	Pr	< 0.000100	M	Te	< 0.012007
M	Sb	< 0.000600	M	Er	< 0.000100	M	Lu	< 0.000100	M	Re	< 0.000100	M	Tb	< 0.000100
O	As	< 0.020000	M	Eu	< 0.000100	s	Mg		M	Rh	< 0.000100	M	Tl	< 0.000100
O	Ba	< 0.000200	M	Gd	< 0.000100	O	Mn	0.003000	M	Rb	< 0.020012	M	Th	< 0.000100
O	Be	< 0.000090	M	Ga	< 0.001001	O	Hg	< 0.005000	M	Ru	< 0.000100	M	Tm	< 0.000100
M	Bi	< 0.005003	O	Ge	< 0.015000	s	Mo		M	Sm	< 0.000100	M	Sn	< 0.003002
O	B	< 0.005000	M	Au	< 0.001001	M	Nd	< 0.000100	O	Sc	< 0.000700	s	Ti	
O	Cd	0.003400	M	Hf	< 0.002001	O	Ni	< 0.002000	M	Se	< 0.050029	O	W	< 0.007000
s	Ca		M	Ho	< 0.000100	M	Nb	< 0.002001	n	Si		M	U	< 0.000100
M	Ce	< 0.000500	M	In	< 0.001001	n	Os		M	Ag	< 0.001001	O	V	< 0.004000
M	Cs	< 0.001001	M	Ir	< 0.000100	M	Pd	< 0.003002	s	Na		M	Yb	< 0.000100
O	Cr	< 0.010000	s	Fe		s	P		O	Sr	0.005000	M	Y	< 0.000100
M	Co	< 0.001001	M	La	< 0.000200	M	Pt	< 0.000100	s	S		M	Zn	0.016610
O	Cu	< 0.020000	M	Pb	0.002001	s	K		M	Ta	< 0.001001	M	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 01 SEP 2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Zach Saunders
Product Documentation Technician

Certificate Approved By: Allyson Guilliams
Quality Control Supervisor

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Reagent

M6020ICS-0B_00006

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CERTIFICATE OF ANALYSIS

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."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 DESCRIPTION OF CRM **Stock Solution**

Catalog No.: 6020ICS-0B

Lot Number: **G2-MEB463151**

Matrix: 3% HNO3(v/v)

2 µg/mL ea:
Ag, As, Cd, Co, Cr3, Cu, Mn, Ni, Zn

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

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

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

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = 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 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

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

4.1 ASSAY INFORMATION

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

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

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

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

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

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- SAI Global File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

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

Certification Date: March 25, 2013

Expiration Date: EXPIRES 01 SEP 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

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300 Technology Drive
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CERTIFICATE OF ANALYSIS

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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."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

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, Cr3	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.

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

($\bar{x}$) = mean

x_i = individual results

n = number of measurements

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

2 = the coverage factor.

$[\Sigma(s_i)^2]^{1/2}$ = 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 TRACEBILITY 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.

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

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.

$[\Sigma(s_i)^2]^{1/2}$ = 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.

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· "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)

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- 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 µg/mL - N/A

6.0 INTENDED USE

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

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

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

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

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

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

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

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

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

10.0 QUALITY STANDARD DOCUMENTATION

10.1 **ISO 9001 Quality Management System Registration**
- SAI Global File Number 010105

10.2 **ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"**
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 **ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"**
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 **10CFR50 Appendix B - Nuclear Regulatory Commission**
- Domestic Licensing of Production and Utilization Facilities

10.5 **10CFR21 - Nuclear Regulatory Commission**
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

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

Certification Date: April 04, 2014

Expiration Date: EXPIRES 01 MAY 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% HNO_3 / 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:

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 Principals 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
- $U = ku_c$ 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.®

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Reagent

MMSCRI-1B_00005

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CERTIFICATE OF ANALYSIS

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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).

ACCREDITED Testing Laboratory Certificate 863.01 ACCREDITED Reference Material Producer Certificate 863.02

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) HNO3
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:
	Cr3, Cu,
	0.25 µg/mL ea:
	Ag, As, Be, Cd,
	Ni, Pb, Tl, V,
	0.125 µg/mL ea:
	Co

3.0 CERTIFIED VALUES AND UNCERTAINTIES

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

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

Assay Information:

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

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

Certified Value $(\bar{X}) = \frac{\Sigma x_i}{n}$ ($\bar{X}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2 [\Sigma(s_i)^2]^{1/2}$ 2 = the coverage factor.

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

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° 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
01 APR 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

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CERTIFICATE OF ANALYSIS

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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."

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

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.

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

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

($\bar{x}$) = mean

x_i = individual results

n = number of measurements

2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = 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 **TRACEBILITY 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 ± 4ºC. **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.

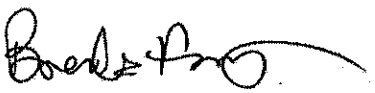
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations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

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CERTIFICATE OF ANALYSIS

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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."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

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.

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

($\bar{x}$) = mean

x_i = individual results

n = number of measurements

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

2 = the coverage factor.

$[\,\Sigma(s_i)^2\,]^{1/2}$ = 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 TRACEBILITY 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#
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.

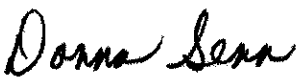
11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: March 08, 2013

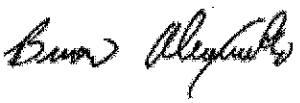
Expiration Date: EXPIRES 01 May 2015

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

MTAPITTICPMS_00020

1222800

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CERTIFICATE OF ANALYSIS

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).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Rec'd 6/17/14 RJR

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

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, Cr3	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	080531
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.

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

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

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

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°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 Requirments 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

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.

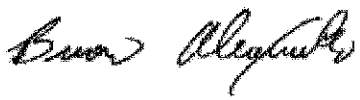
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

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

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CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
info@inorganicventures.com

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).

ACCREDITED Testing Laboratory Certificate 883.01 · ACCREDITED Reference Material Producer Certificate 883.02

rec. 11/13/14 SLB

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

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.

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

x_i = individual results

n = number of measurements

Uncertainty (±) = $2\ [\ \Sigma(s_i)^2\ ]^{1/2}$ 2 = the coverage factor.

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

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

- N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°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 01/2015

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

MTAPITTMSC_00029

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CERTIFICATE OF ANALYSIS

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).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

rec'd 11/3/14 SLB

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

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
Tl	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.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ ($\bar{x}$) = mean
x_i = individual results
n = number of measurements

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

4.0 TRACEABILITY TO NIST

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

4.1 Thermometer Calibration

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

4.2 Balance Calibration

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

4.3 Glassware Calibration

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

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

- N/A

6.0 INTENDED USE

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep tightly sealed when not in use. Store and use at 20 ± 4°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 DEC 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_00092

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www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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)

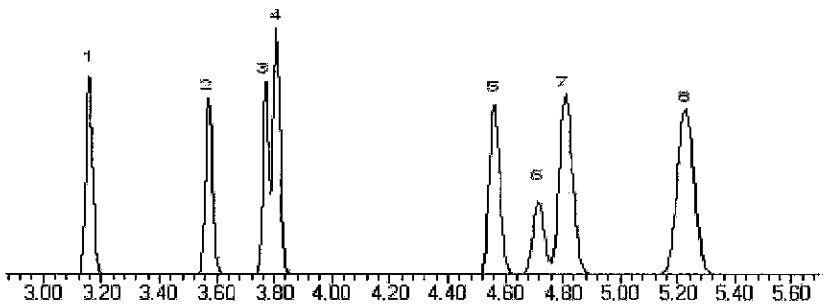
Carrier Gas:
helium-constant flow 2.0 mL/min.

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 - Mix Technician

Date Mixed: 08-Jan-2015 **Balance:** 1125113331

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

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

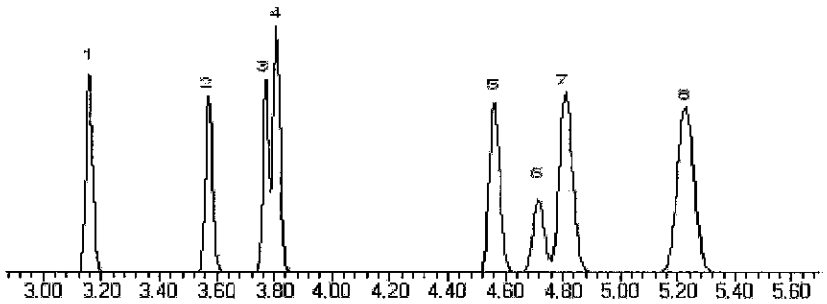
Carrier Gas:
helium-constant flow 2.0 mL/min.

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 - Mix Technician

Date Mixed: 08-Jan-2015 **Balance:** 1125113331

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

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

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

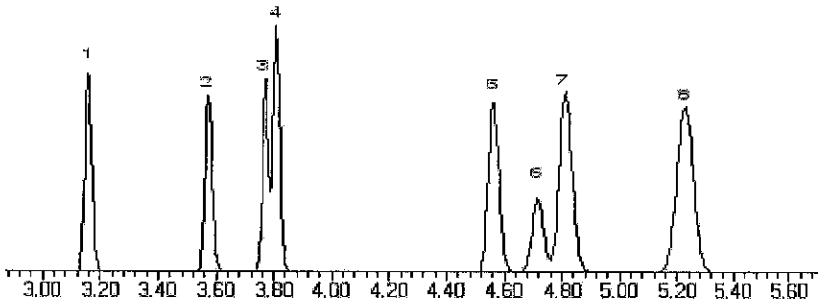
Carrier Gas:
helium-constant flow 2.0 mL/min.

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 J Maye

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

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

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

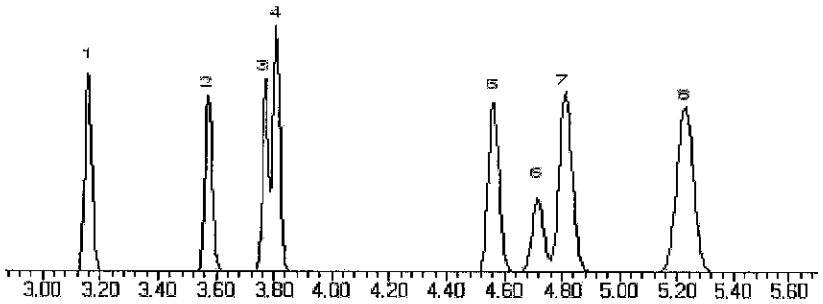
Carrier Gas:
helium-constant flow 2.0 mL/min.

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 J Maye

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

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

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Reagent

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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. : 567649 **Lot No.:** A0104742

Description : 8260 Internal Standard

8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

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

Expiration Date : July 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

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

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

Reagent

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721 **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 **CAS #** 67-64-1 **Purity** 99%	(Lot 07196AK)	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL		Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 **Purity** 99%	(Lot BCBH7802V)	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL		Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 **Purity** 99%	(Lot SHBF5332V)	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL		Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 **Purity** 99%	(Lot MKBK8325V)	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL		Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET1ST_00039

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721 **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 **CAS #** 67-64-1 (Lot 07196AK) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL	Gravimetric Unstressed Stressed
2	2-Butanone (MEK) **CAS #** 78-93-3 (Lot BCBH7802V) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL	Gravimetric Unstressed Stressed
3	4-Methyl-2-pentanone (MIBK) **CAS #** 108-10-1 (Lot SHBF5332V) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL	Gravimetric Unstressed Stressed
4	2-Hexanone **CAS #** 591-78-6 (Lot MKBK8325V) **Purity** 99%	12,537.0 µg/mL	+/- 73.4069 µg/mL +/- 667.2480 µg/mL +/- 667.9837 µg/mL	Gravimetric Unstressed Stressed

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

Reagent

VOA8260KET2ND_00042

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

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-54-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 75-34-3			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 594-20-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-60-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
17	chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 110-82-7			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
23	1,1-Dichloropropene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 563-58-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
24	carbon tetrachloride	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 56-23-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
25	n-Heptane (C7)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 142-82-5			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-01-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	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	1,1,2,2-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	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-50-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 96-12-8			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
69	1,2,4-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 120-82-1			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
70	Hexachlorobutadiene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 87-68-3			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
71	Naphthalene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 91-20-3			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
72	1,2,3-Trichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 87-61-6			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

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

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

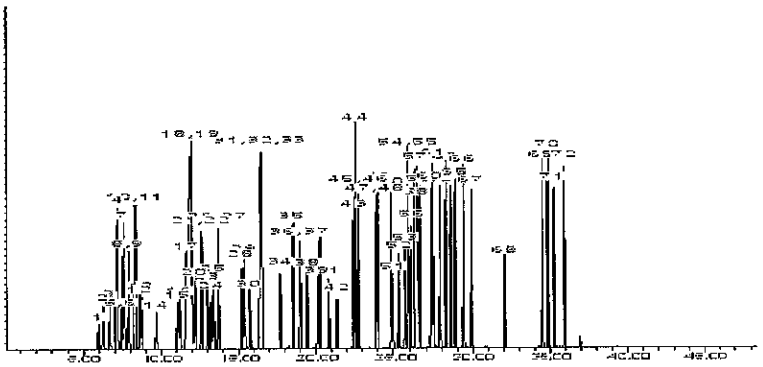
Carrier Gas:
helium-constant pressure 30 psi

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 - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** B251644995

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

Reagent

VOA8260MEGA2_00011

RESTEK

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

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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. : 567641.sec **Lot No.:** A093733

Description : 8260 List 1 / Std #1 MegaMix

8260 List 1 / Std #1 MegaMix 1,000-50,000 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) **CAS #** 60-29-7.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 44.2531 µg/mL +/- 44.4335 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 44.2531 µg/mL +/- 44.4335 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 44.2531 µg/mL +/- 44.4335 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC **Purity** 99%	20,000.0 µg/mL	+/- 116.2756 µg/mL +/- 442.5291 µg/mL +/- 444.3332 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC **Purity** 97%	2,000.0 µg/mL	+/- 11.6284 µg/mL +/- 44.2540 µg/mL +/- 44.4344 µg/mL	Gravimetric Unstressed Stressed
6	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 µg/mL +/- 44.2527 µg/mL +/- 44.4331 µg/mL	Gravimetric Unstressed Stressed
7	Methyl acetate **CAS #** 79-20-9.SEC **Purity** 99%	10,000.0 µg/mL	+/- 58.1378 µg/mL +/- 221.2646 µg/mL +/- 222.1666 µg/mL	Gravimetric Unstressed Stressed
8	Carbon disulfide **CAS #** 75-15-0.SEC **Purity** 98%	2,000.0 µg/mL	+/- 11.6281 µg/mL +/- 44.2527 µg/mL +/- 44.4331 µg/mL	Gravimetric Unstressed Stressed
9	Methylene chloride (dichloromethane) **CAS #** 75-09-2.SEC **Purity** 99%	2,000.0 µg/mL	+/- 11.6282 µg/mL +/- 44.2531 µg/mL +/- 44.4335 µg/mL	Gravimetric Unstressed Stressed

10	Acrylonitrile	20,000.0	µg/mL	+/-	116.2756	µg/mL	Gravimetric
	CAS # 107-13-1.SEC			+/-	442.5291	µg/mL	Unstressed
	Purity 99%			+/-	444.3332	µg/mL	Stressed
11	Methyl-tert-butyl ether (MTBE)	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
12	cis-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 156-59-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
13	n-Hexane (C6)	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 110-54-3.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
14	1,1-Dichloroethane	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 75-34-3.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
15	2,2-Dichloropropane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 594-20-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
16	trans-1,2-Dichloroethene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 156-60-5.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
17	Chloroform	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 67-66-3.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
18	Isobutanol (2-Methyl-1-propanol)	50,000.0	µg/mL	+/-	290.6891	µg/mL	Gravimetric
	CAS # 78-83-1.SEC			+/-	1,106.3228	µg/mL	Unstressed
	Purity 99%			+/-	1,110.8331	µg/mL	Stressed
19	Bromochloromethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 74-97-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
20	Tetrahydrofuran	4,000.0	µg/mL	+/-	23.2563	µg/mL	Gravimetric
	CAS # 109-99-9.SEC			+/-	88.5061	µg/mL	Unstressed
	Purity 99%			+/-	88.8670	µg/mL	Stressed
21	1,1,1-Trichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-55-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
22	Cyclohexane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 110-82-7.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
23	1,1-Dichloropropene	2,010.5	µg/mL	+/-	11.6890	µg/mL	Gravimetric
	CAS # 563-58-6.SEC			+/-	44.4847	µg/mL	Unstressed
	Purity 98%			+/-	44.6661	µg/mL	Stressed
24	Carbon tetrachloride	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 56-23-5.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed
25	n-Heptane (C7)	2,000.1	µg/mL	+/-	11.6288	µg/mL	Gravimetric
	CAS # 142-82-5.SEC			+/-	44.2553	µg/mL	Unstressed
	Purity 99%			+/-	44.4357	µg/mL	Stressed
26	Benzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 71-43-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
27	1,2-Dichloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 107-06-2.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
28	Trichloroethene	2,000.1	µg/mL	+/-	11.6286	µg/mL	Gravimetric
	CAS # 79-01-6.SEC			+/-	44.2549	µg/mL	Unstressed
	Purity 98%			+/-	44.4353	µg/mL	Stressed

29	Methylcyclohexane **CAS #** 108-87-2.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	1,2-Dichloropropane **CAS #** 78-87-5.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane **CAS #** 123-91-1.SEC **Purity** 99%	40,000.0	µg/mL	+/- 232.5513 +/- 885.0582 +/- 888.6665	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane **CAS #** 74-95-3.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Bromodichloromethane **CAS #** 75-27-4.SEC **Purity** 97%	2,000.1	µg/mL	+/- 11.6290 +/- 44.2562 +/- 44.4366	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	cis-1,3-Dichloropropene **CAS #** 10061-01-5.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Toluene **CAS #** 108-88-3.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	Ethyl methacrylate **CAS #** 97-63-2.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	trans-1,3-Dichloropropene **CAS #** 10061-02-6.SEC **Purity** 98%	2,000.0	µg/mL	+/- 11.6281 +/- 44.2527 +/- 44.4331	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,1,2-Trichloroethane **CAS #** 79-00-5.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3-Dichloropropane **CAS #** 142-28-9.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
40	Tetrachloroethene **CAS #** 127-18-4.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Dibromochloromethane **CAS #** 124-48-1.SEC **Purity** 97%	2,000.1	µg/mL	+/- 11.6290 +/- 44.2562 +/- 44.4366	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,2-Dibromoethane (EDB) **CAS #** 106-93-4.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Chlorobenzene **CAS #** 108-90-7.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	m-Xylene **CAS #** 108-38-3.SEC **Purity** 99%	1,000.0	µg/mL	+/- 5.8141 +/- 22.1265 +/- 22.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	p-Xylene **CAS #** 106-42-3.SEC **Purity** 99%	1,000.0	µg/mL	+/- 5.8141 +/- 22.1265 +/- 22.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	o-Xylene **CAS #** 95-47-6.SEC **Purity** 99%	2,000.0	µg/mL	+/- 11.6282 +/- 44.2531 +/- 44.4335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

48	Ethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 100-41-4.SEC			+/-	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.SEC			+/-	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.SEC			+/-	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.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
52	1,1,2,2-Tetrachloroethane	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 79-34-5.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
53	1,2,3-Trichloropropane	2,000.0	µg/mL	+/-	11.6281	µg/mL	Gravimetric
	CAS # 96-18-4.SEC			+/-	44.2527	µg/mL	Unstressed
	Purity 98%			+/-	44.4331	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene	2,000.0	µg/mL	+/-	11.6284	µg/mL	Gravimetric
	CAS # 110-57-6.SEC			+/-	44.2540	µg/mL	Unstressed
	Purity 97%			+/-	44.4344	µg/mL	Stressed
55	n-Propylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 103-65-1.SEC			+/-	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.SEC			+/-	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.SEC			+/-	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.SEC			+/-	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.SEC			+/-	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.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
61	1,2,4-Trimethylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 95-63-6.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
62	sec-Butylbenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 135-98-8.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)	2,000.1	µg/mL	+/-	11.6285	µg/mL	Gravimetric
	CAS # 99-87-6.SEC			+/-	44.2545	µg/mL	Unstressed
	Purity 96%			+/-	44.4349	µg/mL	Stressed
64	1,3-Dichlorobenzene	2,000.0	µg/mL	+/-	11.6282	µg/mL	Gravimetric
	CAS # 541-73-1.SEC			+/-	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.SEC			+/-	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.SEC			+/-	44.2531	µg/mL	Unstressed
	Purity 99%			+/-	44.4335	µg/mL	Stressed

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

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

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

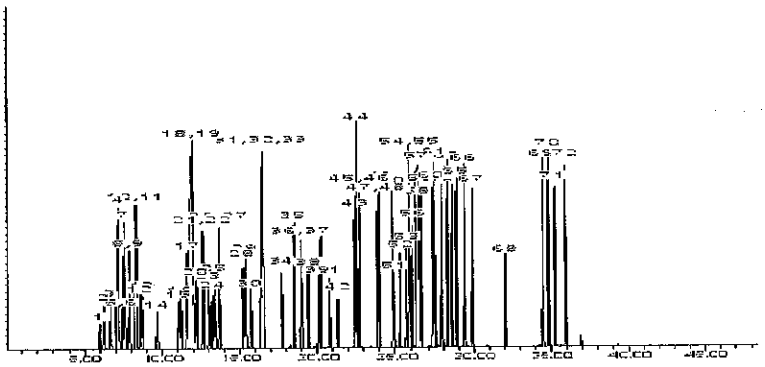
Carrier Gas:
helium-constant pressure 30 psi

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 - QC Analyst

Date Passed: 01-Mar-2013 **Balance:** 1127510105

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

Reagent

VOA8260SURRES_00046

RESTEK

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

www.restek.com

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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. : 567650 **Lot No.:** A093505

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 : February 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	Dibromofluoromethane	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 1868-53-7		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 17060-07-0		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed
3	Toluene-d8	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 2037-26-5		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,500.0 µg/mL	+/- 14.5352	µg/mL	Gravimetric
	CAS # 460-00-4		+/- 30.1344	µg/mL	Unstressed
	Purity 99%		+/- 34.0022	µg/mL	Stressed

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

Reagent

VOA8260VARES_00050

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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.:** A0108225

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

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

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

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Vinyl acetate	5,000.0 µg/mL	+/- 29.3428	µg/mL	Gravimetric
	CAS # 108-05-4 (Lot STBC8935V)		+/- 266.1189	µg/mL	Unstressed
	Purity 99%		+/- 266.4123	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_00064

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

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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	19,759.0 µg/mL	+/- 115.6933	µg/mL	Gravimetric
	CAS # 107-02-8 (Lot 140429JLM)		+/- 633.5357	µg/mL	Unstressed
	Purity 99%		+/- 736.4159	µg/mL	Stressed

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

Reagent

WNa2CO3P_00007

Fisher Scientific

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

Lab Manager Fair Lawn

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

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

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

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

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

Method 8260C Low Level

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

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-QC7-0/1-2	180-42504-1	107	90	108	94
HD-MW-127-0/1-0	180-42504-2	113	96	116	109
HD-MW-97-0/1-0	180-42504-3	123	99	115	106
HD-CW-18-0/1-0	180-42504-4	103	81	114	99
HD-MW-114-0/1-0	180-42504-5	111	89	106	99
HD-MW-114-0/1-0 DL	180-42504-5 DL	116	97	112	105
HD-MW-132-0/1-0	180-42504-6	115	89	112	103
HD-MW-132-0/1-0 DL	180-42504-6 DL	106	94	108	100
HD-MW-75D-0/1-0	180-42504-7	108	84	107	97
HD-MW-75D-0/1-0 DL	180-42504-7 DL	117	104	117	108
HD-MW-51D-0/1-0	180-42504-8	102	81	111	110
HD-MW-50S-0/1-0	180-42504-9	111	84	110	109
	MB 180-137438/6	119	104	117	106
	MB 180-137512/6	114	89	108	103
	MB 180-137564/6	112	91	114	103
	MB 180-137846/7	108	88	111	100
	LCS 180-137438/12	101	90	103	103
	LCS 180-137512/8	101	96	103	104
	LCS 180-137564/13	97	88	107	95
	LCS 180-137846/10	110	97	108	108
	LCSD 180-137512/9	105	98	109	102
	LCSD 180-137846/11	108	96	100	103
HD-CW-18-0/1-0 MS	180-42504-4 MS	94	80	104	99
HD-MW-51D-0/1-0 MS	180-42504-8 MS	88	64	117	86
HD-CW-18-0/1-0 MSD	180-42504-4 MSD	102	91	107	108
HD-MW-51D-0/1-0 MSD	180-42504-8 MSD	87	66	119 X	98

	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 II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040312.D

Lab ID: LCS 180-137438/12 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	9.36	94	50-139	
Vinyl chloride	10.0	9.59	96	53-138	
Bromomethane	10.0	11.9	119	33-150	
Chloroethane	10.0	10.8	108	36-142	
1,1-Dichloroethene	10.0	10.3	103	65-136	
Acetone	20.0	12.9	65	22-150	
Carbon disulfide	10.0	10.4	104	54-132	
Methylene Chloride	10.0	10.9	109	63-129	
trans-1,2-Dichloroethene	10.0	9.81	98	73-126	
Methyl tert-butyl ether	10.0	10.1	101	64-123	
1,1-Dichloroethane	10.0	10.2	102	73-126	
cis-1,2-Dichloroethene	10.0	10.2	102	70-120	
Bromochloromethane	10.0	9.71	97	70-127	
2-Butanone (MEK)	20.0	14.4	72	39-138	
Chloroform	10.0	10.4	104	72-127	
1,1,1-Trichloroethane	10.0	10.7	107	63-133	
Carbon tetrachloride	10.0	10.6	106	55-150	
Benzene	10.0	9.58	96	80-120	
1,2-Dichloroethane	10.0	9.10	91	68-132	
Trichloroethene	10.0	9.30	93	73-120	
1,2-Dichloropropane	10.0	9.48	95	76-124	
Bromodichloromethane	10.0	9.81	98	66-130	
cis-1,3-Dichloropropene	10.0	9.37	94	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	16.4	82	45-145	
Toluene	10.0	8.88	89	80-123	
trans-1,3-Dichloropropene	10.0	9.17	92	65-125	
1,1,2-Trichloroethane	10.0	9.20	92	77-127	
Tetrachloroethene	10.0	8.89	89	70-135	
2-Hexanone	20.0	15.8	79	25-132	
Dibromochloromethane	10.0	9.31	93	60-140	
1,2-Dibromoethane (EDB)	10.0	9.09	91	74-123	
Chlorobenzene	10.0	9.73	97	80-120	
1,1,1,2-Tetrachloroethane	10.0	8.90	89	63-140	
Ethylbenzene	10.0	8.72	87	72-126	
Xylenes, Total	20.0	17.3	87	76-128	
Styrene	10.0	9.69	97	71-127	
Bromoform	10.0	9.43	94	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.2	102	62-125	
1,4-Dioxane	200	169 J	84	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040408.D

Lab ID: LCS 180-137512/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	7.81	78	50-139	
Vinyl chloride	10.0	8.15	81	53-138	
Bromomethane	10.0	11.9	119	33-150	
Chloroethane	10.0	9.96	100	36-142	
1,1-Dichloroethene	10.0	10.4	104	65-136	
Acetone	20.0	32.8	164	22-150	*
Carbon disulfide	10.0	11.1	111	54-132	
Methylene Chloride	10.0	11.3	113	63-129	
trans-1,2-Dichloroethene	10.0	9.54	95	73-126	
Methyl tert-butyl ether	10.0	11.7	117	64-123	
1,1-Dichloroethane	10.0	10.3	103	73-126	
cis-1,2-Dichloroethene	10.0	10.2	102	70-120	
Bromochloromethane	10.0	10.4	104	70-127	
2-Butanone (MEK)	20.0	21.7	109	39-138	
Chloroform	10.0	10.4	104	72-127	
1,1,1-Trichloroethane	10.0	10.2	102	63-133	
Carbon tetrachloride	10.0	9.88	99	55-150	
Benzene	10.0	10.1	101	80-120	
1,2-Dichloroethane	10.0	9.76	98	68-132	
Trichloroethene	10.0	8.78	88	73-120	
1,2-Dichloropropane	10.0	9.51	95	76-124	
Bromodichloromethane	10.0	9.88	99	66-130	
cis-1,3-Dichloropropene	10.0	9.20	92	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	19.2	96	45-145	
Toluene	10.0	8.87	89	80-123	
trans-1,3-Dichloropropene	10.0	8.58	86	65-125	
1,1,2-Trichloroethane	10.0	9.68	97	77-127	
Tetrachloroethene	10.0	7.43	74	70-135	
2-Hexanone	20.0	24.3	121	25-132	
Dibromochloromethane	10.0	9.69	97	60-140	
1,2-Dibromoethane (EDB)	10.0	10.0	100	74-123	
Chlorobenzene	10.0	9.61	96	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.47	95	63-140	
Ethylbenzene	10.0	8.13	81	72-126	
Xylenes, Total	20.0	16.7	84	76-128	
Styrene	10.0	9.95	99	71-127	
Bromoform	10.0	10.2	102	46-150	
1,1,2,2-Tetrachloroethane	10.0	11.1	111	62-125	
1,4-Dioxane	200	197 J	98	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040613.D

Lab ID: LCS 180-137564/13 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	8.50	85	50-139	
Vinyl chloride	10.0	7.89	79	53-138	
Bromomethane	10.0	11.6	116	33-150	
Chloroethane	10.0	9.76	98	36-142	
1,1-Dichloroethene	10.0	10.4	104	65-136	
Acetone	10.0	5.10	51	22-150	
Carbon disulfide	10.0	9.55	95	54-132	
Methylene Chloride	10.0	9.25	92	63-129	
trans-1,2-Dichloroethene	10.0	9.30	93	73-126	
Methyl tert-butyl ether	10.0	10.2	102	64-123	
1,1-Dichloroethane	10.0	9.48	95	73-126	
cis-1,2-Dichloroethene	10.0	9.68	97	70-120	
Bromochloromethane	10.0	9.14	91	70-127	
2-Butanone (MEK)	10.0	6.55	66	39-138	
Chloroform	10.0	9.32	93	72-127	
1,1,1-Trichloroethane	10.0	9.82	98	63-133	
Carbon tetrachloride	10.0	10.1	101	55-150	
Benzene	10.0	8.92	89	80-120	
1,2-Dichloroethane	10.0	8.87	89	68-132	
Trichloroethene	10.0	8.88	89	73-120	
1,2-Dichloropropane	10.0	8.87	89	76-124	
Bromodichloromethane	10.0	9.32	93	66-130	
cis-1,3-Dichloropropene	10.0	8.93	89	66-120	
4-Methyl-2-pentanone (MIBK)	10.0	8.82	88	45-145	
Toluene	10.0	9.32	93	80-123	
trans-1,3-Dichloropropene	10.0	9.63	96	65-125	
1,1,2-Trichloroethane	10.0	9.08	91	77-127	
Tetrachloroethene	10.0	8.12	81	70-135	
2-Hexanone	10.0	8.49	85	25-132	
Dibromochloromethane	10.0	9.40	94	60-140	
1,2-Dibromoethane (EDB)	10.0	8.99	90	74-123	
Chlorobenzene	10.0	9.63	96	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.12	91	63-140	
Ethylbenzene	10.0	8.70	87	72-126	
Xylenes, Total	20.0	16.8	84	76-128	
Styrene	10.0	9.66	97	71-127	
Bromoform	10.0	9.32	93	46-150	
1,1,2,2-Tetrachloroethane	10.0	9.80	98	62-125	
1,4-Dioxane	200	85.3 J	43	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040810.D

Lab ID: LCS 180-137846/10 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chloromethane	10.0	9.72	97	50-139	
Vinyl chloride	10.0	9.48	95	53-138	
Bromomethane	10.0	12.7	127	33-150	
Chloroethane	10.0	10.9	109	36-142	
1,1-Dichloroethene	10.0	9.60	96	65-136	
Acetone	20.0	16.5	83	22-150	
Carbon disulfide	10.0	9.26	93	54-132	
Methylene Chloride	10.0	9.69	97	63-129	
trans-1,2-Dichloroethene	10.0	9.68	97	73-126	
Methyl tert-butyl ether	10.0	9.39	94	64-123	
1,1-Dichloroethane	10.0	10.4	104	73-126	
cis-1,2-Dichloroethene	10.0	10.5	105	70-120	
Bromochloromethane	10.0	9.74	97	70-127	
2-Butanone (MEK)	20.0	16.6	83	39-138	
Chloroform	10.0	10.7	107	72-127	
1,1,1-Trichloroethane	10.0	10.8	108	63-133	
Carbon tetrachloride	10.0	10.5	105	55-150	
Benzene	10.0	9.59	96	80-120	
1,2-Dichloroethane	10.0	8.88	89	68-132	
Trichloroethene	10.0	9.93	99	73-120	
1,2-Dichloropropane	10.0	9.09	91	76-124	
Bromodichloromethane	10.0	10.4	104	66-130	
cis-1,3-Dichloropropene	10.0	9.46	95	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	18.4	92	45-145	
Toluene	10.0	9.72	97	80-123	
trans-1,3-Dichloropropene	10.0	9.70	97	65-125	
1,1,2-Trichloroethane	10.0	9.96	100	77-127	
Tetrachloroethene	10.0	10.3	103	70-135	
2-Hexanone	20.0	17.6	88	25-132	
Dibromochloromethane	10.0	10.1	101	60-140	
1,2-Dibromoethane (EDB)	10.0	9.46	95	74-123	
Chlorobenzene	10.0	9.98	100	80-120	
1,1,1,2-Tetrachloroethane	10.0	10.3	103	63-140	
Ethylbenzene	10.0	9.10	91	72-126	
Xylenes, Total	20.0	18.6	93	76-128	
Styrene	10.0	9.90	99	71-127	
Bromoform	10.0	10.2	102	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.4	104	62-125	
1,4-Dioxane	200	136 J	68	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040409.D

Lab ID: LCSD 180-137512/9 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	8.38	84	7	35	50-139	
Vinyl chloride	10.0	8.38	84	3	35	53-138	
Bromomethane	10.0	11.6	116	3	35	33-150	
Chloroethane	10.0	9.68	97	3	35	36-142	
1,1-Dichloroethene	10.0	11.0	110	5	35	65-136	
Acetone	20.0	27.9	140	16	35	22-150	
Carbon disulfide	10.0	11.2	112	1	35	54-132	
Methylene Chloride	10.0	11.8	118	4	35	63-129	
trans-1,2-Dichloroethene	10.0	10.1	101	6	35	73-126	
Methyl tert-butyl ether	10.0	11.2	112	4	35	64-123	
1,1-Dichloroethane	10.0	11.1	111	7	35	73-126	
cis-1,2-Dichloroethene	10.0	10.7	107	5	35	70-120	
Bromochloromethane	10.0	10.9	109	4	35	70-127	
2-Butanone (MEK)	20.0	20.8	104	4	35	39-138	
Chloroform	10.0	10.5	105	1	35	72-127	
1,1,1-Trichloroethane	10.0	10.7	107	5	35	63-133	
Carbon tetrachloride	10.0	10.3	103	4	35	55-150	
Benzene	10.0	10.7	107	6	32	80-120	
1,2-Dichloroethane	10.0	9.70	97	1	32	68-132	
Trichloroethene	10.0	9.67	97	10	35	73-120	
1,2-Dichloropropane	10.0	9.74	97	2	34	76-124	
Bromodichloromethane	10.0	10.3	103	4	35	66-130	
cis-1,3-Dichloropropene	10.0	9.96	100	8	35	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	20.1	100	4	35	45-145	
Toluene	10.0	9.79	98	10	35	80-123	
trans-1,3-Dichloropropene	10.0	9.43	94	9	35	65-125	
1,1,2-Trichloroethane	10.0	10.1	101	4	35	77-127	
Tetrachloroethene	10.0	8.14	81	9	35	70-135	
2-Hexanone	20.0	25.7	128	6	35	25-132	
Dibromochloromethane	10.0	9.92	99	2	35	60-140	
1,2-Dibromoethane (EDB)	10.0	9.93	99	1	35	74-123	
Chlorobenzene	10.0	9.97	100	4	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.65	97	2	34	63-140	
Ethylbenzene	10.0	8.61	86	6	33	72-126	
Xylenes, Total	20.0	17.4	87	4	32	76-128	
Styrene	10.0	10.0	100	1	34	71-127	
Bromoform	10.0	9.81	98	4	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.6	106	4	35	62-125	
1,4-Dioxane	200	201	101	2	35	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040811.D

Lab ID: LCSD 180-137846/11 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	10.9	109	11	35	50-139	
Vinyl chloride	10.0	10.3	103	9	35	53-138	
Bromomethane	10.0	13.0	130	3	35	33-150	
Chloroethane	10.0	11.6	116	6	35	36-142	
1,1-Dichloroethene	10.0	10.4	104	8	35	65-136	
Acetone	20.0	19.6	98	17	35	22-150	
Carbon disulfide	10.0	9.82	98	6	35	54-132	
Methylene Chloride	10.0	10.2	102	5	35	63-129	
trans-1,2-Dichloroethene	10.0	10.2	102	5	35	73-126	
Methyl tert-butyl ether	10.0	9.23	92	2	35	64-123	
1,1-Dichloroethane	10.0	10.1	101	2	35	73-126	
cis-1,2-Dichloroethene	10.0	9.82	98	7	35	70-120	
Bromochloromethane	10.0	10.6	106	8	35	70-127	
2-Butanone (MEK)	20.0	14.3	72	15	35	39-138	
Chloroform	10.0	10.7	107	0	35	72-127	
1,1,1-Trichloroethane	10.0	10.7	107	1	35	63-133	
Carbon tetrachloride	10.0	10.4	104	1	35	55-150	
Benzene	10.0	9.54	95	0	32	80-120	
1,2-Dichloroethane	10.0	8.50	85	4	32	68-132	
Trichloroethene	10.0	9.36	94	6	35	73-120	
1,2-Dichloropropane	10.0	8.90	89	2	34	76-124	
Bromodichloromethane	10.0	9.91	99	4	35	66-130	
cis-1,3-Dichloropropene	10.0	9.01	90	5	35	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	16.3	81	12	35	45-145	
Toluene	10.0	8.72	87	11	35	80-123	
trans-1,3-Dichloropropene	10.0	8.40	84	14	35	65-125	
1,1,2-Trichloroethane	10.0	8.83	88	12	35	77-127	
Tetrachloroethene	10.0	9.11	91	12	35	70-135	
2-Hexanone	20.0	14.3	72	21	35	25-132	
Dibromochloromethane	10.0	9.37	94	8	35	60-140	
1,2-Dibromoethane (EDB)	10.0	9.01	90	5	35	74-123	
Chlorobenzene	10.0	9.39	94	6	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.89	99	4	34	63-140	
Ethylbenzene	10.0	8.61	86	6	33	72-126	
Xylenes, Total	20.0	17.6	88	5	32	76-128	
Styrene	10.0	9.86	99	0	34	71-127	
Bromoform	10.0	9.21	92	10	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	9.94	99	4	35	62-125	
1,4-Dioxane	200	160 J	80	16	35	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040311.D

Lab ID: 180-42504-4 MS Client ID: HD-CW-18-0/1-0 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	7.33	73	50-139	
Vinyl chloride	10.0	1.0 U	7.71	77	53-138	
Bromomethane	10.0	1.0 U	11.0	110	33-150	
Chloroethane	10.0	1.0 U	10.4	104	36-142	
1,1-Dichloroethene	10.0	1.0 U	8.84	88	65-136	
Acetone	20.0	5.0 U	10.9	54	22-150	
Carbon disulfide	10.0	1.0 U	10.1	101	54-132	
Methylene Chloride	10.0	1.0 U	9.65	97	63-129	
trans-1,2-Dichloroethene	10.0	1.0 U	9.36	94	73-126	
Methyl tert-butyl ether	10.0	1.0 U	8.98	90	64-123	
1,1-Dichloroethane	10.0	1.0 U	10.2	102	73-126	
cis-1,2-Dichloroethene	10.0	4.3	12.8	86	70-120	
Bromochloromethane	10.0	1.0 U	8.82	88	70-127	
2-Butanone (MEK)	20.0	5.0 U	11.9	60	39-138	
Chloroform	10.0	1.0 U	9.50	95	72-127	
1,1,1-Trichloroethane	10.0	1.0 U	10.2	102	63-133	
Carbon tetrachloride	10.0	1.0 U	9.87	99	55-150	
Benzene	10.0	1.0 U	9.03	90	80-120	
1,2-Dichloroethane	10.0	1.0 U	8.16	82	68-132	
Trichloroethene	10.0	0.47 J	9.52	90	73-120	
1,2-Dichloropropane	10.0	1.0 U	8.85	89	76-124	
Bromodichloromethane	10.0	1.0 U	9.55	95	66-130	
cis-1,3-Dichloropropene	10.0	1.0 U	8.89	89	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	5.0 U	15.3	77	45-145	
Toluene	10.0	1.0 U	9.51	95	80-123	
trans-1,3-Dichloropropene	10.0	1.0 U	8.78	88	65-125	
1,1,2-Trichloroethane	10.0	1.0 U	8.65	86	77-127	
Tetrachloroethene	10.0	1.0 U	9.32	93	70-135	
2-Hexanone	20.0	5.0 U	15.0	75	25-132	
Dibromochloromethane	10.0	1.0 U	8.81	88	60-140	
1,2-Dibromoethane (EDB)	10.0	1.0 U	8.39	84	74-123	
Chlorobenzene	10.0	1.0 U	9.79	98	80-120	
1,1,1,2-Tetrachloroethane	10.0	1.0 U	8.84	88	63-140	
Ethylbenzene	10.0	1.0 U	9.36	94	72-126	
Xylenes, Total	20.0	3.0 U	17.8	89	76-128	
Styrene	10.0	1.0 U	10.1	101	71-127	
Bromoform	10.0	1.0 U	8.78	88	46-150	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	9.19	92	62-125	
1,4-Dioxane	200	200 U	156 J	78	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040612.D

Lab ID: 180-42504-8 MS Client ID: HD-MW-51D-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	7.88	79	50-139	
Vinyl chloride	10.0	1.0 U	7.60	76	53-138	
Bromomethane	10.0	1.0 U	8.10	81	33-150	
Chloroethane	10.0	1.0 U	7.09	71	36-142	
1,1-Dichloroethene	10.0	1.0 U	7.82	78	65-136	
Acetone	10.0	5.0 U	3.66 J	37	22-150	
Carbon disulfide	10.0	1.0 U	9.61	96	54-132	
Methylene Chloride	10.0	1.0 U	8.49	85	63-129	
trans-1,2-Dichloroethene	10.0	1.0 U	9.92	99	73-126	
Methyl tert-butyl ether	10.0	1.0 U	6.33	63	64-123	F1
1,1-Dichloroethane	10.0	1.0 U	10.0	100	73-126	
cis-1,2-Dichloroethene	10.0	2.9	13.1	103	70-120	
Bromochloromethane	10.0	1.0 U	7.00	70	70-127	
2-Butanone (MEK)	10.0	5.0 U	6.12	61	39-138	
Chloroform	10.0	1.0 U	9.10	91	72-127	
1,1,1-Trichloroethane	10.0	1.0 U	10.3	103	63-133	
Carbon tetrachloride	10.0	1.0 U	10.3	103	55-150	
Benzene	10.0	1.0 U	9.09	91	80-120	
1,2-Dichloroethane	10.0	1.0 U	6.08	61	68-132	F1
Trichloroethene	10.0	6.3	16.0	97	73-120	
1,2-Dichloropropane	10.0	1.0 U	7.41	74	76-124	F1
Bromodichloromethane	10.0	1.0 U	7.93	79	66-130	
cis-1,3-Dichloropropene	10.0	1.0 U	7.07	71	66-120	
4-Methyl-2-pentanone (MIBK)	10.0	5.0 U	9.70	97	45-145	
Toluene	10.0	1.0 U	10.9	109	80-123	
trans-1,3-Dichloropropene	10.0	1.0 U	7.10	71	65-125	
1,1,2-Trichloroethane	10.0	1.0 U	7.00	70	77-127	F1
Tetrachloroethene	10.0	0.65 J	11.2	105	70-135	
2-Hexanone	10.0	5.0 U	8.48	85	25-132	
Dibromochloromethane	10.0	1.0 U	7.18	72	60-140	
1,2-Dibromoethane (EDB)	10.0	1.0 U	6.08	61	74-123	F1
Chlorobenzene	10.0	1.0 U	9.83	98	80-120	
1,1,1,2-Tetrachloroethane	10.0	1.0 U	9.01	90	63-140	
Ethylbenzene	10.0	1.0 U	9.41	94	72-126	
Xylenes, Total	20.0	3.0 U	18.3	91	76-128	
Styrene	10.0	1.0 U	9.18	92	71-127	
Bromoform	10.0	1.0 U	6.27	63	46-150	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	6.61	66	62-125	
1,4-Dioxane	200	200 U	70.4 J	35	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040313.D

Lab ID: 180-42504-4 MSD Client ID: HD-CW-18-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	9.17	92	22	35	50-139	
Vinyl chloride	10.0	10.1	101	26	35	53-138	
Bromomethane	10.0	11.8	118	7	35	33-150	
Chloroethane	10.0	11.0	110	6	35	36-142	
1,1-Dichloroethene	10.0	10.3	103	15	35	65-136	
Acetone	20.0	14.8	74	30	35	22-150	
Carbon disulfide	10.0	10.4	104	4	35	54-132	
Methylene Chloride	10.0	10.3	103	7	35	63-129	
trans-1,2-Dichloroethene	10.0	9.90	99	6	35	73-126	
Methyl tert-butyl ether	10.0	9.67	97	7	35	64-123	
1,1-Dichloroethane	10.0	10.9	109	7	35	73-126	
cis-1,2-Dichloroethene	10.0	13.9	96	8	35	70-120	
Bromochloromethane	10.0	9.79	98	10	35	70-127	
2-Butanone (MEK)	20.0	13.1	66	10	35	39-138	
Chloroform	10.0	10.7	107	12	35	72-127	
1,1,1-Trichloroethane	10.0	11.0	110	8	35	63-133	
Carbon tetrachloride	10.0	11.1	111	12	35	55-150	
Benzene	10.0	9.42	94	4	32	80-120	
1,2-Dichloroethane	10.0	8.54	85	5	32	68-132	
Trichloroethene	10.0	10.1	96	6	35	73-120	
1,2-Dichloropropane	10.0	8.94	89	1	34	76-124	
Bromodichloromethane	10.0	9.92	99	4	35	66-130	
cis-1,3-Dichloropropene	10.0	9.31	93	5	35	66-120	
4-Methyl-2-pentanone (MIBK)	20.0	17.0	85	10	35	45-145	
Toluene	10.0	9.18	92	4	35	80-123	
trans-1,3-Dichloropropene	10.0	9.15	92	4	35	65-125	
1,1,2-Trichloroethane	10.0	9.41	94	8	35	77-127	
Tetrachloroethene	10.0	9.48	95	2	35	70-135	
2-Hexanone	20.0	16.8	84	11	35	25-132	
Dibromochloromethane	10.0	9.86	99	11	35	60-140	
1,2-Dibromoethane (EDB)	10.0	9.30	93	10	35	74-123	
Chlorobenzene	10.0	9.84	98	0	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	9.47	95	7	34	63-140	
Ethylbenzene	10.0	9.42	94	1	33	72-126	
Xylenes, Total	20.0	18.0	90	1	32	76-128	
Styrene	10.0	10.4	104	2	34	71-127	
Bromoform	10.0	9.57	96	9	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	10.5	105	13	35	62-125	
1,4-Dioxane	200	205	103	27	35	10-160	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7040614.D

Lab ID: 180-42504-8 MSD Client ID: HD-MW-51D-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chloromethane	10.0	7.73	77	2	35	50-139	
Vinyl chloride	10.0	7.68	77	1	35	53-138	
Bromomethane	10.0	11.1	111	31	35	33-150	
Chloroethane	10.0	9.53	95	29	35	36-142	
1,1-Dichloroethene	10.0	9.95	99	24	35	65-136	
Acetone	10.0	4.71 J	47	25	35	22-150	
Carbon disulfide	10.0	9.74	97	1	35	54-132	
Methylene Chloride	10.0	8.31	83	2	35	63-129	
trans-1,2-Dichloroethene	10.0	9.04	90	9	35	73-126	
Methyl tert-butyl ether	10.0	6.31	63	0	35	64-123	F1
1,1-Dichloroethane	10.0	9.57	96	4	35	73-126	
cis-1,2-Dichloroethene	10.0	12.7	99	3	35	70-120	
Bromochloromethane	10.0	6.87	69	2	35	70-127	F1
2-Butanone (MEK)	10.0	6.54	65	7	35	39-138	
Chloroform	10.0	8.96	90	2	35	72-127	
1,1,1-Trichloroethane	10.0	9.79	98	5	35	63-133	
Carbon tetrachloride	10.0	9.80	98	5	35	55-150	
Benzene	10.0	8.75	87	4	32	80-120	
1,2-Dichloroethane	10.0	6.06	61	0	32	68-132	F1
Trichloroethene	10.0	15.7	94	2	35	73-120	
1,2-Dichloropropane	10.0	7.51	75	1	34	76-124	F1
Bromodichloromethane	10.0	7.39	74	7	35	66-130	
cis-1,3-Dichloropropene	10.0	7.12	71	1	35	66-120	
4-Methyl-2-pentanone (MIBK)	10.0	9.86	99	2	35	45-145	
Toluene	10.0	10.2	102	7	35	80-123	
trans-1,3-Dichloropropene	10.0	7.19	72	1	35	65-125	
1,1,2-Trichloroethane	10.0	6.92	69	1	35	77-127	F1
Tetrachloroethene	10.0	10.3	97	8	35	70-135	
2-Hexanone	10.0	9.10	91	7	35	25-132	
Dibromochloromethane	10.0	6.85	69	5	35	60-140	
1,2-Dibromoethane (EDB)	10.0	6.04	60	1	35	74-123	F1
Chlorobenzene	10.0	9.53	95	3	29	80-120	
1,1,1,2-Tetrachloroethane	10.0	8.84	88	2	34	63-140	
Ethylbenzene	10.0	9.19	92	2	33	72-126	
Xylenes, Total	20.0	18.1	90	1	32	76-128	
Styrene	10.0	8.94	89	3	34	71-127	
Bromoform	10.0	6.15	61	2	35	46-150	
1,1,2,2-Tetrachloroethane	10.0	6.93	69	5	35	62-125	
1,4-Dioxane	200	141 J	70	66	35	10-160	F2

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: 7040306.D Lab Sample ID: MB 180-137438/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 04/03/2015 11:46

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-QC7-0/1-2	180-42504-1	7040307.D	04/03/2015 12:13
HD-CW-18-0/1-0	180-42504-4	7040308.D	04/03/2015 12:54
HD-CW-18-0/1-0 MS	180-42504-4 MS	7040311.D	04/03/2015 14:16
	LCS 180-137438/12	7040312.D	04/03/2015 14:44
HD-CW-18-0/1-0 MSD	180-42504-4 MSD	7040313.D	04/03/2015 15:11
HD-MW-97-0/1-0	180-42504-3	7040322.D	04/03/2015 19:14
HD-MW-132-0/1-0 DL	180-42504-6 DL	7040324.D	04/03/2015 20:08
HD-MW-75D-0/1-0 DL	180-42504-7 DL	7040325.D	04/03/2015 20:35

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: 7040406.D Lab Sample ID: MB 180-137512/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 04/04/2015 15:41

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 180-137512/8	7040408.D	04/04/2015 16:44
	LCSD 180-137512/9	7040409.D	04/04/2015 17:11
HD-MW-127-0/1-0	180-42504-2	7040417.D	04/04/2015 20:47

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: 7040606.D Lab Sample ID: MB 180-137564/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 04/06/2015 11:09

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-MW-50S-0/1-0	180-42504-9	7040611.D	04/06/2015 13:48
HD-MW-51D-0/1-0 MS	180-42504-8 MS	7040612.D	04/06/2015 14:18
	LCS 180-137564/13	7040613.D	04/06/2015 14:45
HD-MW-51D-0/1-0 MSD	180-42504-8 MSD	7040614.D	04/06/2015 15:12
HD-MW-51D-0/1-0	180-42504-8	7040616.D	04/06/2015 16:08
HD-MW-132-0/1-0	180-42504-6	7040619.D	04/06/2015 17:29
HD-MW-114-0/1-0 DL	180-42504-5 DL	7040621.D	04/06/2015 18:24
HD-MW-114-0/1-0	180-42504-5	7040622.D	04/06/2015 18:51

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: 7040807.D Lab Sample ID: MB 180-137846/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 04/08/2015 11:22

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-MW-75D-0/1-0	180-42504-7	7040808.D	04/08/2015 11:49
	LCS 180-137846/10	7040810.D	04/08/2015 12:58
	LCSD 180-137846/11	7040811.D	04/08/2015 13:25

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: 7033001.D BFB Injection Date: 03/30/2015

Instrument ID: CHHP7 BFB Injection Time: 09:32

Analysis Batch No.: 136928

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.4	
75	30.0 - 60.0 % of mass 95	51.5	
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	0.2	(0.3)1
174	50.0 - 120.00 % of mass 95	80.2	
175	5.0 - 9.0 % of mass 174	5.6	(6.9)1
176	95.0 - 101.0 % of mass 174	77.4	(96.5)1
177	5.0 - 9.0 % of mass 176	4.8	(6.2)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 180-136928/3	7033003.D	03/30/2015	10:57
	IC 180-136928/4	7033004.D	03/30/2015	11:28
	ICIS 180-136928/5	7033005.D	03/30/2015	11:55
	IC 180-136928/6	7033006.D	03/30/2015	12:23
	IC 180-136928/7	7033007.D	03/30/2015	13:05
	IC 180-136928/8	7033008.D	03/30/2015	13:32
	IC 180-136928/9	7033009.D	03/30/2015	14:05
	IC 180-136928/10	7033010.D	03/30/2015	14:36

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: 7040301.D BFB Injection Date: 04/03/2015

Instrument ID: CHHP7 BFB Injection Time: 09:28

Analysis Batch No.: 137438

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.1	
75	30.0 - 60.0 % of mass 95	50.9	
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	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	83.7	
175	5.0 - 9.0 % of mass 174	6.5	(7.8)1
176	95.0 - 101.0 % of mass 174	80.6	(96.2)1
177	5.0 - 9.0 % of mass 176	5.9	(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 180-137438/3	7040302.D	04/03/2015	10:07
	MB 180-137438/6	7040306.D	04/03/2015	11:46
HD-QC7-0/1-2	180-42504-1	7040307.D	04/03/2015	12:13
HD-CW-18-0/1-0	180-42504-4	7040308.D	04/03/2015	12:54
HD-CW-18-0/1-0 MS	180-42504-4 MS	7040311.D	04/03/2015	14:16
	LCS 180-137438/12	7040312.D	04/03/2015	14:44
HD-CW-18-0/1-0 MSD	180-42504-4 MSD	7040313.D	04/03/2015	15:11
HD-MW-97-0/1-0	180-42504-3	7040322.D	04/03/2015	19:14
HD-MW-132-0/1-0 DL	180-42504-6 DL	7040324.D	04/03/2015	20:08
HD-MW-75D-0/1-0 DL	180-42504-7 DL	7040325.D	04/03/2015	20:35

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: 7040401.D BFB Injection Date: 04/04/2015

Instrument ID: CHHP7 BFB Injection Time: 13:00

Analysis Batch No.: 137512

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.6	
75	30.0 - 60.0 % of mass 95	53.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.6	(0.8)1
174	50.0 - 120.00 % of mass 95	80.4	
175	5.0 - 9.0 % of mass 174	5.9	(7.4)1
176	95.0 - 101.0 % of mass 174	80.8	(100.4)1
177	5.0 - 9.0 % of mass 176	5.4	(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
	CCVIS 180-137512/3	7040403.D	04/04/2015	14:19
	MB 180-137512/6	7040406.D	04/04/2015	15:41
	LCS 180-137512/8	7040408.D	04/04/2015	16:44
	LCSD 180-137512/9	7040409.D	04/04/2015	17:11
HD-MW-127-0/1-0	180-42504-2	7040417.D	04/04/2015	20:47

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: 7040601.D BFB Injection Date: 04/06/2015

Instrument ID: CHHP7 BFB Injection Time: 08:19

Analysis Batch No.: 137564

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.3	
75	30.0 - 60.0 % of mass 95	59.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.5	(0.6)1
174	50.0 - 120.00 % of mass 95	89.5	
175	5.0 - 9.0 % of mass 174	6.5	(7.3)1
176	95.0 - 101.0 % of mass 174	87.0	(97.2)1
177	5.0 - 9.0 % of mass 176	6.4	(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 180-137564/3	7040603.D	04/06/2015	09:40
	MB 180-137564/6	7040606.D	04/06/2015	11:09
HD-MW-50S-0/1-0	180-42504-9	7040611.D	04/06/2015	13:48
HD-MW-51D-0/1-0 MS	180-42504-8 MS	7040612.D	04/06/2015	14:18
	LCS 180-137564/13	7040613.D	04/06/2015	14:45
HD-MW-51D-0/1-0 MSD	180-42504-8 MSD	7040614.D	04/06/2015	15:12
HD-MW-51D-0/1-0	180-42504-8	7040616.D	04/06/2015	16:08
HD-MW-132-0/1-0	180-42504-6	7040619.D	04/06/2015	17:29
HD-MW-114-0/1-0 DL	180-42504-5 DL	7040621.D	04/06/2015	18:24
HD-MW-114-0/1-0	180-42504-5	7040622.D	04/06/2015	18:51

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: 7040801.D BFB Injection Date: 04/08/2015

Instrument ID: CHHP7 BFB Injection Time: 08:17

Analysis Batch No.: 137846

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.8	
75	30.0 - 60.0 % of mass 95	55.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.1	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	86.6	
175	5.0 - 9.0 % of mass 174	7.5	(8.7)1
176	95.0 - 101.0 % of mass 174	82.5	(95.3)1
177	5.0 - 9.0 % of mass 176	6.1	(7.4)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 180-137846/3	7040803.D	04/08/2015	09:26
	MB 180-137846/7	7040807.D	04/08/2015	11:22
HD-MW-75D-0/1-0	180-42504-7	7040808.D	04/08/2015	11:49
	LCS 180-137846/10	7040810.D	04/08/2015	12:58
	LCSD 180-137846/11	7040811.D	04/08/2015	13:25

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Sample No.: CCVIS 180-137438/3 Date Analyzed: 04/03/2015 10:07

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7040302.D Heated Purge: (Y/N) N

Calibration ID: 22965

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		208032	4.79	855803	7.40	254591	10.47
UPPER LIMIT		416064	5.29	1711606	7.90	509182	10.97
LOWER LIMIT		104016	4.29	427902	6.90	127296	9.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137438/6		215384	4.60	689625	7.42	206910	10.47
180-42504-1	HD-QC7-0/1-2	231693	4.60	766562	7.42	216145	10.48
180-42504-4	HD-CW-18-0/1-0	178204	4.61	861164	7.42	251992	10.47
180-42504-4 MS	HD-CW-18-0/1-0 MS	207645	4.83	893547	7.40	267315	10.47
LCS 180-137438/12		201661	4.74	864973	7.41	278213	10.47
180-42504-4 MSD	HD-CW-18-0/1-0 MSD	226038	4.80	902575	7.40	277421	10.47
180-42504-3	HD-MW-97-0/1-0	132183	4.59	651709	7.42	190975	10.47
180-42504-6 DL	HD-MW-132-0/1-0 DL	165659	4.59	687599	7.42	206278	10.47
180-42504-7 DL	HD-MW-75D-0/1-0 DL	164846	4.59	686306	7.42	204689	10.47

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 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Sample No.: CCVIS 180-137438/3 Date Analyzed: 04/03/2015 10:07

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7040302.D Heated Purge: (Y/N) N

Calibration ID: 22965

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		334075	12.79				
UPPER LIMIT		668150	13.29				
LOWER LIMIT		167038	12.29				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137438/6		251065	12.79				
180-42504-1	HD-QC7-0/1-2	283272	12.79				
180-42504-4	HD-CW-18-0/1-0	322521	12.79				
180-42504-4 MS	HD-CW-18-0/1-0 MS	361283	12.79				
LCS 180-137438/12		364439	12.79				
180-42504-4 MSD	HD-CW-18-0/1-0 MSD	393015	12.79				
180-42504-3	HD-MW-97-0/1-0	263808	12.79				
180-42504-6 DL	HD-MW-132-0/1-0 DL	265350	12.79				
180-42504-7 DL	HD-MW-75D-0/1-0 DL	268462	12.79				

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 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Sample No.: CCVIS 180-137512/3 Date Analyzed: 04/04/2015 14:19

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7040403.D Heated Purge: (Y/N) N

Calibration ID: 22965

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		185266	4.77	803043	7.40	248246	10.47
UPPER LIMIT		370532	5.27	1606086	7.90	496492	10.97
LOWER LIMIT		92633	4.27	401522	6.90	124123	9.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137512/6		175848	4.61	768306	7.42	234443	10.47
LCS 180-137512/8		256027	4.74	774174	7.41	231825	10.47
LCSD 180-137512/9		246043	4.74	812560	7.40	241893	10.47
180-42504-2	HD-MW-127-0/1-0	177002	4.59	597926	7.42	171795	10.47

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 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Sample No.: CCVIS 180-137512/3 Date Analyzed: 04/04/2015 14:19

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7040403.D Heated Purge: (Y/N) N

Calibration ID: 22965

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		345664	12.79				
UPPER LIMIT		691328	13.29				
LOWER LIMIT		172832	12.29				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137512/6		336696	12.79				
LCS 180-137512/8		311866	12.78				
LCSD 180-137512/9		306779	12.79				
180-42504-2	HD-MW-127-0/1-0	235559	12.79				

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 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Sample No.: CCVIS 180-137564/3 Date Analyzed: 04/06/2015 09:40

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7040603.D Heated Purge: (Y/N) N

Calibration ID: 22965

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		211903	4.93	817201	7.40	260238	10.47
UPPER LIMIT		423806	5.43	1634402	7.90	520476	10.97
LOWER LIMIT		105952	4.43	408601	6.90	130119	9.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137564/6		213900	4.60	908506	7.42	267699	10.47
180-42504-9	HD-MW-50S-0/1-0	122328	4.62	785307	7.42	217729	10.47
180-42504-8 MS	HD-MW-51D-0/1-0 MS	135821	4.68	896455	7.41	219095	10.47
LCS 180-137564/13		133113	4.68	879353	7.40	253552	10.47
180-42504-8 MSD	HD-MW-51D-0/1-0 MSD	152997	4.70	933571	7.41	250060	10.47
180-42504-8	HD-MW-51D-0/1-0	186800	4.61	875722	7.41	241165	10.47
180-42504-6	HD-MW-132-0/1-0	107437	4.59	548969	7.42	153089	10.48
180-42504-5 DL	HD-MW-114-0/1-0 DL	120850	4.59	547436	7.43	154872	10.47
180-42504-5	HD-MW-114-0/1-0	116460	4.60	565300	7.43	162734	10.47

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 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Sample No.: CCVIS 180-137564/3 Date Analyzed: 04/06/2015 09:40

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7040603.D Heated Purge: (Y/N) N

Calibration ID: 22965

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		344252	12.79				
UPPER LIMIT		688504	13.29				
LOWER LIMIT		172126	12.29				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137564/6		372712	12.79				
180-42504-9	HD-MW-50S-0/1-0	327827	12.79				
180-42504-8 MS	HD-MW-51D-0/1-0 MS	268140	12.79				
LCS 180-137564/13		344449	12.79				
180-42504-8 MSD	HD-MW-51D-0/1-0 MSD	310976	12.79				
180-42504-8	HD-MW-51D-0/1-0	335014	12.79				
180-42504-6	HD-MW-132-0/1-0	209580	12.79				
180-42504-5 DL	HD-MW-114-0/1-0 DL	214533	12.79				
180-42504-5	HD-MW-114-0/1-0	219760	12.79				

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 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Sample No.: CCVIS 180-137846/3 Date Analyzed: 04/08/2015 09:26

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7040803.D Heated Purge: (Y/N) N

Calibration ID: 22965

		TBA		FB		CBZ	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		235061	4.86	1014367	7.40	297396	10.47
UPPER LIMIT		470122	5.36	2028734	7.90	594792	10.97
LOWER LIMIT		117531	4.36	507184	6.90	148698	9.97
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137846/7		235727	4.63	934970	7.43	260563	10.47
180-42504-7	HD-MW-75D-0/1-0	228052	4.60	865381	7.42	246333	10.48
LCS 180-137846/10		221512	4.77	881245	7.40	260359	10.47
LCSD 180-137846/11		193529	4.80	837886	7.40	251051	10.47

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 8260C

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Sample No.: CCVIS 180-137846/3 Date Analyzed: 04/08/2015 09:26

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7040803.D Heated Purge: (Y/N) N

Calibration ID: 22965

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		385394	12.79				
UPPER LIMIT		770788	13.29				
LOWER LIMIT		192697	12.29				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 180-137846/7		369385	12.79				
180-42504-7	HD-MW-75D-0/1-0	349532	12.79				
LCS 180-137846/10		362140	12.79				
LCSD 180-137846/11		348567	12.79				

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 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-QC7-0/1-2 | Lab Sample ID: 180-42504-1

Matrix: Water | Lab File ID: 7040307.D

Analysis Method: 8260C | Date Collected: 03/27/2015 12:00

Sample wt/vol: 20(mL) | Date Analyzed: 04/03/2015 12:13

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.: 137438 | 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.: 180-42504-1

SDG No.:

Client Sample ID: HD-QC7-0/1-2 Lab Sample ID: 180-42504-1

Matrix: Water Lab File ID: 7040307.D

Analysis Method: 8260C Date Collected: 03/27/2015 12:00

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 12:13

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.: 137438 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)	90		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	94		70-118
1868-53-7	Dibromofluoromethane (Surr)	107		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040307.D
Lims ID: 180-42504-A-1 Lab Sample ID: 180-42504-1
Client ID: HD-QC7-0/1-2
Sample Type: Client
Inject. Date: 03-Apr-2015 12:13:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 180-0006312-007
Misc. Info.: 180-0006312-007
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2015 17:04:08 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: journetp Date: 03-Apr-2015 14:29:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.598	4.786	-0.188	95	231693	4000.0	
* 2 Fluorobenzene (IS)	96	7.421	7.402	0.019	99	766562	200.0	
* 3 Chlorobenzene-d5	119	10.475	10.468	0.007	85	216145	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.786	12.786	0.000	95	283272	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.685	6.678	0.007	90	262157	214.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.056	7.043	0.013	96	209486	179.7	
$ 7 Toluene-d8 (Surr)	98	9.045	9.038	0.007	92	694449	216.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.637	11.636	0.001	87	269758	187.2	
12 Chloromethane	50		2.000				ND	
13 Vinyl chloride	62		2.219				ND	
15 Bromomethane	94		2.511				ND	
16 Chloroethane	64		2.626				ND	
22 1,1-Dichloroethene	96		3.527				ND	
24 Acetone	43		3.801				ND	
26 Carbon disulfide	76		3.825				ND	
31 Methylene Chloride	84		4.354				ND	
34 trans-1,2-Dichloroethene	96		4.756				ND	
33 Acrylonitrile	53		4.816				ND	
35 Methyl tert-butyl ether	73		4.865				ND	
37 1,1-Dichloroethane	63		5.364				ND	
45 cis-1,2-Dichloroethene	96		6.112				ND	
46 2-Butanone (MEK)	43		6.179				ND	
49 Chlorobromomethane	128		6.380				ND	
52 Chloroform	83		6.502				ND	
53 1,1,1-Trichloroethane	97		6.678				ND	
56 Carbon tetrachloride	117		6.861				ND	
58 Benzene	78		7.098				ND	
59 1,2-Dichloroethane	62		7.122				ND	
64 Trichloroethene	130		7.797				ND	
67 1,2-Dichloropropane	63		8.035				ND	
70 1,4-Dioxane	88		8.187				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.321				ND	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.935				ND	
76 Toluene	91		9.105				ND	
77 trans-1,3-Dichloropropene	75		9.330				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164		9.647				ND	
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.018				ND	
87 Chlorobenzene	112		10.498				ND	
89 1,1,1,2-Tetrachloroethane	131		10.578				ND	
90 Ethylbenzene	106		10.608				ND	
91 m-Xylene & p-Xylene	106		10.724				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.131				ND	
94 Bromoform	173		11.314				ND	
99 1,1,2,2-Tetrachloroethane	83		11.776				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

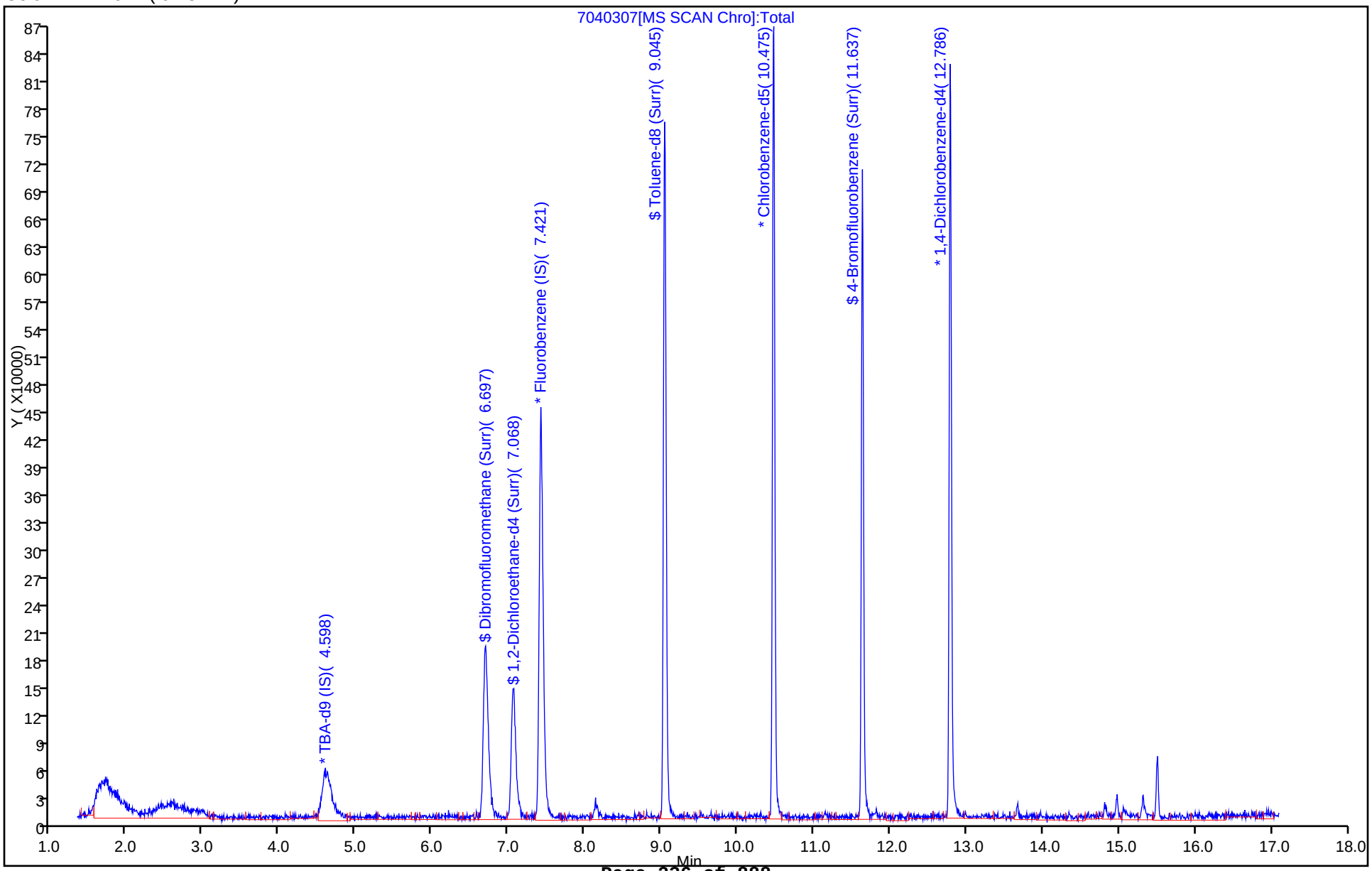
Report Date: 03-Apr-2015 17:04:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040307.D

Injection Date:	03-Apr-2015 12:13:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-A-1	Lab Sample ID:	180-42504-1	Worklist Smp#:	7
Client ID:	HD-QC7-0/1-2				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP7	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.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-127-0/1-0 Lab Sample ID: 180-42504-2

Matrix: Water Lab File ID: 7040417.D

Analysis Method: 8260C Date Collected: 03/27/2015 10:45

Sample wt/vol: 20(mL) Date Analyzed: 04/04/2015 20:47

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.: 137512 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	10	U	10	1.2
156-59-2	cis-1,2-Dichloroethene	220		10	2.4
74-97-5	Bromochloromethane	10	U	10	1.8
78-93-3	2-Butanone (MEK)	50	U	50	5.5
67-66-3	Chloroform	10	U	10	1.7
71-55-6	1,1,1-Trichloroethane	5.2	J	10	2.9
56-23-5	Carbon tetrachloride	10	U	10	1.4
71-43-2	Benzene	10	U	10	1.1
107-06-2	1,2-Dichloroethane	10	U	10	2.1
79-01-6	Trichloroethene	98		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	10	U	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.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-127-0/1-0 Lab Sample ID: 180-42504-2

Matrix: Water Lab File ID: 7040417.D

Analysis Method: 8260C Date Collected: 03/27/2015 10:45

Sample wt/vol: 20(mL) Date Analyzed: 04/04/2015 20:47

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.: 137512 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)	96		64-135
2037-26-5	Toluene-d8 (Surr)	116		71-118
460-00-4	4-Bromofluorobenzene (Surr)	109		70-118
1868-53-7	Dibromofluoromethane (Surr)	113		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040417.D
Lims ID: 180-42504-D-2 Lab Sample ID: 180-42504-2
Client ID: HD-MW-127-0/1-0
Sample Type: Client
Inject. Date: 04-Apr-2015 20:47:30 ALS Bottle#: 12 Worklist Smp#: 17
Purge Vol: 20.000 mL Dil. Factor: 10.0000
Sample Info: 180-42504-D-2
Misc. Info.: 180-0006327-017
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 09:10:39 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 06-Apr-2015 08:57:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.593	4.765	-0.172	89	177002	4000.0	
* 2 Fluorobenzene (IS)	96	7.422	7.399	0.023	99	597926	200.0	
* 3 Chlorobenzene-d5	119	10.469	10.471	-0.002	84	171795	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.793	12.789	0.004	96	235559	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.685	6.675	0.010	90	215888	226.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.044	7.040	0.004	94	173895	191.2	
$ 7 Toluene-d8 (Surr)	98	9.040	9.036	0.004	92	589986	231.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.631	11.633	-0.002	88	247339	218.3	
12 Chloromethane	50		2.028				ND	
13 Vinyl chloride	62		2.192				ND	
15 Bromomethane	94		2.502				ND	
16 Chloroethane	64		2.605				ND	
22 1,1-Dichloroethene	96	3.607	3.518	0.089	1	6142	7.65	M
26 Carbon disulfide	76		3.828				ND	
24 Acetone	43		3.834				ND	
31 Methylene Chloride	84		4.364				ND	
34 trans-1,2-Dichloroethene	96		4.753				ND	
33 Acrylonitrile	53		4.802				ND	
35 Methyl tert-butyl ether	73		4.856				ND	
37 1,1-Dichloroethane	63		5.355				ND	
45 cis-1,2-Dichloroethene	96	6.126	6.103	0.023	78	427737	432.7	
46 2-Butanone (MEK)	43		6.189				ND	
49 Chlorobromomethane	128		6.377				ND	
52 Chloroform	83		6.499				ND	
53 1,1,1-Trichloroethane	97	6.691	6.681	0.010	38	15446	10.3	M
56 Carbon tetrachloride	117		6.858				ND	
58 Benzene	78		7.089				ND	
59 1,2-Dichloroethane	62		7.132				ND	
64 Trichloroethene	130	7.811	7.795	0.016	92	231303	196.1	
67 1,2-Dichloropropane	63		8.032				ND	
70 1,4-Dioxane	88		8.184				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.312				ND	
74 cis-1,3-Dichloropropene	75		8.774				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.938				ND	
76 Toluene	91		9.103				ND	
77 trans-1,3-Dichloropropene	75		9.322				ND	
79 1,1,2-Trichloroethane	97		9.504				ND	
80 Tetrachloroethene	164		9.644				ND	
82 2-Hexanone	43		9.760				ND	
84 Chlorodibromomethane	129		9.900				ND	
85 Ethylene Dibromide	107		10.009				ND	
87 Chlorobenzene	112		10.496				ND	
89 1,1,1,2-Tetrachloroethane	131		10.575				ND	
90 Ethylbenzene	106		10.605				ND	
91 m-Xylene & p-Xylene	106		10.721				ND	
92 o-Xylene	106		11.116				ND	
93 Styrene	104		11.128				ND	
94 Bromoform	173		11.317				ND	
99 1,1,2,2-Tetrachloroethane	83		11.773				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

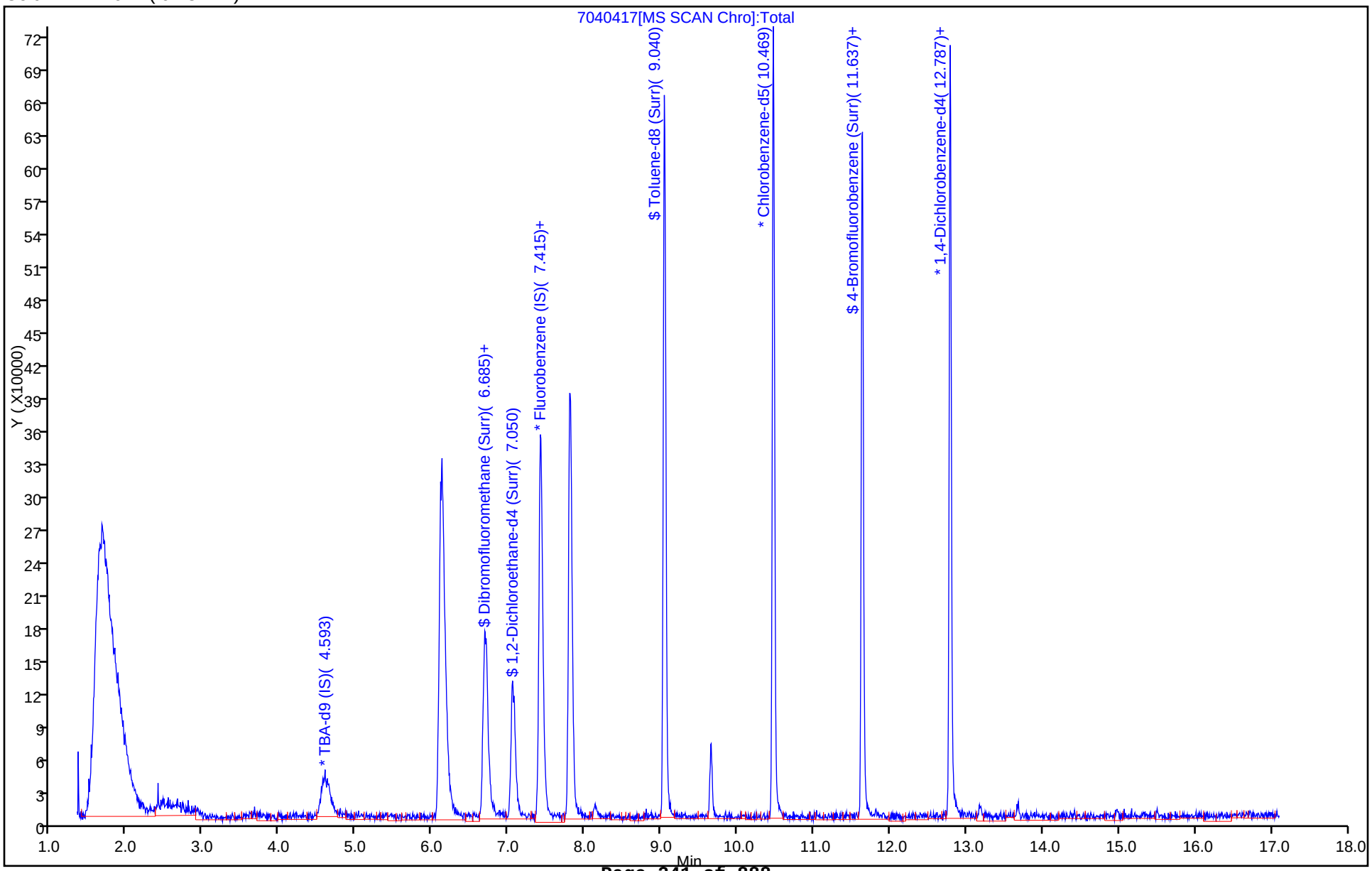
Report Date: 06-Apr-2015 09:10:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040417.D

Injection Date:	04-Apr-2015 20:47:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-D-2	Lab Sample ID:	180-42504-2	Worklist Smp#:	17
Client ID:	HD-MW-127-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



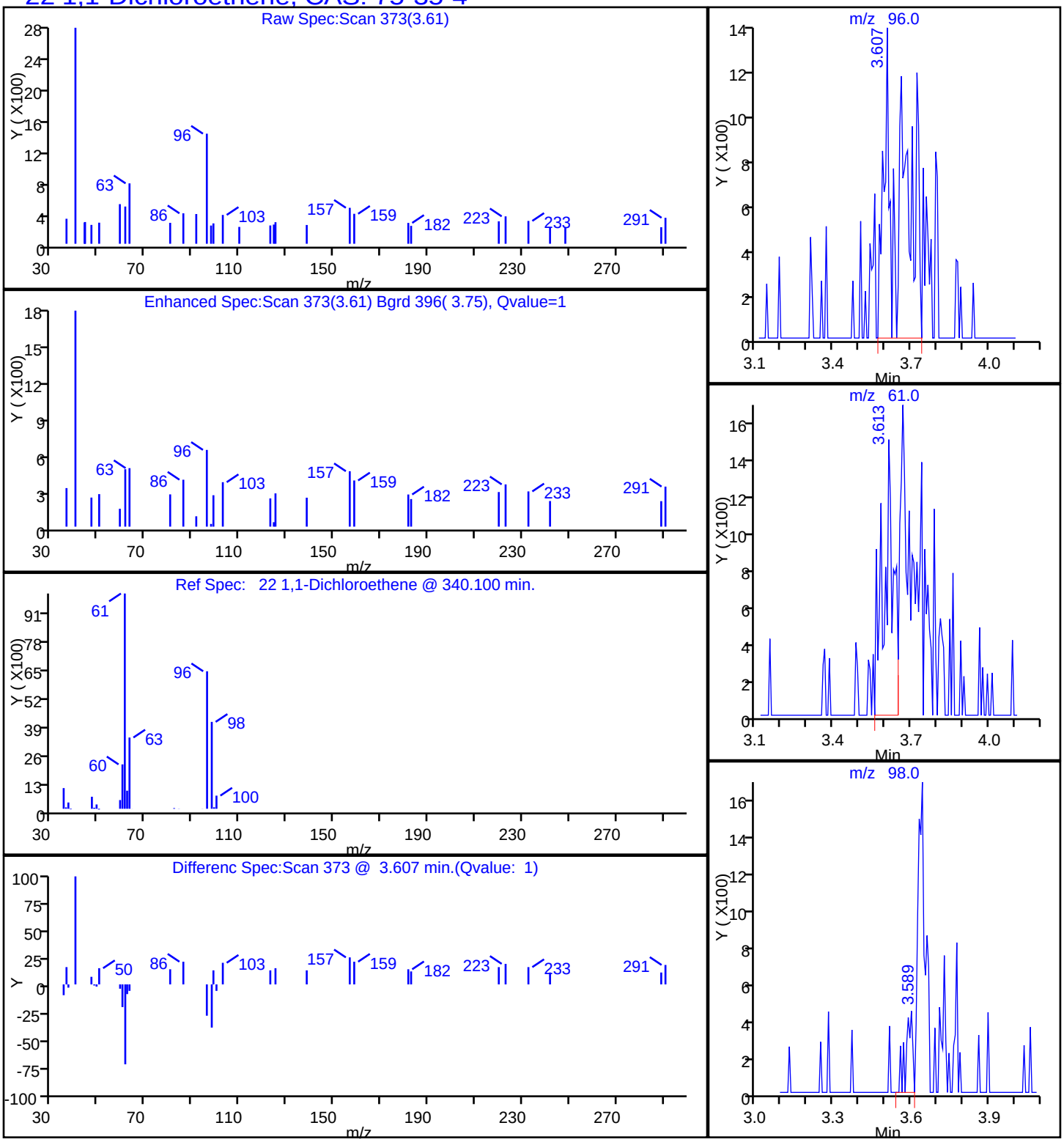
Report Date: 06-Apr-2015 09:10:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040417.D

Injection Date:	04-Apr-2015 20:47:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-2	Lab Sample ID:	180-42504-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

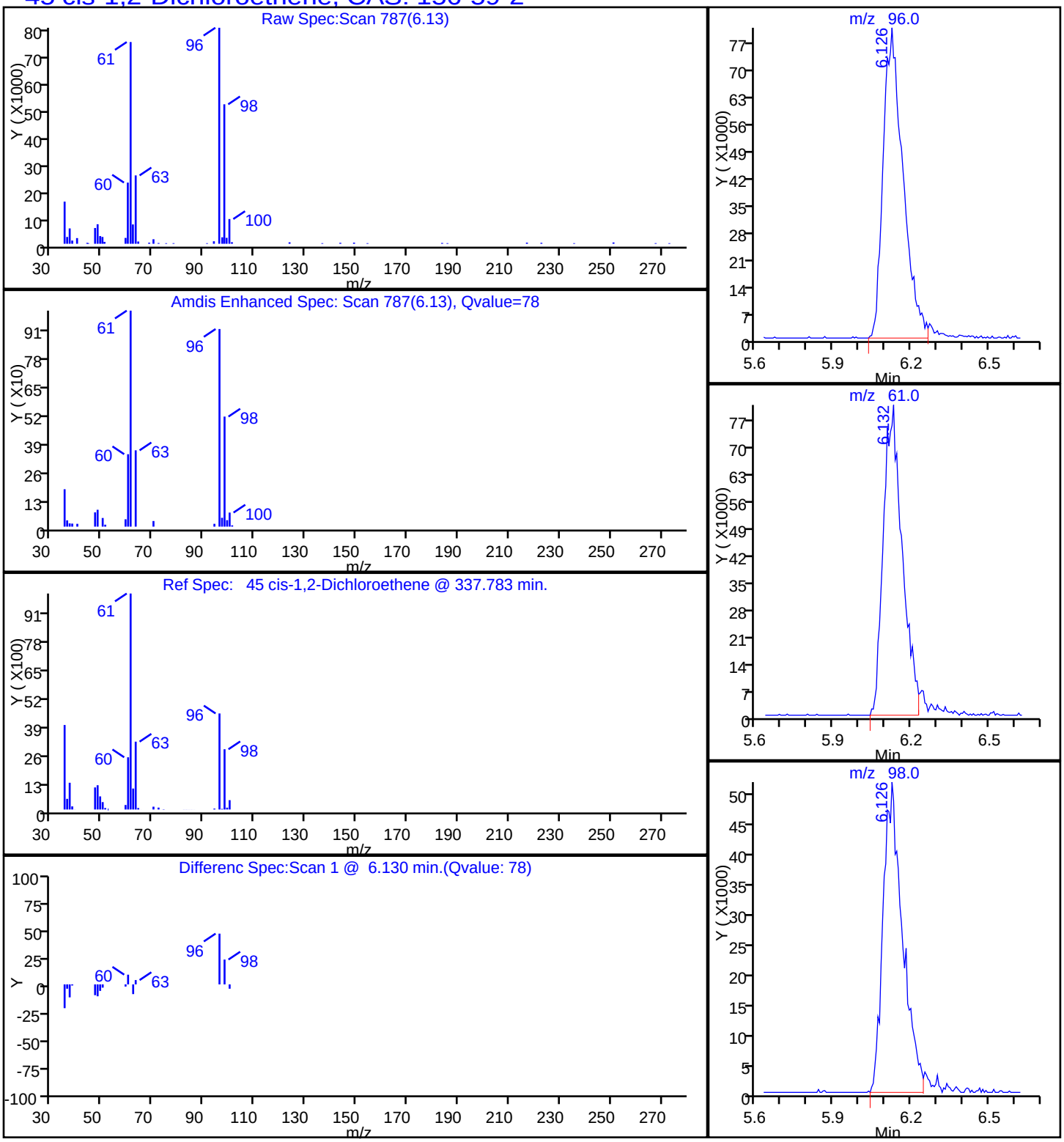


Report Date: 06-Apr-2015 09:10:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040417.D				
Injection Date:	04-Apr-2015 20:47:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-2	Lab Sample ID:	180-42504-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



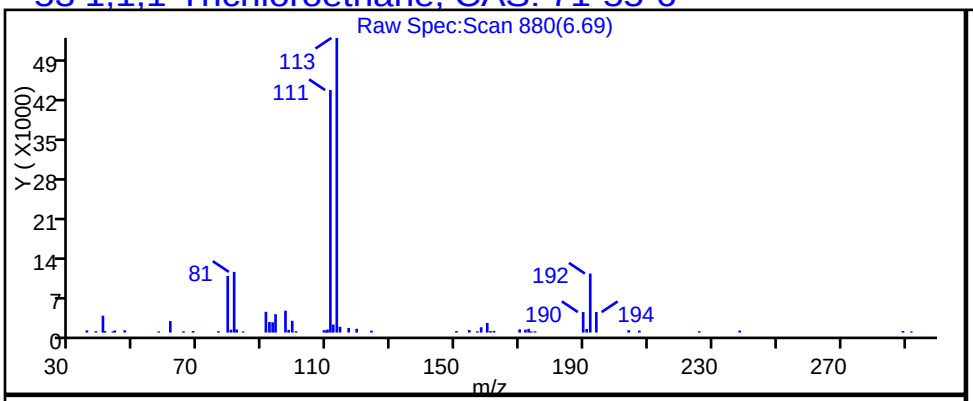
Report Date: 06-Apr-2015 09:10:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

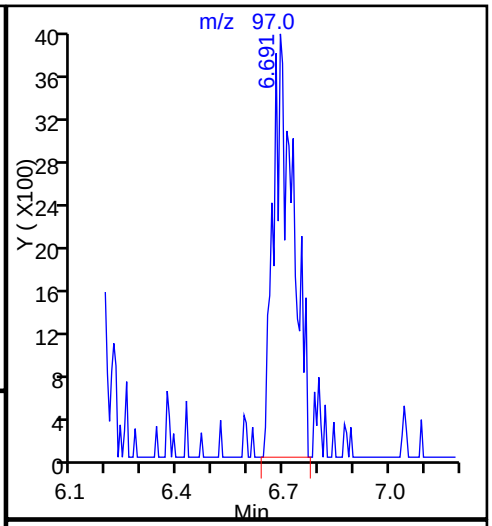
TestAmerica Pittsburgh

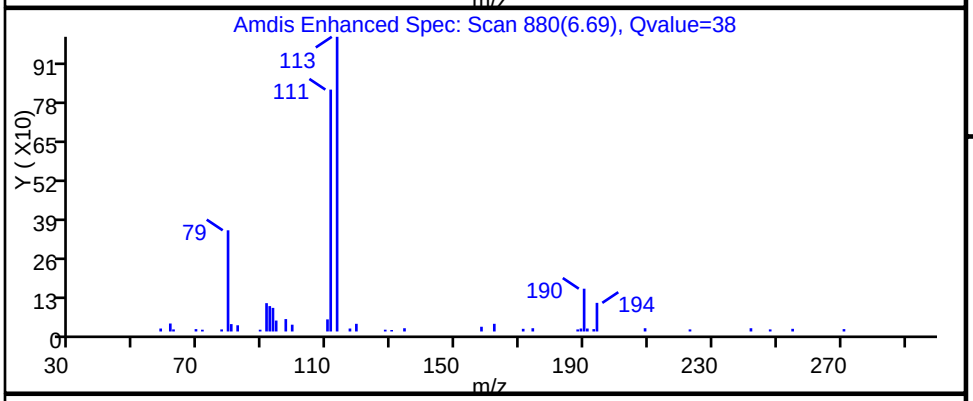
Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040417.D

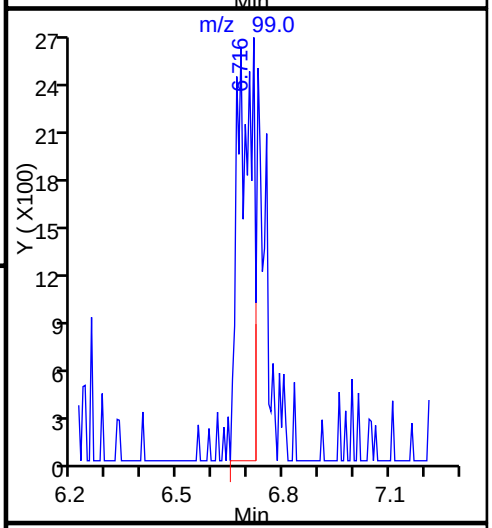
Injection Date:	04-Apr-2015 20:47:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-2	Lab Sample ID:	180-42504-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

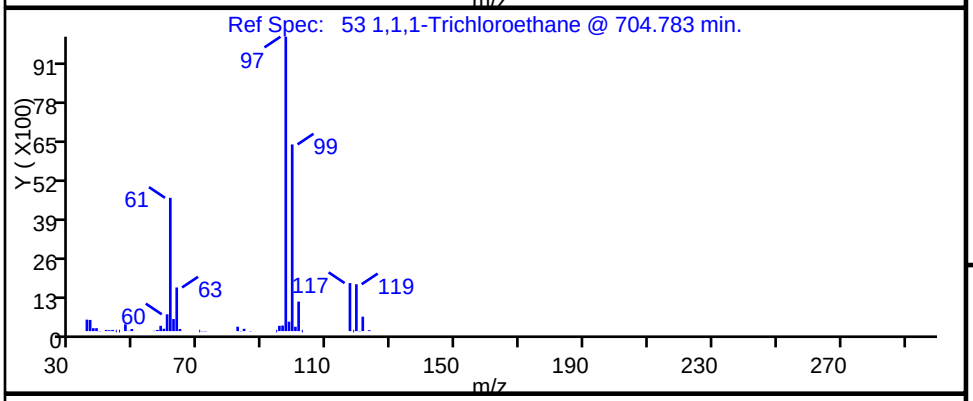
53 1,1,1-Trichloroethane, CAS: 71-55-6

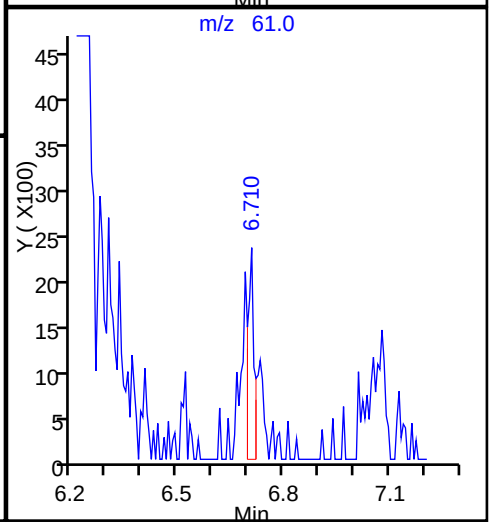


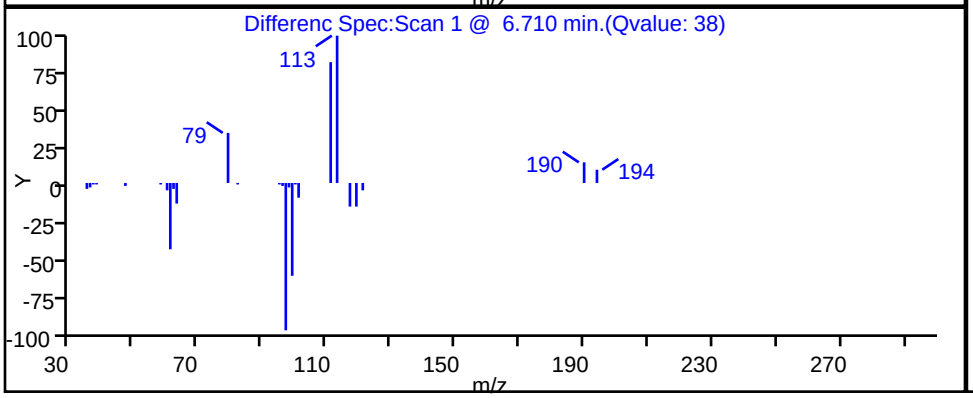










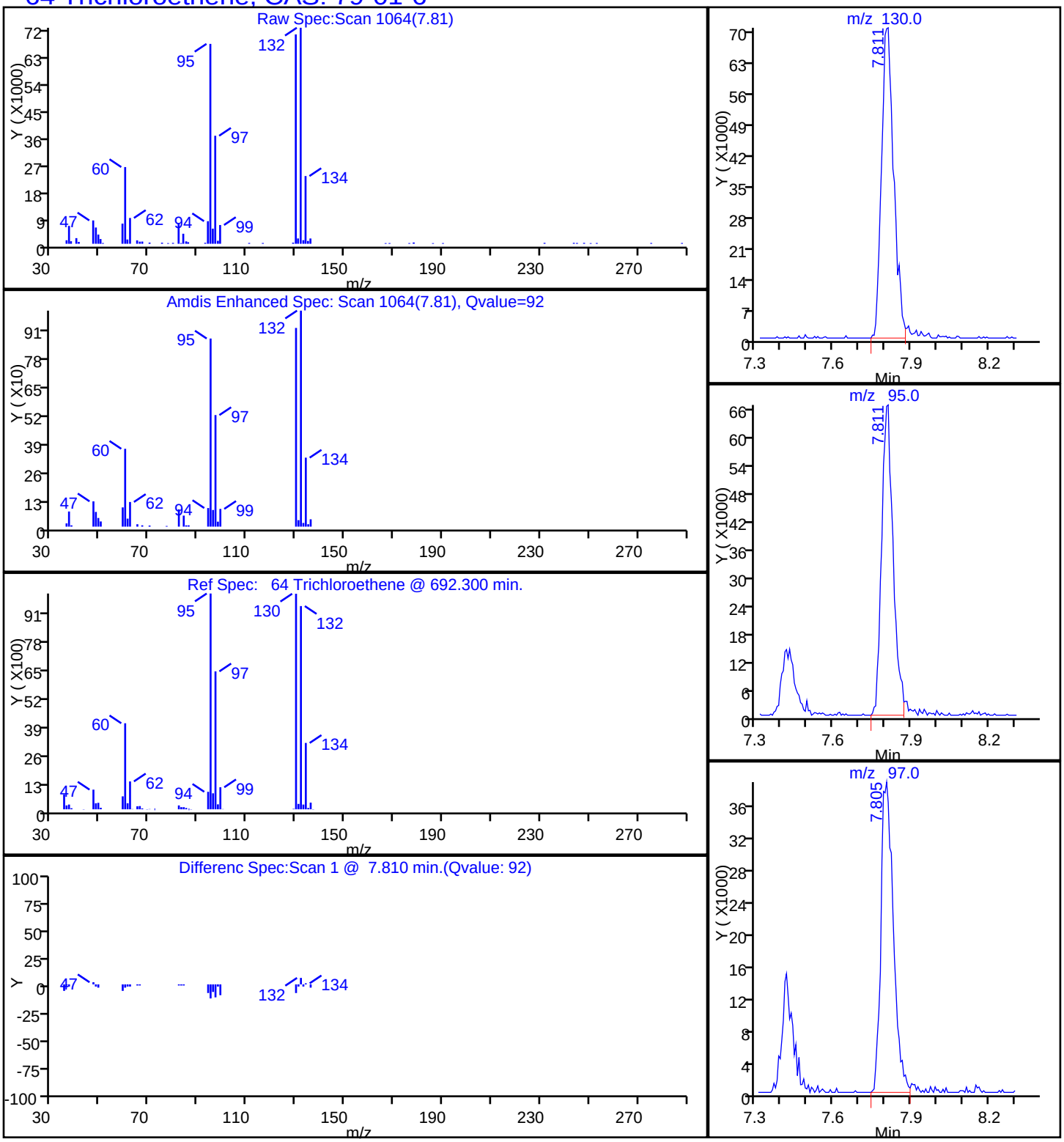


Report Date: 06-Apr-2015 09:10:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040417.D				
Injection Date:	04-Apr-2015 20:47:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-2	Lab Sample ID:	180-42504-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

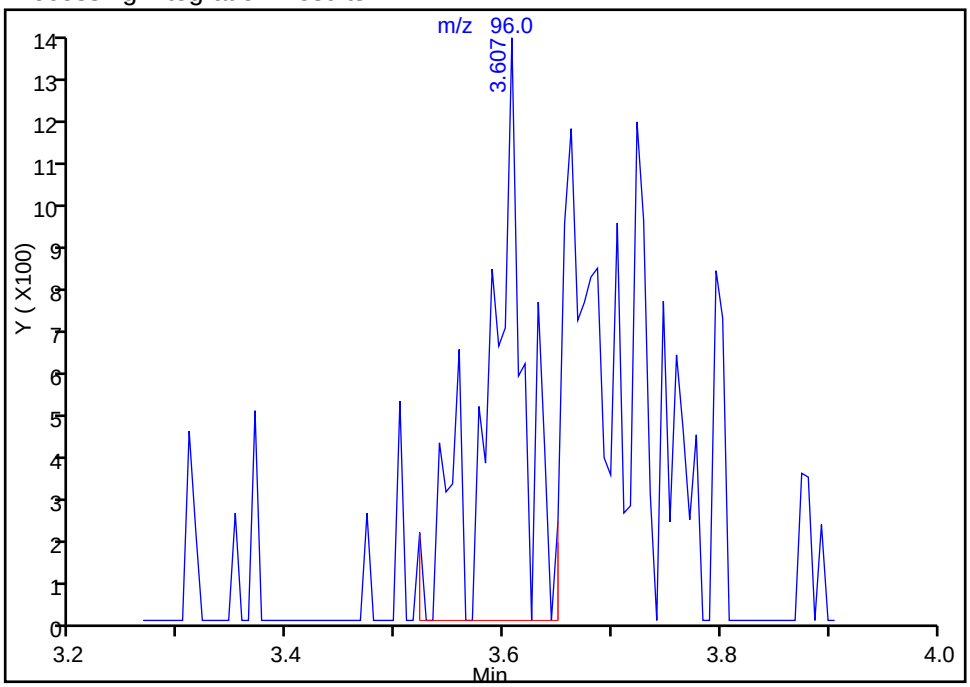
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040417.D				
Injection Date:	04-Apr-2015 20:47:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-2	Lab Sample ID:	180-42504-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

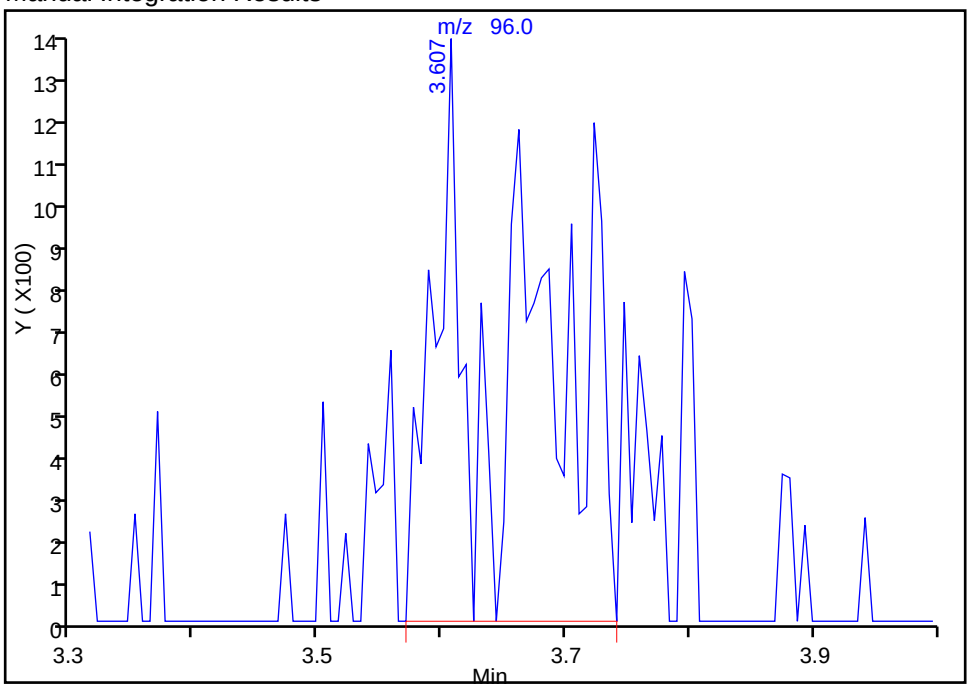
Processing Integration Results

RT: 3.61
Area: 3247
Amount: 4.044547
Amount Units: ng



Manual Integration Results

RT: 3.61
Area: 6142
Amount: 7.650635
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 08:57:38
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

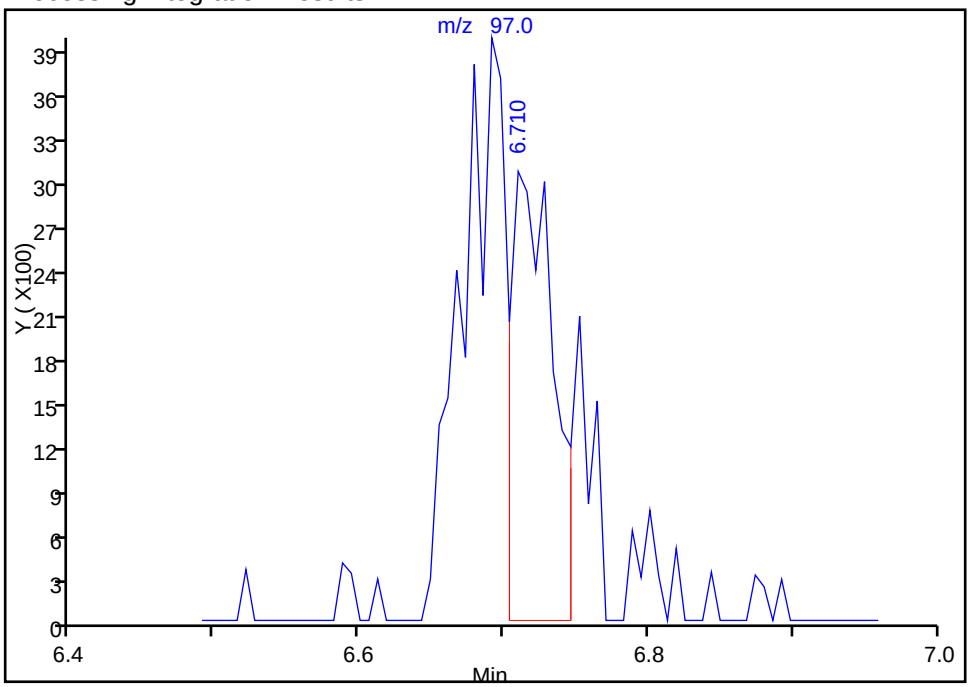
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040417.D				
Injection Date:	04-Apr-2015 20:47:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-2	Lab Sample ID:	180-42504-2		
Client ID:	HD-MW-127-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	17
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

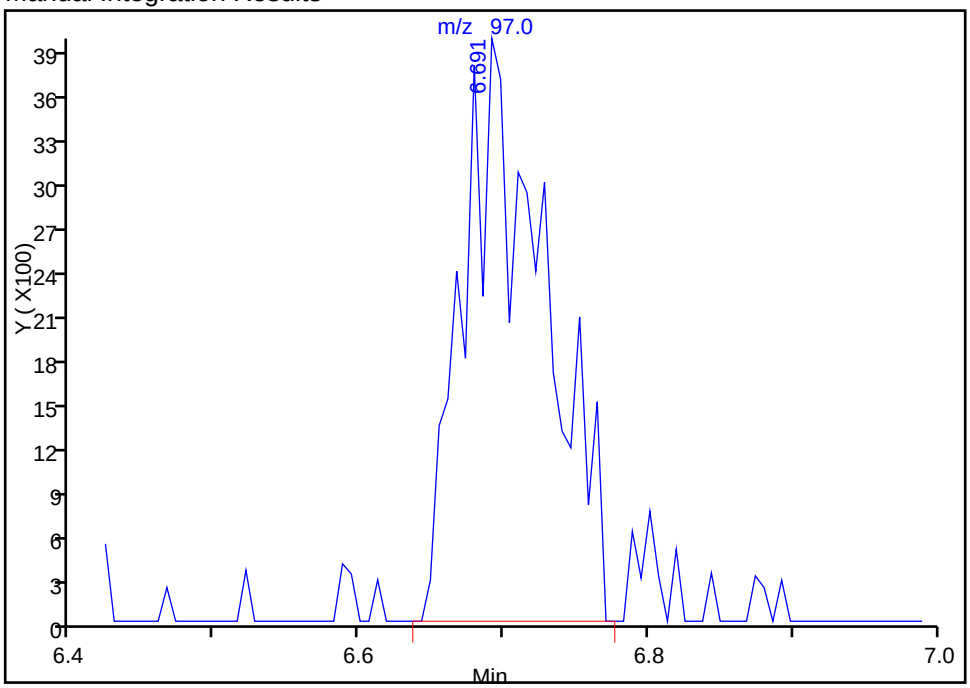
Processing Integration Results

RT: 6.71
Area: 6320
Amount: 4.233383
Amount Units: ng



Manual Integration Results

RT: 6.69
Area: 15446
Amount: 10.346333
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 08:57:38
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-97-0/1-0 Lab Sample ID: 180-42504-3

Matrix: Water Lab File ID: 7040322.D

Analysis Method: 8260C Date Collected: 03/27/2015 08:45

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 19:14

Soil Aliquot Vol: Dilution Factor: 20

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137438 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	20	U	20	5.7
75-01-4	Vinyl chloride	20	U	20	4.5
74-83-9	Bromomethane	20	U	20	6.3
75-00-3	Chloroethane	20	U	20	4.3
75-35-4	1,1-Dichloroethene	8.2	J	20	5.9
67-64-1	Acetone	100	U	100	50
75-15-0	Carbon disulfide	20	U	20	4.2
75-09-2	Methylene Chloride	20	U	20	2.5
156-60-5	trans-1,2-Dichloroethene	20	U	20	3.4
1634-04-4	Methyl tert-butyl ether	20	U	20	3.7
75-34-3	1,1-Dichloroethane	20	U	20	2.3
156-59-2	cis-1,2-Dichloroethene	310		20	4.7
74-97-5	Bromochloromethane	20	U	20	3.6
78-93-3	2-Butanone (MEK)	100	U	100	11
67-66-3	Chloroform	20	U	20	3.4
71-55-6	1,1,1-Trichloroethane	16	J	20	5.7
56-23-5	Carbon tetrachloride	20	U	20	2.7
71-43-2	Benzene	20	U	20	2.1
107-06-2	1,2-Dichloroethane	20	U	20	4.2
79-01-6	Trichloroethene	370		20	2.9
78-87-5	1,2-Dichloropropane	20	U	20	1.9
75-27-4	Bromodichloromethane	20	U	20	2.6
10061-01-5	cis-1,3-Dichloropropene	20	U	20	3.7
108-10-1	4-Methyl-2-pentanone (MIBK)	100	U	100	11
108-88-3	Toluene	20	U	20	3.0
10061-02-6	trans-1,3-Dichloropropene	20	U	20	3.0
79-00-5	1,1,2-Trichloroethane	20	U	20	4.0
127-18-4	Tetrachloroethene	36		20	3.0
591-78-6	2-Hexanone	100	U	100	3.2
124-48-1	Dibromochloromethane	20	U	20	2.7
106-93-4	1,2-Dibromoethane (EDB)	20	U	20	3.6
108-90-7	Chlorobenzene	20	U	20	2.7
630-20-6	1,1,1,2-Tetrachloroethane	20	U	20	5.5
100-41-4	Ethylbenzene	20	U	20	4.5
1330-20-7	Xylenes, Total	60	U	60	9.8
100-42-5	Styrene	20	U	20	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-97-0/1-0 Lab Sample ID: 180-42504-3

Matrix: Water Lab File ID: 7040322.D

Analysis Method: 8260C Date Collected: 03/27/2015 08:45

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 19:14

Soil Aliquot Vol: Dilution Factor: 20

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137438 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	20	U	20	3.8
79-34-5	1,1,2,2-Tetrachloroethane	20	U	20	4.0
107-13-1	Acrylonitrile	400	U	400	11
123-91-1	1,4-Dioxane	4000	U	4000	690

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		64-135
2037-26-5	Toluene-d8 (Surr)	115		71-118
460-00-4	4-Bromofluorobenzene (Surr)	106		70-118
1868-53-7	Dibromofluoromethane (Surr)	123		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040322.D
Lims ID: 180-42504-C-3 Lab Sample ID: 180-42504-3
Client ID: HD-MW-97-0/1-0
Sample Type: Client
Inject. Date: 03-Apr-2015 19:14:30 ALS Bottle#: 10 Worklist Smp#: 22
Purge Vol: 20.000 mL Dil. Factor: 20.0000
Sample Info: 180-42504-C-3
Misc. Info.: 180-0006312-022
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2015 12:03:40 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: journetp Date: 04-Apr-2015 11:47:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.591	4.786	-0.195	88	132183	4000.0	
* 2 Fluorobenzene (IS)	96	7.420	7.402	0.018	99	651709	200.0	
* 3 Chlorobenzene-d5	119	10.474	10.468	0.006	84	190975	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.786	12.786	0.000	94	263808	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.696	6.678	0.018	89	254820	245.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.055	7.043	0.012	95	195729	197.5	
$ 7 Toluene-d8 (Surr)	98	9.044	9.038	0.006	92	653038	230.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	90	267308	211.8	
12 Chloromethane	50		2.000				ND	
13 Vinyl chloride	62		2.219				ND	
15 Bromomethane	94		2.511				ND	
16 Chloroethane	64		2.626				ND	
22 1,1-Dichloroethene	96	3.655	3.527	0.128	1	7202	8.23	M
24 Acetone	43		3.801				ND	
26 Carbon disulfide	76		3.825				ND	
31 Methylene Chloride	84		4.354				ND	
34 trans-1,2-Dichloroethene	96		4.756				ND	
33 Acrylonitrile	53		4.816				ND	
35 Methyl tert-butyl ether	73		4.865				ND	
37 1,1-Dichloroethane	63		5.364				ND	
45 cis-1,2-Dichloroethene	96	6.130	6.112	0.018	80	338183	313.9	
46 2-Butanone (MEK)	43		6.179				ND	
49 Chlorobromomethane	128		6.380				ND	
52 Chloroform	83		6.502				ND	
53 1,1,1-Trichloroethane	97	6.702	6.678	0.024	1	25381	15.6	M
56 Carbon tetrachloride	117		6.861				ND	
58 Benzene	78		7.098				ND	
59 1,2-Dichloroethane	62		7.122				ND	
64 Trichloroethene	130	7.810	7.797	0.013	91	471954	367.1	
67 1,2-Dichloropropane	63		8.035				ND	
70 1,4-Dioxane	88		8.187				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.321				ND	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.935				ND	
76 Toluene	91		9.105				ND	
77 trans-1,3-Dichloropropene	75		9.330				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164	9.659	9.647	0.012	90	48948	36.4	
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.018				ND	
87 Chlorobenzene	112		10.498				ND	
89 1,1,1,2-Tetrachloroethane	131		10.578				ND	
90 Ethylbenzene	106		10.608				ND	
91 m-Xylene & p-Xylene	106		10.724				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.131				ND	
94 Bromoform	173		11.314				ND	
99 1,1,2,2-Tetrachloroethane	83		11.776				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

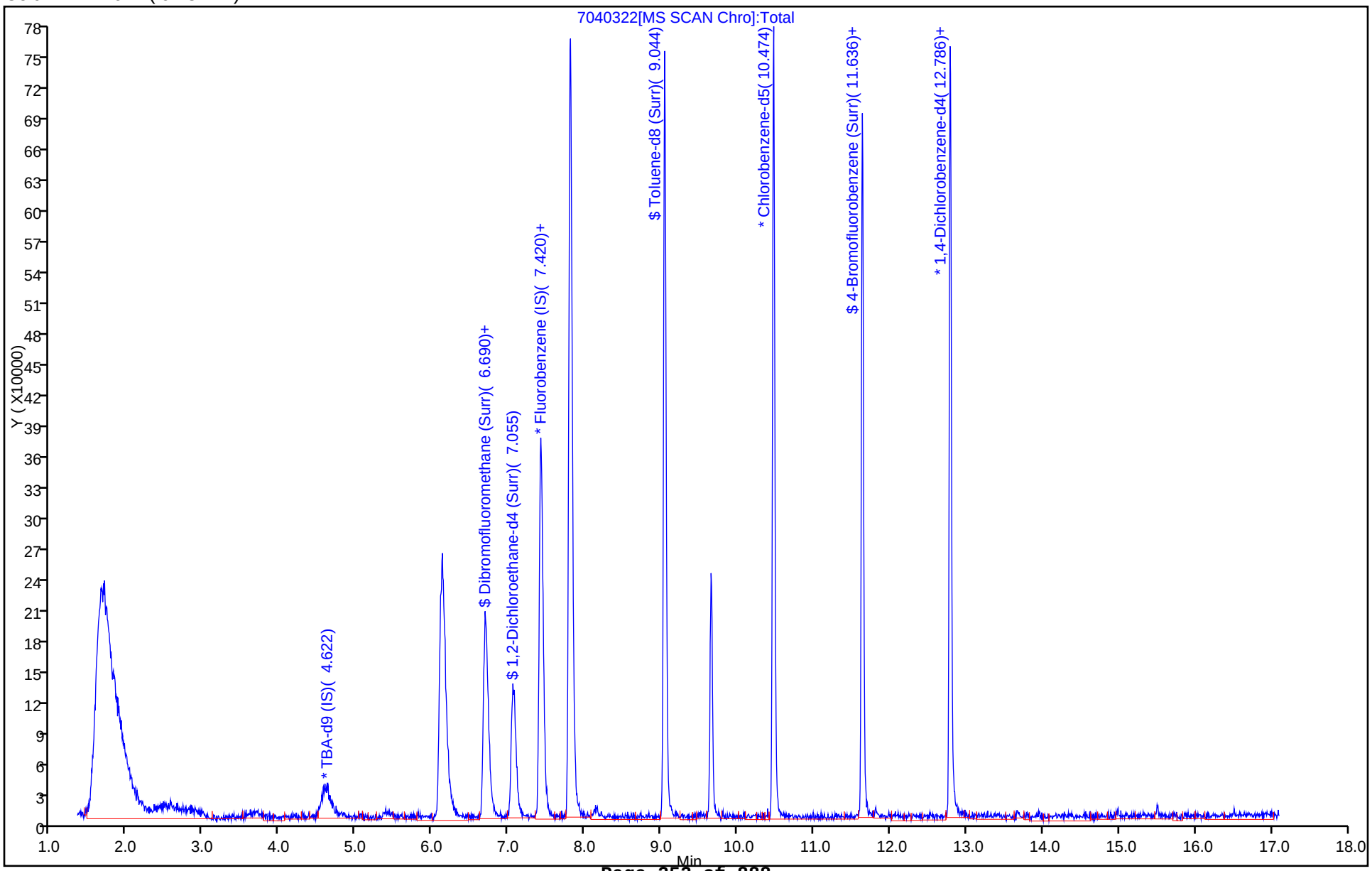
Report Date: 04-Apr-2015 12:04:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040322.D

Injection Date:	03-Apr-2015 19:14:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-C-3	Lab Sample ID:	180-42504-3	Worklist Smp#:	22
Client ID:	HD-MW-97-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	20.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

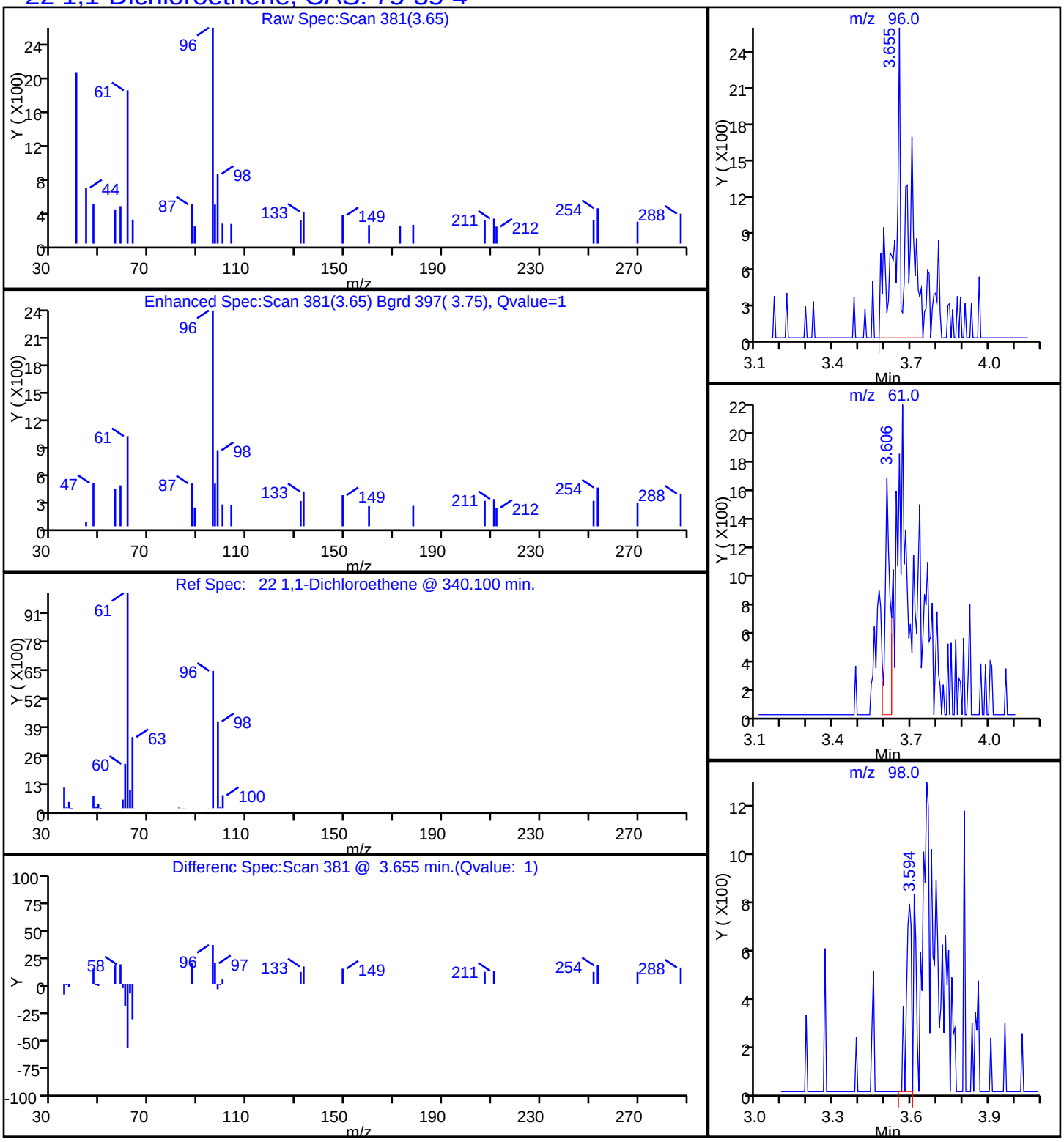


Report Date: 04-Apr-2015 12:04:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040322.D				
Injection Date:	03-Apr-2015 19:14:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-3	Lab Sample ID:	180-42504-3		
Client ID:	HD-MW-97-0/1-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

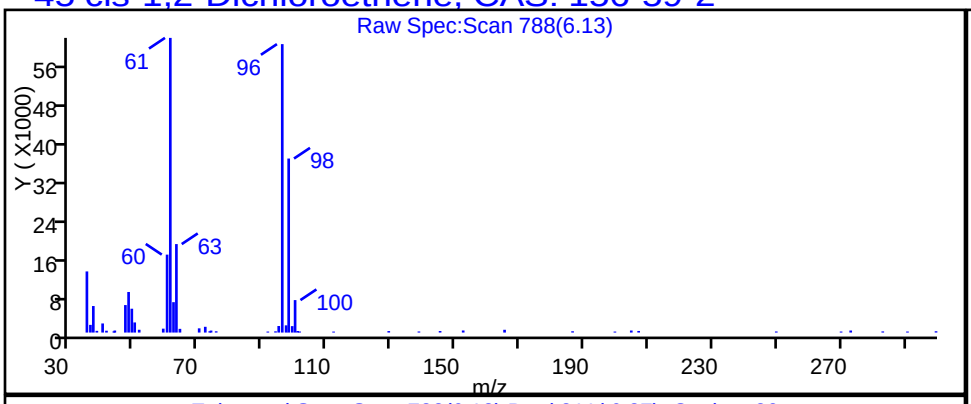


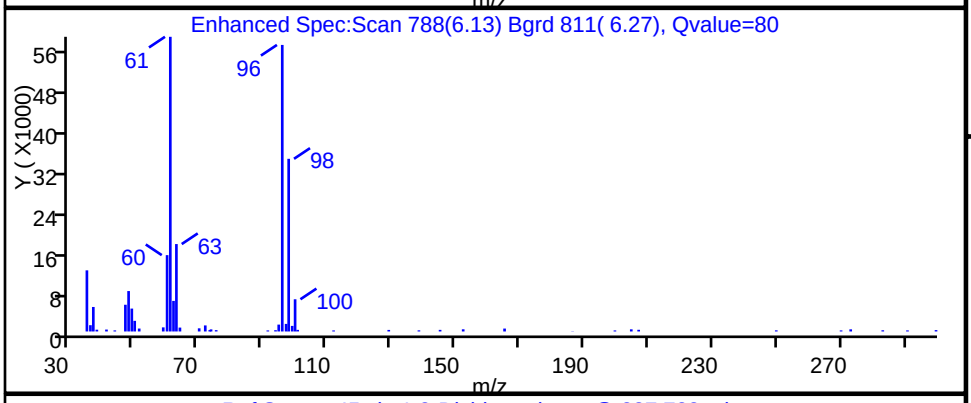
Report Date: 04-Apr-2015 12:04:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

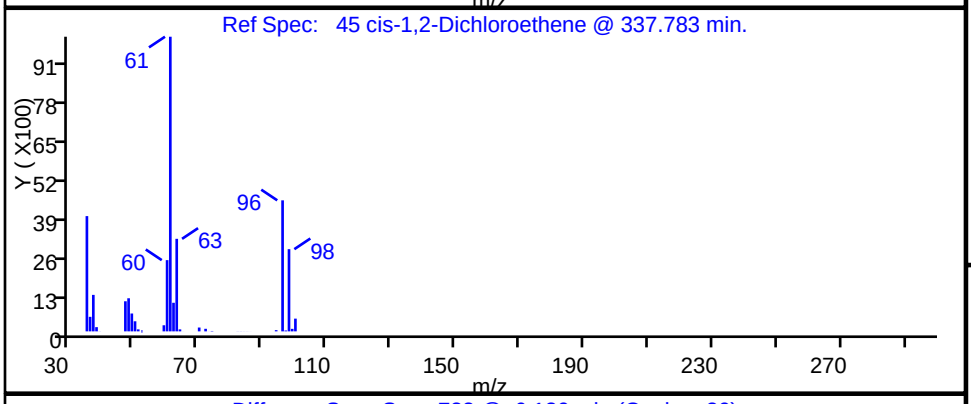
TestAmerica Pittsburgh

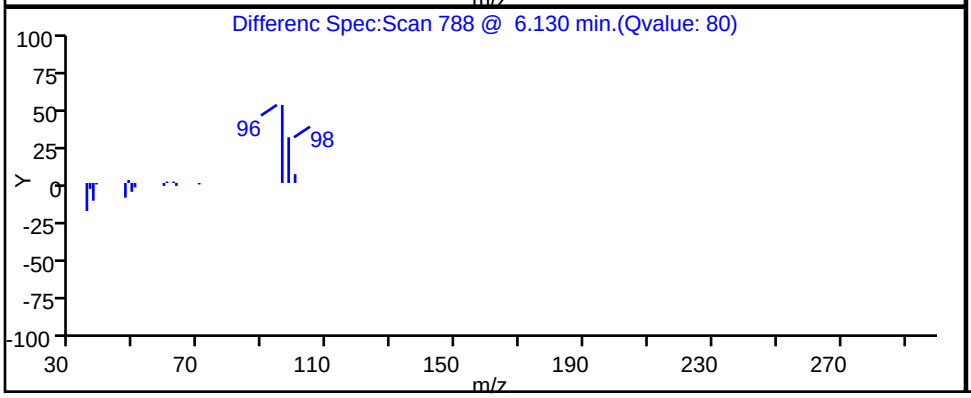
Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040322.D				
Injection Date:	03-Apr-2015 19:14:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-3	Lab Sample ID:	180-42504-3		
Client ID:	HD-MW-97-0/1-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

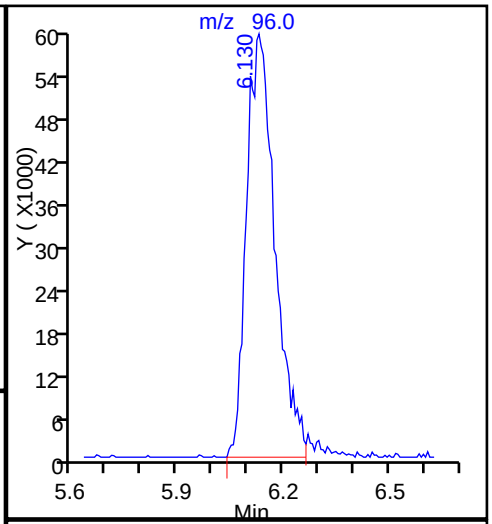
45 cis-1,2-Dichloroethene, CAS: 156-59-2

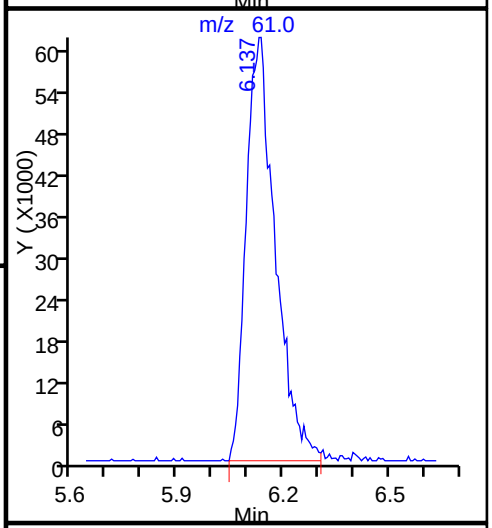


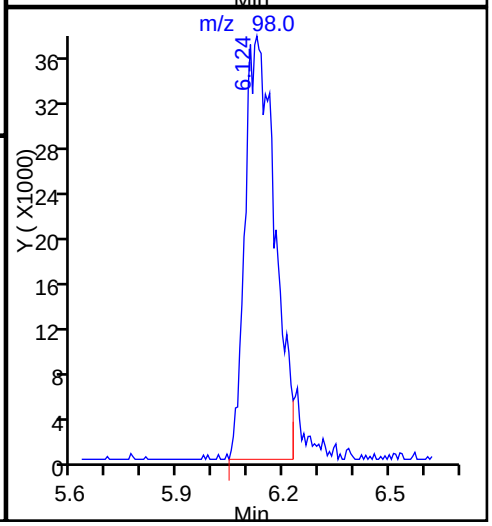












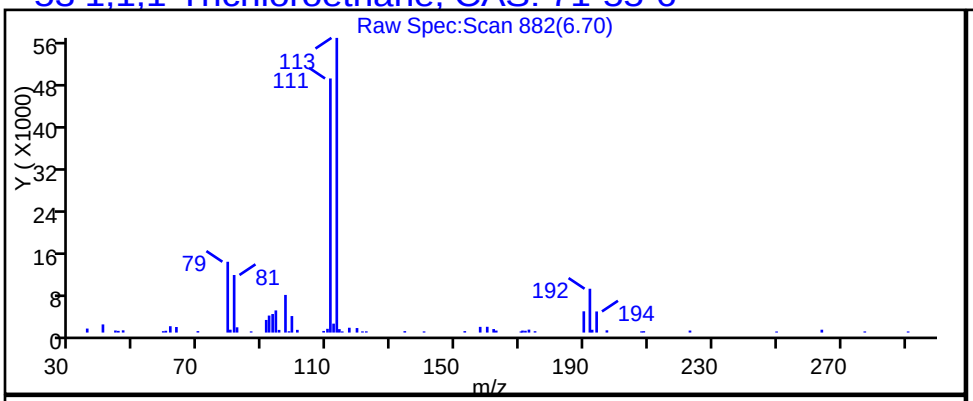
Report Date: 04-Apr-2015 12:04:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

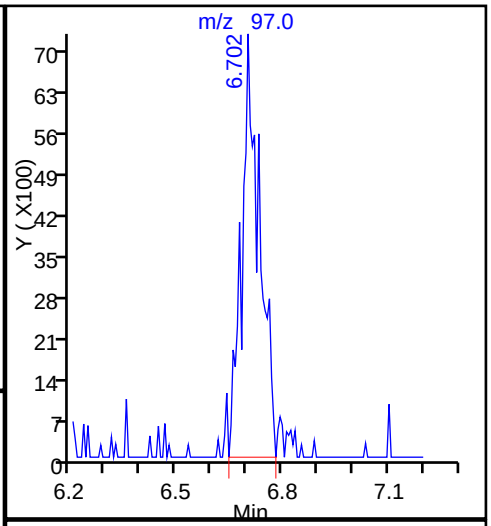
TestAmerica Pittsburgh

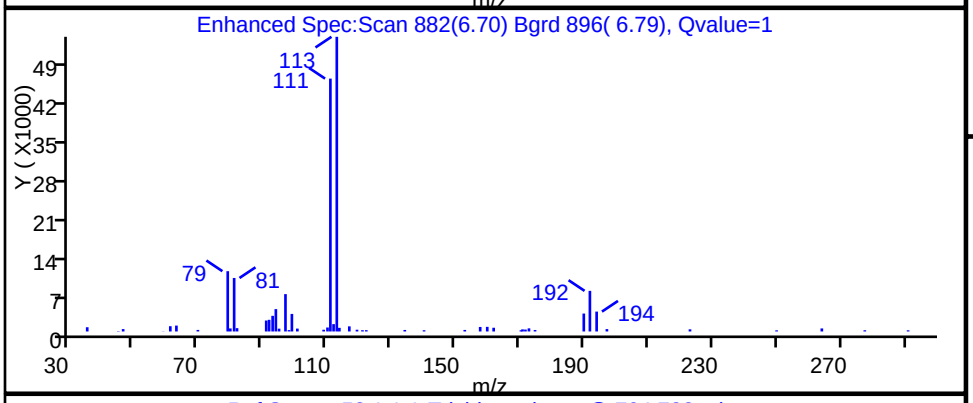
Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040322.D

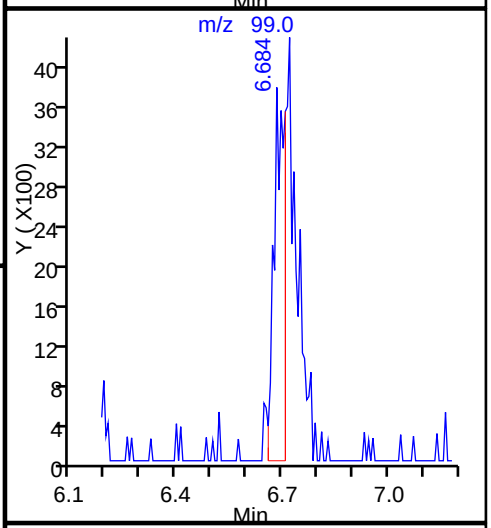
Injection Date:	03-Apr-2015 19:14:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-3	Lab Sample ID:	180-42504-3		
Client ID:	HD-MW-97-0/1-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

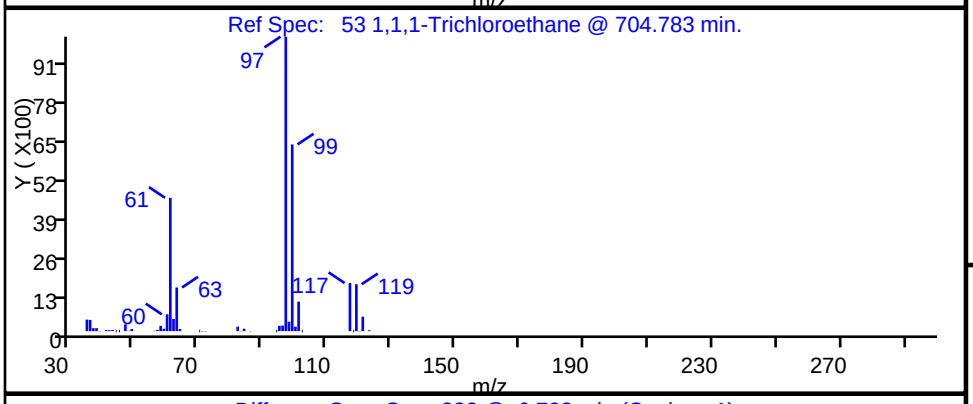
53 1,1,1-Trichloroethane, CAS: 71-55-6

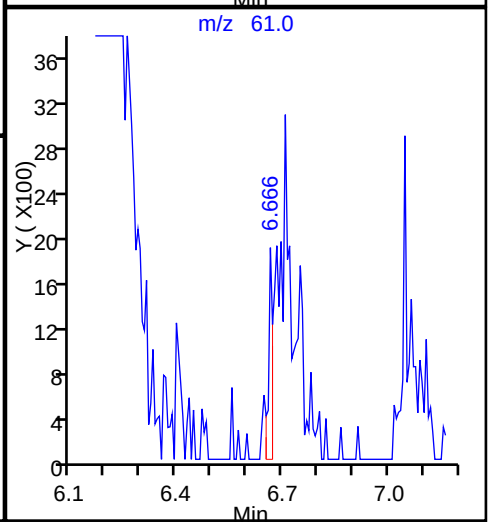


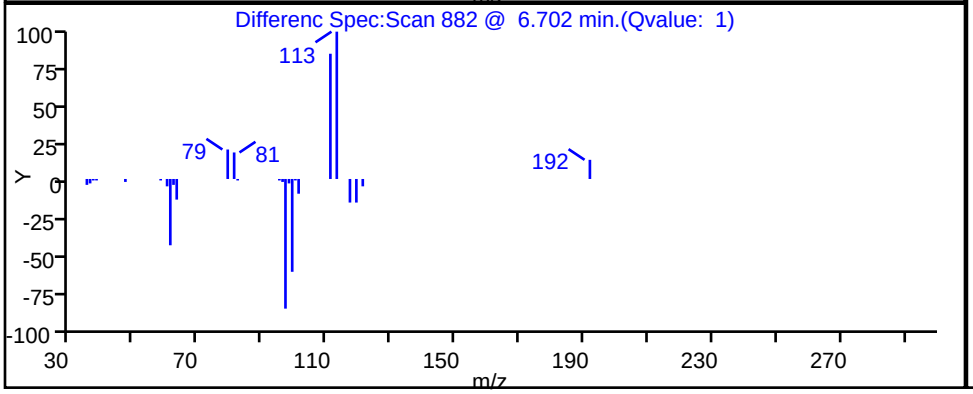












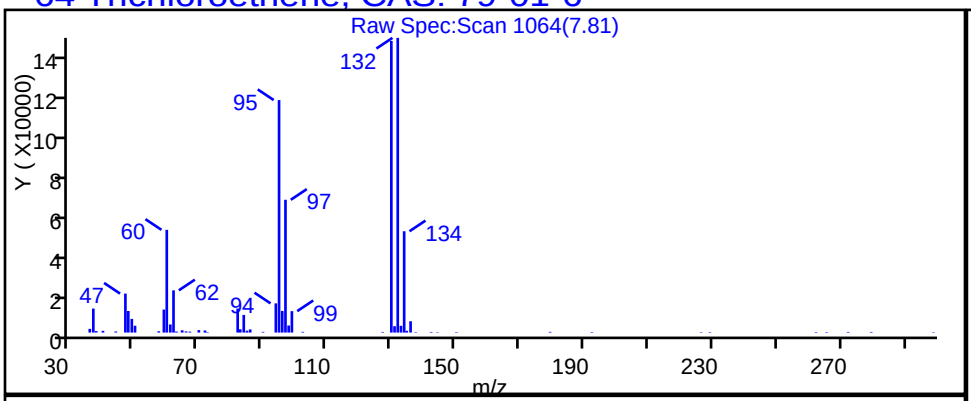
Report Date: 04-Apr-2015 12:04:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

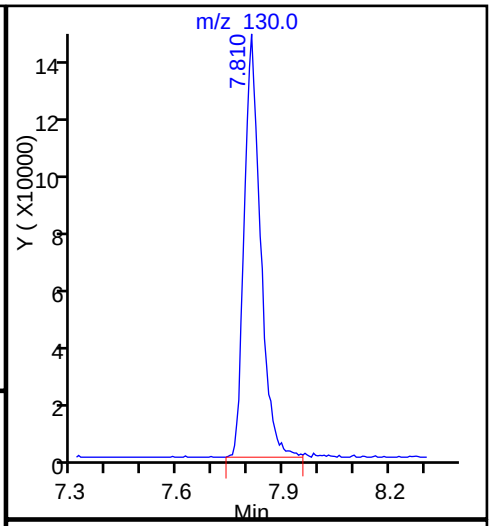
TestAmerica Pittsburgh

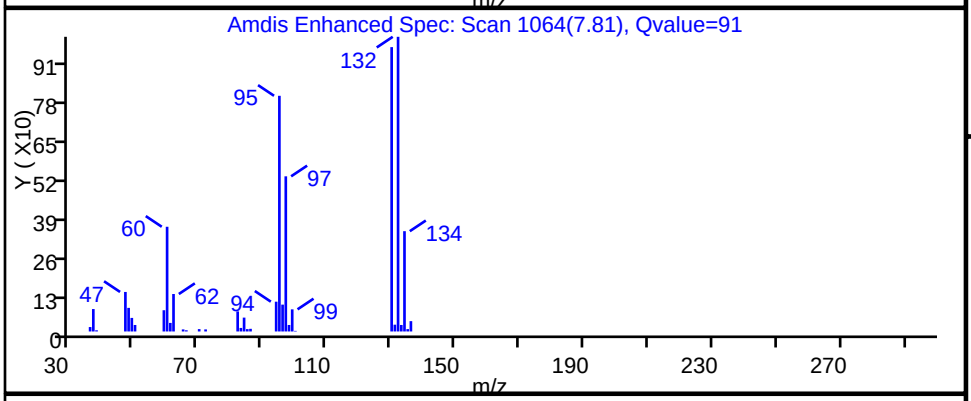
Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040322.D

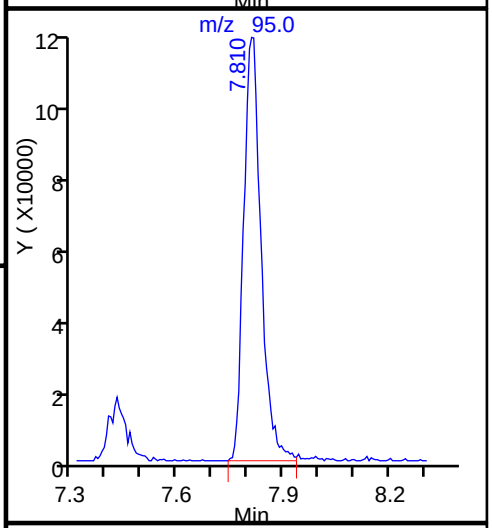
Injection Date:	03-Apr-2015 19:14:30	Instrument ID:	CHHP7
Lims ID:	180-42504-C-3	Lab Sample ID:	180-42504-3
Client ID:	HD-MW-97-0/1-0		
Operator ID:	034635	ALS Bottle#:	10 Worklist Smp#: 22
Purge Vol:	20.000 mL	Dil. Factor:	20.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

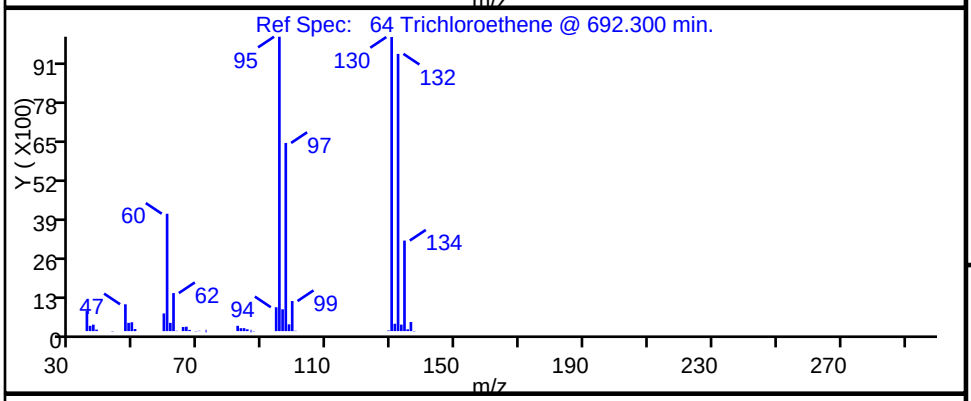
64 Trichloroethene, CAS: 79-01-6

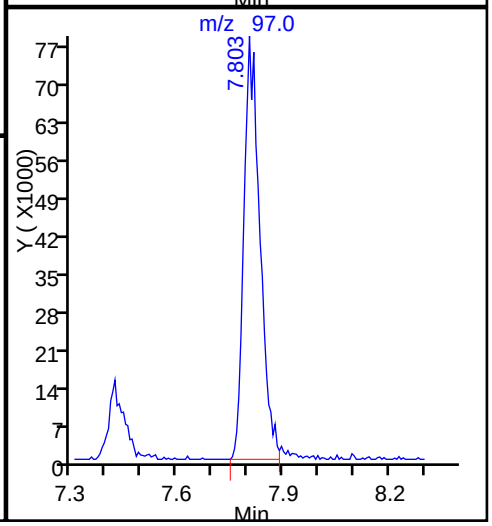


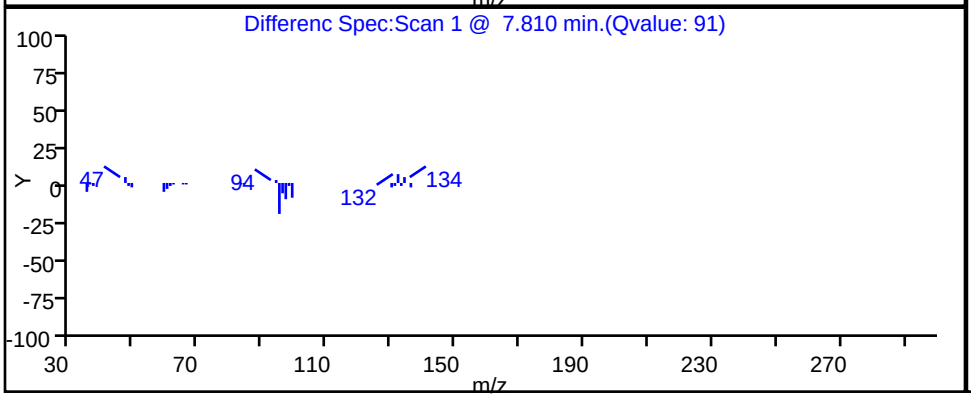










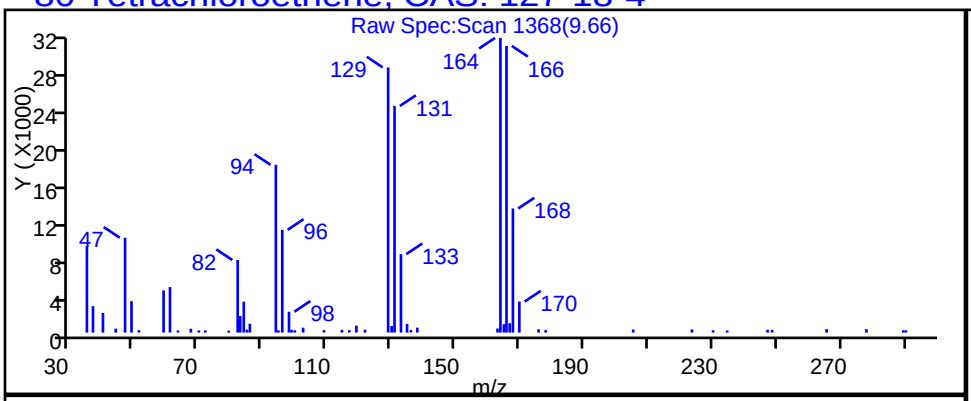


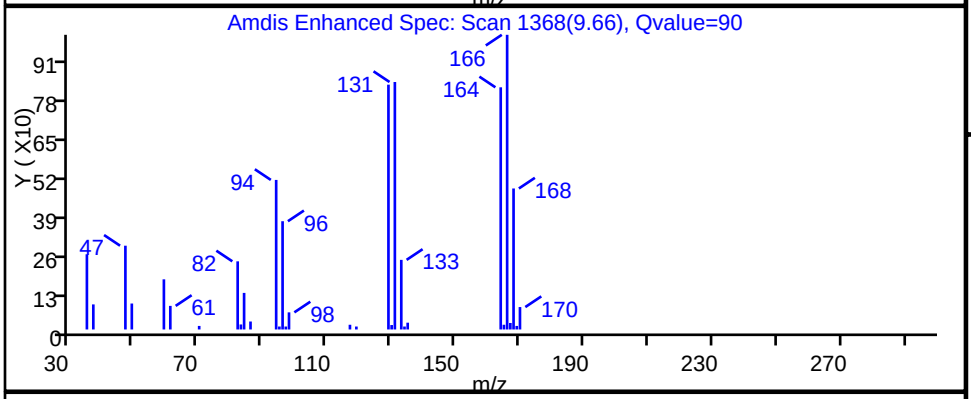
Report Date: 04-Apr-2015 12:04:51 Chrom Revision: 2.2 13-Mar-2015 11:20:44

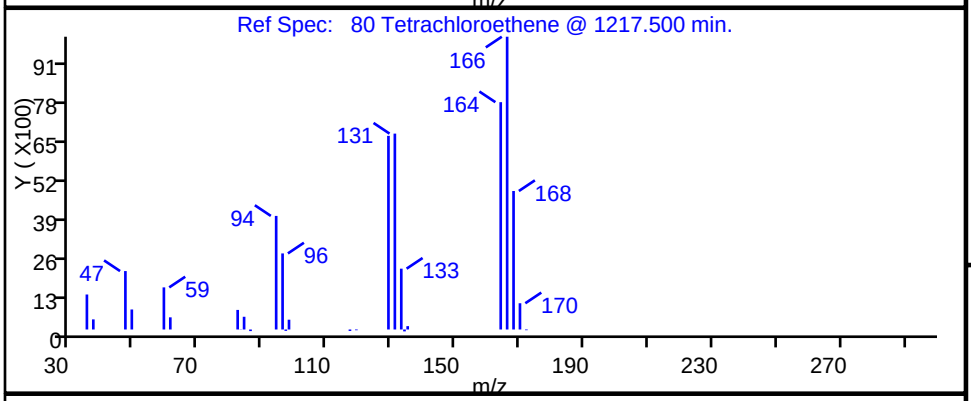
TestAmerica Pittsburgh

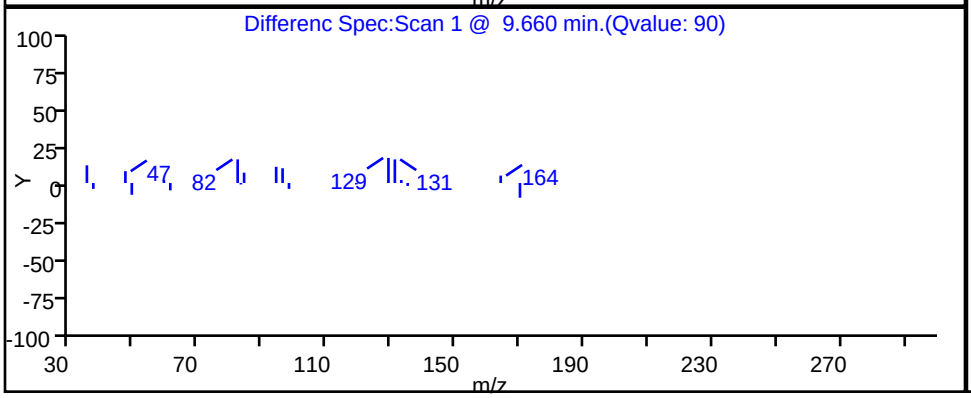
Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040322.D		
Injection Date:	03-Apr-2015 19:14:30	Instrument ID:	CHHP7
Lims ID:	180-42504-C-3	Lab Sample ID:	180-42504-3
Client ID:	HD-MW-97-0/1-0		
Operator ID:	034635	ALS Bottle#:	10 Worklist Smp#: 22
Purge Vol:	20.000 mL	Dil. Factor:	20.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

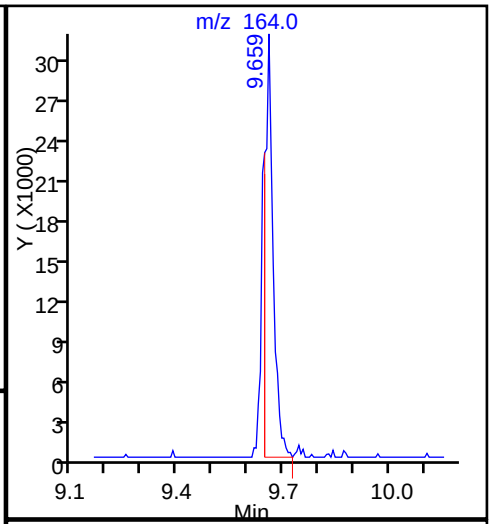
80 Tetrachloroethene, CAS: 127-18-4

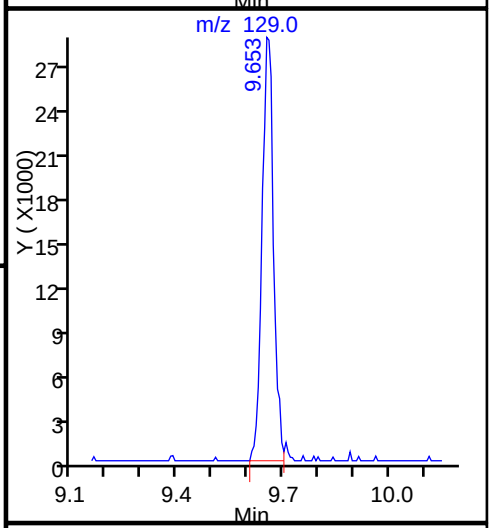


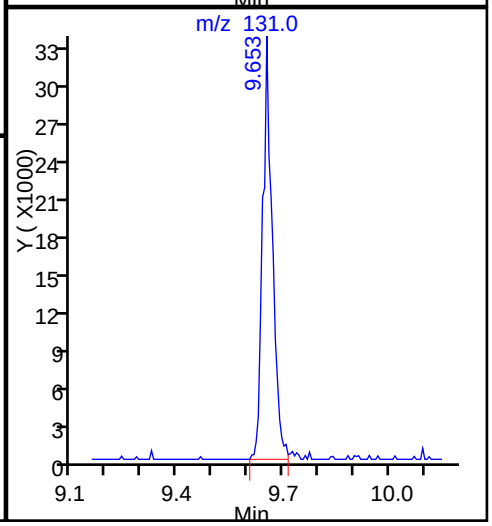












Manual Integration/User Assign Peak Report

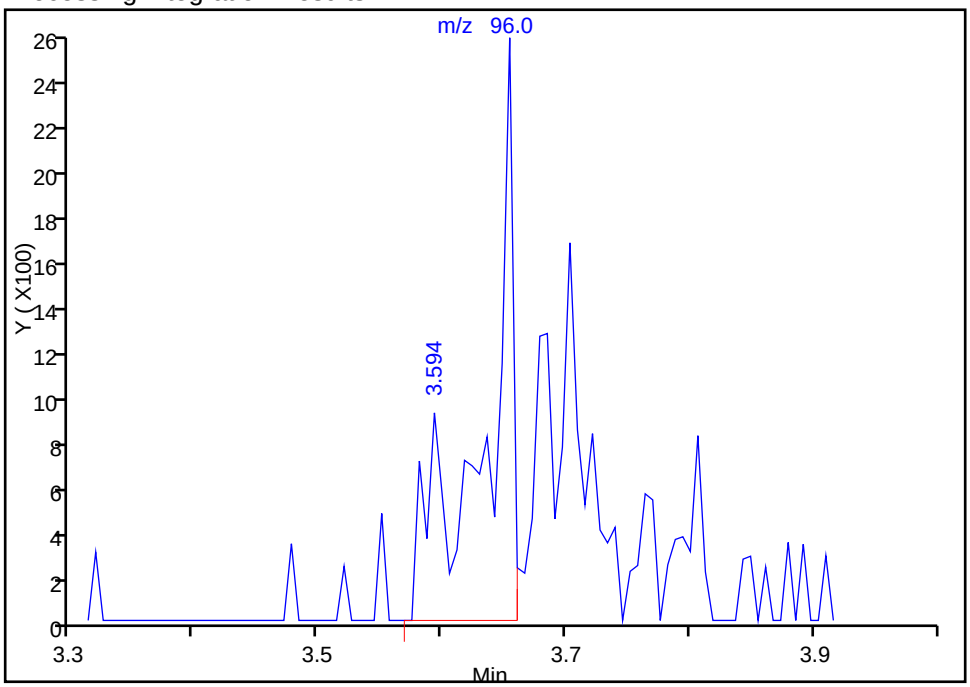
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040322.D				
Injection Date:	03-Apr-2015 19:14:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-3	Lab Sample ID:	180-42504-3		
Client ID:	HD-MW-97-0/1-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

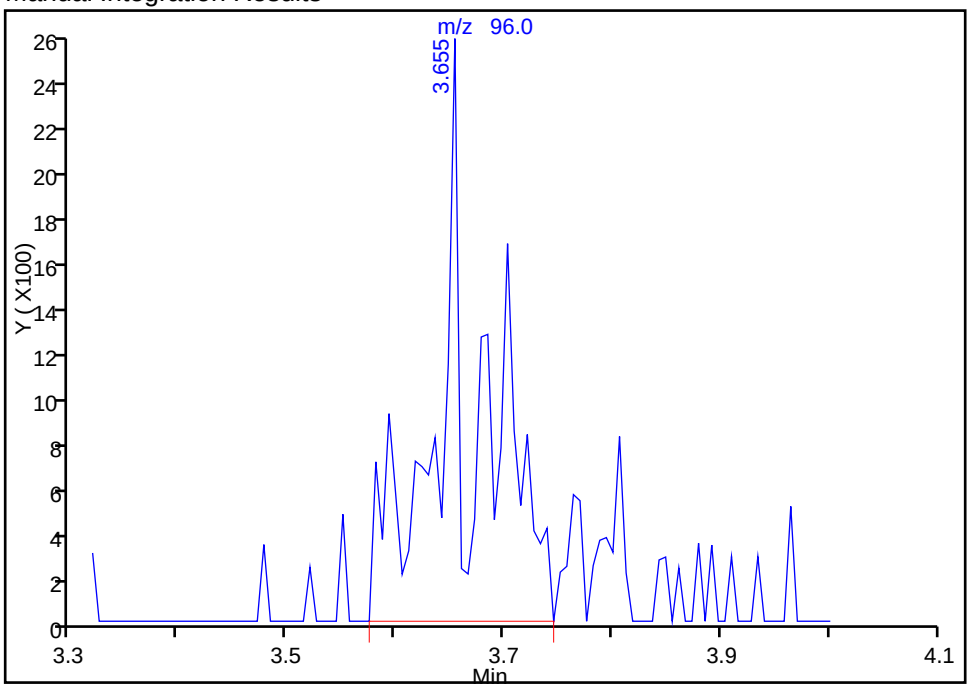
Processing Integration Results

RT: 3.59
Area: 3770
Amount: 4.308466
Amount Units: ng



Manual Integration Results

RT: 3.65
Area: 7202
Amount: 8.230657
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 11:47:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

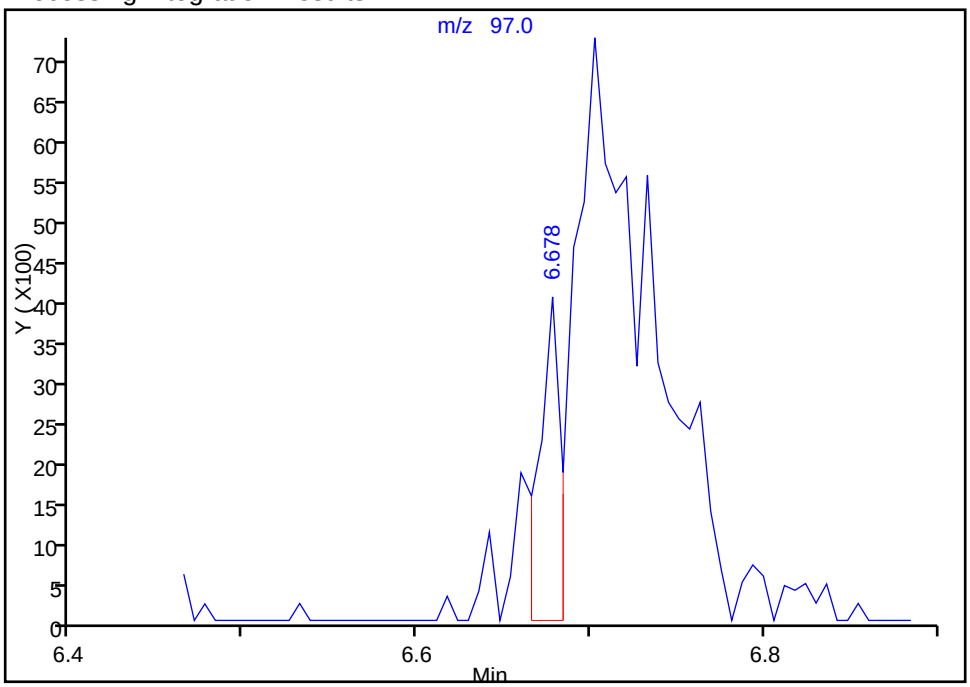
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040322.D				
Injection Date:	03-Apr-2015 19:14:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-3	Lab Sample ID:	180-42504-3		
Client ID:	HD-MW-97-0/1-0				
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	20.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

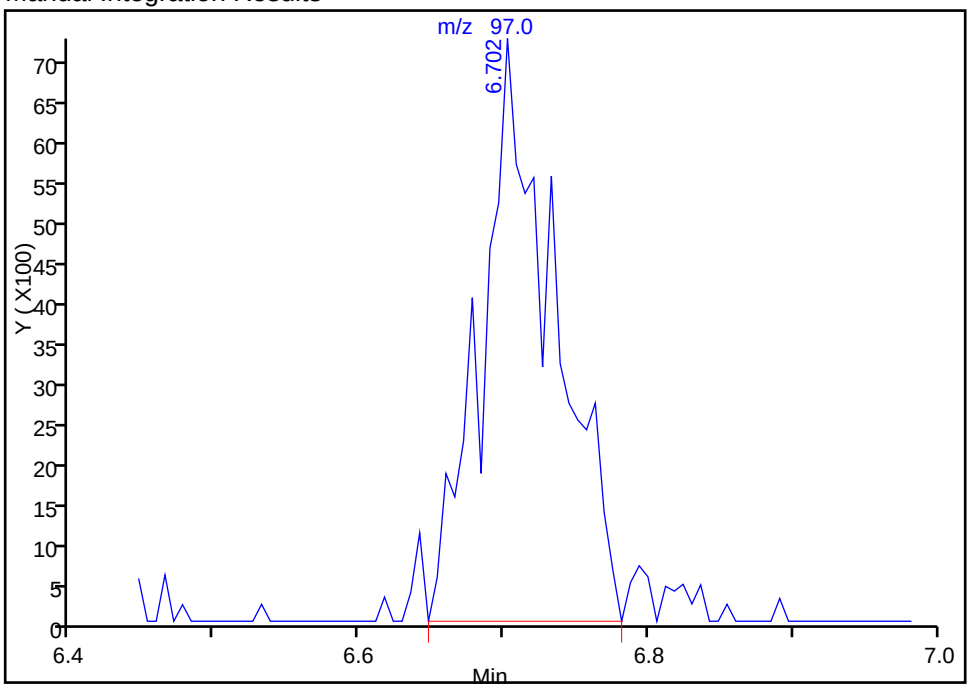
Processing Integration Results

RT: 6.68
Area: 3507
Amount: 2.155261
Amount Units: ng



Manual Integration Results

RT: 6.70
Area: 25381
Amount: 15.598143
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 11:47:10
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 Lab Sample ID: 180-42504-4

Matrix: Water Lab File ID: 7040308.D

Analysis Method: 8260C Date Collected: 03/27/2015 09:37

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 12:54

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.: 137438 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	4.3		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	0.47	J	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.: 180-42504-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 Lab Sample ID: 180-42504-4

Matrix: Water Lab File ID: 7040308.D

Analysis Method: 8260C Date Collected: 03/27/2015 09:37

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 12:54

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.: 137438 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)	81		64-135
2037-26-5	Toluene-d8 (Surr)	114		71-118
460-00-4	4-Bromofluorobenzene (Surr)	99		70-118
1868-53-7	Dibromofluoromethane (Surr)	103		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040308.D
Lims ID: 180-42504-E-4 Lab Sample ID: 180-42504-4
Client ID: HD-CW-18-0/1-0
Sample Type: Client
Inject. Date: 03-Apr-2015 12:54:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 180-42504-E-4
Misc. Info.: 180-0006312-008
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2015 17:04:08 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: journetp Date: 03-Apr-2015 13:54:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.610	4.786	-0.176	90	178204	4000.0	
* 2 Fluorobenzene (IS)	96	7.415	7.402	0.013	99	861164	200.0	
* 3 Chlorobenzene-d5	119	10.469	10.468	0.001	84	251992	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.793	12.786	0.007	95	322521	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.691	6.678	0.013	88	284277	206.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.062	7.043	0.019	94	210900	161.0	
$ 7 Toluene-d8 (Surr)	98	9.045	9.038	0.007	93	850545	227.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.637	11.636	0.001	88	331106	197.9	
12 Chloromethane	50		2.000				ND	
13 Vinyl chloride	62		2.219				ND	
15 Bromomethane	94		2.511				ND	
16 Chloroethane	64		2.626				ND	
22 1,1-Dichloroethene	96		3.527				ND	
24 Acetone	43		3.801				ND	
26 Carbon disulfide	76		3.825				ND	
31 Methylene Chloride	84		4.354				ND	
34 trans-1,2-Dichloroethene	96		4.756				ND	
33 Acrylonitrile	53		4.816				ND	
35 Methyl tert-butyl ether	73		4.865				ND	
37 1,1-Dichloroethane	63		5.364				ND	
45 cis-1,2-Dichloroethene	96	6.131	6.112	0.019	73	121149	85.1	M
46 2-Butanone (MEK)	43		6.179				ND	
49 Chlorobromomethane	128		6.380				ND	
52 Chloroform	83		6.502				ND	
53 1,1,1-Trichloroethane	97		6.678				ND	
56 Carbon tetrachloride	117		6.861				ND	
58 Benzene	78		7.098				ND	
59 1,2-Dichloroethane	62		7.122				ND	
64 Trichloroethene	130	7.804	7.797	0.007	93	16121	9.49	
67 1,2-Dichloropropane	63		8.035				ND	
70 1,4-Dioxane	88		8.187				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.321				ND	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.935				ND	
76 Toluene	91		9.105				ND	
77 trans-1,3-Dichloropropene	75		9.330				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164		9.647				ND	
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.018				ND	
87 Chlorobenzene	112		10.498				ND	
89 1,1,1,2-Tetrachloroethane	131		10.578				ND	
90 Ethylbenzene	106		10.608				ND	
91 m-Xylene & p-Xylene	106		10.724				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.131				ND	
94 Bromoform	173		11.314				ND	
99 1,1,2,2-Tetrachloroethane	83		11.776				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

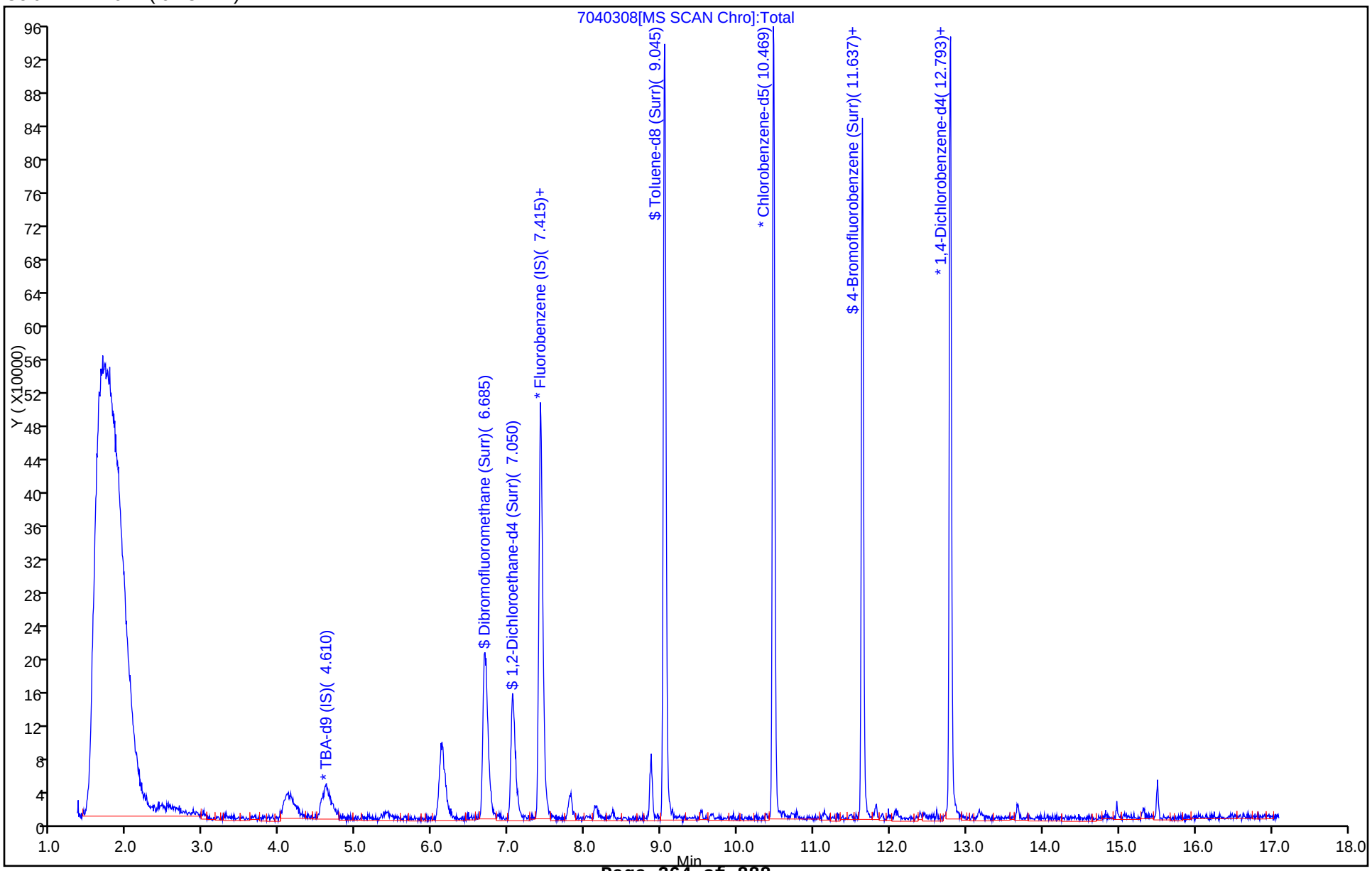
Report Date: 03-Apr-2015 17:04:11 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040308.D

Injection Date:	03-Apr-2015 12:54:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-E-4	Lab Sample ID:	180-42504-4	Worklist Smp#:	8
Client ID:	HD-CW-18-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

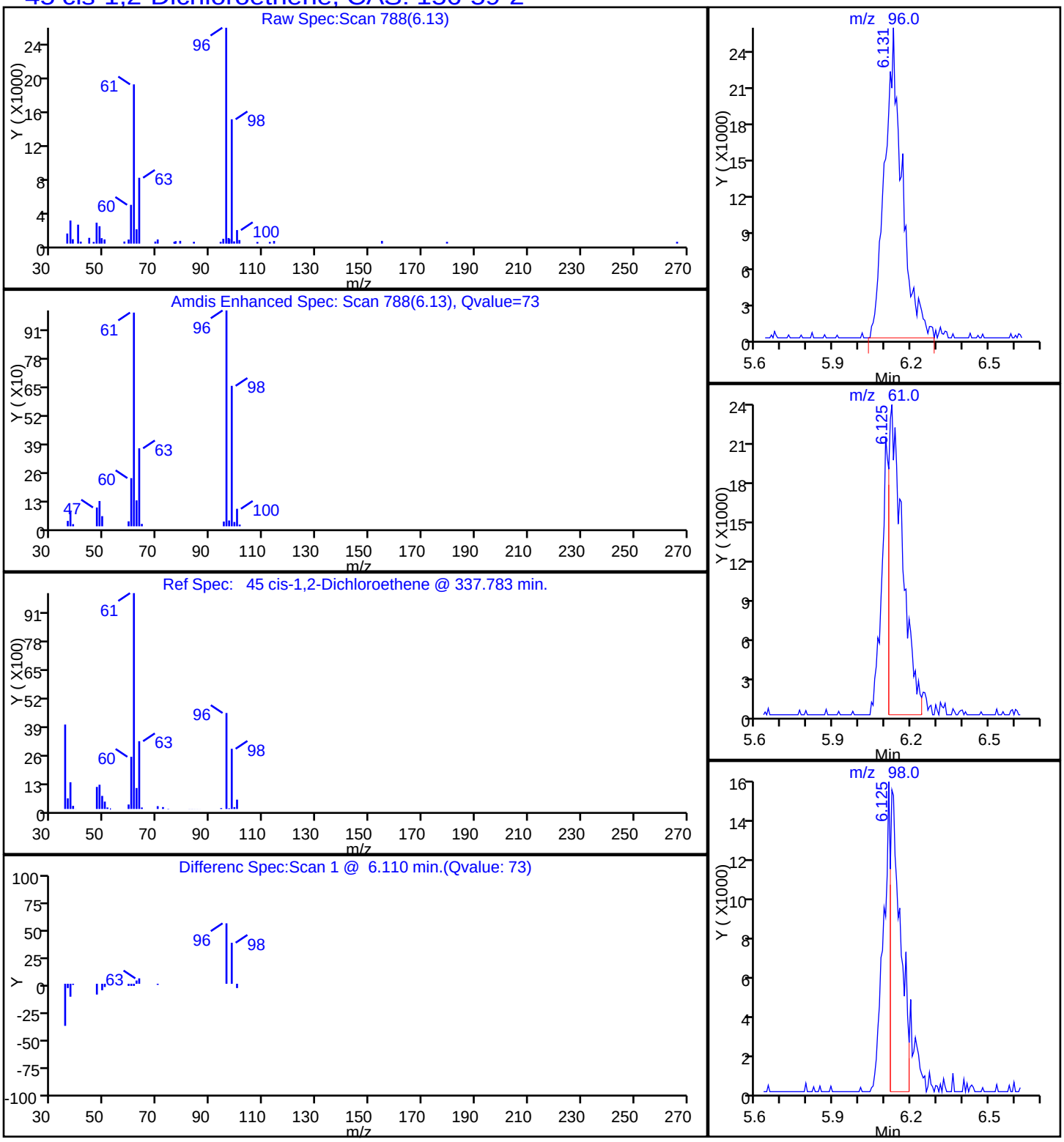


Report Date: 03-Apr-2015 17:04:12 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040308.D				
Injection Date:	03-Apr-2015 12:54:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-E-4	Lab Sample ID:	180-42504-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

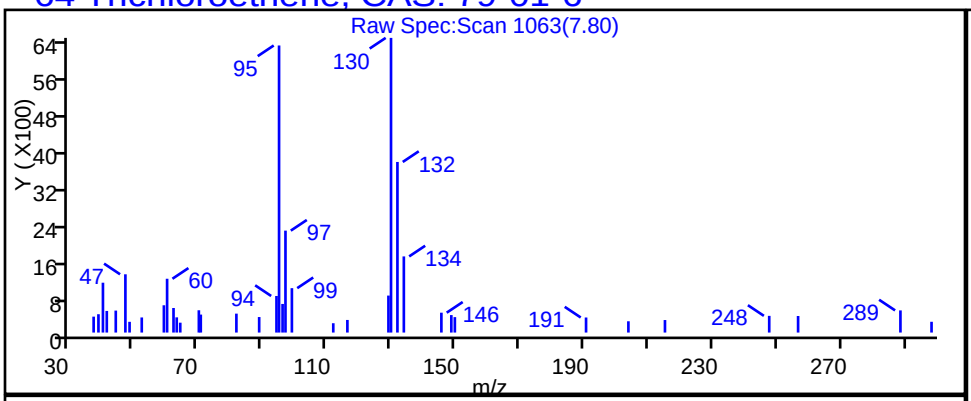


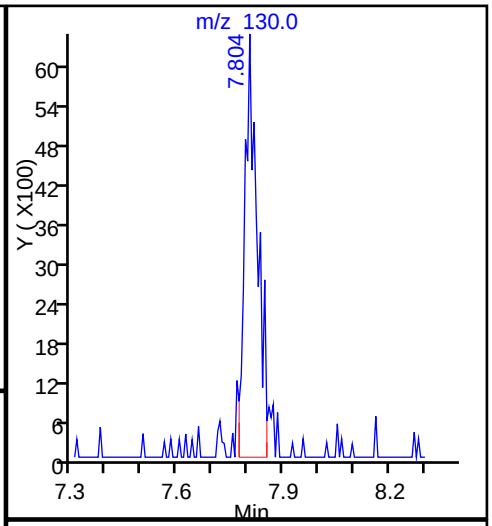
Report Date: 03-Apr-2015 17:04:12 Chrom Revision: 2.2 13-Mar-2015 11:20:44

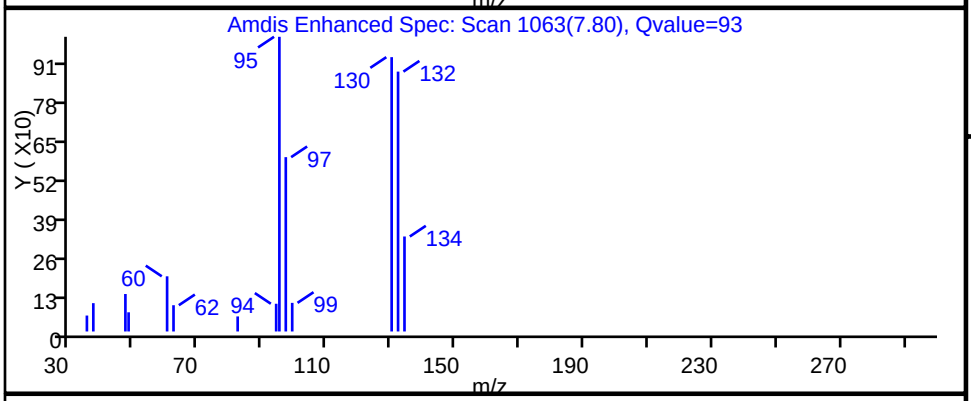
TestAmerica Pittsburgh

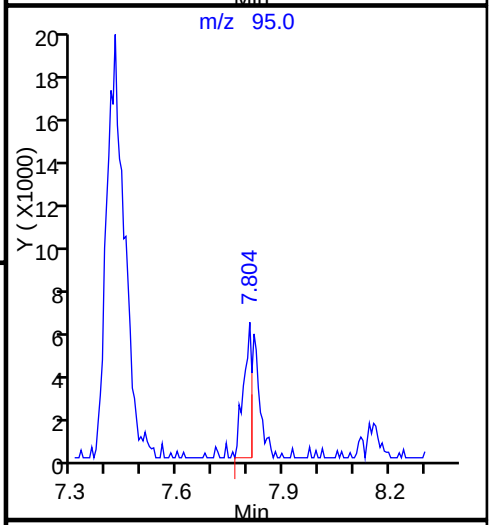
Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040308.D				
Injection Date:	03-Apr-2015 12:54:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-E-4	Lab Sample ID:	180-42504-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

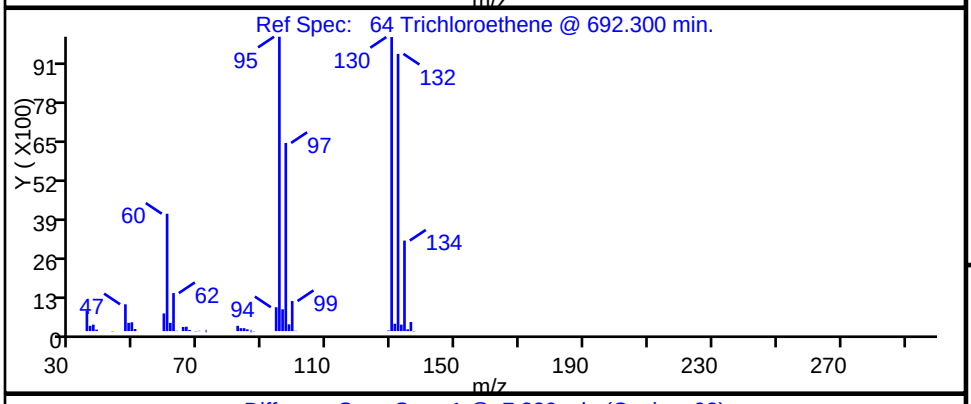
64 Trichloroethene, CAS: 79-01-6

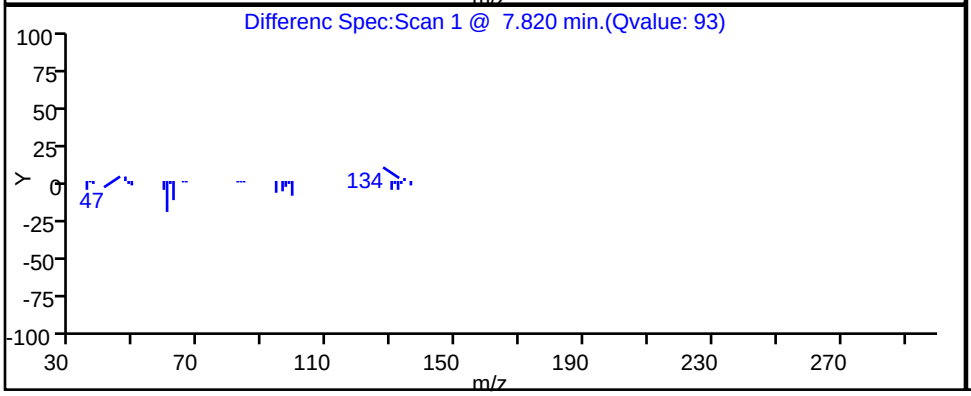


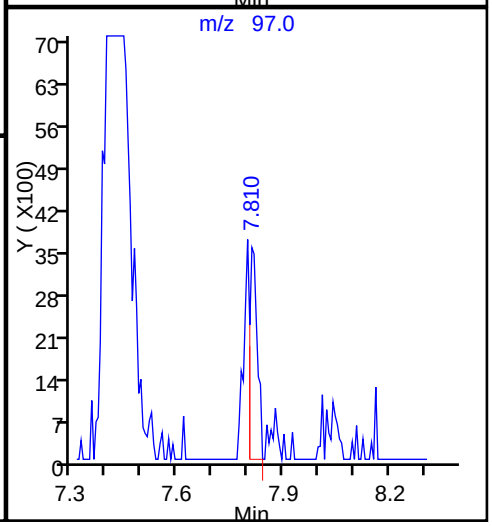












Manual Integration/User Assign Peak Report

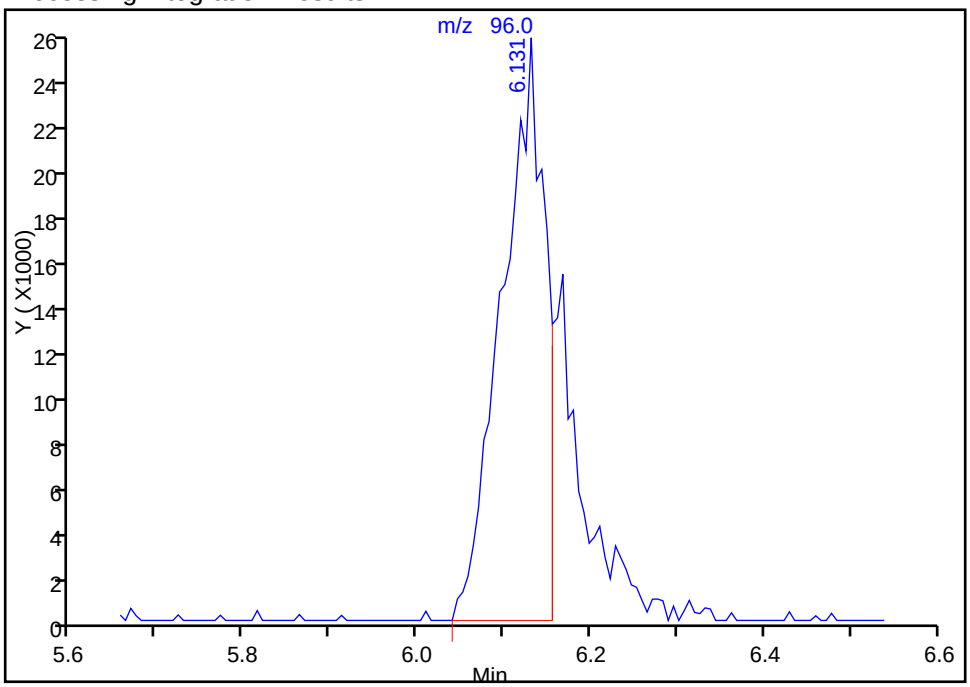
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040308.D				
Injection Date:	03-Apr-2015 12:54:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-E-4	Lab Sample ID:	180-42504-4		
Client ID:	HD-CW-18-0/1-0				
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

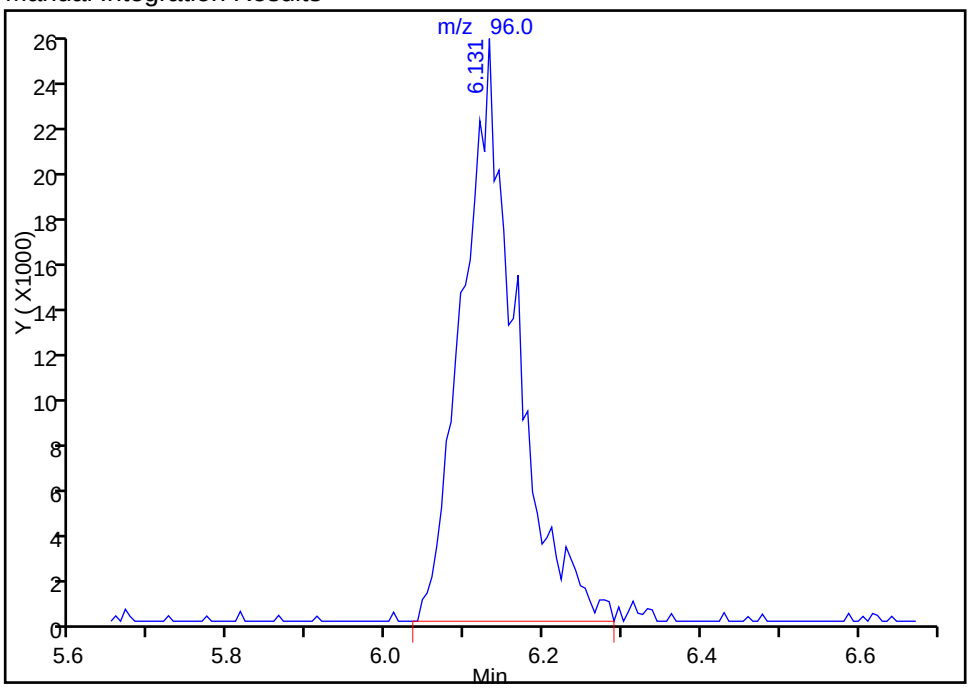
Processing Integration Results

RT: 6.13
Area: 88822
Amount: 62.389735
Amount Units: ng



Manual Integration Results

RT: 6.13
Area: 121149
Amount: 85.096643
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 13:54:56
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-114-0/1-0 | Lab Sample ID: 180-42504-5

Matrix: Water | Lab File ID: 7040622.D

Analysis Method: 8260C | Date Collected: 03/27/2015 13:22

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2015 18:51

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.: 137564 | 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	6.5	J	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	29		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	4.8	J	10	1.7
1634-04-4	Methyl tert-butyl ether	10	U	10	1.8
75-34-3	1,1-Dichloroethane	10	U	10	1.2
156-59-2	*cis-1,2-Dichloroethene*	*1200*	*E*	*10*	*2.4*
74-97-5	Bromochloromethane	10	U	10	1.8
78-93-3	2-Butanone (MEK)	50	U	50	5.5
67-66-3	Chloroform	10	U	10	1.7
71-55-6	1,1,1-Trichloroethane	10	U	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*	*720*	*E*	*10*	*1.4*
78-87-5	1,2-Dichloropropane	10	U	10	0.95
75-27-4	Bromodichloromethane	10	U	10	1.3
10061-01-5	cis-1,3-Dichloropropene	10	U	10	1.9
108-10-1	4-Methyl-2-pentanone (MIBK)	50	U	50	5.3
108-88-3	Toluene	10	U	10	1.5
10061-02-6	trans-1,3-Dichloropropene	10	U	10	1.5
79-00-5	1,1,2-Trichloroethane	10	U	10	2.0
127-18-4	*Tetrachloroethene*	*670*	*E*	*10*	*1.5*
591-78-6	2-Hexanone	50	U	50	1.6
124-48-1	Dibromochloromethane	10	U	10	1.4
106-93-4	1,2-Dibromoethane (EDB)	10	U	10	1.8
108-90-7	Chlorobenzene	10	U	10	1.4
630-20-6	1,1,1,2-Tetrachloroethane	10	U	10	2.8
100-41-4	Ethylbenzene	10	U	10	2.3
1330-20-7	Xylenes, Total	30	U	30	4.9
100-42-5	Styrene	10	U	10	0.97

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-114-0/1-0 Lab Sample ID: 180-42504-5

Matrix: Water Lab File ID: 7040622.D

Analysis Method: 8260C Date Collected: 03/27/2015 13:22

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 18:51

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.: 137564 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)	89		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)	111		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040622.D
Lims ID: 180-42504-D-5 Lab Sample ID: 180-42504-5
Client ID: HD-MW-114-0/1-0
Sample Type: Client
Inject. Date: 06-Apr-2015 18:51:30 ALS Bottle#: 23 Worklist Smp#: 22
Purge Vol: 20.000 mL Dil. Factor: 10.0000
Sample Info: 180-42504-D-5
Misc. Info.: 180-0006335-022
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Apr-2015 08:48:13 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: journetp Date: 07-Apr-2015 08:46:34

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.597	4.932	-0.335	85	116460	4000.0	
*	2 Fluorobenzene (IS)	96	7.426	7.396	0.030	99	565300	200.0	
*	3 Chlorobenzene-d5	119	10.474	10.468	0.006	84	162734	200.0	
*	4 1,4-Dichlorobenzene-d4	152	12.792	12.792	0.000	95	219760	200.0	
$	5 Dibromofluoromethane (Surr	113	6.684	6.672	0.012	88	199624	221.4	
$	6 1,2-Dichloroethane-d4 (Sur	65	7.055	7.037	0.018	92	153448	178.5	
$	7 Toluene-d8 (Surr)	98	9.044	9.032	0.012	93	513348	212.7	
$	8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	88	214926	199.0	
	12 Chloromethane	50		2.012				ND	
	13 Vinyl chloride	62	2.182	2.201	-0.019	24	11618	13.1	
	15 Bromomethane	94		2.487				ND	
	16 Chloroethane	64		2.602				ND	
	22 1,1-Dichloroethene	96	3.648	3.521	0.127	33	44654	58.8	M
	26 Carbon disulfide	76		3.782				ND	
	24 Acetone	43		3.843				ND	
	31 Methylene Chloride	84		4.318				ND	
	34 trans-1,2-Dichloroethene	96	4.835	4.731	0.104	1	9091	9.65	M
	33 Acrylonitrile	53		4.810				ND	
	35 Methyl tert-butyl ether	73		4.877				ND	
	37 1,1-Dichloroethane	63		5.340				ND	
	45 cis-1,2-Dichloroethene	96	6.112	6.082	0.030	76	2326898	2489.9	E
	46 2-Butanone (MEK)	43		6.191				ND	
	49 Chlorobromomethane	128		6.374				ND	
	52 Chloroform	83		6.496				ND	
	53 1,1,1-Trichloroethane	97	6.696	6.672	0.024	38	5575	3.95	
	56 Carbon tetrachloride	117		6.848				ND	
	58 Benzene	78		7.086				ND	
	59 1,2-Dichloroethane	62		7.122				ND	
	64 Trichloroethene	130	7.809	7.785	0.024	92	1604410	1438.6	E
	67 1,2-Dichloropropane	63		8.029				ND	
	70 1,4-Dioxane	88		8.187				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.308				ND	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.941				ND	
76 Toluene	91		9.099				ND	
77 trans-1,3-Dichloropropene	75		9.324				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164	9.653	9.647	0.006	90	574749	1337.2	E
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.006				ND	
87 Chlorobenzene	112		10.498				ND	
89 1,1,1,2-Tetrachloroethane	131		10.572				ND	
90 Ethylbenzene	106		10.602				ND	
91 m-Xylene & p-Xylene	106		10.717				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.125				ND	
94 Bromoform	173		11.320				ND	
99 1,1,2,2-Tetrachloroethane	83		11.770				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

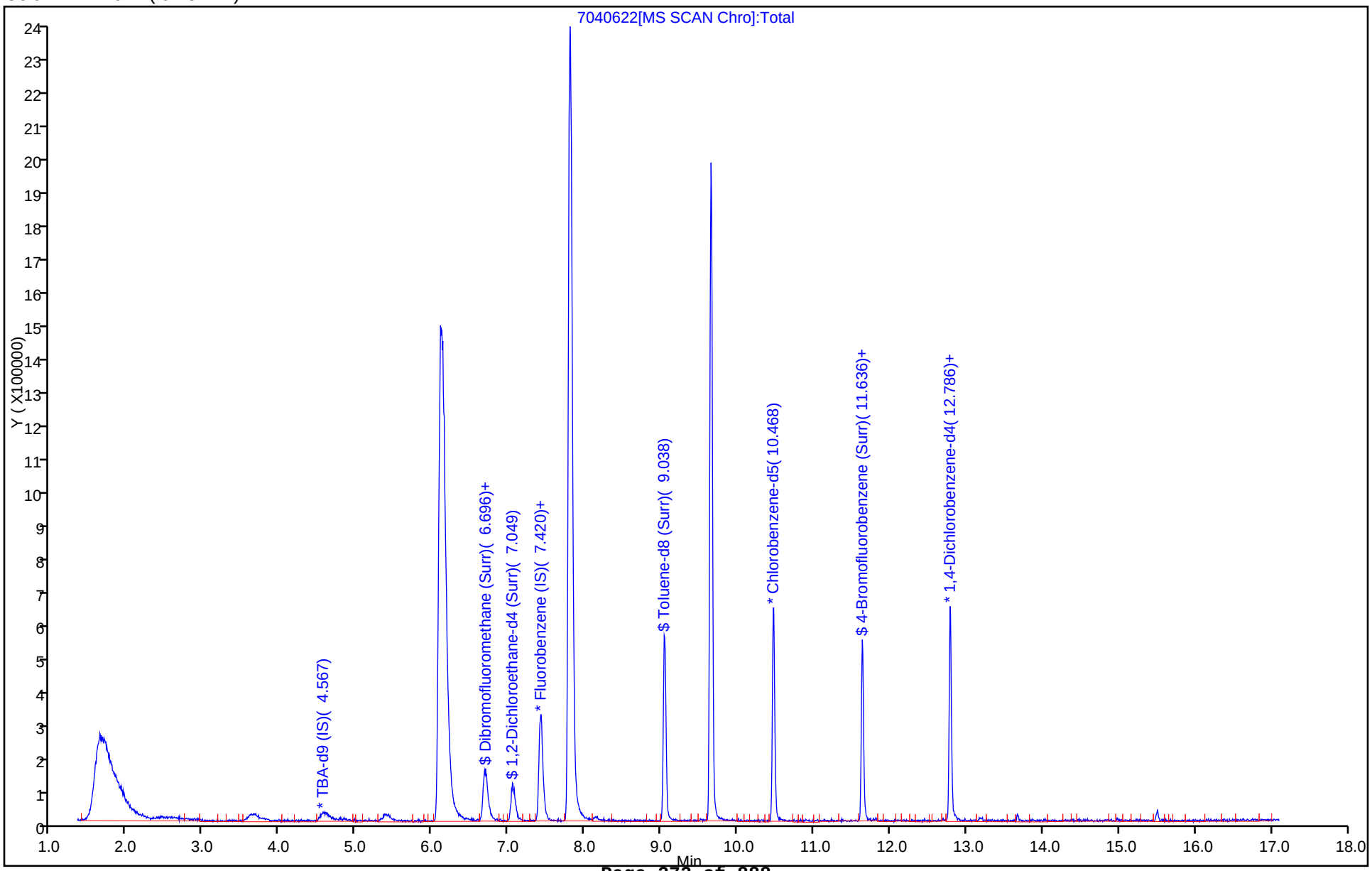
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

Report Date: 07-Apr-2015 08:48:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040622.D				
Injection Date:	06-Apr-2015 18:51:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-D-5	Lab Sample ID:	180-42504-5	Worklist Smp#:	22
Client ID:	HD-MW-114-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	23
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



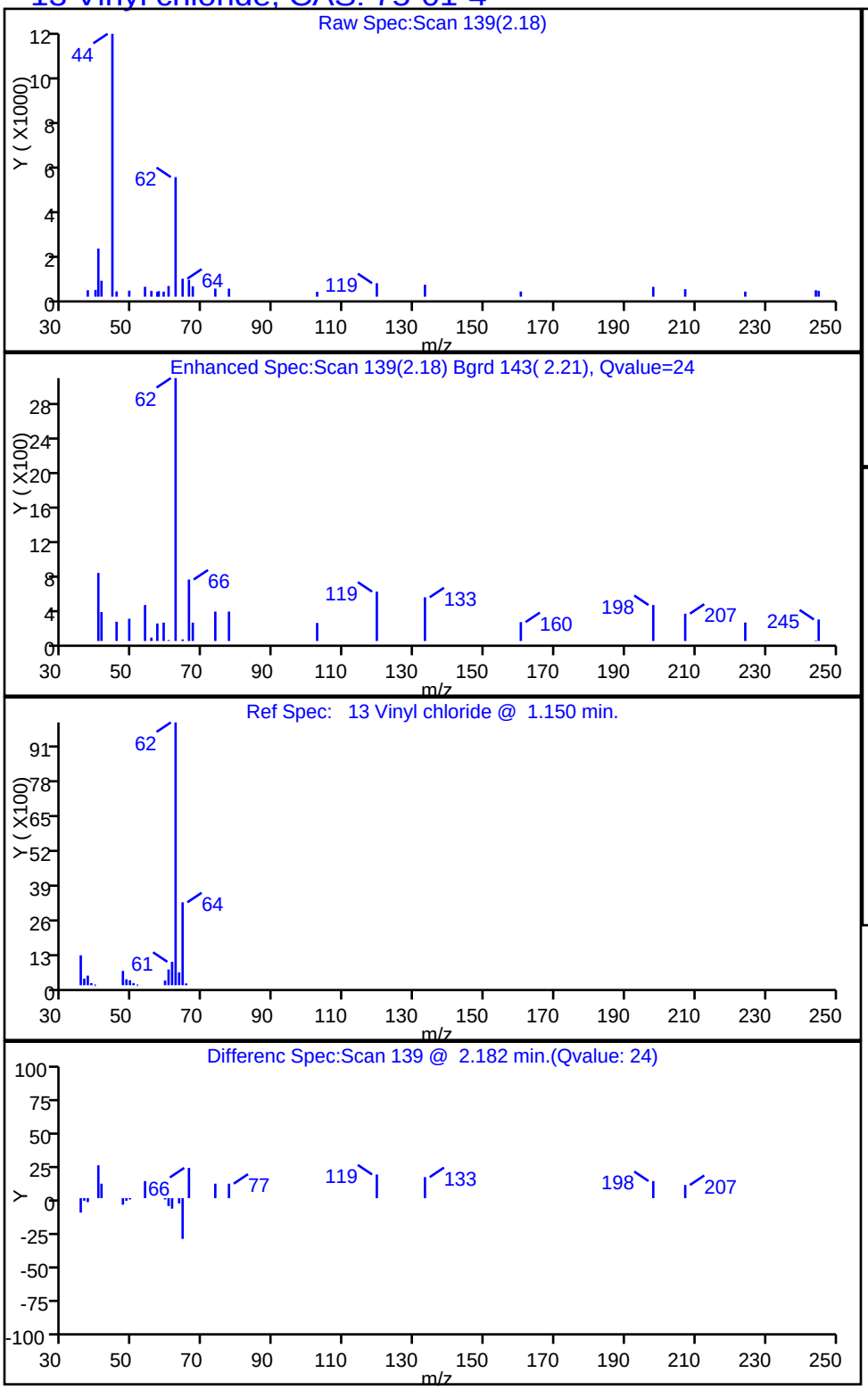
Report Date: 07-Apr-2015 08:48:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

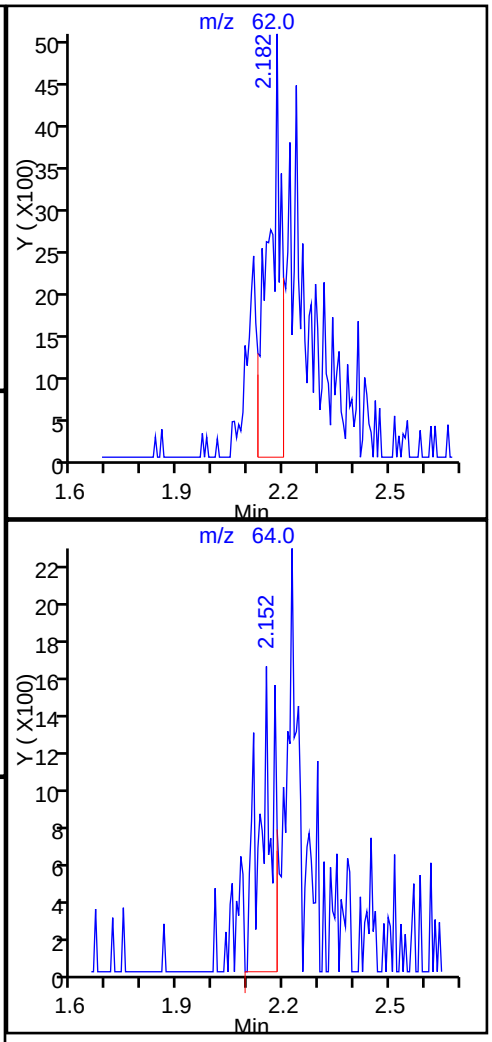
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040622.D

Injection Date:	06-Apr-2015 18:51:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-5	Lab Sample ID:	180-42504-5		
Client ID:	HD-MW-114-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

13 Vinyl chloride, CAS: 75-01-4





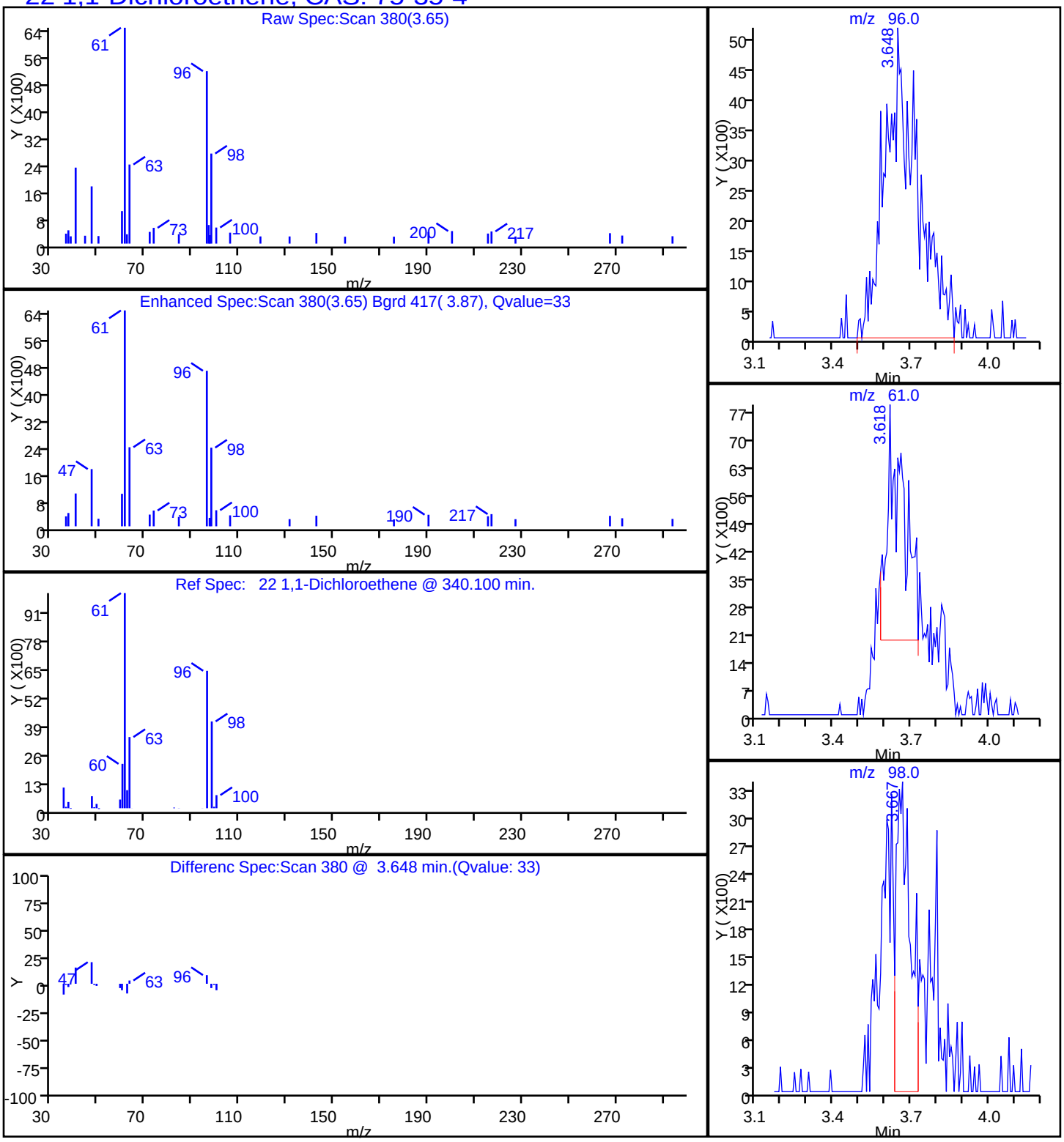
Report Date: 07-Apr-2015 08:48:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040622.D

Injection Date:	06-Apr-2015 18:51:30	Instrument ID:	CHHP7
Lims ID:	180-42504-D-5	Lab Sample ID:	180-42504-5
Client ID:	HD-MW-114-0/1-0		
Operator ID:	034635	ALS Bottle#:	23 Worklist Smp#: 22
Purge Vol:	20.000 mL	Dil. Factor:	10.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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



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TestAmerica Pittsburgh

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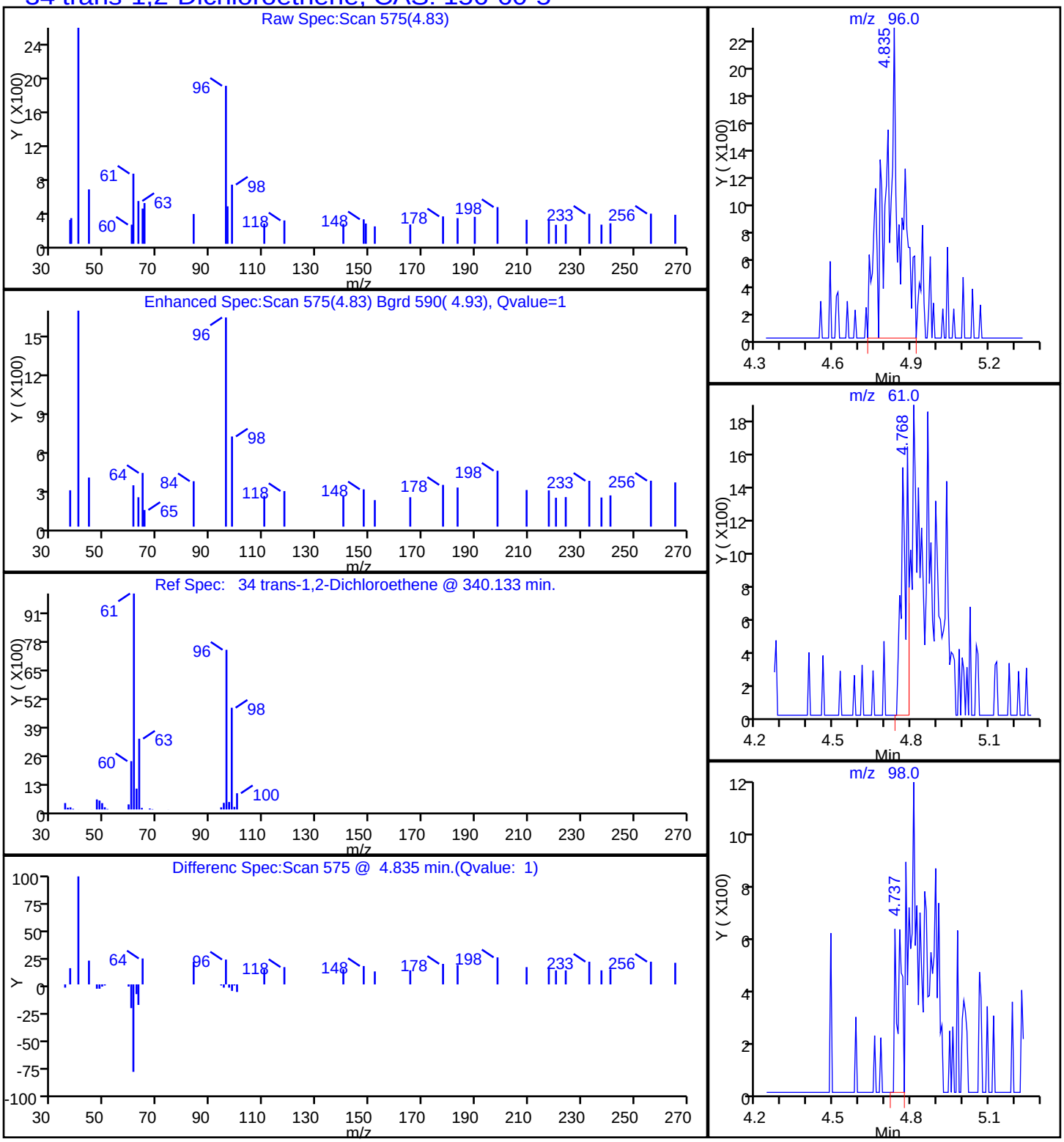
Lims ID:	180-42504-D-5	Lab Sample ID:	180-42504-5		
Client ID:	HD-MW-114-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

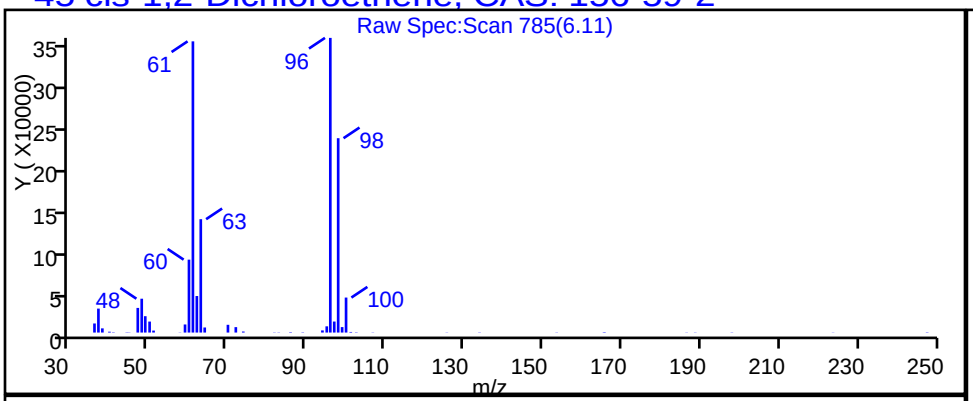


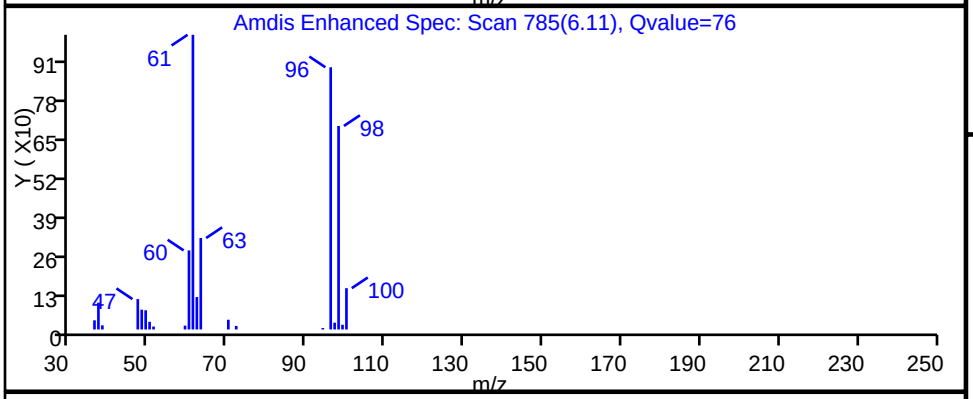
Report Date: 07-Apr-2015 08:48:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

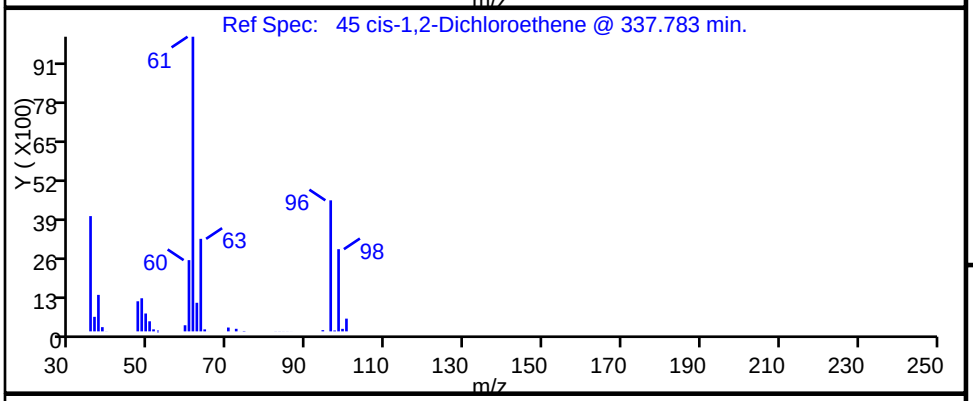
TestAmerica Pittsburgh

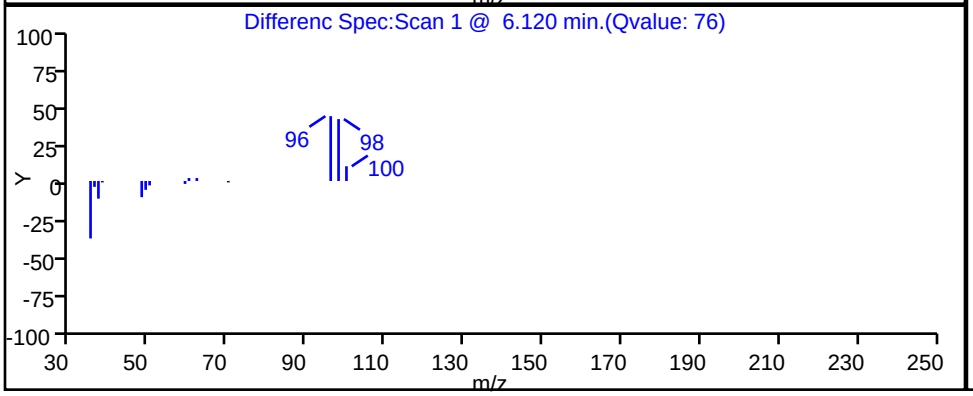
Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040622.D				
Injection Date:	06-Apr-2015 18:51:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-5	Lab Sample ID:	180-42504-5		
Client ID:	HD-MW-114-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

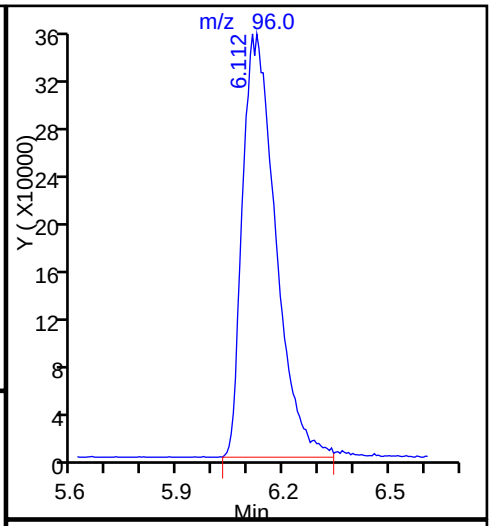
45 cis-1,2-Dichloroethene, CAS: 156-59-2

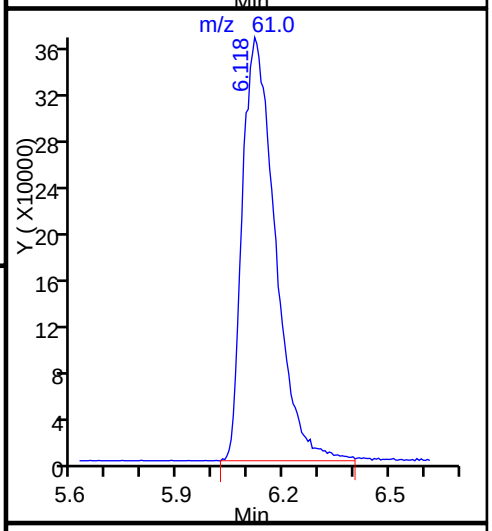


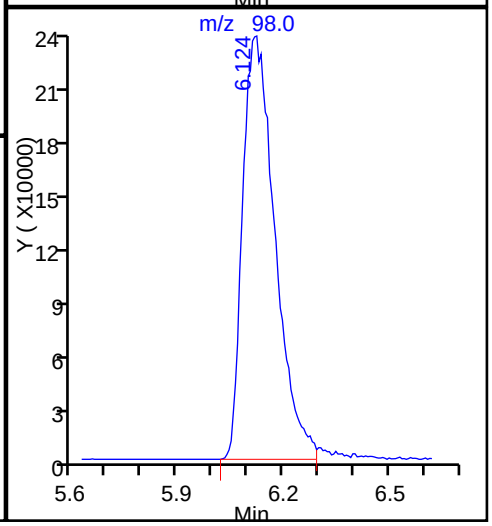










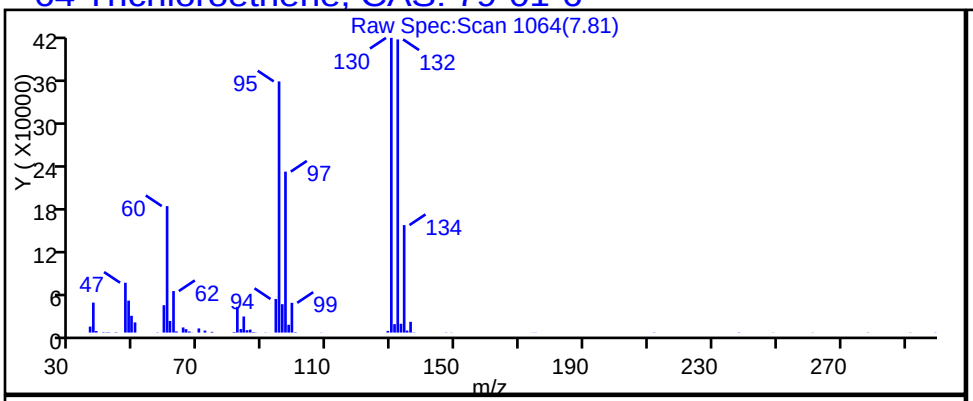


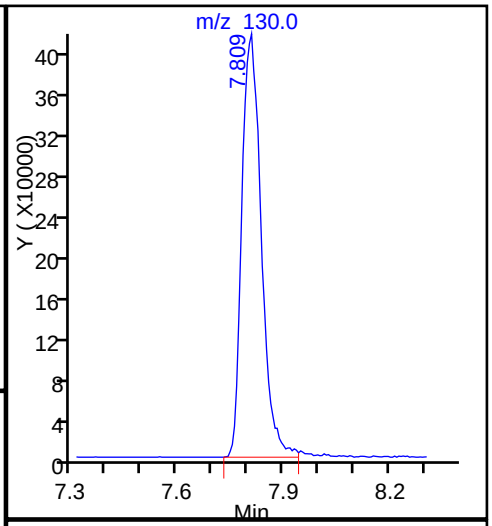
Report Date: 07-Apr-2015 08:48:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

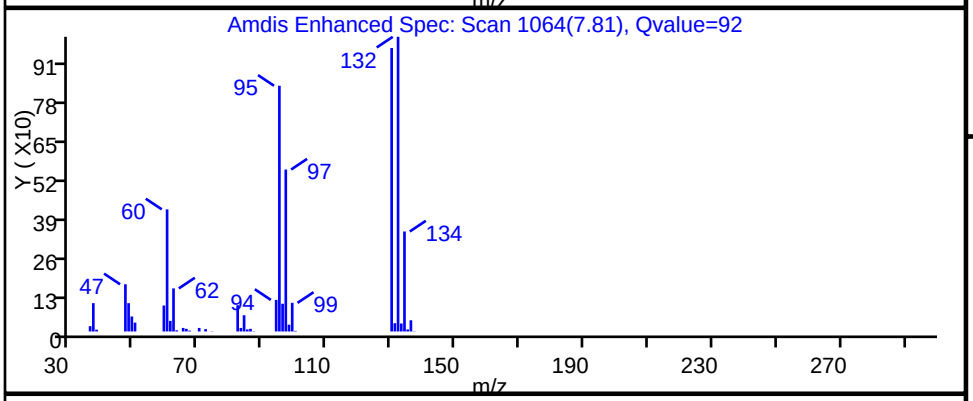
TestAmerica Pittsburgh

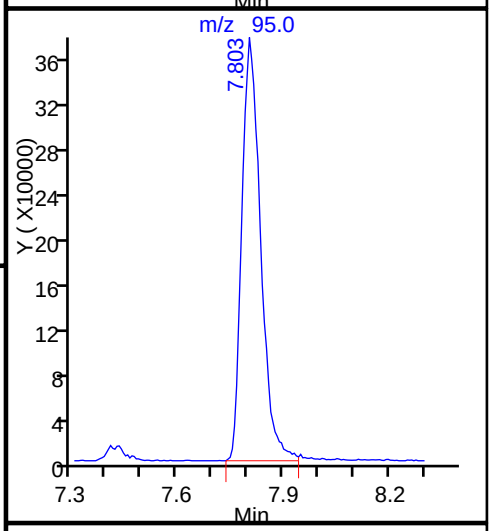
Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040622.D				
Injection Date:	06-Apr-2015 18:51:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-5	Lab Sample ID:	180-42504-5		
Client ID:	HD-MW-114-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

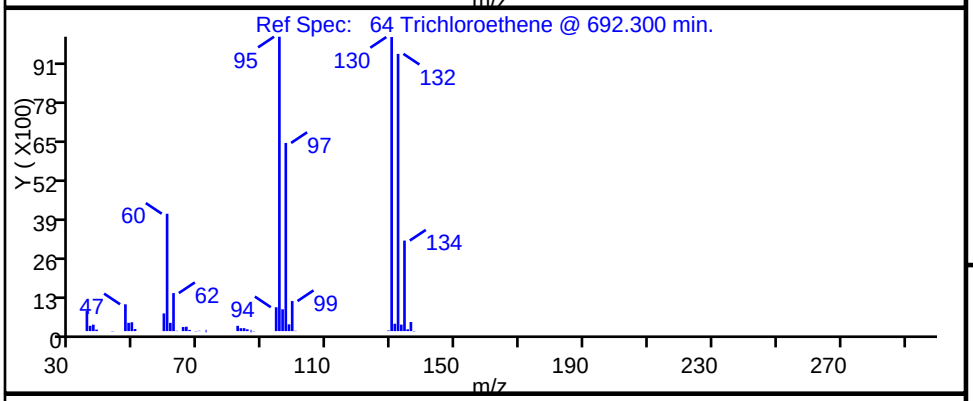
64 Trichloroethene, CAS: 79-01-6

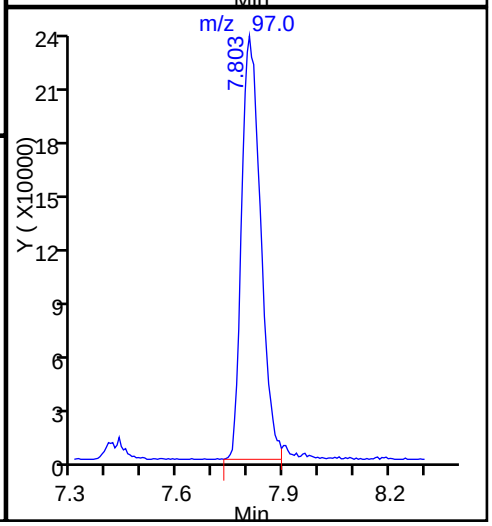


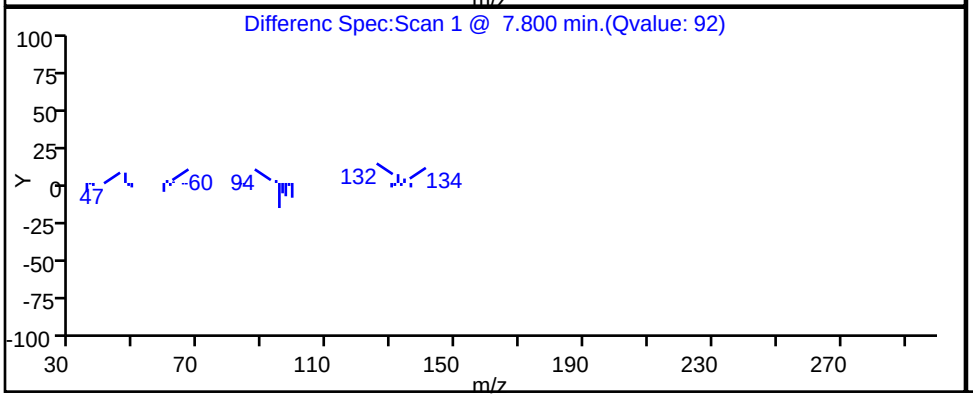










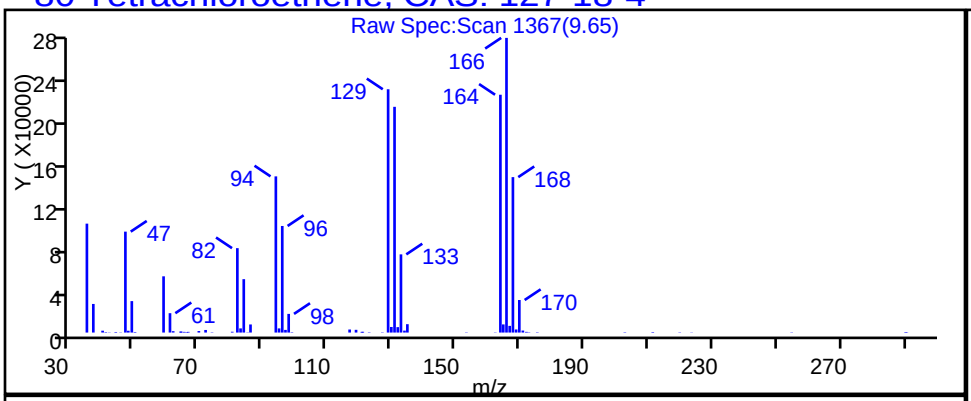


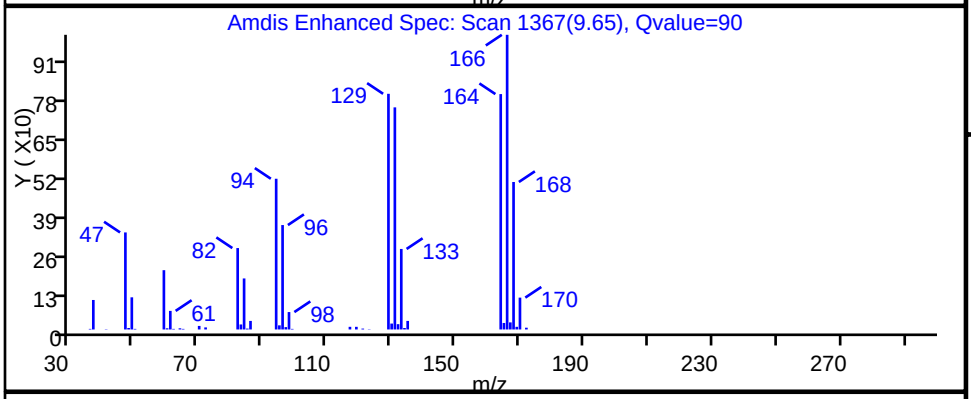
Report Date: 07-Apr-2015 08:48:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

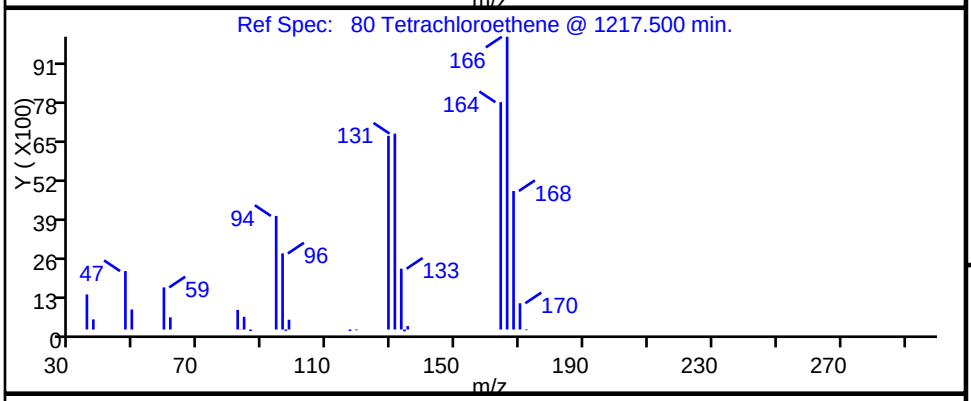
TestAmerica Pittsburgh

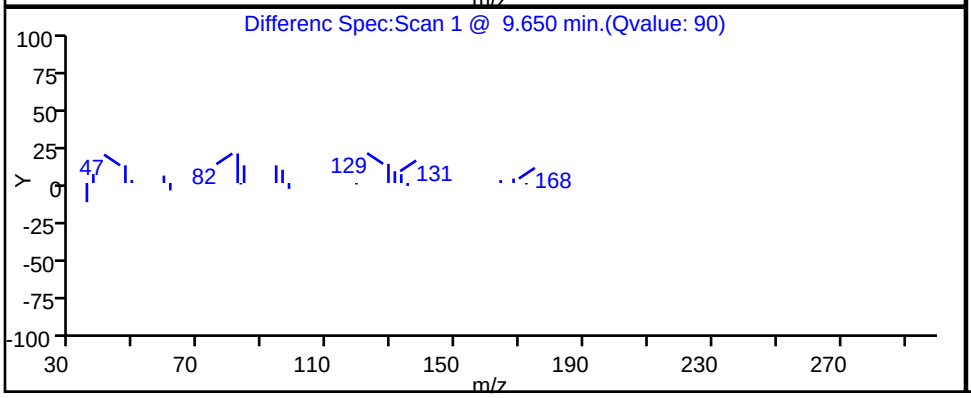
Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040622.D		
Injection Date:	06-Apr-2015 18:51:30	Instrument ID:	CHHP7
Lims ID:	180-42504-D-5	Lab Sample ID:	180-42504-5
Client ID:	HD-MW-114-0/1-0		
Operator ID:	034635	ALS Bottle#:	23 Worklist Smp#: 22
Purge Vol:	20.000 mL	Dil. Factor:	10.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

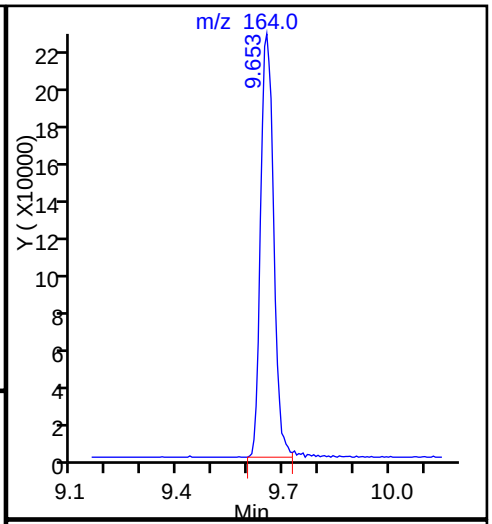
80 Tetrachloroethene, CAS: 127-18-4

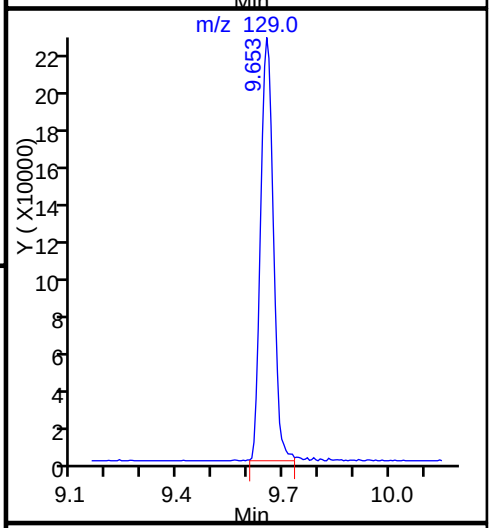


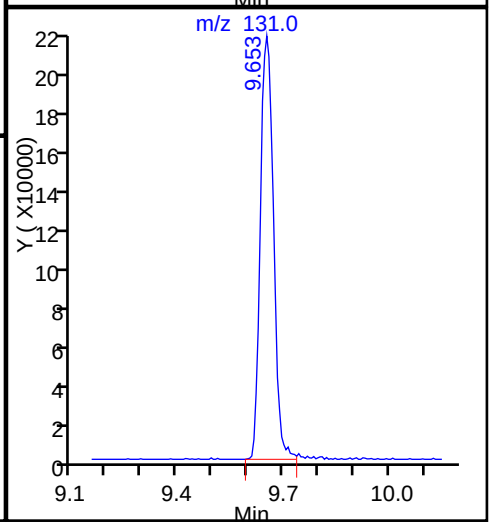












Manual Integration/User Assign Peak Report

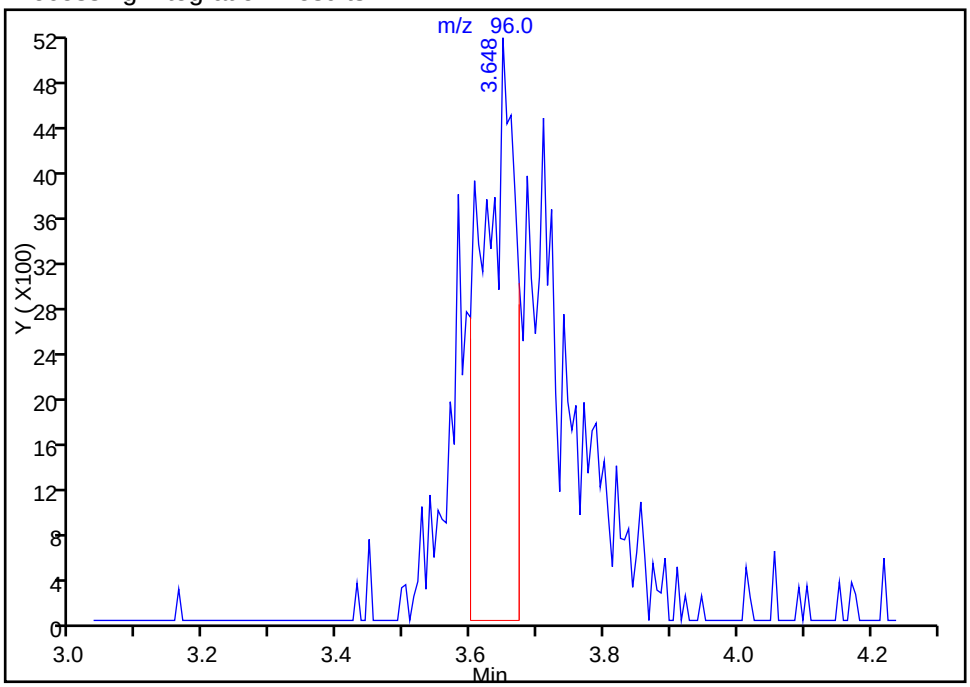
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040622.D				
Injection Date:	06-Apr-2015 18:51:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-5	Lab Sample ID:	180-42504-5		
Client ID:	HD-MW-114-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

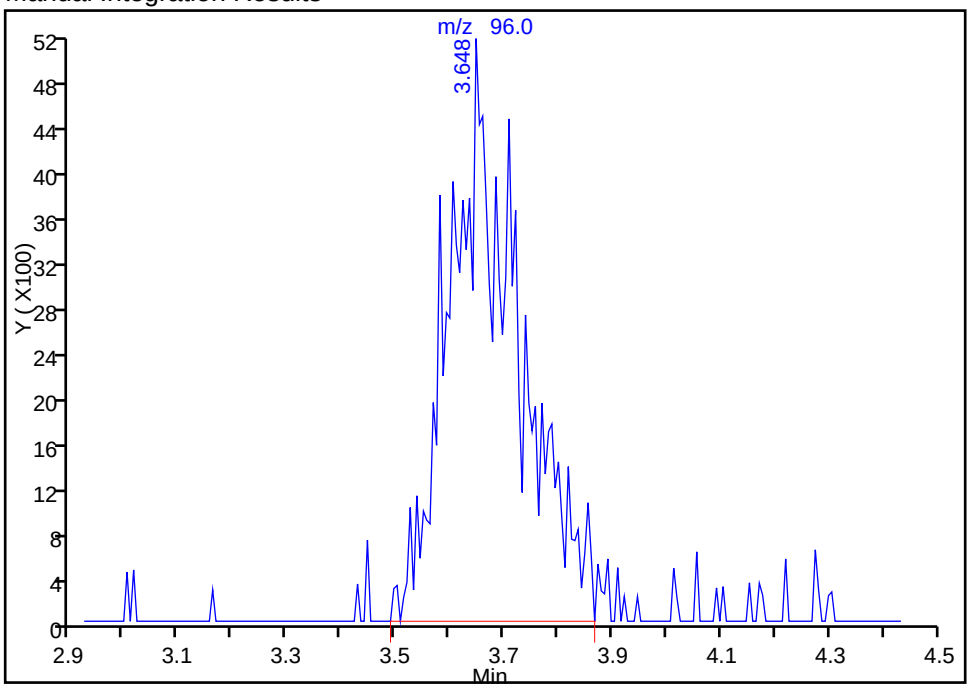
Processing Integration Results

RT: 3.65
Area: 17426
Amount: 22.959044
Amount Units: ng



Manual Integration Results

RT: 3.65
Area: 44654
Amount: 58.832386
Amount Units: ng



Reviewer: journetp, 07-Apr-2015 08:46:34
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

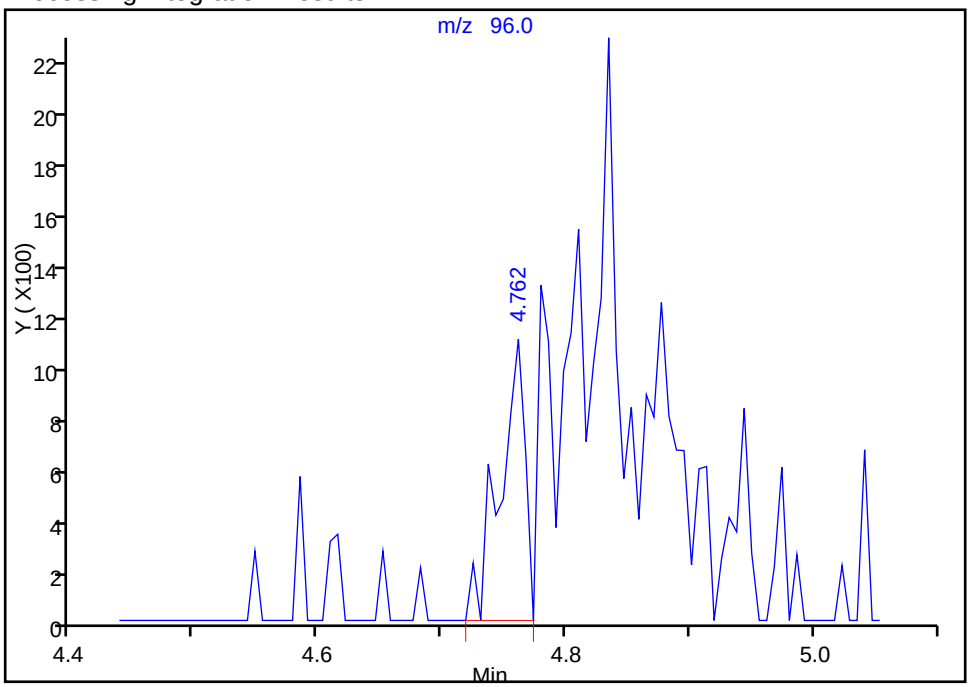
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040622.D				
Injection Date:	06-Apr-2015 18:51:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-5	Lab Sample ID:	180-42504-5		
Client ID:	HD-MW-114-0/1-0				
Operator ID:	034635	ALS Bottle#:	23	Worklist Smp#:	22
Purge Vol:	20.000 mL	Dil. Factor:	10.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

Processing Integration Results

RT: 4.76
Area: 1556
Amount: 1.652271
Amount Units: ng



Manual Integration Results

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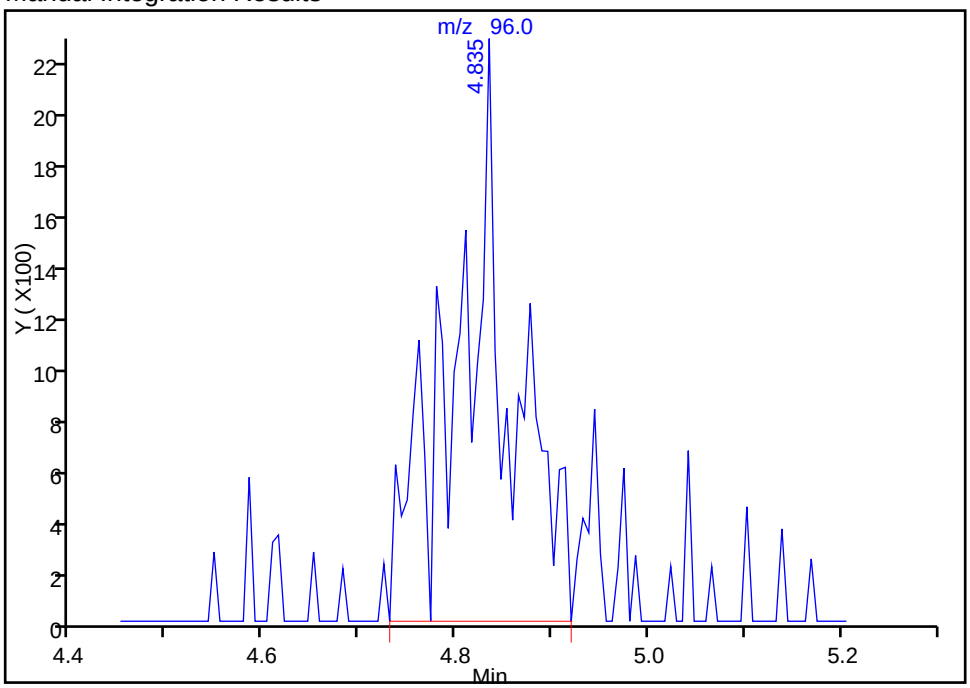
Amount: 9.653470
Amount Units: ng



Reviewer: journetp, 07-Apr-2015 08:46:34
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-114-0/1-0 DL | Lab Sample ID: 180-42504-5 DL

Matrix: Water | Lab File ID: 7040621.D

Analysis Method: 8260C | Date Collected: 03/27/2015 13:22

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2015 18:24

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 137564 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	100	U	100	28
75-01-4	Vinyl chloride	100	U	100	23
74-83-9	Bromomethane	100	U	100	31
75-00-3	Chloroethane	100	U	100	21
75-35-4	1,1-Dichloroethene	100	U	100	30
67-64-1	Acetone	500	U	500	250
75-15-0	Carbon disulfide	100	U	100	21
75-09-2	Methylene Chloride	100	U	100	13
156-60-5	trans-1,2-Dichloroethene	100	U	100	17
1634-04-4	Methyl tert-butyl ether	100	U	100	18
75-34-3	1,1-Dichloroethane	100	U	100	12
156-59-2	cis-1,2-Dichloroethene	1800		100	24
74-97-5	Bromochloromethane	100	U	100	18
78-93-3	2-Butanone (MEK)	500	U	500	55
67-66-3	Chloroform	100	U	100	17
71-55-6	1,1,1-Trichloroethane	100	U	100	29
56-23-5	Carbon tetrachloride	100	U	100	14
71-43-2	Benzene	100	U	100	11
107-06-2	1,2-Dichloroethane	100	U	100	21
79-01-6	Trichloroethene	1100		100	14
78-87-5	1,2-Dichloropropane	100	U	100	9.5
75-27-4	Bromodichloromethane	100	U	100	13
10061-01-5	cis-1,3-Dichloropropene	100	U	100	19
108-10-1	4-Methyl-2-pentanone (MIBK)	500	U	500	53
108-88-3	Toluene	100	U	100	15
10061-02-6	trans-1,3-Dichloropropene	100	U	100	15
79-00-5	1,1,2-Trichloroethane	100	U	100	20
127-18-4	Tetrachloroethene	490		100	15
591-78-6	2-Hexanone	500	U	500	16
124-48-1	Dibromochloromethane	100	U	100	14
106-93-4	1,2-Dibromoethane (EDB)	100	U	100	18
108-90-7	Chlorobenzene	100	U	100	14
630-20-6	1,1,1,2-Tetrachloroethane	100	U	100	28
100-41-4	Ethylbenzene	100	U	100	23
1330-20-7	Xylenes, Total	300	U	300	49
100-42-5	Styrene	100	U	100	9.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-114-0/1-0 DL Lab Sample ID: 180-42504-5 DL

Matrix: Water Lab File ID: 7040621.D

Analysis Method: 8260C Date Collected: 03/27/2015 13:22

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 18:24

Soil Aliquot Vol: Dilution Factor: 100

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137564 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		64-135
2037-26-5	Toluene-d8 (Surr)	112		71-118
460-00-4	4-Bromofluorobenzene (Surr)	105		70-118
1868-53-7	Dibromofluoromethane (Surr)	116		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040621.D
Lims ID: 180-42504-C-5 Lab Sample ID: 180-42504-5
Client ID: HD-MW-114-0/1-0
Sample Type: Client
Inject. Date: 06-Apr-2015 18:24:30 ALS Bottle#: 22 Worklist Smp#: 21
Purge Vol: 20.000 mL Dil. Factor: 100.0000
Sample Info: 180-42504-C-5
Misc. Info.: 180-0006335-021
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Apr-2015 08:48:13 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: journetp Date: 07-Apr-2015 08:19:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.587	4.932	-0.345	81	120850	4000.0	
* 2 Fluorobenzene (IS)	96	7.428	7.396	0.032	99	547436	200.0	
* 3 Chlorobenzene-d5	119	10.469	10.468	0.001	85	154872	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.792	-0.005	94	214533	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.685	6.672	0.013	92	202887	232.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.057	7.037	0.020	94	161926	194.5	
$ 7 Toluene-d8 (Surr)	98	9.046	9.032	0.014	93	516495	224.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.631	11.636	-0.005	88	214831	209.8	
12 Chloromethane	50		2.012				ND	
13 Vinyl chloride	62		2.201				ND	
15 Bromomethane	94		2.487				ND	
16 Chloroethane	64		2.602				ND	
22 1,1-Dichloroethene	96	3.662	3.521	0.141	15	2335	3.18	
26 Carbon disulfide	76		3.782				ND	
24 Acetone	43		3.843				ND	
31 Methylene Chloride	84		4.318				ND	
34 trans-1,2-Dichloroethene	96		4.731				ND	
33 Acrylonitrile	53		4.810				ND	
35 Methyl tert-butyl ether	73		4.877				ND	
37 1,1-Dichloroethane	63		5.340				ND	
45 cis-1,2-Dichloroethene	96	6.108	6.082	0.026	74	318999	352.5	
46 2-Butanone (MEK)	43		6.191				ND	
49 Chlorobromomethane	128		6.374				ND	
52 Chloroform	83		6.496				ND	
53 1,1,1-Trichloroethane	97		6.672				ND	
56 Carbon tetrachloride	117		6.848				ND	
58 Benzene	78		7.086				ND	
59 1,2-Dichloroethane	62		7.122				ND	
64 Trichloroethene	130	7.805	7.785	0.020	93	241904	224.0	
67 1,2-Dichloropropane	63		8.029				ND	
70 1,4-Dioxane	88		8.187				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.308				ND	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.941				ND	
76 Toluene	91		9.099				ND	
77 trans-1,3-Dichloropropene	75		9.324				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164	9.654	9.647	0.007	90	80531	97.2	
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.006				ND	
87 Chlorobenzene	112		10.498				ND	
89 1,1,1,2-Tetrachloroethane	131		10.572				ND	
90 Ethylbenzene	106		10.602				ND	
91 m-Xylene & p-Xylene	106		10.717				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.125				ND	
94 Bromoform	173		11.320				ND	
99 1,1,2,2-Tetrachloroethane	83		11.770				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

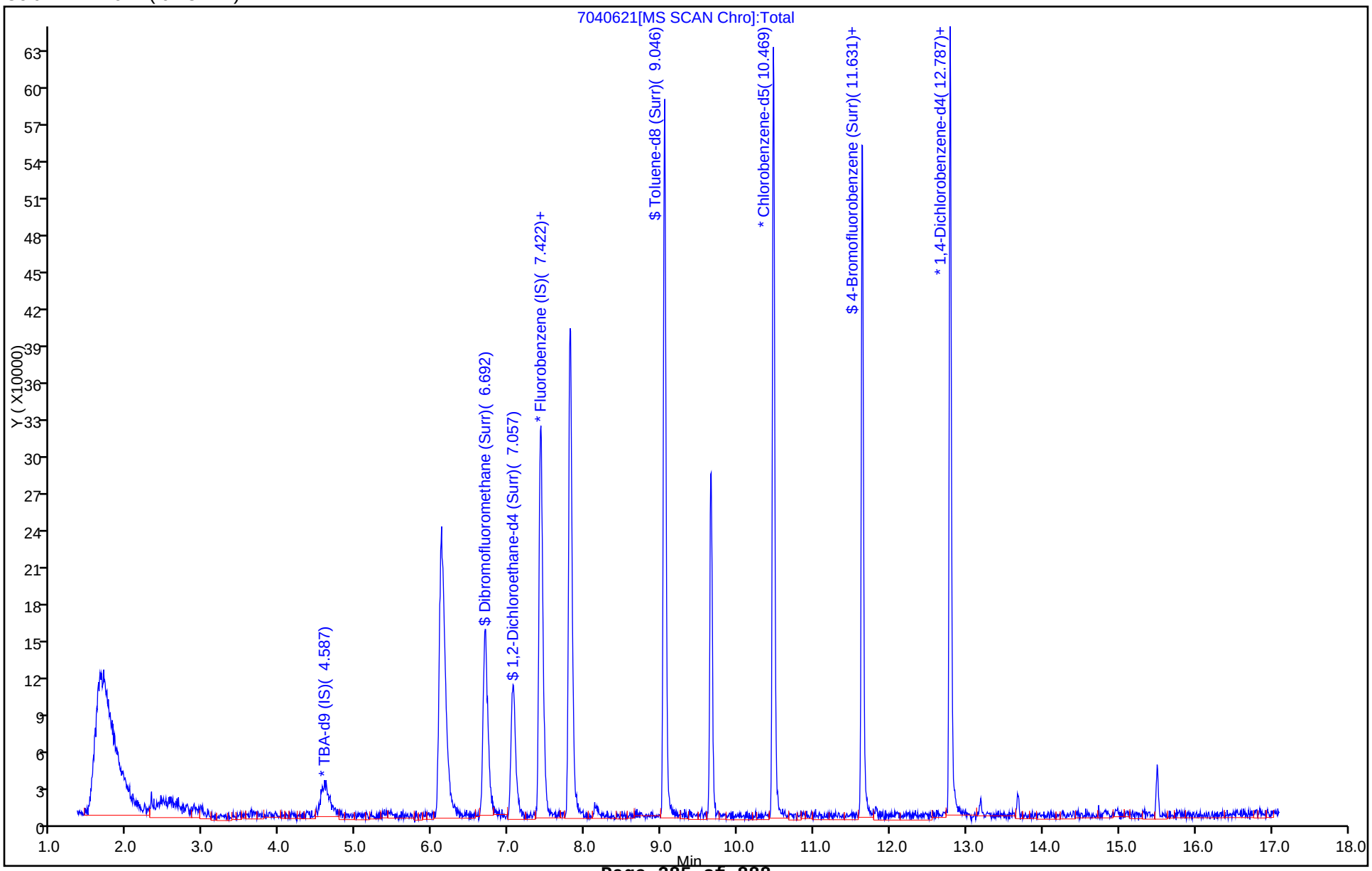
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

Report Date: 07-Apr-2015 08:48:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040621.D				
Injection Date:	06-Apr-2015 18:24:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-C-5	Lab Sample ID:	180-42504-5	Worklist Smp#:	21
Client ID:	HD-MW-114-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	100.0000	ALS Bottle#:	22
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

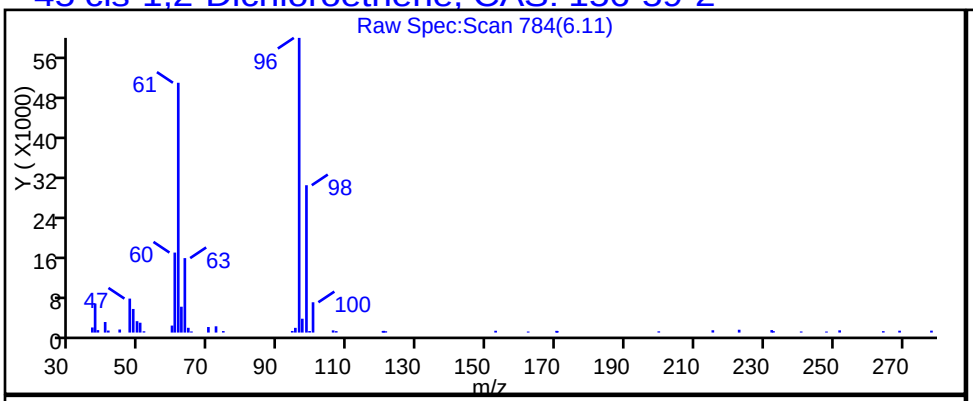


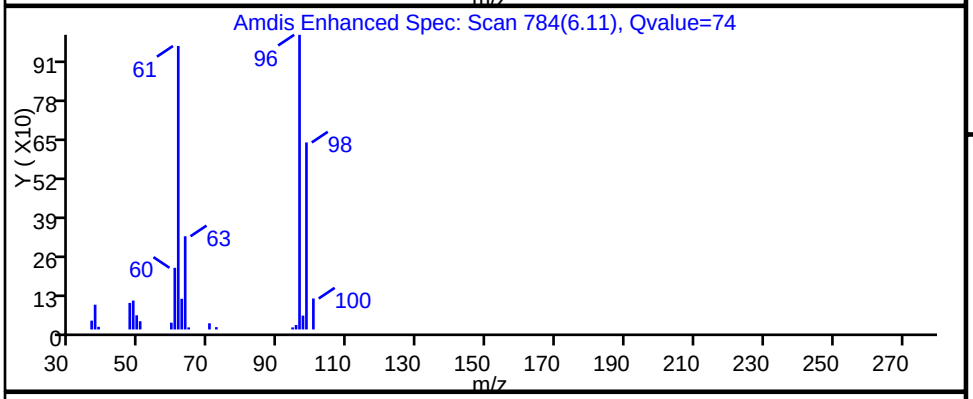
Report Date: 07-Apr-2015 08:48:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

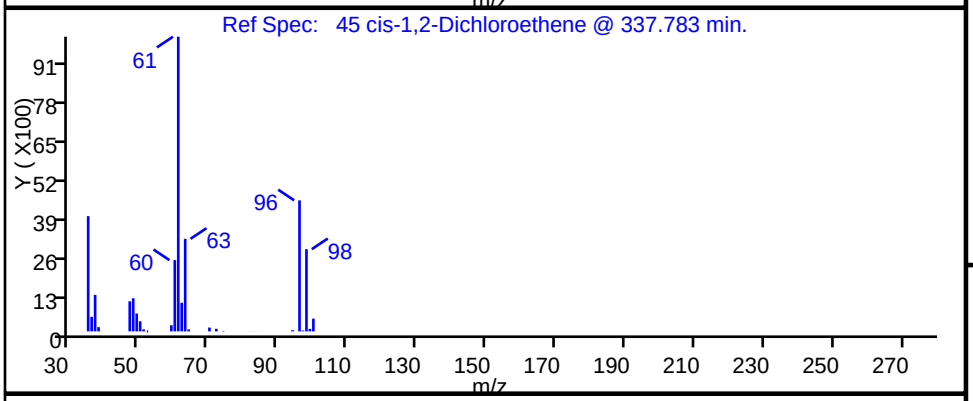
TestAmerica Pittsburgh

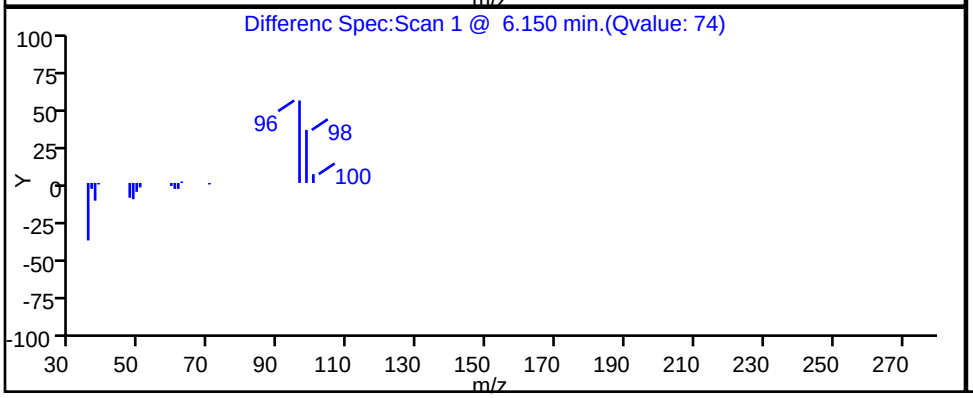
Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040621.D				
Injection Date:	06-Apr-2015 18:24:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-5	Lab Sample ID:	180-42504-5		
Client ID:	HD-MW-114-0/1-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

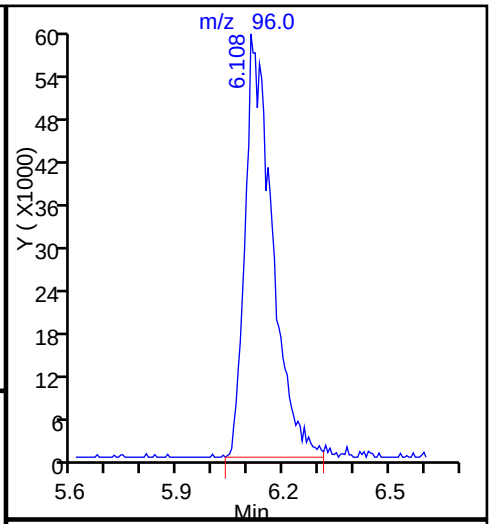
45 cis-1,2-Dichloroethene, CAS: 156-59-2

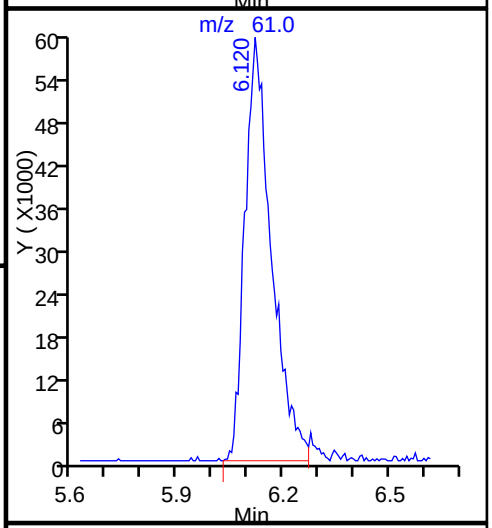


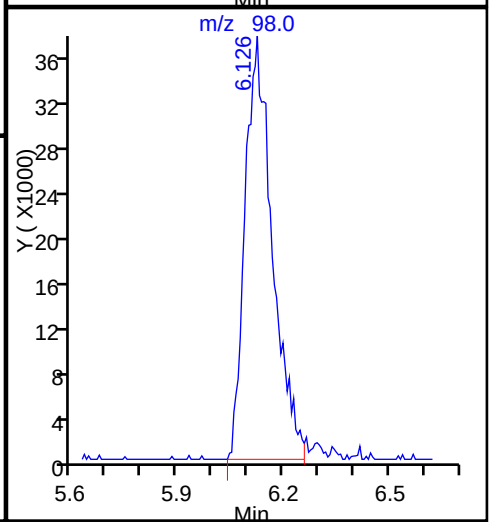










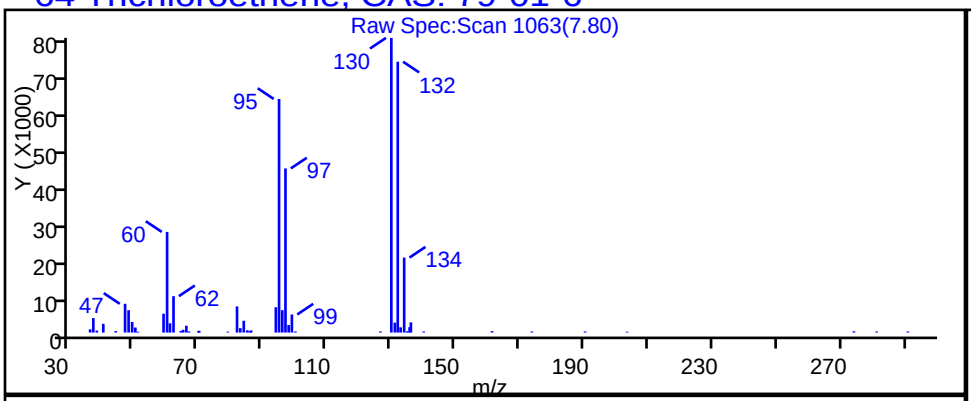


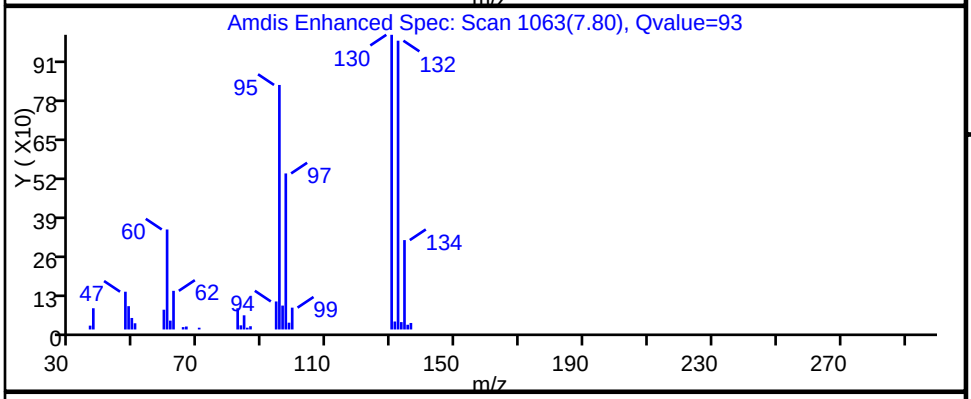
Report Date: 07-Apr-2015 08:48:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

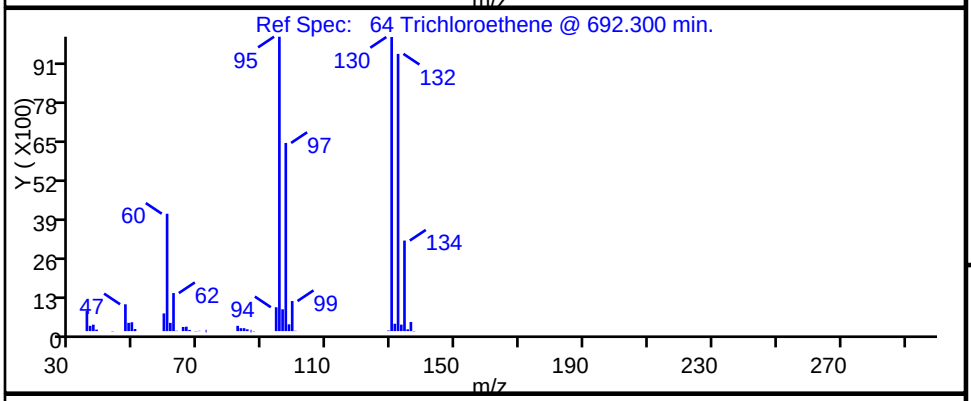
TestAmerica Pittsburgh

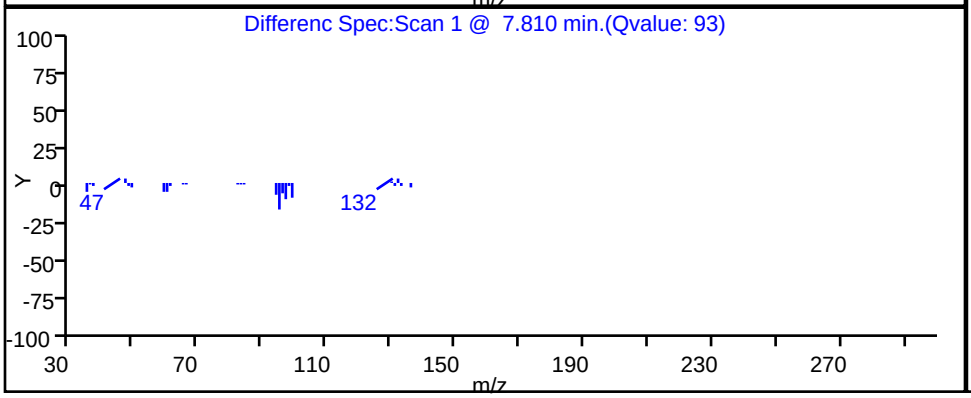
Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040621.D				
Injection Date:	06-Apr-2015 18:24:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-5	Lab Sample ID:	180-42504-5		
Client ID:	HD-MW-114-0/1-0				
Operator ID:	034635	ALS Bottle#:	22	Worklist Smp#:	21
Purge Vol:	20.000 mL	Dil. Factor:	100.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

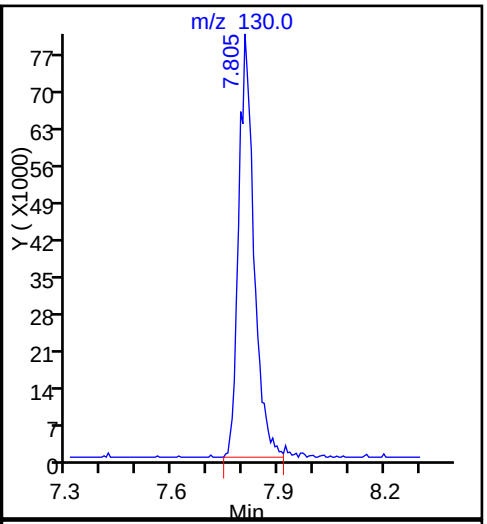
64 Trichloroethene, CAS: 79-01-6

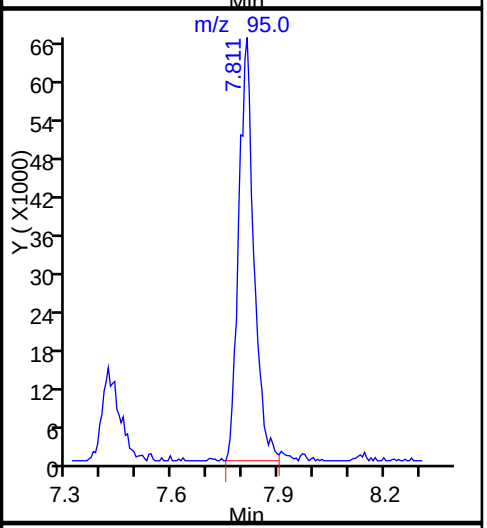


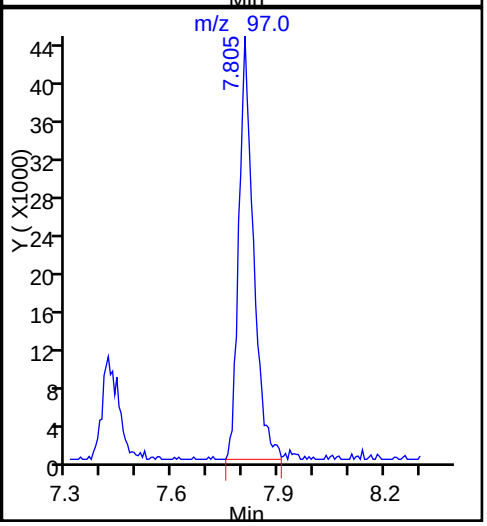












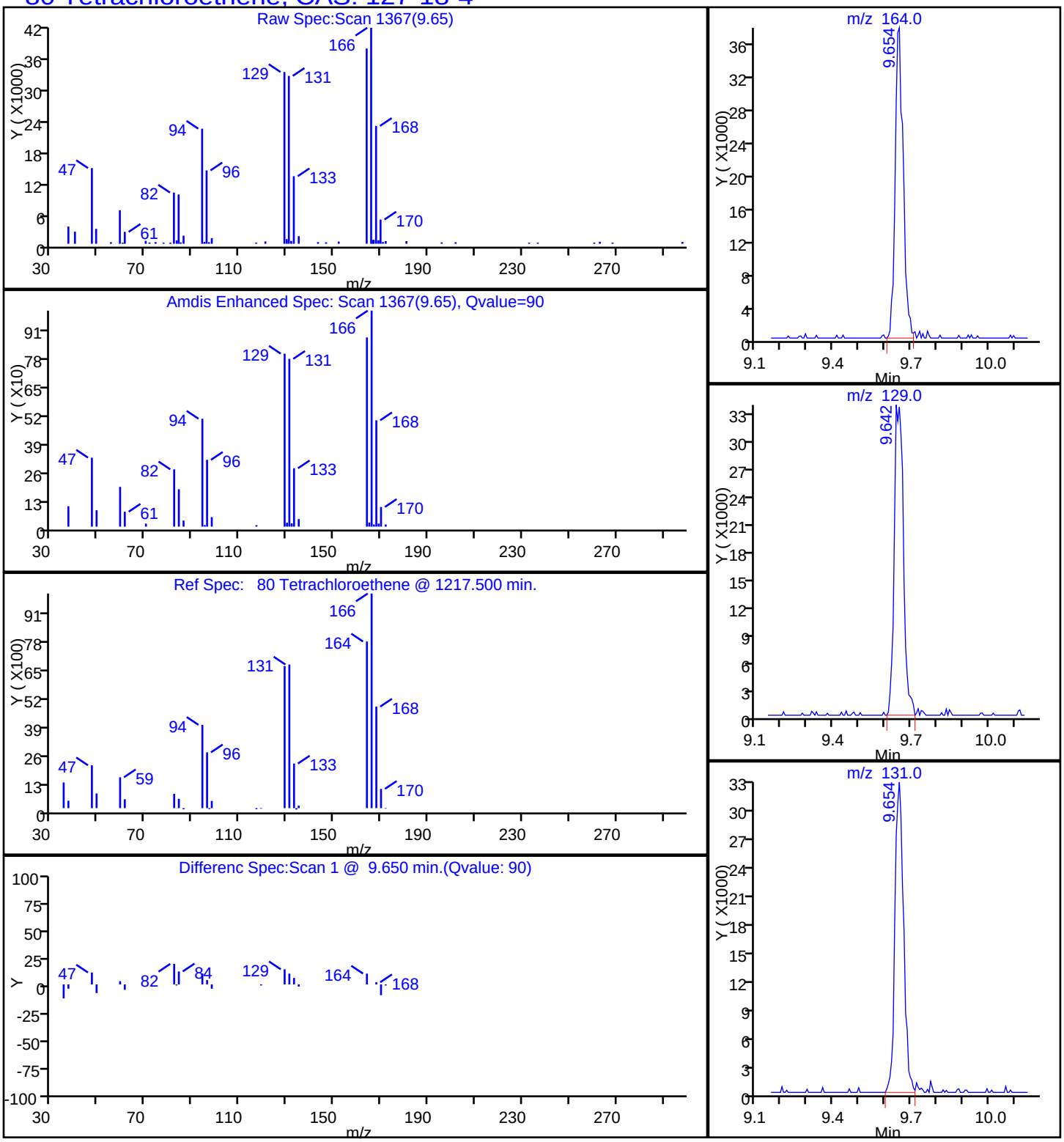
Report Date: 07-Apr-2015 08:48:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040621.D

Injection Date:	06-Apr-2015 18:24:30	Instrument ID:	CHHP7
Lims ID:	180-42504-C-5	Lab Sample ID:	180-42504-5
Client ID:	HD-MW-114-0/1-0		
Operator ID:	034635	ALS Bottle#:	22 Worklist Smp#: 21
Purge Vol:	20.000 mL	Dil. Factor:	100.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-132-0/1-0 | Lab Sample ID: 180-42504-6

Matrix: Water | Lab File ID: 7040619.D

Analysis Method: 8260C | Date Collected: 03/27/2015 12:30

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2015 17:29

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.: 137564 | 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	3.0		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*	*59*	*E*	*1.0*	*0.24*
74-97-5	Bromochloromethane	1.0	U	1.0	0.18
78-93-3	2-Butanone (MEK)	5.0	U	5.0	0.55
67-66-3	Chloroform	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	36		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.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-132-0/1-0 Lab Sample ID: 180-42504-6

Matrix: Water Lab File ID: 7040619.D

Analysis Method: 8260C Date Collected: 03/27/2015 12:30

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 17:29

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.: 137564 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)	89		64-135
2037-26-5	Toluene-d8 (Surr)	112		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	115		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040619.D
Lims ID: 180-42504-D-6 Lab Sample ID: 180-42504-6
Client ID: HD-MW-132-0/1-0
Sample Type: Client
Inject. Date: 06-Apr-2015 17:29:30 ALS Bottle#: 20 Worklist Smp#: 19
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 180-42504-D-6
Misc. Info.: 180-0006335-019
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Apr-2015 09:11:25 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: journetp Date: 07-Apr-2015 09:09:04

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.592	4.932	-0.340	87	107437	4000.0	
*	2 Fluorobenzene (IS)	96	7.421	7.396	0.025	99	548969	200.0	
*	3 Chlorobenzene-d5	119	10.475	10.468	0.006	84	153089	200.0	
*	4 1,4-Dichlorobenzene-d4	152	12.792	12.792	0.000	96	209580	200.0	
$	5 Dibromofluoromethane (Surr	113	6.691	6.672	0.019	89	201955	230.6	
$	6 1,2-Dichloroethane-d4 (Sur	65	7.062	7.037	0.025	93	149365	178.9	
$	7 Toluene-d8 (Surr)	98	9.045	9.032	0.013	93	508167	223.8	
$	8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	90	208820	206.0	
	12 Chloromethane	50		2.012				ND	
	13 Vinyl chloride	62		2.201				ND	
	15 Bromomethane	94		2.487				ND	
	16 Chloroethane	64		2.602				ND	
	22 1,1-Dichloroethene	96	3.655	3.521	0.134	56	44615	60.5	
	26 Carbon disulfide	76		3.782				ND	
	24 Acetone	43		3.843				ND	
	31 Methylene Chloride	84		4.318				ND	
	34 trans-1,2-Dichloroethene	96	4.793	4.731	0.062	22	1683	1.84	
	33 Acrylonitrile	53		4.810				ND	
	35 Methyl tert-butyl ether	73		4.877				ND	
	37 1,1-Dichloroethane	63		5.340				ND	
	45 cis-1,2-Dichloroethene	96	6.125	6.082	0.043	87	1069388	1178.3	E
	46 2-Butanone (MEK)	43		6.191				ND	
	49 Chlorobromomethane	128		6.374				ND	
	52 Chloroform	83		6.496				ND	
	53 1,1,1-Trichloroethane	97		6.672				ND	
	56 Carbon tetrachloride	117		6.848				ND	
	58 Benzene	78		7.086				ND	
	59 1,2-Dichloroethane	62		7.122				ND	
	64 Trichloroethene	130	7.804	7.785	0.019	94	778617	718.9	
	67 1,2-Dichloropropane	63		8.029				ND	
	70 1,4-Dioxane	88		8.187				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.308				ND	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.941				ND	
76 Toluene	91		9.099				ND	
77 trans-1,3-Dichloropropene	75		9.324				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164		9.647				ND	
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.006				ND	
87 Chlorobenzene	112		10.498				ND	
89 1,1,1,2-Tetrachloroethane	131		10.572				ND	
90 Ethylbenzene	106		10.602				ND	
91 m-Xylene & p-Xylene	106		10.717				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.125				ND	
94 Bromoform	173		11.320				ND	
99 1,1,2,2-Tetrachloroethane	83		11.770				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

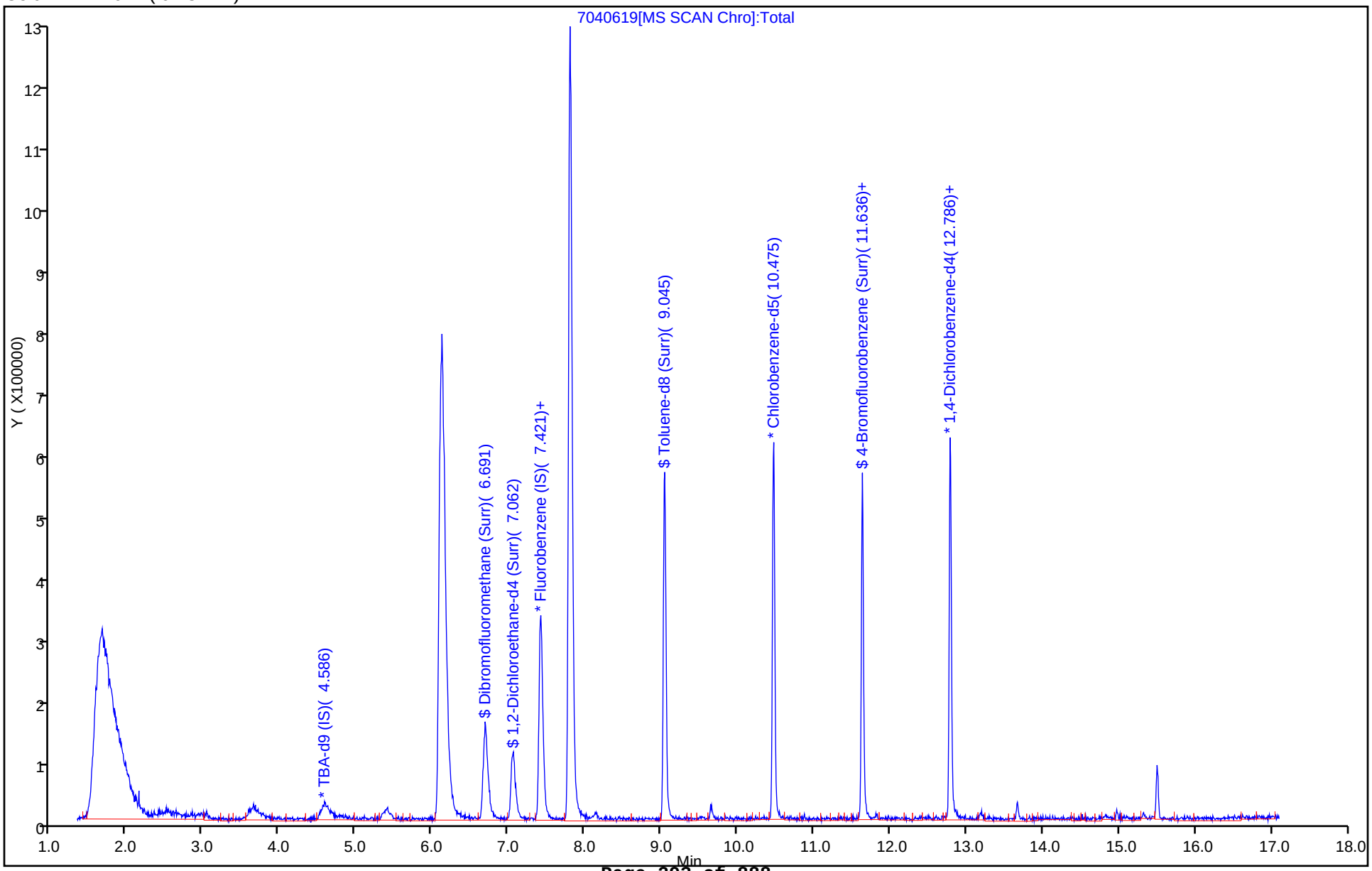
Report Date: 07-Apr-2015 09:15:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040619.D

Injection Date:	06-Apr-2015 17:29:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-D-6	Lab Sample ID:	180-42504-6	Worklist Smp#:	19
Client ID:	HD-MW-132-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

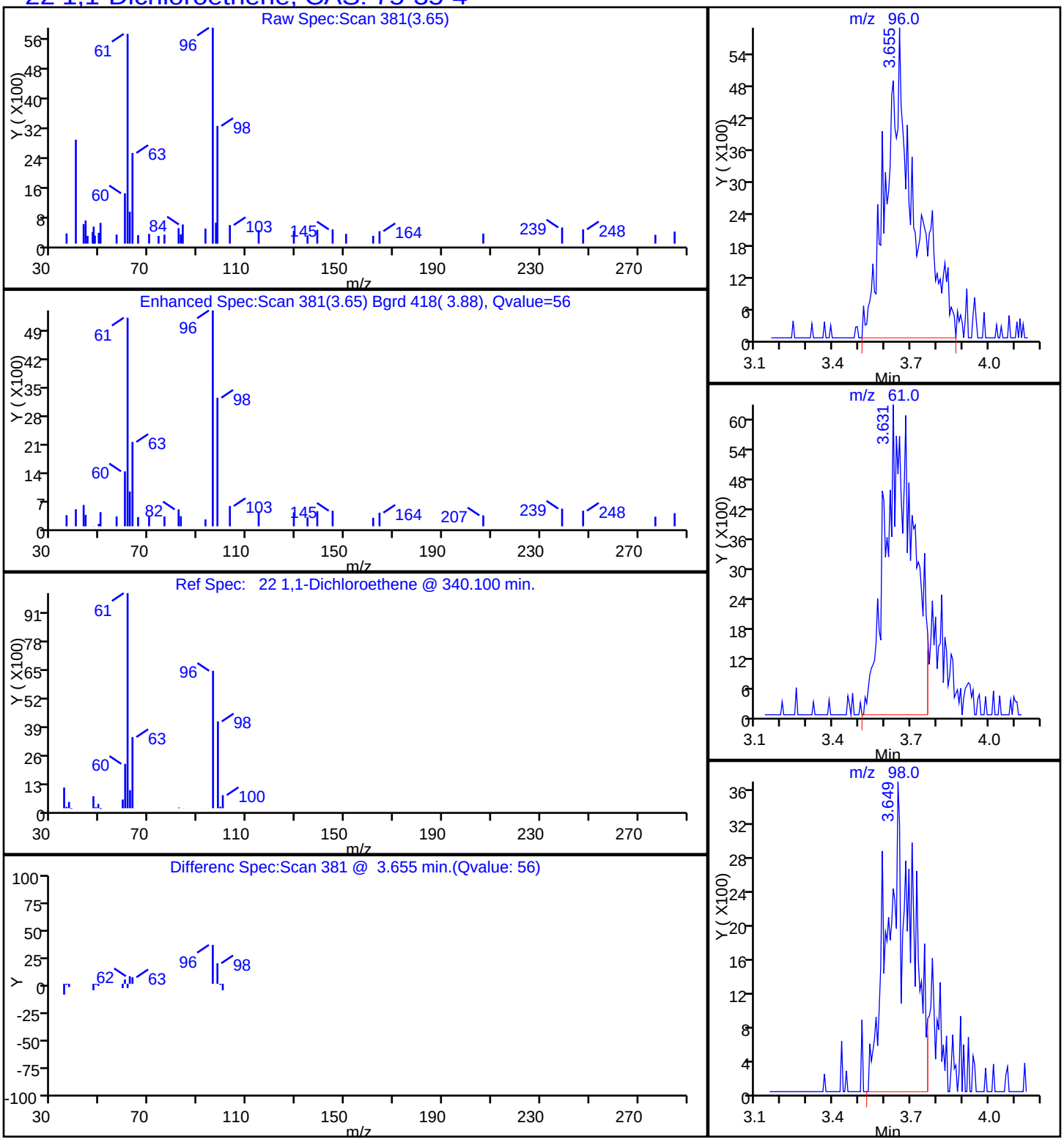


Report Date: 07-Apr-2015 09:15:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040619.D				
Injection Date:	06-Apr-2015 17:29:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-6	Lab Sample ID:	180-42504-6		
Client ID:	HD-MW-132-0/1-0				
Operator ID:	034635	ALS Bottle#:	20	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

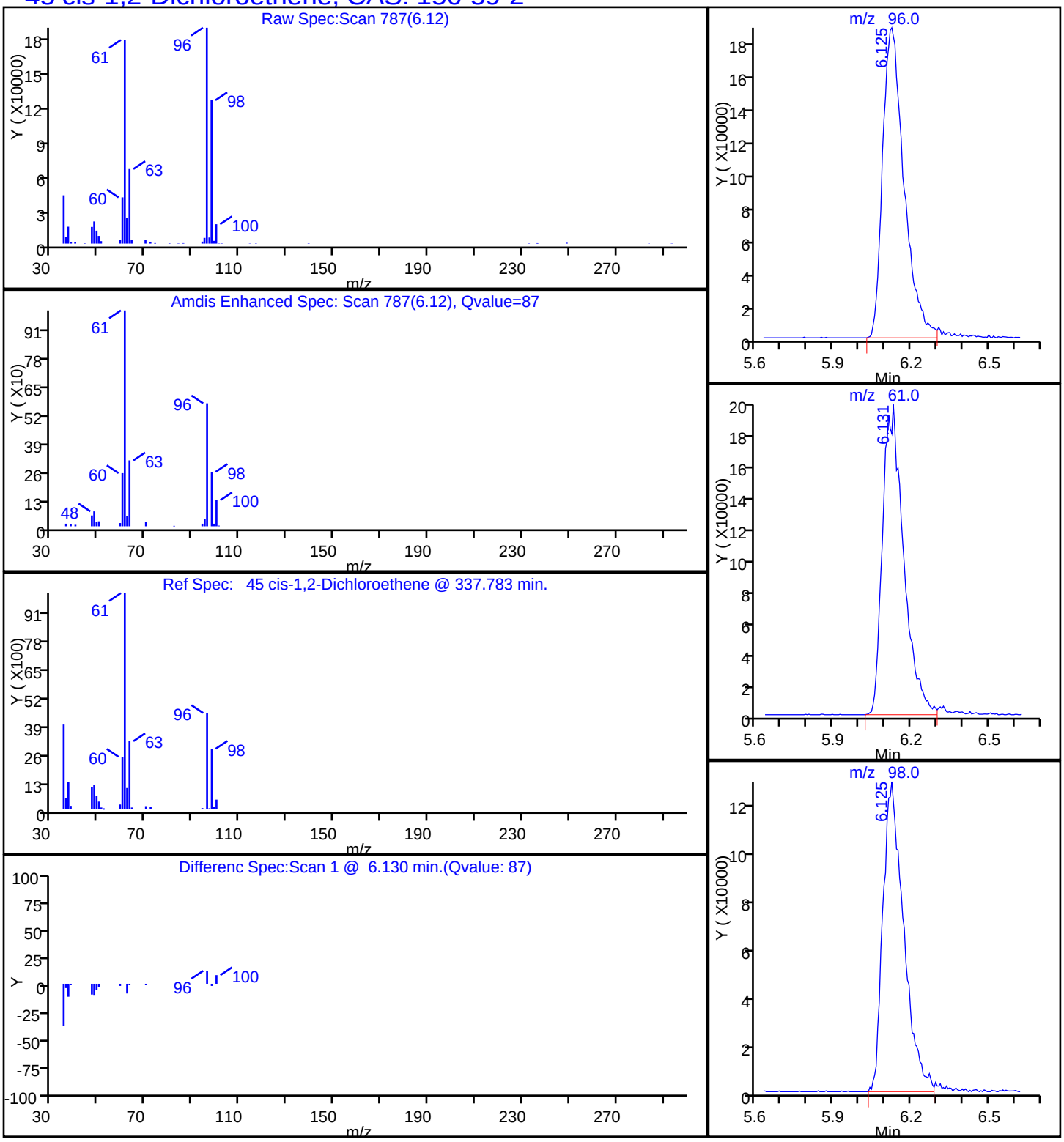


Report Date: 07-Apr-2015 09:15:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040619.D				
Injection Date:	06-Apr-2015 17:29:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-6	Lab Sample ID:	180-42504-6		
Client ID:	HD-MW-132-0/1-0				
Operator ID:	034635	ALS Bottle#:	20	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

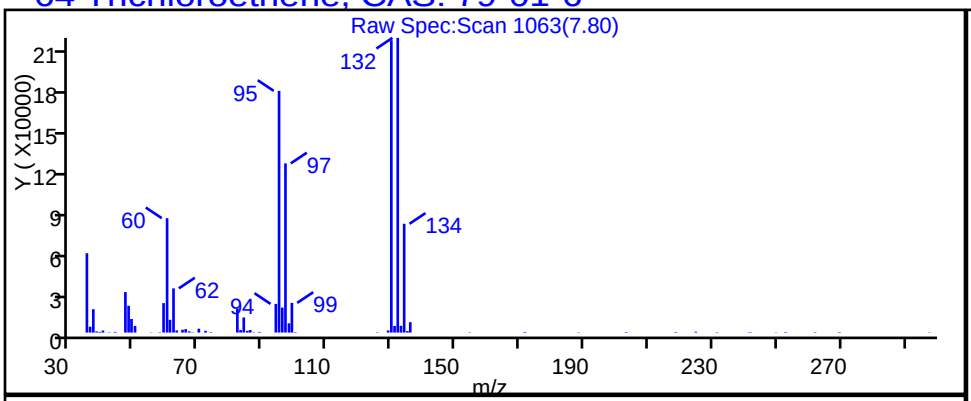


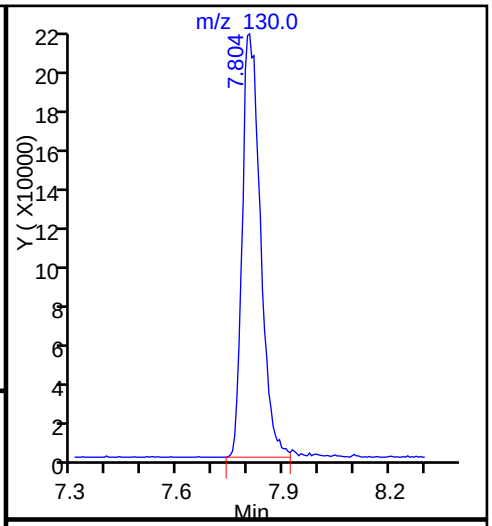
Report Date: 07-Apr-2015 09:15:47 Chrom Revision: 2.2 13-Mar-2015 11:20:44

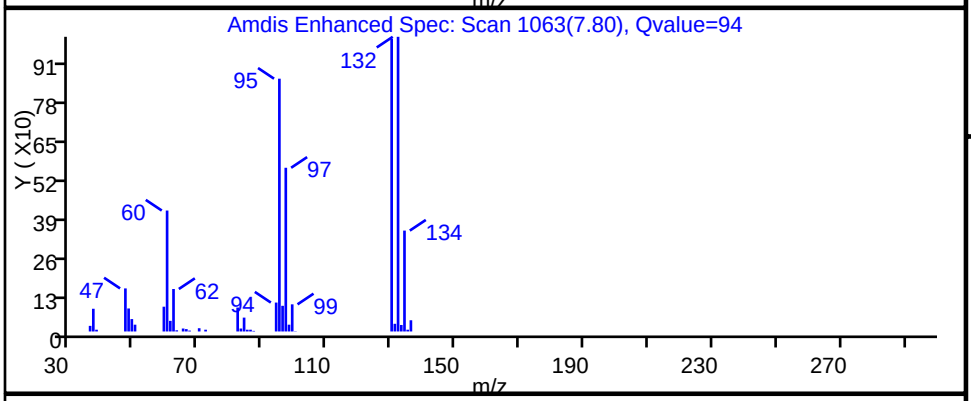
TestAmerica Pittsburgh

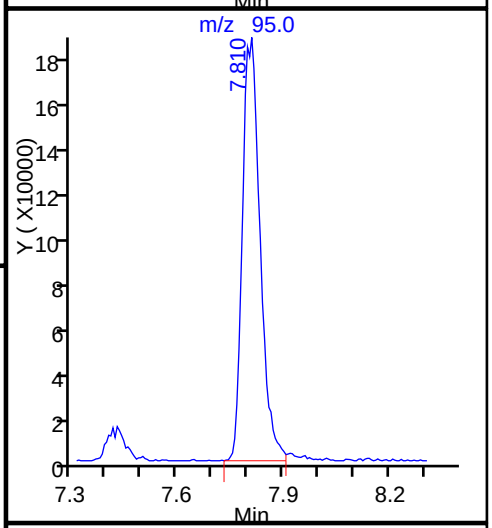
Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040619.D				
Injection Date:	06-Apr-2015 17:29:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-6	Lab Sample ID:	180-42504-6		
Client ID:	HD-MW-132-0/1-0				
Operator ID:	034635	ALS Bottle#:	20	Worklist Smp#:	19
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

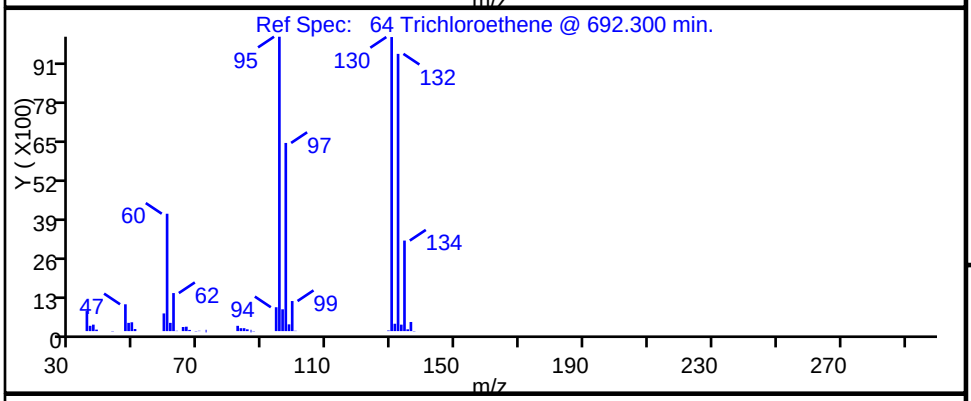
64 Trichloroethene, CAS: 79-01-6

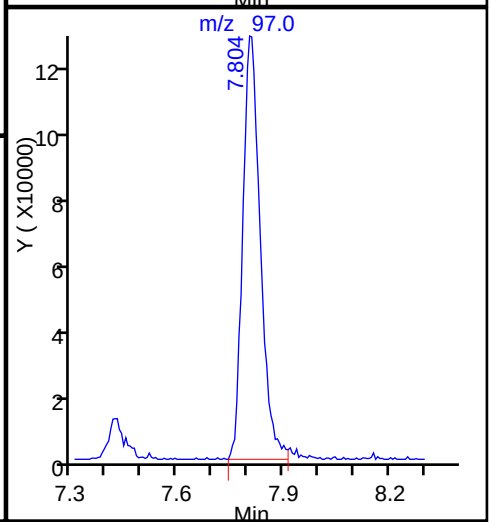


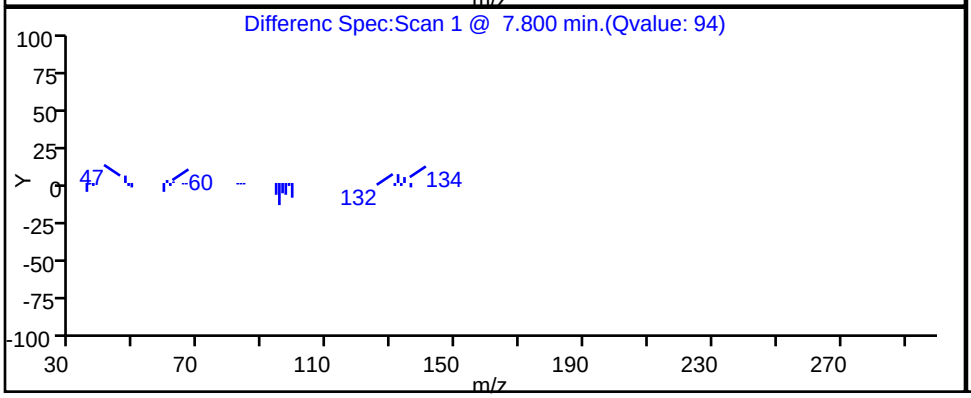












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-132-0/1-0 DL | Lab Sample ID: 180-42504-6 DL

Matrix: Water | Lab File ID: 7040324.D

Analysis Method: 8260C | Date Collected: 03/27/2015 12:30

Sample wt/vol: 20(mL) | Date Analyzed: 04/03/2015 20:08

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.: 137438 | 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	11		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	5.0	U	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	5.0	U	5.0	0.58
156-59-2	cis-1,2-Dichloroethene	230		5.0	1.2
74-97-5	Bromochloromethane	5.0	U	5.0	0.90
78-93-3	2-Butanone (MEK)	25	U	25	2.7
67-66-3	Chloroform	5.0	U	5.0	0.85
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.4
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.68
71-43-2	Benzene	5.0	U	5.0	0.53
107-06-2	1,2-Dichloroethane	5.0	U	5.0	1.1
79-01-6	Trichloroethene	150		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	5.0	U	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.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-132-0/1-0 DL Lab Sample ID: 180-42504-6 DL

Matrix: Water Lab File ID: 7040324.D

Analysis Method: 8260C Date Collected: 03/27/2015 12:30

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 20:08

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.: 137438 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)	94		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	100		70-118
1868-53-7	Dibromofluoromethane (Surr)	106		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040324.D
Lims ID: 180-42504-C-6 Lab Sample ID: 180-42504-6
Client ID: HD-MW-132-0/1-0
Sample Type: Client
Inject. Date: 03-Apr-2015 20:08:30 ALS Bottle#: 12 Worklist Smp#: 24
Purge Vol: 20.000 mL Dil. Factor: 5.0000
Sample Info: 180-42504-C-6
Misc. Info.: 180-0006312-024
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2015 12:03:40 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: journetp Date: 04-Apr-2015 11:49:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.594	4.786	-0.192	87	165659	4000.0	
* 2 Fluorobenzene (IS)	96	7.417	7.402	0.015	99	687599	200.0	
* 3 Chlorobenzene-d5	119	10.471	10.468	0.003	84	206278	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.786	0.003	95	265350	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.699	6.678	0.021	91	232111	211.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.052	7.043	0.009	95	197437	188.8	
$ 7 Toluene-d8 (Surr)	98	9.041	9.038	0.003	93	662121	216.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.639	11.636	0.003	88	274492	200.6	
12 Chloromethane	50		2.000				ND	
13 Vinyl chloride	62		2.219				ND	
15 Bromomethane	94		2.511				ND	
16 Chloroethane	64		2.626				ND	
22 1,1-Dichloroethene	96	3.676	3.527	0.149	1	40683	44.1	M
24 Acetone	43		3.801				ND	
26 Carbon disulfide	76		3.825				ND	
31 Methylene Chloride	84		4.354				ND	
34 trans-1,2-Dichloroethene	96		4.756				ND	
33 Acrylonitrile	53		4.816				ND	
35 Methyl tert-butyl ether	73		4.865				ND	
37 1,1-Dichloroethane	63		5.364				ND	
45 cis-1,2-Dichloroethene	96	6.115	6.112	0.003	79	1047261	921.3	
46 2-Butanone (MEK)	43		6.179				ND	
49 Chlorobromomethane	128		6.380				ND	
52 Chloroform	83		6.502				ND	
53 1,1,1-Trichloroethane	97		6.678				ND	
56 Carbon tetrachloride	117		6.861				ND	
58 Benzene	78		7.098				ND	
59 1,2-Dichloroethane	62		7.122				ND	
64 Trichloroethene	130	7.806	7.797	0.009	93	827490	610.0	
67 1,2-Dichloropropane	63		8.035				ND	
70 1,4-Dioxane	88		8.187				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.321				ND	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.935				ND	
76 Toluene	91		9.105				ND	
77 trans-1,3-Dichloropropene	75		9.330				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164		9.647				ND	
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.018				ND	
87 Chlorobenzene	112		10.498				ND	
89 1,1,1,2-Tetrachloroethane	131		10.578				ND	
90 Ethylbenzene	106		10.608				ND	
91 m-Xylene & p-Xylene	106		10.724				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.131				ND	
94 Bromoform	173		11.314				ND	
99 1,1,2,2-Tetrachloroethane	83		11.776				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

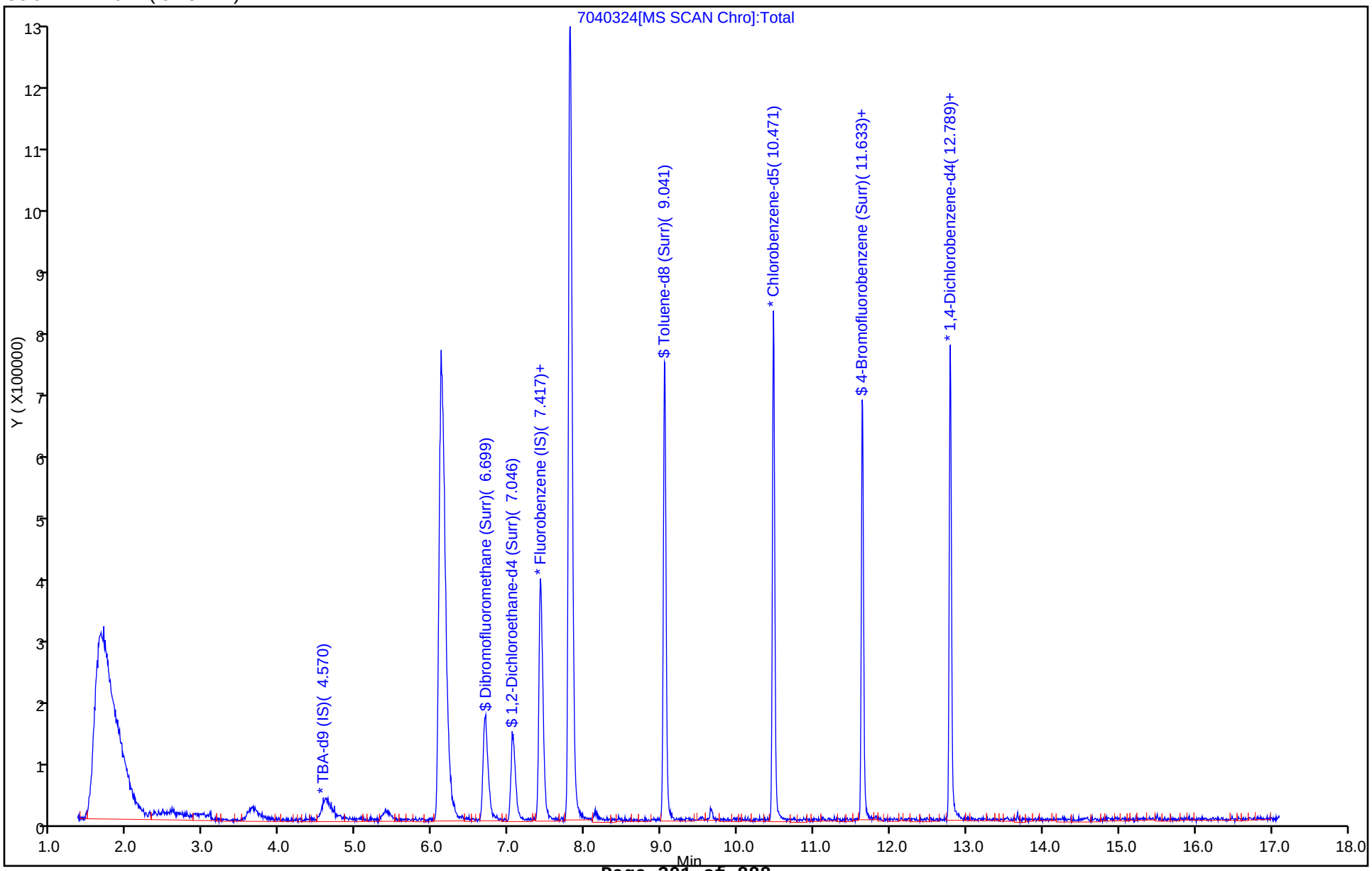
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

Report Date: 04-Apr-2015 12:04:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040324.D				
Injection Date:	03-Apr-2015 20:08:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-C-6	Lab Sample ID:	180-42504-6	Worklist Smp#:	24
Client ID:	HD-MW-132-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	5.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



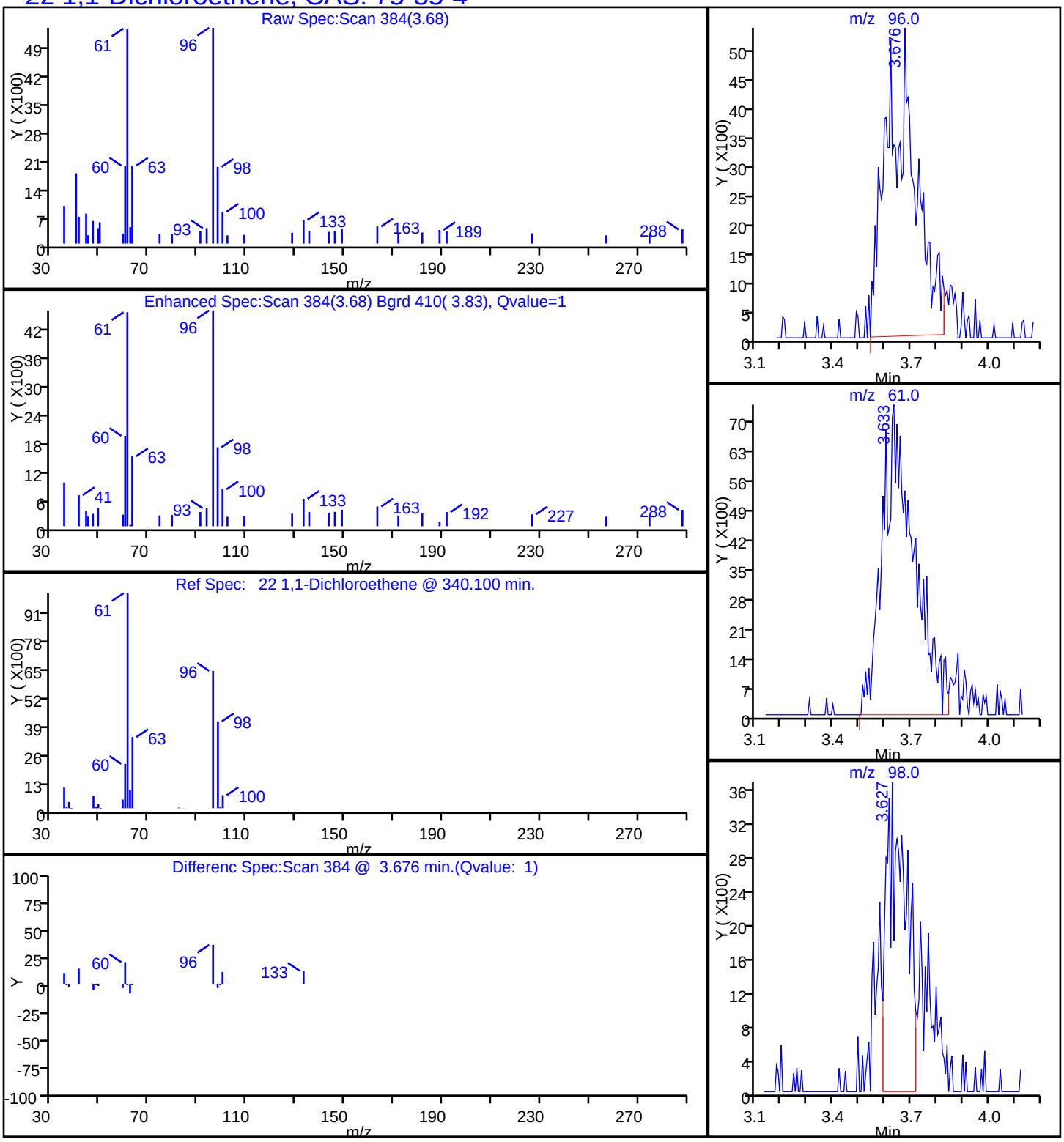
Report Date: 04-Apr-2015 12:04:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040324.D

Injection Date:	03-Apr-2015 20:08:30	Instrument ID:	CHHP7
Lims ID:	180-42504-C-6	Lab Sample ID:	180-42504-6
Client ID:	HD-MW-132-0/1-0		
Operator ID:	034635	ALS Bottle#:	12 Worklist Smp#: 24
Purge Vol:	20.000 mL	Dil. Factor:	5.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

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

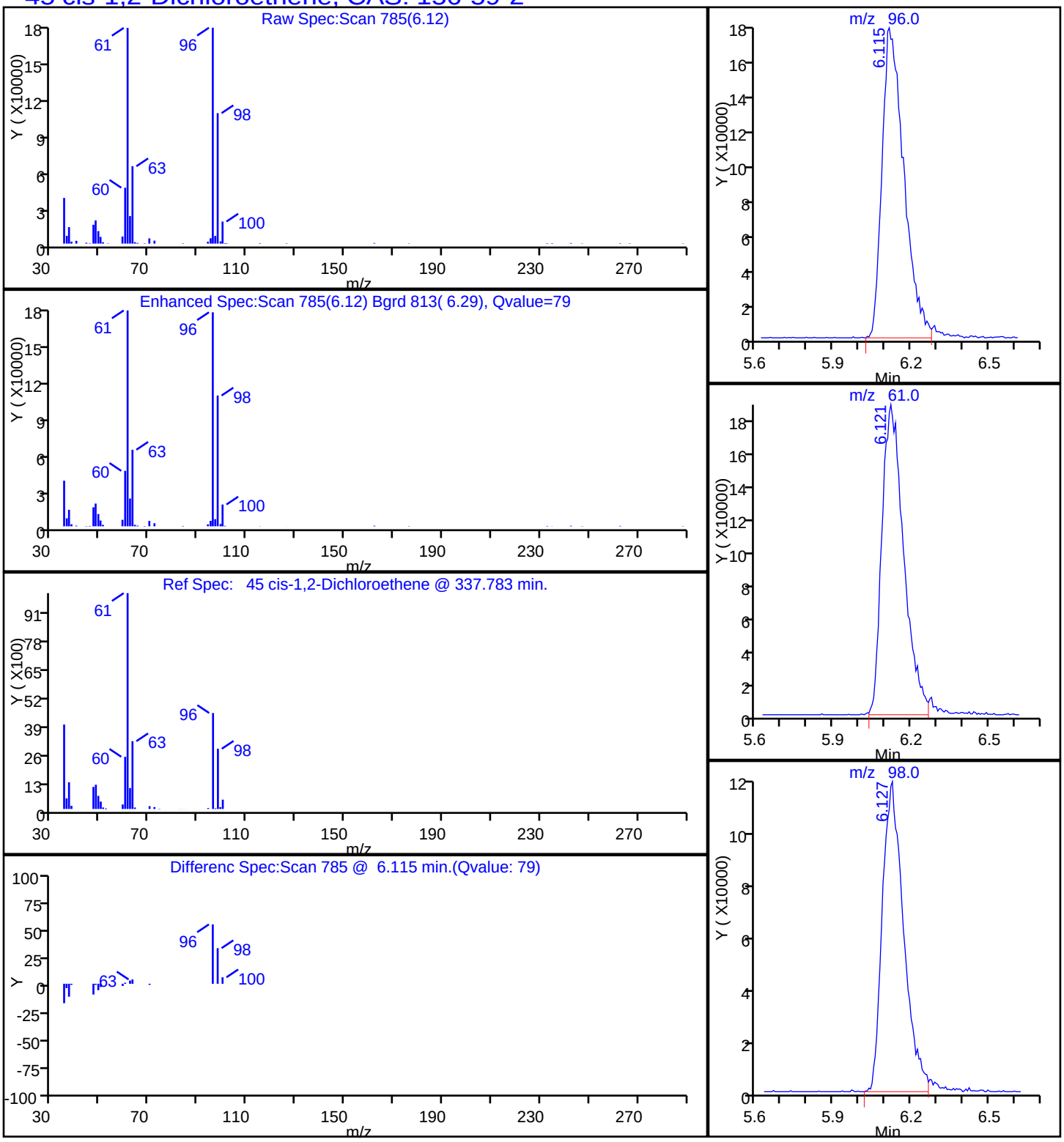


Report Date: 04-Apr-2015 12:04:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040324.D				
Injection Date:	03-Apr-2015 20:08:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-6	Lab Sample ID:	180-42504-6		
Client ID:	HD-MW-132-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	24
Purge Vol:	20.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

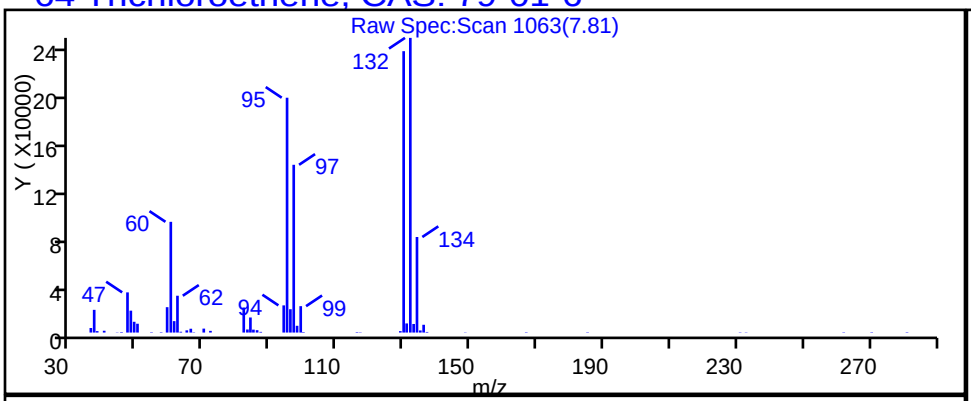


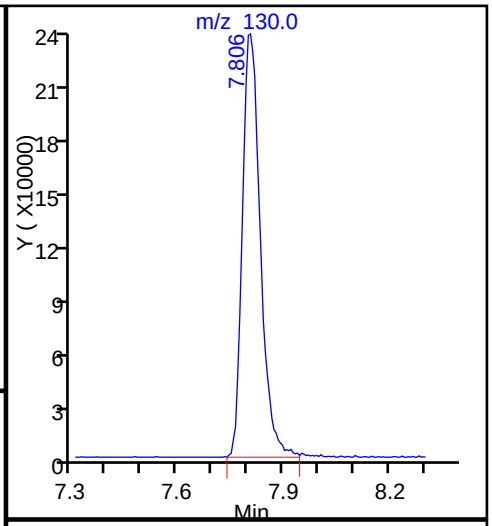
Report Date: 04-Apr-2015 12:04:52 Chrom Revision: 2.2 13-Mar-2015 11:20:44

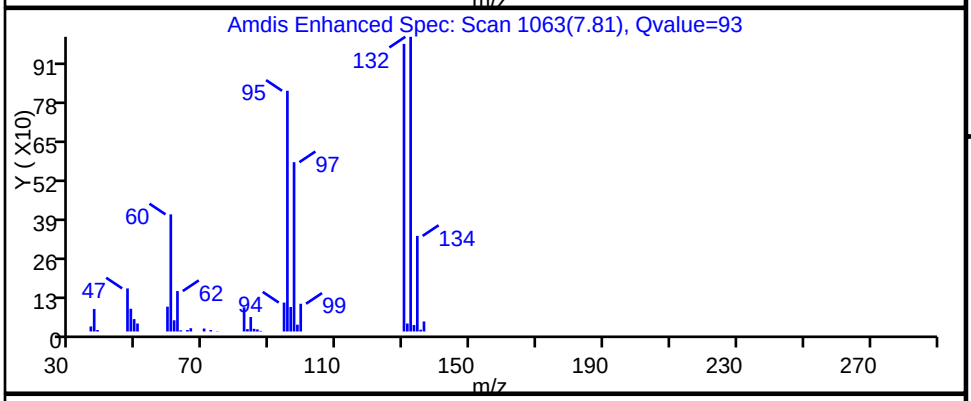
TestAmerica Pittsburgh

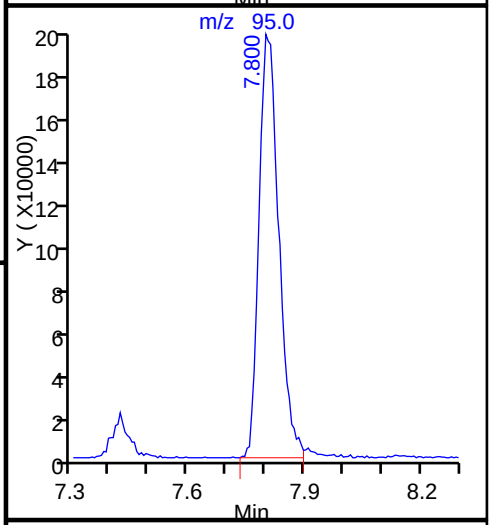
Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040324.D				
Injection Date:	03-Apr-2015 20:08:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-6	Lab Sample ID:	180-42504-6		
Client ID:	HD-MW-132-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	24
Purge Vol:	20.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

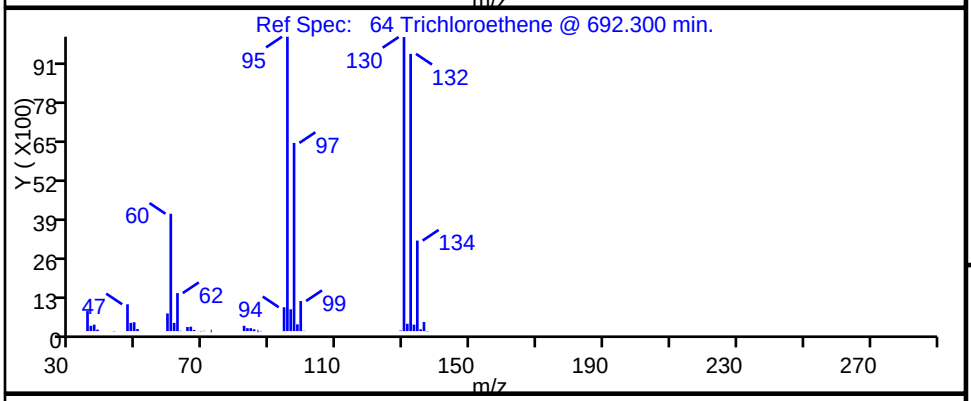
64 Trichloroethene, CAS: 79-01-6

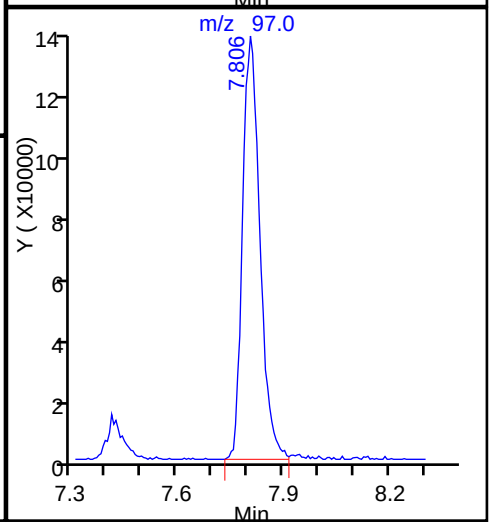


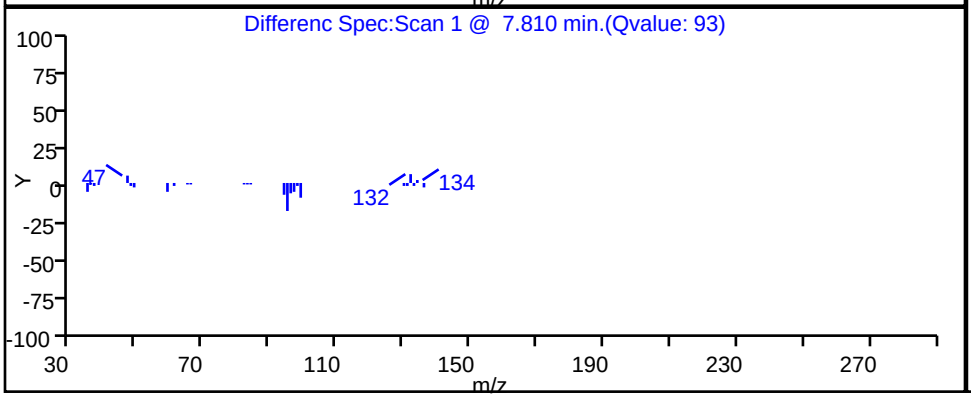












Manual Integration/User Assign Peak Report

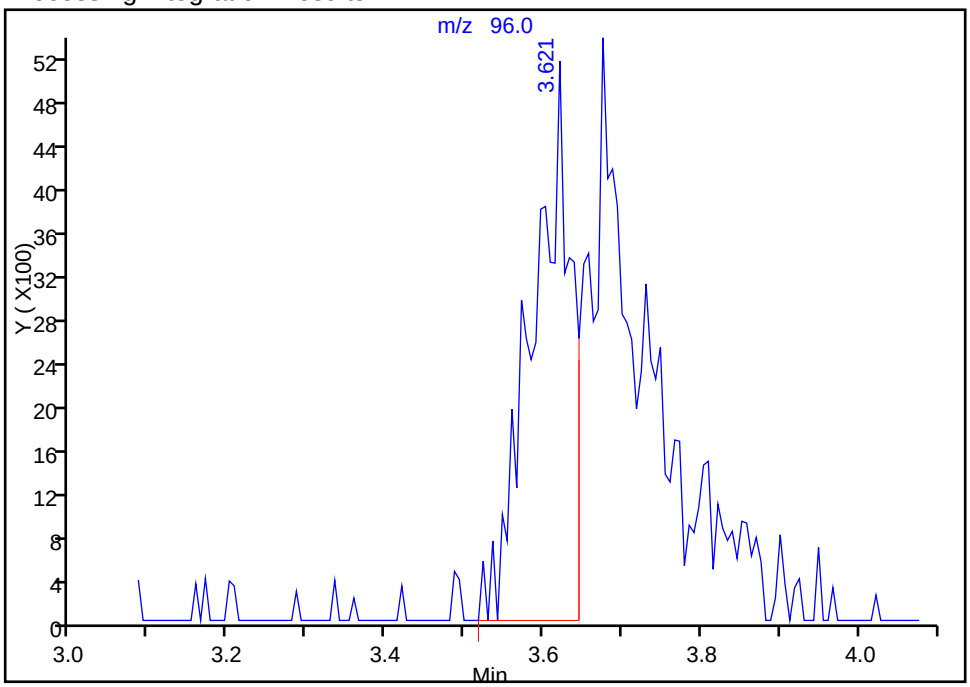
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040324.D				
Injection Date:	03-Apr-2015 20:08:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-6	Lab Sample ID:	180-42504-6		
Client ID:	HD-MW-132-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	24
Purge Vol:	20.000 mL	Dil. Factor:	5.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

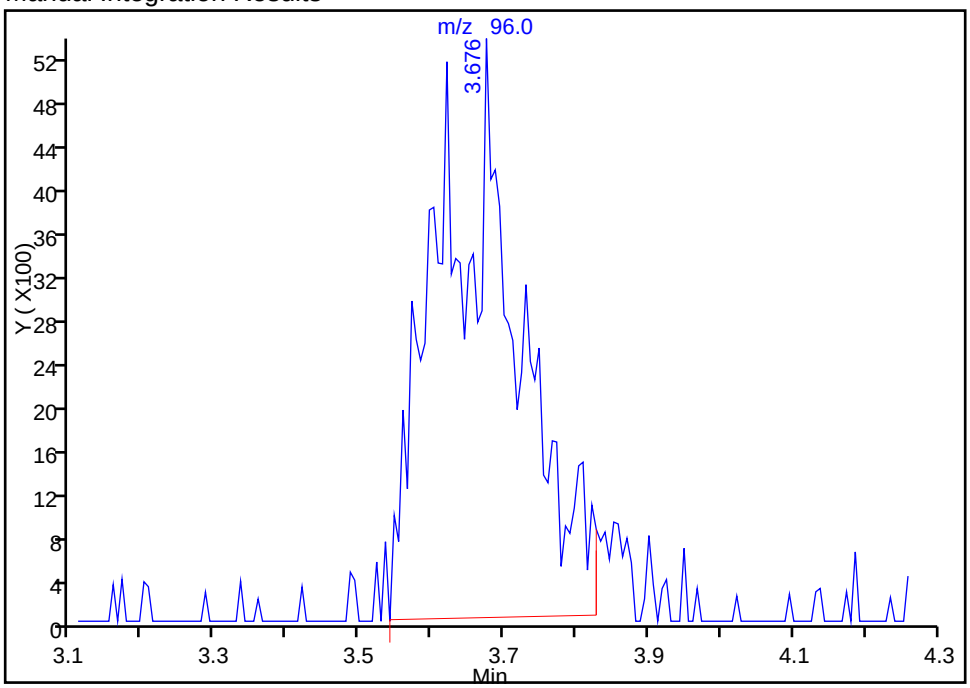
Processing Integration Results

RT: 3.62
Area: 17557
Amount: 19.017357
Amount Units: ng



Manual Integration Results

RT: 3.68
Area: 40683
Amount: 44.066932
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 11:49:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-75D-0/1-0 Lab Sample ID: 180-42504-7

Matrix: Water Lab File ID: 7040808.D

Analysis Method: 8260C Date Collected: 03/27/2015 10:33

Sample wt/vol: 20(mL) Date Analyzed: 04/08/2015 11:49

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137846 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50	U	50	14
75-01-4	Vinyl chloride	50	U	50	11
74-83-9	Bromomethane	50	U	50	16
75-00-3	Chloroethane	50	U	50	11
75-35-4	1,1-Dichloroethene	50	U	50	15
67-64-1	Acetone	250	U	250	130
75-15-0	Carbon disulfide	50	U	50	11
75-09-2	Methylene Chloride	50	U	50	6.3
156-60-5	trans-1,2-Dichloroethene	50	U	50	8.5
1634-04-4	Methyl tert-butyl ether	50	U	50	9.2
75-34-3	1,1-Dichloroethane	50	U	50	5.8
156-59-2	cis-1,2-Dichloroethene	98		50	12
74-97-5	Bromochloromethane	50	U	50	9.0
78-93-3	2-Butanone (MEK)	250	U	250	27
67-66-3	Chloroform	50	U	50	8.5
71-55-6	1,1,1-Trichloroethane	110		50	14
56-23-5	Carbon tetrachloride	50	U	50	6.8
71-43-2	Benzene	50	U	50	5.3
107-06-2	1,2-Dichloroethane	50	U	50	11
79-01-6	Trichloroethene	830		50	7.2
78-87-5	1,2-Dichloropropane	50	U	50	4.7
75-27-4	Bromodichloromethane	50	U	50	6.5
10061-01-5	cis-1,3-Dichloropropene	50	U	50	9.3
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	26
108-88-3	Toluene	50	U	50	7.5
10061-02-6	trans-1,3-Dichloropropene	50	U	50	7.4
79-00-5	1,1,2-Trichloroethane	50	U	50	10
127-18-4	*Tetrachloroethene*	*NQ*		*50*	*7.4*
591-78-6	2-Hexanone	250	U	250	8.0
124-48-1	Dibromochloromethane	50	U	50	6.8
106-93-4	1,2-Dibromoethane (EDB)	50	U	50	9.0
108-90-7	Chlorobenzene	50	U	50	6.8
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	14
100-41-4	Ethylbenzene	50	U	50	11
1330-20-7	Xylenes, Total	150	U	150	24
100-42-5	Styrene	50	U	50	4.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-75D-0/1-0 Lab Sample ID: 180-42504-7

Matrix: Water Lab File ID: 7040808.D

Analysis Method: 8260C Date Collected: 03/27/2015 10:33

Sample wt/vol: 20(mL) Date Analyzed: 04/08/2015 11:49

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137846 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	50	U	50	9.6
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	10
107-13-1	Acrylonitrile	1000	U	1000	27
123-91-1	1,4-Dioxane	10000	U	10000	1700

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		64-135
2037-26-5	Toluene-d8 (Surr)	107		71-118
460-00-4	4-Bromofluorobenzene (Surr)	97		70-118
1868-53-7	Dibromofluoromethane (Surr)	108		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040808.D
Lims ID: 180-42504-D-7 Lab Sample ID: 180-42504-7
Client ID: HD-MW-75D-0/1-0
Sample Type: Client
Inject. Date: 08-Apr-2015 11:49:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 20.000 mL Dil. Factor: 50.0000
Sample Info: 180-42504-D-7
Misc. Info.: 180-0006372-008
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Apr-2015 14:55:26 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: journetp Date: 08-Apr-2015 12:27:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.604	4.861	-0.257	93	228052	4000.0	
* 2 Fluorobenzene (IS)	96	7.421	7.397	0.024	99	865381	200.0	
* 3 Chlorobenzene-d5	119	10.475	10.470	0.005	84	246333	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.786	12.787	-0.001	95	349532	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.697	6.674	0.023	89	297121	215.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.062	7.032	0.030	94	221821	168.5	
$ 7 Toluene-d8 (Surr)	98	9.045	9.034	0.011	92	782960	214.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.637	11.632	0.005	90	318529	194.5	
12 Chloromethane	50		2.062				ND	
13 Vinyl chloride	62		2.227				ND	
15 Bromomethane	94		2.537				ND	
16 Chloroethane	64		2.610				ND	
22 1,1-Dichloroethene	96	3.582	3.541	0.041	1	973	0.8374	
26 Carbon disulfide	76		3.796				ND	
24 Acetone	43		3.863				ND	
31 Methylene Chloride	84		4.337				ND	
34 trans-1,2-Dichloroethene	96		4.733				ND	
33 Acrylonitrile	53		4.824				ND	
35 Methyl tert-butyl ether	73		4.891				ND	
37 1,1-Dichloroethane	63		5.353				ND	
45 cis-1,2-Dichloroethene	96	6.143	6.096	0.047	1	56314	39.4	M
46 2-Butanone (MEK)	43		6.193				ND	
49 Chlorobromomethane	128		6.369				ND	
52 Chloroform	83		6.491				ND	
53 1,1,1-Trichloroethane	97	6.703	6.667	0.036	53	96641	44.7	M
56 Carbon tetrachloride	117		6.856				ND	
58 Benzene	78		7.099				ND	
59 1,2-Dichloroethane	62		7.124				ND	
64 Trichloroethene	130	7.810	7.787	0.023	92	567332	332.3	
67 1,2-Dichloropropane	63		8.024				ND	
70 1,4-Dioxane	88		8.194				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt	ng	Flags
71 Dichlorobromomethane	83		8.310				ND		
74 cis-1,3-Dichloropropene	75		8.772				ND		
75 4-Methyl-2-pentanone (MIBK	43		8.943				ND		
76 Toluene	91		9.101				ND		
77 trans-1,3-Dichloropropene	75		9.320				ND		
79 1,1,2-Trichloroethane	97		9.508				ND		
80 Tetrachloroethene	164	9.659	9.648	0.011	88	1218205		NQ	E
82 2-Hexanone	43		9.764				ND		
84 Chlorodibromomethane	129		9.898				ND		
85 Ethylene Dibromide	107		10.013				ND		
87 Chlorobenzene	112		10.494				ND		
89 1,1,1,2-Tetrachloroethane	131		10.579				ND		
90 Ethylbenzene	106		10.603				ND		
91 m-Xylene & p-Xylene	106		10.719				ND		
92 o-Xylene	106		11.114				ND		
93 Styrene	104		11.127				ND		
94 Bromoform	173		11.315				ND		
99 1,1,2,2-Tetrachloroethane	83		11.771				ND		
S 133 Xylenes, Total	106		1.000				ND		

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

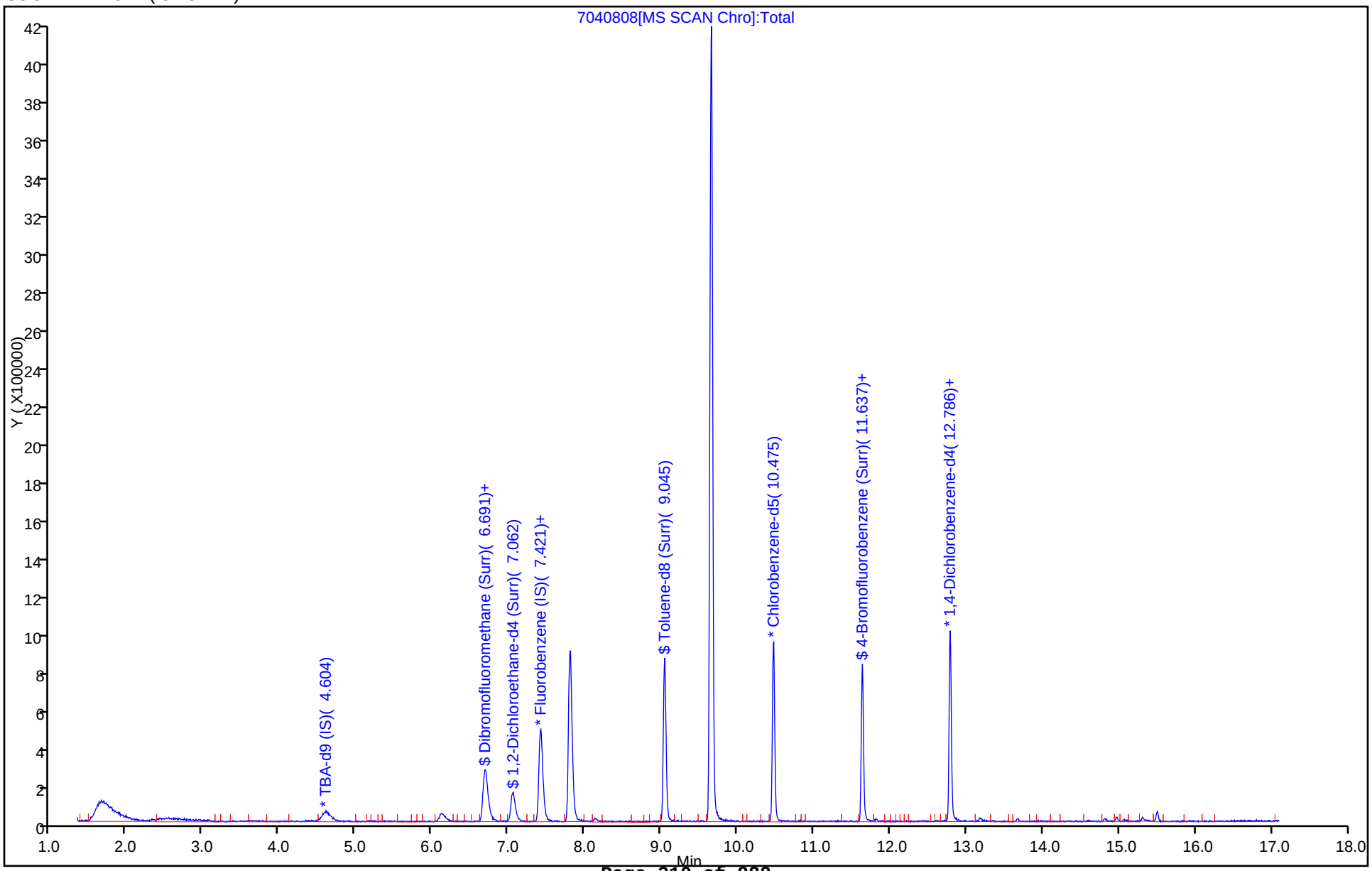
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

Report Date: 08-Apr-2015 14:55:32 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040808.D				
Injection Date:	08-Apr-2015 11:49:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-D-7	Lab Sample ID:	180-42504-7	Worklist Smp#:	8
Client ID:	HD-MW-75D-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	50.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

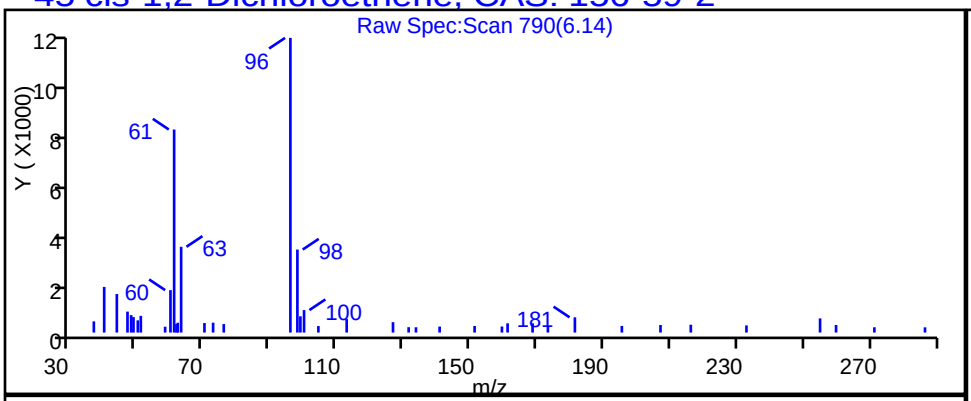


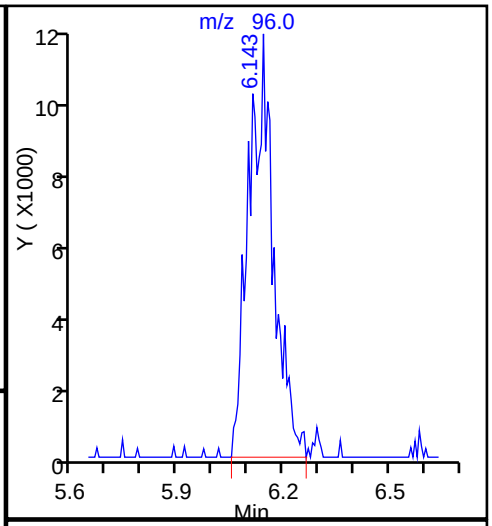
Report Date: 08-Apr-2015 14:55:32 Chrom Revision: 2.2 13-Mar-2015 11:20:44

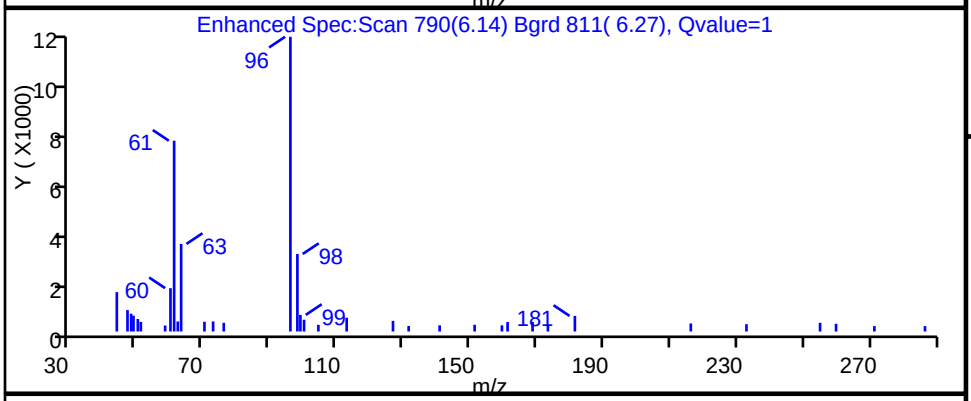
TestAmerica Pittsburgh

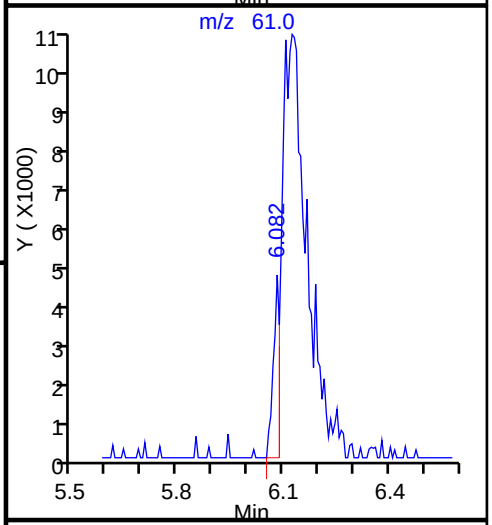
Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040808.D				
Injection Date:	08-Apr-2015 11:49:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-7	Lab Sample ID:	180-42504-7		
Client ID:	HD-MW-75D-0/1-0				
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

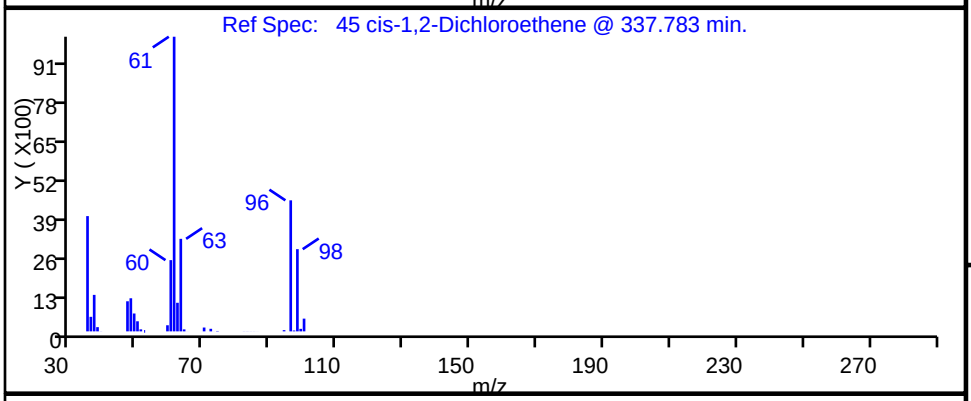
45 cis-1,2-Dichloroethene, CAS: 156-59-2

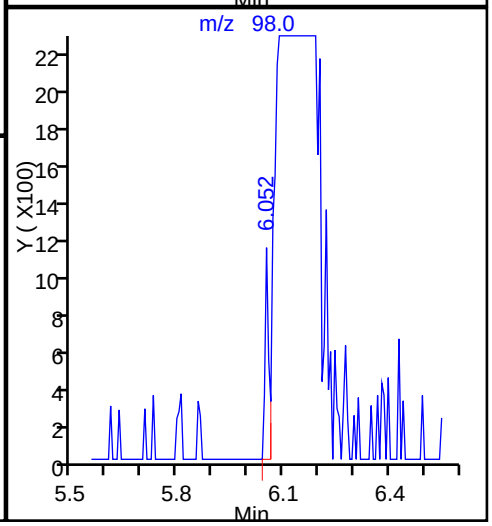


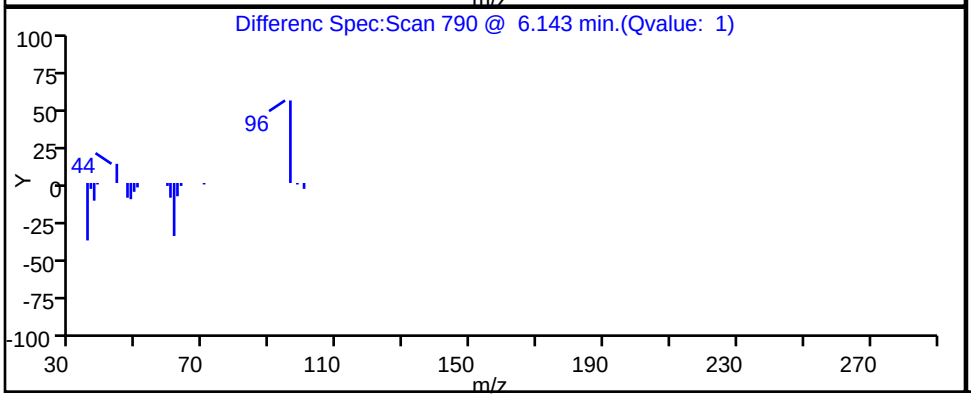










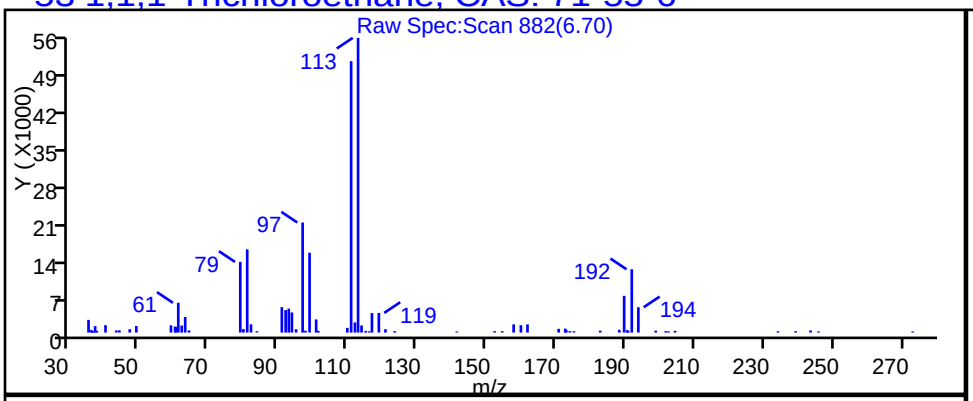


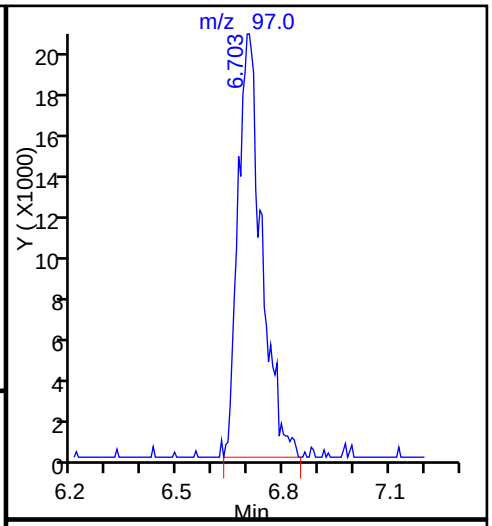
Report Date: 08-Apr-2015 14:55:32 Chrom Revision: 2.2 13-Mar-2015 11:20:44

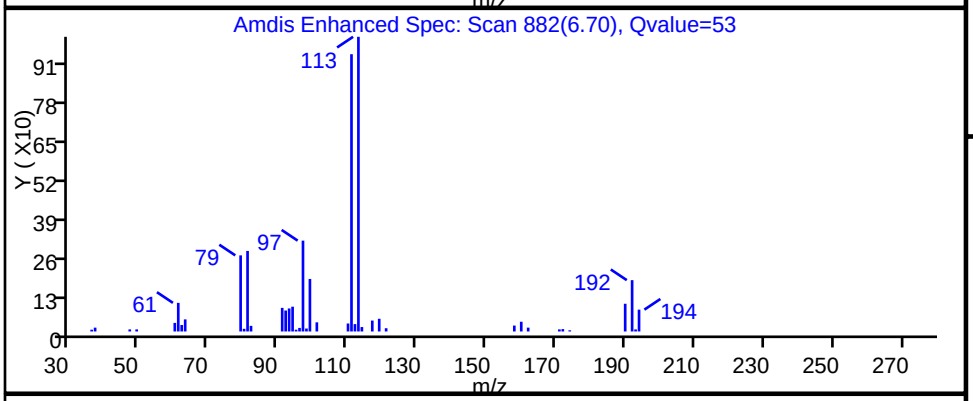
TestAmerica Pittsburgh

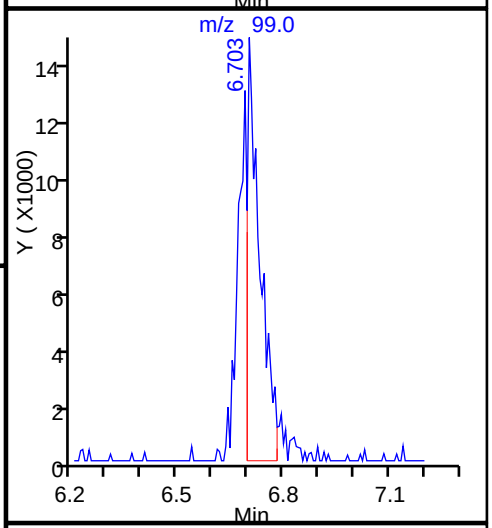
Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040808.D				
Injection Date:	08-Apr-2015 11:49:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-7	Lab Sample ID:	180-42504-7		
Client ID:	HD-MW-75D-0/1-0				
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

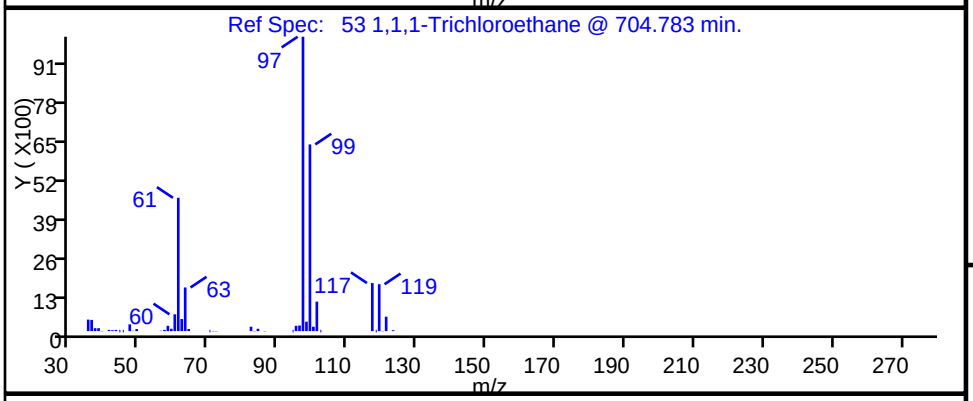
53 1,1,1-Trichloroethane, CAS: 71-55-6

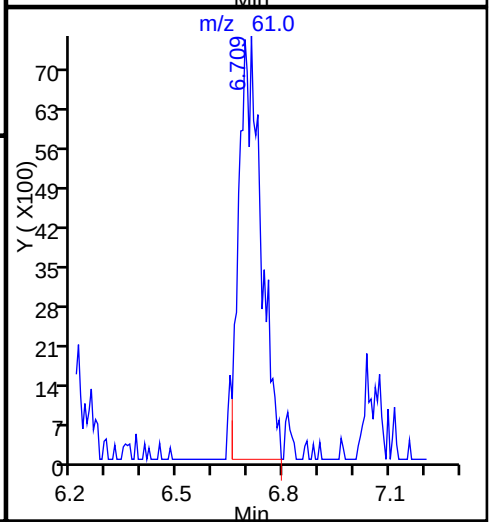


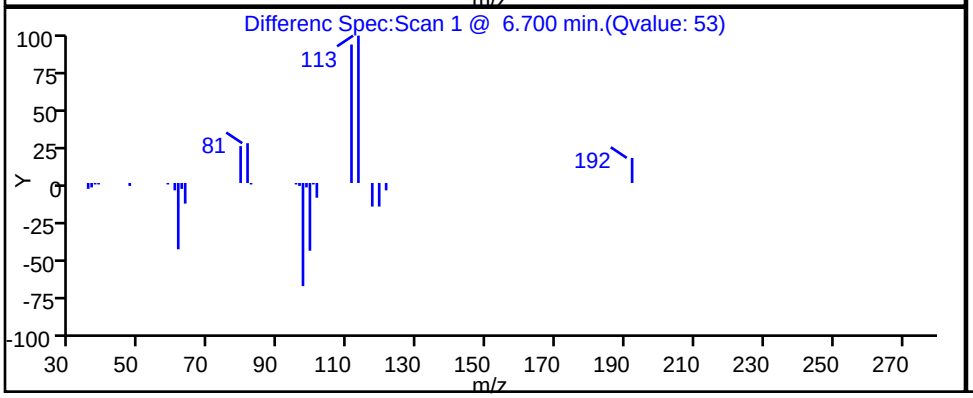










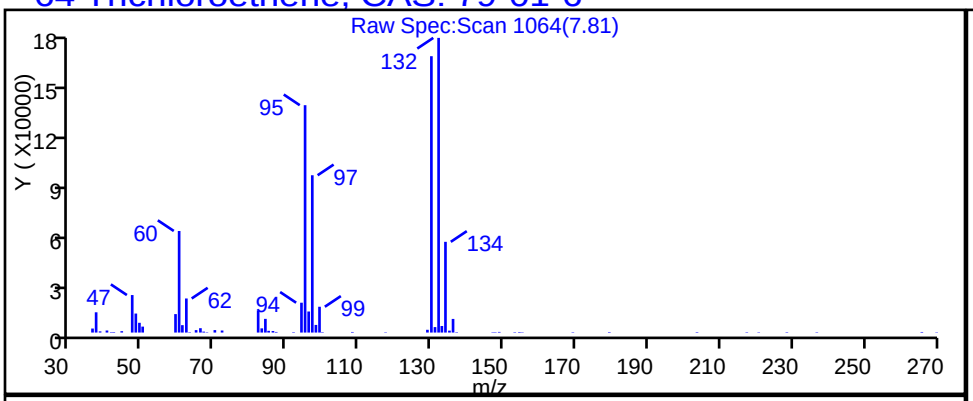


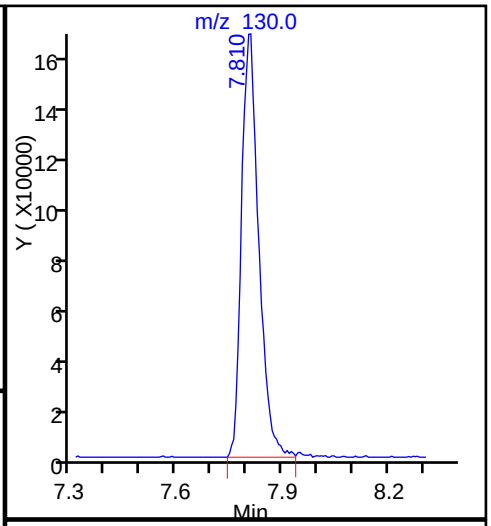
Report Date: 08-Apr-2015 14:55:33 Chrom Revision: 2.2 13-Mar-2015 11:20:44

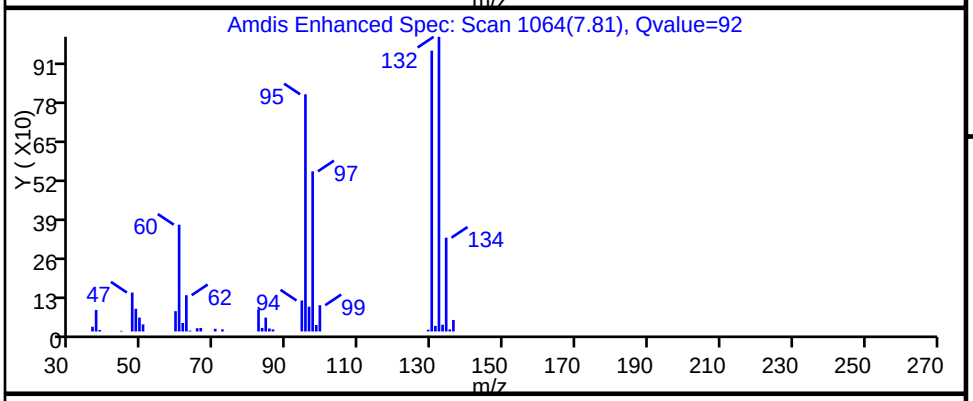
TestAmerica Pittsburgh

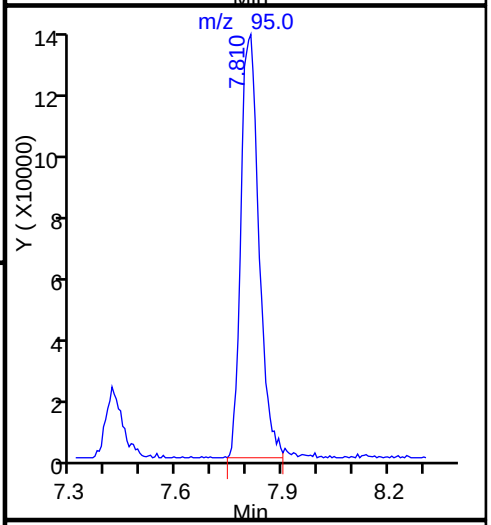
Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040808.D		
Injection Date:	08-Apr-2015 11:49:30	Instrument ID:	CHHP7
Lims ID:	180-42504-D-7	Lab Sample ID:	180-42504-7
Client ID:	HD-MW-75D-0/1-0		
Operator ID:	034635	ALS Bottle#:	8 Worklist Smp#: 8
Purge Vol:	20.000 mL	Dil. Factor:	50.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

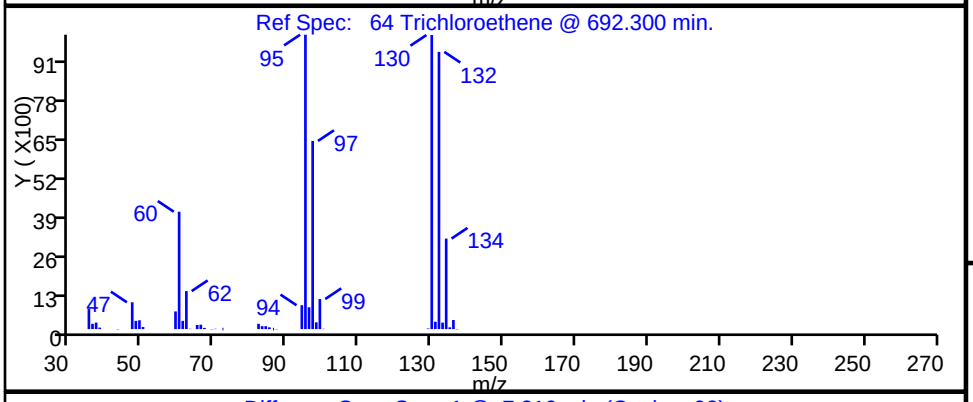
64 Trichloroethene, CAS: 79-01-6

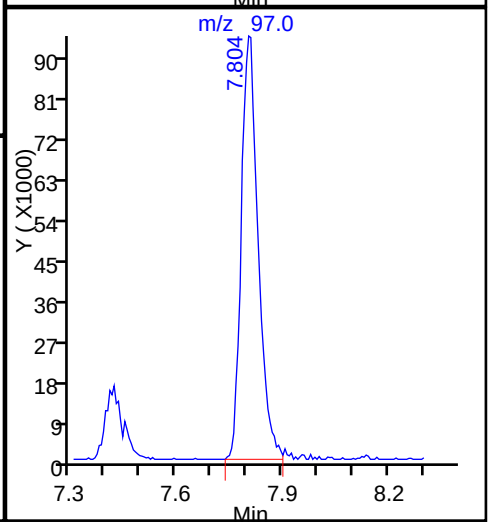


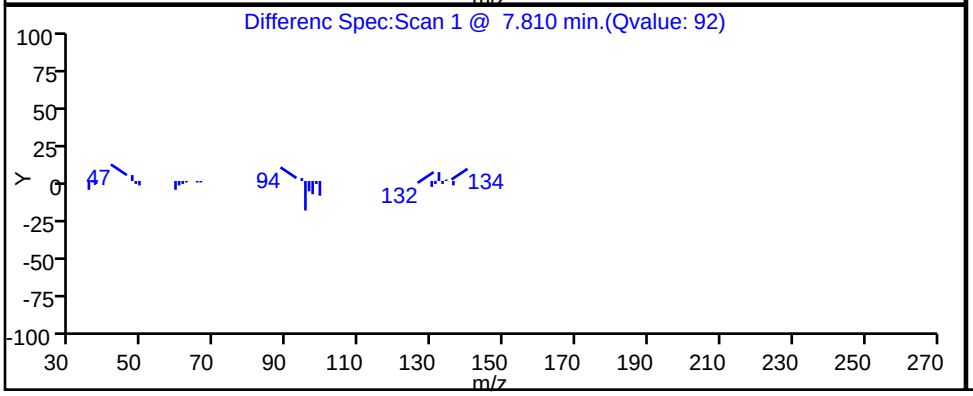










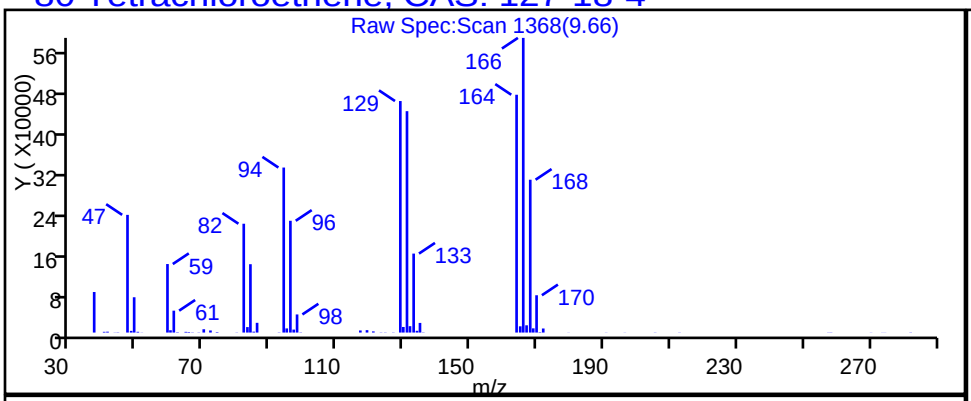


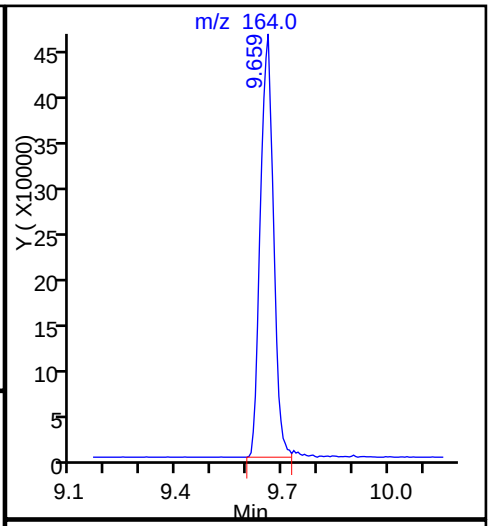
Report Date: 08-Apr-2015 14:55:33 Chrom Revision: 2.2 13-Mar-2015 11:20:44

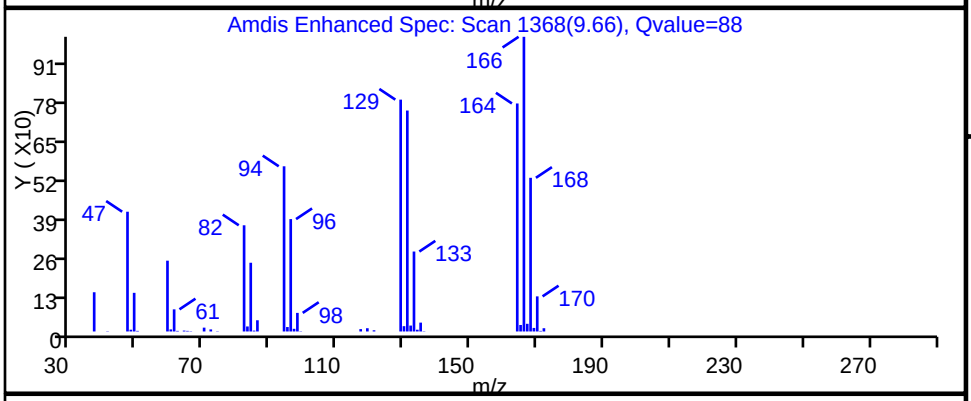
TestAmerica Pittsburgh

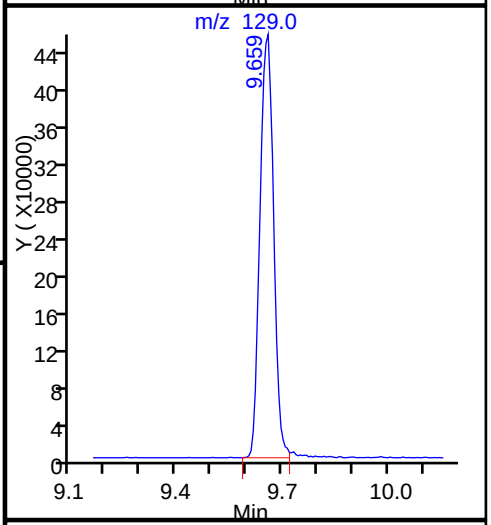
Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040808.D		
Injection Date:	08-Apr-2015 11:49:30	Instrument ID:	CHHP7
Lims ID:	180-42504-D-7	Lab Sample ID:	180-42504-7
Client ID:	HD-MW-75D-0/1-0		
Operator ID:	034635	ALS Bottle#:	8 Worklist Smp#: 8
Purge Vol:	20.000 mL	Dil. Factor:	50.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

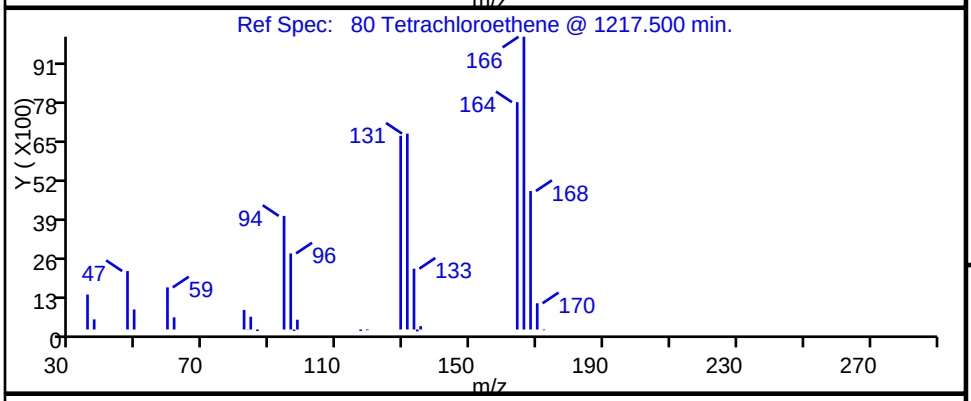
80 Tetrachloroethene, CAS: 127-18-4

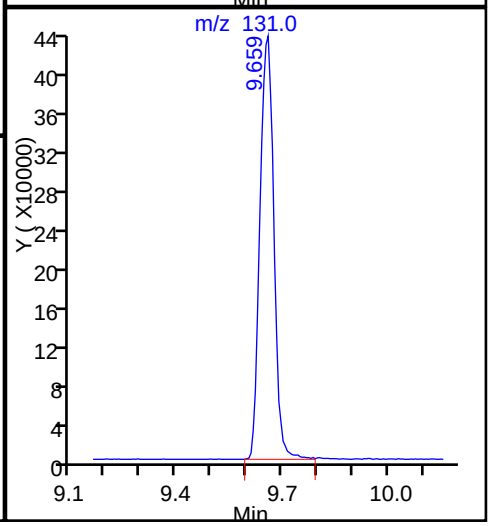


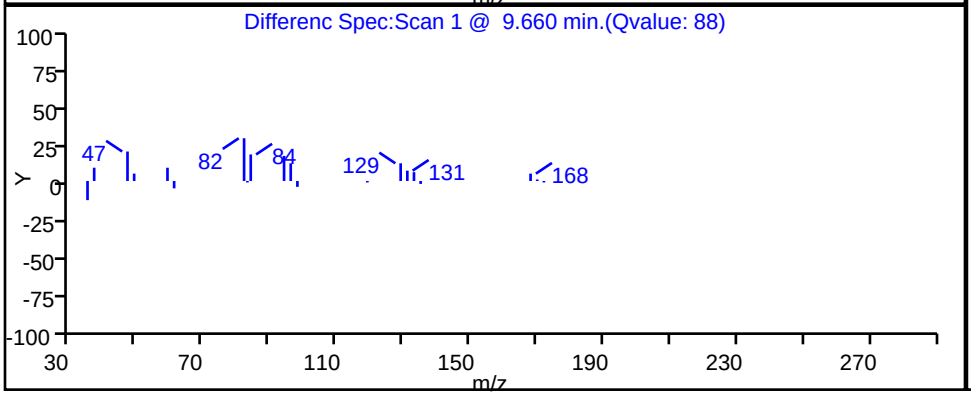












Manual Integration/User Assign Peak Report

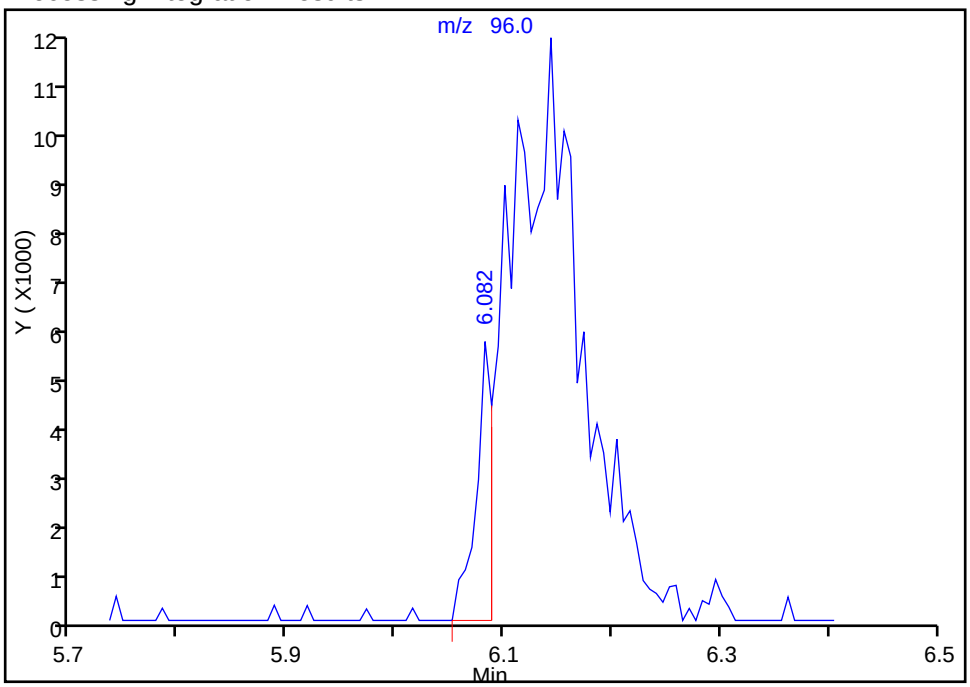
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040808.D				
Injection Date:	08-Apr-2015 11:49:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-7	Lab Sample ID:	180-42504-7		
Client ID:	HD-MW-75D-0/1-0				
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

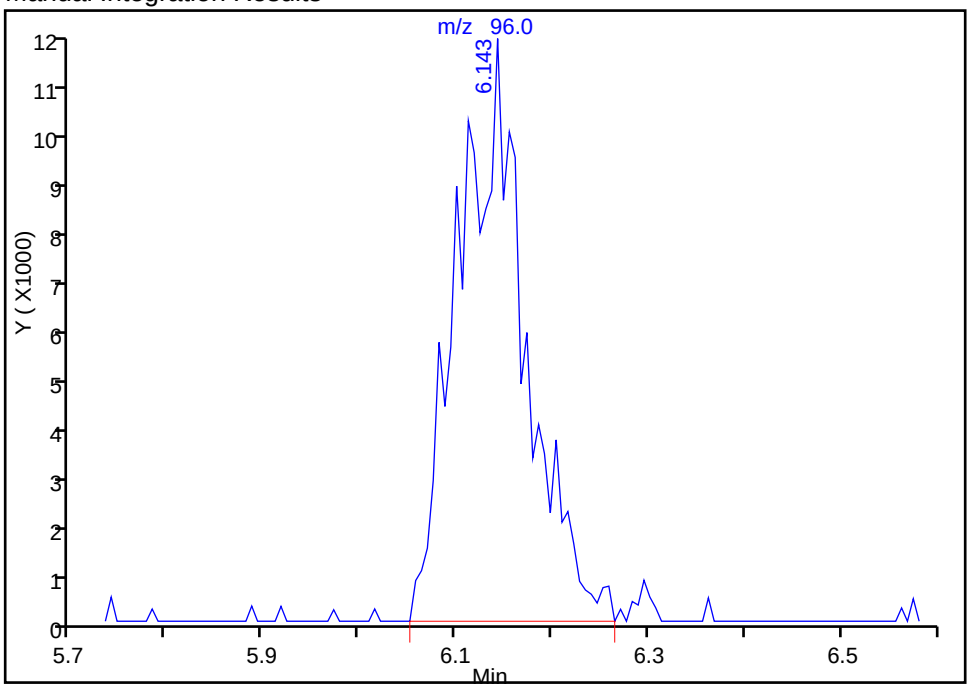
Processing Integration Results

RT: 6.08
Area: 5756
Amount: 4.023388
Amount Units: ng



Manual Integration Results

RT: 6.14
Area: 56314
Amount: 39.362936
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 12:27:25
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

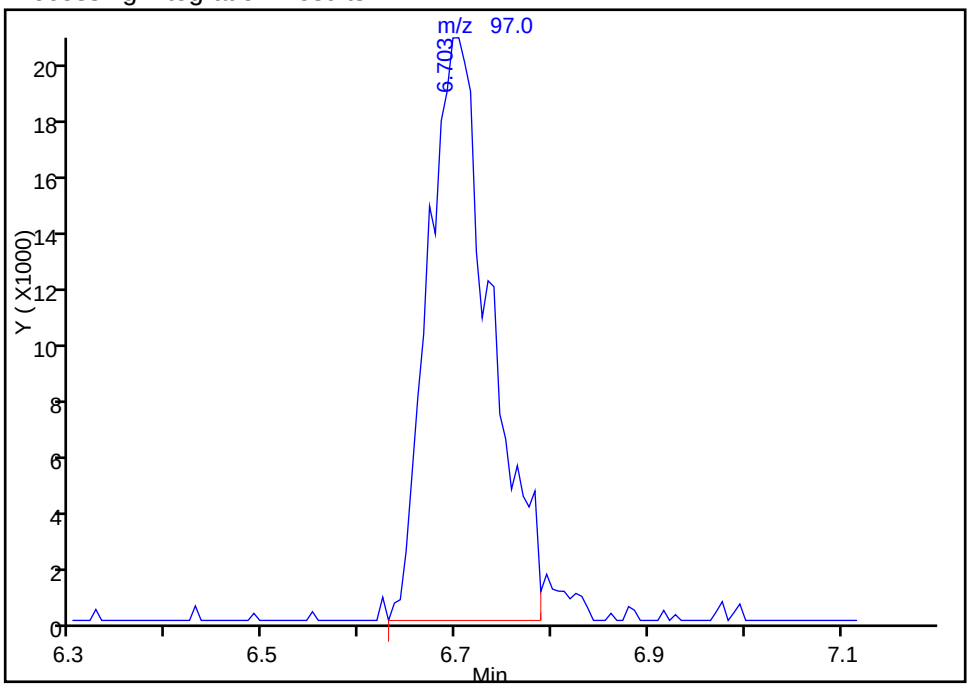
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040808.D				
Injection Date:	08-Apr-2015 11:49:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-7	Lab Sample ID:	180-42504-7		
Client ID:	HD-MW-75D-0/1-0				
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

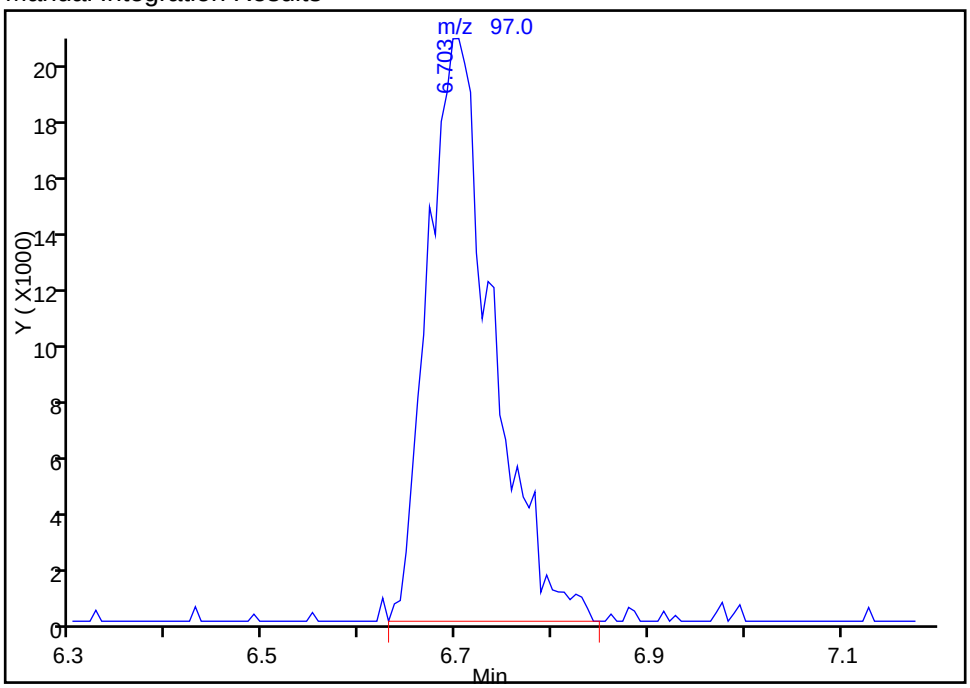
Processing Integration Results

RT: 6.70
Area: 93785
Amount: 43.405414
Amount Units: ng



Manual Integration Results

RT: 6.70
Area: 96641
Amount: 44.727223
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 12:27:25
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-75D-0/1-0 DL | Lab Sample ID: 180-42504-7 DL

Matrix: Water | Lab File ID: 7040325.D

Analysis Method: 8260C | Date Collected: 03/27/2015 10:33

Sample wt/vol: 20(mL) | Date Analyzed: 04/03/2015 20:35

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 137438 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	500	U	500	140
75-01-4	Vinyl chloride	500	U	500	110
74-83-9	Bromomethane	500	U	500	160
75-00-3	Chloroethane	500	U	500	110
75-35-4	1,1-Dichloroethene	500	U	500	150
67-64-1	Acetone	2500	U	2500	1300
75-15-0	Carbon disulfide	500	U	500	110
75-09-2	Methylene Chloride	500	U	500	63
156-60-5	trans-1,2-Dichloroethene	500	U	500	85
1634-04-4	Methyl tert-butyl ether	500	U	500	92
75-34-3	1,1-Dichloroethane	500	U	500	58
156-59-2	cis-1,2-Dichloroethene	270	J	500	120
74-97-5	Bromochloromethane	500	U	500	90
78-93-3	2-Butanone (MEK)	2500	U	2500	270
67-66-3	Chloroform	500	U	500	85
71-55-6	1,1,1-Trichloroethane	500	U	500	140
56-23-5	Carbon tetrachloride	500	U	500	68
71-43-2	Benzene	500	U	500	53
107-06-2	1,2-Dichloroethane	500	U	500	110
79-01-6	Trichloroethene	950		500	72
78-87-5	1,2-Dichloropropane	500	U	500	47
75-27-4	Bromodichloromethane	500	U	500	65
10061-01-5	cis-1,3-Dichloropropene	500	U	500	93
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	U	2500	260
108-88-3	Toluene	500	U	500	75
10061-02-6	trans-1,3-Dichloropropene	500	U	500	74
79-00-5	1,1,2-Trichloroethane	500	U	500	100
127-18-4	Tetrachloroethene	3400		500	74
591-78-6	2-Hexanone	2500	U	2500	80
124-48-1	Dibromochloromethane	500	U	500	68
106-93-4	1,2-Dibromoethane (EDB)	500	U	500	90
108-90-7	Chlorobenzene	500	U	500	68
630-20-6	1,1,1,2-Tetrachloroethane	500	U	500	140
100-41-4	Ethylbenzene	500	U	500	110
1330-20-7	Xylenes, Total	1500	U	1500	240
100-42-5	Styrene	500	U	500	48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-75D-0/1-0 DL Lab Sample ID: 180-42504-7 DL

Matrix: Water Lab File ID: 7040325.D

Analysis Method: 8260C Date Collected: 03/27/2015 10:33

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 20:35

Soil Aliquot Vol: Dilution Factor: 500

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137438 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	*Bromoform*	*500*	*U*	*500*	*96*
79-34-5	*1,1,2,2-Tetrachloroethane*	*500*	*U*	*500*	*100*
107-13-1	*Acrylonitrile*	*10000*	*U*	*10000*	*270*
123-91-1	*1,4-Dioxane*	*100000*	*U*	*100000*	*17000*

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		64-135
2037-26-5	Toluene-d8 (Surr)	117		71-118
460-00-4	4-Bromofluorobenzene (Surr)	108		70-118
1868-53-7	Dibromofluoromethane (Surr)	117		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040325.D
Lims ID: 180-42504-E-7 Lab Sample ID: 180-42504-7
Client ID: HD-MW-75D-0/1-0
Sample Type: Client
Inject. Date: 03-Apr-2015 20:35:30 ALS Bottle#: 13 Worklist Smp#: 25
Purge Vol: 20.000 mL Dil. Factor: 500.0000
Sample Info: 180-42504-E-7
Misc. Info.: 180-0006312-025
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2015 12:03:40 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: journetp Date: 04-Apr-2015 11:50:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.586	4.786	-0.200	89	164846	4000.0	
* 2 Fluorobenzene (IS)	96	7.420	7.402	0.018	99	686306	200.0	
* 3 Chlorobenzene-d5	119	10.474	10.468	0.006	84	204689	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.792	12.786	0.006	95	268462	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.690	6.678	0.012	87	256360	234.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.055	7.043	0.012	95	216806	207.7	
$ 7 Toluene-d8 (Surr)	98	9.051	9.038	0.013	92	711227	234.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	90	292785	216.8	
12 Chloromethane	50		2.000				ND	
13 Vinyl chloride	62		2.219				ND	
15 Bromomethane	94		2.511				ND	
16 Chloroethane	64		2.626				ND	
22 1,1-Dichloroethene	96		3.527				ND	
24 Acetone	43		3.801				ND	
26 Carbon disulfide	76		3.825				ND	
31 Methylene Chloride	84		4.354				ND	
34 trans-1,2-Dichloroethene	96		4.756				ND	
33 Acrylonitrile	53		4.816				ND	
35 Methyl tert-butyl ether	73		4.865				ND	
37 1,1-Dichloroethane	63		5.364				ND	
45 cis-1,2-Dichloroethene	96	6.125	6.112	0.013	1	12267	10.8	M
46 2-Butanone (MEK)	43		6.179				ND	
49 Chlorobromomethane	128		6.380				ND	
52 Chloroform	83		6.502				ND	
53 1,1,1-Trichloroethane	97	6.690	6.678	0.012	1	8701	5.08	M
56 Carbon tetrachloride	117		6.861				ND	
58 Benzene	78		7.098				ND	
59 1,2-Dichloroethane	62		7.122				ND	
64 Trichloroethene	130	7.816	7.797	0.019	84	51616	38.1	
67 1,2-Dichloropropane	63		8.035				ND	
70 1,4-Dioxane	88		8.187				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.321				ND	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.935				ND	
76 Toluene	91		9.105				ND	
77 trans-1,3-Dichloropropene	75		9.330				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164	9.659	9.647	0.012	92	140812	137.3	
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.018				ND	
87 Chlorobenzene	112		10.498				ND	
89 1,1,1,2-Tetrachloroethane	131		10.578				ND	
90 Ethylbenzene	106		10.608				ND	
91 m-Xylene & p-Xylene	106		10.724				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.131				ND	
94 Bromoform	173		11.314				ND	
99 1,1,2,2-Tetrachloroethane	83		11.776				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

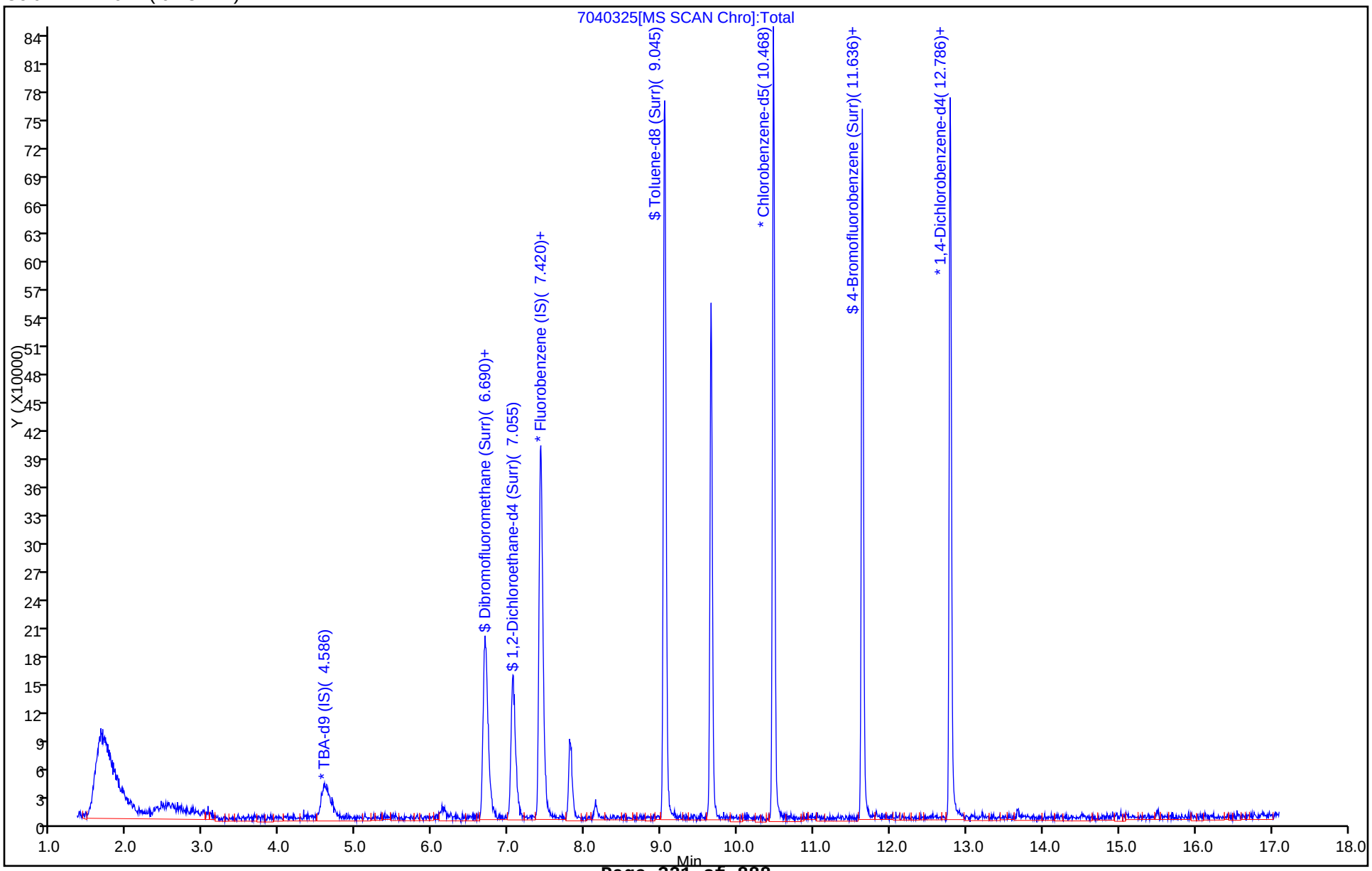
Report Date: 04-Apr-2015 12:04:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040325.D

Injection Date:	03-Apr-2015 20:35:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-E-7	Lab Sample ID:	180-42504-7	Worklist Smp#:	25
Client ID:	HD-MW-75D-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	500.0000	ALS Bottle#:	13
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

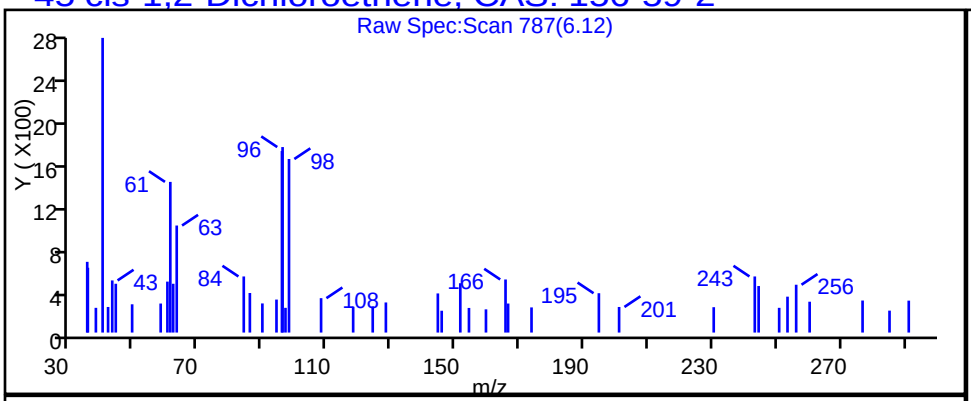


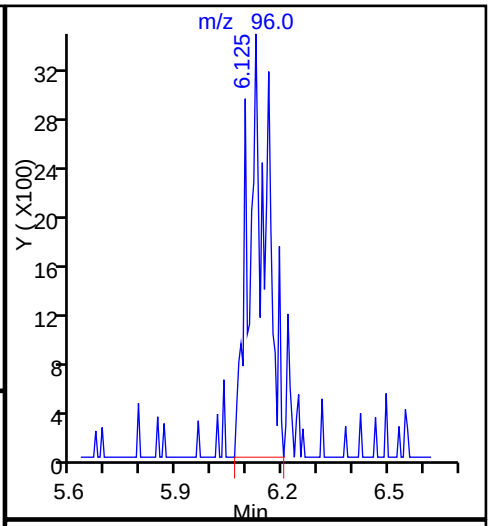
Report Date: 04-Apr-2015 12:04:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

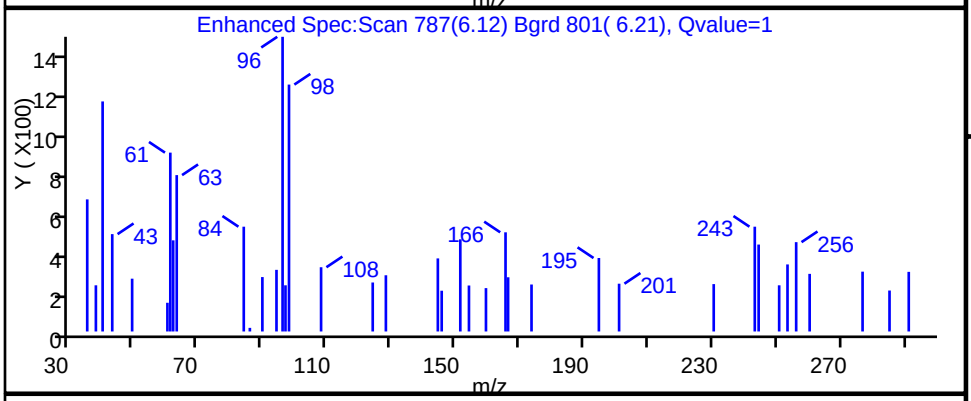
TestAmerica Pittsburgh

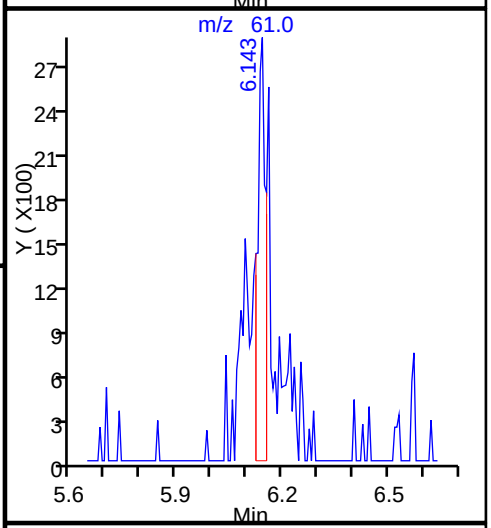
Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040325.D				
Injection Date:	03-Apr-2015 20:35:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-E-7	Lab Sample ID:	180-42504-7		
Client ID:	HD-MW-75D-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	25
Purge Vol:	20.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

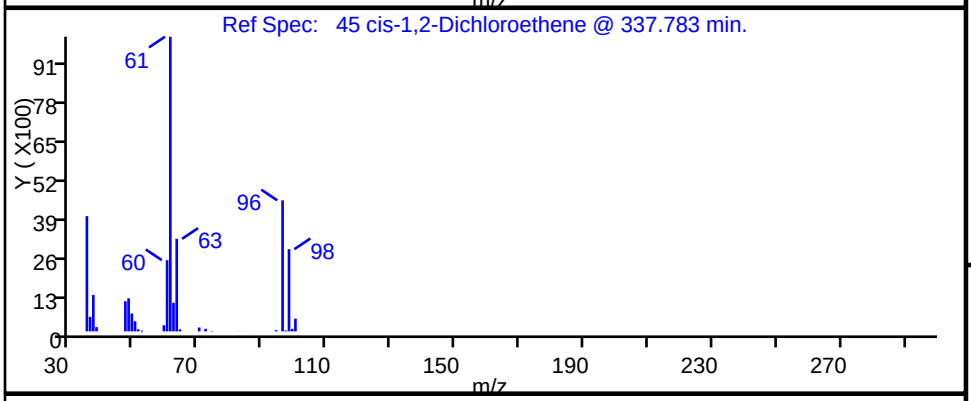
45 cis-1,2-Dichloroethene, CAS: 156-59-2

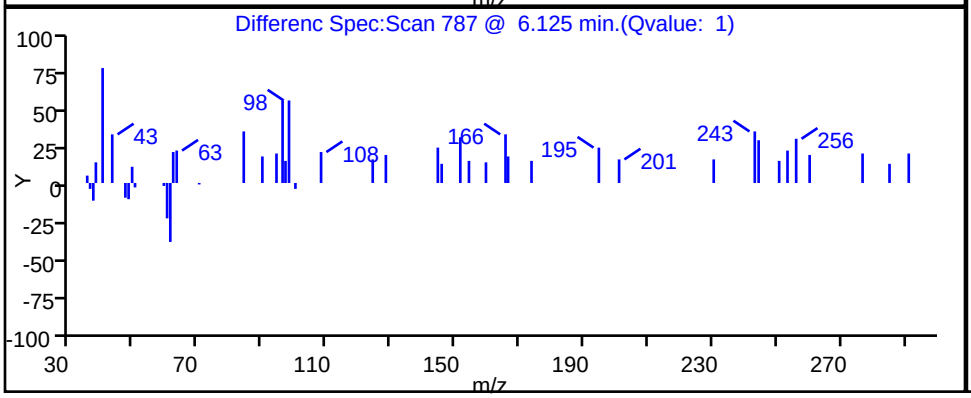


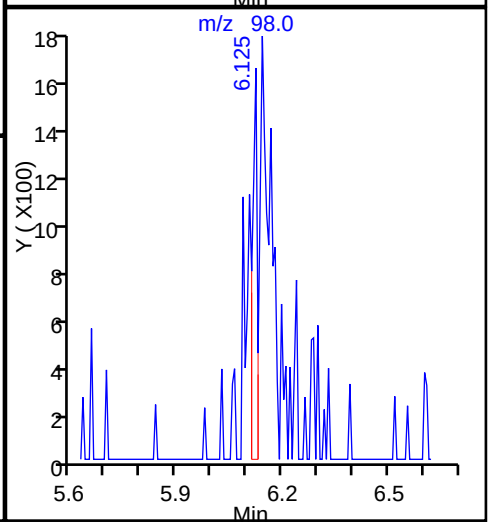












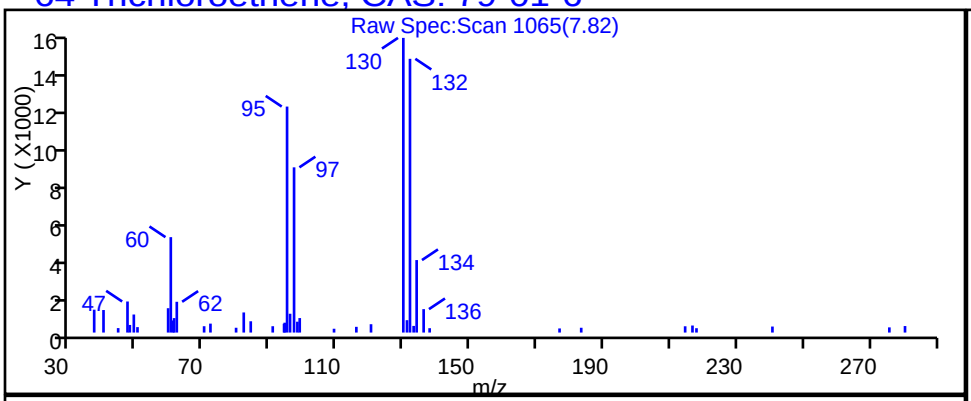
Report Date: 04-Apr-2015 12:04:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

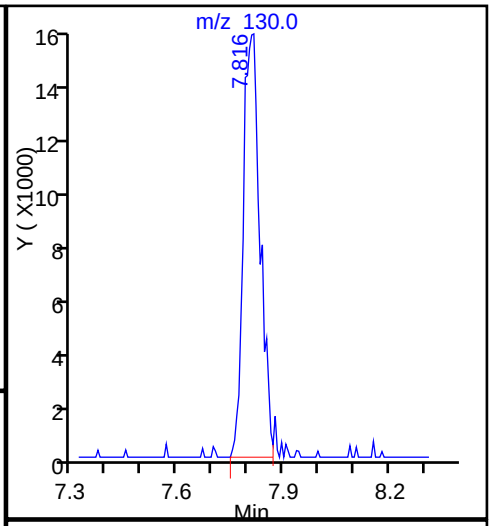
TestAmerica Pittsburgh

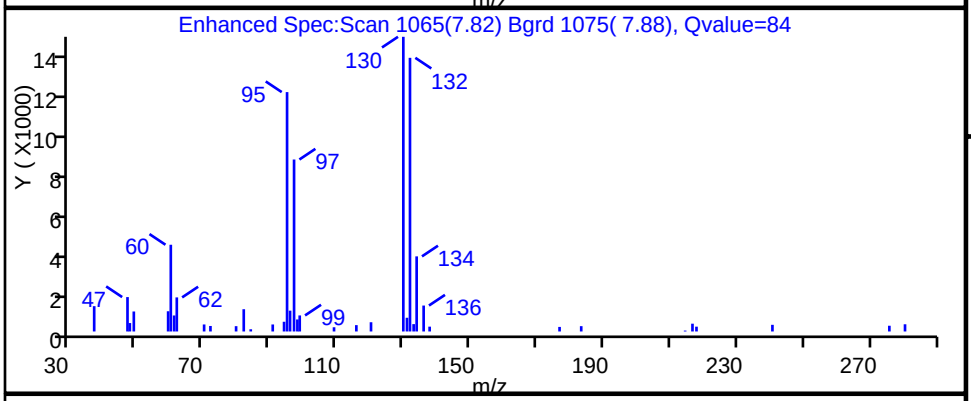
Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040325.D

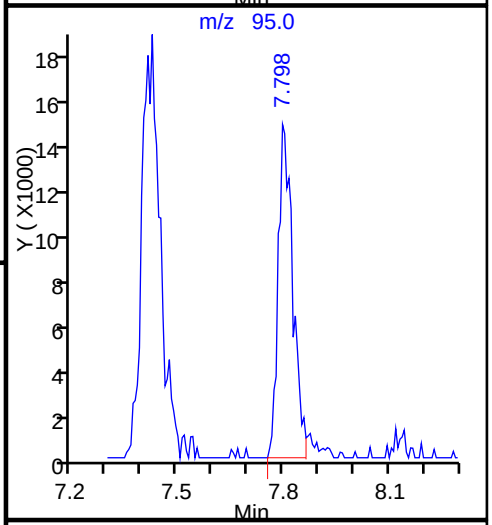
Injection Date:	03-Apr-2015 20:35:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-E-7	Lab Sample ID:	180-42504-7		
Client ID:	HD-MW-75D-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	25
Purge Vol:	20.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

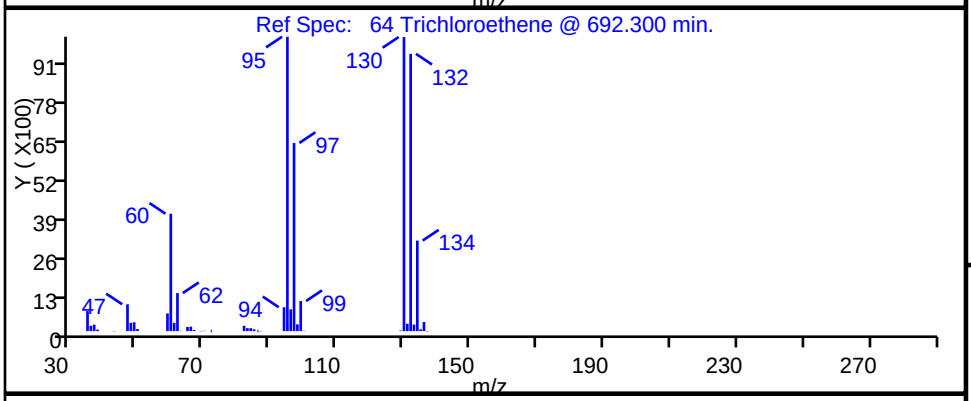
64 Trichloroethene, CAS: 79-01-6

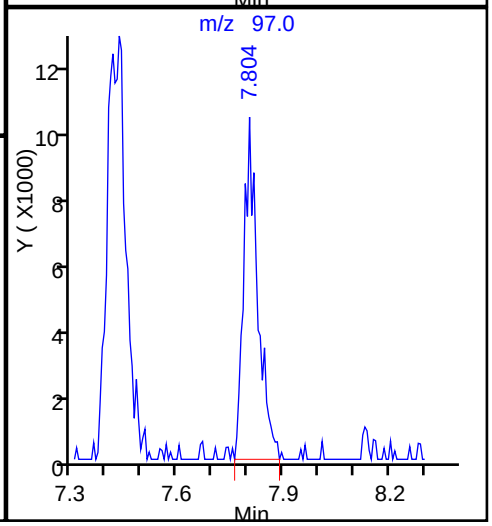


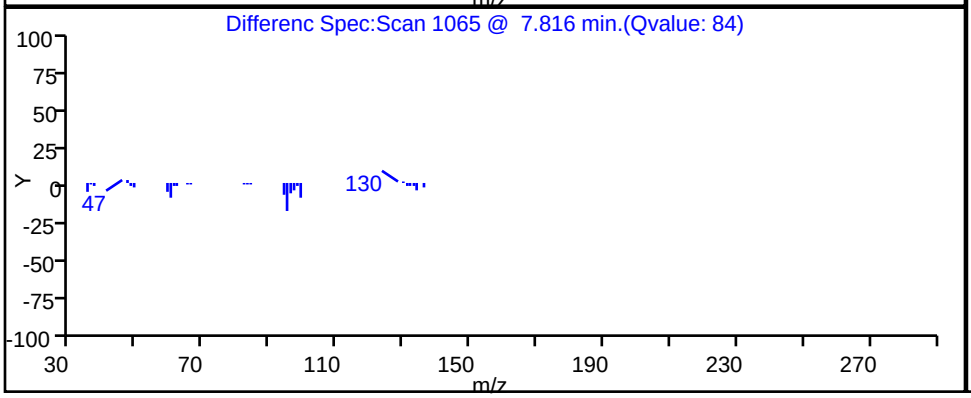












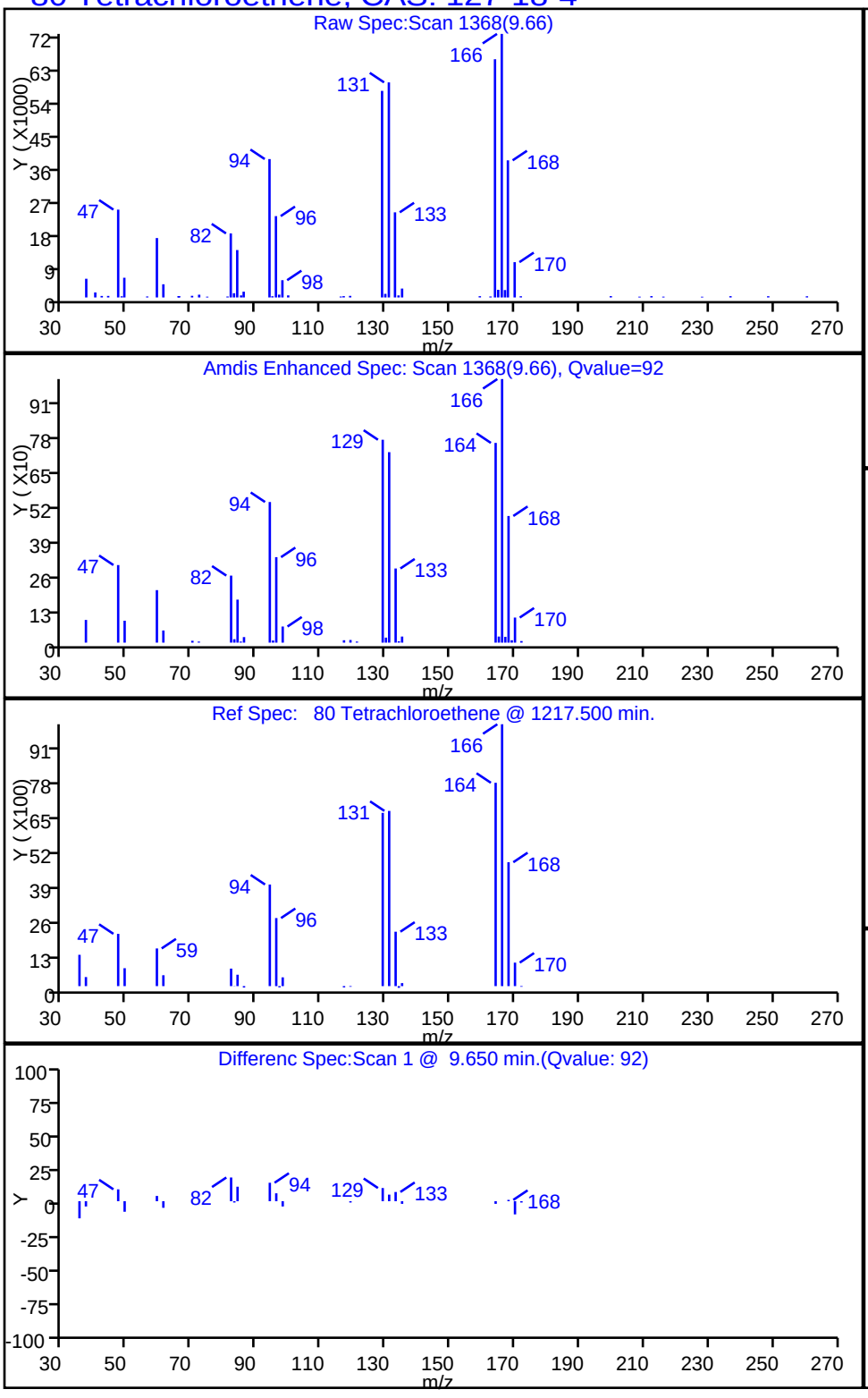
Report Date: 04-Apr-2015 12:04:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

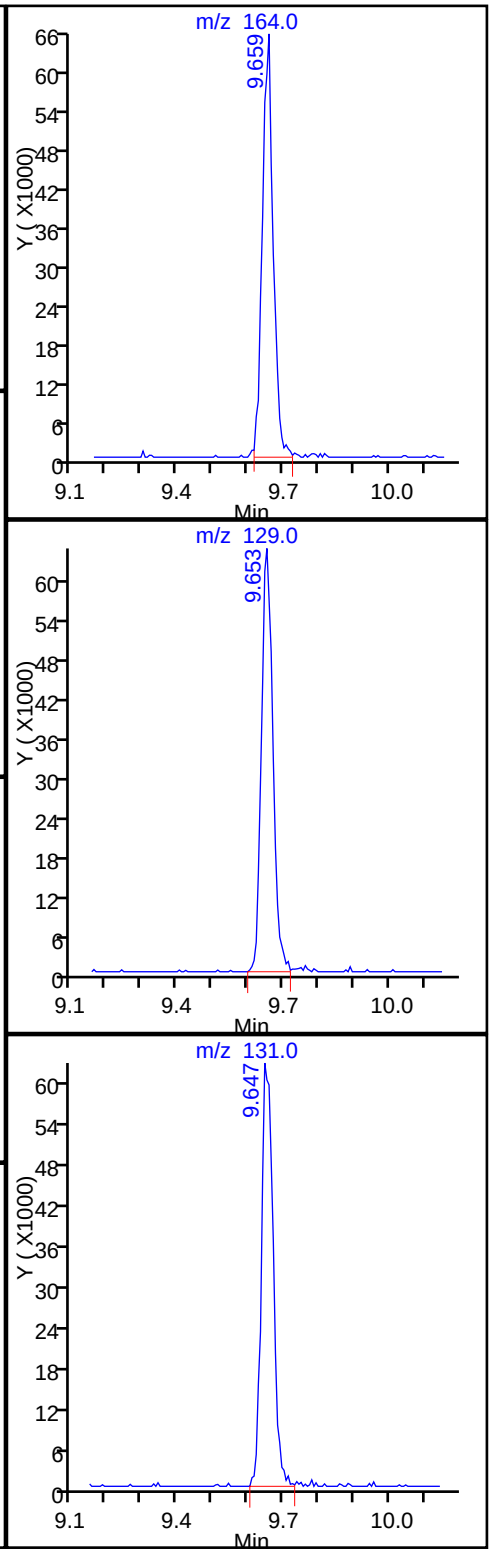
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040325.D

Injection Date:	03-Apr-2015 20:35:30	Instrument ID:	CHHP7
Lims ID:	180-42504-E-7	Lab Sample ID:	180-42504-7
Client ID:	HD-MW-75D-0/1-0		
Operator ID:	034635	ALS Bottle#:	13 Worklist Smp#: 25
Purge Vol:	20.000 mL	Dil. Factor:	500.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4





Manual Integration/User Assign Peak Report

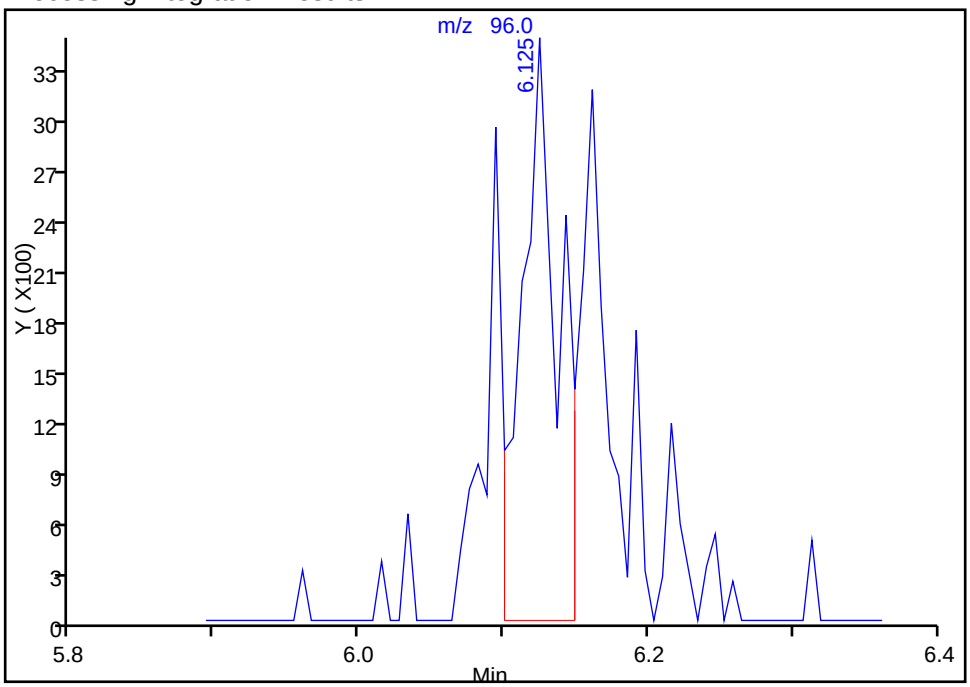
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040325.D				
Injection Date:	03-Apr-2015 20:35:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-E-7	Lab Sample ID:	180-42504-7		
Client ID:	HD-MW-75D-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	25
Purge Vol:	20.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

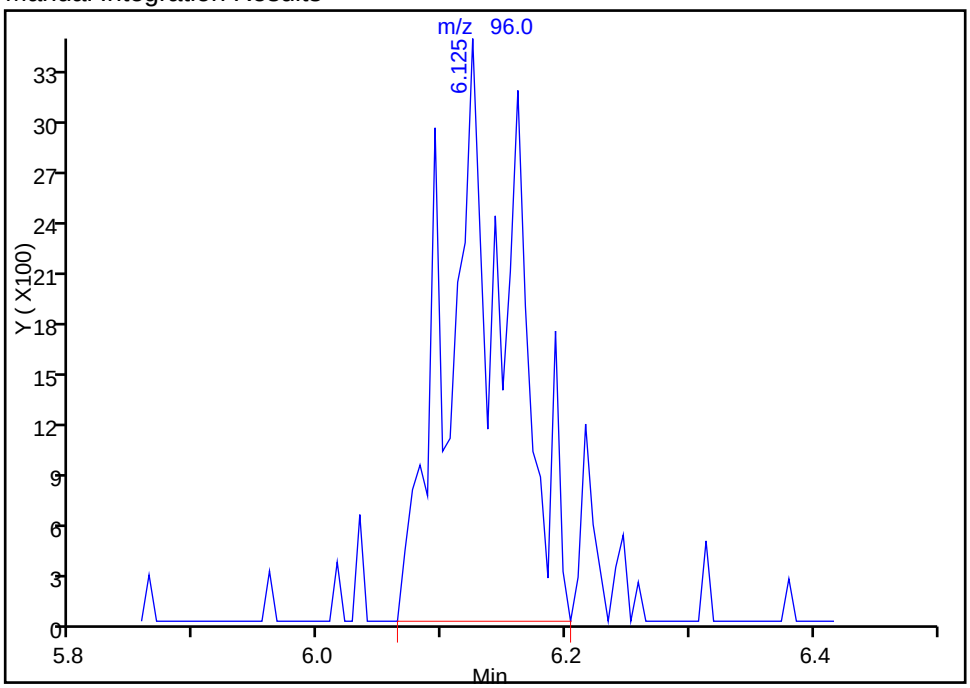
Processing Integration Results

RT: 6.12
Area: 6128
Amount: 5.401065
Amount Units: ng



Manual Integration Results

RT: 6.12
Area: 12267
Amount: 10.811826
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 11:50:50
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

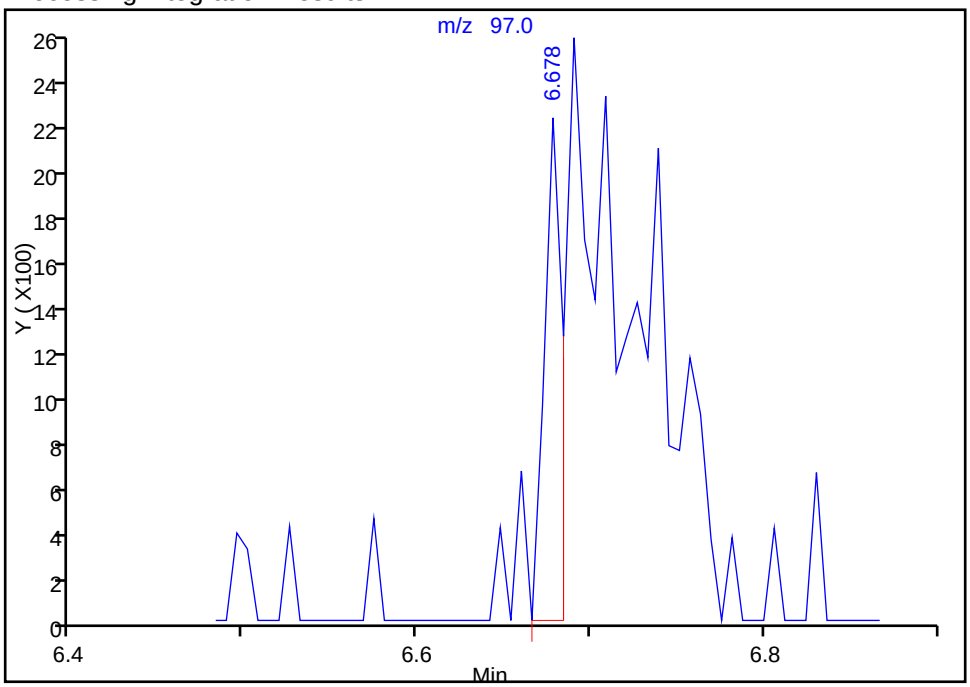
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040325.D				
Injection Date:	03-Apr-2015 20:35:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-E-7	Lab Sample ID:	180-42504-7		
Client ID:	HD-MW-75D-0/1-0				
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	25
Purge Vol:	20.000 mL	Dil. Factor:	500.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

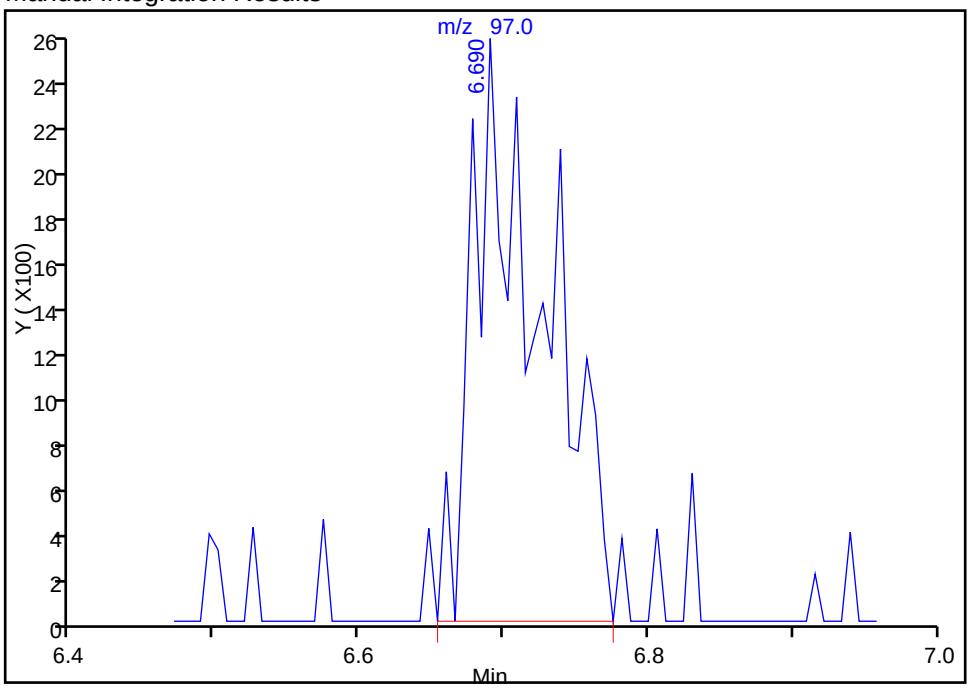
Processing Integration Results

RT: 6.68
Area: 1601
Amount: 0.934311
Amount Units: ng



Manual Integration Results

RT: 6.69
Area: 8701
Amount: 5.077726
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 12:03:00
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-51D-0/1-0 Lab Sample ID: 180-42504-8

Matrix: Water Lab File ID: 7040616.D

Analysis Method: 8260C Date Collected: 03/27/2015 13:30

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 16:08

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.: 137564 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 F1	1.0	0.18
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.12
156-59-2	cis-1,2-Dichloroethene	2.9		1.0	0.24
74-97-5	Bromochloromethane	1.0	U F1	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 F1	1.0	0.21
79-01-6	Trichloroethene	6.3		1.0	0.14
78-87-5	1,2-Dichloropropane	1.0	U F1	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 F1	1.0	0.20
127-18-4	Tetrachloroethene	0.65	J	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 F1	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.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-51D-0/1-0 Lab Sample ID: 180-42504-8

Matrix: Water Lab File ID: 7040616.D

Analysis Method: 8260C Date Collected: 03/27/2015 13:30

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 16:08

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.: 137564 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 F2	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		64-135
2037-26-5	Toluene-d8 (Surr)	111		71-118
460-00-4	4-Bromofluorobenzene (Surr)	110		70-118
1868-53-7	Dibromofluoromethane (Surr)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040616.D
Lims ID: 180-42504-E-8 Lab Sample ID: 180-42504-8
Client ID: HD-MW-51D-0/1-0
Sample Type: Client
Inject. Date: 06-Apr-2015 16:08:30 ALS Bottle#: 17 Worklist Smp#: 16
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 180-42504-E-8
Misc. Info.: 180-0006335-016
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Apr-2015 08:48:13 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: journetp Date: 07-Apr-2015 08:43:25

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
*	1 TBA-d9 (IS)	65	4.610	4.932	-0.322	83	186800	4000.0	
*	2 Fluorobenzene (IS)	96	7.414	7.396	0.018	99	875722	200.0	
*	3 Chlorobenzene-d5	119	10.474	10.468	0.006	84	241165	200.0	
*	4 1,4-Dichlorobenzene-d4	152	12.786	12.792	-0.006	95	335014	200.0	
$	5 Dibromofluoromethane (Surr	113	6.690	6.672	0.018	90	283777	203.1	
$	6 1,2-Dichloroethane-d4 (Sur	65	7.043	7.037	0.006	94	215008	161.4	
$	7 Toluene-d8 (Surr)	98	9.039	9.032	0.007	92	792974	221.7	
$	8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	89	348303	219.0	
	11 Dichlorodifluoromethane	85		1.896				ND	
	12 Chloromethane	50		2.012				ND	
	13 Vinyl chloride	62		2.201				ND	
	14 Butadiene	39		2.201				ND	
	15 Bromomethane	94		2.487				ND	
	16 Chloroethane	64		2.602				ND	
	17 Dichlorofluoromethane	67		2.870				ND	
	18 Trichlorofluoromethane	101		2.876				ND	
	20 Ethyl ether	59		3.296				ND	
	19 Ethanol	45	3.351	3.320	0.031	1	390		NC
	21 Acrolein	56		3.509				ND	
	22 1,1-Dichloroethene	96	3.564	3.521	0.043	13	4374	3.72	
	23 1,1,2-Trichloro-1,2,2-trif	101		3.600				ND	
	25 Iodomethane	142		3.709				ND	
	26 Carbon disulfide	76		3.782				ND	
	24 Acetone	43		3.843				ND	
	27 Isopropyl alcohol	45	4.014	3.861	0.153	29	301		NC
	28 3-Chloro-1-propene	76		4.099				ND	
	29 Acetonitrile	40	4.190	4.190	0.000	10	7745		NC
	30 Methyl acetate	43		4.312				ND	
	31 Methylene Chloride	84		4.318				ND	
	34 trans-1,2-Dichloroethene	96		4.731				ND	
	33 Acrylonitrile	53		4.810				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.877				ND	
32 2-Methyl-2-propanol	59		4.938				ND	
36 Hexane	57		5.121				ND	
38 Vinyl acetate	43		5.121				ND	
37 1,1-Dichloroethane	63		5.340				ND	
41 Isopropyl ether	45		5.437				ND	
40 Isopropyl ether TIC	45		5.456				ND	
39 2-Chloro-1,3-butadiene	53		5.484				ND	
43 Tert-butyl ethyl ether (TI	59		5.961				ND	
45 cis-1,2-Dichloroethene	96	6.106	6.082	0.024	77	82985	57.3	
44 2,2-Dichloropropane	77		6.082				ND	
42 Tert-butyl ethyl ether	59		6.095				ND	
48 Ethyl acetate	43	6.173	6.179	-0.006	0	155	NC	
46 2-Butanone (MEK)	43		6.191				ND	
47 Propionitrile	54		6.283				ND	
50 Methacrylonitrile	41		6.314				ND	
49 Chlorobromomethane	128		6.374				ND	
52 Chloroform	83		6.496				ND	
53 1,1,1-Trichloroethane	97		6.672				ND	
54 Cyclohexane	56		6.715				ND	
51 Tetrahydrofuran	42		6.733				ND	
56 Carbon tetrachloride	117		6.848				ND	
55 1,1-Dichloropropene	75		6.855				ND	
58 Benzene	78		7.086				ND	
59 1,2-Dichloroethane	62		7.122				ND	
60 Tert-amyl methyl ether (TI	73		7.201				ND	
57 Isobutyl alcohol	41		7.390				ND	
62 n-Heptane	43		7.396				ND	
61 Tert-amyl methyl ether	73	7.433	7.408	0.025	37	5552	NC	
64 Trichloroethene	130	7.810	7.785	0.025	93	219331	126.9	
66 Methylcyclohexane	83		7.980				ND	
69 Methyl methacrylate	69	7.968	7.986	-0.018	1	519	NC	
65 Ethyl acrylate	55		7.986				ND	
67 1,2-Dichloropropane	63		8.029				ND	
63 n-Butanol	56	8.303	8.132	0.171	1	119	NC	
68 Dibromomethane	93		8.144				ND	
70 1,4-Dioxane	88		8.187				ND	
71 Dichlorobromomethane	83		8.308				ND	
72 2-Nitropropane	41		8.527				ND	
73 2-Chloroethyl vinyl ether	63	8.814	8.765	0.049	1	156	NC	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.941				ND	
76 Toluene	91		9.099				ND	
77 trans-1,3-Dichloropropene	75		9.324				ND	
78 Ethyl methacrylate	69		9.422				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164	9.659	9.647	0.012	91	36515	12.9	
81 1,3-Dichloropropane	76		9.671				ND	
83 n-Butyl acetate	43	9.836	9.762	0.074	1	81	NC	
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.006				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
87 Chlorobenzene	112		10.498				ND	
86 3-Chlorobenzotrifluoride	180		10.516				ND	
88 4-Chlorobenzotrifluoride	180		10.571				ND	
89 1,1,1,2-Tetrachloroethane	131		10.572				ND	
90 Ethylbenzene	106		10.602				ND	
91 m-Xylene & p-Xylene	106		10.717				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.125				ND	
94 Bromoform	173		11.320				ND	
96 2-Chlorobenzotrifluoride	180		11.417				ND	
97 Isopropylbenzene	105		11.478				ND	
95 Cyclohexanol	57		11.490				ND	
99 1,1,2,2-Tetrachloroethane	83		11.770				ND	
100 Bromobenzene	156		11.782				ND	
101 1,2,3-Trichloropropane	110		11.819				ND	
102 trans-1,4-Dichloro-2-buten	53		11.831				ND	
98 Cyclohexanone	55	11.703	11.885	-0.182	1	200		NC
103 N-Propylbenzene	120		11.892				ND	
104 2-Chlorotoluene	126		11.983				ND	
106 1,3,5-Trimethylbenzene	105		12.062				ND	
107 4-Chlorotoluene	126		12.086				ND	
105 3-Chlorotoluene	126	12.099	12.092	0.007	1	1391		NC
108 tert-Butylbenzene	119		12.390				ND	
109 Pentachloroethane	167		12.421				ND	
110 1,2,4-Trimethylbenzene	105		12.439				ND	
111 1,2-dichloro-4-(trifluorom	214		12.548				ND	
117 1,2,3-Trimethylbenzene	105	12.488	12.609	-0.121	1	95		NC
112 sec-Butylbenzene	105		12.609				ND	
113 1,3-Dichlorobenzene	146		12.725				ND	
114 4-Isopropyltoluene	119		12.755				ND	
115 1,4-Dichlorobenzene	146		12.810				ND	
116 2,4-Dichloro-1-(triflourom	214		12.907				ND	
118 2,5-Dichlorobenzotrifluori	214		12.950				ND	
119 Benzyl chloride	91		13.163				ND	
120 n-Butylbenzene	91		13.163				ND	
121 1,2-Dichlorobenzene	146		13.187				ND	
122 1,2-Dibromo-3-Chloropropan	75		13.972				ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.166				ND	
124 1,3,5-Trichlorobenzene	180		14.228				ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.580				ND	
126 1,2,4-Trichlorobenzene	180	14.800	14.806	-0.006	93	29839		36.1
127 Hexachlorobutadiene	225	14.976	14.970	0.006	90	16893		34.1
128 Naphthalene	128	15.055	15.055	0.000	95	52824		39.1
129 1,2,3-Trichlorobenzene	180	15.305	15.311	-0.006	92	42801		75.8
130 2,3,6-Trichlorotoluene	159		16.107				ND	
131 2,4,5-Trichlorotoluene	159		16.198				ND	
132 2-Methylnaphthalene	142		16.516				ND	
153 1,2 Epoxybutane TIC	1		0.000				ND	
150 2,6-Dichlorotoluene	1		0.000				ND	
146 2,5-Dichlorotoluene	1		0.000				ND	
151 Isooctane	57		0.000				ND	
152 Formaldehyde TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
147 2,4-Dichlorotoluene	1		0.000				ND	
148 2,3-Dichlorotoluene	1		0.000				ND	
149 3,4-Dichlorotoluene	1		0.000				ND	
S 133 Xylenes, Total	106		1.000				ND	
S 134 1,2-Dichloroethene, Total	96				0		57.3	
S 135 1,3-Dichloropropene, Total	1		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	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

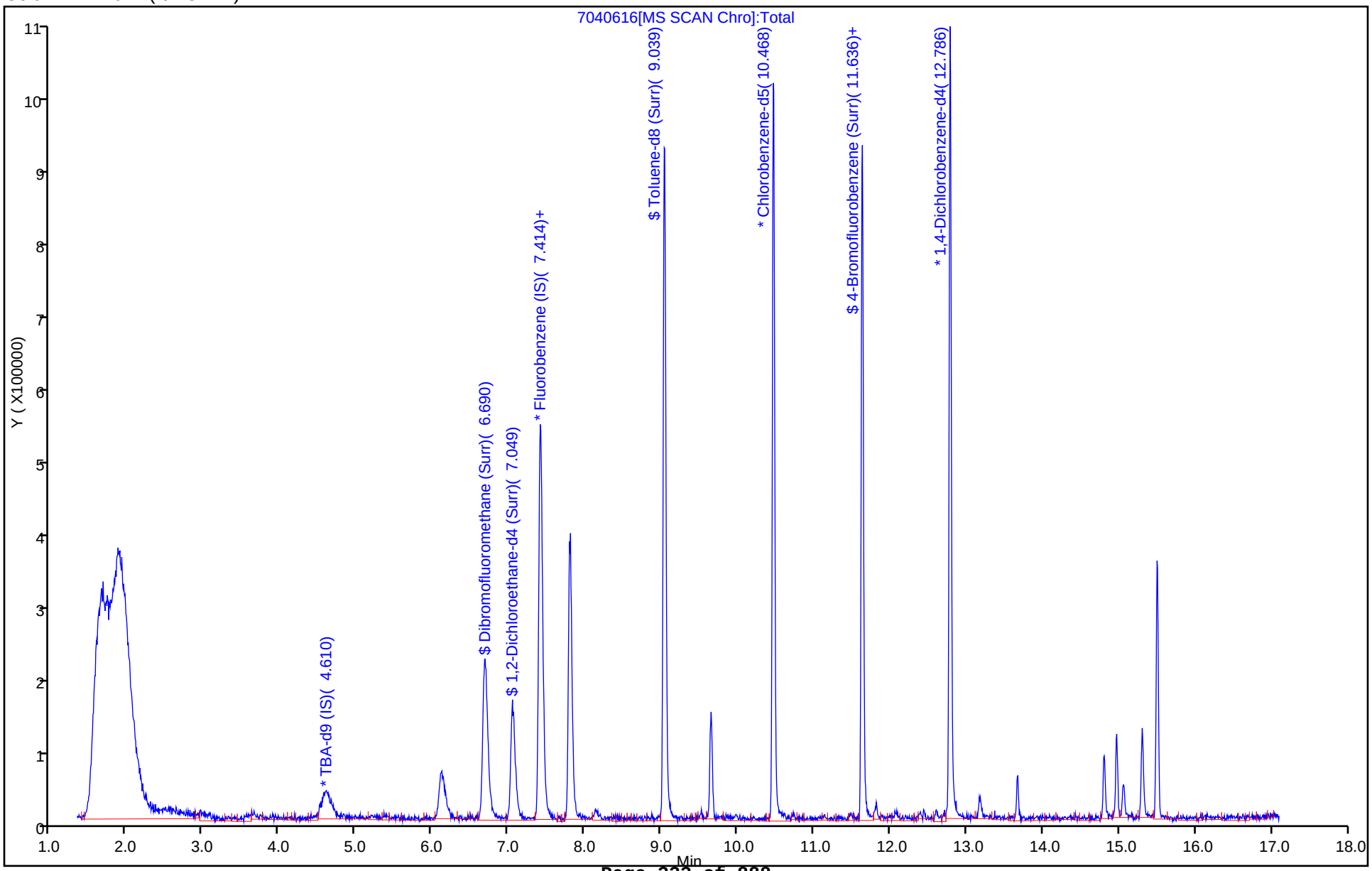
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

Report Date: 07-Apr-2015 08:48:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040616.D				
Injection Date:	06-Apr-2015 16:08:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-E-8	Lab Sample ID:	180-42504-8	Worklist Smp#:	16
Client ID:	HD-MW-51D-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

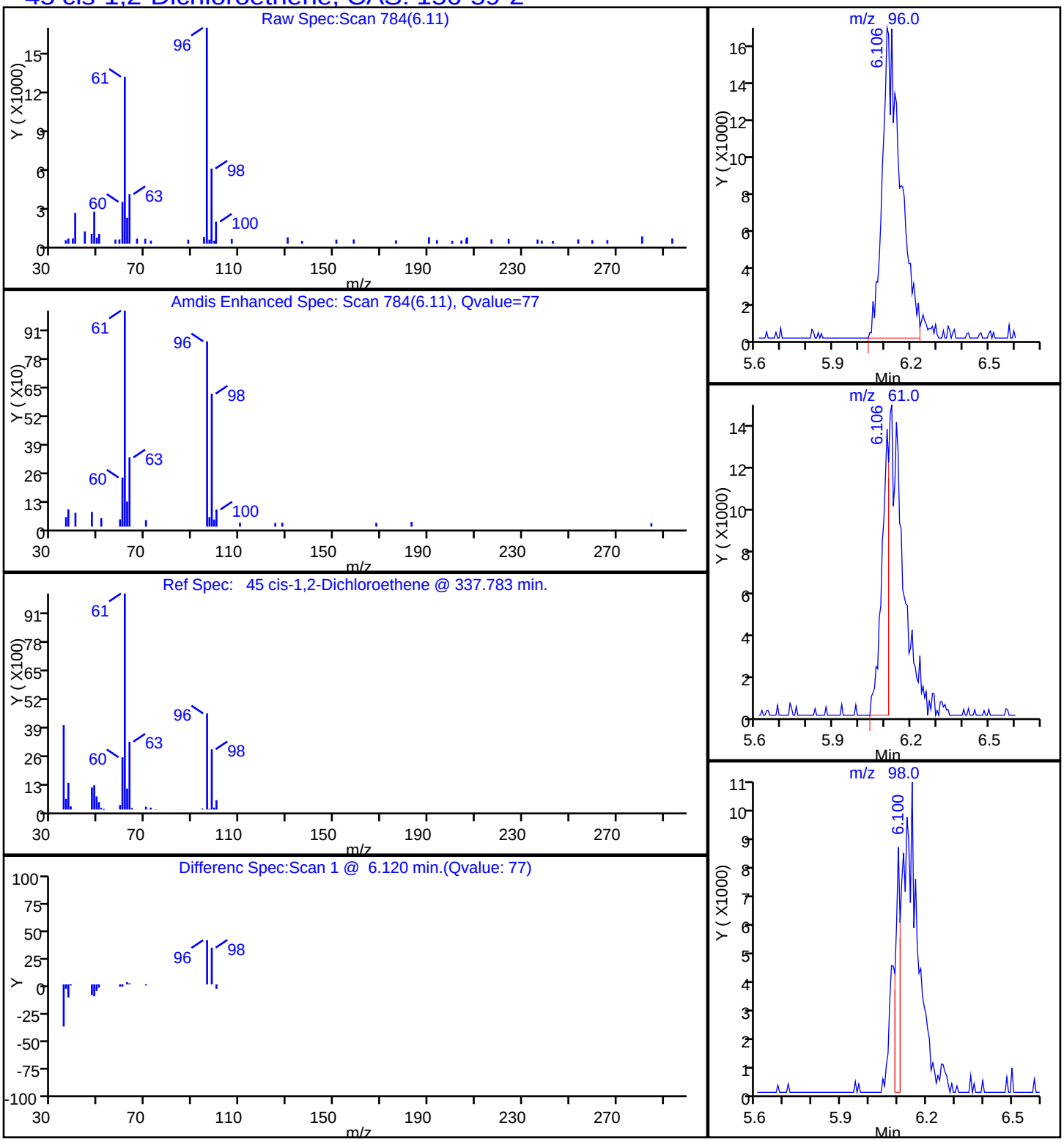


Report Date: 07-Apr-2015 08:48:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040616.D				
Injection Date:	06-Apr-2015 16:08:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-E-8	Lab Sample ID:	180-42504-8		
Client ID:	HD-MW-51D-0/1-0				
Operator ID:	034635	ALS Bottle#:	17	Worklist Smp#:	16
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

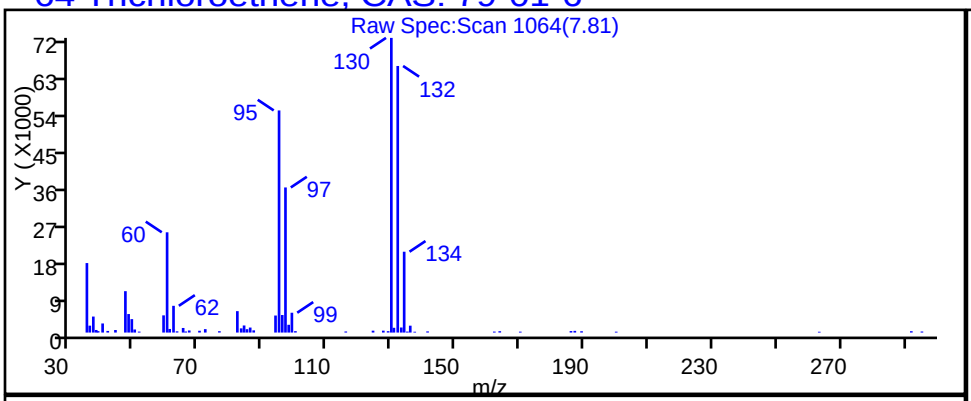


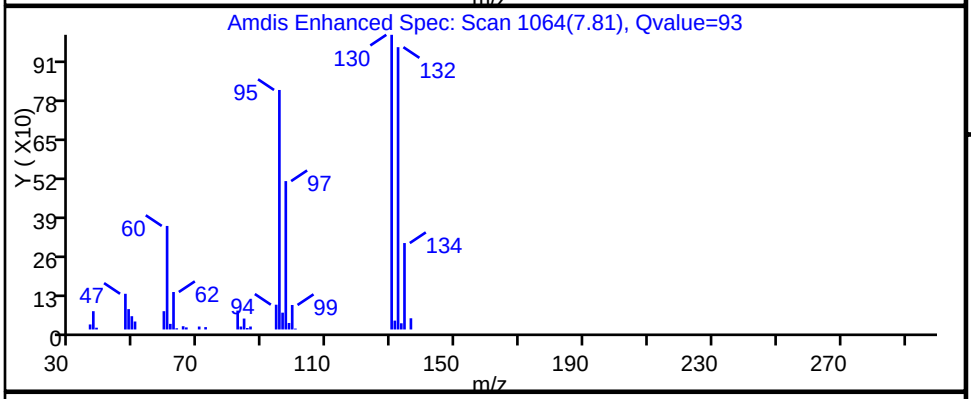
Report Date: 07-Apr-2015 08:48:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

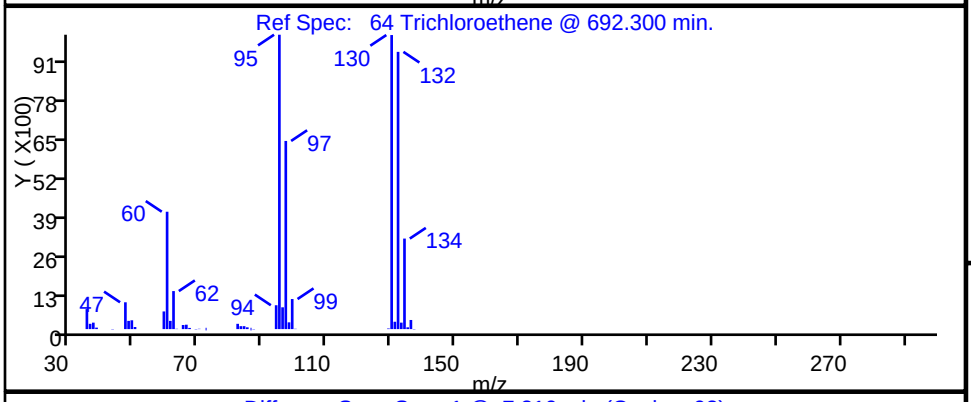
TestAmerica Pittsburgh

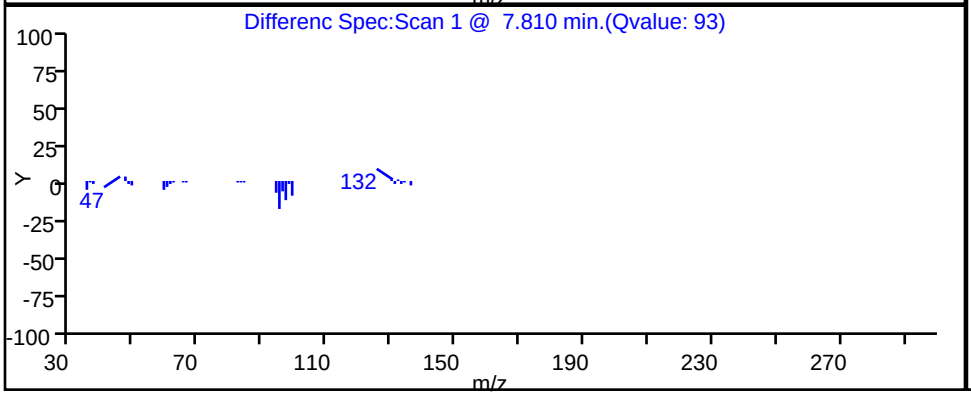
Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040616.D				
Injection Date:	06-Apr-2015 16:08:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-E-8	Lab Sample ID:	180-42504-8		
Client ID:	HD-MW-51D-0/1-0				
Operator ID:	034635	ALS Bottle#:	17	Worklist Smp#:	16
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

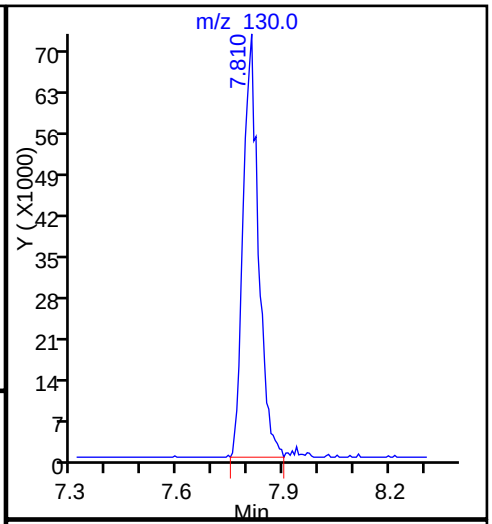
64 Trichloroethene, CAS: 79-01-6

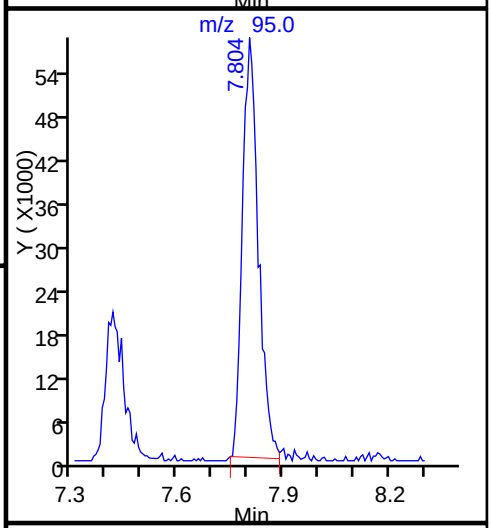


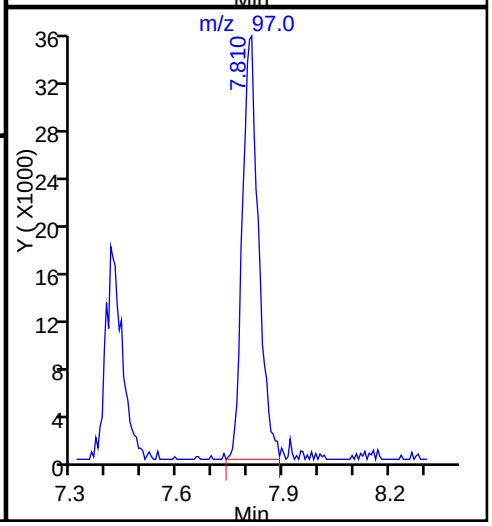












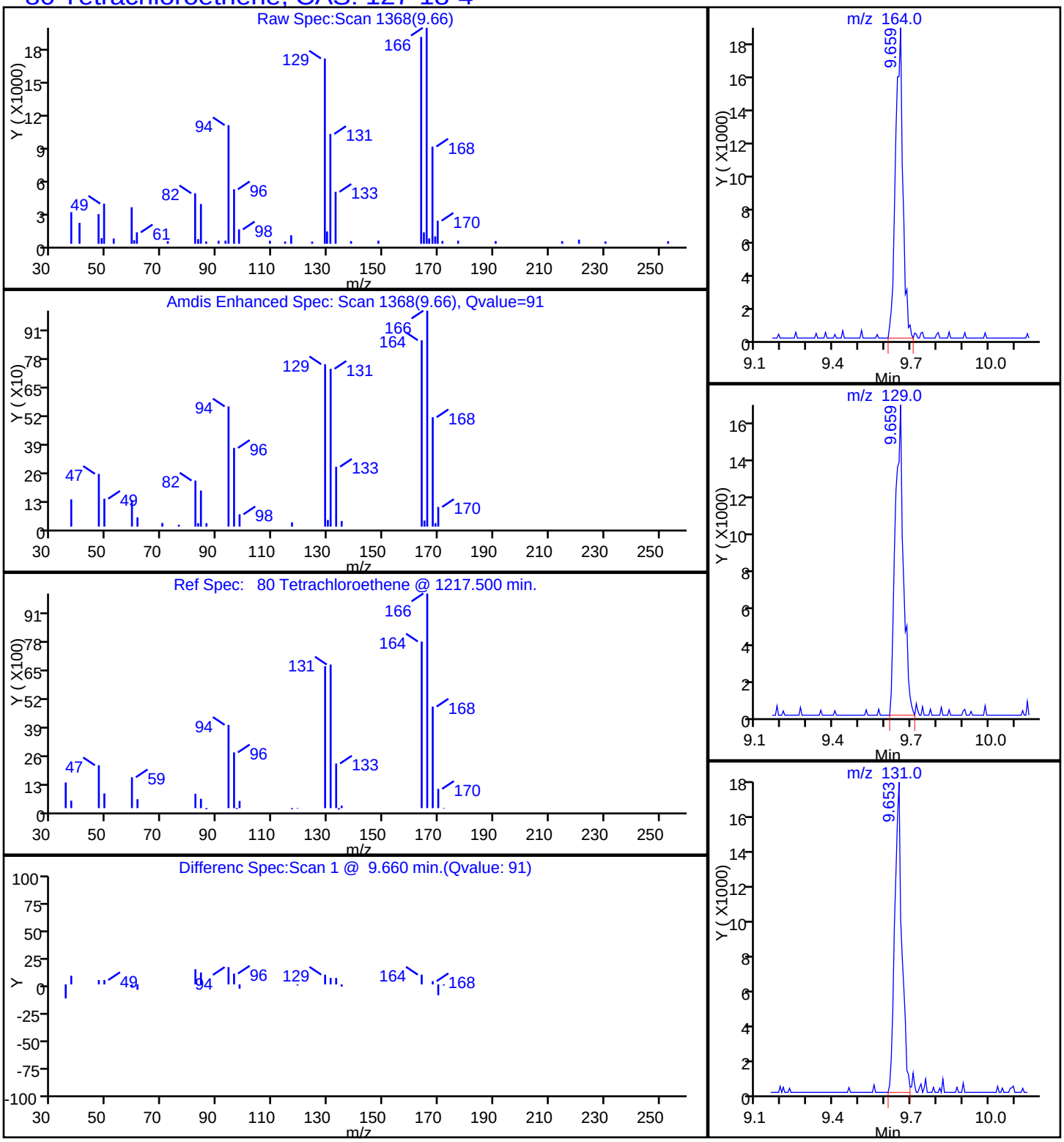
Report Date: 07-Apr-2015 08:48:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040616.D

Injection Date:	06-Apr-2015 16:08:30	Instrument ID:	CHHP7
Lims ID:	180-42504-E-8	Lab Sample ID:	180-42504-8
Client ID:	HD-MW-51D-0/1-0		
Operator ID:	034635	ALS Bottle#:	17 Worklist Smp#: 16
Purge Vol:	20.000 mL	Dil. Factor:	1.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

80 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-50S-0/1-0 Lab Sample ID: 180-42504-9

Matrix: Water Lab File ID: 7040611.D

Analysis Method: 8260C Date Collected: 03/27/2015 11:40

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 13:48

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137564 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	50	U	50	14
75-01-4	Vinyl chloride	50	U	50	11
74-83-9	Bromomethane	50	U	50	16
75-00-3	Chloroethane	50	U	50	11
75-35-4	1,1-Dichloroethene	29	J	50	15
67-64-1	Acetone	250	U	250	130
75-15-0	Carbon disulfide	50	U	50	11
75-09-2	Methylene Chloride	50	U	50	6.3
156-60-5	trans-1,2-Dichloroethene	50	U	50	8.5
1634-04-4	Methyl tert-butyl ether	50	U	50	9.2
75-34-3	1,1-Dichloroethane	50	U	50	5.8
156-59-2	cis-1,2-Dichloroethene	580		50	12
74-97-5	Bromochloromethane	50	U	50	9.0
78-93-3	2-Butanone (MEK)	250	U	250	27
67-66-3	Chloroform	50	U	50	8.5
71-55-6	1,1,1-Trichloroethane	95		50	14
56-23-5	Carbon tetrachloride	50	U	50	6.8
71-43-2	Benzene	50	U	50	5.3
107-06-2	1,2-Dichloroethane	50	U	50	11
79-01-6	Trichloroethene	450		50	7.2
78-87-5	1,2-Dichloropropane	50	U	50	4.7
75-27-4	Bromodichloromethane	50	U	50	6.5
10061-01-5	cis-1,3-Dichloropropene	50	U	50	9.3
108-10-1	4-Methyl-2-pentanone (MIBK)	250	U	250	26
108-88-3	Toluene	50	U	50	7.5
10061-02-6	trans-1,3-Dichloropropene	50	U	50	7.4
79-00-5	1,1,2-Trichloroethane	50	U	50	10
127-18-4	Tetrachloroethene	120		50	7.4
591-78-6	2-Hexanone	250	U	250	8.0
124-48-1	Dibromochloromethane	50	U	50	6.8
106-93-4	1,2-Dibromoethane (EDB)	50	U	50	9.0
108-90-7	Chlorobenzene	50	U	50	6.8
630-20-6	1,1,1,2-Tetrachloroethane	50	U	50	14
100-41-4	Ethylbenzene	50	U	50	11
1330-20-7	Xylenes, Total	150	U	150	24
100-42-5	Styrene	50	U	50	4.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-50S-0/1-0 Lab Sample ID: 180-42504-9

Matrix: Water Lab File ID: 7040611.D

Analysis Method: 8260C Date Collected: 03/27/2015 11:40

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 13:48

Soil Aliquot Vol: Dilution Factor: 50

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 137564 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	50	U	50	9.6
79-34-5	1,1,2,2-Tetrachloroethane	50	U	50	10
107-13-1	Acrylonitrile	1000	U	1000	27
123-91-1	1,4-Dioxane	10000	U	10000	1700

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		64-135
2037-26-5	Toluene-d8 (Surr)	110		71-118
460-00-4	4-Bromofluorobenzene (Surr)	109		70-118
1868-53-7	Dibromofluoromethane (Surr)	111		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040611.D
Lims ID: 180-42504-C-9 Lab Sample ID: 180-42504-9
Client ID: HD-MW-50S-0/1-0
Sample Type: Client
Inject. Date: 06-Apr-2015 13:48:30 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 20.000 mL Dil. Factor: 50.0000
Sample Info: 180-42504-C-9
Misc. Info.: 180-0006335-010
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 15:45:36 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 06-Apr-2015 14:21:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.616	4.932	-0.316	88	122328	4000.0	
* 2 Fluorobenzene (IS)	96	7.415	7.396	0.019	99	785307	200.0	
* 3 Chlorobenzene-d5	119	10.468	10.468	0.000	85	217729	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.786	12.792	-0.006	95	327827	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.685	6.672	0.013	89	278318	222.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.043	7.037	0.006	93	200534	167.9	
$ 7 Toluene-d8 (Surr)	98	9.039	9.032	0.007	93	713233	220.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.637	11.636	0.000	88	311906	217.1	
12 Chloromethane	50		2.012				ND	
13 Vinyl chloride	62		2.201				ND	
15 Bromomethane	94		2.487				ND	
16 Chloroethane	64		2.602				ND	
22 1,1-Dichloroethene	96	3.612	3.521	0.091	48	12363	11.7	M
26 Carbon disulfide	76		3.782				ND	
24 Acetone	43		3.843				ND	
31 Methylene Chloride	84		4.318				ND	
34 trans-1,2-Dichloroethene	96		4.731				ND	
33 Acrylonitrile	53		4.810				ND	
35 Methyl tert-butyl ether	73		4.877				ND	
37 1,1-Dichloroethane	63		5.340				ND	
45 cis-1,2-Dichloroethene	96	6.107	6.082	0.025	76	303286	233.6	
46 2-Butanone (MEK)	43		6.191				ND	
49 Chlorobromomethane	128		6.374				ND	
52 Chloroform	83		6.496				ND	
53 1,1,1-Trichloroethane	97	6.703	6.672	0.031	1	74547	38.0	M
56 Carbon tetrachloride	117		6.848				ND	
58 Benzene	78		7.086				ND	
59 1,2-Dichloroethane	62		7.122				ND	
64 Trichloroethene	130	7.804	7.785	0.019	93	277772	179.3	
67 1,2-Dichloropropane	63		8.029				ND	
70 1,4-Dioxane	88		8.187				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
71 Dichlorobromomethane	83		8.308				ND	
74 cis-1,3-Dichloropropene	75		8.771				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.941				ND	
76 Toluene	91		9.099				ND	
77 trans-1,3-Dichloropropene	75		9.324				ND	
79 1,1,2-Trichloroethane	97		9.507				ND	
80 Tetrachloroethene	164	9.653	9.647	0.006	88	65204	46.2	
82 2-Hexanone	43		9.762				ND	
84 Chlorodibromomethane	129		9.896				ND	
85 Ethylene Dibromide	107		10.006				ND	
87 Chlorobenzene	112		10.498				ND	
89 1,1,1,2-Tetrachloroethane	131		10.572				ND	
90 Ethylbenzene	106		10.602				ND	
91 m-Xylene & p-Xylene	106		10.717				ND	
92 o-Xylene	106		11.113				ND	
93 Styrene	104		11.125				ND	
94 Bromoform	173		11.320				ND	
99 1,1,2,2-Tetrachloroethane	83		11.770				ND	
S 133 Xylenes, Total	106		1.000				ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

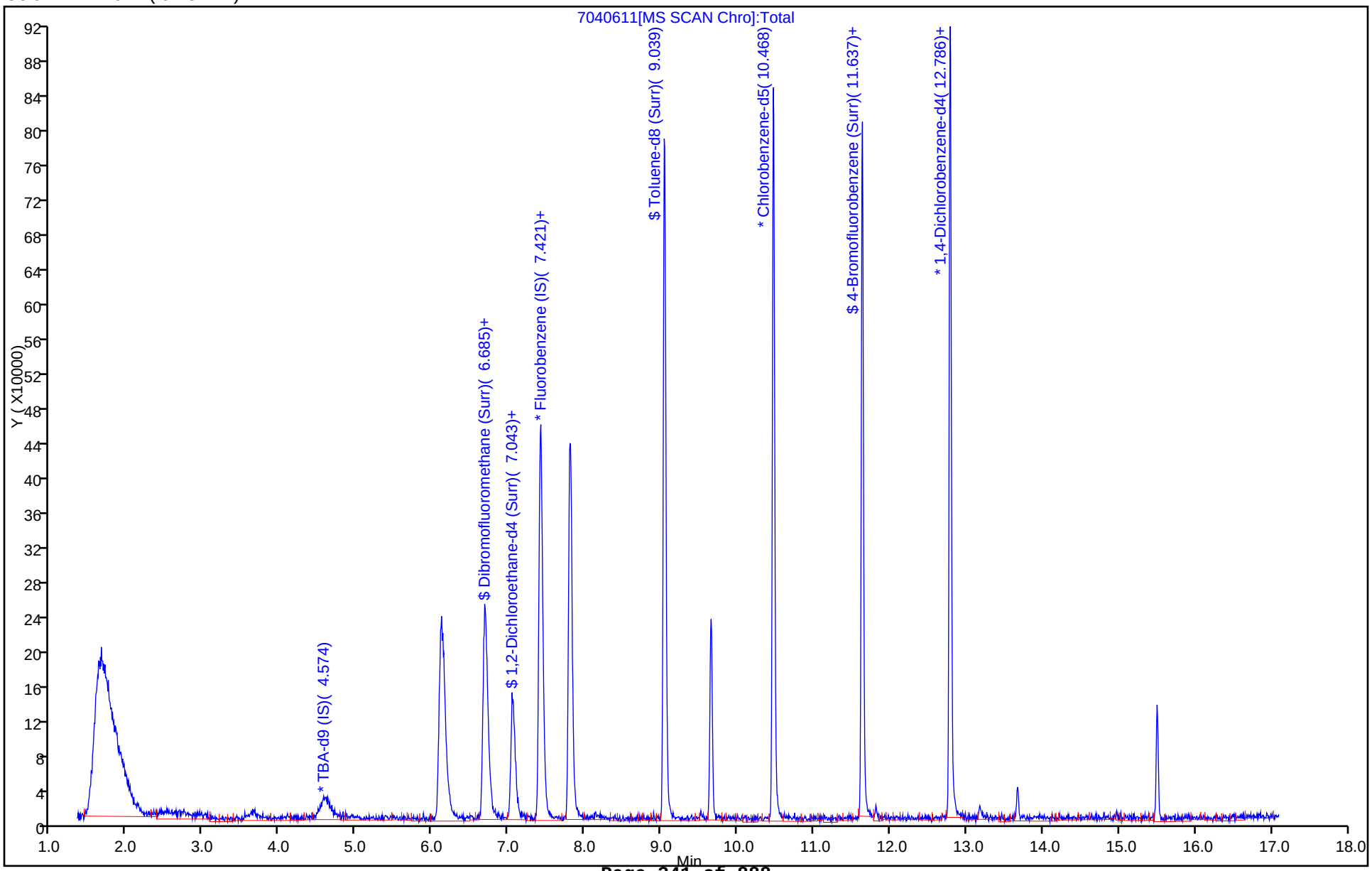
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

Report Date: 06-Apr-2015 15:45:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040611.D				
Injection Date:	06-Apr-2015 13:48:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-C-9	Lab Sample ID:	180-42504-9	Worklist Smp#:	11
Client ID:	HD-MW-50S-0/1-0				
Purge Vol:	20.000 mL	Dil. Factor:	50.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



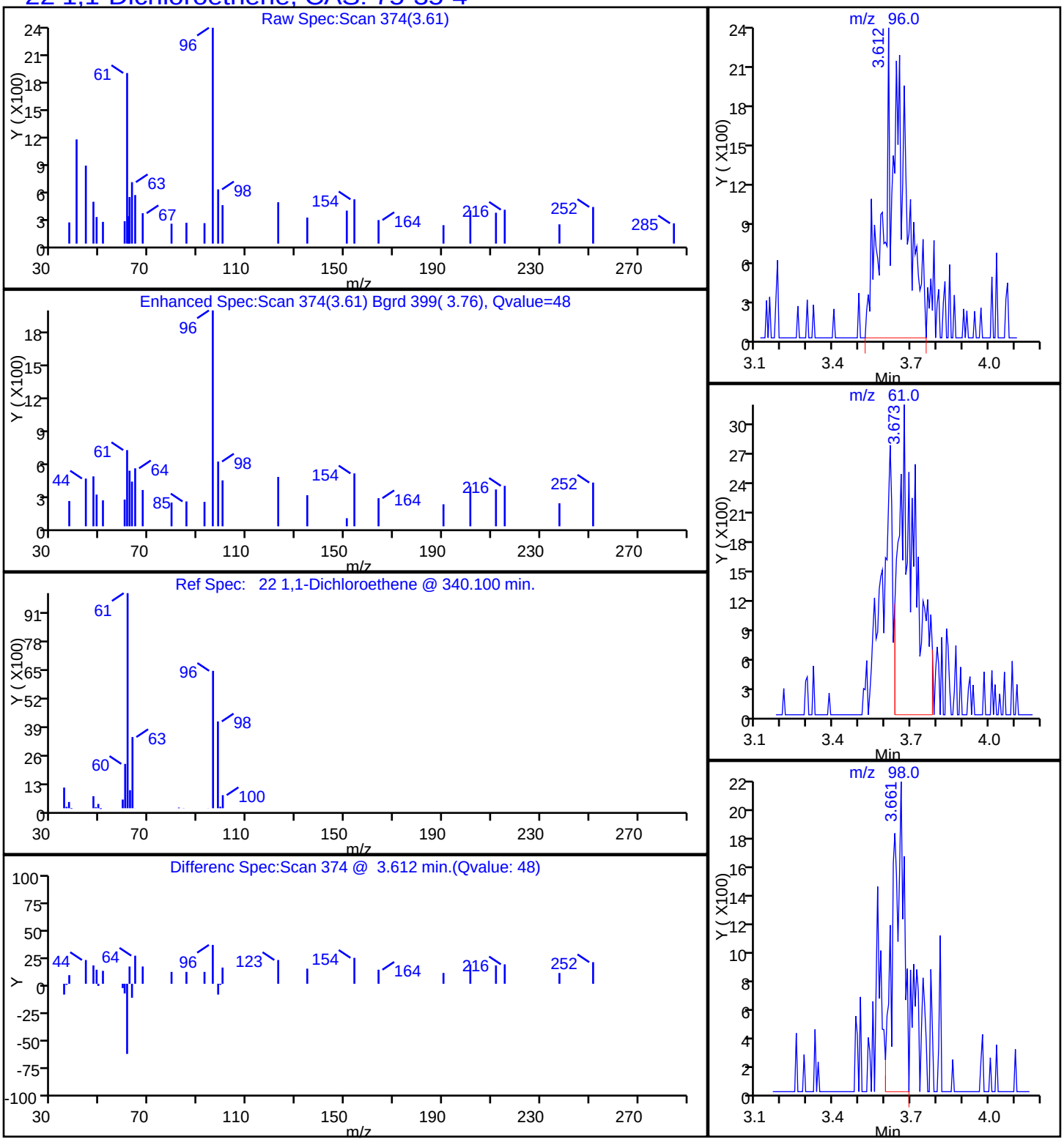
Report Date: 06-Apr-2015 15:45:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040611.D

Injection Date:	06-Apr-2015 13:48:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-9	Lab Sample ID:	180-42504-9		
Client ID:	HD-MW-50S-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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



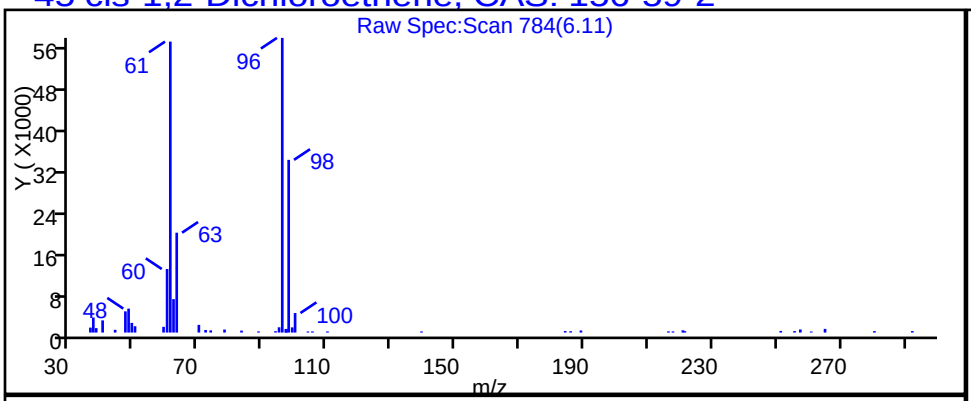
Report Date: 06-Apr-2015 15:45:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

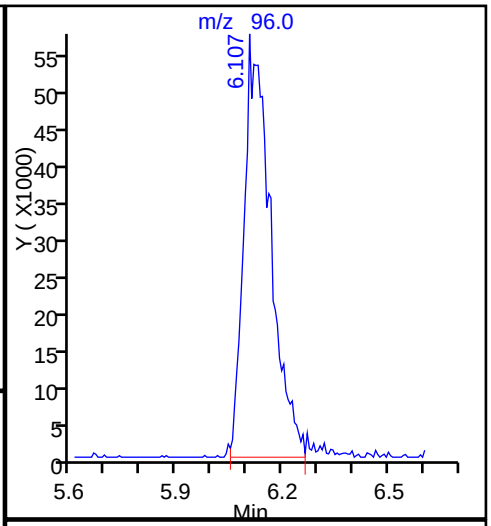
TestAmerica Pittsburgh

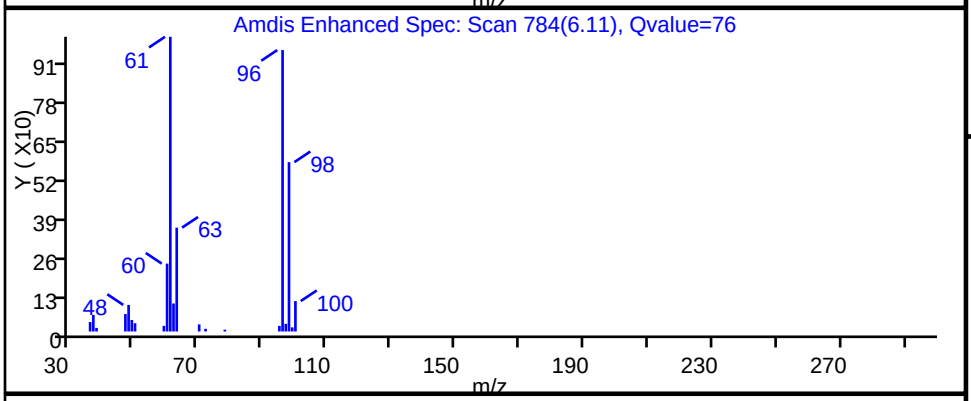
Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040611.D

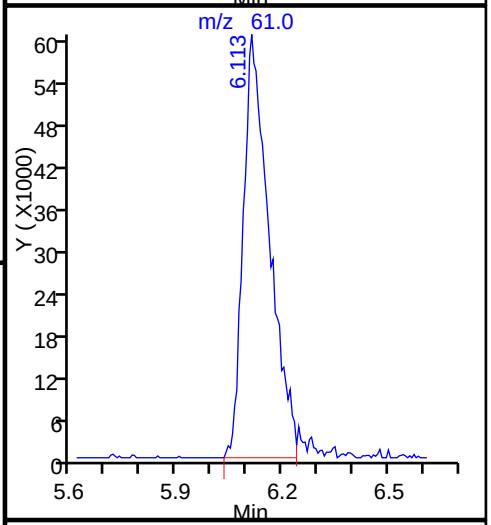
Injection Date:	06-Apr-2015 13:48:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-9	Lab Sample ID:	180-42504-9		
Client ID:	HD-MW-50S-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

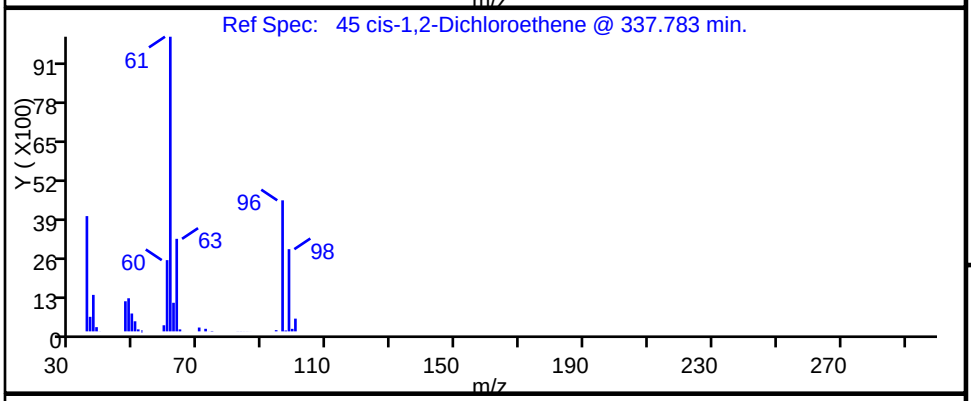
45 cis-1,2-Dichloroethene, CAS: 156-59-2

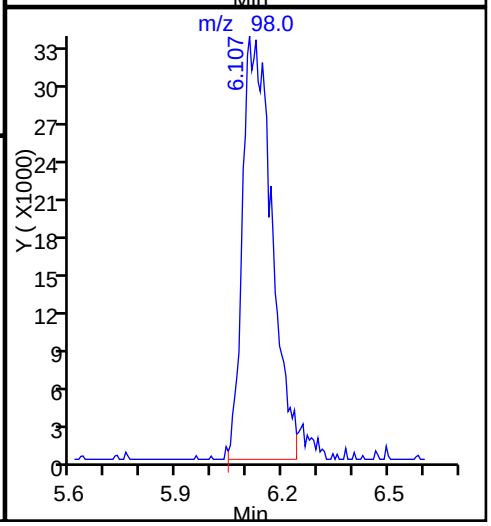


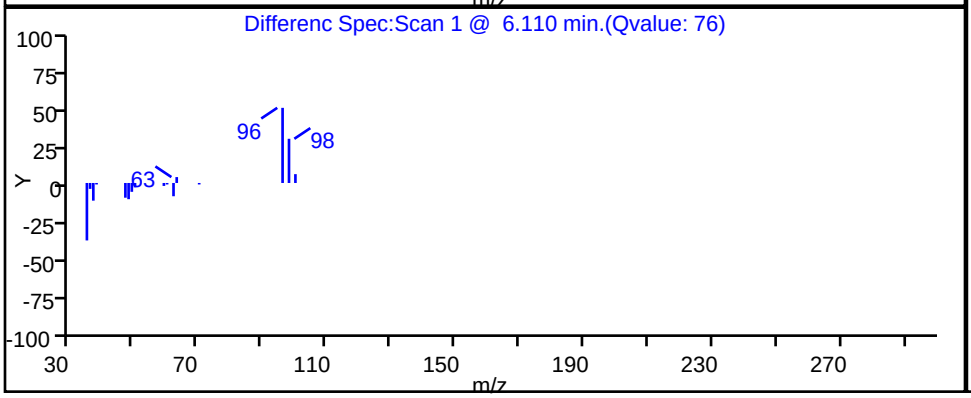










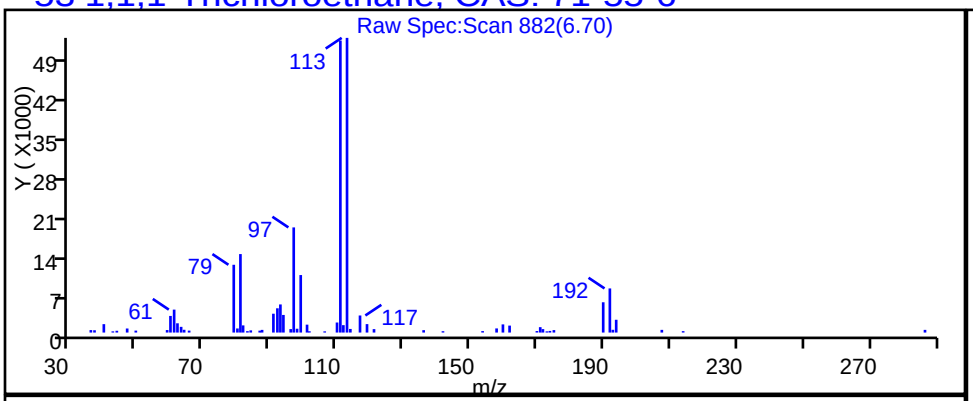


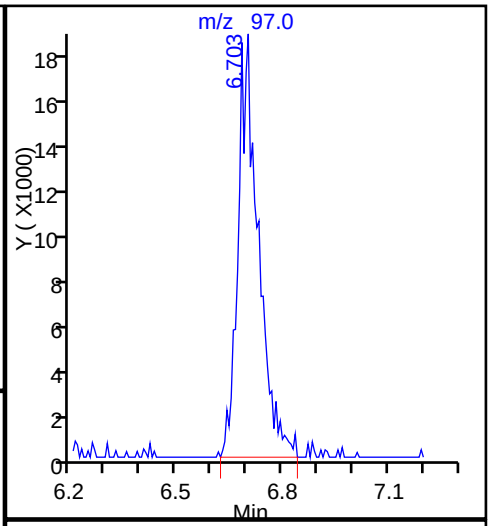
Report Date: 06-Apr-2015 15:45:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

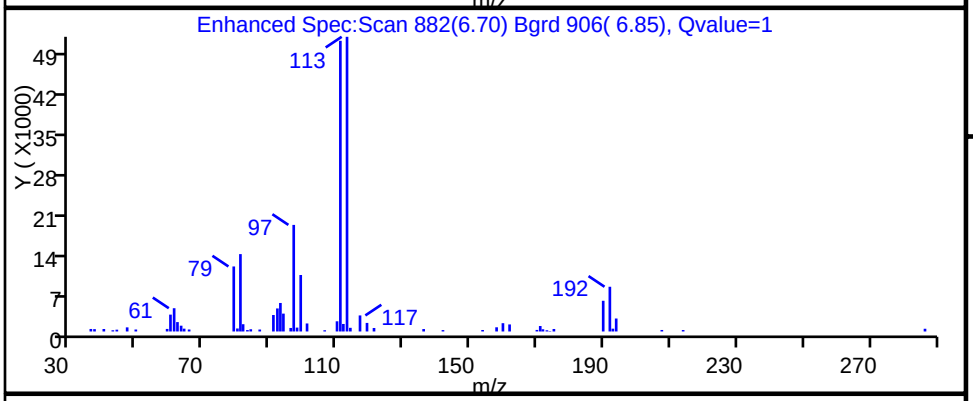
TestAmerica Pittsburgh

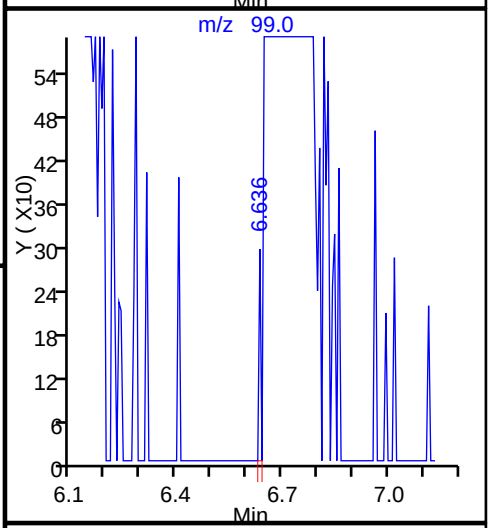
Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040611.D				
Injection Date:	06-Apr-2015 13:48:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-9	Lab Sample ID:	180-42504-9		
Client ID:	HD-MW-50S-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

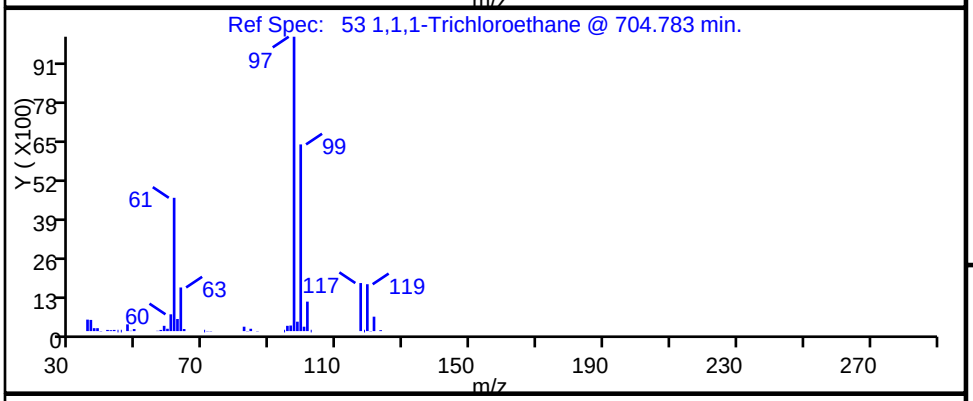
53 1,1,1-Trichloroethane, CAS: 71-55-6

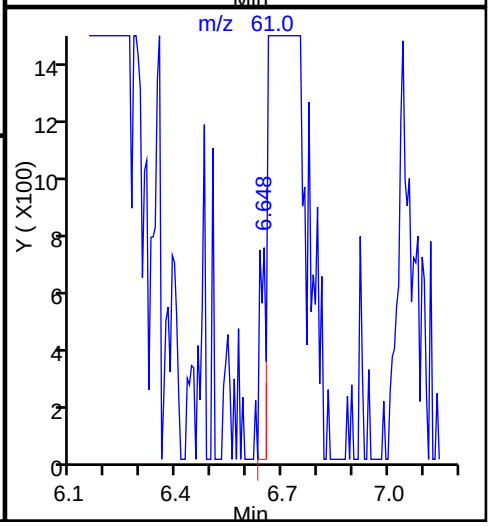


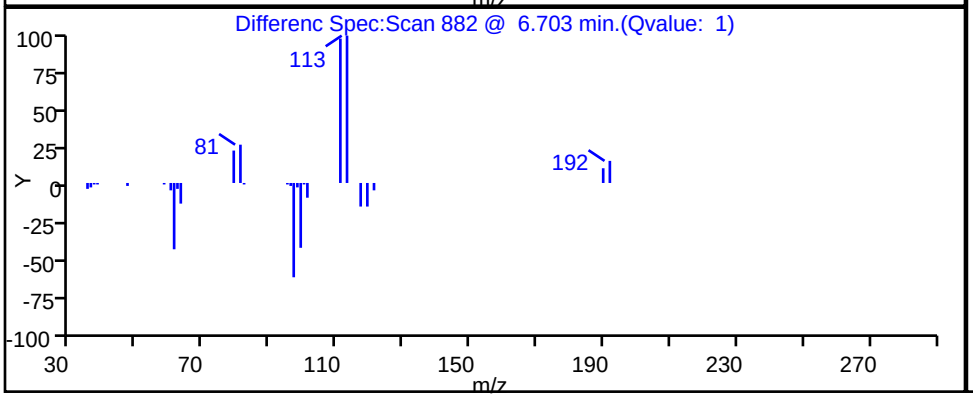












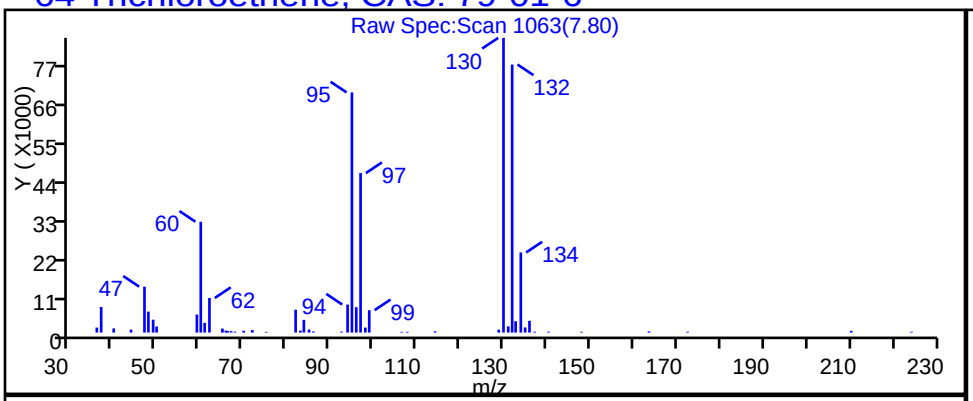
Report Date: 06-Apr-2015 15:45:43 Chrom Revision: 2.2 13-Mar-2015 11:20:44

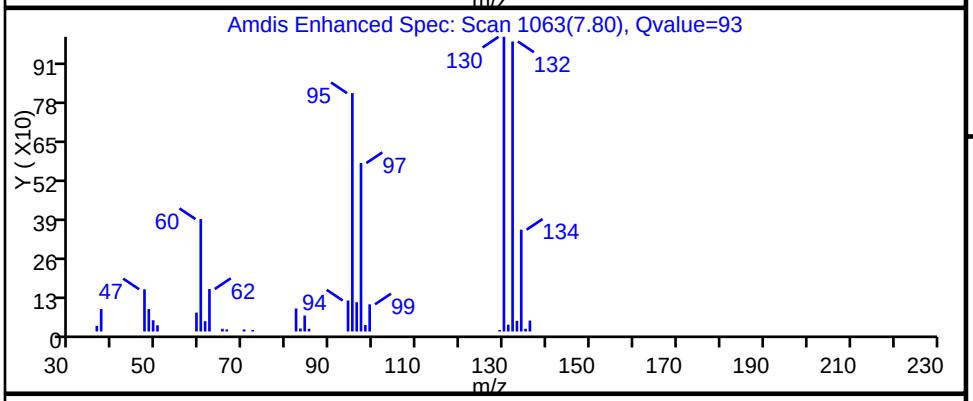
TestAmerica Pittsburgh

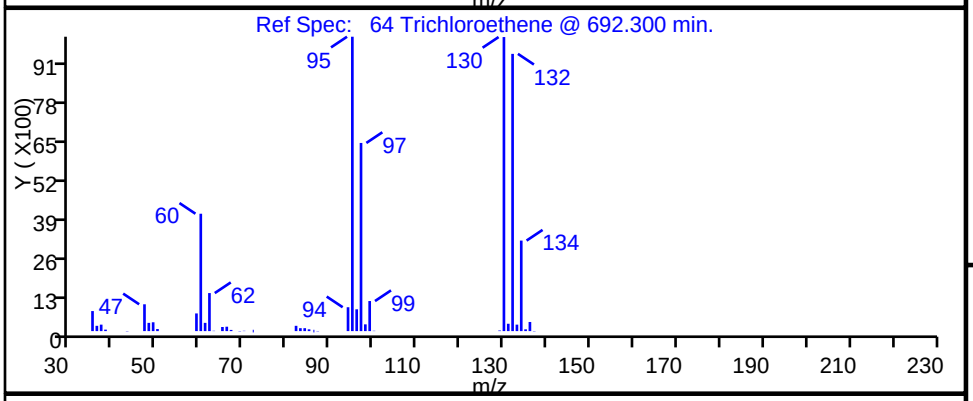
Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040611.D

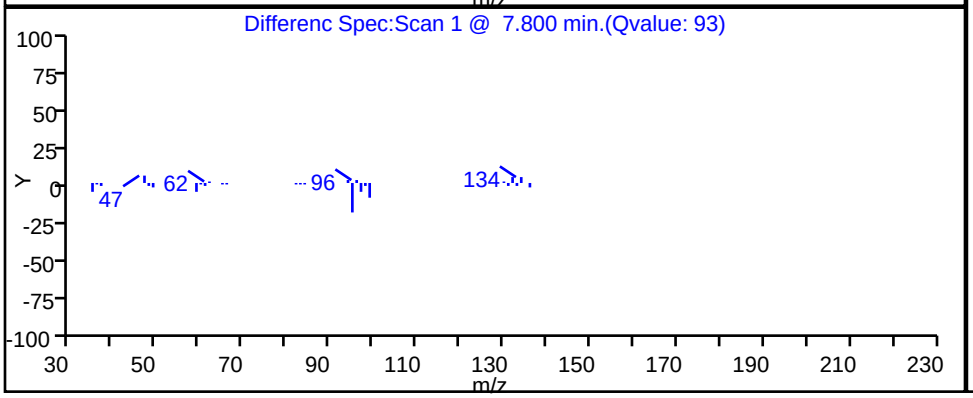
Injection Date:	06-Apr-2015 13:48:30	Instrument ID:	CHHP7
Lims ID:	180-42504-C-9	Lab Sample ID:	180-42504-9
Client ID:	HD-MW-50S-0/1-0		
Operator ID:	034635	ALS Bottle#:	12 Worklist Smp#: 11
Purge Vol:	20.000 mL	Dil. Factor:	50.0000
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL
Column:	DB-624 (0.18 mm)	Detector	MS SCAN

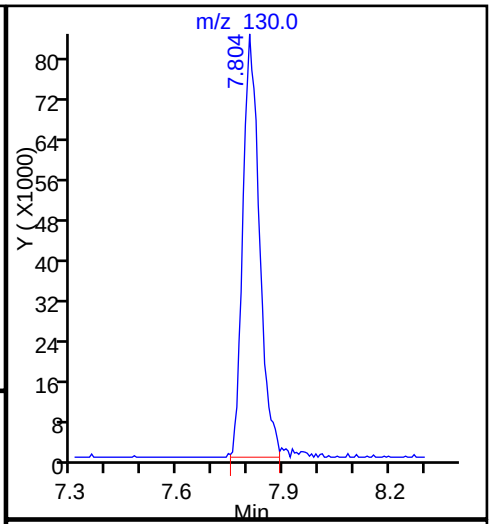
64 Trichloroethene, CAS: 79-01-6

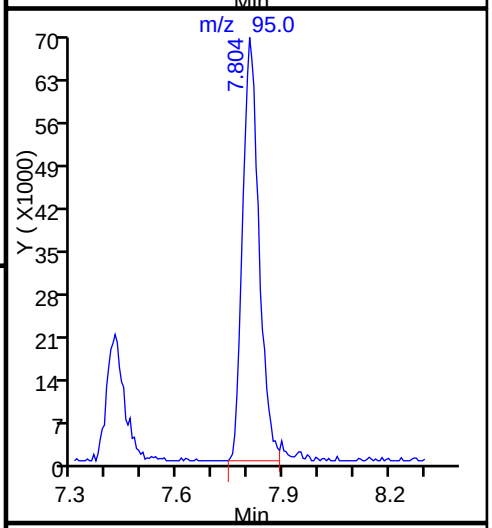


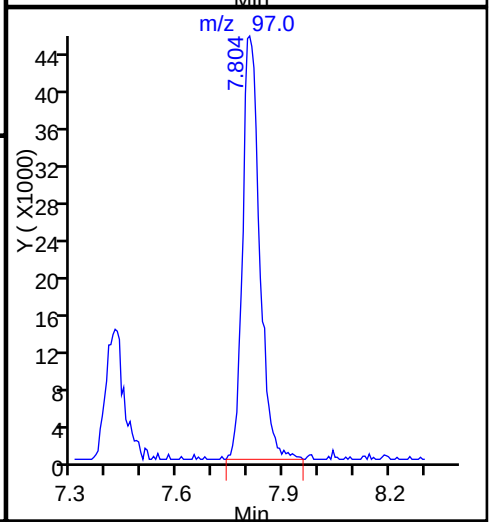










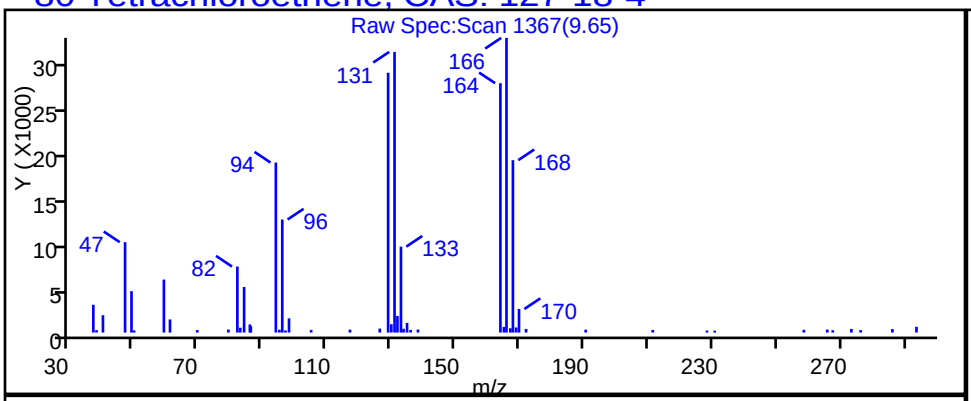


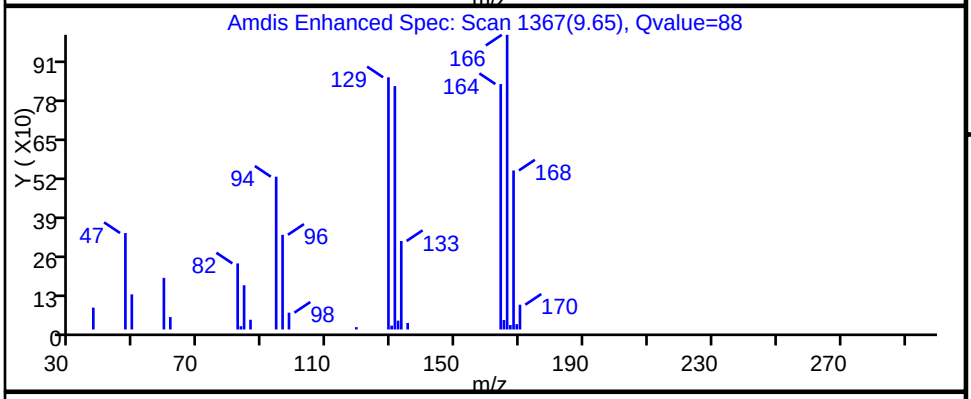
Report Date: 06-Apr-2015 15:45:44 Chrom Revision: 2.2 13-Mar-2015 11:20:44

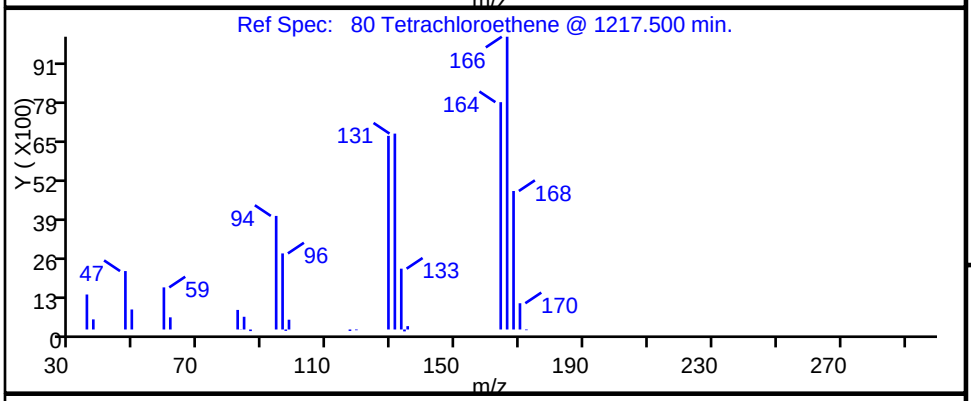
TestAmerica Pittsburgh

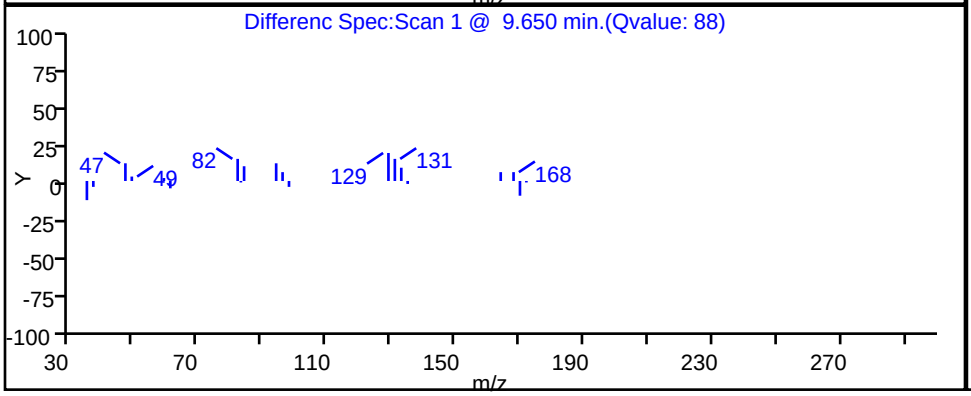
Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040611.D				
Injection Date:	06-Apr-2015 13:48:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-9	Lab Sample ID:	180-42504-9		
Client ID:	HD-MW-50S-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

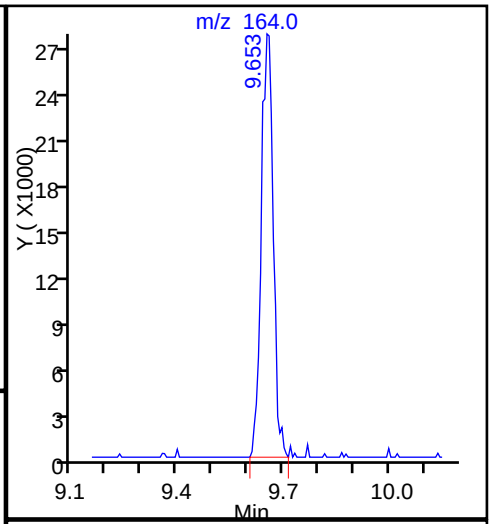
80 Tetrachloroethene, CAS: 127-18-4

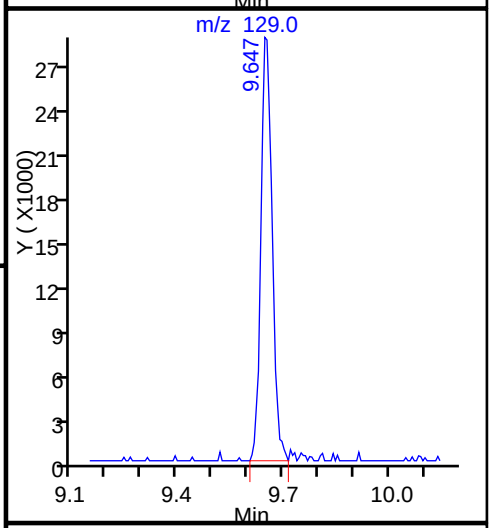


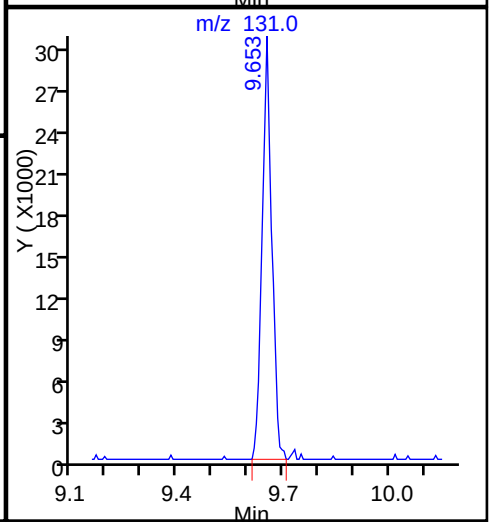












Manual Integration/User Assign Peak Report

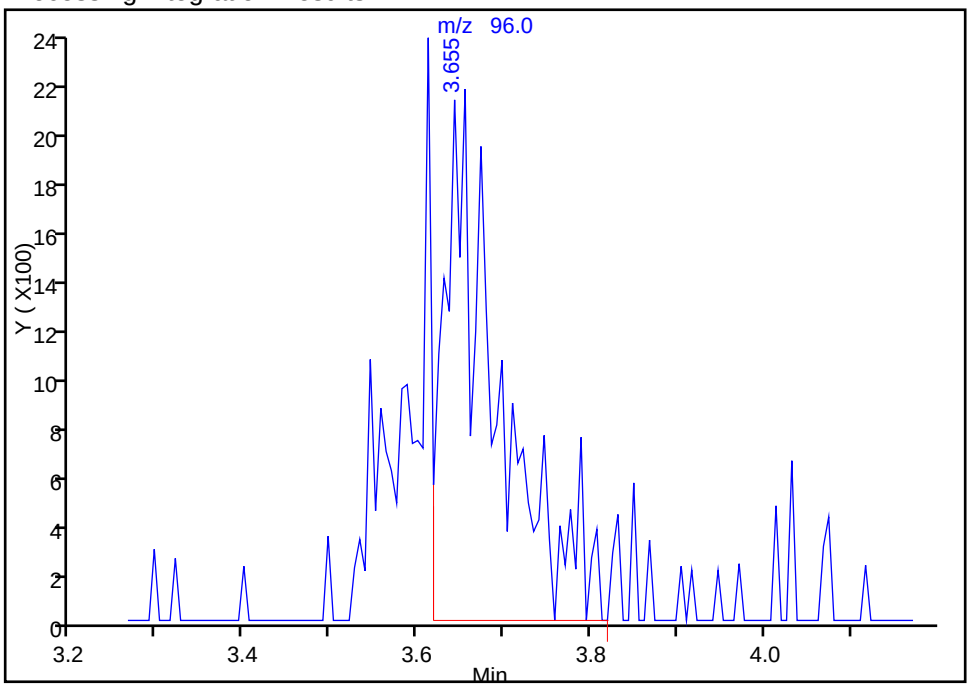
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040611.D				
Injection Date:	06-Apr-2015 13:48:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-9	Lab Sample ID:	180-42504-9		
Client ID:	HD-MW-50S-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

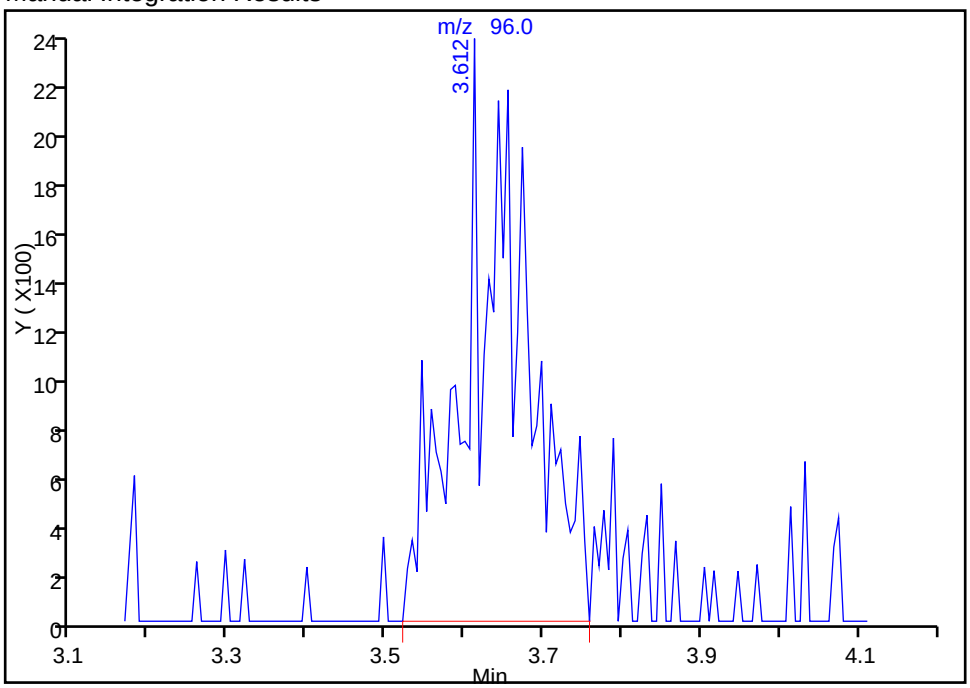
Processing Integration Results

RT: 3.66
Area: 9205
Amount: 8.730104
Amount Units: ng



Manual Integration Results

RT: 3.61
Area: 12363
Amount: 11.725179
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 14:21:46
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

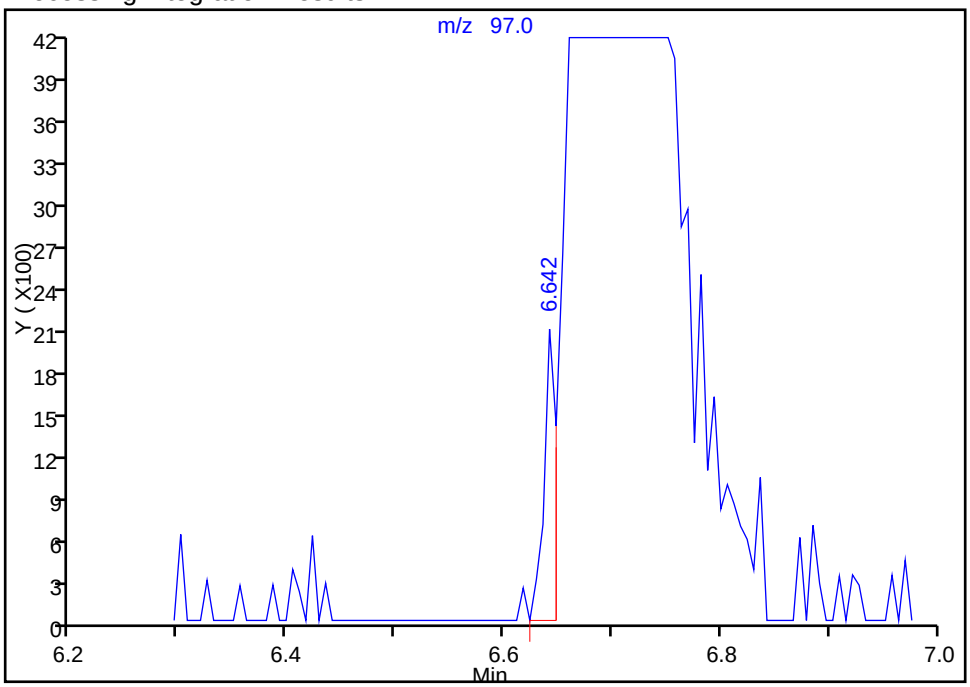
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040611.D				
Injection Date:	06-Apr-2015 13:48:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-9	Lab Sample ID:	180-42504-9		
Client ID:	HD-MW-50S-0/1-0				
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	50.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

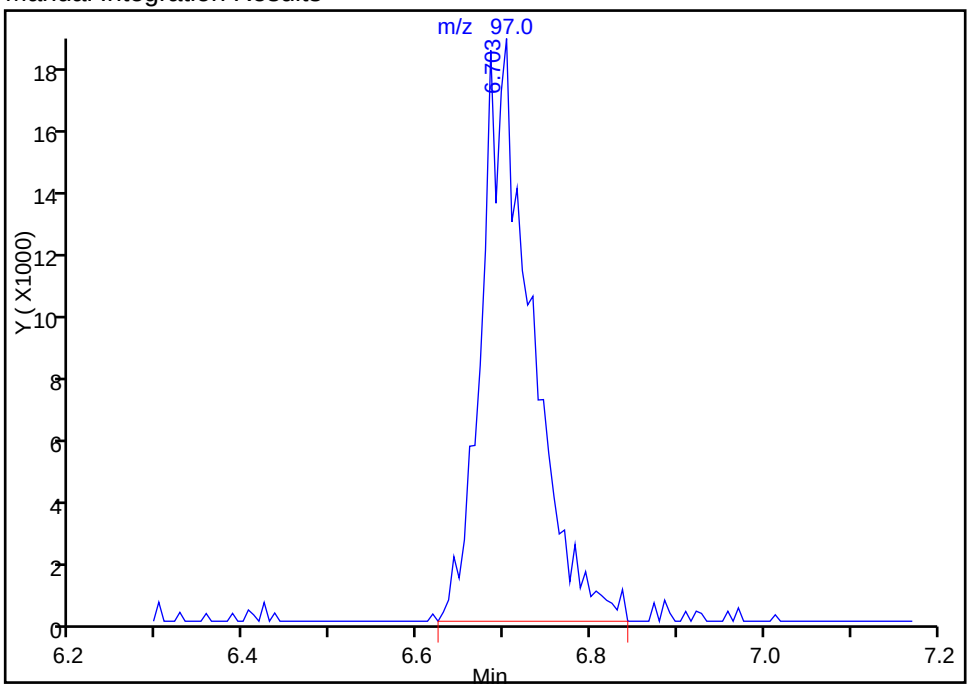
Processing Integration Results

RT: 6.64
Area: 1609
Amount: 0.820606
Amount Units: ng



Manual Integration Results

RT: 6.70
Area: 74547
Amount: 38.019691
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 14:21:46
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.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-136928/3	7033003.D
Level 2	IC 180-136928/4	7033004.D
Level 3	ICIS 180-136928/5	7033005.D
Level 4	IC 180-136928/6	7033006.D
Level 5	IC 180-136928/7	7033007.D
Level 6	IC 180-136928/8	7033008.D
Level 7	IC 180-136928/9	7033009.D
Level 8	IC 180-136928/10	7033010.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.4049 0.3360	0.3761 0.3806	0.3617 0.3747	0.3587	0.3730	Ave		0.3707			0.1000	5.3		20.0			
Chloromethane	0.4308 0.3754	0.4379 0.3945	0.4020 0.4112	0.3800	0.3991	Ave		0.4039			0.1000	5.5		20.0			
1,3-Butadiene	0.4251 0.2932	0.3417 0.3152	0.3460 0.3224	0.3068	0.3068	Ave		0.3321			0.0100	12.5		20.0			
Vinyl chloride	0.3430 0.2838	0.3404 0.3210	0.3159 0.3182	0.2980	0.2958	Ave		0.3145			0.1000	6.7		20.0			
Bromomethane	0.2266 0.2452	0.2793 0.2522	0.2713 0.2662	0.2427	0.2439	Ave		0.2534			0.0500	6.9		20.0			
Chloroethane	0.2749 0.2395	0.2785 0.2519	0.2559 0.2542	0.2356	0.2394	Ave		0.2537			0.0500	6.3		20.0			
Dichlorofluoromethane	0.7624 0.6398	0.7284 0.6488	0.6941 0.6491	0.6381	0.6400	Ave		0.6751			0.0100	7.1		20.0			
Trichlorofluoromethane	0.7558 0.6595	0.7530 0.7005	0.7468 0.7001	0.6815	0.6845	Ave		0.7102			0.1000	5.2		20.0			
Ethyl ether	0.1832 0.2255	0.2405 0.2425	0.2306 0.2326	0.2160	0.2318	Ave		0.2253			0.0100	8.4		20.0			
Acrolein	0.0140 0.0164	0.0160 0.0160	0.0152 0.0149	0.0165	0.0154	Ave		0.0156			0.0100	5.4		20.0			
1,1-Dichloroethene	0.2532 0.2638	0.2820 0.2718	0.2758 0.2787	0.2533	0.2696	Ave		0.2685			0.1000	4.1		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.3623 0.2819	0.3410 0.3053	0.3208 0.3072	0.2935	0.2861	Ave		0.3122			0.1000	8.9		20.0			
Iodomethane	0.6392 0.5330	0.5866 0.5561	0.5852 0.5561	0.4994	0.5379	Ave		0.5617			0.0100	7.5		20.0			
Carbon disulfide	0.8938 0.7034	0.8609 0.9569	0.7989 0.7561	0.7339	0.7484	Ave		0.8065			0.1000	11.0		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.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Acetone	0.0935 0.0524	0.0700 0.0605	0.0664 0.0503	0.0662	0.0561	Lin2	3.9852	0.0533			0.0500				0.9900		0.9900
Allyl chloride	0.2214 0.1874	0.2078 0.1919	0.2013 0.2089	0.1739	0.1919	Ave		0.1981			0.0100	7.5		20.0			
Methylene Chloride	0.3799 0.2640	0.3035 0.2714	0.2901 0.2769	0.2560	0.2639	Ave		0.2882			0.1000	13.9		20.0			
Methyl acetate	0.1722 0.1194	0.1395 0.1300	0.1248 0.1160	0.1357	0.1284	Ave		0.1332			0.1000	13.2		20.0			
trans-1,2-Dichloroethene	0.4144 0.3019	0.3607 0.3130	0.3396 0.3157	0.3071	0.3131	Ave		0.3332			0.1000	11.4		20.0			
tert-Butyl alcohol	0.0387 0.0932	0.1220 +++++	0.0794 +++++	0.0809	0.0812	Qua	17.849	0.0649	0.0000036		0.0100				0.9920		0.9900
Acrylonitrile	0.0594 0.0496	0.0592 0.0518	0.0519 0.0462	0.0554	0.0529	Ave		0.0533			0.0100	8.5		20.0			
Methyl tert-butyl ether	0.7899 0.6103	0.7134 0.6206	0.6523 0.5906	0.6451	0.6306	Ave		0.6566			0.1000	9.9		20.0			
Hexane	0.4307 0.2822	0.3669 0.3594	0.3490 0.3339	0.3327	0.3327	Ave		0.3484			0.0100	12.0		20.0			
Vinyl acetate	0.3325 0.2396	0.2619 0.2566	0.2643 0.2523	0.2426	0.2520	Ave		0.2627			0.0100	11.2		20.0			
1,1-Dichloroethane	0.5036 0.4591	0.5274 0.4830	0.5023 0.4831	0.4692	0.4788	Ave		0.4883			0.2000	4.5		20.0			
2,2-Dichloropropane	0.5029 0.3592	0.4513 0.3672	0.4370 0.3719	0.3889	0.3853	Ave		0.4080			0.0100	12.4		20.0			
cis-1,2-Dichloroethene	0.3895 0.3036	0.3445 0.3133	0.3428 0.3139	0.3115	0.3259	Ave		0.3306			0.1000	8.5		20.0			
2-Butanone (MEK)	0.0916 0.0823	0.0945 0.0951	0.0865 0.0835	0.0972	0.0865	Ave		0.0896			0.0500	6.4		20.0			
Bromochloromethane	0.2408 0.1735	0.1985 0.1795	0.1868 0.1771	0.1814	0.1858	Ave		0.1904			0.0100	11.4		20.0			
Chloroform	0.6919 0.4962	0.6021 0.5075	0.5638 0.4970	0.5223	0.5185	Ave		0.5499			0.2000	12.4		20.0			
1,1,1-Trichloroethane	0.6470 0.4338	0.5649 0.4453	0.5204 0.4470	0.4662	0.4702	Ave		0.4994			0.1000	14.8		20.0			
Tetrahydrofuran	0.0583 0.0434	0.0523 0.0473	0.0512 0.0465	0.0465	0.0468	Ave		0.0490			0.0100	9.5		20.0			
Cyclohexane	0.4837 0.3016	0.3789 0.3248	0.3560 0.3179	0.3259	0.3297	Ave		0.3523			0.1000	16.5		20.0			
Carbon tetrachloride	0.6825 0.4374	0.5598 0.4499	0.5182 0.4533	0.4633	0.4653	Ave		0.5037			0.1000	16.5		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.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.4749 0.3118	0.4121 0.3254	0.3632 0.3234	0.3425	0.3315	Ave		0.3606			0.0100	15.5		20.0			
Benzene	1.2865 0.8459	1.1208 0.8565	1.0418 0.8374	0.9472	0.9380	Ave		0.9843			0.5000	16.0		20.0			
1,2-Dichloroethane	0.4449 0.2913	0.3598 0.3041	0.3316 0.2882	0.3189	0.3208	Ave		0.3325			0.1000	15.3		20.0			
Isobutyl alcohol	0.0058 0.0078	0.0090 0.0084	0.0087 0.0079	0.0084	0.0083	Ave		0.0080		*	0.0100	12.1		20.0			
n-Heptane	0.3667 0.2726	0.3198 0.3008	0.3140 0.2819	0.2975	0.2874	Ave		0.3051			0.0100	9.7		20.0			
Trichloroethene	0.5030 0.3592	0.4242 0.3643	0.4070 0.3634	0.3655	0.3701	Ave		0.3946			0.2000	12.6		20.0			
Methylcyclohexane	0.6516 0.4077	0.5613 0.4391	0.4963 0.4290	0.4483	0.4477	Ave		0.4851			0.1000	17.0		20.0			
1,2-Dichloropropane	0.2769 0.2046	0.2408 0.2102	0.2226 0.2067	0.2149	0.2169	Ave		0.2242			0.1000	10.8		20.0			
Dibromomethane	0.2155 0.1533	0.1721 0.1630	0.1605 0.1556	0.1580	0.1578	Ave		0.1670			0.0100	12.2		20.0			
1,4-Dioxane	0.0011 0.0017	0.0017 0.0016	0.0016 0.0015	0.0016	0.0017	Ave		0.0016		*	0.0100	14.0		20.0			
Bromodichloromethane	0.5011 0.3791	0.4345 0.3935	0.4389 0.3715	0.4015	0.4055	Ave		0.4157			0.2000	10.1		20.0			
cis-1,3-Dichloropropene	0.5064 0.3991	0.4647 0.4120	0.4361 0.3956	0.4220	0.4141	Ave		0.4312			0.2000	8.7		20.0			
4-Methyl-2-pentanone (MIBK)	0.6767 0.5042	0.6920 0.5327	0.5982 0.4777	0.6068	0.5871	Ave		0.5844			0.1000	13.1		20.0			
Toluene	5.1899 2.5462	4.3323 +++++	3.7458 +++++	3.2001	3.0884	Qua	59.817	3.6113	-0.001653		0.4000				0.9980		0.9900
trans-1,3-Dichloropropene	1.5711 1.0794	1.3970 1.1590	1.3200 1.0988	1.2284	1.2043	Ave		1.2572			0.1000	13.2		20.0			
Ethyl methacrylate	0.9335 0.7520	0.9291 0.8068	0.8555 0.7438	0.8484	0.8213	Ave		0.8363			0.0100	8.5		20.0			
1,1,2-Trichloroethane	0.8855 0.6162	0.8540 0.6499	0.7237 0.6235	0.7000	0.6895	Ave		0.7178			0.1000	14.1		20.0			
Tetrachloroethene	1.3748 0.7298	1.1588 +++++	1.0063 +++++	0.8271	0.8403	Qua	18.605	0.9071	-0.000294		0.2000				0.9960		0.9900
1,3-Dichloropropane	1.4391 0.8728	1.2584 0.9209	1.0879 0.8529	1.0537	1.0026	Ave		1.0610			0.0100	19.0		20.0			
2-Hexanone	0.3670 0.3420	0.4257 0.3868	0.3763 0.3473	0.4008	0.3699	Ave		0.3770			0.1000	7.3		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.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromochloromethane	1.6221 1.0342	1.4835 1.0818	1.2614 1.0448	1.1836	1.1607	Ave		1.2340			0.1000	17.3		20.0			
1,2-Dibromoethane (EDB)	1.0152 0.7073	0.9211 0.7388	0.8185 0.7100	0.8157	0.7788	Ave		0.8132			0.1000	13.2		20.0			
Chlorobenzene	3.3646 1.9926	2.9913 2.0244	2.7538 +++++	2.3750	2.3439	Ave		2.5494			0.5000	20.0		20.0			
1,1,1,2-Tetrachloroethane	1.5889 0.9290	1.4050 +++++	1.2815 +++++	1.0970	1.0940	Ave		1.2326			0.0100	19.5		20.0			
Ethylbenzene	1.8336 +++++	1.5625 +++++	1.4260 +++++	1.2323	1.1882	Ave		1.4485			0.1000	18.1		20.0			
m-Xylene & p-Xylene	2.4750 +++++	2.1389 +++++	1.8971 +++++	1.6377	1.6157	Ave		1.9529			0.1000	18.5		20.0			
o-Xylene	2.5079 +++++	2.1474 +++++	1.9091 +++++	1.6305	1.6116	Ave		1.9613			0.3000	19.2		20.0			
Styrene	3.8120 1.9480	3.3063 +++++	2.9124 +++++	2.4325	2.2974	Qua	50.819	2.6911	-0.001179		0.3000				0.9960		0.9900
Bromoform	0.7243 0.6451	0.7592 0.6862	0.7446 0.6361	0.7002	0.6981	Ave		0.6992			0.1000	6.2		20.0			
Isopropylbenzene	7.1951 3.1900	5.9426 +++++	5.0312 +++++	4.2116	4.0042	Qua	92.518	4.8193	-0.002533		0.1000				0.9970		0.9900
1,1,2,2-Tetrachloroethane	0.9848 0.6054	0.9132 0.6322	0.8169 0.5648	0.7841	0.7248	Ave		0.7533			0.3000	19.9		20.0			
Bromobenzene	1.1165 0.7135	0.9786 0.7488	0.9296 0.7475	0.8209	0.8013	Ave		0.8571			0.0100	16.3		20.0			
1,2,3-Trichloropropane	0.2417 0.1693	0.1958 0.1858	0.1909 0.1738	0.1938	0.1843	Ave		0.1919			0.0100	11.5		20.0			
trans-1,4-Dichloro-2-butene	0.1531 0.1100	0.1141 0.1244	0.1095 0.1185	0.1163	0.1158	Ave		0.1202			0.0100	11.7		20.0			
N-Propylbenzene	1.4292 0.8832	1.1494 0.9326	1.1314 0.9537	0.9720	0.9646	Ave		1.0520			0.0100	17.0		20.0			
2-Chlorotoluene	1.2281 0.7964	1.0898 0.8646	1.0225 0.8617	0.8871	0.8904	Ave		0.9551			0.0100	15.2		20.0			
1,3,5-Trimethylbenzene	4.1186 1.8195	3.0572 1.9013	2.7687 +++++	2.3152	2.2282	Qua	67.889	2.3446	-0.000742		0.0100				0.9930		0.9900
4-Chlorotoluene	1.2432 0.7686	1.0657 0.8062	0.9133 0.8390	0.8423	0.8441	Ave		0.9153			0.0100	17.5		20.0			
tert-Butylbenzene	4.2827 +++++	3.4124 +++++	3.0690 +++++	2.5961	2.8531	Lin2	30.327	2.8130			0.0100				0.9920		0.9900
1,2,4-Trimethylbenzene	4.0219 1.9151	3.0757 +++++	2.8098 +++++	2.3617	2.3037	Qua	42.580	2.6673	-0.001167		0.0100				0.9980		0.9900

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.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	5.2909 2.4720	4.0963 2.5660	3.6564 +++++	3.1061	2.9949	Qua	84.993	3.1560	-0.000971		0.0100				0.9940		0.9900
1,3-Dichlorobenzene	2.4747 +++++	1.9570 +++++	1.7890 +++++	1.5759	1.5484	Lin2	17.686	1.6184			0.6000				0.9930		0.9900
4-Isopropyltoluene	4.9789 2.1016	3.7099 +++++	3.2078 +++++	2.7147	2.6092	Qua	59.165	3.0703	-0.001511		0.0100				0.9980		0.9900
1,4-Dichlorobenzene	2.1272 1.3020	1.8048 1.3637	1.6770 1.3380	1.5472	1.5324	Ave		1.5865			0.5000	17.6		20.0			
n-Butylbenzene	4.0854 1.7178	3.0325 +++++	2.6889 +++++	2.2607	2.1557	Qua	45.927	2.5887	-0.001344		0.0100				0.9980		0.9900
1,2-Dichlorobenzene	2.0434 +++++	1.6187 +++++	1.4639 +++++	1.3402	1.3053	Ave		1.5543			0.4000	19.3		20.0			
1,2-Dibromo-3-Chloropropane	0.0507 0.0782	0.0680 0.0870	0.0819 0.0820	0.0731	0.0825	Lin2	-0.637	0.0814			0.0500				0.9960		0.9900
1,2,4-Trichlorobenzene	0.7025 0.4194	0.3528 0.5475	0.4356 0.5373	0.4533	0.4943	Ave		0.4928			0.2000	21.5	*	20.0			
Hexachlorobutadiene	0.4740 0.2409	0.2353 0.3139	0.2616 0.3189	0.2513	0.2667	Ave		0.2953			0.0100	26.6	*	20.0			
Naphthalene	1.5147 0.6355	0.5116 0.8497	0.7105 0.7291	0.7661	0.7400	Ave		0.8071			0.0100	37.5	*	20.0			
1,2,3-Trichlorobenzene	0.7098 0.2525	0.1737 0.3849	0.2343 0.3451	0.3041	0.2934	Ave		0.3372			0.0100	48.7	*	20.0			
Dibromofluoromethane (Surr)	0.3940 0.2872	0.3394 0.3076	0.3277 0.2870	0.3013	0.3080	Ave		0.3190				11.1		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3741 0.2827	0.3162 0.2966	0.2978 0.2767	0.2969	0.2923	Ave		0.3042				10.0		20.0			
Toluene-d8 (Surr)	+++++ 2.4399	3.9879 2.5256	3.5025 2.4058	2.9863	2.9170	Ave		2.9664				20.0		20.0			
4-Bromofluorobenzene (Surr)	2.1145 1.1414	1.5844 1.1868	1.5023 1.1481	1.2914	1.2834	Lin2	18.461	1.2346							0.9900		0.9900

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.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-136928/3	7033003.D
Level 2	IC 180-136928/4	7033004.D
Level 3	ICIS 180-136928/5	7033005.D
Level 4	IC 180-136928/6	7033006.D
Level 5	IC 180-136928/7	7033007.D
Level 6	IC 180-136928/8	7033008.D
Level 7	IC 180-136928/9	7033009.D
Level 8	IC 180-136928/10	7033010.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	41448 1251238	202683 1578981	396029 1958336	547112	769843	20.0 700	100 800	200 1000	300	400
Chloromethane	FB	Ave	44098 1397995	236017 1636714	440108 2148873	579635	823816	20.0 700	100 800	200 1000	300	400
1,3-Butadiene	FB	Ave	43516 1091852	184180 1307567	378863 1684970	467958	633176	20.0 700	100 800	200 1000	300	400
Vinyl chloride	FB	Ave	35111 1056944	183450 1331694	345858 1662883	454519	610532	20.0 700	100 800	200 1000	300	400
Bromomethane	FB	Ave	23195 913392	150507 1046463	297025 1390949	370267	503455	20.0 700	100 800	200 1000	300	400
Chloroethane	FB	Ave	28139 891876	150067 1044851	280211 1328639	359315	494064	20.0 700	100 800	200 1000	300	400
Dichlorofluoromethane	FB	Ave	78053 2383040	392557 2691604	759945 3391987	973235	1320934	20.0 700	100 800	200 1000	300	400
Trichlorofluoromethane	FB	Ave	77379 2456359	405833 2906130	817631 3658414	1039442	1412799	20.0 700	100 800	200 1000	300	400
Ethyl ether	FB	Ave	18758 839764	129633 1005937	252518 1215677	329495	478344	20.0 700	100 800	200 1000	300	400
Acrolein	FB	Ave	28748 78643	43044 83224	49804 85538	58776	63644	400 900	500 1000	600 1100	700	800
1,1-Dichloroethene	FB	Ave	25924 982672	151987 1127478	301988 1456322	386363	556448	20.0 700	100 800	200 1000	300	400
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	37088 1049950	183780 1266754	351192 1605157	447607	590436	20.0 700	100 800	200 1000	300	400
Iodomethane	FB	Ave	65439 1985287	316113 2306954	640777 2906153	761762	1110172	20.0 700	100 800	200 1000	300	400
Carbon disulfide	FB	Ave	91497 2619768	463969 3969960	874756 3951355	1119377	1544647	20.0 700	100 800	200 1000	300	400
Acetone	FB	Lin2	47874 390281	75446 501900	145367 526230	201909	231424	100 1400	200 1600	400 2000	600	800

FORM VI

GC/MS VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

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	22664 698091	111987 796185	220406 1091756	265180	396144	20.0 700	100 800	200 1000	300	400
Methylene Chloride	FB	Ave	38895 983292	163557 1126005	317590 1446969	390467	544613	20.0 700	100 800	200 1000	300	400
Methyl acetate	FB	Ave	88164 2224238	375826 2696602	683140 3030290	1035067	1324779	100 3500	500 4000	1000 5000	1500	2000
trans-1,2-Dichloroethene	FB	Ave	42422 1124535	194386 1298488	371778 1650008	468410	646149	20.0 700	100 800	200 1000	300	400
tert-Butyl alcohol	TBA	Qua	567 53007	9778 +++++	12318 +++++	18904	25255	200 7000	1000 +++++	2000 +++++	3000	4000
Acrylonitrile	FB	Ave	60806 1848860	318922 2150290	568053 2412565	845412	1091986	200 7000	1000 8000	2000 10000	3000	4000
Methyl tert-butyl ether	FB	Ave	80870 2272845	384502 2574759	714150 3086291	984040	1301482	20.0 700	100 800	200 1000	300	400
Hexane	FB	Ave	44092 1051129	197721 1491013	382145 1744973	507536	686716	20.0 700	100 800	200 1000	300	400
Vinyl acetate	FB	Ave	34041 892468	141126 1064694	289383 1318507	370011	520045	20.0 700	100 800	200 1000	300	400
1,1-Dichloroethane	FB	Ave	51559 1709875	284258 2003605	550009 2524474	715666	988166	20.0 700	100 800	200 1000	300	400
2,2-Dichloropropane	FB	Ave	51484 1337687	243195 1523531	478480 1943271	593228	795291	20.0 700	100 800	200 1000	300	400
cis-1,2-Dichloroethene	FB	Ave	39878 1130925	185651 1299902	375290 1640293	475209	672672	20.0 700	100 800	200 1000	300	400
2-Butanone (MEK)	FB	Ave	46886 613084	101832 789394	189308 872275	296627	357127	100 1400	200 1600	400 2000	600	800
Bromochloromethane	FB	Ave	24652 646182	106979 744761	204558 925671	276754	383470	20.0 700	100 800	200 1000	300	400
Chloroform	FB	Ave	70828 1847979	324491 2105517	617343 2597161	796703	1070128	20.0 700	100 800	200 1000	300	400
1,1,1-Trichloroethane	FB	Ave	66238 1615549	304449 1847241	569802 2336141	711168	970491	20.0 700	100 800	200 1000	300	400
Tetrahydrofuran	FB	Ave	11945 323514	56328 392456	112031 486083	141960	193358	40.0 1400	200 1600	400 2000	600	800
Cyclohexane	FB	Ave	49523 1123391	204193 1347518	389741 1661352	497062	680423	20.0 700	100 800	200 1000	300	400
Carbon tetrachloride	FB	Ave	69874 1629157	301680 1866632	567374 2368924	706744	960424	20.0 700	100 800	200 1000	300	400
1,1-Dichloropropene	FB	Ave	48614 1161217	222122 1350014	397710 1689887	522409	684260	20.0 700	100 800	200 1000	300	400
Benzene	FB	Ave	131703 3150535	604063 3553209	1140696 4375955	1444796	1936130	20.0 700	100 800	200 1000	300	400

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

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
1,2-Dichloroethane	FB	Ave	45545 1085110	193915 1261454	363062 1506238	486348	662167	20.0 700	100 800	200 1000	300	400
Isobutyl alcohol	FB	Ave	14915 725140	120699 875607	238248 1032146	318675	426103	500 17500	2500 20000	5000 25000	7500	10000
n-Heptane	FB	Ave	37541 1015361	172370 1247753	343792 1473278	453730	593146	20.0 700	100 800	200 1000	300	400
Trichloroethene	FB	Ave	51491 1337763	228617 1511187	445574 1899175	557536	763898	20.0 700	100 800	200 1000	300	400
Methylcyclohexane	FB	Ave	66709 1518386	302516 1821723	543409 2242100	683732	924161	20.0 700	100 800	200 1000	300	400
1,2-Dichloropropane	FB	Ave	28343 761874	129781 872134	243750 1079980	327752	447696	20.0 700	100 800	200 1000	300	400
Dibromomethane	FB	Ave	22063 570980	92763 676332	175702 813226	240979	325671	20.0 700	100 800	200 1000	300	400
1,4-Dioxane	FB	Ave	2158 129768	18551 130621	36036 160108	49259	68277	400 14000	2000 16000	4000 20000	6000	8000
Bromodichloromethane	FB	Ave	51297 1412009	234170 1632472	480549 1941561	612413	837049	20.0 700	100 800	200 1000	300	400
cis-1,3-Dichloropropene	FB	Ave	51839 1486494	250427 1709267	477454 2067222	643615	854790	20.0 700	100 800	200 1000	300	400
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	92825 1221845	198312 1421595	367652 1593755	558709	733664	100 1400	200 1600	400 2000	600	800
Toluene	CBZ	Qua	142380 3084889	620797 +++++	1151125 +++++	1473364	1929599	20.0 700	100 +++++	200 +++++	300	400
trans-1,3-Dichloropropene	CBZ	Ave	43102 1307789	200178 1546548	405643 1832921	565545	752421	20.0 700	100 800	200 1000	300	400
Ethyl methacrylate	CBZ	Ave	25609 911071	133131 1076607	262894 1240685	390626	513149	20.0 700	100 800	200 1000	300	400
1,1,2-Trichloroethane	CBZ	Ave	24292 746577	122370 867173	222398 1040134	322268	430806	20.0 700	100 800	200 1000	300	400
Tetrachloroethene	CBZ	Qua	37717 884171	166044 +++++	309255 +++++	380796	524990	20.0 700	100 +++++	200 +++++	300	400
1,3-Dichloropropane	CBZ	Ave	39480 1057404	180327 1228755	334311 1422739	485148	626433	20.0 700	100 800	200 1000	300	400
2-Hexanone	CBZ	Ave	50336 828690	121993 1032279	231264 1158826	369022	462161	100 1400	200 1600	400 2000	600	800
Dibromochloromethane	CBZ	Ave	44500 1253031	212583 1443562	387652 1742790	544921	725170	20.0 700	100 800	200 1000	300	400
1,2-Dibromoethane (EDB)	CBZ	Ave	27850 856980	131988 985791	251542 1184293	375561	486579	20.0 700	100 800	200 1000	300	400
Chlorobenzene	CBZ	Ave	92306 2414200	428641 2701248	846268 +++++	1093489	1464442	20.0 700	100 800	200 +++++	300	400

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

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
1,1,1,2-Tetrachloroethane	CBZ	Ave	43591 1125563	201326 +++++	393829 +++++	505049	683517	20.0 700	100 +++++	200 +++++	300	400
Ethylbenzene	CBZ	Ave	50304 +++++	223898 +++++	438222 +++++	567348	742350	20.0 +++++	100 +++++	200 +++++	300	400
m-Xylene & p-Xylene	CBZ	Ave	67901 +++++	306490 +++++	582999 +++++	753992	1009451	20.0 +++++	100 +++++	200 +++++	300	400
o-Xylene	CBZ	Ave	68803 +++++	307714 +++++	586685 +++++	750708	1006935	20.0 +++++	100 +++++	200 +++++	300	400
Styrene	CBZ	Qua	104580 2360095	473776 +++++	895002 +++++	1119936	1435413	20.0 700	100 +++++	200 +++++	300	400
Bromoform	CBZ	Ave	19871 781610	108786 915646	228827 1061162	322387	436139	20.0 700	100 800	200 1000	300	400
Isopropylbenzene	CBZ	Qua	197392 3864822	851551 +++++	1546157 +++++	1939042	2501798	20.0 700	100 +++++	200 +++++	300	400
1,1,2,2-Tetrachloroethane	CBZ	Ave	27018 733504	130862 843599	251042 942162	360995	452814	20.0 700	100 800	200 1000	300	400
Bromobenzene	DCB	Ave	45193 1224216	217052 1357100	423173 1650286	548599	719427	20.0 700	100 800	200 1000	300	400
1,2,3-Trichloropropane	DCB	Ave	9783 290435	43419 336681	86903 383754	129479	165438	20.0 700	100 800	200 1000	300	400
trans-1,4-Dichloro-2-butene	DCB	Ave	6196 188752	25315 225524	49829 261594	77709	103928	20.0 700	100 800	200 1000	300	400
N-Propylbenzene	DCB	Ave	57850 1515443	254930 1690335	515043 2105507	649531	866084	20.0 700	100 800	200 1000	300	400
2-Chlorotoluene	DCB	Ave	49710 1366522	241717 1567014	465485 1902501	592801	799439	20.0 700	100 800	200 1000	300	400
1,3,5-Trimethylbenzene	DCB	Qua	166706 3121962	678088 3446156	1260442 +++++	1547120	2000575	20.0 700	100 800	200 +++++	300	400
4-Chlorotoluene	DCB	Ave	50322 1318727	236378 1461135	415760 1852378	562904	757841	20.0 700	100 800	200 1000	300	400
tert-Butylbenzene	DCB	Lin2	173349 +++++	756877 +++++	1397136 +++++	1734851	2561684	20.0 +++++	100 +++++	200 +++++	300	400
1,2,4-Trimethylbenzene	DCB	Qua	162794 3286002	682185 +++++	1279121 +++++	1578246	2068364	20.0 700	100 +++++	200 +++++	300	400
sec-Butylbenzene	DCB	Qua	214158 4241460	908560 4650844	1664550 +++++	2075658	2688983	20.0 700	100 800	200 +++++	300	400
1,3-Dichlorobenzene	DCB	Lin2	100166 +++++	434056 +++++	814415 +++++	1053105	1390255	20.0 +++++	100 +++++	200 +++++	300	400
4-Isopropyltoluene	DCB	Qua	201528 3605948	822865 +++++	1460316 +++++	1814126	2342656	20.0 700	100 +++++	200 +++++	300	400
1,4-Dichlorobenzene	DCB	Ave	86104 2234049	400302 2471728	763456 2953963	1033910	1375837	20.0 700	100 800	200 1000	300	400

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

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1 Analy Batch No.: 136928

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/30/2015 10:57 Calibration End Date: 03/30/2015 14:36 Calibration ID: 22965

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
n-Butylbenzene	DCB	Qua	165362 2947372	672615 +++++	1224106 +++++	1510703	1935500	20.0 700	100 +++++	200 +++++	300	400
1,2-Dichlorobenzene	DCB	Ave	82710 +++++	359029 +++++	666444 +++++	895594	1172011	20.0 +++++	100 +++++	200 +++++	300	400
1,2-Dibromo-3-Chloropropane	DCB	Lin2	2051 134161	15088 157690	37304 181072	48853	74075	20.0 700	100 800	200 1000	300	400
1,2,4-Trichlorobenzene	DCB	Ave	28435 719677	78248 992400	198283 1186297	302905	443796	20.0 700	100 800	200 1000	300	400
Hexachlorobutadiene	DCB	Ave	19184 413354	52188 568860	119072 704150	167959	239421	20.0 700	100 800	200 1000	300	400
Naphthalene	DCB	Ave	61310 1090423	113468 1540124	323445 1609562	511933	664374	20.0 700	100 800	200 1000	300	400
1,2,3-Trichlorobenzene	DCB	Ave	28729 433251	38530 697645	106664 761958	203191	263400	20.0 700	100 800	200 1000	300	400
Dibromofluoromethane (Surr)	FB	Ave	40332 1069500	182892 1276297	358794 1499933	459650	635809	20.0 700	100 800	200 1000	300	400
1,2-Dichloroethane-d4 (Surr)	FB	Ave	38294 1052781	170431 1230322	326104 1446117	452870	603243	20.0 700	100 800	200 1000	300	400
Toluene-d8 (Surr)	CBZ	Ave	+++++ 2956031	571452 3370087	1076372 4013224	1374921	1822472	+++++ 700	100 800	200 1000	300	400
4-Bromofluorobenzene (Surr)	CBZ	Lin2	58011 1382927	227038 1583659	461682 1915172	594575	801850	20.0 700	100 800	200 1000	300	400

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Mar-2015 10:57:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0006234-003
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub1

Method: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:54:14 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 30-Mar-2015 11:35:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	5.012	5.024	-0.012	82	293090	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.403	7.396	0.007	99	1023741	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.469	10.462	0.007	84	274343	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.792	-0.006	93	404767	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.679	6.678	0.001	84	40332	20.0	24.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.044	7.037	0.007	66	38294	20.0	24.6	
$ 7 Toluene-d8 (Surr)	98		9.033				ND	ND	
$ 8 4-Bromofluorobenzene (Surr	95	11.631	11.636	-0.005	92	58011	20.0	19.3	
11 Dichlorodifluoromethane	85	1.934	1.939	-0.005	1	41448	20.0	21.8	M
12 Chloromethane	50	2.086	2.018	0.068	22	44098	20.0	21.3	M
14 Butadiene	39	2.183	2.176	0.007	65	43516	20.0	25.6	
13 Vinyl chloride	62	2.171	2.225	-0.054	27	35111	20.0	21.8	M
15 Bromomethane	94	2.499	2.499	0.000	10	23195	20.0	17.9	M
16 Chloroethane	64	2.615	2.639	-0.024	65	28139	20.0	21.7	
17 Dichlorofluoromethane	67	2.919	2.882	0.037	69	78053	20.0	22.6	
18 Trichlorofluoromethane	101	2.956	2.913	0.043	75	77379	20.0	21.3	
20 Ethyl ether	59	3.357	3.314	0.043	64	18758	20.0	16.3	
22 1,1-Dichloroethene	96	3.461	3.460	0.001	1	25924	20.0	18.9	M
21 Acrolein	56	3.485	3.497	-0.012	72	28748	400.0	361.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.637	3.563	0.074	1	37088	20.0	23.2	M
25 Iodomethane	142	3.710	3.716	-0.006	92	65439	20.0	22.8	
26 Carbon disulfide	76	3.771	3.764	0.007	79	91497	20.0	22.2	
24 Acetone	43	3.874	3.855	0.019	65	47874	100.0	100.6	M
28 3-Chloro-1-propene	76	4.063	4.087	-0.024	54	22664	20.0	22.4	M
31 Methylene Chloride	84	4.318	4.294	0.024	55	38895	20.0	26.4	M
30 Methyl acetate	43	4.355	4.324	0.031	68	88164	100.0	129.3	M
34 trans-1,2-Dichloroethene	96	4.714	4.725	-0.011	55	42422	20.0	24.9	
32 2-Methyl-2-propanol	59	4.708	4.744	-0.036	1	567	200.0	-157.2	
33 Acrylonitrile	53	4.872	4.829	0.043	64	60806	200.0	222.9	M
35 Methyl tert-butyl ether	73	4.896	4.890	0.006	62	80870	20.0	24.1	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.115	5.090	0.025	81	44092	20.0	24.7	M
38 Vinyl acetate	43	5.115	5.115	0.000	76	34041	20.0	25.3	M
37 1,1-Dichloroethane	63	5.328	5.334	-0.006	62	51559	20.0	20.6	M
44 2,2-Dichloropropane	77	6.083	6.076	0.007	84	51484	20.0	24.7	M
45 cis-1,2-Dichloroethene	96	6.101	6.094	0.007	76	39878	20.0	23.6	
46 2-Butanone (MEK)	43	6.222	6.216	0.006	74	46886	100.0	102.2	
49 Chlorobromomethane	128	6.375	6.380	-0.005	74	24652	20.0	25.3	
52 Chloroform	83	6.502	6.496	0.006	92	70828	20.0	25.2	M
53 1,1,1-Trichloroethane	97	6.667	6.660	0.007	94	66238	20.0	25.9	M
51 Tetrahydrofuran	42	6.727	6.709	0.018	46	11945	40.0	47.6	M
54 Cyclohexane	56	6.715	6.709	0.006	86	49523	20.0	27.5	M
56 Carbon tetrachloride	117	6.849	6.849	0.000	95	69874	20.0	27.1	
55 1,1-Dichloropropene	75	6.855	6.855	0.000	50	48614	20.0	26.3	M
58 Benzene	78	7.098	7.086	0.012	95	131703	20.0	26.1	
59 1,2-Dichloroethane	62	7.129	7.122	0.007	84	45545	20.0	26.8	M
62 n-Heptane	43	7.390	7.390	0.000	40	37541	20.0	24.0	M
57 Isobutyl alcohol	41	7.208	7.396	-0.188	56	14915	500.0	362.9	M
64 Trichloroethene	130	7.798	7.785	0.013	88	51491	20.0	25.5	M
66 Methylcyclohexane	83	7.981	7.980	0.001	86	66709	20.0	26.9	
67 1,2-Dichloropropane	63	8.029	8.029	0.000	82	28343	20.0	24.7	
68 Dibromomethane	93	8.151	8.144	0.007	90	22063	20.0	25.8	M
70 1,4-Dioxane	88	8.206	8.205	0.001	2	2158	400.0	269.0	M
71 Dichlorobromomethane	83	8.321	8.315	0.006	96	51297	20.0	24.1	
74 cis-1,3-Dichloropropene	75	8.771	8.771	0.000	89	51839	20.0	23.5	
75 4-Methyl-2-pentanone (MIBK	43	8.948	8.947	0.001	97	92825	100.0	115.8	
76 Toluene	91	9.100	9.099	0.001	97	142380	20.0	12.2	
77 trans-1,3-Dichloropropene	75	9.325	9.325	0.000	95	43102	20.0	25.0	
78 Ethyl methacrylate	69	9.428	9.428	0.000	92	25609	20.0	22.3	
79 1,1,2-Trichloroethane	97	9.514	9.513	0.001	91	24292	20.0	24.7	
80 Tetrachloroethene	164	9.647	9.641	0.006	91	37717	20.0	9.83	
81 1,3-Dichloropropane	76	9.666	9.671	-0.005	92	39480	20.0	27.1	
82 2-Hexanone	43	9.769	9.769	0.000	95	50336	100.0	97.3	
84 Chlorodibromomethane	129	9.897	9.896	0.001	85	44500	20.0	26.3	
85 Ethylene Dibromide	107	10.012	10.006	0.006	95	27850	20.0	25.0	
87 Chlorobenzene	112	10.499	10.499	0.000	97	92306	20.0	26.4	
89 1,1,1,2-Tetrachloroethane	131	10.572	10.578	-0.006	89	43591	20.0	25.8	
90 Ethylbenzene	106	10.603	10.602	0.001	98	50304	20.0	25.3	
91 m-Xylene & p-Xylene	106	10.718	10.718	0.000	98	67901	20.0	25.3	
92 o-Xylene	106	11.114	11.113	0.001	95	68803	20.0	25.6	
93 Styrene	104	11.126	11.125	0.001	94	104580	20.0	9.49	
94 Bromoform	173	11.314	11.314	0.000	92	19871	20.0	20.7	
97 Isopropylbenzene	105	11.479	11.478	0.001	96	197392	20.0	10.7	
99 1,1,2,2-Tetrachloroethane	83	11.777	11.776	0.001	59	27018	20.0	26.1	
100 Bromobenzene	156	11.789	11.788	0.001	90	45193	20.0	26.1	
101 1,2,3-Trichloropropane	110	11.813	11.819	-0.006	55	9783	20.0	25.2	
102 trans-1,4-Dichloro-2-buten	53	11.837	11.831	0.006	47	6196	20.0	25.5	
103 N-Propylbenzene	120	11.892	11.892	0.000	97	57850	20.0	27.2	
104 2-Chlorotoluene	126	11.983	11.977	0.006	97	49710	20.0	25.7	
106 1,3,5-Trimethylbenzene	105	12.063	12.062	0.001	95	166706	20.0	6.19	
107 4-Chlorotoluene	126	12.087	12.086	0.001	95	50322	20.0	27.2	
108 tert-Butylbenzene	119	12.391	12.391	0.000	91	173349	20.0	19.7	
110 1,2,4-Trimethylbenzene	105	12.440	12.439	0.001	95	162794	20.0	14.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.610	12.610	0.000	94	214158	20.0	6.61	
113 1,3-Dichlorobenzene	146	12.726	12.725	0.001	96	100166	20.0	19.7	
114 4-Isopropyltoluene	119	12.750	12.756	-0.006	96	201528	20.0	13.2	
115 1,4-Dichlorobenzene	146	12.817	12.816	0.001	94	86104	20.0	26.8	
120 n-Butylbenzene	91	13.164	13.163	0.001	96	165362	20.0	13.9	
121 1,2-Dichlorobenzene	146	13.188	13.188	0.000	97	82710	20.0	26.3	
122 1,2-Dibromo-3-Chloropropan	75	13.955	13.972	-0.017	52	2051	20.0	20.3	
126 1,2,4-Trichlorobenzene	180	14.818	14.806	0.012	91	28435	20.0	28.5	
127 Hexachlorobutadiene	225	14.964	14.970	-0.006	84	19184	20.0	32.1	
128 Naphthalene	128	15.056	15.055	0.001	96	61310	20.0	37.5	
129 1,2,3-Trichlorobenzene	180	15.311	15.305	0.006	93	28729	20.0	42.1	
S 134 1,2-Dichloroethene, Total	96				0		40.0	48.4	
S 133 Xylenes, Total	106				0		40.0	50.9	
S 135 1,3-Dichloropropene, Total	1				0		40.0	48.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	0.80	Units: uL
VOAVAPRI_00005	Amount Added:	0.80	Units: uL
VOAACRPRI_00003	Amount Added:	16.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOA8260VOAPRI_00108	Amount Added:	0.80	Units: uL
voaWKet2 Rest_00002	Amount Added:	3.20	Units: uL

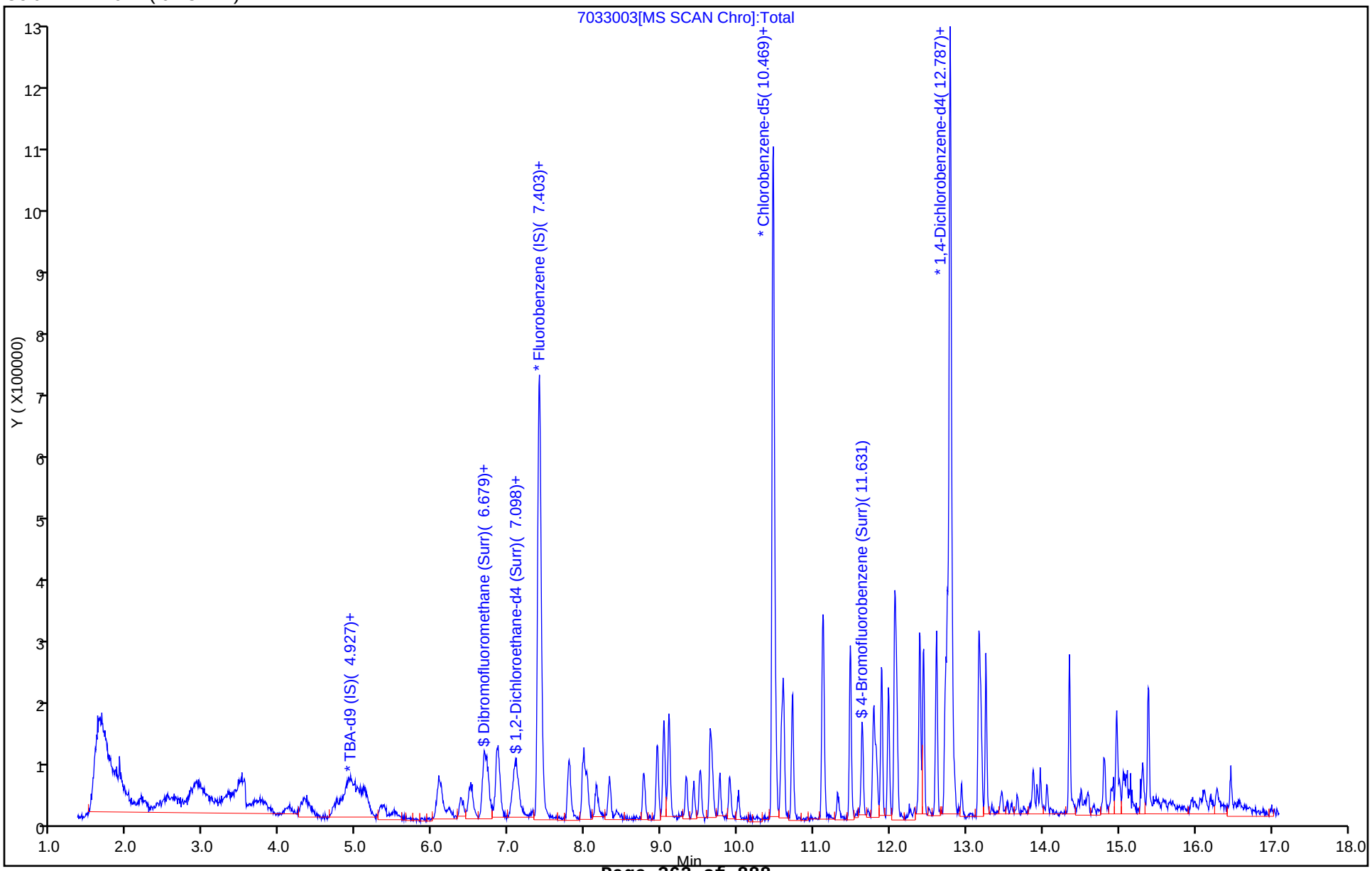
Report Date: 31-Mar-2015 08:54:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D

Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

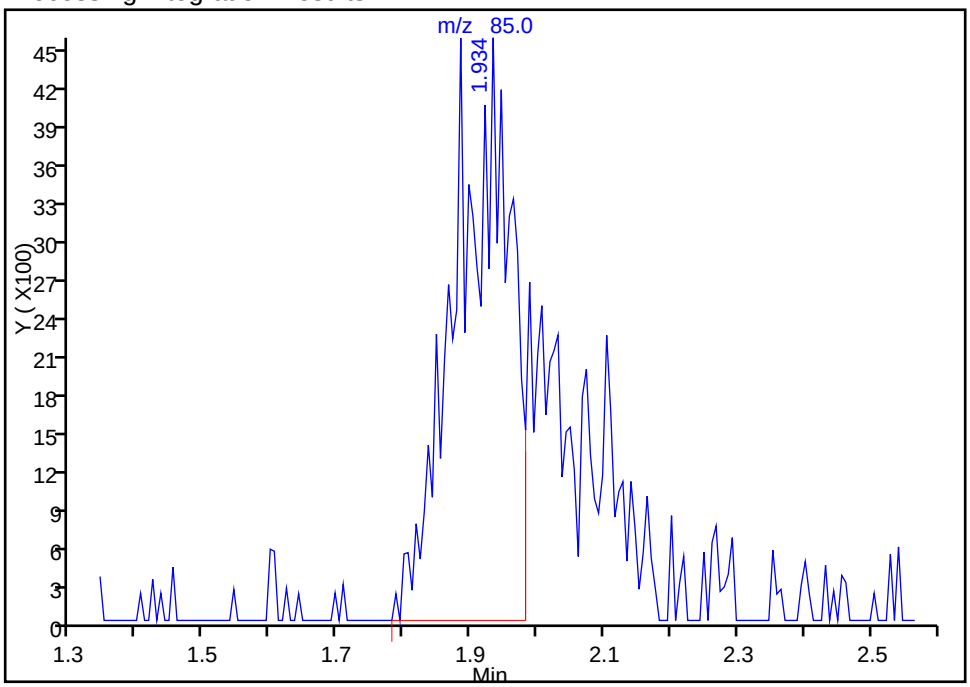
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

11 Dichlorodifluoromethane, CAS: 75-71-8

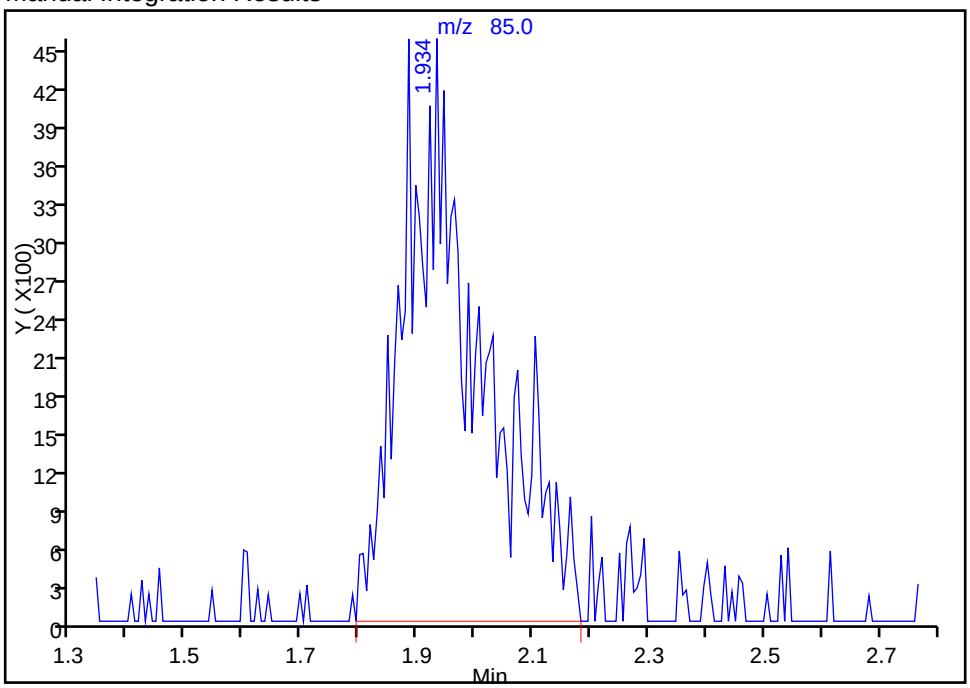
Processing Integration Results

RT: 1.93
Area: 26133
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 1.93
Area: 41448
Amount: 21.843208
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

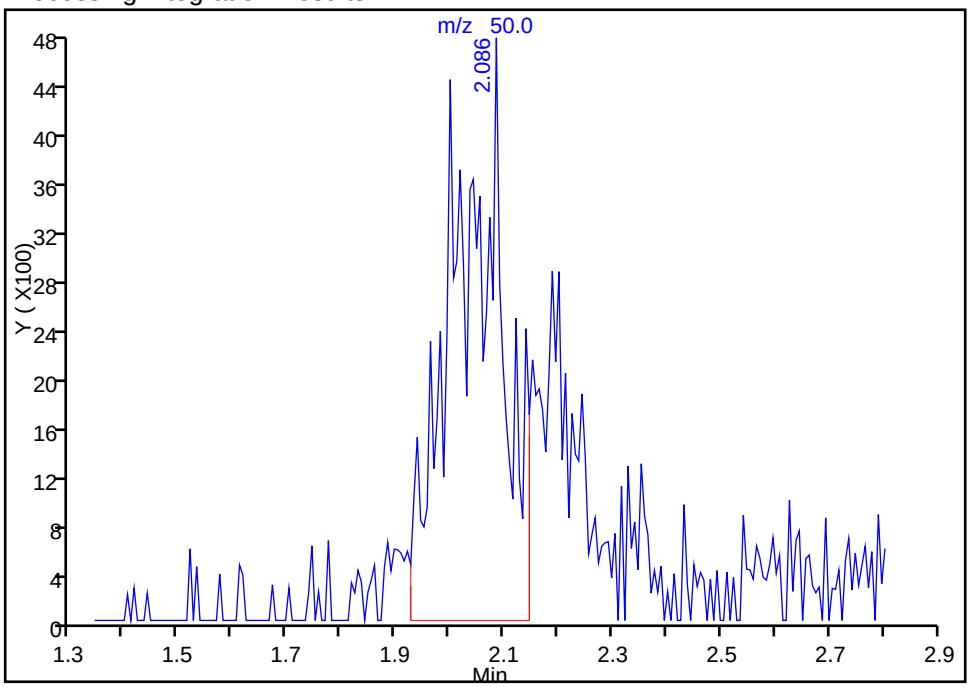
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

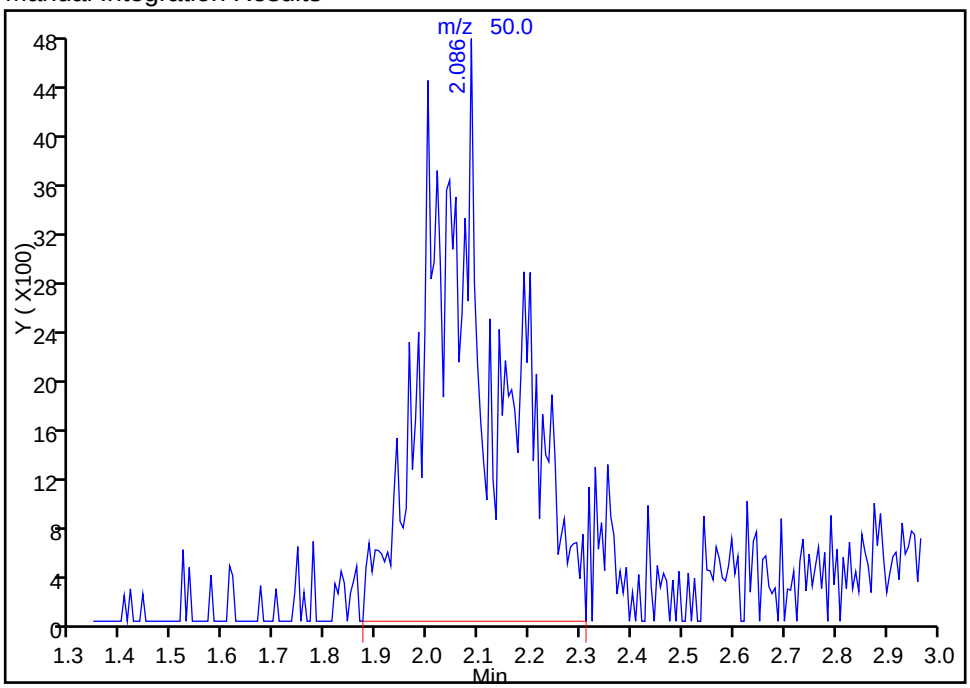
Processing Integration Results

RT: 2.09
Area: 29503
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 2.09
Area: 44098
Amount: 21.331829
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

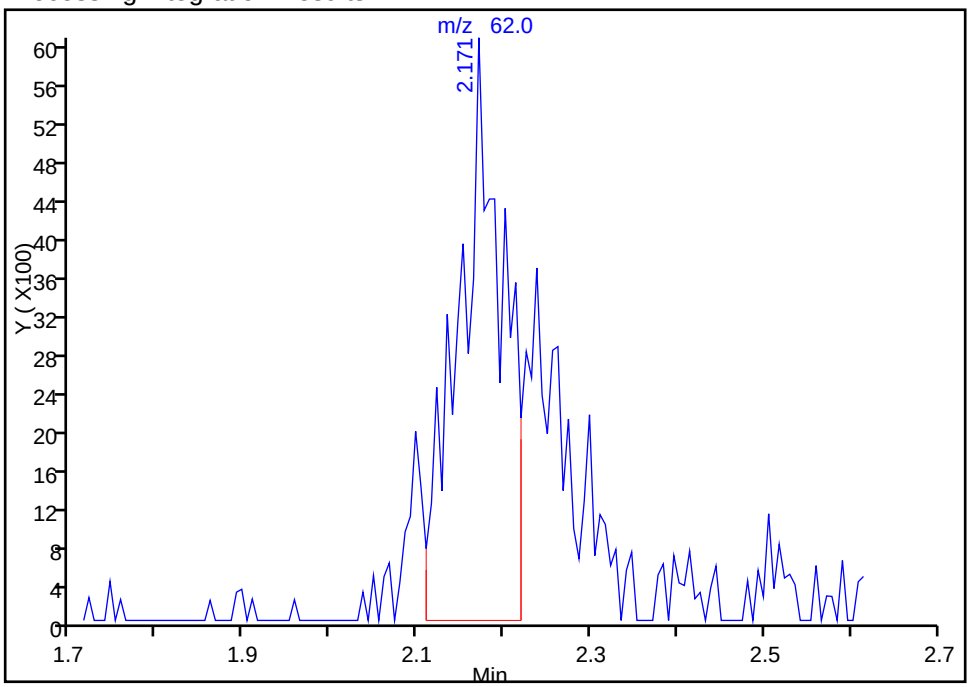
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

13 Vinyl chloride, CAS: 75-01-4

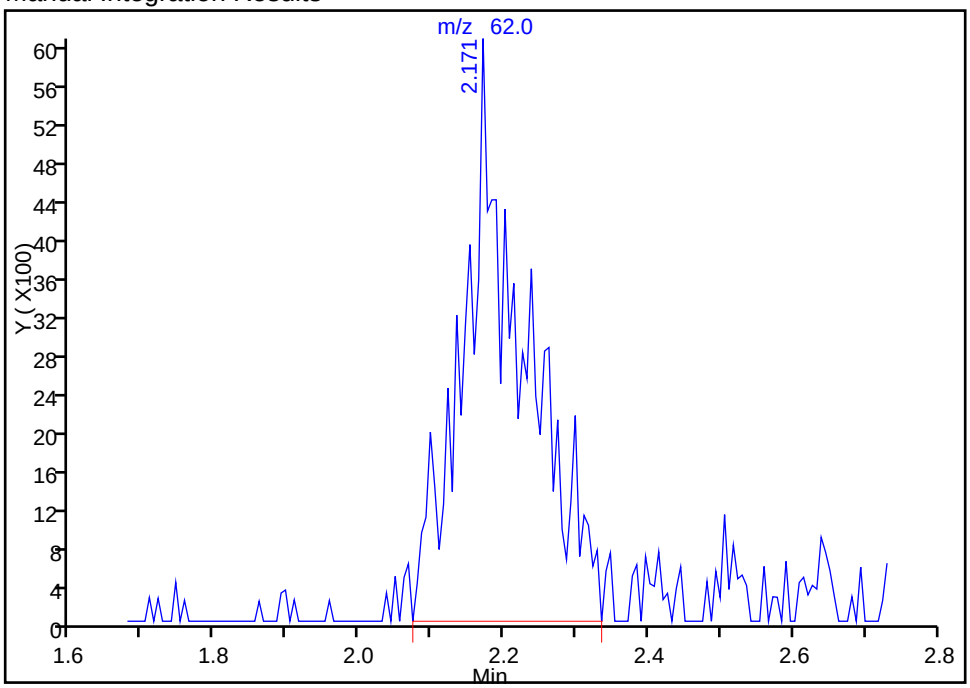
Processing Integration Results

RT: 2.17
Area: 21509
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 2.17
Area: 35111
Amount: 21.810178
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

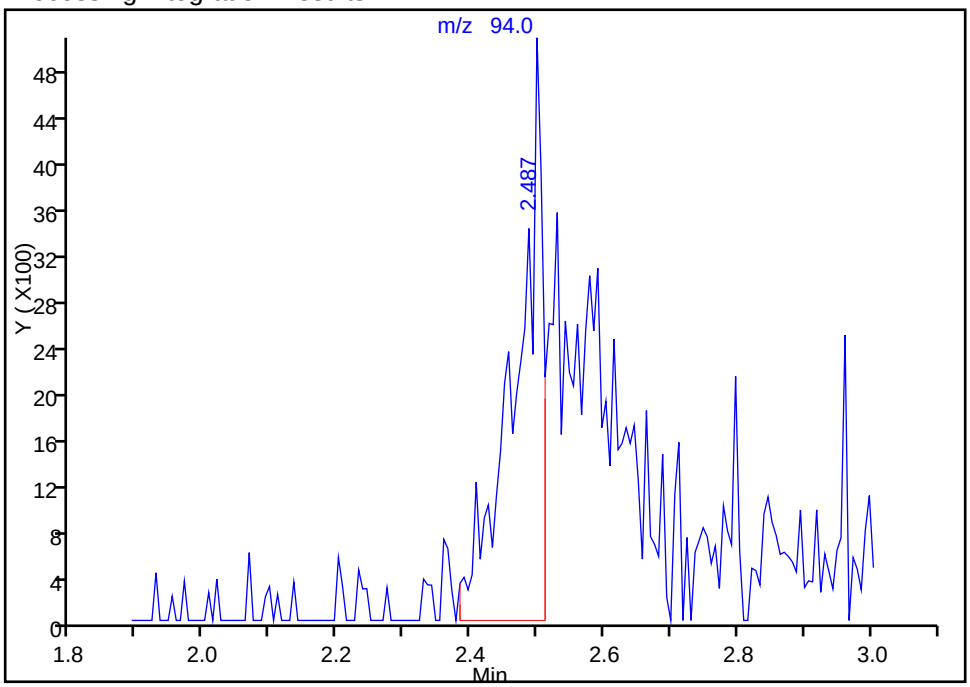
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

15 Bromomethane, CAS: 74-83-9

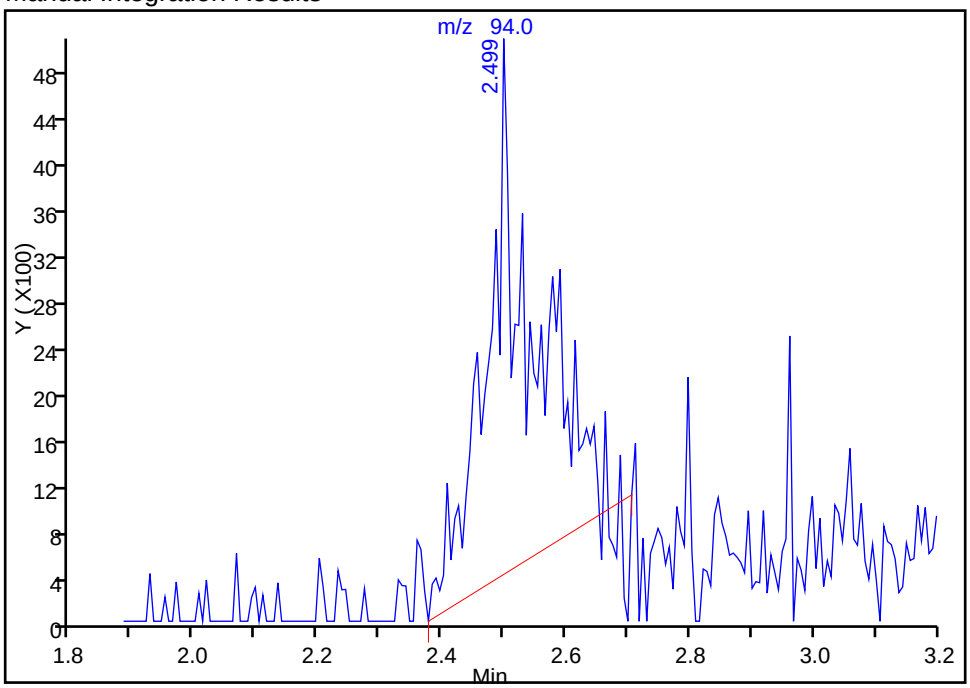
Processing Integration Results

RT: 2.49
Area: 13755
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 2.50
Area: 23195
Amount: 17.880294
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

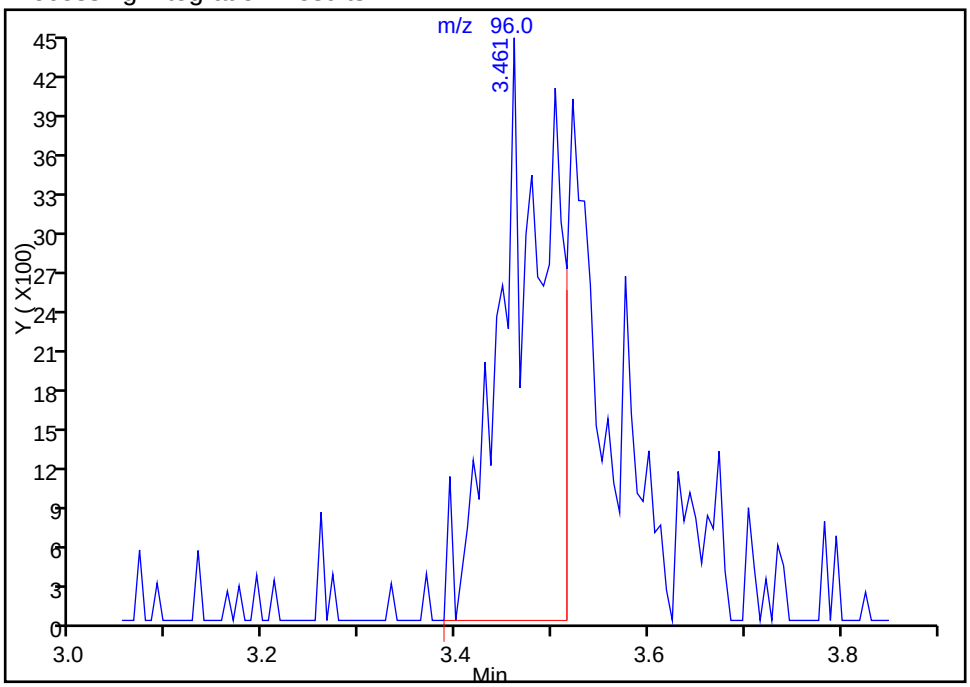
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

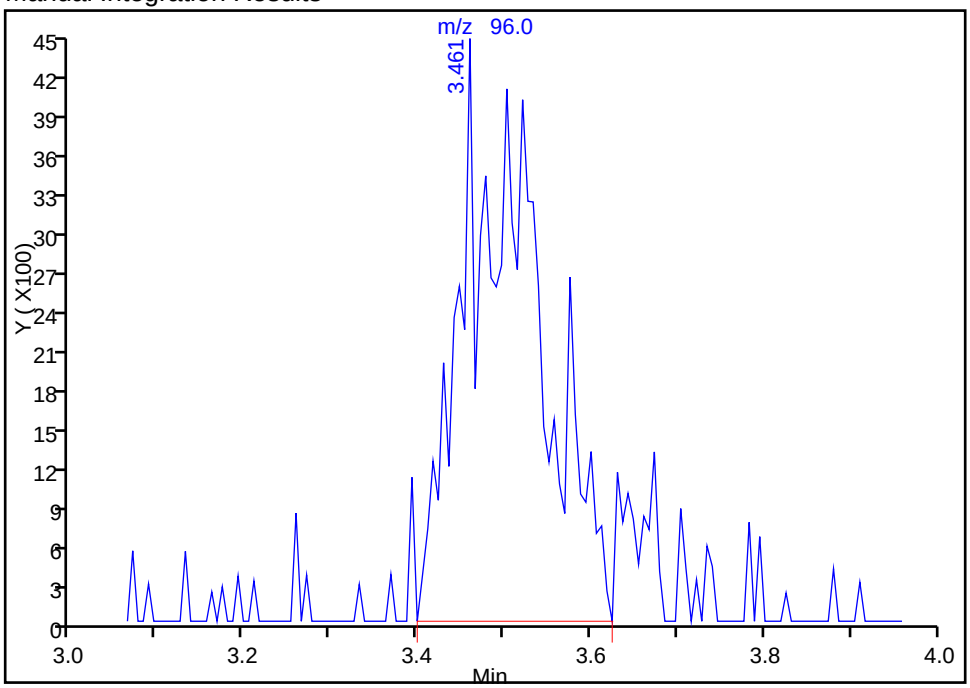
Processing Integration Results

RT: 3.46
Area: 16183
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 3.46
Area: 25924
Amount: 18.860231
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

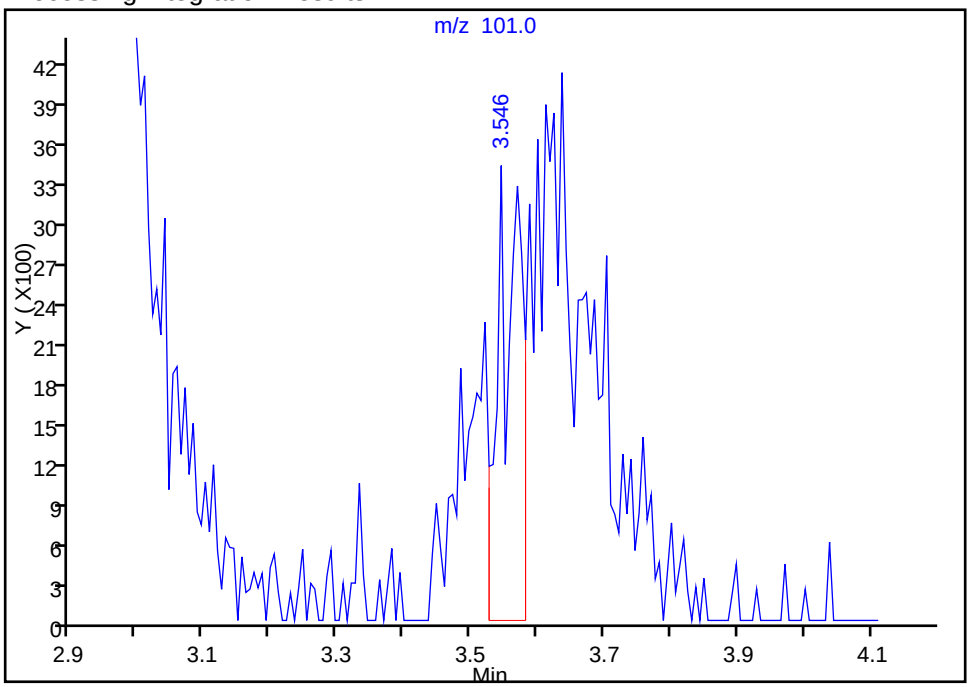
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D
Injection Date: 30-Mar-2015 10:57:30 Instrument ID: CHHP7
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

23 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

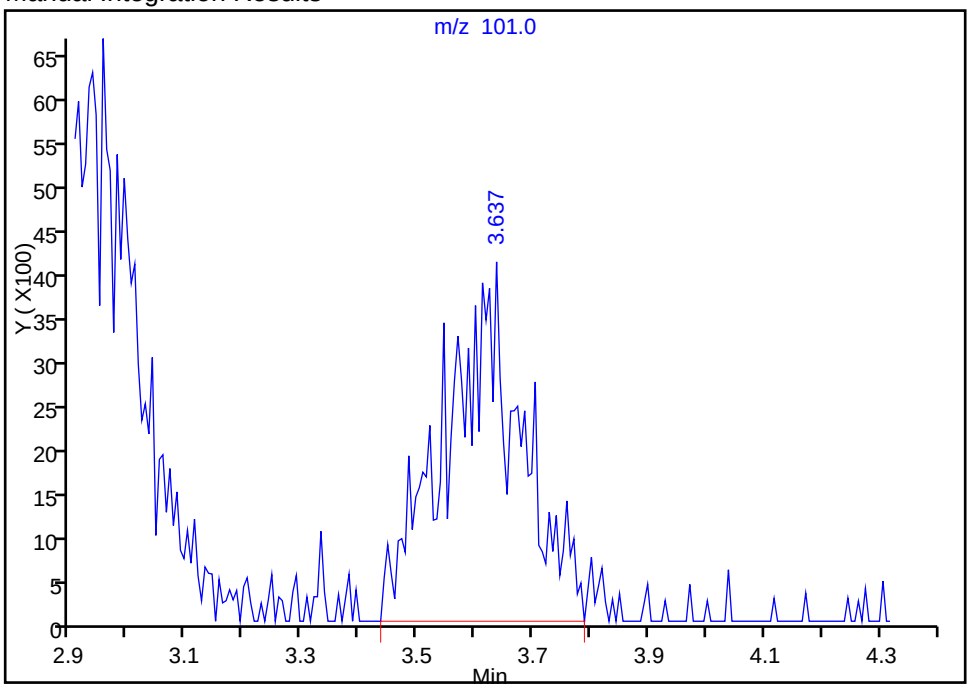
Processing Integration Results

RT: 3.55
Area: 7866
Amount: 0
Amount Units: ng



Manual Integration Results

RT: 3.64
Area: 37088
Amount: 23.204719
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

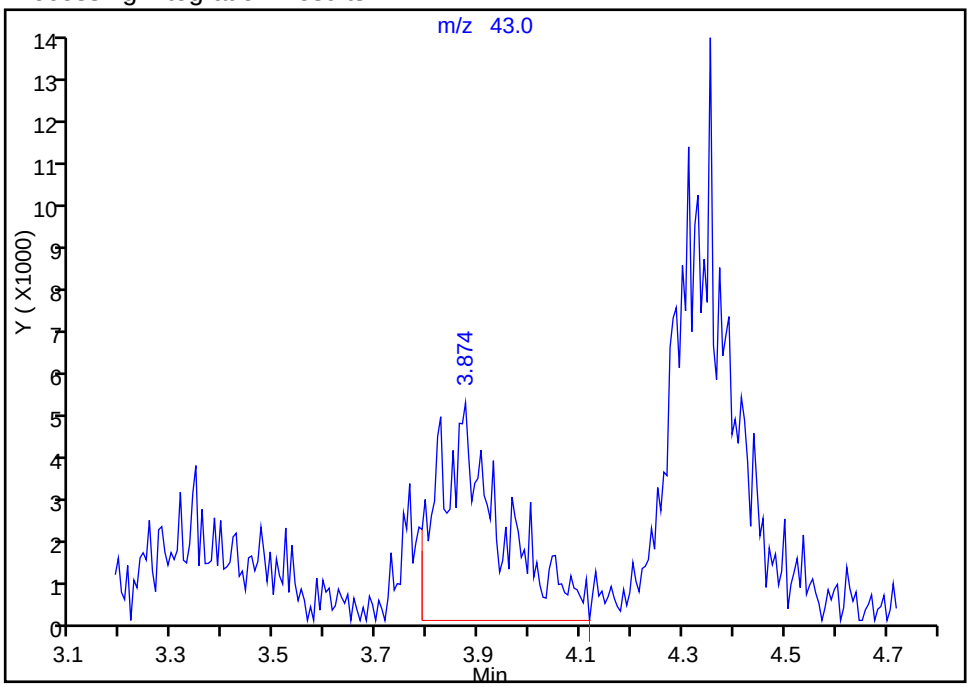
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

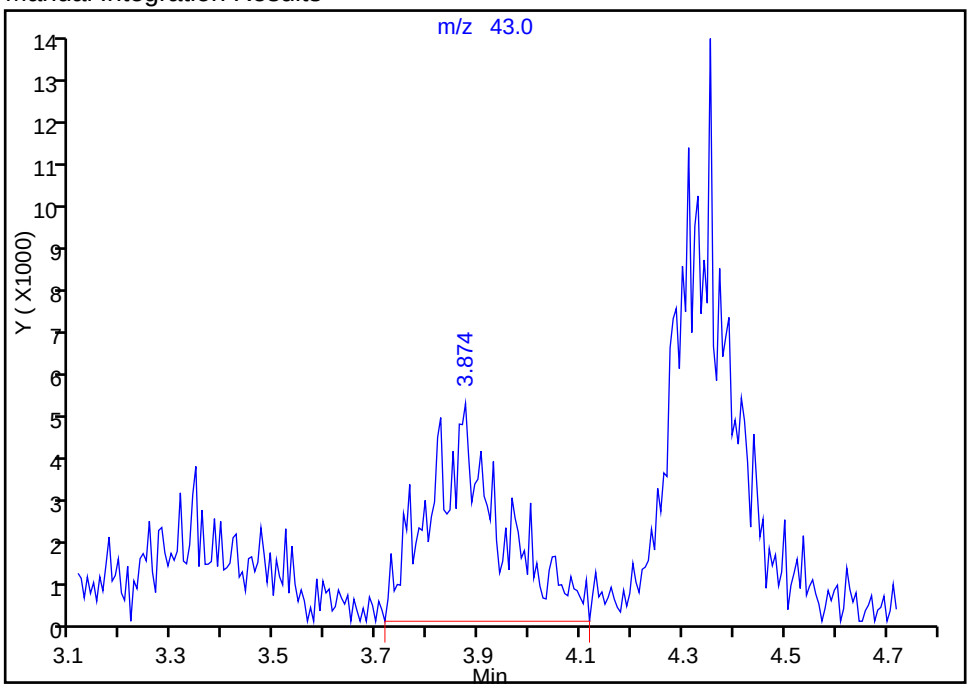
Processing Integration Results

RT: 3.87
Area: 41567
Amount: 100.0000
Amount Units: ng



Manual Integration Results

RT: 3.87
Area: 47874
Amount: 100.6346
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

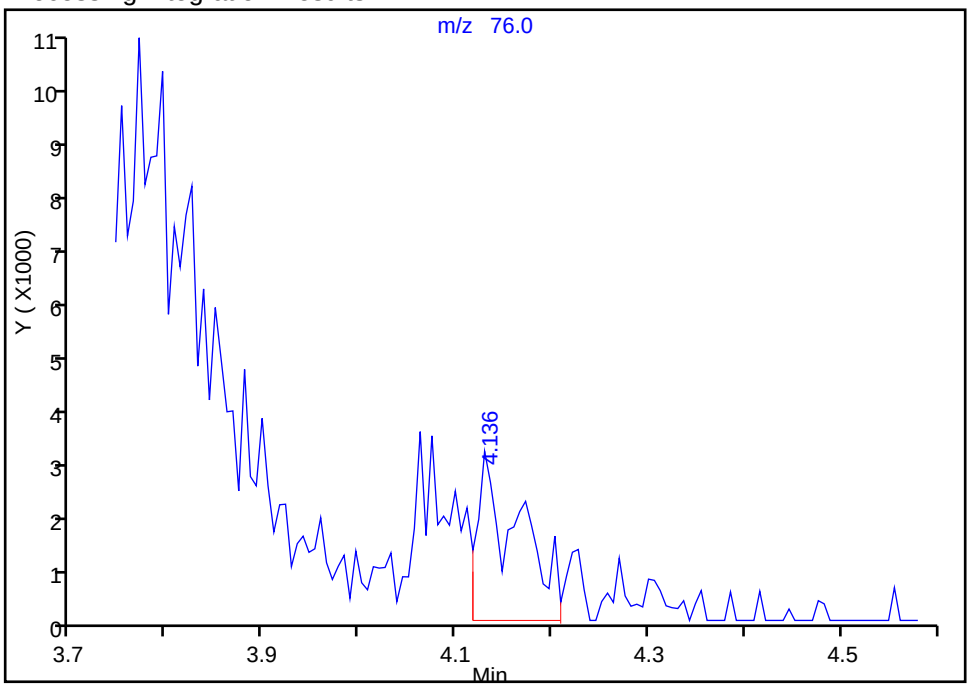
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

28 3-Chloro-1-propene, CAS: 107-05-1

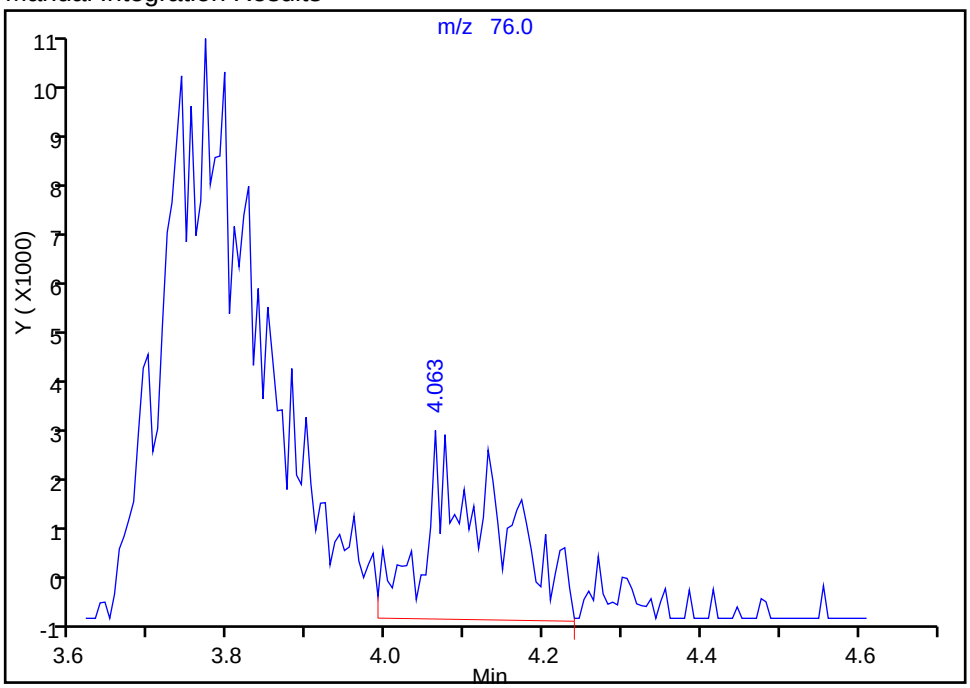
Processing Integration Results

RT: 4.14
Area: 9385
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 4.06
Area: 22664
Amount: 22.354527
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

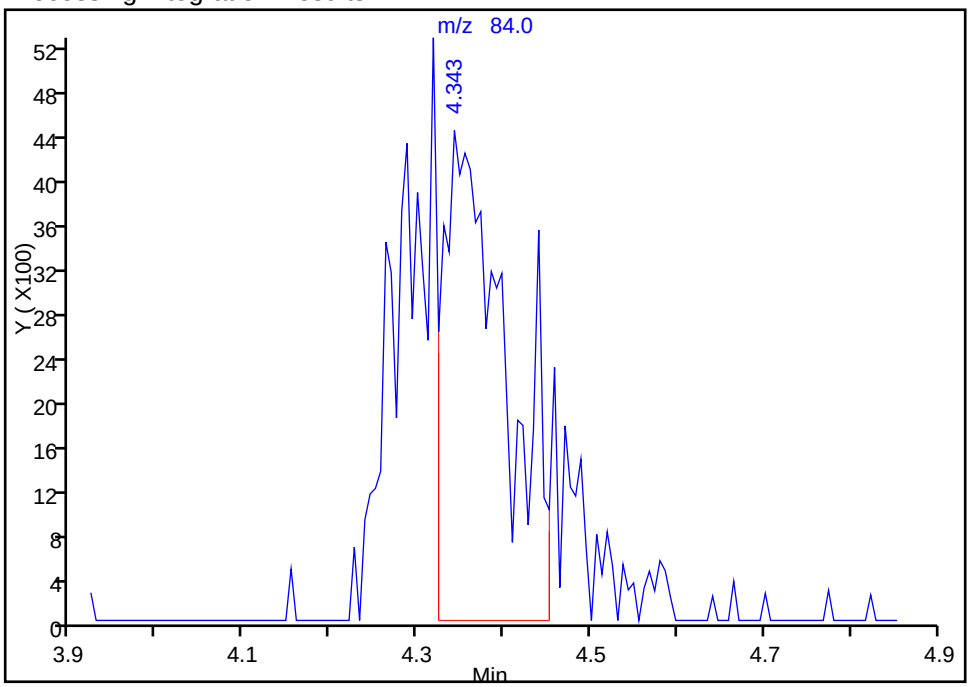
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

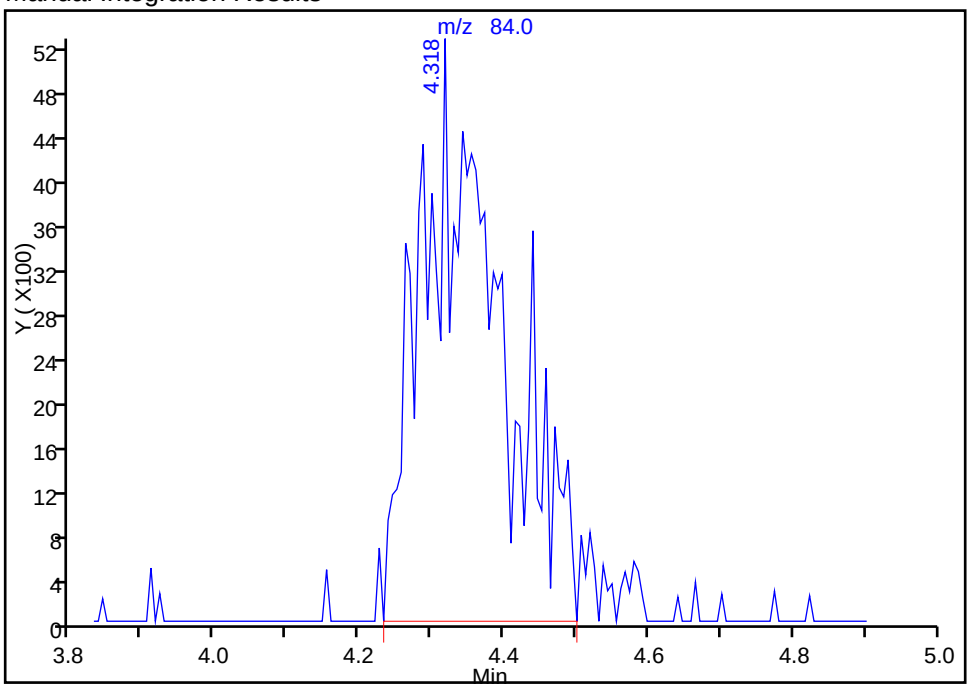
Processing Integration Results

RT: 4.34
Area: 21726
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 4.32
Area: 38895
Amount: 26.365167
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

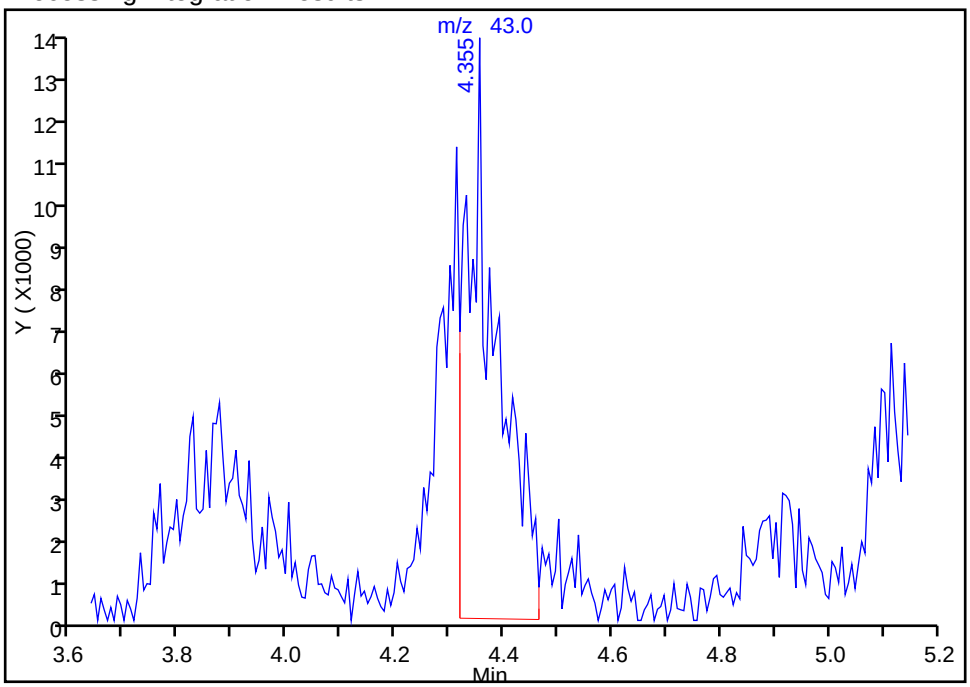
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

30 Methyl acetate, CAS: 79-20-9

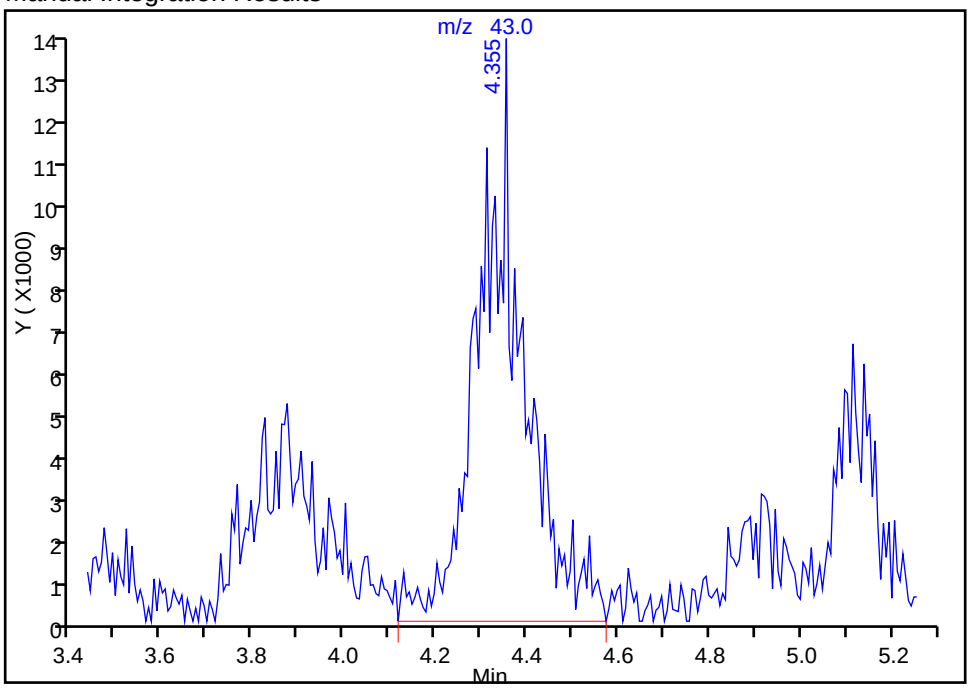
Processing Integration Results

RT: 4.35
Area: 51204
Amount: 100.0000
Amount Units: ng



Manual Integration Results

RT: 4.35
Area: 88164
Amount: 129.2601
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

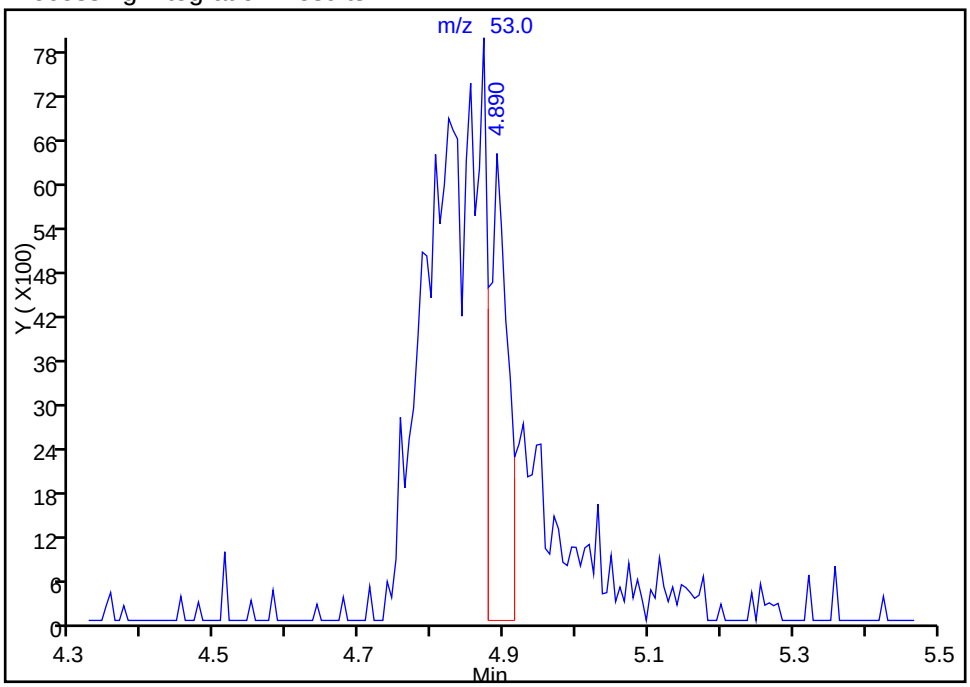
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

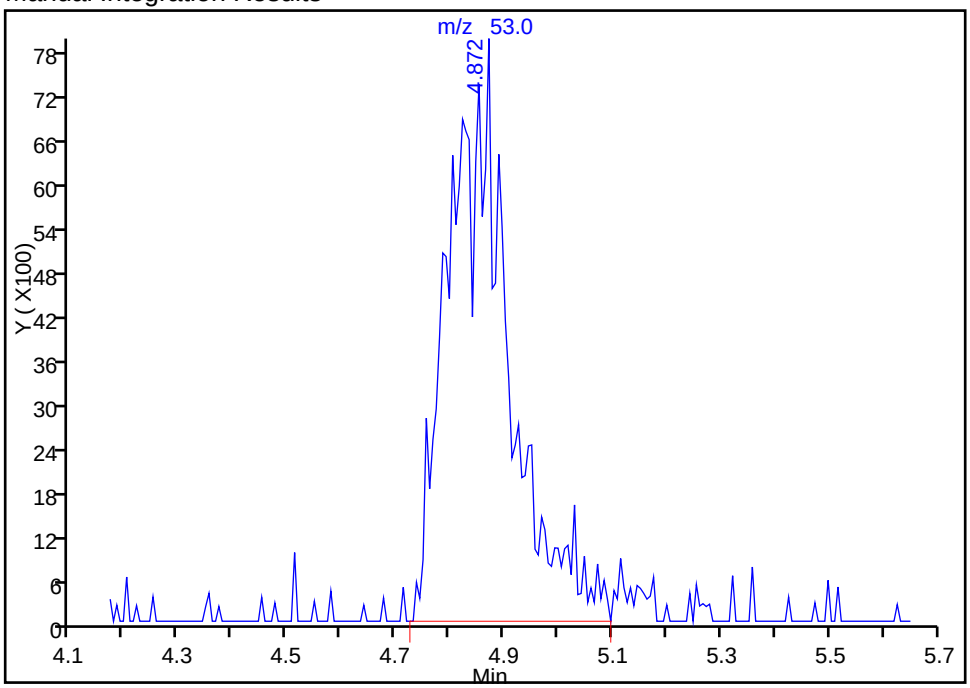
Processing Integration Results

RT: 4.89
Area: 11115
Amount: 0
Amount Units: ng



Manual Integration Results

RT: 4.87
Area: 60806
Amount: 222.8607
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

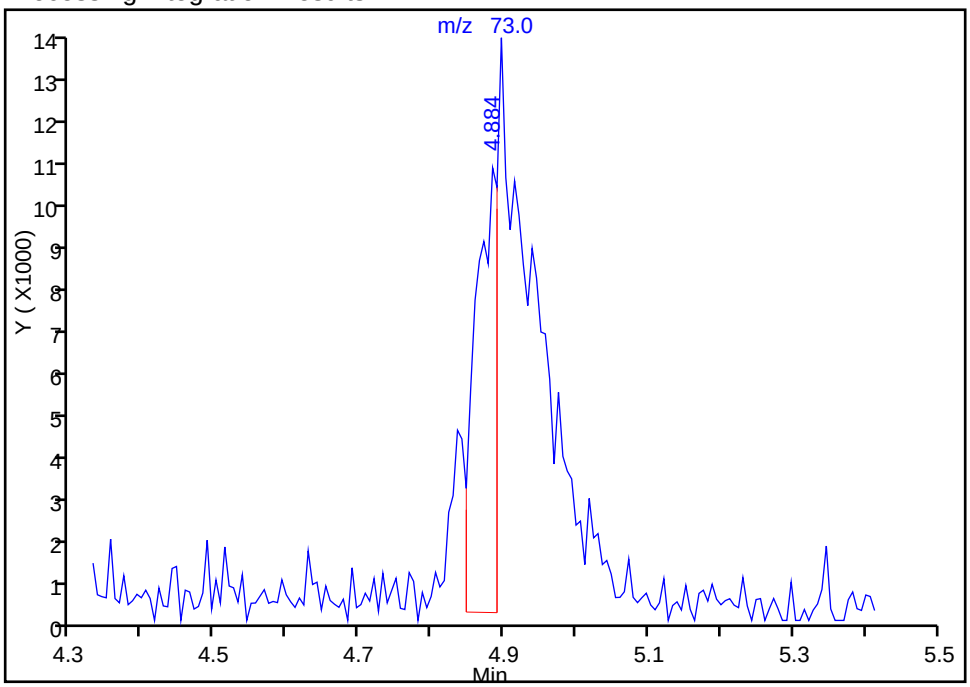
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

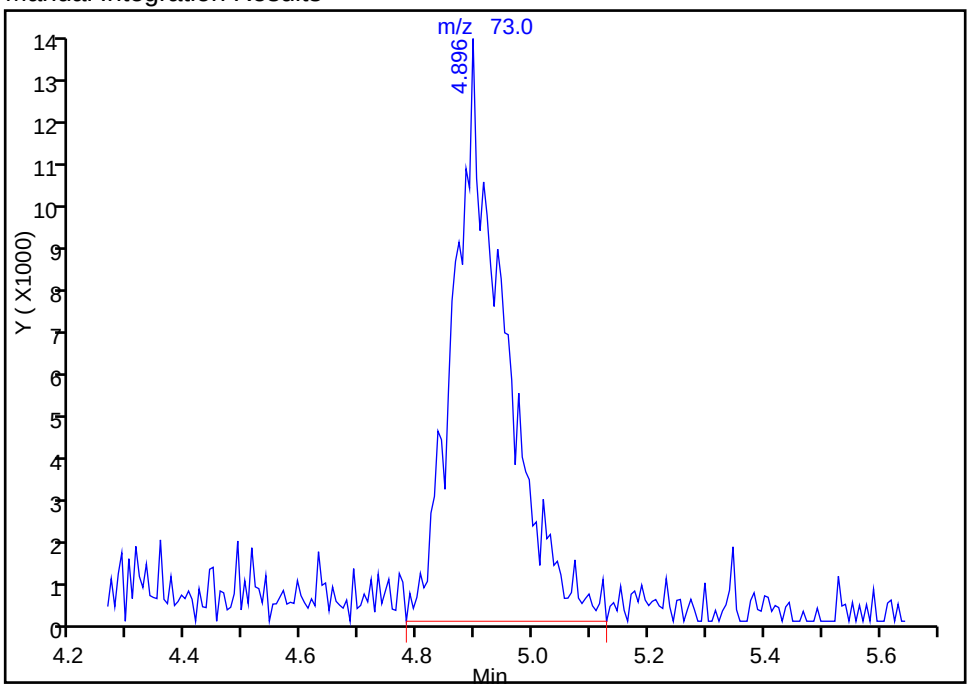
Processing Integration Results

RT: 4.88
Area: 21512
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 4.90
Area: 80870
Amount: 24.061609
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

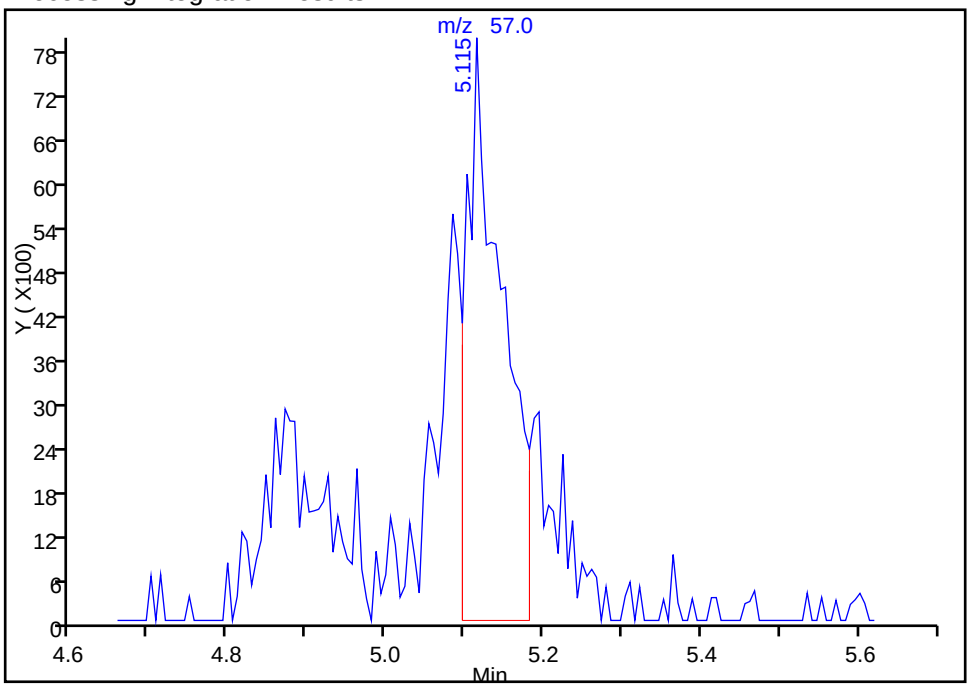
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

36 Hexane, CAS: 110-54-3

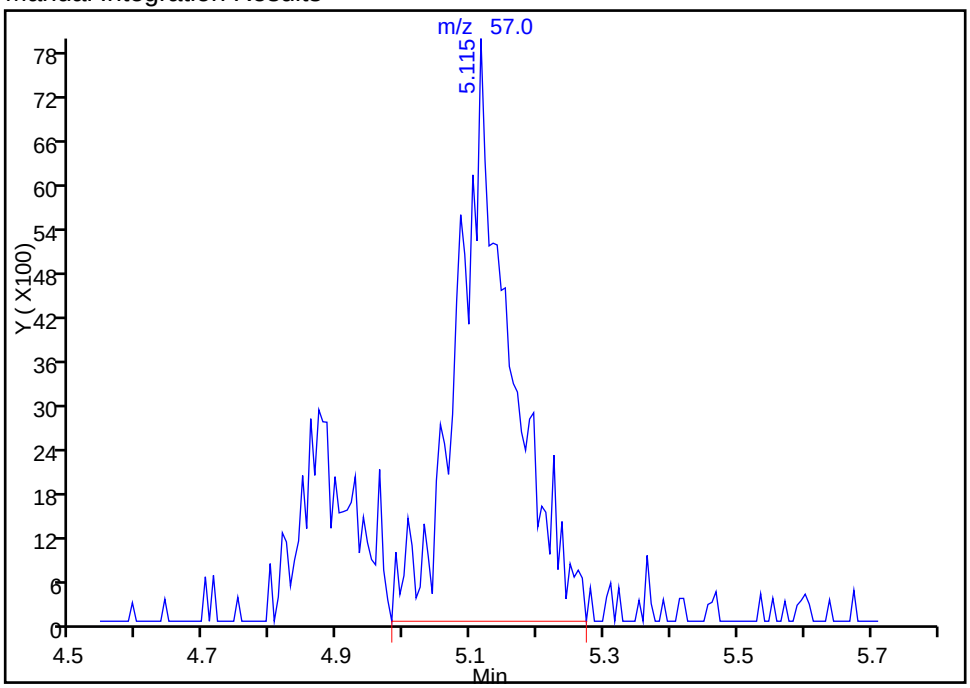
Processing Integration Results

RT: 5.12
Area: 24973
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 5.12
Area: 44092
Amount: 24.720726
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

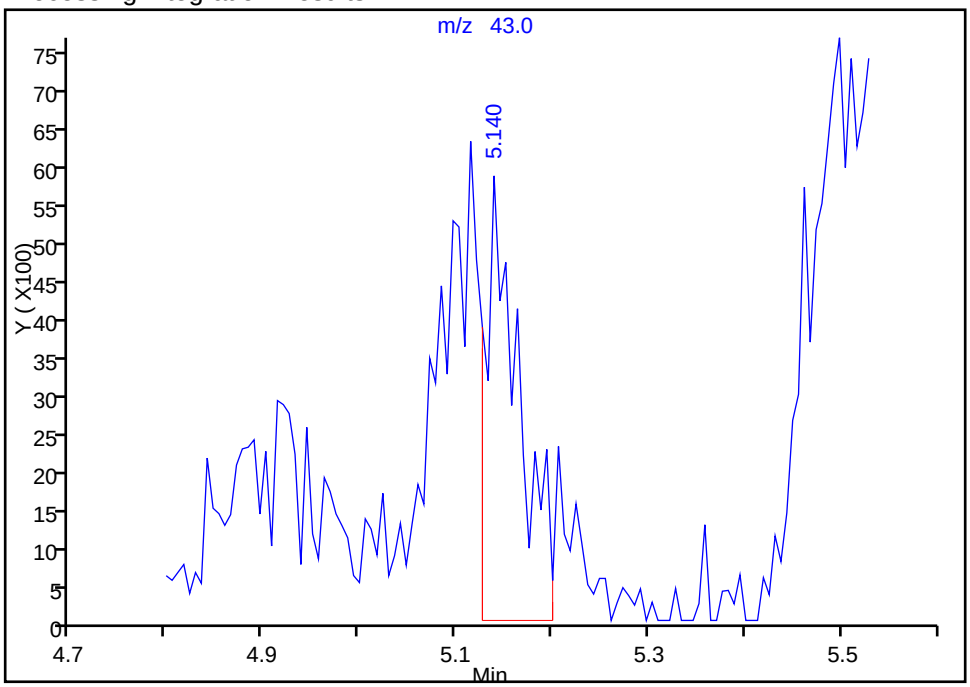
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

38 Vinyl acetate, CAS: 108-05-4

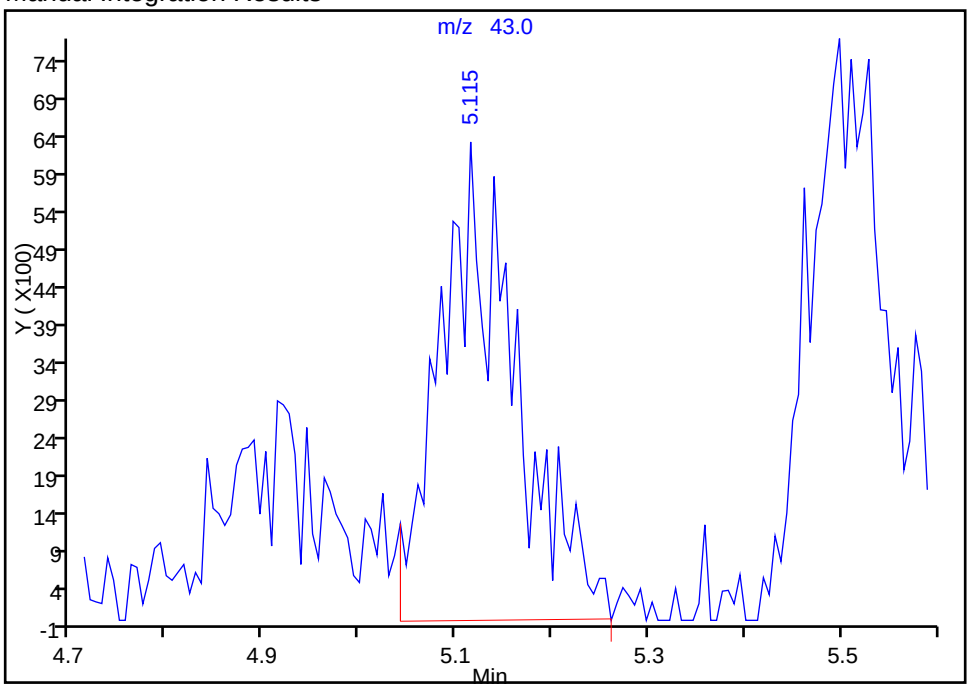
Processing Integration Results

RT: 5.14
Area: 14037
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 5.12
Area: 34041
Amount: 25.312957
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

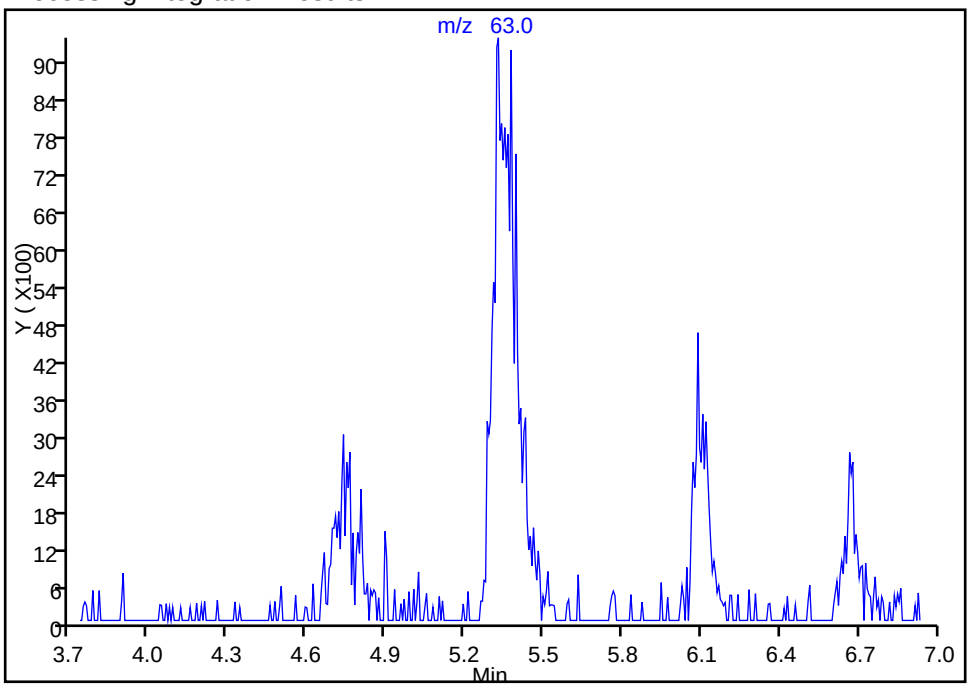
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

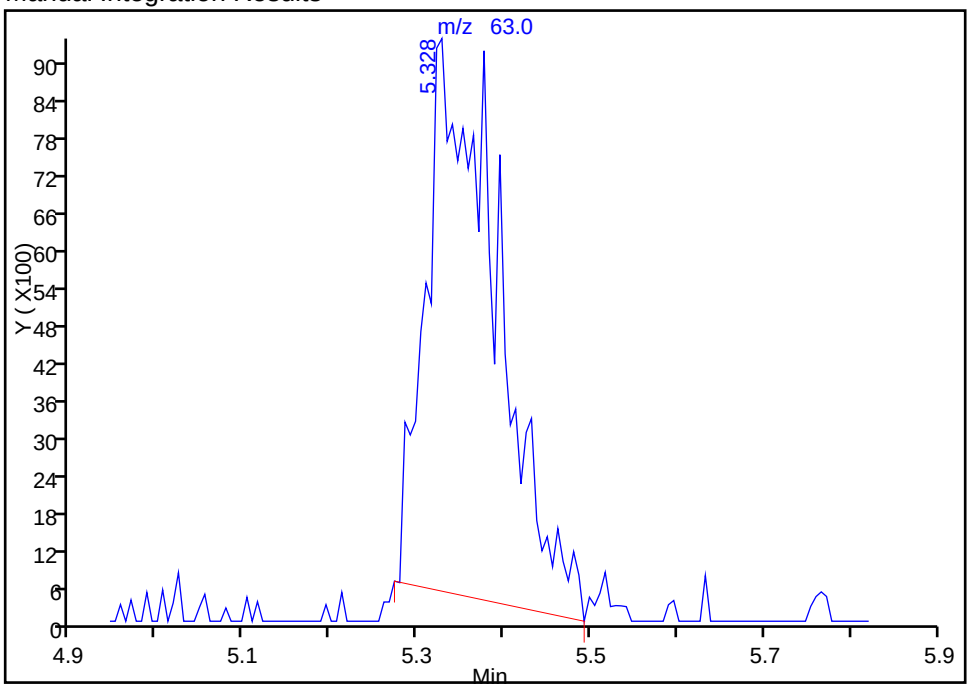
Not Detected
Expected RT: 5.33

Processing Integration Results



Manual Integration Results

RT: 5.33
Area: 51559
Amount: 20.627467
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

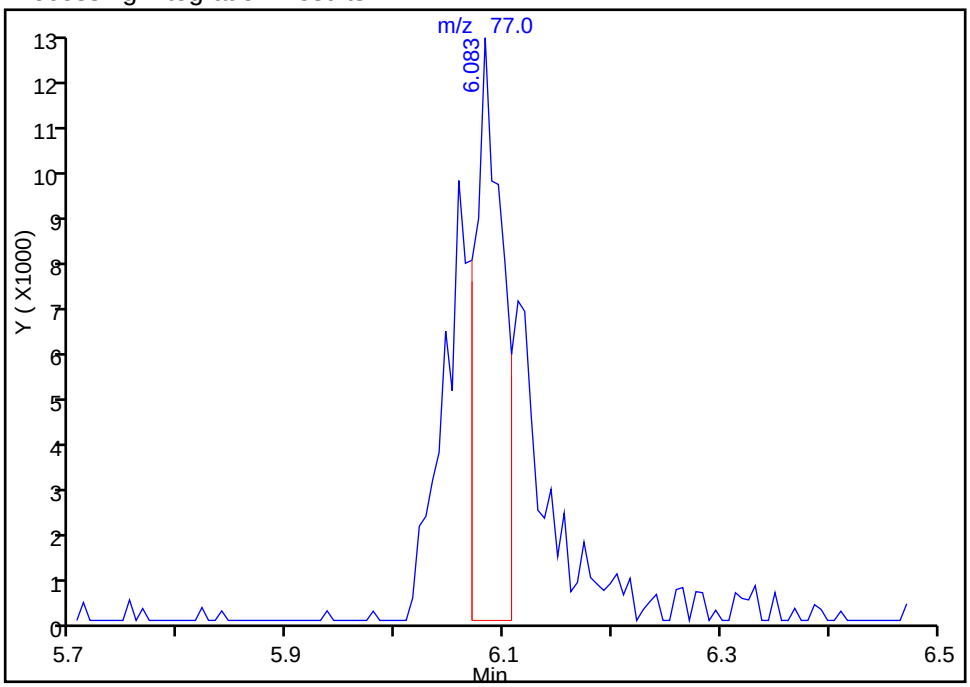
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

44 2,2-Dichloropropane, CAS: 594-20-7

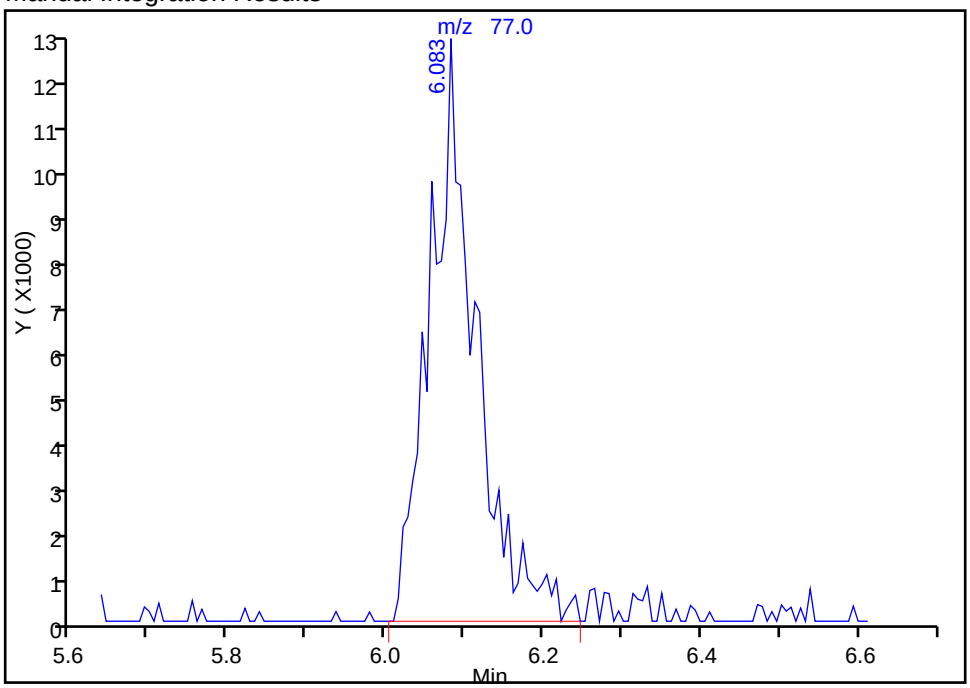
Processing Integration Results

RT: 6.08
Area: 22544
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 6.08
Area: 51484
Amount: 24.654531
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

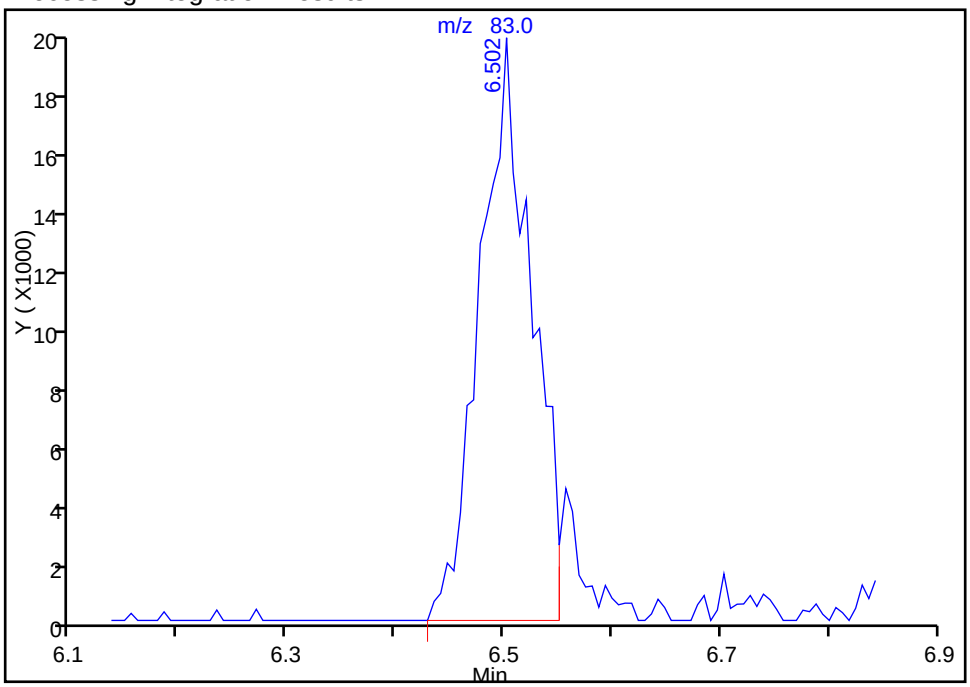
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

52 Chloroform, CAS: 67-66-3

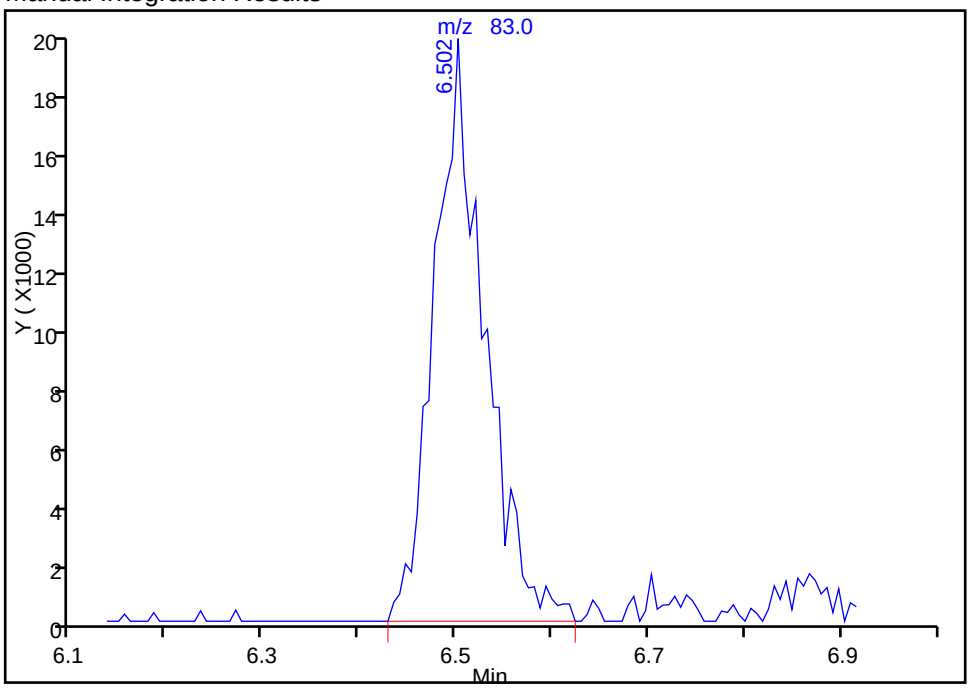
Processing Integration Results

RT: 6.50
Area: 65001
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 6.50
Area: 70828
Amount: 25.162519
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

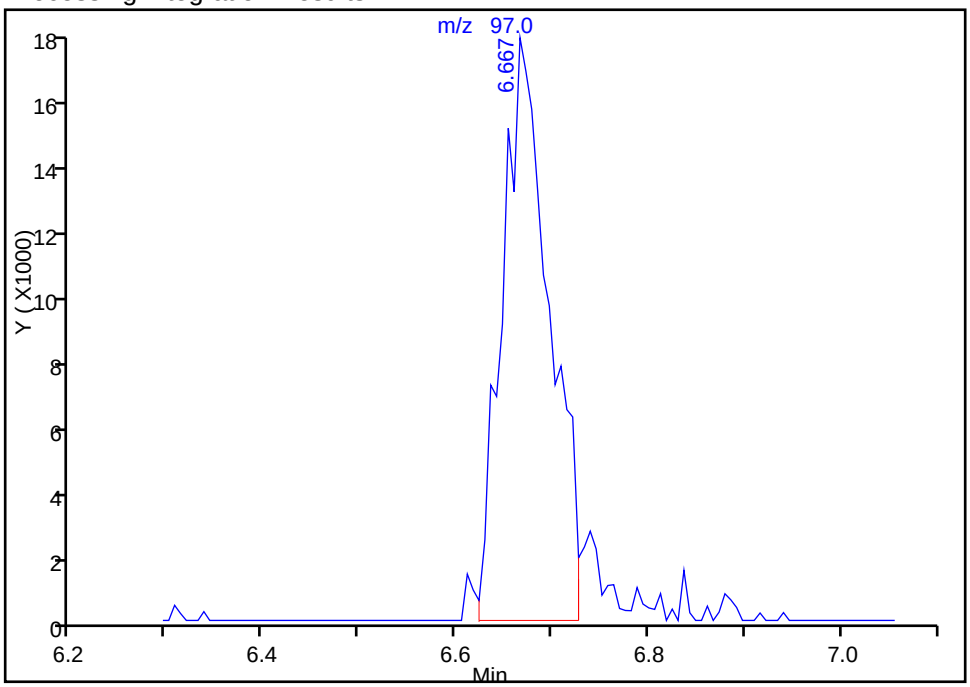
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D
Injection Date: 30-Mar-2015 10:57:30 Instrument ID: CHHP7
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

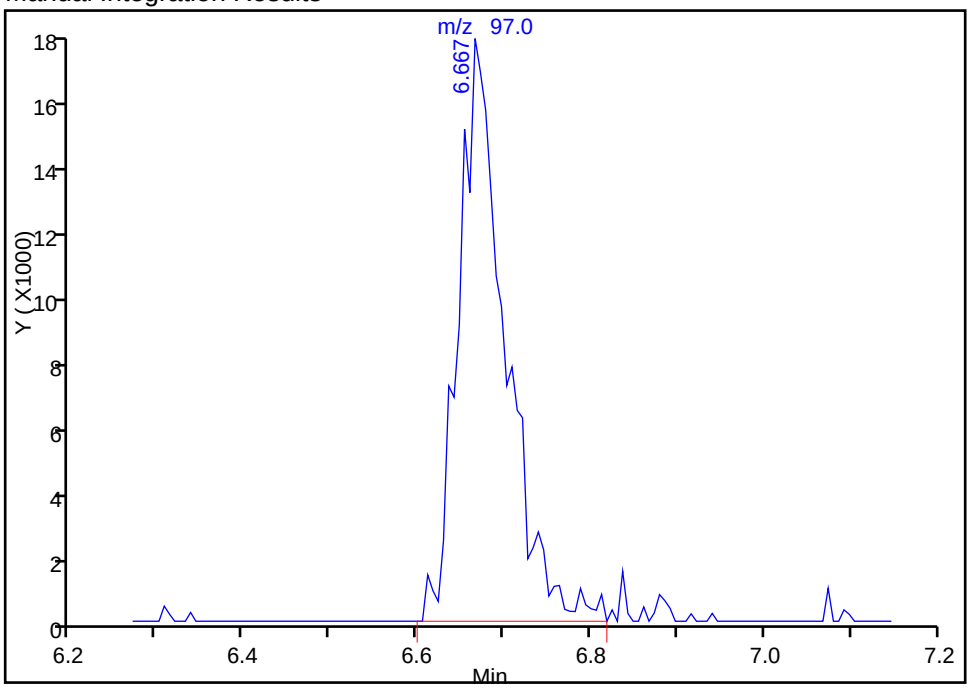
Processing Integration Results

RT: 6.67
Area: 60310
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 6.67
Area: 66238
Amount: 25.914032
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

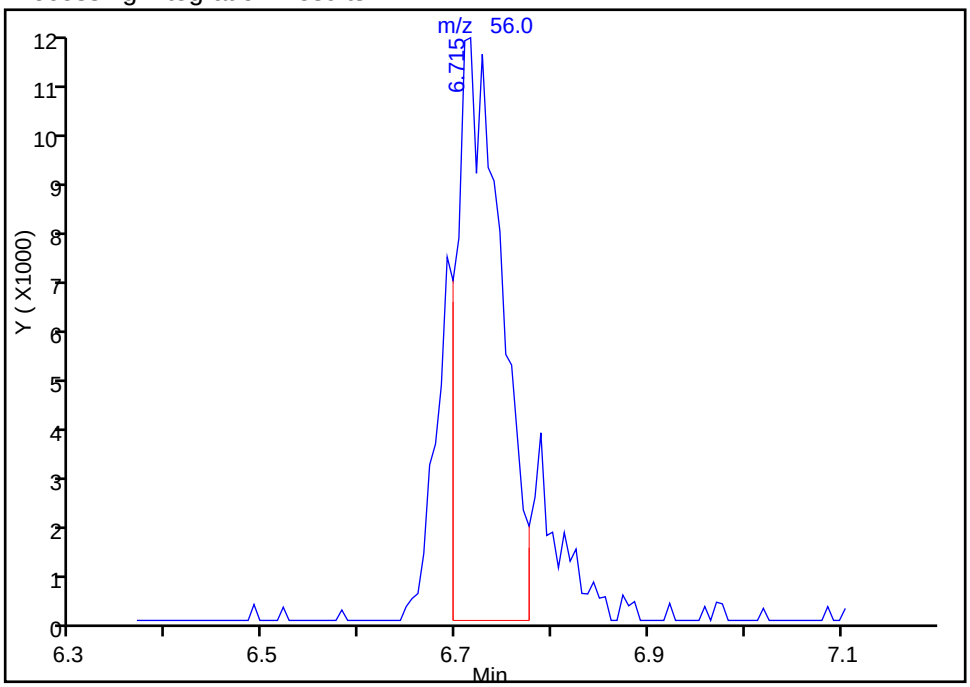
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

54 Cyclohexane, CAS: 110-82-7

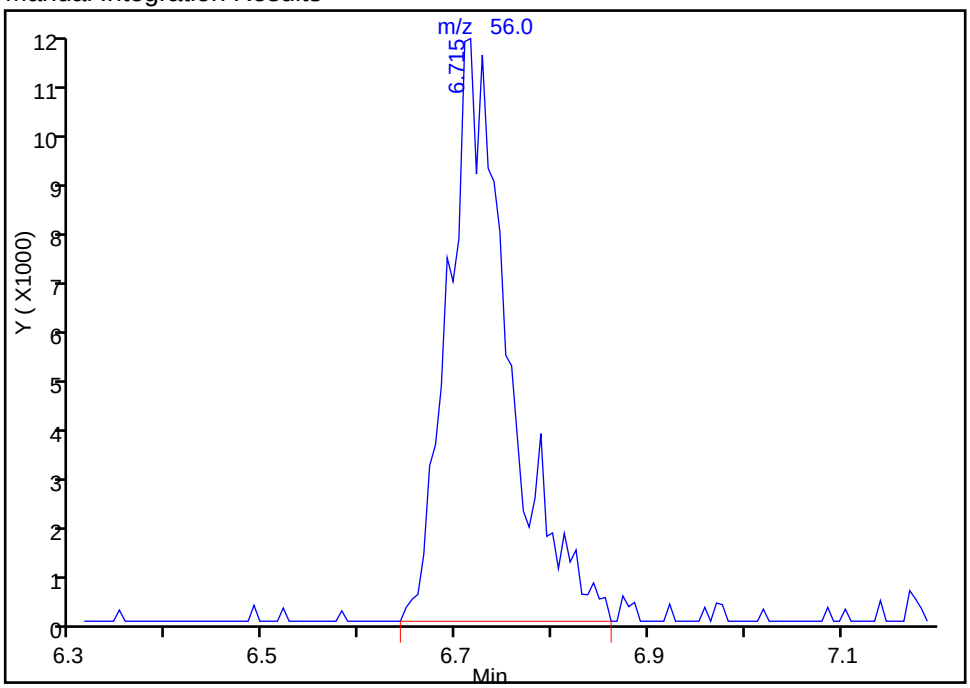
Processing Integration Results

RT: 6.72
Area: 35785
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 6.72
Area: 49523
Amount: 27.461349
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

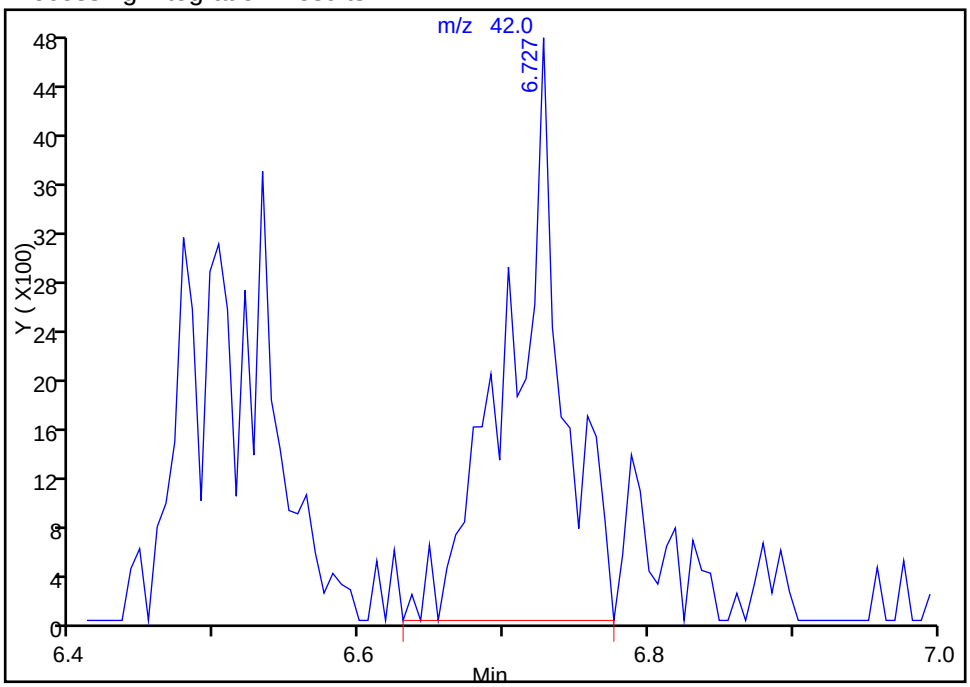
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

51 Tetrahydrofuran, CAS: 109-99-9

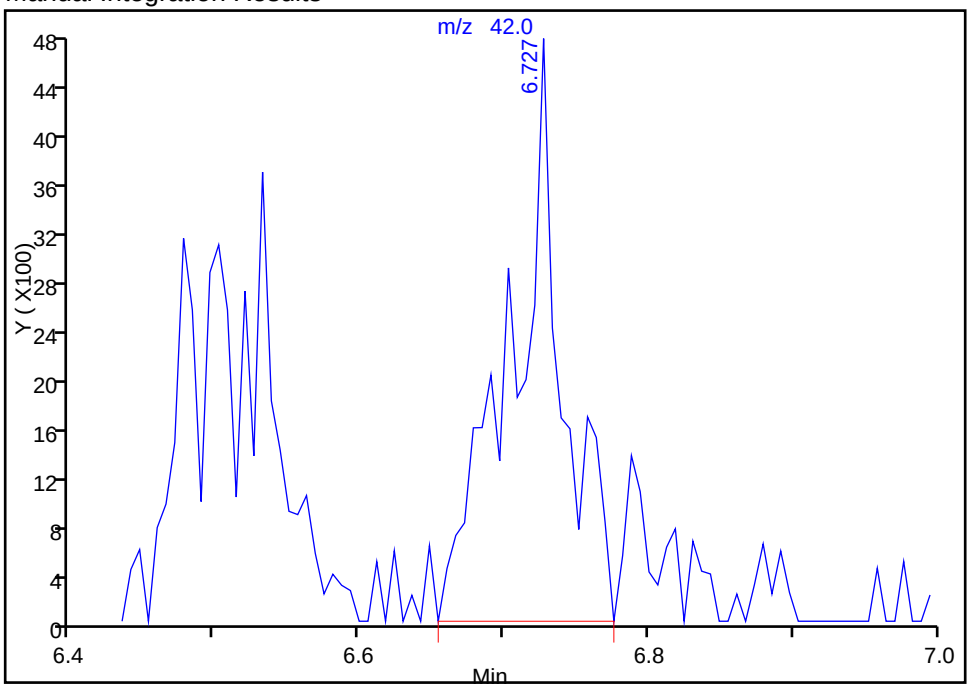
Processing Integration Results

RT: 6.73
Area: 12247
Amount: 40.000000
Amount Units: ng



Manual Integration Results

RT: 6.73
Area: 11945
Amount: 47.579118
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

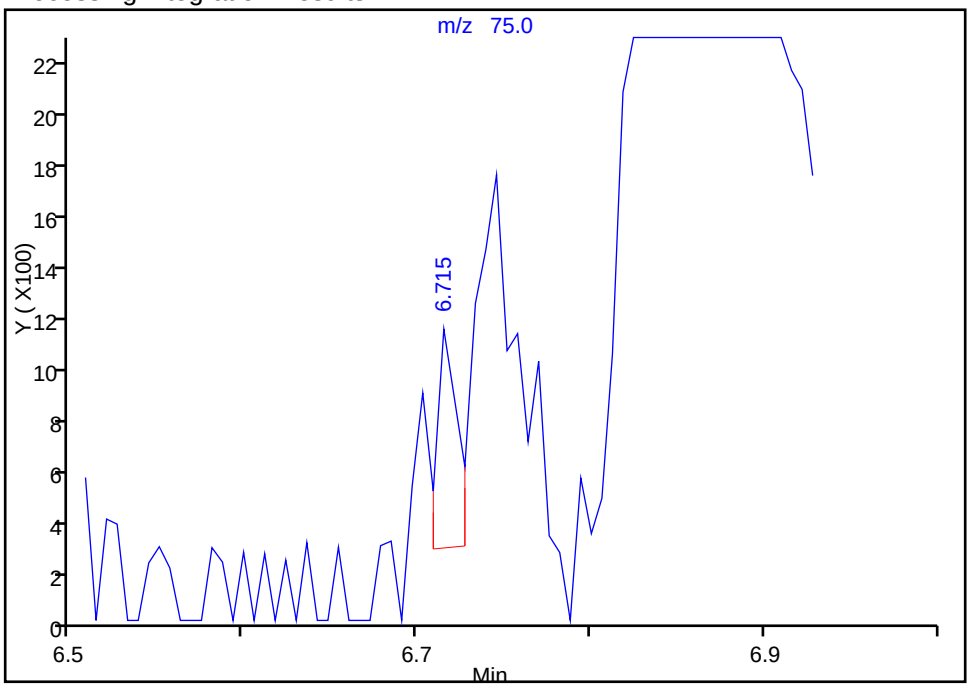
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

55 1,1-Dichloropropene, CAS: 563-58-6

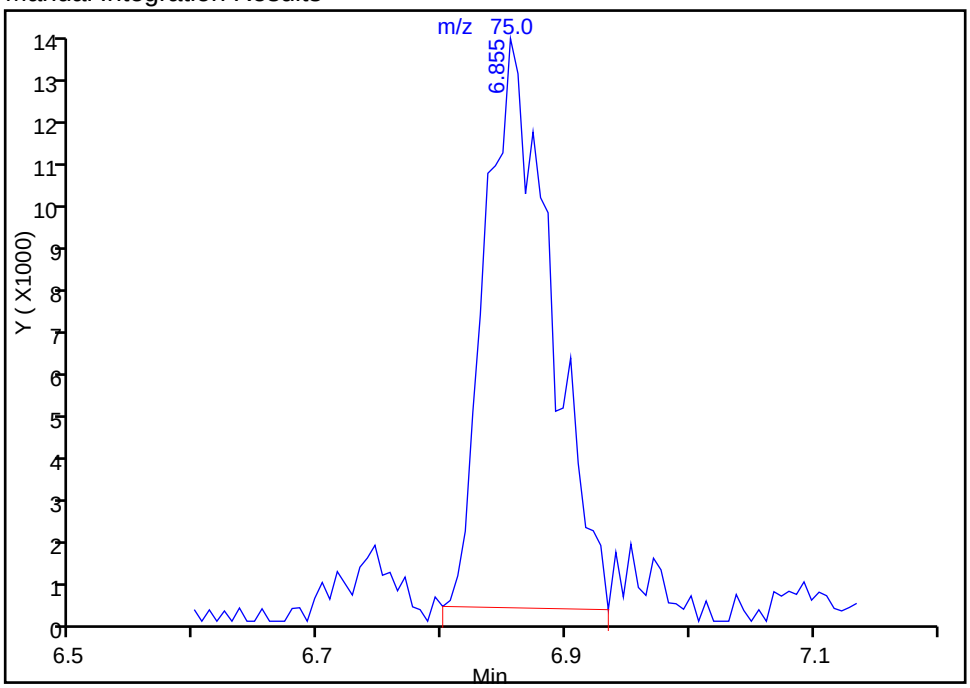
Processing Integration Results

RT: 6.72
Area: 727
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 6.86
Area: 48614
Amount: 26.337182
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

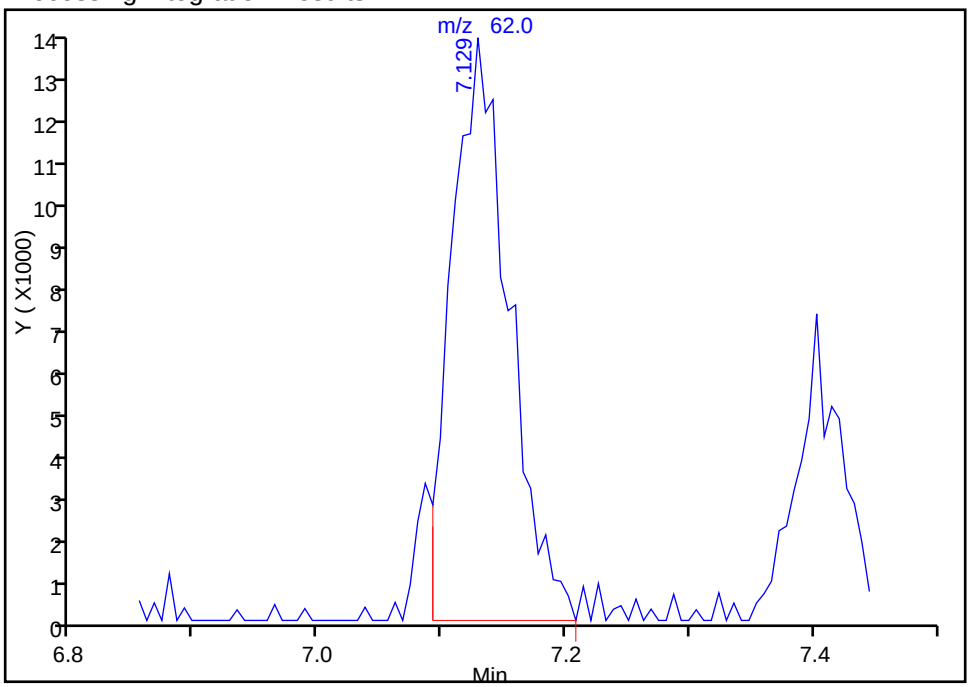
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

59 1,2-Dichloroethane, CAS: 107-06-2

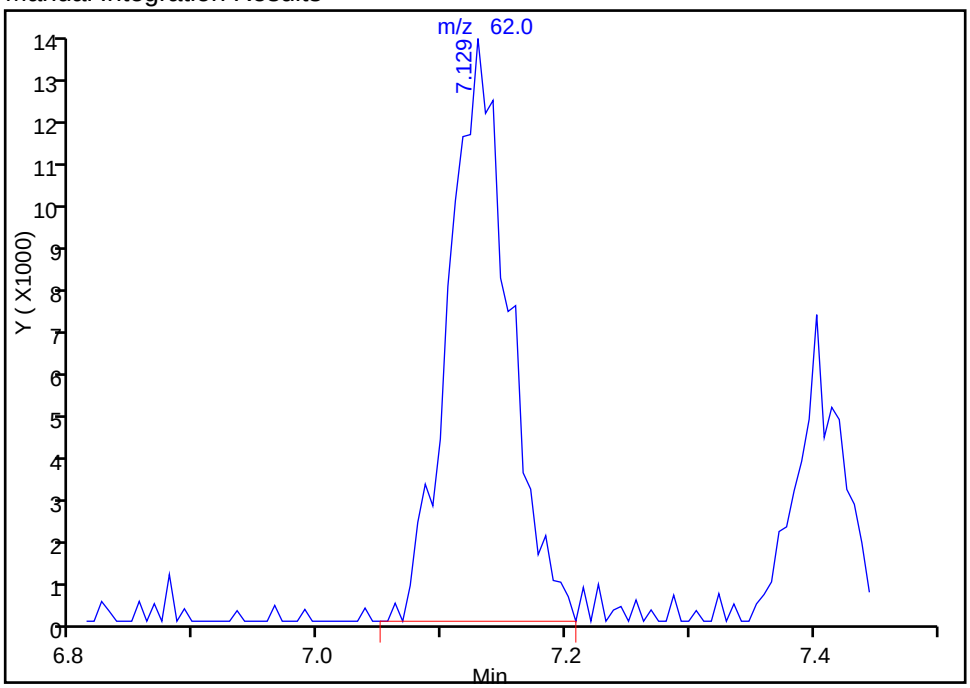
Processing Integration Results

RT: 7.13
Area: 43117
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 7.13
Area: 45545
Amount: 26.764103
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

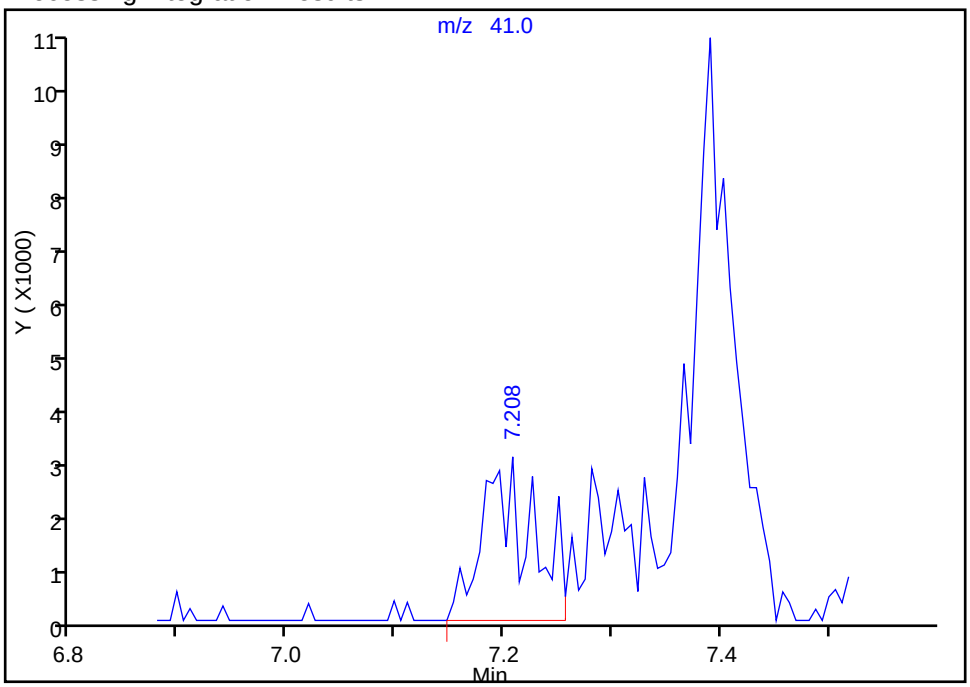
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

57 Isobutyl alcohol, CAS: 78-83-1

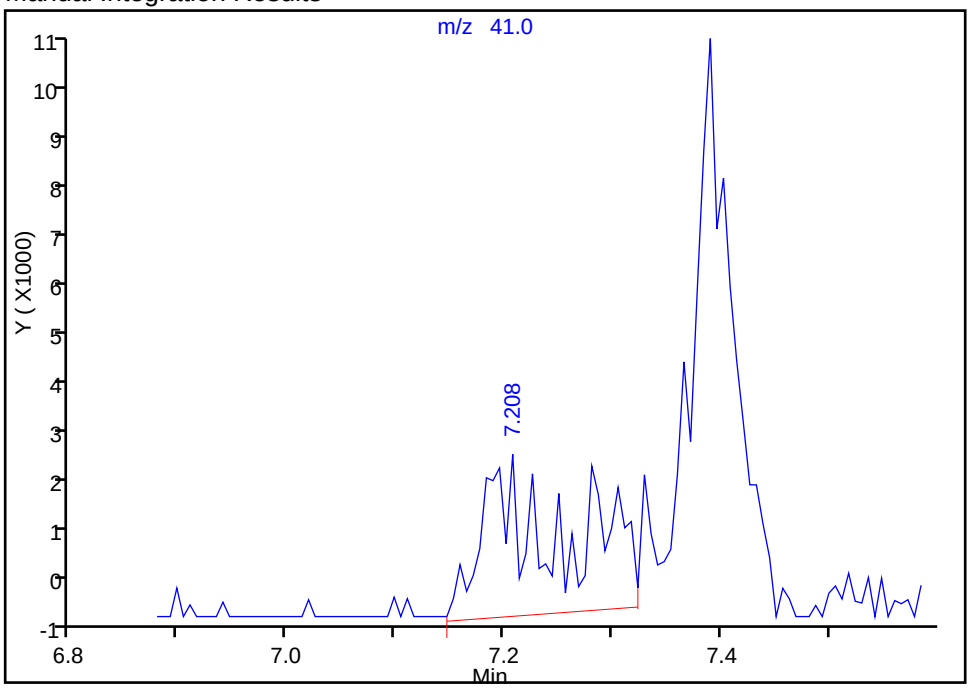
Processing Integration Results

RT: 7.21
Area: 9274
Amount: 500.0000
Amount Units: ng



Manual Integration Results

RT: 7.21
Area: 14915
Amount: 362.8929
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

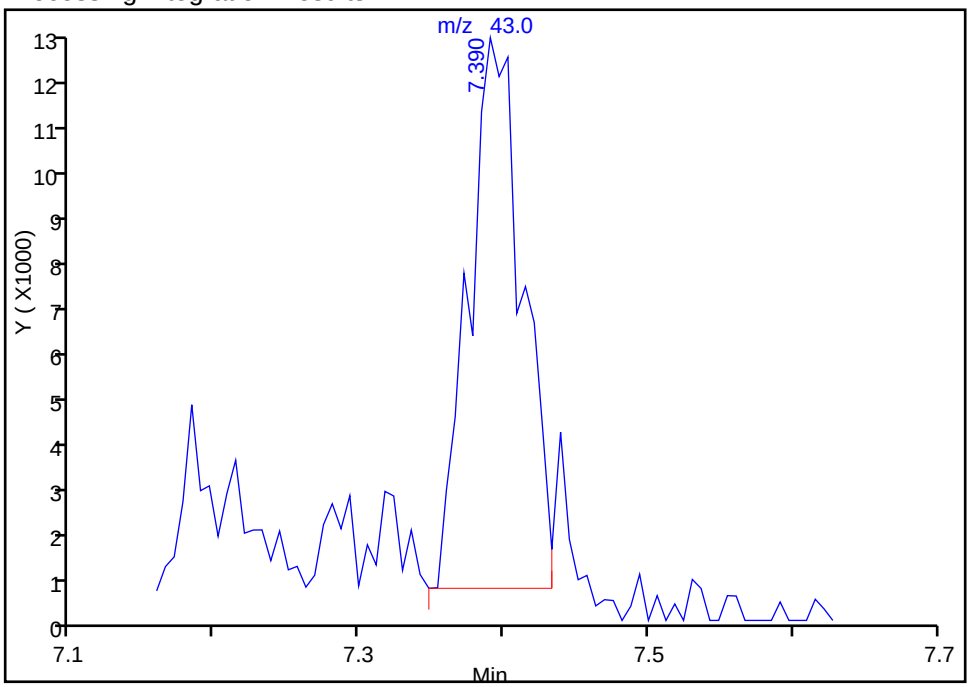
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

62 n-Heptane, CAS: 142-82-5

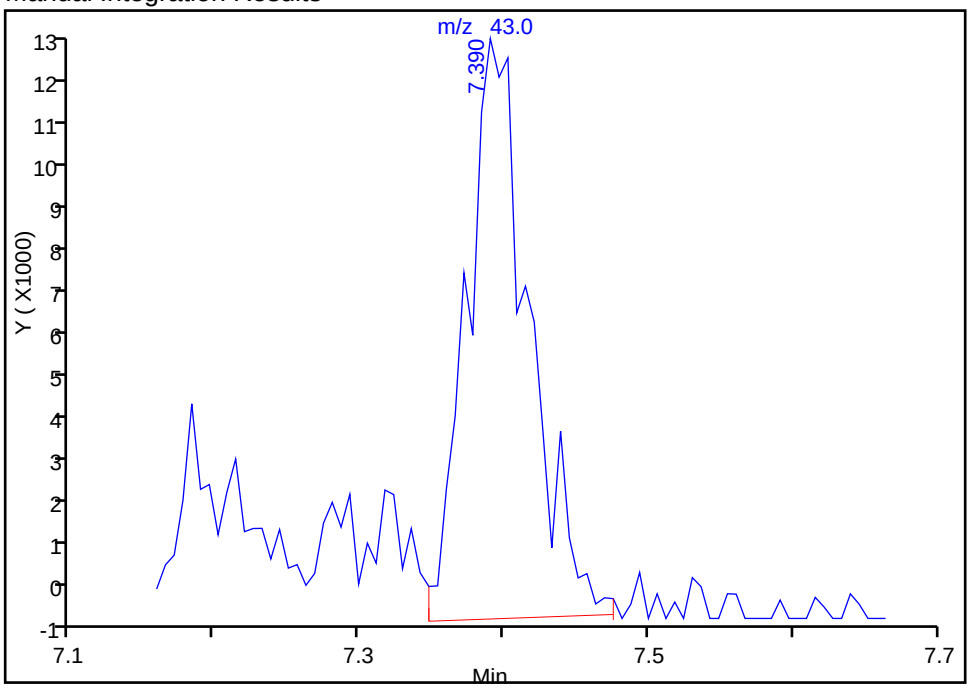
Processing Integration Results

RT: 7.39
Area: 30699
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 7.39
Area: 37541
Amount: 24.039397
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

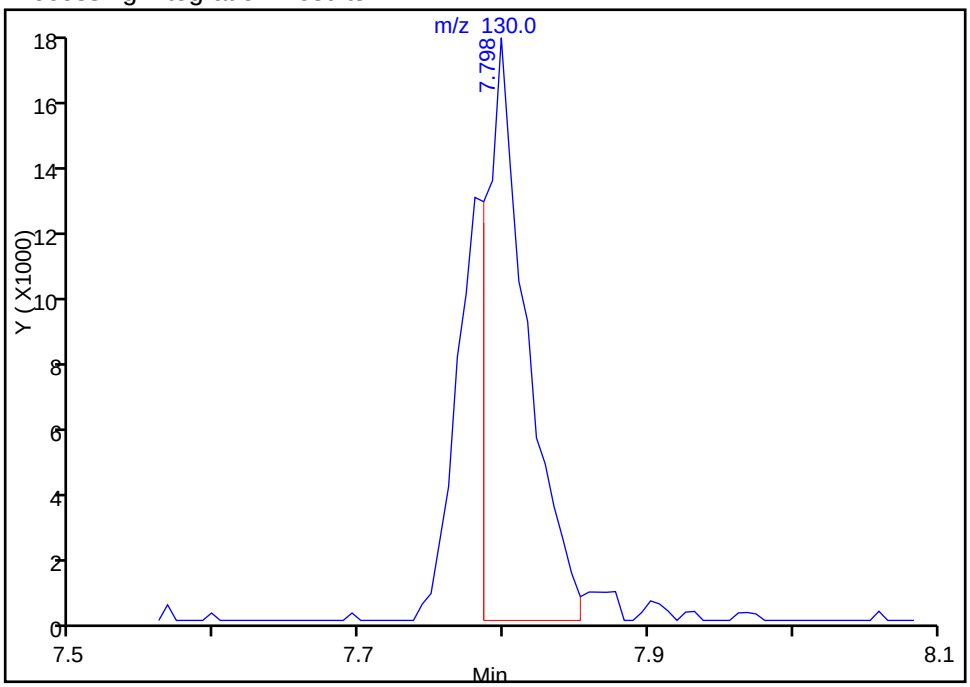
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

64 Trichloroethene, CAS: 79-01-6

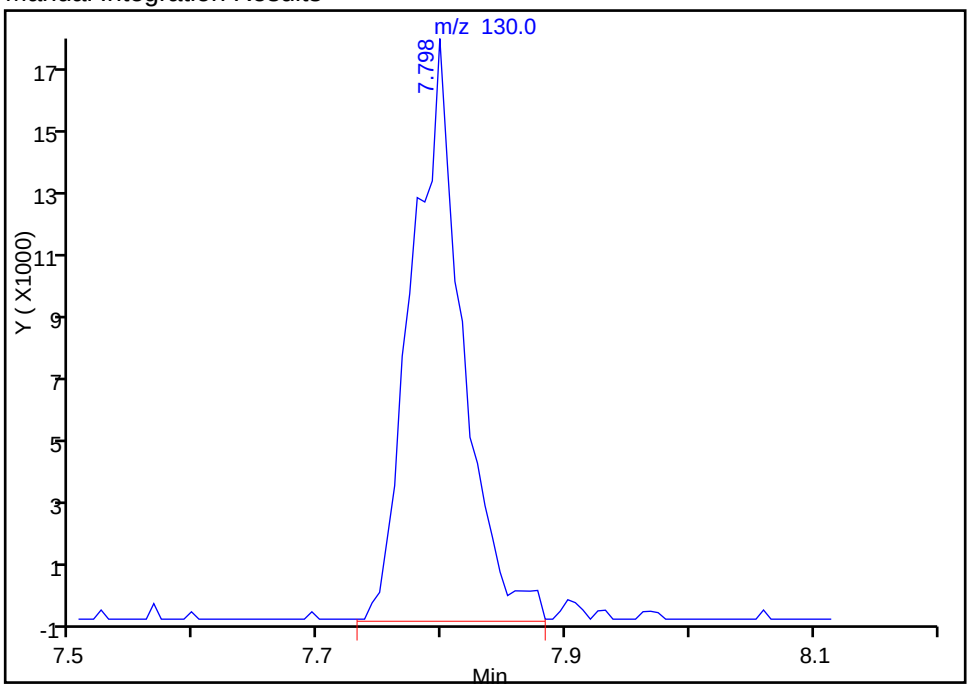
Processing Integration Results

RT: 7.80
Area: 35318
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 7.80
Area: 51491
Amount: 25.494006
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

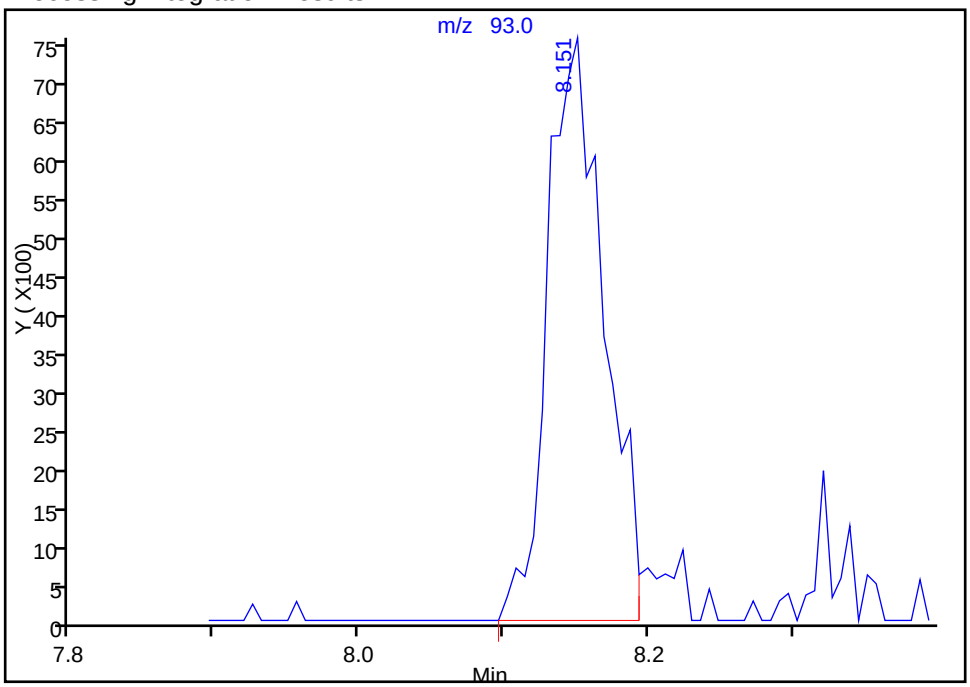
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

68 Dibromomethane, CAS: 74-95-3

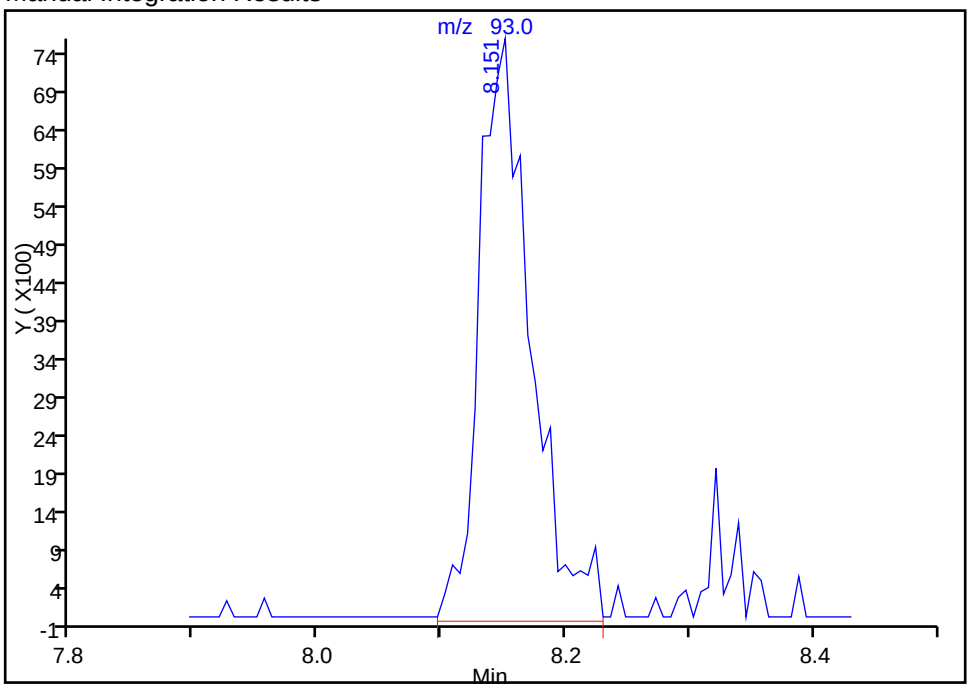
Processing Integration Results

RT: 8.15
Area: 20404
Amount: 20.000000
Amount Units: ng



Manual Integration Results

RT: 8.15
Area: 22063
Amount: 25.813221
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

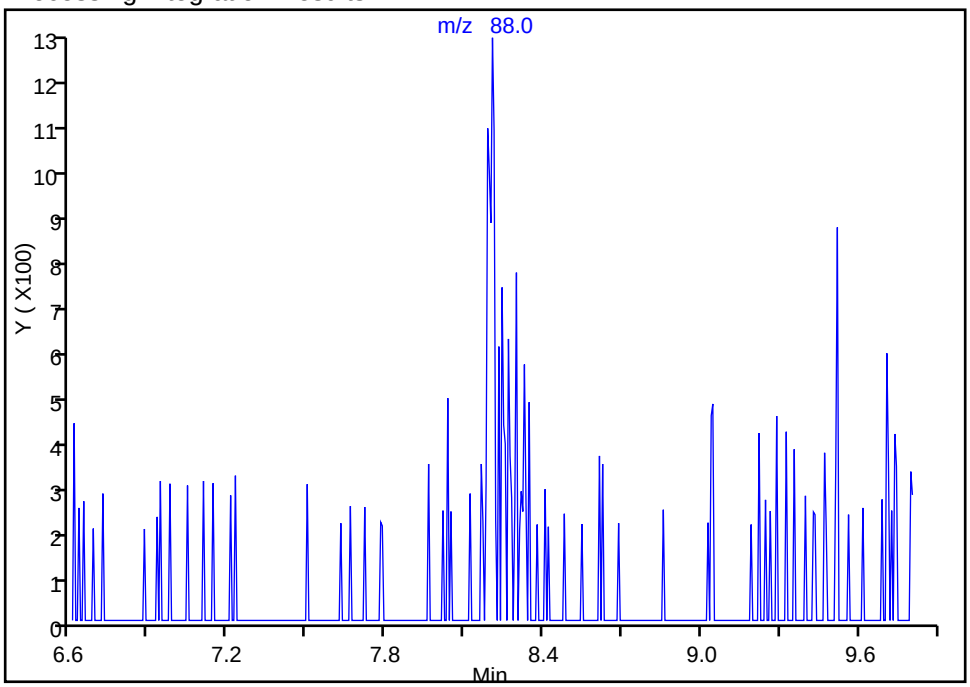
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033003.D				
Injection Date:	30-Mar-2015 10:57:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

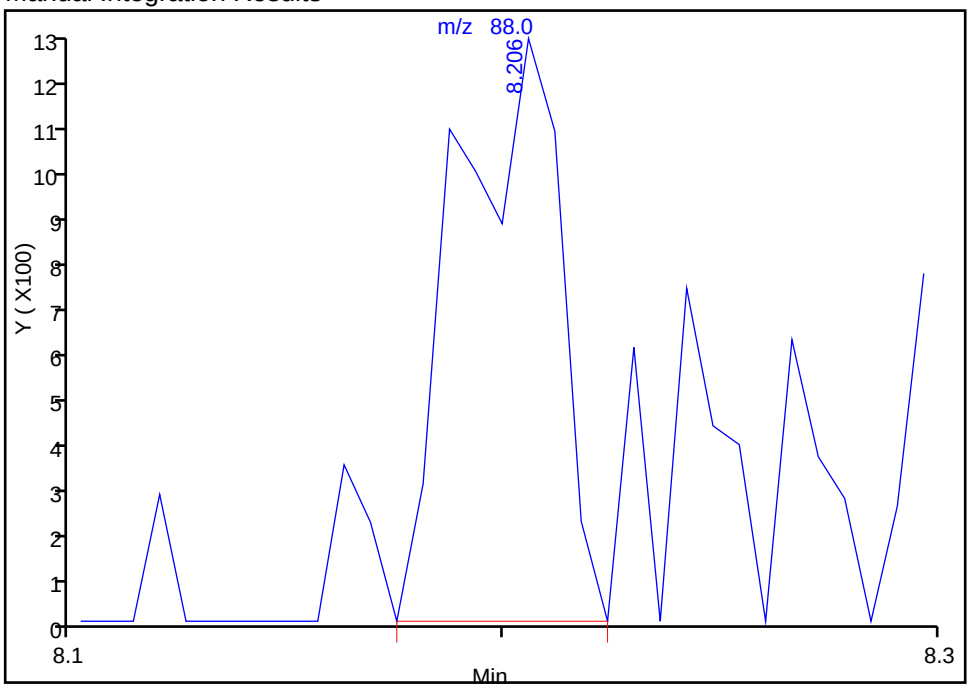
Not Detected
Expected RT: 8.21

Processing Integration Results



Manual Integration Results

RT: 8.21
Area: 2158
Amount: 269.0070
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 11:35:43
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Mar-2015 11:28:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0006234-004
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub1

Method: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:54:17 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 30-Mar-2015 12:11:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	5.061	5.024	0.037	92	320581	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.403	7.396	0.007	99	1077871	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.469	10.462	0.007	84	286591	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.792	-0.005	93	443603	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.685	6.678	0.007	79	182892	100.0	106.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.038	7.037	0.001	93	170431	100.0	104.0	
$ 7 Toluene-d8 (Surr)	98	9.034	9.033	0.001	93	571452	100.0	134.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.637	11.636	0.001	92	227038	100.0	113.4	
11 Dichlorodifluoromethane	85	1.928	1.939	-0.011	61	202683	100.0	101.5	
12 Chloromethane	50	2.013	2.018	-0.005	86	236017	100.0	108.4	
14 Butadiene	39	2.202	2.176	0.026	90	184180	100.0	102.9	M
13 Vinyl chloride	62	2.202	2.225	-0.023	83	183450	100.0	108.2	
15 Bromomethane	94	2.542	2.499	0.043	86	150507	100.0	110.2	
16 Chloroethane	64	2.628	2.639	-0.011	72	150067	100.0	109.7	
17 Dichlorofluoromethane	67	2.871	2.882	-0.011	93	392557	100.0	107.9	
18 Trichlorofluoromethane	101	2.944	2.913	0.031	90	405833	100.0	106.0	
20 Ethyl ether	59	3.309	3.314	-0.005	80	129633	100.0	106.7	
22 1,1-Dichloroethene	96	3.485	3.460	0.025	93	151987	100.0	105.0	
21 Acrolein	56	3.552	3.497	0.055	44	43044	500.0	513.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.571	3.563	0.008	90	183780	100.0	109.2	
25 Iodomethane	142	3.704	3.716	-0.012	95	316113	100.0	104.4	
26 Carbon disulfide	76	3.753	3.764	-0.011	96	463969	100.0	106.7	M
24 Acetone	43	3.869	3.855	0.014	27	75446	200.0	187.7	M
28 3-Chloro-1-propene	76	4.106	4.087	0.019	1	111987	100.0	104.9	M
31 Methylene Chloride	84	4.301	4.294	0.007	75	163557	100.0	105.3	
30 Methyl acetate	43	4.331	4.324	0.007	99	375826	500.0	523.3	
34 trans-1,2-Dichloroethene	96	4.726	4.725	0.001	94	194386	100.0	108.3	
32 2-Methyl-2-propanol	59	4.732	4.744	-0.012	33	9778	1000.0	1483.1	M
33 Acrylonitrile	53	4.824	4.829	-0.005	50	318922	1000.0	1110.2	M
35 Methyl tert-butyl ether	73	4.909	4.890	0.019	94	384502	100.0	108.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.110	5.090	0.020	93	197721	100.0	105.3	
38 Vinyl acetate	43	5.104	5.115	-0.011	87	141126	100.0	99.7	
37 1,1-Dichloroethane	63	5.335	5.334	0.001	96	284258	100.0	108.0	
44 2,2-Dichloropropane	77	6.083	6.076	0.007	81	243195	100.0	110.6	
45 cis-1,2-Dichloroethene	96	6.095	6.094	0.001	80	185651	100.0	104.2	
46 2-Butanone (MEK)	43	6.229	6.216	0.013	98	101832	200.0	210.8	
49 Chlorobromomethane	128	6.363	6.380	-0.017	82	106979	100.0	104.2	
52 Chloroform	83	6.509	6.496	0.013	1	324491	100.0	109.5	M
53 1,1,1-Trichloroethane	97	6.679	6.660	0.019	95	304449	100.0	113.1	
51 Tetrahydrofuran	42	6.697	6.709	-0.012	45	56328	200.0	213.1	
54 Cyclohexane	56	6.704	6.709	-0.005	72	204193	100.0	107.5	
56 Carbon tetrachloride	117	6.850	6.849	0.001	95	301680	100.0	111.1	
55 1,1-Dichloropropene	75	6.850	6.855	-0.005	88	222122	100.0	114.3	
58 Benzene	78	7.087	7.086	0.001	95	604063	100.0	113.9	
59 1,2-Dichloroethane	62	7.123	7.122	0.001	96	193915	100.0	108.2	
62 n-Heptane	43	7.391	7.390	0.001	84	172370	100.0	104.8	
57 Isobutyl alcohol	41	7.397	7.396	0.001	79	120699	2500.0	2789.2	
64 Trichloroethene	130	7.786	7.785	0.001	93	228617	100.0	107.5	
66 Methylcyclohexane	83	7.981	7.980	0.001	84	302516	100.0	115.7	
67 1,2-Dichloropropane	63	8.024	8.029	-0.005	81	129781	100.0	107.4	
68 Dibromomethane	93	8.145	8.144	0.001	93	92763	100.0	103.1	
70 1,4-Dioxane	88	8.206	8.205	0.001	41	18551	2000.0	2196.4	M
71 Dichlorobromomethane	83	8.322	8.315	0.007	98	234170	100.0	104.5	
74 cis-1,3-Dichloropropene	75	8.766	8.771	-0.005	94	250427	100.0	107.8	
75 4-Methyl-2-pentanone (MIBK	43	8.948	8.947	0.001	96	198312	200.0	236.8	
76 Toluene	91	9.100	9.099	0.001	99	620797	100.0	108.8	
77 trans-1,3-Dichloropropene	75	9.326	9.325	0.001	94	200178	100.0	111.1	
78 Ethyl methacrylate	69	9.429	9.428	0.001	87	133131	100.0	111.1	
79 1,1,2-Trichloroethane	97	9.514	9.513	0.001	89	122370	100.0	119.0	
80 Tetrachloroethene	164	9.642	9.641	0.001	91	166044	100.0	111.2	
81 1,3-Dichloropropane	76	9.672	9.671	0.001	91	180327	100.0	118.6	
82 2-Hexanone	43	9.770	9.769	0.001	96	121993	200.0	225.8	
84 Chlorodibromomethane	129	9.903	9.896	0.007	86	212583	100.0	120.2	
85 Ethylene Dibromide	107	10.007	10.006	0.001	98	131988	100.0	113.3	
87 Chlorobenzene	112	10.500	10.499	0.001	95	428641	100.0	117.3	
89 1,1,1,2-Tetrachloroethane	131	10.579	10.578	0.001	93	201326	100.0	114.0	
90 Ethylbenzene	106	10.609	10.602	0.007	98	223898	100.0	107.9	
91 m-Xylene & p-Xylene	106	10.725	10.718	0.007	98	306490	100.0	109.5	
92 o-Xylene	106	11.114	11.113	0.001	96	307714	100.0	109.5	
93 Styrene	104	11.126	11.125	0.001	92	473776	100.0	109.2	
94 Bromoform	173	11.315	11.314	0.001	94	108786	100.0	108.6	
97 Isopropylbenzene	105	11.479	11.478	0.001	95	851551	100.0	110.5	
99 1,1,2,2-Tetrachloroethane	83	11.777	11.776	0.001	96	130862	100.0	121.2	
100 Bromobenzene	156	11.789	11.788	0.001	86	217052	100.0	114.2	
101 1,2,3-Trichloropropane	110	11.826	11.819	0.007	85	43419	100.0	102.0	
102 trans-1,4-Dichloro-2-buten	53	11.832	11.831	0.001	68	25315	100.0	95.0	
103 N-Propylbenzene	120	11.893	11.892	0.001	97	254930	100.0	109.3	
104 2-Chlorotoluene	126	11.978	11.977	0.001	96	241717	100.0	114.1	
106 1,3,5-Trimethylbenzene	105	12.063	12.062	0.001	97	678088	100.0	104.9	
107 4-Chlorotoluene	126	12.087	12.086	0.001	96	236378	100.0	116.4	
108 tert-Butylbenzene	119	12.392	12.391	0.001	91	756877	100.0	110.5	
110 1,2,4-Trimethylbenzene	105	12.440	12.439	0.001	96	682185	100.0	104.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.611	12.610	0.001	94	908560	100.0	106.3	
113 1,3-Dichlorobenzene	146	12.726	12.725	0.001	97	434056	100.0	110.0	
114 4-Isopropyltoluene	119	12.750	12.756	-0.006	96	822865	100.0	107.2	
115 1,4-Dichlorobenzene	146	12.817	12.816	0.001	95	400302	100.0	113.8	
120 n-Butylbenzene	91	13.164	13.163	0.001	96	672615	100.0	105.1	
121 1,2-Dichlorobenzene	146	13.189	13.188	0.000	96	359029	100.0	104.1	
122 1,2-Dibromo-3-Chloropropan	75	13.973	13.972	0.001	78	15088	100.0	91.4	
126 1,2,4-Trichlorobenzene	180	14.807	14.806	0.001	95	78248	100.0	71.6	
127 Hexachlorobutadiene	225	14.971	14.970	0.001	82	52188	100.0	79.7	
128 Naphthalene	128	15.056	15.055	0.001	95	113468	100.0	63.4	
129 1,2,3-Trichlorobenzene	180	15.306	15.305	0.001	95	38530	100.0	51.5	
S 134 1,2-Dichloroethene, Total	96				0		200.0	212.4	
S 133 Xylenes, Total	106				0		200.0	219.0	
S 135 1,3-Dichloropropene, Total	1				0		200.0	218.9	

QC Flag Legend

Review Flags

M - Manually Integrated

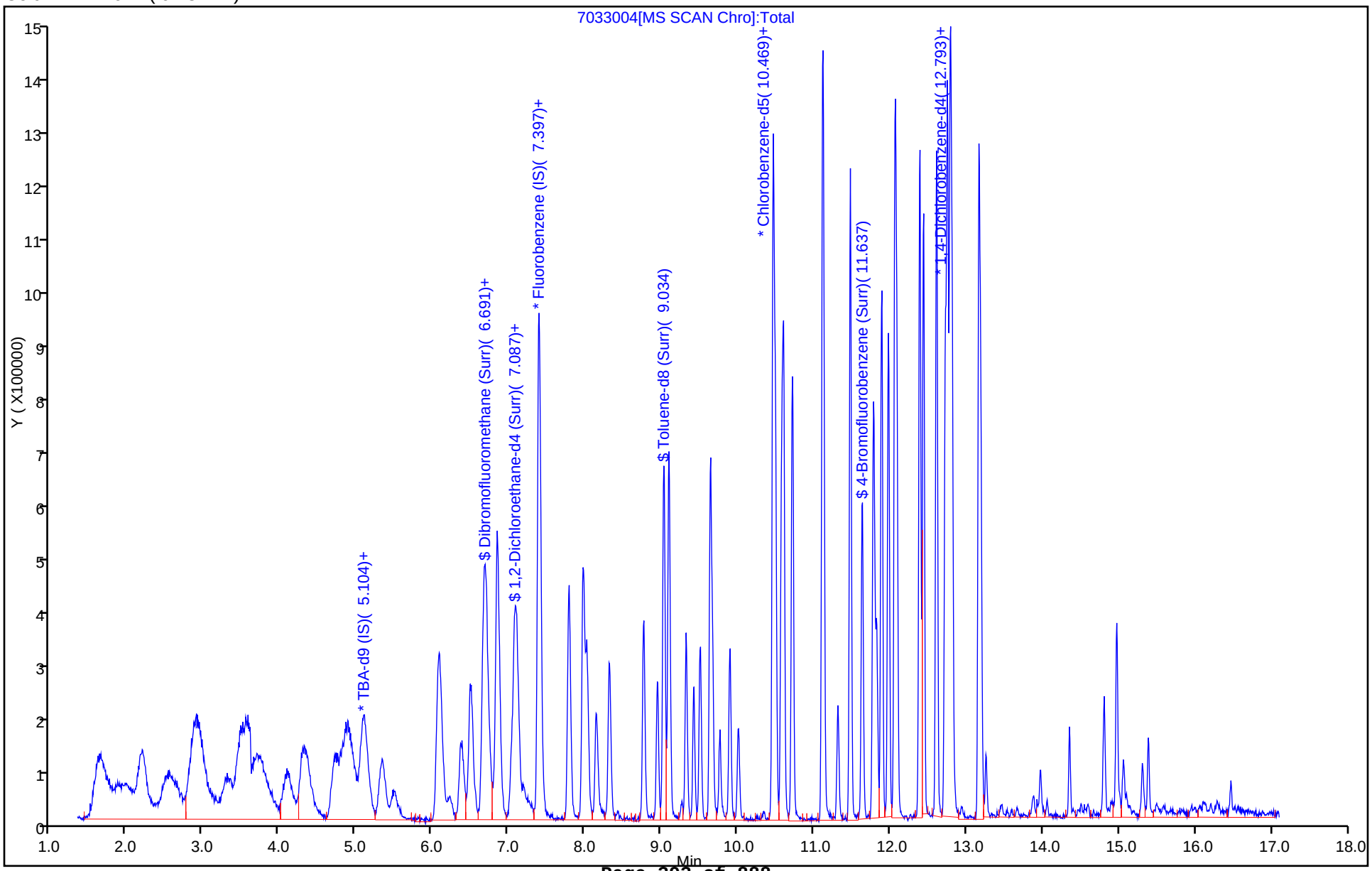
Reagents:

VOA8260SURR_00017	Amount Added:	4.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOAVAPRI_00005	Amount Added:	4.00	Units: uL
VOAACRPRI_00003	Amount Added:	20.00	Units: uL
VOA8260VOAPRI_00108	Amount Added:	4.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	4.00	Units: uL

Report Date: 31-Mar-2015 08:54:18 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D				
Injection Date:	30-Mar-2015 11:28:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column: DB-624 (0.18 mm)					



Manual Integration/User Assign Peak Report

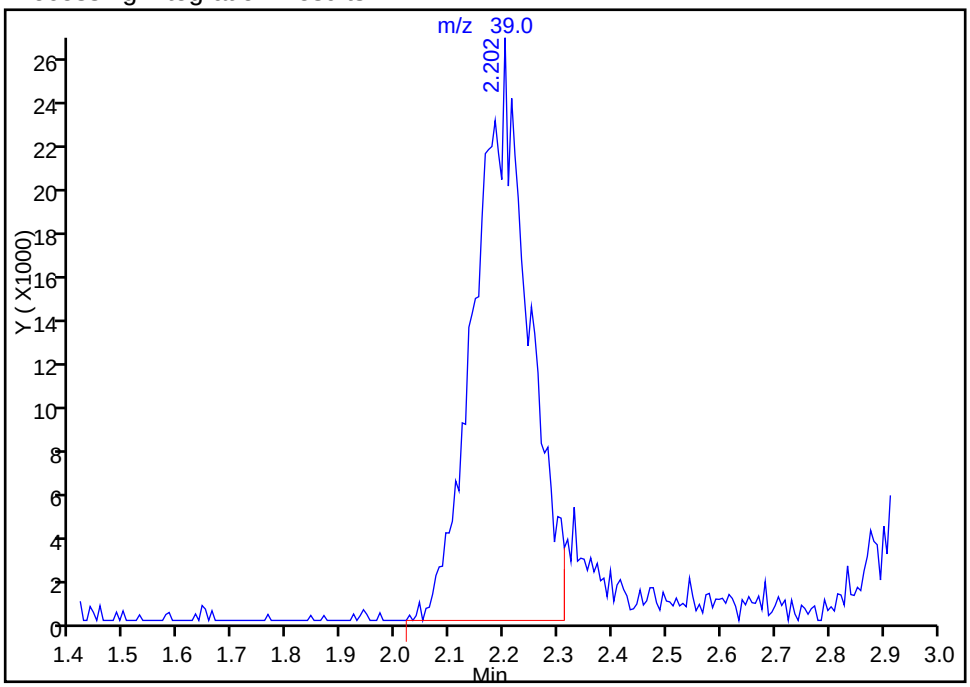
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D				
Injection Date:	30-Mar-2015 11:28:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

14 Butadiene, CAS: 106-99-0

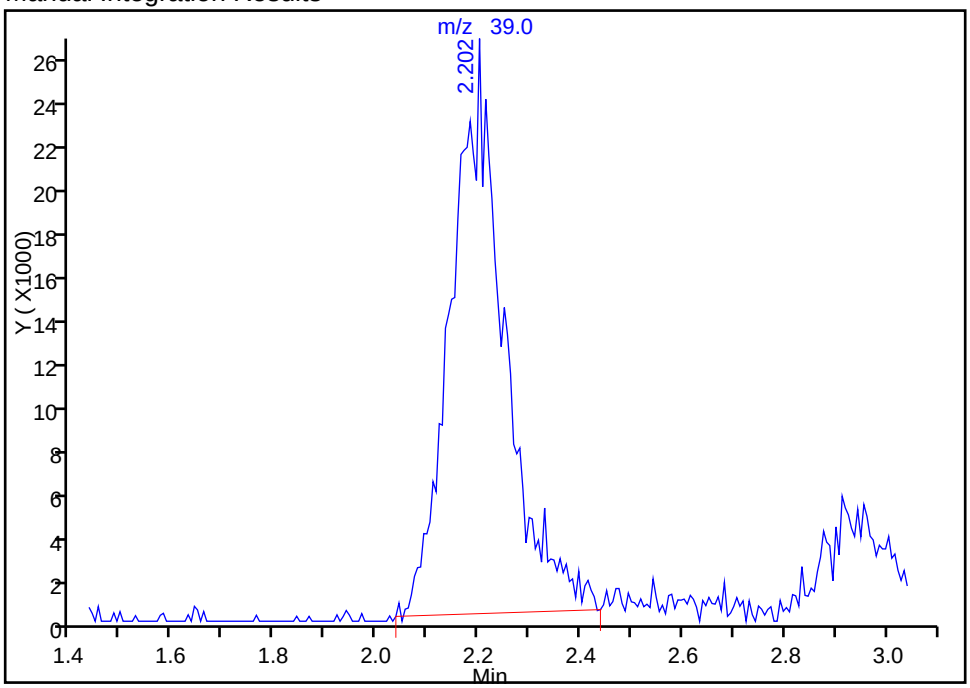
Processing Integration Results

RT: 2.20
Area: 177223
Amount: 87.235904
Amount Units: ng



Manual Integration Results

RT: 2.20
Area: 184180
Amount: 102.8902
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 12:11:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

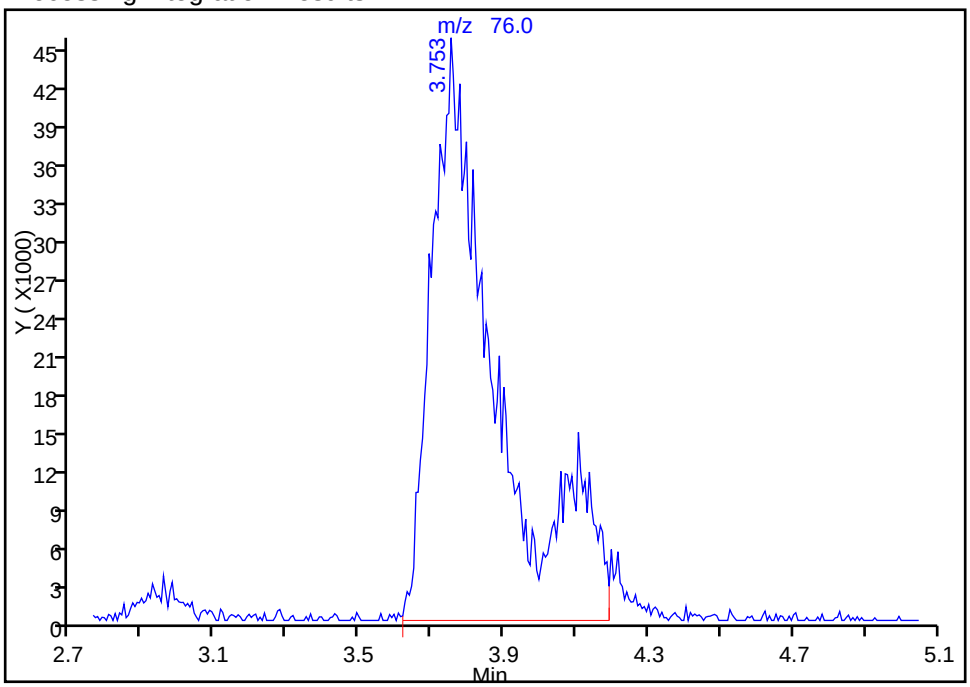
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D				
Injection Date:	30-Mar-2015 11:28:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

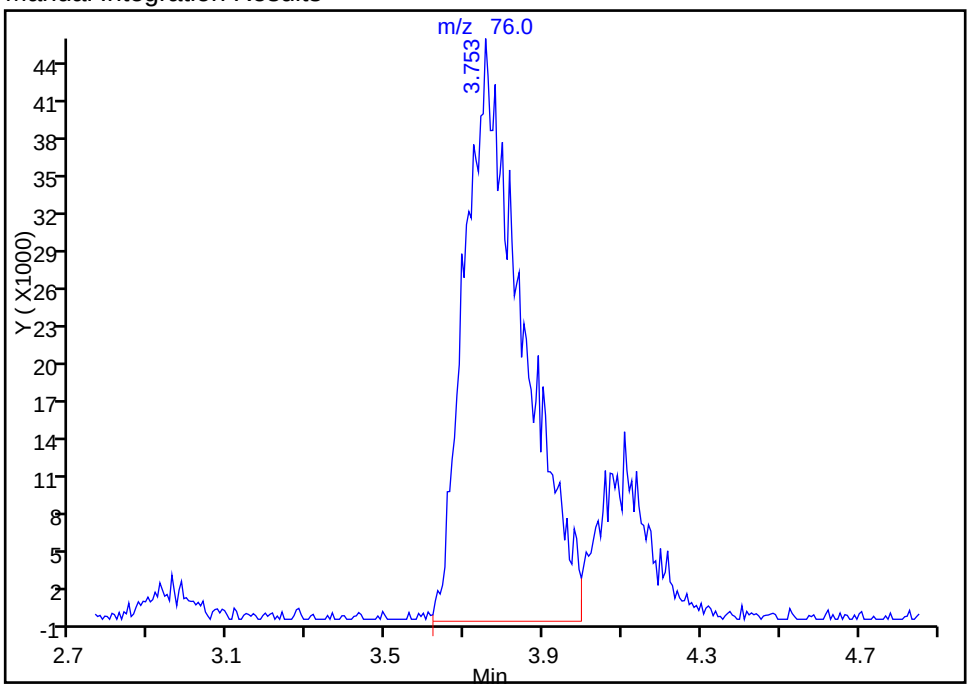
Processing Integration Results

RT: 3.75
Area: 555041
Amount: 107.0768
Amount Units: ng



Manual Integration Results

RT: 3.75
Area: 463969
Amount: 106.7401
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 12:11:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

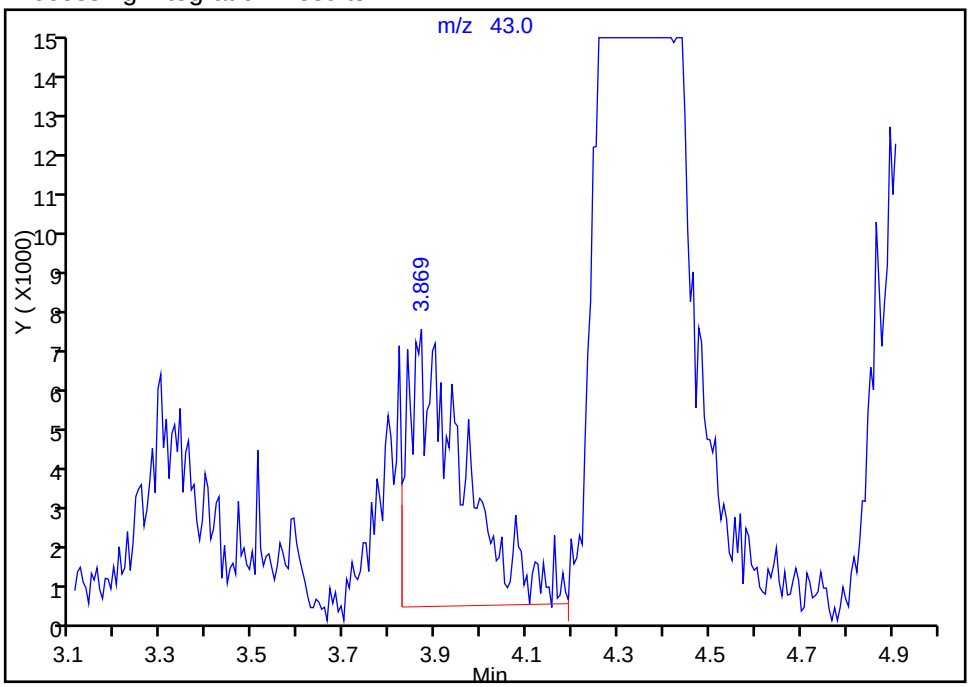
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D				
Injection Date:	30-Mar-2015 11:28:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

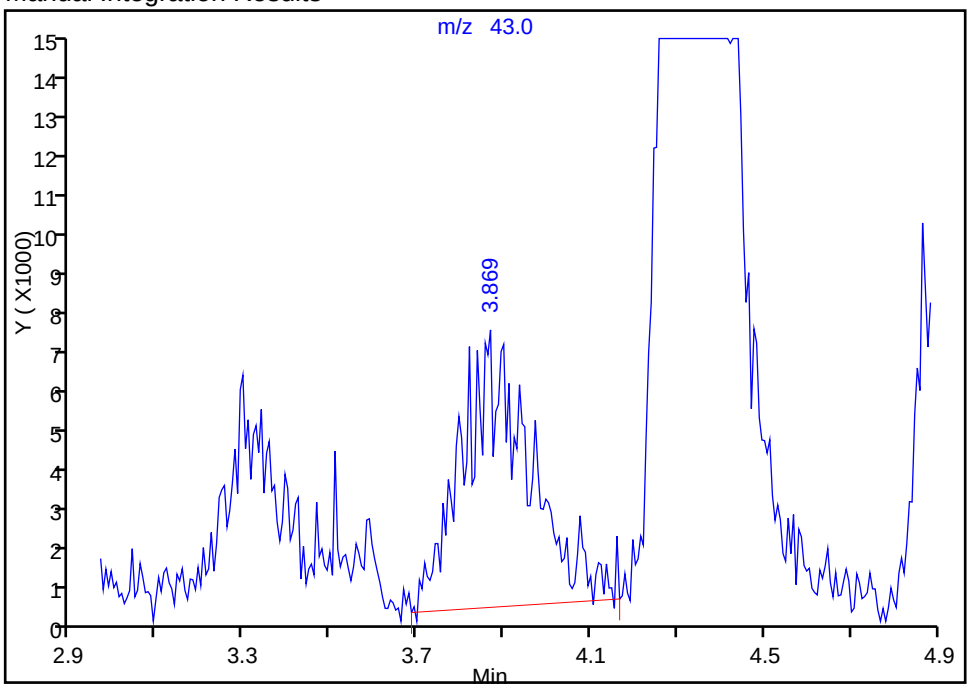
Processing Integration Results

RT: 3.87
Area: 59143
Amount: 147.9003
Amount Units: ng



Manual Integration Results

RT: 3.87
Area: 75446
Amount: 187.7476
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 12:11:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

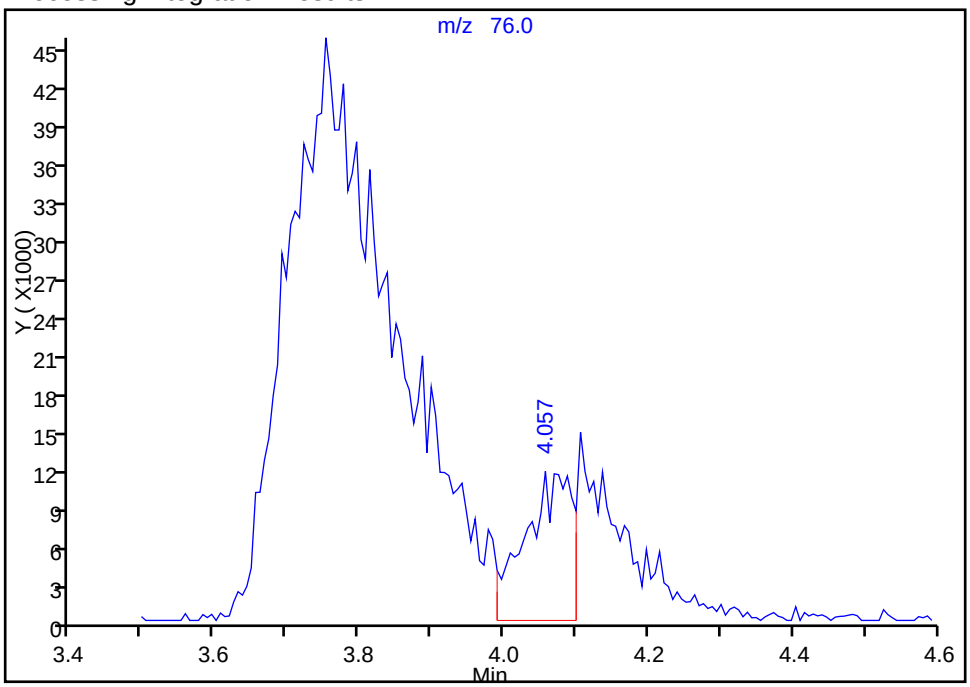
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D
Injection Date: 30-Mar-2015 11:28:30 Instrument ID: CHHP7
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

28 3-Chloro-1-propene, CAS: 107-05-1

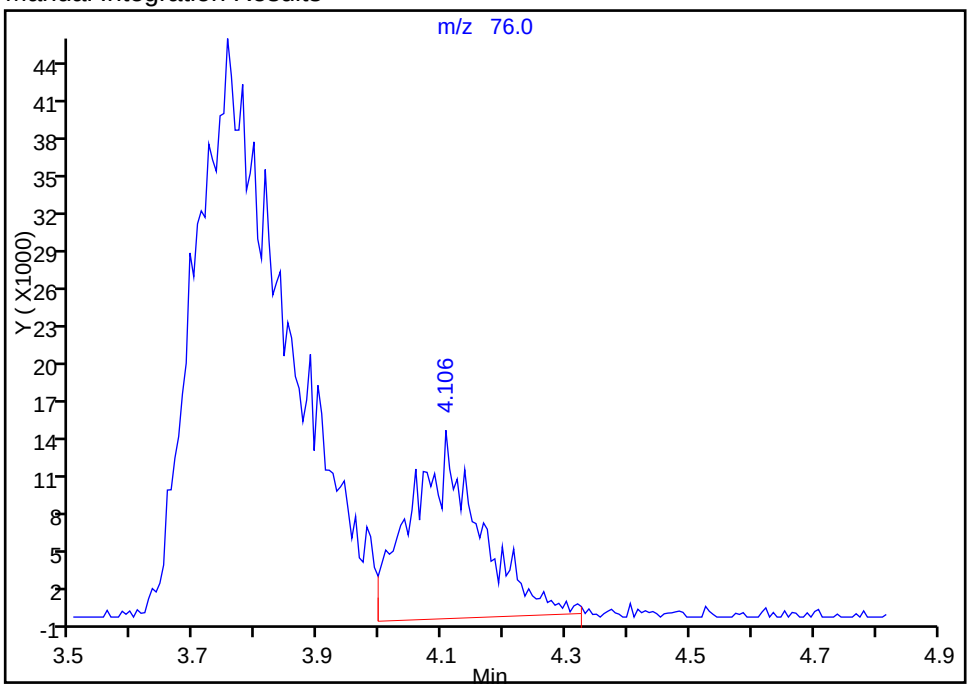
Processing Integration Results

RT: 4.06
Area: 52473
Amount: 61.091566
Amount Units: ng



Manual Integration Results

RT: 4.11
Area: 111987
Amount: 104.9107
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 12:11:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

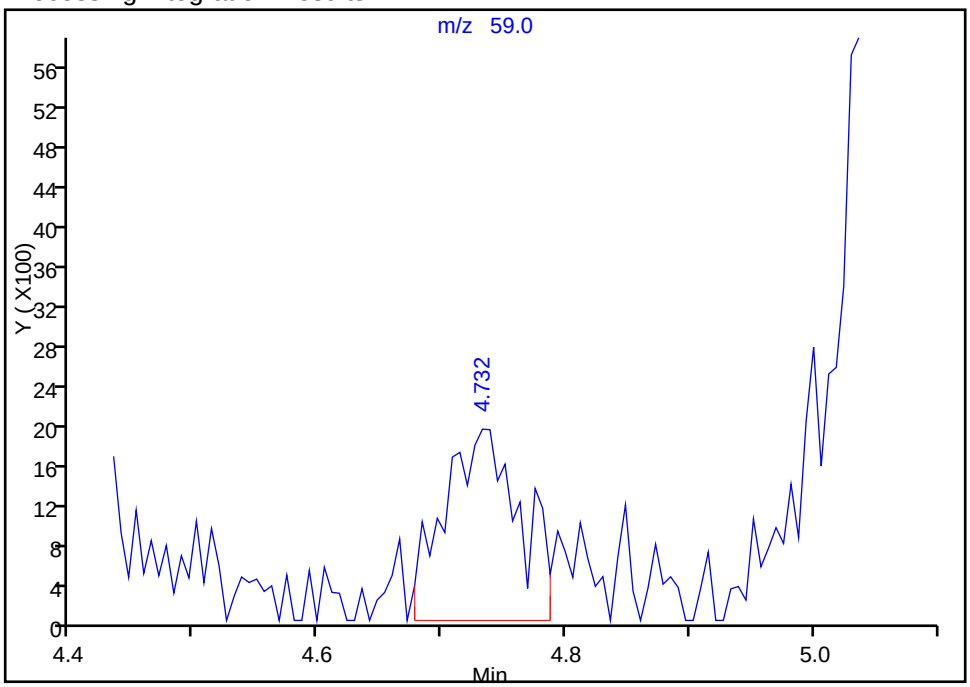
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D				
Injection Date:	30-Mar-2015 11:28:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

32 2-Methyl-2-propanol, CAS: 75-65-0

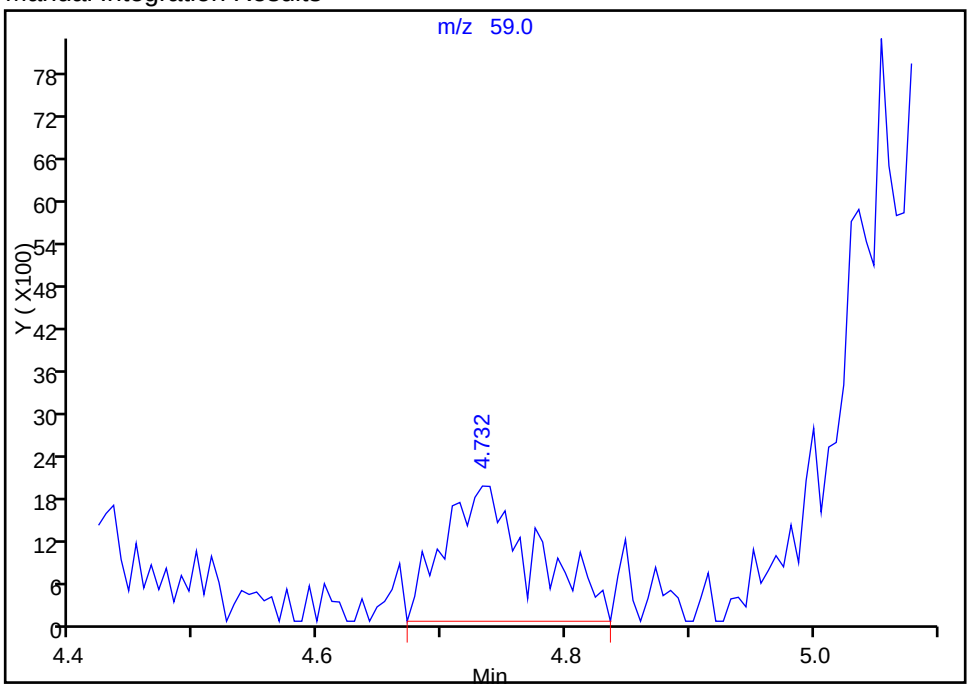
Processing Integration Results

RT: 4.73
Area: 8182
Amount: 1000.0000
Amount Units: ng



Manual Integration Results

RT: 4.73
Area: 9778
Amount: 1483.0651
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 12:11:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

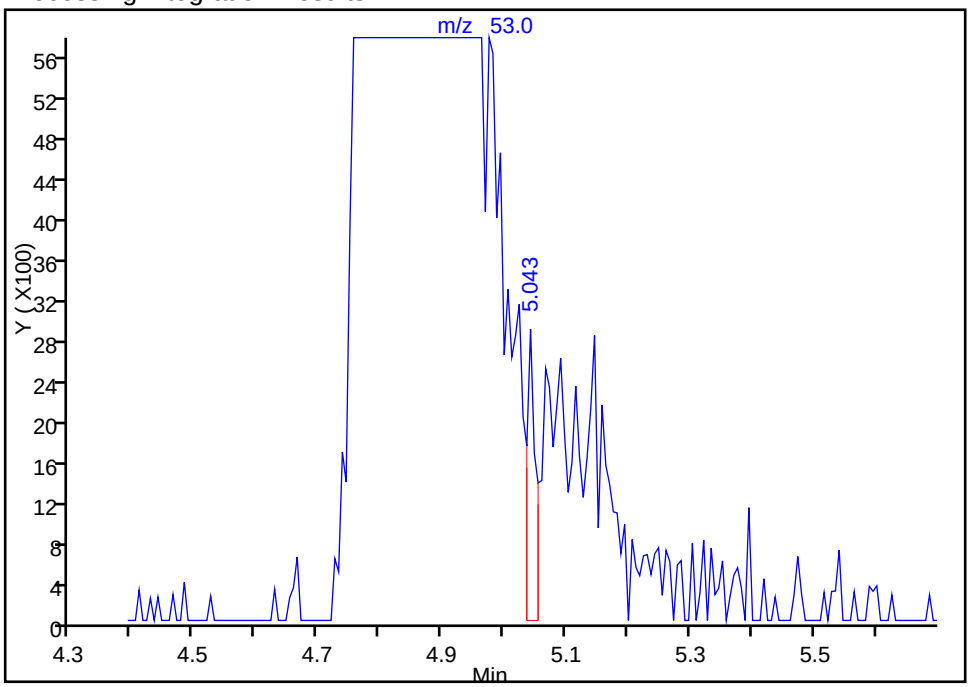
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D				
Injection Date:	30-Mar-2015 11:28:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

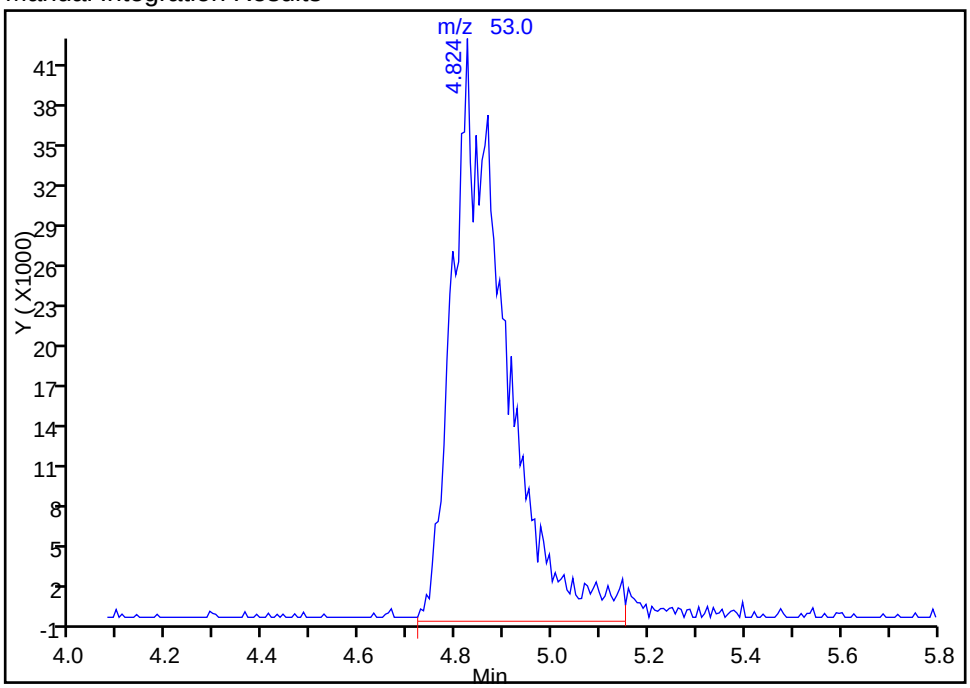
Processing Integration Results

RT: 5.04
Area: 2761
Amount: 17.103044
Amount Units: ng



Manual Integration Results

RT: 4.82
Area: 318922
Amount: 1110.1834
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 12:11:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

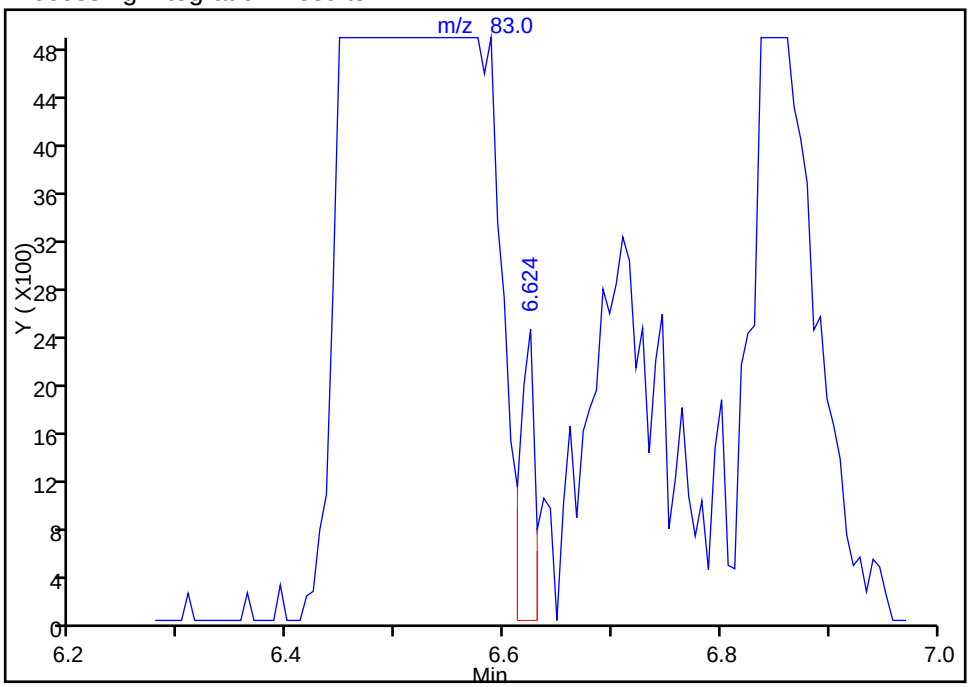
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D
Injection Date: 30-Mar-2015 11:28:30 Instrument ID: CHHP7
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

52 Chloroform, CAS: 67-66-3

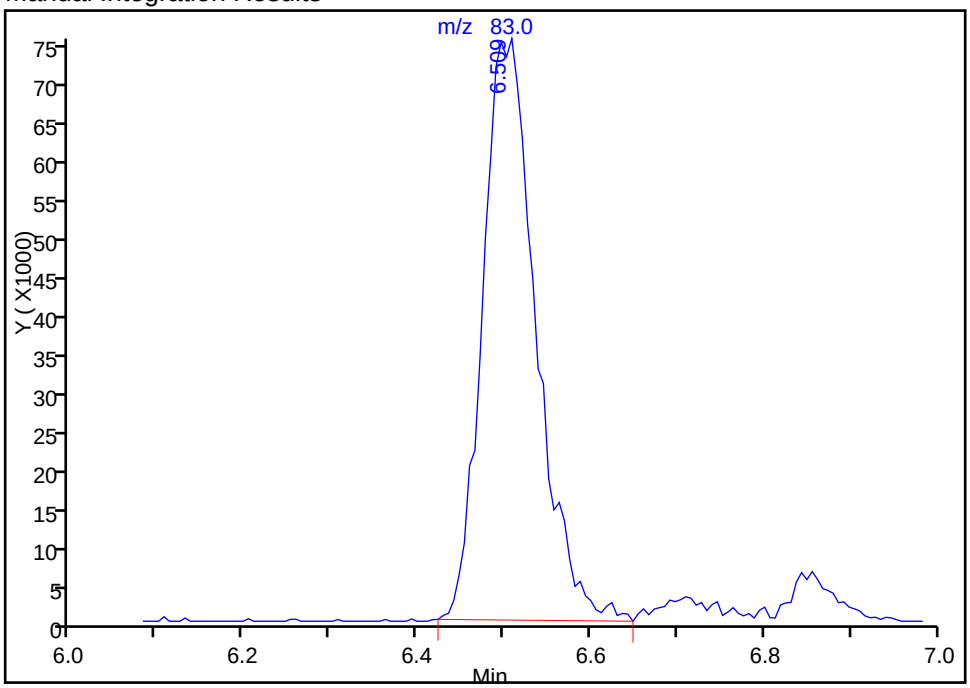
Processing Integration Results

RT: 6.62
Area: 2278
Amount: 1.214470
Amount Units: ng



Manual Integration Results

RT: 6.51
Area: 324491
Amount: 109.4902
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 12:11:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

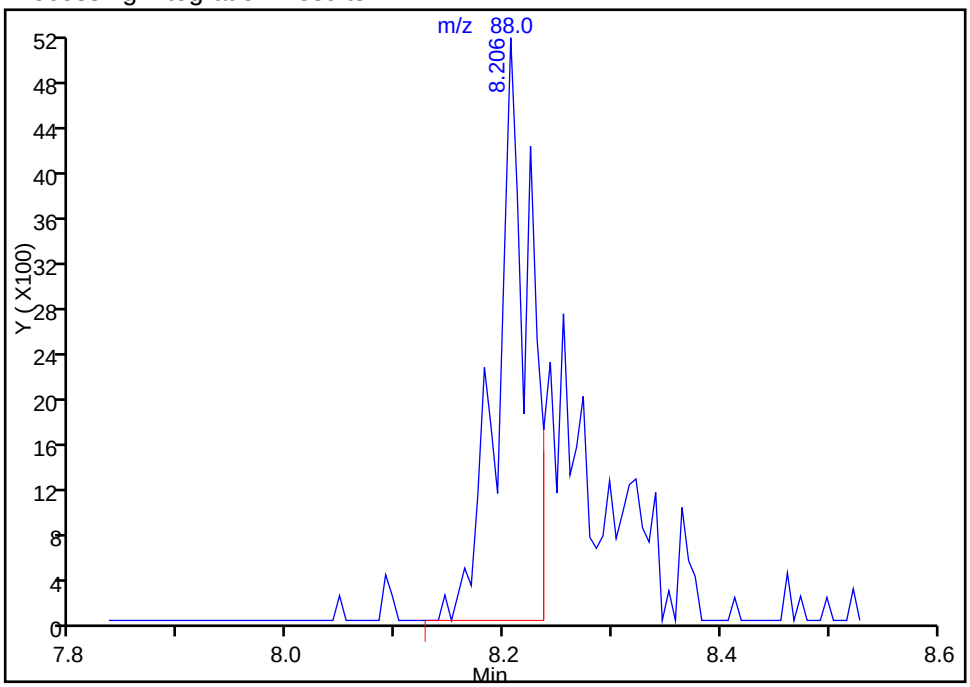
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033004.D				
Injection Date:	30-Mar-2015 11:28:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	4
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

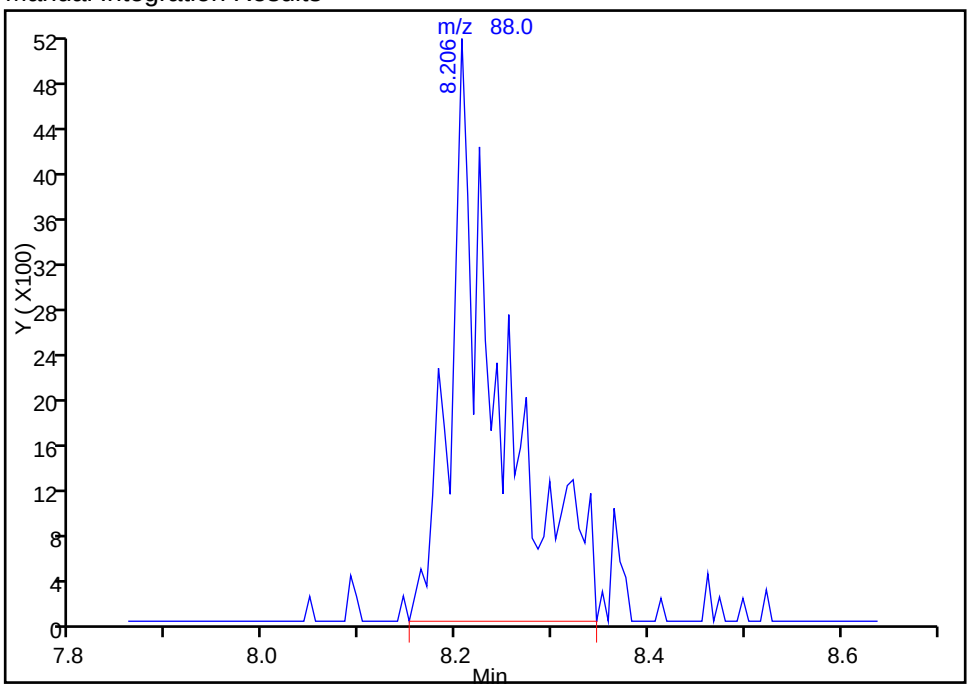
Processing Integration Results

RT: 8.21
Area: 10899
Amount: 1958.5330
Amount Units: ng



Manual Integration Results

RT: 8.21
Area: 18551
Amount: 2196.3559
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 12:11:13
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033005.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 30-Mar-2015 11:55:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Misc. Info.: 180-0006234-005
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub1

Method: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:54:19 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 30-Mar-2015 12:42:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	5.024	5.024	0.000	92	310282	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.396	7.396	0.000	95	1094895	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.462	10.462	0.000	86	307311	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.792	12.792	0.000	93	455243	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.678	6.678	0.000	85	358794	200.0	205.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.037	7.037	0.000	68	326104	200.0	195.8	
$ 7 Toluene-d8 (Surr)	98	9.033	9.033	0.000	91	1076372	200.0	236.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	90	461682	200.0	228.4	
11 Dichlorodifluoromethane	85	1.939	1.939	0.000	58	396029	200.0	195.1	
12 Chloromethane	50	2.018	2.018	0.000	96	440108	200.0	199.1	
14 Butadiene	39	2.176	2.176	0.000	95	378863	200.0	208.4	
13 Vinyl chloride	62	2.225	2.225	0.000	96	345858	200.0	200.9	
15 Bromomethane	94	2.499	2.499	0.000	93	297025	200.0	214.1	
16 Chloroethane	64	2.639	2.639	0.000	58	280211	200.0	201.7	
17 Dichlorofluoromethane	67	2.882	2.882	0.000	95	759945	200.0	205.6	
18 Trichlorofluoromethane	101	2.913	2.913	0.000	85	817631	200.0	210.3	
20 Ethyl ether	59	3.314	3.314	0.000	85	252518	200.0	204.7	
22 1,1-Dichloroethene	96	3.460	3.460	0.000	95	301988	200.0	205.4	
21 Acrolein	56	3.497	3.497	0.000	29	49804	600.0	584.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.563	3.563	0.000	90	351192	200.0	205.4	
25 Iodomethane	142	3.716	3.716	0.000	87	640777	200.0	208.4	
26 Carbon disulfide	76	3.764	3.764	0.000	99	874756	200.0	198.1	M
24 Acetone	43	3.855	3.855	0.000	30	145367	400.0	423.1	
28 3-Chloro-1-propene	76	4.087	4.087	0.000	83	220406	200.0	203.3	
31 Methylene Chloride	84	4.294	4.294	0.000	79	317590	200.0	201.3	
30 Methyl acetate	43	4.324	4.324	0.000	98	683140	1000.0	936.5	
34 trans-1,2-Dichloroethene	96	4.725	4.725	0.000	93	371778	200.0	203.8	
32 2-Methyl-2-propanol	59	4.744	4.744	0.000	34	12318	2000.0	1959.0	
33 Acrylonitrile	53	4.829	4.829	0.000	99	568053	2000.0	1946.7	
35 Methyl tert-butyl ether	73	4.890	4.890	0.000	93	714150	200.0	198.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.090	5.090	0.000	94	382145	200.0	200.3	
38 Vinyl acetate	43	5.115	5.115	0.000	91	289383	200.0	201.2	
37 1,1-Dichloroethane	63	5.334	5.334	0.000	96	550009	200.0	205.7	
44 2,2-Dichloropropane	77	6.076	6.076	0.000	89	478480	200.0	214.2	
45 cis-1,2-Dichloroethene	96	6.094	6.094	0.000	77	375290	200.0	207.3	
46 2-Butanone (MEK)	43	6.216	6.216	0.000	99	189308	400.0	385.7	
49 Chlorobromomethane	128	6.380	6.380	0.000	83	204558	200.0	196.2	
52 Chloroform	83	6.496	6.496	0.000	93	617343	200.0	205.1	
53 1,1,1-Trichloroethane	97	6.660	6.660	0.000	97	569802	200.0	208.4	
51 Tetrahydrofuran	42	6.709	6.709	0.000	44	112031	400.0	417.2	
54 Cyclohexane	56	6.709	6.709	0.000	77	389741	200.0	202.1	
56 Carbon tetrachloride	117	6.849	6.849	0.000	94	567374	200.0	205.7	
55 1,1-Dichloropropene	75	6.855	6.855	0.000	89	397710	200.0	201.5	
58 Benzene	78	7.086	7.086	0.000	95	1140696	200.0	211.7	
59 1,2-Dichloroethane	62	7.122	7.122	0.000	97	363062	200.0	199.5	
62 n-Heptane	43	7.390	7.390	0.000	63	343792	200.0	205.8	
57 Isobutyl alcohol	41	7.396	7.396	0.000	50	238248	5000.0	5420.0	
64 Trichloroethene	130	7.785	7.785	0.000	91	445574	200.0	206.3	
66 Methylcyclohexane	83	7.980	7.980	0.000	87	543409	200.0	204.6	
67 1,2-Dichloropropane	63	8.029	8.029	0.000	82	243750	200.0	198.6	
68 Dibromomethane	93	8.144	8.144	0.000	95	175702	200.0	192.2	
70 1,4-Dioxane	88	8.205	8.205	0.000	88	36036	4000.0	4200.2	M
71 Dichlorobromomethane	83	8.315	8.315	0.000	97	480549	200.0	211.2	
74 cis-1,3-Dichloropropene	75	8.771	8.771	0.000	91	477454	200.0	202.2	
75 4-Methyl-2-pentanone (MIBK	43	8.947	8.947	0.000	97	367652	400.0	409.4	
76 Toluene	91	9.099	9.099	0.000	98	1151125	200.0	211.3	
77 trans-1,3-Dichloropropene	75	9.325	9.325	0.000	94	405643	200.0	210.0	
78 Ethyl methacrylate	69	9.428	9.428	0.000	87	262894	200.0	204.6	
79 1,1,2-Trichloroethane	97	9.513	9.513	0.000	92	222398	200.0	201.6	
80 Tetrachloroethene	164	9.641	9.641	0.000	94	309255	200.0	216.5	
81 1,3-Dichloropropane	76	9.671	9.671	0.000	90	334311	200.0	205.1	
82 2-Hexanone	43	9.769	9.769	0.000	97	231264	400.0	399.3	
84 Chlorodibromomethane	129	9.896	9.896	0.000	89	387652	200.0	204.4	
85 Ethylene Dibromide	107	10.006	10.006	0.000	98	251542	200.0	201.3	
87 Chlorobenzene	112	10.499	10.499	0.000	94	846268	200.0	216.0	
89 1,1,1,2-Tetrachloroethane	131	10.578	10.578	0.000	93	393829	200.0	207.9	
90 Ethylbenzene	106	10.602	10.602	0.000	98	438222	200.0	196.9	
91 m-Xylene & p-Xylene	106	10.718	10.718	0.000	97	582999	200.0	194.3	
92 o-Xylene	106	11.113	11.113	0.000	95	586685	200.0	194.7	
93 Styrene	104	11.125	11.125	0.000	93	895002	200.0	218.5	
94 Bromoform	173	11.314	11.314	0.000	94	228827	200.0	213.0	
97 Isopropylbenzene	105	11.478	11.478	0.000	95	1546157	200.0	213.6	
99 1,1,2,2-Tetrachloroethane	83	11.776	11.776	0.000	98	251042	200.0	216.9	
100 Bromobenzene	156	11.788	11.788	0.000	86	423173	200.0	216.9	
101 1,2,3-Trichloropropane	110	11.819	11.819	0.000	83	86903	200.0	199.0	
102 trans-1,4-Dichloro-2-buten	53	11.831	11.831	0.000	70	49829	200.0	182.1	
103 N-Propylbenzene	120	11.892	11.892	0.000	96	515043	200.0	215.1	
104 2-Chlorotoluene	126	11.977	11.977	0.000	95	465485	200.0	214.1	
106 1,3,5-Trimethylbenzene	105	12.062	12.062	0.000	97	1260442	200.0	223.0	
107 4-Chlorotoluene	126	12.086	12.086	0.000	96	415760	200.0	199.6	
108 tert-Butylbenzene	119	12.391	12.391	0.000	91	1397136	200.0	207.4	
110 1,2,4-Trimethylbenzene	105	12.439	12.439	0.000	96	1279121	200.0	214.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.610	12.610	0.000	94	1664550	200.0	219.6	
113 1,3-Dichlorobenzene	146	12.725	12.725	0.000	97	814415	200.0	210.1	
114 4-Isopropyltoluene	119	12.756	12.756	0.000	95	1460316	200.0	211.8	
115 1,4-Dichlorobenzene	146	12.816	12.816	0.000	94	763456	200.0	211.4	
120 n-Butylbenzene	91	13.163	13.163	0.000	95	1224106	200.0	213.7	
121 1,2-Dichlorobenzene	146	13.188	13.188	0.000	97	666444	200.0	188.4	
122 1,2-Dibromo-3-Chloropropan	75	13.972	13.972	0.000	88	37304	200.0	209.2	
126 1,2,4-Trichlorobenzene	180	14.806	14.806	0.000	95	198283	200.0	176.8	
127 Hexachlorobutadiene	225	14.970	14.970	0.000	88	119072	200.0	177.1	
128 Naphthalene	128	15.055	15.055	0.000	96	323445	200.0	176.1	
129 1,2,3-Trichlorobenzene	180	15.305	15.305	0.000	93	106664	200.0	139.0	
S 134 1,2-Dichloroethene, Total	96				0		400.0	411.2	
S 133 Xylenes, Total	106				0		400.0	389.0	
S 135 1,3-Dichloropropene, Total	1				0		400.0	412.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOAVAPRI_00005	Amount Added:	8.00	Units: uL
VOAACRPRI_00003	Amount Added:	24.00	Units: uL
VOA8260VOAPRI_00108	Amount Added:	8.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	8.00	Units: uL

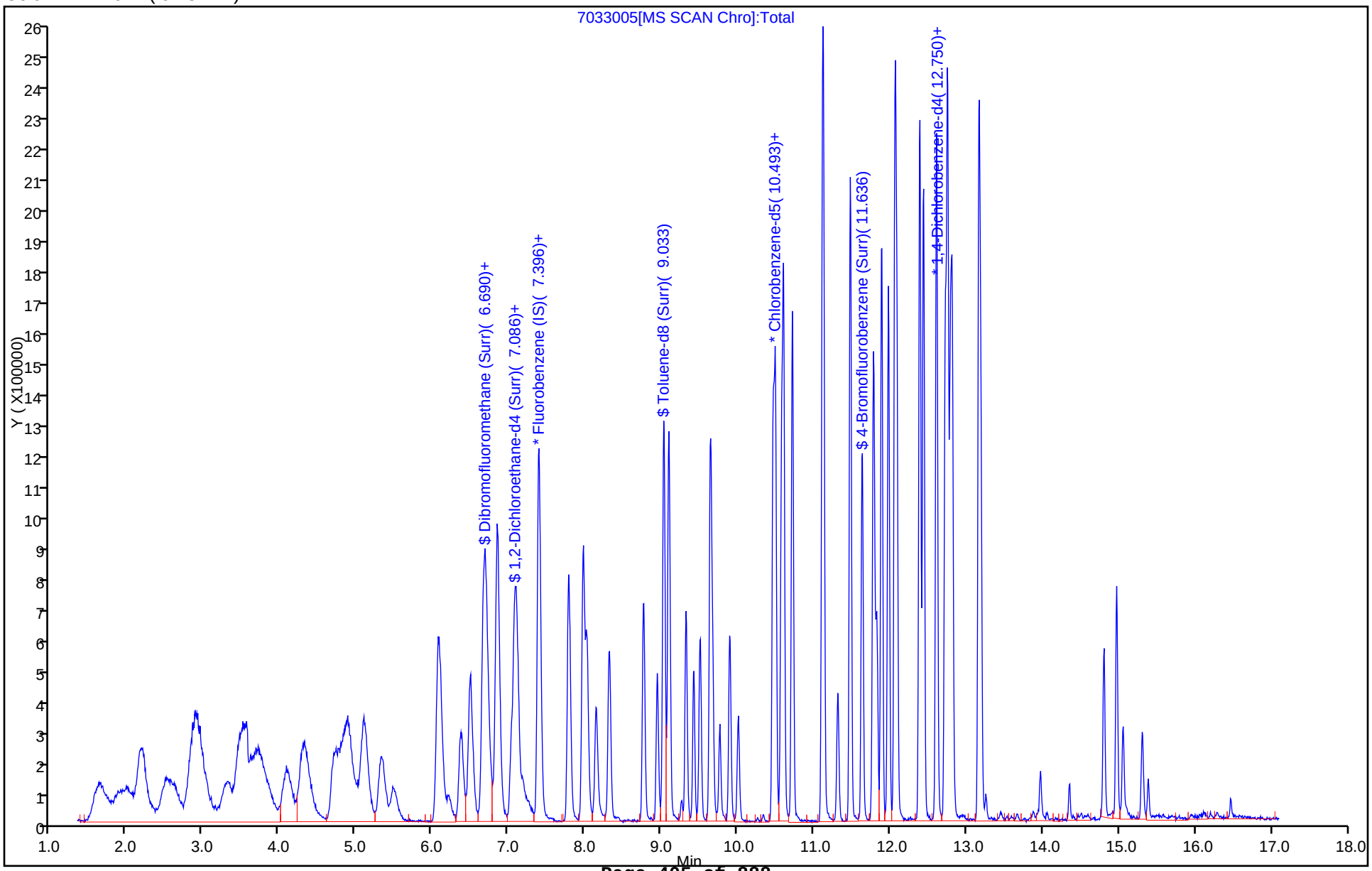
Report Date: 31-Mar-2015 08:54:21 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033005.D

Injection Date:	30-Mar-2015 11:55:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	icis			Worklist Smp#:	5
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

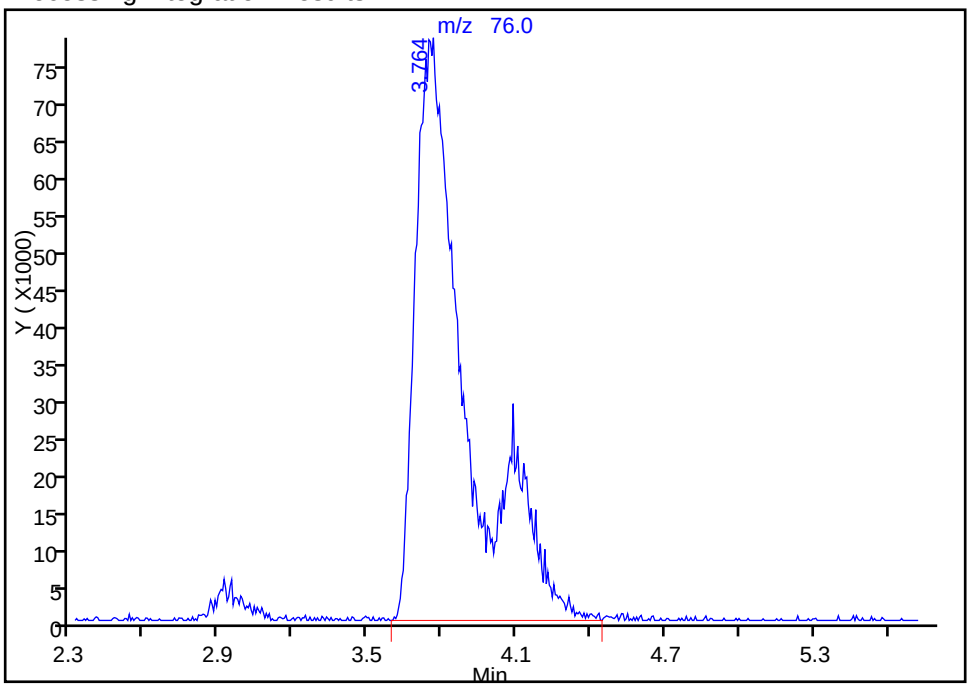
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033005.D				
Injection Date:	30-Mar-2015 11:55:30	Instrument ID:	CHHP7		
Lims ID:	icis				
Client ID:					
Operator ID:	034635	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

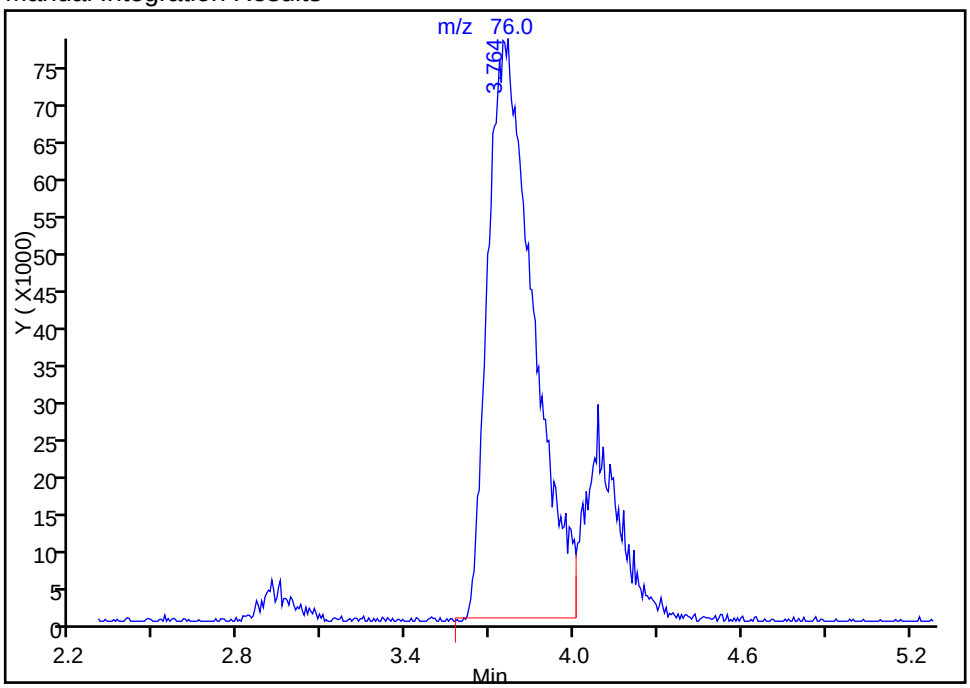
Processing Integration Results

RT: 3.76
Area: 1107648
Amount: 219.4227
Amount Units: ng



Manual Integration Results

RT: 3.76
Area: 874756
Amount: 198.1162
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 12:42:49
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

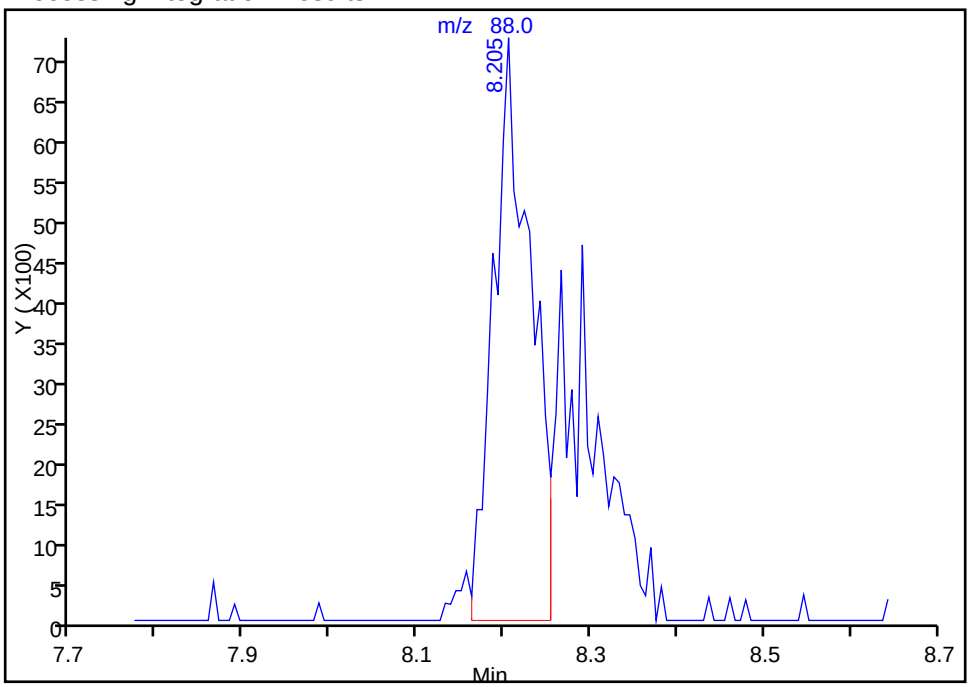
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033005.D				
Injection Date:	30-Mar-2015 11:55:30	Instrument ID:	CHHP7		
Lims ID:	icis				
Client ID:					
Operator ID:	034635	ALS Bottle#:	5	Worklist Smp#:	5
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

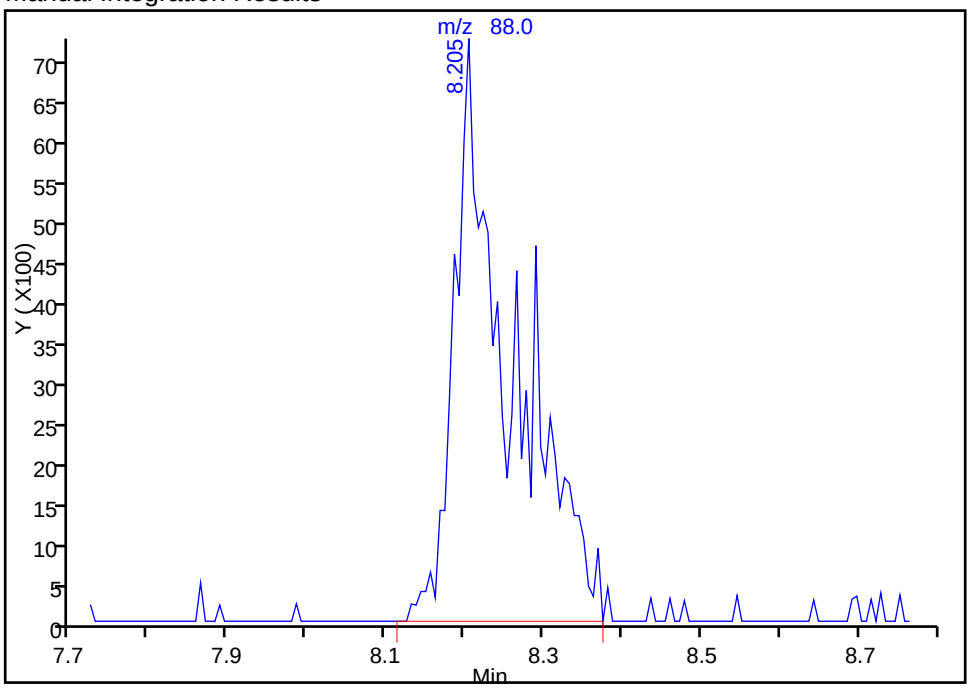
Processing Integration Results

RT: 8.21
Area: 21873
Amount: 2688.0682
Amount Units: ng



Manual Integration Results

RT: 8.21
Area: 36036
Amount: 4200.1644
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 15:32:59
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033006.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Mar-2015 12:23:30 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0006234-006
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub1

Method: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 09:13:23 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 31-Mar-2015 09:13:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	5.051	5.051	0.000	88	311643	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.399	7.399	0.000	93	1016877	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.471	10.471	0.000	82	306938	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.789	0.000	94	445506	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.675	6.675	0.000	91	459650	300.0	283.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.040	7.040	0.000	70	452870	300.0	292.8	
$ 7 Toluene-d8 (Surr)	98	9.036	9.036	0.000	92	1374921	300.0	302.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.633	11.633	0.000	91	594575	300.0	298.8	
11 Dichlorodifluoromethane	85	1.888	1.888	0.000	91	547112	300.0	290.3	
12 Chloromethane	50	2.015	2.015	0.000	87	579635	300.0	282.3	
14 Butadiene	39	2.174	2.174	0.000	96	467958	300.0	277.1	
13 Vinyl chloride	62	2.204	2.204	0.000	79	454519	300.0	284.2	
15 Bromomethane	94	2.496	2.496	0.000	95	370267	300.0	287.4	
16 Chloroethane	64	2.612	2.612	0.000	98	359315	300.0	278.5	
17 Dichlorofluoromethane	67	2.873	2.873	0.000	94	973235	300.0	283.5	
18 Trichlorofluoromethane	101	2.904	2.904	0.000	90	1039442	300.0	287.9	
20 Ethyl ether	59	3.299	3.299	0.000	96	329495	300.0	287.6	
21 Acrolein	56	3.445	3.445	0.000	27	58776	700.0	743.1	
22 1,1-Dichloroethene	96	3.457	3.457	0.000	85	386363	300.0	283.0	
23 1,1,2-Trichloro-1,2,2-trif	101	3.579	3.579	0.000	93	447607	300.0	281.9	
25 Iodomethane	142	3.676	3.676	0.000	97	761762	300.0	266.7	
26 Carbon disulfide	76	3.731	3.731	0.000	98	1119377	300.0	273.0	M
24 Acetone	43	3.877	3.877	0.000	71	201909	600.0	669.8	
28 3-Chloro-1-propene	76	4.072	4.072	0.000	85	265180	300.0	263.3	
31 Methylene Chloride	84	4.309	4.309	0.000	66	390467	300.0	266.5	
30 Methyl acetate	43	4.321	4.321	0.000	97	1035067	1500.0	1527.8	
34 trans-1,2-Dichloroethene	96	4.698	4.698	0.000	93	468410	300.0	276.5	
32 2-Methyl-2-propanol	59	4.698	4.698	0.000	32	18904	3000.0	2972.9	
33 Acrylonitrile	53	4.844	4.844	0.000	98	845412	3000.0	3119.4	
35 Methyl tert-butyl ether	73	4.905	4.905	0.000	95	984040	300.0	294.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.100	5.100	0.000	92	507536	300.0	286.5	
38 Vinyl acetate	43	5.100	5.100	0.000	64	370011	300.0	277.0	
37 1,1-Dichloroethane	63	5.337	5.337	0.000	97	715666	300.0	288.3	
44 2,2-Dichloropropane	77	6.073	6.073	0.000	88	593228	300.0	286.0	
45 cis-1,2-Dichloroethene	96	6.091	6.091	0.000	77	475209	300.0	282.7	
46 2-Butanone (MEK)	43	6.225	6.225	0.000	100	296627	600.0	650.8	
49 Chlorobromomethane	128	6.377	6.377	0.000	82	276754	300.0	285.8	
52 Chloroform	83	6.493	6.493	0.000	93	796703	300.0	284.9	
53 1,1,1-Trichloroethane	97	6.669	6.669	0.000	97	711168	300.0	280.1	
51 Tetrahydrofuran	42	6.700	6.700	0.000	52	141960	600.0	569.3	
54 Cyclohexane	56	6.712	6.712	0.000	88	497062	300.0	277.5	
56 Carbon tetrachloride	117	6.846	6.846	0.000	95	706744	300.0	275.9	
55 1,1-Dichloropropene	75	6.852	6.852	0.000	88	522409	300.0	284.9	
58 Benzene	78	7.083	7.083	0.000	95	1444796	300.0	288.7	
59 1,2-Dichloroethane	62	7.126	7.126	0.000	95	486348	300.0	287.7	
62 n-Heptane	43	7.387	7.387	0.000	75	453730	300.0	292.5	
57 Isobutyl alcohol	41	7.393	7.393	0.000	60	318675	7500.0	7805.9	
64 Trichloroethene	130	7.789	7.789	0.000	91	557536	300.0	277.9	
66 Methylcyclohexane	83	7.977	7.977	0.000	87	683732	300.0	277.2	
67 1,2-Dichloropropane	63	8.026	8.026	0.000	79	327752	300.0	287.5	
68 Dibromomethane	93	8.141	8.141	0.000	92	240979	300.0	283.8	
70 1,4-Dioxane	88	8.214	8.214	0.000	78	49259	6000.0	6181.9	
71 Dichlorobromomethane	83	8.318	8.318	0.000	97	612413	300.0	289.7	
74 cis-1,3-Dichloropropene	75	8.768	8.768	0.000	92	643615	300.0	293.5	
75 4-Methyl-2-pentanone (MIBK	43	8.951	8.951	0.000	96	558709	600.0	622.9	
76 Toluene	91	9.103	9.103	0.000	97	1473364	300.0	287.0	
77 trans-1,3-Dichloropropene	75	9.322	9.322	0.000	95	565545	300.0	293.1	
78 Ethyl methacrylate	69	9.425	9.425	0.000	86	390626	300.0	304.4	
79 1,1,2-Trichloroethane	97	9.510	9.510	0.000	91	322268	300.0	292.6	
80 Tetrachloroethene	164	9.644	9.644	0.000	92	380796	300.0	278.1	
81 1,3-Dichloropropane	76	9.674	9.674	0.000	90	485148	300.0	297.9	
82 2-Hexanone	43	9.766	9.766	0.000	97	369022	600.0	637.9	
84 Chlorodibromomethane	129	9.900	9.900	0.000	89	544921	300.0	287.7	
85 Ethylene Dibromide	107	10.009	10.009	0.000	98	375561	300.0	300.9	
87 Chlorobenzene	112	10.496	10.496	0.000	94	1093489	300.0	279.5	
89 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	93	505049	300.0	267.0	
90 Ethylbenzene	106	10.605	10.605	0.000	97	567348	300.0	255.2	
91 m-Xylene & p-Xylene	106	10.721	10.721	0.000	97	753992	300.0	251.6	
92 o-Xylene	106	11.116	11.116	0.000	94	750708	300.0	249.4	
93 Styrene	104	11.128	11.128	0.000	92	1119936	300.0	288.8	
94 Bromoform	173	11.311	11.311	0.000	93	322387	300.0	300.4	
97 Isopropylbenzene	105	11.481	11.481	0.000	95	1939042	300.0	285.9	
99 1,1,2,2-Tetrachloroethane	83	11.773	11.773	0.000	98	360995	300.0	312.3	
100 Bromobenzene	156	11.785	11.785	0.000	86	548599	300.0	287.4	
101 1,2,3-Trichloropropane	110	11.822	11.822	0.000	86	129479	300.0	302.9	
102 trans-1,4-Dichloro-2-buten	53	11.834	11.834	0.000	72	77709	300.0	290.2	
103 N-Propylbenzene	120	11.889	11.889	0.000	96	649531	300.0	277.2	
104 2-Chlorotoluene	126	11.980	11.980	0.000	95	592801	300.0	278.6	
106 1,3,5-Trimethylbenzene	105	12.065	12.065	0.000	97	1547120	300.0	294.8	
107 4-Chlorotoluene	126	12.090	12.090	0.000	95	562904	300.0	276.1	
108 tert-Butylbenzene	119	12.388	12.388	0.000	91	1734851	300.0	266.1	
110 1,2,4-Trimethylbenzene	105	12.442	12.442	0.000	95	1578246	300.0	285.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.613	12.613	0.000	94	2075658	300.0	295.1	
113 1,3-Dichlorobenzene	146	12.722	12.722	0.000	97	1053105	300.0	281.2	
114 4-Isopropyltoluene	119	12.753	12.753	0.000	94	1814126	300.0	286.3	
115 1,4-Dichlorobenzene	146	12.814	12.814	0.000	93	1033910	300.0	292.6	
120 n-Butylbenzene	91	13.160	13.160	0.000	94	1510703	300.0	287.0	
121 1,2-Dichlorobenzene	146	13.191	13.191	0.000	98	895594	300.0	258.7	
122 1,2-Dibromo-3-Chloropropan	75	13.969	13.969	0.000	89	48853	300.0	277.4	
126 1,2,4-Trichlorobenzene	180	14.803	14.803	0.000	96	302905	300.0	275.9	
127 Hexachlorobutadiene	225	14.973	14.973	0.000	88	167959	300.0	255.3	
128 Naphthalene	128	15.052	15.052	0.000	97	511933	300.0	284.7	
129 1,2,3-Trichlorobenzene	180	15.308	15.308	0.000	94	203191	300.0	270.5	
S 134 1,2-Dichloroethene, Total	96				0		600.0	559.2	
S 133 Xylenes, Total	106				0		600.0	501.0	
S 135 1,3-Dichloropropene, Total	1				0		600.0	586.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

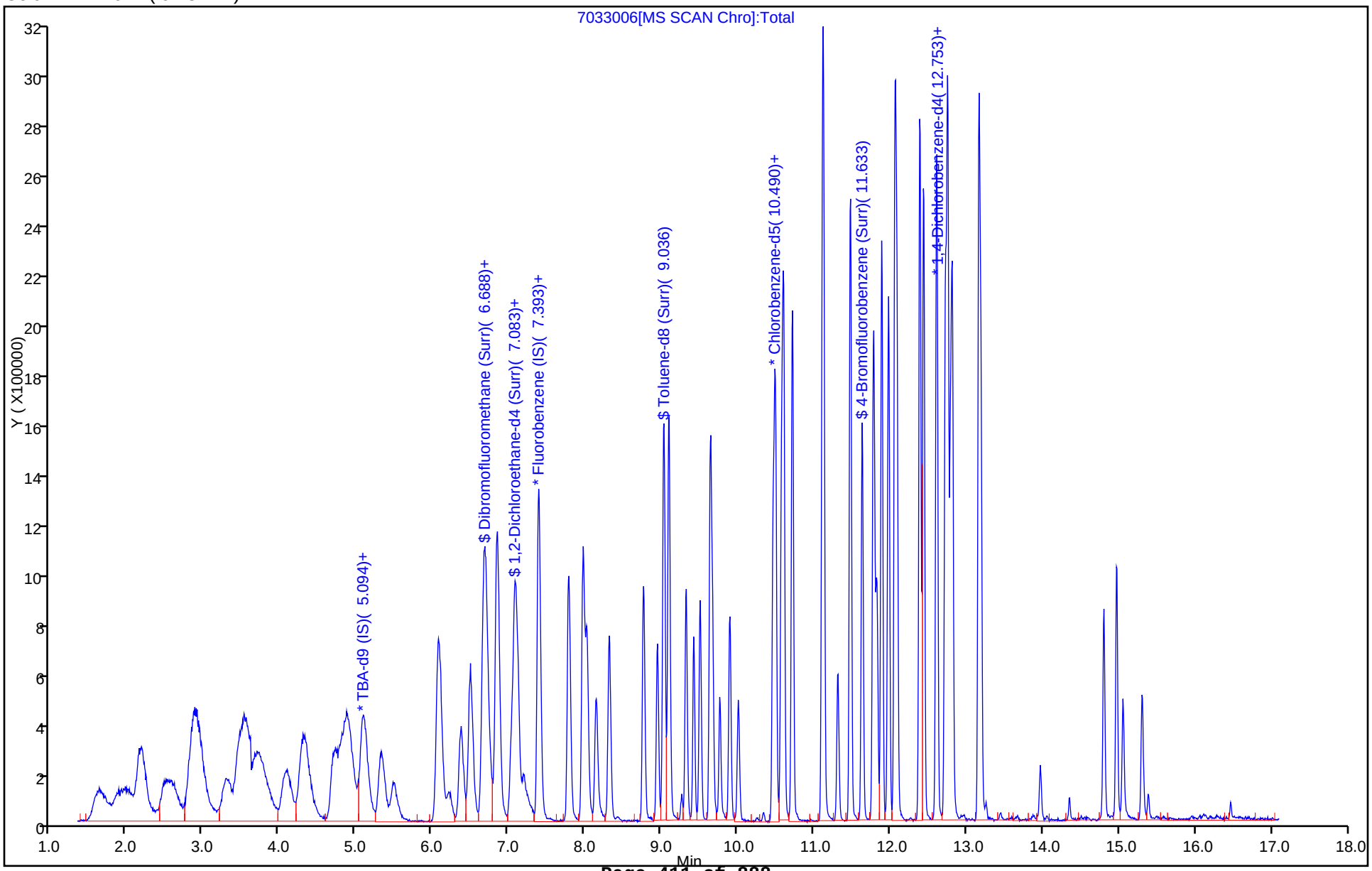
VOA8260SURR_00017	Amount Added:	12.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOAVAPRI_00005	Amount Added:	12.00	Units: uL
VOAACRPRI_00003	Amount Added:	28.00	Units: uL
VOA8260VOAPRI_00108	Amount Added:	12.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	12.00	Units: uL

Report Date: 31-Mar-2015 09:13:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033006.D				
Injection Date:	30-Mar-2015 12:23:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

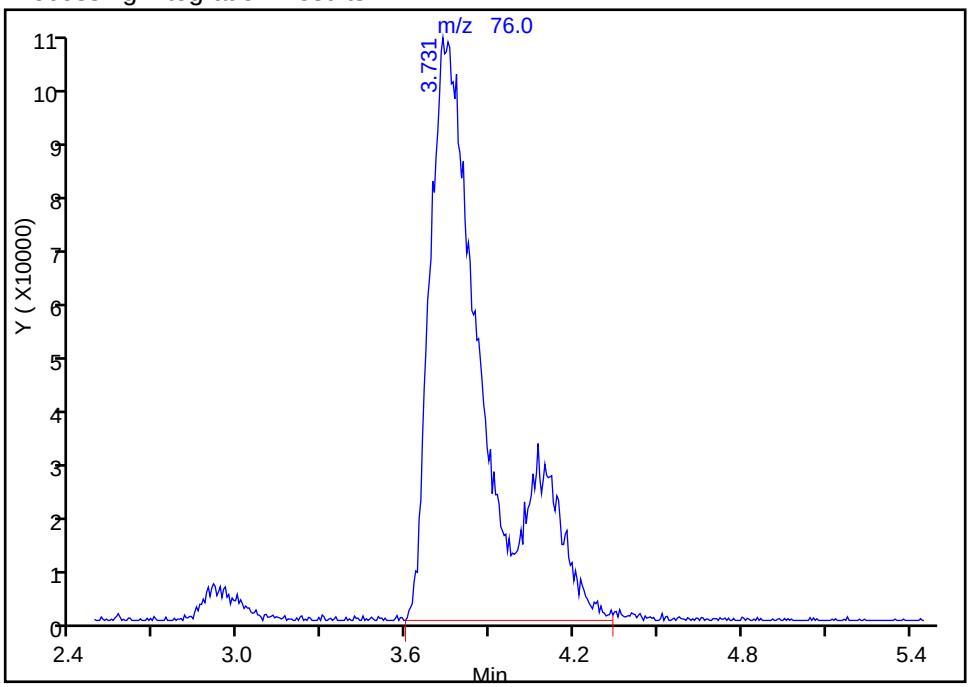
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033006.D
Injection Date: 30-Mar-2015 12:23:30 Instrument ID: CHHP7
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

26 Carbon disulfide, CAS: 75-15-0

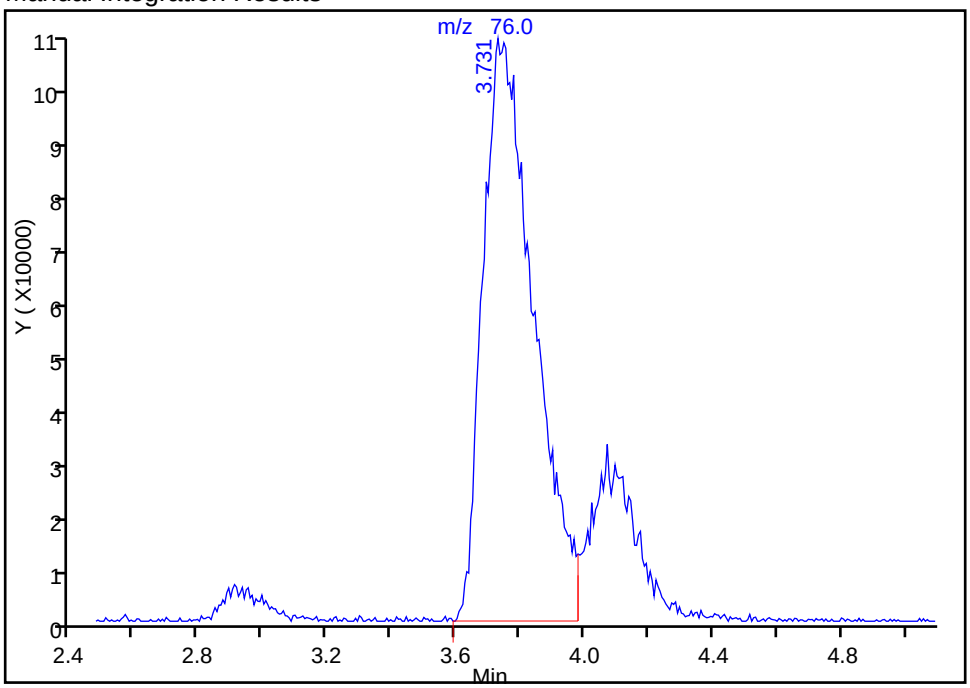
Processing Integration Results

RT: 3.73
Area: 1395013
Amount: 316.4464
Amount Units: ng



Manual Integration Results

RT: 3.73
Area: 1119377
Amount: 272.9691
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 13:12:54
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033007.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Mar-2015 13:05:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0006234-007
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub1

Method: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:54:23 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 30-Mar-2015 13:53:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	5.045	5.051	-0.006	90	310851	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.405	7.399	0.006	92	1032012	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.471	10.471	0.000	84	312393	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.795	12.789	0.006	93	448930	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.687	6.675	0.012	89	635809	400.0	386.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.046	7.040	0.006	70	603243	400.0	384.4	
$ 7 Toluene-d8 (Surr)	98	9.036	9.036	0.000	92	1822472	400.0	393.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.633	11.633	0.000	91	801850	400.0	400.9	
11 Dichlorodifluoromethane	85	1.918	1.888	0.030	88	769843	400.0	402.5	
12 Chloromethane	50	2.052	2.015	0.037	87	823816	400.0	395.3	
14 Butadiene	39	2.210	2.174	0.036	95	633176	400.0	369.4	
13 Vinyl chloride	62	2.204	2.204	0.000	97	610532	400.0	376.2	
15 Bromomethane	94	2.545	2.496	0.049	93	503455	400.0	385.0	
16 Chloroethane	64	2.666	2.612	0.054	49	494064	400.0	377.4	
17 Dichlorofluoromethane	67	2.904	2.873	0.031	96	1320934	400.0	379.2	
18 Trichlorofluoromethane	101	2.934	2.904	0.030	87	1412799	400.0	385.5	
20 Ethyl ether	59	3.305	3.299	0.006	90	478344	400.0	411.4	
22 1,1-Dichloroethene	96	3.481	3.457	0.024	97	556448	400.0	401.6	
21 Acrolein	56	3.488	3.445	0.043	45	63644	800.0	792.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.585	3.579	0.006	88	590436	400.0	366.5	
25 Iodomethane	142	3.670	3.676	-0.006	98	1110172	400.0	383.0	
26 Carbon disulfide	76	3.755	3.731	0.024	99	1544647	400.0	371.2	M
24 Acetone	43	3.865	3.877	-0.012	26	231424	800.0	766.1	
28 3-Chloro-1-propene	76	4.090	4.072	0.018	87	396144	400.0	387.6	
31 Methylene Chloride	84	4.309	4.309	0.000	76	544613	400.0	366.2	
30 Methyl acetate	43	4.327	4.321	0.006	97	1324779	2000.0	1926.7	
34 trans-1,2-Dichloroethene	96	4.710	4.698	0.012	90	646149	400.0	375.8	
32 2-Methyl-2-propanol	59	4.735	4.698	0.037	31	25255	4000.0	3891.2	M
33 Acrylonitrile	53	4.832	4.844	-0.012	99	1091986	4000.0	3970.2	
35 Methyl tert-butyl ether	73	4.899	4.905	-0.006	96	1301482	400.0	384.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.118	5.100	0.018	96	686716	400.0	381.9	
38 Vinyl acetate	43	5.112	5.100	0.012	70	520045	400.0	383.6	
37 1,1-Dichloroethane	63	5.337	5.337	0.000	96	988166	400.0	392.2	
44 2,2-Dichloropropane	77	6.079	6.073	0.006	87	795291	400.0	377.8	
45 cis-1,2-Dichloroethene	96	6.097	6.091	0.006	77	672672	400.0	394.3	
46 2-Butanone (MEK)	43	6.219	6.225	-0.006	100	357127	800.0	772.0	
49 Chlorobromomethane	128	6.383	6.377	0.006	80	383470	400.0	390.2	
52 Chloroform	83	6.499	6.493	0.006	93	1070128	400.0	377.1	
53 1,1,1-Trichloroethane	97	6.675	6.669	0.006	96	970491	400.0	376.6	
51 Tetrahydrofuran	42	6.712	6.700	0.012	51	193358	800.0	764.0	
54 Cyclohexane	56	6.718	6.712	0.006	78	680423	400.0	374.3	
56 Carbon tetrachloride	117	6.858	6.846	0.012	94	960424	400.0	369.5	
55 1,1-Dichloropropene	75	6.858	6.852	0.006	88	684260	400.0	367.7	
58 Benzene	78	7.089	7.083	0.006	95	1936130	400.0	381.2	
59 1,2-Dichloroethane	62	7.132	7.126	0.006	97	662167	400.0	386.0	
62 n-Heptane	43	7.399	7.387	0.012	84	593146	400.0	376.8	
57 Isobutyl alcohol	41	7.393	7.393	0.000	74	426103	10000	10284	
64 Trichloroethene	130	7.795	7.789	0.006	91	763898	400.0	375.2	
66 Methylcyclohexane	83	7.983	7.977	0.006	86	924161	400.0	369.2	
67 1,2-Dichloropropane	63	8.026	8.026	0.000	81	447696	400.0	387.0	
68 Dibromomethane	93	8.154	8.141	0.013	94	325671	400.0	378.0	
70 1,4-Dioxane	88	8.208	8.214	-0.006	85	68277	8000.0	8442.9	
71 Dichlorobromomethane	83	8.324	8.318	0.006	97	837049	400.0	390.2	
74 cis-1,3-Dichloropropene	75	8.774	8.768	0.006	91	854790	400.0	384.1	
75 4-Methyl-2-pentanone (MIBK	43	8.951	8.951	0.000	95	733664	800.0	803.7	
76 Toluene	91	9.103	9.103	0.000	96	1929599	400.0	398.0	
77 trans-1,3-Dichloropropene	75	9.328	9.322	0.006	94	752421	400.0	383.2	
78 Ethyl methacrylate	69	9.425	9.425	0.000	86	513149	400.0	392.8	
79 1,1,2-Trichloroethane	97	9.510	9.510	0.000	91	430806	400.0	384.3	
80 Tetrachloroethene	164	9.644	9.644	0.000	92	524990	400.0	402.5	
81 1,3-Dichloropropane	76	9.674	9.674	0.000	91	626433	400.0	378.0	
82 2-Hexanone	43	9.772	9.766	0.006	96	462161	800.0	784.9	
84 Chlorodibromomethane	129	9.900	9.900	0.000	88	725170	400.0	376.2	
85 Ethylene Dibromide	107	10.009	10.009	0.000	98	486579	400.0	383.1	
87 Chlorobenzene	112	10.502	10.496	0.006	93	1464442	400.0	367.8	
89 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	92	683517	400.0	355.0	
90 Ethylbenzene	106	10.605	10.605	0.000	97	742350	400.0	328.1	
91 m-Xylene & p-Xylene	106	10.721	10.721	0.000	95	1009451	400.0	330.9	
92 o-Xylene	106	11.116	11.116	0.000	94	1006935	400.0	328.7	
93 Styrene	104	11.134	11.128	0.006	93	1435413	400.0	388.9	
94 Bromoform	173	11.317	11.311	0.006	95	436139	400.0	399.3	
97 Isopropylbenzene	105	11.481	11.481	0.000	96	2501798	400.0	395.2	
99 1,1,2,2-Tetrachloroethane	83	11.779	11.773	0.006	97	452814	400.0	384.9	
100 Bromobenzene	156	11.785	11.785	0.000	86	719427	400.0	374.0	
101 1,2,3-Trichloropropane	110	11.822	11.822	0.000	87	165438	400.0	384.1	
102 trans-1,4-Dichloro-2-buten	53	11.834	11.834	0.000	80	103928	400.0	385.2	
103 N-Propylbenzene	120	11.895	11.889	0.006	95	866084	400.0	366.8	
104 2-Chlorotoluene	126	11.980	11.980	0.000	96	799439	400.0	372.9	
106 1,3,5-Trimethylbenzene	105	12.065	12.065	0.000	97	2000575	400.0	402.4	
107 4-Chlorotoluene	126	12.090	12.090	0.000	94	757841	400.0	368.9	
108 tert-Butylbenzene	119	12.394	12.388	0.006	91	2561684	400.0	394.9	
110 1,2,4-Trimethylbenzene	105	12.442	12.442	0.000	95	2068364	400.0	399.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.613	12.613	0.000	94	2688983	400.0	402.5	
113 1,3-Dichlorobenzene	146	12.728	12.722	0.006	96	1390255	400.0	371.8	
114 4-Isopropyltoluene	119	12.759	12.753	0.006	94	2342656	400.0	399.0	
115 1,4-Dichlorobenzene	146	12.820	12.814	0.006	92	1375837	400.0	386.3	
120 n-Butylbenzene	91	13.166	13.160	0.006	94	1935500	400.0	397.3	
121 1,2-Dichlorobenzene	146	13.191	13.191	0.000	97	1172011	400.0	335.9	
122 1,2-Dibromo-3-Chloropropan	75	13.969	13.969	0.000	88	74075	400.0	413.4	
126 1,2,4-Trichlorobenzene	180	14.803	14.803	0.000	95	443796	400.0	401.2	M
127 Hexachlorobutadiene	225	14.973	14.973	0.000	88	239421	400.0	361.2	
128 Naphthalene	128	15.058	15.052	0.006	96	664374	400.0	366.7	
129 1,2,3-Trichlorobenzene	180	15.308	15.308	0.000	95	263400	400.0	348.0	
S 134 1,2-Dichloroethene, Total	96				0		800.0	770.1	
S 133 Xylenes, Total	106				0		800.0	659.6	
S 135 1,3-Dichloropropene, Total	1				0		800.0	767.3	

QC Flag Legend

Review Flags

M - Manually Integrated

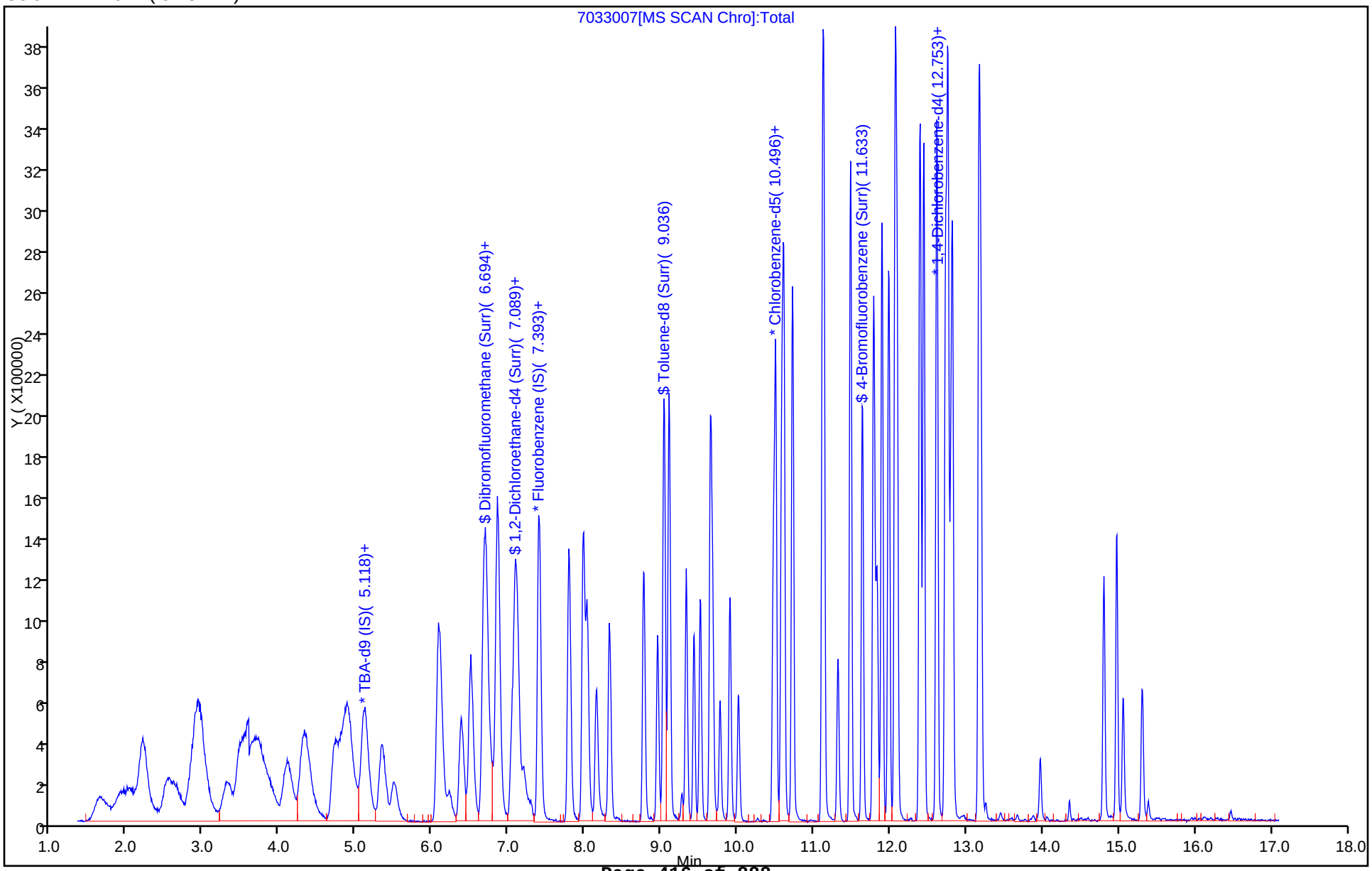
Reagents:

VOA8260SURR_00017	Amount Added:	16.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOAVAPRI_00005	Amount Added:	16.00	Units: uL
VOAACRPRI_00003	Amount Added:	32.00	Units: uL
VOA8260VOAPRI_00108	Amount Added:	16.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	16.00	Units: uL

Report Date: 31-Mar-2015 08:54:24 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033007.D				
Injection Date:	30-Mar-2015 13:05:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column: DB-624 (0.18 mm)					



Manual Integration/User Assign Peak Report

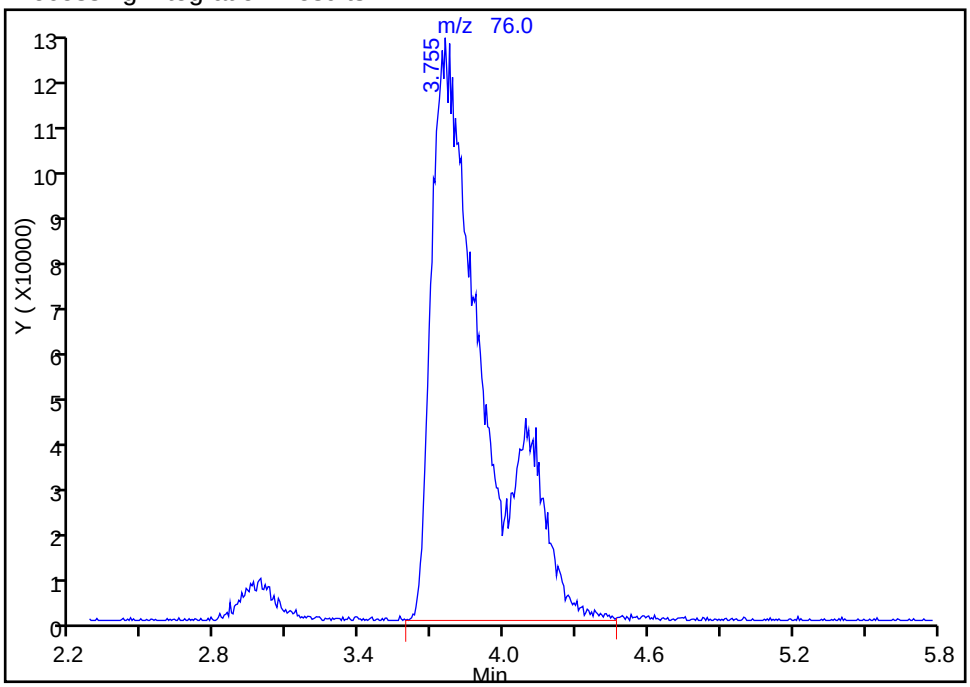
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033007.D				
Injection Date:	30-Mar-2015 13:05:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

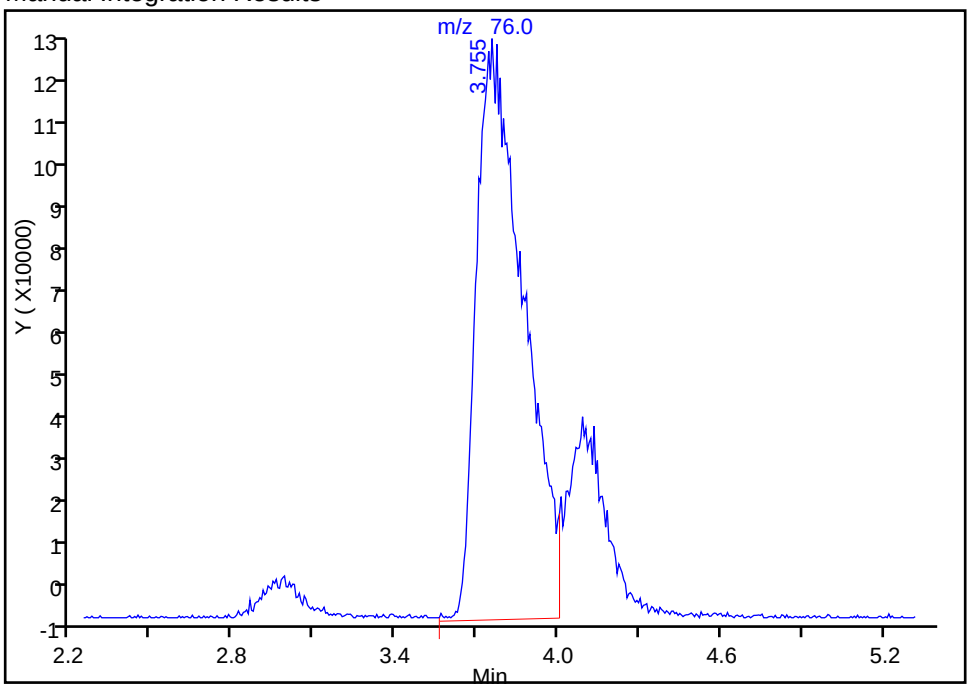
Processing Integration Results

RT: 3.76
Area: 1952405
Amount: 446.8874
Amount Units: ng



Manual Integration Results

RT: 3.76
Area: 1544647
Amount: 371.1505
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 13:53:19
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

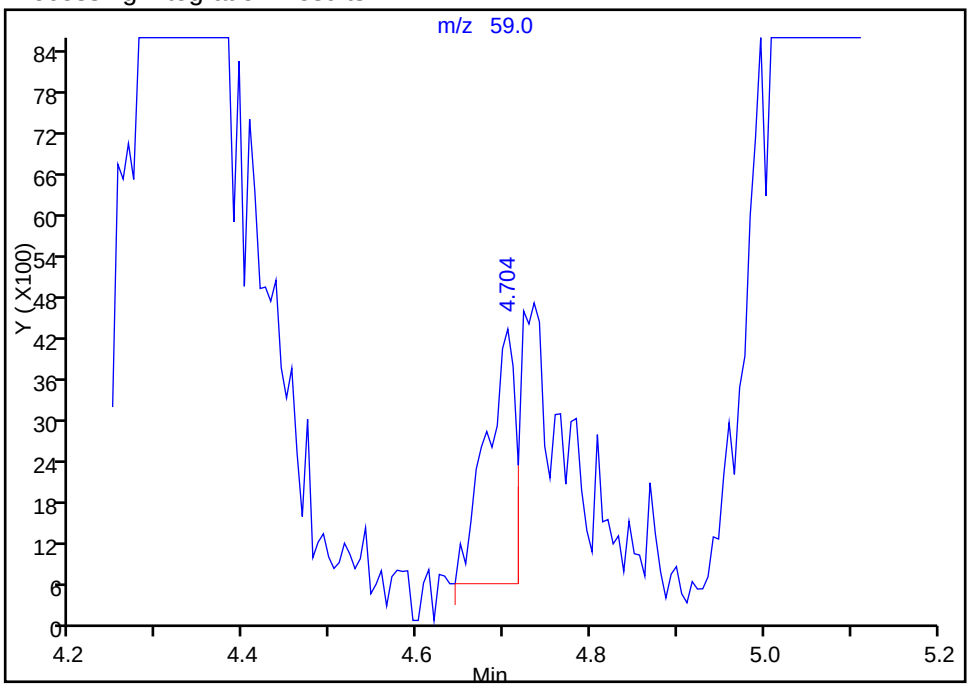
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033007.D				
Injection Date:	30-Mar-2015 13:05:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

32 2-Methyl-2-propanol, CAS: 75-65-0

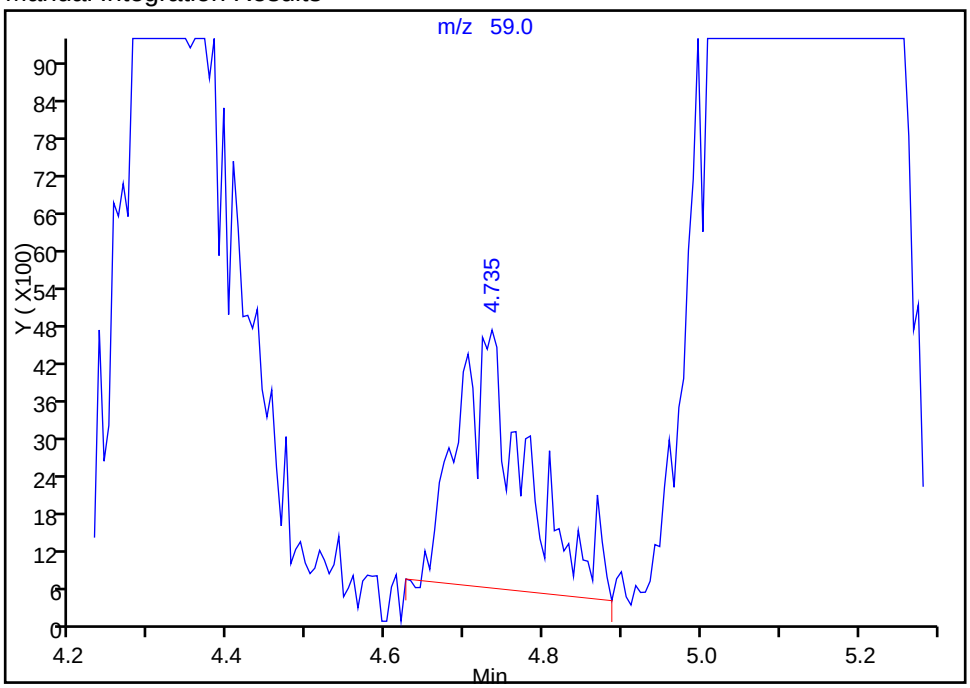
Processing Integration Results

RT: 4.70
Area: 8865
Amount: 1468.1351
Amount Units: ng



Manual Integration Results

RT: 4.73
Area: 25255
Amount: 3891.2177
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 16:20:01
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

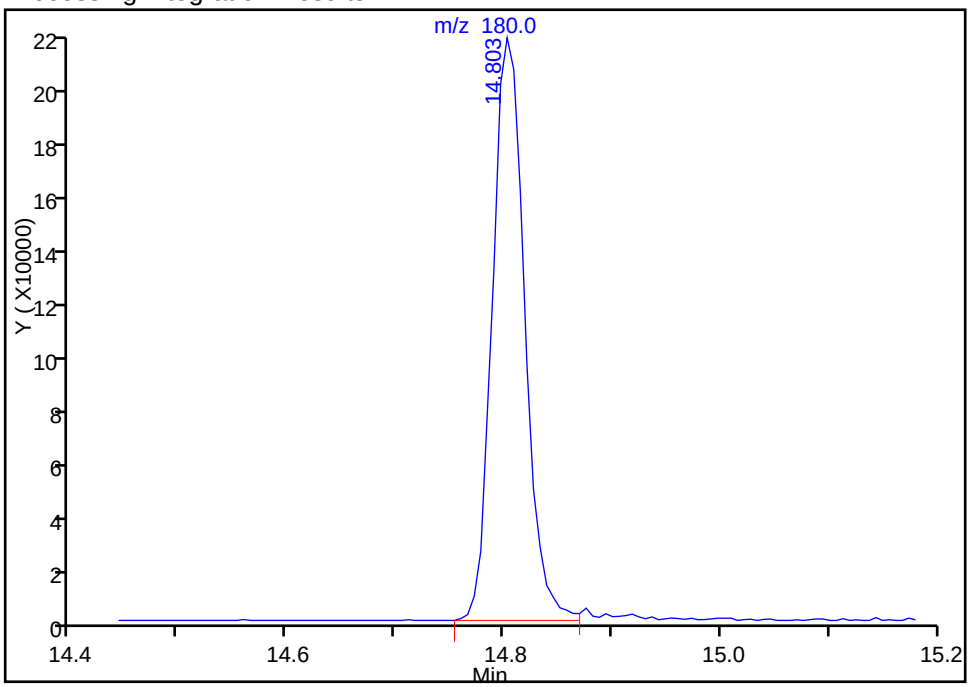
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033007.D				
Injection Date:	30-Mar-2015 13:05:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

126 1,2,4-Trichlorobenzene, CAS: 120-82-1

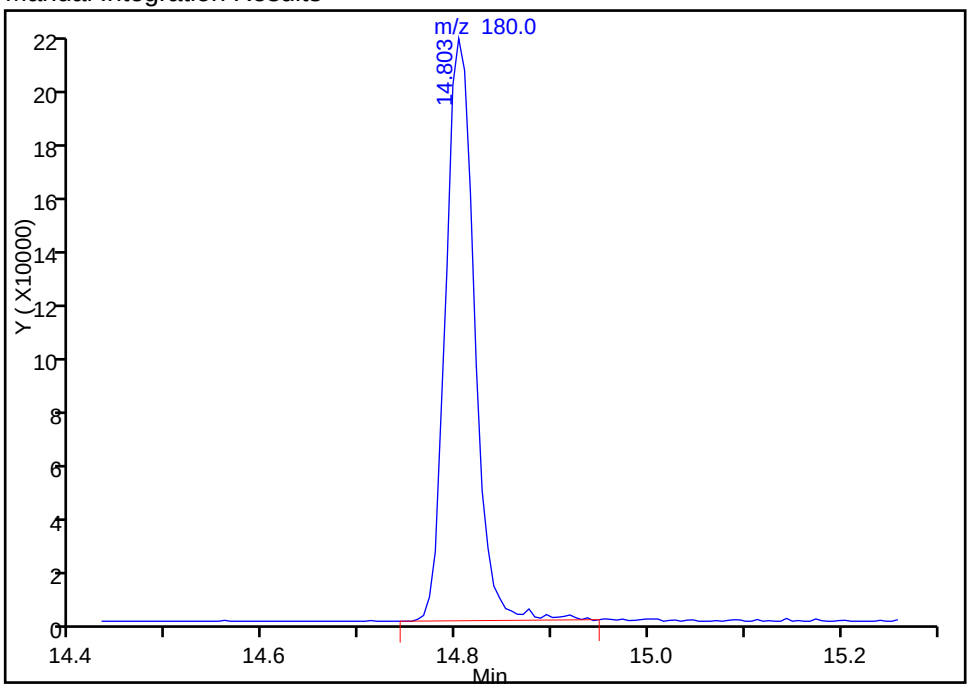
Processing Integration Results

RT: 14.80
Area: 439985
Amount: 424.0170
Amount Units: ng



Manual Integration Results

RT: 14.80
Area: 443796
Amount: 401.1709
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 16:20:01
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033008.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Mar-2015 13:32:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0006234-008
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub1

Method: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 09:17:36 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 30-Mar-2015 14:17:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	5.045	5.051	-0.006	90	325061	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.399	7.399	0.000	94	1064126	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.471	10.471	0.000	82	346158	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.795	12.789	0.006	93	490230	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.675	6.675	0.000	89	1069500	700.0	630.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.046	7.040	0.006	96	1052781	700.0	650.5	
$ 7 Toluene-d8 (Surr)	98	9.036	9.036	0.000	92	2956031	700.0	575.7	
$ 8 4-Bromofluorobenzene (Surr	95	11.639	11.633	0.006	91	1382927	700.0	632.2	
11 Dichlorodifluoromethane	85	1.900	1.888	0.012	95	1251238	700.0	634.4	
12 Chloromethane	50	2.046	2.015	0.031	89	1397995	700.0	650.6	
14 Butadiene	39	2.204	2.174	0.030	95	1091852	700.0	617.8	
13 Vinyl chloride	62	2.222	2.204	0.018	90	1056944	700.0	631.6	
15 Bromomethane	94	2.508	2.496	0.012	95	913392	700.0	677.4	
16 Chloroethane	64	2.642	2.612	0.030	92	891876	700.0	660.7	
17 Dichlorofluoromethane	67	2.897	2.873	0.024	93	2383040	700.0	663.5	
18 Trichlorofluoromethane	101	2.958	2.904	0.054	94	2456359	700.0	650.0	
20 Ethyl ether	59	3.293	3.299	-0.006	88	839764	700.0	700.4	
21 Acrolein	56	3.463	3.445	0.018	29	78643	900.0	950.1	
22 1,1-Dichloroethene	96	3.487	3.457	0.030	93	982672	700.0	687.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.603	3.579	0.024	93	1049950	700.0	632.0	
25 Iodomethane	142	3.676	3.676	0.000	98	1985287	700.0	664.3	
26 Carbon disulfide	76	3.731	3.731	0.000	98	2619768	700.0	610.5	M
24 Acetone	43	3.846	3.877	-0.031	30	390281	1400.0	1300.6	
28 3-Chloro-1-propene	76	4.096	4.072	0.024	86	698091	700.0	662.4	
31 Methylene Chloride	84	4.315	4.309	0.006	83	983292	700.0	641.2	
30 Methyl acetate	43	4.321	4.321	0.000	96	2224238	3500.0	3137.3	
34 trans-1,2-Dichloroethene	96	4.716	4.698	0.018	94	1124535	700.0	634.4	
32 2-Methyl-2-propanol	59	4.735	4.698	0.037	1	53007	7000.0	7028.6	M
33 Acrylonitrile	53	4.832	4.844	-0.012	97	1848860	7000.0	6519.1	
35 Methyl tert-butyl ether	73	4.905	4.905	0.000	95	2272845	700.0	650.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.106	5.100	0.006	93	1051129	700.0	567.0	
38 Vinyl acetate	43	5.106	5.100	0.006	65	892468	700.0	638.5	
37 1,1-Dichloroethane	63	5.337	5.337	0.000	96	1709875	700.0	658.1	
44 2,2-Dichloropropane	77	6.073	6.073	0.000	92	1337687	700.0	616.3	
45 cis-1,2-Dichloroethene	96	6.091	6.091	0.000	82	1130925	700.0	642.9	
46 2-Butanone (MEK)	43	6.225	6.225	0.000	100	613084	1400.0	1285.4	
49 Chlorobromomethane	128	6.383	6.377	0.006	84	646182	700.0	637.7	
52 Chloroform	83	6.499	6.493	0.006	93	1847979	700.0	631.6	
53 1,1,1-Trichloroethane	97	6.675	6.669	0.006	97	1615549	700.0	608.1	
51 Tetrahydrofuran	42	6.712	6.700	0.012	55	323514	1400.0	1239.7	
54 Cyclohexane	56	6.712	6.712	0.000	88	1123391	700.0	599.3	
56 Carbon tetrachloride	117	6.846	6.846	0.000	94	1629157	700.0	607.9	
55 1,1-Dichloropropene	75	6.852	6.852	0.000	89	1161217	700.0	605.2	
58 Benzene	78	7.089	7.083	0.006	96	3150535	700.0	601.6	
59 1,2-Dichloroethane	62	7.131	7.126	0.005	87	1085110	700.0	613.5	
62 n-Heptane	43	7.393	7.387	0.006	92	1015361	700.0	625.5	
57 Isobutyl alcohol	41	7.393	7.393	0.000	86	725140	17500	16974	
64 Trichloroethene	130	7.795	7.789	0.006	92	1337763	700.0	637.2	
66 Methylcyclohexane	83	7.977	7.977	0.000	85	1518386	700.0	588.2	
67 1,2-Dichloropropane	63	8.026	8.026	0.000	80	761874	700.0	638.7	
68 Dibromomethane	93	8.147	8.141	0.006	94	570980	700.0	642.7	
70 1,4-Dioxane	88	8.214	8.214	0.000	86	129768	14000	15562	
71 Dichlorobromomethane	83	8.324	8.318	0.006	96	1412009	700.0	638.4	
74 cis-1,3-Dichloropropene	75	8.768	8.768	0.000	91	1486494	700.0	647.9	
75 4-Methyl-2-pentanone (MIBK	43	8.957	8.951	0.006	95	1221845	1400.0	1207.9	
76 Toluene	91	9.109	9.103	0.006	95	3084889	700.0	703.5	
77 trans-1,3-Dichloropropene	75	9.328	9.322	0.006	94	1307789	700.0	601.0	
78 Ethyl methacrylate	69	9.431	9.425	0.006	88	911071	700.0	629.4	
79 1,1,2-Trichloroethane	97	9.510	9.510	0.000	92	746577	700.0	601.0	
80 Tetrachloroethene	164	9.650	9.644	0.006	92	884171	700.0	702.4	
81 1,3-Dichloropropane	76	9.674	9.674	0.000	91	1057404	700.0	575.8	
82 2-Hexanone	43	9.772	9.766	0.006	97	828690	1400.0	1270.2	
84 Chlorodibromomethane	129	9.899	9.900	-0.001	88	1253031	700.0	586.7	
85 Ethylene Dibromide	107	10.015	10.009	0.006	98	856980	700.0	608.9	
87 Chlorobenzene	112	10.502	10.496	0.006	91	2414200	700.0	547.1	
89 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	92	1125563	700.0	527.6	
90 Ethylbenzene	106	10.611	10.605	0.006	96	1229831	700.0	490.5	
91 m-Xylene & p-Xylene	106	10.727	10.721	0.006	93	1715038	700.0	507.4	
92 o-Xylene	106	11.122	11.116	0.006	92	1683040	700.0	495.8	
93 Styrene	104	11.134	11.128	0.006	90	2360095	700.0	706.5	
94 Bromoform	173	11.317	11.311	0.006	93	781610	700.0	645.8	
97 Isopropylbenzene	105	11.481	11.481	0.000	95	3864822	700.0	706.3	
99 1,1,2,2-Tetrachloroethane	83	11.779	11.773	0.006	95	733504	700.0	562.6	
100 Bromobenzene	156	11.791	11.785	0.006	85	1224216	700.0	582.7	
101 1,2,3-Trichloropropane	110	11.828	11.822	0.006	86	290435	700.0	617.4	
102 trans-1,4-Dichloro-2-buten	53	11.840	11.834	0.006	78	188752	700.0	640.6	
103 N-Propylbenzene	120	11.901	11.889	0.012	93	1515443	700.0	587.7	
104 2-Chlorotoluene	126	11.986	11.980	0.006	92	1366522	700.0	583.7	
106 1,3,5-Trimethylbenzene	105	12.071	12.065	0.006	96	3121962	700.0	646.6	
107 4-Chlorotoluene	126	12.096	12.090	0.006	91	1318727	700.0	587.8	
108 tert-Butylbenzene	119	12.394	12.388	0.006	91	3583483	700.0	508.9	
110 1,2,4-Trimethylbenzene	105	12.448	12.442	0.006	94	3286002	700.0	702.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.619	12.613	0.006	94	4241460	700.0	652.2	
113 1,3-Dichlorobenzene	146	12.734	12.722	0.012	94	2242920	700.0	554.5	
114 4-Isopropyltoluene	119	12.759	12.753	0.006	92	3605948	700.0	703.5	
115 1,4-Dichlorobenzene	146	12.820	12.814	0.006	90	2234049	700.0	574.5	
120 n-Butylbenzene	91	13.172	13.160	0.012	93	2947372	700.0	704.4	
121 1,2-Dichlorobenzene	146	13.191	13.191	0.000	95	1883558	700.0	494.4	
122 1,2-Dibromo-3-Chloropropan	75	13.969	13.969	0.000	91	134161	700.0	680.5	
126 1,2,4-Trichlorobenzene	180	14.803	14.803	0.000	96	719677	700.0	595.7	
127 Hexachlorobutadiene	225	14.973	14.973	0.000	90	413354	700.0	571.0	
128 Naphthalene	128	15.052	15.052	0.000	97	1090423	700.0	551.2	
129 1,2,3-Trichlorobenzene	180	15.308	15.308	0.000	95	433251	700.0	524.2	
S 134 1,2-Dichloroethene, Total	96				0		1400.0	1277.2	
S 133 Xylenes, Total	106				0		1400.0	1003.2	
S 135 1,3-Dichloropropene, Total	1				0		1400.0	1248.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	28.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOAVAPRI_00005	Amount Added:	28.00	Units: uL
VOAACRPRI_00003	Amount Added:	36.00	Units: uL
VOA8260VOAPRI_00108	Amount Added:	28.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	28.00	Units: uL

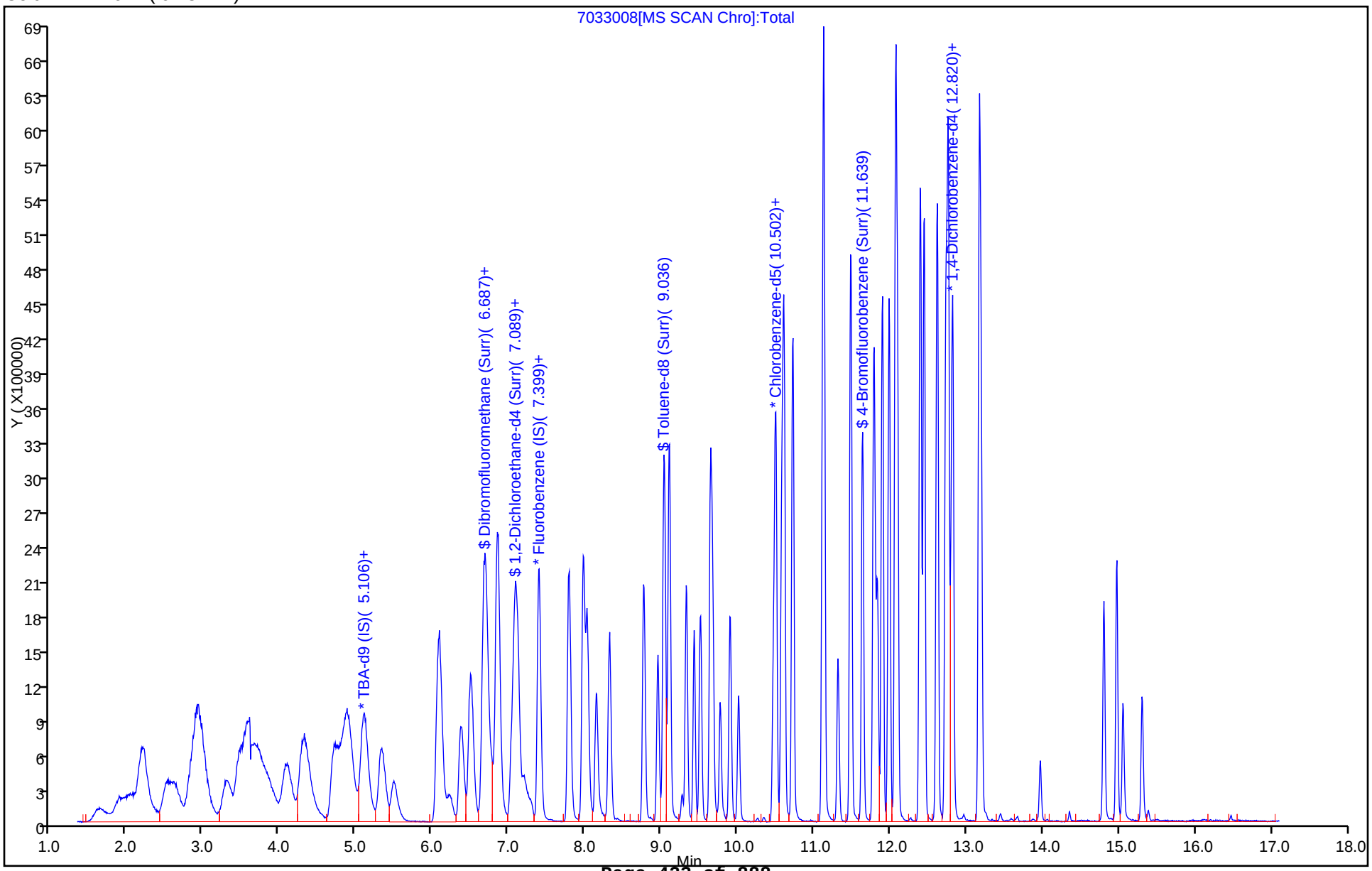
Report Date: 31-Mar-2015 09:17:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033008.D

Injection Date:	30-Mar-2015 13:32:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

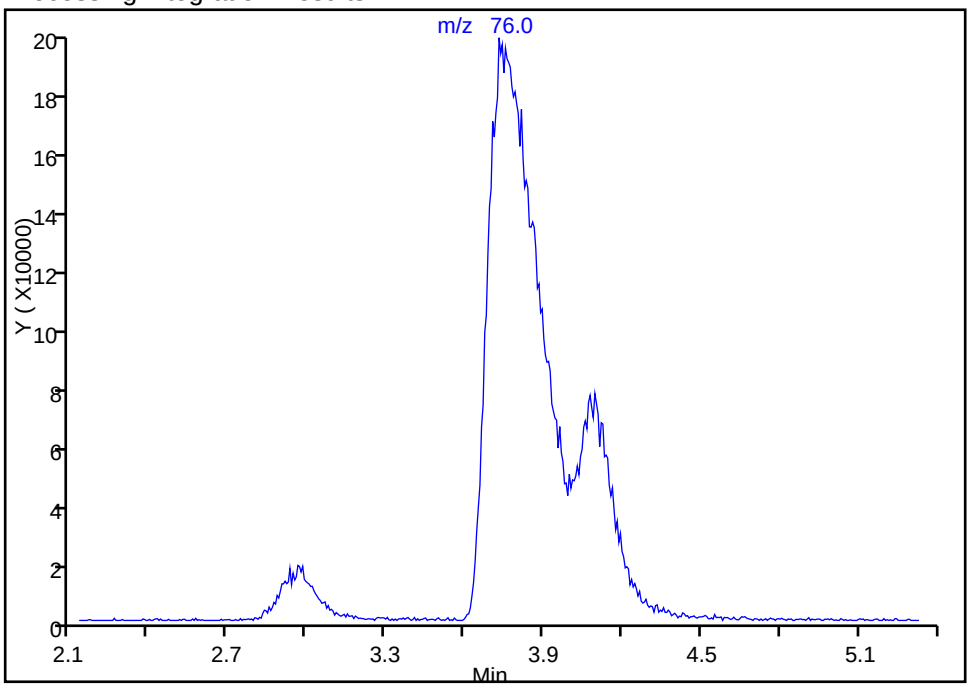
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033008.D				
Injection Date:	30-Mar-2015 13:32:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	8	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

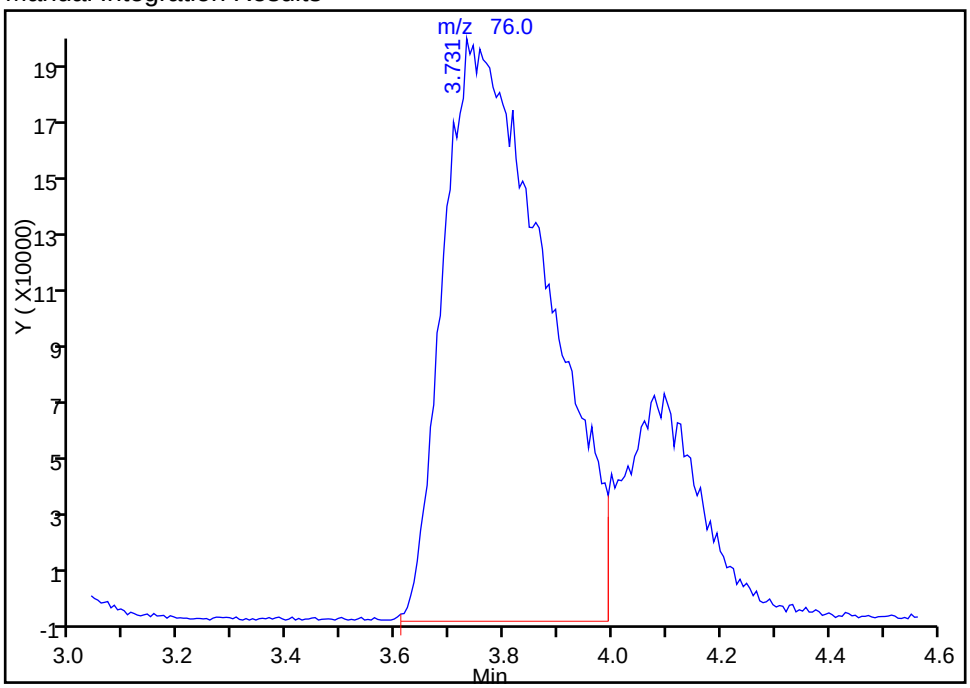
Not Detected
Expected RT: 3.73

Processing Integration Results



Manual Integration Results

RT: 3.73
Area: 2619768
Amount: 610.4854
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 14:17:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

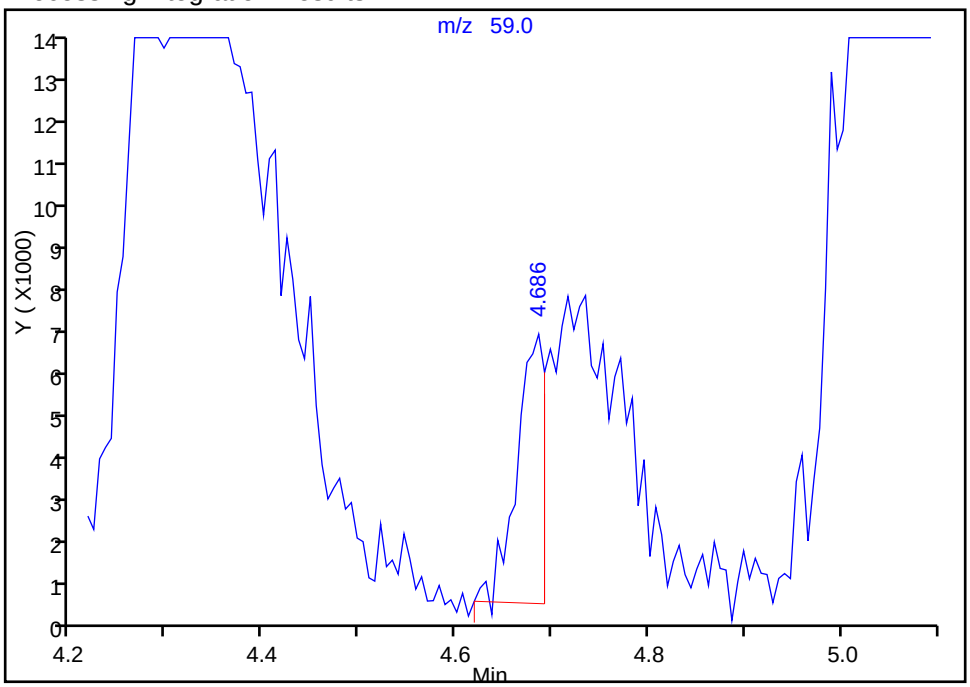
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033008.D
Injection Date: 30-Mar-2015 13:32:30 Instrument ID: CHHP7
Lims ID: ic
Client ID:
Operator ID: 034635 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

32 2-Methyl-2-propanol, CAS: 75-65-0

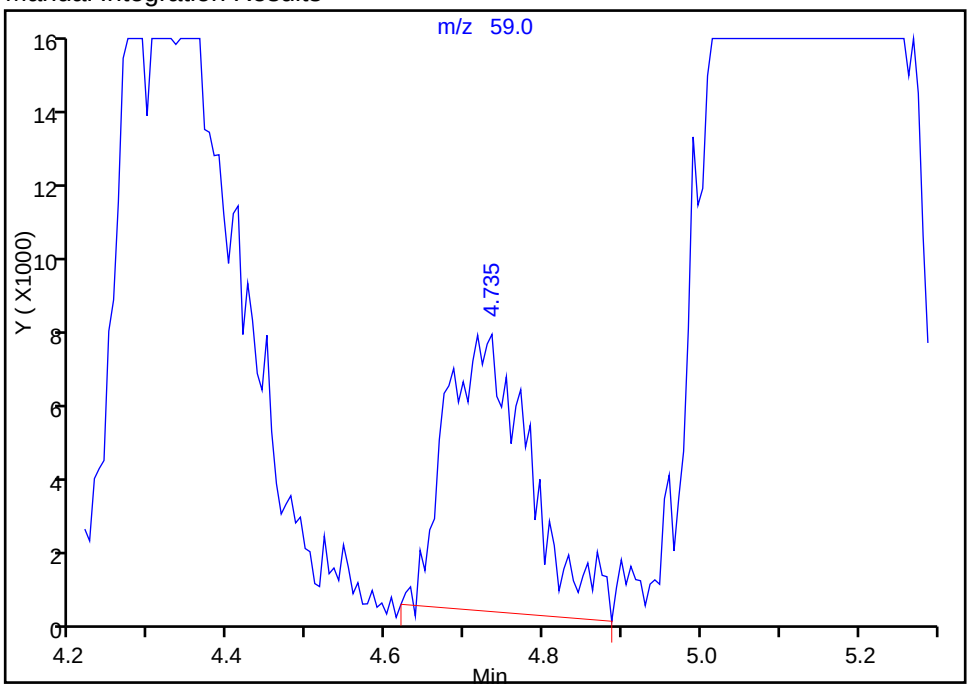
Processing Integration Results

RT: 4.69
Area: 12354
Amount: 2062.6313
Amount Units: ng



Manual Integration Results

RT: 4.73
Area: 53007
Amount: 7028.5816
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 14:17:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033009.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 30-Mar-2015 14:05:30 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0006234-009
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub1

Method: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:54:27 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 30-Mar-2015 15:31:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	5.057	5.051	0.006	39	296956	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.405	7.399	0.006	97	1037142	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.471	10.471	0.000	82	333592	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.795	12.789	0.006	93	453121	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.681	6.675	0.006	90	1276297	800.0	771.5	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.046	7.040	0.006	96	1230322	800.0	780.0	
$ 7 Toluene-d8 (Surr)	98	9.042	9.036	0.006	92	3370087	800.0	681.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.639	11.633	0.006	91	1583659	800.0	754.1	
11 Dichlorodifluoromethane	85	1.906	1.888	0.018	85	1578981	800.0	821.4	
12 Chloromethane	50	2.070	2.015	0.055	87	1636714	800.0	781.5	
14 Butadiene	39	2.192	2.174	0.018	97	1307567	800.0	759.1	
13 Vinyl chloride	62	2.216	2.204	0.012	67	1331694	800.0	816.5	
15 Bromomethane	94	2.520	2.496	0.024	94	1046463	800.0	796.3	
16 Chloroethane	64	2.630	2.612	0.018	80	1044851	800.0	794.1	
17 Dichlorofluoromethane	67	2.904	2.873	0.031	93	2691604	800.0	768.9	
18 Trichlorofluoromethane	101	2.940	2.904	0.036	90	2906130	800.0	789.1	
20 Ethyl ether	59	3.299	3.299	0.000	91	1005937	800.0	860.8	
21 Acrolein	56	3.475	3.445	0.030	27	83224	1000.0	1031.6	
22 1,1-Dichloroethene	96	3.530	3.457	0.073	96	1127478	800.0	809.7	
23 1,1,2-Trichloro-1,2,2-trif	101	3.585	3.579	0.006	93	1266754	800.0	782.3	
25 Iodomethane	142	3.688	3.676	0.012	99	2306954	800.0	792.0	
26 Carbon disulfide	76	3.780	3.731	0.049	100	3969960	800.0	949.2	
24 Acetone	43	3.907	3.877	0.030	40	501900	1600.0	1739.9	
28 3-Chloro-1-propene	76	4.078	4.072	0.006	83	796185	800.0	775.2	
31 Methylene Chloride	84	4.315	4.309	0.006	70	1126005	800.0	753.4	
30 Methyl acetate	43	4.333	4.321	0.012	97	2696602	4000.0	3902.5	
34 trans-1,2-Dichloroethene	96	4.723	4.698	0.025	89	1298488	800.0	751.5	
32 2-Methyl-2-propanol	59	4.723	4.698	0.025	32	42028	8000.0	6265.5	
33 Acrylonitrile	53	4.832	4.844	-0.012	99	2150290	8000.0	7779.2	
35 Methyl tert-butyl ether	73	4.905	4.905	0.000	94	2574759	800.0	756.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.106	5.100	0.006	93	1491013	800.0	825.2	
38 Vinyl acetate	43	5.106	5.100	0.006	98	1064694	800.0	781.5	
37 1,1-Dichloroethane	63	5.337	5.337	0.000	97	2003605	800.0	791.2	
44 2,2-Dichloropropane	77	6.073	6.073	0.000	88	1523531	800.0	720.2	
45 cis-1,2-Dichloroethene	96	6.091	6.091	0.000	77	1299902	800.0	758.1	
46 2-Butanone (MEK)	43	6.225	6.225	0.000	99	789394	1600.0	1698.1	
49 Chlorobromomethane	128	6.377	6.377	0.000	81	744761	800.0	754.1	
52 Chloroform	83	6.505	6.493	0.012	93	2105517	800.0	738.3	
53 1,1,1-Trichloroethane	97	6.669	6.669	0.000	96	1847241	800.0	713.4	
51 Tetrahydrofuran	42	6.511	6.700	-0.189	92	392456	1600.0	1543.0	
54 Cyclohexane	56	6.718	6.712	0.006	88	1347518	800.0	737.6	
56 Carbon tetrachloride	117	6.852	6.846	0.006	95	1866632	800.0	714.6	
55 1,1-Dichloropropene	75	6.858	6.852	0.006	88	1350014	800.0	721.9	
58 Benzene	78	7.095	7.083	0.012	97	3553209	800.0	696.1	
59 1,2-Dichloroethane	62	7.132	7.126	0.006	94	1261454	800.0	731.7	
62 n-Heptane	43	7.393	7.387	0.006	87	1247753	800.0	788.7	
57 Isobutyl alcohol	41	7.393	7.393	0.000	84	875607	20000	21029	
64 Trichloroethene	130	7.789	7.789	0.000	91	1511187	800.0	738.5	
66 Methylcyclohexane	83	7.977	7.977	0.000	86	1821723	800.0	724.1	
67 1,2-Dichloropropane	63	8.032	8.026	0.006	79	872134	800.0	750.2	
68 Dibromomethane	93	8.148	8.141	0.007	93	676332	800.0	781.1	
70 1,4-Dioxane	88	8.208	8.214	-0.006	84	130621	16000	16072	
71 Dichlorobromomethane	83	8.324	8.318	0.006	97	1632472	800.0	757.3	
74 cis-1,3-Dichloropropene	75	8.774	8.768	0.006	87	1709267	800.0	764.3	
75 4-Methyl-2-pentanone (MIBK	43	8.957	8.951	0.006	94	1421595	1600.0	1458.4	
76 Toluene	91	9.109	9.103	0.006	94	3491462	800.0	NQ	
77 trans-1,3-Dichloropropene	75	9.334	9.322	0.012	94	1546548	800.0	737.5	
78 Ethyl methacrylate	69	9.431	9.425	0.006	87	1076607	800.0	771.8	
79 1,1,2-Trichloroethane	97	9.516	9.510	0.006	93	867173	800.0	724.3	
80 Tetrachloroethene	164	9.644	9.644	0.000	92	1011053	800.0	924.4	
81 1,3-Dichloropropane	76	9.681	9.674	0.007	92	1228755	800.0	694.3	
82 2-Hexanone	43	9.772	9.766	0.006	95	1032279	1600.0	1641.8	
84 Chlorodibromomethane	129	9.900	9.900	0.000	91	1443562	800.0	701.3	
85 Ethylene Dibromide	107	10.015	10.009	0.006	98	985791	800.0	726.8	
87 Chlorobenzene	112	10.502	10.496	0.006	91	2701248	800.0	635.2	
89 1,1,1,2-Tetrachloroethane	131	10.581	10.581	0.000	92	1258389	800.0	612.1	
90 Ethylbenzene	106	10.611	10.605	0.006	95	1391048	800.0	575.8	
91 m-Xylene & p-Xylene	106	10.727	10.721	0.006	93	1961344	800.0	602.1	
92 o-Xylene	106	11.122	11.116	0.006	93	1933648	800.0	591.1	
93 Styrene	104	11.134	11.128	0.006	93	2670138	800.0	NQ	
94 Bromoform	173	11.317	11.311	0.006	93	915646	800.0	785.1	
97 Isopropylbenzene	105	11.487	11.481	0.006	95	4316426	800.0	NQ	
99 1,1,2,2-Tetrachloroethane	83	11.779	11.773	0.006	97	843599	800.0	671.4	
100 Bromobenzene	156	11.798	11.785	0.013	85	1357100	800.0	698.9	
101 1,2,3-Trichloropropane	110	11.828	11.822	0.006	86	336681	800.0	774.4	
102 trans-1,4-Dichloro-2-buten	53	11.840	11.834	0.006	79	225524	800.0	828.1	
103 N-Propylbenzene	120	11.901	11.889	0.012	94	1690335	800.0	709.2	
104 2-Chlorotoluene	126	11.992	11.980	0.012	91	1567014	800.0	724.2	
106 1,3,5-Trimethylbenzene	105	12.071	12.065	0.006	95	3446156	800.0	846.6	
107 4-Chlorotoluene	126	12.096	12.090	0.006	91	1461135	800.0	704.6	
108 tert-Butylbenzene	119	12.400	12.388	0.012	91	3999628	800.0	616.8	
110 1,2,4-Trimethylbenzene	105	12.449	12.442	0.007	93	3545216	800.0	1107.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.619	12.613	0.006	94	4650844	800.0	841.1	
113 1,3-Dichlorobenzene	146	12.734	12.722	0.012	93	2457052	800.0	659.2	
114 4-Isopropyltoluene	119	12.765	12.753	0.012	91	3946644	800.0	NQ	
115 1,4-Dichlorobenzene	146	12.826	12.814	0.012	93	2471728	800.0	687.6	
120 n-Butylbenzene	91	13.172	13.160	0.012	91	3283929	800.0	NQ	
121 1,2-Dichlorobenzene	146	13.191	13.191	0.000	94	2089815	800.0	593.5	
122 1,2-Dibromo-3-Chloropropan	75	13.963	13.969	-0.006	90	157690	800.0	863.2	
126 1,2,4-Trichlorobenzene	180	14.803	14.803	0.000	96	992400	800.0	888.8	
127 Hexachlorobutadiene	225	14.973	14.973	0.000	91	568860	800.0	850.2	
128 Naphthalene	128	15.052	15.052	0.000	97	1540124	800.0	842.2	
129 1,2,3-Trichlorobenzene	180	15.302	15.308	-0.006	96	697645	800.0	913.1	
S 134 1,2-Dichloroethene, Total	96				0		1600.0	1509.7	
S 133 Xylenes, Total	106				0		1600.0	1193.2	
S 135 1,3-Dichloropropene, Total	1				0		1600.0	1501.8	

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

Reagents:

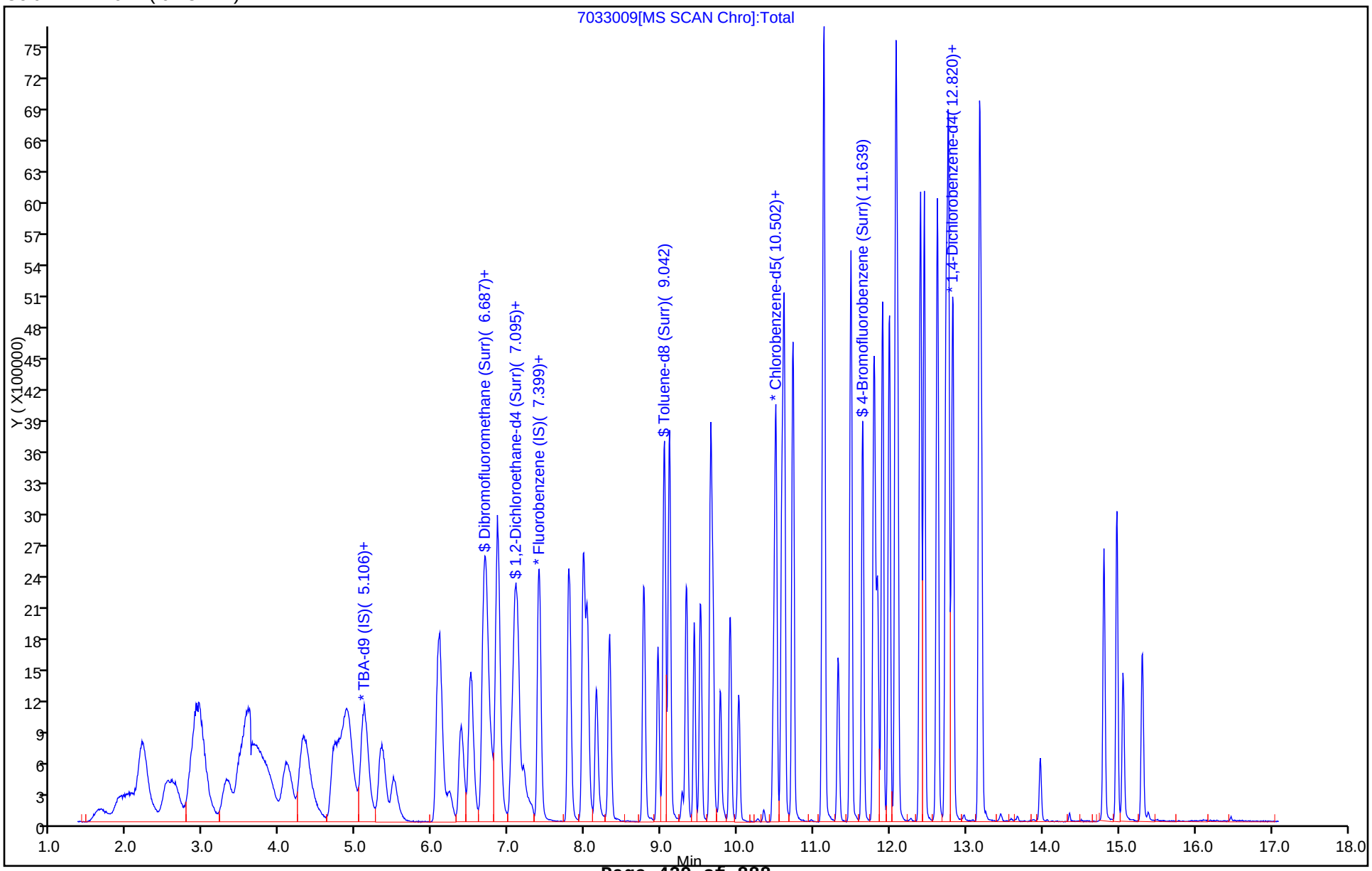
VOA8260SURR_00017	Amount Added:	32.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOAVAPRI_00005	Amount Added:	32.00	Units: uL
VOAACRPRI_00003	Amount Added:	40.00	Units: uL
VOA8260VOAPRI_00108	Amount Added:	32.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	32.00	Units: uL

Report Date: 31-Mar-2015 08:54:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033009.D				
Injection Date:	30-Mar-2015 14:05:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 30-Mar-2015 14:36:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 180-0006234-010
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub1

Method: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 31-Mar-2015 08:54:29 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: journetp Date: 30-Mar-2015 15:30:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	5.098	5.051	0.047	29	262357	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.410	7.399	0.011	78	1045154	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.476	10.471	0.005	82	333626	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.800	12.789	0.011	92	441544	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.686	6.675	0.011	92	1499933	1000.0	899.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.051	7.040	0.011	67	1446117	1000.0	909.8	
$ 7 Toluene-d8 (Surr)	98	9.040	9.036	0.004	92	4013224	1000.0	811.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.644	11.633	0.011	92	1915172	1000.0	915.0	
11 Dichlorodifluoromethane	85	1.904	1.888	0.016	97	1958336	1000.0	1010.9	
12 Chloromethane	50	2.075	2.015	0.060	64	2148873	1000.0	1018.2	
14 Butadiene	39	2.202	2.174	0.028	96	1684970	1000.0	970.8	
13 Vinyl chloride	62	2.239	2.204	0.035	98	1662883	1000.0	1011.8	
15 Bromomethane	94	2.537	2.496	0.041	96	1390949	1000.0	1050.3	
16 Chloroethane	64	2.610	2.612	-0.002	96	1328639	1000.0	1002.1	
17 Dichlorofluoromethane	67	2.890	2.873	0.017	96	3391987	1000.0	961.5	
18 Trichlorofluoromethane	101	2.963	2.904	0.059	92	3658414	1000.0	985.7	
20 Ethyl ether	59	3.310	3.299	0.011	90	1215677	1000.0	1032.3	
21 Acrolein	56	3.480	3.445	0.035	28	85538	1100.0	1052.1	
22 1,1-Dichloroethene	96	3.553	3.457	0.096	91	1456322	1000.0	1037.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.571	3.579	-0.008	94	1605157	1000.0	983.7	
25 Iodomethane	142	3.681	3.676	0.005	90	2906153	1000.0	990.1	
26 Carbon disulfide	76	3.754	3.731	0.023	100	3951355	1000.0	937.5	M
24 Acetone	43	3.875	3.877	-0.002	16	526230	2000.0	1813.3	
28 3-Chloro-1-propene	76	4.082	4.072	0.010	84	1091756	1000.0	1054.8	M
31 Methylene Chloride	84	4.313	4.309	0.004	80	1446969	1000.0	960.7	
30 Methyl acetate	43	4.326	4.321	0.005	99	3030290	5000.0	4351.8	
34 trans-1,2-Dichloroethene	96	4.727	4.698	0.029	96	1650008	1000.0	947.7	
32 2-Methyl-2-propanol	59	4.709	4.698	0.011	32	87352	10000	12101	
33 Acrylonitrile	53	4.843	4.844	-0.001	95	2412565	10000	8661.2	M
35 Methyl tert-butyl ether	73	4.928	4.905	0.023	96	3086291	1000.0	899.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.098	5.100	-0.002	94	1744973	1000.0	958.3	
38 Vinyl acetate	43	5.092	5.100	-0.008	62	1318507	1000.0	960.4	
37 1,1-Dichloroethane	63	5.335	5.337	-0.002	95	2524474	1000.0	989.3	
44 2,2-Dichloropropane	77	6.078	6.073	0.005	89	1943271	1000.0	911.5	
45 cis-1,2-Dichloroethene	96	6.096	6.091	0.005	77	1640293	1000.0	949.3	
46 2-Butanone (MEK)	43	6.242	6.225	0.017	99	872275	2000.0	1862.0	
49 Chlorobromomethane	128	6.382	6.377	0.005	81	925671	1000.0	930.1	
52 Chloroform	83	6.497	6.493	0.004	93	2597161	1000.0	903.8	
53 1,1,1-Trichloroethane	97	6.668	6.669	-0.001	97	2336141	1000.0	895.2	
51 Tetrahydrofuran	42	6.722	6.700	0.022	50	486083	2000.0	1896.5	
54 Cyclohexane	56	6.716	6.712	0.004	90	1661352	1000.0	902.4	
56 Carbon tetrachloride	117	6.856	6.846	0.010	93	2368924	1000.0	899.9	
55 1,1-Dichloropropene	75	6.856	6.852	0.004	88	1689887	1000.0	896.8	
58 Benzene	78	7.094	7.083	0.011	96	4375955	1000.0	850.8	
59 1,2-Dichloroethane	62	7.136	7.126	0.010	97	1506238	1000.0	867.0	
62 n-Heptane	43	7.392	7.387	0.005	84	1473278	1000.0	924.1	
57 Isobutyl alcohol	41	7.392	7.393	-0.001	83	1032146	25000	24598	
64 Trichloroethene	130	7.793	7.789	0.004	90	1899175	1000.0	921.0	
66 Methylcyclohexane	83	7.982	7.977	0.005	85	2242100	1000.0	884.4	
67 1,2-Dichloropropane	63	8.036	8.026	0.010	80	1079980	1000.0	921.8	
68 Dibromomethane	93	8.152	8.141	0.011	93	813226	1000.0	932.0	
70 1,4-Dioxane	88	8.207	8.214	-0.007	82	160108	20000	19549	
71 Dichlorobromomethane	83	8.322	8.318	0.004	96	1941561	1000.0	893.7	
74 cis-1,3-Dichloropropene	75	8.773	8.768	0.005	90	2067222	1000.0	917.3	
75 4-Methyl-2-pentanone (MIBK	43	8.961	8.951	0.010	95	1593755	2000.0	1634.8	
76 Toluene	91	9.107	9.103	0.004	93	4117813	1000.0	NQ	
77 trans-1,3-Dichloropropene	75	9.332	9.322	0.010	94	1832921	1000.0	874.0	
78 Ethyl methacrylate	69	9.436	9.425	0.011	87	1240685	1000.0	889.4	
79 1,1,2-Trichloroethane	97	9.515	9.510	0.005	91	1040134	1000.0	868.7	
80 Tetrachloroethene	164	9.649	9.644	0.005	91	1252526	1000.0	NQ	
81 1,3-Dichloropropane	76	9.679	9.674	0.005	91	1422739	1000.0	803.8	
82 2-Hexanone	43	9.782	9.766	0.016	95	1158826	2000.0	1842.9	
84 Chlorodibromomethane	129	9.904	9.900	0.004	88	1742790	1000.0	846.6	
85 Ethylene Dibromide	107	10.014	10.009	0.005	98	1184293	1000.0	873.1	
87 Chlorobenzene	112	10.506	10.496	0.010	95	3258104	1000.0	766.1	
89 1,1,1,2-Tetrachloroethane	131	10.585	10.581	0.004	92	1561007	1000.0	759.2	
90 Ethylbenzene	106	10.616	10.605	0.011	94	1756448	1000.0	726.9	
91 m-Xylene & p-Xylene	106	10.731	10.721	0.010	91	2370008	1000.0	727.5	
92 o-Xylene	106	11.127	11.116	0.011	89	2438224	1000.0	745.2	
93 Styrene	104	11.139	11.128	0.011	88	3231479	1000.0	NQ	
94 Bromoform	173	11.322	11.311	0.011	93	1061162	1000.0	909.8	
97 Isopropylbenzene	105	11.492	11.481	0.011	95	5133808	1000.0	NQ	
99 1,1,2,2-Tetrachloroethane	83	11.784	11.773	0.011	97	942162	1000.0	749.8	
100 Bromobenzene	156	11.796	11.785	0.011	84	1650286	1000.0	872.2	
101 1,2,3-Trichloropropane	110	11.833	11.822	0.011	86	383754	1000.0	905.8	
102 trans-1,4-Dichloro-2-buten	53	11.845	11.834	0.011	87	261594	1000.0	985.7	
103 N-Propylbenzene	120	11.906	11.889	0.017	91	2105507	1000.0	906.6	
104 2-Chlorotoluene	126	11.991	11.980	0.011	93	1902501	1000.0	902.3	
106 1,3,5-Trimethylbenzene	105	12.076	12.065	0.011	94	4183147	1000.0	1394.8	
107 4-Chlorotoluene	126	12.100	12.090	0.010	92	1852378	1000.0	916.7	
108 tert-Butylbenzene	119	12.404	12.388	0.016	91	4730707	1000.0	751.0	
110 1,2,4-Trimethylbenzene	105	12.453	12.442	0.011	92	4215502	1000.0	NQ	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.623	12.613	0.010	93	5554035	1000.0	1253.2	
113 1,3-Dichlorobenzene	146	12.739	12.722	0.017	93	2939423	1000.0	811.7	
114 4-Isopropyltoluene	119	12.769	12.753	0.016	90	4751587	1000.0	NQ	
115 1,4-Dichlorobenzene	146	12.824	12.814	0.010	92	2953963	1000.0	843.4	
120 n-Butylbenzene	91	13.171	13.160	0.011	88	3968525	1000.0	NQ	
121 1,2-Dichlorobenzene	146	13.195	13.191	0.004	93	2520618	1000.0	734.6	
122 1,2-Dibromo-3-Chloropropan	75	13.968	13.969	-0.001	90	181072	1000.0	1015.8	
126 1,2,4-Trichlorobenzene	180	14.801	14.803	-0.002	96	1186297	1000.0	1090.3	
127 Hexachlorobutadiene	225	14.978	14.973	0.005	89	704150	1000.0	1080.0	
128 Naphthalene	128	15.057	15.052	0.005	97	1609562	1000.0	903.3	
129 1,2,3-Trichlorobenzene	180	15.306	15.308	-0.002	95	761958	1000.0	1023.5	
S 134 1,2-Dichloroethene, Total	96				0		2000.0	1897.0	
S 133 Xylenes, Total	106				0		2000.0	1472.8	
S 135 1,3-Dichloropropene, Total	1				0		2000.0	1791.3	

QC Flag Legend

Processing Flags

NQ - Not Quantifiable

Review Flags

M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	40.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOAVAPRI_00005	Amount Added:	40.00	Units: uL
VOAACRPRI_00003	Amount Added:	44.00	Units: uL
VOA8260VOAPRI_00108	Amount Added:	40.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	40.00	Units: uL

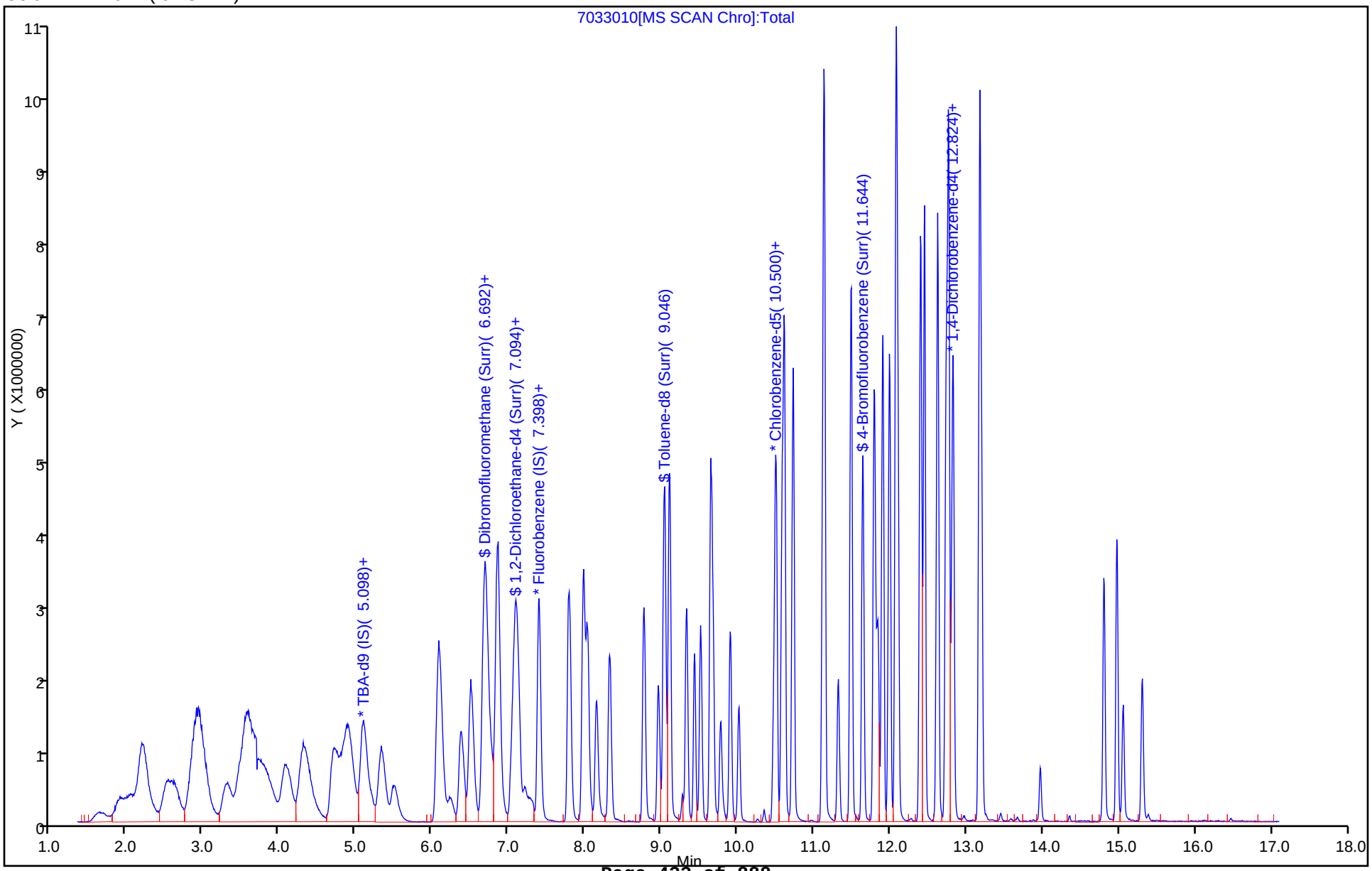
Report Date: 31-Mar-2015 08:54:29 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Injection Date:	30-Mar-2015 14:36:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

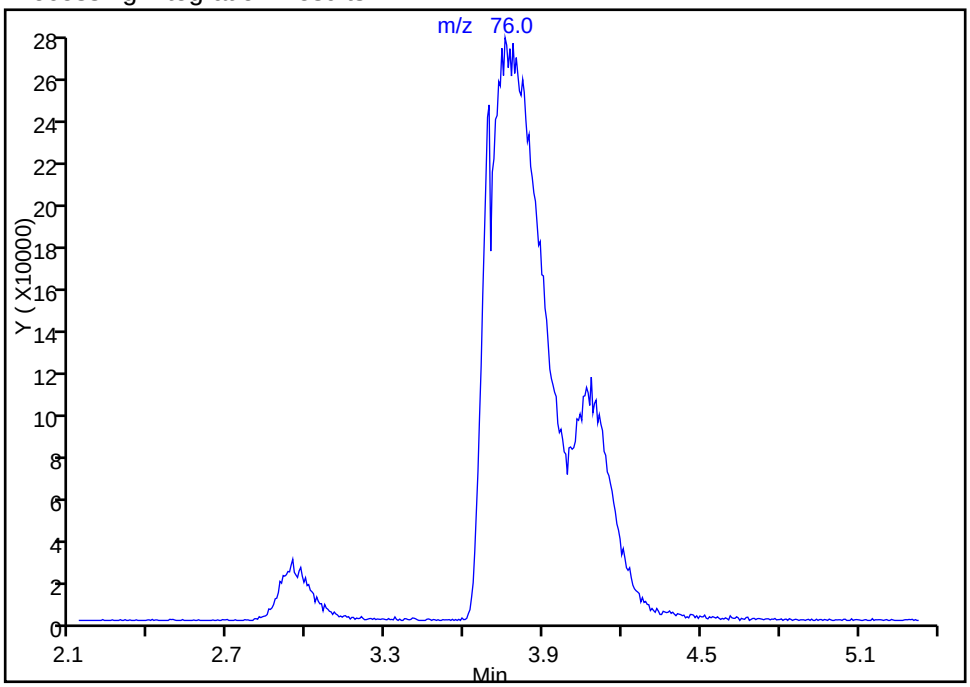
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D				
Injection Date:	30-Mar-2015 14:36:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

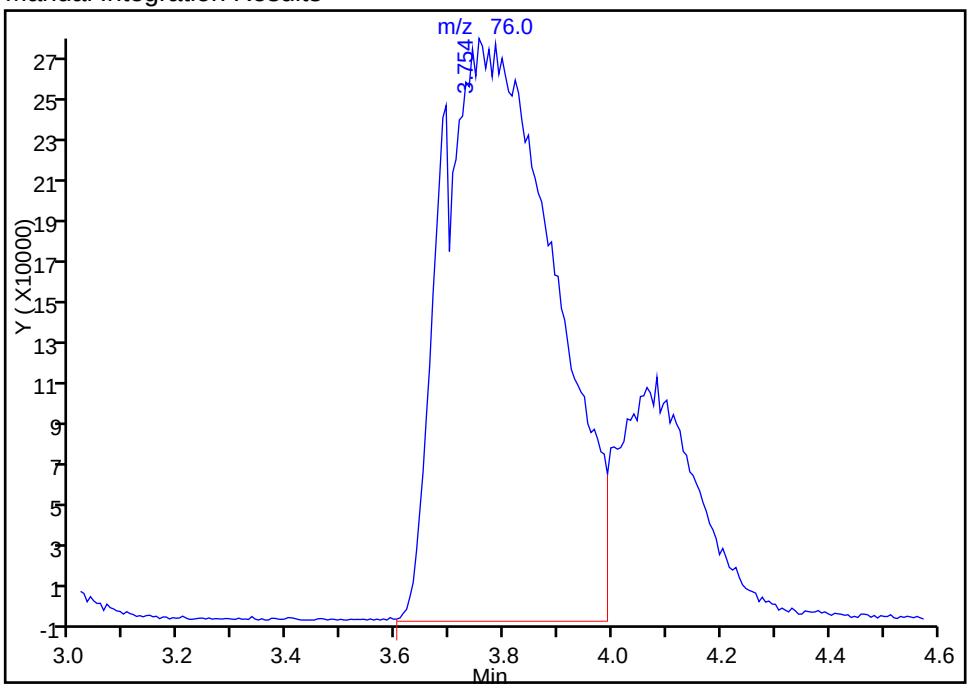
Not Detected
Expected RT: 3.73

Processing Integration Results



Manual Integration Results

RT: 3.75
Area: 3951355
Amount: 937.5001
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 15:30:19
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

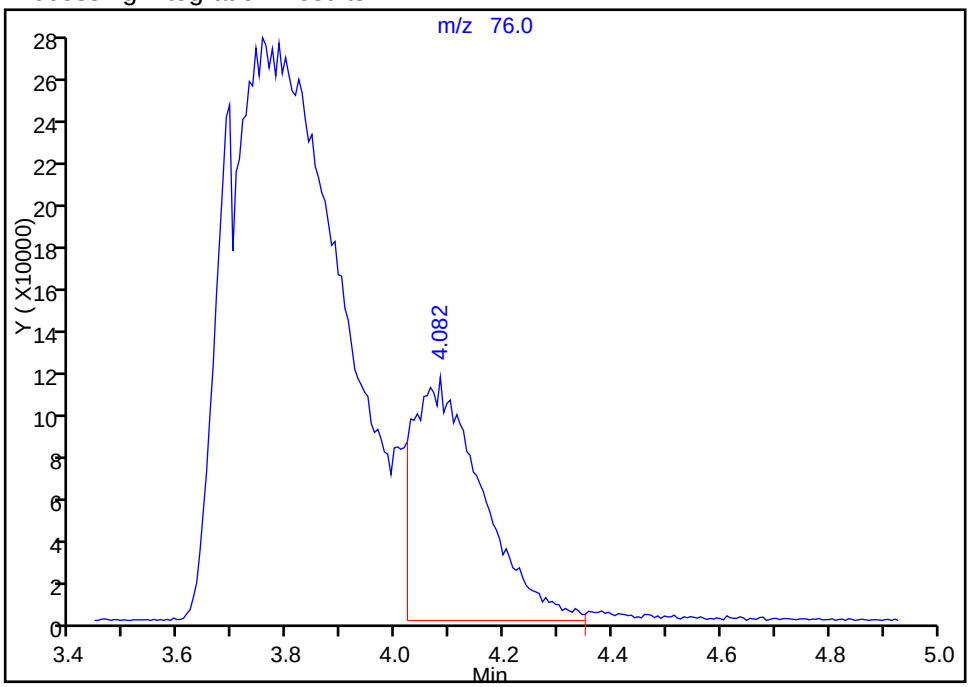
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D				
Injection Date:	30-Mar-2015 14:36:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

28 3-Chloro-1-propene, CAS: 107-05-1

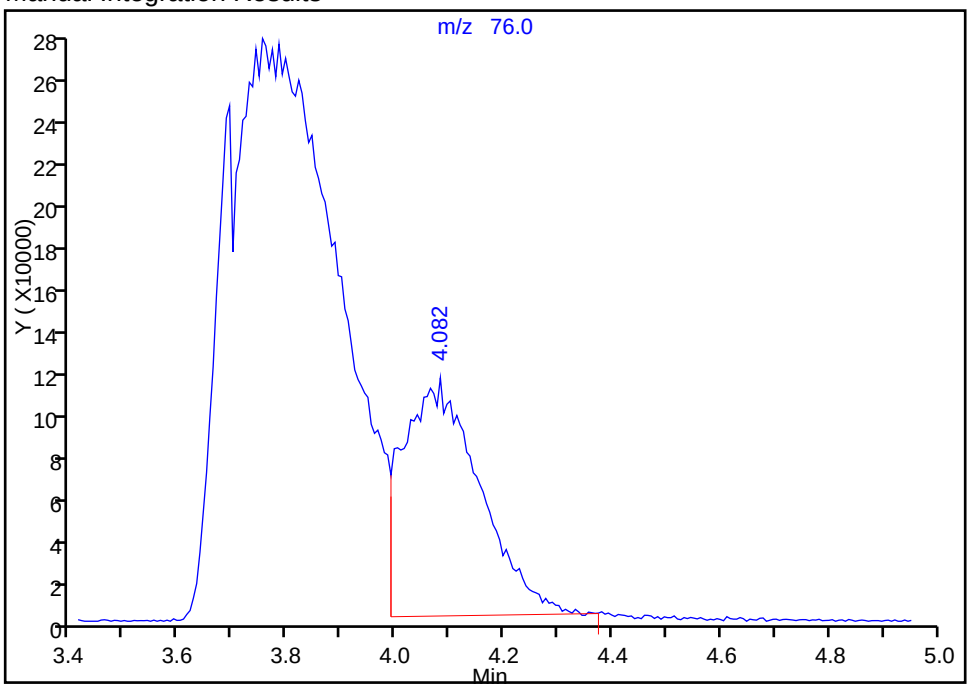
Processing Integration Results

RT: 4.08
Area: 1009836
Amount: 985.3886
Amount Units: ng



Manual Integration Results

RT: 4.08
Area: 1091756
Amount: 1054.7859
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 15:30:19
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

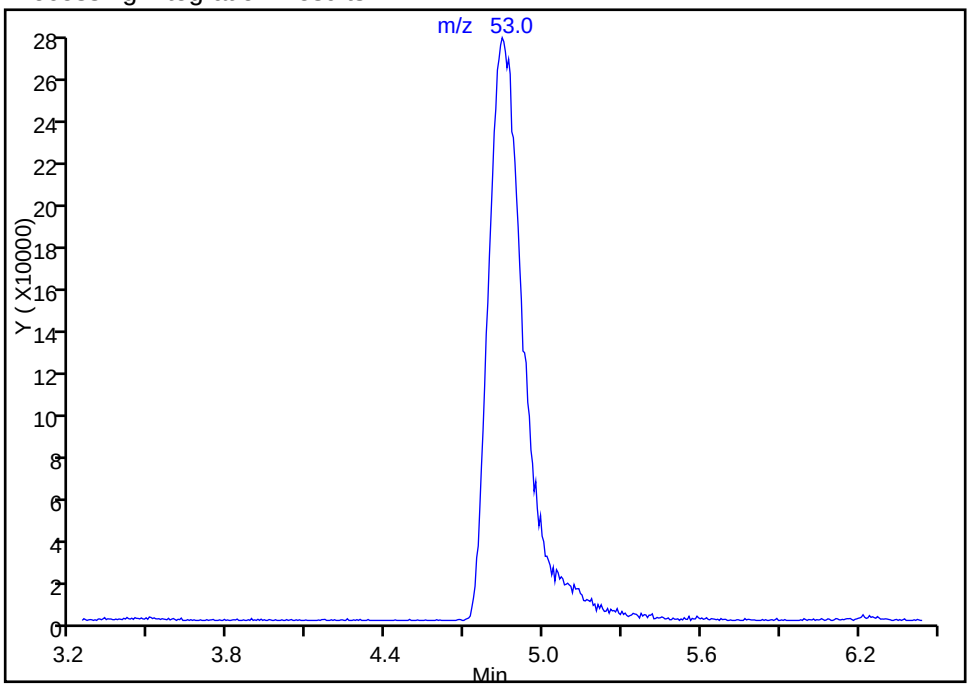
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D				
Injection Date:	30-Mar-2015 14:36:30	Instrument ID:	CHHP7		
Lims ID:	ic				
Client ID:					
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	10
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

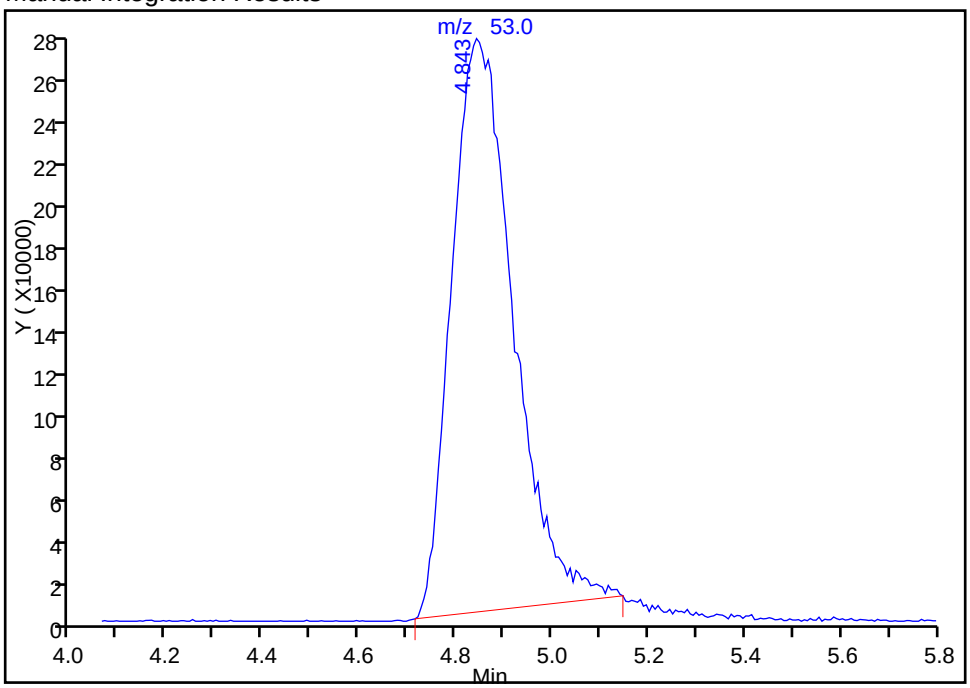
Not Detected
Expected RT: 4.84

Processing Integration Results



Manual Integration Results

RT: 4.84
Area: 2412565
Amount: 8661.1546
Amount Units: ng



Reviewer: journetp, 30-Mar-2015 15:30:19
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137438/3 Calibration Date: 04/03/2015 10:07

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040302.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	0.3707	0.3962	0.1000	10.7	10.0	6.9	20.0
Chloromethane	Ave	0.4039	0.3450	0.1000	8.54	10.0	-14.6	20.0
Vinyl chloride	Ave	0.3145	0.2985	0.1000	9.49	10.0	-5.1	20.0
Bromomethane	Ave	0.2534	0.3304	0.0500	13.0	10.0	30.4*	20.0
Chloroethane	Ave	0.2537	0.2935	0.0500	11.6	10.0	15.7	20.0
Dichlorofluoromethane	Ave	0.6751	0.8098	0.0100	12.0	10.0	20.0	20.0
Trichlorofluoromethane	Ave	0.7102	0.8883	0.1000	12.5	10.0	25.1*	20.0
Ethyl ether	Ave	0.2253	0.1703	0.0100	7.56	10.0	-24.4*	20.0
Acrolein	Ave	0.0156	0.0115	0.0100	22.3	30.0	-25.8*	20.0
1,1-Dichloroethene	Ave	0.2685	0.2921	0.1000	10.9	10.0	8.8	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3122	0.3531	0.1000	11.3	10.0	13.1	20.0
Iodomethane	Ave	0.5617	0.6195	0.0100	11.0	10.0	10.3	20.0
Acetone	Lin2		0.0565	0.0500	17.4	20.0	-12.8	20.0
Carbon disulfide	Ave	0.8065	0.8614	0.1000	10.7	10.0	6.8	20.0
Allyl chloride	Ave	0.1981	0.1952	0.0100	9.85	10.0	-1.5	20.0
Methyl acetate	Ave	0.1332	0.1229	0.1000	46.1	50.0	-7.8	20.0
Methylene Chloride	Ave	0.2882	0.3088	0.1000	10.7	10.0	7.2	20.0
trans-1,2-Dichloroethene	Ave	0.3332	0.3449	0.1000	10.4	10.0	3.5	20.0
Acrylonitrile	Ave	0.0533	0.0475	0.0100	89.1	100	-10.9	20.0
Methyl tert-butyl ether	Ave	0.6566	0.6464	0.1000	9.84	10.0	-1.6	20.0
tert-Butyl alcohol	Qua		1.052	0.0100	834	100	733.8*	20.0
Vinyl acetate	Ave	0.2627	0.2242	0.0100	8.53	10.0	-14.7	20.0
Hexane	Ave	0.3484	0.3002	0.0100	8.62	10.0	-13.8	20.0
1,1-Dichloroethane	Ave	0.4883	0.5046	0.2000	10.3	10.0	3.3	20.0
2,2-Dichloropropane	Ave	0.4080	0.4409	0.0100	10.8	10.0	8.1	20.0
cis-1,2-Dichloroethene	Ave	0.3306	0.3335	0.1000	10.1	10.0	0.9	20.0
2-Butanone (MEK)	Ave	0.0896	0.0679	0.0500	15.2	20.0	-24.2*	20.0
Bromochloromethane	Ave	0.1904	0.1759	0.0100	9.24	10.0	-7.6	20.0
Chloroform	Ave	0.5499	0.5769	0.2000	10.5	10.0	4.9	20.0
1,1,1-Trichloroethane	Ave	0.4994	0.5197	0.1000	10.4	10.0	4.1	20.0
Tetrahydrofuran	Ave	0.0490	0.0513	0.0100	20.9	20.0	4.7	20.0
Cyclohexane	Ave	0.3523	0.3613	0.1000	10.3	10.0	2.6	20.0
Carbon tetrachloride	Ave	0.5037	0.5215	0.1000	10.4	10.0	3.5	20.0
1,1-Dichloropropene	Ave	0.3606	0.3374	0.0100	9.36	10.0	-6.4	20.0
Benzene	Ave	0.9843	0.9407	0.5000	9.56	10.0	-4.4	20.0
1,2-Dichloroethane	Ave	0.3325	0.2980	0.1000	8.96	10.0	-10.4	20.0
Isobutyl alcohol	Ave	0.0080	0.0079*	0.0100	245	250	-1.8	20.0
n-Heptane	Ave	0.3051	0.2772	0.0100	9.09	10.0	-9.1	20.0
Trichloroethene	Ave	0.3946	0.3842	0.2000	9.74	10.0	-2.6	20.0
Methylcyclohexane	Ave	0.4851	0.5001	0.1000	10.3	10.0	3.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137438/3 Calibration Date: 04/03/2015 10:07

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040302.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	0.2242	0.2078	0.1000	9.27	10.0	-7.3	20.0
Dibromomethane	Ave	0.1670	0.1476	0.0100	8.84	10.0	-11.6	20.0
1,4-Dioxane	Ave	0.0016	0.0014*	0.0100	173	200	-13.3	20.0
Bromodichloromethane	Ave	0.4157	0.4164	0.2000	10.0	10.0	0.2	20.0
cis-1,3-Dichloropropene	Ave	0.4312	0.4094	0.2000	9.49	10.0	-5.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5844	0.5060	0.1000	17.3	20.0	-13.4	20.0
Toluene	Qua		3.597	0.4000	10.1	10.0	0.6	20.0
trans-1,3-Dichloropropene	Ave	1.257	1.150	0.1000	9.15	10.0	-8.5	20.0
Ethyl methacrylate	Ave	0.8363	0.7285	0.0100	8.71	10.0	-12.9	20.0
1,1,2-Trichloroethane	Ave	0.7178	0.6584	0.1000	9.17	10.0	-8.3	20.0
Tetrachloroethene	Qua		0.8734	0.2000	9.14	10.0	-8.6	20.0
1,3-Dichloropropane	Ave	1.061	0.9619	0.0100	9.07	10.0	-9.3	20.0
2-Hexanone	Ave	0.3770	0.3047	0.1000	16.2	20.0	-19.2	20.0
Dibromochloromethane	Ave	1.234	1.183	0.1000	9.58	10.0	-4.2	20.0
1,2-Dibromoethane (EDB)	Ave	0.8132	0.7577	0.1000	9.32	10.0	-6.8	20.0
Chlorobenzene	Ave	2.549	2.567	0.5000	10.1	10.0	0.7	20.0
1,1,1,2-Tetrachloroethane	Ave	1.233	1.164	0.0100	9.44	10.0	-5.6	20.0
Ethylbenzene	Ave	1.449	1.311	0.1000	9.05	10.0	-9.5	20.0
m-Xylene & p-Xylene	Ave	1.953	1.781	0.1000	9.12	10.0	-8.8	20.0
o-Xylene	Ave	1.961	1.841	0.3000	9.38	10.0	-6.2	20.0
Styrene	Qua		2.842	0.3000	10.6	10.0	6.0	20.0
Bromoform	Ave	0.6992	0.6621	0.1000	9.47	10.0	-5.3	20.0
Isopropylbenzene	Qua		5.028	0.1000	10.7	10.0	6.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7533	0.7822	0.3000	10.4	10.0	3.8	20.0
Bromobenzene	Ave	0.8571	0.9553	0.0100	11.1	10.0	11.5	20.0
1,2,3-Trichloropropane	Ave	0.1919	0.1913	0.0100	9.97	10.0	-0.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1202	0.1173	0.0100	9.76	10.0	-2.4	20.0
N-Propylbenzene	Ave	1.052	1.202	0.0100	11.4	10.0	14.2	20.0
2-Chlorotoluene	Ave	0.9551	1.111	0.0100	11.6	10.0	16.3	20.0
1,3,5-Trimethylbenzene	Qua		3.034	0.0100	12.5	10.0	24.8*	20.0
4-Chlorotoluene	Ave	0.9153	1.026	0.0100	11.2	10.0	12.1	20.0
tert-Butylbenzene	Lin2	3.243	3.187	0.0100	10.8	10.0	7.9	20.0
1,2,4-Trimethylbenzene	Qua		3.016	0.0100	11.7	10.0	17.1	20.0
sec-Butylbenzene	Qua		4.038	0.0100	12.4	10.0	23.9*	20.0
1,3-Dichlorobenzene	Lin2	1.869	1.878	0.6000	11.1	10.0	10.6	20.0
4-Isopropyltoluene	Qua		3.387	0.0100	11.3	10.0	13.3	20.0
1,4-Dichlorobenzene	Ave	1.587	1.694	0.5000	10.7	10.0	6.8	20.0
n-Butylbenzene	Qua		2.827	0.0100	11.4	10.0	13.8	20.0
1,2-Dichlorobenzene	Ave	1.554	1.471	0.4000	9.46	10.0	-5.4	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.0625	0.0500	8.07	10.0	-19.3	20.0
1,2,4-Trichlorobenzene	Ave	0.4928	0.1777*	0.2000	3.61	10.0	-63.9*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137438/3 Calibration Date: 04/03/2015 10:07

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040302.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
Hexachlorobutadiene	Ave	0.2953	0.1634	0.0100	5.53	10.0	-44.7*	20.0
Naphthalene	Ave	0.8071	0.2125	0.0100	2.63	10.0	-73.7*	20.0
1,2,3-Trichlorobenzene	Ave	0.3372	0.0564	0.0100	1.67	10.0	-83.3*	20.0
Dibromofluoromethane (Surr)	Ave	0.3190	0.3133		9.82	10.0	-1.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3042	0.2715		8.93	10.0	-10.7	20.0
Toluene-d8 (Surr)	Ave	2.966	3.263		11.0	10.0	10.0	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.394		10.5	10.0	5.4	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040302.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 03-Apr-2015 10:07:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006312-002
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub8

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2015 17:14:14 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: journetp Date: 03-Apr-2015 10:53:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.786	4.786	0.000	71	208032	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.402	7.402	0.000	95	855803	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.468	10.468	0.000	84	254591	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.786	12.786	0.000	95	334075	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.678	6.678	0.000	74	268091	200.0	196.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.043	7.043	0.000	62	232346	200.0	178.5	
$ 7 Toluene-d8 (Surr)	98	9.038	9.038	0.000	92	830813	200.0	220.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	91	354879	200.0	210.9	
11 Dichlorodifluoromethane	85	1.963	1.963	0.000	78	339106	200.0	213.8	
12 Chloromethane	50	2.000	2.000	0.000	84	295209	200.0	170.8	
14 Butadiene	39	2.207	2.207	0.000	97	277226	200.0	195.1	
13 Vinyl chloride	62	2.219	2.219	0.000	91	255437	200.0	189.8	
15 Bromomethane	94	2.511	2.511	0.000	96	282717	200.0	260.7	
16 Chloroethane	64	2.626	2.626	0.000	72	251170	200.0	231.4	
17 Dichlorofluoromethane	67	2.888	2.888	0.000	91	693005	200.0	239.9	
18 Trichlorofluoromethane	101	2.906	2.906	0.000	72	760214	200.0	250.2	
20 Ethyl ether	59	3.320	3.320	0.000	81	145752	200.0	151.2	M
21 Acrolein	56	3.478	3.478	0.000	23	29637	600.0	445.2	
22 1,1-Dichloroethene	96	3.527	3.527	0.000	84	250008	200.0	217.6	
23 1,1,2-Trichloro-1,2,2-trif	101	3.673	3.673	0.000	89	302198	200.0	226.2	
25 Iodomethane	142	3.758	3.758	0.000	98	530151	200.0	220.6	
24 Acetone	43	3.801	3.801	0.000	25	96667	400.0	348.8	M
26 Carbon disulfide	76	3.825	3.825	0.000	99	737174	200.0	213.6	M
28 3-Chloro-1-propene	76	4.135	4.135	0.000	83	167048	200.0	197.1	
30 Methyl acetate	43	4.318	4.318	0.000	99	525673	1000.0	921.9	
31 Methylene Chloride	84	4.354	4.354	0.000	84	264303	200.0	214.3	
34 trans-1,2-Dichloroethene	96	4.756	4.756	0.000	89	295142	200.0	207.0	
33 Acrylonitrile	53	4.816	4.816	0.000	98	406666	2000.0	1783.0	M
35 Methyl tert-butyl ether	73	4.865	4.865	0.000	98	553169	200.0	196.9	
32 2-Methyl-2-propanol	59	4.902	4.902	0.000	42	109435	2000.0	16676	E

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	5.145	5.145	0.000	74	191830	200.0	170.6	
36 Hexane	57	5.151	5.151	0.000	94	256921	200.0	172.3	
37 1,1-Dichloroethane	63	5.364	5.364	0.000	95	431832	200.0	206.7	
44 2,2-Dichloropropane	77	6.088	6.088	0.000	87	377286	200.0	216.1	
45 cis-1,2-Dichloroethene	96	6.112	6.112	0.000	76	285440	200.0	201.8	
46 2-Butanone (MEK)	43	6.179	6.179	0.000	97	116281	400.0	303.1	
49 Chlorobromomethane	128	6.380	6.380	0.000	84	150552	200.0	184.8	
52 Chloroform	83	6.502	6.502	0.000	92	493712	200.0	209.8	
53 1,1,1-Trichloroethane	97	6.678	6.678	0.000	96	444795	200.0	208.2	
51 Tetrahydrofuran	42	6.727	6.727	0.000	50	87853	400.0	418.6	
54 Cyclohexane	56	6.733	6.733	0.000	87	309216	200.0	205.1	
56 Carbon tetrachloride	117	6.861	6.861	0.000	93	446291	200.0	207.1	
55 1,1-Dichloropropene	75	6.873	6.873	0.000	82	288747	200.0	187.1	
58 Benzene	78	7.098	7.098	0.000	95	805011	200.0	191.1	
59 1,2-Dichloroethane	62	7.122	7.122	0.000	97	255030	200.0	179.3	
62 n-Heptane	43	7.408	7.408	0.000	60	237220	200.0	181.7	
57 Isobutyl alcohol	41	7.408	7.408	0.000	51	168695	5000.0	4909.9	
64 Trichloroethene	130	7.797	7.797	0.000	93	328796	200.0	194.7	
66 Methylcyclohexane	83	7.986	7.986	0.000	86	427960	200.0	206.2	
67 1,2-Dichloropropane	63	8.035	8.035	0.000	81	177841	200.0	185.4	
68 Dibromomethane	93	8.150	8.150	0.000	94	126308	200.0	176.8	
70 1,4-Dioxane	88	8.187	8.187	0.000	31	23261	4000.0	3468.6	M
71 Dichlorobromomethane	83	8.321	8.321	0.000	97	356393	200.0	200.4	
74 cis-1,3-Dichloropropene	75	8.771	8.771	0.000	92	350386	200.0	189.9	
75 4-Methyl-2-pentanone (MIBK	43	8.935	8.935	0.000	96	257664	400.0	346.3	
76 Toluene	91	9.105	9.105	0.000	99	915700	200.0	201.1	
77 trans-1,3-Dichloropropene	75	9.330	9.330	0.000	95	292738	200.0	182.9	
78 Ethyl methacrylate	69	9.422	9.422	0.000	88	185471	200.0	174.2	
79 1,1,2-Trichloroethane	97	9.507	9.507	0.000	92	167618	200.0	183.4	
80 Tetrachloroethene	164	9.647	9.647	0.000	92	222347	200.0	182.9	
81 1,3-Dichloropropane	76	9.677	9.677	0.000	92	244900	200.0	181.3	
82 2-Hexanone	43	9.762	9.762	0.000	95	155121	400.0	323.3	
84 Chlorodibromomethane	129	9.896	9.896	0.000	89	301060	200.0	191.7	
85 Ethylene Dibromide	107	10.018	10.018	0.000	97	192891	200.0	186.3	
87 Chlorobenzene	112	10.498	10.498	0.000	95	653527	200.0	201.4	
89 1,1,1,2-Tetrachloroethane	131	10.578	10.578	0.000	92	296307	200.0	188.9	
90 Ethylbenzene	106	10.608	10.608	0.000	98	333891	200.0	181.1	
91 m-Xylene & p-Xylene	106	10.724	10.724	0.000	98	453542	200.0	182.4	
92 o-Xylene	106	11.113	11.113	0.000	95	468594	200.0	187.7	
93 Styrene	104	11.131	11.131	0.000	93	723487	200.0	212.0	
94 Bromoform	173	11.314	11.314	0.000	93	168570	200.0	189.4	
97 Isopropylbenzene	105	11.484	11.484	0.000	95	1280100	200.0	213.4	
99 1,1,2,2-Tetrachloroethane	83	11.776	11.776	0.000	96	199137	200.0	207.7	
100 Bromobenzene	156	11.788	11.788	0.000	87	319156	200.0	222.9	
101 1,2,3-Trichloropropane	110	11.825	11.825	0.000	85	63911	200.0	199.4	
102 trans-1,4-Dichloro-2-buten	53	11.831	11.831	0.000	73	39176	200.0	195.1	
103 N-Propylbenzene	120	11.892	11.892	0.000	97	401409	200.0	228.4	
104 2-Chlorotoluene	126	11.983	11.983	0.000	95	371077	200.0	232.6	
106 1,3,5-Trimethylbenzene	105	12.062	12.062	0.000	97	1013509	200.0	249.5	
107 4-Chlorotoluene	126	12.092	12.092	0.000	96	342792	200.0	224.2	
108 tert-Butylbenzene	119	12.390	12.390	0.000	91	1064750	200.0	215.8	
110 1,2,4-Trimethylbenzene	105	12.439	12.439	0.000	96	1007648	200.0	234.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.609	12.609	0.000	94	1348936	200.0	247.8	
113 1,3-Dichlorobenzene	146	12.725	12.725	0.000	98	627397	200.0	221.2	
114 4-Isopropyltoluene	119	12.755	12.755	0.000	95	1131626	200.0	226.7	
115 1,4-Dichlorobenzene	146	12.810	12.810	0.000	93	566068	200.0	213.6	
120 n-Butylbenzene	91	13.163	13.163	0.000	96	944293	200.0	227.5	
121 1,2-Dichlorobenzene	146	13.187	13.187	0.000	98	491328	200.0	189.2	
122 1,2-Dibromo-3-Chloropropan	75	13.972	13.966	0.006	87	20884	200.0	161.5	
126 1,2,4-Trichlorobenzene	180	14.806	14.806	0.000	93	59378	200.0	72.1	
127 Hexachlorobutadiene	225	14.970	14.970	0.000	86	54592	200.0	110.7	
128 Naphthalene	128	15.061	15.061	0.000	96	70999	200.0	52.7	
129 1,2,3-Trichlorobenzene	180	15.317	15.317	0.000	88	18826	200.0	33.4	
S 134 1,2-Dichloroethene, Total	96				0		400.0	408.8	
S 133 Xylenes, Total	106				0		400.0	370.1	
S 135 1,3-Dichloropropene, Total	1				0		400.0	372.8	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00108	Amount Added:	8.00	Units: uL
VOAACRO2ND_00007	Amount Added:	24.00	Units: uL
voaWVA2nd Res_00006	Amount Added:	8.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOA8260SURR_00017	Amount Added:	8.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	8.00	Units: uL

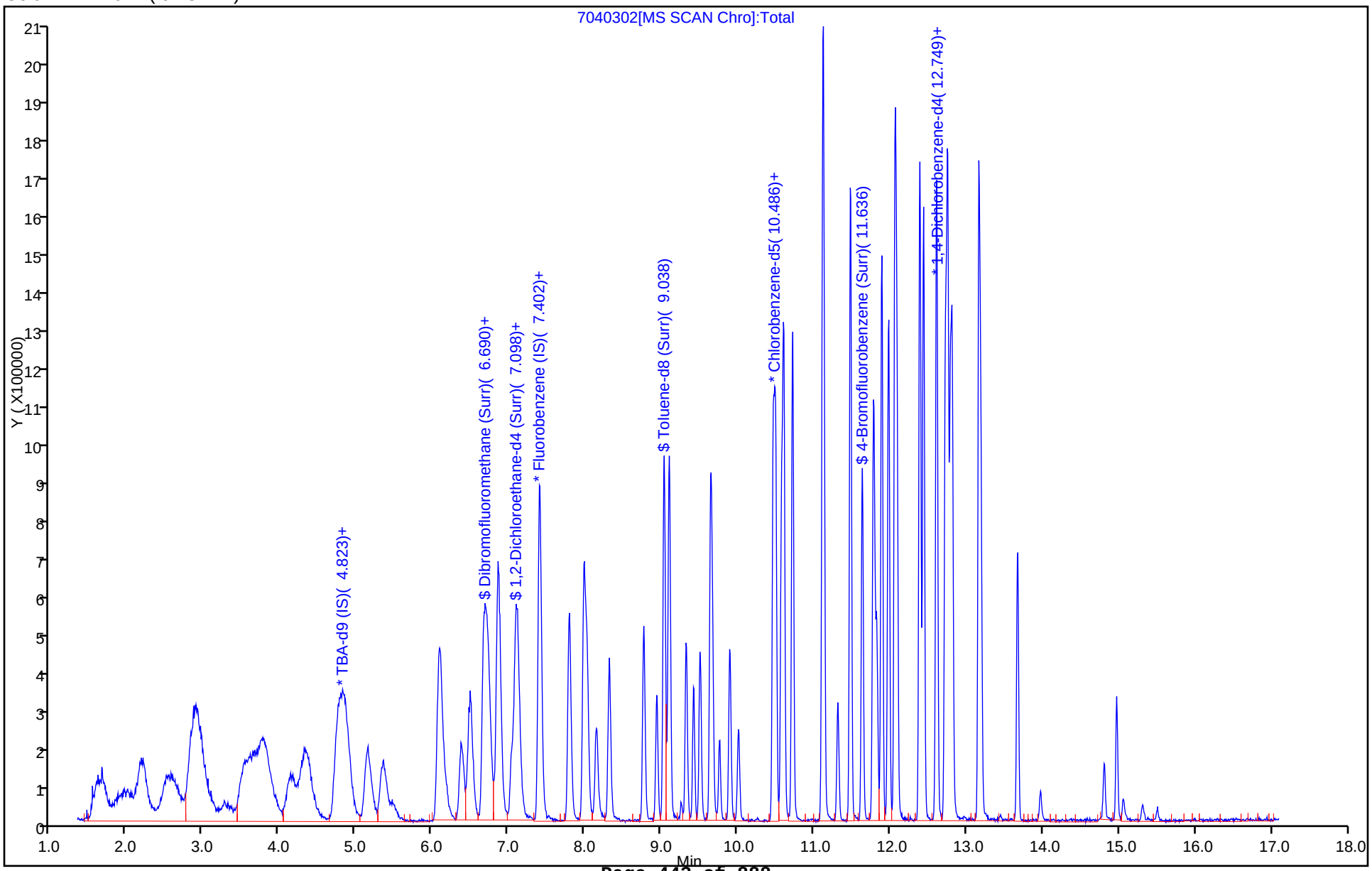
Report Date: 03-Apr-2015 17:14:14 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040302.D

Injection Date:	03-Apr-2015 10:07:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

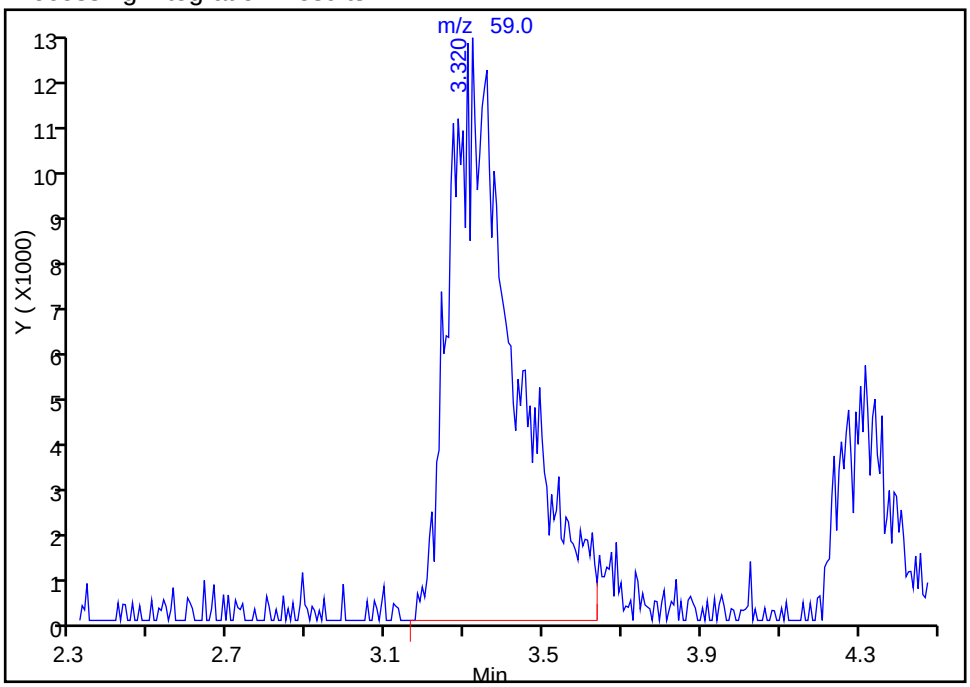
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040302.D				
Injection Date:	03-Apr-2015 10:07:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

20 Ethyl ether, CAS: 60-29-7

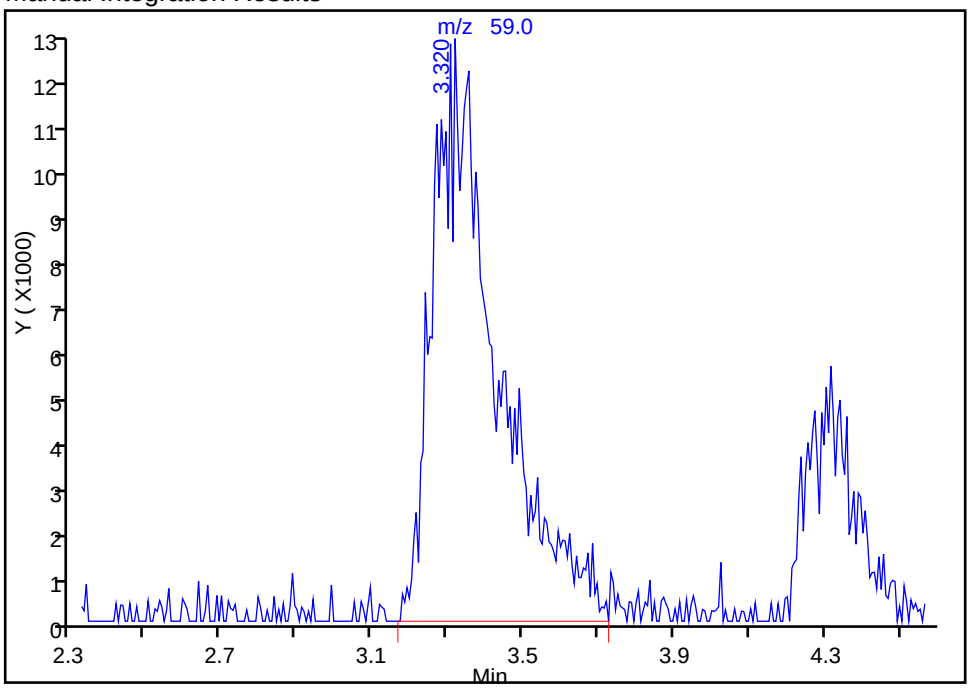
Processing Integration Results

RT: 3.32
Area: 141420
Amount: 146.6632
Amount Units: ng



Manual Integration Results

RT: 3.32
Area: 145752
Amount: 151.1558
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 10:53:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

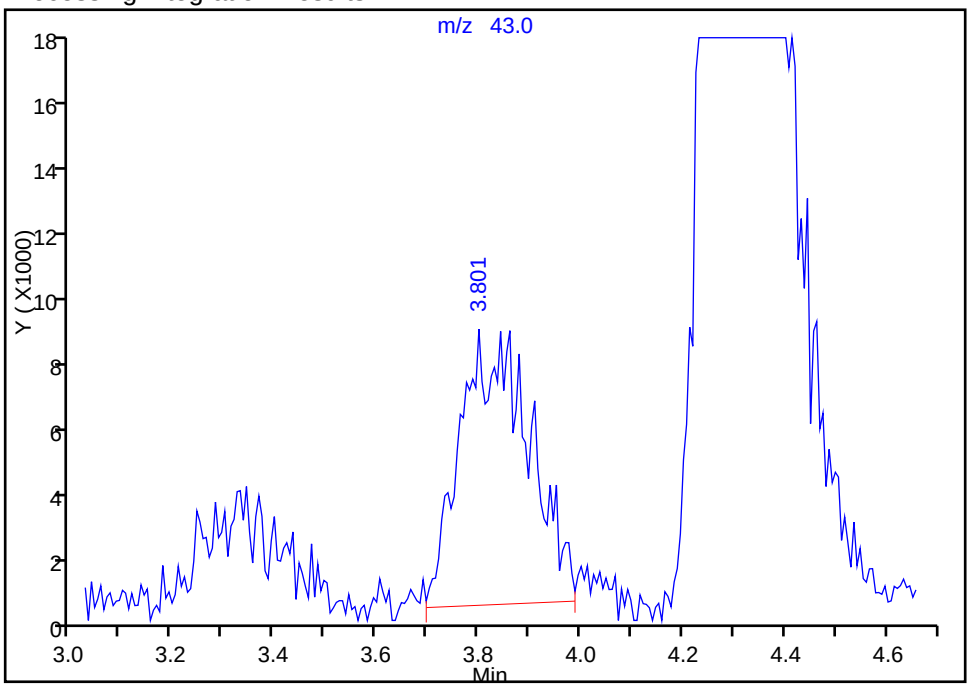
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040302.D				
Injection Date:	03-Apr-2015 10:07:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

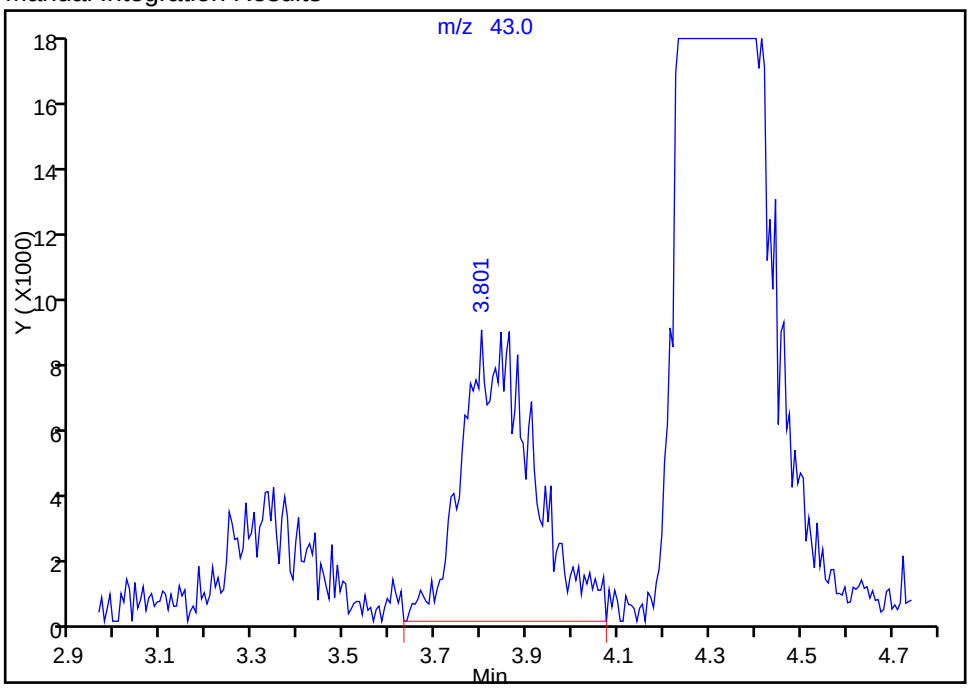
Processing Integration Results

RT: 3.80
Area: 79541
Amount: 273.7960
Amount Units: ng



Manual Integration Results

RT: 3.80
Area: 96667
Amount: 348.8348
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 10:53:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

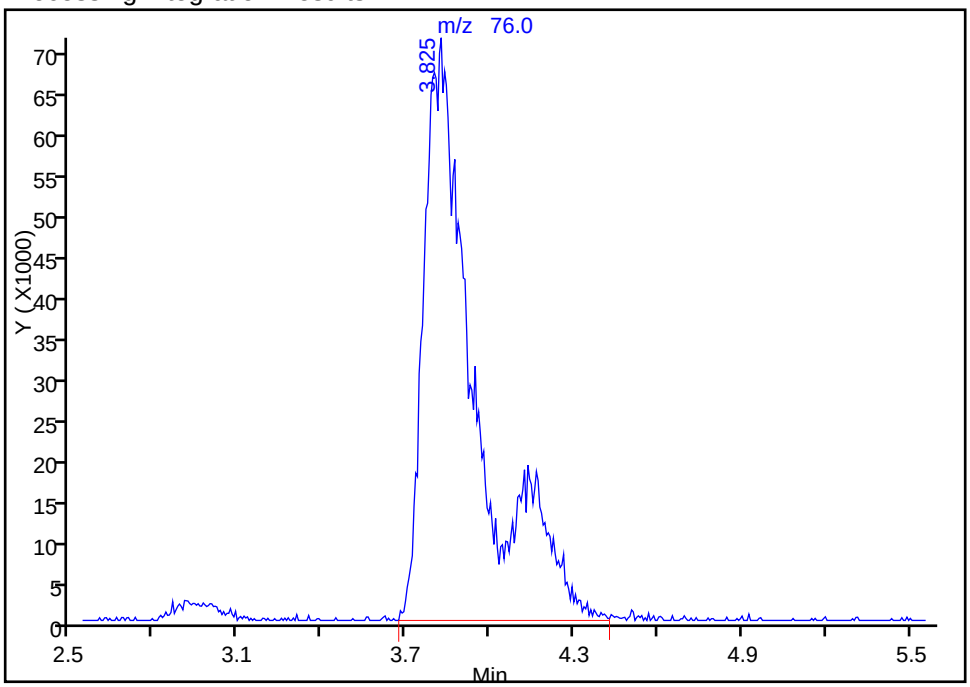
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040302.D				
Injection Date:	03-Apr-2015 10:07:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

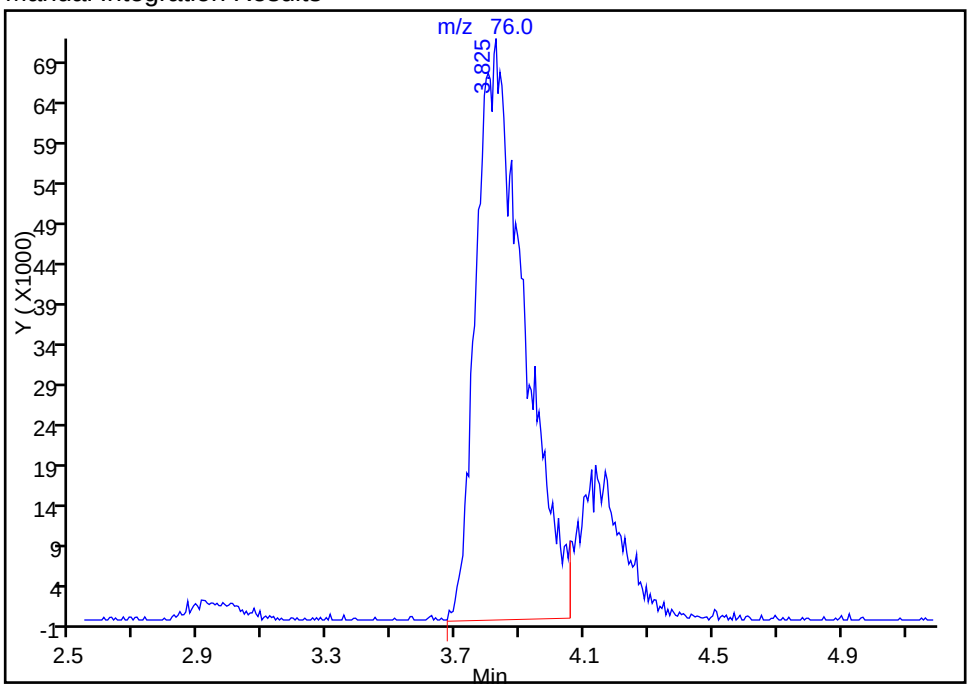
Processing Integration Results

RT: 3.82
Area: 907237
Amount: 262.8769
Amount Units: ng



Manual Integration Results

RT: 3.82
Area: 737174
Amount: 213.6002
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 10:53:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

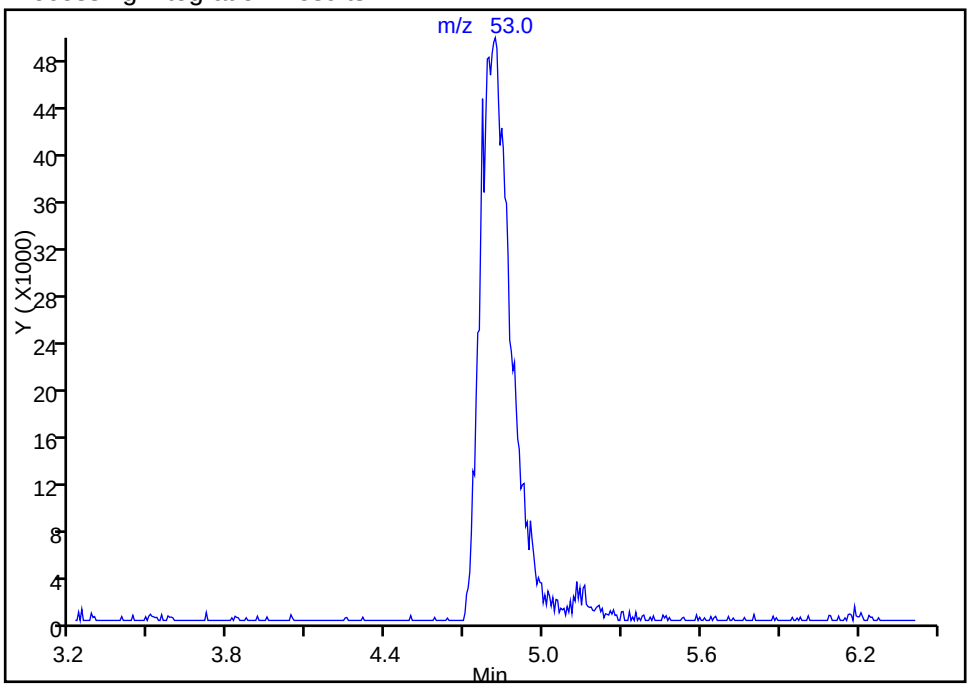
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040302.D				
Injection Date:	03-Apr-2015 10:07:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

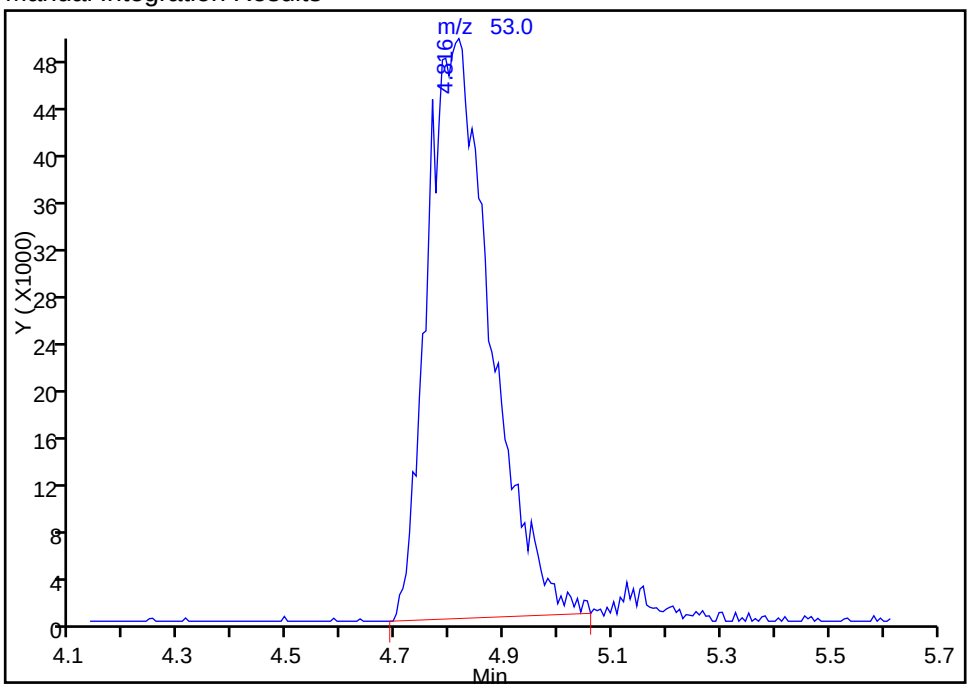
Not Detected
Expected RT: 4.82

Processing Integration Results



Manual Integration Results

RT: 4.82
Area: 406666
Amount: 1782.9580
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 10:53:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

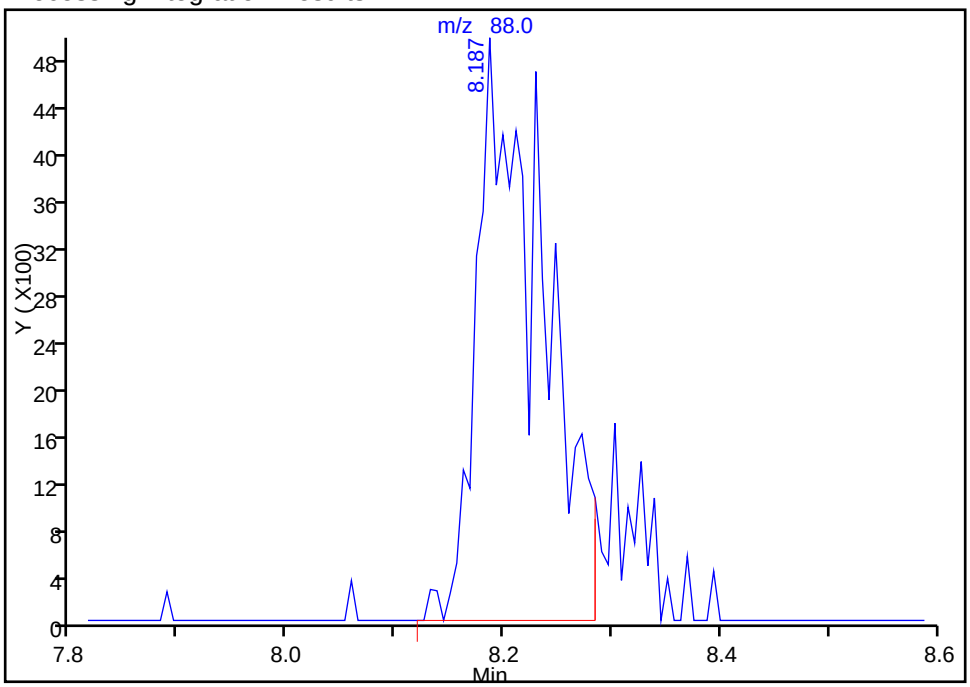
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040302.D				
Injection Date:	03-Apr-2015 10:07:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

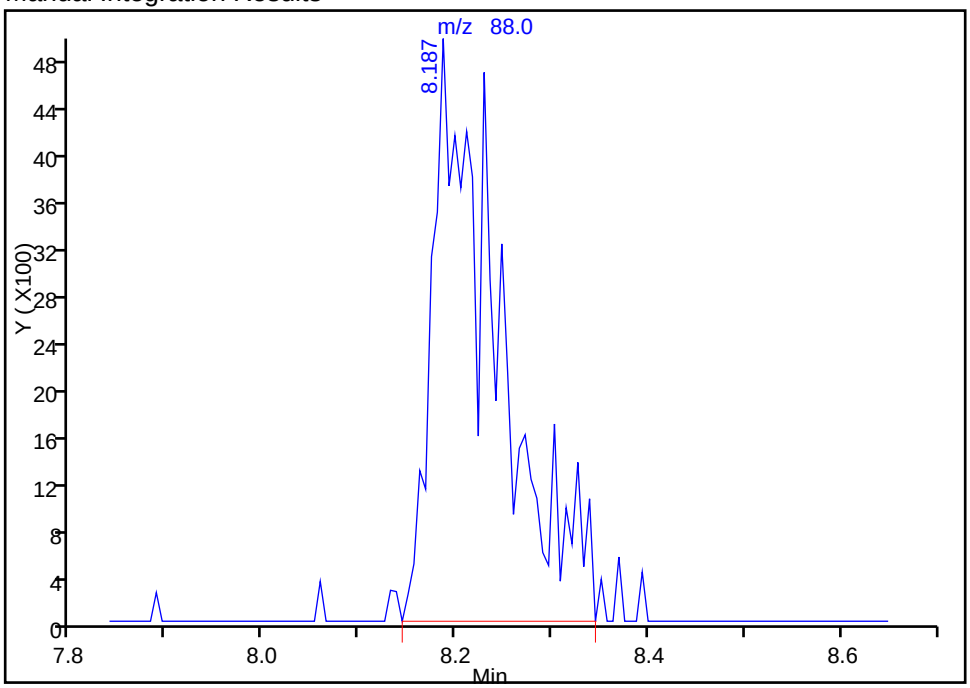
Processing Integration Results

RT: 8.19
Area: 20710
Amount: 3088.2217
Amount Units: ng



Manual Integration Results

RT: 8.19
Area: 23261
Amount: 3468.6203
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 10:53:14
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137512/3 Calibration Date: 04/04/2015 14:19

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040403.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	0.3707	0.4032	0.1000	10.9	10.0	8.8	20.0
Chloromethane	Ave	0.4039	0.4255	0.1000	10.5	10.0	5.4	20.0
Vinyl chloride	Ave	0.3145	0.3309	0.1000	10.5	10.0	5.2	20.0
Bromomethane	Ave	0.2534	0.3650	0.0500	14.4	10.0	44.0*	20.0
Chloroethane	Ave	0.2537	0.3187	0.0500	12.6	10.0	25.6*	20.0
Dichlorofluoromethane	Ave	0.6751	0.8479	0.0100	12.6	10.0	25.6*	20.0
Trichlorofluoromethane	Ave	0.7102	0.9237	0.1000	13.0	10.0	30.1*	20.0
Ethyl ether	Ave	0.2253	0.1638	0.0100	7.27	10.0	-27.3*	20.0
Acrolein	Ave	0.0156	0.0127	0.0100	24.5	30.0	-18.4	20.0
1,1-Dichloroethene	Ave	0.2685	0.2841	0.1000	10.6	10.0	5.8	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3122	0.3641	0.1000	11.7	10.0	16.6	20.0
Iodomethane	Ave	0.5617	0.6556	0.0100	11.7	10.0	16.7	20.0
Carbon disulfide	Ave	0.8065	0.8765	0.1000	10.9	10.0	8.7	20.0
Acetone	Lin2		0.0558	0.0500	17.2	20.0	-14.0	20.0
Allyl chloride	Ave	0.1981	0.2057	0.0100	10.4	10.0	3.8	20.0
Methyl acetate	Ave	0.1332	0.1186	0.1000	44.5	50.0	-11.0	20.0
Methylene Chloride	Ave	0.2882	0.3197	0.1000	11.1	10.0	10.9	20.0
trans-1,2-Dichloroethene	Ave	0.3332	0.3483	0.1000	10.5	10.0	4.5	20.0
Acrylonitrile	Ave	0.0533	0.0454	0.0100	85.2	100	-14.8	20.0
Methyl tert-butyl ether	Ave	0.6566	0.6554	0.1000	9.98	10.0	-0.2	20.0
tert-Butyl alcohol	Qua		0.4273	0.0100	435	100	334.6*	20.0
Vinyl acetate	Ave	0.2627	0.2146	0.0100	8.17	10.0	-18.3	20.0
Hexane	Ave	0.3484	0.3212	0.0100	9.22	10.0	-7.8	20.0
1,1-Dichloroethane	Ave	0.4883	0.5211	0.2000	10.7	10.0	6.7	20.0
2,2-Dichloropropane	Ave	0.4080	0.4819	0.0100	11.8	10.0	18.1	20.0
cis-1,2-Dichloroethene	Ave	0.3306	0.3377	0.1000	10.2	10.0	2.1	20.0
2-Butanone (MEK)	Ave	0.0896	0.0623	0.0500	13.9	20.0	-30.6*	20.0
Bromochloromethane	Ave	0.1904	0.1813	0.0100	9.52	10.0	-4.8	20.0
Chloroform	Ave	0.5499	0.5739	0.2000	10.4	10.0	4.4	20.0
1,1,1-Trichloroethane	Ave	0.4994	0.5390	0.1000	10.8	10.0	7.9	20.0
Cyclohexane	Ave	0.3523	0.3592	0.1000	10.2	10.0	1.9	20.0
Tetrahydrofuran	Ave	0.0490	0.0531	0.0100	21.6	20.0	8.2	20.0
Carbon tetrachloride	Ave	0.5037	0.5463	0.1000	10.8	10.0	8.4	20.0
1,1-Dichloropropene	Ave	0.3606	0.3389	0.0100	9.40	10.0	-6.0	20.0
Benzene	Ave	0.9843	0.9480	0.5000	9.63	10.0	-3.7	20.0
1,2-Dichloroethane	Ave	0.3325	0.3080	0.1000	9.26	10.0	-7.4	20.0
Isobutyl alcohol	Ave	0.0080	0.0076*	0.0100	238	250	-4.9	20.0
n-Heptane	Ave	0.3051	0.2697	0.0100	8.84	10.0	-11.6	20.0
Trichloroethene	Ave	0.3946	0.3771	0.2000	9.56	10.0	-4.4	20.0
Methylcyclohexane	Ave	0.4851	0.5152	0.1000	10.6	10.0	6.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137512/3 Calibration Date: 04/04/2015 14:19

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040403.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	0.2242	0.2045	0.1000	9.12	10.0	-8.8	20.0
Dibromomethane	Ave	0.1670	0.1516	0.0100	9.08	10.0	-9.2	20.0
1,4-Dioxane	Ave	0.0016	0.0014*	0.0100	183	200	-8.4	20.0
Bromodichloromethane	Ave	0.4157	0.4161	0.2000	10.0	10.0	0.0	20.0
cis-1,3-Dichloropropene	Ave	0.4312	0.4051	0.2000	9.39	10.0	-6.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5844	0.4786	0.1000	16.4	20.0	-18.1	20.0
Toluene	Qua		3.415	0.4000	9.45	10.0	-5.5	20.0
trans-1,3-Dichloropropene	Ave	1.257	1.160	0.1000	9.22	10.0	-7.8	20.0
Ethyl methacrylate	Ave	0.8363	0.7322	0.0100	8.76	10.0	-12.4	20.0
1,1,2-Trichloroethane	Ave	0.7178	0.6735	0.1000	9.38	10.0	-6.2	20.0
Tetrachloroethene	Qua		0.8531	0.2000	8.89	10.0	-11.1	20.0
1,3-Dichloropropane	Ave	1.061	0.9558	0.0100	9.01	10.0	-9.9	20.0
2-Hexanone	Ave	0.3770	0.3073	0.1000	16.3	20.0	-18.5	20.0
Dibromochloromethane	Ave	1.234	1.197	0.1000	9.70	10.0	-3.0	20.0
1,2-Dibromoethane (EDB)	Ave	0.8132	0.7562	0.1000	9.30	10.0	-7.0	20.0
Chlorobenzene	Ave	2.549	2.614	0.5000	10.3	10.0	2.5	20.0
1,1,1,2-Tetrachloroethane	Ave	1.233	1.183	0.0100	9.60	10.0	-4.0	20.0
Ethylbenzene	Ave	1.449	1.386	0.1000	9.57	10.0	-4.3	20.0
m-Xylene & p-Xylene	Ave	1.953	1.826	0.1000	9.35	10.0	-6.5	20.0
o-Xylene	Ave	1.961	1.813	0.3000	9.24	10.0	-7.6	20.0
Styrene	Qua		2.886	0.3000	10.8	10.0	8.0	20.0
Bromoform	Ave	0.6992	0.6668	0.1000	9.54	10.0	-4.6	20.0
Isopropylbenzene	Qua		5.035	0.1000	10.7	10.0	6.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7533	0.7976	0.3000	10.6	10.0	5.9	20.0
Bromobenzene	Ave	0.8571	0.9560	0.0100	11.2	10.0	11.5	20.0
1,2,3-Trichloropropane	Ave	0.1919	0.1825	0.0100	9.51	10.0	-4.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1202	0.1073	0.0100	8.92	10.0	-10.8	20.0
N-Propylbenzene	Ave	1.052	1.195	0.0100	11.4	10.0	13.6	20.0
2-Chlorotoluene	Ave	0.9551	1.082	0.0100	11.3	10.0	13.3	20.0
1,3,5-Trimethylbenzene	Qua		2.910	0.0100	11.9	10.0	18.5	20.0
4-Chlorotoluene	Ave	0.9153	0.9870	0.0100	10.8	10.0	7.8	20.0
tert-Butylbenzene	Lin2	3.243	3.054	0.0100	10.3	10.0	3.2	20.0
1,2,4-Trimethylbenzene	Qua		2.954	0.0100	11.4	10.0	14.2	20.0
sec-Butylbenzene	Qua		3.869	0.0100	11.8	10.0	17.6	20.0
1,3-Dichlorobenzene	Lin2	1.869	1.835	0.6000	10.8	10.0	7.9	20.0
4-Isopropyltoluene	Qua		3.328	0.0100	11.1	10.0	10.9	20.0
1,4-Dichlorobenzene	Ave	1.587	1.714	0.5000	10.8	10.0	8.0	20.0
n-Butylbenzene	Qua		2.851	0.0100	11.5	10.0	15.0	20.0
1,2-Dichlorobenzene	Ave	1.554	1.440	0.4000	9.26	10.0	-7.4	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.0764	0.0500	9.78	10.0	-2.2	20.0
1,2,4-Trichlorobenzene	Ave	0.4928	0.5248	0.2000	10.6	10.0	6.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137512/3 Calibration Date: 04/04/2015 14:19

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040403.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
Hexachlorobutadiene	Ave	0.2953	0.2934	0.0100	9.94	10.0	-0.6	20.0
Naphthalene	Ave	0.8071	0.9599	0.0100	11.9	10.0	18.9	20.0
1,2,3-Trichlorobenzene	Ave	0.3372	0.3246	0.0100	9.62	10.0	-3.8	20.0
Dibromofluoromethane (Surr)	Ave	0.3190	0.3243		10.2	10.0	1.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3042	0.2782		9.15	10.0	-8.5	20.0
Toluene-d8 (Surr)	Ave	2.966	3.183		10.7	10.0	7.3	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.425		10.8	10.0	8.0	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 04-Apr-2015 14:19:30 ALS Bottle#: 4 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006327-003
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub8

Method: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 09:16:00 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 04-Apr-2015 15:22:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.765	4.765	0.000	55	185266	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.399	7.399	0.000	96	803043	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.471	10.471	0.000	84	248246	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.789	0.000	94	345664	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.675	6.675	0.000	74	260455	200.0	203.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.040	7.040	0.000	94	223385	200.0	182.9	
$ 7 Toluene-d8 (Surr)	98	9.036	9.036	0.000	92	790179	200.0	214.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.633	11.633	0.000	89	353811	200.0	215.9	
11 Dichlorodifluoromethane	85	1.912	1.912	0.000	62	323781	200.0	217.5	
12 Chloromethane	50	2.028	2.028	0.000	89	341723	200.0	210.7	
14 Butadiene	39	2.186	2.186	0.000	94	274450	200.0	205.8	
13 Vinyl chloride	62	2.192	2.192	0.000	96	265731	200.0	210.4	
15 Bromomethane	94	2.502	2.502	0.000	84	293070	200.0	288.0	
16 Chloroethane	64	2.605	2.605	0.000	93	255928	200.0	251.2	
18 Trichlorofluoromethane	101	2.879	2.879	0.000	80	741779	200.0	260.1	
17 Dichlorofluoromethane	67	2.879	2.879	0.000	91	680863	200.0	251.2	
20 Ethyl ether	59	3.311	3.311	0.000	77	131553	200.0	145.4	M
21 Acrolein	56	3.481	3.481	0.000	26	30598	600.0	489.8	M
22 1,1-Dichloroethene	96	3.518	3.518	0.000	95	228146	200.0	211.6	M
23 1,1,2-Trichloro-1,2,2-trif	101	3.634	3.634	0.000	86	292407	200.0	233.2	
25 Iodomethane	142	3.761	3.761	0.000	97	526508	200.0	233.5	
26 Carbon disulfide	76	3.828	3.828	0.000	100	703845	200.0	217.3	M
24 Acetone	43	3.834	3.834	0.000	30	89679	400.0	344.0	M
28 3-Chloro-1-propene	76	4.126	4.126	0.000	89	165163	200.0	207.7	
30 Methyl acetate	43	4.297	4.297	0.000	98	476238	1000.0	890.1	
31 Methylene Chloride	84	4.364	4.364	0.000	87	256749	200.0	221.9	
34 trans-1,2-Dichloroethene	96	4.753	4.753	0.000	87	279715	200.0	209.1	
33 Acrylonitrile	53	4.802	4.802	0.000	98	364826	2000.0	1704.6	M
35 Methyl tert-butyl ether	73	4.856	4.856	0.000	97	526343	200.0	199.6	
32 2-Methyl-2-propanol	59	4.875	4.875	0.000	40	39585	2000.0	8692.1	E

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	5.148	5.148	0.000	61	172309	200.0	163.3	M
36 Hexane	57	5.160	5.160	0.000	93	257894	200.0	184.3	
37 1,1-Dichloroethane	63	5.355	5.355	0.000	95	418462	200.0	213.4	
44 2,2-Dichloropropane	77	6.091	6.091	0.000	81	386997	200.0	236.3	
45 cis-1,2-Dichloroethene	96	6.103	6.103	0.000	78	271178	200.0	204.3	
46 2-Butanone (MEK)	43	6.189	6.189	0.000	97	99975	400.0	277.7	M
49 Chlorobromomethane	128	6.377	6.377	0.000	84	145615	200.0	190.4	
52 Chloroform	83	6.499	6.499	0.000	93	460827	200.0	208.7	
53 1,1,1-Trichloroethane	97	6.681	6.681	0.000	97	432825	200.0	215.9	
51 Tetrahydrofuran	42	6.730	6.730	0.000	48	85213	400.0	432.7	
54 Cyclohexane	56	6.730	6.730	0.000	88	288415	200.0	203.9	
56 Carbon tetrachloride	117	6.858	6.858	0.000	96	438659	200.0	216.9	
55 1,1-Dichloropropene	75	6.864	6.864	0.000	82	272120	200.0	187.9	
58 Benzene	78	7.089	7.089	0.000	95	761316	200.0	192.6	
59 1,2-Dichloroethane	62	7.132	7.132	0.000	98	247318	200.0	185.3	
57 Isobutyl alcohol	41	7.399	7.399	0.000	50	153316	5000.0	4755.5	
62 n-Heptane	43	7.405	7.405	0.000	61	216593	200.0	176.8	
64 Trichloroethene	130	7.795	7.795	0.000	94	302846	200.0	191.2	
66 Methylcyclohexane	83	7.989	7.989	0.000	88	413711	200.0	212.4	
67 1,2-Dichloropropane	63	8.032	8.032	0.000	80	164196	200.0	182.4	
68 Dibromomethane	93	8.147	8.147	0.000	96	121764	200.0	181.6	
70 1,4-Dioxane	88	8.184	8.184	0.000	81	23066	4000.0	3665.5	M
71 Dichlorobromomethane	83	8.312	8.312	0.000	97	334108	200.0	200.2	
74 cis-1,3-Dichloropropene	75	8.774	8.774	0.000	91	325317	200.0	187.9	
75 4-Methyl-2-pentanone (MIBK	43	8.938	8.938	0.000	96	237611	400.0	327.6	
76 Toluene	91	9.103	9.103	0.000	99	847787	200.0	188.9	
77 trans-1,3-Dichloropropene	75	9.322	9.322	0.000	96	287847	200.0	184.5	
78 Ethyl methacrylate	69	9.425	9.425	0.000	86	181772	200.0	175.1	
79 1,1,2-Trichloroethane	97	9.504	9.504	0.000	91	167195	200.0	187.7	
80 Tetrachloroethene	164	9.644	9.644	0.000	91	211777	200.0	177.8	
81 1,3-Dichloropropane	76	9.668	9.668	0.000	92	237265	200.0	180.2	
82 2-Hexanone	43	9.760	9.760	0.000	97	152552	400.0	326.0	
84 Chlorodibromomethane	129	9.900	9.900	0.000	89	297080	200.0	194.0	
85 Ethylene Dibromide	107	10.009	10.009	0.000	97	187728	200.0	186.0	
87 Chlorobenzene	112	10.496	10.496	0.000	95	649008	200.0	205.1	
89 1,1,1,2-Tetrachloroethane	131	10.575	10.575	0.000	92	293674	200.0	192.0	
90 Ethylbenzene	106	10.605	10.605	0.000	98	344007	200.0	191.3	
91 m-Xylene & p-Xylene	106	10.721	10.721	0.000	97	453294	200.0	187.0	
92 o-Xylene	106	11.116	11.116	0.000	97	450082	200.0	184.9	
93 Styrene	104	11.128	11.128	0.000	94	716500	200.0	216.1	
94 Bromoform	173	11.317	11.317	0.000	94	165526	200.0	190.7	
97 Isopropylbenzene	105	11.481	11.481	0.000	96	1249918	200.0	213.8	
99 1,1,2,2-Tetrachloroethane	83	11.773	11.773	0.000	98	198009	200.0	211.8	
100 Bromobenzene	156	11.785	11.785	0.000	88	330438	200.0	223.1	
101 1,2,3-Trichloropropane	110	11.822	11.822	0.000	86	63091	200.0	190.2	
102 trans-1,4-Dichloro-2-buten	53	11.828	11.828	0.000	71	37074	200.0	178.5	
103 N-Propylbenzene	120	11.889	11.889	0.000	96	413094	200.0	227.2	
104 2-Chlorotoluene	126	11.980	11.980	0.000	96	374011	200.0	226.6	
106 1,3,5-Trimethylbenzene	105	12.065	12.065	0.000	96	1005869	200.0	237.1	
107 4-Chlorotoluene	126	12.090	12.090	0.000	96	341160	200.0	215.7	
108 tert-Butylbenzene	119	12.388	12.388	0.000	91	1055559	200.0	206.3	
110 1,2,4-Trimethylbenzene	105	12.436	12.436	0.000	96	1020939	200.0	228.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.607	12.607	0.000	94	1337323	200.0	235.3	
113 1,3-Dichlorobenzene	146	12.722	12.722	0.000	98	634124	200.0	215.8	
114 4-Isopropyltoluene	119	12.753	12.753	0.000	96	1150529	200.0	221.8	
115 1,4-Dichlorobenzene	146	12.814	12.814	0.000	95	592529	200.0	216.1	
120 n-Butylbenzene	91	13.160	13.160	0.000	95	985585	200.0	230.0	
121 1,2-Dichlorobenzene	146	13.185	13.185	0.000	98	497656	200.0	185.3	
122 1,2-Dibromo-3-Chloropropan	75	13.969	13.969	0.000	90	26419	200.0	195.7	
126 1,2,4-Trichlorobenzene	180	14.803	14.803	0.000	94	181411	200.0	213.0	
127 Hexachlorobutadiene	225	14.973	14.973	0.000	86	101422	200.0	198.7	
128 Naphthalene	128	15.058	15.058	0.000	96	331802	200.0	237.9	
129 1,2,3-Trichlorobenzene	180	15.308	15.308	0.000	93	112187	200.0	192.5	
S 133 Xylenes, Total	106				0		400.0	371.9	
S 134 1,2-Dichloroethene, Total	96				0		400.0	413.4	
S 135 1,3-Dichloropropene, Total	1				0		400.0	372.3	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00108	Amount Added:	8.00	Units: uL
VOAACRO2ND_00007	Amount Added:	24.00	Units: uL
voaWVA2nd Res_00006	Amount Added:	8.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOA8260SURR_00017	Amount Added:	8.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	8.00	Units: uL

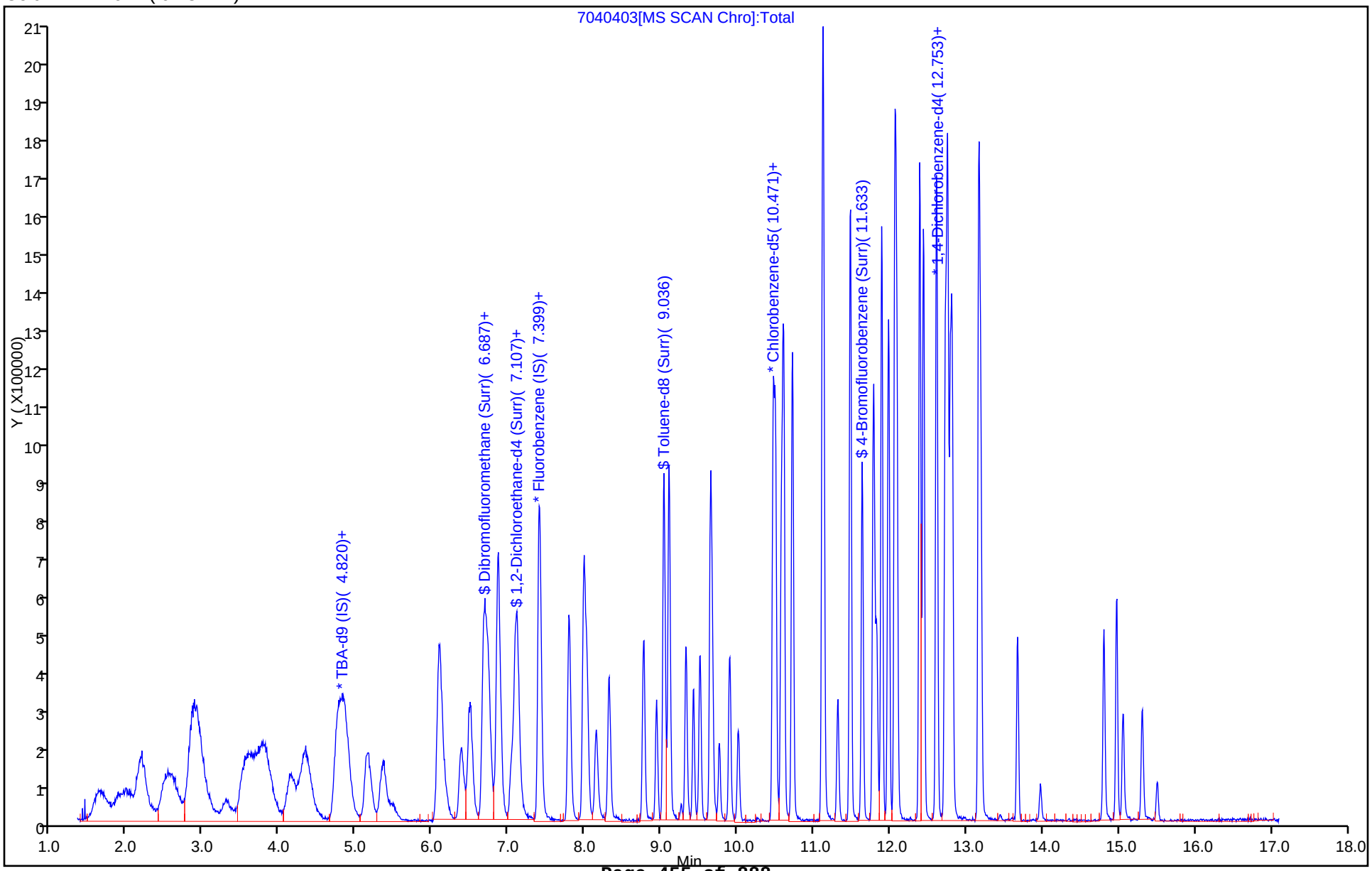
Report Date: 06-Apr-2015 09:16:00 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D

Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

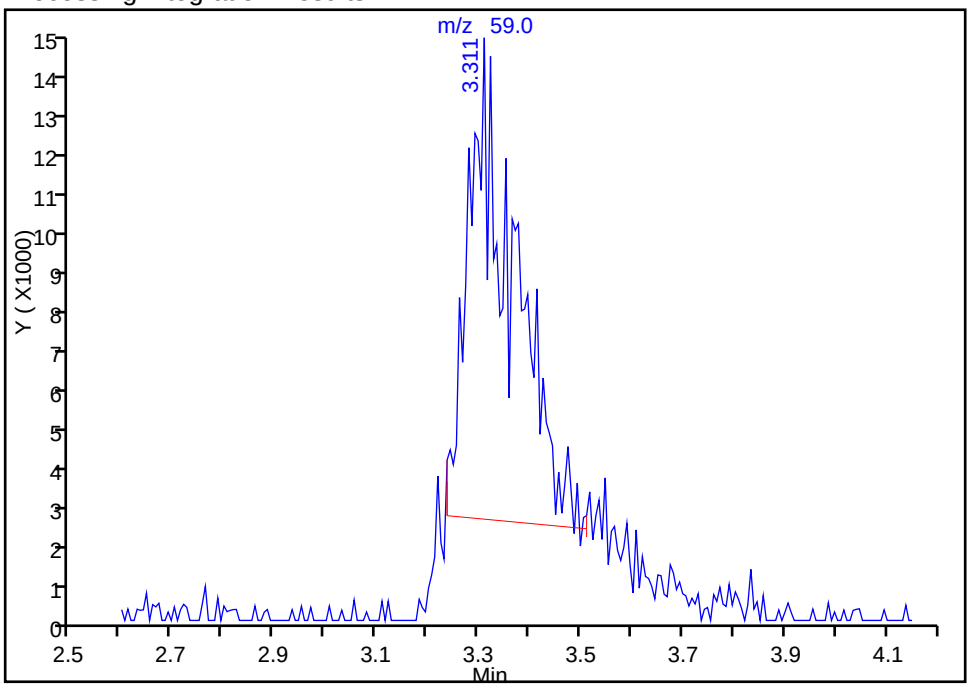
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D				
Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

20 Ethyl ether, CAS: 60-29-7

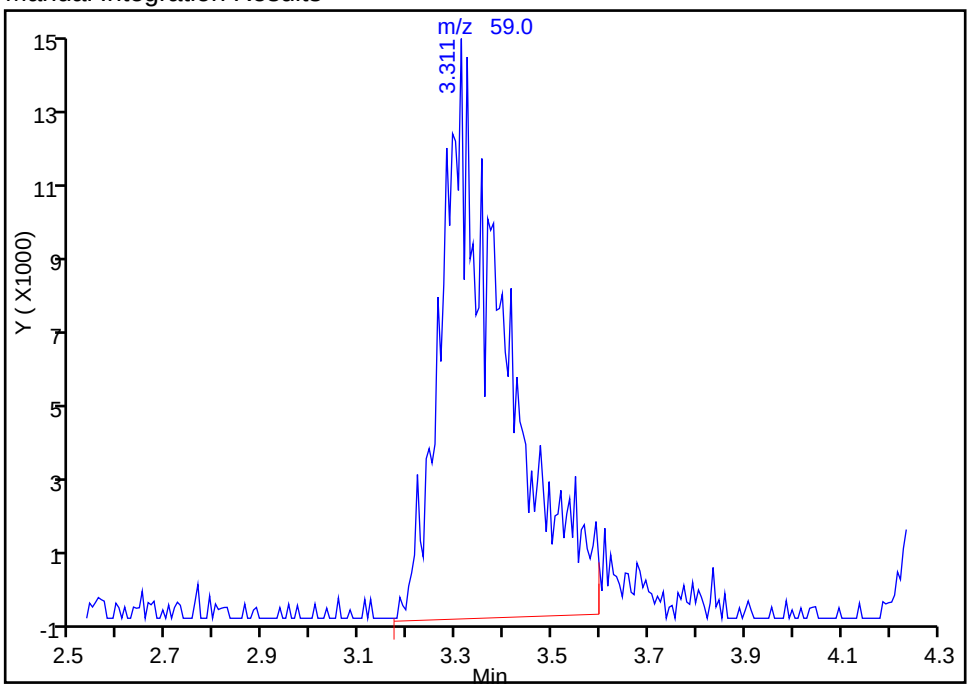
Processing Integration Results

RT: 3.31
Area: 74630
Amount: 82.481931
Amount Units: ng



Manual Integration Results

RT: 3.31
Area: 131553
Amount: 145.3939
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 15:22:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

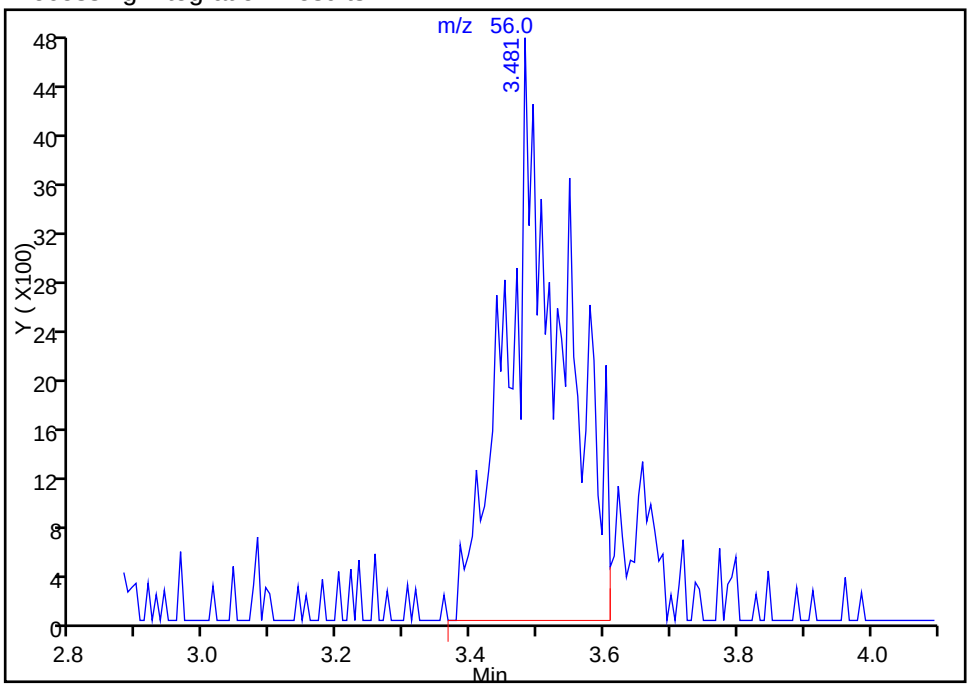
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D				
Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

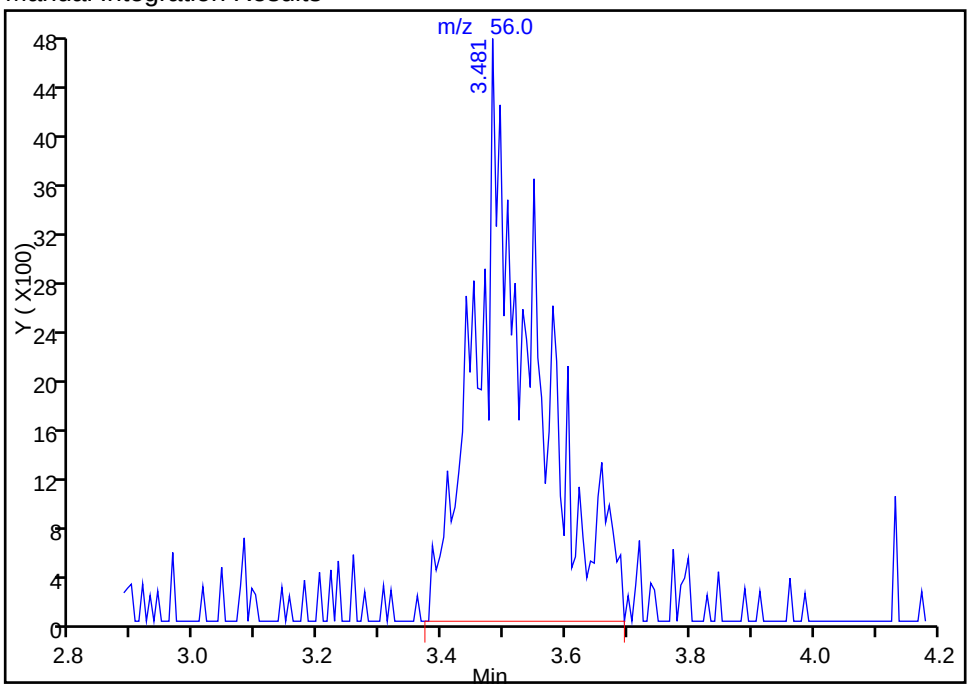
Processing Integration Results

RT: 3.48
Area: 27156
Amount: 434.7241
Amount Units: ng



Manual Integration Results

RT: 3.48
Area: 30598
Amount: 489.8250
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 15:22:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

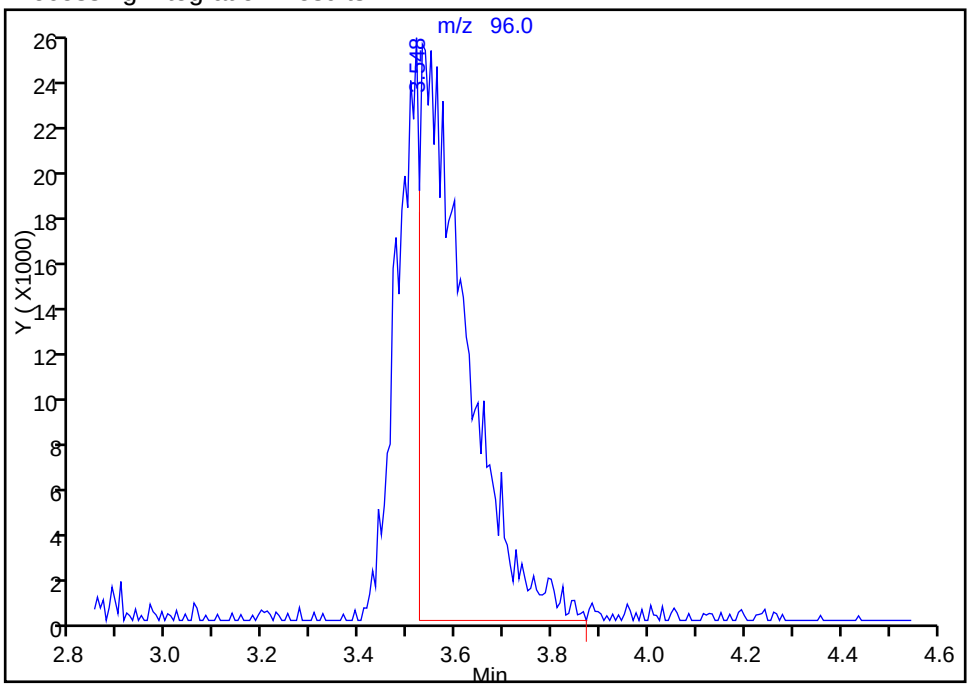
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D				
Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

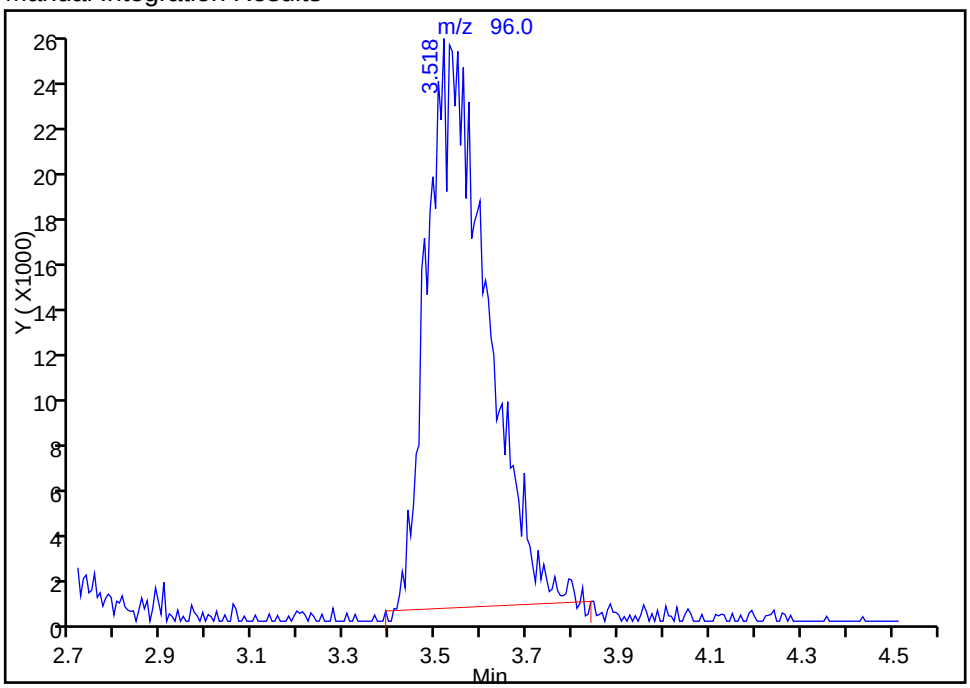
Processing Integration Results

RT: 3.55
Area: 170206
Amount: 157.8597
Amount Units: ng



Manual Integration Results

RT: 3.52
Area: 228146
Amount: 211.5968
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 15:22:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

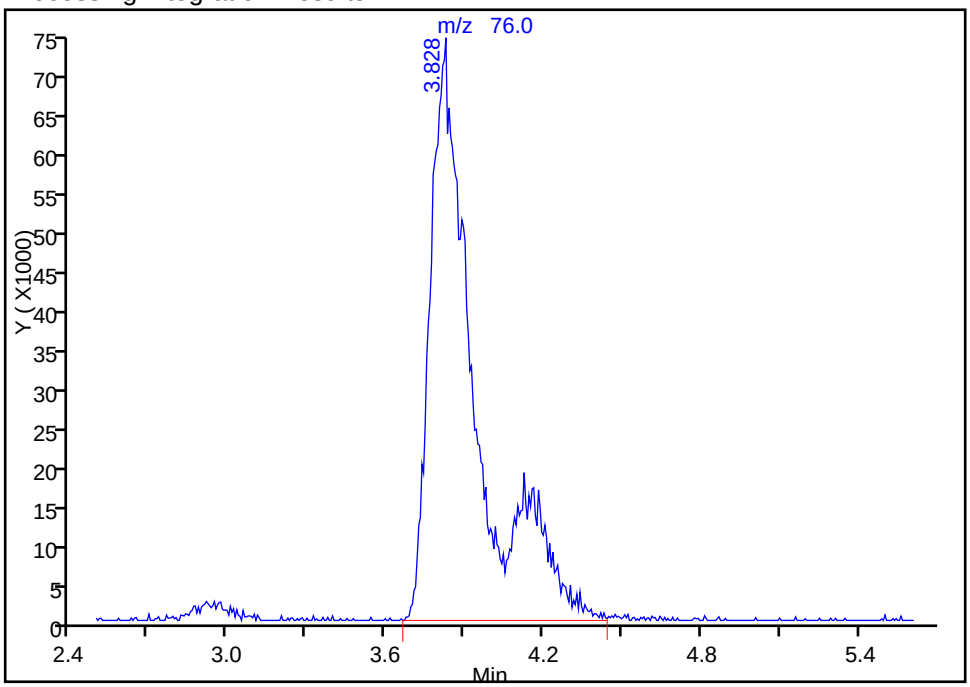
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D				
Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

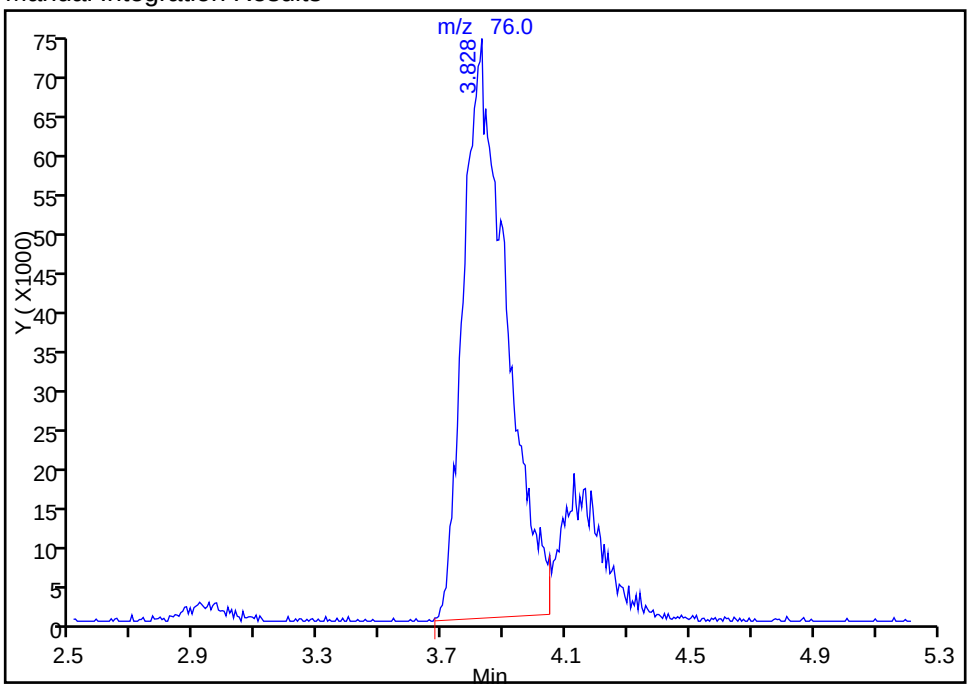
Processing Integration Results

RT: 3.83
Area: 881692
Amount: 272.2599
Amount Units: ng



Manual Integration Results

RT: 3.83
Area: 703845
Amount: 217.3421
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 15:22:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

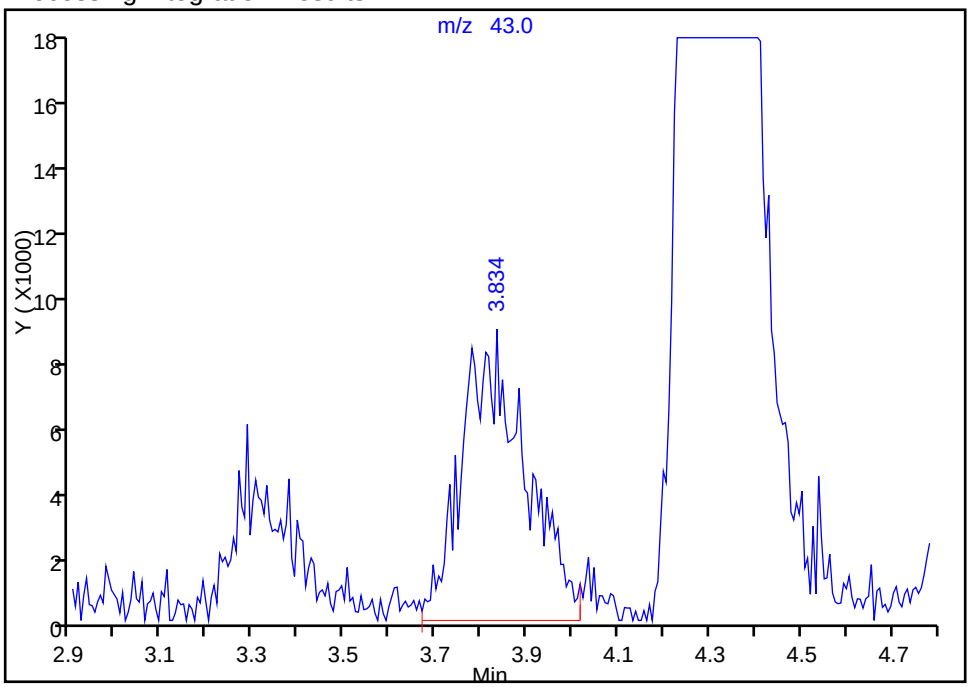
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D				
Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

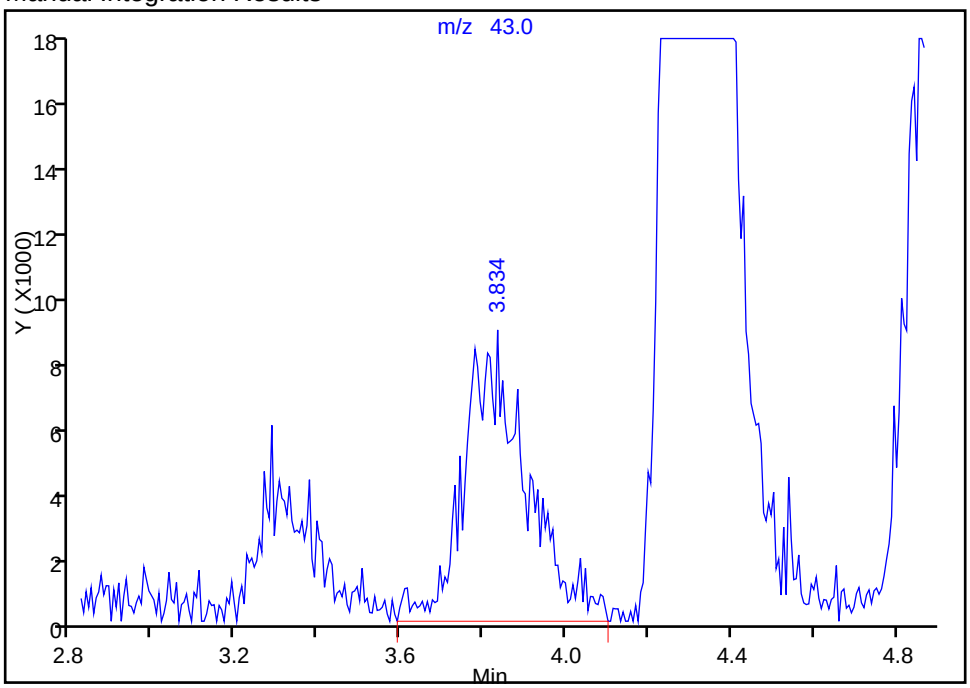
Processing Integration Results

RT: 3.83
Area: 83292
Amount: 314.2085
Amount Units: ng



Manual Integration Results

RT: 3.83
Area: 89679
Amount: 344.0322
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 15:22:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

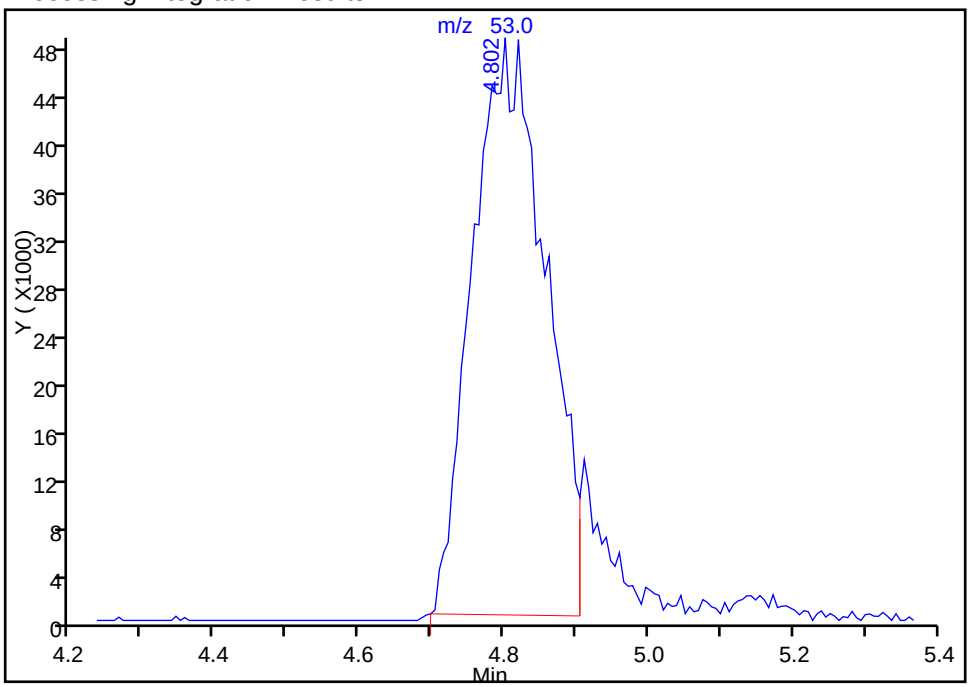
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D				
Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

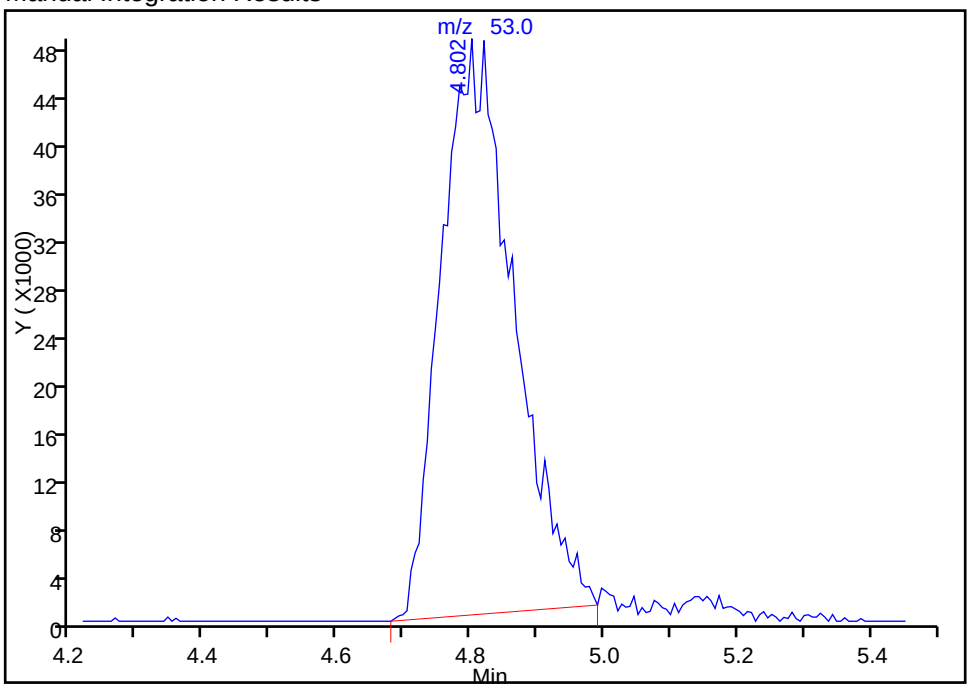
Processing Integration Results

RT: 4.80
Area: 341852
Amount: 1597.2628
Amount Units: ng



Manual Integration Results

RT: 4.80
Area: 364826
Amount: 1704.6061
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 15:22:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

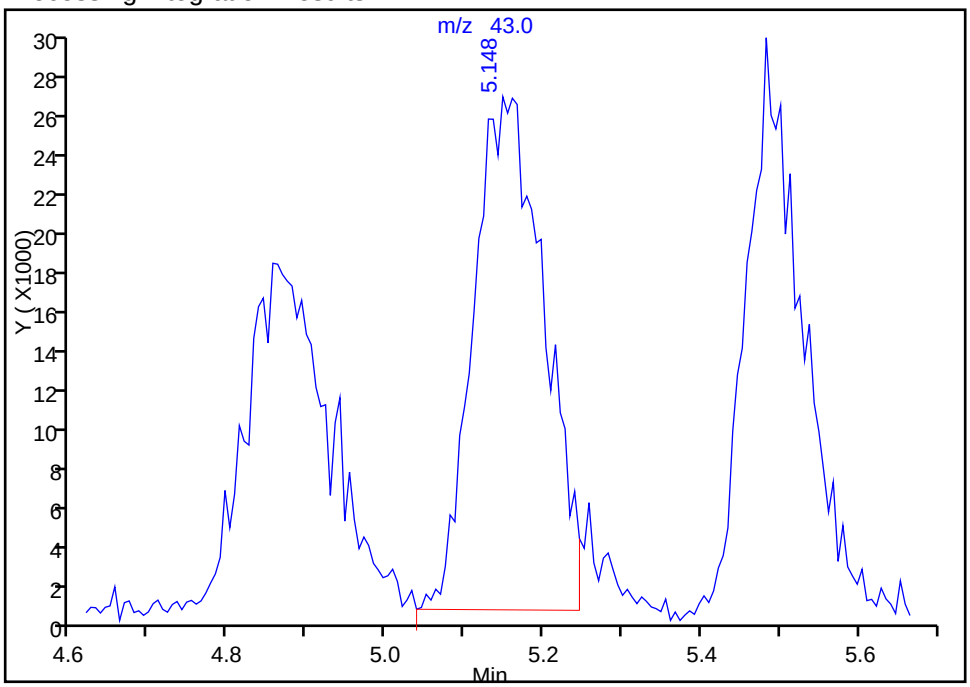
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D				
Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

38 Vinyl acetate, CAS: 108-05-4

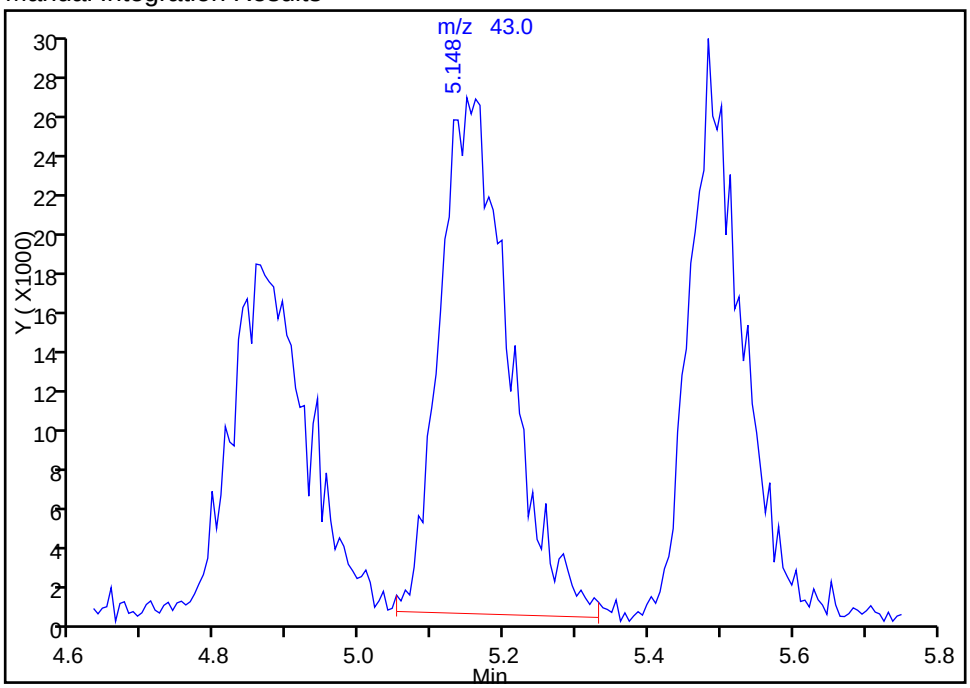
Processing Integration Results

RT: 5.15
Area: 160095
Amount: 151.7643
Amount Units: ng



Manual Integration Results

RT: 5.15
Area: 172309
Amount: 163.3427
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 15:22:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

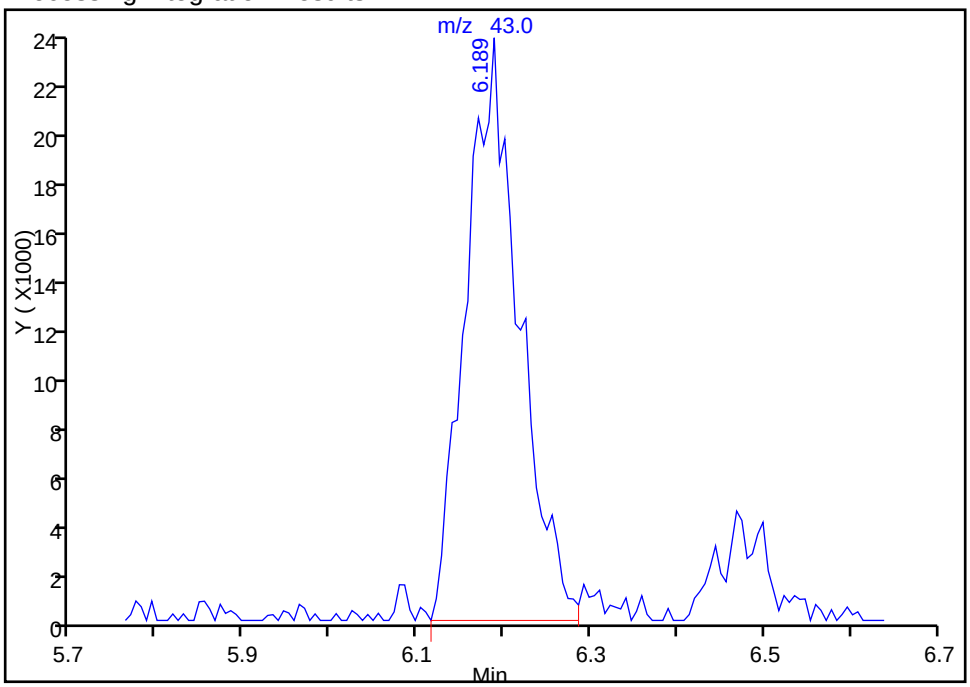
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D				
Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

46 2-Butanone (MEK), CAS: 78-93-3

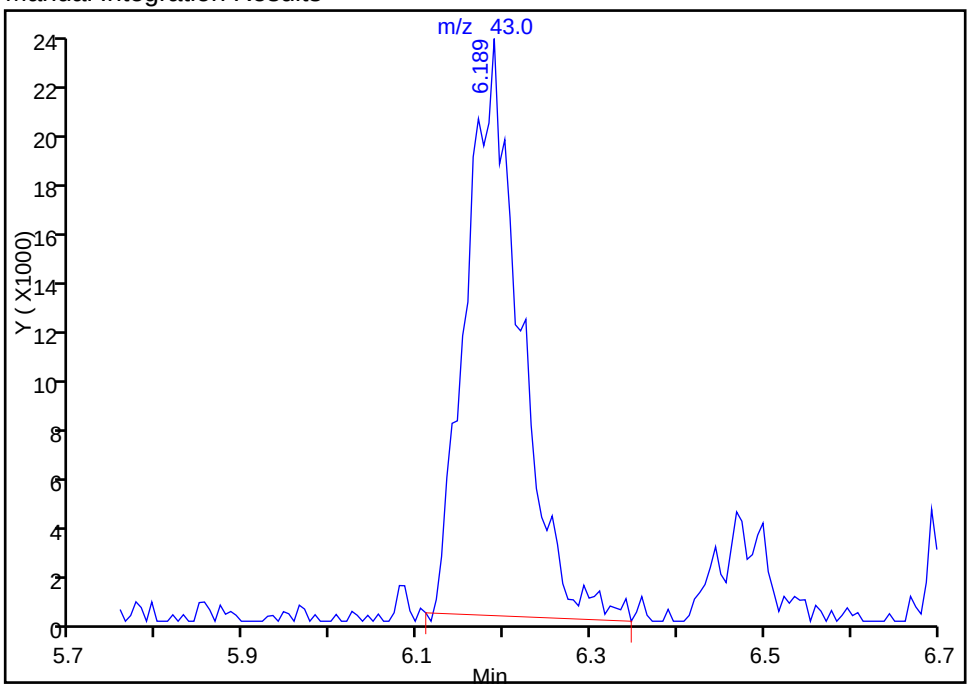
Processing Integration Results

RT: 6.19
Area: 99625
Amount: 276.7735
Amount Units: ng



Manual Integration Results

RT: 6.19
Area: 99975
Amount: 277.7458
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 15:22:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

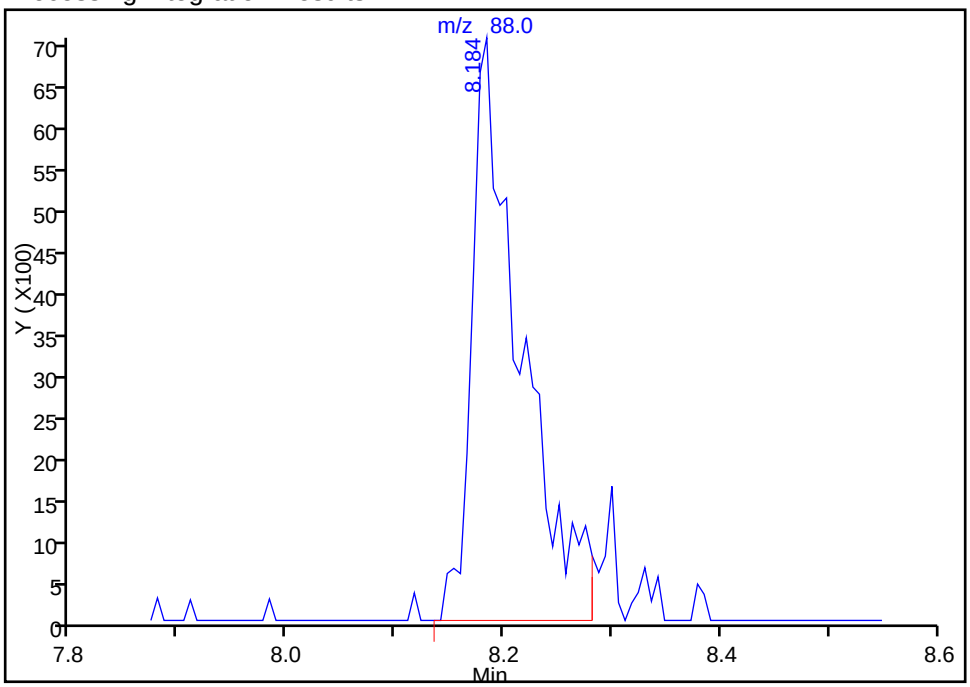
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040403.D				
Injection Date:	04-Apr-2015 14:19:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

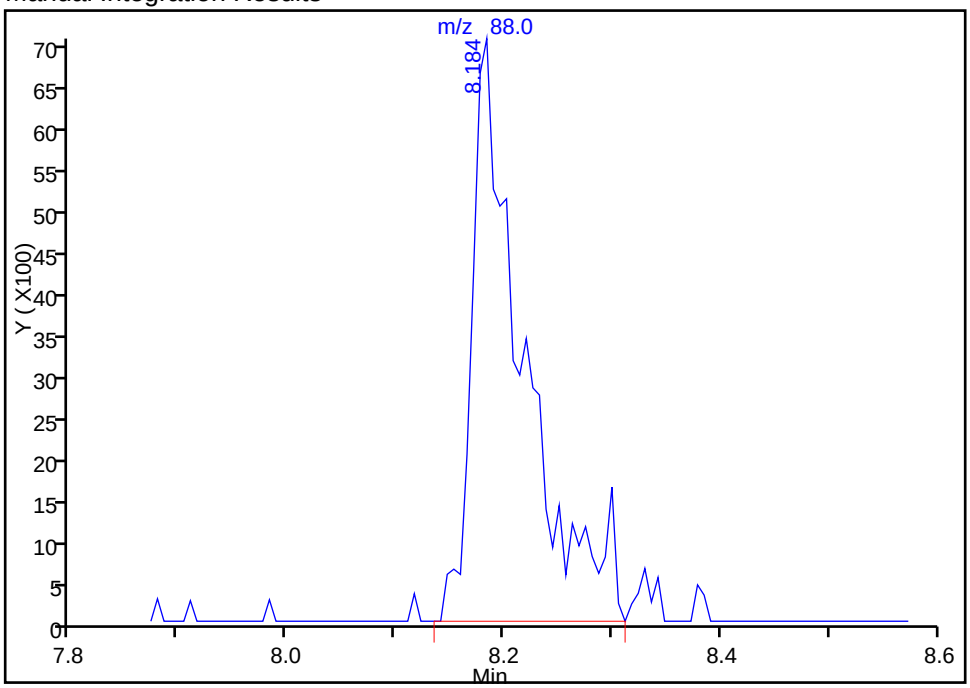
Processing Integration Results

RT: 8.18
Area: 21907
Amount: 3481.3388
Amount Units: ng



Manual Integration Results

RT: 8.18
Area: 23066
Amount: 3665.5206
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 15:22:58
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137564/3 Calibration Date: 04/06/2015 09:40

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040603.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	0.3707	0.3882	0.1000	10.5	10.0	4.7	20.0
Chloromethane	Ave	0.4039	0.4128	0.1000	10.2	10.0	2.2	20.0
Vinyl chloride	Ave	0.3145	0.3448	0.1000	11.0	10.0	9.6	20.0
Bromomethane	Ave	0.2534	0.3218	0.0500	12.7	10.0	27.0*	20.0
Chloroethane	Ave	0.2537	0.2962	0.0500	11.7	10.0	16.8	20.0
Dichlorofluoromethane	Ave	0.6751	0.7901	0.0100	11.7	10.0	17.0	20.0
Trichlorofluoromethane	Ave	0.7102	0.8930	0.1000	12.6	10.0	25.7*	20.0
Ethyl ether	Ave	0.2253	0.1908	0.0100	8.46	10.0	-15.4	20.0
Acrolein	Ave	0.0156	0.0164	0.0100	31.6	30.0	5.4	20.0
1,1-Dichloroethene	Ave	0.2685	0.2696	0.1000	10.0	10.0	0.4	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3122	0.3538	0.1000	11.3	10.0	13.3	20.0
Iodomethane	Ave	0.5617	0.6251	0.0100	11.1	10.0	11.3	20.0
Carbon disulfide	Ave	0.8065	0.8910	0.1000	11.0	10.0	10.5	20.0
Acetone	Lin2		0.0698	0.0500	22.4	20.0	12.2	20.0
Allyl chloride	Ave	0.1981	0.2056	0.0100	10.4	10.0	3.8	20.0
Methyl acetate	Ave	0.1332	0.1291	0.1000	48.4	50.0	-3.1	20.0
Methylene Chloride	Ave	0.2882	0.3070	0.1000	10.7	10.0	6.5	20.0
trans-1,2-Dichloroethene	Ave	0.3332	0.3701	0.1000	11.1	10.0	11.1	20.0
Acrylonitrile	Ave	0.0533	0.0523	0.0100	98.0	100	-2.0	20.0
Methyl tert-butyl ether	Ave	0.6566	0.7485	0.1000	11.4	10.0	14.0	20.0
tert-Butyl alcohol	Qua		0.3585	0.0100	379	100	279.0*	20.0
Hexane	Ave	0.3484	0.3377	0.0100	9.69	10.0	-3.1	20.0
Vinyl acetate	Ave	0.2627	0.2352	0.0100	8.95	10.0	-10.5	20.0
1,1-Dichloroethane	Ave	0.4883	0.5330	0.2000	10.9	10.0	9.2	20.0
2,2-Dichloropropane	Ave	0.4080	0.5023	0.0100	12.3	10.0	23.1*	20.0
cis-1,2-Dichloroethene	Ave	0.3306	0.3659	0.1000	11.1	10.0	10.7	20.0
2-Butanone (MEK)	Ave	0.0896	0.0810	0.0500	18.1	20.0	-9.6	20.0
Bromochloromethane	Ave	0.1904	0.1995	0.0100	10.5	10.0	4.8	20.0
Chloroform	Ave	0.5499	0.5828	0.2000	10.6	10.0	6.0	20.0
1,1,1-Trichloroethane	Ave	0.4994	0.5670	0.1000	11.4	10.0	13.5	20.0
Cyclohexane	Ave	0.3523	0.4040	0.1000	11.5	10.0	14.7	20.0
Tetrahydrofuran	Ave	0.0490	0.0548	0.0100	22.3	20.0	11.6	20.0
Carbon tetrachloride	Ave	0.5037	0.5737	0.1000	11.4	10.0	13.9	20.0
1,1-Dichloropropene	Ave	0.3606	0.3817	0.0100	10.6	10.0	5.9	20.0
Benzene	Ave	0.9843	1.000	0.5000	10.2	10.0	1.6	20.0
1,2-Dichloroethane	Ave	0.3325	0.3110	0.1000	9.36	10.0	-6.4	20.0
Isobutyl alcohol	Ave	0.0080	0.0082*	0.0100	255	250	2.1	20.0
n-Heptane	Ave	0.3051	0.2909	0.0100	9.54	10.0	-4.6	20.0
Trichloroethene	Ave	0.3946	0.3837	0.2000	9.72	10.0	-2.8	20.0
Methylcyclohexane	Ave	0.4851	0.5334	0.1000	11.0	10.0	9.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137564/3 Calibration Date: 04/06/2015 09:40

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040603.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	0.2242	0.2090	0.1000	9.32	10.0	-6.8	20.0
Dibromomethane	Ave	0.1670	0.1548	0.0100	9.27	10.0	-7.3	20.0
1,4-Dioxane	Ave	0.0016	0.0012*	0.0100	147	200	-26.4*	20.0
Bromodichloromethane	Ave	0.4157	0.4227	0.2000	10.2	10.0	1.7	20.0
cis-1,3-Dichloropropene	Ave	0.4312	0.4593	0.2000	10.7	10.0	6.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5844	0.5207	0.1000	17.8	20.0	-10.9	20.0
Toluene	Qua		3.420	0.4000	9.46	10.0	-5.4	20.0
trans-1,3-Dichloropropene	Ave	1.257	1.265	0.1000	10.1	10.0	0.6	20.0
Ethyl methacrylate	Ave	0.8363	0.7628	0.0100	9.12	10.0	-8.8	20.0
1,1,2-Trichloroethane	Ave	0.7178	0.6947	0.1000	9.68	10.0	-3.2	20.0
Tetrachloroethene	Qua		0.9008	0.2000	9.49	10.0	-5.1	20.0
1,3-Dichloropropane	Ave	1.061	1.019	0.0100	9.61	10.0	-3.9	20.0
2-Hexanone	Ave	0.3770	0.3266	0.1000	17.3	20.0	-13.4	20.0
Dibromochloromethane	Ave	1.234	1.236	0.1000	10.0	10.0	0.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.8132	0.7656	0.1000	9.42	10.0	-5.8	20.0
Chlorobenzene	Ave	2.549	2.586	0.5000	10.1	10.0	1.4	20.0
1,1,1,2-Tetrachloroethane	Ave	1.233	1.168	0.0100	9.47	10.0	-5.3	20.0
Ethylbenzene	Ave	1.449	1.362	0.1000	9.40	10.0	-6.0	20.0
m-Xylene & p-Xylene	Ave	1.953	1.836	0.1000	9.40	10.0	-6.0	20.0
o-Xylene	Ave	1.961	1.797	0.3000	9.16	10.0	-8.4	20.0
Styrene	Qua		2.765	0.3000	10.2	10.0	2.5	20.0
Bromoform	Ave	0.6992	0.6915	0.1000	9.89	10.0	-1.1	20.0
Isopropylbenzene	Qua		4.825	0.1000	10.1	10.0	1.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7533	0.7937	0.3000	10.5	10.0	5.4	20.0
Bromobenzene	Ave	0.8571	0.998	0.0100	11.6	10.0	16.4	20.0
1,2,3-Trichloropropane	Ave	0.1919	0.2064	0.0100	10.8	10.0	7.6	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1202	0.1092	0.0100	9.08	10.0	-9.2	20.0
N-Propylbenzene	Ave	1.052	1.218	0.0100	11.6	10.0	15.7	20.0
2-Chlorotoluene	Ave	0.9551	1.072	0.0100	11.2	10.0	12.2	20.0
1,3,5-Trimethylbenzene	Qua		2.970	0.0100	12.2	10.0	21.5*	20.0
4-Chlorotoluene	Ave	0.9153	1.015	0.0100	11.1	10.0	10.9	20.0
tert-Butylbenzene	Lin2	3.243	3.134	0.0100	10.6	10.0	6.0	20.0
1,2,4-Trimethylbenzene	Qua		2.984	0.0100	11.6	10.0	15.6	20.0
sec-Butylbenzene	Qua		3.962	0.0100	12.1	10.0	21.1*	20.0
1,3-Dichlorobenzene	Lin2	1.869	1.877	0.6000	11.1	10.0	10.5	20.0
4-Isopropyltoluene	Qua		3.418	0.0100	11.5	10.0	14.6	20.0
1,4-Dichlorobenzene	Ave	1.587	1.746	0.5000	11.0	10.0	10.0	20.0
n-Butylbenzene	Qua		2.855	0.0100	11.5	10.0	15.2	20.0
1,2-Dichlorobenzene	Ave	1.554	1.518	0.4000	9.77	10.0	-2.3	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.0874	0.0500	11.1	10.0	11.3	20.0
1,2,4-Trichlorobenzene	Ave	0.4928	0.5636	0.2000	11.4	10.0	14.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137564/3 Calibration Date: 04/06/2015 09:40

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040603.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
Hexachlorobutadiene	Ave	0.2953	0.2911	0.0100	9.86	10.0	-1.4	20.0
Naphthalene	Ave	0.8071	1.039	0.0100	12.9	10.0	28.7*	20.0
1,2,3-Trichlorobenzene	Ave	0.3372	0.3508	0.0100	10.4	10.0	4.0	20.0
Dibromofluoromethane (Surr)	Ave	0.3190	0.3258		10.2	10.0	2.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3042	0.2875		9.45	10.0	-5.5	20.0
Toluene-d8 (Surr)	Ave	2.966	3.131		10.6	10.0	5.5	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.394		10.5	10.0	5.5	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040603.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 06-Apr-2015 09:40:30 ALS Bottle#: 4 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006335-003
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub8

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 15:45:36 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 06-Apr-2015 10:42:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.932	4.932	0.000	88	211903	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.396	7.396	0.000	95	817201	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.468	10.468	0.000	83	260238	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.792	12.792	0.000	93	344252	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.672	6.672	0.000	72	266270	200.0	204.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.037	7.037	0.000	68	234923	200.0	189.0	
$ 7 Toluene-d8 (Surr)	98	9.032	9.032	0.000	92	814781	200.0	211.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	89	362844	200.0	210.9	
11 Dichlorodifluoromethane	85	1.896	1.896	0.000	58	317198	200.0	209.4	
12 Chloromethane	50	2.012	2.012	0.000	57	337366	200.0	204.4	M
13 Vinyl chloride	62	2.201	2.201	0.000	86	281796	200.0	219.3	
14 Butadiene	39	2.201	2.201	0.000	91	289661	200.0	213.4	
15 Bromomethane	94	2.487	2.487	0.000	91	262984	200.0	254.0	
16 Chloroethane	64	2.602	2.602	0.000	95	242079	200.0	233.5	
17 Dichlorofluoromethane	67	2.870	2.870	0.000	94	645670	200.0	234.1	
18 Trichlorofluoromethane	101	2.876	2.876	0.000	85	729788	200.0	251.5	
20 Ethyl ether	59	3.296	3.296	0.000	85	155883	200.0	169.3	
21 Acrolein	56	3.509	3.509	0.000	29	40185	600.0	632.2	
22 1,1-Dichloroethene	96	3.521	3.521	0.000	93	220335	200.0	200.8	
23 1,1,2-Trichloro-1,2,2-trif	101	3.600	3.600	0.000	86	289141	200.0	226.6	
25 Iodomethane	142	3.709	3.709	0.000	96	510864	200.0	222.6	
26 Carbon disulfide	76	3.782	3.782	0.000	100	728118	200.0	220.9	
24 Acetone	43	3.843	3.843	0.000	25	114102	400.0	448.8	
28 3-Chloro-1-propene	76	4.099	4.099	0.000	89	167975	200.0	207.6	
30 Methyl acetate	43	4.312	4.312	0.000	97	527555	1000.0	969.0	
31 Methylene Chloride	84	4.318	4.318	0.000	83	250913	200.0	213.1	M
34 trans-1,2-Dichloroethene	96	4.731	4.731	0.000	93	302419	200.0	222.1	
33 Acrylonitrile	53	4.810	4.810	0.000	97	427087	2000.0	1960.9	
35 Methyl tert-butyl ether	73	4.877	4.877	0.000	95	611647	200.0	228.0	
32 2-Methyl-2-propanol	59	4.938	4.938	0.000	38	37986	2000.0	7579.2	E

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.121	5.121	0.000	94	275972	200.0	193.8	
38 Vinyl acetate	43	5.121	5.121	0.000	72	192227	200.0	179.1	
37 1,1-Dichloroethane	63	5.340	5.340	0.000	84	435598	200.0	218.3	
45 cis-1,2-Dichloroethene	96	6.082	6.082	0.000	80	299024	200.0	221.3	
44 2,2-Dichloropropane	77	6.082	6.082	0.000	83	410515	200.0	246.3	
46 2-Butanone (MEK)	43	6.191	6.191	0.000	96	132381	400.0	361.4	
49 Chlorobromomethane	128	6.374	6.374	0.000	80	163041	200.0	209.5	
52 Chloroform	83	6.496	6.496	0.000	93	476242	200.0	212.0	
53 1,1,1-Trichloroethane	97	6.672	6.672	0.000	96	463366	200.0	227.1	
54 Cyclohexane	56	6.715	6.715	0.000	88	330106	200.0	229.3	
51 Tetrahydrofuran	42	6.733	6.733	0.000	47	89492	400.0	446.6	
56 Carbon tetrachloride	117	6.848	6.848	0.000	96	468788	200.0	227.8	
55 1,1-Dichloropropene	75	6.855	6.855	0.000	85	311943	200.0	211.7	
58 Benzene	78	7.086	7.086	0.000	96	817428	200.0	203.3	
59 1,2-Dichloroethane	62	7.122	7.122	0.000	97	254162	200.0	187.1	
57 Isobutyl alcohol	41	7.390	7.390	0.000	52	167508	5000.0	5105.7	
62 n-Heptane	43	7.396	7.396	0.000	60	237725	200.0	190.7	
64 Trichloroethene	130	7.785	7.785	0.000	93	313522	200.0	194.5	
66 Methylcyclohexane	83	7.980	7.980	0.000	84	435881	200.0	219.9	
67 1,2-Dichloropropane	63	8.029	8.029	0.000	81	170796	200.0	186.5	
68 Dibromomethane	93	8.144	8.144	0.000	93	126485	200.0	185.4	
70 1,4-Dioxane	88	8.187	8.187	0.000	89	18852	4000.0	2944.0	
71 Dichlorobromomethane	83	8.308	8.308	0.000	97	345463	200.0	203.4	
74 cis-1,3-Dichloropropene	75	8.771	8.771	0.000	93	375354	200.0	213.0	
75 4-Methyl-2-pentanone (MIBK	43	8.941	8.941	0.000	97	271027	400.0	356.4	
76 Toluene	91	9.099	9.099	0.000	98	889886	200.0	189.2	
77 trans-1,3-Dichloropropene	75	9.324	9.324	0.000	94	329236	200.0	201.3	
78 Ethyl methacrylate	69	9.422	9.422	0.000	88	198498	200.0	182.4	
79 1,1,2-Trichloroethane	97	9.507	9.507	0.000	89	180776	200.0	193.6	
80 Tetrachloroethene	164	9.647	9.647	0.000	93	234417	200.0	189.7	
81 1,3-Dichloropropane	76	9.671	9.671	0.000	90	265291	200.0	192.2	
82 2-Hexanone	43	9.762	9.762	0.000	95	169959	400.0	346.5	
84 Chlorodibromomethane	129	9.896	9.896	0.000	87	321542	200.0	200.3	
85 Ethylene Dibromide	107	10.006	10.006	0.000	98	199239	200.0	188.3	
87 Chlorobenzene	112	10.498	10.498	0.000	94	672968	200.0	202.9	
89 1,1,1,2-Tetrachloroethane	131	10.572	10.572	0.000	93	303903	200.0	189.5	
90 Ethylbenzene	106	10.602	10.602	0.000	98	354361	200.0	188.0	
91 m-Xylene & p-Xylene	106	10.717	10.717	0.000	98	477857	200.0	188.1	
92 o-Xylene	106	11.113	11.113	0.000	96	467623	200.0	183.2	
93 Styrene	104	11.125	11.125	0.000	94	719464	200.0	205.0	
94 Bromoform	173	11.320	11.320	0.000	92	179945	200.0	197.8	
97 Isopropylbenzene	105	11.478	11.478	0.000	96	1255664	200.0	202.6	
99 1,1,2,2-Tetrachloroethane	83	11.770	11.770	0.000	96	206551	200.0	210.7	
100 Bromobenzene	156	11.782	11.782	0.000	87	343455	200.0	232.8	
101 1,2,3-Trichloropropane	110	11.819	11.819	0.000	82	71066	200.0	215.1	
102 trans-1,4-Dichloro-2-buten	53	11.831	11.831	0.000	68	37576	200.0	181.6	
103 N-Propylbenzene	120	11.892	11.892	0.000	97	419139	200.0	231.5	
104 2-Chlorotoluene	126	11.983	11.983	0.000	96	368927	200.0	224.4	
106 1,3,5-Trimethylbenzene	105	12.062	12.062	0.000	97	1022405	200.0	243.1	
107 4-Chlorotoluene	126	12.086	12.086	0.000	95	349562	200.0	221.9	
108 tert-Butylbenzene	119	12.390	12.390	0.000	91	1078916	200.0	212.0	
110 1,2,4-Trimethylbenzene	105	12.439	12.439	0.000	95	1027393	200.0	231.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.609	12.609	0.000	94	1363981	200.0	242.2	
113 1,3-Dichlorobenzene	146	12.725	12.725	0.000	96	646294	200.0	221.1	
114 4-Isopropyltoluene	119	12.755	12.755	0.000	95	1176787	200.0	229.3	
115 1,4-Dichlorobenzene	146	12.810	12.810	0.000	93	600929	200.0	220.1	
120 n-Butylbenzene	91	13.163	13.163	0.000	96	982950	200.0	230.4	
121 1,2-Dichlorobenzene	146	13.187	13.187	0.000	98	522730	200.0	195.4	
122 1,2-Dibromo-3-Chloropropan	75	13.972	13.972	0.000	90	30078	200.0	222.6	
126 1,2,4-Trichlorobenzene	180	14.806	14.806	0.000	95	194021	200.0	228.7	
127 Hexachlorobutadiene	225	14.970	14.970	0.000	89	100209	200.0	197.1	
128 Naphthalene	128	15.055	15.055	0.000	97	357581	200.0	257.4	
129 1,2,3-Trichlorobenzene	180	15.311	15.311	0.000	95	120750	200.0	208.0	
S 133 Xylenes, Total	106				0		400.0	371.3	
S 134 1,2-Dichloroethene, Total	96				0		400.0	443.5	
S 135 1,3-Dichloropropene, Total	1				0		400.0	414.3	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00108	Amount Added:	8.00	Units: uL
VOAACRO2ND_00007	Amount Added:	24.00	Units: uL
voaWVA2nd Res_00006	Amount Added:	8.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOA8260SURR_00017	Amount Added:	8.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	8.00	Units: uL

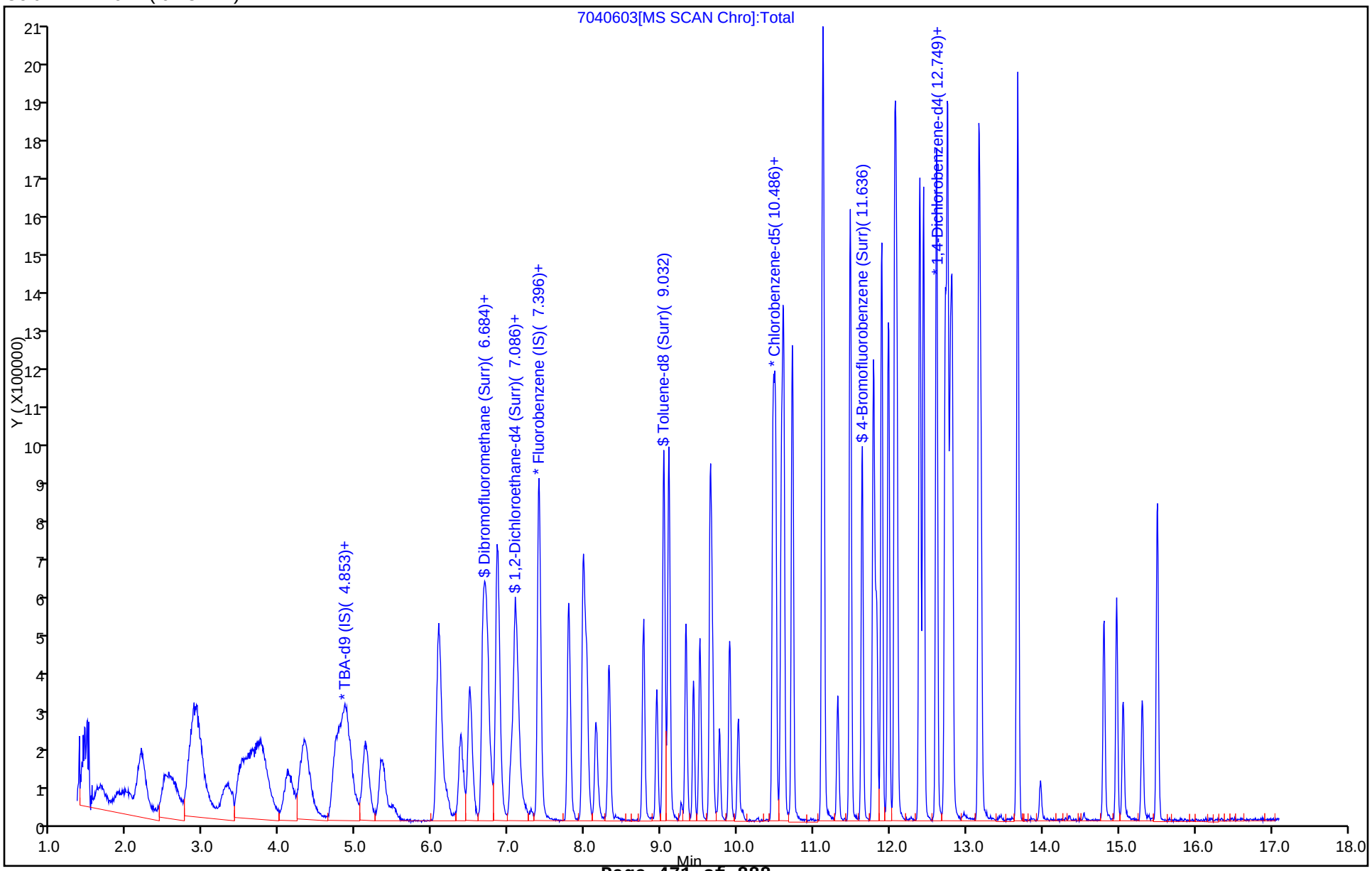
Report Date: 06-Apr-2015 15:45:36 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040603.D

Injection Date:	06-Apr-2015 09:40:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

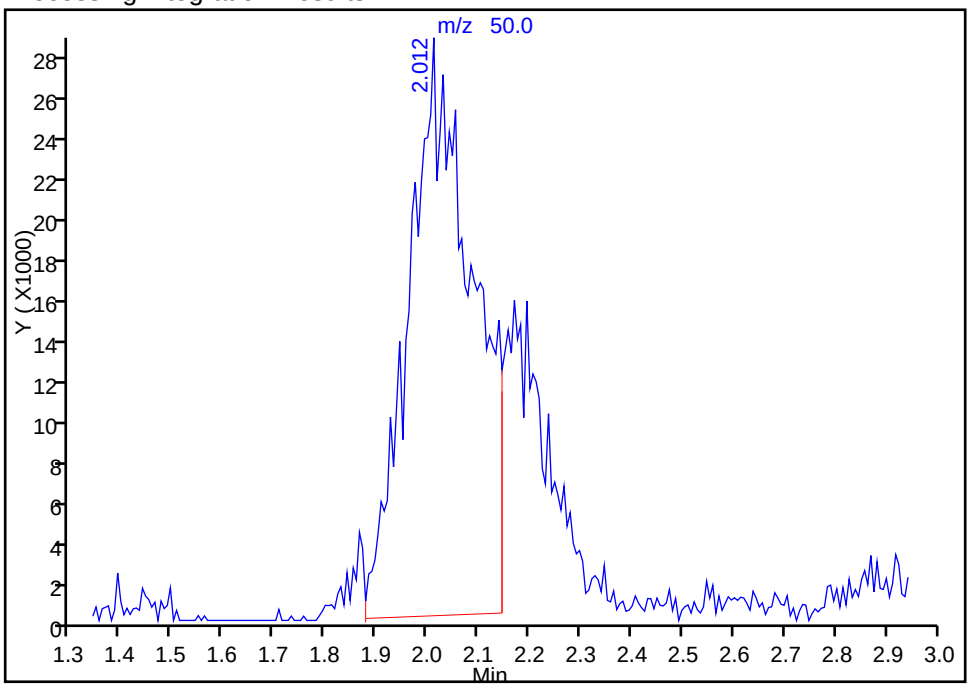
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040603.D				
Injection Date:	06-Apr-2015 09:40:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

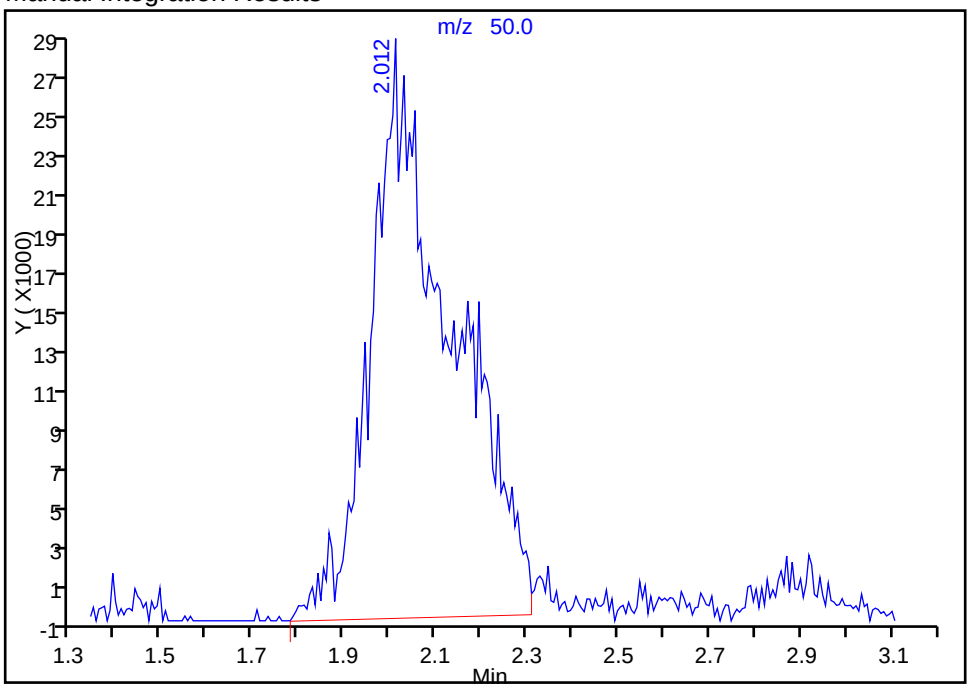
Processing Integration Results

RT: 2.01
Area: 244785
Amount: 148.3390
Amount Units: ng



Manual Integration Results

RT: 2.01
Area: 337366
Amount: 204.4428
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 10:42:09
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

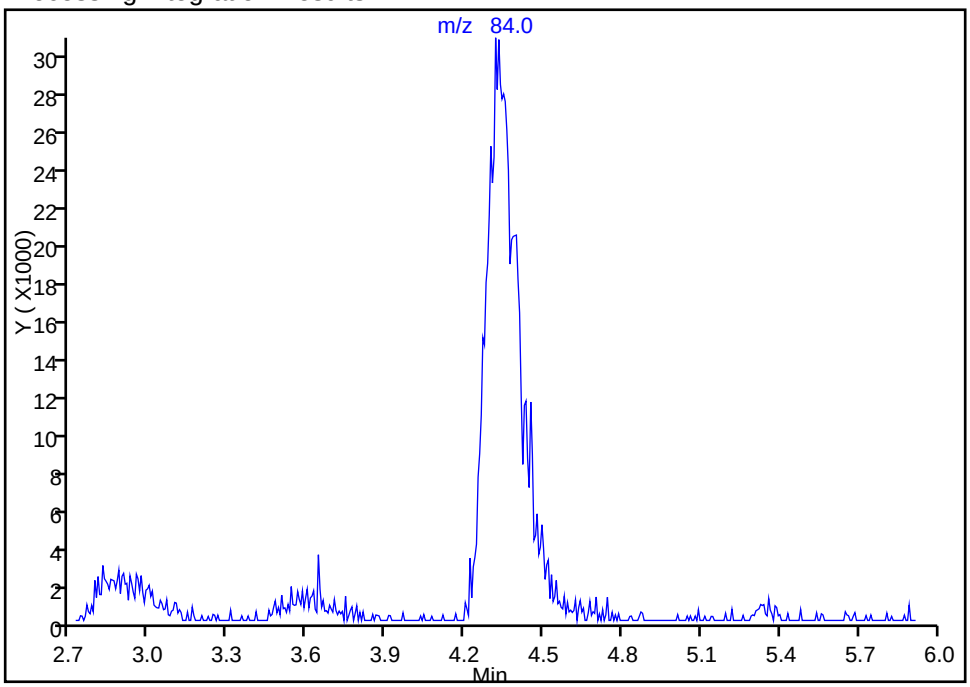
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040603.D				
Injection Date:	06-Apr-2015 09:40:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

31 Methylene Chloride, CAS: 75-09-2

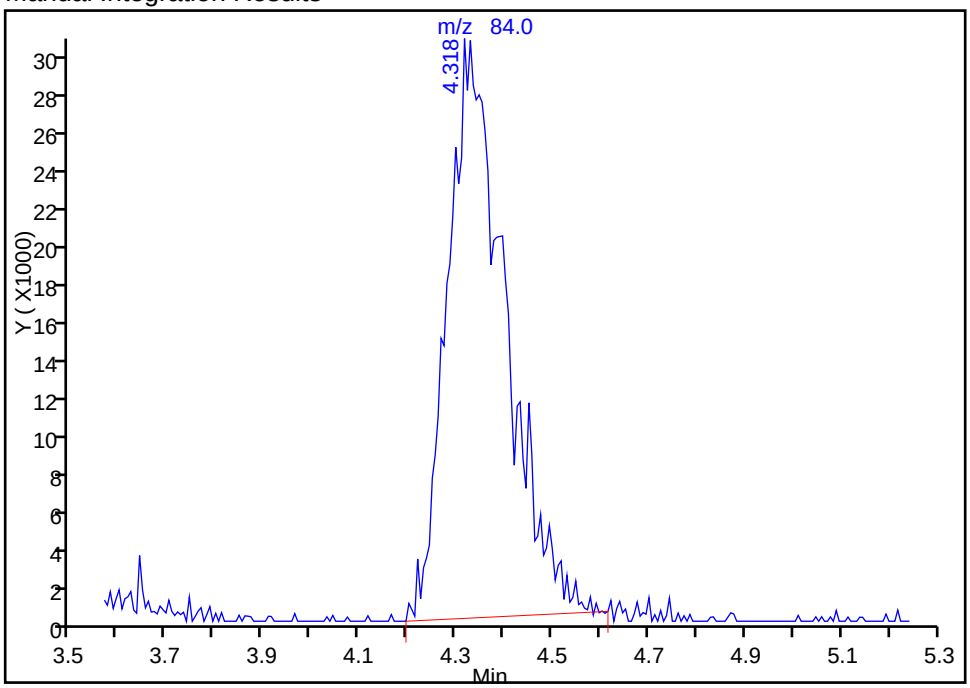
Not Detected
Expected RT: 4.32

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 250913
Amount: 213.0694
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 10:42:09
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137846/3 Calibration Date: 04/08/2015 09:26

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040803.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	0.3707	0.4114	0.1000	11.1	10.0	11.0	20.0
Chloromethane	Ave	0.4039	0.4200	0.1000	10.4	10.0	4.0	20.0
Vinyl chloride	Ave	0.3145	0.3214	0.1000	10.2	10.0	2.2	20.0
Bromomethane	Ave	0.2534	0.3258	0.0500	12.9	10.0	28.6*	20.0
Chloroethane	Ave	0.2537	0.2785	0.0500	11.0	10.0	9.8	20.0
Dichlorofluoromethane	Ave	0.6751	0.7745	0.0100	11.5	10.0	14.7	20.0
Trichlorofluoromethane	Ave	0.7102	0.8406	0.1000	11.8	10.0	18.4	20.0
Ethyl ether	Ave	0.2253	0.1811	0.0100	8.04	10.0	-19.6	20.0
Acrolein	Ave	0.0156	0.0119	0.0100	23.0	30.0	-23.3*	20.0
1,1-Dichloroethene	Ave	0.2685	0.2528	0.1000	9.41	10.0	-5.9	20.0
1,1,2-Trichloro-1,2,2-triflu oroethane	Ave	0.3122	0.2963	0.1000	9.49	10.0	-5.1	20.0
Iodomethane	Ave	0.5617	0.5723	0.0100	10.2	10.0	1.9	20.0
Carbon disulfide	Ave	0.8065	0.7906	0.1000	9.80	10.0	-2.0	20.0
Acetone	Lin2		0.0452*	0.0500	13.2	20.0	-33.9*	20.0
Allyl chloride	Ave	0.1981	0.1943	0.0100	9.81	10.0	-1.9	20.0
Methyl acetate	Ave	0.1332	0.0915*	0.1000	34.3	50.0	-31.3*	20.0
Methylene Chloride	Ave	0.2882	0.2787	0.1000	9.67	10.0	-3.3	20.0
trans-1,2-Dichloroethene	Ave	0.3332	0.3167	0.1000	9.50	10.0	-5.0	20.0
Acrylonitrile	Ave	0.0533	0.0405	0.0100	75.9	100	-24.1*	20.0
Methyl tert-butyl ether	Ave	0.6566	0.5753	0.1000	8.76	10.0	-12.4	20.0
tert-Butyl alcohol	Qua		0.9839	0.0100	796	100	696.4*	20.0
Hexane	Ave	0.3484	0.2392	0.0100	6.86	10.0	-31.4*	20.0
Vinyl acetate	Ave	0.2627	0.2104	0.0100	8.01	10.0	-19.9	20.0
1,1-Dichloroethane	Ave	0.4883	0.4870	0.2000	9.97	10.0	-0.3	20.0
2,2-Dichloropropane	Ave	0.4080	0.4729	0.0100	11.6	10.0	15.9	20.0
cis-1,2-Dichloroethene	Ave	0.3306	0.3323	0.1000	10.1	10.0	0.5	20.0
2-Butanone (MEK)	Ave	0.0896	0.0610	0.0500	13.6	20.0	-32.0*	20.0
Bromochloromethane	Ave	0.1904	0.1815	0.0100	9.53	10.0	-4.7	20.0
Chloroform	Ave	0.5499	0.5751	0.2000	10.5	10.0	4.6	20.0
1,1,1-Trichloroethane	Ave	0.4994	0.5407	0.1000	10.8	10.0	8.3	20.0
Cyclohexane	Ave	0.3523	0.3399	0.1000	9.65	10.0	-3.5	20.0
Tetrahydrofuran	Ave	0.0490	0.0482	0.0100	19.7	20.0	-1.6	20.0
1,1-Dichloropropene	Ave	0.3606	0.3500	0.0100	9.70	10.0	-3.0	20.0
Carbon tetrachloride	Ave	0.5037	0.5369	0.1000	10.7	10.0	6.6	20.0
Benzene	Ave	0.9843	0.9751	0.5000	9.91	10.0	-0.9	20.0
1,2-Dichloroethane	Ave	0.3325	0.2841	0.1000	8.55	10.0	-14.5	20.0
Isobutyl alcohol	Ave	0.0080	0.0079*	0.0100	246	250	-1.8	20.0
n-Heptane	Ave	0.3051	0.2798	0.0100	9.17	10.0	-8.3	20.0
Trichloroethene	Ave	0.3946	0.4087	0.2000	10.4	10.0	3.6	20.0
Methylcyclohexane	Ave	0.4851	0.4813	0.1000	9.92	10.0	-0.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137846/3 Calibration Date: 04/08/2015 09:26

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040803.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	0.2242	0.2048	0.1000	9.14	10.0	-8.6	20.0
Dibromomethane	Ave	0.1670	0.1447	0.0100	8.67	10.0	-13.3	20.0
1,4-Dioxane	Ave	0.0016	0.0015*	0.0100	190	200	-5.1	20.0
Bromodichloromethane	Ave	0.4157	0.4104	0.2000	9.87	10.0	-1.3	20.0
cis-1,3-Dichloropropene	Ave	0.4312	0.4040	0.2000	9.37	10.0	-6.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.5844	0.4318	0.1000	14.8	20.0	-26.1*	20.0
Toluene	Qua		3.535	0.4000	9.85	10.0	-1.5	20.0
trans-1,3-Dichloropropene	Ave	1.257	1.155	0.1000	9.18	10.0	-8.2	20.0
Ethyl methacrylate	Ave	0.8363	0.6649	0.0100	7.95	10.0	-20.5*	20.0
1,1,2-Trichloroethane	Ave	0.7178	0.6334	0.1000	8.82	10.0	-11.8	20.0
Tetrachloroethene	Qua		0.9099	0.2000	9.60	10.0	-4.0	20.0
1,3-Dichloropropane	Ave	1.061	0.9609	0.0100	9.06	10.0	-9.4	20.0
2-Hexanone	Ave	0.3770	0.2865	0.1000	15.2	20.0	-24.0*	20.0
Dibromochloromethane	Ave	1.234	1.195	0.1000	9.68	10.0	-3.2	20.0
1,2-Dibromoethane (EDB)	Ave	0.8132	0.7396	0.1000	9.10	10.0	-9.0	20.0
Chlorobenzene	Ave	2.549	2.585	0.5000	10.1	10.0	1.4	20.0
1,1,1,2-Tetrachloroethane	Ave	1.233	1.227	0.0100	9.96	10.0	-0.4	20.0
Ethylbenzene	Ave	1.449	1.335	0.1000	9.22	10.0	-7.8	20.0
m-Xylene & p-Xylene	Ave	1.953	1.821	0.1000	9.33	10.0	-6.7	20.0
o-Xylene	Ave	1.961	1.833	0.3000	9.35	10.0	-6.5	20.0
Styrene	Qua		2.781	0.3000	10.3	10.0	3.3	20.0
Bromoform	Ave	0.6992	0.6371	0.1000	9.11	10.0	-8.9	20.0
Isopropylbenzene	Qua		4.912	0.1000	10.4	10.0	3.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7533	0.6682	0.3000	8.87	10.0	-11.3	20.0
Bromobenzene	Ave	0.8571	0.9419	0.0100	11.0	10.0	9.9	20.0
1,2,3-Trichloropropane	Ave	0.1919	0.1792	0.0100	9.34	10.0	-6.6	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1202	0.1133	0.0100	9.42	10.0	-5.8	20.0
N-Propylbenzene	Ave	1.052	1.236	0.0100	11.8	10.0	17.5	20.0
2-Chlorotoluene	Ave	0.9551	1.128	0.0100	11.8	10.0	18.1	20.0
1,3,5-Trimethylbenzene	Qua		3.040	0.0100	12.5	10.0	25.1*	20.0
4-Chlorotoluene	Ave	0.9153	1.036	0.0100	11.3	10.0	13.2	20.0
tert-Butylbenzene	Lin2	3.243	3.269	0.0100	11.1	10.0	10.8	20.0
1,2,4-Trimethylbenzene	Qua		3.076	0.0100	12.0	10.0	20.0	20.0
sec-Butylbenzene	Qua		4.131	0.0100	12.7	10.0	27.4*	20.0
1,3-Dichlorobenzene	Lin2	1.869	1.887	0.6000	11.1	10.0	11.1	20.0
4-Isopropyltoluene	Qua		3.580	0.0100	12.1	10.0	21.5*	20.0
1,4-Dichlorobenzene	Ave	1.587	1.744	0.5000	11.0	10.0	9.9	20.0
n-Butylbenzene	Qua		3.007	0.0100	12.3	10.0	23.0*	20.0
1,2-Dichlorobenzene	Ave	1.554	1.435	0.4000	9.23	10.0	-7.7	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.0716	0.0500	9.19	10.0	-8.1	20.0
1,2,4-Trichlorobenzene	Ave	0.4928	0.5676	0.2000	11.5	10.0	15.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCVIS 180-137846/3 Calibration Date: 04/08/2015 09:26

Instrument ID: CHHP7 Calib Start Date: 03/30/2015 10:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/30/2015 14:36

Lab File ID: 7040803.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
Hexachlorobutadiene	Ave	0.2953	0.3492	0.0100	11.8	10.0	18.2	20.0
Naphthalene	Ave	0.8071	0.9833	0.0100	12.2	10.0	21.8*	20.0
1,2,3-Trichlorobenzene	Ave	0.3372	0.3455	0.0100	10.2	10.0	2.5	20.0
Dibromofluoromethane (Surr)	Ave	0.3190	0.3206		10.1	10.0	0.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3042	0.2740		9.01	10.0	-9.9	20.0
Toluene-d8 (Surr)	Ave	2.966	3.225		10.9	10.0	8.7	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.355		10.2	10.0	2.3	20.0

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040803.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 08-Apr-2015 09:26:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 180-0006372-003
Operator ID: 034635 Instrument ID: CHHP7
Sublist: chrom-MSVOA_LL_CHHP7*sub8

Method: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Apr-2015 16:14:33 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: journetp Date: 08-Apr-2015 10:15:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.861	4.861	0.000	44	235061	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.397	7.397	0.000	95	1014367	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.470	10.470	0.000	83	297396	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.787	0.000	94	385394	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.674	6.674	0.000	89	325242	200.0	201.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.032	7.032	0.000	84	277948	200.0	180.2	
$ 7 Toluene-d8 (Surr)	98	9.034	9.034	0.000	92	959188	200.0	217.5	
$ 8 4-Bromofluorobenzene (Surr	95	11.632	11.632	0.000	89	403046	200.0	204.6	
11 Dichlorodifluoromethane	85	1.941	1.941	0.000	84	417329	200.0	222.0	
12 Chloromethane	50	2.062	2.062	0.000	80	426005	200.0	208.0	M
14 Butadiene	39	2.190	2.190	0.000	92	348094	200.0	206.6	
13 Vinyl chloride	62	2.227	2.227	0.000	77	326002	200.0	204.4	
15 Bromomethane	94	2.537	2.537	0.000	87	330472	200.0	257.1	
16 Chloroethane	64	2.610	2.610	0.000	97	282530	200.0	219.6	
17 Dichlorofluoromethane	67	2.890	2.890	0.000	95	785613	200.0	229.4	
18 Trichlorofluoromethane	101	2.908	2.908	0.000	79	852707	200.0	236.7	
20 Ethyl ether	59	3.291	3.291	0.000	82	183691	200.0	160.7	
21 Acrolein	56	3.534	3.534	0.000	29	36312	600.0	460.2	M
22 1,1-Dichloroethene	96	3.541	3.541	0.000	92	256388	200.0	188.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.650	3.650	0.000	74	300585	200.0	189.8	M
25 Iodomethane	142	3.711	3.711	0.000	97	580477	200.0	203.8	
26 Carbon disulfide	76	3.796	3.796	0.000	99	801966	200.0	196.0	
24 Acetone	43	3.863	3.863	0.000	25	91769	400.0	264.5	M
28 3-Chloro-1-propene	76	4.112	4.112	0.000	85	197076	200.0	196.2	
30 Methyl acetate	43	4.295	4.295	0.000	95	464167	1000.0	686.8	
31 Methylene Chloride	84	4.337	4.337	0.000	88	282706	200.0	193.4	
34 trans-1,2-Dichloroethene	96	4.733	4.733	0.000	93	321224	200.0	190.1	
33 Acrylonitrile	53	4.824	4.824	0.000	98	410394	2000.0	1518.0	M
35 Methyl tert-butyl ether	73	4.891	4.891	0.000	94	583571	200.0	175.2	
32 2-Methyl-2-propanol	59	4.976	4.976	0.000	17	115634	2000.0	15928	EM

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.140	5.140	0.000	93	242605	200.0	137.3	
38 Vinyl acetate	43	5.147	5.147	0.000	66	213450	200.0	160.2	
37 1,1-Dichloroethane	63	5.353	5.353	0.000	96	494019	200.0	199.5	
44 2,2-Dichloropropane	77	6.083	6.083	0.000	88	479698	200.0	231.8	
45 cis-1,2-Dichloroethene	96	6.096	6.096	0.000	77	337069	200.0	201.0	
46 2-Butanone (MEK)	43	6.193	6.193	0.000	100	123724	400.0	272.1	
49 Chlorobromomethane	128	6.369	6.369	0.000	81	184141	200.0	190.6	
52 Chloroform	83	6.491	6.491	0.000	94	583315	200.0	209.1	
53 1,1,1-Trichloroethane	97	6.667	6.667	0.000	62	548427	200.0	216.5	
54 Cyclohexane	56	6.728	6.728	0.000	90	344740	200.0	192.9	
51 Tetrahydrofuran	42	6.728	6.728	0.000	47	97866	400.0	393.4	
56 Carbon tetrachloride	117	6.856	6.856	0.000	96	544593	200.0	213.2	
55 1,1-Dichloropropene	75	6.856	6.856	0.000	85	354992	200.0	194.1	
58 Benzene	78	7.099	7.099	0.000	95	989123	200.0	198.1	
59 1,2-Dichloroethane	62	7.124	7.124	0.000	79	288202	200.0	170.9	
62 n-Heptane	43	7.397	7.397	0.000	59	283798	200.0	183.4	
57 Isobutyl alcohol	41	7.397	7.397	0.000	51	199978	5000.0	4910.6	
64 Trichloroethene	130	7.787	7.787	0.000	94	414545	200.0	207.1	
66 Methylcyclohexane	83	7.981	7.981	0.000	85	488213	200.0	198.4	
67 1,2-Dichloropropane	63	8.024	8.024	0.000	77	207754	200.0	182.7	
68 Dibromomethane	93	8.146	8.146	0.000	93	146769	200.0	173.3	
70 1,4-Dioxane	88	8.194	8.194	0.000	59	30174	4000.0	3796.1	
71 Dichlorobromomethane	83	8.310	8.310	0.000	97	416294	200.0	197.4	
74 cis-1,3-Dichloropropene	75	8.772	8.772	0.000	93	409830	200.0	187.4	
75 4-Methyl-2-pentanone (MIBK	43	8.943	8.943	0.000	97	256844	400.0	295.6	
76 Toluene	91	9.101	9.101	0.000	98	1051217	200.0	196.9	
77 trans-1,3-Dichloropropene	75	9.320	9.320	0.000	95	343386	200.0	183.7	
78 Ethyl methacrylate	69	9.423	9.423	0.000	87	197745	200.0	159.0	
79 1,1,2-Trichloroethane	97	9.508	9.508	0.000	91	188360	200.0	176.5	
80 Tetrachloroethene	164	9.648	9.648	0.000	92	270602	200.0	192.0	
81 1,3-Dichloropropane	76	9.673	9.673	0.000	90	285770	200.0	181.1	
82 2-Hexanone	43	9.764	9.764	0.000	97	170391	400.0	304.0	
84 Chlorodibromomethane	129	9.898	9.898	0.000	87	355403	200.0	193.7	
85 Ethylene Dibromide	107	10.013	10.013	0.000	98	219962	200.0	181.9	
87 Chlorobenzene	112	10.494	10.494	0.000	94	768720	200.0	202.8	
89 1,1,1,2-Tetrachloroethane	131	10.579	10.579	0.000	93	364926	200.0	199.1	
90 Ethylbenzene	106	10.603	10.603	0.000	98	397091	200.0	184.4	
91 m-Xylene & p-Xylene	106	10.719	10.719	0.000	97	541687	200.0	186.5	
92 o-Xylene	106	11.114	11.114	0.000	96	545153	200.0	186.9	
93 Styrene	104	11.127	11.127	0.000	94	827171	200.0	206.5	
94 Bromoform	173	11.315	11.315	0.000	94	189464	200.0	182.2	
97 Isopropylbenzene	105	11.479	11.479	0.000	96	1460955	200.0	207.2	
99 1,1,2,2-Tetrachloroethane	83	11.771	11.771	0.000	96	198710	200.0	177.4	
100 Bromobenzene	156	11.784	11.784	0.000	89	362995	200.0	219.8	
101 1,2,3-Trichloropropane	110	11.820	11.820	0.000	83	69050	200.0	186.7	
102 trans-1,4-Dichloro-2-buten	53	11.832	11.832	0.000	68	43661	200.0	188.5	
103 N-Propylbenzene	120	11.893	11.893	0.000	96	476499	200.0	235.1	
104 2-Chlorotoluene	126	11.978	11.978	0.000	95	434776	200.0	236.2	
106 1,3,5-Trimethylbenzene	105	12.063	12.063	0.000	97	1171627	200.0	250.2	
107 4-Chlorotoluene	126	12.088	12.088	0.000	95	399244	200.0	226.4	
108 tert-Butylbenzene	119	12.392	12.392	0.000	92	1259875	200.0	221.6	
110 1,2,4-Trimethylbenzene	105	12.441	12.441	0.000	96	1185662	200.0	239.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
112 sec-Butylbenzene	105	12.611	12.611	0.000	94	1591917	200.0	254.8	
113 1,3-Dichlorobenzene	146	12.727	12.727	0.000	97	727148	200.0	222.2	
114 4-Isopropyltoluene	119	12.751	12.751	0.000	96	1379545	200.0	243.0	
115 1,4-Dichlorobenzene	146	12.812	12.812	0.000	94	672215	200.0	219.9	
120 n-Butylbenzene	91	13.165	13.165	0.000	95	1158690	200.0	245.9	
121 1,2-Dichlorobenzene	146	13.189	13.189	0.000	98	552911	200.0	184.6	
122 1,2-Dibromo-3-Chloropropan	75	13.968	13.968	0.000	87	27604	200.0	183.9	
126 1,2,4-Trichlorobenzene	180	14.801	14.801	0.000	94	218760	200.0	230.3	
127 Hexachlorobutadiene	225	14.971	14.971	0.000	89	134582	200.0	236.5	
128 Naphthalene	128	15.057	15.057	0.000	97	378969	200.0	243.7	
129 1,2,3-Trichlorobenzene	180	15.306	15.306	0.000	96	133158	200.0	204.9	
S 134 1,2-Dichloroethene, Total	96				0		400.0	391.1	
S 133 Xylenes, Total	106				0		400.0	373.5	
S 135 1,3-Dichloropropene, Total	1				0		400.0	371.1	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOA8260VOA2ND_00110	Amount Added:	8.00	Units: uL
VOAACRO2ND_00007	Amount Added:	24.00	Units: uL
voaWVA2nd Res_00006	Amount Added:	8.00	Units: uL
VOA8260INT_00030	Amount Added:	8.00	Units: uL
VOA8260SURR_00017	Amount Added:	8.00	Units: uL
voaWKet2 Rest_00002	Amount Added:	8.00	Units: uL

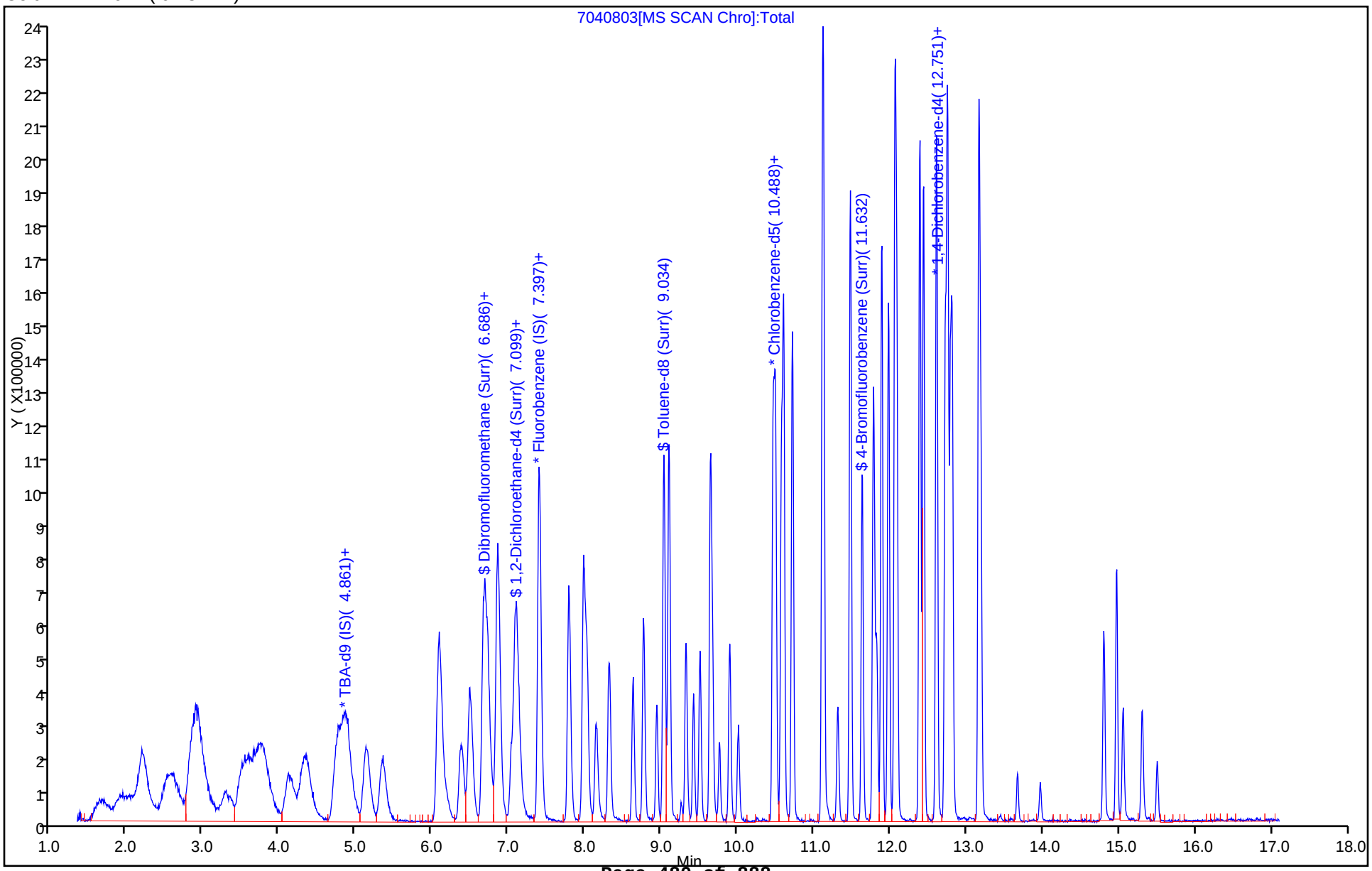
Report Date: 08-Apr-2015 16:14:33 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040803.D

Injection Date:	08-Apr-2015 09:26:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

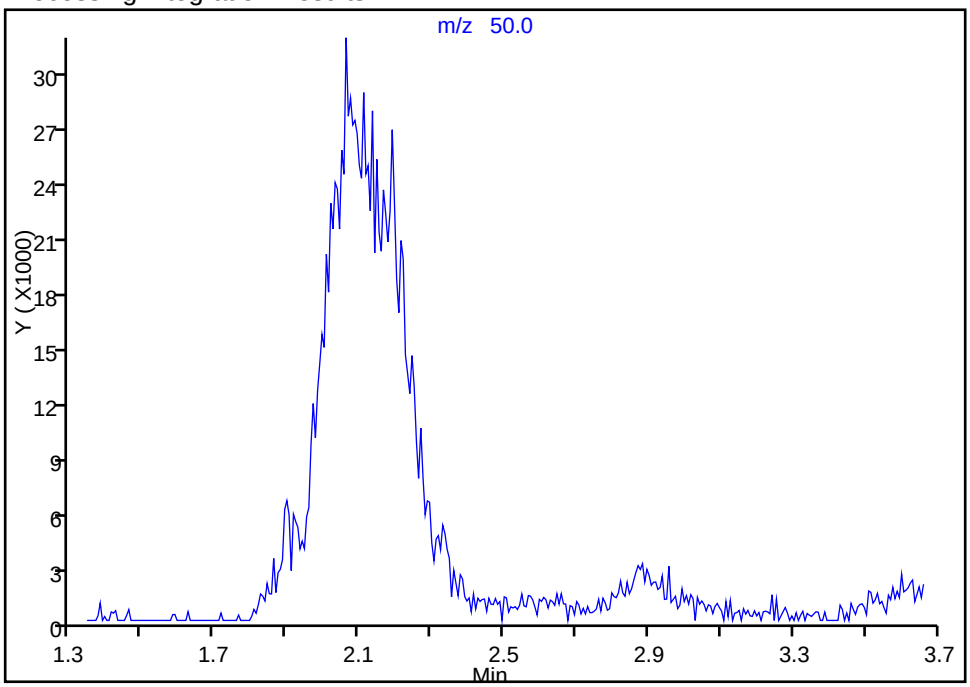
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040803.D				
Injection Date:	08-Apr-2015 09:26:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

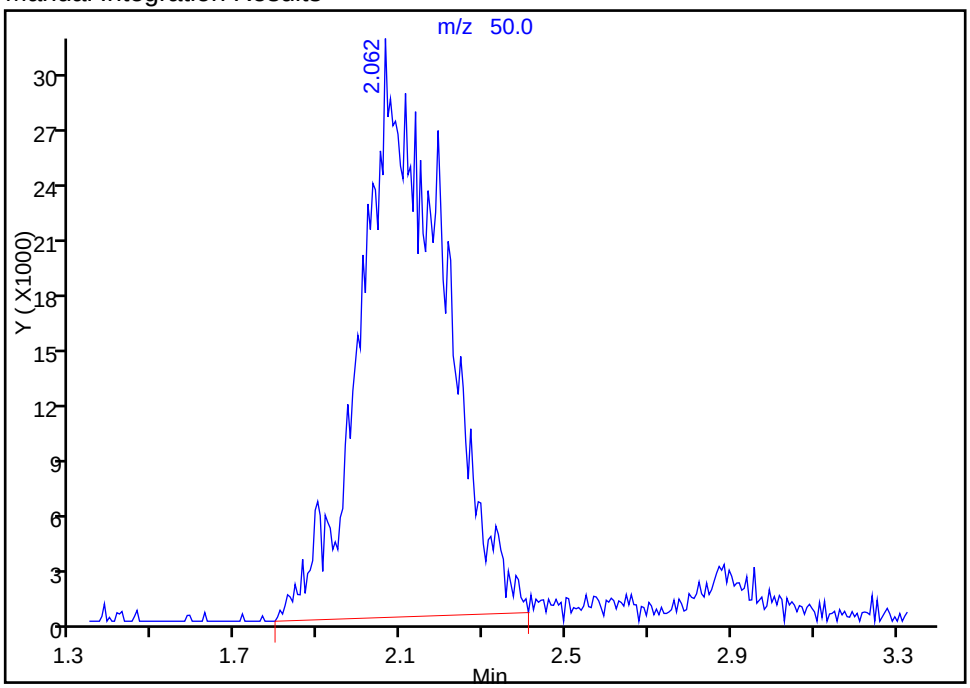
Not Detected
Expected RT: 2.06

Processing Integration Results



Manual Integration Results

RT: 2.06
Area: 426005
Amount: 207.9787
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 10:15:38
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

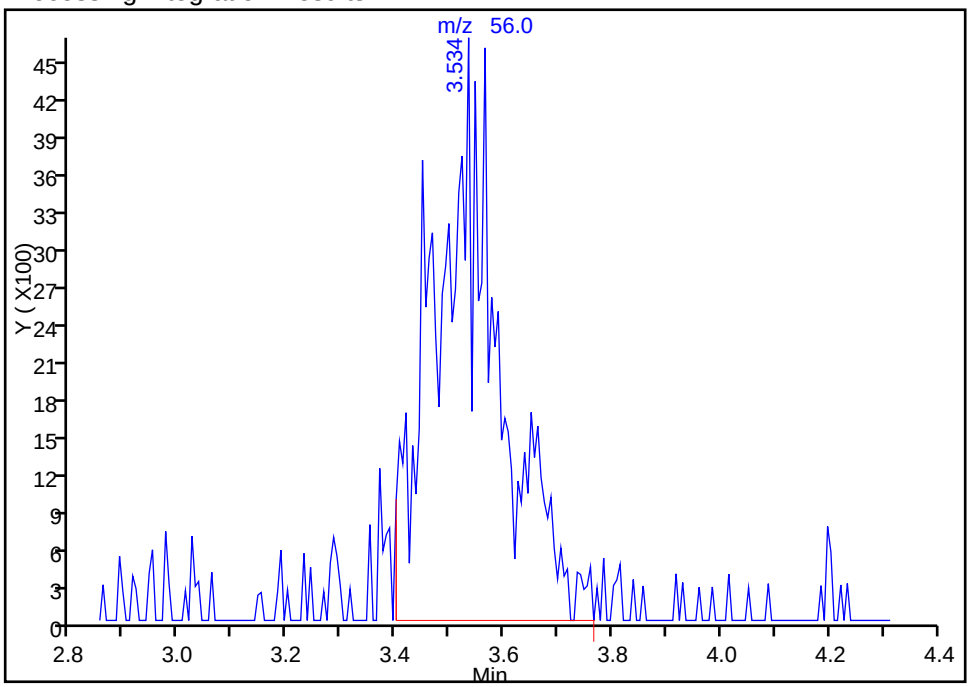
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040803.D				
Injection Date:	08-Apr-2015 09:26:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

21 Acrolein, CAS: 107-02-8

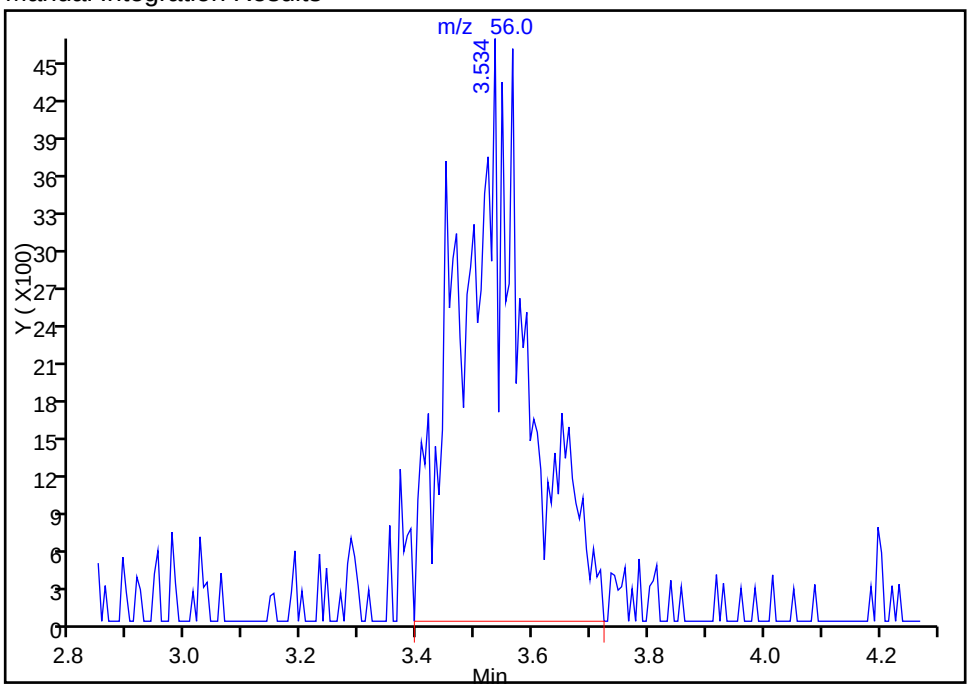
Processing Integration Results

RT: 3.53
Area: 36928
Amount: 468.0017
Amount Units: ng



Manual Integration Results

RT: 3.53
Area: 36312
Amount: 460.1949
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 10:15:38
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

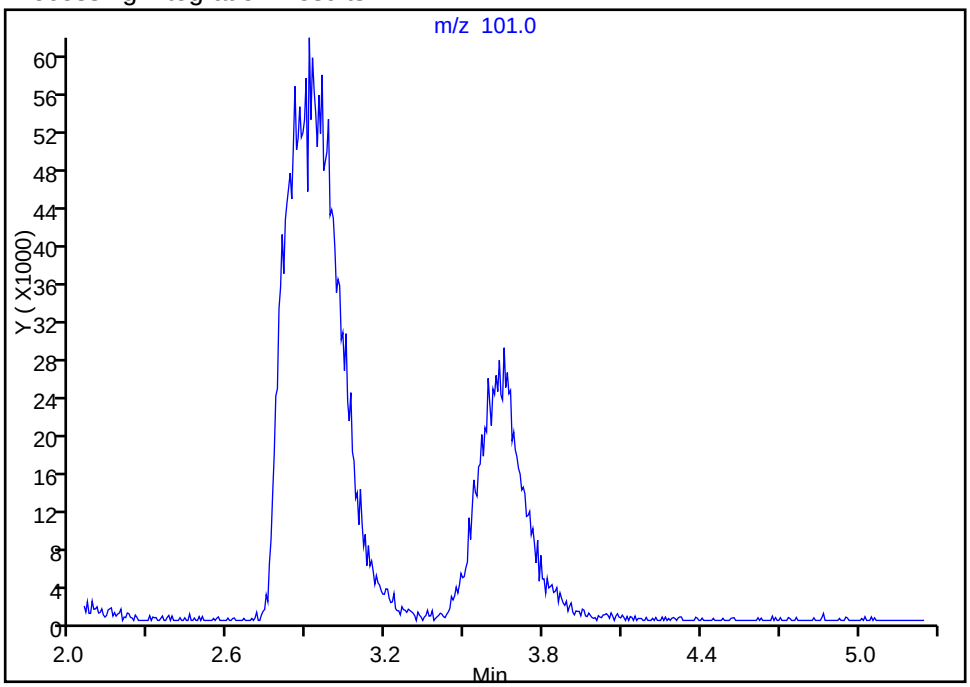
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040803.D				
Injection Date:	08-Apr-2015 09:26:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

23 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

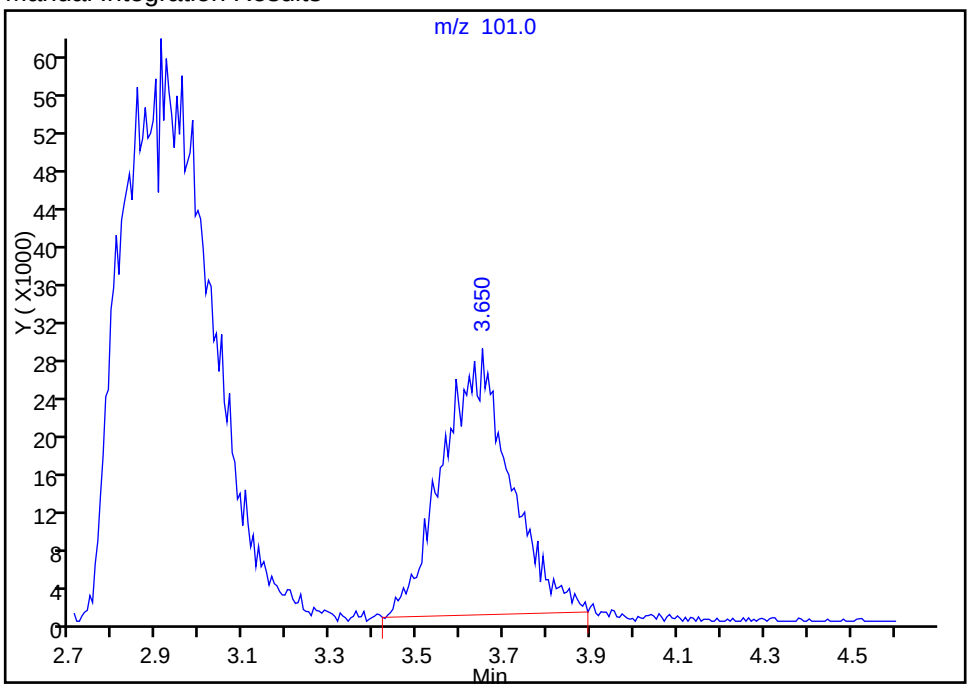
Not Detected
Expected RT: 3.65

Processing Integration Results



Manual Integration Results

RT: 3.65
Area: 300585
Amount: 189.8039
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 10:15:38
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

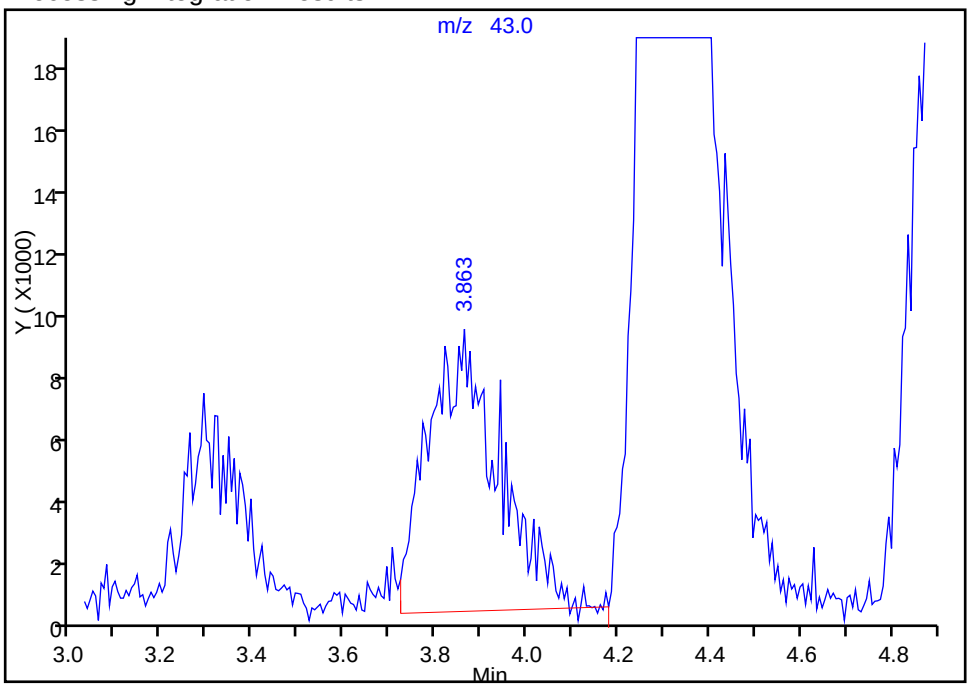
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040803.D				
Injection Date:	08-Apr-2015 09:26:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

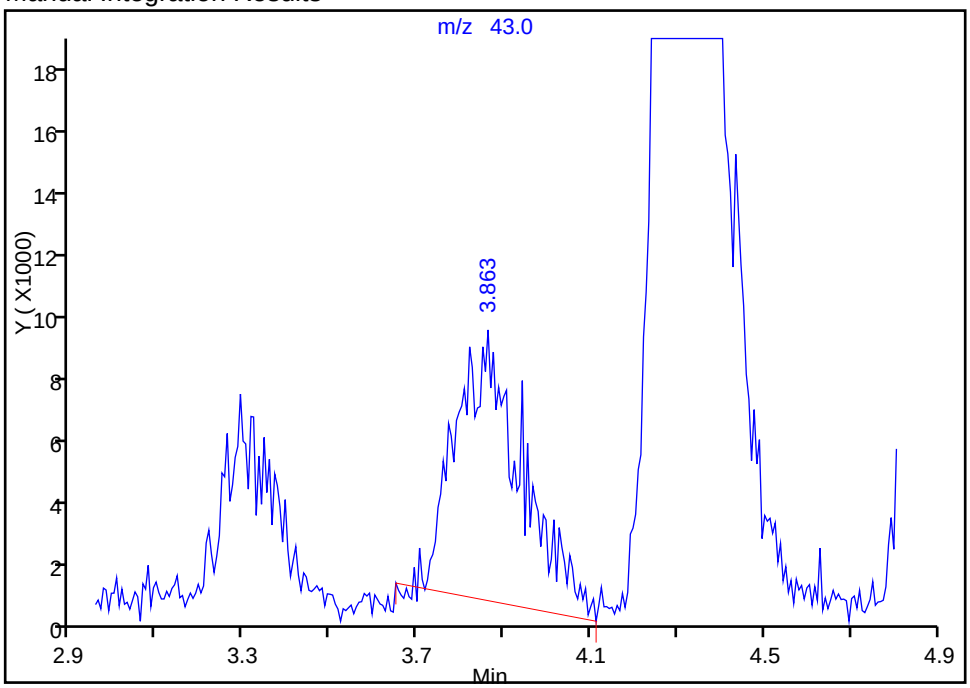
Processing Integration Results

RT: 3.86
Area: 97103
Amount: 284.2375
Amount Units: ng



Manual Integration Results

RT: 3.86
Area: 91769
Amount: 264.5196
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 10:15:38
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

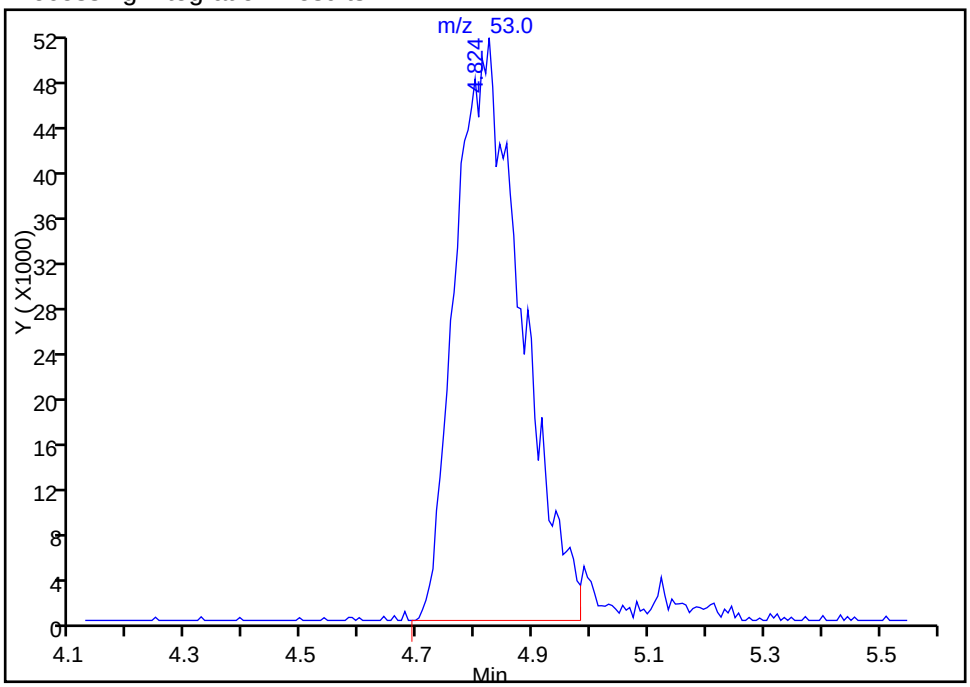
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040803.D				
Injection Date:	08-Apr-2015 09:26:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

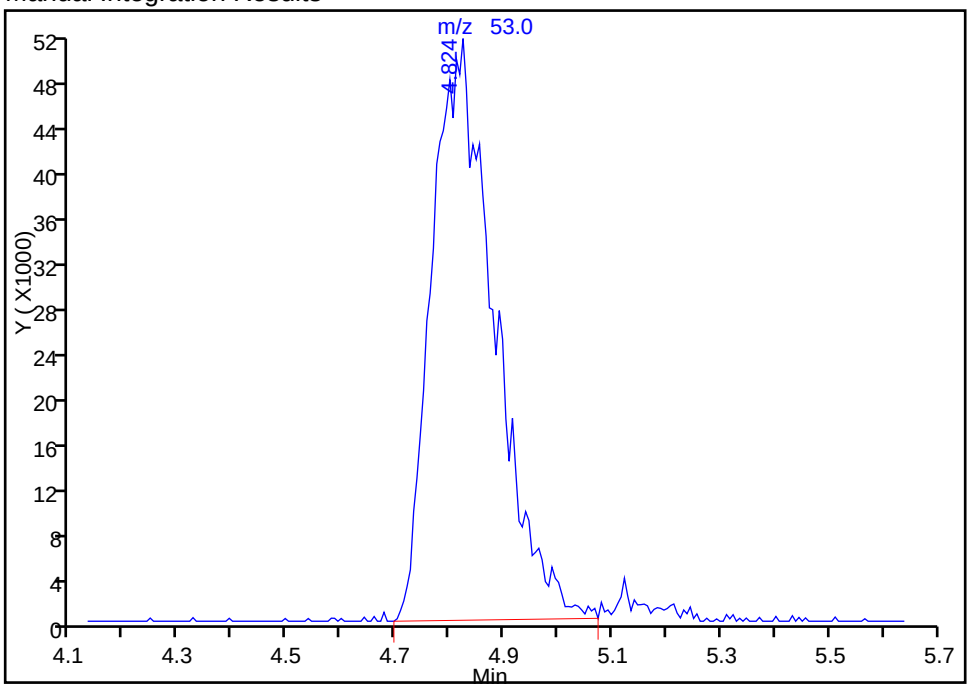
Processing Integration Results

RT: 4.82
Area: 403820
Amount: 1493.7220
Amount Units: ng



Manual Integration Results

RT: 4.82
Area: 410394
Amount: 1518.0391
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 10:15:38
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

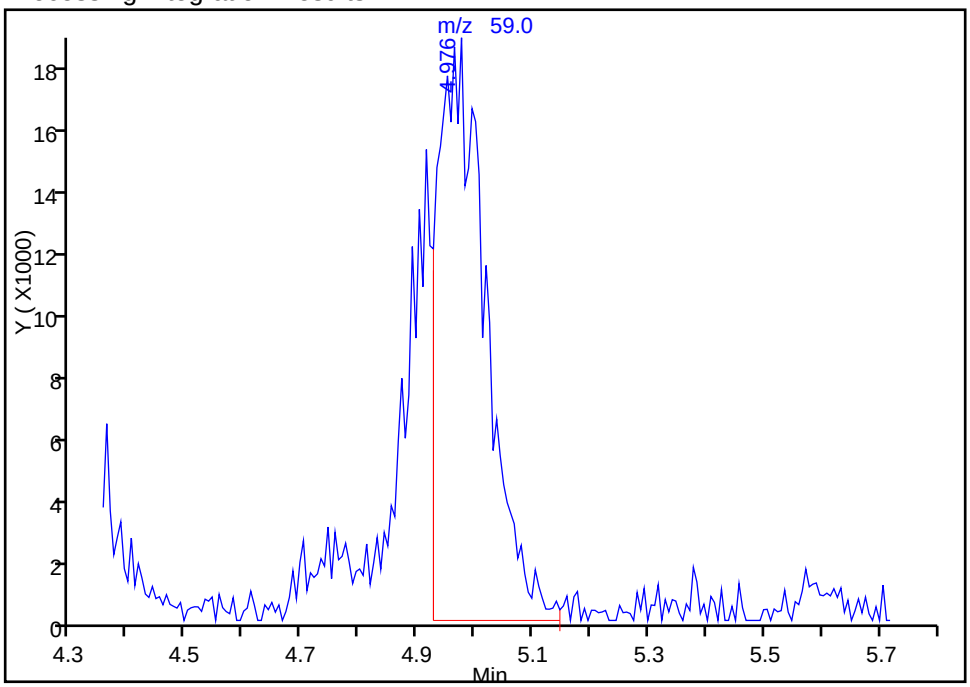
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040803.D				
Injection Date:	08-Apr-2015 09:26:30	Instrument ID:	CHHP7		
Lims ID:	CCVIS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	3
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

32 2-Methyl-2-propanol, CAS: 75-65-0

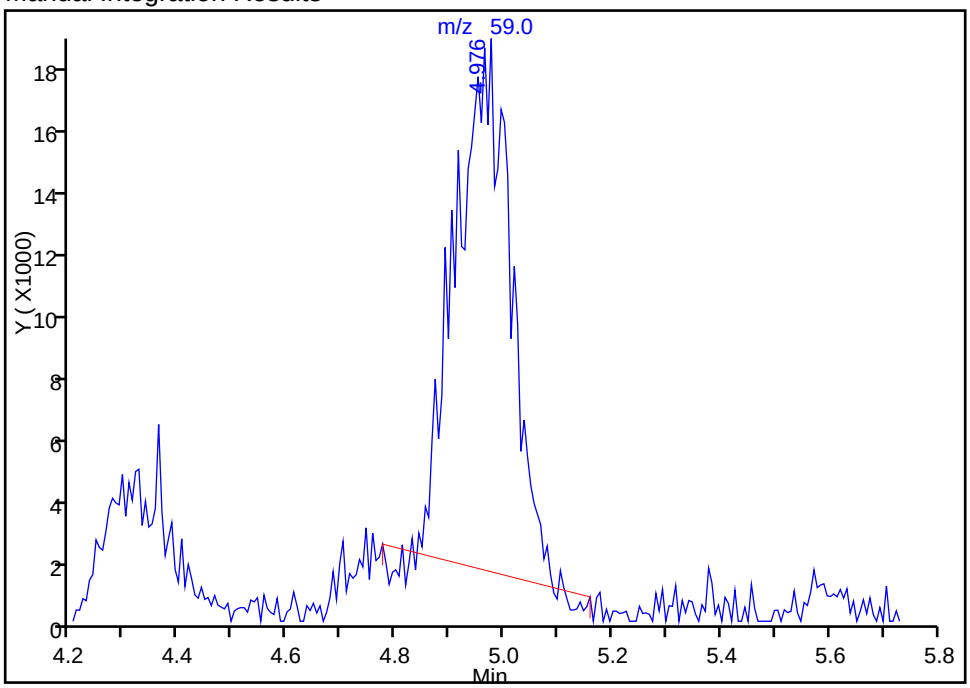
Processing Integration Results

RT: 4.98
Area: 105600
Amount: 14961
Amount Units: ng



Manual Integration Results

RT: 4.98
Area: 115634
Amount: 15928
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 10:15:38
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033001.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	30-Mar-2015 09:32:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	180-0006234-001				
Operator ID:	034635	Instrument ID:	CHHP7		
Method:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\MSVOA_LL_CHHP7.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	31-Mar-2015 08:54:12	Calib Date:	30-Mar-2015 14:36:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK004				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	11.637	11.637	0.000	0	289971	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

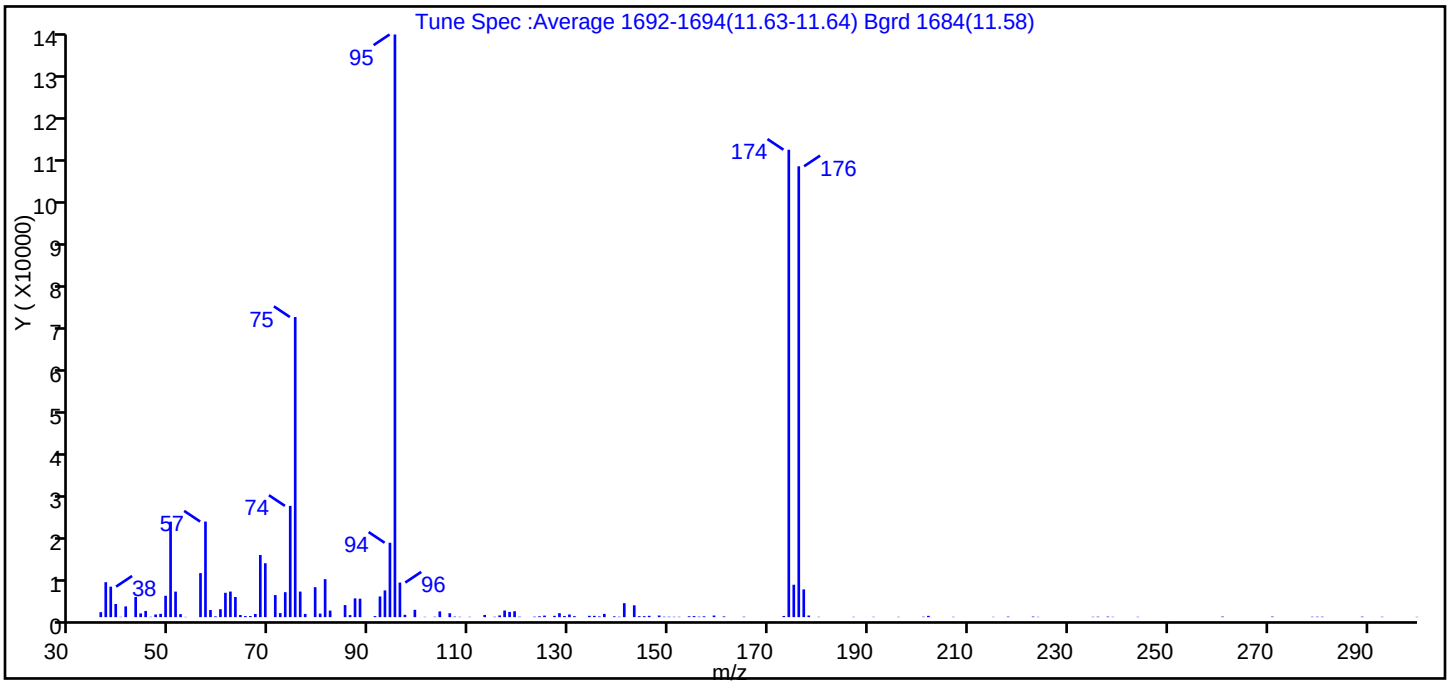
VOABFB25_00059 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033001.D
Injection Date: 30-Mar-2015 09:32:30 Instrument ID: CHHP7
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 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	16.4
75	30 to 60% of m/z 95	51.5
96	5 to 9% of m/z 95	5.9
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	80.2
175	5 to 9% of m/z 174	5.6 (6.9)
176	Greater than 95% but less than 101% of m/z 174	77.4 (96.5)
177	5 to 9% of m/z 176	4.8 (6.2)

Report Date: 31-Mar-2015 08:54:13 Chrom Revision: 2.2 13-Mar-2015 11:20:44

Data File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033001.D\MSVOA_LL_CHHP7.rslt\spectra.d
Injection Date: 30-Mar-2015 09:32:30
Spectrum: Tune Spec :Average 1692-1694(11.63-11.64) Bgrd 1684(11.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 130

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1170	73.00	5848	118.00	1221	165.00	105
37.00	8186	74.00	26056	119.00	1385	173.00	274
38.00	7142	75.00	70280	120.00	109	174.00	109456
39.00	3083	76.00	5984	123.00	114	175.00	7591
40.00	73	77.00	754	124.00	206	176.00	105584
41.00	2517	79.00	7016	125.00	361	177.00	6501
43.00	4710	80.00	834	127.00	306	178.00	384
44.00	876	81.00	8896	128.00	933	180.00	78
45.00	1453	82.00	1533	129.00	273	187.00	76
46.00	79	85.00	2824	130.00	615	191.00	77
47.00	624	86.00	480	131.00	233	196.00	76
48.00	770	87.00	4396	134.00	310	201.00	102
49.00	5005	88.00	4323	135.00	303	202.00	305
50.00	22368	91.00	251	136.00	171	207.00	75
51.00	5983	92.00	4844	137.00	763	215.00	70
52.00	702	93.00	6261	139.00	182	218.00	122
53.00	62	94.00	17424	140.00	99	223.00	137
56.00	10307	95.00	136448	141.00	3269	224.00	69
57.00	22384	96.00	8098	143.00	2771	235.00	86
58.00	1668	97.00	542	144.00	224	236.00	111
59.00	184	99.00	1717	145.00	225	238.00	129
60.00	1857	100.00	12	146.00	313	239.00	76
61.00	5703	101.00	71	148.00	379	244.00	79
62.00	5994	103.00	96	149.00	101	261.00	131
63.00	4718	104.00	1345	150.00	102	271.00	130
64.00	499	106.00	915	151.00	87	279.00	94
65.00	255	107.00	125	152.00	86	280.00	103
66.00	253	108.00	78	154.00	202	281.00	102
67.00	743	110.00	74	155.00	243	289.00	120
68.00	14557	113.00	515	156.00	115	293.00	88
69.00	12624	115.00	90	157.00	197	300.00	69
71.00	5173	116.00	405	159.00	377		
72.00	939	117.00	1555	161.00	170		

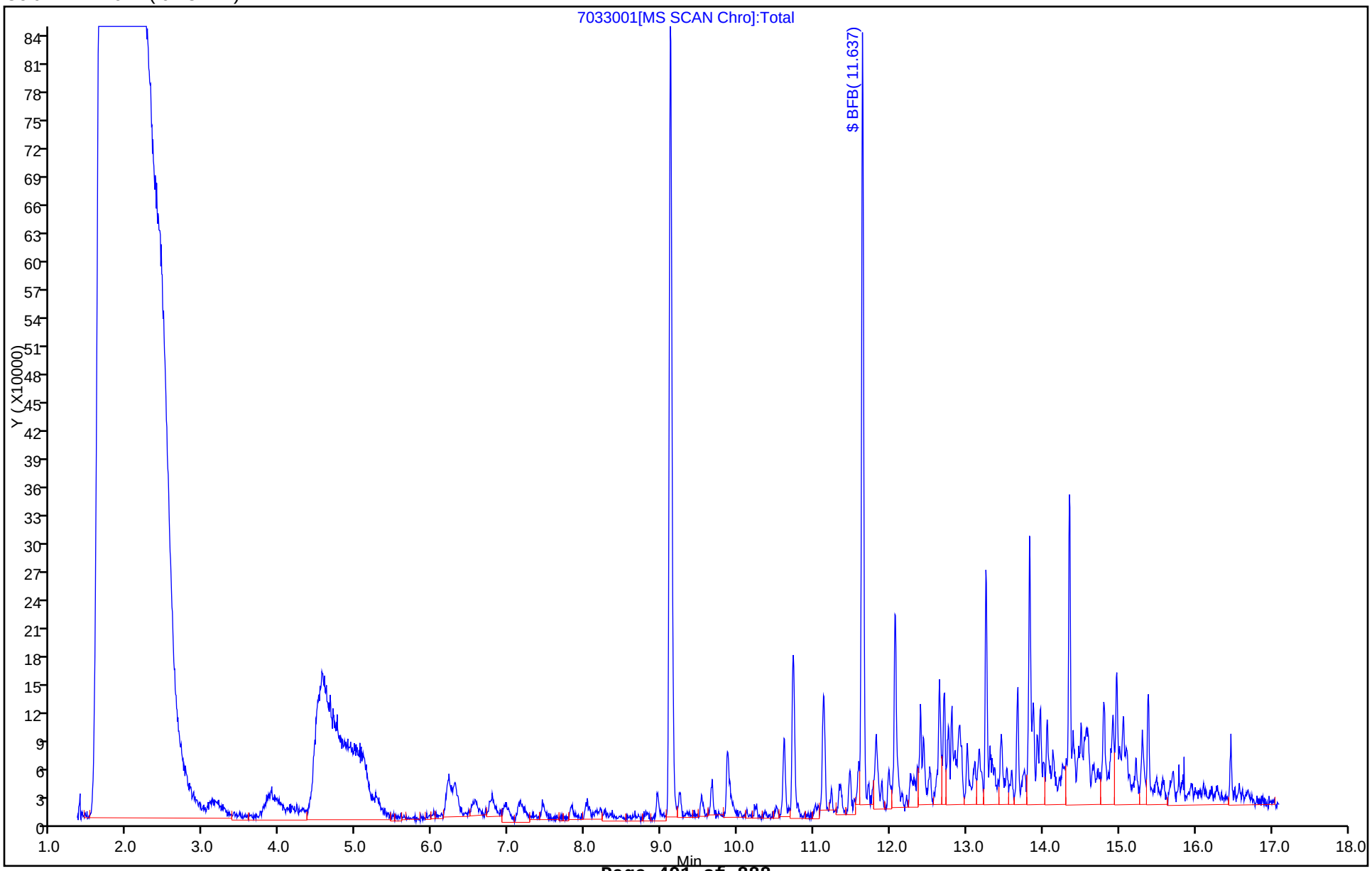
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1170	73.00	5848	118.00	1221	165.00	105
37.00	8186	74.00	26056	119.00	1385	173.00	274
38.00	7142	75.00	70280	120.00	109	174.00	109456
39.00	3083	76.00	5984	123.00	114	175.00	7591
40.00	73	77.00	754	124.00	206	176.00	105584
41.00	2517	79.00	7016	125.00	361	177.00	6501
43.00	4710	80.00	834	127.00	306	178.00	384
44.00	876	81.00	8896	128.00	933	180.00	78
45.00	1453	82.00	1533	129.00	273	187.00	76
46.00	79	85.00	2824	130.00	615	191.00	77
47.00	624	86.00	480	131.00	233	196.00	76
48.00	770	87.00	4396	134.00	310	201.00	102
49.00	5005	88.00	4323	135.00	303	202.00	305
50.00	22368	91.00	251	136.00	171	207.00	75
51.00	5983	92.00	4844	137.00	763	215.00	70
52.00	702	93.00	6261	139.00	182	218.00	122
53.00	62	94.00	17424	140.00	99	223.00	137
56.00	10307	95.00	136448	141.00	3269	224.00	69
57.00	22384	96.00	8098	143.00	2771	235.00	86
58.00	1668	97.00	542	144.00	224	236.00	111
59.00	184	99.00	1717	145.00	225	238.00	129
60.00	1857	100.00	12	146.00	313	239.00	76
61.00	5703	101.00	71	148.00	379	244.00	79
62.00	5994	103.00	96	149.00	101	261.00	131
63.00	4718	104.00	1345	150.00	102	271.00	130
64.00	499	106.00	915	151.00	87	279.00	94
65.00	255	107.00	125	152.00	86	280.00	103
66.00	253	108.00	78	154.00	202	281.00	102
67.00	743	110.00	74	155.00	243	289.00	120
68.00	14557	113.00	515	156.00	115	293.00	88
69.00	12624	115.00	90	157.00	197	300.00	69
71.00	5173	116.00	405	159.00	377		
72.00	939	117.00	1555	161.00	170		

Report Date: 31-Mar-2015 08:54:13 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033001.D				
Injection Date:	30-Mar-2015 09:32:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040301.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Apr-2015 09:28:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006312-001
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2015 17:04:08 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: journetp Date: 03-Apr-2015 10:12:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	11.636	11.636	0.000	0	420042	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

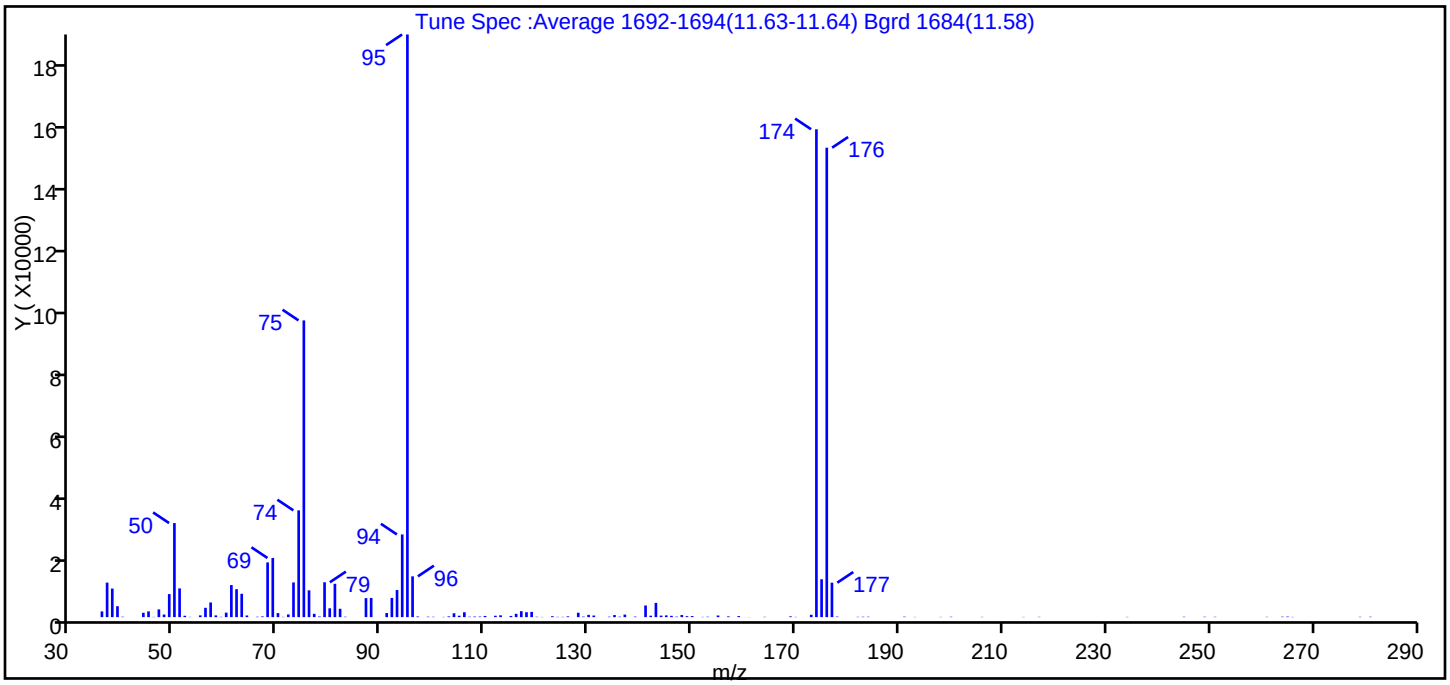
VOABFB25_00059 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040301.D				
Injection Date:	03-Apr-2015 09:28:30	Instrument ID:	CHHP7		
Lims ID:	BFB				
Client ID:					
Operator ID:	034635	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	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	16.1
75	30 to 60% of m/z 95	50.9
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	83.7
175	5 to 9% of m/z 174	6.5 (7.8)
176	Greater than 95% but less than 101% of m/z 174	80.6 (96.2)
177	5 to 9% of m/z 176	5.9 (7.3)

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040301.D\MSVOA_LL_CHHP7.rslt\spectra.d
Injection Date: 03-Apr-2015 09:28:30
Spectrum: Tune Spec :Average 1692-1694(11.63-11.64) Bgrd 1684(11.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 130

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1820	74.00	33744	116.00	1051	159.00	333
37.00	10915	75.00	93776	117.00	1885	161.00	41
38.00	9033	76.00	8468	118.00	1558	164.00	100
39.00	3459	77.00	1053	119.00	1658	169.00	243
40.00	131	78.00	198	120.00	121	170.00	78
44.00	1380	79.00	11022	121.00	68	173.00	744
45.00	1822	80.00	2795	123.00	294	174.00	154176
46.00	74	81.00	10545	124.00	92	175.00	11973
47.00	2450	82.00	2644	125.00	88	176.00	148352
48.00	826	83.00	132	126.00	250	177.00	10890
49.00	7288	87.00	6009	128.00	1393	178.00	166
50.00	29728	88.00	6063	129.00	160	182.00	100
51.00	9083	91.00	1295	130.00	726	183.00	128
52.00	435	92.00	6077	131.00	505	184.00	126
53.00	84	93.00	8569	134.00	144	191.00	143
55.00	557	94.00	26136	135.00	658	193.00	68
56.00	2952	95.00	184128	136.00	142	198.00	70
57.00	4635	96.00	12889	137.00	801	200.00	125
58.00	550	97.00	212	139.00	167	206.00	85
59.00	104	99.00	141	141.00	3687	214.00	69
60.00	1426	100.00	109	142.00	456	217.00	96
61.00	10139	102.00	75	143.00	4507	234.00	80
62.00	8835	103.00	236	144.00	486	245.00	120
63.00	7378	104.00	1227	145.00	551	249.00	120
64.00	530	105.00	441	146.00	413	251.00	107
66.00	126	106.00	1548	147.00	154	261.00	96
67.00	222	107.00	137	148.00	665	264.00	138
68.00	17296	108.00	181	149.00	301	265.00	170
69.00	18696	109.00	176	150.00	335	266.00	74
70.00	1282	110.00	377	152.00	72	279.00	110
71.00	90	112.00	442	153.00	129	281.00	126
72.00	854	113.00	577	155.00	518		
73.00	10966	115.00	382	157.00	240		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1820	74.00	33744	116.00	1051	159.00	333
37.00	10915	75.00	93776	117.00	1885	161.00	41
38.00	9033	76.00	8468	118.00	1558	164.00	100
39.00	3459	77.00	1053	119.00	1658	169.00	243
40.00	131	78.00	198	120.00	121	170.00	78
44.00	1380	79.00	11022	121.00	68	173.00	744
45.00	1822	80.00	2795	123.00	294	174.00	154176
46.00	74	81.00	10545	124.00	92	175.00	11973
47.00	2450	82.00	2644	125.00	88	176.00	148352
48.00	826	83.00	132	126.00	250	177.00	10890
49.00	7288	87.00	6009	128.00	1393	178.00	166
50.00	29728	88.00	6063	129.00	160	182.00	100
51.00	9083	91.00	1295	130.00	726	183.00	128
52.00	435	92.00	6077	131.00	505	184.00	126
53.00	84	93.00	8569	134.00	144	191.00	143
55.00	557	94.00	26136	135.00	658	193.00	68
56.00	2952	95.00	184128	136.00	142	198.00	70
57.00	4635	96.00	12889	137.00	801	200.00	125
58.00	550	97.00	212	139.00	167	206.00	85
59.00	104	99.00	141	141.00	3687	214.00	69
60.00	1426	100.00	109	142.00	456	217.00	96
61.00	10139	102.00	75	143.00	4507	234.00	80
62.00	8835	103.00	236	144.00	486	245.00	120
63.00	7378	104.00	1227	145.00	551	249.00	120
64.00	530	105.00	441	146.00	413	251.00	107
66.00	126	106.00	1548	147.00	154	261.00	96
67.00	222	107.00	137	148.00	665	264.00	138
68.00	17296	108.00	181	149.00	301	265.00	170
69.00	18696	109.00	176	150.00	335	266.00	74
70.00	1282	110.00	377	152.00	72	279.00	110
71.00	90	112.00	442	153.00	129	281.00	126
72.00	854	113.00	577	155.00	518		
73.00	10966	115.00	382	157.00	240		

Report Date: 03-Apr-2015 17:04:08 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040301.D

Injection Date:	03-Apr-2015 09:28:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040401.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	04-Apr-2015 13:00:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	180-0006327-001				
Operator ID:	034635	Instrument ID:	CHHP7		
Method:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\MSVOA_LL_CHHP7.m				
Limit Group:	VOA 8260C ICAL				
Last Update:	06-Apr-2015 09:15:58	Calib Date:	30-Mar-2015 14:36:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D				
Column 1 :	DB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	XAWRK002				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	11.640	11.640	0.000	0	291081	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

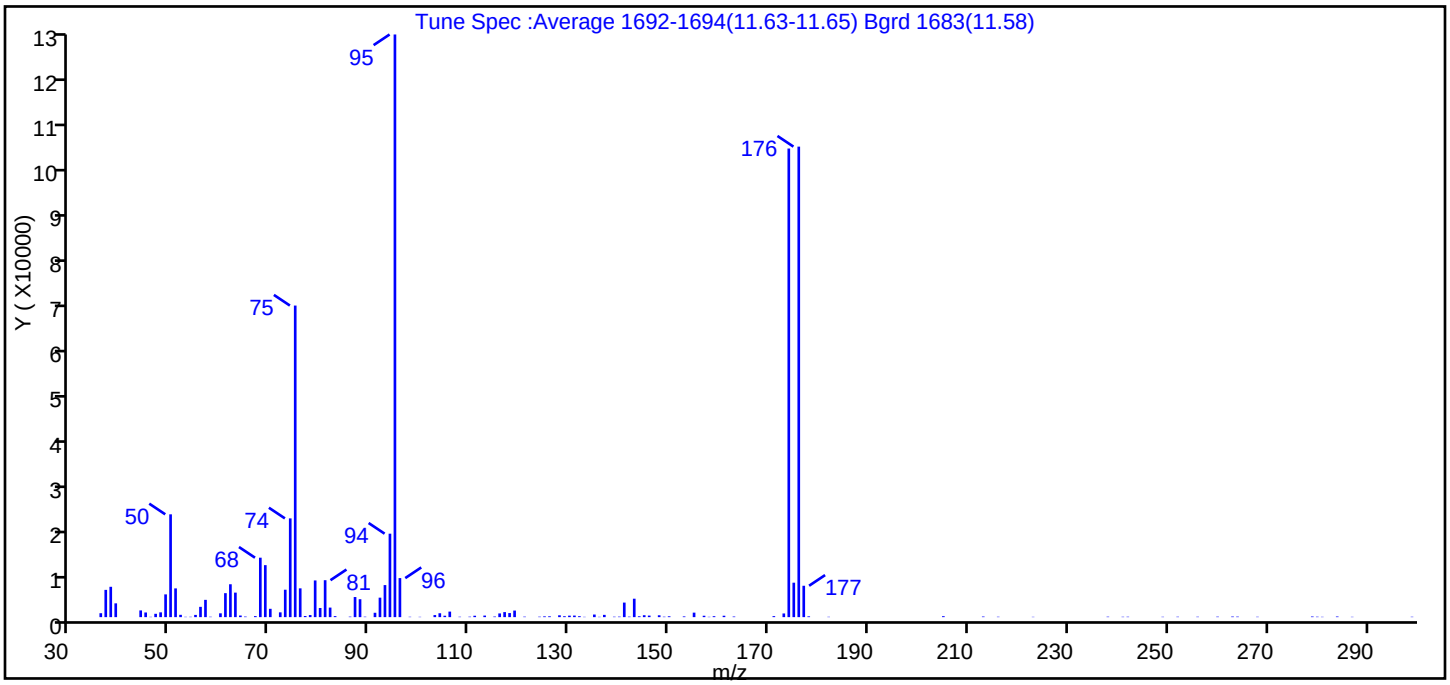
VOABFB25_00059 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040401.D
Injection Date: 04-Apr-2015 13:00:30 Instrument ID: CHHP7
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 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	17.6
75	30 to 60% of m/z 95	53.5
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.6 (0.8)
174	50 to 120% of m/z 95	80.4
175	5 to 9% of m/z 174	5.9 (7.4)
176	Greater than 95% but less than 101% of m/z 174	80.8 (100.4)
177	5 to 9% of m/z 176	5.4 (6.7)

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040401.D\MSVOA_LL_CHHP7.rslt\spectra.d
Injection Date: 04-Apr-2015 13:00:30
Spectrum: Tune Spec :Average 1692-1694(11.63-11.65) Bgrd 1683(11.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	868	75.00	68632	118.00	900	163.00	133
37.00	6005	76.00	6343	119.00	1449	171.00	221
38.00	6684	77.00	248	121.00	106	173.00	813
39.00	3040	78.00	455	124.00	102	174.00	103224
44.00	1479	79.00	8084	125.00	169	175.00	7589
45.00	1027	80.00	2016	126.00	183	176.00	103640
46.00	68	81.00	8137	128.00	406	177.00	6913
47.00	738	82.00	2107	129.00	202	178.00	172
48.00	1056	83.00	224	130.00	330	182.00	75
49.00	5013	86.00	111	131.00	346	205.00	205
50.00	22648	87.00	4429	132.00	208	213.00	132
51.00	6332	88.00	3949	133.00	67	216.00	88
52.00	512	89.00	99	135.00	574	223.00	68
53.00	72	91.00	963	136.00	68	238.00	101
54.00	79	92.00	4292	137.00	501	241.00	83
55.00	493	93.00	7061	139.00	96	242.00	92
56.00	2268	94.00	18384	140.00	110	249.00	79
57.00	3809	95.00	128344	141.00	3206	252.00	92
58.00	88	96.00	8601	142.00	108	256.00	90
60.00	845	98.00	81	143.00	4061	260.00	106
61.00	5284	100.00	68	144.00	185	263.00	131
62.00	7245	103.00	456	145.00	422	264.00	115
63.00	5402	104.00	859	146.00	343	268.00	82
64.00	356	105.00	315	148.00	409	279.00	140
65.00	123	106.00	1220	149.00	97	280.00	97
67.00	226	108.00	88	150.00	187	281.00	72
68.00	13096	110.00	100	153.00	159	284.00	141
69.00	11453	111.00	310	155.00	993	287.00	70
70.00	1837	113.00	344	157.00	308	299.00	86
72.00	1057	115.00	132	158.00	70		
73.00	6041	116.00	818	159.00	206		
74.00	21752	117.00	1112	161.00	309		

Report Date: 06-Apr-2015 09:15:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040401.D

Injection Date:	04-Apr-2015 13:00:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040601.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 06-Apr-2015 08:19:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006335-001
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 15:45:35 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 06-Apr-2015 08:51:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	11.637	11.637	0.000	0	451637	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

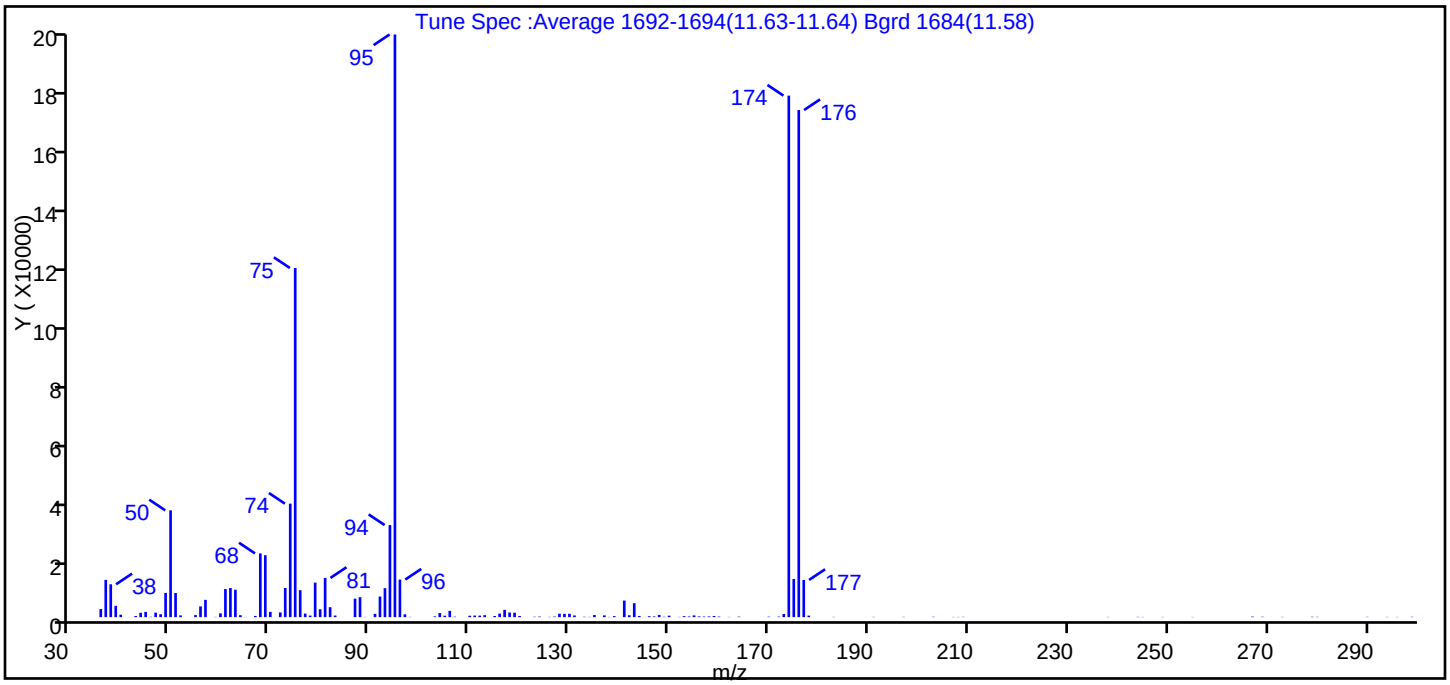
VOABFB25_00059 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040601.D
Injection Date: 06-Apr-2015 08:19:30 Instrument ID: CHHP7
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Tune Method: BFB Method 8260

$ 10 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.3
75	30 to 60% of m/z 95	59.9
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	89.5
175	5 to 9% of m/z 174	6.5 (7.3)
176	Greater than 95% but less than 101% of m/z 174	87.0 (97.2)
177	5 to 9% of m/z 176	6.4 (7.3)

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040601.D\MSVOA_LL_CHHP7.rslt\spectra.d
Injection Date: 06-Apr-2015 08:19:30
Spectrum: Tune Spec :Average 1692-1694(11.63-11.64) Bgrd 1684(11.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 131

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2784	76.00	9233	120.00	400	162.00	80
37.00	12762	77.00	1212	123.00	131	164.00	173
38.00	11247	78.00	536	124.00	187	170.00	156
39.00	3860	79.00	11826	126.00	85	172.00	183
40.00	833	80.00	2702	127.00	188	173.00	1071
43.00	376	81.00	13427	128.00	1183	174.00	178496
44.00	1485	82.00	3404	129.00	1133	175.00	13049
45.00	1811	83.00	552	130.00	1156	176.00	173568
46.00	112	87.00	6324	131.00	581	177.00	12731
47.00	1544	88.00	6834	133.00	126	178.00	519
48.00	992	89.00	78	134.00	93	183.00	77
49.00	8303	91.00	1122	135.00	721	191.00	77
50.00	36552	92.00	7057	137.00	610	197.00	89
51.00	8261	93.00	9914	138.00	74	203.00	121
52.00	603	94.00	31520	139.00	350	207.00	71
55.00	702	95.00	199424	141.00	5675	208.00	74
56.00	3680	96.00	12859	142.00	648	209.00	97
57.00	5912	97.00	967	143.00	4777	211.00	4
59.00	75	98.00	85	144.00	405	238.00	74
60.00	1301	103.00	256	146.00	306	244.00	97
61.00	9604	104.00	1406	147.00	231	245.00	69
62.00	9970	105.00	499	148.00	775	249.00	85
63.00	9377	106.00	2140	149.00	133	255.00	73
64.00	665	107.00	157	150.00	499	267.00	184
65.00	71	110.00	483	152.00	76	269.00	123
67.00	406	111.00	547	153.00	338	273.00	91
68.00	21816	112.00	513	154.00	217	279.00	134
69.00	21200	113.00	668	155.00	589	280.00	109
70.00	1809	115.00	397	156.00	250	290.00	107
72.00	1608	116.00	1206	157.00	199	294.00	76
73.00	9968	117.00	2491	158.00	244	296.00	68
74.00	38840	118.00	1585	159.00	386	299.00	122
75.00	119496	119.00	1514	160.00	181		

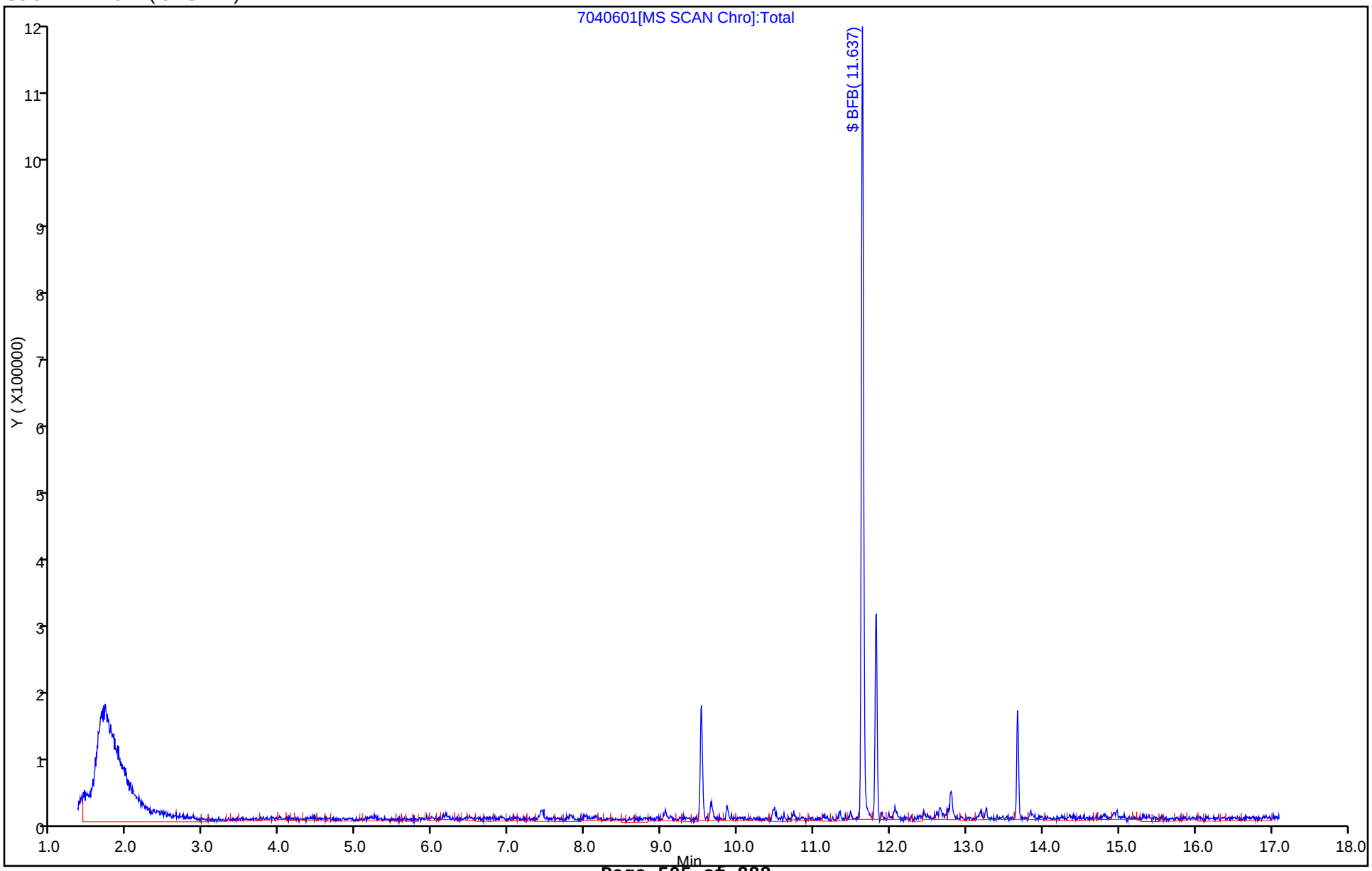
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2784	76.00	9233	120.00	400	162.00	80
37.00	12762	77.00	1212	123.00	131	164.00	173
38.00	11247	78.00	536	124.00	187	170.00	156
39.00	3860	79.00	11826	126.00	85	172.00	183
40.00	833	80.00	2702	127.00	188	173.00	1071
43.00	376	81.00	13427	128.00	1183	174.00	178496
44.00	1485	82.00	3404	129.00	1133	175.00	13049
45.00	1811	83.00	552	130.00	1156	176.00	173568
46.00	112	87.00	6324	131.00	581	177.00	12731
47.00	1544	88.00	6834	133.00	126	178.00	519
48.00	992	89.00	78	134.00	93	183.00	77
49.00	8303	91.00	1122	135.00	721	191.00	77
50.00	36552	92.00	7057	137.00	610	197.00	89
51.00	8261	93.00	9914	138.00	74	203.00	121
52.00	603	94.00	31520	139.00	350	207.00	71
55.00	702	95.00	199424	141.00	5675	208.00	74
56.00	3680	96.00	12859	142.00	648	209.00	97
57.00	5912	97.00	967	143.00	4777	211.00	4
59.00	75	98.00	85	144.00	405	238.00	74
60.00	1301	103.00	256	146.00	306	244.00	97
61.00	9604	104.00	1406	147.00	231	245.00	69
62.00	9970	105.00	499	148.00	775	249.00	85
63.00	9377	106.00	2140	149.00	133	255.00	73
64.00	665	107.00	157	150.00	499	267.00	184
65.00	71	110.00	483	152.00	76	269.00	123
67.00	406	111.00	547	153.00	338	273.00	91
68.00	21816	112.00	513	154.00	217	279.00	134
69.00	21200	113.00	668	155.00	589	280.00	109
70.00	1809	115.00	397	156.00	250	290.00	107
72.00	1608	116.00	1206	157.00	199	294.00	76
73.00	9968	117.00	2491	158.00	244	296.00	68
74.00	38840	118.00	1585	159.00	386	299.00	122
75.00	119496	119.00	1514	160.00	181		

Report Date: 06-Apr-2015 15:45:35 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040601.D				
Injection Date:	06-Apr-2015 08:19:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040801.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-Apr-2015 08:17:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 180-0006372-001
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Apr-2015 14:55:25 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
$ 10 BFB	95	11.637	11.637	0.000	0	224666	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

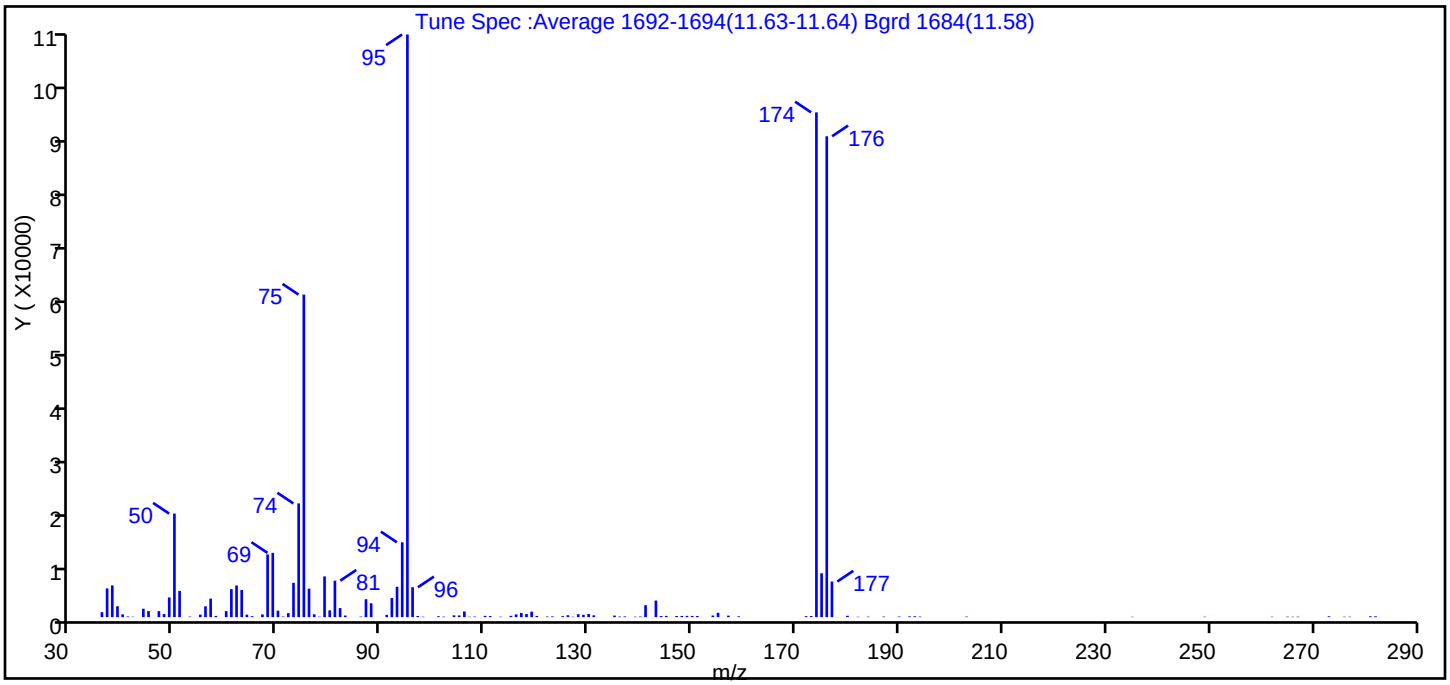
VOABFB25_00059 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040801.D
Injection Date: 08-Apr-2015 08:17:30 Instrument ID: CHHP7
Lims ID: BFB
Client ID:
Operator ID: 034635 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 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	17.8
75	30 to 60% of m/z 95	55.4
96	5 to 9% of m/z 95	5.1
173	Less than 2% of m/z 174	0.2 (0.2)
174	50 to 120% of m/z 95	86.6
175	5 to 9% of m/z 174	7.5 (8.7)
176	Greater than 95% but less than 101% of m/z 174	82.5 (95.3)
177	5 to 9% of m/z 176	6.1 (7.4)

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040801.D\MSVOA_LL_CHHP7.rslt\spectra.d
Injection Date: 08-Apr-2015 08:17:30
Spectrum: Tune Spec :Average 1692-1694(11.63-11.64) Bgrd 1684(11.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 123

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	891	73.00	6158	113.00	80	155.00	794
37.00	5162	74.00	20424	115.00	236	157.00	273
38.00	5696	75.00	57928	116.00	493	159.00	146
39.00	1959	76.00	5117	117.00	759	172.00	175
40.00	498	77.00	502	118.00	559	173.00	196
41.00	120	78.00	81	119.00	987	174.00	90656
42.00	74	79.00	7315	120.00	216	175.00	7876
44.00	1511	80.00	1216	122.00	114	176.00	86360
45.00	1086	81.00	6552	123.00	128	177.00	6397
47.00	1074	82.00	1630	125.00	175	178.00	13
48.00	557	83.00	295	126.00	345	180.00	244
49.00	3547	86.00	97	127.00	76	182.00	68
50.00	18600	87.00	3221	128.00	524	184.00	88
51.00	4714	88.00	2491	129.00	422	187.00	102
53.00	97	91.00	411	130.00	576	190.00	105
55.00	449	92.00	3430	131.00	324	192.00	132
56.00	1941	93.00	5455	135.00	281	193.00	154
57.00	3326	94.00	13443	136.00	104	194.00	98
58.00	226	95.00	104640	137.00	135	203.00	101
60.00	1083	96.00	5365	139.00	83	235.00	67
61.00	5026	97.00	202	140.00	112	249.00	74
62.00	5682	98.00	79	141.00	2147	262.00	71
63.00	4884	101.00	165	143.00	2979	265.00	87
64.00	443	102.00	88	144.00	203	266.00	75
65.00	174	104.00	326	145.00	232	267.00	91
67.00	483	105.00	305	147.00	203	273.00	147
68.00	11264	106.00	1022	148.00	219	276.00	75
69.00	11544	107.00	79	149.00	226	277.00	77
70.00	1163	108.00	104	150.00	217	281.00	155
71.00	109	110.00	231	151.00	200	282.00	151
72.00	713	111.00	192	154.00	293		

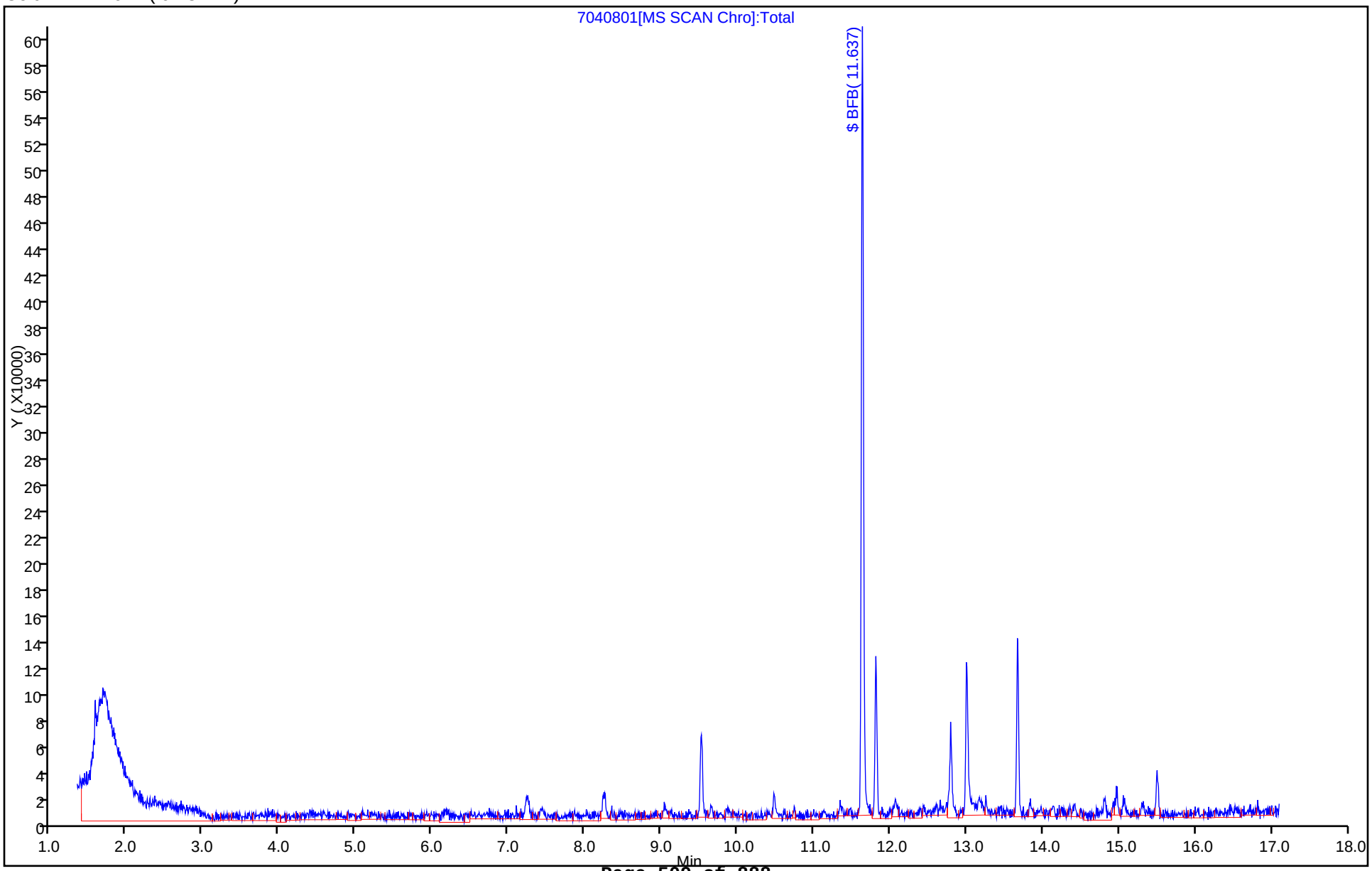
Report Date: 08-Apr-2015 14:55:26 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040801.D

Injection Date:	08-Apr-2015 08:17:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSVOA_LL_CHHP7	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.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137438/6

Matrix: Water Lab File ID: 7040306.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 11:46

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.: 137438 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.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137438/6

Matrix: Water Lab File ID: 7040306.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 11:46

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.: 137438 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)	104		64-135
2037-26-5	Toluene-d8 (Surr)	117		71-118
460-00-4	4-Bromofluorobenzene (Surr)	106		70-118
1868-53-7	Dibromofluoromethane (Surr)	119		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040306.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 03-Apr-2015 11:46:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 180-0006312-006
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2015 17:04:08 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: journetp Date: 03-Apr-2015 12:57:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.598	4.786	-0.188	94	215384	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.420	7.402	0.018	99	689625	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.474	10.468	0.006	84	206910	200.0	200.0	M
* 4 1,4-Dichlorobenzene-d4	152	12.786	12.786	0.000	96	251065	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.696	6.678	0.018	90	262024	200.0	238.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.055	7.043	0.012	95	217744	200.0	207.6	
$ 7 Toluene-d8 (Surr)	98	9.045	9.038	0.007	92	716839	200.0	233.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	88	289210	200.0	211.5	
11 Dichlorodifluoromethane	85		1.963					ND	
12 Chloromethane	50		2.000					ND	
14 Butadiene	39		2.207					ND	
13 Vinyl chloride	62		2.219					ND	
15 Bromomethane	94		2.511					ND	
16 Chloroethane	64		2.626					ND	
17 Dichlorofluoromethane	67		2.888					ND	
18 Trichlorofluoromethane	101		2.906					ND	
19 Ethanol	45		3.320					ND	
20 Ethyl ether	59		3.320					ND	
21 Acrolein	56		3.478					ND	
22 1,1-Dichloroethene	96		3.527					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.673					ND	
25 Iodomethane	142		3.758					ND	
24 Acetone	43		3.801					ND	
26 Carbon disulfide	76		3.825					ND	
27 Isopropyl alcohol	45		3.861					ND	
28 3-Chloro-1-propene	76		4.135					ND	
29 Acetonitrile	40		4.190					ND	
30 Methyl acetate	43		4.318					ND	
31 Methylene Chloride	84		4.354					ND	
34 trans-1,2-Dichloroethene	96		4.756					ND	
33 Acrylonitrile	53		4.816					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.865					ND	
32 2-Methyl-2-propanol	59		4.902					ND	
38 Vinyl acetate	43		5.145					ND	
36 Hexane	57		5.151					ND	
37 1,1-Dichloroethane	63		5.364					ND	
41 Isopropyl ether	45		5.437					ND	
40 Isopropyl ether TIC	45		5.456					ND	
39 2-Chloro-1,3-butadiene	53		5.484					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
44 2,2-Dichloropropane	77		6.088					ND	
42 Tert-butyl ethyl ether	59		6.095					ND	
45 cis-1,2-Dichloroethene	96		6.112					ND	
46 2-Butanone (MEK)	43		6.179					ND	
48 Ethyl acetate	43		6.179					ND	
47 Propionitrile	54		6.283					ND	
50 Methacrylonitrile	41		6.314					ND	
49 Chlorobromomethane	128		6.380					ND	
52 Chloroform	83		6.502					ND	
53 1,1,1-Trichloroethane	97		6.678					ND	
51 Tetrahydrofuran	42		6.727					ND	
54 Cyclohexane	56		6.733					ND	
56 Carbon tetrachloride	117		6.861					ND	
55 1,1-Dichloropropene	75		6.873					ND	
58 Benzene	78		7.098					ND	
59 1,2-Dichloroethane	62		7.122					ND	
60 Tert-amyl methyl ether (TI	73		7.201					ND	
57 Isobutyl alcohol	41		7.408					ND	
61 Tert-amyl methyl ether	73	7.414	7.408	0.006	37	5456			NC
62 n-Heptane	43		7.408					ND	
64 Trichloroethene	130		7.797					ND	
65 Ethyl acrylate	55		7.986					ND	
69 Methyl methacrylate	69		7.986					ND	
66 Methylcyclohexane	83		7.986					ND	
67 1,2-Dichloropropane	63		8.035					ND	
63 n-Butanol	56	8.114	8.132	-0.018	1	243			NC
68 Dibromomethane	93		8.150					ND	
70 1,4-Dioxane	88		8.187					ND	
71 Dichlorobromomethane	83		8.321					ND	
72 2-Nitropropane	41		8.527					ND	
73 2-Chloroethyl vinyl ether	63	8.753	8.765	-0.012	1	97			NC
74 cis-1,3-Dichloropropene	75		8.771					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.935					ND	
76 Toluene	91		9.105					ND	
77 trans-1,3-Dichloropropene	75		9.330					ND	
78 Ethyl methacrylate	69		9.422					ND	
79 1,1,2-Trichloroethane	97		9.507					ND	
80 Tetrachloroethene	164		9.647					ND	
81 1,3-Dichloropropane	76		9.677					ND	
82 2-Hexanone	43		9.762					ND	
83 n-Butyl acetate	43		9.762					ND	
84 Chlorodibromomethane	129		9.896					ND	
85 Ethylene Dibromide	107		10.018					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
87 Chlorobenzene	112		10.498					ND	
86 3-Chlorobenzotrifluoride	180		10.516					ND	
88 4-Chlorobenzotrifluoride	180		10.571					ND	
89 1,1,1,2-Tetrachloroethane	131		10.578					ND	
90 Ethylbenzene	106		10.608					ND	
91 m-Xylene & p-Xylene	106		10.724					ND	
92 o-Xylene	106		11.113					ND	
93 Styrene	104		11.131					ND	
94 Bromoform	173		11.314					ND	
96 2-Chlorobenzotrifluoride	180		11.417					ND	
97 Isopropylbenzene	105		11.484					ND	
95 Cyclohexanol	57		11.490					ND	
99 1,1,2,2-Tetrachloroethane	83		11.776					ND	
100 Bromobenzene	156		11.788					ND	
101 1,2,3-Trichloropropane	110		11.825					ND	
102 trans-1,4-Dichloro-2-buten	53		11.831					ND	
98 Cyclohexanone	55		11.885					ND	
103 N-Propylbenzene	120		11.892					ND	
104 2-Chlorotoluene	126		11.983					ND	
106 1,3,5-Trimethylbenzene	105		12.062					ND	
105 3-Chlorotoluene	126	12.184	12.092	0.092	1	78			NC
107 4-Chlorotoluene	126		12.092					ND	
108 tert-Butylbenzene	119		12.390					ND	
109 Pentachloroethane	167	12.336	12.421	-0.085	1	149			NC
110 1,2,4-Trimethylbenzene	105		12.439					ND	
111 1,2-dichloro-4-(trifluorom	214		12.548					ND	
112 sec-Butylbenzene	105		12.609					ND	
117 1,2,3-Trimethylbenzene	105	12.439	12.609	-0.170	1	1066			NC
113 1,3-Dichlorobenzene	146		12.725					ND	
114 4-Isopropyltoluene	119		12.755					ND	
115 1,4-Dichlorobenzene	146		12.810					ND	
116 2,4-Dichloro-1-(triflourom	214		12.907					ND	
118 2,5-Dichlorobenzotrifluori	214		12.950					ND	
119 Benzyl chloride	91	13.133	13.163	-0.030	1	94			NC
120 n-Butylbenzene	91		13.163					ND	
121 1,2-Dichlorobenzene	146		13.187					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.966					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.166					ND	
124 1,3,5-Trichlorobenzene	180		14.228					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.580					ND	
126 1,2,4-Trichlorobenzene	180		14.806					ND	
127 Hexachlorobutadiene	225		14.970					ND	
128 Naphthalene	128		15.061					ND	
129 1,2,3-Trichlorobenzene	180		15.317					ND	
130 2,3,6-Trichlorotoluene	159		16.107					ND	
131 2,4,5-Trichlorotoluene	159		16.198					ND	
132 2-Methylnaphthalene	142		16.516					ND	
149 3,4-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
151 Isooctane	57		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
152 Formaldehyde TIC	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

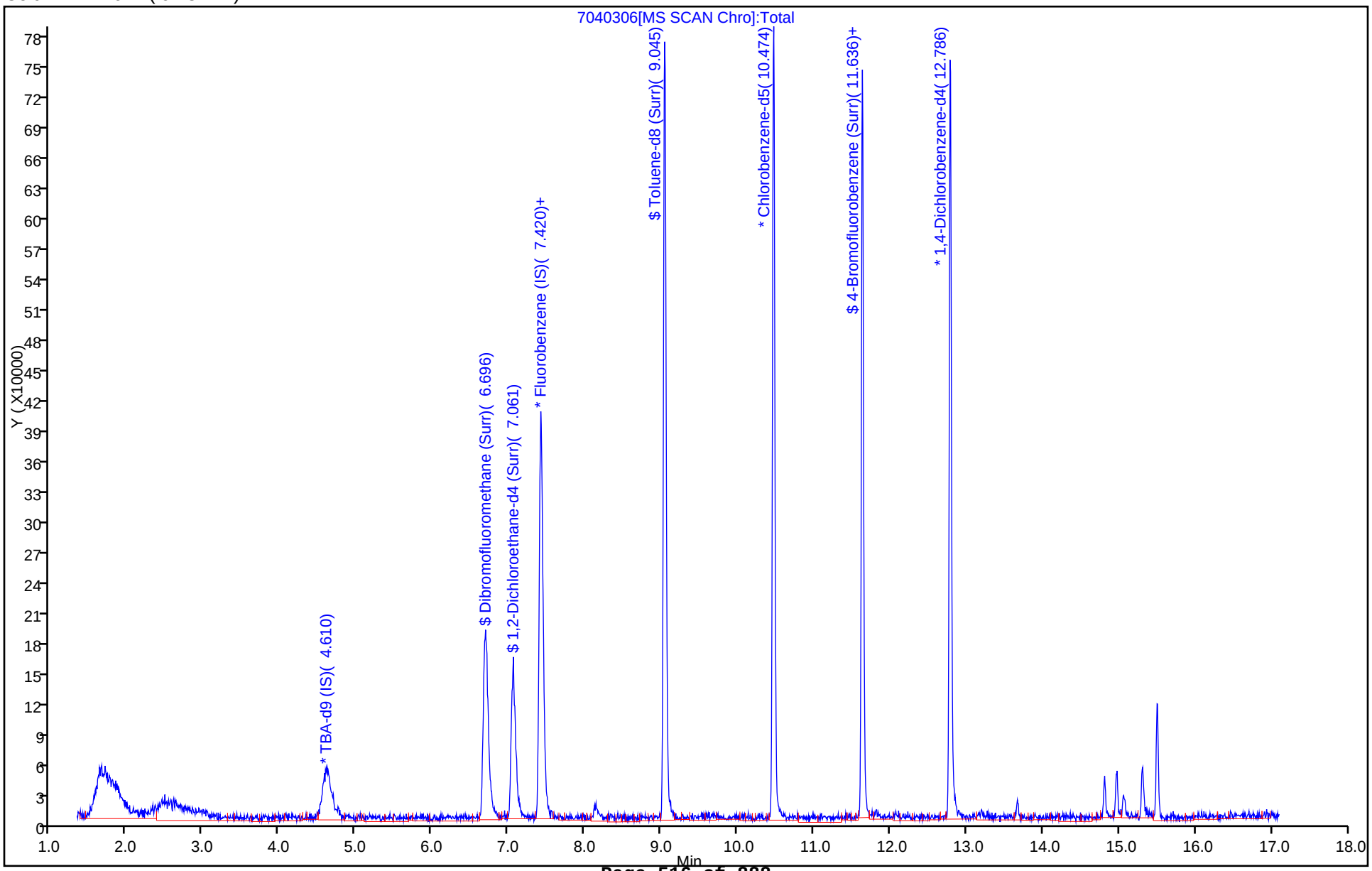
Report Date: 03-Apr-2015 17:04:09 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040306.D

Injection Date:	03-Apr-2015 11:46:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

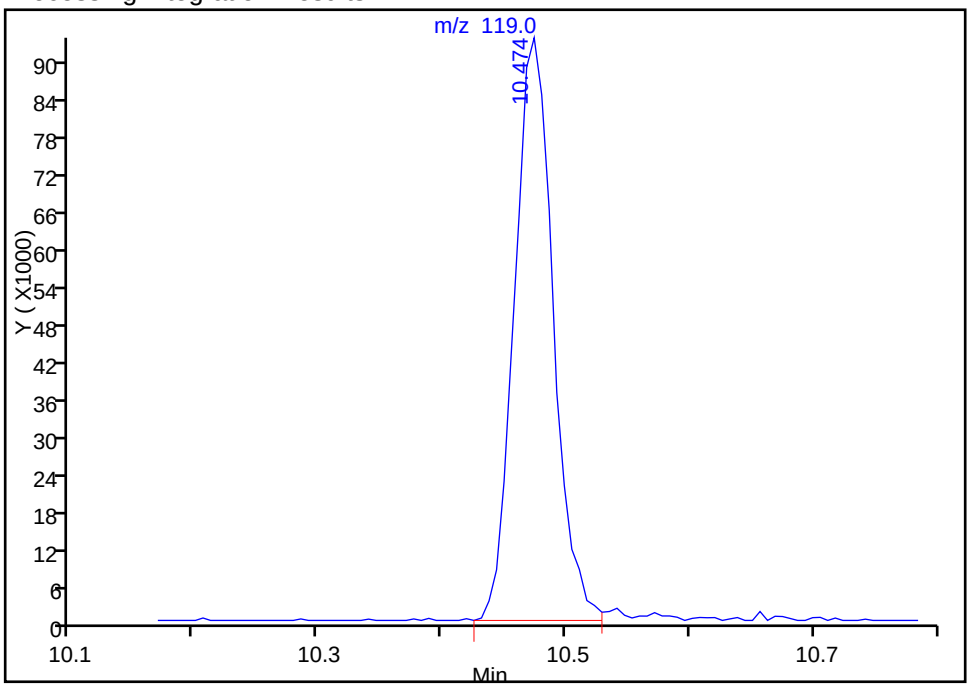
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040306.D				
Injection Date:	03-Apr-2015 11:46:30	Instrument ID:	CHHP7		
Lims ID:	mb				
Client ID:					
Operator ID:	034635	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

* 3 Chlorobenzene-d5, CAS: 3114-55-4

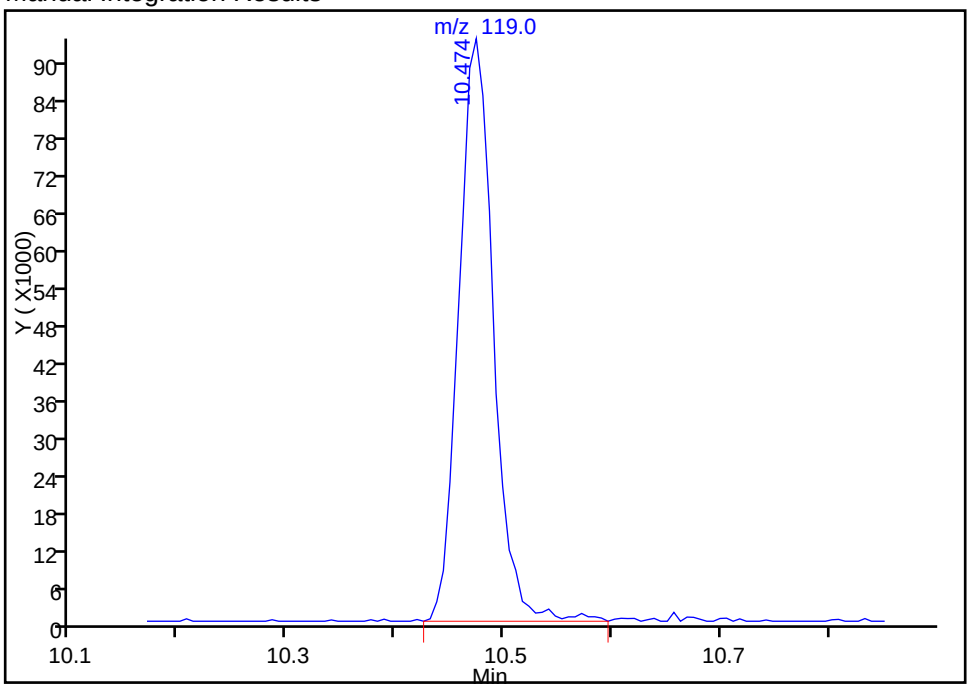
Processing Integration Results

RT: 10.47
Area: 203546
Amount: 200.0000
Amount Units: ng



Manual Integration Results

RT: 10.47
Area: 206910
Amount: 200.0000
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 12:57:22
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137512/6

Matrix: Water Lab File ID: 7040406.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/04/2015 15:41

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.: 137512 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.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137512/6

Matrix: Water Lab File ID: 7040406.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/04/2015 15:41

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.: 137512 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)	89		64-135
2037-26-5	Toluene-d8 (Surr)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	114		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040406.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 04-Apr-2015 15:41:30 ALS Bottle#: 7 Worklist Smp#: 6
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 180-0006327-006
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 09:16:00 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 06-Apr-2015 09:10:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.605	4.765	-0.160	85	175848	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.415	7.399	0.016	99	768306	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.469	10.471	-0.002	84	234443	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.789	-0.002	95	336696	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.685	6.675	0.010	88	278476	200.0	227.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.050	7.040	0.010	95	208779	200.0	178.7	
$ 7 Toluene-d8 (Surr)	98	9.045	9.036	0.009	92	749588	200.0	215.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.637	11.633	0.004	89	319547	200.0	205.8	
11 Dichlorodifluoromethane	85		1.912					ND	
12 Chloromethane	50		2.028					ND	
14 Butadiene	39		2.186					ND	
13 Vinyl chloride	62		2.192					ND	
15 Bromomethane	94		2.502					ND	
16 Chloroethane	64		2.605					ND	
18 Trichlorofluoromethane	101		2.879					ND	
17 Dichlorofluoromethane	67		2.879					ND	
20 Ethyl ether	59		3.311					ND	
19 Ethanol	45		3.320					ND	
21 Acrolein	56		3.481					ND	
22 1,1-Dichloroethene	96		3.518					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.634					ND	
25 Iodomethane	142		3.761					ND	
26 Carbon disulfide	76		3.828					ND	
24 Acetone	43		3.834					ND	
27 Isopropyl alcohol	45		3.861					ND	
28 3-Chloro-1-propene	76		4.126					ND	
29 Acetonitrile	40		4.190					ND	
30 Methyl acetate	43		4.297					ND	
31 Methylene Chloride	84		4.364					ND	
34 trans-1,2-Dichloroethene	96		4.753					ND	
33 Acrylonitrile	53		4.802					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.856					ND	
32 2-Methyl-2-propanol	59		4.875					ND	
38 Vinyl acetate	43		5.148					ND	
36 Hexane	57		5.160					ND	
37 1,1-Dichloroethane	63		5.355					ND	
41 Isopropyl ether	45		5.437					ND	
40 Isopropyl ether TIC	45		5.456					ND	
39 2-Chloro-1,3-butadiene	53		5.484					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
44 2,2-Dichloropropane	77		6.091					ND	
42 Tert-butyl ethyl ether	59		6.095					ND	
45 cis-1,2-Dichloroethene	96		6.103					ND	
48 Ethyl acetate	43		6.179					ND	
46 2-Butanone (MEK)	43		6.189					ND	
47 Propionitrile	54		6.283					ND	
50 Methacrylonitrile	41		6.314					ND	
49 Chlorobromomethane	128		6.377					ND	
52 Chloroform	83		6.499					ND	
53 1,1,1-Trichloroethane	97		6.681					ND	
51 Tetrahydrofuran	42		6.730					ND	
54 Cyclohexane	56		6.730					ND	
56 Carbon tetrachloride	117		6.858					ND	
55 1,1-Dichloropropene	75		6.864					ND	
58 Benzene	78		7.089					ND	
59 1,2-Dichloroethane	62		7.132					ND	
60 Tert-amyl methyl ether (TI	73		7.201					ND	
57 Isobutyl alcohol	41		7.399					ND	
62 n-Heptane	43		7.405					ND	
61 Tert-amyl methyl ether	73	7.409	7.408	0.001	37	9359			NC
64 Trichloroethene	130		7.795					ND	
69 Methyl methacrylate	69		7.986					ND	
65 Ethyl acrylate	55		7.986					ND	
66 Methylcyclohexane	83		7.989					ND	
67 1,2-Dichloropropane	63		8.032					ND	
63 n-Butanol	56		8.132					ND	
68 Dibromomethane	93		8.147					ND	
70 1,4-Dioxane	88		8.184					ND	
71 Dichlorobromomethane	83		8.312					ND	
72 2-Nitropropane	41		8.527					ND	
73 2-Chloroethyl vinyl ether	63	8.577	8.765	-0.188	1	184			NC
74 cis-1,3-Dichloropropene	75		8.774					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.938					ND	
76 Toluene	91		9.103					ND	
77 trans-1,3-Dichloropropene	75		9.322					ND	
78 Ethyl methacrylate	69		9.425					ND	
79 1,1,2-Trichloroethane	97		9.504					ND	
80 Tetrachloroethene	164		9.644					ND	
81 1,3-Dichloropropane	76		9.668					ND	
82 2-Hexanone	43		9.760					ND	
83 n-Butyl acetate	43		9.762					ND	
84 Chlorodibromomethane	129		9.900					ND	
85 Ethylene Dibromide	107		10.009					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
87 Chlorobenzene	112		10.496					ND	
86 3-Chlorobenzotrifluoride	180		10.516					ND	
88 4-Chlorobenzotrifluoride	180		10.571					ND	
89 1,1,1,2-Tetrachloroethane	131		10.575					ND	
90 Ethylbenzene	106		10.605					ND	
91 m-Xylene & p-Xylene	106		10.721					ND	
92 o-Xylene	106		11.116					ND	
93 Styrene	104		11.128					ND	
94 Bromoform	173		11.317					ND	
96 2-Chlorobenzotrifluoride	180		11.417					ND	
97 Isopropylbenzene	105		11.481					ND	
95 Cyclohexanol	57	11.485	11.490	-0.005	0	173			NC
99 1,1,2,2-Tetrachloroethane	83		11.773					ND	
100 Bromobenzene	156		11.785					ND	
101 1,2,3-Trichloropropane	110		11.822					ND	
102 trans-1,4-Dichloro-2-buten	53		11.828					ND	
98 Cyclohexanone	55		11.885					ND	
103 N-Propylbenzene	120		11.889					ND	
104 2-Chlorotoluene	126		11.980					ND	
106 1,3,5-Trimethylbenzene	105		12.065					ND	
107 4-Chlorotoluene	126		12.090					ND	
105 3-Chlorotoluene	126	12.093	12.092	0.001	1	363			NC
108 tert-Butylbenzene	119		12.388					ND	
109 Pentachloroethane	167		12.421					ND	
110 1,2,4-Trimethylbenzene	105		12.436					ND	
111 1,2-dichloro-4-(trifluorom	214		12.548					ND	
112 sec-Butylbenzene	105		12.607					ND	
117 1,2,3-Trimethylbenzene	105	12.756	12.609	0.147	1	310			NC
113 1,3-Dichlorobenzene	146		12.722					ND	
114 4-Isopropyltoluene	119		12.753					ND	
115 1,4-Dichlorobenzene	146		12.814					ND	
116 2,4-Dichloro-1-(triflourom	214		12.907					ND	
118 2,5-Dichlorobenzotrifluori	214		12.950					ND	
120 n-Butylbenzene	91		13.160					ND	
119 Benzyl chloride	91		13.163					ND	
121 1,2-Dichlorobenzene	146		13.185					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.969					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.166					ND	
124 1,3,5-Trichlorobenzene	180		14.228					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.580					ND	
126 1,2,4-Trichlorobenzene	180		14.803					ND	
127 Hexachlorobutadiene	225		14.973					ND	
128 Naphthalene	128		15.058					ND	
129 1,2,3-Trichlorobenzene	180		15.308					ND	
130 2,3,6-Trichlorotoluene	159		16.107					ND	
131 2,4,5-Trichlorotoluene	159		16.198					ND	
132 2-Methylnaphthalene	142		16.516					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
147 2,4-Dichlorotoluene	1		0.000					ND	
151 Isooctane	57		0.000					ND	
149 3,4-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 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	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

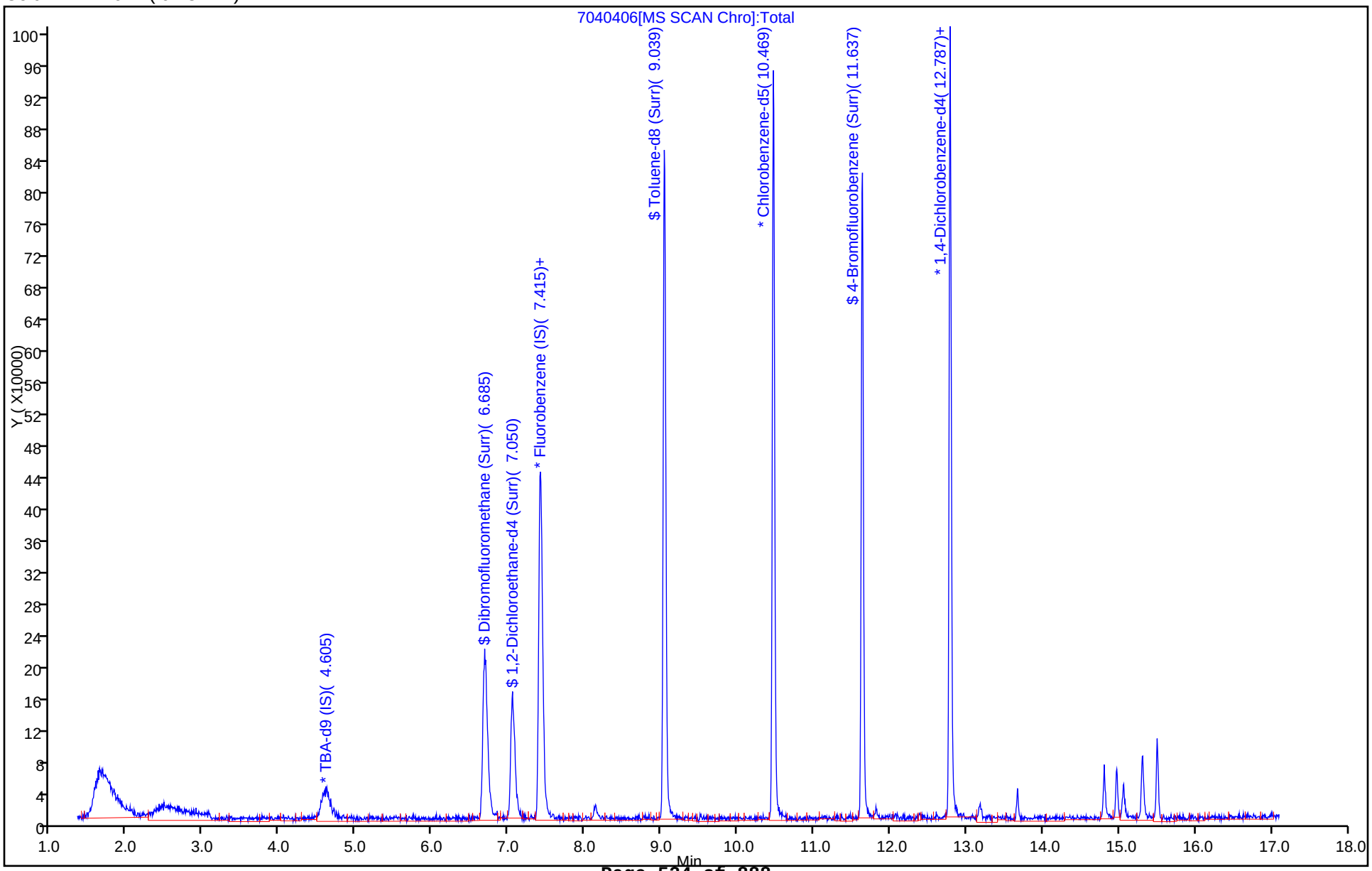
Report Date: 06-Apr-2015 09:16:02 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040406.D

Injection Date:	04-Apr-2015 15:41:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP7	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.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137564/6

Matrix: Water Lab File ID: 7040606.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 11:09

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.: 137564 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.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137564/6

Matrix: Water Lab File ID: 7040606.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 11:09

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.: 137564 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)	91		64-135
2037-26-5	Toluene-d8 (Surr)	114		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	112		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040606.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 06-Apr-2015 11:09:30 ALS Bottle#: 7 Worklist Smp#: 6
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 180-0006335-006
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 15:45:36 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 06-Apr-2015 11:42:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.601	4.932	-0.331	94	213900	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.418	7.396	0.022	99	908506	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.471	10.468	0.003	85	267699	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.789	12.792	-0.003	95	372712	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.694	6.672	0.022	90	325526	200.0	224.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.046	7.037	0.009	93	252290	200.0	182.6	
$ 7 Toluene-d8 (Surr)	98	9.042	9.032	0.010	93	908658	200.0	228.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.633	11.636	-0.003	90	366778	200.0	207.0	
11 Dichlorodifluoromethane	85		1.896					ND	
12 Chloromethane	50		2.012					ND	
13 Vinyl chloride	62		2.201					ND	
14 Butadiene	39		2.201					ND	
15 Bromomethane	94		2.487					ND	
16 Chloroethane	64		2.602					ND	
17 Dichlorofluoromethane	67		2.870					ND	
18 Trichlorofluoromethane	101		2.876					ND	
20 Ethyl ether	59		3.296					ND	
19 Ethanol	45		3.320					ND	
21 Acrolein	56		3.509					ND	
22 1,1-Dichloroethene	96		3.521					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.600					ND	
25 Iodomethane	142		3.709					ND	
26 Carbon disulfide	76		3.782					ND	
24 Acetone	43		3.843					ND	
27 Isopropyl alcohol	45		3.861					ND	
28 3-Chloro-1-propene	76		4.099					ND	
29 Acetonitrile	40		4.190					ND	
30 Methyl acetate	43		4.312					ND	
31 Methylene Chloride	84		4.318					ND	
34 trans-1,2-Dichloroethene	96		4.731					ND	
33 Acrylonitrile	53		4.810					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.877					ND	
32 2-Methyl-2-propanol	59		4.938					ND	
36 Hexane	57		5.121					ND	
38 Vinyl acetate	43		5.121					ND	
37 1,1-Dichloroethane	63		5.340					ND	
41 Isopropyl ether	45		5.437					ND	
40 Isopropyl ether TIC	45		5.456					ND	
39 2-Chloro-1,3-butadiene	53		5.484					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
45 cis-1,2-Dichloroethene	96		6.082					ND	
44 2,2-Dichloropropane	77		6.082					ND	
42 Tert-butyl ethyl ether	59		6.095					ND	
48 Ethyl acetate	43		6.179					ND	
46 2-Butanone (MEK)	43		6.191					ND	
47 Propionitrile	54	6.371	6.283	0.088	1	257			NC
50 Methacrylonitrile	41		6.314					ND	
49 Chlorobromomethane	128		6.374					ND	
52 Chloroform	83		6.496					ND	
53 1,1,1-Trichloroethane	97		6.672					ND	
54 Cyclohexane	56		6.715					ND	
51 Tetrahydrofuran	42		6.733					ND	
56 Carbon tetrachloride	117		6.848					ND	
55 1,1-Dichloropropene	75		6.855					ND	
58 Benzene	78		7.086					ND	
59 1,2-Dichloroethane	62		7.122					ND	
60 Tert-amyl methyl ether (TI	73		7.201					ND	
57 Isobutyl alcohol	41		7.390					ND	
62 n-Heptane	43		7.396					ND	
61 Tert-amyl methyl ether	73	7.418	7.408	0.010	1	6852			NC
64 Trichloroethene	130		7.785					ND	
66 Methylcyclohexane	83		7.980					ND	
69 Methyl methacrylate	69		7.986					ND	
65 Ethyl acrylate	55	7.977	7.986	-0.009	1	295			NC
67 1,2-Dichloropropane	63		8.029					ND	
63 n-Butanol	56	8.008	8.132	-0.124	1	198			NC
68 Dibromomethane	93		8.144					ND	
70 1,4-Dioxane	88		8.187					ND	
71 Dichlorobromomethane	83		8.308					ND	
72 2-Nitropropane	41	8.476	8.527	-0.051	1	99			NC
73 2-Chloroethyl vinyl ether	63	8.817	8.765	0.052	1	199			NC
74 cis-1,3-Dichloropropene	75		8.771					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.941					ND	
76 Toluene	91		9.099					ND	
77 trans-1,3-Dichloropropene	75		9.324					ND	
78 Ethyl methacrylate	69		9.422					ND	
79 1,1,2-Trichloroethane	97		9.507					ND	
80 Tetrachloroethene	164		9.647					ND	
81 1,3-Dichloropropane	76		9.671					ND	
83 n-Butyl acetate	43		9.762					ND	
82 2-Hexanone	43		9.762					ND	
84 Chlorodibromomethane	129		9.896					ND	
85 Ethylene Dibromide	107		10.006					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
87 Chlorobenzene	112		10.498					ND	
86 3-Chlorobenzotrifluoride	180		10.516					ND	
88 4-Chlorobenzotrifluoride	180		10.571					ND	
89 1,1,1,2-Tetrachloroethane	131		10.572					ND	
90 Ethylbenzene	106		10.602					ND	
91 m-Xylene & p-Xylene	106		10.717					ND	
92 o-Xylene	106		11.113					ND	
93 Styrene	104		11.125					ND	
94 Bromoform	173		11.320					ND	
96 2-Chlorobenzotrifluoride	180		11.417					ND	
97 Isopropylbenzene	105		11.478					ND	
95 Cyclohexanol	57		11.490					ND	
99 1,1,2,2-Tetrachloroethane	83		11.770					ND	
100 Bromobenzene	156		11.782					ND	
101 1,2,3-Trichloropropane	110		11.819					ND	
102 trans-1,4-Dichloro-2-buten	53		11.831					ND	
98 Cyclohexanone	55		11.885					ND	
103 N-Propylbenzene	120		11.892					ND	
104 2-Chlorotoluene	126		11.983					ND	
106 1,3,5-Trimethylbenzene	105		12.062					ND	
107 4-Chlorotoluene	126		12.086					ND	
105 3-Chlorotoluene	126	12.096	12.092	0.004	1	439			NC
108 tert-Butylbenzene	119		12.390					ND	
109 Pentachloroethane	167		12.421					ND	
110 1,2,4-Trimethylbenzene	105		12.439					ND	
111 1,2-dichloro-4-(trifluorom	214		12.548					ND	
117 1,2,3-Trimethylbenzene	105	12.449	12.609	-0.160	7	2333			NC
112 sec-Butylbenzene	105		12.609					ND	
113 1,3-Dichlorobenzene	146		12.725					ND	
114 4-Isopropyltoluene	119		12.755					ND	
115 1,4-Dichlorobenzene	146		12.810					ND	
116 2,4-Dichloro-1-(triflourom	214		12.907					ND	
118 2,5-Dichlorobenzotrifluori	214		12.950					ND	
119 Benzyl chloride	91		13.163					ND	
120 n-Butylbenzene	91		13.163					ND	
121 1,2-Dichlorobenzene	146		13.187					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.972					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.166					ND	
124 1,3,5-Trichlorobenzene	180		14.228					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.580					ND	
126 1,2,4-Trichlorobenzene	180		14.806					ND	
127 Hexachlorobutadiene	225		14.970					ND	
128 Naphthalene	128		15.055					ND	
129 1,2,3-Trichlorobenzene	180		15.311					ND	
130 2,3,6-Trichlorotoluene	159		16.107					ND	
131 2,4,5-Trichlorotoluene	159		16.198					ND	
132 2-Methylnaphthalene	142	16.500	16.516	-0.016	1	187			NC
149 3,4-Dichlorotoluene	1		0.000					ND	
151 Isooctane	57		0.000					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
152 Formaldehyde TIC	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
146 2,5-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 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	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

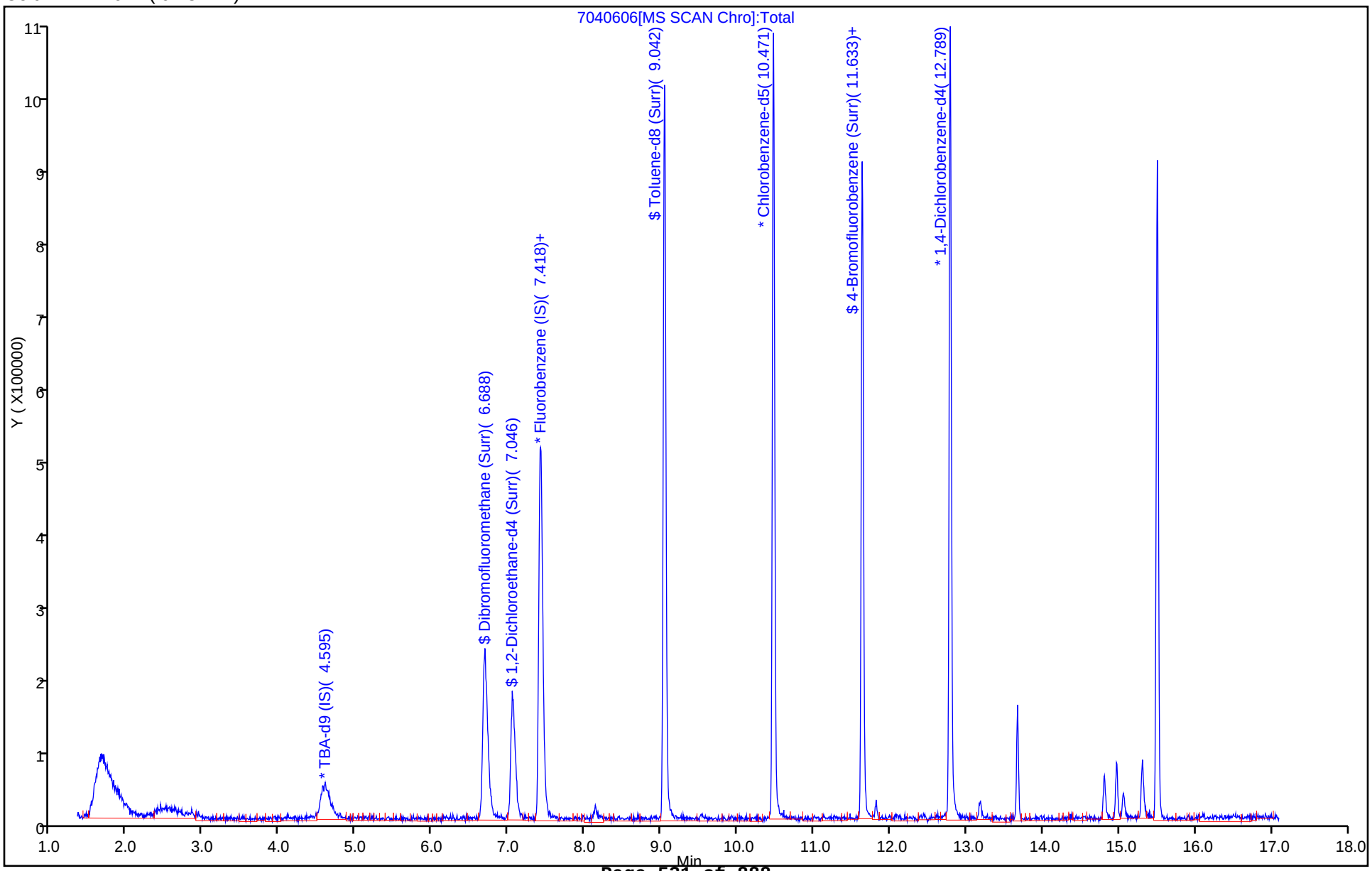
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

Report Date: 06-Apr-2015 15:45:37 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040606.D				
Injection Date:	06-Apr-2015 11:09:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	6
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP7	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.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137846/7

Matrix: Water Lab File ID: 7040807.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/08/2015 11:22

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.: 137846 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.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-137846/7

Matrix: Water Lab File ID: 7040807.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/08/2015 11:22

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.: 137846 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)	88		64-135
2037-26-5	Toluene-d8 (Surr)	111		71-118
460-00-4	4-Bromofluorobenzene (Surr)	100		70-118
1868-53-7	Dibromofluoromethane (Surr)	108		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040807.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 08-Apr-2015 11:22:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 180-0006372-007
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Apr-2015 14:55:26 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: journetp Date: 08-Apr-2015 11:56:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.628	4.861	-0.233	95	235727	4000.0	4000.0	M
* 2 Fluorobenzene (IS)	96	7.426	7.397	0.029	100	934970	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.474	10.470	0.004	84	260563	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.792	12.787	0.005	96	369385	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.684	6.674	0.010	88	321495	200.0	215.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.055	7.032	0.023	94	250687	200.0	176.3	
$ 7 Toluene-d8 (Surr)	98	9.044	9.034	0.010	93	857912	200.0	222.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.636	11.632	0.004	90	344626	200.0	199.3	
11 Dichlorodifluoromethane	85		1.941					ND	
12 Chloromethane	50		2.062					ND	
14 Butadiene	39		2.190					ND	
13 Vinyl chloride	62		2.227					ND	
15 Bromomethane	94		2.537					ND	
16 Chloroethane	64		2.610					ND	
17 Dichlorofluoromethane	67		2.890					ND	
18 Trichlorofluoromethane	101		2.908					ND	
20 Ethyl ether	59		3.291					ND	
19 Ethanol	45		3.320					ND	
21 Acrolein	56		3.534					ND	
22 1,1-Dichloroethene	96		3.541					ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.650					ND	
25 Iodomethane	142		3.711					ND	
26 Carbon disulfide	76		3.796					ND	
27 Isopropyl alcohol	45		3.861					ND	
24 Acetone	43		3.863					ND	
28 3-Chloro-1-propene	76		4.112					ND	
29 Acetonitrile	40		4.190					ND	
30 Methyl acetate	43		4.295					ND	
31 Methylene Chloride	84		4.337					ND	
34 trans-1,2-Dichloroethene	96		4.733					ND	
33 Acrylonitrile	53		4.824					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
35 Methyl tert-butyl ether	73		4.891					ND	
32 2-Methyl-2-propanol	59		4.976					ND	
36 Hexane	57		5.140					ND	
38 Vinyl acetate	43		5.147					ND	
37 1,1-Dichloroethane	63		5.353					ND	
41 Isopropyl ether	45		5.437					ND	
40 Isopropyl ether TIC	45		5.456					ND	
39 2-Chloro-1,3-butadiene	53		5.484					ND	
43 Tert-butyl ethyl ether (TI	59		5.961					ND	
44 2,2-Dichloropropane	77		6.083					ND	
42 Tert-butyl ethyl ether	59		6.095					ND	
45 cis-1,2-Dichloroethene	96		6.096					ND	
48 Ethyl acetate	43		6.179					ND	
46 2-Butanone (MEK)	43		6.193					ND	
47 Propionitrile	54		6.283					ND	
50 Methacrylonitrile	41		6.314					ND	
49 Chlorobromomethane	128		6.369					ND	
52 Chloroform	83		6.491					ND	
53 1,1,1-Trichloroethane	97		6.667					ND	
54 Cyclohexane	56		6.728					ND	
51 Tetrahydrofuran	42		6.728					ND	
56 Carbon tetrachloride	117		6.856					ND	
55 1,1-Dichloropropene	75		6.856					ND	
58 Benzene	78		7.099					ND	
59 1,2-Dichloroethane	62		7.124					ND	
60 Tert-amyl methyl ether (TI	73		7.201					ND	
62 n-Heptane	43		7.397					ND	
57 Isobutyl alcohol	41		7.397					ND	
61 Tert-amyl methyl ether	73		7.408					ND	
64 Trichloroethene	130		7.787					ND	
66 Methylcyclohexane	83		7.981					ND	
65 Ethyl acrylate	55		7.986					ND	
69 Methyl methacrylate	69		7.986					ND	
67 1,2-Dichloropropane	63		8.024					ND	
63 n-Butanol	56		8.132					ND	
68 Dibromomethane	93		8.146					ND	
70 1,4-Dioxane	88		8.194					ND	
71 Dichlorobromomethane	83		8.310					ND	
72 2-Nitropropane	41		8.527					ND	
73 2-Chloroethyl vinyl ether	63		8.765					ND	
74 cis-1,3-Dichloropropene	75		8.772					ND	
75 4-Methyl-2-pentanone (MIBK	43		8.943					ND	
76 Toluene	91		9.101					ND	
77 trans-1,3-Dichloropropene	75		9.320					ND	
78 Ethyl methacrylate	69		9.423					ND	
79 1,1,2-Trichloroethane	97		9.508					ND	
80 Tetrachloroethene	164		9.648					ND	
81 1,3-Dichloropropane	76		9.673					ND	
83 n-Butyl acetate	43		9.762					ND	
82 2-Hexanone	43		9.764					ND	
84 Chlorodibromomethane	129		9.898					ND	
85 Ethylene Dibromide	107		10.013					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
87 Chlorobenzene	112		10.494					ND	
86 3-Chlorobenzotrifluoride	180		10.516					ND	
88 4-Chlorobenzotrifluoride	180		10.571					ND	
89 1,1,1,2-Tetrachloroethane	131		10.579					ND	
90 Ethylbenzene	106		10.603					ND	
91 m-Xylene & p-Xylene	106		10.719					ND	
92 o-Xylene	106		11.114					ND	
93 Styrene	104		11.127					ND	
94 Bromoform	173		11.315					ND	
96 2-Chlorobenzotrifluoride	180		11.417					ND	
97 Isopropylbenzene	105		11.479					ND	
95 Cyclohexanol	57		11.490					ND	
99 1,1,2,2-Tetrachloroethane	83		11.771					ND	
100 Bromobenzene	156		11.784					ND	
101 1,2,3-Trichloropropane	110		11.820					ND	
102 trans-1,4-Dichloro-2-buten	53		11.832					ND	
98 Cyclohexanone	55		11.885					ND	
103 N-Propylbenzene	120		11.893					ND	
104 2-Chlorotoluene	126		11.978					ND	
106 1,3,5-Trimethylbenzene	105		12.063					ND	
107 4-Chlorotoluene	126		12.088					ND	
105 3-Chlorotoluene	126		12.092					ND	
108 tert-Butylbenzene	119		12.392					ND	
109 Pentachloroethane	167		12.421					ND	
110 1,2,4-Trimethylbenzene	105		12.441					ND	
111 1,2-dichloro-4-(trifluorom	214		12.548					ND	
117 1,2,3-Trimethylbenzene	105		12.609					ND	
112 sec-Butylbenzene	105		12.611					ND	
113 1,3-Dichlorobenzene	146		12.727					ND	
114 4-Isopropyltoluene	119		12.751					ND	
115 1,4-Dichlorobenzene	146		12.812					ND	
116 2,4-Dichloro-1-(triflourom	214		12.907					ND	
118 2,5-Dichlorobenzotrifluori	214		12.950					ND	
119 Benzyl chloride	91		13.163					ND	
120 n-Butylbenzene	91		13.165					ND	
121 1,2-Dichlorobenzene	146		13.189					ND	
122 1,2-Dibromo-3-Chloropropan	75		13.968					ND	
123 2,4- & 2,5- & 2,6- Dichlor	125		14.166					ND	
124 1,3,5-Trichlorobenzene	180		14.228					ND	
125 2,3- & 3,4- Dichlorotoluen	125		14.580					ND	
126 1,2,4-Trichlorobenzene	180		14.801					ND	
127 Hexachlorobutadiene	225		14.971					ND	
128 Naphthalene	128		15.057					ND	
129 1,2,3-Trichlorobenzene	180		15.306					ND	
130 2,3,6-Trichlorotoluene	159		16.107					ND	
131 2,4,5-Trichlorotoluene	159		16.198					ND	
132 2-Methylnaphthalene	142		16.516					ND	
147 2,4-Dichlorotoluene	1		0.000					ND	
148 2,3-Dichlorotoluene	1		0.000					ND	
153 1,2 Epoxybutane TIC	1		0.000					ND	
150 2,6-Dichlorotoluene	1		0.000					ND	
146 2,5-Dichlorotoluene	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
149 3,4-Dichlorotoluene	1		0.000					ND	
151 Isooctane	57		0.000					ND	
152 Formaldehyde TIC	1		0.000					ND	
S 134 1,2-Dichloroethene, Total	96		1.000					ND	
S 133 Xylenes, Total	106		1.000					ND	
S 135 1,3-Dichloropropene, Total	1		0.000					ND	
T 138 Methyl n-amyl ketone TIC	43		0.000					ND	
T 137 Tetrahydrofuran TIC	42		0.000					ND	
T 136 Mesityl oxide TIC	83		0.000					ND	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

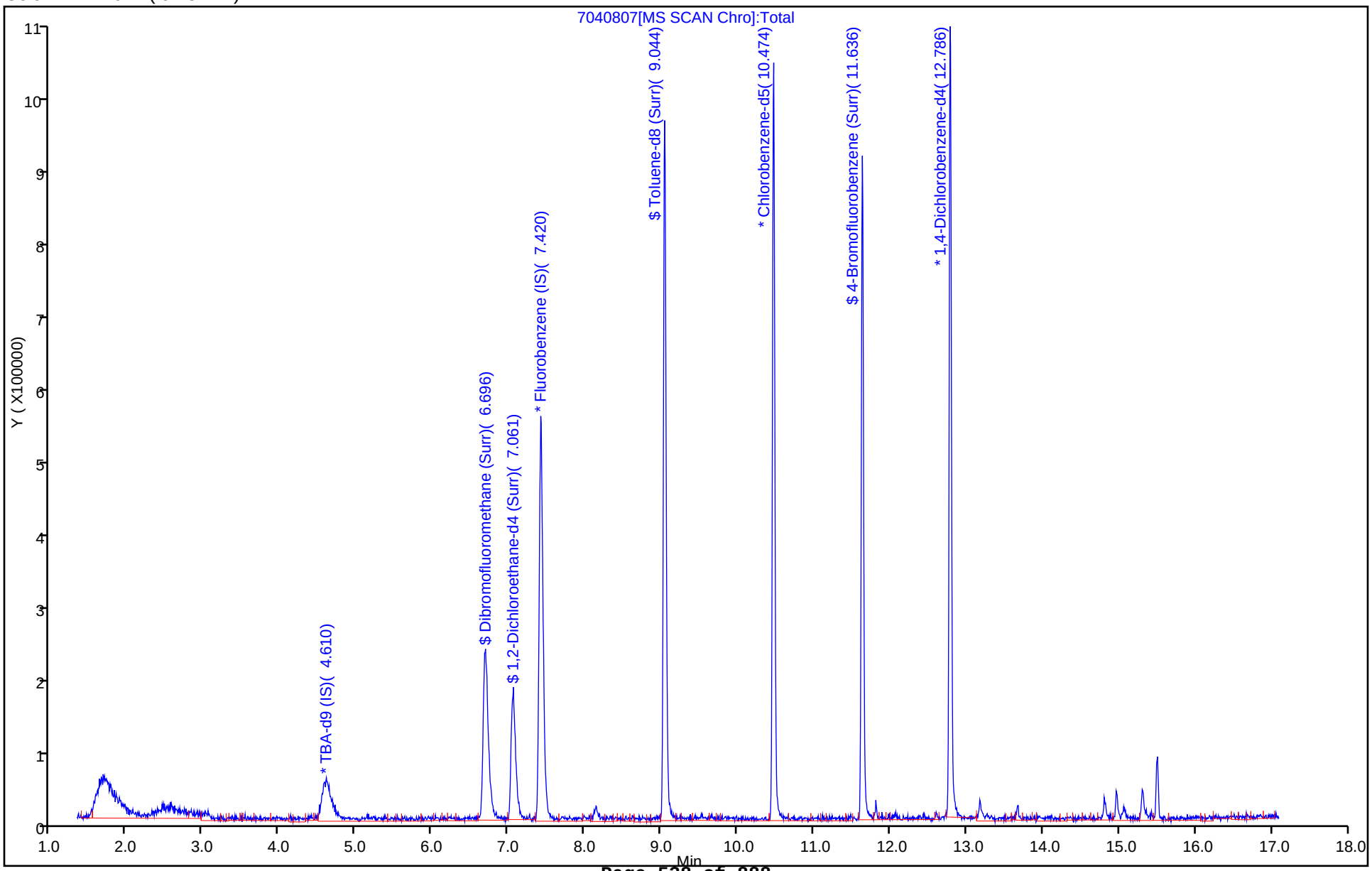
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

Report Date: 08-Apr-2015 14:55:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040807.D				
Injection Date:	08-Apr-2015 11:22:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	mb			Worklist Smp#:	7
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

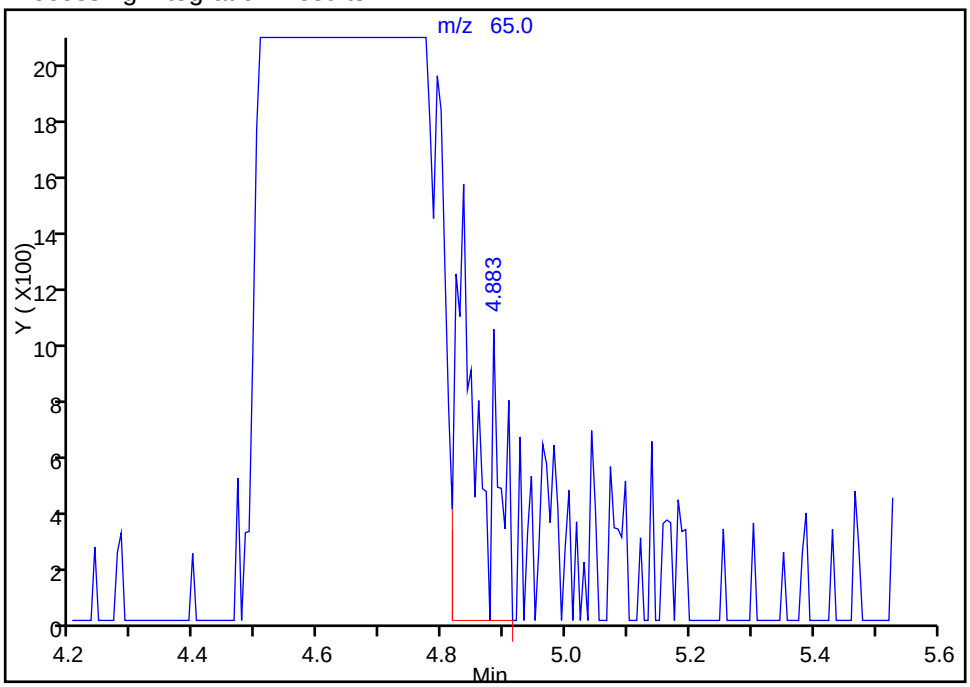
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040807.D				
Injection Date:	08-Apr-2015 11:22:30	Instrument ID:	CHHP7		
Lims ID:	mb				
Client ID:					
Operator ID:	034635	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

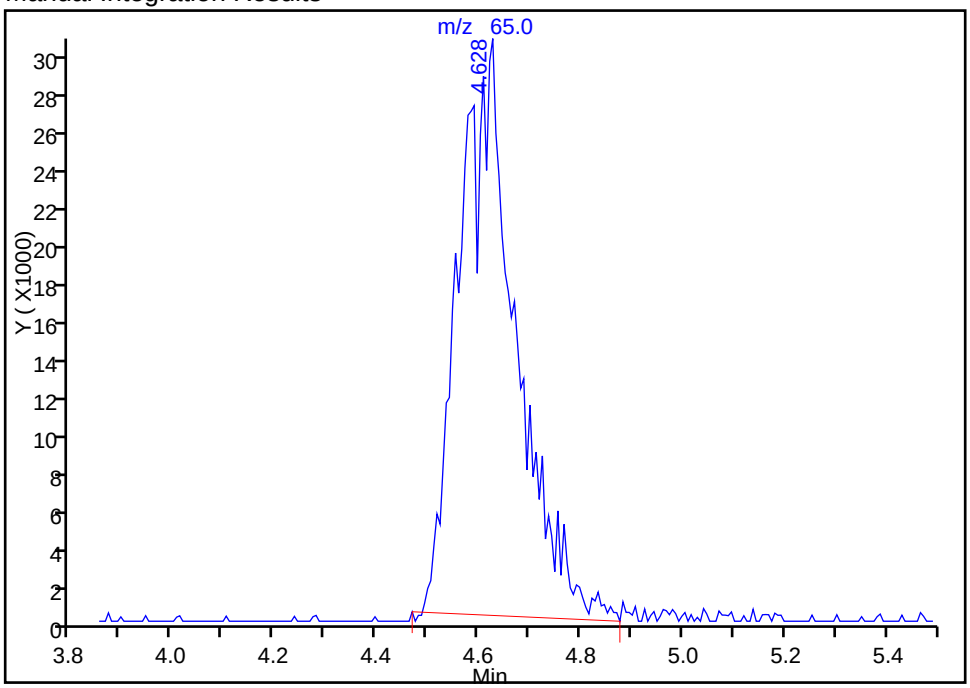
Processing Integration Results

RT: 4.88
Area: 4023
Amount: 4000.0000
Amount Units: ng



Manual Integration Results

RT: 4.63
Area: 235727
Amount: 4000.0000
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 11:56:35
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137438/12

Matrix: Water Lab File ID: 7040312.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 14:44

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.: 137438 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.36		1.0	0.28
75-01-4	Vinyl chloride	9.59		1.0	0.23
74-83-9	Bromomethane	11.9		1.0	0.31
75-00-3	Chloroethane	10.8		1.0	0.21
75-35-4	1,1-Dichloroethene	10.3		1.0	0.30
67-64-1	Acetone	12.9		5.0	2.5
75-15-0	Carbon disulfide	10.4		1.0	0.21
75-09-2	Methylene Chloride	10.9		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.81		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.1		1.0	0.18
75-34-3	1,1-Dichloroethane	10.2		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10.2		1.0	0.24
74-97-5	Bromochloromethane	9.71		1.0	0.18
78-93-3	2-Butanone (MEK)	14.4		5.0	0.55
67-66-3	Chloroform	10.4		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.7		1.0	0.29
56-23-5	Carbon tetrachloride	10.6		1.0	0.14
71-43-2	Benzene	9.58		1.0	0.11
107-06-2	1,2-Dichloroethane	9.10		1.0	0.21
79-01-6	Trichloroethene	9.30		1.0	0.14
78-87-5	1,2-Dichloropropane	9.48		1.0	0.095
75-27-4	Bromodichloromethane	9.81		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.37		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	16.4		5.0	0.53
108-88-3	Toluene	8.88		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.17		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.20		1.0	0.20
127-18-4	Tetrachloroethene	8.89		1.0	0.15
591-78-6	2-Hexanone	15.8		5.0	0.16
124-48-1	Dibromochloromethane	9.31		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.09		1.0	0.18
108-90-7	Chlorobenzene	9.73		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	8.90		1.0	0.28
100-41-4	Ethylbenzene	8.72		1.0	0.23
1330-20-7	Xylenes, Total	17.3		3.0	0.49
100-42-5	Styrene	9.69		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137438/12

Matrix: Water Lab File ID: 7040312.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 14:44

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.: 137438 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.43		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.2		1.0	0.20
107-13-1	Acrylonitrile	88.6		20	0.55
123-91-1	1,4-Dioxane	169	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		64-135
2037-26-5	Toluene-d8 (Surr)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	101		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040312.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 03-Apr-2015 14:44:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 180-0006312-012
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 03-Apr-2015 17:04:08 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: journetp Date: 03-Apr-2015 15:42:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.744	4.786	-0.042	93	201661	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.409	7.402	0.007	95	864973	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.469	10.468	0.001	84	278213	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.786	0.001	95	364439	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.679	6.678	0.001	72	278477	200.0	201.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.044	7.043	0.001	65	236330	200.0	179.7	
$ 7 Toluene-d8 (Surr)	98	9.039	9.038	0.001	92	849829	200.0	205.9	
$ 8 4-Bromofluorobenzene (Surr	95	11.637	11.636	0.001	91	377879	200.0	205.1	
11 Dichlorodifluoromethane	85	1.940	1.963	-0.023	33	310151	200.0	193.5	
12 Chloromethane	50	2.037	2.000	0.037	42	327110	200.0	187.3	
14 Butadiene	39	2.165	2.207	-0.042	86	274776	200.0	191.3	
13 Vinyl chloride	62	2.195	2.219	-0.024	76	260971	200.0	191.9	
15 Bromomethane	94	2.512	2.511	0.001	94	260614	200.0	237.8	
16 Chloroethane	64	2.603	2.626	-0.023	55	237363	200.0	216.3	
17 Dichlorofluoromethane	67	2.889	2.888	0.001	93	651156	200.0	223.0	
18 Trichlorofluoromethane	101	2.901	2.906	-0.005	92	707180	200.0	230.2	
20 Ethyl ether	59	3.321	3.320	0.001	61	140378	200.0	144.0	M
21 Acrolein	56	3.509	3.478	0.031	4	26683	600.0	396.6	M
22 1,1-Dichloroethene	96	3.521	3.527	-0.006	83	239862	200.0	206.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.661	3.673	-0.012	79	277855	200.0	205.8	
25 Iodomethane	142	3.783	3.758	0.025	98	516314	200.0	212.5	
24 Acetone	43	3.820	3.801	0.019	22	76886	400.0	258.6	
26 Carbon disulfide	76	3.844	3.825	0.019	99	725538	200.0	208.0	M
28 3-Chloro-1-propene	76	4.148	4.135	0.013	68	172223	200.0	201.1	M
30 Methyl acetate	43	4.282	4.318	-0.036	98	528863	1000.0	917.7	
31 Methylene Chloride	84	4.410	4.354	0.056	92	271926	200.0	218.2	
34 trans-1,2-Dichloroethene	96	4.775	4.756	0.019	89	282830	200.0	196.3	
33 Acrylonitrile	53	4.805	4.816	-0.011	95	408526	2000.0	1772.1	
35 Methyl tert-butyl ether	73	4.866	4.865	0.001	98	575649	200.0	202.7	
32 2-Methyl-2-propanol	59	4.872	4.902	-0.030	43	129900	2000.0	19109	EM
38 Vinyl acetate	43	5.164	5.145	0.019	89	173928	200.0	153.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.158	5.151	0.007	92	265336	200.0	176.1	
37 1,1-Dichloroethane	63	5.365	5.364	0.001	96	432624	200.0	204.9	
44 2,2-Dichloropropane	77	6.095	6.088	0.007	82	413204	200.0	234.2	
45 cis-1,2-Dichloroethene	96	6.107	6.112	-0.005	79	291354	200.0	203.7	
46 2-Butanone (MEK)	43	6.180	6.179	0.001	97	111540	400.0	287.7	
49 Chlorobromomethane	128	6.387	6.380	0.007	80	160019	200.0	194.3	
52 Chloroform	83	6.496	6.502	-0.006	96	497000	200.0	209.0	
53 1,1,1-Trichloroethane	97	6.685	6.678	0.007	97	463503	200.0	214.6	
51 Tetrahydrofuran	42	6.727	6.727	0.000	48	87493	400.0	412.5	
54 Cyclohexane	56	6.740	6.733	0.007	90	312024	200.0	204.8	
56 Carbon tetrachloride	117	6.867	6.861	0.006	95	459813	200.0	211.1	
55 1,1-Dichloropropene	75	6.867	6.873	-0.006	83	287834	200.0	184.6	
58 Benzene	78	7.092	7.098	-0.006	97	815450	200.0	191.6	
59 1,2-Dichloroethane	62	7.129	7.122	0.007	97	261739	200.0	182.0	
57 Isobutyl alcohol	41	7.403	7.408	-0.005	52	173847	5000.0	5006.2	
62 n-Heptane	43	7.403	7.408	-0.005	61	246860	200.0	187.1	
64 Trichloroethene	130	7.792	7.797	-0.005	92	317543	200.0	186.1	
66 Methylcyclohexane	83	7.987	7.986	0.001	87	443777	200.0	211.5	
67 1,2-Dichloropropane	63	8.029	8.035	-0.006	79	183862	200.0	189.6	
68 Dibromomethane	93	8.151	8.150	0.001	95	137432	200.0	190.3	
70 1,4-Dioxane	88	8.194	8.187	0.007	67	22860	4000.0	3372.7	M
71 Dichlorobromomethane	83	8.321	8.321	0.000	97	352660	200.0	196.2	
74 cis-1,3-Dichloropropene	75	8.765	8.771	-0.006	93	349667	200.0	187.5	
75 4-Methyl-2-pentanone (MIBK	43	8.942	8.935	0.007	95	266199	400.0	327.4	
76 Toluene	91	9.106	9.105	0.001	98	902682	200.0	177.6	
77 trans-1,3-Dichloropropene	75	9.325	9.330	-0.005	94	320813	200.0	183.4	
78 Ethyl methacrylate	69	9.422	9.422	0.000	88	217659	200.0	187.1	
79 1,1,2-Trichloroethane	97	9.508	9.507	0.001	91	183765	200.0	184.0	
80 Tetrachloroethene	164	9.648	9.647	0.001	94	237228	200.0	177.7	
81 1,3-Dichloropropane	76	9.672	9.677	-0.005	90	272308	200.0	184.5	
82 2-Hexanone	43	9.757	9.762	-0.005	97	165606	400.0	315.8	
84 Chlorodibromomethane	129	9.897	9.896	0.001	89	319644	200.0	186.2	
85 Ethylene Dibromide	107	10.013	10.018	-0.005	98	205706	200.0	181.9	
87 Chlorobenzene	112	10.499	10.498	0.001	96	689815	200.0	194.5	
89 1,1,1,2-Tetrachloroethane	131	10.578	10.578	0.000	92	305290	200.0	178.1	
90 Ethylbenzene	106	10.609	10.608	0.001	98	351435	200.0	174.4	
91 m-Xylene & p-Xylene	106	10.724	10.724	0.000	98	472879	200.0	174.1	
92 o-Xylene	106	11.114	11.113	0.001	95	469613	200.0	172.1	
93 Styrene	104	11.132	11.131	0.001	93	734703	200.0	193.8	
94 Bromoform	173	11.320	11.314	0.006	93	183383	200.0	188.5	
97 Isopropylbenzene	105	11.479	11.484	-0.005	95	1257265	200.0	186.7	
99 1,1,2,2-Tetrachloroethane	83	11.777	11.776	0.001	95	213535	200.0	203.8	
100 Bromobenzene	156	11.789	11.788	0.001	87	355702	200.0	227.8	
101 1,2,3-Trichloropropane	110	11.825	11.825	0.000	85	68939	200.0	197.1	
102 trans-1,4-Dichloro-2-buten	53	11.832	11.831	0.001	76	37985	200.0	173.4	
103 N-Propylbenzene	120	11.892	11.892	0.000	97	410378	200.0	214.1	
104 2-Chlorotoluene	126	11.977	11.983	-0.006	96	379639	200.0	218.1	
106 1,3,5-Trimethylbenzene	105	12.063	12.062	0.001	97	1016871	200.0	225.1	
107 4-Chlorotoluene	126	12.087	12.092	-0.005	96	348636	200.0	209.0	
108 tert-Butylbenzene	119	12.391	12.390	0.001	90	1056867	200.0	195.4	
110 1,2,4-Trimethylbenzene	105	12.440	12.439	0.001	95	1043292	200.0	219.8	
112 sec-Butylbenzene	105	12.610	12.609	0.001	94	1388841	200.0	231.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.726	12.725	0.001	97	651829	200.0	210.1	
114 4-Isopropyltoluene	119	12.756	12.755	0.001	95	1197062	200.0	218.1	
115 1,4-Dichlorobenzene	146	12.817	12.810	0.007	93	603997	200.0	208.9	
120 n-Butylbenzene	91	13.164	13.163	0.001	96	1034219	200.0	228.7	
121 1,2-Dichlorobenzene	146	13.188	13.187	0.001	96	529483	200.0	186.9	
122 1,2-Dibromo-3-Chloropropan	75	13.973	13.966	0.007	81	25430	200.0	179.3	
126 1,2,4-Trichlorobenzene	180	14.806	14.806	0.000	96	190274	200.0	211.9	
127 Hexachlorobutadiene	225	14.971	14.970	0.001	87	113862	200.0	211.6	
128 Naphthalene	128	15.056	15.061	-0.005	97	329038	200.0	223.7	
129 1,2,3-Trichlorobenzene	180	15.305	15.317	-0.012	96	121460	200.0	197.7	
S 134 1,2-Dichloroethene, Total	96				0		400.0	400.0	
S 133 Xylenes, Total	106				0		400.0	346.2	
S 135 1,3-Dichloropropene, Total	1				0		400.0	370.9	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added:	24.00	Units: uL	
VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00108	Amount Added:	8.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	8.00	Units: uL	
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

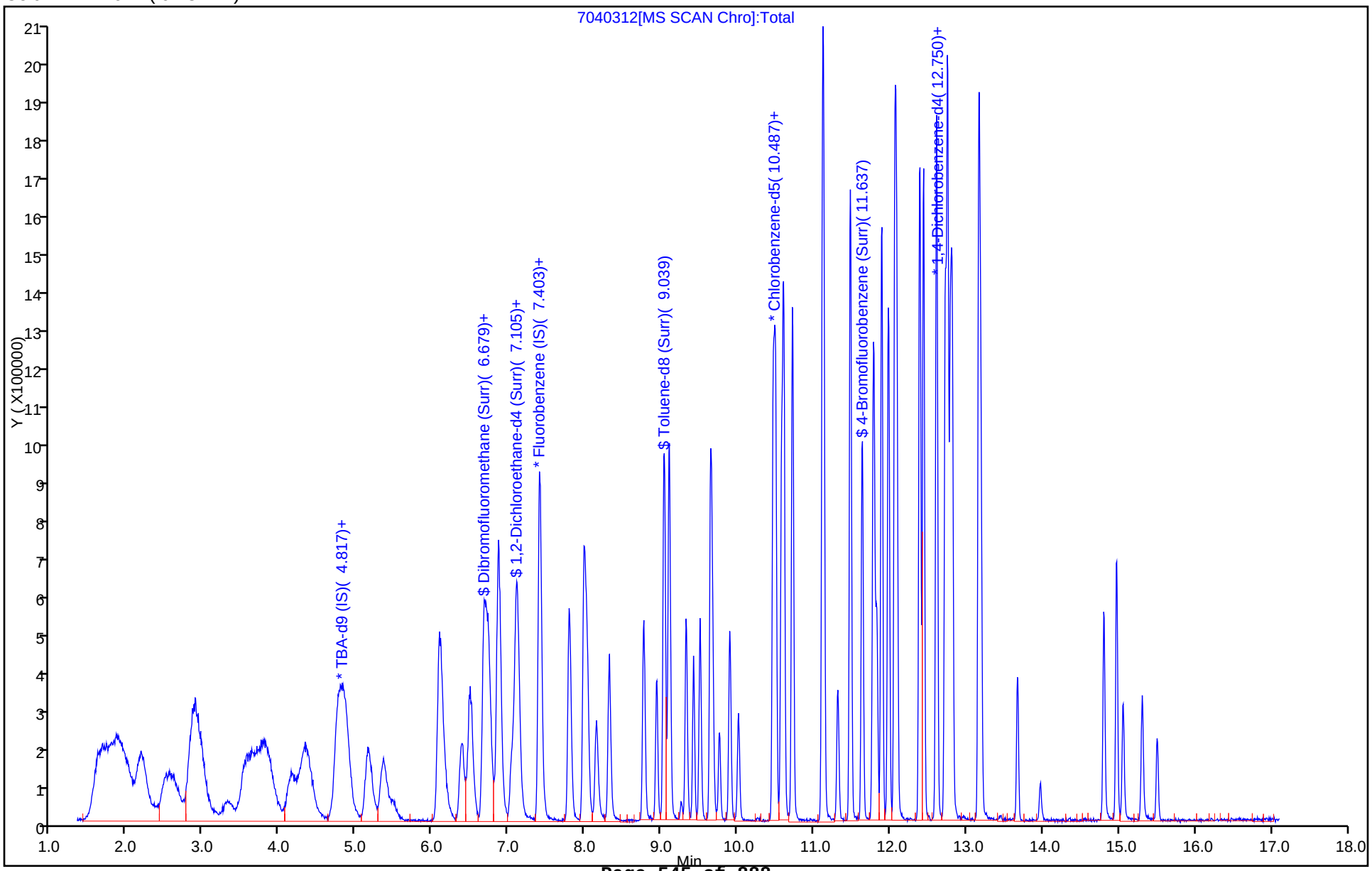
Report Date: 03-Apr-2015 17:04:15 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040312.D

Injection Date:	03-Apr-2015 14:44:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	lcs			Worklist Smp#:	12
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

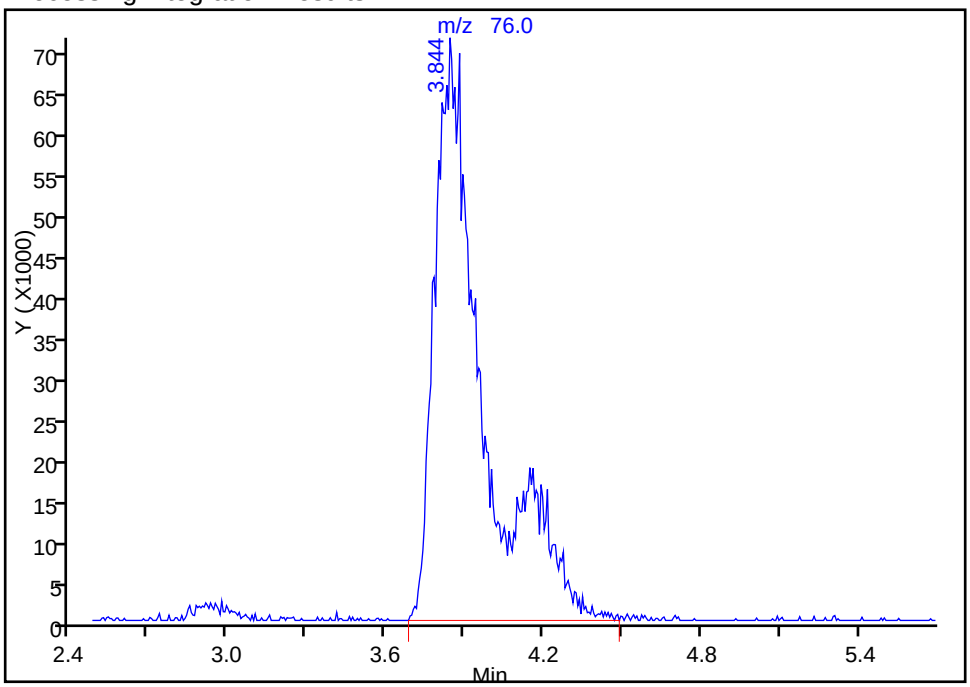
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040312.D				
Injection Date:	03-Apr-2015 14:44:30	Instrument ID:	CHHP7		
Lims ID:	lcs				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

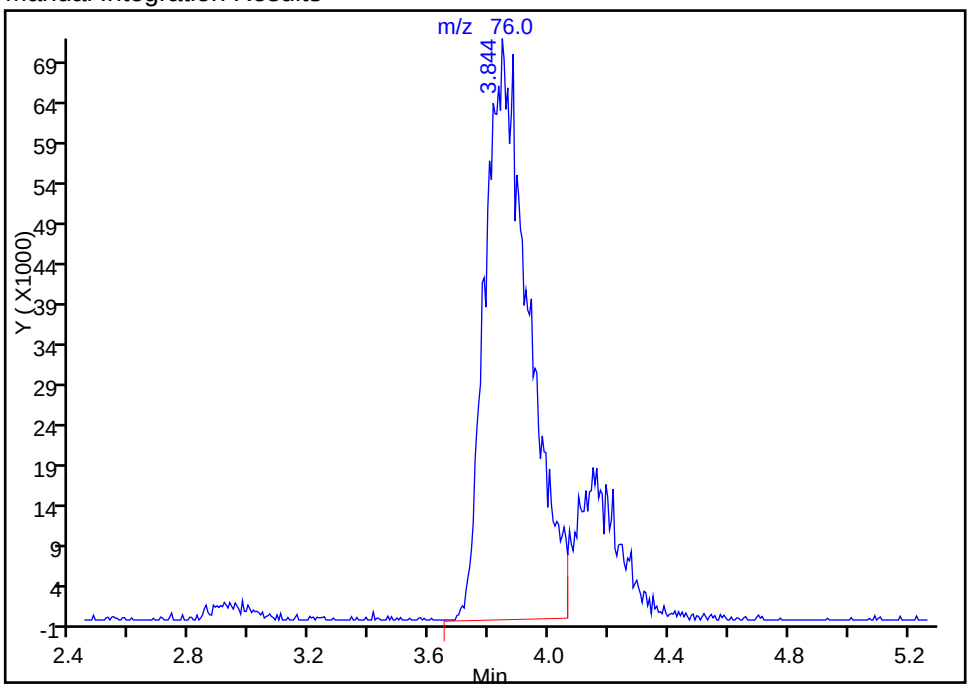
Processing Integration Results

RT: 3.84
Area: 904119
Amount: 259.1962
Amount Units: ng



Manual Integration Results

RT: 3.84
Area: 725538
Amount: 207.9999
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 15:42:27
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

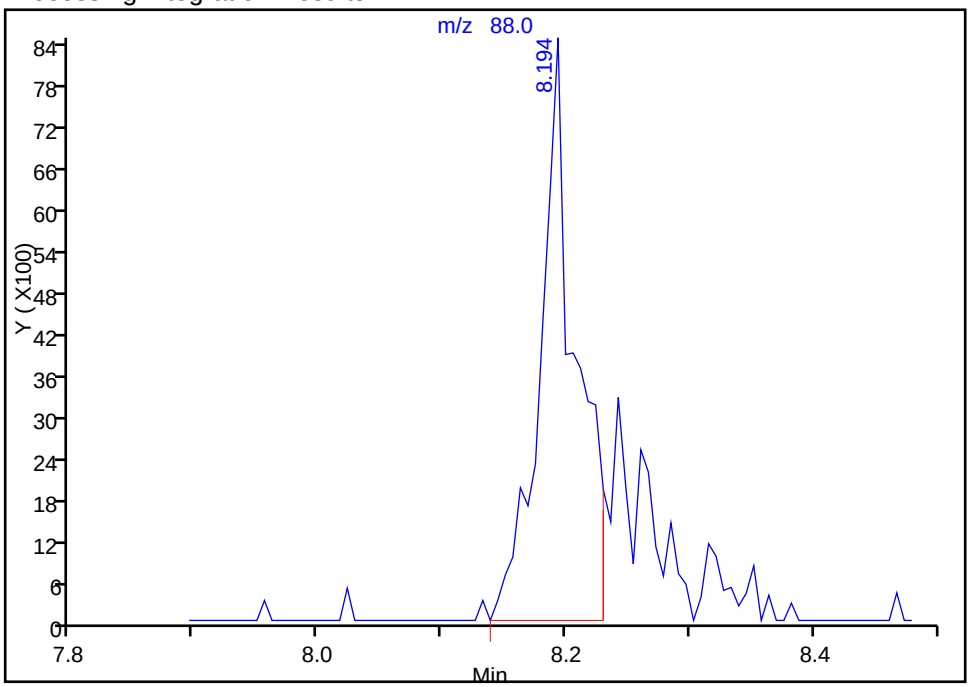
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040312.D				
Injection Date:	03-Apr-2015 14:44:30	Instrument ID:	CHHP7		
Lims ID:	lcs				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

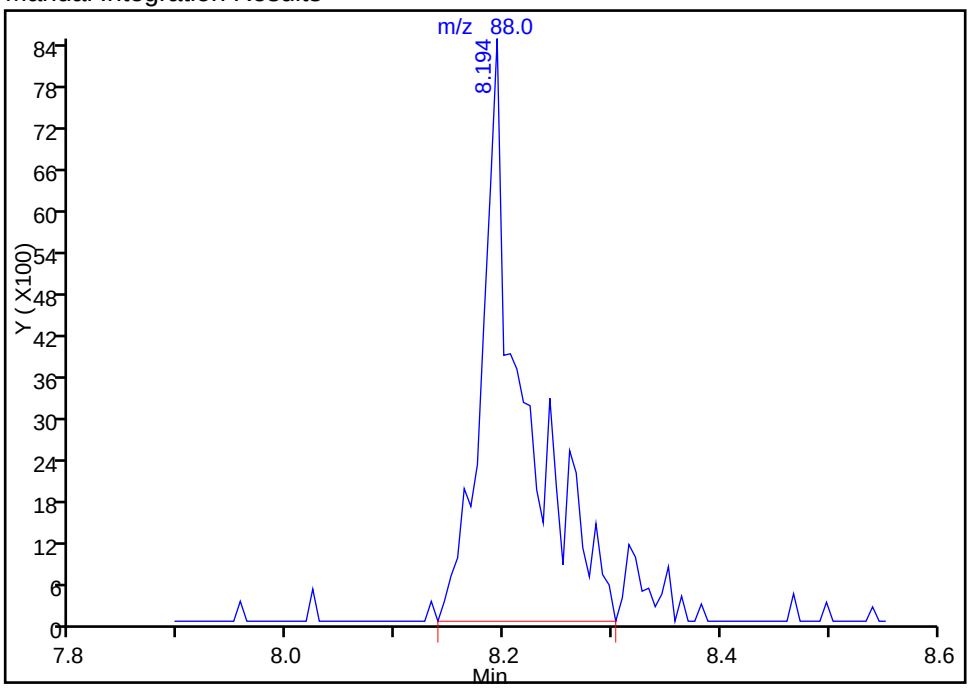
Processing Integration Results

RT: 8.19
Area: 16904
Amount: 2493.9579
Amount Units: ng



Manual Integration Results

RT: 8.19
Area: 22860
Amount: 3372.6856
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 15:42:27
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-137512/8

Matrix: Water | Lab File ID: 7040408.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 04/04/2015 16:44

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.: 137512 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	7.81		1.0	0.28
75-01-4	Vinyl chloride	8.15		1.0	0.23
74-83-9	Bromomethane	11.9		1.0	0.31
75-00-3	Chloroethane	9.96		1.0	0.21
75-35-4	1,1-Dichloroethene	10.4		1.0	0.30
67-64-1	Acetone	32.8		5.0	2.5
75-15-0	Carbon disulfide	11.1		1.0	0.21
75-09-2	Methylene Chloride	11.3		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.54		1.0	0.17
1634-04-4	Methyl tert-butyl ether	11.7		1.0	0.18
75-34-3	1,1-Dichloroethane	10.3		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10.2		1.0	0.24
74-97-5	Bromochloromethane	10.4		1.0	0.18
78-93-3	2-Butanone (MEK)	21.7		5.0	0.55
67-66-3	Chloroform	10.4		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.2		1.0	0.29
56-23-5	Carbon tetrachloride	9.88		1.0	0.14
71-43-2	Benzene	10.1		1.0	0.11
107-06-2	1,2-Dichloroethane	9.76		1.0	0.21
79-01-6	Trichloroethene	8.78		1.0	0.14
78-87-5	1,2-Dichloropropane	9.51		1.0	0.095
75-27-4	Bromodichloromethane	9.88		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.20		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	19.2		5.0	0.53
108-88-3	Toluene	8.87		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	8.58		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.68		1.0	0.20
127-18-4	Tetrachloroethene	7.43		1.0	0.15
591-78-6	2-Hexanone	24.3		5.0	0.16
124-48-1	Dibromochloromethane	9.69		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	10.0		1.0	0.18
108-90-7	Chlorobenzene	9.61		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.47		1.0	0.28
100-41-4	Ethylbenzene	8.13		1.0	0.23
1330-20-7	Xylenes, Total	16.7		3.0	0.49
100-42-5	Styrene	9.95		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137512/8

Matrix: Water Lab File ID: 7040408.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/04/2015 16:44

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.: 137512 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.2		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	11.1		1.0	0.20
107-13-1	Acrylonitrile	101		20	0.55
123-91-1	1,4-Dioxane	197	J	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)	103		71-118
460-00-4	4-Bromofluorobenzene (Surr)	104		70-118
1868-53-7	Dibromofluoromethane (Surr)	101		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040408.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 04-Apr-2015 16:44:30 ALS Bottle#: 3 Worklist Smp#: 8
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 180-0006327-008
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 09:16:00 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 06-Apr-2015 08:47:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.741	4.765	-0.024	93	256027	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.405	7.399	0.006	98	774174	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.465	10.471	-0.006	84	231825	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.783	12.789	-0.006	94	311866	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.675	6.675	0.000	74	249623	200.0	202.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.046	7.040	0.006	96	226125	200.0	192.1	
$ 7 Toluene-d8 (Surr)	98	9.036	9.036	0.000	93	709786	200.0	206.4	
$ 8 4-Bromofluorobenzene (Surr	95	11.633	11.633	0.000	89	319985	200.0	208.6	
11 Dichlorodifluoromethane	85	2.009	1.912	0.097	65	172965	200.0	120.5	
12 Chloromethane	50	2.027	2.028	-0.001	94	244097	200.0	156.1	
14 Butadiene	39	2.180	2.186	-0.006	86	195878	200.0	152.4	
13 Vinyl chloride	62	2.198	2.192	0.006	78	198428	200.0	163.0	
15 Bromomethane	94	2.514	2.502	0.012	88	233210	200.0	237.7	
16 Chloroethane	64	2.618	2.605	0.013	90	195565	200.0	199.1	
18 Trichlorofluoromethane	101	2.897	2.879	0.018	73	502388	200.0	182.7	
17 Dichlorofluoromethane	67	2.879	2.879	0.000	93	527526	200.0	201.9	
20 Ethyl ether	59	3.311	3.311	0.000	26	52157	200.0	59.8	
21 Acrolein	56	3.500	3.481	0.019	25	10277	600.0	170.7	M
22 1,1-Dichloroethene	96	3.554	3.518	0.036	91	216685	200.0	208.5	
23 1,1,2-Trichloro-1,2,2-trif	101	3.688	3.634	0.054	36	223380	200.0	184.8	M
25 Iodomethane	142	3.786	3.761	0.025	97	511498	200.0	235.3	
26 Carbon disulfide	76	3.840	3.828	0.012	100	693727	200.0	222.2	M
24 Acetone	43	3.792	3.834	-0.042	34	150757	400.0	655.5	
28 3-Chloro-1-propene	76	4.157	4.126	0.031	83	179142	200.0	233.7	
30 Methyl acetate	43	4.303	4.297	0.006	98	528118	1000.0	1023.9	
31 Methylene Chloride	84	4.394	4.364	0.030	93	252812	200.0	226.6	
34 trans-1,2-Dichloroethene	96	4.783	4.753	0.030	93	246120	200.0	190.8	
33 Acrylonitrile	53	4.814	4.802	0.012	95	418224	2000.0	2027.0	M
35 Methyl tert-butyl ether	73	4.868	4.856	0.012	98	595530	200.0	234.3	
32 2-Methyl-2-propanol	59	4.820	4.875	-0.055	56	137215	2000.0	16888	E
38 Vinyl acetate	43	5.148	5.148	0.000	66	94557	200.0	93.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.173	5.160	0.013	91	141533	200.0	104.9	
37 1,1-Dichloroethane	63	5.355	5.355	0.000	97	390900	200.0	206.8	
44 2,2-Dichloropropane	77	6.097	6.091	0.006	80	360160	200.0	228.1	
45 cis-1,2-Dichloroethene	96	6.109	6.103	0.006	80	260115	200.0	203.2	
46 2-Butanone (MEK)	43	6.182	6.189	-0.007	99	150651	400.0	434.1	
49 Chlorobromomethane	128	6.389	6.377	0.012	81	153304	200.0	208.0	
52 Chloroform	83	6.499	6.499	0.000	94	441124	200.0	207.2	
53 1,1,1-Trichloroethane	97	6.681	6.681	0.000	96	392645	200.0	203.1	
51 Tetrahydrofuran	42	6.736	6.730	0.006	47	68102	400.0	358.7	
54 Cyclohexane	56	6.736	6.730	0.006	89	233895	200.0	171.5	
56 Carbon tetrachloride	117	6.870	6.858	0.012	96	385419	200.0	197.7	
55 1,1-Dichloropropene	75	6.864	6.864	0.000	82	236409	200.0	169.4	
58 Benzene	78	7.095	7.089	0.006	96	769766	200.0	202.0	
59 1,2-Dichloroethane	62	7.132	7.132	0.000	97	251097	200.0	195.1	
57 Isobutyl alcohol	41	7.405	7.399	0.006	40	76651	5000.0	2466.2	
62 n-Heptane	43	7.411	7.405	0.006	48	104000	200.0	88.1	
64 Trichloroethene	130	7.789	7.795	-0.006	92	268212	200.0	175.6	
66 Methylcyclohexane	83	7.995	7.989	0.006	86	261772	200.0	139.4	
67 1,2-Dichloropropane	63	8.026	8.032	-0.006	91	164995	200.0	190.1	
68 Dibromomethane	93	8.154	8.147	0.007	92	123453	200.0	191.0	
70 1,4-Dioxane	88	8.178	8.184	-0.006	94	23849	4000.0	3931.3	
71 Dichlorobromomethane	83	8.318	8.312	0.006	98	318123	200.0	197.7	
74 cis-1,3-Dichloropropene	75	8.774	8.774	0.000	93	307098	200.0	184.0	
75 4-Methyl-2-pentanone (MIBK	43	8.938	8.938	0.000	95	259922	400.0	383.7	
76 Toluene	91	9.096	9.103	-0.007	98	751856	200.0	177.5	
77 trans-1,3-Dichloropropene	75	9.328	9.322	0.006	94	250029	200.0	171.6	
78 Ethyl methacrylate	69	9.419	9.425	-0.006	88	181441	200.0	187.2	
79 1,1,2-Trichloroethane	97	9.510	9.504	0.006	90	161095	200.0	193.6	
80 Tetrachloroethene	164	9.650	9.644	0.006	93	170334	200.0	148.6	
81 1,3-Dichloropropane	76	9.674	9.668	0.006	90	238898	200.0	194.2	
82 2-Hexanone	43	9.760	9.760	0.000	97	211972	400.0	485.1	
84 Chlorodibromomethane	129	9.899	9.900	-0.001	88	277104	200.0	193.7	
85 Ethylene Dibromide	107	10.015	10.009	0.006	97	188679	200.0	200.2	
87 Chlorobenzene	112	10.496	10.496	0.000	95	568094	200.0	192.2	
89 1,1,1,2-Tetrachloroethane	131	10.575	10.575	0.000	92	270548	200.0	189.4	
90 Ethylbenzene	106	10.605	10.605	0.000	98	273139	200.0	162.7	
91 m-Xylene & p-Xylene	106	10.721	10.721	0.000	98	370258	200.0	163.6	
92 o-Xylene	106	11.110	11.116	-0.006	95	388015	200.0	170.7	
93 Styrene	104	11.128	11.128	0.000	93	625330	200.0	198.9	
94 Bromoform	173	11.317	11.317	0.000	93	165922	200.0	204.7	
97 Isopropylbenzene	105	11.481	11.481	0.000	95	940697	200.0	163.2	
99 1,1,2,2-Tetrachloroethane	83	11.773	11.773	0.000	97	193696	200.0	221.8	
100 Bromobenzene	156	11.791	11.785	0.006	88	287174	200.0	214.9	
101 1,2,3-Trichloropropane	110	11.822	11.822	0.000	85	64929	200.0	217.0	
102 trans-1,4-Dichloro-2-buten	53	11.828	11.828	0.000	69	33221	200.0	177.2	
103 N-Propylbenzene	120	11.889	11.889	0.000	97	284274	200.0	173.3	
104 2-Chlorotoluene	126	11.980	11.980	0.000	96	295767	200.0	198.6	
106 1,3,5-Trimethylbenzene	105	12.059	12.065	-0.006	96	753285	200.0	188.3	
107 4-Chlorotoluene	126	12.083	12.090	-0.007	95	281860	200.0	197.5	
108 tert-Butylbenzene	119	12.388	12.388	0.000	91	702356	200.0	149.3	
110 1,2,4-Trimethylbenzene	105	12.436	12.436	0.000	96	795960	200.0	191.5	
112 sec-Butylbenzene	105	12.607	12.607	0.000	94	871917	200.0	157.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.722	12.722	0.000	98	502848	200.0	188.3	
114 4-Isopropyltoluene	119	12.753	12.753	0.000	95	775957	200.0	154.6	
115 1,4-Dichlorobenzene	146	12.813	12.814	-0.001	94	490765	200.0	198.4	
120 n-Butylbenzene	91	13.160	13.160	0.000	96	604141	200.0	142.5	
121 1,2-Dichlorobenzene	146	13.191	13.185	0.006	98	437388	200.0	180.5	
122 1,2-Dibromo-3-Chloropropan	75	13.975	13.969	0.006	88	23725	200.0	194.8	
126 1,2,4-Trichlorobenzene	180	14.803	14.803	0.000	94	125187	200.0	162.9	
127 Hexachlorobutadiene	225	14.973	14.973	0.000	83	48440	200.0	105.2	
128 Naphthalene	128	15.052	15.058	-0.006	96	296668	200.0	235.7	
129 1,2,3-Trichlorobenzene	180	15.308	15.308	0.000	94	83917	200.0	159.6	
S 133 Xylenes, Total	106				0		400.0	334.2	
S 134 1,2-Dichloroethene, Total	96				0		400.0	394.1	
S 135 1,3-Dichloropropene, Total	1				0		400.0	355.5	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added:	24.00	Units: uL	
VOA8260VOAPRI_00108	Amount Added:	8.00	Units: uL	
VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	8.00	Units: uL	
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

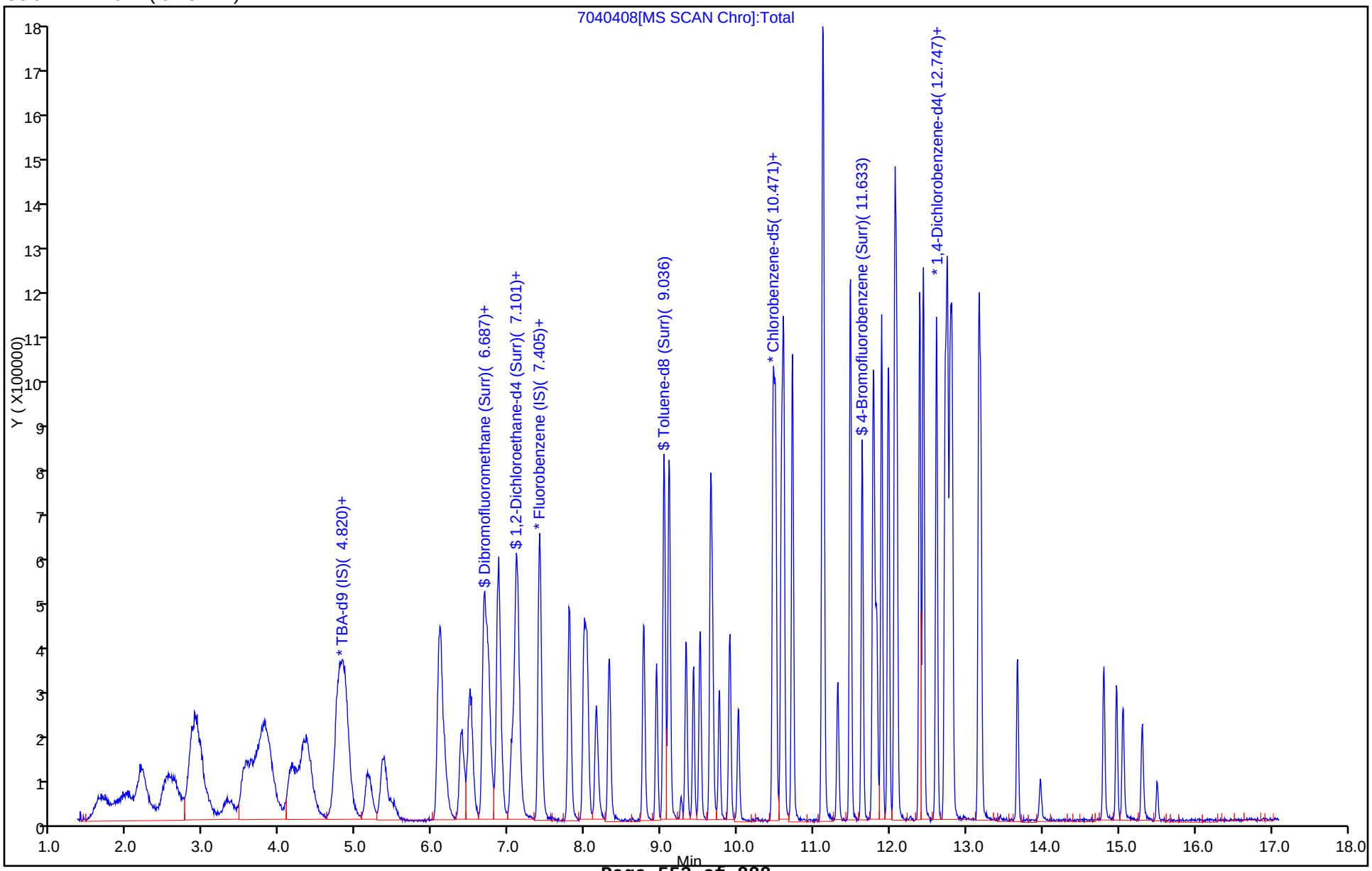
Report Date: 06-Apr-2015 09:16:04 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040408.D

Injection Date:	04-Apr-2015 16:44:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	lcs			Worklist Smp#:	8
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

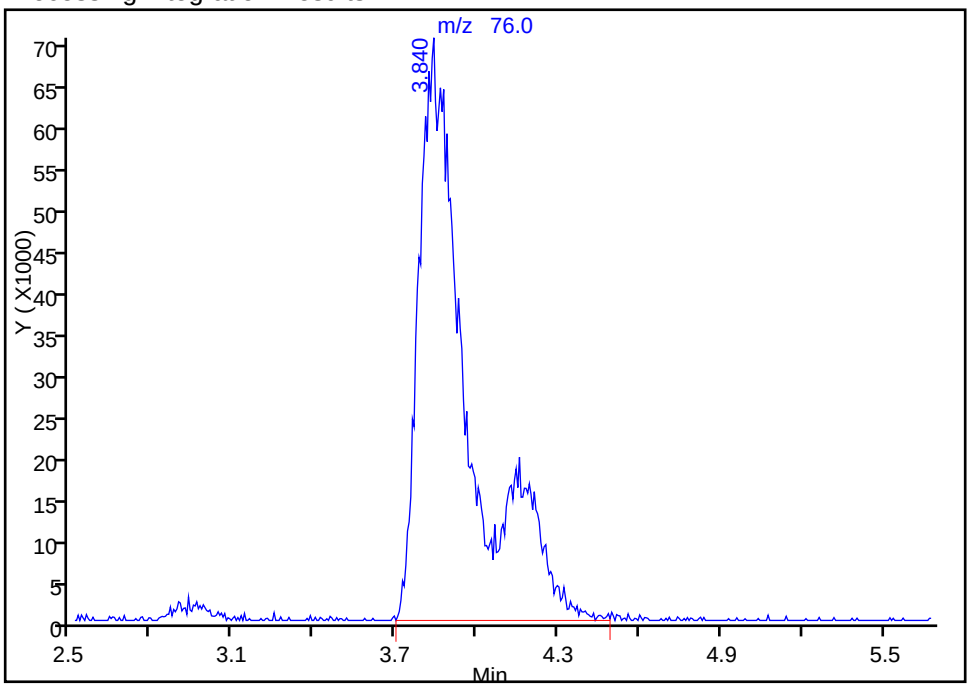
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040408.D				
Injection Date:	04-Apr-2015 16:44:30	Instrument ID:	CHHP7		
Lims ID:	lcs				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

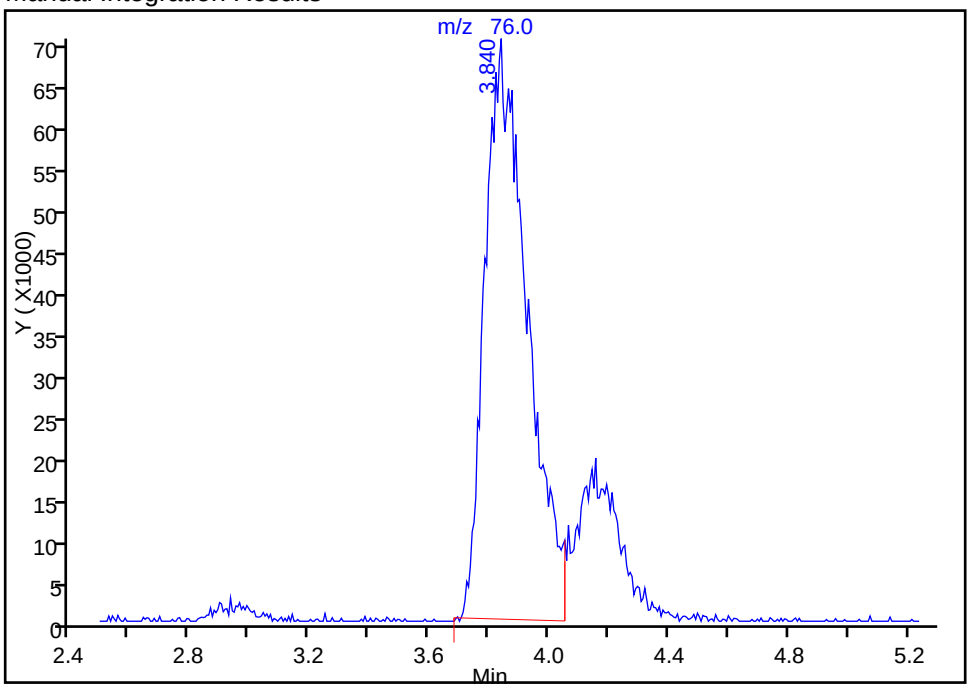
Processing Integration Results

RT: 3.84
Area: 886030
Amount: 283.8020
Amount Units: ng



Manual Integration Results

RT: 3.84
Area: 693727
Amount: 222.2059
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 08:47:57
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

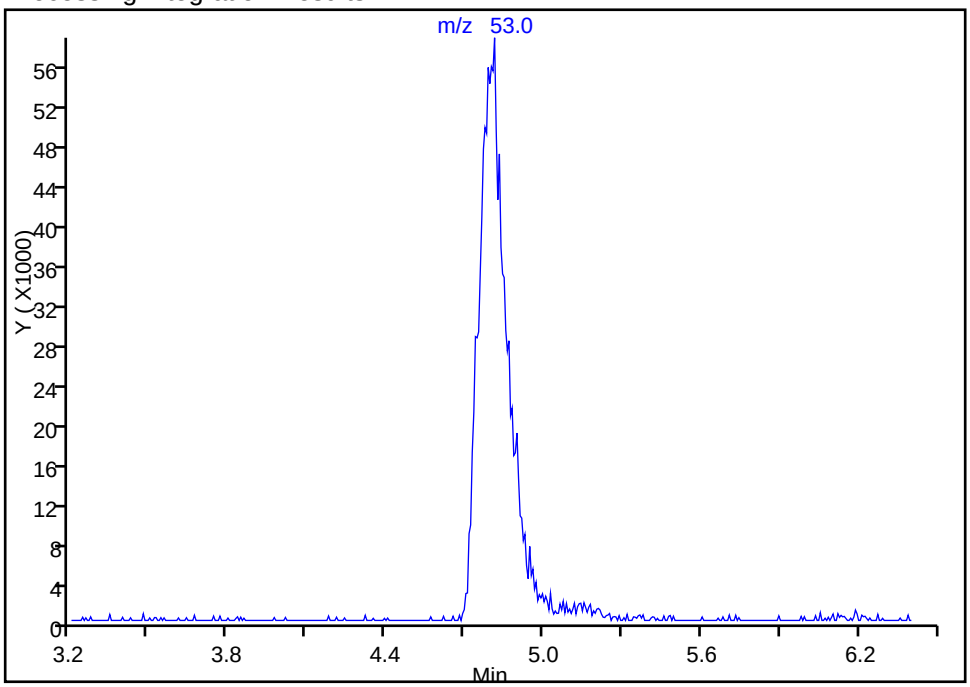
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040408.D				
Injection Date:	04-Apr-2015 16:44:30	Instrument ID:	CHHP7		
Lims ID:	lcs				
Client ID:					
Operator ID:	034635	ALS Bottle#:	3	Worklist Smp#:	8
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

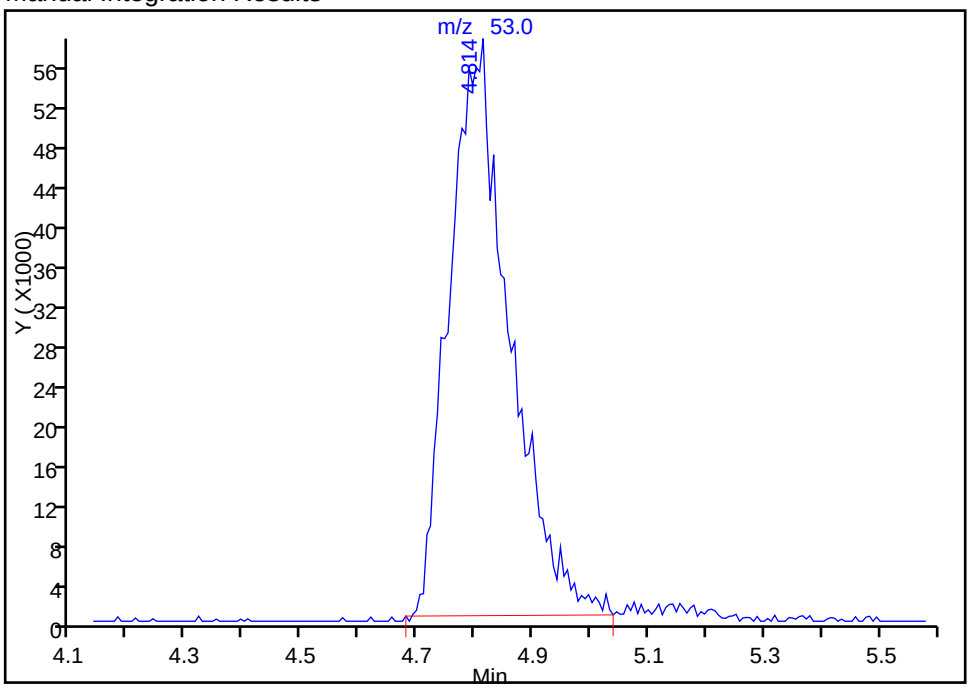
Not Detected
Expected RT: 4.80

Processing Integration Results



Manual Integration Results

RT: 4.81
Area: 418224
Amount: 2026.9705
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 08:47:57
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137564/13

Matrix: Water Lab File ID: 7040613.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 14:45

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.: 137564 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.50		1.0	0.28
75-01-4	Vinyl chloride	7.89		1.0	0.23
74-83-9	Bromomethane	11.6		1.0	0.31
75-00-3	Chloroethane	9.76		1.0	0.21
75-35-4	1,1-Dichloroethene	10.4		1.0	0.30
67-64-1	Acetone	5.10		5.0	2.5
75-15-0	Carbon disulfide	9.55		1.0	0.21
75-09-2	Methylene Chloride	9.25		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.30		1.0	0.17
1634-04-4	Methyl tert-butyl ether	10.2		1.0	0.18
75-34-3	1,1-Dichloroethane	9.48		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.68		1.0	0.24
74-97-5	Bromochloromethane	9.14		1.0	0.18
78-93-3	2-Butanone (MEK)	6.55		5.0	0.55
67-66-3	Chloroform	9.32		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.82		1.0	0.29
56-23-5	Carbon tetrachloride	10.1		1.0	0.14
71-43-2	Benzene	8.92		1.0	0.11
107-06-2	1,2-Dichloroethane	8.87		1.0	0.21
79-01-6	Trichloroethene	8.88		1.0	0.14
78-87-5	1,2-Dichloropropane	8.87		1.0	0.095
75-27-4	Bromodichloromethane	9.32		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	8.93		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	8.82		5.0	0.53
108-88-3	Toluene	9.32		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.63		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.08		1.0	0.20
127-18-4	Tetrachloroethene	8.12		1.0	0.15
591-78-6	2-Hexanone	8.49		5.0	0.16
124-48-1	Dibromochloromethane	9.40		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	8.99		1.0	0.18
108-90-7	Chlorobenzene	9.63		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.12		1.0	0.28
100-41-4	Ethylbenzene	8.70		1.0	0.23
1330-20-7	Xylenes, Total	16.8		3.0	0.49
100-42-5	Styrene	9.66		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137564/13

Matrix: Water Lab File ID: 7040613.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 14:45

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.: 137564 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.32		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	9.80		1.0	0.20
107-13-1	Acrylonitrile	47.5		20	0.55
123-91-1	1,4-Dioxane	85.3	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		64-135
2037-26-5	Toluene-d8 (Surr)	107		71-118
460-00-4	4-Bromofluorobenzene (Surr)	95		70-118
1868-53-7	Dibromofluoromethane (Surr)	97		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040613.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 06-Apr-2015 14:45:30 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 180-0006335-013
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Apr-2015 09:28:15 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: journetp Date: 07-Apr-2015 10:25:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.677	4.932	-0.255	64	133113	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.402	7.396	0.006	96	879353	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.468	10.468	0.000	83	253552	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.786	12.792	-0.006	94	344449	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.672	6.672	0.000	89	273149	200.0	194.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.049	7.037	0.012	74	235724	200.0	176.3	
$ 7 Toluene-d8 (Surr)	98	9.039	9.032	0.007	92	801103	200.0	213.0	
$ 8 4-Bromofluorobenzene (Surr	95	11.630	11.636	-0.006	91	321201	200.0	190.3	
11 Dichlorodifluoromethane	85	1.970	1.896	0.074	77	255060	200.0	156.5	
12 Chloromethane	50	2.043	2.012	0.031	77	302038	200.0	170.1	
13 Vinyl chloride	62	2.201	2.201	0.000	68	218070	200.0	157.7	
14 Butadiene	39	2.201	2.201	0.000	94	247656	200.0	169.6	
15 Bromomethane	94	2.535	2.487	0.048	82	257406	200.0	231.0	
16 Chloroethane	64	2.645	2.602	0.043	47	217803	200.0	195.2	
17 Dichlorofluoromethane	67	2.900	2.870	0.030	93	509840	200.0	171.8	
18 Trichlorofluoromethane	101	2.900	2.876	0.024	77	619297	200.0	198.3	
20 Ethyl ether	59	3.351	3.296	0.055	79	120942	200.0	122.1	
21 Acrolein	56	3.551	3.509	0.042	54	14232	600.0	208.1	
22 1,1-Dichloroethene	96	3.588	3.521	0.067	88	244710	200.0	207.3	
23 1,1,2-Trichloro-1,2,2-trif	101	3.734	3.600	0.134	79	281185	200.0	204.8	
25 Iodomethane	142	3.795	3.709	0.086	99	498899	200.0	202.0	
26 Carbon disulfide	76	3.886	3.782	0.104	99	677268	200.0	191.0	M
24 Acetone	43	3.776	3.843	-0.067	14	41424	200.0	101.9	M
28 3-Chloro-1-propene	76	4.184	4.099	0.085	65	180534	200.0	207.3	M
30 Methyl acetate	43	4.306	4.312	-0.006	95	503188	1000.0	858.9	
31 Methylene Chloride	84	4.397	4.318	0.079	84	234313	200.0	184.9	
34 trans-1,2-Dichloroethene	96	4.780	4.731	0.049	96	272338	200.0	185.9	
33 Acrylonitrile	53	4.805	4.810	-0.005	91	222583	2000.0	949.7	
35 Methyl tert-butyl ether	73	4.841	4.877	-0.036	92	591737	200.0	205.0	M
32 2-Methyl-2-propanol	59	4.805	4.938	-0.133	34	93102	2000.0	20178	EM
38 Vinyl acetate	43	5.182	5.121	0.061	66	175433	200.0	151.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.182	5.121	0.061	94	264222	200.0	172.5	
37 1,1-Dichloroethane	63	5.370	5.340	0.030	96	407140	200.0	189.6	
45 cis-1,2-Dichloroethene	96	6.106	6.082	0.024	87	281510	200.0	193.6	
44 2,2-Dichloropropane	77	6.100	6.082	0.018	81	366528	200.0	204.3	
46 2-Butanone (MEK)	43	6.173	6.191	-0.018	44	51638	200.0	131.0	
49 Chlorobromomethane	128	6.398	6.374	0.024	80	153090	200.0	182.8	
52 Chloroform	83	6.502	6.496	0.006	95	450808	200.0	186.5	
53 1,1,1-Trichloroethane	97	6.684	6.672	0.012	96	431373	200.0	196.5	
54 Cyclohexane	56	6.745	6.715	0.030	89	284130	200.0	183.4	M
51 Tetrahydrofuran	42	6.745	6.733	0.012	53	84610	400.0	392.4	
56 Carbon tetrachloride	117	6.873	6.848	0.025	95	446701	200.0	201.7	
55 1,1-Dichloropropene	75	6.867	6.855	0.013	86	303898	200.0	191.7	
58 Benzene	78	7.104	7.086	0.018	96	771880	200.0	178.4	
59 1,2-Dichloroethane	62	7.135	7.122	0.012	96	259357	200.0	177.4	
57 Isobutyl alcohol	41	7.414	7.390	0.024	51	168153	5000.0	4763.1	
62 n-Heptane	43	7.408	7.396	0.012	59	231842	200.0	172.8	
64 Trichloroethene	130	7.798	7.785	0.013	93	308167	200.0	177.6	
66 Methylcyclohexane	83	7.992	7.980	0.012	87	383124	200.0	179.6	
67 1,2-Dichloropropane	63	8.029	8.029	0.000	76	174830	200.0	177.4	
68 Dibromomethane	93	8.157	8.144	0.013	94	132599	200.0	180.6	
70 1,4-Dioxane	88	8.181	8.187	-0.006	27	11757	4000.0	1706.2	
71 Dichlorobromomethane	83	8.321	8.308	0.013	97	340867	200.0	186.5	
74 cis-1,3-Dichloropropene	75	8.771	8.771	0.000	92	338752	200.0	178.7	
75 4-Methyl-2-pentanone (MIBK	43	8.935	8.941	-0.006	95	130674	200.0	176.4	
76 Toluene	91	9.106	9.099	0.007	99	856462	200.0	186.4	
77 trans-1,3-Dichloropropene	75	9.331	9.324	0.007	95	306876	200.0	192.5	
78 Ethyl methacrylate	69	9.422	9.422	0.000	88	194753	200.0	183.7	
79 1,1,2-Trichloroethane	97	9.507	9.507	0.000	92	165312	200.0	181.7	
80 Tetrachloroethene	164	9.653	9.647	0.006	93	200538	200.0	162.4	
81 1,3-Dichloropropane	76	9.677	9.671	0.006	92	243878	200.0	181.3	
82 2-Hexanone	43	9.763	9.762	0.001	97	81122	200.0	169.8	
84 Chlorodibromomethane	129	9.896	9.896	0.000	89	294231	200.0	188.1	
85 Ethylene Dibromide	107	10.012	10.006	0.006	99	185396	200.0	179.8	
87 Chlorobenzene	112	10.499	10.498	0.001	95	622251	200.0	192.5	
89 1,1,1,2-Tetrachloroethane	131	10.578	10.572	0.006	93	285005	200.0	182.4	
90 Ethylbenzene	106	10.608	10.602	0.006	98	319360	200.0	173.9	
91 m-Xylene & p-Xylene	106	10.718	10.717	0.001	98	422434	200.0	170.6	
92 o-Xylene	106	11.119	11.113	0.006	94	411020	200.0	165.3	
93 Styrene	104	11.131	11.125	0.006	92	667770	200.0	193.2	
94 Bromoform	173	11.314	11.320	-0.006	93	165170	200.0	186.3	
97 Isopropylbenzene	105	11.478	11.478	0.000	96	1156276	200.0	188.8	
99 1,1,2,2-Tetrachloroethane	83	11.776	11.770	0.006	96	187236	200.0	196.1	
100 Bromobenzene	156	11.782	11.782	0.000	87	309700	200.0	209.8	
101 1,2,3-Trichloropropane	110	11.819	11.819	0.000	86	61722	200.0	186.8	
102 trans-1,4-Dichloro-2-buten	53	11.831	11.831	0.000	83	34848	200.0	168.3	
103 N-Propylbenzene	120	11.892	11.892	0.000	97	372063	200.0	205.4	
104 2-Chlorotoluene	126	11.983	11.983	0.000	97	335330	200.0	203.9	
106 1,3,5-Trimethylbenzene	105	12.062	12.062	0.000	96	943998	200.0	220.2	
107 4-Chlorotoluene	126	12.093	12.086	0.007	95	319663	200.0	202.8	
108 tert-Butylbenzene	119	12.385	12.390	-0.005	91	986735	200.0	192.9	
110 1,2,4-Trimethylbenzene	105	12.439	12.439	0.000	96	931535	200.0	205.3	
112 sec-Butylbenzene	105	12.610	12.609	0.001	94	1261102	200.0	220.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.725	12.725	0.000	97	602521	200.0	205.2	
114 4-Isopropyltoluene	119	12.756	12.755	0.001	96	1116269	200.0	214.5	
115 1,4-Dichlorobenzene	146	12.816	12.810	0.006	94	546781	200.0	200.1	
120 n-Butylbenzene	91	13.163	13.163	0.000	96	942468	200.0	218.4	
121 1,2-Dichlorobenzene	146	13.188	13.187	0.001	98	479674	200.0	179.2	
122 1,2-Dibromo-3-Chloropropan	75	13.966	13.972	-0.006	78	21515	200.0	161.4	
126 1,2,4-Trichlorobenzene	180	14.800	14.806	-0.006	94	141178	200.0	166.3	
127 Hexachlorobutadiene	225	14.970	14.970	0.000	85	92125	200.0	181.1	
128 Naphthalene	128	15.055	15.055	0.000	97	251845	200.0	181.2	
129 1,2,3-Trichlorobenzene	180	15.305	15.311	-0.006	94	91840	200.0	158.1	
S 134 1,2-Dichloroethene, Total	96				0		400.0	379.6	
S 133 Xylenes, Total	106				0		400.0	335.9	
S 135 1,3-Dichloropropene, Total	1				0		400.0	371.2	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00108	Amount Added:	8.00	Units: uL	
VOAACRPRI_00005	Amount Added:	24.00	Units: uL	
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

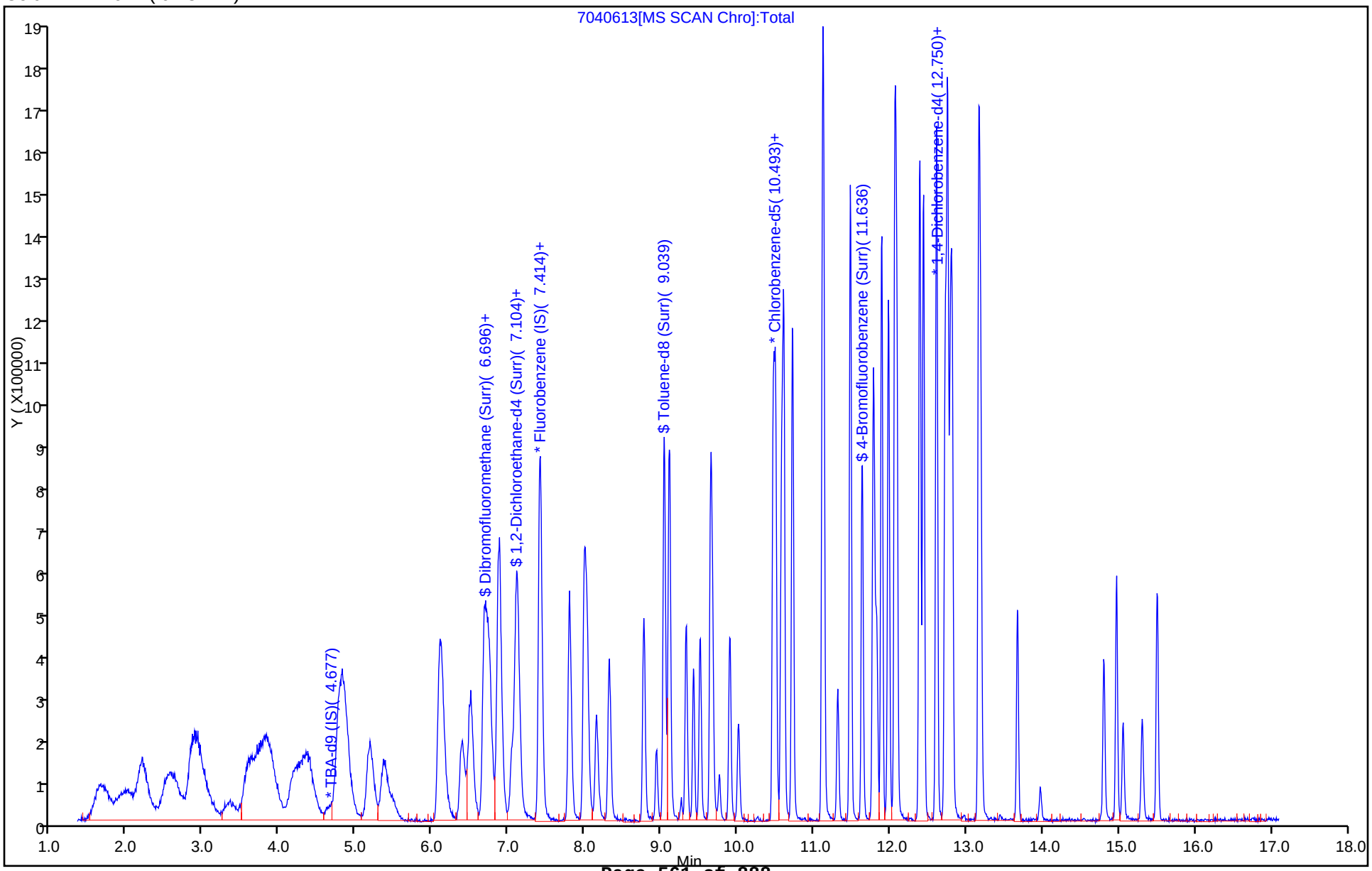
Report Date: 07-Apr-2015 10:25:53 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040613.D

Injection Date:	06-Apr-2015 14:45:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	lcs			Worklist Smp#:	13
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

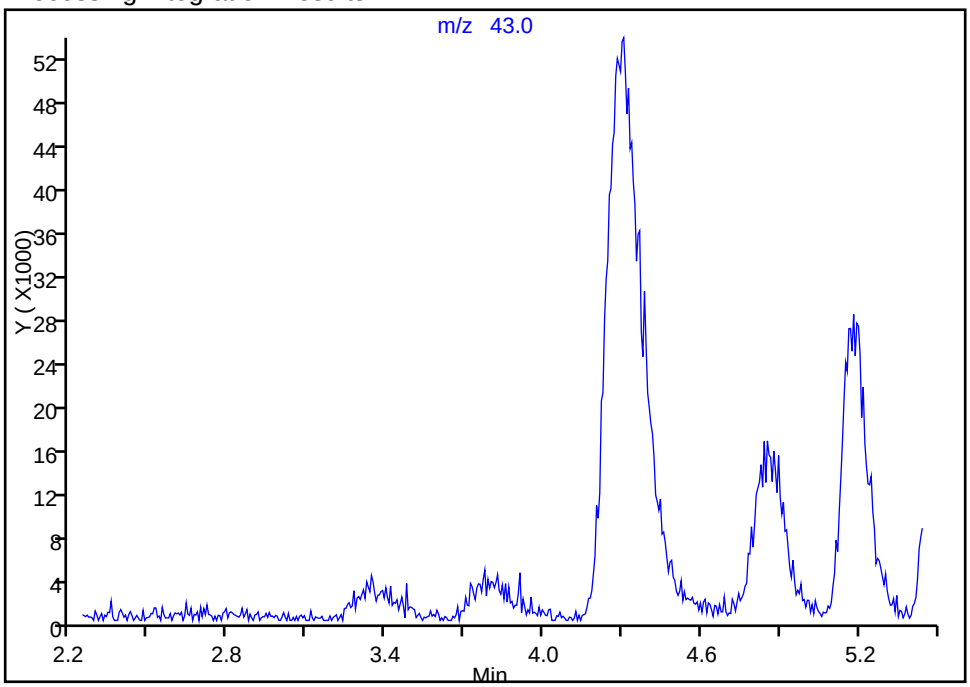
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040613.D				
Injection Date:	06-Apr-2015 14:45:30	Instrument ID:	CHHP7		
Lims ID:	lcs				
Client ID:					
Operator ID:	034635	ALS Bottle#:	14	Worklist Smp#:	13
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

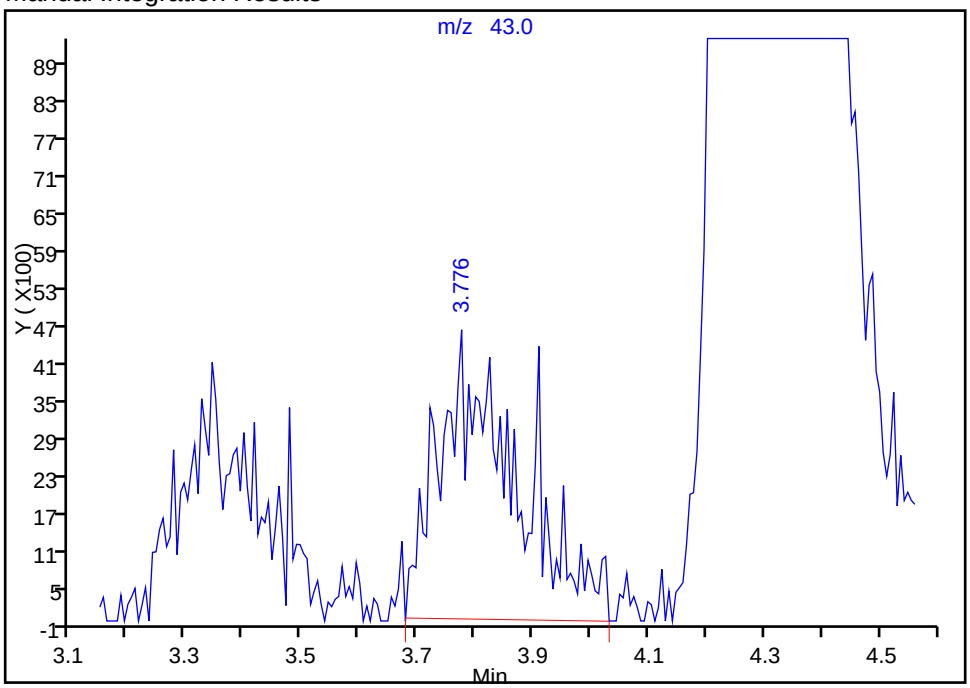
Not Detected
Expected RT: 3.84

Processing Integration Results



Manual Integration Results

RT: 3.78
Area: 41424
Amount: 101.9229
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 15:21:26
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

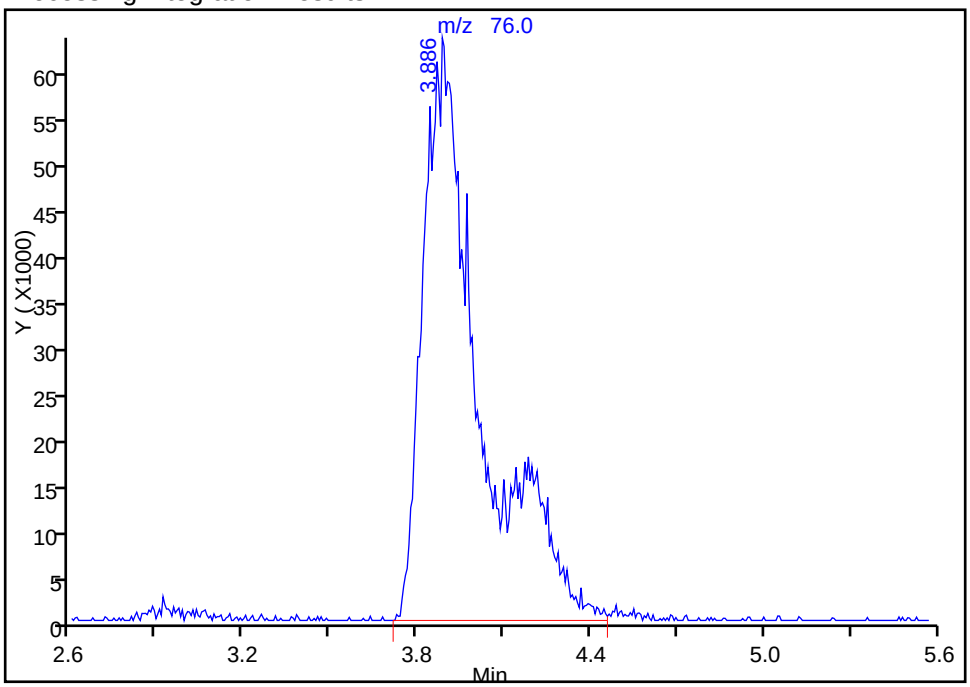
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040613.D				
Injection Date:	06-Apr-2015 14:45:30	Instrument ID:	CHHP7		
Lims ID:	lcs				
Client ID:					
Operator ID:	034635	ALS Bottle#:	14	Worklist Smp#:	13
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

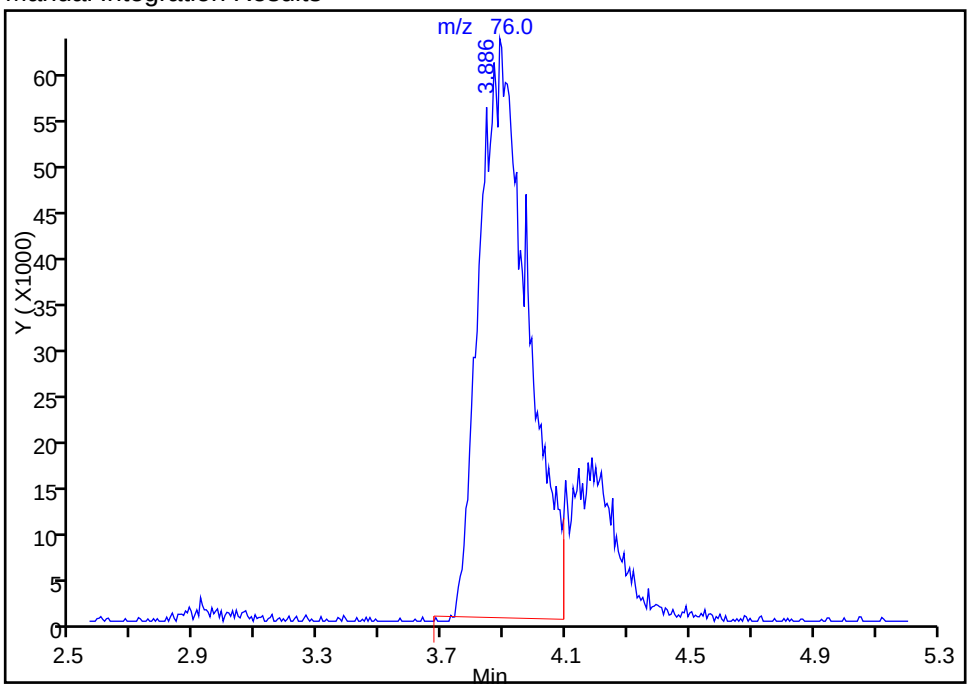
Processing Integration Results

RT: 3.89
Area: 861470
Amount: 242.9307
Amount Units: ng



Manual Integration Results

RT: 3.89
Area: 677268
Amount: 190.9866
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 15:21:26
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

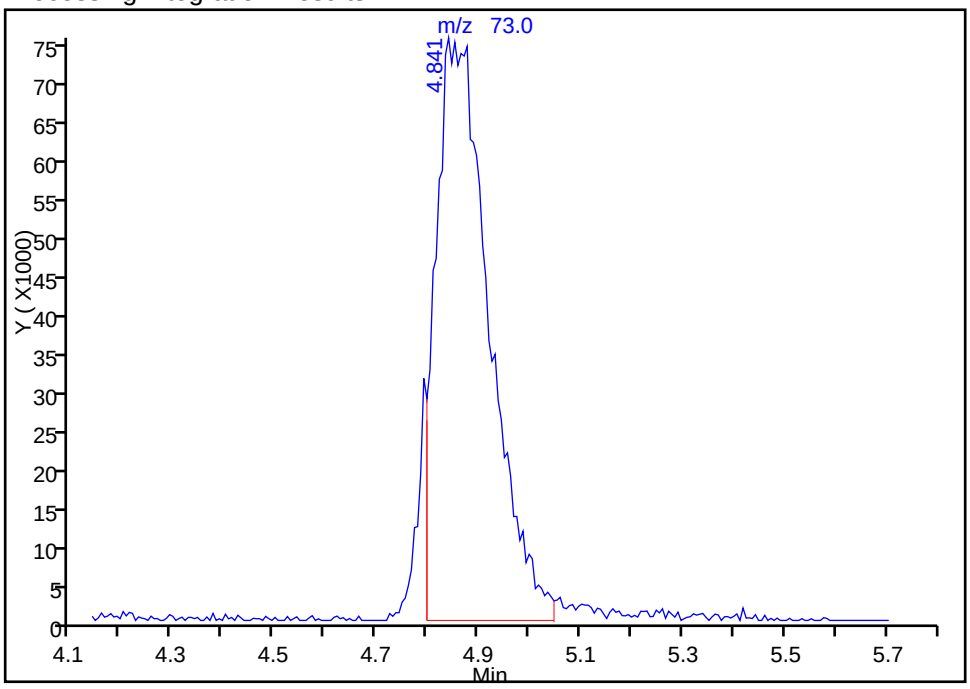
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040613.D				
Injection Date:	06-Apr-2015 14:45:30	Instrument ID:	CHHP7		
Lims ID:	lcs				
Client ID:					
Operator ID:	034635	ALS Bottle#:	14	Worklist Smp#:	13
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

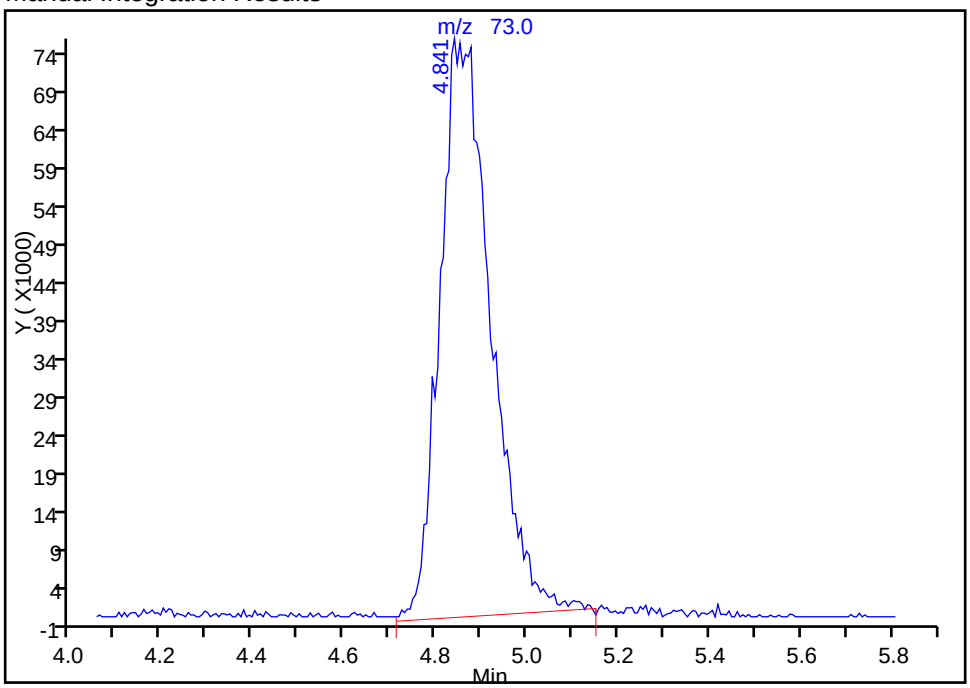
Processing Integration Results

RT: 4.84
Area: 553328
Amount: 191.6667
Amount Units: ng



Manual Integration Results

RT: 4.84
Area: 591737
Amount: 204.9712
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 15:21:26
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137846/10

Matrix: Water Lab File ID: 7040810.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/08/2015 12:58

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.: 137846 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.72		1.0	0.28
75-01-4	Vinyl chloride	9.48		1.0	0.23
74-83-9	Bromomethane	12.7		1.0	0.31
75-00-3	Chloroethane	10.9		1.0	0.21
75-35-4	1,1-Dichloroethene	9.60		1.0	0.30
67-64-1	Acetone	16.5		5.0	2.5
75-15-0	Carbon disulfide	9.26		1.0	0.21
75-09-2	Methylene Chloride	9.69		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.68		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.39		1.0	0.18
75-34-3	1,1-Dichloroethane	10.4		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.24
74-97-5	Bromochloromethane	9.74		1.0	0.18
78-93-3	2-Butanone (MEK)	16.6		5.0	0.55
67-66-3	Chloroform	10.7		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.8		1.0	0.29
56-23-5	Carbon tetrachloride	10.5		1.0	0.14
71-43-2	Benzene	9.59		1.0	0.11
107-06-2	1,2-Dichloroethane	8.88		1.0	0.21
79-01-6	Trichloroethene	9.93		1.0	0.14
78-87-5	1,2-Dichloropropane	9.09		1.0	0.095
75-27-4	Bromodichloromethane	10.4		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.46		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	18.4		5.0	0.53
108-88-3	Toluene	9.72		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.70		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.96		1.0	0.20
127-18-4	Tetrachloroethene	10.3		1.0	0.15
591-78-6	2-Hexanone	17.6		5.0	0.16
124-48-1	Dibromochloromethane	10.1		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.46		1.0	0.18
108-90-7	Chlorobenzene	9.98		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	10.3		1.0	0.28
100-41-4	Ethylbenzene	9.10		1.0	0.23
1330-20-7	Xylenes, Total	18.6		3.0	0.49
100-42-5	Styrene	9.90		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-137846/10

Matrix: Water Lab File ID: 7040810.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/08/2015 12:58

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.: 137846 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	10.2		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.4		1.0	0.20
107-13-1	Acrylonitrile	83.3		20	0.55
123-91-1	1,4-Dioxane	136	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)	108		71-118
460-00-4	4-Bromofluorobenzene (Surr)	108		70-118
1868-53-7	Dibromofluoromethane (Surr)	110		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040810.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 08-Apr-2015 12:58:30 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 180-0006372-010
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Apr-2015 14:55:26 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: journetp Date: 08-Apr-2015 14:28:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.768	4.861	-0.093	55	221512	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.402	7.397	0.005	96	881245	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.468	10.470	-0.002	83	260359	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.792	12.787	0.005	93	362140	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.678	6.674	0.004	75	309784	200.0	220.4	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.037	7.032	0.005	95	259855	200.0	193.9	
$ 7 Toluene-d8 (Surr)	98	9.032	9.034	-0.002	92	837225	200.0	216.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.630	11.632	-0.002	91	371260	200.0	216.0	
11 Dichlorodifluoromethane	85	1.927	1.941	-0.014	93	341666	200.0	209.2	
12 Chloromethane	50	2.067	2.062	0.005	87	345809	200.0	194.3	
14 Butadiene	39	2.213	2.190	0.023	95	257611	200.0	176.0	
13 Vinyl chloride	62	2.219	2.227	-0.007	95	262799	200.0	189.6	
15 Bromomethane	94	2.535	2.537	-0.002	84	283444	200.0	253.8	
16 Chloroethane	64	2.608	2.610	-0.002	50	242616	200.0	217.0	
17 Dichlorofluoromethane	67	2.900	2.890	0.010	92	666287	200.0	224.0	
18 Trichlorofluoromethane	101	2.882	2.908	-0.026	76	729687	200.0	233.2	
20 Ethyl ether	59	3.283	3.291	-0.008	79	143497	200.0	144.5	
21 Acrolein	56	3.588	3.534	0.054	26	33582	600.0	489.9	
22 1,1-Dichloroethene	96	3.521	3.541	-0.020	90	227270	200.0	192.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.642	3.650	-0.008	75	281023	200.0	204.3	
25 Iodomethane	142	3.752	3.711	0.041	98	489018	200.0	197.6	
26 Carbon disulfide	76	3.825	3.796	0.029	100	658277	200.0	185.2	
24 Acetone	43	3.800	3.863	-0.063	28	95267	400.0	330.6	
28 3-Chloro-1-propene	76	4.165	4.112	0.053	79	168857	200.0	193.5	
30 Methyl acetate	43	4.293	4.295	-0.002	98	473638	1000.0	806.7	
31 Methylene Chloride	84	4.342	4.337	0.005	85	246140	200.0	193.8	
34 trans-1,2-Dichloroethene	96	4.743	4.733	0.010	98	284333	200.0	193.7	
33 Acrylonitrile	53	4.810	4.824	-0.014	97	391458	2000.0	1666.7	
35 Methyl tert-butyl ether	73	4.859	4.891	-0.032	95	543214	200.0	187.8	
32 2-Methyl-2-propanol	59	5.017	4.976	0.041	1	3980	2000.0	797.3	
36 Hexane	57	5.151	5.140	0.011	94	257517	200.0	167.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	5.151	5.147	0.004	67	184905	200.0	159.7	
37 1,1-Dichloroethane	63	5.346	5.353	-0.007	96	446315	200.0	207.4	
44 2,2-Dichloropropane	77	6.088	6.083	0.005	81	395073	200.0	219.8	
45 cis-1,2-Dichloroethene	96	6.100	6.096	0.004	83	306965	200.0	210.7	
46 2-Butanone (MEK)	43	6.191	6.193	-0.002	94	131124	400.0	332.0	
49 Chlorobromomethane	128	6.374	6.369	0.005	87	163452	200.0	194.8	
52 Chloroform	83	6.495	6.491	0.004	92	519122	200.0	214.2	
53 1,1,1-Trichloroethane	97	6.684	6.667	0.017	96	475142	200.0	215.9	
54 Cyclohexane	56	6.727	6.728	-0.001	89	308464	200.0	198.7	
51 Tetrahydrofuran	42	6.739	6.728	0.011	49	92394	400.0	427.5	
56 Carbon tetrachloride	117	6.854	6.856	-0.002	95	465763	200.0	209.8	
55 1,1-Dichloropropene	75	6.867	6.856	0.011	87	317215	200.0	199.6	
58 Benzene	78	7.092	7.099	-0.007	95	831787	200.0	191.8	
59 1,2-Dichloroethane	62	7.128	7.124	0.004	97	260229	200.0	177.6	
62 n-Heptane	43	7.402	7.397	0.005	58	226239	200.0	168.3	
57 Isobutyl alcohol	41	7.402	7.397	0.005	49	165403	5000.0	4675.1	
64 Trichloroethene	130	7.791	7.787	0.004	94	345319	200.0	198.6	
66 Methylcyclohexane	83	7.986	7.981	0.005	88	433541	200.0	202.8	
67 1,2-Dichloropropane	63	8.028	8.024	0.004	78	179603	200.0	181.8	
68 Dibromomethane	93	8.144	8.146	-0.002	93	137863	200.0	187.4	
70 1,4-Dioxane	88	8.181	8.194	-0.013	32	18803	4000.0	2722.9	
71 Dichlorobromomethane	83	8.314	8.310	0.004	97	379463	200.0	207.2	
74 cis-1,3-Dichloropropene	75	8.771	8.772	-0.001	93	359542	200.0	189.2	
75 4-Methyl-2-pentanone (MIBK	43	8.941	8.943	-0.002	96	279740	400.0	367.7	
76 Toluene	91	9.105	9.101	0.004	98	910366	200.0	194.4	
77 trans-1,3-Dichloropropene	75	9.330	9.320	0.010	94	317377	200.0	193.9	
78 Ethyl methacrylate	69	9.428	9.423	0.005	87	203072	200.0	186.5	
79 1,1,2-Trichloroethane	97	9.513	9.508	0.005	91	186124	200.0	199.2	
80 Tetrachloroethene	164	9.647	9.648	-0.001	93	250613	200.0	205.4	
81 1,3-Dichloropropane	76	9.671	9.673	-0.002	92	265192	200.0	192.0	
82 2-Hexanone	43	9.762	9.764	-0.002	97	172789	400.0	352.1	
84 Chlorodibromomethane	129	9.896	9.898	-0.002	89	325584	200.0	202.7	
85 Ethylene Dibromide	107	10.012	10.013	-0.001	98	200234	200.0	189.2	
87 Chlorobenzene	112	10.498	10.494	0.004	95	662156	200.0	199.5	
89 1,1,1,2-Tetrachloroethane	131	10.577	10.579	-0.002	93	329144	200.0	205.1	
90 Ethylbenzene	106	10.608	10.603	0.005	98	343309	200.0	182.1	
91 m-Xylene & p-Xylene	106	10.723	10.719	0.004	98	467931	200.0	184.1	
92 o-Xylene	106	11.113	11.114	-0.001	95	478094	200.0	187.3	
93 Styrene	104	11.131	11.127	0.004	93	699705	200.0	198.0	
94 Bromoform	173	11.314	11.315	-0.001	93	185959	200.0	204.3	
97 Isopropylbenzene	105	11.478	11.479	-0.001	95	1267446	200.0	204.9	
99 1,1,2,2-Tetrachloroethane	83	11.770	11.771	-0.001	96	203397	200.0	207.4	
100 Bromobenzene	156	11.788	11.784	0.004	86	343535	200.0	221.4	
101 1,2,3-Trichloropropane	110	11.825	11.820	0.005	86	70947	200.0	204.2	
102 trans-1,4-Dichloro-2-buten	53	11.837	11.832	0.005	69	42586	200.0	195.7	
103 N-Propylbenzene	120	11.891	11.893	-0.002	97	404781	200.0	212.5	
104 2-Chlorotoluene	126	11.977	11.978	-0.001	97	369313	200.0	213.6	
106 1,3,5-Trimethylbenzene	105	12.062	12.063	-0.001	97	1021561	200.0	228.1	
107 4-Chlorotoluene	126	12.086	12.088	-0.002	96	355844	200.0	214.7	
108 tert-Butylbenzene	119	12.390	12.392	-0.002	91	1087164	200.0	202.7	
110 1,2,4-Trimethylbenzene	105	12.439	12.441	-0.002	96	1041841	200.0	221.2	
112 sec-Butylbenzene	105	12.609	12.611	-0.002	94	1400275	200.0	235.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.725	12.727	-0.002	97	644511	200.0	209.0	
114 4-Isopropyltoluene	119	12.755	12.751	0.004	95	1189673	200.0	218.1	
115 1,4-Dichlorobenzene	146	12.816	12.812	0.004	95	601587	200.0	209.4	
120 n-Butylbenzene	91	13.163	13.165	-0.002	96	984063	200.0	216.5	
121 1,2-Dichlorobenzene	146	13.187	13.189	-0.002	98	518149	200.0	184.1	
122 1,2-Dibromo-3-Chloropropan	75	13.972	13.968	0.004	87	21921	200.0	156.6	
126 1,2,4-Trichlorobenzene	180	14.805	14.801	0.004	94	58792	200.0	65.9	
127 Hexachlorobutadiene	225	14.970	14.971	-0.001	89	57173	200.0	106.9	
128 Naphthalene	128	15.061	15.057	0.004	95	71401	200.0	48.9	
129 1,2,3-Trichlorobenzene	180	15.316	15.306	0.010	94	19132	200.0	31.3	
S 134 1,2-Dichloroethene, Total	96				0		400.0	404.4	
S 133 Xylenes, Total	106				0		400.0	371.3	
S 135 1,3-Dichloropropene, Total	1				0		400.0	383.1	

Reagents:

VOA8260VOAPRI_00109	Amount Added:	8.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	8.00	Units: uL	
VOAACRPRI_00005	Amount Added:	24.00	Units: uL	
VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

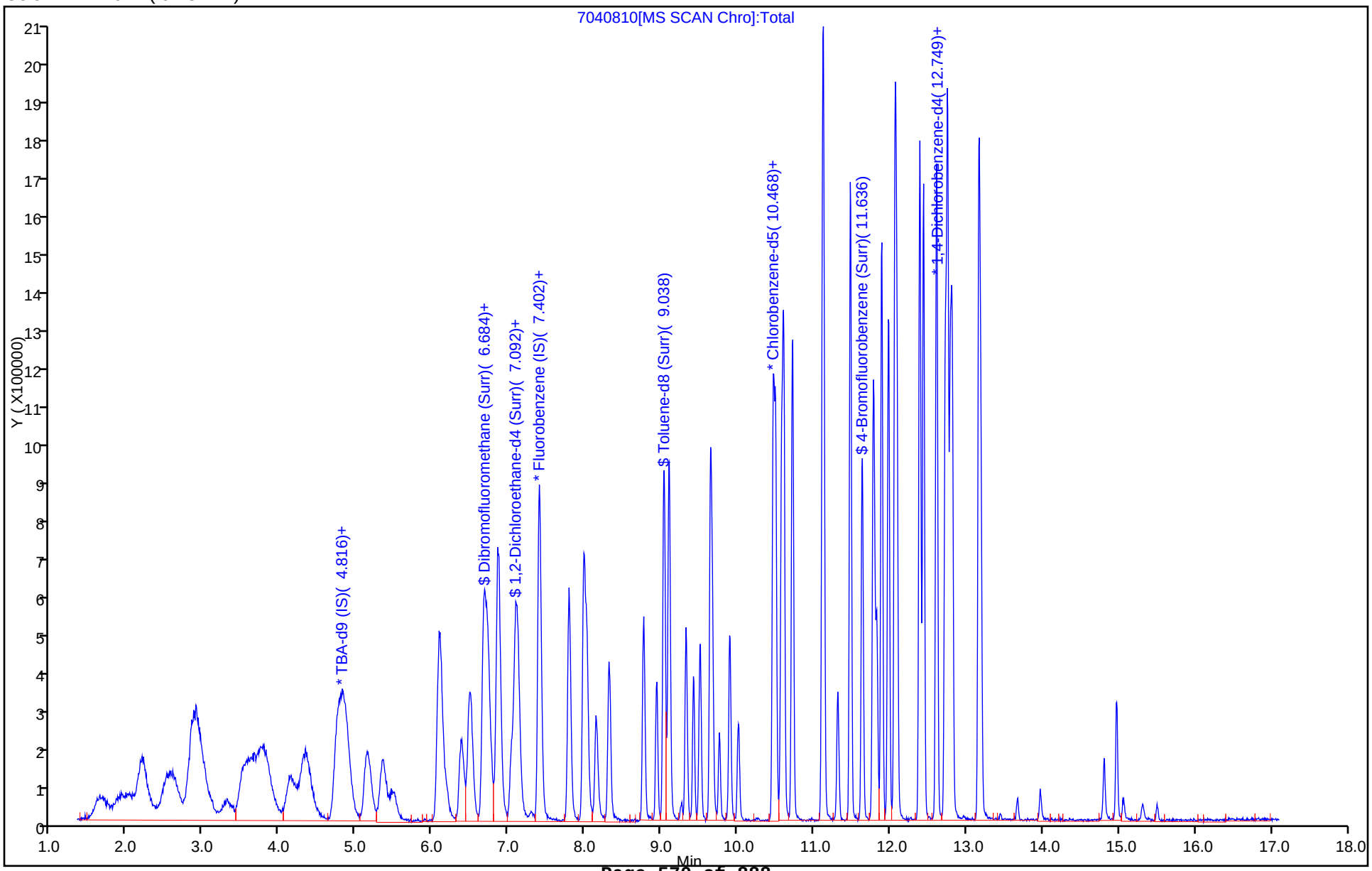
Report Date: 08-Apr-2015 14:55:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040810.D

Injection Date:	08-Apr-2015 12:58:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	lcs			Worklist Smp#:	10
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP7	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.: 180-42504-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-137512/9

Matrix: Water | Lab File ID: 7040409.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 04/04/2015 17:11

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.: 137512 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	8.38		1.0	0.28
75-01-4	Vinyl chloride	8.38		1.0	0.23
74-83-9	Bromomethane	11.6		1.0	0.31
75-00-3	Chloroethane	9.68		1.0	0.21
75-35-4	1,1-Dichloroethene	11.0		1.0	0.30
67-64-1	Acetone	27.9		5.0	2.5
75-15-0	Carbon disulfide	11.2		1.0	0.21
75-09-2	Methylene Chloride	11.8		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	10.1		1.0	0.17
1634-04-4	Methyl tert-butyl ether	11.2		1.0	0.18
75-34-3	1,1-Dichloroethane	11.1		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	10.7		1.0	0.24
74-97-5	Bromochloromethane	10.9		1.0	0.18
78-93-3	2-Butanone (MEK)	20.8		5.0	0.55
67-66-3	Chloroform	10.5		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.7		1.0	0.29
56-23-5	Carbon tetrachloride	10.3		1.0	0.14
71-43-2	Benzene	10.7		1.0	0.11
107-06-2	1,2-Dichloroethane	9.70		1.0	0.21
79-01-6	Trichloroethene	9.67		1.0	0.14
78-87-5	1,2-Dichloropropane	9.74		1.0	0.095
75-27-4	Bromodichloromethane	10.3		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.96		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	20.1		5.0	0.53
108-88-3	Toluene	9.79		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.43		1.0	0.15
79-00-5	1,1,2-Trichloroethane	10.1		1.0	0.20
127-18-4	Tetrachloroethene	8.14		1.0	0.15
591-78-6	2-Hexanone	25.7		5.0	0.16
124-48-1	Dibromochloromethane	9.92		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.93		1.0	0.18
108-90-7	Chlorobenzene	9.97		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.65		1.0	0.28
100-41-4	Ethylbenzene	8.61		1.0	0.23
1330-20-7	Xylenes, Total	17.4		3.0	0.49
100-42-5	Styrene	10.0		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-137512/9

Matrix: Water Lab File ID: 7040409.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/04/2015 17:11

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.: 137512 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	10.6		1.0	0.20
107-13-1	Acrylonitrile	98.9		20	0.55
123-91-1	1,4-Dioxane	201		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)	109		71-118
460-00-4	4-Bromofluorobenzene (Surr)	102		70-118
1868-53-7	Dibromofluoromethane (Surr)	105		70-128

Report Date: 06-Apr-2015 09:16:05 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040409.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 04-Apr-2015 17:11:30 ALS Bottle#: 4 Worklist Smp#: 9
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Misc. Info.: 180-0006327-009
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 09:16:00 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 06-Apr-2015 08:48:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.739	4.765	-0.026	95	246043	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.403	7.399	0.004	97	812560	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.469	10.471	-0.002	85	241893	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.787	12.789	-0.002	94	306779	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.673	6.675	-0.002	75	273176	200.0	210.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.044	7.040	0.004	70	241676	200.0	195.6	
$ 7 Toluene-d8 (Surr)	98	9.034	9.036	-0.002	93	779709	200.0	217.3	
$ 8 4-Bromofluorobenzene (Surr	95	11.631	11.633	-0.002	90	327665	200.0	204.5	
11 Dichlorodifluoromethane	85	1.922	1.912	0.010	69	238358	200.0	158.3	
12 Chloromethane	50	2.019	2.028	-0.009	73	275120	200.0	167.7	M
14 Butadiene	39	2.190	2.186	0.004	96	209780	200.0	155.5	
13 Vinyl chloride	62	2.159	2.192	-0.033	78	214137	200.0	167.6	
15 Bromomethane	94	2.512	2.502	0.010	92	238335	200.0	231.5	
16 Chloroethane	64	2.615	2.605	0.010	75	199532	200.0	193.6	
18 Trichlorofluoromethane	101	2.914	2.879	0.035	81	549054	200.0	190.3	
17 Dichlorofluoromethane	67	2.871	2.879	-0.008	92	569775	200.0	207.7	
20 Ethyl ether	59	3.345	3.311	0.034	85	137192	200.0	149.9	
21 Acrolein	56	3.528	3.481	0.047	1	13661	600.0	216.1	M
22 1,1-Dichloroethene	96	3.546	3.518	0.028	92	239385	200.0	219.4	
23 1,1,2-Trichloro-1,2,2-trif	101	3.668	3.634	0.034	78	259862	200.0	204.8	
25 Iodomethane	142	3.759	3.761	-0.002	97	531303	200.0	232.8	
26 Carbon disulfide	76	3.838	3.828	0.010	98	736722	200.0	224.8	M
24 Acetone	43	3.832	3.834	-0.002	33	137245	400.0	558.6	
28 3-Chloro-1-propene	76	4.197	4.126	0.071	93	206170	200.0	256.2	
30 Methyl acetate	43	4.307	4.297	0.010	98	556844	1000.0	1028.6	
31 Methylene Chloride	84	4.355	4.364	-0.009	85	276247	200.0	235.9	
34 trans-1,2-Dichloroethene	96	4.751	4.753	-0.002	93	273100	200.0	201.8	
33 Acrylonitrile	53	4.812	4.802	0.010	97	428164	2000.0	1977.1	
35 Methyl tert-butyl ether	73	4.860	4.856	0.004	95	598911	200.0	224.5	
32 2-Methyl-2-propanol	59	4.854	4.875	-0.021	48	128805	2000.0	16621	E
38 Vinyl acetate	43	5.158	5.148	0.010	71	114647	200.0	107.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
36 Hexane	57	5.158	5.160	-0.002	93	161508	200.0	114.1	M
37 1,1-Dichloroethane	63	5.347	5.355	-0.008	96	440884	200.0	222.2	
44 2,2-Dichloropropane	77	6.095	6.091	0.004	81	401809	200.0	242.4	
45 cis-1,2-Dichloroethene	96	6.120	6.103	0.017	79	286553	200.0	213.3	
46 2-Butanone (MEK)	43	6.174	6.189	-0.015	97	151183	400.0	415.1	
49 Chlorobromomethane	128	6.387	6.377	0.010	80	168002	200.0	217.1	
52 Chloroform	83	6.497	6.499	-0.002	93	467713	200.0	209.3	
53 1,1,1-Trichloroethane	97	6.679	6.681	-0.002	96	435121	200.0	214.5	
51 Tetrahydrofuran	42	6.740	6.730	0.010	46	71750	400.0	360.1	
54 Cyclohexane	56	6.740	6.730	0.010	90	258121	200.0	180.3	
56 Carbon tetrachloride	117	6.856	6.858	-0.002	95	422176	200.0	206.3	
55 1,1-Dichloropropene	75	6.868	6.864	0.004	83	268252	200.0	183.1	
58 Benzene	78	7.099	7.089	0.010	96	855606	200.0	214.0	
59 1,2-Dichloroethane	62	7.129	7.132	-0.003	73	262076	200.0	194.0	
57 Isobutyl alcohol	41	7.403	7.399	0.004	41	86969	5000.0	2666.0	
62 n-Heptane	43	7.415	7.405	0.010	48	118702	200.0	95.8	
64 Trichloroethene	130	7.792	7.795	-0.003	93	309959	200.0	193.4	
66 Methylcyclohexane	83	7.987	7.989	-0.002	88	283287	200.0	143.7	
67 1,2-Dichloropropane	63	8.030	8.032	-0.002	90	177426	200.0	194.8	
68 Dibromomethane	93	8.145	8.147	-0.002	93	133702	200.0	197.1	
70 1,4-Dioxane	88	8.200	8.184	0.016	65	25619	4000.0	4023.5	
71 Dichlorobromomethane	83	8.310	8.312	-0.002	97	347699	200.0	205.9	
74 cis-1,3-Dichloropropene	75	8.772	8.774	-0.002	93	348843	200.0	199.1	
75 4-Methyl-2-pentanone (MIBK	43	8.936	8.938	-0.002	96	283502	400.0	401.1	
76 Toluene	91	9.100	9.103	-0.003	99	850789	200.0	195.8	
77 trans-1,3-Dichloropropene	75	9.326	9.322	0.004	94	286811	200.0	188.6	
78 Ethyl methacrylate	69	9.423	9.425	-0.002	85	199769	200.0	197.5	
79 1,1,2-Trichloroethane	97	9.508	9.504	0.004	91	175319	200.0	202.0	
80 Tetrachloroethene	164	9.648	9.644	0.004	91	191658	200.0	162.8	
81 1,3-Dichloropropane	76	9.672	9.668	0.004	86	276501	200.0	215.5	
82 2-Hexanone	43	9.764	9.760	0.004	96	233962	400.0	513.2	
84 Chlorodibromomethane	129	9.897	9.900	-0.003	88	296077	200.0	198.4	
85 Ethylene Dibromide	107	10.007	10.009	-0.002	95	195228	200.0	198.5	
87 Chlorobenzene	112	10.500	10.496	0.004	93	614650	200.0	199.3	
89 1,1,1,2-Tetrachloroethane	131	10.573	10.575	-0.002	93	287731	200.0	193.0	
90 Ethylbenzene	106	10.603	10.605	-0.002	98	301807	200.0	172.3	
91 m-Xylene & p-Xylene	106	10.719	10.721	-0.002	98	406982	200.0	172.3	
92 o-Xylene	106	11.114	11.116	-0.002	95	414578	200.0	174.8	
93 Styrene	104	11.126	11.128	-0.002	94	657813	200.0	200.9	
94 Bromoform	173	11.315	11.317	-0.002	93	165933	200.0	196.2	
97 Isopropylbenzene	105	11.479	11.481	-0.002	96	1007644	200.0	168.6	
99 1,1,2,2-Tetrachloroethane	83	11.777	11.773	0.004	96	193415	200.0	212.3	
100 Bromobenzene	156	11.783	11.785	-0.002	86	298262	200.0	226.9	
101 1,2,3-Trichloropropane	110	11.820	11.822	-0.002	84	65625	200.0	222.9	
102 trans-1,4-Dichloro-2-buten	53	11.832	11.828	0.004	68	37581	200.0	203.8	
103 N-Propylbenzene	120	11.893	11.889	0.004	97	298690	200.0	185.1	
104 2-Chlorotoluene	126	11.978	11.980	-0.002	96	303885	200.0	207.4	
106 1,3,5-Trimethylbenzene	105	12.063	12.065	-0.002	97	798404	200.0	206.5	
107 4-Chlorotoluene	126	12.087	12.090	-0.003	95	292285	200.0	208.2	
108 tert-Butylbenzene	119	12.392	12.388	0.004	92	894842	200.0	196.6	
110 1,2,4-Trimethylbenzene	105	12.434	12.436	-0.002	95	842569	200.0	209.1	
112 sec-Butylbenzene	105	12.605	12.607	-0.002	94	937953	200.0	176.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.720	12.722	-0.002	98	549154	200.0	210.3	
114 4-Isopropyltoluene	119	12.751	12.753	-0.003	96	816798	200.0	168.1	
115 1,4-Dichlorobenzene	146	12.811	12.814	-0.003	94	498805	200.0	205.0	
120 n-Butylbenzene	91	13.164	13.160	0.004	95	634346	200.0	154.4	
121 1,2-Dichlorobenzene	146	13.189	13.185	0.004	98	458226	200.0	192.2	
122 1,2-Dibromo-3-Chloropropan	75	13.967	13.969	-0.002	85	25647	200.0	213.3	
126 1,2,4-Trichlorobenzene	180	14.801	14.803	-0.002	96	156155	200.0	206.6	
127 Hexachlorobutadiene	225	14.971	14.973	-0.002	86	61270	200.0	135.3	
128 Naphthalene	128	15.056	15.058	-0.002	96	378311	200.0	305.6	
129 1,2,3-Trichlorobenzene	180	15.312	15.308	0.004	93	121126	200.0	234.2	
S 133 Xylenes, Total	106				0		400.0	347.1	
S 134 1,2-Dichloroethene, Total	96				0		400.0	415.1	
S 135 1,3-Dichloropropene, Total	1				0		400.0	387.7	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added:	24.00	Units: uL	
VOA8260VOAPRI_00108	Amount Added:	8.00	Units: uL	
VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	8.00	Units: uL	
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

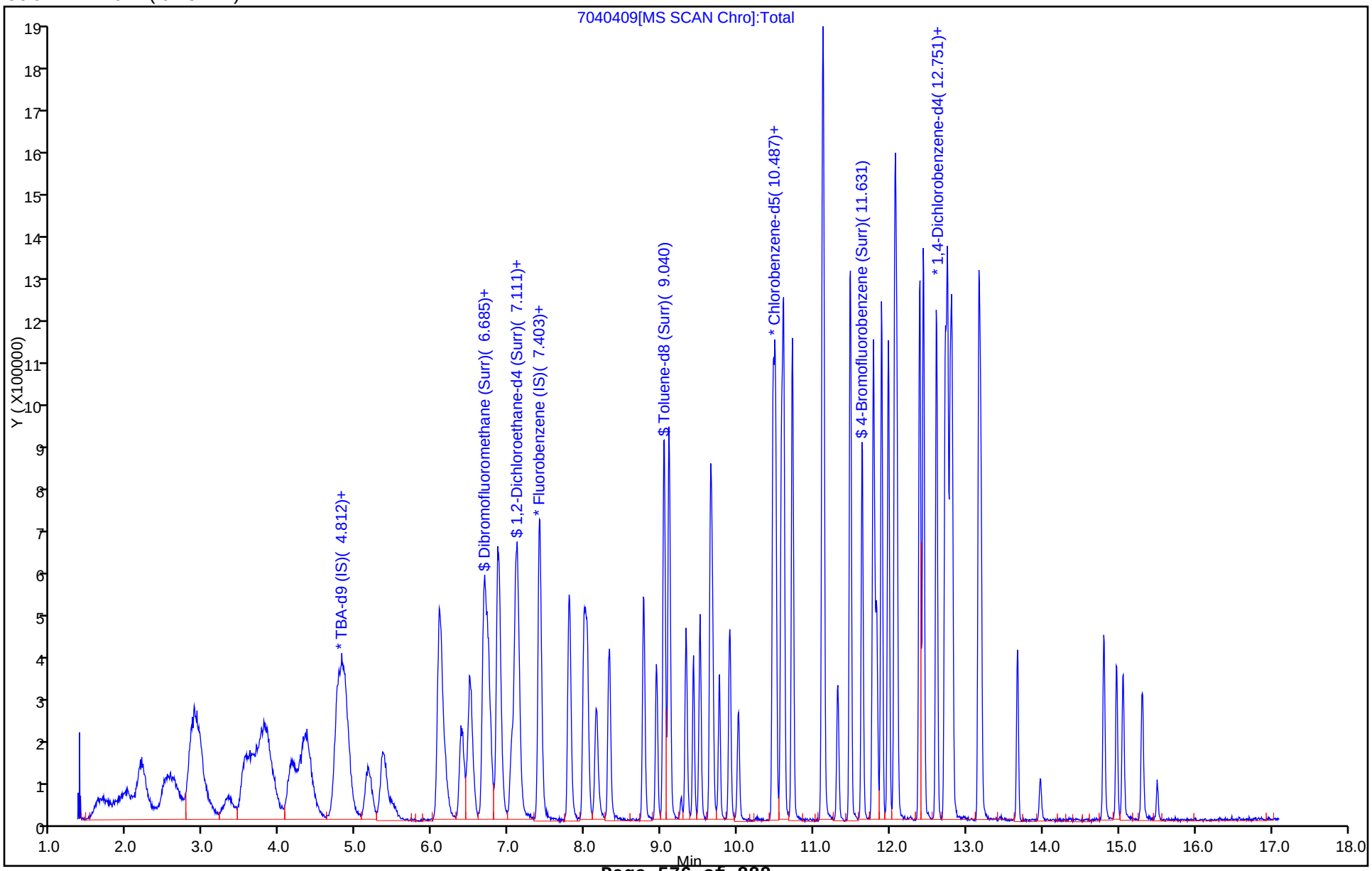
Report Date: 06-Apr-2015 09:16:05 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040409.D

Injection Date:	04-Apr-2015 17:11:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	lcsd			Worklist Smp#:	9
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

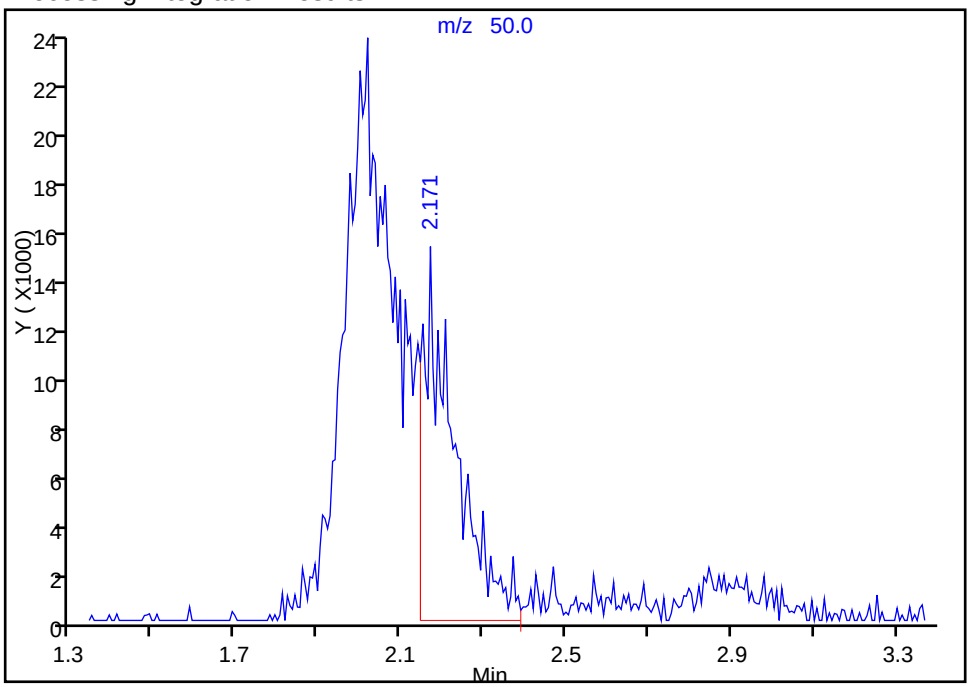
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040409.D				
Injection Date:	04-Apr-2015 17:11:30	Instrument ID:	CHHP7		
Lims ID:	lcsd				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	9
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

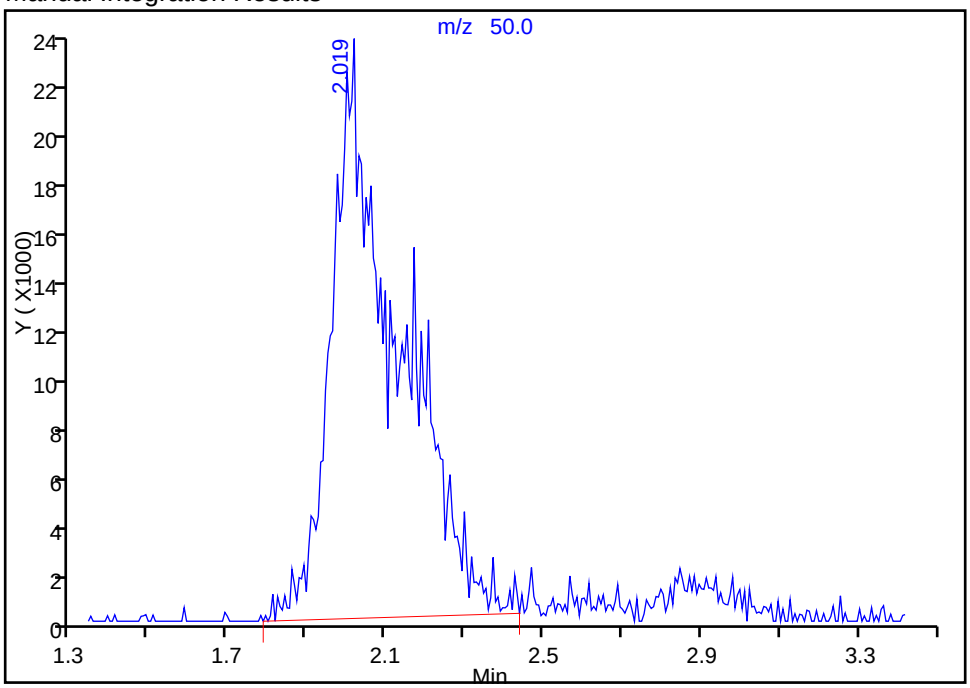
Processing Integration Results

RT: 2.17
Area: 79507
Amount: 48.456186
Amount Units: ng



Manual Integration Results

RT: 2.02
Area: 275120
Amount: 167.6741
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 08:52:23
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

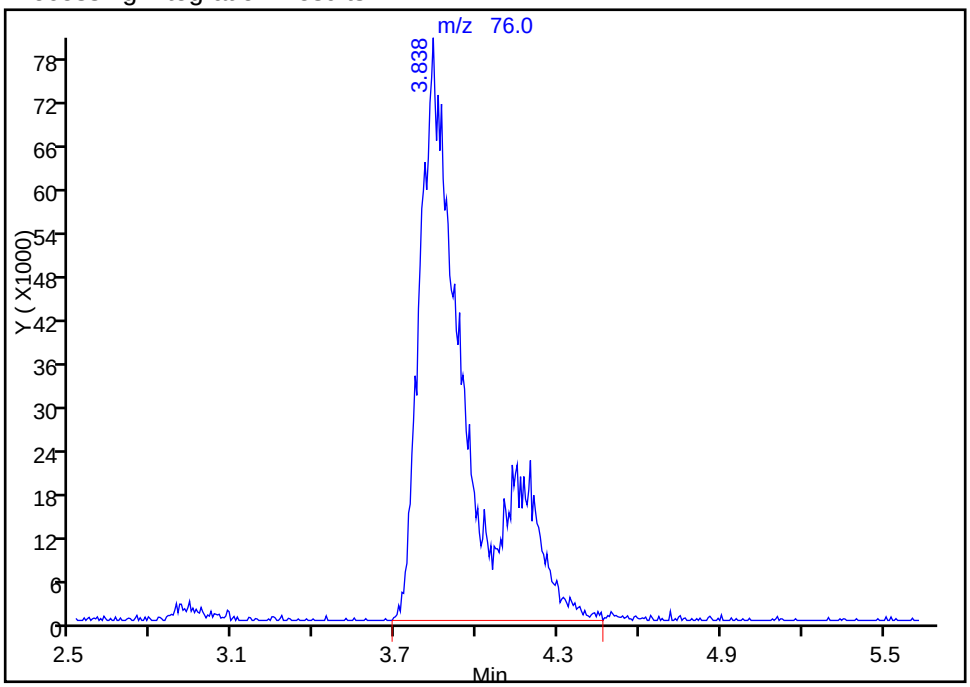
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150404-6327.b\7040409.D				
Injection Date:	04-Apr-2015 17:11:30	Instrument ID:	CHHP7		
Lims ID:	lcsd				
Client ID:					
Operator ID:	034635	ALS Bottle#:	4	Worklist Smp#:	9
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

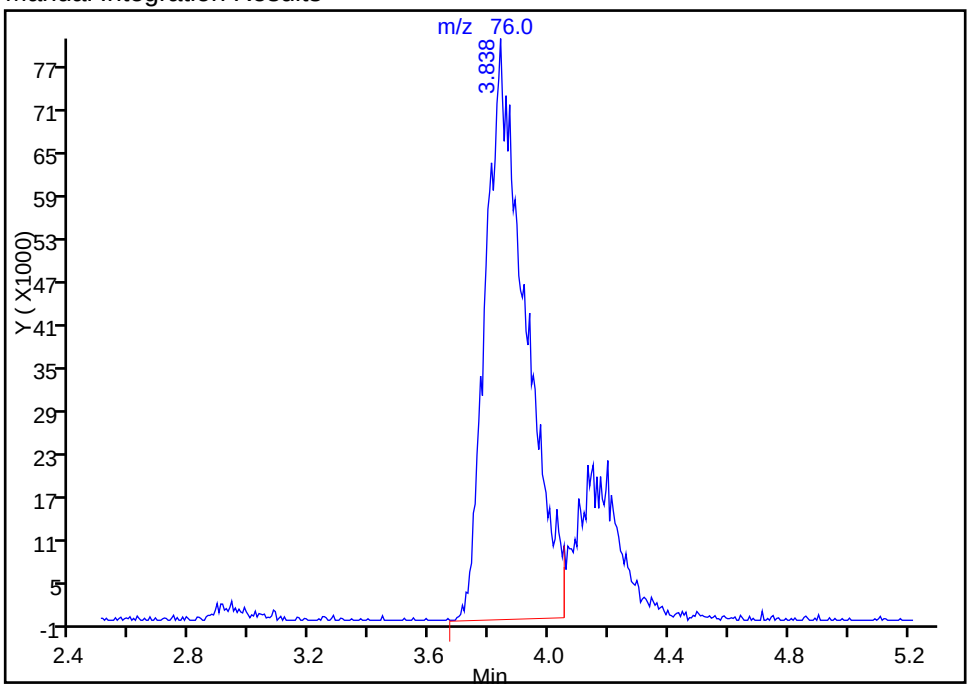
Processing Integration Results

RT: 3.84
Area: 946550
Amount: 288.8642
Amount Units: ng



Manual Integration Results

RT: 3.84
Area: 736722
Amount: 224.8297
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 08:48:34
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-137846/11

Matrix: Water Lab File ID: 7040811.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/08/2015 13:25

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.: 137846 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	10.9		1.0	0.28
75-01-4	Vinyl chloride	10.3		1.0	0.23
74-83-9	Bromomethane	13.0		1.0	0.31
75-00-3	Chloroethane	11.6		1.0	0.21
75-35-4	1,1-Dichloroethene	10.4		1.0	0.30
67-64-1	Acetone	19.6		5.0	2.5
75-15-0	Carbon disulfide	9.82		1.0	0.21
75-09-2	Methylene Chloride	10.2		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	10.2		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.23		1.0	0.18
75-34-3	1,1-Dichloroethane	10.1		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	9.82		1.0	0.24
74-97-5	Bromochloromethane	10.6		1.0	0.18
78-93-3	2-Butanone (MEK)	14.3		5.0	0.55
67-66-3	Chloroform	10.7		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.7		1.0	0.29
56-23-5	Carbon tetrachloride	10.4		1.0	0.14
71-43-2	Benzene	9.54		1.0	0.11
107-06-2	1,2-Dichloroethane	8.50		1.0	0.21
79-01-6	Trichloroethene	9.36		1.0	0.14
78-87-5	1,2-Dichloropropane	8.90		1.0	0.095
75-27-4	Bromodichloromethane	9.91		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.01		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	16.3		5.0	0.53
108-88-3	Toluene	8.72		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	8.40		1.0	0.15
79-00-5	1,1,2-Trichloroethane	8.83		1.0	0.20
127-18-4	Tetrachloroethene	9.11		1.0	0.15
591-78-6	2-Hexanone	14.3		5.0	0.16
124-48-1	Dibromochloromethane	9.37		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.01		1.0	0.18
108-90-7	Chlorobenzene	9.39		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.89		1.0	0.28
100-41-4	Ethylbenzene	8.61		1.0	0.23
1330-20-7	Xylenes, Total	17.6		3.0	0.49
100-42-5	Styrene	9.86		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 180-137846/11

Matrix: Water Lab File ID: 7040811.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 04/08/2015 13:25

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.: 137846 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.21		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	9.94		1.0	0.20
107-13-1	Acrylonitrile	85.8		20	0.55
123-91-1	1,4-Dioxane	160	J	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)	100		71-118
460-00-4	4-Bromofluorobenzene (Surr)	103		70-118
1868-53-7	Dibromofluoromethane (Surr)	108		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040811.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 08-Apr-2015 13:25:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 180-0006372-011
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 08-Apr-2015 14:55:26 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: journetp Date: 08-Apr-2015 14:25:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.798	4.861	-0.063	65	193529	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.402	7.397	0.005	96	837886	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.468	10.470	-0.002	84	251051	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.792	12.787	0.005	93	348567	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.690	6.674	0.016	73	287635	200.0	215.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.037	7.032	0.005	95	243424	200.0	191.0	
$ 7 Toluene-d8 (Surr)	98	9.038	9.034	0.004	92	747642	200.0	200.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.630	11.632	-0.002	88	340895	200.0	205.0	
11 Dichlorodifluoromethane	85	1.902	1.941	-0.039	76	364752	200.0	234.9	
12 Chloromethane	50	2.048	2.062	-0.014	63	367255	200.0	217.1	
14 Butadiene	39	2.188	2.190	-0.002	89	289481	200.0	208.0	
13 Vinyl chloride	62	2.225	2.227	-0.001	82	272092	200.0	206.5	
15 Bromomethane	94	2.523	2.537	-0.014	88	276531	200.0	260.5	
16 Chloroethane	64	2.620	2.610	0.010	58	245887	200.0	231.3	
17 Dichlorofluoromethane	67	2.894	2.890	0.004	96	659049	200.0	233.0	
18 Trichlorofluoromethane	101	2.864	2.908	-0.044	78	715917	200.0	240.6	
20 Ethyl ether	59	3.289	3.291	-0.002	77	135593	200.0	143.6	
21 Acrolein	56	3.575	3.534	0.041	23	29407	600.0	451.2	M
22 1,1-Dichloroethene	96	3.545	3.541	0.004	90	234120	200.0	208.1	
23 1,1,2-Trichloro-1,2,2-trif	101	3.642	3.650	-0.008	87	272459	200.0	208.3	
25 Iodomethane	142	3.746	3.711	0.035	98	492165	200.0	209.1	
26 Carbon disulfide	76	3.813	3.796	0.017	99	663739	200.0	196.4	
24 Acetone	43	3.843	3.863	-0.020	10	104171	400.0	391.5	M
28 3-Chloro-1-propene	76	4.117	4.112	0.005	85	150868	200.0	181.8	M
30 Methyl acetate	43	4.318	4.295	0.023	98	484752	1000.0	868.4	
31 Methylene Chloride	84	4.360	4.337	0.023	83	246358	200.0	204.0	
34 trans-1,2-Dichloroethene	96	4.750	4.733	0.017	96	283729	200.0	203.3	
33 Acrylonitrile	53	4.792	4.824	-0.032	97	383342	2000.0	1716.6	
35 Methyl tert-butyl ether	73	4.877	4.891	-0.014	92	507841	200.0	184.6	
32 2-Methyl-2-propanol	59	4.926	4.976	-0.050	53	102492	2000.0	16752	EM
36 Hexane	57	5.151	5.140	0.011	92	234356	200.0	160.5	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
38 Vinyl acetate	43	5.163	5.147	0.016	66	160597	200.0	145.9	
37 1,1-Dichloroethane	63	5.364	5.353	0.011	97	414484	200.0	202.6	
44 2,2-Dichloropropane	77	6.076	6.083	-0.007	83	382206	200.0	223.6	
45 cis-1,2-Dichloroethene	96	6.094	6.096	-0.002	79	272144	200.0	196.5	
46 2-Butanone (MEK)	43	6.179	6.193	-0.014	96	107614	400.0	286.5	
49 Chlorobromomethane	128	6.374	6.369	0.005	79	168960	200.0	211.8	
52 Chloroform	83	6.502	6.491	0.011	93	493685	200.0	214.3	
53 1,1,1-Trichloroethane	97	6.678	6.667	0.011	97	447523	200.0	213.9	
54 Cyclohexane	56	6.739	6.728	0.011	87	288570	200.0	195.5	
51 Tetrahydrofuran	42	6.733	6.728	0.005	46	79063	400.0	384.8	
56 Carbon tetrachloride	117	6.860	6.856	0.004	94	440148	200.0	208.6	
55 1,1-Dichloropropene	75	6.867	6.856	0.011	81	285805	200.0	189.2	
58 Benzene	78	7.092	7.099	-0.007	95	786995	200.0	190.9	
59 1,2-Dichloroethane	62	7.122	7.124	-0.002	97	236853	200.0	170.1	
62 n-Heptane	43	7.408	7.397	0.011	57	208592	200.0	163.2	
57 Isobutyl alcohol	41	7.396	7.397	-0.001	48	146104	5000.0	4343.3	
64 Trichloroethene	130	7.797	7.787	0.010	93	309423	200.0	187.2	
66 Methylcyclohexane	83	7.980	7.981	-0.001	86	411081	200.0	202.3	
67 1,2-Dichloropropane	63	8.029	8.024	0.004	80	167142	200.0	178.0	
68 Dibromomethane	93	8.156	8.146	0.010	93	123128	200.0	176.0	
70 1,4-Dioxane	88	8.205	8.194	0.011	69	20977	4000.0	3194.9	
71 Dichlorobromomethane	83	8.321	8.310	0.010	98	345241	200.0	198.2	
74 cis-1,3-Dichloropropene	75	8.771	8.772	-0.001	92	325710	200.0	180.3	
75 4-Methyl-2-pentanone (MIBK	43	8.941	8.943	-0.002	97	238841	400.0	325.6	
76 Toluene	91	9.099	9.101	-0.002	98	802340	200.0	174.3	
77 trans-1,3-Dichloropropene	75	9.324	9.320	0.004	95	265061	200.0	168.0	
78 Ethyl methacrylate	69	9.422	9.423	-0.001	87	164742	200.0	156.9	
79 1,1,2-Trichloroethane	97	9.507	9.508	-0.001	93	159077	200.0	176.6	
80 Tetrachloroethene	164	9.647	9.648	-0.001	93	218632	200.0	182.3	
81 1,3-Dichloropropane	76	9.671	9.673	-0.002	91	229691	200.0	172.5	
82 2-Hexanone	43	9.762	9.764	-0.002	93	135493	400.0	286.3	
84 Chlorodibromomethane	129	9.902	9.898	0.004	86	290326	200.0	187.4	
85 Ethylene Dibromide	107	10.012	10.013	-0.001	97	183842	200.0	180.1	
87 Chlorobenzene	112	10.498	10.494	0.004	95	601060	200.0	187.8	
89 1,1,1,2-Tetrachloroethane	131	10.577	10.579	-0.002	92	306078	200.0	197.8	
90 Ethylbenzene	106	10.602	10.603	-0.001	98	313242	200.0	172.3	
91 m-Xylene & p-Xylene	106	10.723	10.719	0.004	98	412914	200.0	168.4	
92 o-Xylene	106	11.113	11.114	-0.001	95	453116	200.0	184.0	
93 Styrene	104	11.131	11.127	0.004	94	672222	200.0	197.1	
94 Bromoform	173	11.314	11.315	-0.001	92	161632	200.0	184.2	
97 Isopropylbenzene	105	11.478	11.479	-0.001	96	1203217	200.0	200.9	
99 1,1,2,2-Tetrachloroethane	83	11.770	11.771	-0.001	97	188001	200.0	198.8	
100 Bromobenzene	156	11.788	11.784	0.004	85	324586	200.0	217.3	
101 1,2,3-Trichloropropane	110	11.819	11.820	-0.002	84	63821	200.0	190.8	
102 trans-1,4-Dichloro-2-buten	53	11.837	11.832	0.005	68	35001	200.0	167.1	
103 N-Propylbenzene	120	11.892	11.893	-0.001	96	400287	200.0	218.3	
104 2-Chlorotoluene	126	11.983	11.978	0.005	96	351001	200.0	210.9	
106 1,3,5-Trimethylbenzene	105	12.062	12.063	-0.001	96	1009762	200.0	235.7	
107 4-Chlorotoluene	126	12.086	12.088	-0.002	95	330720	200.0	207.3	
108 tert-Butylbenzene	119	12.390	12.392	-0.002	92	1051230	200.0	203.6	
110 1,2,4-Trimethylbenzene	105	12.439	12.441	-0.002	96	1022308	200.0	226.4	
112 sec-Butylbenzene	105	12.609	12.611	-0.002	94	1365763	200.0	238.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
113 1,3-Dichlorobenzene	146	12.725	12.727	-0.002	97	619096	200.0	208.6	
114 4-Isopropyltoluene	119	12.749	12.751	-0.002	95	1183857	200.0	227.4	
115 1,4-Dichlorobenzene	146	12.816	12.812	0.004	96	592596	200.0	214.3	
120 n-Butylbenzene	91	13.163	13.165	-0.002	95	994185	200.0	230.1	
121 1,2-Dichlorobenzene	146	13.187	13.189	-0.002	97	506019	200.0	186.8	
122 1,2-Dibromo-3-Chloropropan	75	13.972	13.968	0.004	89	24108	200.0	177.8	
126 1,2,4-Trichlorobenzene	180	14.799	14.801	-0.002	93	197338	200.0	229.7	
127 Hexachlorobutadiene	225	14.970	14.971	-0.001	85	110572	200.0	214.8	
128 Naphthalene	128	15.055	15.057	-0.002	96	371605	200.0	264.2	
129 1,2,3-Trichlorobenzene	180	15.310	15.306	0.004	95	128391	200.0	218.5	
S 134 1,2-Dichloroethene, Total	96				0		400.0	399.7	
S 133 Xylenes, Total	106				0		400.0	352.5	
S 135 1,3-Dichloropropene, Total	1				0		400.0	348.2	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VOAVAPRI_00005	Amount Added: 8.00	Units: uL		
VOA8260VOAPRI_00109	Amount Added: 8.00	Units: uL		
voaWKetpri Re_00004	Amount Added: 8.00	Units: uL		
VOAACRPRI_00005	Amount Added: 24.00	Units: uL		
VOA8260SURR_00017	Amount Added: 8.00	Units: uL	Run Reagent	
VOA8260INT_00030	Amount Added: 8.00	Units: uL	Run Reagent	

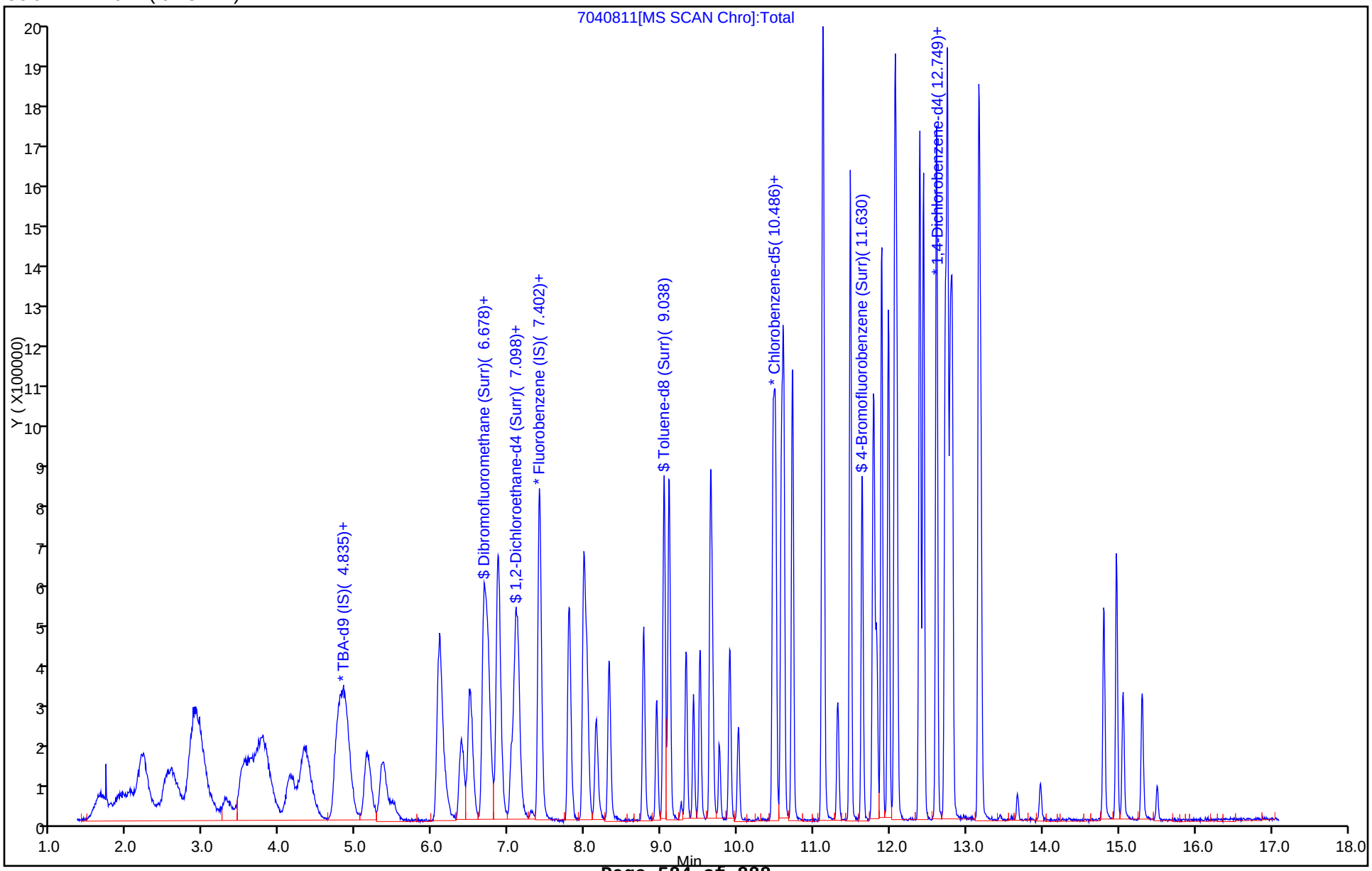
Report Date: 08-Apr-2015 14:55:34 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040811.D

Injection Date:	08-Apr-2015 13:25:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	lcsd			Worklist Smp#:	11
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

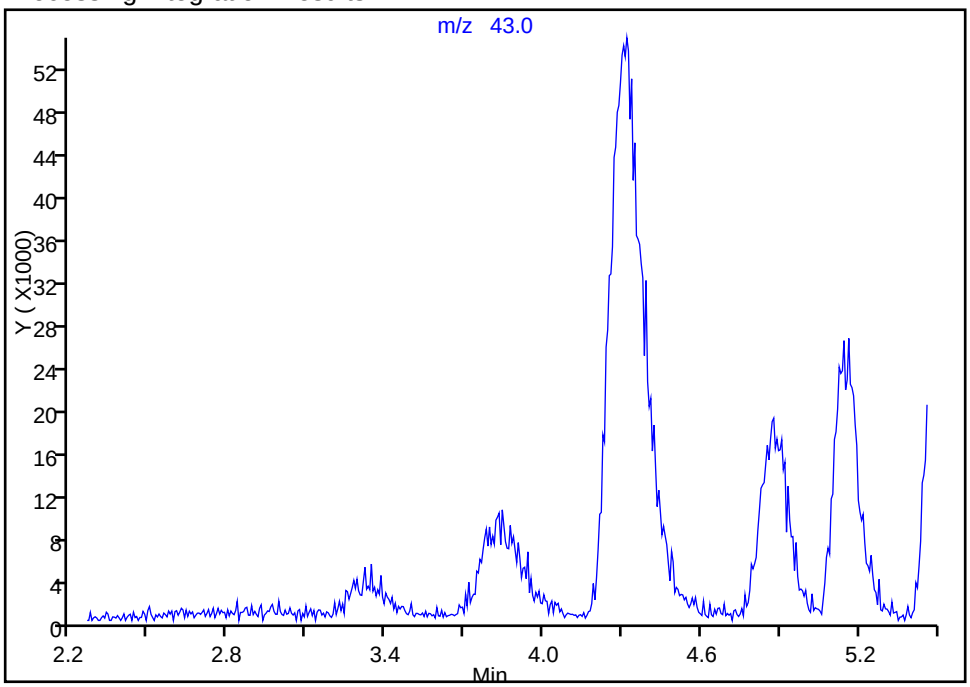
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150408-6372.b\7040811.D				
Injection Date:	08-Apr-2015 13:25:30	Instrument ID:	CHHP7		
Lims ID:	lcsd				
Client ID:					
Operator ID:	034635	ALS Bottle#:	11	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

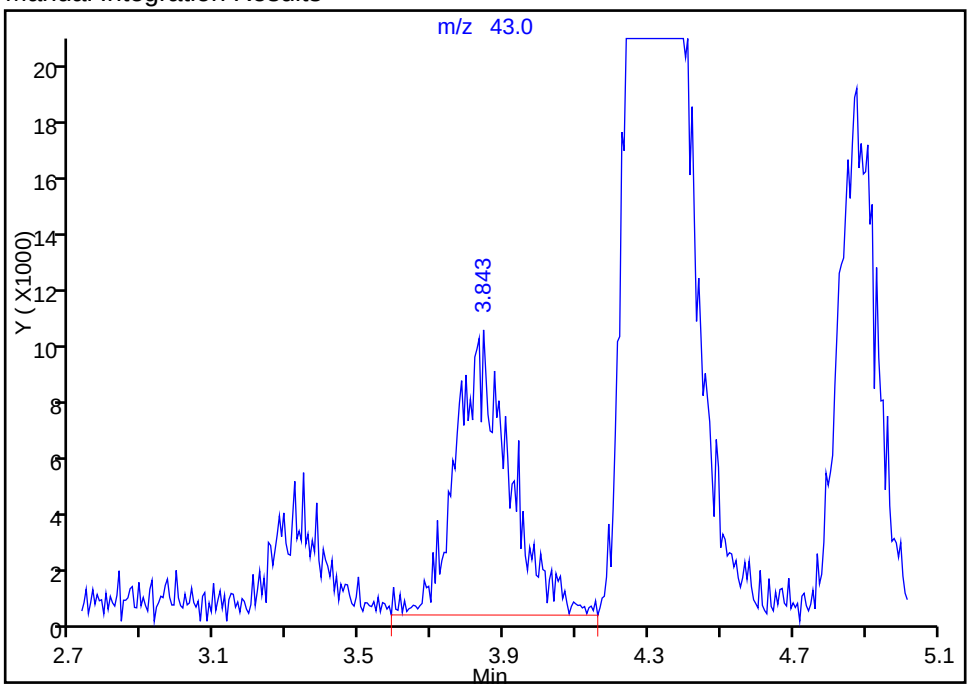
Not Detected
Expected RT: 3.86

Processing Integration Results



Manual Integration Results

RT: 3.84
Area: 104171
Amount: 391.4743
Amount Units: ng



Reviewer: journetp, 08-Apr-2015 14:25:08
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 MS | Lab Sample ID: 180-42504-4 MS

Matrix: Water | Lab File ID: 7040311.D

Analysis Method: 8260C | Date Collected: 03/27/2015 09:37

Sample wt/vol: 20(mL) | Date Analyzed: 04/03/2015 14:16

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.: 137438 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	7.33		1.0	0.28
75-01-4	Vinyl chloride	7.71		1.0	0.23
74-83-9	Bromomethane	11.0		1.0	0.31
75-00-3	Chloroethane	10.4		1.0	0.21
75-35-4	1,1-Dichloroethene	8.84		1.0	0.30
67-64-1	Acetone	10.9		5.0	2.5
75-15-0	Carbon disulfide	10.1		1.0	0.21
75-09-2	Methylene Chloride	9.65		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.36		1.0	0.17
1634-04-4	Methyl tert-butyl ether	8.98		1.0	0.18
75-34-3	1,1-Dichloroethane	10.2		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	12.8		1.0	0.24
74-97-5	Bromochloromethane	8.82		1.0	0.18
78-93-3	2-Butanone (MEK)	11.9		5.0	0.55
67-66-3	Chloroform	9.50		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.2		1.0	0.29
56-23-5	Carbon tetrachloride	9.87		1.0	0.14
71-43-2	Benzene	9.03		1.0	0.11
107-06-2	1,2-Dichloroethane	8.16		1.0	0.21
79-01-6	Trichloroethene	9.52		1.0	0.14
78-87-5	1,2-Dichloropropane	8.85		1.0	0.095
75-27-4	Bromodichloromethane	9.55		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	8.89		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	15.3		5.0	0.53
108-88-3	Toluene	9.51		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	8.78		1.0	0.15
79-00-5	1,1,2-Trichloroethane	8.65		1.0	0.20
127-18-4	Tetrachloroethene	9.32		1.0	0.15
591-78-6	2-Hexanone	15.0		5.0	0.16
124-48-1	Dibromochloromethane	8.81		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	8.39		1.0	0.18
108-90-7	Chlorobenzene	9.79		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	8.84		1.0	0.28
100-41-4	Ethylbenzene	9.36		1.0	0.23
1330-20-7	Xylenes, Total	17.8		3.0	0.49
100-42-5	Styrene	10.1		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 MS Lab Sample ID: 180-42504-4 MS

Matrix: Water Lab File ID: 7040311.D

Analysis Method: 8260C Date Collected: 03/27/2015 09:37

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 14:16

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.: 137438 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	8.78		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	9.19		1.0	0.20
107-13-1	Acrylonitrile	75.2		20	0.55
123-91-1	1,4-Dioxane	156	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	80		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)	94		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040311.D
Lims ID: 180-42504-C-4 MS
Client ID:
Sample Type: MS
Inject. Date: 03-Apr-2015 14:16:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 180-42504-C-4 ms
Misc. Info.: 180-0006312-011
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2015 13:18:55 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: journetp Date: 03-Apr-2015 15:40:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.829	4.786	0.043	84	207645	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.403	7.402	0.001	96	893547	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.469	10.468	0.001	84	267315	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.793	12.786	0.006	94	361283	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.673	6.678	-0.005	70	267791	200.0	187.9	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.038	7.043	-0.005	66	217341	200.0	159.9	
$ 7 Toluene-d8 (Surr)	98	9.033	9.038	-0.005	91	827927	200.0	208.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.637	11.636	0.001	90	352848	200.0	198.9	
12 Chloromethane	50	2.000	2.000	0.000	58	264416	200.0	146.5	M
13 Vinyl chloride	62	2.219	2.219	0.000	98	216632	200.0	154.2	
15 Bromomethane	94	2.518	2.511	0.007	90	250020	200.0	220.8	
16 Chloroethane	64	2.621	2.626	-0.005	73	235861	200.0	208.1	
22 1,1-Dichloroethene	96	3.521	3.527	-0.006	94	212223	200.0	176.9	
24 Acetone	43	3.832	3.801	0.031	24	69714	400.0	217.8	
26 Carbon disulfide	76	3.801	3.825	-0.024	100	724799	200.0	201.1	M
31 Methylene Chloride	84	4.367	4.354	0.013	89	248619	200.0	193.1	
34 trans-1,2-Dichloroethene	96	4.762	4.756	0.006	92	278716	200.0	187.2	
33 Acrylonitrile	53	4.805	4.816	-0.011	96	358327	2000.0	1504.7	
35 Methyl tert-butyl ether	73	4.890	4.865	0.025	97	526857	200.0	179.6	
37 1,1-Dichloroethane	63	5.346	5.364	-0.018	96	445549	200.0	204.2	
45 cis-1,2-Dichloroethene	96	6.101	6.112	-0.011	81	378641	200.0	256.3	
46 2-Butanone (MEK)	43	6.192	6.179	0.013	97	95598	400.0	238.7	
49 Chlorobromomethane	128	6.393	6.380	0.013	81	150051	200.0	176.4	
52 Chloroform	83	6.496	6.502	-0.006	92	466852	200.0	190.0	
53 1,1,1-Trichloroethane	97	6.673	6.678	-0.005	97	453081	200.0	203.1	
56 Carbon tetrachloride	117	6.855	6.861	-0.006	95	444441	200.0	197.5	
58 Benzene	78	7.092	7.098	-0.006	95	794212	200.0	180.6	
59 1,2-Dichloroethane	62	7.123	7.122	0.001	97	242480	200.0	163.3	
64 Trichloroethene	130	7.792	7.797	-0.005	94	335794	200.0	190.5	
67 1,2-Dichloropropane	63	8.029	8.035	-0.006	78	177354	200.0	177.1	
70 1,4-Dioxane	88	8.181	8.187	-0.006	27	21882	4000.0	3125.2	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
71 Dichlorobromomethane	83	8.315	8.321	-0.006	98	354582	200.0	190.9	
74 cis-1,3-Dichloropropene	75	8.771	8.771	0.000	92	342679	200.0	177.9	
75 4-Methyl-2-pentanone (MIBK	43	8.942	8.935	0.007	95	239478	400.0	306.6	
76 Toluene	91	9.100	9.105	-0.005	98	918421	200.0	190.3	
77 trans-1,3-Dichloropropene	75	9.325	9.330	-0.005	95	295198	200.0	175.7	
79 1,1,2-Trichloroethane	97	9.507	9.507	0.000	92	165963	200.0	173.0	
80 Tetrachloroethene	164	9.647	9.647	0.000	93	237229	200.0	186.4	
82 2-Hexanone	43	9.763	9.762	0.001	97	151121	400.0	299.9	
84 Chlorodibromomethane	129	9.903	9.896	0.007	88	290762	200.0	176.3	
85 Ethylene Dibromide	107	10.012	10.018	-0.006	98	182325	200.0	167.8	
87 Chlorobenzene	112	10.499	10.498	0.001	94	667104	200.0	195.8	
89 1,1,1,2-Tetrachloroethane	131	10.578	10.578	0.000	92	291239	200.0	176.8	
90 Ethylbenzene	106	10.609	10.608	0.001	98	362527	200.0	187.3	
91 m-Xylene & p-Xylene	106	10.724	10.724	0.000	98	459168		175.9	
92 o-Xylene	106	11.113	11.113	0.000	95	472053		180.1	
93 Styrene	104	11.132	11.131	0.001	93	732333	200.0	202.7	
94 Bromoform	173	11.314	11.314	0.000	93	164133	200.0	175.6	
99 1,1,2,2-Tetrachloroethane	83	11.770	11.776	-0.006	97	184958	200.0	183.7	
S 133 Xylenes, Total	106				0		400.0	356.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added:	24.00	Units: uL	
VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00108	Amount Added:	8.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	8.00	Units: uL	
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

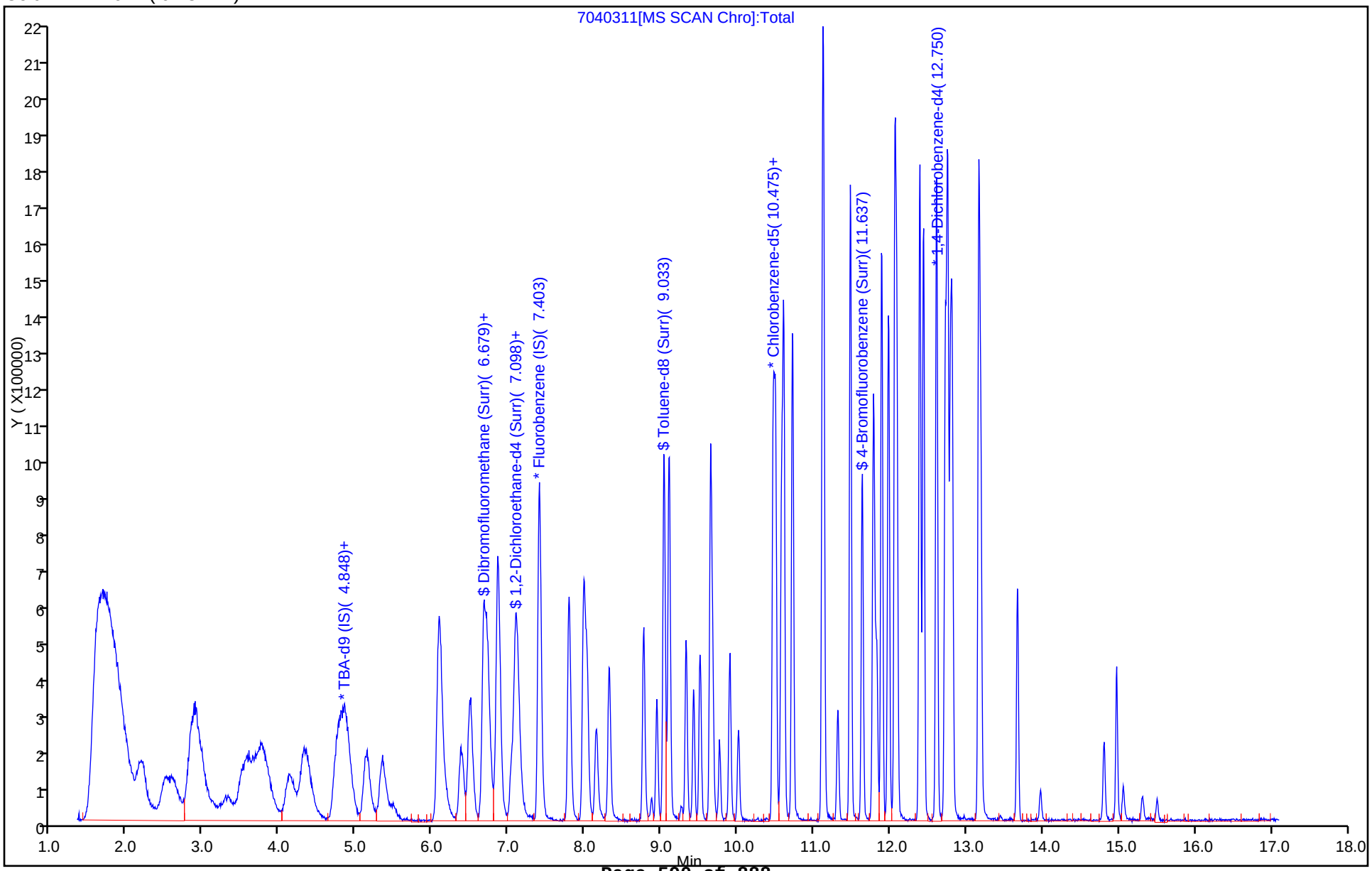
Report Date: 04-Apr-2015 13:18:56 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040311.D

Injection Date:	03-Apr-2015 14:16:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-C-4 MS			Worklist Smp#:	11
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

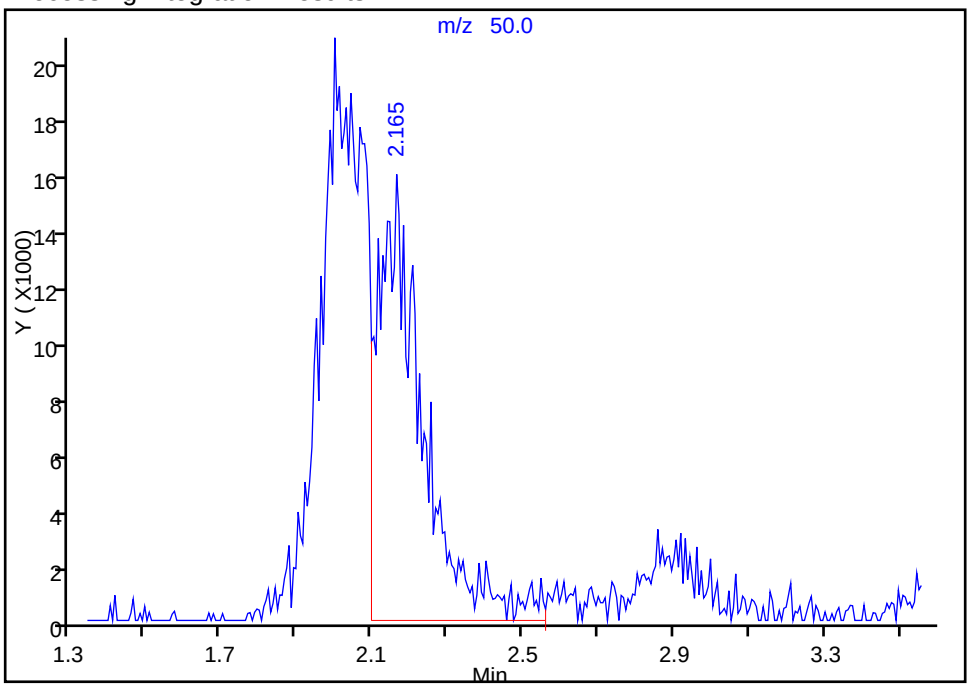
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040311.D				
Injection Date:	03-Apr-2015 14:16:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-4 MS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

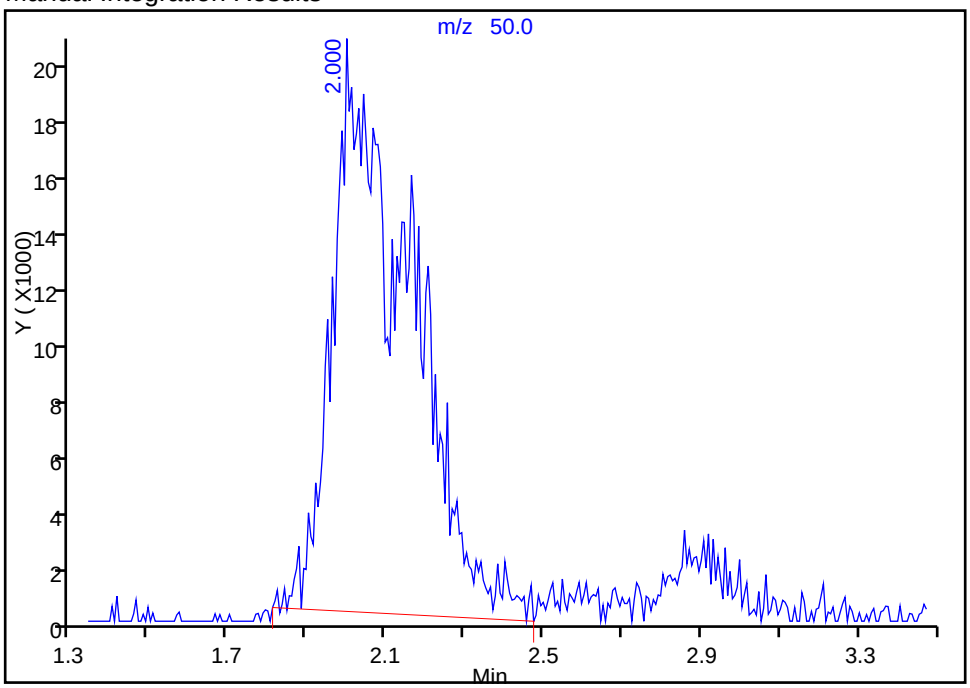
Processing Integration Results

RT: 2.16
Area: 124644
Amount: 69.080151
Amount Units: ng



Manual Integration Results

RT: 2.00
Area: 264416
Amount: 146.5445
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 13:18:12
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

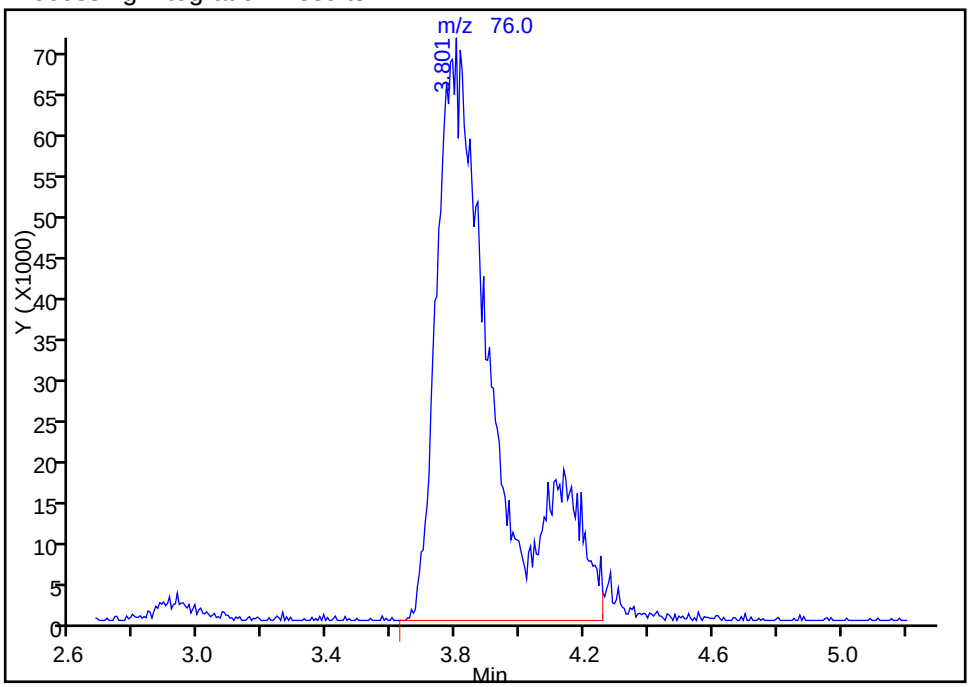
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040311.D				
Injection Date:	03-Apr-2015 14:16:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-4 MS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

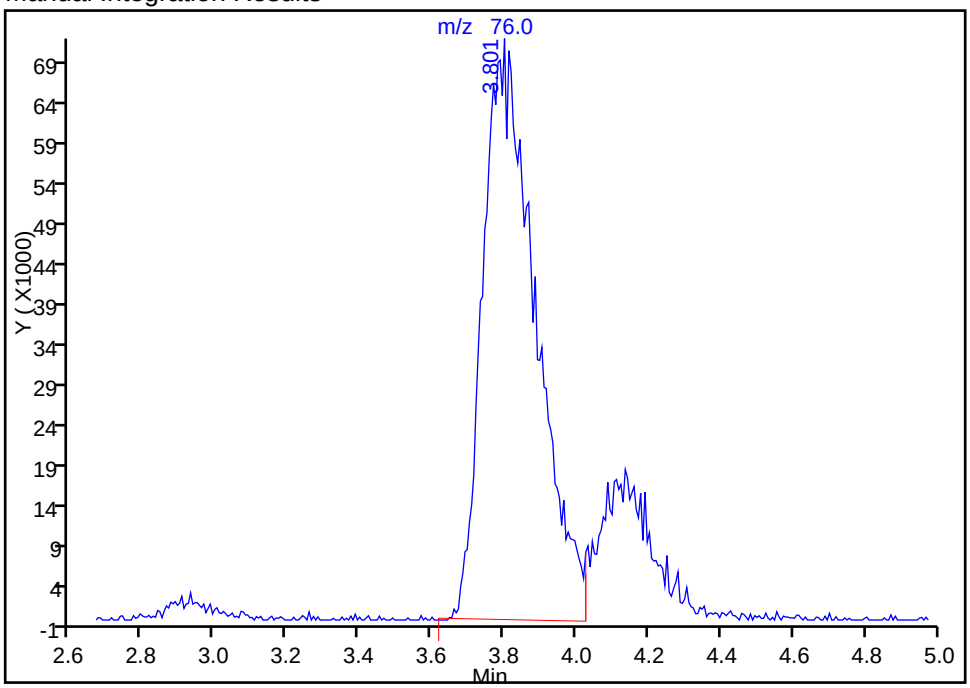
Processing Integration Results

RT: 3.80
Area: 887704
Amount: 246.3521
Amount Units: ng



Manual Integration Results

RT: 3.80
Area: 724799
Amount: 201.1434
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 15:40:18
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

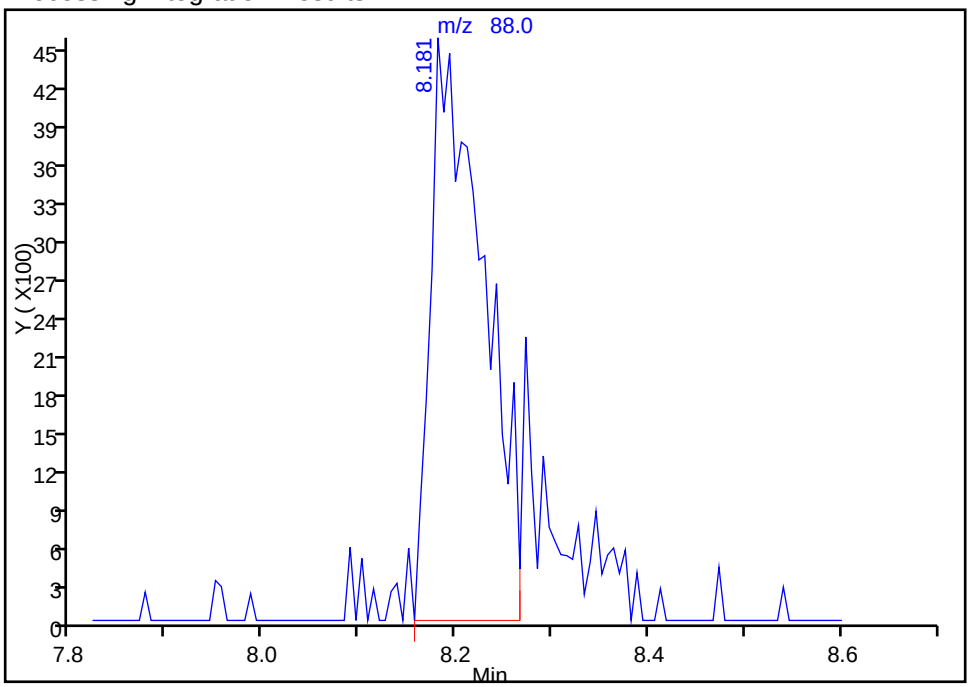
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040311.D				
Injection Date:	03-Apr-2015 14:16:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-4 MS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

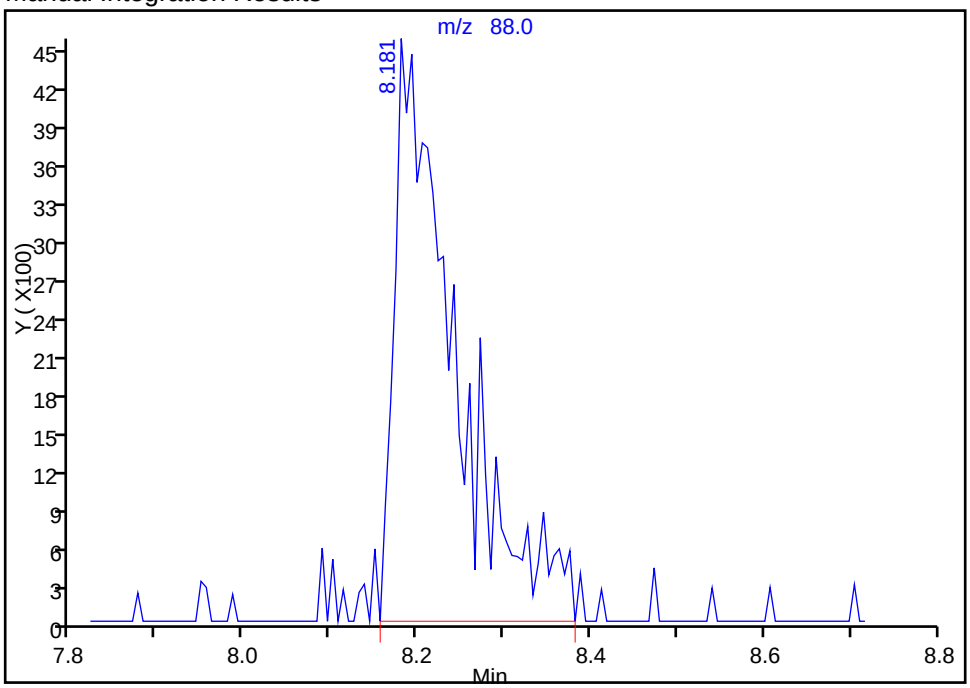
Processing Integration Results

RT: 8.18
Area: 17327
Amount: 2474.6179
Amount Units: ng



Manual Integration Results

RT: 8.18
Area: 21882
Amount: 3125.1567
Amount Units: ng



Reviewer: journetp, 04-Apr-2015 12:21:59
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-51D-0/1-0 MS Lab Sample ID: 180-42504-8 MS

Matrix: Water Lab File ID: 7040612.D

Analysis Method: 8260C Date Collected: 03/27/2015 13:30

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 14:18

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.: 137564 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	7.88		1.0	0.28
75-01-4	Vinyl chloride	7.60		1.0	0.23
74-83-9	Bromomethane	8.10		1.0	0.31
75-00-3	Chloroethane	7.09		1.0	0.21
75-35-4	1,1-Dichloroethene	7.82		1.0	0.30
67-64-1	Acetone	3.66	J	5.0	2.5
75-15-0	Carbon disulfide	9.61		1.0	0.21
75-09-2	Methylene Chloride	8.49		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.92		1.0	0.17
1634-04-4	Methyl tert-butyl ether	6.33		1.0	0.18
75-34-3	1,1-Dichloroethane	10.0		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	13.1		1.0	0.24
74-97-5	Bromochloromethane	7.00		1.0	0.18
78-93-3	2-Butanone (MEK)	6.12		5.0	0.55
67-66-3	Chloroform	9.10		1.0	0.17
71-55-6	1,1,1-Trichloroethane	10.3		1.0	0.29
56-23-5	Carbon tetrachloride	10.3		1.0	0.14
71-43-2	Benzene	9.09		1.0	0.11
107-06-2	1,2-Dichloroethane	6.08		1.0	0.21
79-01-6	Trichloroethene	16.0		1.0	0.14
78-87-5	1,2-Dichloropropane	7.41		1.0	0.095
75-27-4	Bromodichloromethane	7.93		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	7.07		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	9.70		5.0	0.53
108-88-3	Toluene	10.9		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	7.10		1.0	0.15
79-00-5	1,1,2-Trichloroethane	7.00		1.0	0.20
127-18-4	Tetrachloroethene	11.2		1.0	0.15
591-78-6	2-Hexanone	8.48		5.0	0.16
124-48-1	Dibromochloromethane	7.18		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	6.08		1.0	0.18
108-90-7	Chlorobenzene	9.83		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.01		1.0	0.28
100-41-4	Ethylbenzene	9.41		1.0	0.23
1330-20-7	Xylenes, Total	18.3		3.0	0.49
100-42-5	Styrene	9.18		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-51D-0/1-0 MS Lab Sample ID: 180-42504-8 MS

Matrix: Water Lab File ID: 7040612.D

Analysis Method: 8260C Date Collected: 03/27/2015 13:30

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 14:18

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.: 137564 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	6.27		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	6.61		1.0	0.20
107-13-1	Acrylonitrile	40.0		20	0.55
123-91-1	1,4-Dioxane	70.4	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	64		64-135
2037-26-5	Toluene-d8 (Surr)	117		71-118
460-00-4	4-Bromofluorobenzene (Surr)	86		70-118
1868-53-7	Dibromofluoromethane (Surr)	88		70-128

Report Date: 07-Apr-2015 11:18:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040612.D
Lims ID: 180-42504-D-8 MS
Client ID:
Sample Type: MS
Inject. Date: 06-Apr-2015 14:18:30 ALS Bottle#: 13 Worklist Smp#: 12
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 180-42504-D-8 ms
Misc. Info.: 180-0006335-012
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 07-Apr-2015 11:18:38 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: journetp Date: 07-Apr-2015 11:18:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.676	4.932	-0.256	54	135821	4000.0	4000.0	M
* 2 Fluorobenzene (IS)	96	7.414	7.396	0.018	96	896455	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.467	10.468	-0.001	84	219095	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.791	12.792	-0.001	92	268140	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.690	6.672	0.018	70	251248	200.0	175.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.049	7.037	0.012	76	175852	200.0	129.0	
$ 7 Toluene-d8 (Surr)	98	9.038	9.032	0.006	92	763026	200.0	234.8	
$ 8 4-Bromofluorobenzene (Surr	95	11.636	11.636	0.000	91	253211	200.0	172.3	
12 Chloromethane	50	2.011	2.012	-0.001	53	285237	200.0	157.6	
13 Vinyl chloride	62	2.237	2.201	0.036	59	214264	200.0	152.0	
15 Bromomethane	94	2.529	2.487	0.042	81	184092	200.0	162.1	
16 Chloroethane	64	2.693	2.602	0.091	43	161366	200.0	141.9	
22 1,1-Dichloroethene	96	3.617	3.521	0.096	79	188341	200.0	156.5	
26 Carbon disulfide	76	3.897	3.782	0.115	100	694882	200.0	192.2	M
24 Acetone	43	3.776	3.843	-0.067	10	35383	200.0	73.3	M
31 Methylene Chloride	84	4.414	4.318	0.096	92	219447	200.0	169.9	
34 trans-1,2-Dichloroethene	96	4.798	4.731	0.067	91	296143	200.0	198.3	
33 Acrylonitrile	53	4.804	4.810	-0.006	49	191045	2000.0	799.6	M
35 Methyl tert-butyl ether	73	4.859	4.877	-0.018	93	372579	200.0	126.6	
37 1,1-Dichloroethane	63	5.376	5.340	0.036	97	437744	200.0	200.0	
45 cis-1,2-Dichloroethene	96	6.124	6.082	0.042	84	389379	200.0	262.7	
46 2-Butanone (MEK)	43	6.173	6.191	-0.018	35	49169	200.0	122.4	
49 Chlorobromomethane	128	6.392	6.374	0.018	78	119502	200.0	140.0	
52 Chloroform	83	6.507	6.496	0.011	91	448734	200.0	182.1	
53 1,1,1-Trichloroethane	97	6.696	6.672	0.024	97	460384	200.0	205.7	
56 Carbon tetrachloride	117	6.878	6.848	0.030	95	463539	200.0	205.3	
58 Benzene	78	7.097	7.086	0.011	96	801987	200.0	181.8	
59 1,2-Dichloroethane	62	7.128	7.122	0.006	90	181316	200.0	121.7	
64 Trichloroethene	130	7.797	7.785	0.012	93	566926	200.0	320.5	
67 1,2-Dichloropropane	63	8.034	8.029	0.005	78	148955	200.0	148.2	
70 1,4-Dioxane	88	8.180	8.187	-0.007	27	9891	4000.0	1408.0	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
71 Dichlorobromomethane	83	8.320	8.308	0.012	97	295487	200.0	158.6	
74 cis-1,3-Dichloropropene	75	8.770	8.771	-0.001	93	273326	200.0	141.4	
75 4-Methyl-2-pentanone (MIBK	43	8.934	8.941	-0.007	96	124153	200.0	193.9	
76 Toluene	91	9.105	9.099	0.006	99	843221	200.0	218.4	
77 trans-1,3-Dichloropropene	75	9.330	9.324	0.006	95	195520	200.0	142.0	
79 1,1,2-Trichloroethane	97	9.512	9.507	0.005	92	110098	200.0	140.0	
80 Tetrachloroethene	164	9.652	9.647	0.005	90	226491	200.0	223.6	
82 2-Hexanone	43	9.762	9.762	0.000	96	70041	200.0	169.6	
84 Chlorodibromomethane	129	9.902	9.896	0.006	87	194170	200.0	143.6	
85 Ethylene Dibromide	107	10.011	10.006	0.005	98	108270	200.0	121.5	
87 Chlorobenzene	112	10.504	10.498	0.006	96	549162	200.0	196.6	
89 1,1,1,2-Tetrachloroethane	131	10.577	10.572	0.005	93	243253	200.0	180.2	
90 Ethylbenzene	106	10.607	10.602	0.005	98	298643	200.0	188.2	
91 m-Xylene & p-Xylene	106	10.723	10.717	0.006	99	391020		182.8	
92 o-Xylene	106	11.118	11.113	0.005	95	392571		182.7	
93 Styrene	104	11.131	11.125	0.006	93	553545	200.0	183.7	
94 Bromoform	173	11.313	11.320	-0.007	93	96017	200.0	125.4	
99 1,1,2,2-Tetrachloroethane	83	11.775	11.770	0.005	95	109044	200.0	132.1	
S 133 Xylenes, Total	106				0		400.0	365.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

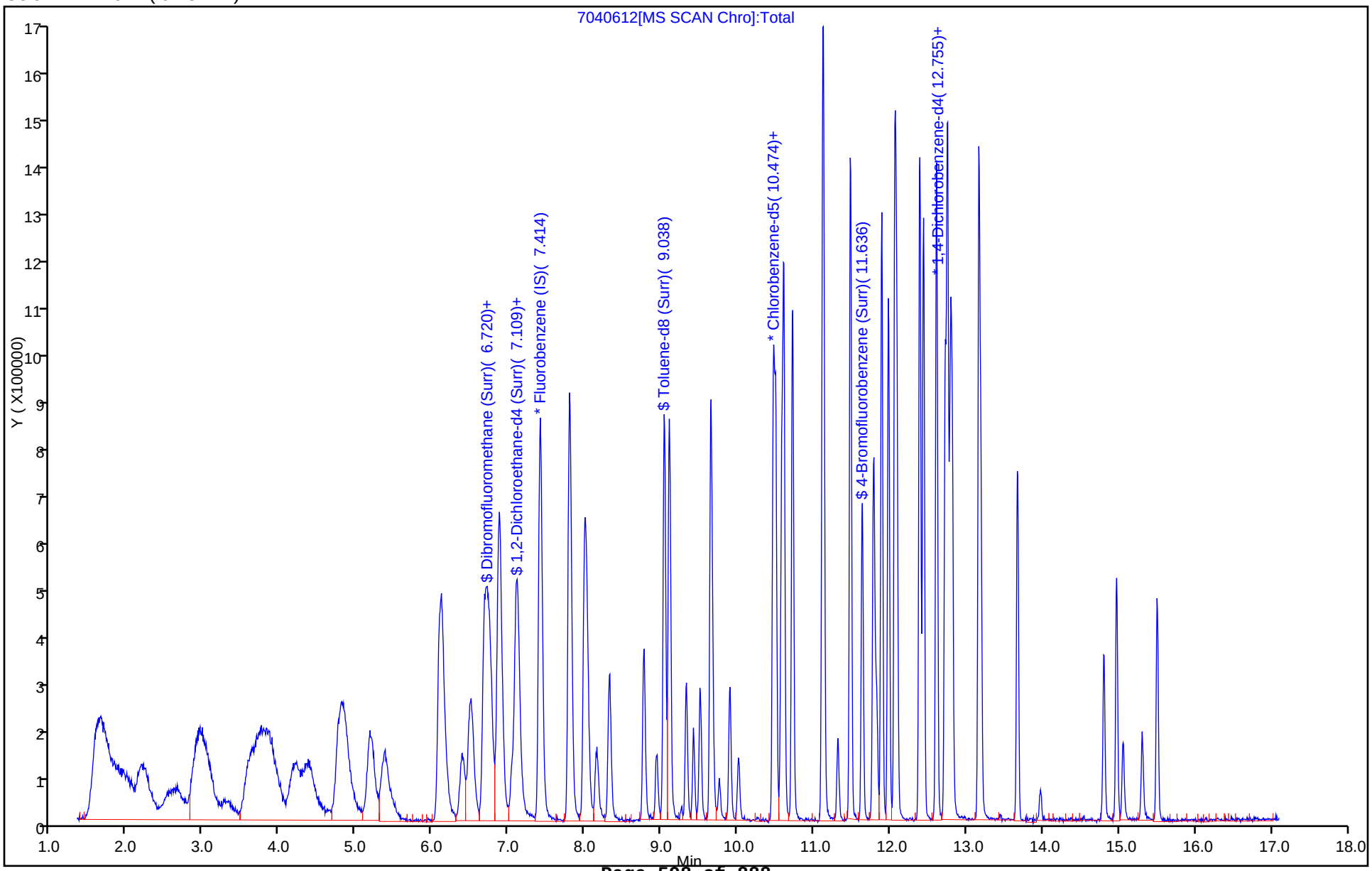
VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00108	Amount Added:	8.00	Units: uL	
VOAACRPRI_00005	Amount Added:	24.00	Units: uL	
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

Report Date: 07-Apr-2015 11:18:50 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040612.D				
Injection Date:	06-Apr-2015 14:18:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-D-8 MS			Worklist Smp#:	12
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

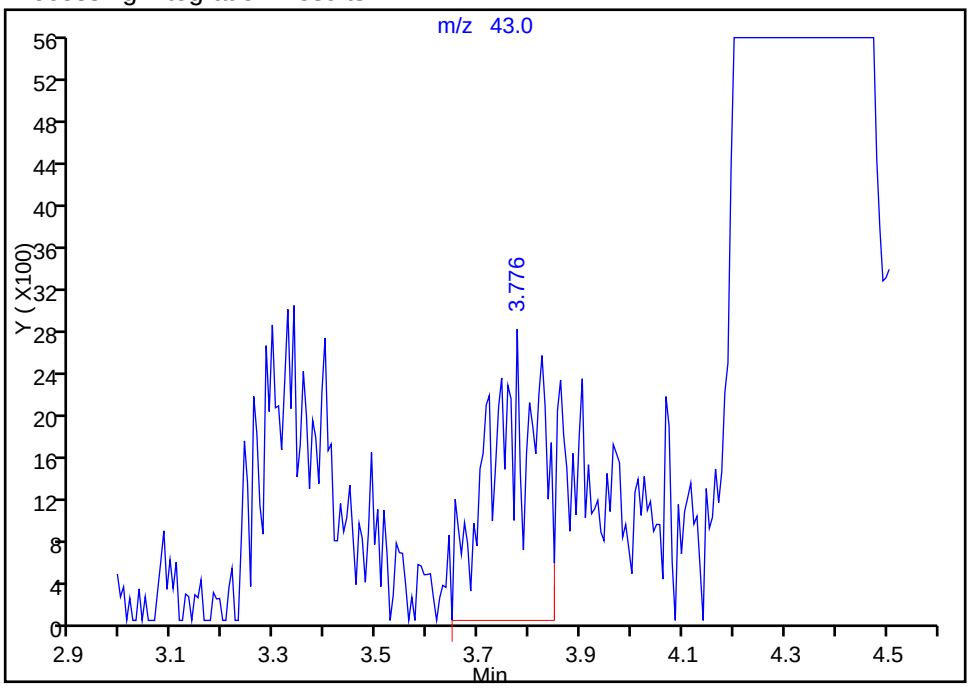
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040612.D				
Injection Date:	06-Apr-2015 14:18:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-8 MS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	12
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

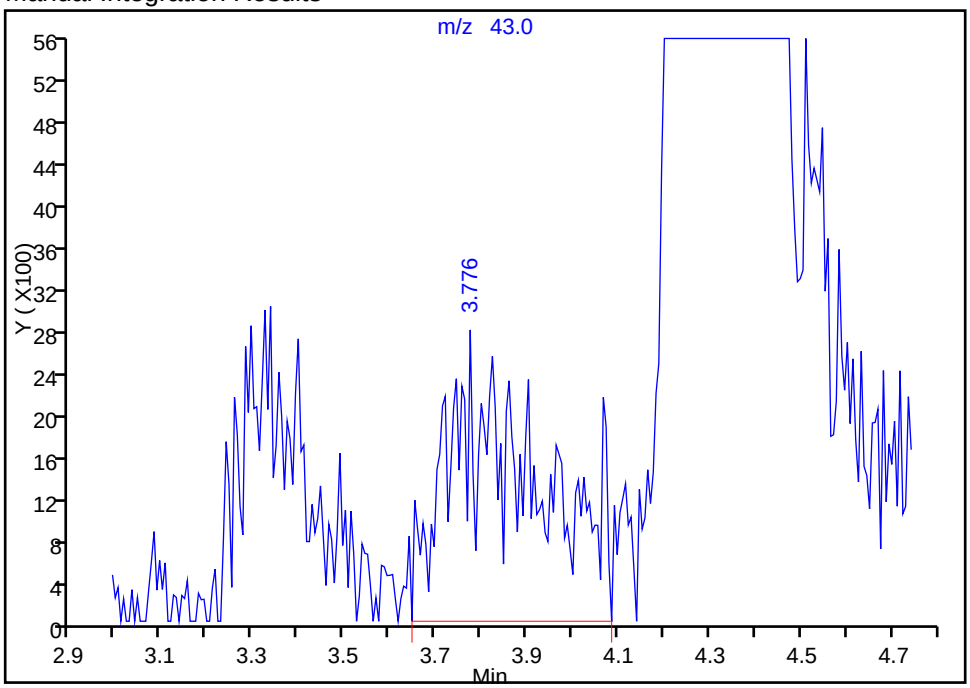
Processing Integration Results

RT: 3.78
Area: 18053
Amount: 0.795091
Amount Units: ng



Manual Integration Results

RT: 3.78
Area: 35383
Amount: 73.284337
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 14:54:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

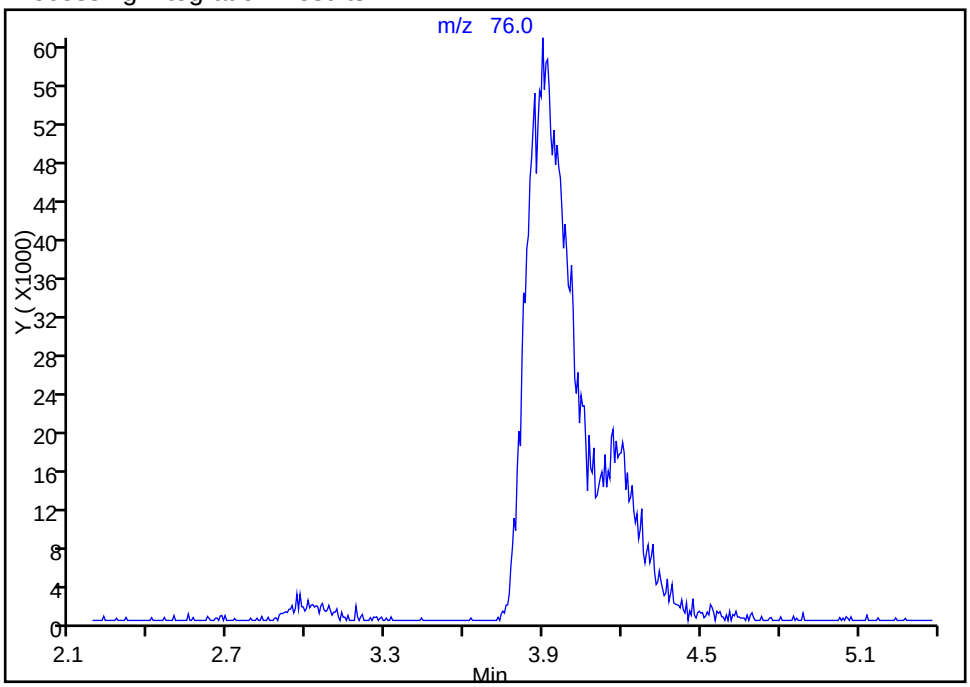
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040612.D				
Injection Date:	06-Apr-2015 14:18:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-8 MS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	12
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

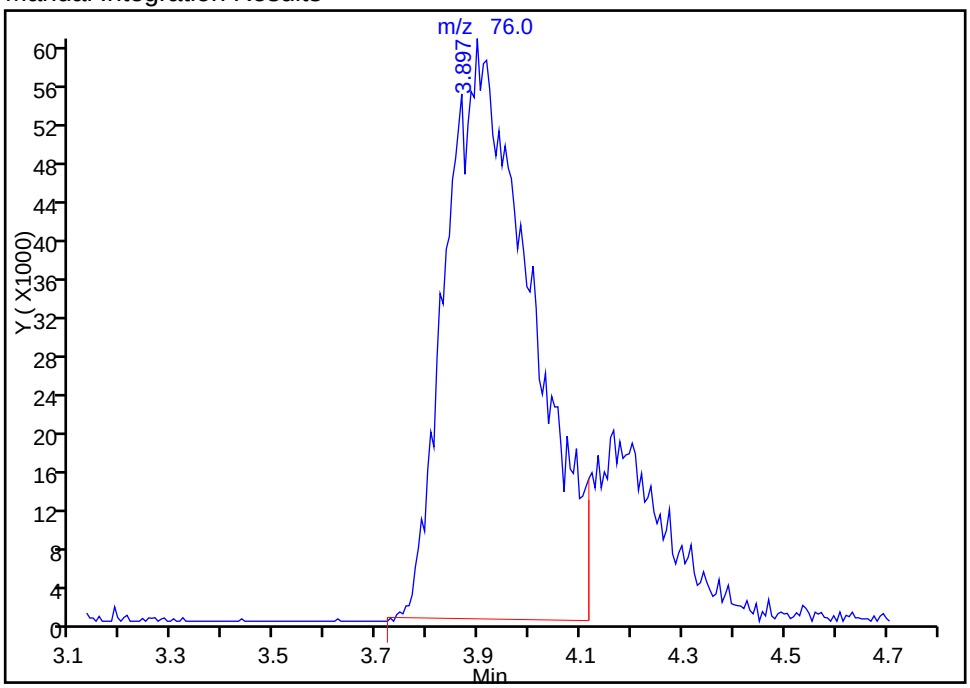
Not Detected
Expected RT: 3.78

Processing Integration Results



Manual Integration Results

RT: 3.90
Area: 694882
Amount: 192.2154
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 14:54:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

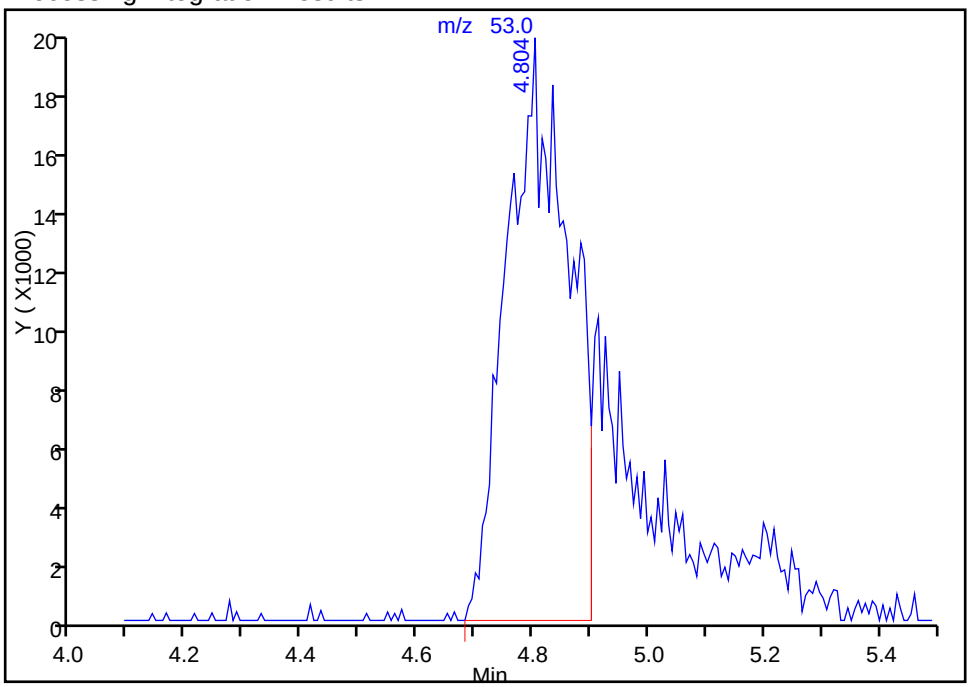
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040612.D				
Injection Date:	06-Apr-2015 14:18:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-8 MS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	12
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

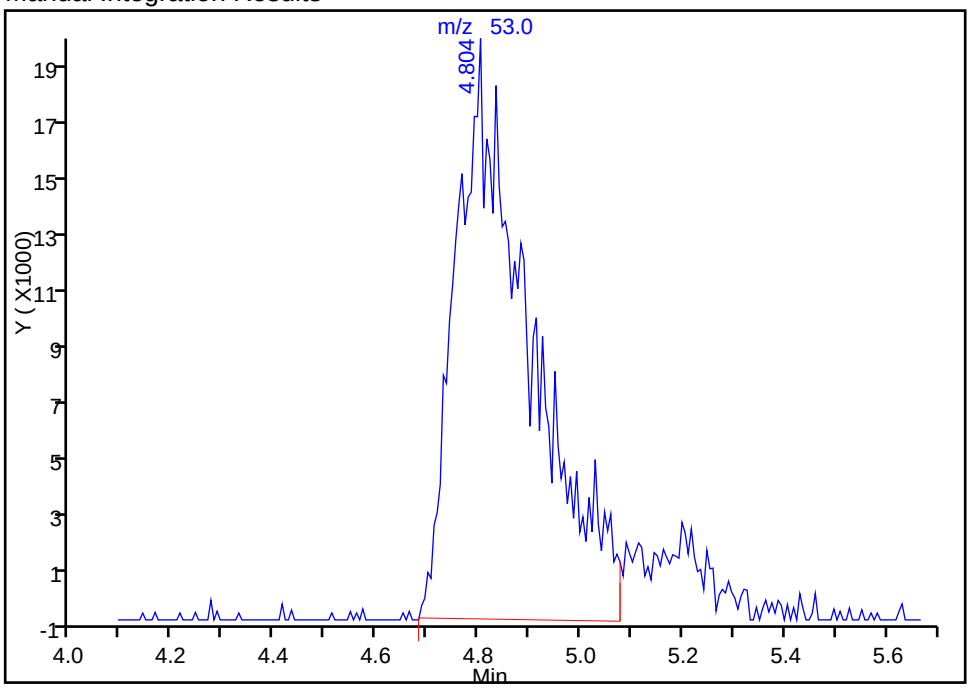
Processing Integration Results

RT: 4.80
Area: 141690
Amount: 593.0452
Amount Units: ng



Manual Integration Results

RT: 4.80
Area: 191045
Amount: 799.6211
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 14:54:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

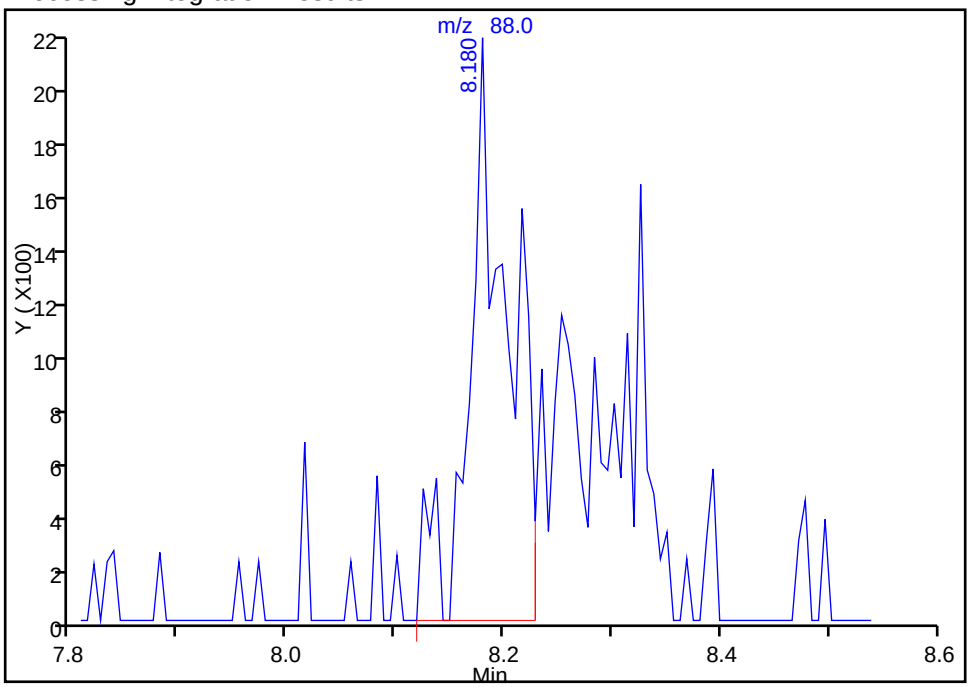
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040612.D				
Injection Date:	06-Apr-2015 14:18:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-8 MS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	12
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

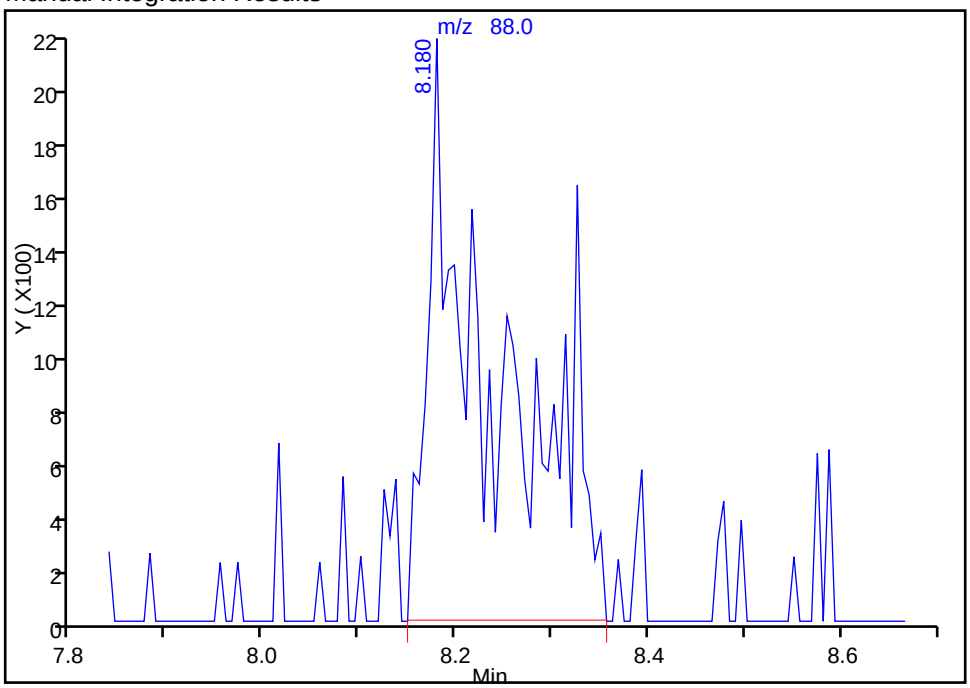
Processing Integration Results

RT: 8.18
Area: 5420
Amount: 771.5658
Amount Units: ng



Manual Integration Results

RT: 8.18
Area: 9891
Amount: 1408.0364
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 14:54:17
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

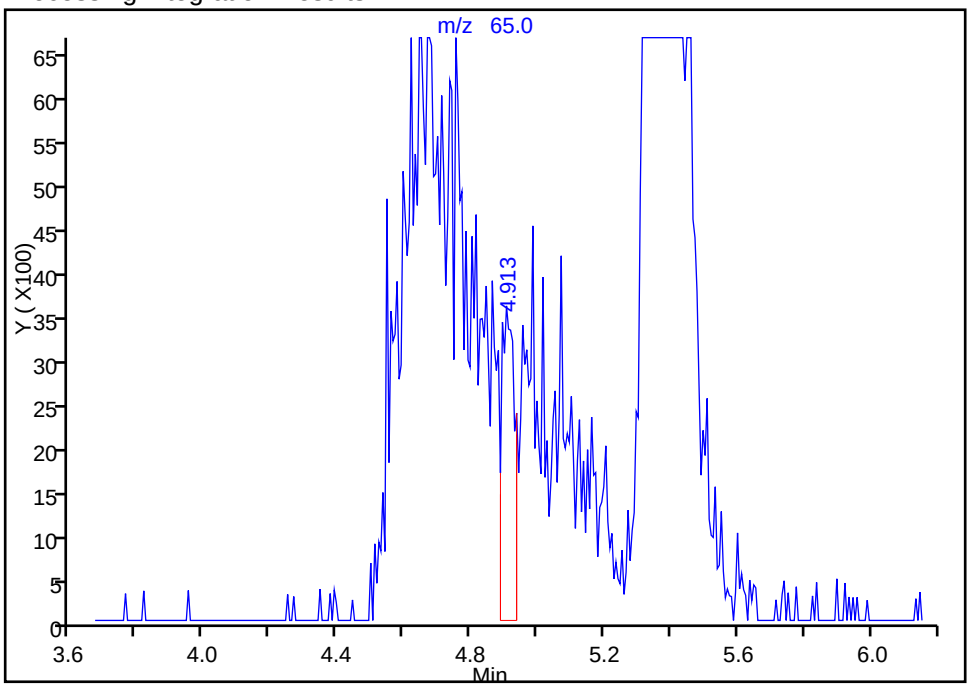
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040612.D				
Injection Date:	06-Apr-2015 14:18:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-8 MS				
Client ID:					
Operator ID:	034635	ALS Bottle#:	13	Worklist Smp#:	12
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

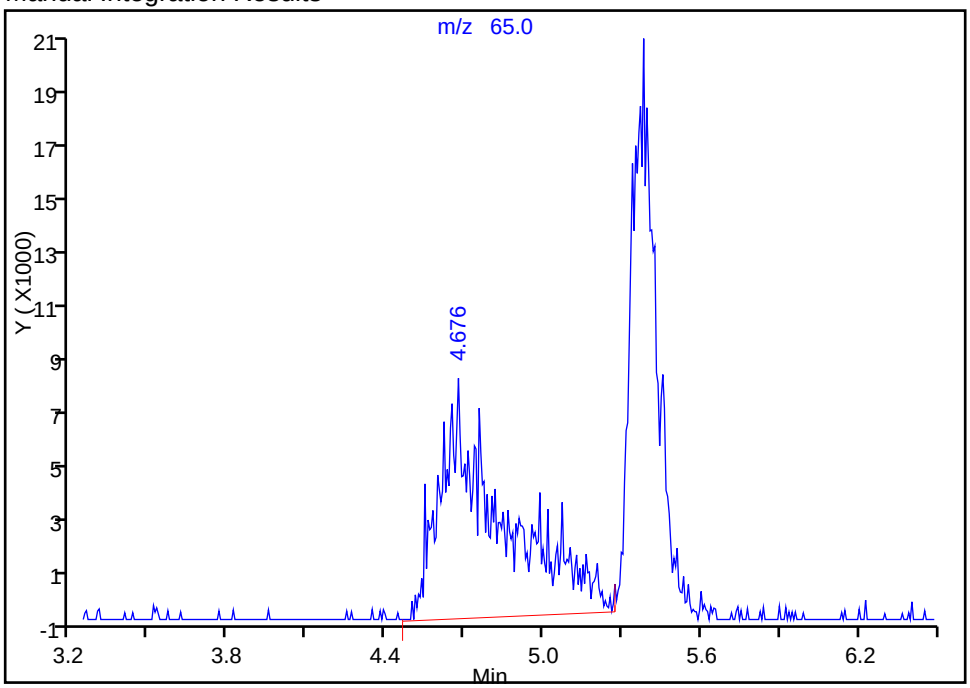
Processing Integration Results

RT: 4.91
Area: 9560
Amount: 4000.0000
Amount Units: ng



Manual Integration Results

RT: 4.68
Area: 135821
Amount: 4000.0000
Amount Units: ng



Reviewer: journetp, 07-Apr-2015 11:18:38
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 MSD | Lab Sample ID: 180-42504-4 MSD

Matrix: Water | Lab File ID: 7040313.D

Analysis Method: 8260C | Date Collected: 03/27/2015 09:37

Sample wt/vol: 20(mL) | Date Analyzed: 04/03/2015 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.: 137438 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	9.17		1.0	0.28
75-01-4	Vinyl chloride	10.1		1.0	0.23
74-83-9	Bromomethane	11.8		1.0	0.31
75-00-3	Chloroethane	11.0		1.0	0.21
75-35-4	1,1-Dichloroethene	10.3		1.0	0.30
67-64-1	Acetone	14.8		5.0	2.5
75-15-0	Carbon disulfide	10.4		1.0	0.21
75-09-2	Methylene Chloride	10.3		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.90		1.0	0.17
1634-04-4	Methyl tert-butyl ether	9.67		1.0	0.18
75-34-3	1,1-Dichloroethane	10.9		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	13.9		1.0	0.24
74-97-5	Bromochloromethane	9.79		1.0	0.18
78-93-3	2-Butanone (MEK)	13.1		5.0	0.55
67-66-3	Chloroform	10.7		1.0	0.17
71-55-6	1,1,1-Trichloroethane	11.0		1.0	0.29
56-23-5	Carbon tetrachloride	11.1		1.0	0.14
71-43-2	Benzene	9.42		1.0	0.11
107-06-2	1,2-Dichloroethane	8.54		1.0	0.21
79-01-6	Trichloroethene	10.1		1.0	0.14
78-87-5	1,2-Dichloropropane	8.94		1.0	0.095
75-27-4	Bromodichloromethane	9.92		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	9.31		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	17.0		5.0	0.53
108-88-3	Toluene	9.18		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	9.15		1.0	0.15
79-00-5	1,1,2-Trichloroethane	9.41		1.0	0.20
127-18-4	Tetrachloroethene	9.48		1.0	0.15
591-78-6	2-Hexanone	16.8		5.0	0.16
124-48-1	Dibromochloromethane	9.86		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	9.30		1.0	0.18
108-90-7	Chlorobenzene	9.84		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	9.47		1.0	0.28
100-41-4	Ethylbenzene	9.42		1.0	0.23
1330-20-7	Xylenes, Total	18.0		3.0	0.49
100-42-5	Styrene	10.4		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 MSD Lab Sample ID: 180-42504-4 MSD

Matrix: Water Lab File ID: 7040313.D

Analysis Method: 8260C Date Collected: 03/27/2015 09:37

Sample wt/vol: 20(mL) Date Analyzed: 04/03/2015 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.: 137438 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	9.57		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	10.5		1.0	0.20
107-13-1	Acrylonitrile	80.9		20	0.55
123-91-1	1,4-Dioxane	205		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)	107		71-118
460-00-4	4-Bromofluorobenzene (Surr)	108		70-118
1868-53-7	Dibromofluoromethane (Surr)	102		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040313.D
Lims ID: 180-42504-C-4 MSD
Client ID:
Sample Type: MSD
Inject. Date: 03-Apr-2015 15:11:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 180-42504-C-4 msd
Misc. Info.: 180-0006312-013
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 04-Apr-2015 13:04:11 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK027

First Level Reviewer: journetp Date: 04-Apr-2015 13:17:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.799	4.786	0.013	71	226038	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.402	7.402	0.000	95	902575	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.468	10.468	0.000	83	277421	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.792	12.786	0.006	95	393015	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.685	6.678	0.007	73	292323	200.0	203.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.037	7.043	-0.006	94	250020	200.0	182.1	
$ 7 Toluene-d8 (Surr)	98	9.039	9.038	0.001	92	881364	200.0	214.2	
$ 8 4-Bromofluorobenzene (Surr	95	11.630	11.636	-0.006	90	394277	200.0	215.3	
12 Chloromethane	50	2.025	2.000	0.025	40	334429	200.0	183.5	
13 Vinyl chloride	62	2.219	2.219	0.000	75	285442	200.0	201.1	
15 Bromomethane	94	2.523	2.511	0.012	94	269942	200.0	236.0	
16 Chloroethane	64	2.621	2.626	-0.005	43	252041	200.0	220.1	
22 1,1-Dichloroethene	96	3.533	3.527	0.006	81	248866	200.0	205.4	
24 Acetone	43	3.831	3.801	0.030	25	89227	400.0	296.0	
26 Carbon disulfide	76	3.813	3.825	-0.012	99	758730	200.0	208.5	M
31 Methylene Chloride	84	4.336	4.354	-0.018	82	268710	200.0	206.6	
34 trans-1,2-Dichloroethene	96	4.750	4.756	-0.006	91	297708	200.0	198.0	
33 Acrylonitrile	53	4.805	4.816	-0.011	94	388981	2000.0	1617.0	
35 Methyl tert-butyl ether	73	4.866	4.865	0.001	99	573221	200.0	193.4	
37 1,1-Dichloroethane	63	5.352	5.364	-0.012	97	481072	200.0	218.3	
45 cis-1,2-Dichloroethene	96	6.107	6.112	-0.005	80	414026	200.0	277.5	
46 2-Butanone (MEK)	43	6.186	6.179	0.007	98	106400	400.0	263.0	
49 Chlorobromomethane	128	6.368	6.380	-0.012	82	168259	200.0	195.8	
52 Chloroform	83	6.496	6.502	-0.006	92	529995	200.0	213.6	
53 1,1,1-Trichloroethane	97	6.672	6.678	-0.006	96	497657	200.0	220.8	
56 Carbon tetrachloride	117	6.861	6.861	0.000	96	504204	200.0	221.8	
58 Benzene	78	7.092	7.098	-0.006	96	836533	200.0	188.3	
59 1,2-Dichloroethane	62	7.123	7.122	0.001	97	256233	200.0	170.8	
64 Trichloroethene	130	7.792	7.797	-0.005	92	359525	200.0	201.9	
67 1,2-Dichloropropane	63	8.029	8.035	-0.006	82	180922	200.0	178.8	
70 1,4-Dioxane	88	8.199	8.187	0.012	60	29029	4000.0	4104.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
71 Dichlorobromomethane	83	8.315	8.321	-0.006	97	372327	200.0	198.5	
74 cis-1,3-Dichloropropene	75	8.771	8.771	0.000	93	362180	200.0	186.1	
75 4-Methyl-2-pentanone (MIBK	43	8.941	8.935	0.006	97	275018	400.0	339.3	
76 Toluene	91	9.100	9.105	-0.005	99	925532	200.0	183.6	
77 trans-1,3-Dichloropropene	75	9.331	9.330	0.001	95	319167	200.0	183.0	
79 1,1,2-Trichloroethane	97	9.507	9.507	0.000	93	187460	200.0	188.3	
80 Tetrachloroethene	164	9.647	9.647	0.000	92	249733	200.0	189.6	
82 2-Hexanone	43	9.763	9.762	0.001	96	175453	400.0	335.6	
84 Chlorodibromomethane	129	9.897	9.896	0.001	87	337704	200.0	197.3	
85 Ethylene Dibromide	107	10.012	10.018	-0.006	98	209782	200.0	186.0	
87 Chlorobenzene	112	10.499	10.498	0.001	94	695749	200.0	196.7	
89 1,1,1,2-Tetrachloroethane	131	10.578	10.578	0.000	92	323840	200.0	189.4	
90 Ethylbenzene	106	10.602	10.608	-0.006	97	378614	200.0	188.4	
91 m-Xylene & p-Xylene	106	10.724	10.724	0.000	98	481231		177.7	
92 o-Xylene	106	11.113	11.113	0.000	96	494062		181.6	
93 Styrene	104	11.132	11.131	0.001	94	775445	200.0	207.8	
94 Bromoform	173	11.314	11.314	0.000	94	185621	200.0	191.4	
99 1,1,2,2-Tetrachloroethane	83	11.776	11.776	0.000	96	219025	200.0	209.6	
S 133 Xylenes, Total	106				0		400.0	359.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOAACRPRI_00005	Amount Added:	24.00	Units: uL	
VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00108	Amount Added:	8.00	Units: uL	
voaWKetpri Re_00004	Amount Added:	8.00	Units: uL	
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

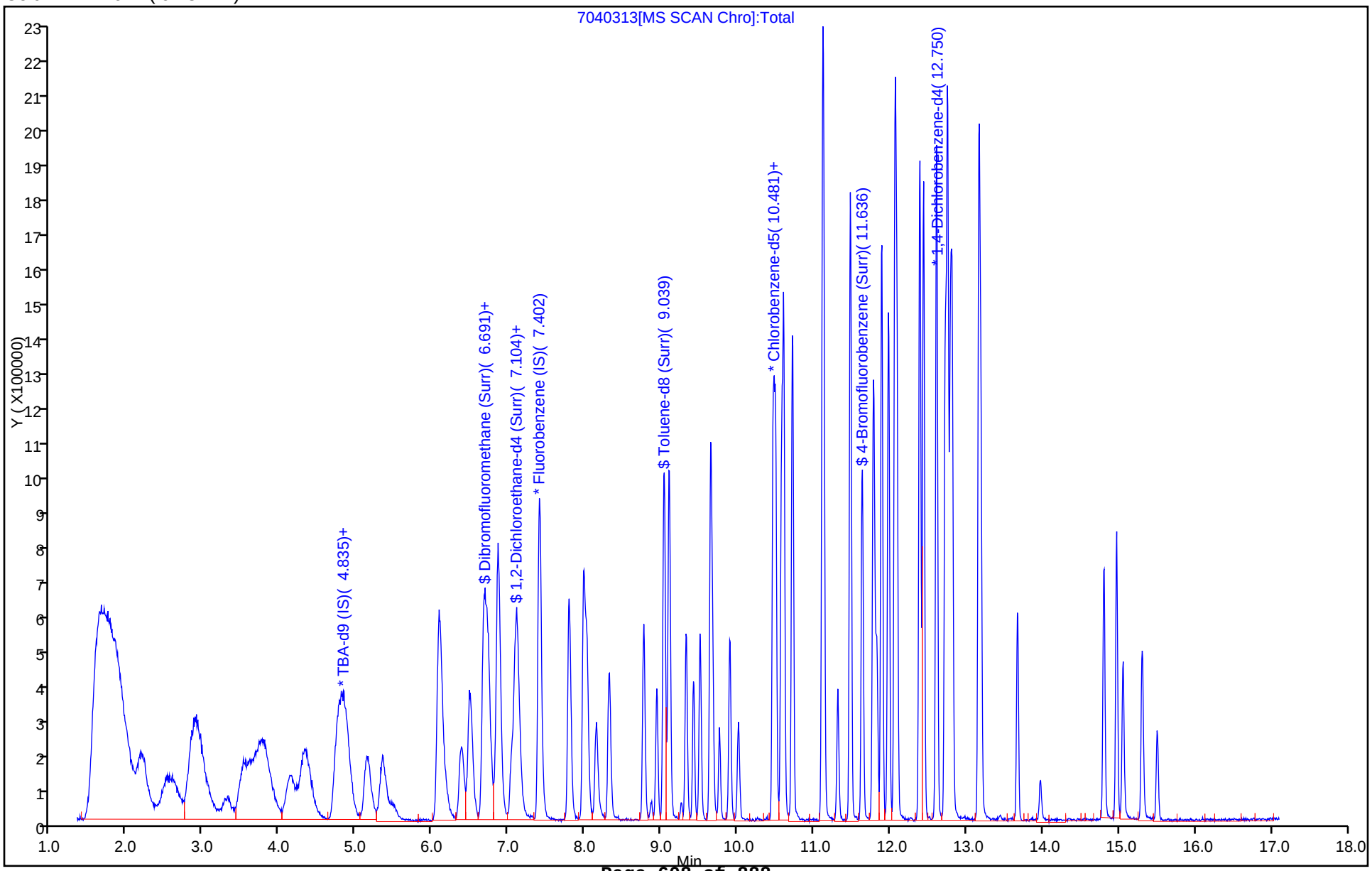
Report Date: 04-Apr-2015 13:17:03 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040313.D

Injection Date:	03-Apr-2015 15:11:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-C-4 MSD			Worklist Smp#:	13
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

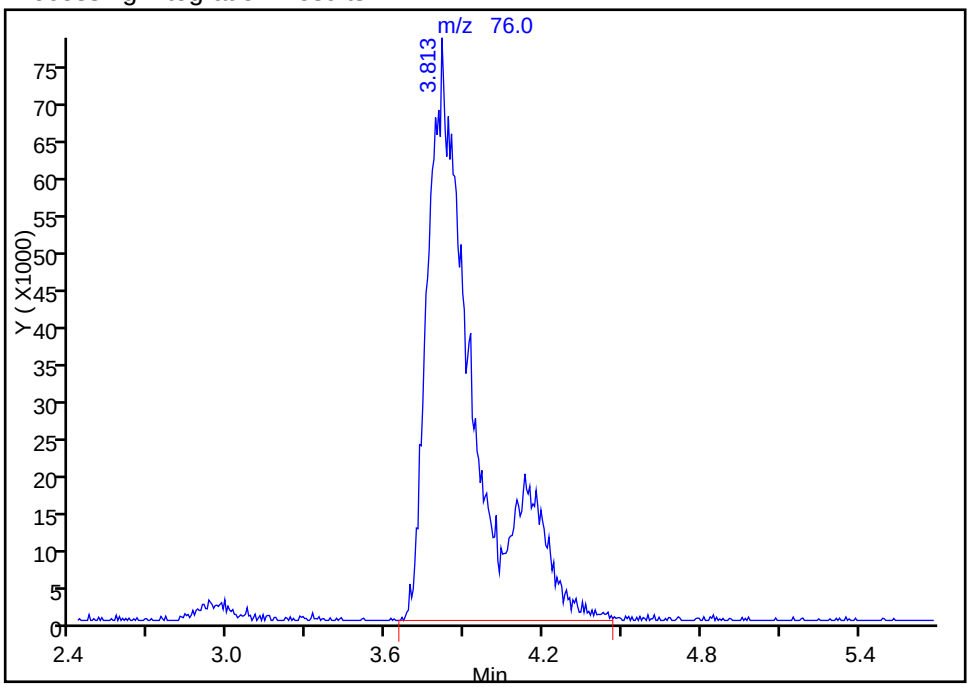
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150403-6312.b\7040313.D				
Injection Date:	03-Apr-2015 15:11:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-C-4 MSD				
Client ID:					
Operator ID:	034635	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

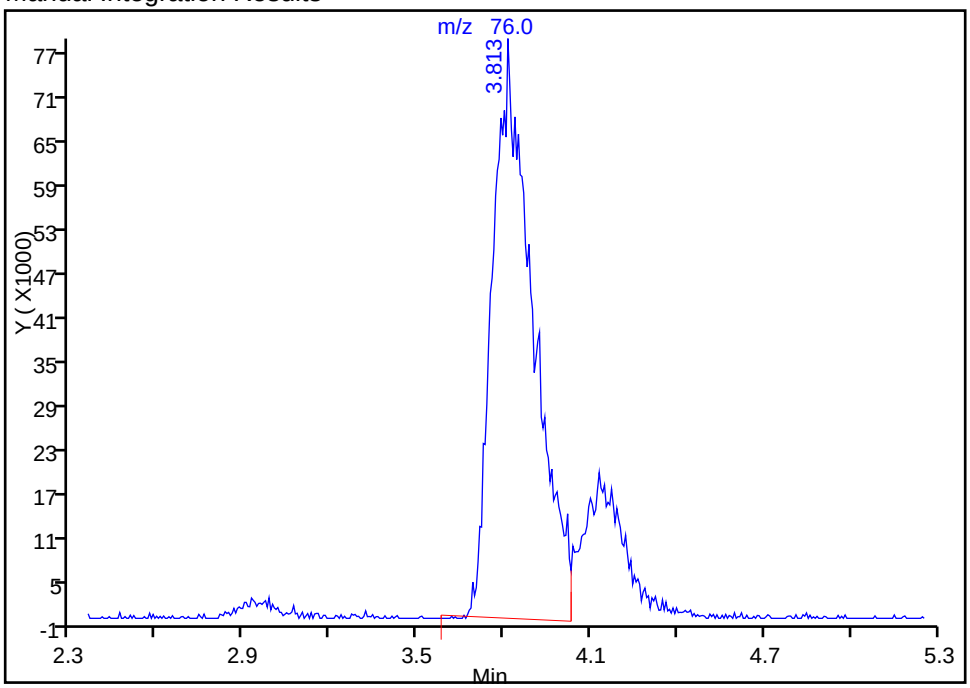
Processing Integration Results

RT: 3.81
Area: 948470
Amount: 260.5829
Amount Units: ng



Manual Integration Results

RT: 3.81
Area: 758730
Amount: 208.4536
Amount Units: ng



Reviewer: journetp, 03-Apr-2015 15:45:42
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-51D-0/1-0 MSD | Lab Sample ID: 180-42504-8 MSD

Matrix: Water | Lab File ID: 7040614.D

Analysis Method: 8260C | Date Collected: 03/27/2015 13:30

Sample wt/vol: 20(mL) | Date Analyzed: 04/06/2015 15:12

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.: 137564 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	7.73		1.0	0.28
75-01-4	Vinyl chloride	7.68		1.0	0.23
74-83-9	Bromomethane	11.1		1.0	0.31
75-00-3	Chloroethane	9.53		1.0	0.21
75-35-4	1,1-Dichloroethene	9.95		1.0	0.30
67-64-1	Acetone	4.71	J	5.0	2.5
75-15-0	Carbon disulfide	9.74		1.0	0.21
75-09-2	Methylene Chloride	8.31		1.0	0.13
156-60-5	trans-1,2-Dichloroethene	9.04		1.0	0.17
1634-04-4	Methyl tert-butyl ether	6.31		1.0	0.18
75-34-3	1,1-Dichloroethane	9.57		1.0	0.12
156-59-2	cis-1,2-Dichloroethene	12.7		1.0	0.24
74-97-5	Bromochloromethane	6.87		1.0	0.18
78-93-3	2-Butanone (MEK)	6.54		5.0	0.55
67-66-3	Chloroform	8.96		1.0	0.17
71-55-6	1,1,1-Trichloroethane	9.79		1.0	0.29
56-23-5	Carbon tetrachloride	9.80		1.0	0.14
71-43-2	Benzene	8.75		1.0	0.11
107-06-2	1,2-Dichloroethane	6.06		1.0	0.21
79-01-6	Trichloroethene	15.7		1.0	0.14
78-87-5	1,2-Dichloropropane	7.51		1.0	0.095
75-27-4	Bromodichloromethane	7.39		1.0	0.13
10061-01-5	cis-1,3-Dichloropropene	7.12		1.0	0.19
108-10-1	4-Methyl-2-pentanone (MIBK)	9.86		5.0	0.53
108-88-3	Toluene	10.2		1.0	0.15
10061-02-6	trans-1,3-Dichloropropene	7.19		1.0	0.15
79-00-5	1,1,2-Trichloroethane	6.92		1.0	0.20
127-18-4	Tetrachloroethene	10.3		1.0	0.15
591-78-6	2-Hexanone	9.10		5.0	0.16
124-48-1	Dibromochloromethane	6.85		1.0	0.14
106-93-4	1,2-Dibromoethane (EDB)	6.04		1.0	0.18
108-90-7	Chlorobenzene	9.53		1.0	0.14
630-20-6	1,1,1,2-Tetrachloroethane	8.84		1.0	0.28
100-41-4	Ethylbenzene	9.19		1.0	0.23
1330-20-7	Xylenes, Total	18.1		3.0	0.49
100-42-5	Styrene	8.94		1.0	0.097

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-51D-0/1-0 MSD Lab Sample ID: 180-42504-8 MSD

Matrix: Water Lab File ID: 7040614.D

Analysis Method: 8260C Date Collected: 03/27/2015 13:30

Sample wt/vol: 20(mL) Date Analyzed: 04/06/2015 15:12

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.: 137564 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-25-2	Bromoform	6.15		1.0	0.19
79-34-5	1,1,2,2-Tetrachloroethane	6.93		1.0	0.20
107-13-1	Acrylonitrile	41.3		20	0.55
123-91-1	1,4-Dioxane	141	J	200	34

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	66		64-135
2037-26-5	Toluene-d8 (Surr)	119	X	71-118
460-00-4	4-Bromofluorobenzene (Surr)	98		70-118
1868-53-7	Dibromofluoromethane (Surr)	87		70-128

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040614.D
Lims ID: 180-42504-D-8 MSD
Client ID:
Sample Type: MSD
Inject. Date: 06-Apr-2015 15:12:30 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 180-42504-D-8 msD
Misc. Info.: 180-0006335-014
Operator ID: 034635 Instrument ID: CHHP7

Method: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Apr-2015 15:45:36 Calib Date: 30-Mar-2015 14:36:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHHP7\20150330-6234.b\7033010.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK002

First Level Reviewer: journetp Date: 06-Apr-2015 15:44:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.704	4.932	-0.228	84	152997	4000.0	4000.0	
* 2 Fluorobenzene (IS)	96	7.405	7.396	0.009	96	933571	200.0	200.0	
* 3 Chlorobenzene-d5	119	10.471	10.468	0.003	83	250060	200.0	200.0	
* 4 1,4-Dichlorobenzene-d4	152	12.788	12.792	-0.004	94	310976	200.0	200.0	
$ 5 Dibromofluoromethane (Surr	113	6.675	6.672	0.003	78	258820	200.0	173.8	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.040	7.037	0.003	70	186564	200.0	131.4	
$ 7 Toluene-d8 (Surr)	98	9.041	9.032	0.009	91	879569	200.0	237.1	
$ 8 4-Bromofluorobenzene (Surr	95	11.633	11.636	-0.003	90	326380	200.0	196.5	
12 Chloromethane	50	1.996	2.012	-0.016	50	291594	200.0	154.7	
13 Vinyl chloride	62	2.215	2.201	0.014	75	225493	200.0	153.6	M
15 Bromomethane	94	2.532	2.487	0.045	80	261723	200.0	221.2	
16 Chloroethane	64	2.647	2.602	0.045	47	225823	200.0	190.7	
22 1,1-Dichloroethene	96	3.572	3.521	0.051	86	249412	200.0	199.0	
26 Carbon disulfide	76	3.864	3.782	0.082	100	733438	200.0	194.8	
24 Acetone	43	3.767	3.843	-0.076	26	42038	200.0	94.1	M
31 Methylene Chloride	84	4.357	4.318	0.039	84	223689	200.0	166.3	
34 trans-1,2-Dichloroethene	96	4.770	4.731	0.039	91	281250	200.0	180.8	
33 Acrylonitrile	53	4.789	4.810	-0.021	83	205427	2000.0	825.6	M
35 Methyl tert-butyl ether	73	4.843	4.877	-0.034	94	386977	200.0	126.3	M
37 1,1-Dichloroethane	63	5.348	5.340	0.008	97	436362	200.0	191.4	
45 cis-1,2-Dichloroethene	96	6.103	6.082	0.021	78	393082	200.0	254.7	
46 2-Butanone (MEK)	43	6.188	6.191	-0.003	89	54768	200.0	130.9	M
49 Chlorobromomethane	128	6.383	6.374	0.009	80	122182	200.0	137.4	
52 Chloroform	83	6.498	6.496	0.002	92	460135	200.0	179.3	
53 1,1,1-Trichloroethane	97	6.687	6.672	0.015	95	456546	200.0	195.9	
56 Carbon tetrachloride	117	6.863	6.848	0.015	96	460971	200.0	196.0	
58 Benzene	78	7.106	7.086	0.020	96	803670	200.0	174.9	
59 1,2-Dichloroethane	62	7.131	7.122	0.009	61	188212	200.0	121.3	
64 Trichloroethene	130	7.794	7.785	0.009	92	578744	200.0	314.2	
67 1,2-Dichloropropane	63	8.031	8.029	0.002	80	157218	200.0	150.2	
70 1,4-Dioxane	88	8.189	8.187	0.002	34	20561	4000.0	2810.6	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng	OnCol Amt ng	Flags
71 Dichlorobromomethane	83	8.311	8.308	0.003	98	286861	200.0	147.8	
74 cis-1,3-Dichloropropene	75	8.773	8.771	0.002	93	286529	200.0	142.3	
75 4-Methyl-2-pentanone (MIBK	43	8.938	8.941	-0.003	96	144112	200.0	197.2	
76 Toluene	91	9.102	9.099	0.003	98	909146	200.0	203.8	
77 trans-1,3-Dichloropropene	75	9.333	9.324	0.009	95	226104	200.0	143.8	
79 1,1,2-Trichloroethane	97	9.509	9.507	0.002	89	124149	200.0	138.3	
80 Tetrachloroethene	164	9.649	9.647	0.002	91	242117	200.0	206.8	
82 2-Hexanone	43	9.759	9.762	-0.003	95	85782	200.0	182.0	
84 Chlorodibromomethane	129	9.899	9.896	0.003	89	211461	200.0	137.1	
85 Ethylene Dibromide	107	10.014	10.006	0.008	96	122892	200.0	120.9	
87 Chlorobenzene	112	10.501	10.498	0.003	94	607514	200.0	190.6	
89 1,1,1,2-Tetrachloroethane	131	10.580	10.572	0.008	94	272551	200.0	176.9	
90 Ethylbenzene	106	10.604	10.602	0.002	98	332851	200.0	183.8	
91 m-Xylene & p-Xylene	106	10.726	10.717	0.009	98	450463		184.5	
92 o-Xylene	106	11.115	11.113	0.002	96	432966		176.6	
93 Styrene	104	11.128	11.125	0.003	94	618211	200.0	178.9	
94 Bromoform	173	11.316	11.320	-0.004	93	107480	200.0	122.9	
99 1,1,2,2-Tetrachloroethane	83	11.773	11.770	0.002	74	130520	200.0	138.6	
S 133 Xylenes, Total	106				0		400.0	361.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

VOAVAPRI_00005	Amount Added:	8.00	Units: uL	
VOA8260VOAPRI_00108	Amount Added:	8.00	Units: uL	
VOAACRPRI_00005	Amount Added:	24.00	Units: uL	
VOA8260SURR_00017	Amount Added:	8.00	Units: uL	Run Reagent
VOA8260INT_00030	Amount Added:	8.00	Units: uL	Run Reagent

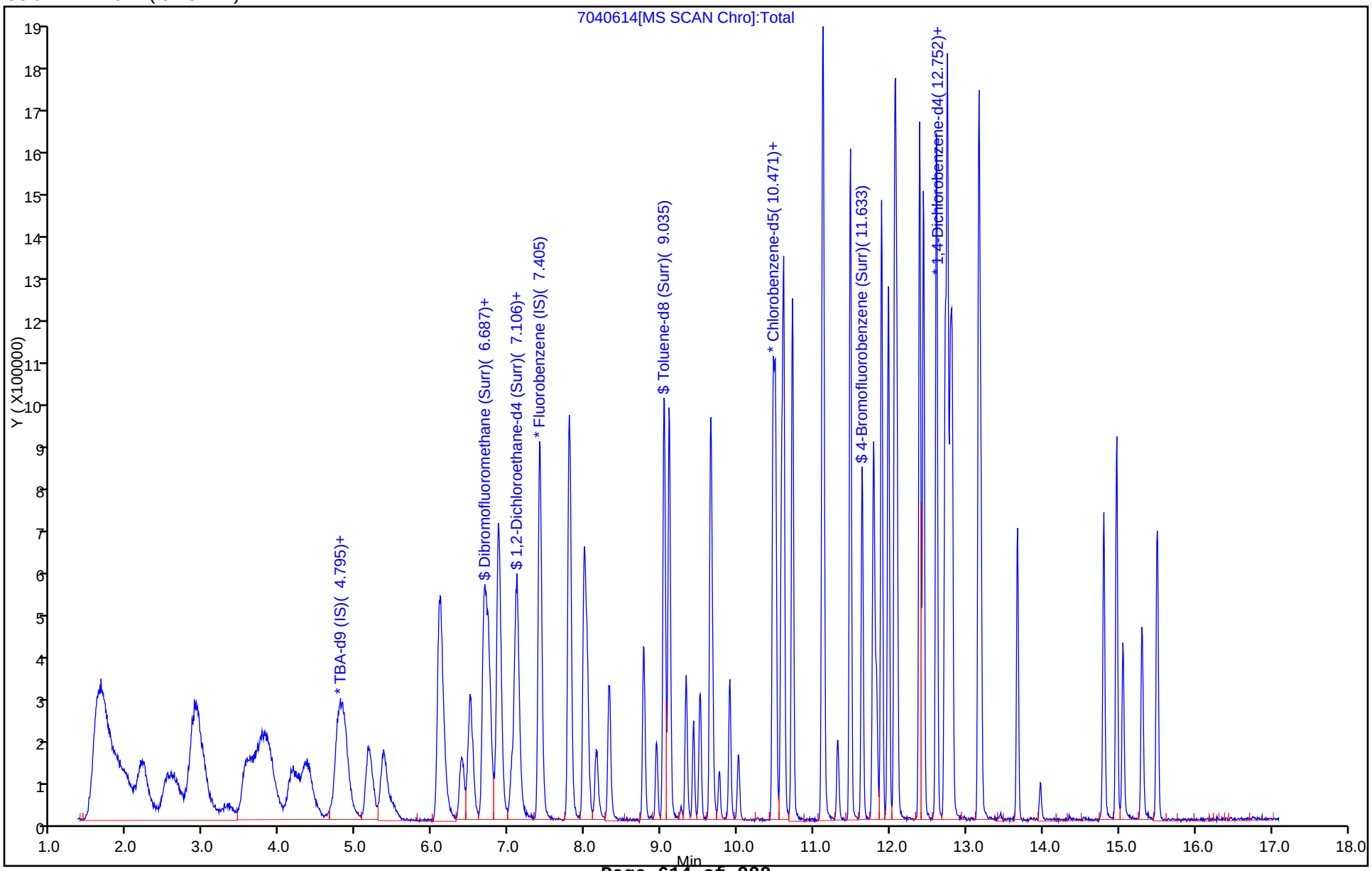
Report Date: 06-Apr-2015 15:45:46 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040614.D

Injection Date:	06-Apr-2015 15:12:30	Instrument ID:	CHHP7	Operator ID:	034635
Lims ID:	180-42504-D-8 MSD			Worklist Smp#:	14
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		

Column: DB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

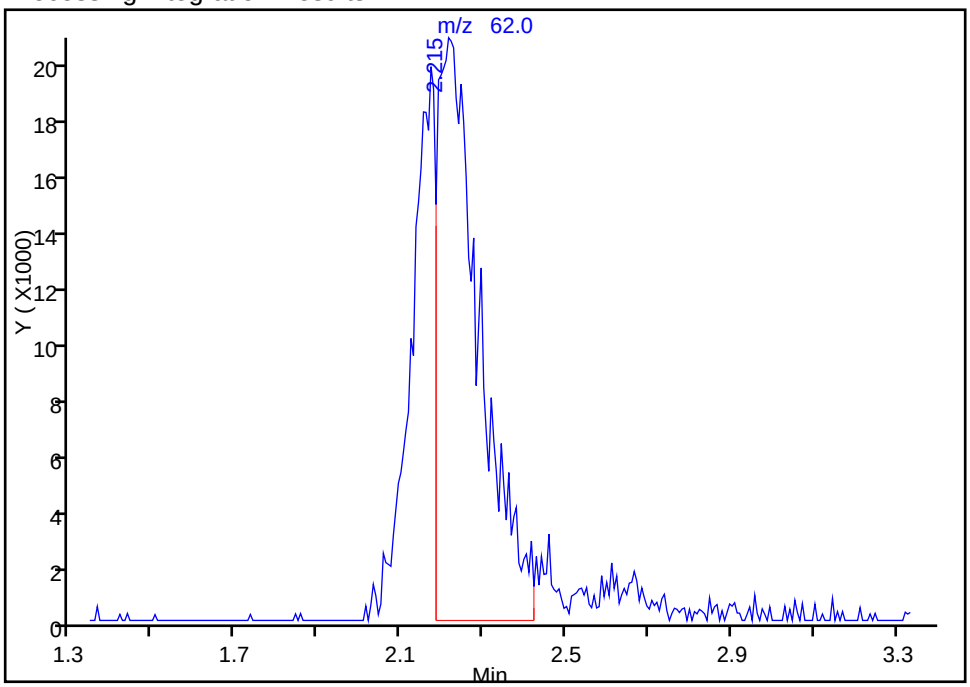
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040614.D
Injection Date: 06-Apr-2015 15:12:30 Instrument ID: CHHP7
Lims ID: 180-42504-D-8 MSD
Client ID:
Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

13 Vinyl chloride, CAS: 75-01-4

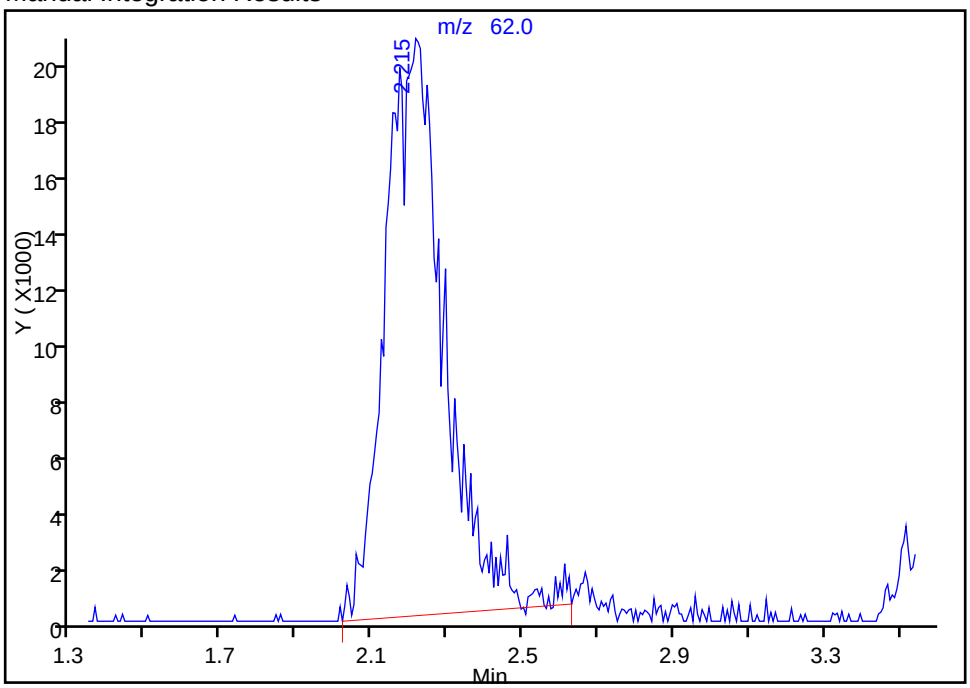
Processing Integration Results

RT: 2.22
Area: 147289
Amount: 100.3296
Amount Units: ng



Manual Integration Results

RT: 2.22
Area: 225493
Amount: 153.6002
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 15:44:44
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

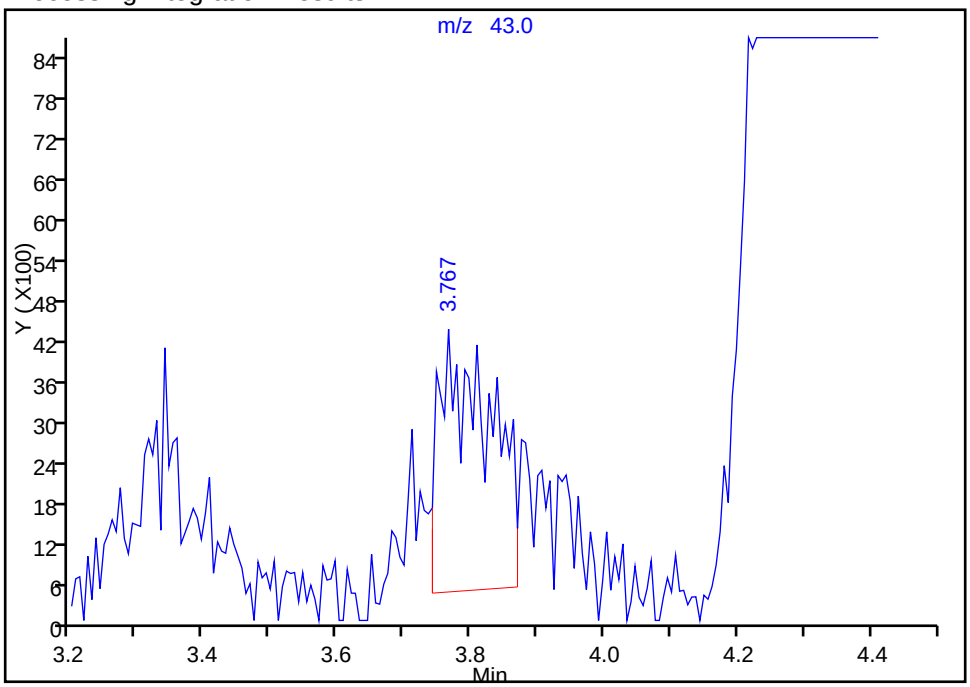
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040614.D				
Injection Date:	06-Apr-2015 15:12:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-8 MSD				
Client ID:					
Operator ID:	034635	ALS Bottle#:	15	Worklist Smp#:	14
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

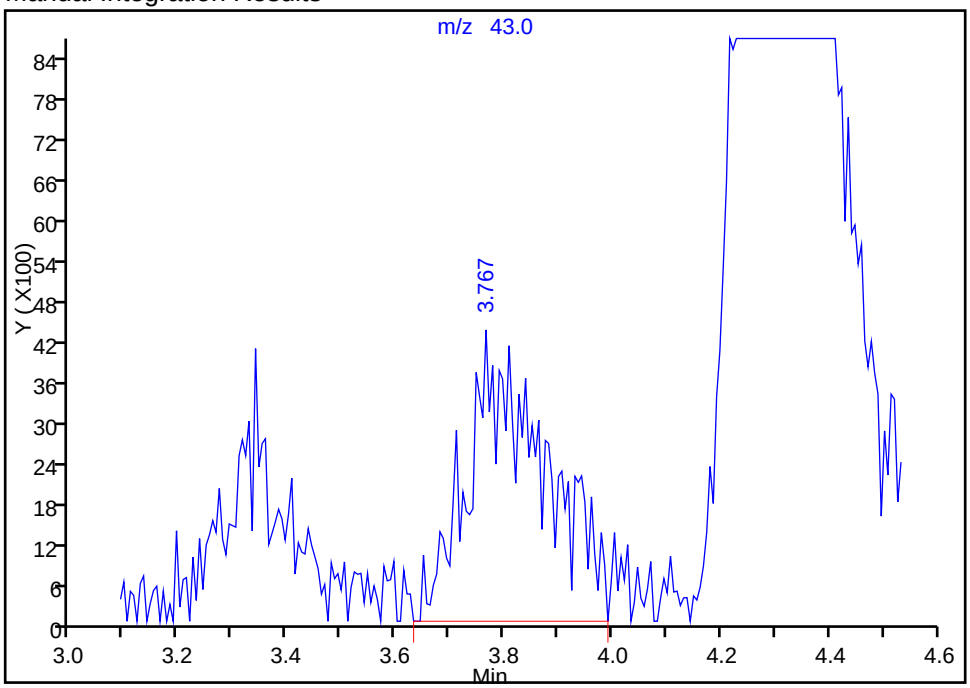
Processing Integration Results

RT: 3.77
Area: 20496
Amount: 7.605400
Amount Units: ng



Manual Integration Results

RT: 3.77
Area: 42038
Amount: 94.130514
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 15:44:44
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

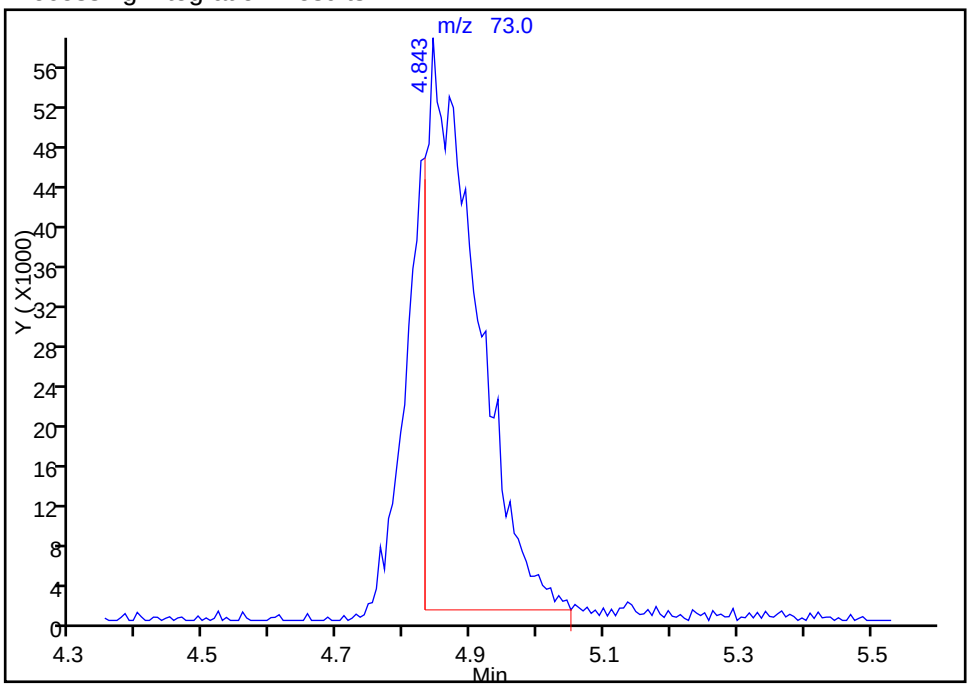
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040614.D
Injection Date: 06-Apr-2015 15:12:30 Instrument ID: CHHP7
Lims ID: 180-42504-D-8 MSD
Client ID:
Operator ID: 034635 ALS Bottle#: 15 Worklist Smp#: 14
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MSVOA_LL_CHHP7 Limit Group: VOA 8260C ICAL
Column: DB-624 (0.18 mm) Detector MS SCAN

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

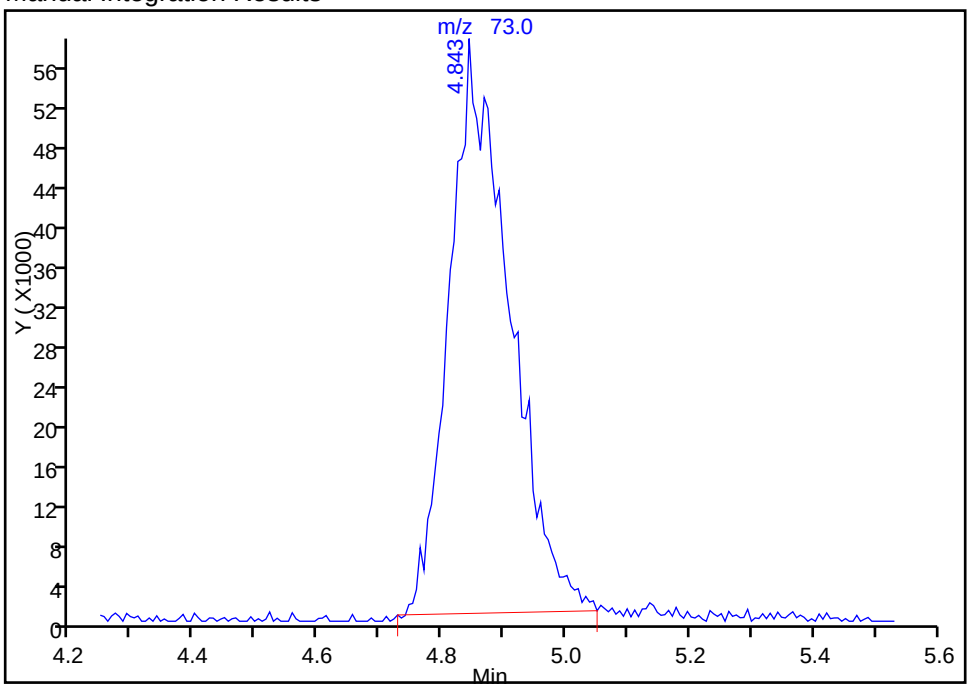
Processing Integration Results

RT: 4.84
Area: 298795
Amount: 97.488480
Amount Units: ng



Manual Integration Results

RT: 4.84
Area: 386977
Amount: 126.2598
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 15:44:44
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

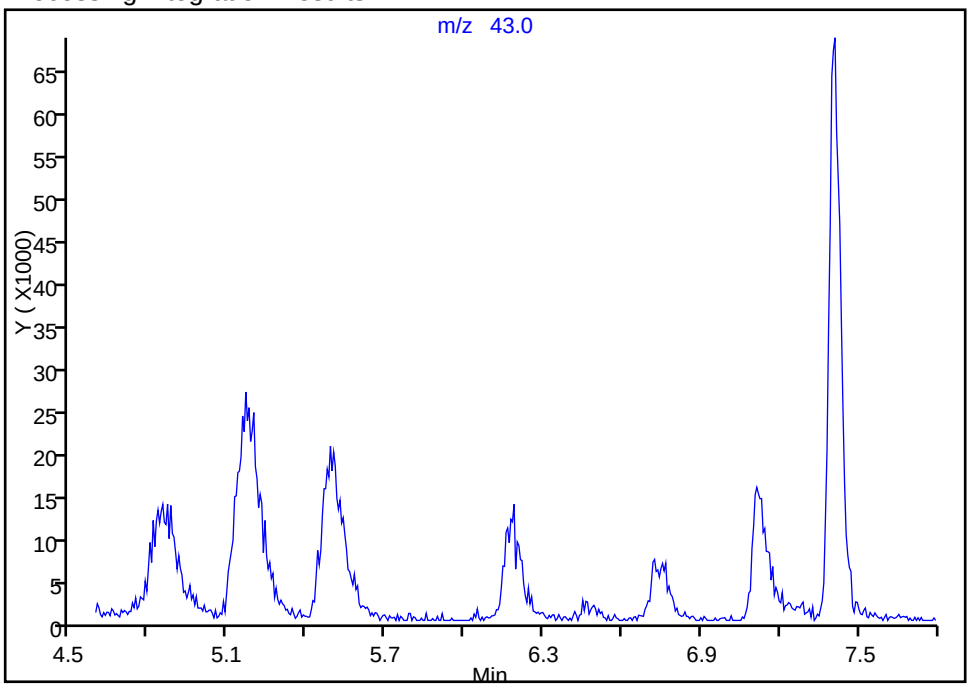
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040614.D				
Injection Date:	06-Apr-2015 15:12:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-8 MSD				
Client ID:					
Operator ID:	034635	ALS Bottle#:	15	Worklist Smp#:	14
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

46 2-Butanone (MEK), CAS: 78-93-3

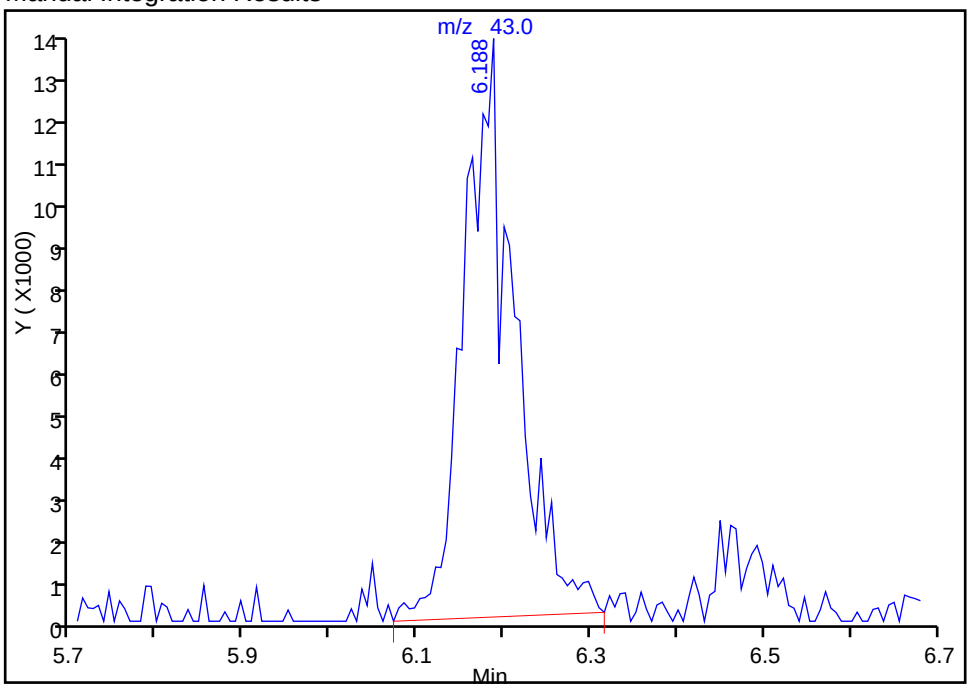
Not Detected
Expected RT: 6.19

Processing Integration Results



Manual Integration Results

RT: 6.19
Area: 54768
Amount: 130.8804
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 15:44:44
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

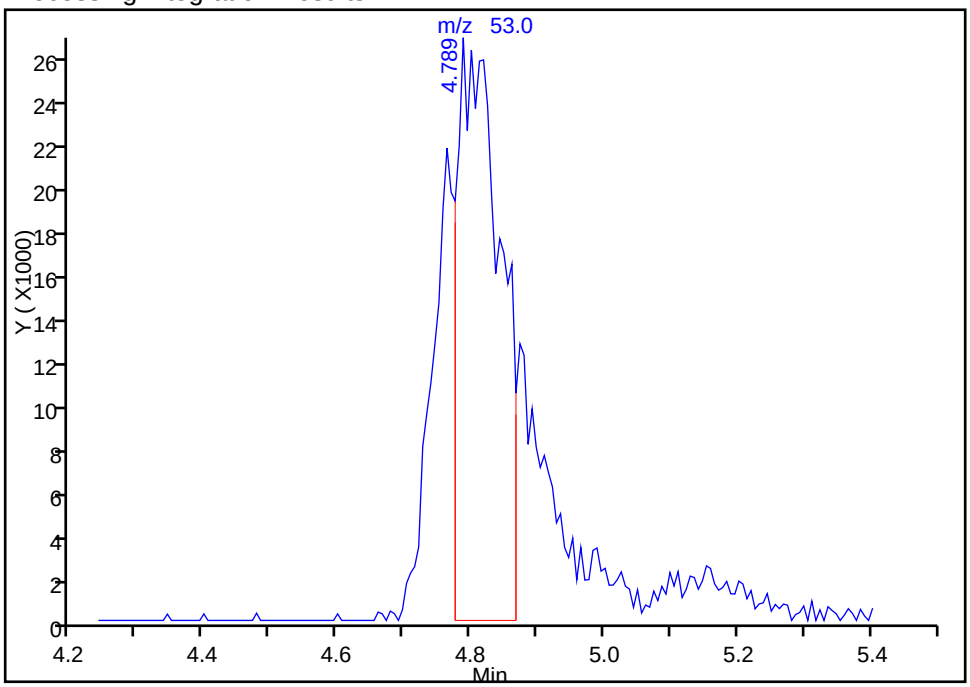
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040614.D				
Injection Date:	06-Apr-2015 15:12:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-8 MSD				
Client ID:					
Operator ID:	034635	ALS Bottle#:	15	Worklist Smp#:	14
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

33 Acrylonitrile, CAS: 107-13-1

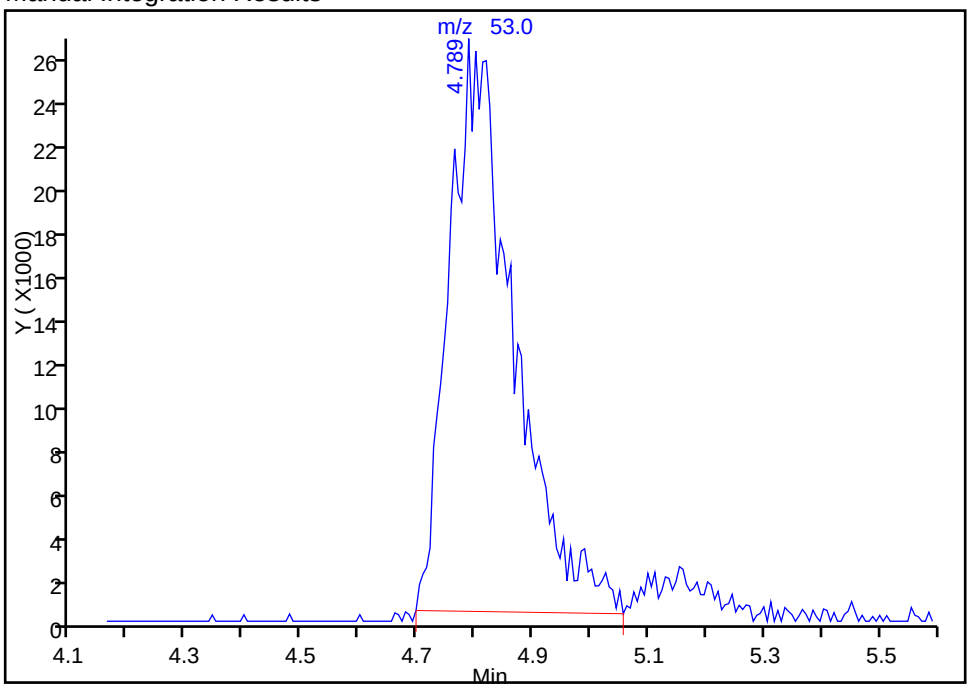
Processing Integration Results

RT: 4.79
Area: 120292
Amount: 483.4666
Amount Units: ng



Manual Integration Results

RT: 4.79
Area: 205427
Amount: 825.6334
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 15:44:44
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

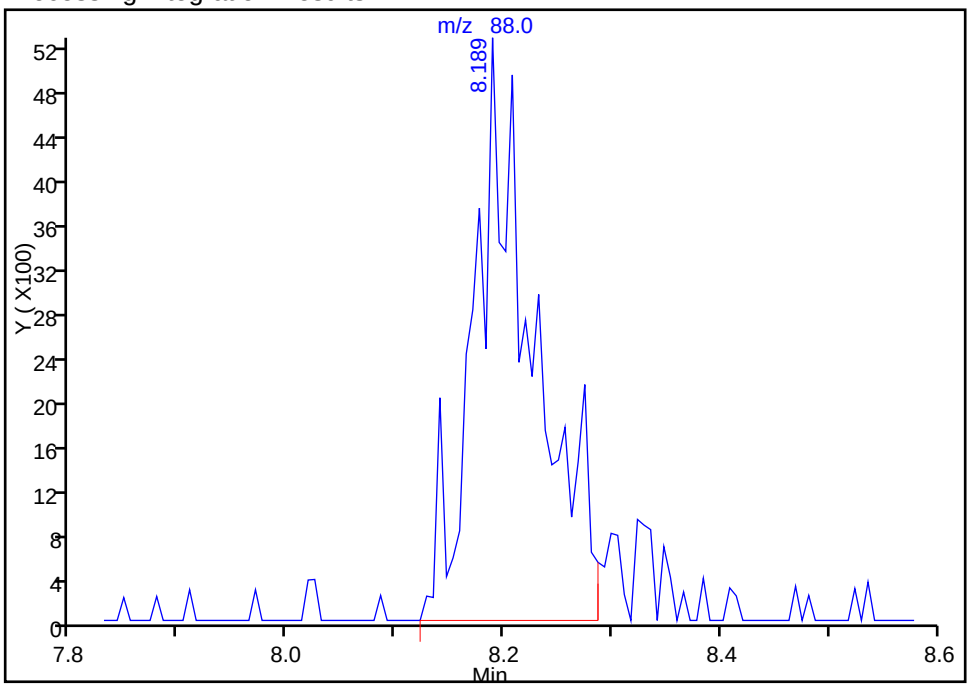
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHHP7\20150406-6335.b\7040614.D				
Injection Date:	06-Apr-2015 15:12:30	Instrument ID:	CHHP7		
Lims ID:	180-42504-D-8 MSD				
Client ID:					
Operator ID:	034635	ALS Bottle#:	15	Worklist Smp#:	14
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MSVOA_LL_CHHP7	Limit Group:	VOA 8260C ICAL		
Column:	DB-624 (0.18 mm)	Detector	MS SCAN		

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

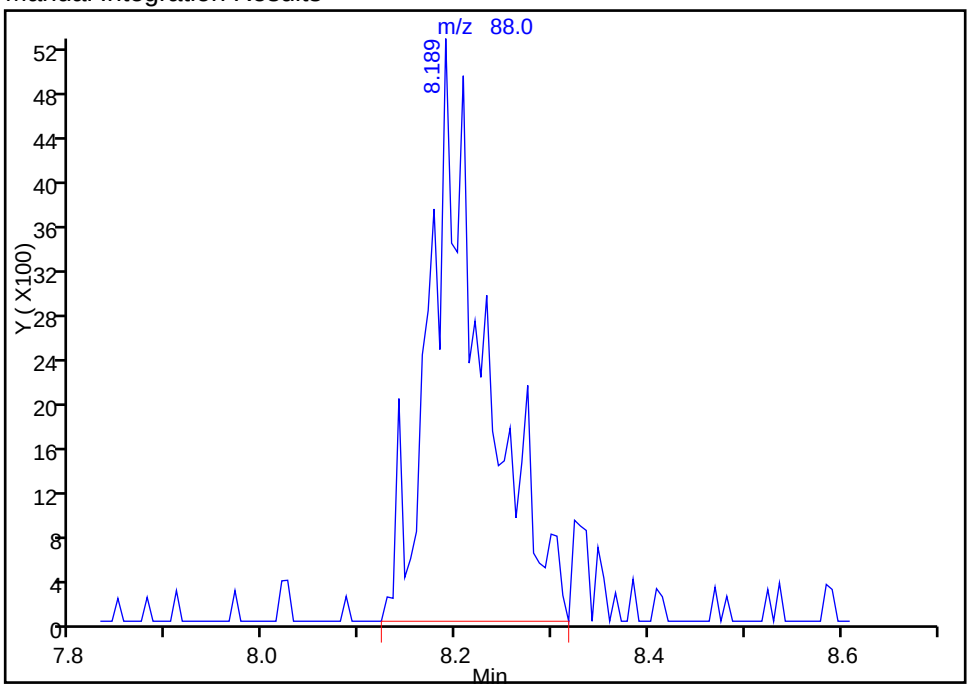
Processing Integration Results

RT: 8.19
Area: 19742
Amount: 2698.6464
Amount Units: ng



Manual Integration Results

RT: 8.19
Area: 20561
Amount: 2810.6001
Amount Units: ng



Reviewer: journetp, 06-Apr-2015 15:44:44
Audit Action: Manually Integrated
Audit Reason: Poor chromatography

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Start Date: 03/30/2015 09:32

Analysis Batch Number: 136928 End Date: 03/30/2015 14:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-136928/1		03/30/2015 09:32	1	7033001.D	DB-624 0.18(mm)
IC 180-136928/3		03/30/2015 10:57	1	7033003.D	DB-624 0.18(mm)
IC 180-136928/4		03/30/2015 11:28	1	7033004.D	DB-624 0.18(mm)
ICIS 180-136928/5		03/30/2015 11:55	1	7033005.D	DB-624 0.18(mm)
IC 180-136928/6		03/30/2015 12:23	1	7033006.D	DB-624 0.18(mm)
IC 180-136928/7		03/30/2015 13:05	1	7033007.D	DB-624 0.18(mm)
IC 180-136928/8		03/30/2015 13:32	1	7033008.D	DB-624 0.18(mm)
IC 180-136928/9		03/30/2015 14:05	1	7033009.D	DB-624 0.18(mm)
IC 180-136928/10		03/30/2015 14:36	1	7033010.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Start Date: 04/03/2015 09:28

Analysis Batch Number: 137438 End Date: 04/03/2015 20:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-137438/1		04/03/2015 09:28	1	7040301.D	DB-624 0.18(mm)
CCVIS 180-137438/3		04/03/2015 10:07	1	7040302.D	DB-624 0.18(mm)
MB 180-137438/6		04/03/2015 11:46	1	7040306.D	DB-624 0.18(mm)
180-42504-1	HD-QC7-0/1-2	04/03/2015 12:13	1	7040307.D	DB-624 0.18(mm)
180-42504-4	HD-CW-18-0/1-0	04/03/2015 12:54	1	7040308.D	DB-624 0.18(mm)
ZZZZZ		04/03/2015 13:22	25		DB-624 0.18(mm)
180-42504-4 MS	HD-CW-18-0/1-0 MS	04/03/2015 14:16	1	7040311.D	DB-624 0.18(mm)
LCS 180-137438/12		04/03/2015 14:44	1	7040312.D	DB-624 0.18(mm)
180-42504-4 MSD	HD-CW-18-0/1-0 MSD	04/03/2015 15:11	1	7040313.D	DB-624 0.18(mm)
ZZZZZ		04/03/2015 16:05	1		DB-624 0.18(mm)
ZZZZZ		04/03/2015 16:32	10		DB-624 0.18(mm)
ZZZZZ		04/03/2015 16:59	1		DB-624 0.18(mm)
ZZZZZ		04/03/2015 17:26	10		DB-624 0.18(mm)
ZZZZZ		04/03/2015 17:53	4		DB-624 0.18(mm)
ZZZZZ		04/03/2015 18:47	10		DB-624 0.18(mm)
180-42504-3	HD-MW-97-0/1-0	04/03/2015 19:14	20	7040322.D	DB-624 0.18(mm)
ZZZZZ		04/03/2015 19:41	100		DB-624 0.18(mm)
180-42504-6 DL	HD-MW-132-0/1-0 DL	04/03/2015 20:08	5	7040324.D	DB-624 0.18(mm)
180-42504-7 DL	HD-MW-75D-0/1-0 DL	04/03/2015 20:35	500	7040325.D	DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Start Date: 04/04/2015 13:00

Analysis Batch Number: 137512 End Date: 04/04/2015 23:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-137512/1		04/04/2015 13:00	1	7040401.D	DB-624 0.18(mm)
CCVIS 180-137512/3		04/04/2015 14:19	1	7040403.D	DB-624 0.18(mm)
MB 180-137512/6		04/04/2015 15:41	1	7040406.D	DB-624 0.18(mm)
LCS 180-137512/8		04/04/2015 16:44	1	7040408.D	DB-624 0.18(mm)
LCSD 180-137512/9		04/04/2015 17:11	1	7040409.D	DB-624 0.18(mm)
ZZZZZ		04/04/2015 18:59	2.5		DB-624 0.18(mm)
ZZZZZ		04/04/2015 19:53	5		DB-624 0.18(mm)
180-42504-2	HD-MW-127-0/1-0	04/04/2015 20:47	10	7040417.D	DB-624 0.18(mm)
ZZZZZ		04/04/2015 21:14	50		DB-624 0.18(mm)
ZZZZZ		04/04/2015 22:36	1		DB-624 0.18(mm)
ZZZZZ		04/04/2015 23:30	40		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Start Date: 04/06/2015 08:19

Analysis Batch Number: 137564 End Date: 04/06/2015 19:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-137564/1		04/06/2015 08:19	1	7040601.D	DB-624 0.18(mm)
CCVIS 180-137564/3		04/06/2015 09:40	1	7040603.D	DB-624 0.18(mm)
MB 180-137564/6		04/06/2015 11:09	1	7040606.D	DB-624 0.18(mm)
ZZZZZ		04/06/2015 11:48	500		DB-624 0.18(mm)
ZZZZZ		04/06/2015 12:15	1		DB-624 0.18(mm)
ZZZZZ		04/06/2015 12:54	5		DB-624 0.18(mm)
ZZZZZ		04/06/2015 13:21	1		DB-624 0.18(mm)
180-42504-9	HD-MW-50S-0/1-0	04/06/2015 13:48	50	7040611.D	DB-624 0.18(mm)
180-42504-8 MS	HD-MW-51D-0/1-0 MS	04/06/2015 14:18	1	7040612.D	DB-624 0.18(mm)
LCS 180-137564/13		04/06/2015 14:45	1	7040613.D	DB-624 0.18(mm)
180-42504-8 MSD	HD-MW-51D-0/1-0 MSD	04/06/2015 15:12	1	7040614.D	DB-624 0.18(mm)
180-42504-8	HD-MW-51D-0/1-0	04/06/2015 16:08	1	7040616.D	DB-624 0.18(mm)
ZZZZZ		04/06/2015 16:35	2.5		DB-624 0.18(mm)
180-42504-6	HD-MW-132-0/1-0	04/06/2015 17:29	1	7040619.D	DB-624 0.18(mm)
180-42504-5 DL	HD-MW-114-0/1-0 DL	04/06/2015 18:24	100	7040621.D	DB-624 0.18(mm)
180-42504-5	HD-MW-114-0/1-0	04/06/2015 18:51	10	7040622.D	DB-624 0.18(mm)
ZZZZZ		04/06/2015 19:45	1		DB-624 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHHP7 Start Date: 04/08/2015 08:17

Analysis Batch Number: 137846 End Date: 04/08/2015 13:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-137846/1		04/08/2015 08:17	1	7040801.D	DB-624 0.18(mm)
CCVIS 180-137846/3		04/08/2015 09:26	1	7040803.D	DB-624 0.18(mm)
ZZZZZ		04/08/2015 09:26	1		DB-624 0.18(mm)
MB 180-137846/7		04/08/2015 11:22	1	7040807.D	DB-624 0.18(mm)
180-42504-7	HD-MW-75D-0/1-0	04/08/2015 11:49	50	7040808.D	DB-624 0.18(mm)
LCS 180-137846/10		04/08/2015 12:58	1	7040810.D	DB-624 0.18(mm)
LCSD 180-137846/11		04/08/2015 13:25	1	7040811.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.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-28-2015-5.d

Lab ID: LCS 180-136855/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Nitrate as N	2.50	2.61	104	90-110	
Chloride	50.0	49.8	100	90-110	
Sulfate	50.0	49.8	100	90-110	

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-28-2015-31.d

Lab ID: 180-42504-6 MS Client ID: HD-MW-132-0/1-0 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Nitrate as N	1.25	4.9	6.16	98	80-120	
Chloride	25.0	9.0	33.5	98	80-120	
Sulfate	25.0	3.2	27.9	99	80-120	

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-28-2015-8.d

Lab ID: 180-42504-8 MS Client ID: HD-MW-51D-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	0.36	1.75	111	80-120	
Chloride	25.0	5.5	31.7	105	80-120	
Sulfate	25.0	7.2	33.8	107	80-120	

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-28-2015-32.d

Lab ID: 180-42504-6 MSD Client ID: HD-MW-132-0/1-0 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Nitrate as N	1.25	6.22	103	1	20	80-120	
Chloride	25.0	33.9	100	1	20	80-120	
Sulfate	25.0	28.1	100	1	20	80-120	

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water Level: Low Lab File ID: A-ICS2100 A 03-28-2015-9.d

Lab ID: 180-42504-8 MSD Client ID: HD-MW-51D-0/1-0 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Nitrate as N	1.25	1.74	111	0	20	80-120	
Chloride	25.0	33.8	113	6	20	80-120	
Sulfate	25.0	40.7	134	18	20	80-120	F1

Column to be used to flag recovery and RPD values

FORM III 300.0

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: A-ICS2100 A 03-28-2015-6.d Lab Sample ID: MB 180-136855/6

Matrix: Water Date Extracted:

Instrument ID: CHIC2100A Date Analyzed: 03/28/2015 12:24

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	CCB 180-136855/4	A-ICS2100 A 03-28-2015-4.d	03/28/2015 11:50
	LCS 180-136855/5	A-ICS2100 A 03-28-2015-5.d	03/28/2015 12:07
HD-MW-51D-0/1-0	180-42504-8	A-ICS2100 A 03-28-2015-7.d	03/28/2015 13:46
HD-MW-51D-0/1-0 MS	180-42504-8 MS	A-ICS2100 A 03-28-2015-8.d	03/28/2015 14:01
HD-MW-51D-0/1-0 MSD	180-42504-8 MSD	A-ICS2100 A 03-28-2015-9.d	03/28/2015 14:17
	CCB 180-136855/16	A-ICS2100 A 03-28-2015-16.d	03/28/2015 16:10
	CCB 180-136855/28	A-ICS2100 A 03-28-2015-28.d	03/28/2015 19:38
HD-MW-127-0/1-0	180-42504-2	A-ICS2100 A 03-28-2015-29.d	03/28/2015 19:56
HD-MW-132-0/1-0	180-42504-6	A-ICS2100 A 03-28-2015-30.d	03/28/2015 20:13
HD-MW-132-0/1-0 MS	180-42504-6 MS	A-ICS2100 A 03-28-2015-31.d	03/28/2015 20:30
HD-MW-132-0/1-0 MSD	180-42504-6 MSD	A-ICS2100 A 03-28-2015-32.d	03/28/2015 20:48
HD-MW-97-0/1-0	180-42504-3	A-ICS2100 A 03-28-2015-33.d	03/28/2015 21:05
HD-MW-75D-0/1-0	180-42504-7	A-ICS2100 A 03-28-2015-34.d	03/28/2015 21:22
HD-MW-50S-0/1-0	180-42504-9	A-ICS2100 A 03-28-2015-35.d	03/28/2015 21:39
HD-MW-114-0/1-0	180-42504-5	A-ICS2100 A 03-28-2015-36.d	03/28/2015 21:57

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab File ID: A-ICS2100 A 03-28-2015-6.d Lab Sample ID: MB 180-136855/6

Matrix: Water Date Extracted:

Instrument ID: CHIC2100A Date Analyzed: 03/28/2015 12:24

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
HD-CW-18-0/1-0	180-42504-4	A-ICS2100 A 03-28-2015-37.d	03/28/2015 22:14
HD-CW-18-0/1-0	180-42504-4	A-ICS2100 A 03-28-2015-38.d	03/28/2015 22:31
	CCB 180-136855/40	A-ICS2100 A 03-28-2015-40.d	03/28/2015 23:06

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-127-0/1-0 Lab Sample ID: 180-42504-2

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-29.d

Analysis Method: 300.0 Date Collected: 03/27/2015 10:45

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 19:56

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.3	B	0.10	0.0062
16887-00-6	Chloride	110	B	1.0	0.20
14808-79-8	Sulfate	7.6		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

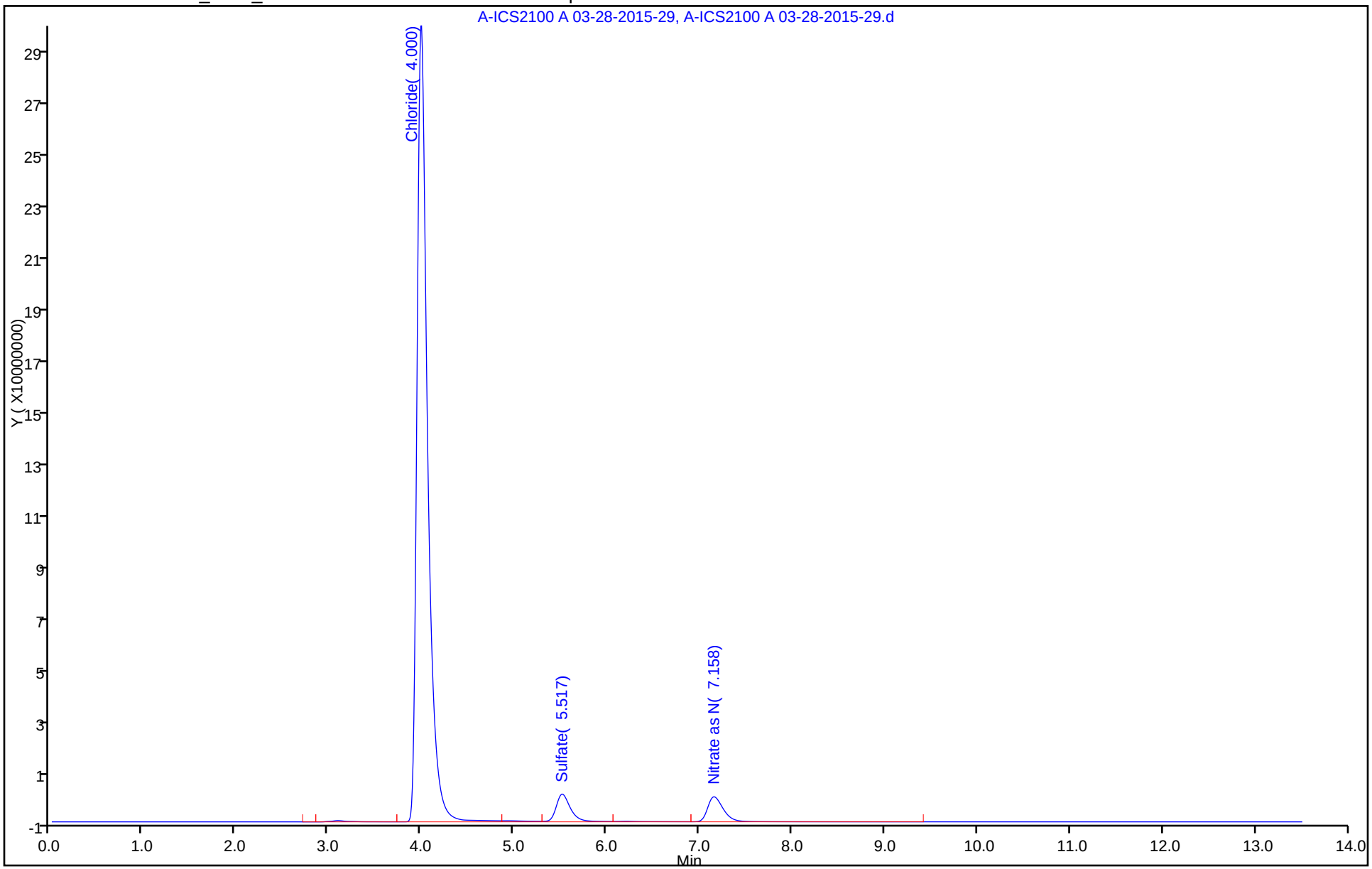
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-29.d				
Lims ID:	180-42504-A-2	Lab Sample ID:	180-42504-2		
Client ID:	HD-MW-127-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Mar-2015 19:56:00	ALS Bottle#:	0	Worklist Smp#:	29
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006220-029				
Misc. Info.:	29 180-42504-a-2				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	30-Mar-2015 10:46:56	Calib Date:	18-Mar-2015 13:15:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d				
Column 1 :			Det: 0008		
Process Host:	XAWRK050				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.000	4.008	-0.008	2386209131	114.8	
3 Sulfate	5.517	5.467	0.050	113853473	7.62	
5 Nitrate as N	7.158	7.150	0.008	113669621	2.33	

Report Date: 30-Mar-2015 10:46:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-29.d				
Injection Date:	28-Mar-2015 19:56:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-2	Lab Sample ID:	180-42504-2	Worklist Smp#:	29
Client ID:	HD-MW-127-0/1-0				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-97-0/1-0 Lab Sample ID: 180-42504-3

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-33.d

Analysis Method: 300.0 Date Collected: 03/27/2015 08:45

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 21:05

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	1.9	B	0.10	0.0062
16887-00-6	Chloride	120	B	1.0	0.20
14808-79-8	Sulfate	31		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

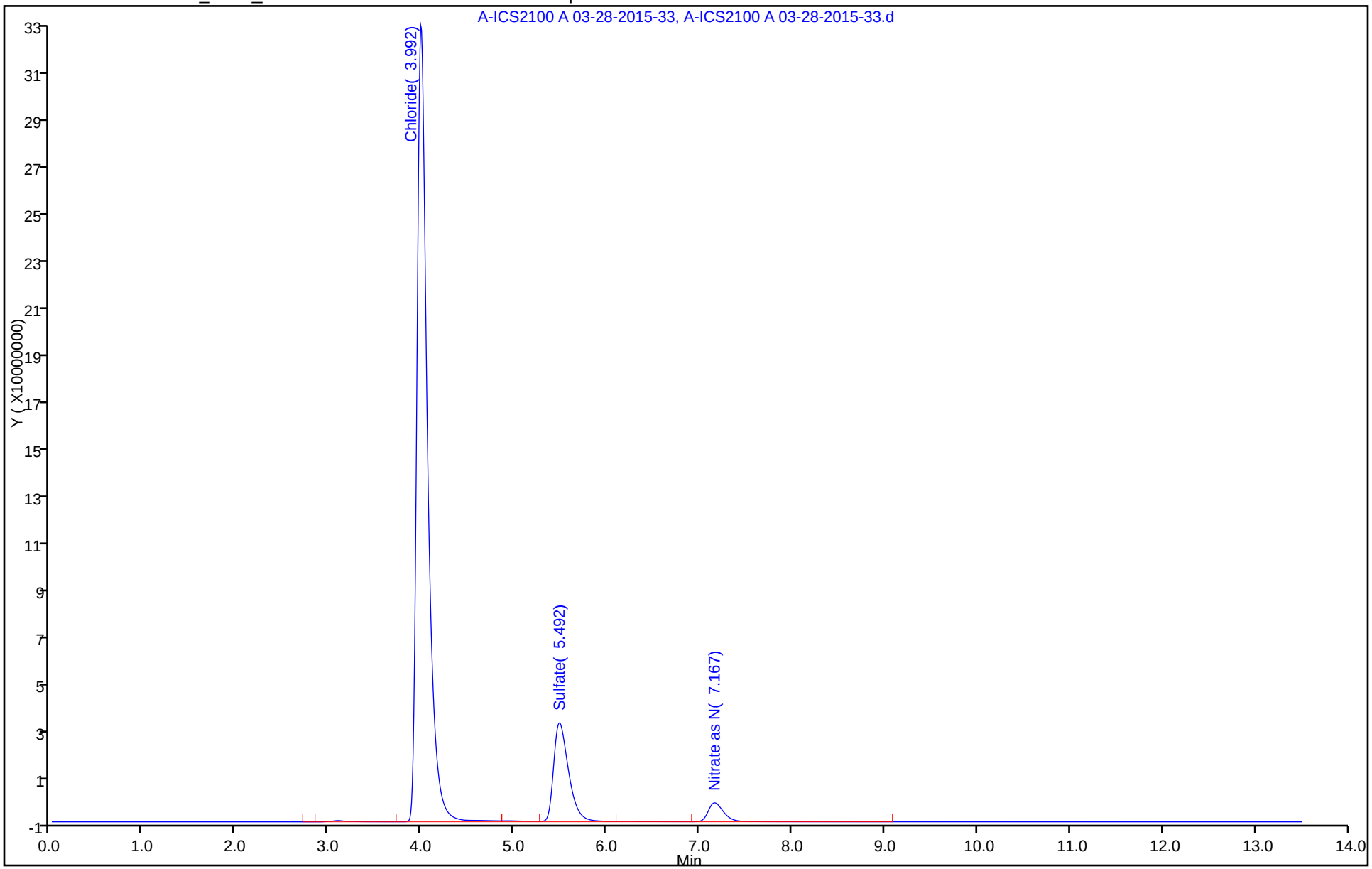
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-33.d				
Lims ID:	180-42504-A-3	Lab Sample ID:	180-42504-3		
Client ID:	HD-MW-97-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Mar-2015 21:05:00	ALS Bottle#:	0	Worklist Smp#:	33
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006220-033				
Misc. Info.:	33 180-42504-a-3				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	30-Mar-2015 10:46:56	Calib Date:	18-Mar-2015 13:15:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d				
Column 1 :			Det: 0008		
Process Host:	XAWRK050				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.008	-0.016	2597586438	124.9	
3 Sulfate	5.492	5.467	0.025	457570109	30.7	
5 Nitrate as N	7.167	7.150	0.017	93242874	1.92	

Report Date: 30-Mar-2015 10:46:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-33.d				
Injection Date:	28-Mar-2015 21:05:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-3	Lab Sample ID:	180-42504-3	Worklist Smp#:	33
Client ID:	HD-MW-97-0/1-0				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 Lab Sample ID: 180-42504-4

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-37.d

Analysis Method: 300.0 Date Collected: 03/27/2015 09:37

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 22:14

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.056	J B	0.10	0.0062

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-37.d				
Lims ID:	180-42504-A-4	Lab Sample ID:	180-42504-4		
Client ID:	HD-CW-18-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Mar-2015 22:14:00	ALS Bottle#:	0	Worklist Smp#:	37
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006220-037				
Misc. Info.:	37 180-42504-a-4				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	30-Mar-2015 10:46:56	Calib Date:	18-Mar-2015 13:15:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d				
Column 1 :			Det: 0008		
Process Host:	XAWRK050				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.008	-0.016	4763274079	228.8	E
3 Sulfate	5.250	5.467	-0.217	5538480006	371.1	E
5 Nitrate as N	7.183	7.150	0.033	1391483	0.0560	

QC Flag Legend

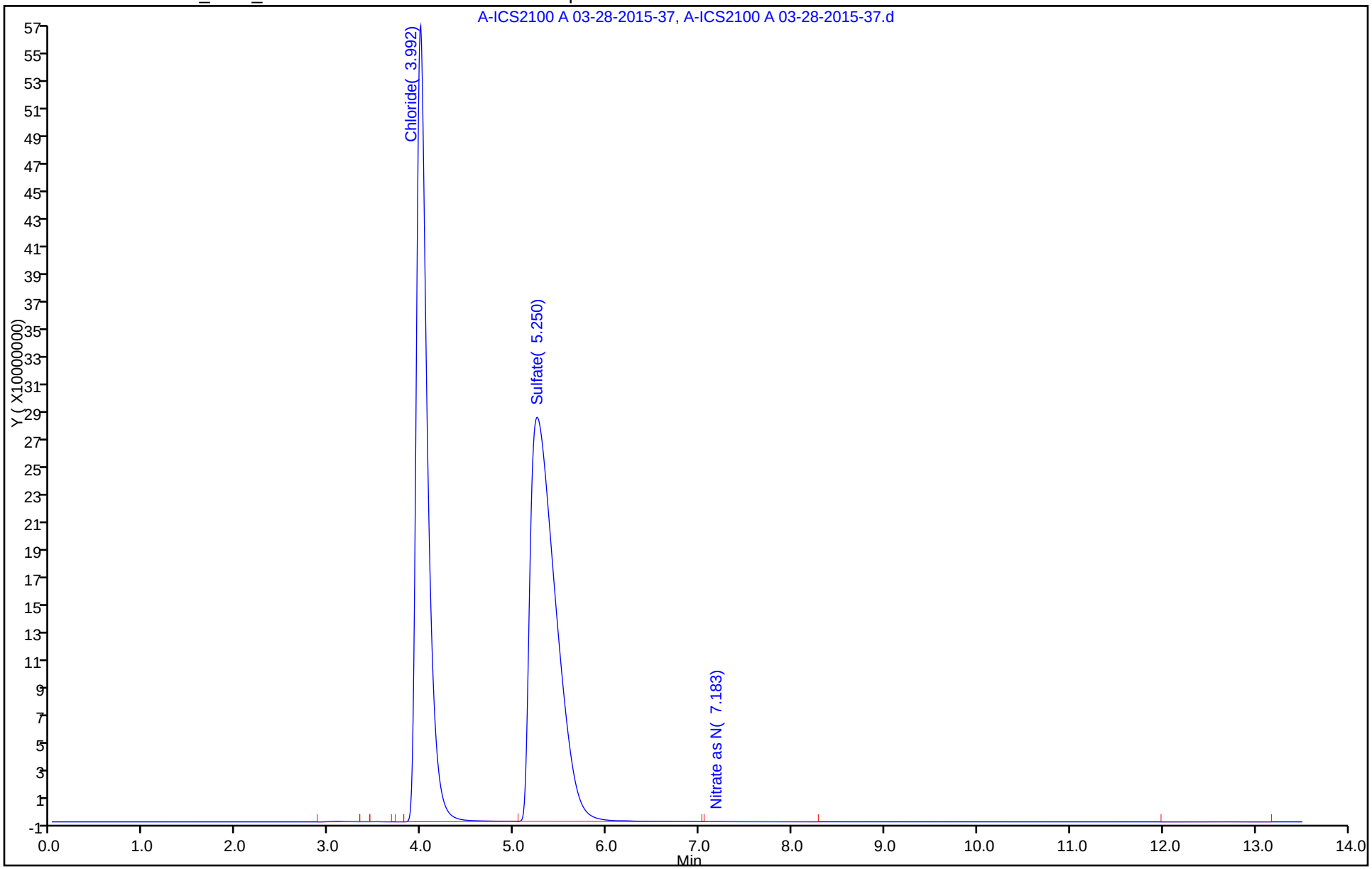
Processing Flags

E - Exceeded Maximum Amount

Report Date: 30-Mar-2015 10:47:00 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-37.d				
Injection Date:	28-Mar-2015 22:14:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-4	Lab Sample ID:	180-42504-4	Worklist Smp#:	37
Client ID:	HD-CW-18-0/1-0				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-CW-18-0/1-0 Lab Sample ID: 180-42504-4

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-38.d

Analysis Method: 300.0 Date Collected: 03/27/2015 09:37

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 22:31

Con. Extract Vol.: Dilution Factor: 5

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
16887-00-6	Chloride	240	B	5.0	0.98
14808-79-8	Sulfate	390		5.0	1.1

TestAmerica Pittsburgh
Target Compound Quantitation Report

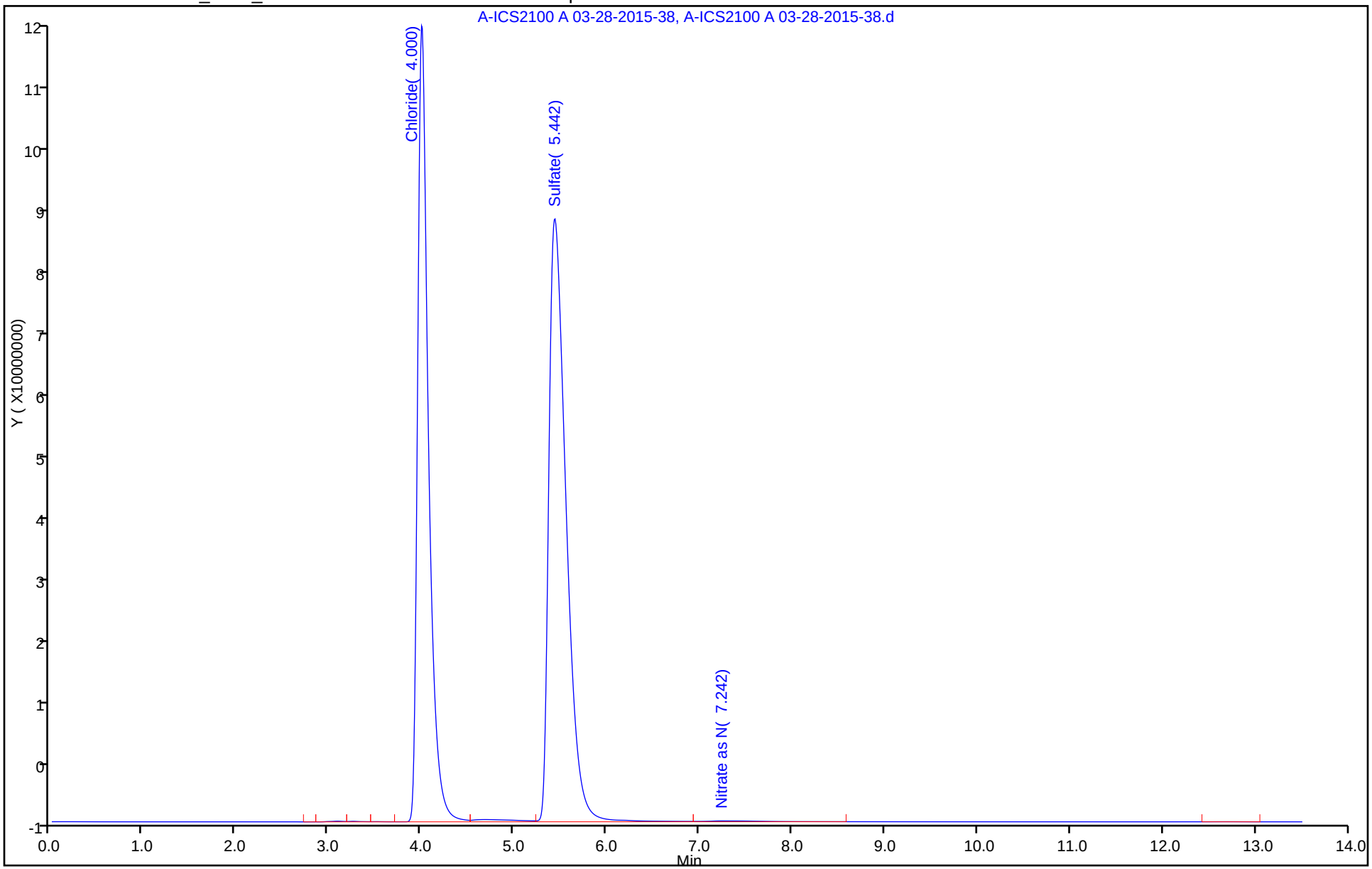
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-38.d				
Lims ID:	180-42504-A-4	Lab Sample ID:	180-42504-4		
Client ID:	HD-CW-18-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Mar-2015 22:31:00	ALS Bottle#:	0	Worklist Smp#:	38
Injection Vol:	10.0 ul	Dil. Factor:	5.0000		
Sample Info:	180-0006220-038				
Misc. Info.:	38 180-42504-a-4,,,5				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	30-Mar-2015 10:46:56	Calib Date:	18-Mar-2015 13:15:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d				
Column 1 :			Det: 0008		
Process Host:	XAWRK050				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	4.000	4.008	-0.008	982319962	47.4	
3 Sulfate	5.442	5.467	-0.025	1178218401	78.9	
5 Nitrate as N	7.242	7.150	0.092	5137546	0.1320	

Report Date: 30-Mar-2015 10:47:00 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-38.d				
Injection Date:	28-Mar-2015 22:31:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-4	Lab Sample ID:	180-42504-4	Worklist Smp#:	38
Client ID:	HD-CW-18-0/1-0				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-114-0/1-0 Lab Sample ID: 180-42504-5

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-36.d

Analysis Method: 300.0 Date Collected: 03/27/2015 13:22

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 21:57

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.61	B	0.10	0.0062
16887-00-6	Chloride	160	B	1.0	0.20
14808-79-8	Sulfate	69		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

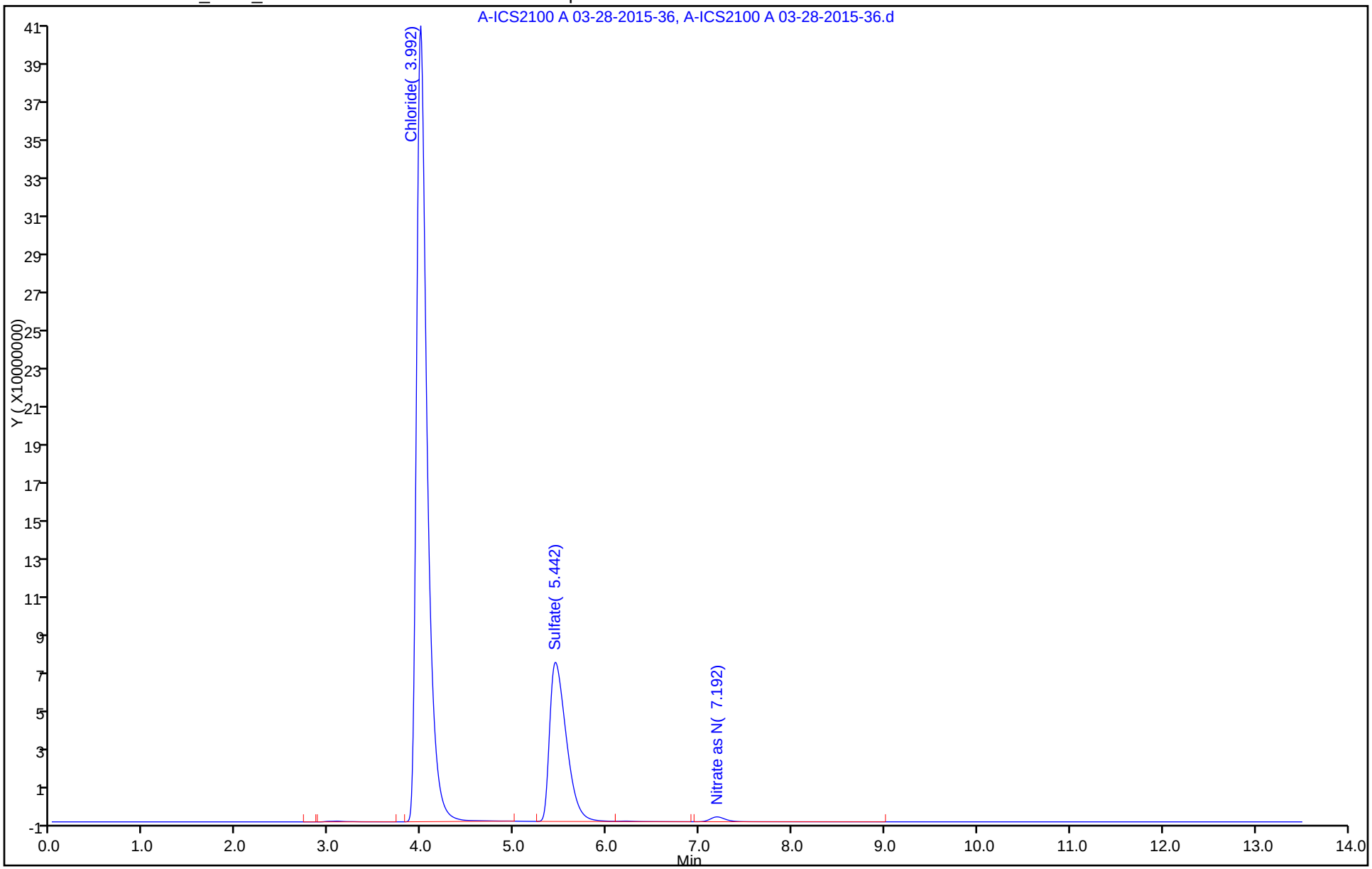
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-36.d				
Lims ID:	180-42504-A-5	Lab Sample ID:	180-42504-5		
Client ID:	HD-MW-114-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Mar-2015 21:57:00	ALS Bottle#:	0	Worklist Smp#:	36
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006220-036				
Misc. Info.:	36 180-42504-a-5				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	30-Mar-2015 10:46:56	Calib Date:	18-Mar-2015 13:15:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d				
Column 1 :			Det: 0008		
Process Host:	XAWRK050				
First Level Reviewer: hartmanm		Date:	30-Mar-2015 10:45:33		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.008	-0.016	3268461063	157.1	
3 Sulfate	5.442	5.467	-0.025	1024519019	68.6	
5 Nitrate as N	7.192	7.150	0.042	28703907	0.6099	

Report Date: 30-Mar-2015 10:47:00 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-36.d				
Injection Date:	28-Mar-2015 21:57:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-5	Lab Sample ID:	180-42504-5	Worklist Smp#:	36
Client ID:	HD-MW-114-0/1-0				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-132-0/1-0 Lab Sample ID: 180-42504-6

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-30.d

Analysis Method: 300.0 Date Collected: 03/27/2015 12:30

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 20:13

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	4.9	B	0.10	0.0062
16887-00-6	Chloride	9.0	B	1.0	0.20
14808-79-8	Sulfate	3.2		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-30.d
Lims ID: 180-42504-A-6 Lab Sample ID: 180-42504-6
Client ID: HD-MW-132-0/1-0
Sample Type: Client
Inject. Date: 28-Mar-2015 20:13:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-030
Misc. Info.: 30 180-42504-a-6
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 30-Mar-2015 10:46:56 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

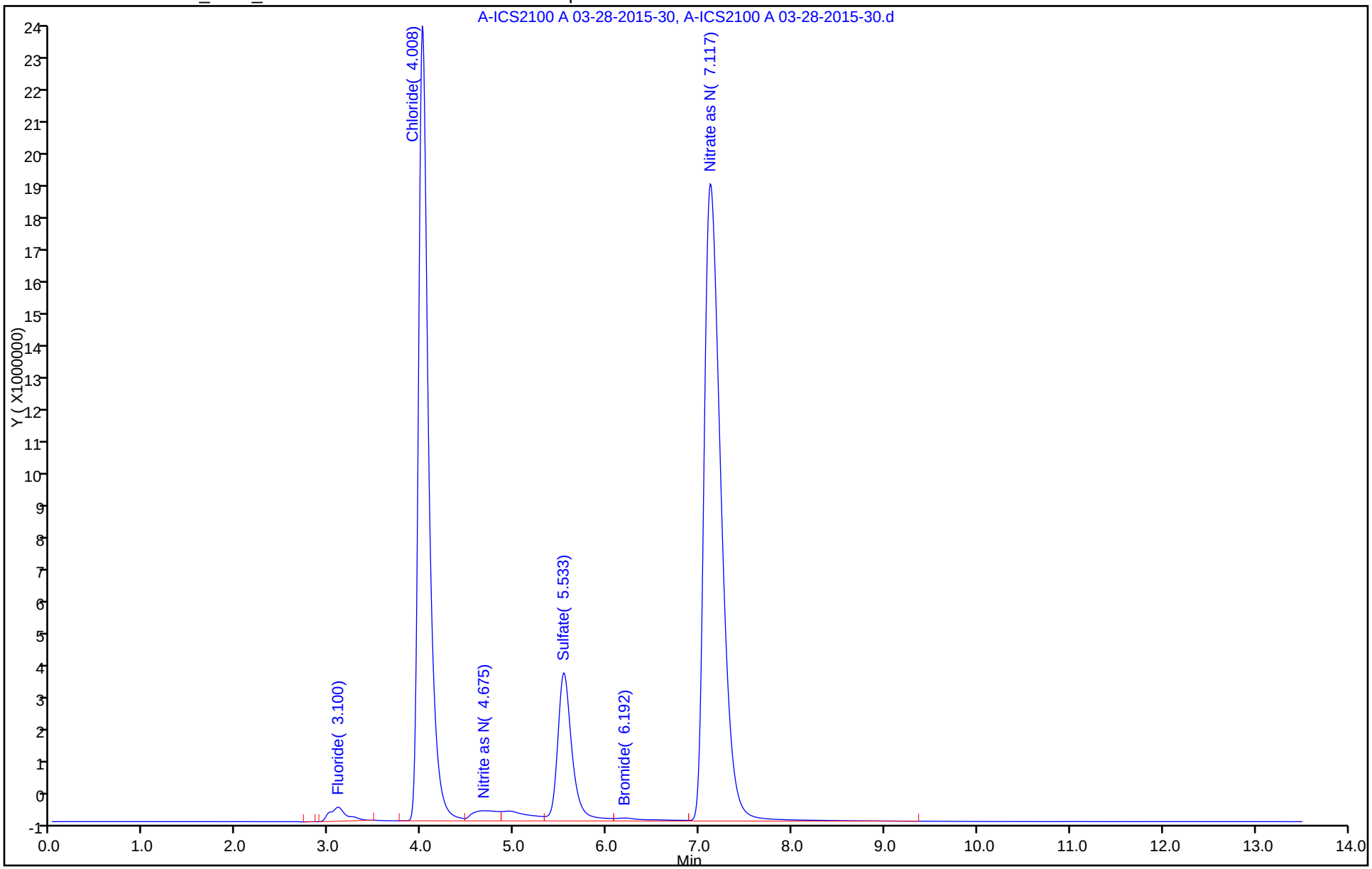
Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.100	3.008	0.092	5291800	0.1633	
2 Chloride	4.008	4.008	0.000	181071967	8.97	
7 Nitrite as N	4.675	4.675	0.000	5916195	0.1153	
3 Sulfate	5.533	5.467	0.066	47818441	3.20	
4 Bromide	6.192	6.200	-0.008	2189774	0.2312	
5 Nitrate as N	7.117	7.150	-0.033	242073141	4.94	
6 Orthophosphate as P		10.117			ND	

Report Date: 30-Mar-2015 10:46:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-30.d				
Injection Date:	28-Mar-2015 20:13:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-6	Lab Sample ID:	180-42504-6	Worklist Smp#:	30
Client ID:	HD-MW-132-0/1-0				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-75D-0/1-0 Lab Sample ID: 180-42504-7

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-34.d

Analysis Method: 300.0 Date Collected: 03/27/2015 10:33

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 21:22

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	3.2	B	0.10	0.0062
16887-00-6	Chloride	170	B	1.0	0.20
14808-79-8	Sulfate	32		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

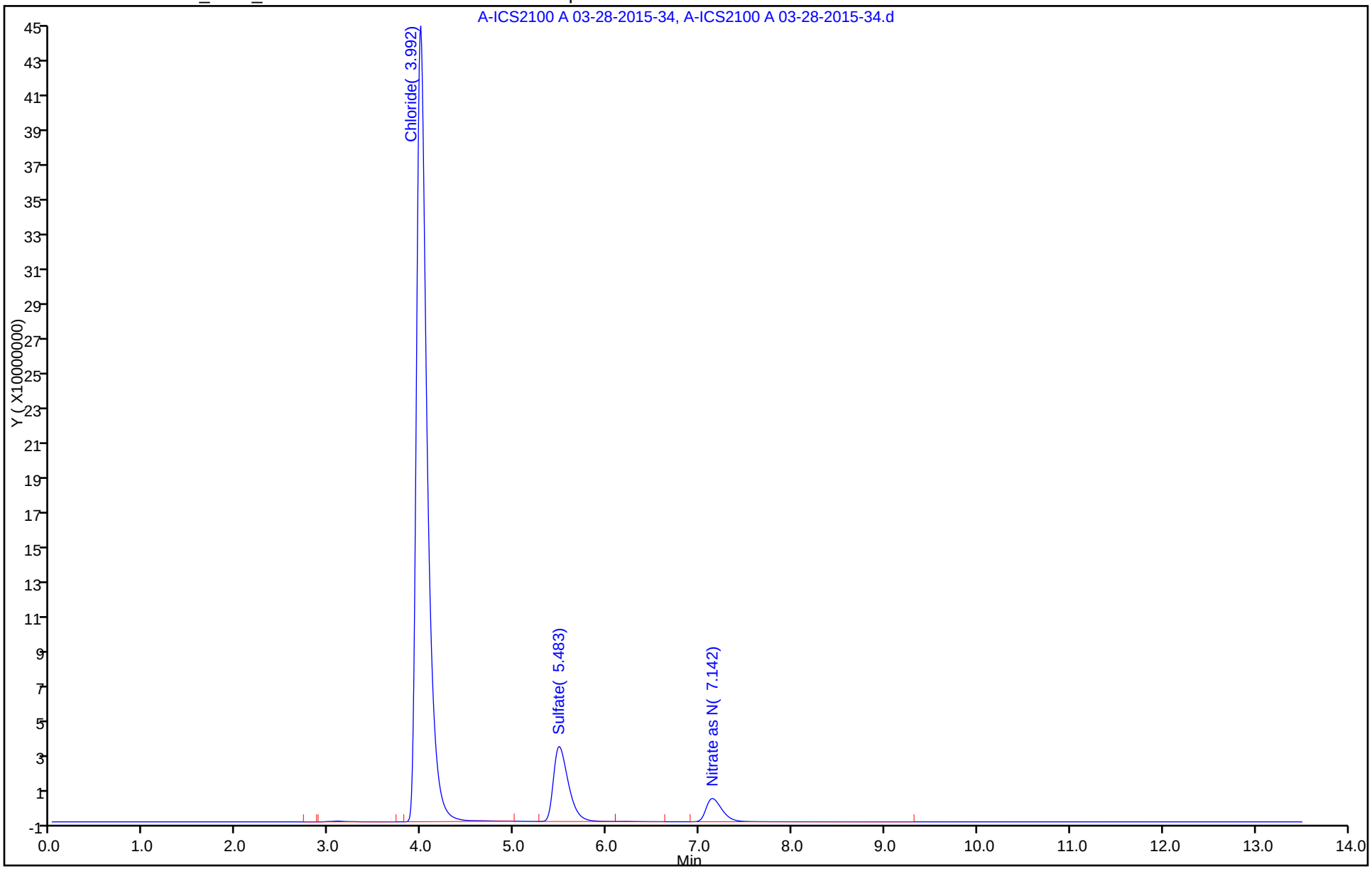
Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-34.d				
Lims ID:	180-42504-A-7	Lab Sample ID:	180-42504-7		
Client ID:	HD-MW-75D-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Mar-2015 21:22:00	ALS Bottle#:	0	Worklist Smp#:	34
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006220-034				
Misc. Info.:	34 180-42504-a-7				
Operator ID:		Instrument ID:	CHIC2100A		
Method:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	30-Mar-2015 10:46:56	Calib Date:	18-Mar-2015 13:15:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d				
Column 1 :			Det: 0008		
Process Host:	XAWRK050				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.008	-0.016	3597330621	172.9	
3 Sulfate	5.483	5.467	0.016	471893544	31.6	
5 Nitrate as N	7.142	7.150	-0.008	158409857	3.24	

Report Date: 30-Mar-2015 10:46:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-34.d				
Injection Date:	28-Mar-2015 21:22:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-7	Lab Sample ID:	180-42504-7	Worklist Smp#:	34
Client ID:	HD-MW-75D-0/1-0				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-51D-0/1-0 Lab Sample ID: 180-42504-8

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-7.d

Analysis Method: 300.0 Date Collected: 03/27/2015 13:30

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 13:46

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.36	B	0.10	0.0062
16887-00-6	Chloride	5.5	B	1.0	0.20
14808-79-8	Sulfate	7.2	F1	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-7.d
Lims ID: 180-42504-A-8 Lab Sample ID: 180-42504-8
Client ID: HD-MW-51D-0/1-0
Sample Type: Client
Inject. Date: 28-Mar-2015 13:46:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-007
Misc. Info.: 7 180-42504-a-8
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 15:22:28 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

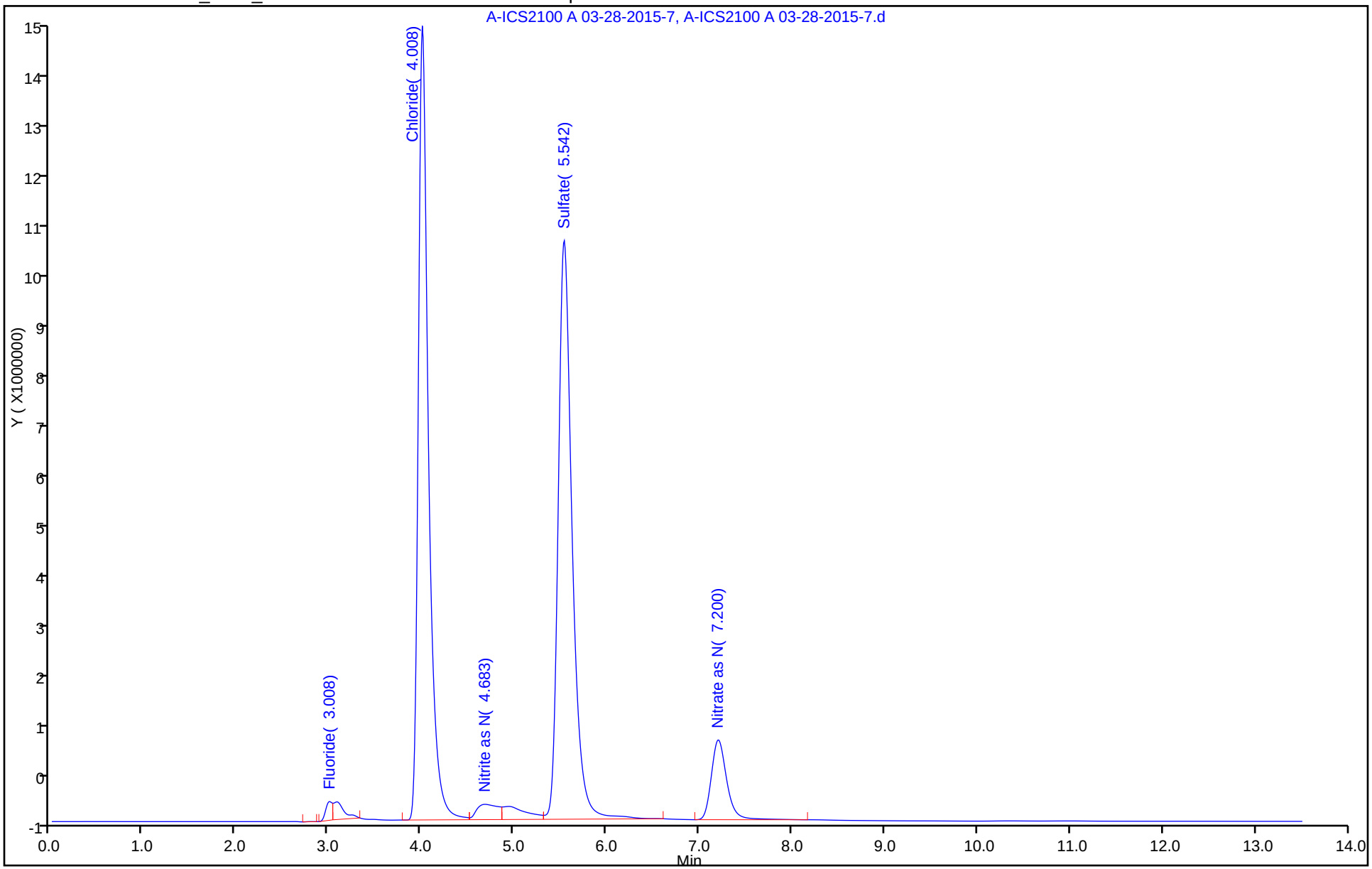
Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.008	0.000	1587641	0.0490	
2 Chloride	4.008	4.008	0.000	107672786	5.45	
7 Nitrite as N	4.683	4.683	0.000	4380682	0.0786	
3 Sulfate	5.542	5.475	0.067	107510673	7.20	
4 Bromide		6.208			ND	
5 Nitrate as N	7.200	7.158	0.042	16350024	0.3594	
6 Orthophosphate as P		10.108			ND	

Report Date: 28-Mar-2015 15:22:29 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-7.d				
Injection Date:	28-Mar-2015 13:46:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-8	Lab Sample ID:	180-42504-8	Worklist Smp#:	7
Client ID:	HD-MW-51D-0/1-0				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-50S-0/1-0 Lab Sample ID: 180-42504-9

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-35.d

Analysis Method: 300.0 Date Collected: 03/27/2015 11:40

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 21:39

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.5	B	0.10	0.0062
16887-00-6	Chloride	160	B	1.0	0.20
14808-79-8	Sulfate	55		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-35.d
Lims ID: 180-42504-A-9 Lab Sample ID: 180-42504-9
Client ID: HD-MW-50S-0/1-0
Sample Type: Client
Inject. Date: 28-Mar-2015 21:39:00 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-035
Misc. Info.: 35 180-42504-a-9
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 30-Mar-2015 10:46:56 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

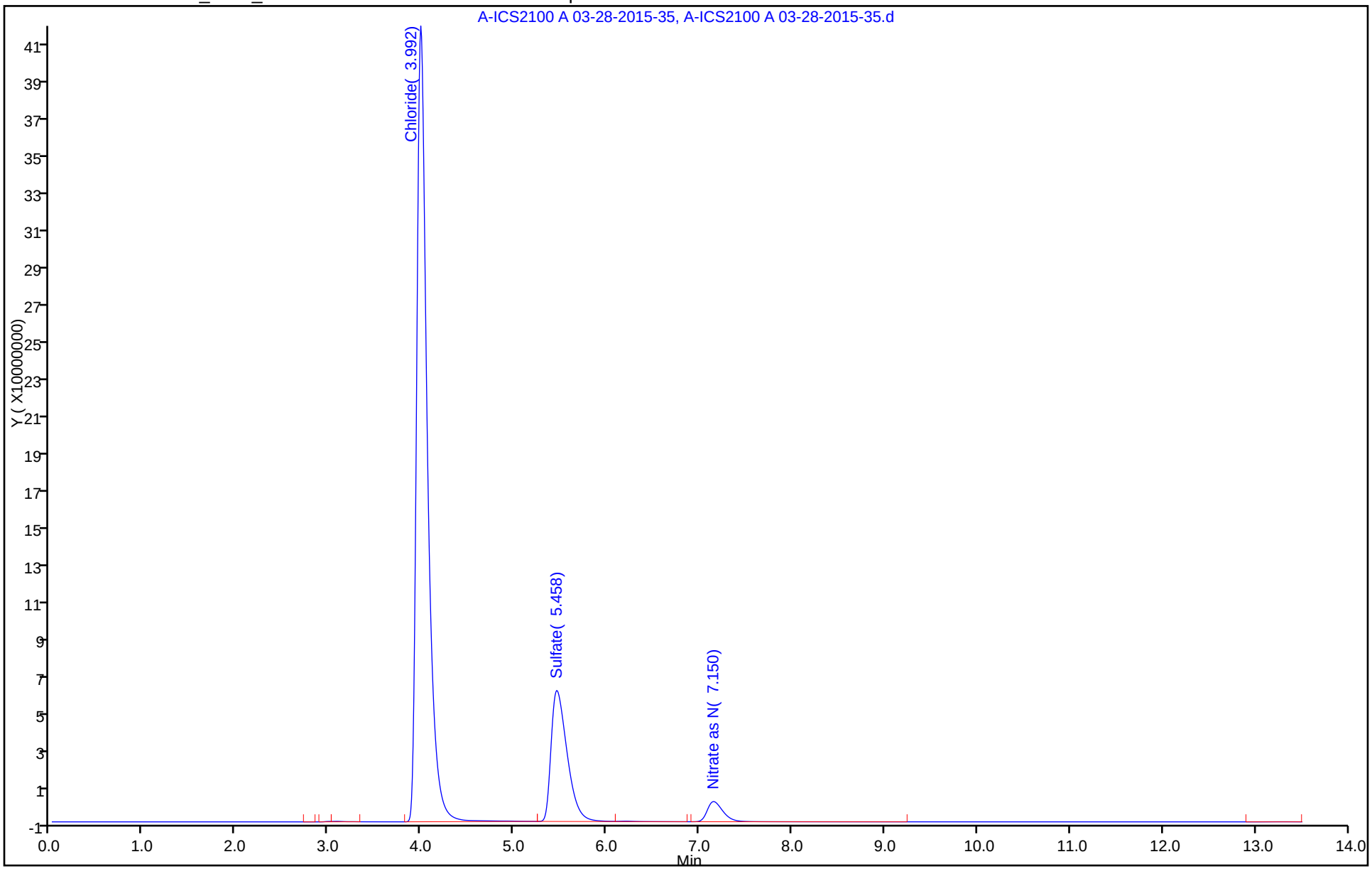
Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
2 Chloride	3.992	4.008	-0.016	3311022121	159.2	
3 Sulfate	5.458	5.467	-0.009	817376276	54.8	
5 Nitrate as N	7.150	7.150	0.000	124246026	2.55	

Report Date: 30-Mar-2015 10:47:00 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-35.d				
Injection Date:	28-Mar-2015 21:39:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-9	Lab Sample ID:	180-42504-9	Worklist Smp#:	35
Client ID:	HD-MW-50S-0/1-0				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1 Analy Batch No.: 135876

SDG No.:

Instrument ID: CHIC2100A GC Column: AS-18 ID: Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 11:27 Calibration End Date: 03/18/2015 13:15 Calibration ID: 22466

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-135876/2	A-ICS2100 A 03-18-2015-2.d
Level 2	IC 180-135876/3	A-ICS2100 A 03-18-2015-3.d
Level 3	ICRT 180-135876/4	A-ICS2100 A 03-18-2015-4.d
Level 4	IC 180-135876/5	A-ICS2100 A 03-18-2015-5.d
Level 5	IC 180-135876/6	A-ICS2100 A 03-18-2015-6.d
Level 6	IC 180-135876/7	A-ICS2100 A 03-18-2015-7.d
Level 7	IC 180-135876/8	A-ICS2100 A 03-18-2015-8.d
Level 8	IC 180-135876/9	A-ICS2100 A 03-18-2015-9.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
Fluoride	3.008	2.992	3.017	3.017	3.008	3.000	3.000	3.000			2.667 - 3.367	3.005
Chloride	4.025	4.008	4.008	4.017	4.008	4.000	3.992	3.992			3.658 - 4.358	4.006
Nitrite as N	4.692	4.683	4.692	4.692	4.683	4.675	4.667	4.667			4.442 - 4.942	4.681
Sulfate	5.558	5.550	5.550	5.525	5.483	5.425	5.383	5.350			5.200 - 5.900	5.478
Bromide	6.225	6.225	6.233	6.233	6.217	6.192	6.167	6.158			5.883 - 6.583	6.206
Nitrate as N	7.217	7.233	7.225	7.217	7.175	7.125	7.092	7.067			6.975 - 7.475	7.169
Orthophosphate as P	+++++	+++++	10.283	10.233	10.150	10.008	9.917	9.825			10.033 - 10.533	10.069

FORM VI
HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1 Analy Batch No.: 135876

SDG No.:

Instrument ID: CHIC2100A GC Column: AS-18 ID: Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 11:27 Calibration End Date: 03/18/2015 13:15 Calibration ID: 22466

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-135876/2	A-ICS2100 A 03-18-2015-2.d
Level 2	IC 180-135876/3	A-ICS2100 A 03-18-2015-3.d
Level 3	ICRT 180-135876/4	A-ICS2100 A 03-18-2015-4.d
Level 4	IC 180-135876/5	A-ICS2100 A 03-18-2015-5.d
Level 5	IC 180-135876/6	A-ICS2100 A 03-18-2015-6.d
Level 6	IC 180-135876/7	A-ICS2100 A 03-18-2015-7.d
Level 7	IC 180-135876/8	A-ICS2100 A 03-18-2015-8.d
Level 8	IC 180-135876/9	A-ICS2100 A 03-18-2015-9.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	16004240 30863838	16267240 33530807	24060914 32036807	28839713 32501482	LinF		32408968.8							0.9990		0.9900
Chloride	14881940 19901089	20047781 21252356	19916375 20661843	20520642 21294820	Lin2	-5924255.0	20840179.2							0.9990		0.9900
Nitrite as N	63542880 41119787	46070376 41105911	45721532 38406569	43482294 39110343	Lin2	1094129.86	41807466.0							0.9990		0.9900
Sulfate	15082609 14386476	14869728 15483002	14612347 14835660	14862208 15411414	Lin2	103384.444	14924946.0							0.9990		0.9900
Bromide	9197380 8636410	8475818 9449189	8696617 9236390	8449051 9671968	LinF		9470258.87							0.9990		0.9900
Nitrate as N	2179760 47995192	36876120 4133386	43393238 51666882	46463120 53600763	Lin2	-1371660.0	49313078.5							0.9930		0.9900
Orthophosphate as P	+++++ 13980382	+++++ 17216210	7663188 17125842	10946796 18463603	Lin2	-5441456.9	17709156.5							0.9930		0.9900

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.: 180-42504-1 Analy Batch No.: 135876

SDG No.:

Instrument ID: CHIC2100A GC Column: AS-18 ID: Heated Purge: (Y/N) N

Calibration Start Date: 03/18/2015 11:27 Calibration End Date: 03/18/2015 13:15 Calibration ID: 22466

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-135876/2	A-ICS2100 A 03-18-2015-2.d
Level 2	IC 180-135876/3	A-ICS2100 A 03-18-2015-3.d
Level 3	ICRT 180-135876/4	A-ICS2100 A 03-18-2015-4.d
Level 4	IC 180-135876/5	A-ICS2100 A 03-18-2015-5.d
Level 5	IC 180-135876/6	A-ICS2100 A 03-18-2015-6.d
Level 6	IC 180-135876/7	A-ICS2100 A 03-18-2015-7.d
Level 7	IC 180-135876/8	A-ICS2100 A 03-18-2015-8.d
Level 8	IC 180-135876/9	A-ICS2100 A 03-18-2015-9.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		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
Fluoride	LinF	800212 167654034	4066810 240276056	12030457 325014820	28839713	77159596	0.0500 5.00	0.250 7.50	0.500 10.0	1.00	2.50
Chloride	Lin2	14881940 2125235619	100238904 3099276402	199163746 4258964050	410412845	995054428	1.00 100	5.00 150	10.0 200	20.0	50.0
Nitrite as N	Lin2	3177144 205529554	11517594 288049270	22860766 391103425	43482294	102799468	0.0500 5.00	0.250 7.50	0.500 10.0	1.00	2.50
Sulfate	Lin2	15082609 1548300187	74348642 2225349056	146123470 3082282736	297244169	719323783	1.00 100	5.00 150	10.0 200	20.0	50.0
Bromide	LinF	1839476 188983772	8475818 277091709	17393233 386878705	33796204	86364096	0.200 20.0	1.00 30.0	2.00 40.0	4.00	10.0
Nitrate as N	Lin2	108988 20666930	9219030 387501618	21696619 536007632	46463120	119987980	0.0500 5.00	0.250 7.50	0.500 10.0	1.00	2.50
Orthophosphate as P	Lin2	+++++ 86081052	+++++ 128443816	3831594 184636030	10946796	34950954	+++++ 5.00	+++++ 7.50	0.500 10.0	1.00	2.50

Curve Type Legend:

Lin2 = Linear 1/conc^2
LinF = Linear forced zero

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-2.d
Lims ID: ic L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Mar-2015 11:27:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006073-002
Misc. Info.: 2 IC L2
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 18-Mar-2015 18:15:51 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK033

First Level Reviewer: hartmanm Date: 18-Mar-2015 13:48:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.017	-0.009	800212	0.0500	0.0247	M
2 Chloride	4.025	4.008	0.017	14881940	1.00	1.00	M
7 Nitrite as N	4.692	4.692	0.000	3177144	0.0500	0.0498	M
3 Sulfate	5.558	5.550	0.008	15082609	1.00	1.00	M
4 Bromide	6.225	6.233	-0.008	1839476	0.2000	0.1942	M
5 Nitrate as N	7.217	7.225	-0.008	108988H	0.0500	0.0288	M
6 Orthophosphate as P	10.317	10.283	0.034	21158	0.0500	0.3085	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

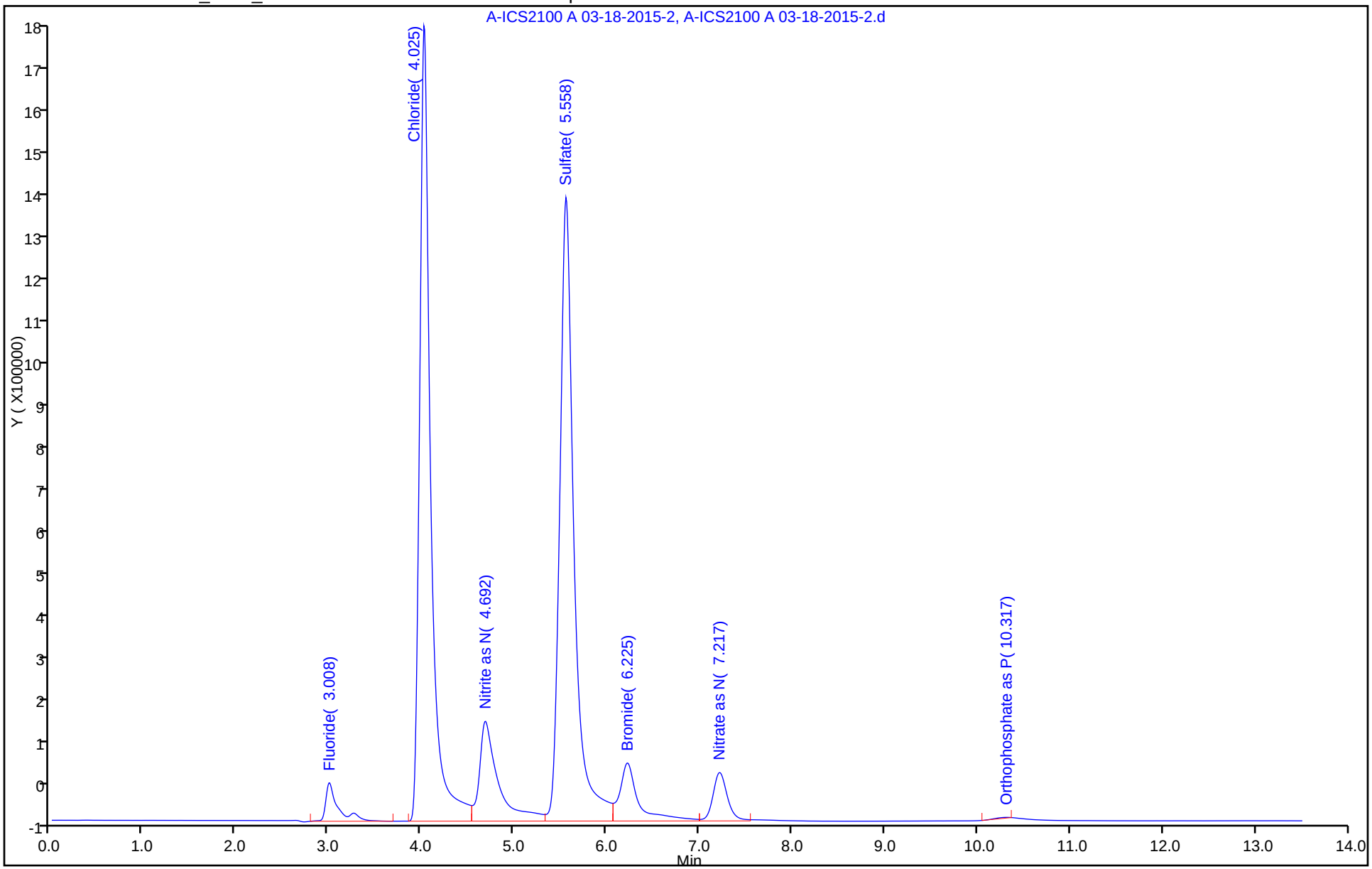
ICSTDL2_00160 Amount Added: 1.00 Units: mL

Report Date: 18-Mar-2015 18:15:51 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-2.d

Injection Date:	18-Mar-2015 11:27:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



Manual Integration/User Assign Peak Report

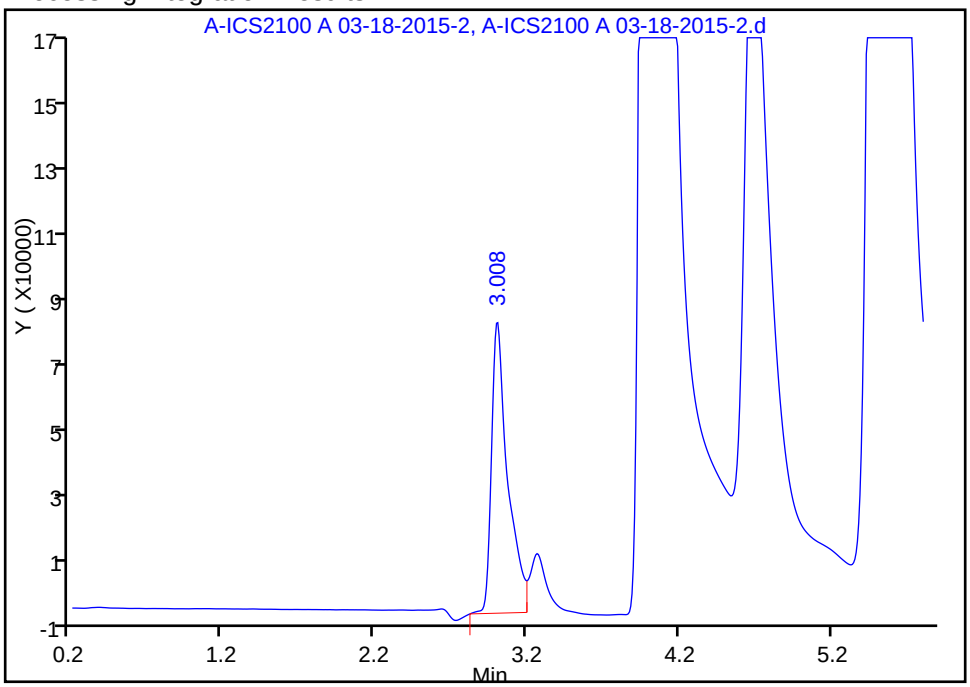
TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-2.d
Injection Date: 18-Mar-2015 11:27:00 Instrument ID: CHIC2100A
Lims ID: ic L2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: 300_9056_CHIC2100A Limit Group: GC Anions ICAL
Column: Detector 0008

1 Fluoride, CAS: 16984-48-8

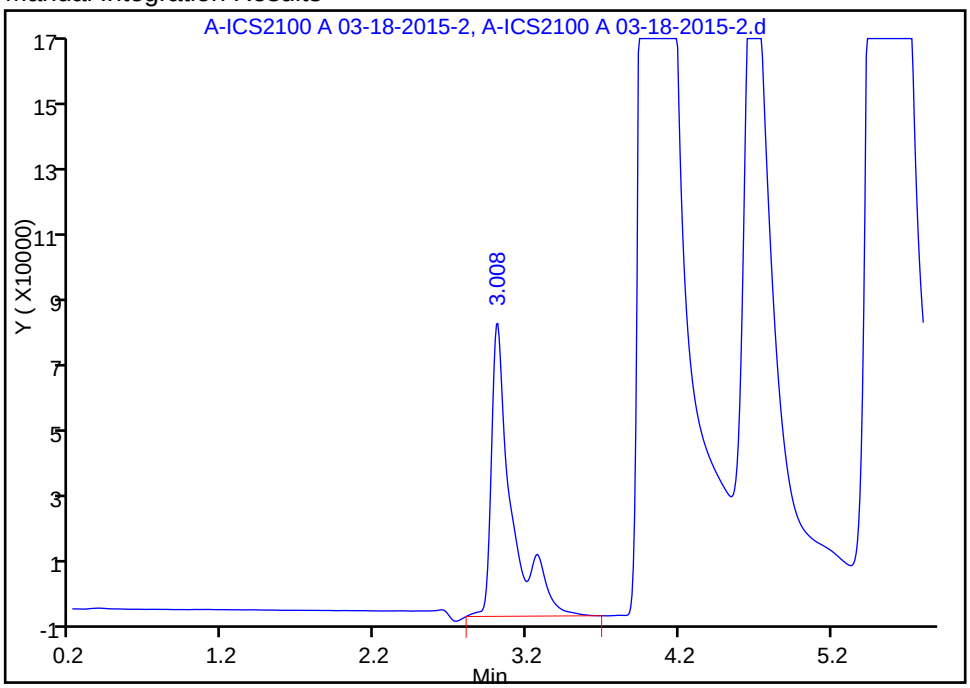
Processing Integration Results

RT: 3.01
Area: 637528
Amount: 0.055286
Amount Units: ug/ml



Manual Integration Results

RT: 3.01
Area: 800212
Amount: 0.024691
Amount Units: ug/ml



Reviewer: hartmanm, 18-Mar-2015 13:48:30
Audit Action: Manually Integrated
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

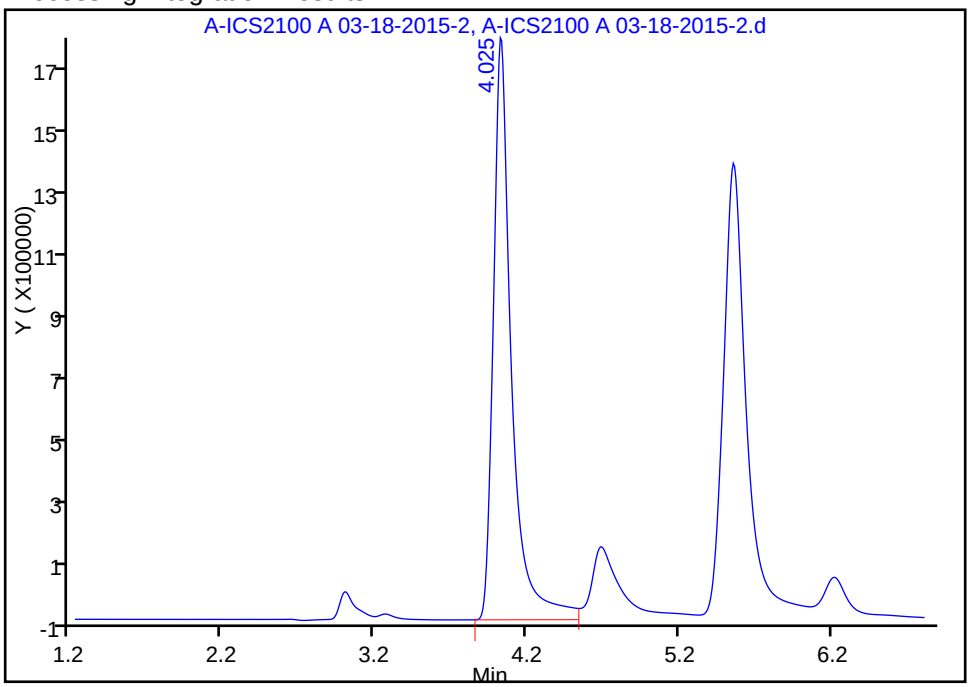
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-2.d				
Injection Date:	18-Mar-2015 11:27:00	Instrument ID:	CHIC2100A		
Lims ID:	ic L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		
Column:		Detector	0008		

2 Chloride, CAS: 16887-00-6

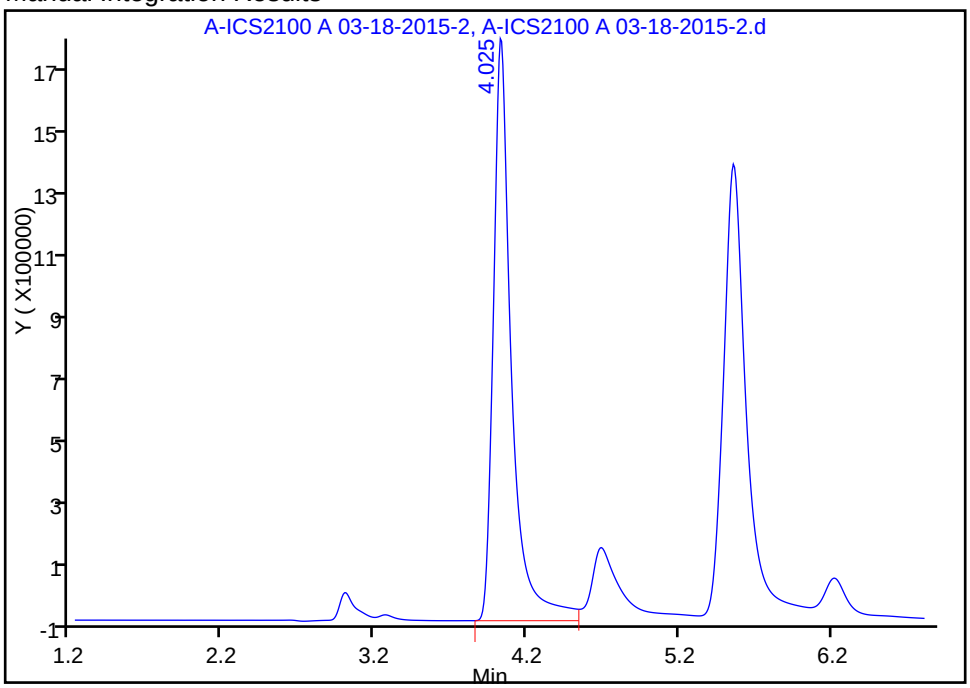
Processing Integration Results

RT: 4.03
Area: 14867118
Amount: 0.998345
Amount Units: ug/ml



Manual Integration Results

RT: 4.03
Area: 14881940
Amount: 0.998369
Amount Units: ug/ml



Reviewer: hartmanm, 18-Mar-2015 18:15:51
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

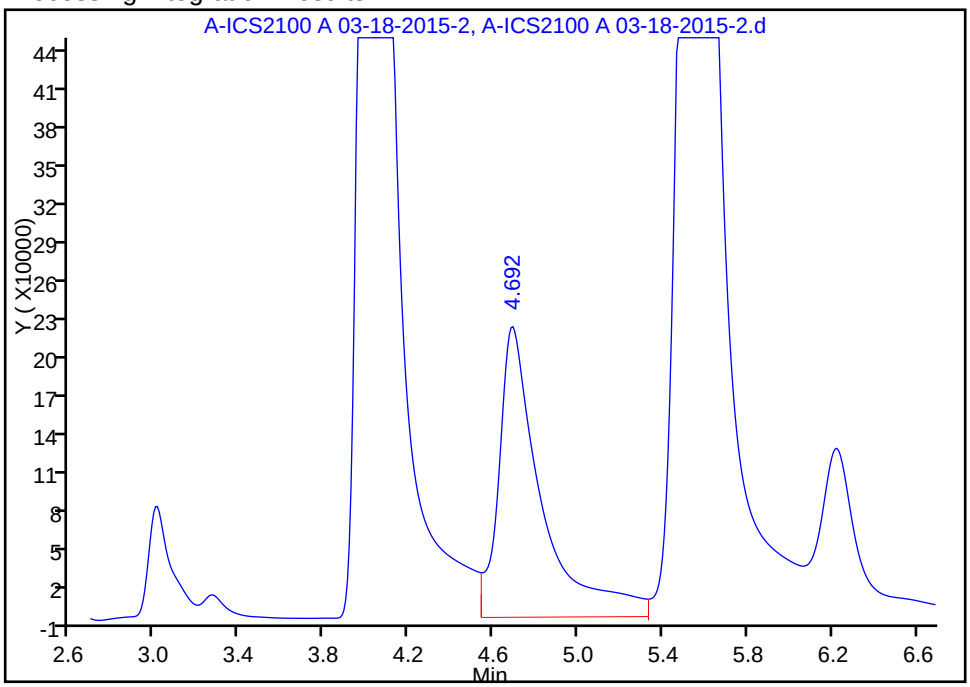
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-2.d				
Injection Date:	18-Mar-2015 11:27:00	Instrument ID:	CHIC2100A		
Lims ID:	ic L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		
Column:		Detector	0008		

7 Nitrite as N, CAS: 14797-65-0

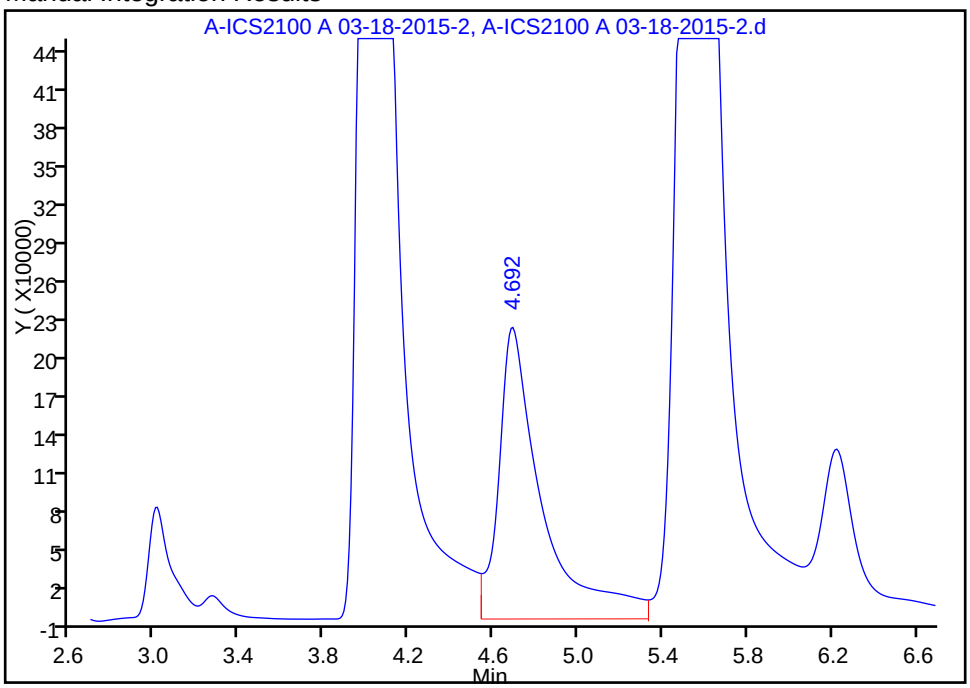
Processing Integration Results

RT: 4.69
Area: 3136128
Amount: 0.049797
Amount Units: ug/ml



Manual Integration Results

RT: 4.69
Area: 3177144
Amount: 0.049824
Amount Units: ug/ml



Reviewer: hartmanm, 18-Mar-2015 18:15:51
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

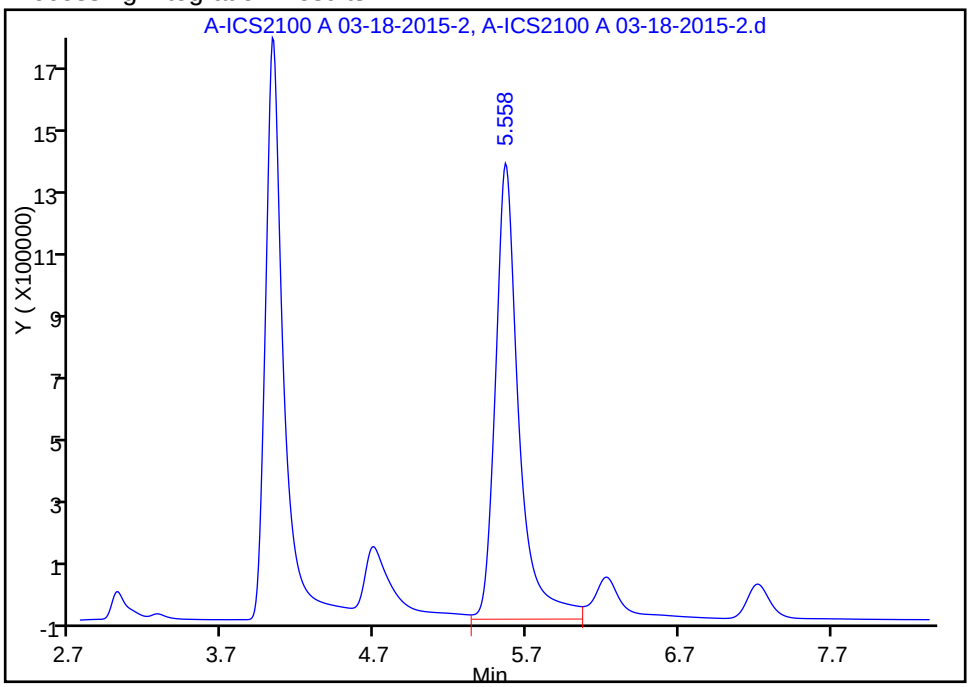
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-2.d				
Injection Date:	18-Mar-2015 11:27:00	Instrument ID:	CHIC2100A		
Lims ID:	ic L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		
Column:		Detector	0008		

3 Sulfate, CAS: 14808-79-8

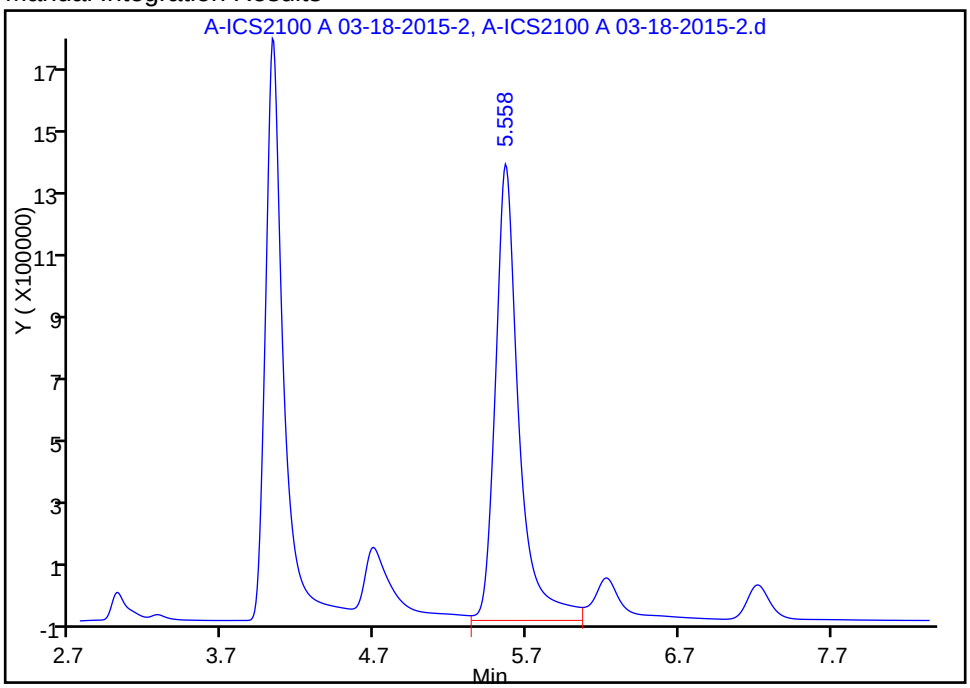
Processing Integration Results

RT: 5.56
Area: 15021977
Amount: 1.003499
Amount Units: ug/ml



Manual Integration Results

RT: 5.56
Area: 15082609
Amount: 1.003637
Amount Units: ug/ml



Reviewer: hartmanm, 18-Mar-2015 18:15:51
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

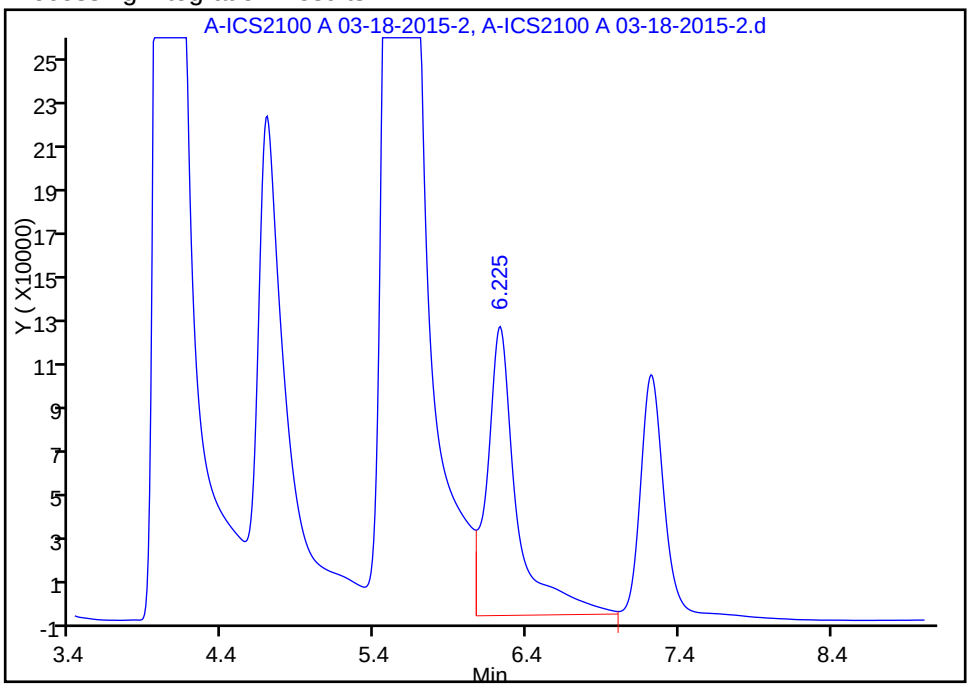
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-2.d				
Injection Date:	18-Mar-2015 11:27:00	Instrument ID:	CHIC2100A		
Lims ID:	ic L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		
Column:		Detector	0008		

4 Bromide, CAS: 24959-67-9

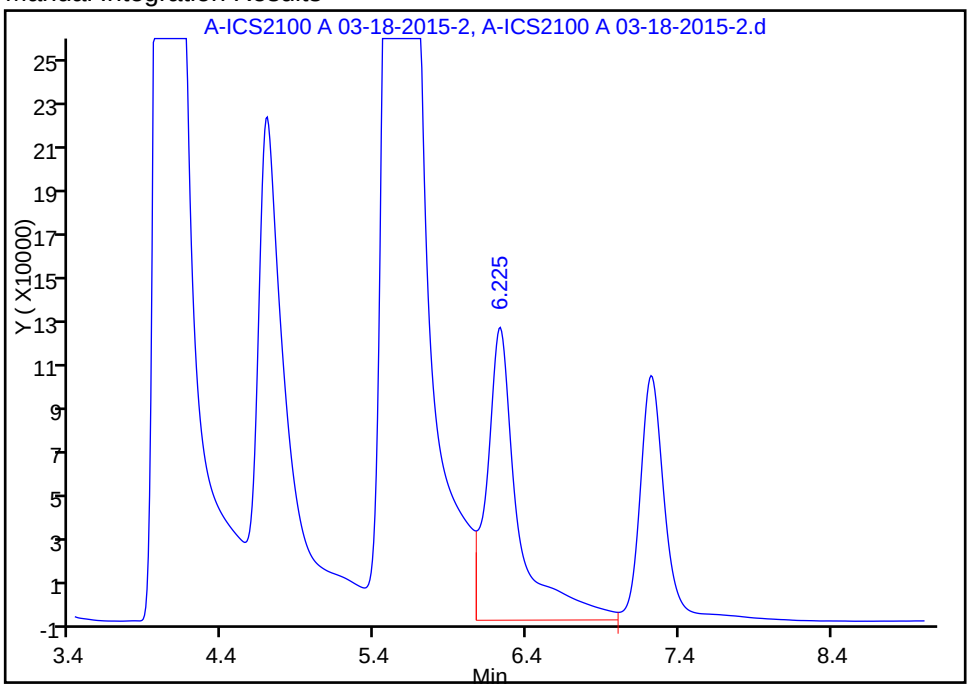
Processing Integration Results

RT: 6.23
Area: 1730864
Amount: 0.182769
Amount Units: ug/ml



Manual Integration Results

RT: 6.23
Area: 1839476
Amount: 0.194237
Amount Units: ug/ml



Reviewer: hartmanm, 18-Mar-2015 18:15:51
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Manual Integration/User Assign Peak Report

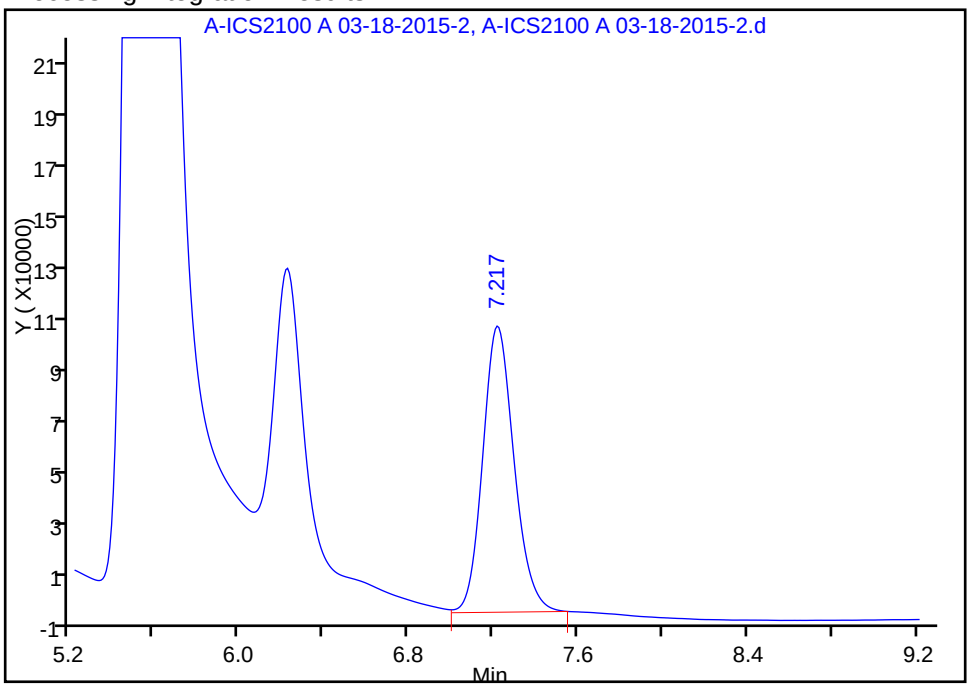
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-2.d				
Injection Date:	18-Mar-2015 11:27:00	Instrument ID:	CHIC2100A		
Lims ID:	ic L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		
Column:		Detector	0008		

5 Nitrate as N, CAS: 14797-55-8

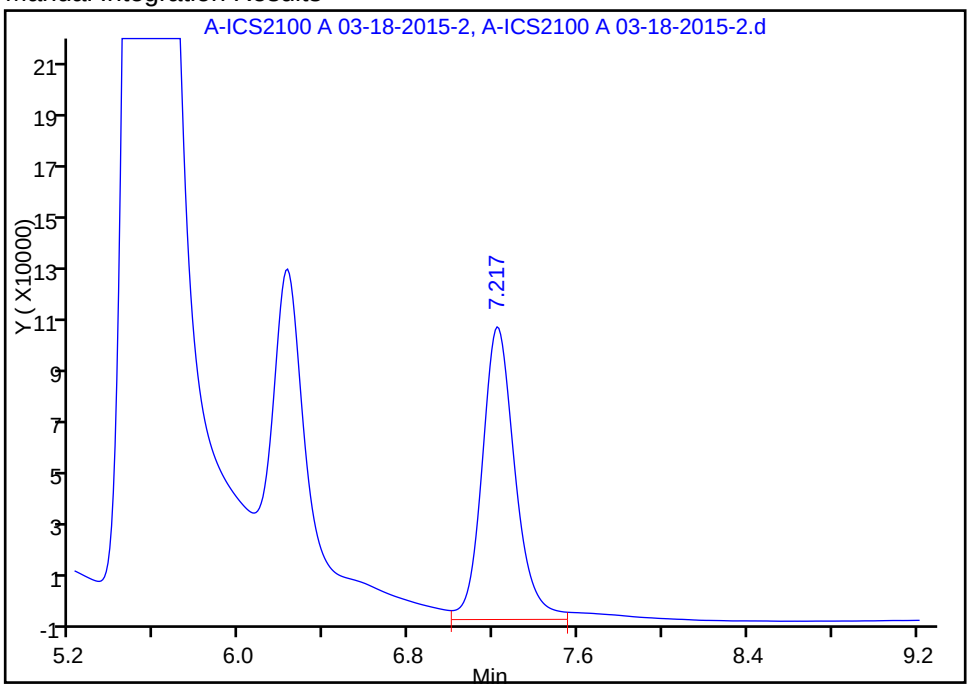
Processing Integration Results

RT: 7.22
Height: 106589
Amount: 0.028142
Amount Units: ug/ml



Manual Integration Results

RT: 7.22
Height: 108988
Amount: 0.028776
Amount Units: ug/ml



Reviewer: hartmanm, 18-Mar-2015 18:15:51
Audit Action: Assigned New Baseline
Audit Reason: Baseline

Report Date: 18-Mar-2015 15:00:56 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-3.d
Lims ID: ic L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Mar-2015 11:43:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006073-003
Misc. Info.: 3 IC L3
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 18-Mar-2015 15:00:56 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK033

First Level Reviewer: hartmanm Date: 18-Mar-2015 13:44:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.992	3.017	-0.025	4066810	0.2500	0.1255	M
2 Chloride	4.008	4.008	0.000	100238904	5.00	5.09	
7 Nitrite as N	4.683	4.692	-0.009	11517594	0.2500	0.2547	
3 Sulfate	5.550	5.550	0.000	74348642	5.00	4.98	
4 Bromide	6.225	6.233	-0.008	8475818	1.00	0.8950	
5 Nitrate as N	7.233	7.225	0.008	9219030	0.2500	0.2161	
6 Orthophosphate as P	10.292	10.283	0.009	1266213	0.2500	0.3788	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

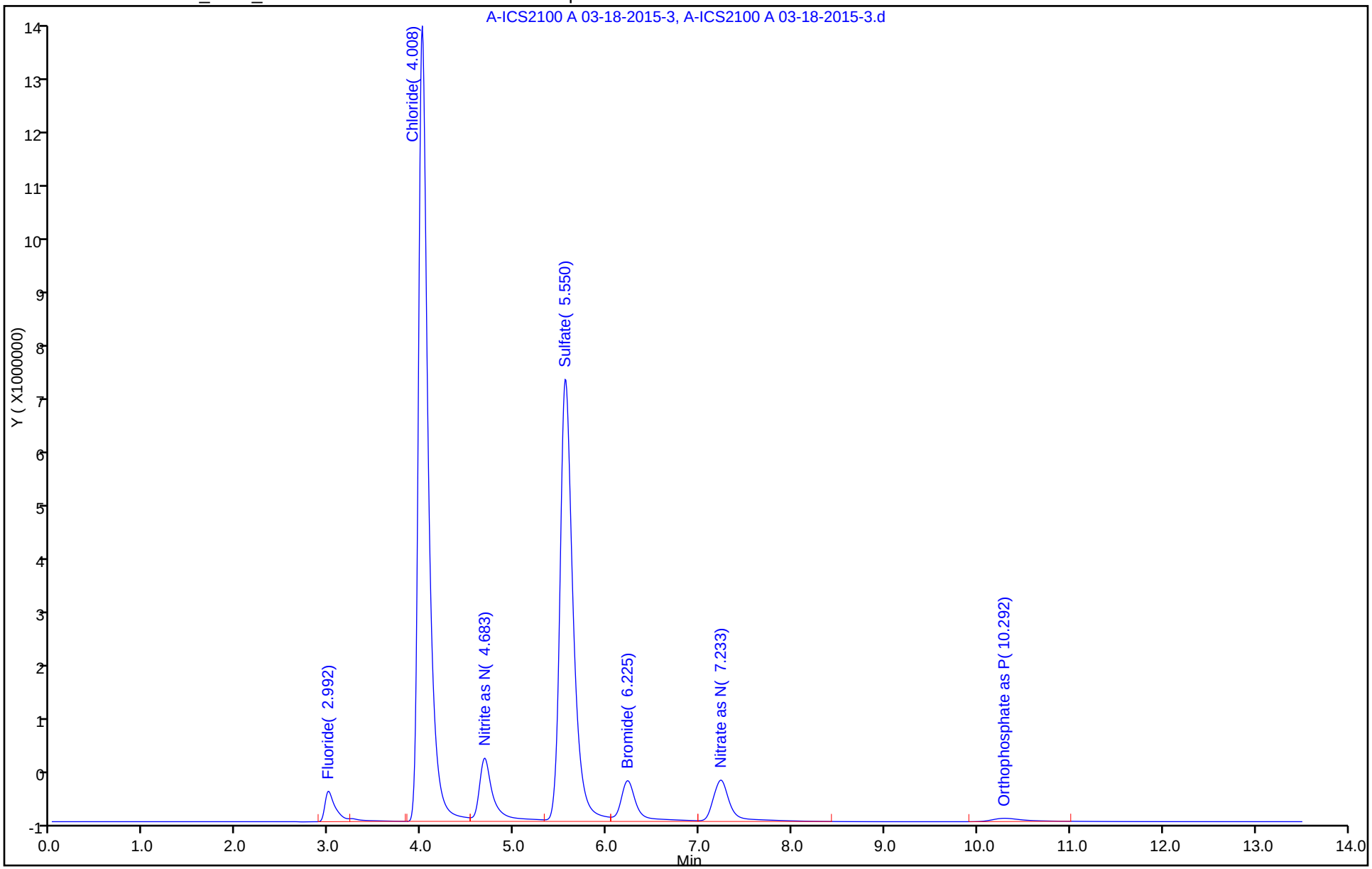
ICSTDL3_00200 Amount Added: 1.00 Units: mL

Report Date: 18-Mar-2015 15:00:56 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-3.d

Injection Date:	18-Mar-2015 11:43:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



Manual Integration/User Assign Peak Report

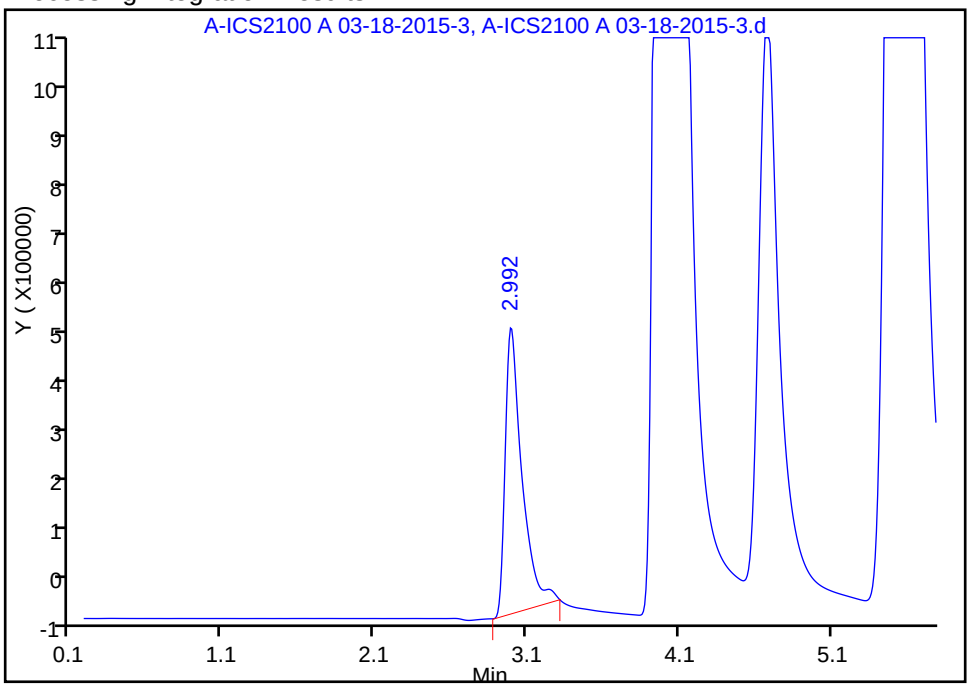
TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-3.d				
Injection Date:	18-Mar-2015 11:43:00	Instrument ID:	CHIC2100A		
Lims ID:	ic L3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		
Column:		Detector	0008		

1 Fluoride, CAS: 16984-48-8

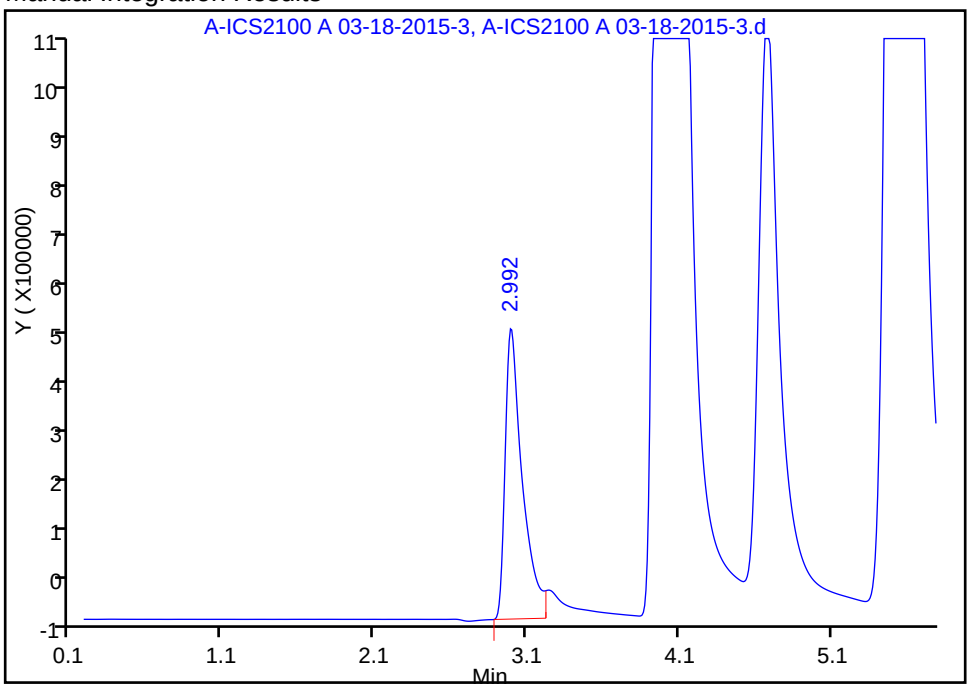
Processing Integration Results

RT: 2.99
Area: 3912395
Amount: 0.156660
Amount Units: ug/ml



Manual Integration Results

RT: 2.99
Area: 4066810
Amount: 0.125484
Amount Units: ug/ml



Reviewer: hartmanm, 18-Mar-2015 13:51:41
Audit Action: Split an Integrated Peak
Audit Reason: Split Peak

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-4.d
Lims ID: icrt L4
Client ID:
Sample Type: ICRT Calib Level: 4
Inject. Date: 18-Mar-2015 11:58:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006073-004
Misc. Info.: 4 ICRT L4
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 18-Mar-2015 18:07:27 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK033

First Level Reviewer: hartmanm Date: 18-Mar-2015 12:45:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.017	3.017	0.000	12030457	0.5000	0.3712	
2 Chloride	4.008	4.008	0.000	199163746	10.0	9.84	
7 Nitrite as N	4.692	4.692	0.000	22860766	0.5000	0.5209	
3 Sulfate	5.550	5.550	0.000	146123470	10.0	9.79	
4 Bromide	6.233	6.233	0.000	17393233	2.00	1.84	
5 Nitrate as N	7.225	7.225	0.000	21696619	0.5000	0.4120	
6 Orthophosphate as P	10.283	10.283	0.000	3831594	0.5000	0.5236	

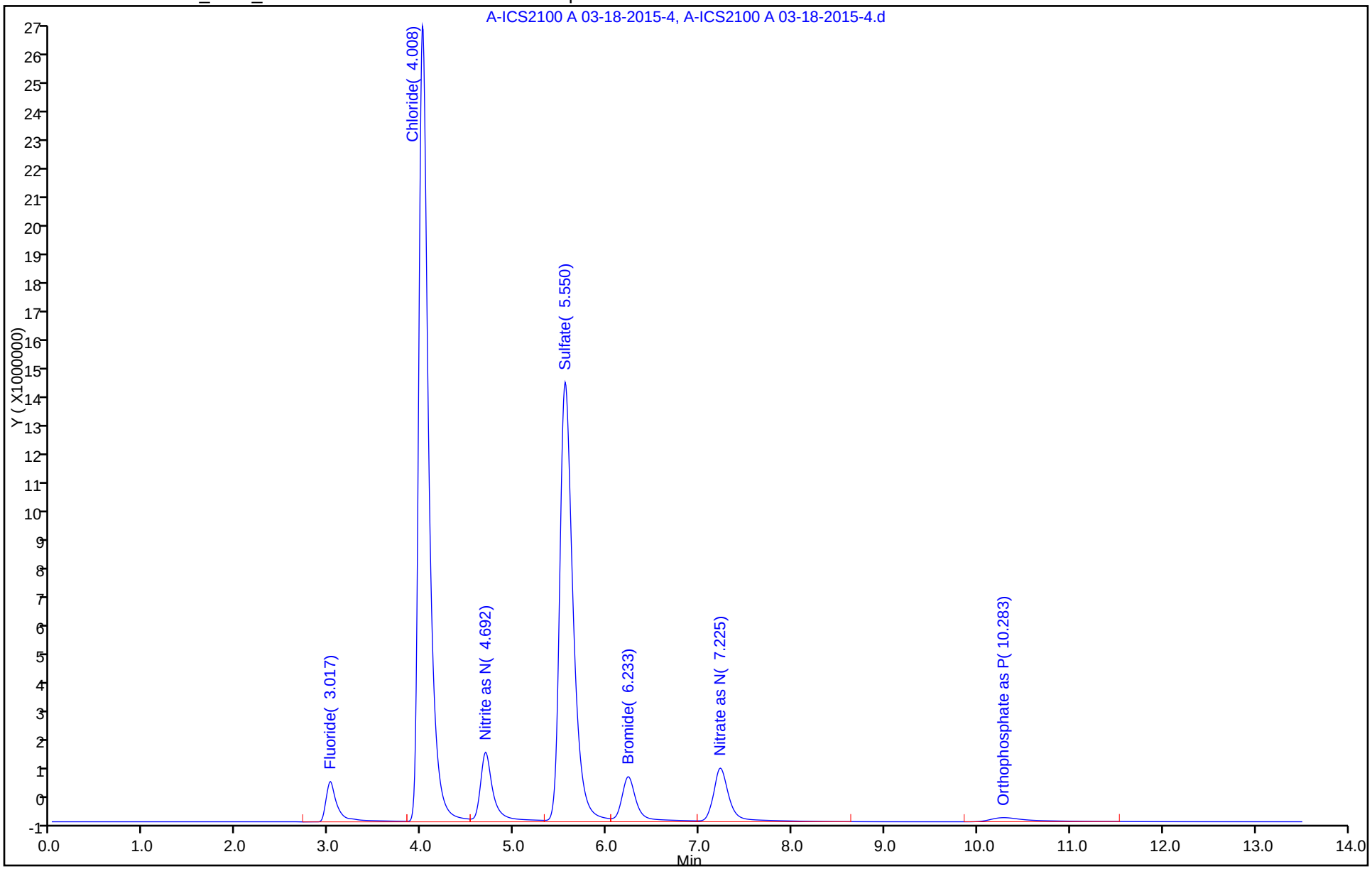
Reagents:

ICSTDL4_00135 Amount Added: 1.00 Units: mL

Report Date: 18-Mar-2015 18:07:28 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-4.d				
Injection Date:	18-Mar-2015 11:58:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-5.d
Lims ID: ic L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-Mar-2015 12:13:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006073-005
Misc. Info.: 5 IC L5
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 18-Mar-2015 18:08:48 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK033

First Level Reviewer: hartmanm Date: 18-Mar-2015 18:08:48

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.017	3.017	0.000	28839713	1.00	0.8899	
2 Chloride	4.017	4.008	0.009	410412845	20.0	20.0	
7 Nitrite as N	4.692	4.692	0.000	43482294	1.00	1.01	
3 Sulfate	5.525	5.550	-0.025	297244169	20.0	19.9	
4 Bromide	6.233	6.233	0.000	33796204	4.00	3.57	
5 Nitrate as N	7.217	7.225	-0.008	46463120	1.00	0.8822	
6 Orthophosphate as P	10.233	10.283	-0.050	10946796	1.00	0.9254	

Reagents:

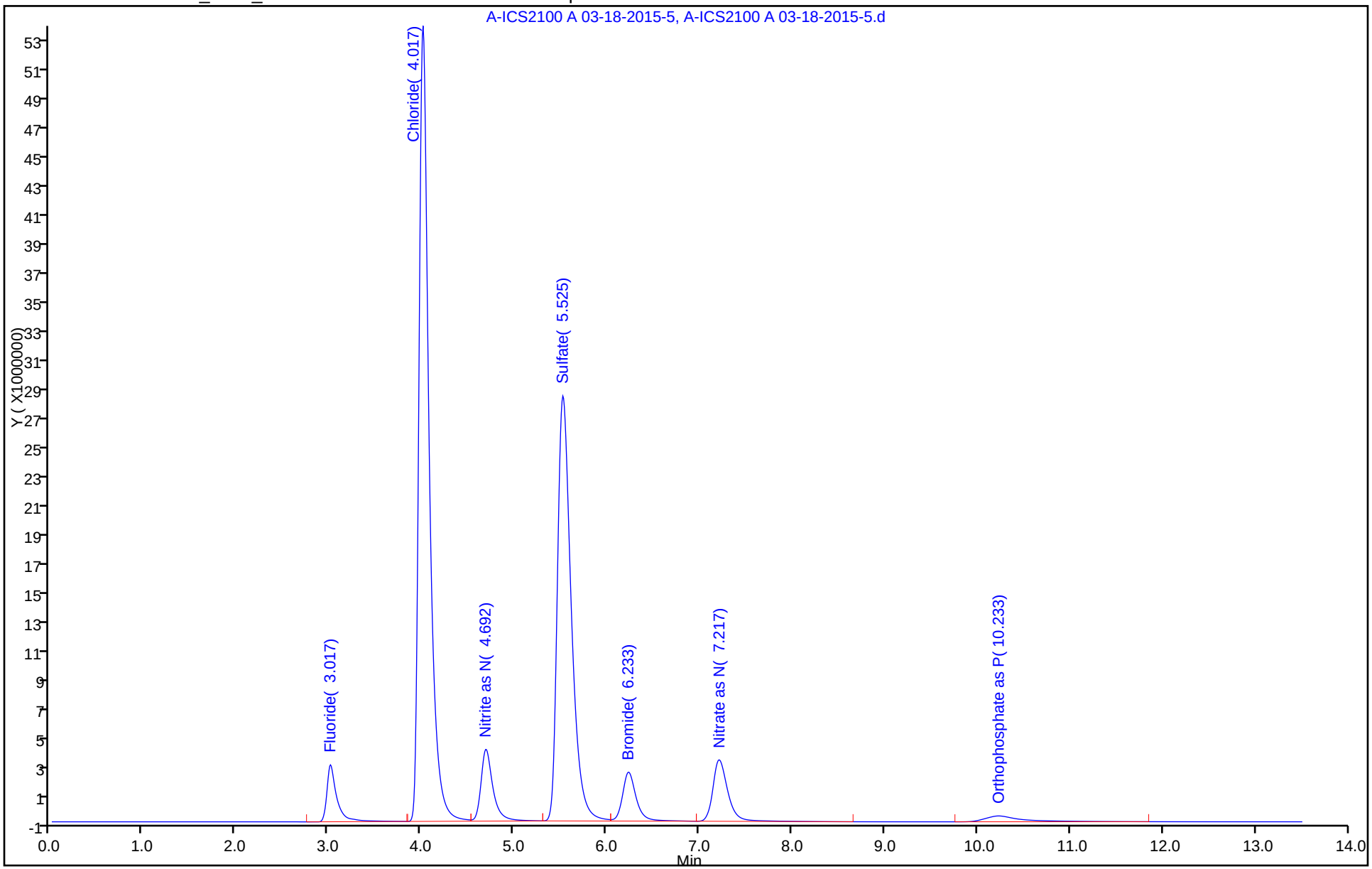
ICSTDL5_00136 Amount Added: 1.00 Units: mL

Report Date: 18-Mar-2015 18:08:48 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-5.d

Injection Date:	18-Mar-2015 12:13:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



Report Date: 18-Mar-2015 18:20:14 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-6.d
Lims ID: ic L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 18-Mar-2015 12:29:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006053-006
Misc. Info.: 6 IC L6
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 18-Mar-2015 18:20:14 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK033

First Level Reviewer: hartmanm Date: 18-Mar-2015 18:18:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.017	-0.009	77159596	2.50	2.38	
2 Chloride	4.008	4.008	0.000	995054428	50.0	48.0	
7 Nitrite as N	4.683	4.692	-0.009	102799468	2.50	2.43	
3 Sulfate	5.483	5.550	-0.067	719323783	50.0	48.2	
4 Bromide	6.217	6.233	-0.016	86364096	10.0	9.12	
5 Nitrate as N	7.175	7.225	-0.050	119987980	2.50	2.46	
6 Orthophosphate as P	10.150	10.283	-0.133	34950954	2.50	2.28	

Reagents:

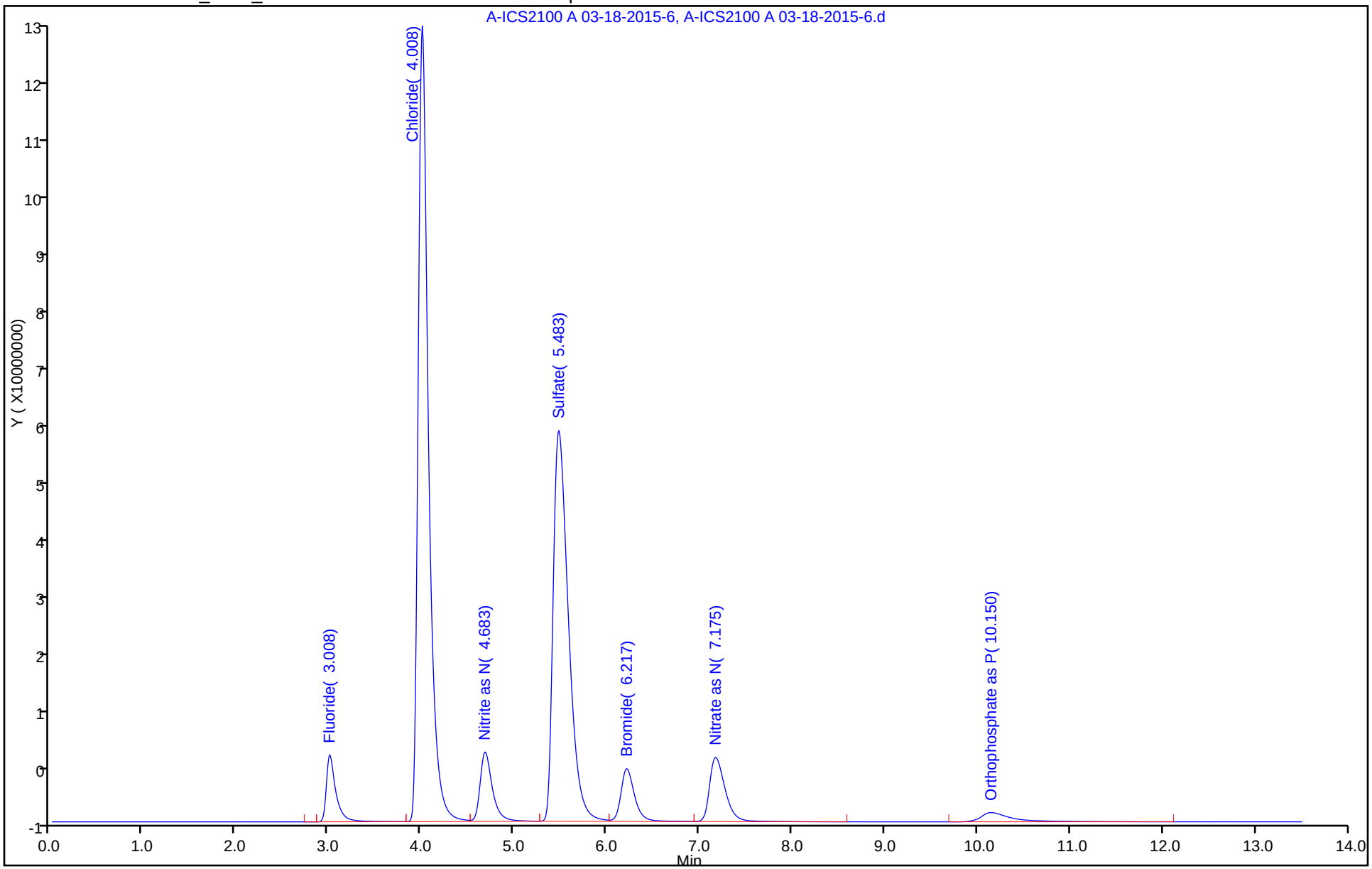
ICSTDL6_00201 Amount Added: 1.00 Units: mL

Report Date: 18-Mar-2015 18:20:14 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-6.d

Injection Date:	18-Mar-2015 12:29:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



Report Date: 18-Mar-2015 18:17:32 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-7.d
Lims ID: ic L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Mar-2015 12:44:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006073-007
Misc. Info.: 7 IC L7
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 18-Mar-2015 18:17:31 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK033

First Level Reviewer: hartmanm Date: 18-Mar-2015 18:17:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.017	-0.017	167654034	5.00	5.17	
2 Chloride	4.000	4.008	-0.008	2125235619	100.0	102.3	
7 Nitrite as N	4.675	4.692	-0.017	205529554	5.00	4.89	
3 Sulfate	5.425	5.550	-0.125	1548300187	100.0	103.7	
4 Bromide	6.192	6.233	-0.041	188983772	20.0	20.0	
5 Nitrate as N	7.125	7.225	-0.100	20666930H	5.00	5.46	
6 Orthophosphate as P	10.008	10.283	-0.275	86081052	5.00	5.17	

Reagents:

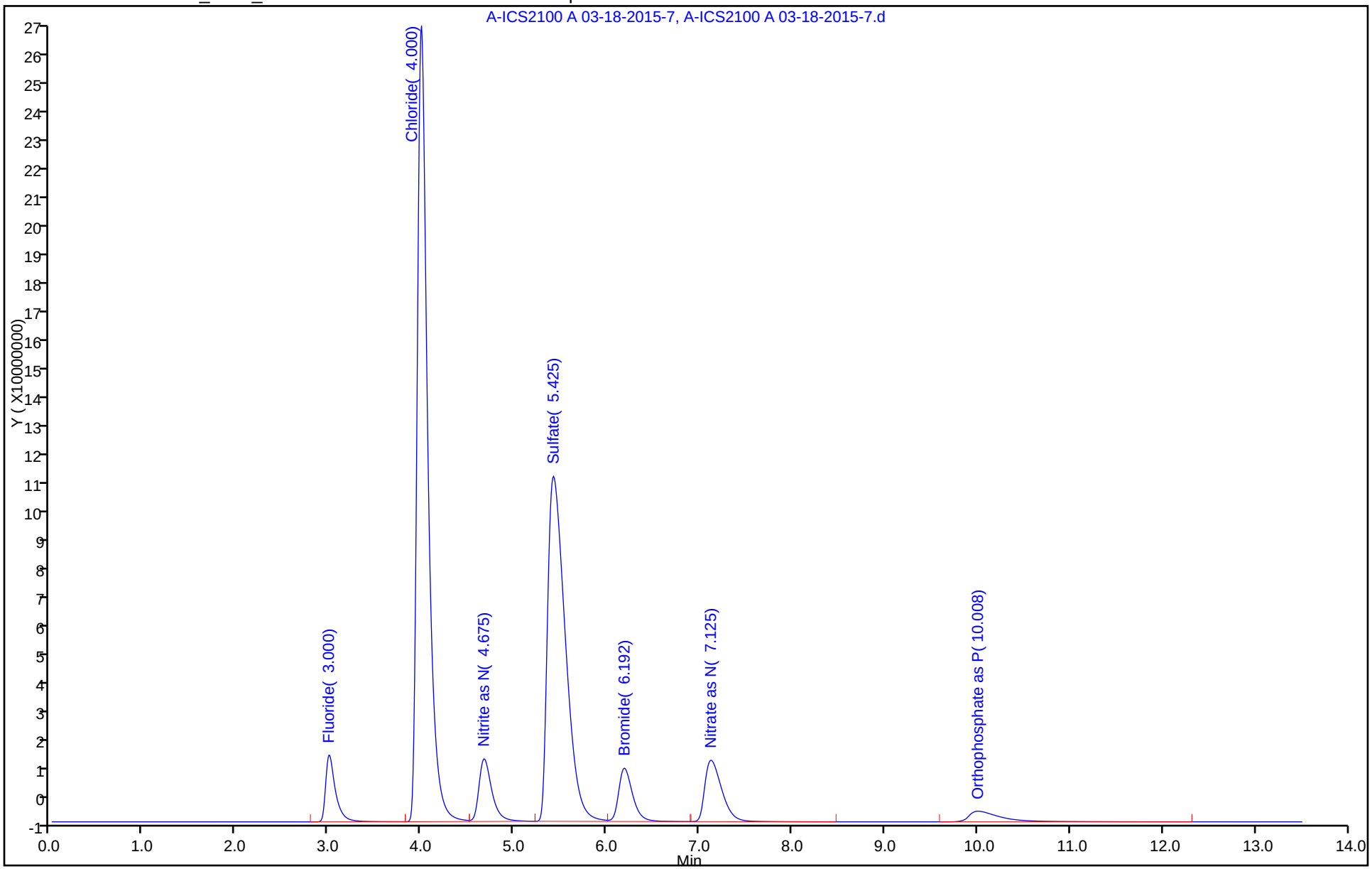
ICSTDL7_00132 Amount Added: 1.00 Units: mL

Report Date: 18-Mar-2015 18:17:32 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-7.d

Injection Date:	18-Mar-2015 12:44:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



Report Date: 18-Mar-2015 15:00:54 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-8.d
Lims ID: ic L8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 18-Mar-2015 12:59:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006073-008
Misc. Info.: 8 IC L8
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 18-Mar-2015 15:00:54 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK033

First Level Reviewer: hartmanm Date: 18-Mar-2015 13:17:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.000	0.000	240276056	7.50	7.41	
2 Chloride	3.992	4.000	-0.008	3099276402	150.0	149.0	
7 Nitrite as N	4.667	4.675	-0.008	288049270	7.50	7.03	
3 Sulfate	5.383	5.483	-0.100	2225349056	150.0	149.1	
4 Bromide	6.167	6.208	-0.041	277091709	30.0	29.3	
5 Nitrate as N	7.092	7.167	-0.075	387501618	7.50	7.87	
6 Orthophosphate as P	9.917	10.150	-0.233	128443816	7.50	7.56	

Reagents:

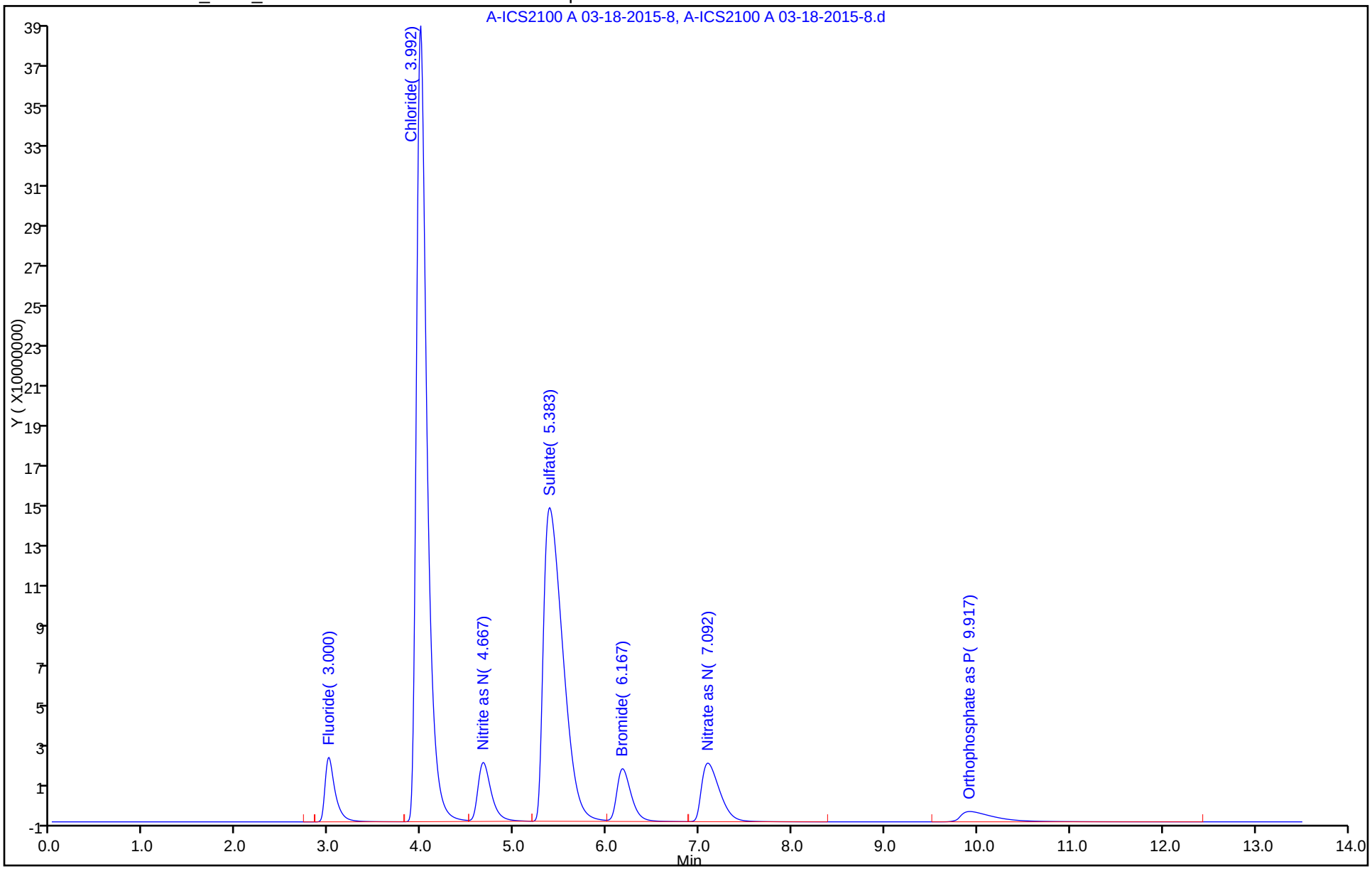
ICSTDL8_00102 Amount Added: 1.00 Units: mL

Report Date: 18-Mar-2015 15:00:54 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-8.d

Injection Date:	18-Mar-2015 12:59:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



Report Date: 18-Mar-2015 15:00:54 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d
Lims ID: ic L9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 18-Mar-2015 13:15:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006073-009
Misc. Info.: 9 IC L9
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 18-Mar-2015 15:00:54 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK033

First Level Reviewer: hartmanm Date: 18-Mar-2015 13:41:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.000	0.000	325014820	10.0	10.0	
2 Chloride	3.992	4.000	-0.008	4258964050	200.0	204.6	
7 Nitrite as N	4.667	4.675	-0.008	391103425	10.0	9.55	
3 Sulfate	5.350	5.483	-0.133	3082282736	200.0	206.5	
4 Bromide	6.158	6.208	-0.050	386878705	40.0	40.9	
5 Nitrate as N	7.067	7.167	-0.100	536007632	10.0	10.9	
6 Orthophosphate as P	9.825	10.150	-0.325	184636030	10.0	10.7	

Reagents:

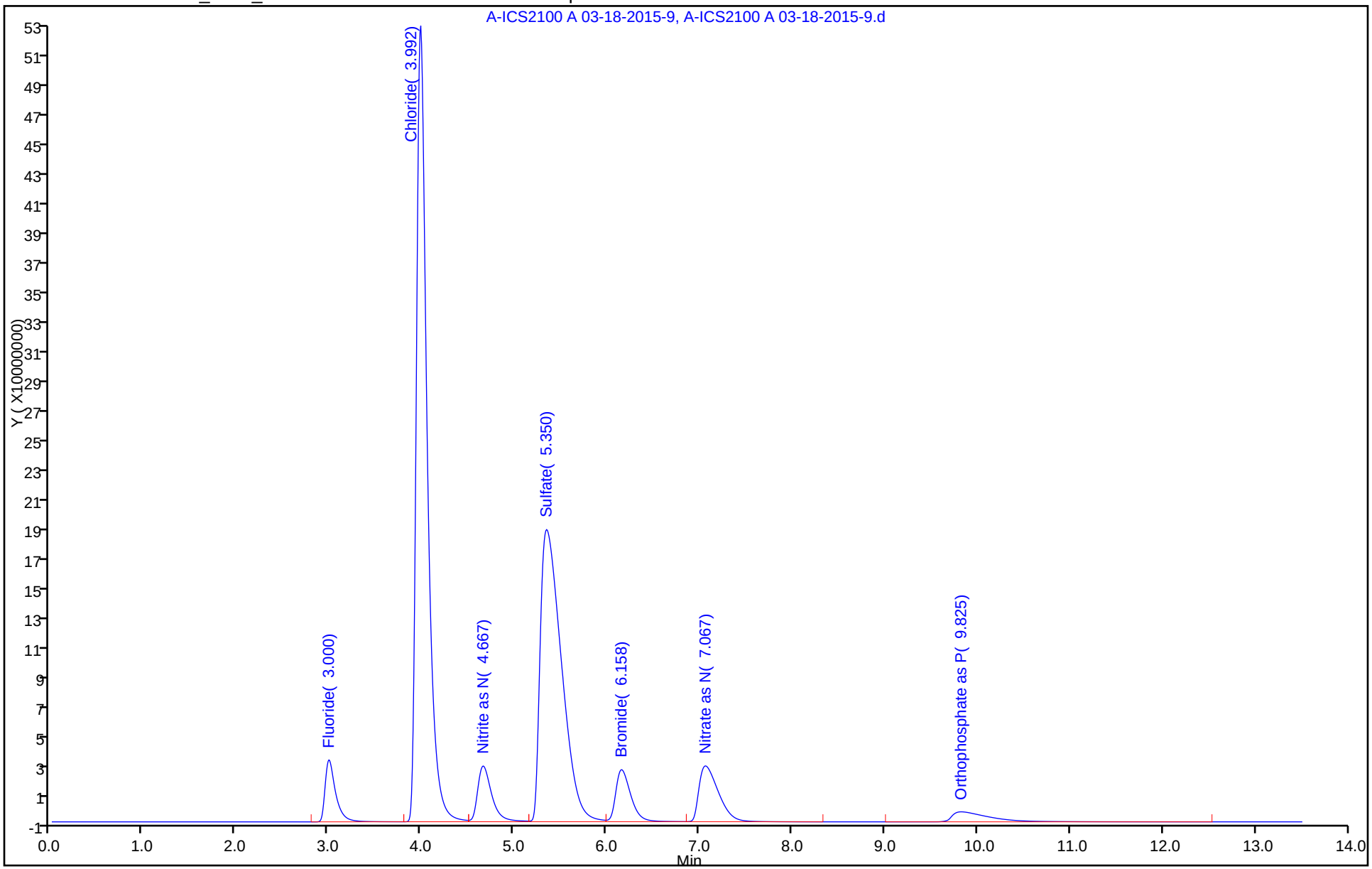
ICSTDL9_00107 Amount Added: 1.00 Units: mL

Report Date: 18-Mar-2015 15:00:54 Chrom Revision: 2.2 15-Jan-2015 13:05:58

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Injection Date:	18-Mar-2015 13:15:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: ICV 180-136855/2 Calibration Date: 03/28/2015 11:15

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-2.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		33894838		3.14	3.00	4.6	10.0
Chloride	Lin2		20658535		59.8	60.0	-0.4	10.0
Nitrite as N	Lin2		43455110		3.09	3.00	3.1	10.0
Sulfate	Lin2		15045820		60.5	60.0	0.8	10.0
Bromide	LinF		9143357		11.6	12.0	-3.5	10.0
Nitrate as N	Lin2		50304045		3.09	3.00	2.9	10.0
Orthophosphate as P	Lin2		15666954		2.96	3.00	-1.3	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: ICV 180-136855/2 Calibration Date: 03/28/2015 11:15

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-2.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.02	2.66	3.36
Chloride	4.01	3.66	4.36
Nitrite as N	4.68	4.43	4.93
Sulfate	5.46	5.13	5.83
Bromide	6.21	5.86	6.56
Nitrate as N	7.15	6.91	7.41
Orthophosphate as P	10.05	9.86	10.36

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-2.d
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 28-Mar-2015 11:15:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-002
Misc. Info.: 2 ICV
Operator ID: Instrument ID: CHIC2100A
Sublist:

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 15:21:53 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.017	3.008	0.009	101684515	3.00	3.14	
2 Chloride	4.008	4.008	0.000	1239512113	60.0	59.8	
7 Nitrite as N	4.675	4.683	-0.008	130417476	3.00	3.09	
3 Sulfate	5.458	5.475	-0.017	902749190	60.0	60.5	
4 Bromide	6.208	6.208	0.000	109720286	12.0	11.6	
5 Nitrate as N	7.150	7.158	-0.008	150912134	3.00	3.09	
6 Orthophosphate as P	10.050	10.108	-0.058	47000862	3.00	2.96	

Reagents:

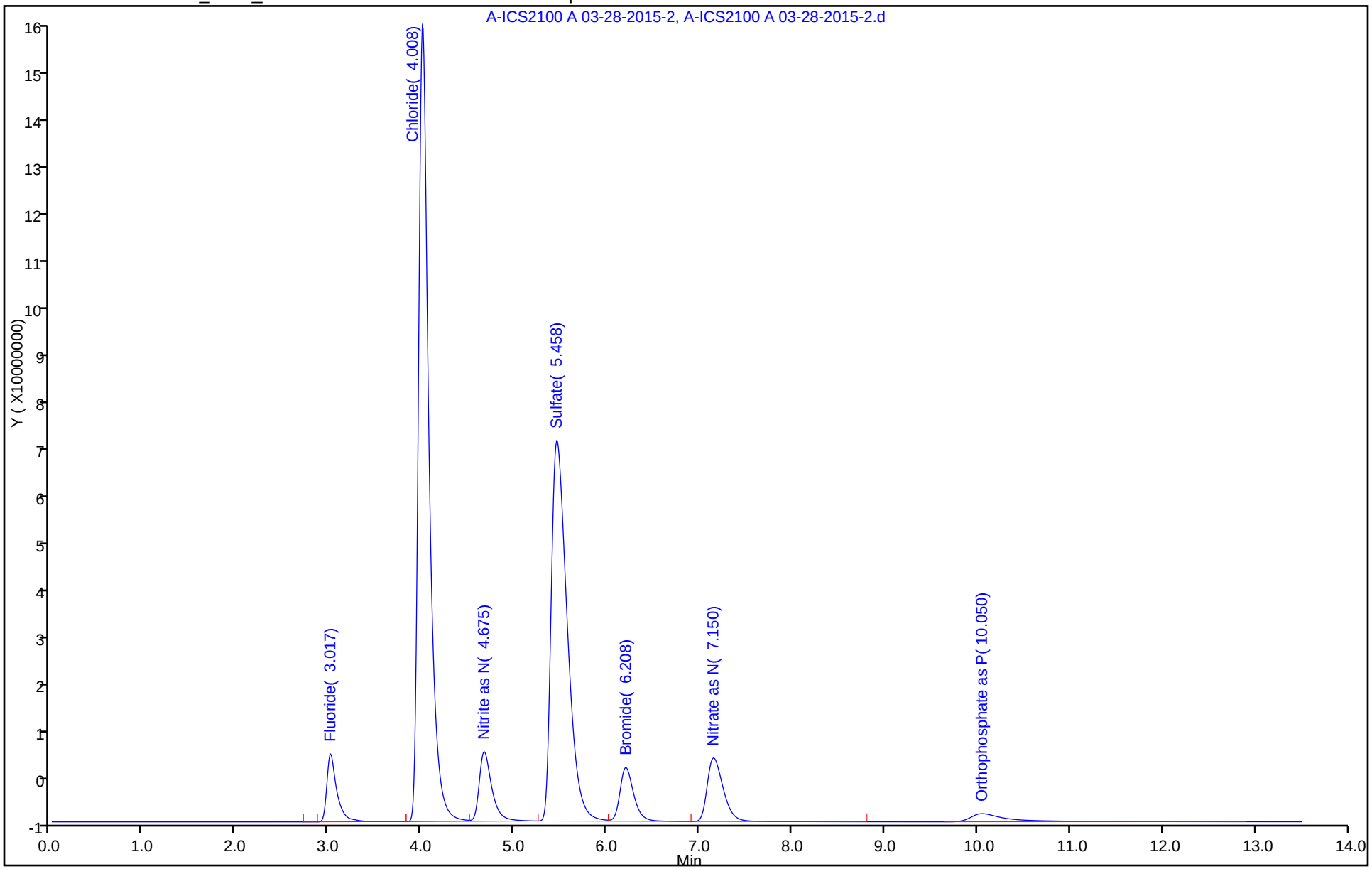
icicv_01232 Amount Added: 1.00 Units: mL

Report Date: 28-Mar-2015 15:22:27 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-2.d

Injection Date:	28-Mar-2015 11:15:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCV 180-136855/3 Calibration Date: 03/28/2015 11:32

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-3.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		32807585		2.53	2.50	1.2	10.0
Chloride	Lin2		20455812		49.4	50.0	-1.3	10.0
Nitrite as N	Lin2		43950697		2.60	2.50	4.1	10.0
Sulfate	Lin2		14745153		49.4	50.0	-1.2	10.0
Bromide	LinF		9002843		9.51	10.0	-4.9	10.0
Nitrate as N	Lin2		50532122		2.59	2.50	3.6	10.0
Orthophosphate as P	Lin2		15282890		2.46	2.50	-1.4	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCV 180-136855/3 Calibration Date: 03/28/2015 11:32

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-3.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.01	2.66	3.36
Chloride	4.01	3.66	4.36
Nitrite as N	4.68	4.43	4.93
Sulfate	5.48	5.13	5.83
Bromide	6.21	5.86	6.56
Nitrate as N	7.16	6.91	7.41
Orthophosphate as P	10.11	9.86	10.36

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-3.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 28-Mar-2015 11:32:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-003
Misc. Info.: 3 CCV
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 15:22:28 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.008	0.000	82018963	2.50	2.53	
2 Chloride	4.008	4.008	0.000	1022790588	50.0	49.4	
7 Nitrite as N	4.683	4.683	0.000	109876743	2.50	2.60	
3 Sulfate	5.475	5.475	0.000	737257660	50.0	49.4	
4 Bromide	6.208	6.208	0.000	90028426	10.0	9.51	
5 Nitrate as N	7.158	7.158	0.000	126330306	2.50	2.59	
6 Orthophosphate as P	10.108	10.108	0.000	38207225	2.50	2.46	

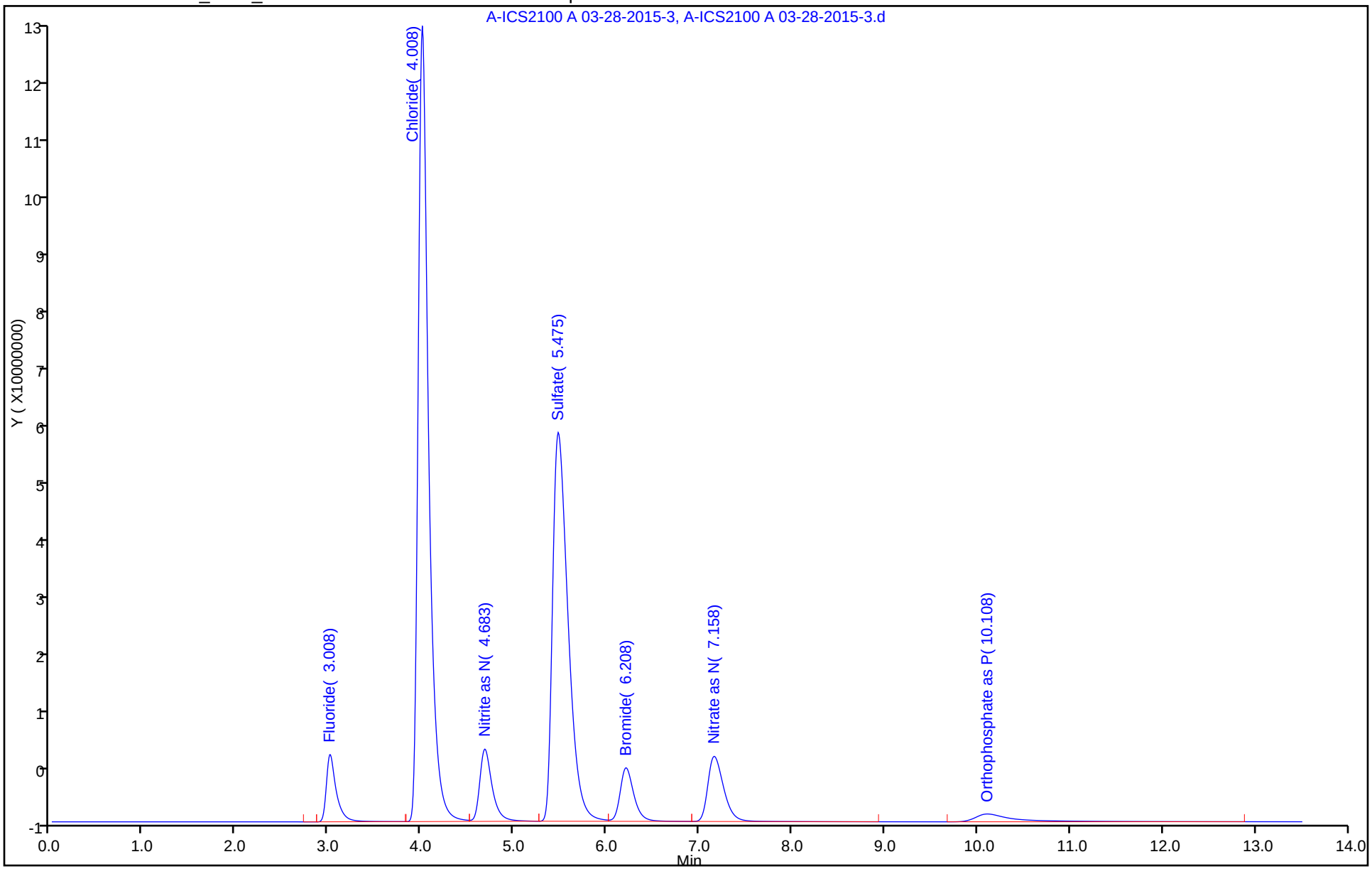
Reagents:

icccv_01202 Amount Added: 1.00 Units: mL

Report Date: 28-Mar-2015 15:22:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-3.d				
Injection Date:	28-Mar-2015 11:32:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCV 180-136855/15 Calibration Date: 03/28/2015 15:53

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-15.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		33098578		2.55	2.50	2.1	10.0
Chloride	Lin2		20641205		49.8	50.0	-0.4	10.0
Nitrite as N	Lin2		44126382		2.61	2.50	4.5	10.0
Sulfate	Lin2		14885393		49.9	50.0	-0.3	10.0
Bromide	LinF		9094302		9.60	10.0	-4.0	10.0
Nitrate as N	Lin2		50915222		2.61	2.50	4.4	10.0
Orthophosphate as P	Lin2		14761672		2.39	2.50	-4.4	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCV 180-136855/15 Calibration Date: 03/28/2015 15:53

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-15.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.00	2.65	3.35
Chloride	4.00	3.65	4.35
Nitrite as N	4.68	4.43	4.93
Sulfate	5.48	5.13	5.83
Bromide	6.19	5.84	6.54
Nitrate as N	7.15	6.90	7.40
Orthophosphate as P	10.15	9.90	10.40

Report Date: 28-Mar-2015 19:05:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-15.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 28-Mar-2015 15:53:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-015
Misc. Info.: 15 ccv
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 19:05:53 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK025

First Level Reviewer: reaglec Date: 28-Mar-2015 19:05:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.000	0.000	82746444	2.50	2.55	
2 Chloride	4.000	4.000	0.000	1032060248	50.0	49.8	
7 Nitrite as N	4.675	4.675	0.000	110315955	2.50	2.61	
3 Sulfate	5.475	5.475	0.000	744269659	50.0	49.9	
4 Bromide	6.192	6.192	0.000	90943019	10.0	9.60	
5 Nitrate as N	7.150	7.150	0.000	127288054	2.50	2.61	
6 Orthophosphate as P	10.150	10.150	0.000	36904181	2.50	2.39	

Reagents:

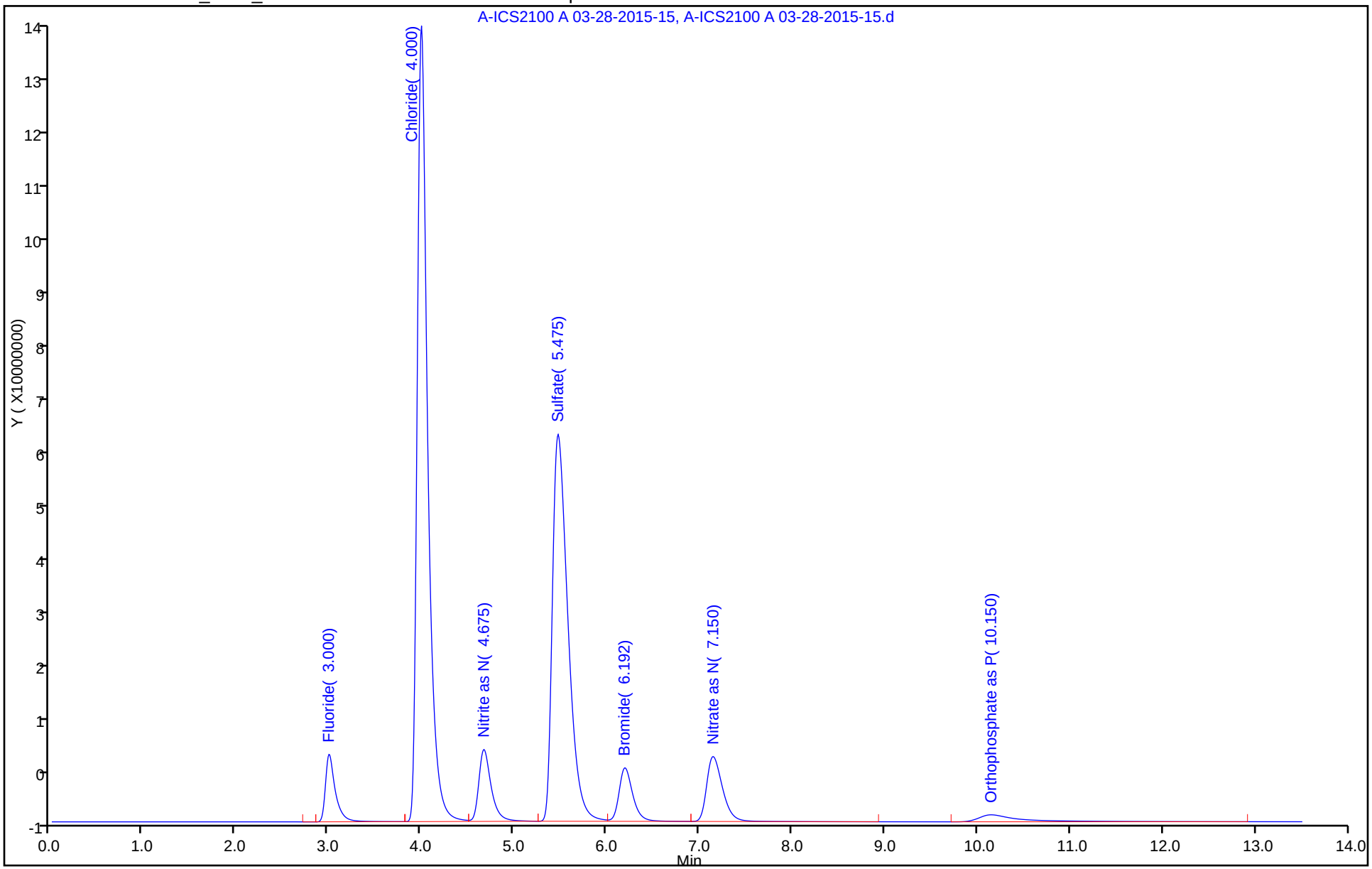
icccv_01202 Amount Added: 1.00 Units: mL

Report Date: 28-Mar-2015 19:05:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-15.d

Injection Date:	28-Mar-2015 15:53:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCV 180-136855/27 Calibration Date: 03/28/2015 19:21

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-27.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		33644256		2.60	2.50	3.8	10.0
Chloride	Lin2		20975137		50.6	50.0	1.2	10.0
Nitrite as N	Lin2		44838826		2.66	2.50	6.2	10.0
Sulfate	Lin2		15163952		50.8	50.0	1.6	10.0
Bromide	LinF		9222407		9.74	10.0	-2.6	10.0
Nitrate as N	Lin2		51732528		2.65	2.50	6.0	10.0
Orthophosphate as P	Lin2		15551206		2.50	2.50	0.1	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCV 180-136855/27 Calibration Date: 03/28/2015 19:21

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-27.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.01	2.66	3.36
Chloride	4.01	3.66	4.36
Nitrite as N	4.68	4.43	4.93
Sulfate	5.47	5.12	5.82
Bromide	6.20	5.85	6.55
Nitrate as N	7.15	6.90	7.40
Orthophosphate as P	10.12	9.87	10.37

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-27.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 28-Mar-2015 19:21:00 ALS Bottle#: 0 Worklist Smp#: 27
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-027
Misc. Info.: 27 ccv
Operator ID: Instrument ID: CHIC2100A
Sublist: chrom-300_9056_CHIC2100A*sub3

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 30-Mar-2015 10:46:56 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.008	0.000	84110640	2.50	2.60	
2 Chloride	4.008	4.008	0.000	1048756855	50.0	50.6	
7 Nitrite as N	4.675	4.675	0.000	112097065	2.50	2.66	
3 Sulfate	5.467	5.467	0.000	758197600	50.0	50.8	
4 Bromide	6.200	6.200	0.000	92224071	10.0	9.74	
5 Nitrate as N	7.150	7.150	0.000	129331321	2.50	2.65	
6 Orthophosphate as P	10.117	10.117	0.000	38878015	2.50	2.50	

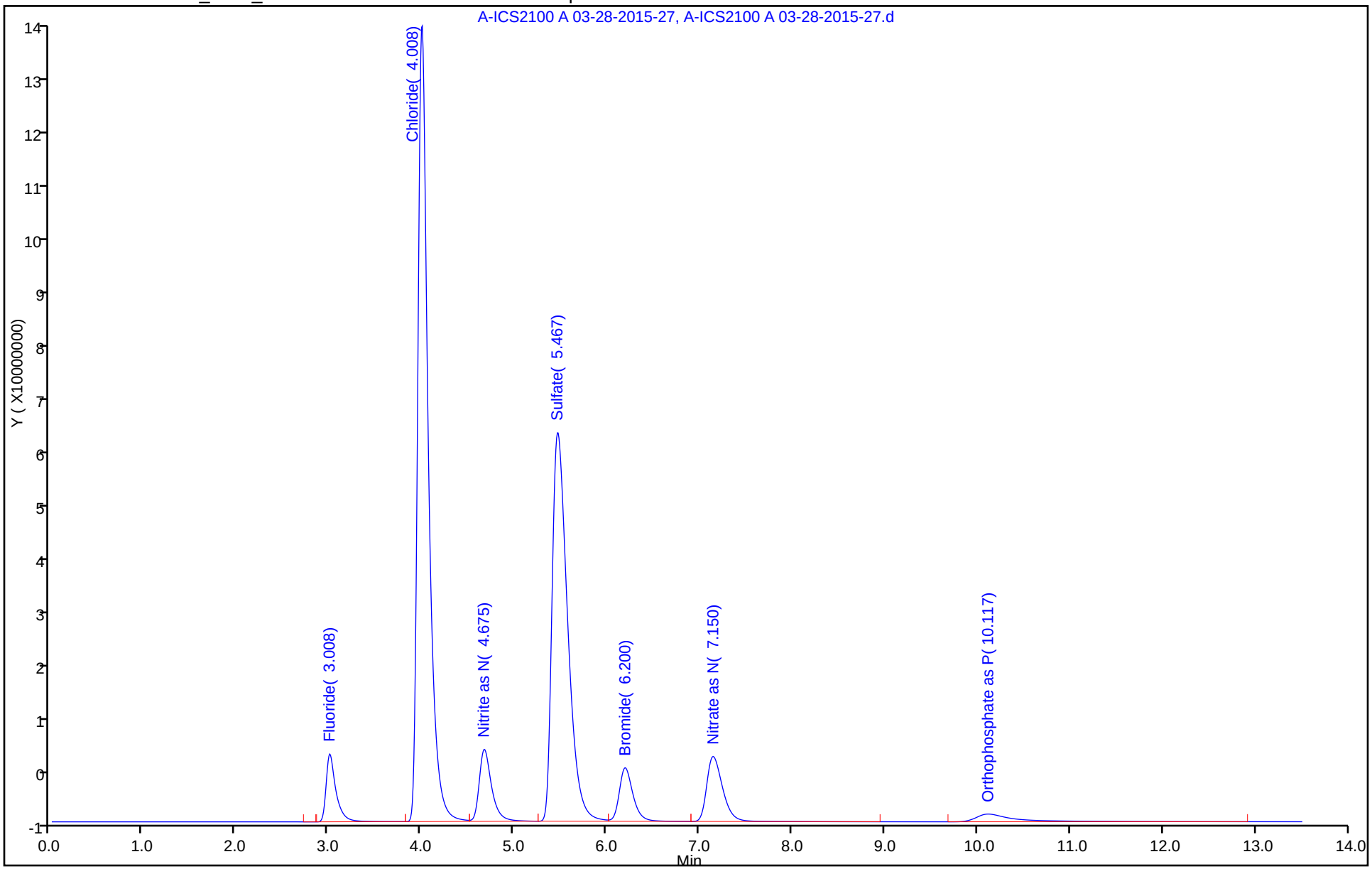
Reagents:

icccv_01202 Amount Added: 1.00 Units: mL

Report Date: 30-Mar-2015 10:46:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-27.d				
Injection Date:	28-Mar-2015 19:21:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCV 180-136855/39 Calibration Date: 03/28/2015 22:49

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-39.d Conc. Units: mg/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Fluoride	LinF		33693123		2.60	2.50	4.0	10.0
Chloride	Lin2		21039396		50.8	50.0	1.5	10.0
Nitrite as N	Lin2		44861804		2.66	2.50	6.3	10.0
Sulfate	Lin2		15144546		50.7	50.0	1.5	10.0
Bromide	LinF		9225712		9.74	10.0	-2.6	10.0
Nitrate as N	Lin2		52236780		2.68	2.50	7.0	10.0
Orthophosphate as P	Lin2		13104435		2.16	2.50	-13.7*	10.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: CCV 180-136855/39 Calibration Date: 03/28/2015 22:49

Instrument ID: CHIC2100A Calib Start Date: 03/18/2015 11:27

GC Column: AS-18 ID: Calib End Date: 03/18/2015 13:15

Lab File ID: A-ICS2100 A 03-28-2015-39.d

Analyte	RT	RT WINDOW	
		FROM	TO
Fluoride	3.03	2.68	3.38
Chloride	4.02	3.67	4.37
Nitrite as N	4.68	4.43	4.93
Sulfate	5.46	5.11	5.81
Bromide	6.20	5.85	6.55
Nitrate as N	7.15	6.90	7.40
Orthophosphate as P	10.16	9.91	10.41

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-39.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	28-Mar-2015 22:49:00	ALS Bottle#:	0	Worklist Smp#:	39
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	180-0006220-039				
Misc. Info.:	39 ccv				
Operator ID:		Instrument ID:	CHIC2100A		
Sublist:	chrom-300_9056_CHIC2100A*sub3				
Method:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m				
Limit Group:	GC Anions ICAL				
Last Update:	30-Mar-2015 10:47:01	Calib Date:	18-Mar-2015 13:15:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d				
Column 1 :			Det: 0008		
Process Host:	XAWRK050				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.025	3.025	0.000	84232808	2.50	2.60	
2 Chloride	4.017	4.017	0.000	1051969798	50.0	50.8	
7 Nitrite as N	4.683	4.683	0.000	112154509	2.50	2.66	
3 Sulfate	5.458	5.458	0.000	757227318	50.0	50.7	
4 Bromide	6.200	6.200	0.000	92257122	10.0	9.74	
5 Nitrate as N	7.150	7.150	0.000	130591950	2.50	2.68	
6 Orthophosphate as P	10.158	10.158	0.000	32761088	2.50	2.16	

Reagents:

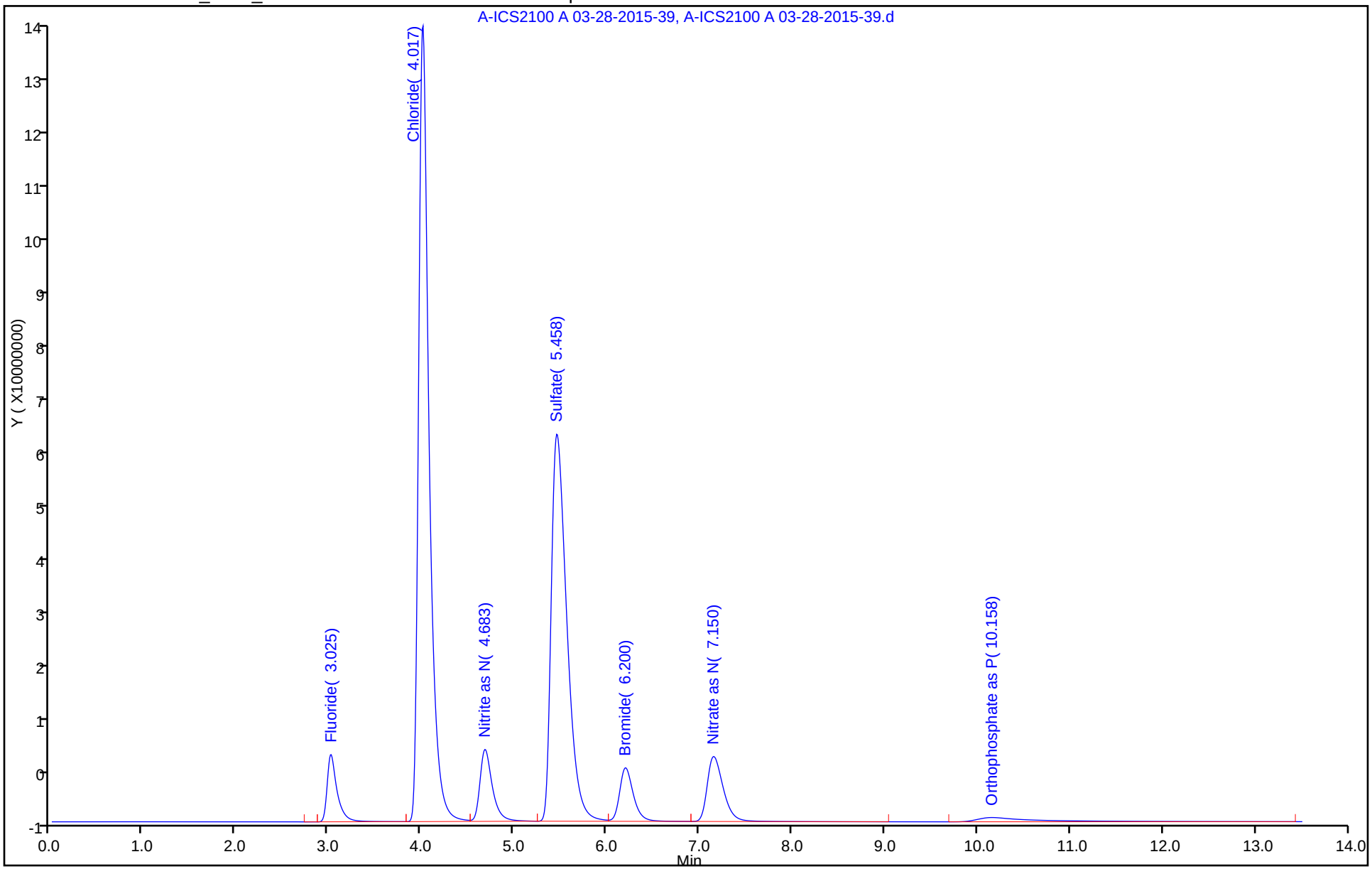
icccv_01202 Amount Added: 1.00 Units: mL

Report Date: 30-Mar-2015 10:47:01 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-39.d

Injection Date:	28-Mar-2015 22:49:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 180-136855/6

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-6.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 12:24

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0303	J	0.10	0.0062
16887-00-6	Chloride	0.375	J	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-6.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 28-Mar-2015 12:24:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-006
Misc. Info.: 6 MB
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 15:22:28 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

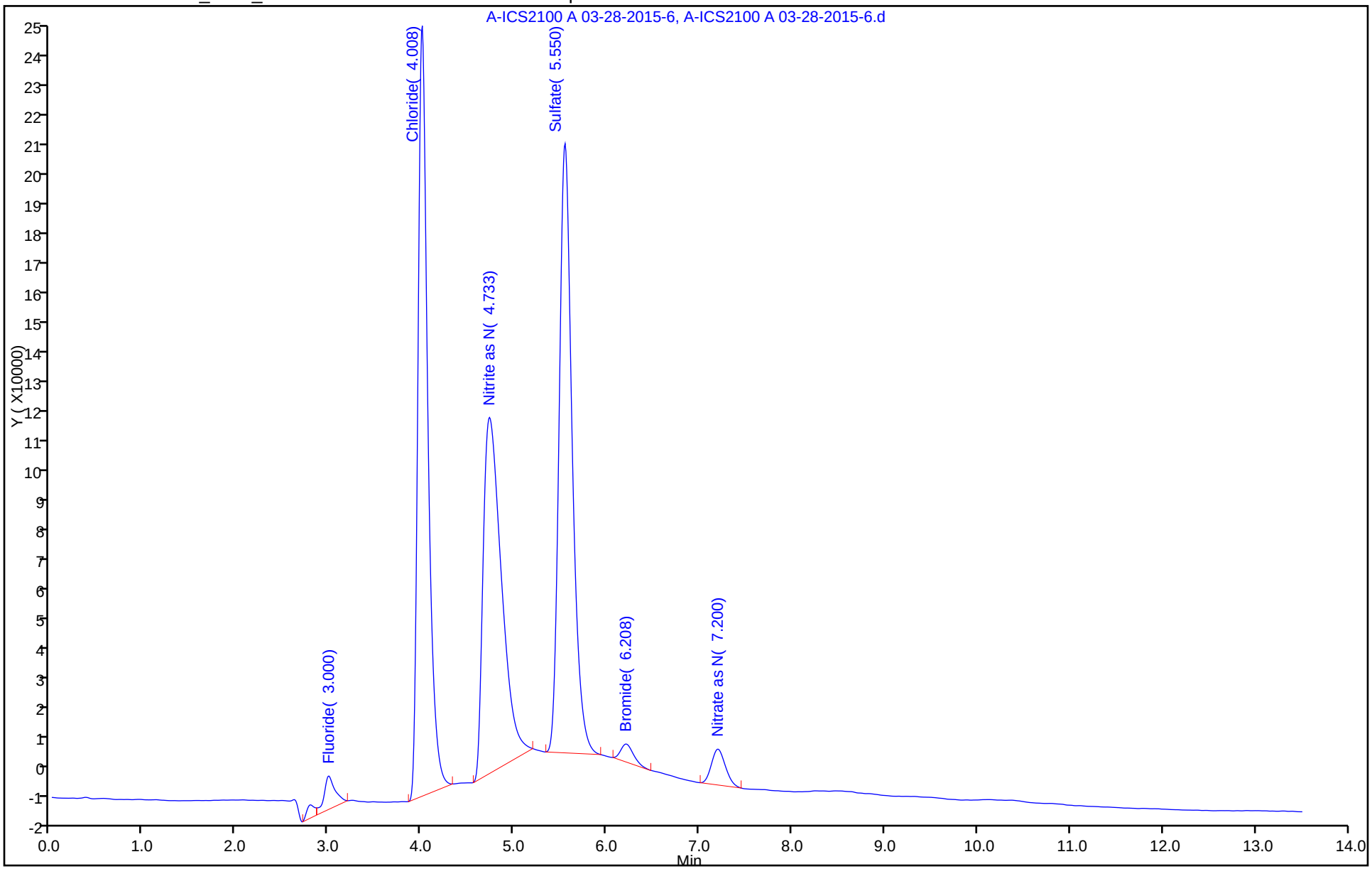
Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.008	-0.008	91205		0.002814	
2 Chloride	4.008	4.008	0.000	1881831		0.3746	
7 Nitrite as N	4.733	4.683	0.050	1603760		0.0122	
3 Sulfate	5.550	5.475	0.075	1954705		0.1240	
4 Bromide	6.208	6.208	0.000	57080		0.006027	
5 Nitrate as N	7.200	7.158	0.042	123192		0.0303	
6 Orthophosphate as P		10.108				ND	

Report Date: 28-Mar-2015 15:22:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-6.d				
Injection Date:	28-Mar-2015 12:24:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136855/4

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-4.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 11:50

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0305	J	0.10	0.0062
16887-00-6	Chloride	0.380	J	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-4.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 28-Mar-2015 11:50:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-004
Misc. Info.: 4 CCB
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 15:22:28 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

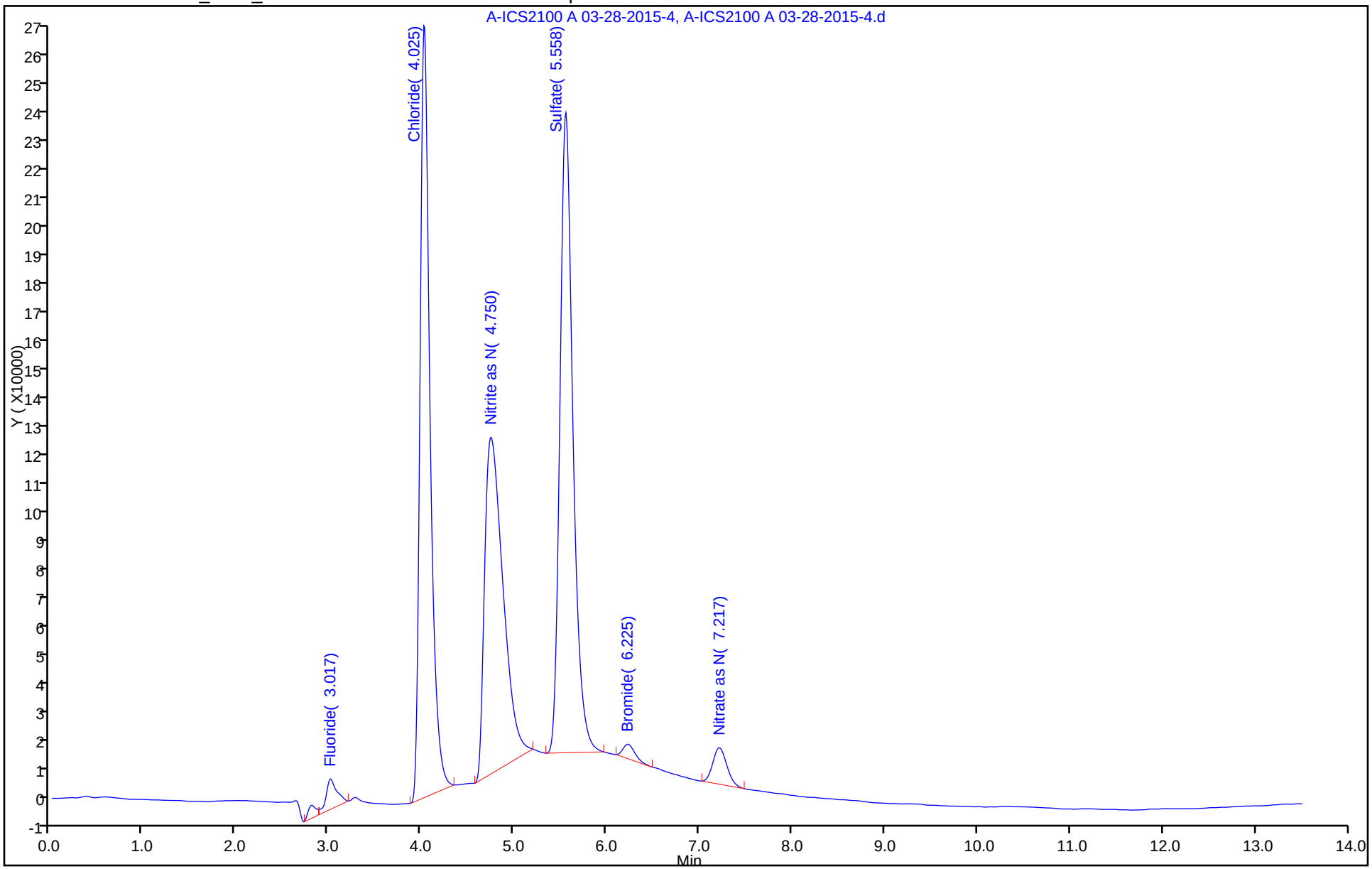
Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.017	3.008	0.009	84824		0.002617	
2 Chloride	4.025	4.008	0.017	1986220		0.3796	
7 Nitrite as N	4.750	4.683	0.067	1591008		0.0119	
3 Sulfate	5.558	5.475	0.083	2144619		0.1368	
4 Bromide	6.225	6.208	0.017	45217		0.004775	
5 Nitrate as N	7.217	7.158	0.059	131700		0.0305	
6 Orthophosphate as P		10.108				ND	

Report Date: 28-Mar-2015 15:22:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-4.d				
Injection Date:	28-Mar-2015 11:50:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136855/16

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-16.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 16:10

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0298	J	0.10	0.0062
16887-00-6	Chloride	0.417	J	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-16.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 28-Mar-2015 16:10:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-016
Misc. Info.: 16 ccb
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 19:05:53 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK025

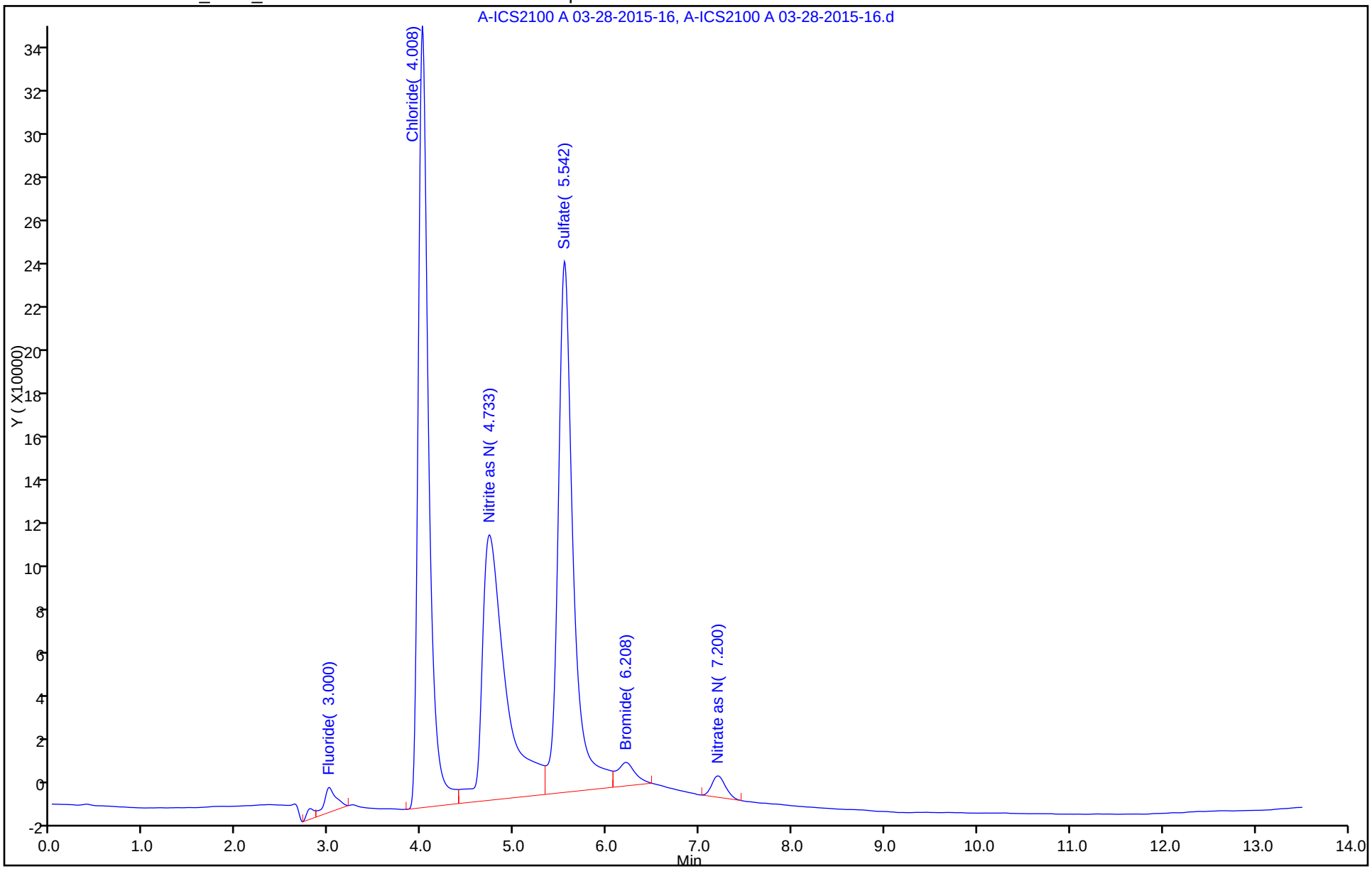
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.000	0.000	101610		0.003135	
2 Chloride	4.008	4.000	0.008	2761971		0.4168	
7 Nitrite as N	4.733	4.675	0.058	2141961		0.0251	
3 Sulfate	5.542	5.475	0.067	2742045		0.1768	
4 Bromide	6.208	6.192	0.016	145210		0.0153	
5 Nitrate as N	7.200	7.150	0.050	99571		0.0298	
6 Orthophosphate as P		10.150				ND	

Report Date: 28-Mar-2015 19:05:54 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-16.d

Injection Date:	28-Mar-2015 16:10:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136855/28

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-28.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 19:38

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0300	J	0.10	0.0062
16887-00-6	Chloride	0.436	J	1.0	0.20
14808-79-8	Sulfate	0.229	J	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-28.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 28-Mar-2015 19:38:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-028
Misc. Info.: 28 ccb
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 30-Mar-2015 10:46:56 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

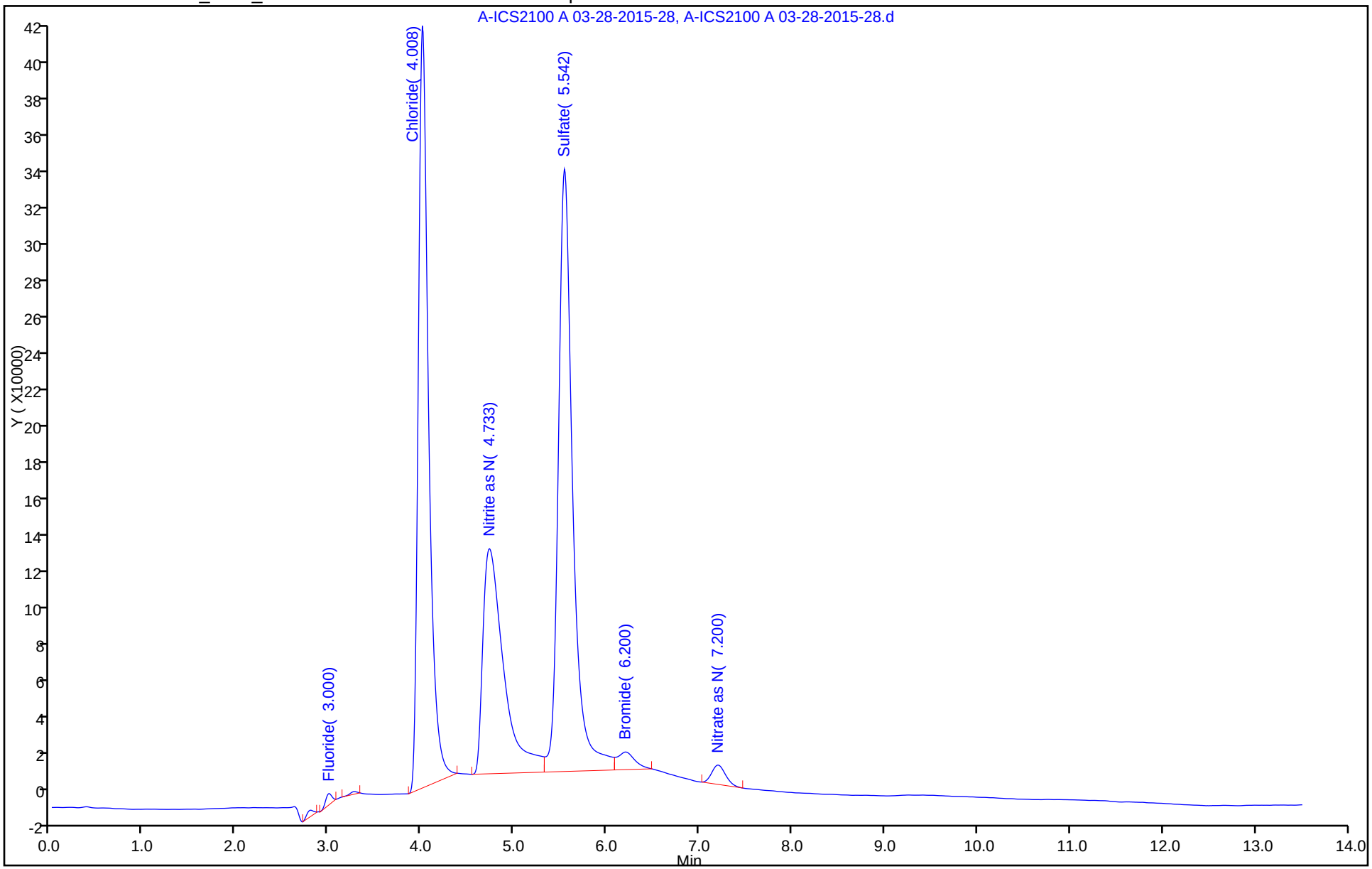
Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.008	-0.008	28430		0.000877	
2 Chloride	4.008	4.008	0.000	3171290		0.4364	
7 Nitrite as N	4.733	4.675	0.058	1900256		0.0193	
3 Sulfate	5.542	5.467	0.075	3517938		0.2288	
4 Bromide	6.200	6.200	0.000	122802		0.0130	
5 Nitrate as N	7.200	7.150	0.050	107637		0.0300	
6 Orthophosphate as P		10.117				ND	

Report Date: 30-Mar-2015 10:46:57 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File:	\\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-28.d				
Injection Date:	28-Mar-2015 19:38:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 180-136855/40

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-40.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 23:06

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	0.0309	J	0.10	0.0062
16887-00-6	Chloride	0.523	J	1.0	0.20
14808-79-8	Sulfate	1.0	U	1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-40.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 28-Mar-2015 23:06:00 ALS Bottle#: 0 Worklist Smp#: 40
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-040
Misc. Info.: 40 ccb
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 30-Mar-2015 10:47:01 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK050

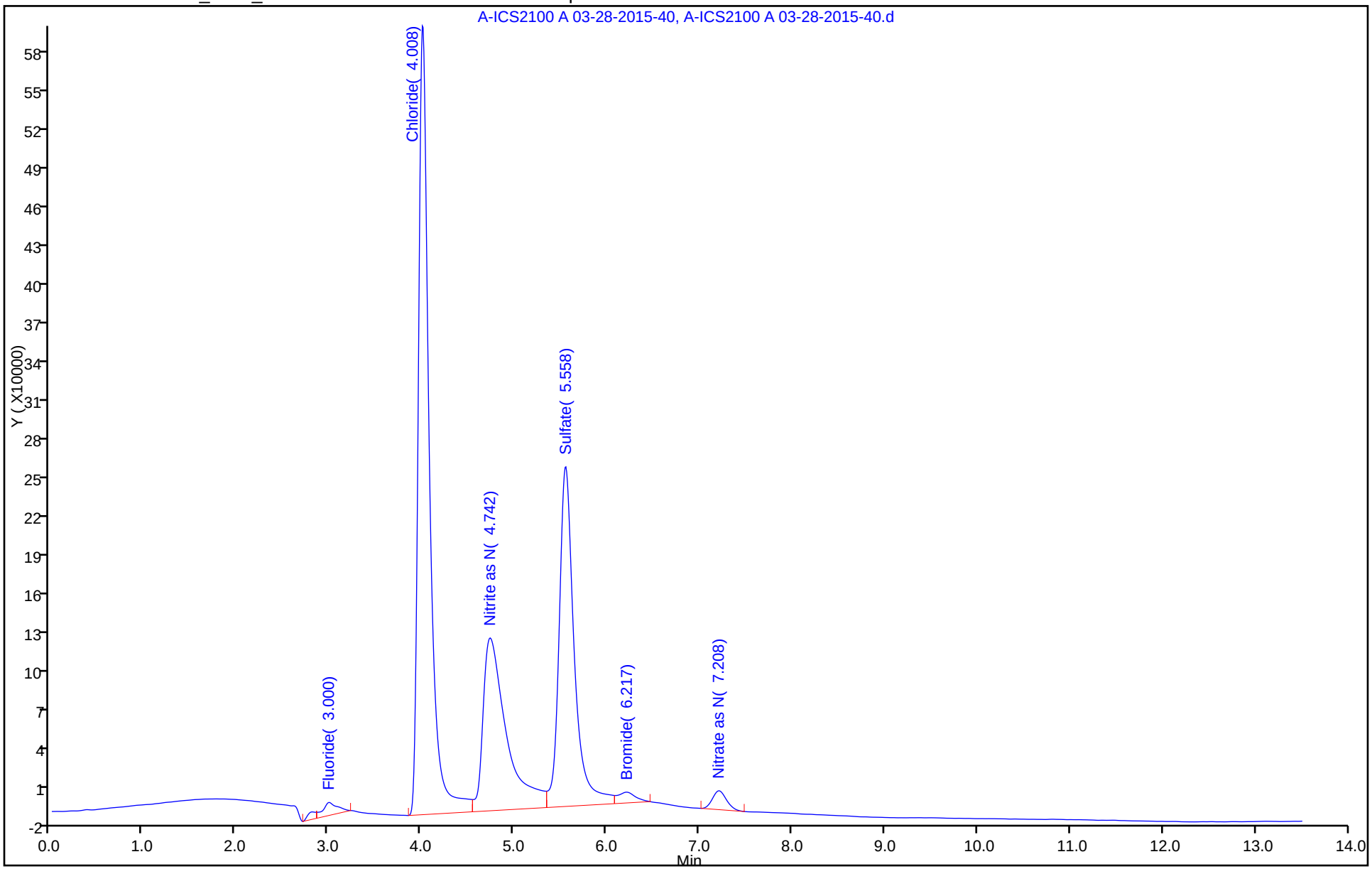
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.000	3.025	-0.025	109296		0.003372	
2 Chloride	4.008	4.017	-0.009	4976908		0.5231	
7 Nitrite as N	4.742	4.683	0.059	2324118		0.0294	
3 Sulfate	5.558	5.458	0.100	2951641		0.1908	
4 Bromide	6.217	6.200	0.017	109722		0.0116	
5 Nitrate as N	7.208	7.150	0.058	152346		0.0309	
6 Orthophosphate as P		10.158				ND	

Report Date: 30-Mar-2015 10:47:01 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-40.d

Injection Date:	28-Mar-2015 23:06:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 180-136855/5

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-5.d

Analysis Method: 300.0 Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 12:07

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	2.61		0.10	0.0062
16887-00-6	Chloride	49.8		1.0	0.20
14808-79-8	Sulfate	49.8		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-5.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 28-Mar-2015 12:07:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-005
Misc. Info.: 5 LCS
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 15:22:28 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.008	0.000	82709108	2.50	2.55	
2 Chloride	4.000	4.008	-0.008	1031309848	50.0	49.8	
7 Nitrite as N	4.675	4.683	-0.008	111039183	2.50	2.63	
3 Sulfate	5.467	5.475	-0.008	743898309	50.0	49.8	
4 Bromide	6.192	6.208	-0.016	90725612	10.0	9.58	
5 Nitrate as N	7.150	7.158	-0.008	127430767	2.50	2.61	
6 Orthophosphate as P	10.117	10.108	0.009	38332846	2.50	2.47	

Reagents:

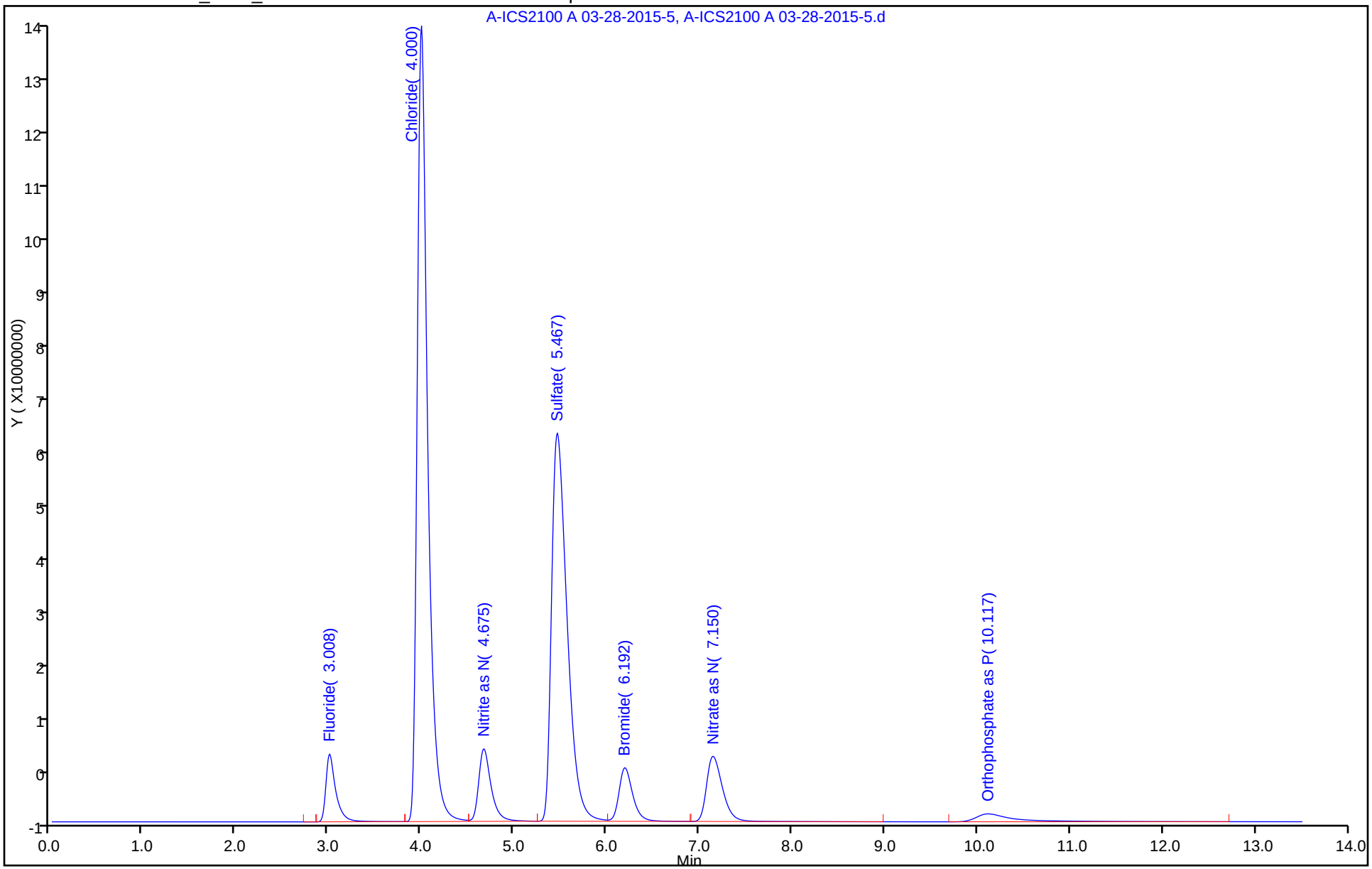
icccv_01202 Amount Added: 1.00 Units: mL

Report Date: 28-Mar-2015 15:22:28 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-5.d

Injection Date:	28-Mar-2015 12:07:00	Instrument ID:	CHIC2100A	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_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-132-0/1-0 MS Lab Sample ID: 180-42504-6 MS

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-31.d

Analysis Method: 300.0 Date Collected: 03/27/2015 12:30

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 20:30

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	6.16		0.10	0.0062
16887-00-6	Chloride	33.5		1.0	0.20
14808-79-8	Sulfate	27.9		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-31.d
Lims ID: 180-42504-A-6 MS
Client ID:
Sample Type: MS
Inject. Date: 28-Mar-2015 20:30:00 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-031
Misc. Info.: 31 180-42504-a-6 ms
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 30-Mar-2015 10:46:56 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.008	0.000	47458064	1.25	1.46	
2 Chloride	4.008	4.008	0.000	693257208	25.0	33.5	
7 Nitrite as N	4.650	4.675	-0.025	6328272		0.1252	
3 Sulfate	5.492	5.467	0.025	416976835	25.0	27.9	
4 Bromide	6.200	6.200	0.000	44954037	5.00	4.75	
5 Nitrate as N	7.100	7.150	-0.050	302555062	1.25	6.16	
6 Orthophosphate as P		10.117			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

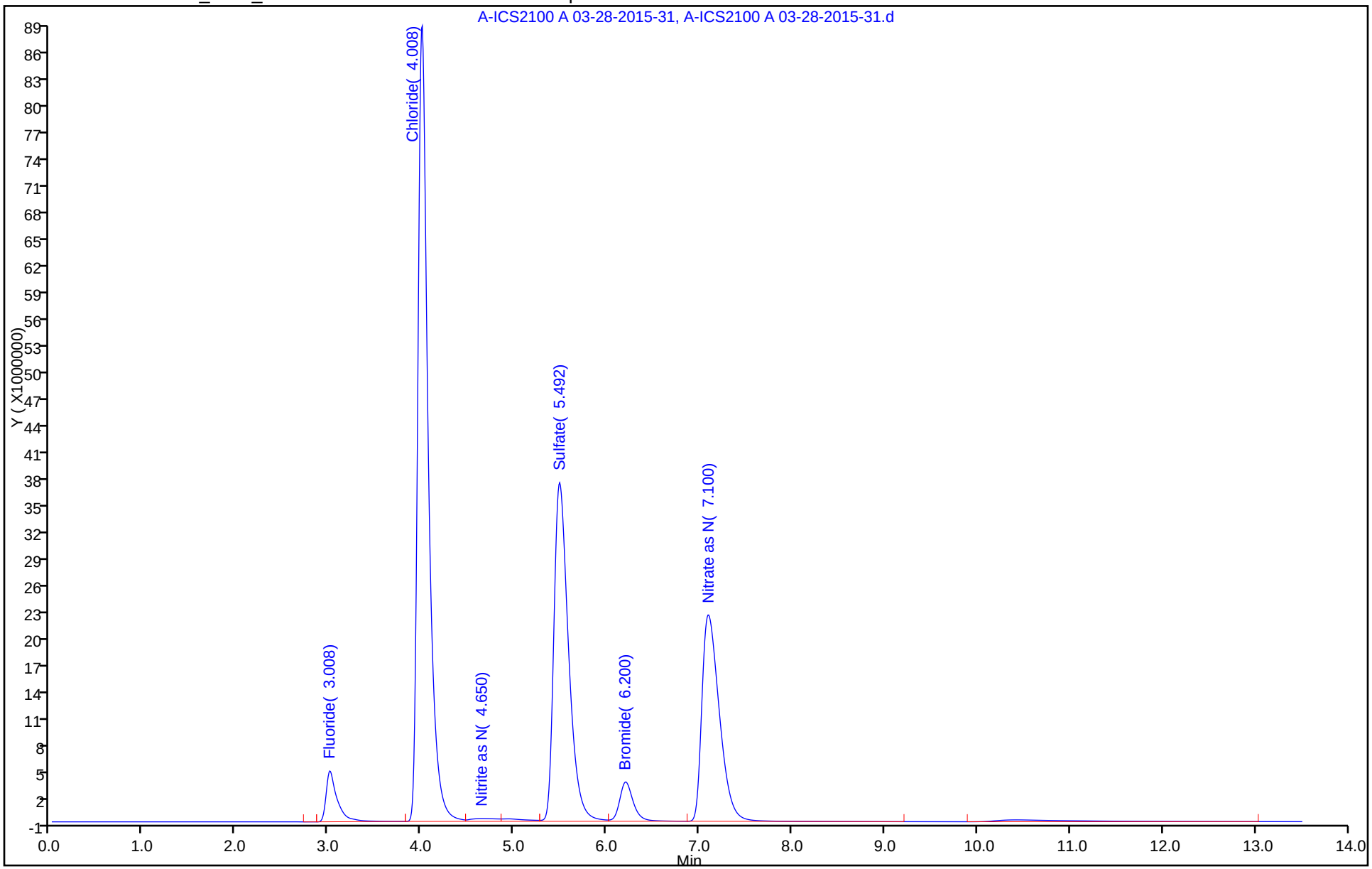
ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 30-Mar-2015 10:46:58 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-31.d

Injection Date:	28-Mar-2015 20:30:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-6 MS			Worklist Smp#:	31
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-51D-0/1-0 MS Lab Sample ID: 180-42504-8 MS

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-8.d

Analysis Method: 300.0 Date Collected: 03/27/2015 13:30

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 14:01

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	1.75		0.10	0.0062
16887-00-6	Chloride	31.7		1.0	0.20
14808-79-8	Sulfate	33.8		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-8.d
Lims ID: 180-42504-A-8 MS
Client ID:
Sample Type: MS
Inject. Date: 28-Mar-2015 14:01:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-008
Misc. Info.: 8 180-42504-a-8 ms
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 15:22:28 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.008	0.000	51325335	1.25	1.58	
2 Chloride	4.000	4.008	-0.008	655310999	25.0	31.7	
7 Nitrite as N	4.675	4.683	-0.008	4917944		0.0915	
3 Sulfate	5.492	5.475	0.017	504902659	25.0	33.8	
4 Bromide	6.208	6.208	0.000	48186840	5.00	5.09	
5 Nitrate as N	7.167	7.158	0.009	84779977	1.25	1.75	
6 Orthophosphate as P	10.233	10.108	0.125	17375046	1.25	1.29	

Reagents:

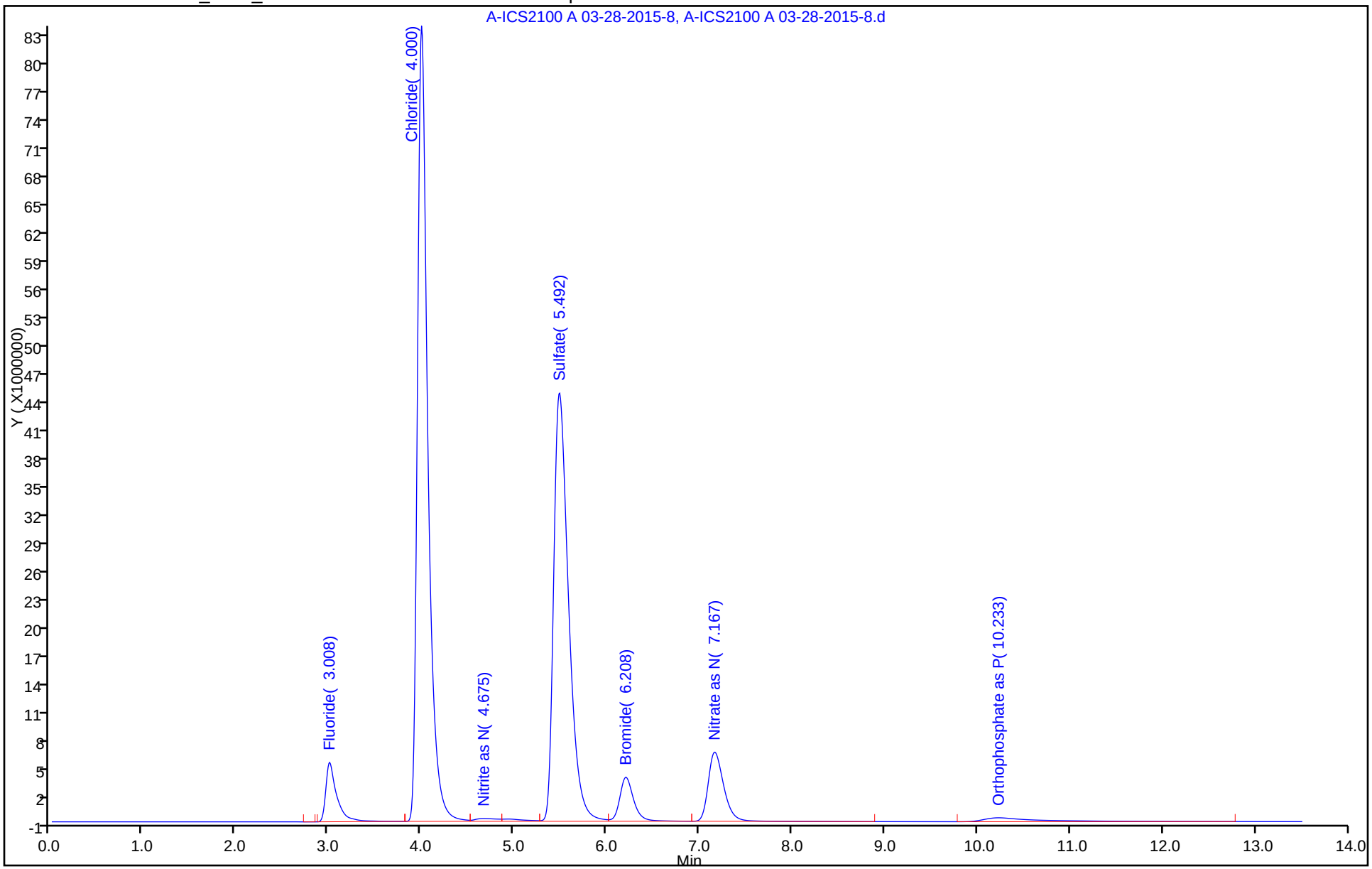
ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 28-Mar-2015 15:22:29 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-8.d

Injection Date:	28-Mar-2015 14:01:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-8 MS			Worklist Smp#:	8
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-132-0/1-0 MSD Lab Sample ID: 180-42504-6 MSD

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-32.d

Analysis Method: 300.0 Date Collected: 03/27/2015 12:30

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 20:48

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	6.22		0.10	0.0062
16887-00-6	Chloride	33.9		1.0	0.20
14808-79-8	Sulfate	28.1		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-32.d
Lims ID: 180-42504-A-6 MSD
Client ID:
Sample Type: MSD
Inject. Date: 28-Mar-2015 20:48:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-032
Misc. Info.: 32 180-42504-a-6 msd
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 30-Mar-2015 10:46:56 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.008	0.000	44424428	1.25	1.37	
2 Chloride	4.000	4.008	-0.008	700883636	25.0	33.9	
7 Nitrite as N	4.650	4.675	-0.025	10923357		0.2351	
3 Sulfate	5.492	5.467	0.025	419874899	25.0	28.1	
4 Bromide	6.208	6.200	0.008	45426580	5.00	4.80	
5 Nitrate as N	7.100	7.150	-0.050	305447067	1.25	6.22	
6 Orthophosphate as P		10.117			ND	ND	

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Reagents:

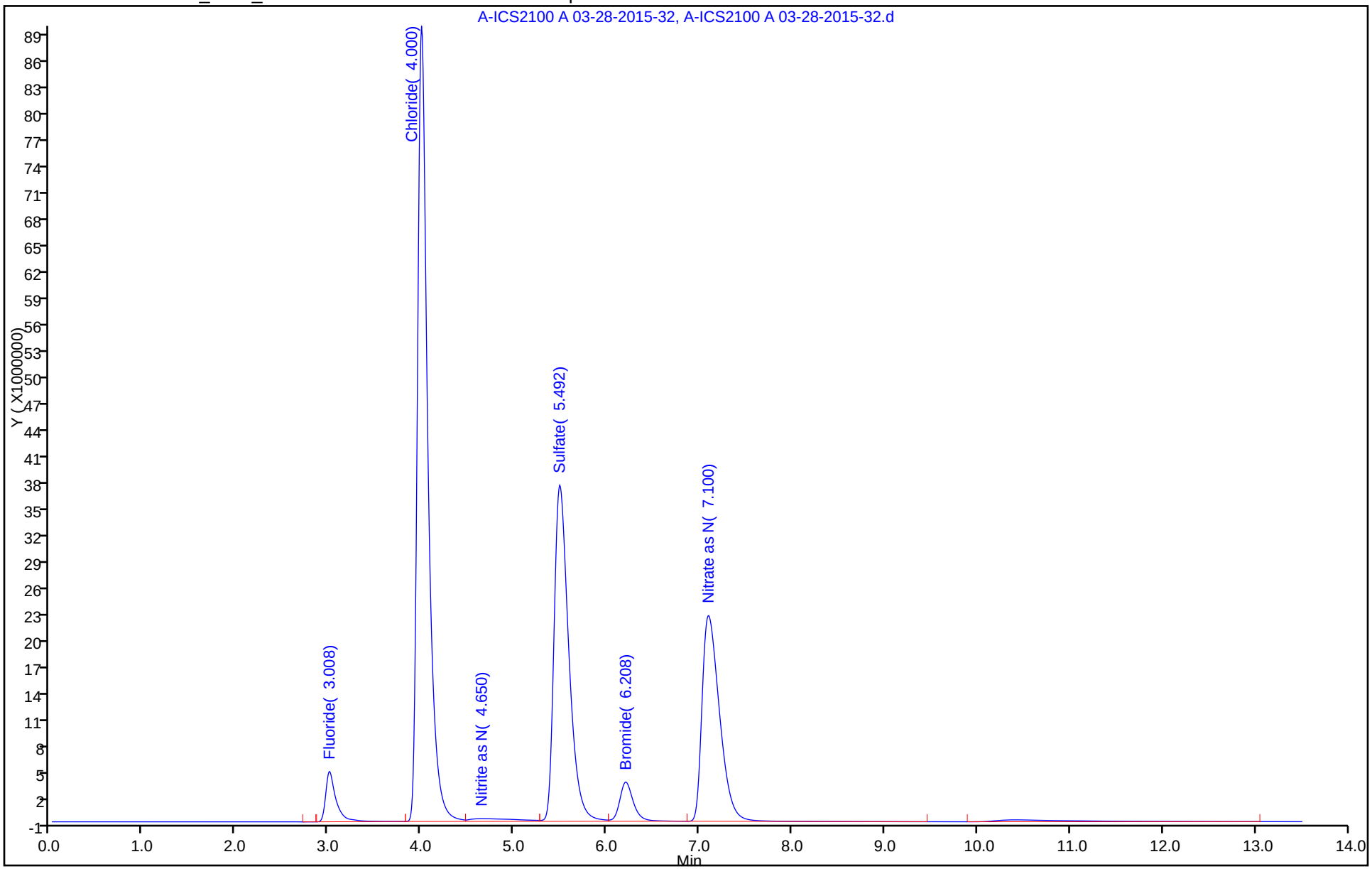
ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 30-Mar-2015 10:46:59 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-32.d

Injection Date:	28-Mar-2015 20:48:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-6 MSD			Worklist Smp#:	32
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Client Sample ID: HD-MW-51D-0/1-0 MSD Lab Sample ID: 180-42504-8 MSD

Matrix: Water Lab File ID: A-ICS2100 A 03-28-2015-9.d

Analysis Method: 300.0 Date Collected: 03/27/2015 13:30

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 03/28/2015 14:17

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 10(uL) GC Column: AS-18 ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 136855 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
14797-55-8	Nitrate as N	1.74		0.10	0.0062
16887-00-6	Chloride	33.8		1.0	0.20
14808-79-8	Sulfate	40.7		1.0	0.21

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-9.d
Lims ID: 180-42504-A-8 MSD
Client ID:
Sample Type: MSD
Inject. Date: 28-Mar-2015 14:17:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 180-0006220-009
Misc. Info.: 9 180-42504-a-8 msd
Operator ID: Instrument ID: CHIC2100A

Method: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\300_9056_CHIC2100A.m
Limit Group: GC Anions ICAL
Last Update: 28-Mar-2015 15:22:28 Calib Date: 18-Mar-2015 13:15:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\PITCHROM\ChromData\CHIC2100A\20150318-6073.b\A-ICS2100 A 03-18-2015-9.d

Column 1 : Det: 0008
Process Host: XAWRK050

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.008	3.008	0.000	48541669	1.25	1.50	
2 Chloride	4.000	4.008	-0.008	698691530	25.0	33.8	
7 Nitrite as N	4.675	4.683	-0.008	8376317		0.1742	
3 Sulfate	5.483	5.475	0.008	607359243	25.0	40.7	
4 Bromide	6.208	6.208	0.000	48337344	5.00	5.10	
5 Nitrate as N	7.167	7.158	0.009	84522797	1.25	1.74	
6 Orthophosphate as P	10.242	10.108	0.134	16870574	1.25	1.26	

Reagents:

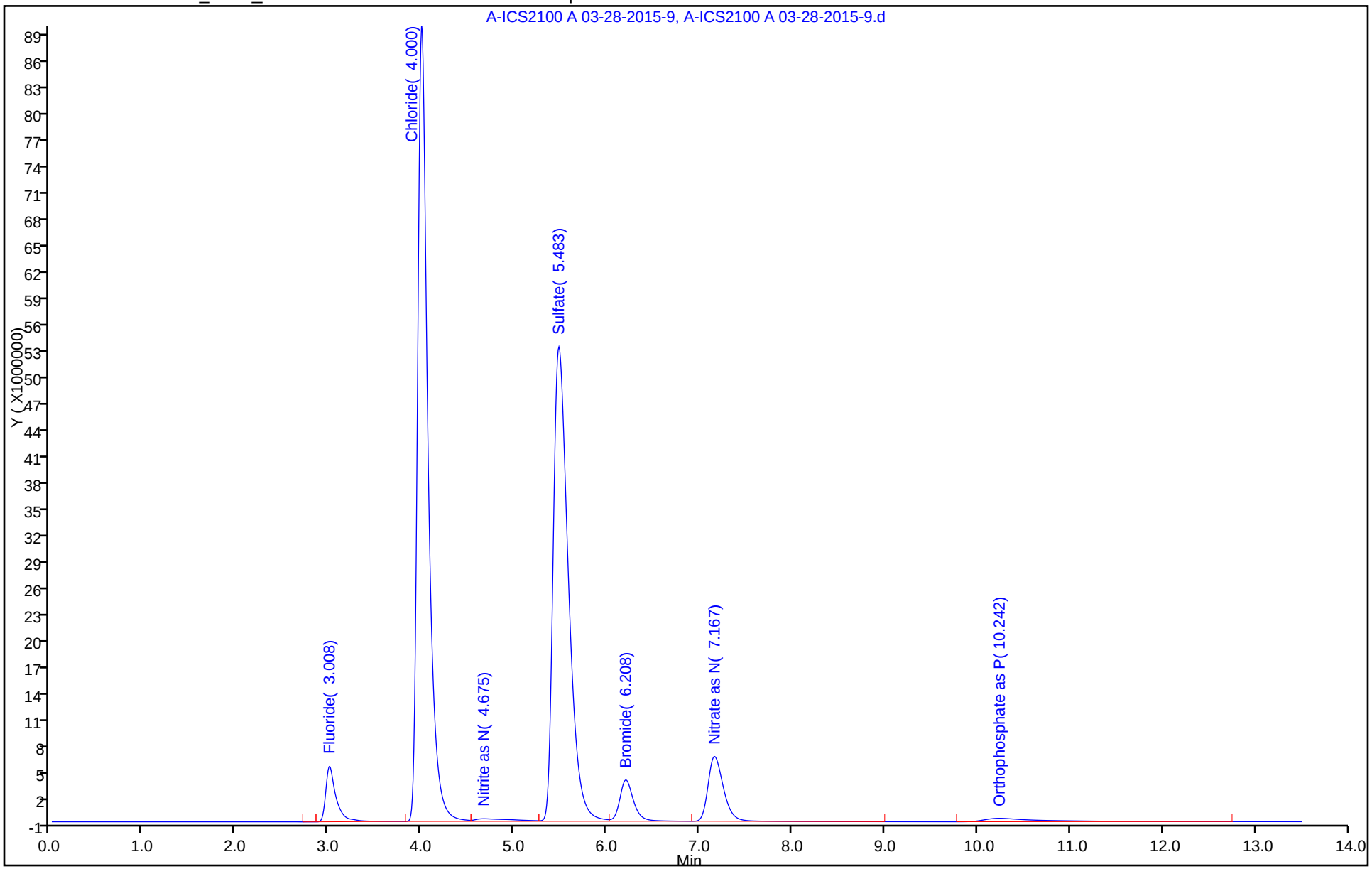
ICPRIMARYSTA_00006 Amount Added: 0.15 Units: mL

Report Date: 28-Mar-2015 15:22:29 Chrom Revision: 2.2 13-Mar-2015 11:20:44

TestAmerica Pittsburgh

Data File: \\PITCHROM\ChromData\CHIC2100A\20150328-6220.b\A-ICS2100 A 03-28-2015-9.d

Injection Date:	28-Mar-2015 14:17:00	Instrument ID:	CHIC2100A	Operator ID:	
Lims ID:	180-42504-A-8 MSD			Worklist Smp#:	9
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	300_9056_CHIC2100A	Limit Group:	GC Anions ICAL		



HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHIC2100A Start Date: 03/18/2015 11:12

Analysis Batch Number: 135876 End Date: 03/19/2015 03:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/18/2015 11:12	1		AS-18
IC 180-135876/2		03/18/2015 11:27	1	A-ICS2100 A 03-18-2015-2.d	AS-18
IC 180-135876/3		03/18/2015 11:43	1	A-ICS2100 A 03-18-2015-3.d	AS-18
ICRT 180-135876/4		03/18/2015 11:58	1	A-ICS2100 A 03-18-2015-4.d	AS-18
IC 180-135876/5		03/18/2015 12:13	1	A-ICS2100 A 03-18-2015-5.d	AS-18
IC 180-135876/6		03/18/2015 12:29	1	A-ICS2100 A 03-18-2015-6.d	AS-18
IC 180-135876/7		03/18/2015 12:44	1	A-ICS2100 A 03-18-2015-7.d	AS-18
IC 180-135876/8		03/18/2015 12:59	1	A-ICS2100 A 03-18-2015-8.d	AS-18
IC 180-135876/9		03/18/2015 13:15	1	A-ICS2100 A 03-18-2015-9.d	AS-18
ZZZZZ		03/18/2015 13:30	1		AS-18
ZZZZZ		03/18/2015 13:45	1		AS-18
ZZZZZ		03/18/2015 14:01	1		AS-18
ICV 180-135876/13		03/18/2015 14:16	1		AS-18
CCV 180-135876/14		03/18/2015 14:31	1		AS-18
CCB 180-135876/15		03/18/2015 14:46	1		AS-18
ZZZZZ		03/18/2015 15:02	1		AS-18
ZZZZZ		03/18/2015 15:17	1		AS-18
ZZZZZ		03/18/2015 15:32	100		AS-18
ZZZZZ		03/18/2015 15:48	1		AS-18
ZZZZZ		03/18/2015 16:03	5		AS-18
ZZZZZ		03/18/2015 16:18	1		AS-18
ZZZZZ		03/18/2015 16:34	5		AS-18
ZZZZZ		03/18/2015 16:49	1		AS-18
ZZZZZ		03/18/2015 17:04	10		AS-18
ZZZZZ		03/18/2015 17:20	1000		AS-18
CCV 180-135876/26		03/18/2015 18:20	1		AS-18
CCB 180-135876/27		03/18/2015 18:46	1		AS-18
ZZZZZ		03/18/2015 19:01	1		AS-18
ZZZZZ		03/18/2015 19:17	1		AS-18
ZZZZZ		03/18/2015 19:32	1		AS-18
ZZZZZ		03/18/2015 19:47	10		AS-18
ZZZZZ		03/18/2015 20:03	10		AS-18
ZZZZZ		03/18/2015 20:18	10		AS-18
ZZZZZ		03/18/2015 20:33	5		AS-18
ZZZZZ		03/18/2015 20:49	50		AS-18
ZZZZZ		03/18/2015 21:04	5		AS-18
ZZZZZ		03/18/2015 21:19	50		AS-18
CCV 180-135876/38		03/18/2015 21:35	1		AS-18
CCB 180-135876/39		03/18/2015 21:50	1		AS-18
ZZZZZ		03/18/2015 22:05	1		AS-18
ZZZZZ		03/18/2015 22:21	1		AS-18

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHIC2100A Start Date: 03/18/2015 11:12

Analysis Batch Number: 135876 End Date: 03/19/2015 03:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/18/2015 22:36	100		AS-18
ZZZZZ		03/18/2015 22:51	1000		AS-18
ZZZZZ		03/18/2015 23:06	5		AS-18
ZZZZZ		03/18/2015 23:22	5		AS-18
ZZZZZ		03/18/2015 23:37	5		AS-18
ZZZZZ		03/18/2015 23:52	50		AS-18
ZZZZZ		03/19/2015 00:08	50		AS-18
ZZZZZ		03/19/2015 00:23	50		AS-18
CCV 180-135876/50		03/19/2015 00:38	1		AS-18
CCB 180-135876/51		03/19/2015 00:54	1		AS-18
ZZZZZ		03/19/2015 01:09	1		AS-18
ZZZZZ		03/19/2015 01:24	5		AS-18
ZZZZZ		03/19/2015 01:39	5		AS-18
ZZZZZ		03/19/2015 01:55	5		AS-18
ZZZZZ		03/19/2015 02:10	50		AS-18
ZZZZZ		03/19/2015 02:25	50		AS-18
ZZZZZ		03/19/2015 02:41	50		AS-18
ZZZZZ		03/19/2015 02:56	1		AS-18
ZZZZZ		03/19/2015 03:11	1		AS-18
CCV 180-135876/61		03/19/2015 03:27	1		AS-18
CCB 180-135876/62		03/19/2015 03:42	1		AS-18

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHIC2100A Start Date: 03/28/2015 10:58

Analysis Batch Number: 136855 End Date: 03/28/2015 23:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/28/2015 10:58	1		AS-18
ICV 180-136855/2		03/28/2015 11:15	1	A-ICS2100 A 03-28-2015-2.d	AS-18
CCV 180-136855/3		03/28/2015 11:32	1	A-ICS2100 A 03-28-2015-3.d	AS-18
CCB 180-136855/4		03/28/2015 11:50	1	A-ICS2100 A 03-28-2015-4.d	AS-18
LCS 180-136855/5		03/28/2015 12:07	1	A-ICS2100 A 03-28-2015-5.d	AS-18
MB 180-136855/6		03/28/2015 12:24	1	A-ICS2100 A 03-28-2015-6.d	AS-18
180-42504-8	HD-MW-51D-0/1-0	03/28/2015 13:46	1	A-ICS2100 A 03-28-2015-7.d	AS-18
180-42504-8 MS	HD-MW-51D-0/1-0 MS	03/28/2015 14:01	1	A-ICS2100 A 03-28-2015-8.d	AS-18
180-42504-8 MSD	HD-MW-51D-0/1-0 MSD	03/28/2015 14:17	1	A-ICS2100 A 03-28-2015-9.d	AS-18
ZZZZZ		03/28/2015 14:32	2.5		AS-18
ZZZZZ		03/28/2015 14:47	1		AS-18
ZZZZZ		03/28/2015 15:03	10		AS-18
ZZZZZ		03/28/2015 15:18	2.5		AS-18
ZZZZZ		03/28/2015 15:35	25		AS-18
CCV 180-136855/15		03/28/2015 15:53	1	A-ICS2100 A 03-28-2015-15.d	AS-18
CCB 180-136855/16		03/28/2015 16:10	1	A-ICS2100 A 03-28-2015-16.d	AS-18
ZZZZZ		03/28/2015 16:28	1		AS-18
ZZZZZ		03/28/2015 16:45	5		AS-18
ZZZZZ		03/28/2015 17:02	1		AS-18
ZZZZZ		03/28/2015 17:20	5		AS-18
ZZZZZ		03/28/2015 17:37	1		AS-18
ZZZZZ		03/28/2015 17:54	5		AS-18
ZZZZZ		03/28/2015 18:12	1		AS-18
ZZZZZ		03/28/2015 18:29	10		AS-18
ZZZZZ		03/28/2015 18:46	2.5		AS-18
ZZZZZ		03/28/2015 19:04	25		AS-18
CCV 180-136855/27		03/28/2015 19:21	1	A-ICS2100 A 03-28-2015-27.d	AS-18
CCB 180-136855/28		03/28/2015 19:38	1	A-ICS2100 A 03-28-2015-28.d	AS-18
180-42504-2	HD-MW-127-0/1-0	03/28/2015 19:56	1	A-ICS2100 A 03-28-2015-29.d	AS-18
180-42504-6	HD-MW-132-0/1-0	03/28/2015 20:13	1	A-ICS2100 A 03-28-2015-30.d	AS-18
180-42504-6 MS	HD-MW-132-0/1-0 MS	03/28/2015 20:30	1	A-ICS2100 A 03-28-2015-31.d	AS-18
180-42504-6 MSD	HD-MW-132-0/1-0 MSD	03/28/2015 20:48	1	A-ICS2100 A 03-28-2015-32.d	AS-18
180-42504-3	HD-MW-97-0/1-0	03/28/2015 21:05	1	A-ICS2100 A 03-28-2015-33.d	AS-18
180-42504-7	HD-MW-75D-0/1-0	03/28/2015 21:22	1	A-ICS2100 A 03-28-2015-34.d	AS-18
180-42504-9	HD-MW-50S-0/1-0	03/28/2015 21:39	1	A-ICS2100 A 03-28-2015-35.d	AS-18
180-42504-5	HD-MW-114-0/1-0	03/28/2015 21:57	1	A-ICS2100 A 03-28-2015-36.d	AS-18

HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: CHIC2100A Start Date: 03/28/2015 10:58

Analysis Batch Number: 136855 End Date: 03/28/2015 23:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
180-42504-4	HD-CW-18-0/1-0	03/28/2015 22:14	1	A-ICS2100 A 03-28-2015-37.d	AS-18
180-42504-4	HD-CW-18-0/1-0	03/28/2015 22:31	5	A-ICS2100 A 03-28-2015-38.d	AS-18
CCV 180-136855/39		03/28/2015 22:49	1	A-ICS2100 A 03-28-2015-39.d	AS-18
CCB 180-136855/40		03/28/2015 23:06	1	A-ICS2100 A 03-28-2015-40.d	AS-18
ZZZZZ		03/28/2015 23:23	1		AS-18
CCV 180-136855/42		03/28/2015 23:41	1		AS-18
CCB 180-136855/43		03/28/2015 23:58	1		AS-18

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-42504-1

SDG No.:

Project: Harley Davidson

Client Sample ID	Lab Sample ID
HD-MW-127-0/1-0	180-42504-2
HD-MW-97-0/1-0	180-42504-3
HD-CW-18-0/1-0	180-42504-4
HD-MW-114-0/1-0	180-42504-5
HD-MW-132-0/1-0	180-42504-6
HD-MW-75D-0/1-0	180-42504-7
HD-MW-51D-0/1-0	180-42504-8
HD-MW-50S-0/1-0	180-42504-9

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-127-0/1-0 Lab Sample ID: 180-42504-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 10:45

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	110000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	4200	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	19000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	34000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-97-0/1-0 Lab Sample ID: 180-42504-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 08:45

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	95000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	7200	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	19000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	42000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-CW-18-0/1-0 Lab Sample ID: 180-42504-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 09:37

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	120000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	12000	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	50000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	200000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-114-0/1-0 Lab Sample ID: 180-42504-5

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 13:22

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	120000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	10000	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	23000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	43000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-132-0/1-0 Lab Sample ID: 180-42504-6

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 12:30

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	50000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	1900	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	3300	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	5100	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-75D-0/1-0 Lab Sample ID: 180-42504-7

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 10:33

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	91000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	8700	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	20000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	75000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-51D-0/1-0 Lab Sample ID: 180-42504-8

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 13:30

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	11000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	10000	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	690	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	7000	100	3.8	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: HD-MW-50S-0/1-0 Lab Sample ID: 180-42504-9

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 11:40

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-70-2	Calcium	130000	100	2.8	ug/L		B	1	6020A
7440-09-7	Potassium	9700	100	5.8	ug/L			1	6020A
7439-95-4	Magnesium	15000	100	1.2	ug/L		B	1	6020A
7440-23-5	Sodium	51000	100	3.8	ug/L		B	1	6020A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

ICV Source: MICVX_00030 Concentration Units: ug/L

CCV Source: MCCV1X_00073

Analyte	ICV 180-138082/5 04/08/2015 23:32				CCV 180-138082/11 04/09/2015 00:02				CCV 180-138082/35 04/09/2015 01:58			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	40500		40000	101	50500		50000	101	48900		50000	98
Magnesium	39000		40000	97	49500		50000	99	48600		50000	97
Potassium	39600		40000	99	49300		50000	99	48400		50000	97
Sodium	38900		40000	97	49300		50000	99	48900		50000	98

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.: 180-42504-1

SDG No.:

ICV Source: MICVX_00030 Concentration Units: ug/L

CCV Source: MCCV1X_00073

Analyte	CCV 180-138082/47 04/09/2015 03:04				CCV 180-138082/59 04/09/2015 03:59							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	49600		50000	99	49700		50000	99				
Magnesium	48100		50000	96	47300		50000	95				
Potassium	49100		50000	98	49400		50000	99				
Sodium	49000		50000	98	48600		50000	97				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Method: 6020A Instrument ID: X

Lab Sample ID: CRI 180-138082/8 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	500	493		99	70-130
Potassium	500	520		104	70-130
Magnesium	500	506		101	70-130
Sodium	500	566		113	70-130

Lab Sample ID: CRI 180-138082/65 Concentration Units: ug/L

CRQL Check Standard Source: MCRIX_00065

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	500	489		98	70-130
Potassium	500	512		102	70-130
Magnesium	500	486		97	70-130
Sodium	500	517		103	70-130

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 180-138082/7 04/08/2015 23:41		CCB1 180-138082/12 04/09/2015 00:10		CCB3 180-138082/36 04/09/2015 02:06		CCB4 180-138082/48 04/09/2015 03:11	
		Found	C	Found	C	Found	C	Found	C
Calcium	100	100	U	100	U	7.47	J	8.59	J
Magnesium	100	100	U	1.44	J	6.04	J	8.68	J
Potassium	100	9.00	J	18.3	J	100	U	100	U
Sodium	100	100	U	100	U	100	U	100	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB5 180-138082/60 04/09/2015 04:06							
		Found	C	Found	C	Found	C	Found	C
Calcium	100	9.69	J						
Magnesium	100	7.96	J						
Potassium	100	13.0	J						
Sodium	100	100	U						

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 180-137213/1-A

Instrument Code: X Batch No.: 138082

CAS No.	Analyte	Concentration	C	Q	Method
7440-70-2	Calcium	7.33	J		6020A
7440-09-7	Potassium	100	U		6020A
7439-95-4	Magnesium	2.82	J		6020A
7440-23-5	Sodium	38.6	J		6020A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: ICSA 180-138082/9 Instrument ID: X

Lab File ID: X50408A.xml ICS Source: MICSAX_00064

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Calcium	**100000**	**104300**	**104**
Magnesium	**100000**	**104700**	**105**
Potassium	**100000**	**104300**	**104**
Sodium	**100000**	**105100**	**105**
Aluminum	*100000*	*102600*	*103*
Antimony		*0.0400*	
Arsenic		*-0.0370*	
Barium		*0.251*	
Beryllium		*-0.0950*	
Boron		*0.803*	
Cadmium		*2.60*	
Chromium		*0.205*	
Cobalt		*0.200*	
Copper		*2.49*	
Iron	*100000*	*104200*	*104*
Lead		*0.284*	
Manganese		*1.22*	
Molybdenum	*2000*	*2307*	*115*
Nickel		*-0.0890*	
Selenium		*-0.0470*	
Silicon		*56.1*	
Silver		*0.0600*	
Strontium		*0.797*	
Thallium		*0.0330*	
Tin		*-0.0410*	
Titanium	*2000*	*2226*	*111*
Vanadium		*-0.332*	
Zinc		*4.40*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Lab Sample ID: ICSAB 180-138082/10 Instrument ID: X

Lab File ID: X50408A.xml ICS Source: MICSABX_00068

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Calcium	**100000**	**106033**	**106**
Magnesium	**100000**	**106567**	**107**
Potassium	**100000**	**105167**	**105**
Sodium	**100000**	**107067**	**107**
Aluminum	*100000*	*104500*	*105*
Antimony	*20.0*	*20.9*	*104*
Arsenic	*20.0*	*20.9*	*104*
Barium	*20.0*	*20.6*	*103*
Beryllium	*20.0*	*21.8*	*109*
Boron	*50.0*	*54.6*	*109*
Cadmium	*20.0*	*22.7*	*114*
Chromium	*20.0*	*20.6*	*103*
Cobalt	*20.0*	*20.6*	*103*
Copper	*20.0*	*23.0*	*115*
Iron	*100000*	*104500*	*105*
Lead	*20.0*	*20.0*	*100*
Manganese	*22.5*	*20.3*	*90*
Molybdenum	*2000*	*2306*	*115*
Nickel	*20.0*	*20.6*	*103*
Selenium	*50.0*	*51.9*	*104*
Silicon	*500*	*556*	*111*
Silver	*20.0*	*19.8*	*99*
Strontium	*25.0*	*20.8*	*83*
Thallium	*20.0*	*20.5*	*102*
Tin	*100*	*106*	*106*
Titanium	*2000*	*2233*	*112*
Vanadium	*20.0*	*20.3*	*102*
Zinc	*25.0*	*22.9*	*91*

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

FORM IVA-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 180-137213/2-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

Sample Matrix: Water LCS Source: MTAPITTMSA_00023

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	50000	51000		102	80	120		6020A
Potassium	50000	49900		100	80	120		6020A
Magnesium	50000	44700		89	80	120		6020A
Sodium	50000	48200		96	80	120		6020A

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

FORM VIIA - IN

7D-IN
LAB CONTROL SAMPLE DUPLICATE
METALS - TOTAL RECOVERABLE

Lab ID: LCSD 180-137213/3-A

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

Sample Matrix: Water LCS Source: MTAPITTMSA_00023

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Calcium	49800		50000	100	80-120	2	20		6020A
Potassium	48700		50000	97	80-120	2	20		6020A
Magnesium	43900		50000	88	80-120	2	20		6020A
Sodium	47300		50000	95	80-120	2	20		6020A

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIID - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 180-42504-6

SDG No:

Lab Name: TestAmerica Pittsburgh Job No: 180-42504-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Calcium	50000		47100		5.1		6020A
Potassium	1900		1710		7.8		6020A
Magnesium	3300		3440		3.8		6020A
Sodium	5100		5140		1.5		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: 180-42504-1

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	100	2.8374
Magnesium	26	100	1.1665
Potassium	39	100	5.823
Sodium	23	100	3.8135

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Pittsburgh Job Number: 180-42504-1

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	100	2.8374
Magnesium	26	100	1.1665
Potassium	39	100	5.823
Sodium	23	100	3.8135

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Pittsburgh Job No: 180-42504-1

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.: 180-42504-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 180-137213/1-A	04/01/2015 09:51	137213		50	50
LCS 180-137213/2-A	04/01/2015 09:51	137213		50	50
LCSD 180-137213/3-A	04/01/2015 09:51	137213		50	50
180-42504-2	04/01/2015 09:51	137213		50	50
180-42504-3	04/01/2015 09:51	137213		50	50
180-42504-4	04/01/2015 09:51	137213		50	50
180-42504-5	04/01/2015 09:51	137213		50	50
180-42504-6	04/01/2015 09:51	137213		50	50
180-42504-7	04/01/2015 09:51	137213		50	50
180-42504-8	04/01/2015 09:51	137213		50	50
180-42504-9	04/01/2015 09:51	137213		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/08/2015 15:25 End Date: 04/09/2015 06:37

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ca	K	Mg	Na																							
ITUNE 180-138082/1			15:25																											
STD1 180-138082/2 IC	1		23:17	X	X	X	X																							
STD2 180-138082/3 IC	1		23:24	X	X	X	X																							
STD3 180-138082/4 IC	1		23:28	X	X	X	X																							
ICV 180-138082/5	1		23:32	X	X	X	X																							
ICV 180-138082/6	1		23:37																											
ICB 180-138082/7	1		23:41	X	X	X	X																							
CRI 180-138082/8	1		23:45	X	X	X	X																							
ICSA 180-138082/9	1		23:50	X	X	X	X																							
ICSAB 180-138082/10	1		23:54	X	X	X	X																							
CCV 180-138082/11	1		00:02	X	X	X	X																							
CCB1 180-138082/12	1		00:10	X	X	X	X																							
ZZZZZZ			00:14																											
ZZZZZZ			00:18																											
ZZZZZZ			00:22																											
ZZZZZZ			00:27																											
ZZZZZZ			00:31																											
ZZZZZZ			00:35																											
ZZZZZZ			00:40																											
ZZZZZZ			00:44																											
ZZZZZZ			00:48																											
ZZZZZZ			00:53																											
CCV 180-138082/23			01:00																											
CCB2 180-138082/24			01:08																											
ZZZZZZ			01:12																											
ZZZZZZ			01:17																											
ZZZZZZ			01:21																											
ZZZZZZ			01:25																											
ZZZZZZ			01:29																											
ZZZZZZ			01:33																											
ZZZZZZ			01:38																											
ZZZZZZ			01:42																											
ZZZZZZ			01:46																											
ZZZZZZ			01:50																											
CCV 180-138082/35	1		01:58	X	X	X	X																							
CCB3 180-138082/36	1		02:06	X	X	X	X																							
ZZZZZZ			02:10																											
MB 180-137213/1-A	1	R	02:18	X	X	X	X																							
LCS 180-137213/2-A	1	R	02:23	X	X	X	X																							
LCSD 180-137213/3-A	1	R	02:27	X	X	X	X																							
180-42504-2	1	T	02:35	X	X	X	X																							
180-42504-3	1	T	02:39	X	X	X	X																							

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/08/2015 15:25 End Date: 04/09/2015 06:37

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ca	K	Mg	Na																						
180-42504-4	1	T	02:43	X	X	X	X																						
180-42504-5	1	T	02:48	X	X	X	X																						
180-42504-6	1	T	02:52	X	X	X	X																						
180-42504-6 SD	5	T	02:56	X	X	X	X																						
CCV 180-138082/47	1		03:04	X	X	X	X																						
CCB4 180-138082/48	1		03:11	X	X	X	X																						
180-42504-7	1	T	03:16	X	X	X	X																						
180-42504-8	1	T	03:20	X	X	X	X																						
180-42504-9	1	T	03:24	X	X	X	X																						
ZZZZZZ			03:29																										
ZZZZZZ			03:33																										
ZZZZZZ			03:37																										
ZZZZZZ			03:41																										
ZZZZZZ			03:46																										
ZZZZZZ			03:50																										
ZZZZZZ			03:54																										
CCV 180-138082/59	1		03:59	X	X	X	X																						
CCB5 180-138082/60	1		04:06	X	X	X	X																						
ZZZZZZ			04:11																										
ZZZZZZ			04:15																										
ZZZZZZ			04:19																										
ZZZZZZ			04:27																										
CRI 180-138082/65	1		04:36	X	X	X	X																						
ZZZZZZ			04:40																										
ZZZZZZ			04:45																										
ZZZZZZ			04:49																										
ZZZZZZ			04:53																										
CCV 180-138082/70			05:01																										
CCB6 180-138082/71			05:08																										
ZZZZZZ			05:13																										
ZZZZZZ			05:17																										
ZZZZZZ			05:21																										
ZZZZZZ			05:29																										
ZZZZZZ			05:34																										
ZZZZZZ			05:38																										
ZZZZZZ			05:42																										
ZZZZZZ			05:47																										
ZZZZZZ			05:51																										
ZZZZZZ			05:55																										
CCV 180-138082/82			06:00																										
CCB7 180-138082/83			06:07																										
ZZZZZZ			06:12																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Instrument ID: X Analysis Method: 6020A

Start Date: 04/08/2015 15:25 End Date: 04/09/2015 06:37

Lab Sample Id	D/F	Type	Time	Analytes																									
				Ca	K	Mg	Na																						
ZZZZZZ			06:16																										
ZZZZZZ			06:20																										
ZZZZZZ			06:24																										
CCV 180-138082/88			06:29																										
CCB8 180-138082/89			06:37																										

Prep Types:
R = Total Recoverable
T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

ICP-MS Instrument ID: X Start Date: 04/08/2015 End Date: 04/09/2015

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 180-138082/2 IC	23:17	100		100		100		100		100	
STD2 180-138082/3 IC	23:24	94		97		98		94		94	
STD3 180-138082/4 IC	23:28	99		98		99		99		99	
ICV 180-138082/5	23:32	102		100		102		98		100	
ICV 180-138082/6	23:37	104		103		105		105		104	
ICB 180-138082/7	23:41	100		103		104		103		102	
CRI 180-138082/8	23:45	101		102		98		103		101	
ICSA 180-138082/9	23:50	86		92		96		90		94	
ICSAB 180-138082/10	23:54	87		96		102		96		100	
CCV 180-138082/11	00:02	98		103		105		102		102	
CCB1 180-138082/12	00:10	102		105		105		104		103	
CCV 180-138082/35	01:58	90		97		98		95		96	
CCB3 180-138082/36	02:06	98		99		102		102		101	
MB 180-137213/1-A	02:18	93		93		97		96		96	
LCS 180-137213/2-A	02:23	100		93		96		92		93	
LCSD 180-137213/3-A	02:27	98		92		94		90		93	
180-42504-2	02:35	97		89		92		87		88	
180-42504-3	02:39	92		88		93		88		91	
180-42504-4	02:43	88		86		91		87		89	
180-42504-5	02:48	91		88		92		89		91	
180-42504-6	02:52	93		90		94		91		95	
180-42504-6 SD	02:56	88		90		94		92		94	
CCV 180-138082/47	03:04	92		96		98		95		97	
CCB4 180-138082/48	03:11	102		103		105		106		104	
180-42504-7	03:16	89		91		96		91		94	
180-42504-8	03:20	93		89		93		92		93	
180-42504-9	03:24	89		86		91		86		90	
CCV 180-138082/59	03:59	92		95		99		97		98	
CCB5 180-138082/60	04:06	102		104		106		106		105	
CRI 180-138082/65	04:36	99		98		101		102		104	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

ICP-MS Instrument ID: X Start Date: 04/08/2015 End Date: 04/09/2015

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD1 180-138082/2 IC	23:17	100		100		100					
STD2 180-138082/3 IC	23:24	100		100		99					
STD3 180-138082/4 IC	23:28	100		101		114					
ICV 180-138082/5	23:32	102		103		111					
ICV 180-138082/6	23:37	105		106		119					
ICB 180-138082/7	23:41	103		103		114					
CRI 180-138082/8	23:45	103		103		115					
ICSA 180-138082/9	23:50	100		101		112					
ICSAB 180-138082/10	23:54	101		103		114					
CCV 180-138082/11	00:02	99		106		115					
CCB1 180-138082/12	00:10	102		104		110					
CCV 180-138082/35	01:58	102		103		108					
CCB3 180-138082/36	02:06	103		104		114					
MB 180-137213/1-A	02:18	99		99		114					
LCS 180-137213/2-A	02:23	99		99		91					
LCSD 180-137213/3-A	02:27	96		96		88					
180-42504-2	02:35	93		93		80					
180-42504-3	02:39	96		96		96					
180-42504-4	02:43	94		95		94					
180-42504-5	02:48	97		96		98					
180-42504-6	02:52	97		98		105					
180-42504-6 SD	02:56	97		97		109					
CCV 180-138082/47	03:04	100		101		109					
CCB4 180-138082/48	03:11	104		104		112					
180-42504-7	03:16	99		99		107					
180-42504-8	03:20	96		97		106					
180-42504-9	03:24	94		94		94					
CCV 180-138082/59	03:59	101		102		118					
CCB5 180-138082/60	04:06	105		106		114					
CRI 180-138082/65	04:36	101		102		114					

Dilution Corrected Concentrations

STD1 1501659 4/8/2015 11:17:44 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	23:18:10	98.063%	0.192	0.135	0.062	0.000	2.596	0.518	-0.156
2	23:18:37	100.996%	-0.119	-0.200	-0.130	0.000	-2.293	-1.063	-0.081
3	23:19:04	100.941%	-0.073	0.065	0.068	0.000	-0.303	0.545	0.237
x		100.000%	-0.000	-0.000	-0.000	0.000	-0.000	-0.000	-0.000
σ		1.678%	0.168	0.176	0.113	0.000	2.459	0.921	0.208
%RSD		1.678	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	23:18:10	0.083	-1.001	0.000	4.495	18.130	0.610	99.401%	-0.051
2	23:18:37	-0.135	0.157	0.000	2.518	-14.590	-1.458	100.773%	0.158
3	23:19:04	0.052	0.844	0.000	-7.013	-3.536	0.848	99.825%	-0.107
x		0.000	-0.000	0.000	0.000	-0.000	0.000	100.000%	-0.000
σ		0.118	0.932	0.000	6.154	16.640	1.269	0.703%	0.140
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.703	0.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:10	-0.006	0.003	-0.019	0.452	2.105	0.000	-0.019	0.042
2	23:18:37	-0.021	-0.030	0.005	0.739	-2.301	0.003	-0.041	-0.002
3	23:19:04	0.027	0.027	0.014	-1.191	0.196	-0.004	0.060	-0.040
x		0.000	-0.000	-0.000	0.000	-0.000	-0.000	0.000	0.000
σ		0.025	0.029	0.017	1.041	2.210	0.004	0.053	0.041
%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	23:18:10	0.133	0.027	0.110	0.235	-0.989	0.509	0.000	-0.003
2	23:18:37	-0.009	-0.044	-0.036	-0.266	-0.123	-0.260	0.000	-0.002
3	23:19:04	-0.123	0.017	-0.074	0.031	1.112	-0.249	0.000	0.005
x		-0.000	-0.000	0.000	0.000	0.000	-0.000	0.000	-0.000
σ		0.128	0.038	0.097	0.252	1.056	0.441	0.000	0.004
%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	23:18:10	98.261%	0.080	0.003	99.021%	-0.004	-0.013	-0.002	0.019
2	23:18:37	99.570%	-0.039	-0.001	100.924%	0.006	0.004	0.014	0.023
3	23:19:04	102.169%	-0.041	-0.002	100.056%	-0.002	0.009	-0.013	-0.043
x		100.000%	-0.000	0.000	100.000%	-0.000	-0.000	-0.000	0.000
σ		1.990%	0.069	0.002	0.953%	0.005	0.011	0.014	0.037
%RSD		1.990	0.000	0.000	0.953	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	23:18:10	97.225%	0.094	-0.017	-0.003	-0.003	-0.001	97.333%	97.929%
2	23:18:37	100.920%	-0.037	0.003	-0.004	-0.060	0.016	99.136%	100.105%
3	23:19:04	101.856%	-0.057	0.015	0.007	0.063	-0.015	103.531%	101.966%
x		100.000%	0.000	0.000	-0.000	0.000	0.000	100.000%	100.000%
σ		2.449%	0.082	0.016	0.006	0.061	0.015	3.188%	2.021%
%RSD		2.449	0.000	0.000	0.000	0.000	0.000	3.188	2.021

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:10	0.002	-0.001	-0.012	0.024	0.010	95.956%
2	23:18:37	-0.003	0.000	0.005	0.007	0.000	99.135%
3	23:19:04	0.001	0.001	0.007	-0.031	-0.010	104.910%
x		-0.000	0.000	0.000	-0.000	-0.000	100.000%
σ		0.002	0.001	0.010	0.028	0.010	4.539%
%RSD		0.000	0.000	0.000	0.000	0.000	4.539

STD2 1487947 4/8/2015 11:24:23 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	23:24:49	93.751%	193.800	0.396	0.299	0.000	99430.000	99590.000	99240.000
2	23:25:17	94.821%	202.800	0.363	0.245	0.000	99520.000	99180.000	99650.000
3	23:25:43	94.333%	203.400	0.929	0.785	0.000	101100.000	101200.000	101100.000
x		94.302%	200.000	0.562	0.443	0.000	100000.000	100000.000	100000.000
σ		0.536%	5.374	0.318	0.298	0.000	912.200	1086.000	985.200
%RSD		0.568	2.687	56.500	67.210	0.000	0.912	1.086	0.985
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:49	992.500	10.110	0.000	99220.000	99390.000	100100.000	95.902%	0.499
2	23:25:17	997.100	10.480	0.000	100400.000	99910.000	100300.000	96.886%	0.155
3	23:25:43	1010.000	9.719	0.000	100400.000	100700.000	99580.000	98.087%	0.120
x		1000.000	10.100	0.000	100000.000	100000.000	100000.000	96.959%	0.258
σ		9.318	0.379	0.000	674.500	665.300	366.900	1.095%	0.210
%RSD		0.932	3.747	0.000	0.674	0.665	0.367	1.129	81.350
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:49	198.900	199.000	987.500	49690.000	49080.000	197.700	198.100	197.000
2	23:25:17	200.600	200.400	1008.000	50270.000	50530.000	201.100	201.900	202.800
3	23:25:43	200.500	200.600	1005.000	50040.000	50390.000	201.200	200.000	200.300
x		200.000	200.000	1000.000	50000.000	50000.000	200.000	200.000	200.000
σ		0.981	0.843	10.910	290.700	797.300	2.015	1.910	2.912
%RSD		0.491	0.422	1.091	0.581	1.595	1.007	0.955	1.456
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:49	197.100	200.100	199.600	198.000	197.100	195.200	0.000	199.100
2	23:25:17	202.800	200.900	201.900	200.700	202.500	202.300	0.000	200.700
3	23:25:43	200.100	199.000	198.600	201.300	200.400	202.500	0.000	200.200
x		200.000	200.000	200.000	200.000	200.000	200.000	0.000	200.000
σ		2.848	0.925	1.690	1.769	2.710	4.188	0.000	0.799
%RSD		1.424	0.463	0.845	0.884	1.355	2.094	0.000	0.400
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:49	96.707%	0.226	0.144	92.247%	198.400	197.600	197.100	198.000
2	23:25:17	98.386%	0.166	0.225	93.796%	198.900	200.600	200.000	200.200
3	23:25:43	100.107%	0.087	0.079	95.777%	202.700	201.700	202.900	201.800
x		98.400%	0.160	0.149	93.940%	200.000	200.000	200.000	200.000
σ		1.700%	0.069	0.073	1.769%	2.394	2.113	2.935	1.921
%RSD		1.727	43.520	48.960	1.883	1.197	1.057	1.468	0.960
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:49	93.677%	-0.161	0.134	0.155	197.400	198.000	98.818%	98.303%
2	23:25:17	93.404%	-0.088	0.177	0.130	198.200	201.000	101.703%	100.403%
3	23:25:43	94.314%	-0.178	0.157	0.145	204.400	201.000	100.447%	101.826%
x		93.798%	-0.142	0.156	0.143	200.000	200.000	100.322%	100.177%
σ		0.467%	0.048	0.021	0.013	3.860	1.722	1.447%	1.773%
%RSD		0.498	33.520	13.620	8.923	1.930	0.861	1.442	1.769
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:24:49	191.800	192.500	190.200	191.000	190.100	100.360%		
2	23:25:17	201.400	201.700	201.600	201.100	202.400	98.439%		
3	23:25:43	206.800	205.800	208.200	208.000	207.400	98.848%		
x		200.000	200.000	200.000	200.000	200.000	99.215%		
σ		7.583	6.773	9.123	8.558	8.912	1.012%		
%RSD		3.792	3.386	4.562	4.279	4.456	1.020		

STD3 1487948 4/8/2015 11:28:41 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	23:29:07	98.005%	0.099	191.600	203.600	0.000	103.500	98.530	95.250
2	23:29:34	99.959%	0.276	210.800	199.200	0.000	101.300	93.030	93.760
3	23:30:00	99.257%	0.140	197.600	197.200	0.000	103.900	92.230	94.360
x		99.074%	0.171	200.000	200.000	0.000	102.900	94.600	94.460
σ		0.990%	0.092	9.815	3.262	0.000	1.404	3.428	0.750
%RSD		0.999	53.900	4.908	1.631	0.000	1.365	3.624	0.794
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	9.863	9970.000	0.000	107.100	112.000	210.300	97.475%	201.600
2	23:29:34	9.774	10050.000	0.000	93.740	120.700	207.200	98.587%	198.700
3	23:30:00	10.110	9978.000	0.000	94.290	100.900	196.300	99.266%	199.700
x		9.916	10000.000	0.000	98.390	111.200	204.600	98.443%	200.000
σ		0.174	45.420	0.000	7.574	9.931	7.320	0.904%	1.436
%RSD		1.759	0.454	0.000	7.699	8.931	3.577	0.918	0.718
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	0.235	0.175	1.300	91.460	88.480	0.199	0.231	0.414
2	23:29:34	0.035	0.099	1.337	75.800	73.080	0.234	0.300	0.431
3	23:30:00	0.219	0.147	1.240	68.340	63.940	0.194	0.303	0.416
x		0.163	0.140	1.292	78.530	75.170	0.209	0.278	0.420
σ		0.111	0.039	0.049	11.800	12.410	0.022	0.041	0.009
%RSD		68.070	27.590	3.755	15.030	16.500	10.420	14.790	2.185
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	0.095	1.569	1.306	-0.038	0.218	-0.717	0.000	0.379
2	23:29:34	0.329	1.386	1.375	0.290	0.030	-0.486	0.000	0.397
3	23:30:00	0.188	1.481	1.246	0.169	1.421	-0.639	0.000	0.411
x		0.204	1.479	1.309	0.140	0.556	-0.614	0.000	0.396
σ		0.118	0.091	0.064	0.166	0.755	0.117	0.000	0.016
%RSD		57.650	6.173	4.916	118.400	135.700	19.120	0.000	3.989
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	97.624%	197.600	196.800	97.687%	0.558	0.568	0.554	-0.465
2	23:29:34	98.989%	200.800	200.700	98.502%	0.522	0.508	0.474	-0.330
3	23:30:00	99.941%	201.600	202.500	100.103%	0.453	0.519	0.400	-0.061
x		98.852%	200.000	200.000	98.764%	0.511	0.532	0.476	-0.285
σ		1.165%	2.099	2.899	1.229%	0.053	0.032	0.077	0.206
%RSD		1.178	1.049	1.450	1.244	10.440	6.005	16.210	72.160
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:29:07	96.675%	200.100	198.600	202.000	0.382	0.615	97.352%	98.942%
2	23:29:34	100.429%	198.200	201.000	199.400	0.426	0.608	101.012%	101.721%
3	23:30:00	100.377%	201.700	200.400	198.600	0.479	0.630	101.255%	101.798%
x		99.160%	200.000	200.000	200.000	0.429	0.618	99.873%	100.820%
σ		2.152%	1.766	1.245	1.766	0.048	0.012	2.186%	1.627%
%RSD		2.170	0.883	0.623	0.883	11.250	1.892	2.189	1.614
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:29:07	0.194	0.181	0.224	0.226	0.228	109.732%		
2	23:29:34	0.163	0.165	0.209	0.216	0.192	116.162%		
3	23:30:00	0.159	0.150	0.178	0.227	0.214	116.831%		
x		0.172	0.165	0.204	0.223	0.211	114.241%		
σ		0.019	0.015	0.024	0.006	0.018	3.920%		
%RSD		11.100	9.136	11.570	2.797	8.419	3.431		

ICV 1495536 4/8/2015 11:32:58 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	23:33:25	98.947%	81.530	79.060	84.470	0.000	39190.000	38970.000	39190.000
2	23:33:51	101.954%	81.620	84.140	81.680	0.000	38920.000	38780.000	38890.000
3	23:34:18	103.987%	79.750	78.040	84.020	0.000	38720.000	38570.000	38830.000
x		101.629%	101.210%	100.518%	104.236%	0.000	97.355%	96.930%	97.426%
σ		2.536%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.495	1.300	4.065	1.797	0.000	0.609	0.512	0.502
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:25	395.900	5907.000	0.000	39610.000	38710.000	40190.000	98.384%	82.760
2	23:33:51	396.700	6318.000	0.000	39460.000	39610.000	40630.000	100.028%	82.320
3	23:34:18	389.000	6622.000	0.000	39630.000	39630.000	40710.000	101.656%	80.110
x		98.467%	157.063%	0.000	98.920%	98.292%	101.275%	100.022%	102.162%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.636%	n/a
%RSD		1.068	5.710	0.000	0.242	1.330	0.696	1.636	1.736
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:25	79.200	79.750	377.900	19880.000	18820.000	79.380	81.720	80.920
2	23:33:51	81.560	82.170	383.400	20050.000	19250.000	80.630	81.310	81.750
3	23:34:18	78.620	80.450	382.400	19910.000	19020.000	80.540	81.040	81.900
x		99.741%	100.988%	95.307%	99.732%	95.156%	100.231%	101.695%	101.903%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.956	1.544	0.773	0.439	1.114	0.871	0.425	0.645
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:25	81.230	78.330	78.010	79.800	82.040	79.980	0.000	78.830
2	23:33:51	83.250	80.810	80.410	81.710	80.280	81.750	0.000	81.360
3	23:34:18	82.580	78.550	77.620	80.410	81.460	83.120	0.000	80.390
x		102.943%	99.036%	98.348%	100.800%	101.576%	102.022%	0.000	100.244%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.249	1.733	1.922	1.211	1.101	1.930	0.000	1.591
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:25	99.899%	80.230	82.650	95.003%	79.380	77.790	75.400	76.340
2	23:33:51	101.856%	81.660	83.890	98.734%	77.660	78.330	77.710	76.500
3	23:34:18	102.998%	84.240	84.400	99.368%	78.660	79.390	79.150	78.740
x		101.584%	102.555%	104.559%	97.702%	98.207%	98.132%	96.775%	96.491%
σ		1.567%	n/a	n/a	2.358%	n/a	n/a	n/a	n/a
%RSD		1.543	2.479	1.072	2.414	1.103	1.038	2.444	1.734
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:33:25	98.014%	80.720	79.880	80.590	81.890	78.690	99.586%	100.565%
2	23:33:51	101.727%	82.960	80.740	79.900	79.150	78.270	102.418%	104.573%
3	23:34:18	101.266%	82.870	81.200	81.780	80.370	78.770	103.405%	103.737%
x		100.336%	102.731%	100.760%	100.941%	100.584%	98.225%	101.803%	102.958%
σ		2.024%	n/a	n/a	n/a	n/a	n/a	1.982%	2.114%
%RSD		2.017	1.541	0.827	1.178	1.706	0.341	1.947	2.053
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:33:25	77.090	79.720	74.220	76.290	73.580	110.802%		
2	23:33:51	78.060	81.730	75.560	78.240	75.350	113.240%		
3	23:34:18	81.960	83.380	80.370	81.090	79.560	109.445%		
x		98.794%	102.008%	95.898%	98.175%	95.204%	111.162%		
σ		n/a	n/a	n/a	n/a	n/a	1.923%		
%RSD		3.260	2.246	4.219	3.070	4.035	1.730		

ICV 1459789 4/8/2015 11:37:19 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	23:37:45	103.195%	-0.034	-0.757	0.819	0.000	49.900	41.390	44.190
2	23:38:12	103.794%	-0.036	1.387	0.609	0.000	50.320	45.070	41.610
3	23:38:39	103.944%	0.075	1.256	0.769	0.000	52.440	39.530	40.030
x		103.644%	0.002	0.629	0.733	0.000	50.880	42.000	41.940
σ		0.396%	0.063	1.202	0.110	0.000	1.361	2.815	2.104
%RSD		0.382	3431.000	191.200	14.960	0.000	2.675	6.703	5.015
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:45	6.601	4171.000	0.000	53.500	39.830	93.080	101.426%	0.658
2	23:38:12	6.630	4173.000	0.000	45.800	45.670	86.310	103.321%	0.768
3	23:38:39	6.794	4182.000	0.000	47.130	84.330	83.300	103.144%	0.220
x		6.675	4175.000	0.000	48.810	56.610	87.570	102.630%	0.549
σ		0.104	5.750	0.000	4.115	24.190	5.008	1.047%	0.290
%RSD		1.564	0.138	0.000	8.432	42.730	5.719	1.020	52.810
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:45	0.154	0.478	0.645	50.130	42.270	0.080	0.254	0.222
2	23:38:12	0.042	0.290	0.601	43.400	35.950	0.123	0.077	0.299
3	23:38:39	-0.026	0.350	0.575	36.780	34.950	0.102	0.107	0.277
x		0.057	0.373	0.607	43.440	37.720	0.102	0.146	0.266
σ		0.091	0.096	0.036	6.673	3.969	0.021	0.095	0.039
%RSD		160.700	25.750	5.876	15.360	10.520	20.970	65.040	14.780
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:45	0.136	1.616	1.446	0.279	1.947	-0.026	0.000	0.232
2	23:38:12	0.052	1.890	1.825	0.063	0.389	-0.828	0.000	0.220
3	23:38:39	0.141	1.821	2.049	-0.282	0.112	-0.747	0.000	0.215
x		0.109	1.776	1.773	0.020	0.816	-0.534	0.000	0.222
σ		0.050	0.143	0.305	0.283	0.990	0.441	0.000	0.009
%RSD		45.710	8.039	17.180	1412.000	121.300	82.740	0.000	4.009
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:45	102.528%	0.736	0.697	102.907%	0.174	0.171	0.065	0.206
2	23:38:12	104.842%	0.671	0.548	105.603%	0.151	0.163	0.072	0.055
3	23:38:39	106.591%	0.447	0.500	106.300%	0.171	0.167	0.046	0.105
x		104.654%	0.618	0.582	104.937%	0.165	0.167	0.061	0.122
σ		2.038%	0.152	0.103	1.792%	0.012	0.004	0.014	0.077
%RSD		1.948	24.560	17.690	1.708	7.491	2.384	22.100	62.840
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:45	102.693%	-0.103	0.049	0.072	0.176	0.301	102.918%	104.216%
2	23:38:12	104.077%	0.045	0.058	0.034	0.210	0.220	106.190%	105.782%
3	23:38:39	104.033%	0.112	0.056	0.054	0.160	0.250	105.351%	107.247%
x		103.601%	0.018	0.054	0.053	0.182	0.257	104.820%	105.748%
σ		0.787%	0.110	0.005	0.019	0.025	0.041	1.700%	1.515%
%RSD		0.759	612.100	8.494	35.980	13.890	15.950	1.622	1.433
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:37:45	0.076	0.063	0.074	0.089	0.077	115.672%		
2	23:38:12	0.073	0.053	0.077	0.107	0.083	119.513%		
3	23:38:39	0.078	0.064	0.082	0.091	0.087	120.388%		
x		0.076	0.060	0.078	0.096	0.082	118.524%		
σ		0.002	0.006	0.004	0.010	0.005	2.508%		
%RSD		3.009	10.220	5.304	10.420	5.829	2.116		

ICB 4/8/2015 11:41:36 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	23:42:03	99.295%	-0.162	-0.165	-0.105	0.000	-9.754	0.499	1.034
2	23:42:30	102.162%	-0.121	-1.645	-0.400	0.000	-12.180	0.293	-0.480
3	23:42:56	99.616%	-0.140	0.481	-0.340	0.000	-10.500	-0.212	-0.007
x		100.358%	-0.141	-0.443	-0.282	0.000	-10.810	0.193	0.183
σ		1.571%	0.020	1.090	0.156	0.000	1.242	0.366	0.775
%RSD		1.565	14.440	246.100	55.270	0.000	11.490	189.200	424.400
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:03	-0.044	13.950	0.000	12.530	-4.369	0.932	101.375%	-0.219
2	23:42:30	-0.016	15.520	0.000	7.367	-2.730	3.726	102.903%	-0.040
3	23:42:56	-0.012	18.660	0.000	7.111	9.823	3.633	103.511%	-0.147
x		-0.024	16.040	0.000	9.002	0.908	2.763	102.596%	-0.135
σ		0.017	2.401	0.000	3.055	7.764	1.587	1.101%	0.090
%RSD		71.550	14.970	0.000	33.940	855.000	57.410	1.073	66.810
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:03	-0.022	0.037	-0.029	8.052	4.168	-0.006	-0.053	-0.022
2	23:42:30	-0.091	-0.043	-0.018	5.185	-0.190	-0.003	-0.035	-0.088
3	23:42:56	-0.032	0.016	-0.028	4.502	6.873	-0.010	-0.046	-0.033
x		-0.048	0.004	-0.025	5.913	3.617	-0.006	-0.045	-0.048
σ		0.038	0.042	0.006	1.883	3.564	0.004	0.009	0.035
%RSD		77.630	1152.000	23.370	31.850	98.510	58.370	20.120	73.550
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:03	-0.199	-0.085	-0.144	-0.001	-0.659	-0.352	0.000	0.000
2	23:42:30	-0.025	-0.048	-0.018	-0.190	0.294	-0.633	0.000	-0.004
3	23:42:56	-0.113	0.239	-0.092	-0.536	0.800	-0.733	0.000	-0.000
x		-0.112	0.035	-0.085	-0.242	0.145	-0.573	0.000	-0.001
σ		0.087	0.177	0.063	0.272	0.741	0.197	0.000	0.002
%RSD		77.650	502.400	74.480	112.000	511.900	34.460	0.000	156.800
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:03	101.575%	-0.041	-0.010	100.842%	-0.004	-0.006	0.006	0.023
2	23:42:30	104.138%	-0.022	-0.024	104.221%	-0.003	-0.009	0.030	0.011
3	23:42:56	104.871%	-0.048	-0.025	104.685%	-0.001	0.014	-0.014	0.016
x		103.528%	-0.037	-0.020	103.249%	-0.003	-0.001	0.007	0.017
σ		1.730%	0.013	0.008	2.098%	0.002	0.013	0.022	0.006
%RSD		1.672	35.550	41.900	2.032	56.860	2115.000	297.100	36.680
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:03	99.047%	-0.482	-0.054	-0.066	-0.007	-0.014	101.153%	99.821%
2	23:42:30	102.646%	-0.378	-0.067	-0.063	-0.083	-0.009	103.227%	103.733%
3	23:42:56	104.910%	-0.571	-0.040	-0.046	-0.074	-0.021	104.671%	104.876%
x		102.201%	-0.477	-0.054	-0.058	-0.054	-0.015	103.017%	102.810%
σ		2.957%	0.097	0.014	0.010	0.042	0.006	1.769%	2.651%
%RSD		2.893	20.270	25.610	17.630	76.640	40.900	1.717	2.579
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:42:03	0.004	-0.002	-0.023	-0.005	-0.009	109.860%		
2	23:42:30	-0.004	-0.001	-0.020	-0.033	-0.019	115.039%		
3	23:42:56	0.007	-0.001	-0.025	-0.003	-0.011	117.629%		
x		0.002	-0.001	-0.022	-0.014	-0.013	114.176%		
σ		0.006	0.000	0.003	0.017	0.005	3.956%		
%RSD		248.800	39.740	12.020	124.500	42.190	3.465		

CRI 1525173 4/8/2015 11:45:57 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	23:46:23	98.448%	0.960	24.520	19.470	0.000	570.200	506.800	508.400
2	23:46:50	101.192%	0.744	17.330	20.220	0.000	565.900	503.000	513.200
3	23:47:16	102.521%	0.867	21.080	19.630	0.000	562.500	504.600	496.300
x		100.720%	85.690%	419.540%	395.465%	0.000	707.776%	504.809%	505.965%
σ		2.077%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.062	12.610	17.160	2.017	0.000	0.686	0.378	1.724
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:23	30.680	506.400	0.000	516.900	538.000	466.600	101.243%	4.858
2	23:46:50	30.170	511.000	0.000	519.500	598.200	503.600	102.774%	4.409
3	23:47:16	29.830	508.300	0.000	523.800	494.400	508.800	102.337%	5.140
x		100.750%	101.710%	0.000	520.047%	543.522%	493.006%	102.118%	96.045%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.788%	n/a
%RSD		1.415	0.451	0.000	0.671	9.596	4.661	0.772	7.683
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:23	1.024	1.828	4.774	59.340	57.650	0.530	1.205	2.110
2	23:46:50	1.164	2.001	4.745	58.860	56.180	0.504	1.076	1.988
3	23:47:16	1.264	1.872	4.745	58.710	55.080	0.527	0.860	2.059
x		115.096%	95.012%	95.093%	117.940%	112.606%	104.105%	104.694%	102.612%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		10.470	4.725	0.352	0.554	2.290	2.792	16.650	2.964
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:23	2.298	5.274	5.260	0.558	5.709	3.965	0.000	5.145
2	23:46:50	1.875	5.361	5.039	0.925	6.482	4.145	0.000	5.172
3	23:47:16	2.169	5.447	5.281	1.093	6.754	4.610	0.000	5.314
x		105.689%	107.210%	103.866%	85.844%	126.305%	84.799%	0.000	104.208%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		10.260	1.618	2.582	31.840	8.584	7.855	0.000	1.745
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:23	96.403%	4.887	4.717	100.625%	1.038	0.994	1.000	1.077
2	23:46:50	98.199%	5.017	5.009	103.555%	0.970	1.039	0.743	0.976
3	23:47:16	98.784%	5.190	4.733	104.516%	1.005	1.026	0.987	0.990
x		97.795%	100.627%	96.398%	102.899%	100.415%	101.957%	90.978%	101.424%
σ		1.241%	n/a	n/a	2.027%	n/a	n/a	n/a	n/a
%RSD		1.269	3.027	3.408	1.970	3.382	2.288	15.910	5.391
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:46:23	100.053%	4.756	1.657	1.985	9.802	9.637	101.167%	101.368%
2	23:46:50	99.843%	6.015	1.853	1.895	10.070	10.240	104.238%	104.252%
3	23:47:16	102.635%	6.403	1.787	1.906	9.990	9.638	103.195%	104.701%
x		100.844%	114.494%	88.275%	96.429%	99.533%	98.372%	102.867%	103.440%
σ		1.555%	n/a	n/a	n/a	n/a	n/a	1.561%	1.809%
%RSD		1.542	15.040	5.624	2.554	1.377	3.511	1.518	1.748
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	23:46:23	0.838	0.970	0.952	0.820	0.838	118.361%		
2	23:46:50	0.949	0.995	0.980	0.951	0.963	113.328%		
3	23:47:16	1.037	0.995	1.021	1.001	1.011	113.403%		
x		94.109%	98.650%	98.403%	92.423%	93.734%	115.031%		
σ		n/a	n/a	n/a	n/a	n/a	2.884%		
%RSD		10.600	1.486	3.510	10.100	9.551	2.507		

ICSA 1501693 4/8/2015 11:50:15 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	23:50:42	87.765%	-0.036	0.591	0.985	0.000	103700.000	103200.000	103500.000
2	23:51:08	86.780%	-0.060	-0.586	0.656	0.000	104300.000	104600.000	104500.000
3	23:51:35	83.737%	-0.188	0.255	0.768	0.000	107400.000	107000.000	106100.000
x		86.094%	-0.095	0.087	0.803	0.000	105100.000	104900.000	104700.000
σ		2.100%	0.081	0.606	0.167	0.000	1952.000	1921.000	1319.000
%RSD		2.439	85.940	701.000	20.810	0.000	1.857	1.830	1.259

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:42	100800.000	51.670	0.000	103800.000	101500.000	104100.000	91.318%	2203.000
2	23:51:08	103000.000	55.800	0.000	104100.000	103500.000	104800.000	92.228%	2254.000
3	23:51:35	104200.000	60.870	0.000	105000.000	104200.000	104000.000	92.833%	2222.000
x		102600.000	56.110	0.000	104300.000	103100.000	104300.000	92.126%	2226.000
σ		1716.000	4.604	0.000	631.300	1384.000	418.900	0.763%	26.090
%RSD		1.672	8.205	0.000	0.605	1.343	0.402	0.828	1.172

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:42	-0.408	0.224	1.231	102900.000	93260.000	0.218	-0.171	1.838
2	23:51:08	-0.222	0.191	1.243	105000.000	94640.000	0.210	-0.120	1.979
3	23:51:35	-0.366	0.201	1.189	104600.000	94790.000	0.172	0.026	2.006
x		-0.332	0.205	1.221	104200.000	94230.000	0.200	-0.089	1.941
σ		0.098	0.017	0.028	1137.000	842.100	0.024	0.102	0.090
%RSD		29.400	8.199	2.301	1.092	0.894	12.140	115.400	4.633

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:42	2.540	4.459	3.204	0.206	1.615	0.476	0.000	0.788
2	23:51:08	2.570	4.145	3.346	-0.359	0.749	0.025	0.000	0.765
3	23:51:35	2.356	4.586	3.878	0.043	0.815	-0.641	0.000	0.837
x		2.489	4.397	3.476	-0.037	1.060	-0.047	0.000	0.797
σ		0.116	0.227	0.355	0.291	0.482	0.562	0.000	0.036
%RSD		4.663	5.165	10.220	791.000	45.480	1201.000	0.000	4.573

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:42	94.053%	2166.000	2265.000	88.382%	0.068	0.059	2.685	0.396
2	23:51:08	96.356%	2233.000	2320.000	89.837%	0.076	0.083	2.676	0.386
3	23:51:35	97.431%	2268.000	2336.000	91.890%	0.037	0.061	2.433	0.271
x		95.947%	2222.000	2307.000	90.036%	0.060	0.068	2.598	0.351
σ		1.726%	51.780	37.660	1.763%	0.021	0.014	0.143	0.070
%RSD		1.799	2.330	1.632	1.958	34.090	20.250	5.499	19.830

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:42	92.415%	-0.181	0.038	0.064	0.291	0.198	99.124%	98.989%
2	23:51:08	94.620%	-0.019	0.044	0.081	0.128	0.259	101.038%	100.960%
3	23:51:35	94.701%	0.077	0.038	0.046	0.107	0.296	100.549%	102.101%
x		93.912%	-0.041	0.040	0.064	0.175	0.251	100.237%	100.683%
σ		1.297%	0.131	0.004	0.018	0.101	0.050	0.995%	1.574%
%RSD		1.381	319.600	9.377	27.840	57.350	19.730	0.992	1.564

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:50:42	0.042	0.031	0.300	0.281	0.283	114.194%
2	23:51:08	0.009	0.030	0.291	0.278	0.279	111.567%
3	23:51:35	0.037	0.039	0.339	0.271	0.290	109.054%
x		0.030	0.033	0.310	0.277	0.284	111.605%
σ		0.018	0.005	0.026	0.005	0.005	2.570%
%RSD		59.620	15.460	8.293	1.875	1.873	2.303

ICSAB 1501694 4/8/2015 11:54:32 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	23:54:59	85.808%	21.880	49.350	54.840	0.000	107500.000	106600.000	106500.000
2	23:55:26	87.908%	21.610	54.860	53.260	0.000	106600.000	106400.000	106000.000
3	23:55:52	87.518%	21.760	54.080	55.840	0.000	107100.000	107500.000	107200.000
x		87.078%	108.758%	105.525%	109.297%	0.000	107.076%	106.821%	106.561%
σ		1.117%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.283	0.634	5.643	2.379	0.000	0.454	0.541	0.593

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:59	103600.000	558.500	0.000	105300.000	102800.000	104900.000	95.934%	2192.000
2	23:55:26	104400.000	550.700	0.000	104700.000	104200.000	105700.000	96.923%	2230.000
3	23:55:52	105500.000	560.100	0.000	105500.000	105400.000	107500.000	96.313%	2277.000
x		104.492%	111.286%	0.000	105.156%	104.134%	106.047%	96.390%	111.645%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.499%	n/a
%RSD		0.906	0.910	0.000	0.405	1.234	1.273	0.517	1.892

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:59	19.490	20.120	19.800	102600.000	93210.000	20.250	20.400	22.020
2	23:55:26	20.510	20.880	20.720	105300.000	95150.000	20.790	20.650	22.110
3	23:55:52	21.030	20.880	20.240	105600.000	96440.000	20.820	20.710	22.820
x		101.700%	103.130%	101.276%	104.478%	94.933%	103.108%	102.929%	111.592%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		3.854	2.122	2.265	1.574	1.710	1.558	0.793	1.974

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:59	22.810	22.210	21.740	20.250	54.690	50.130	0.000	20.360
2	23:55:26	23.080	23.630	23.500	19.810	50.090	51.850	0.000	21.230
3	23:55:52	23.050	22.730	22.190	22.620	55.070	53.700	0.000	20.890
x		114.899%	91.418%	89.910%	104.462%	106.559%	103.780%	0.000	104.135%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.637	3.147	4.057	7.226	5.205	3.444	0.000	2.120

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:59	101.328%	2156.000	2241.000	93.786%	20.130	19.450	22.960	19.830
2	23:55:26	102.219%	2232.000	2324.000	96.632%	19.180	19.690	22.600	19.260
3	23:55:52	103.386%	2238.000	2354.000	95.981%	19.940	19.350	22.540	20.160
x		102.311%	110.416%	115.330%	95.467%	98.761%	97.499%	113.494%	98.750%
σ		1.032%	n/a	n/a	1.491%	n/a	n/a	n/a	n/a
%RSD		1.009	2.073	2.532	1.562	2.555	0.896	1.008	2.307

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:59	97.338%	105.300	20.880	21.220	20.690	20.320	100.211%	100.853%
2	23:55:26	102.407%	105.200	20.770	21.060	20.810	20.860	101.520%	104.300%
3	23:55:52	101.499%	106.700	21.030	21.510	20.470	20.760	101.727%	102.752%
x		100.414%	105.739%	104.482%	106.315%	103.288%	103.240%	101.153%	102.635%
σ		2.703%	n/a	n/a	n/a	n/a	n/a	0.822%	1.726%
%RSD		2.692	0.820	0.633	1.078	0.830	1.402	0.813	1.682

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	23:54:59	19.880	20.360	20.270	20.570	19.930	112.098%
2	23:55:26	19.670	20.480	19.660	20.660	19.900	115.473%
3	23:55:52	19.970	20.620	20.230	21.060	20.270	115.329%
x		99.208%	102.432%	100.258%	103.807%	100.165%	114.300%
σ		n/a	n/a	n/a	n/a	n/a	1.908%
%RSD		0.774	0.631	1.715	1.271	1.022	1.670

CCV 1487954 4/9/2015 12:02:20 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	00:02:46	96.089%	100.700	100.700	100.400	0.000	49560.000	49760.000	49620.000
2	00:03:12	98.612%	100.800	103.800	98.960	0.000	49150.000	49490.000	49310.000
3	00:03:39	99.600%	99.150	97.030	101.100	0.000	49150.000	49490.000	49610.000
x		98.100%	100.216%	100.505%	100.134%	0.000	98.570%	99.157%	99.027%
σ		1.811%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.846	0.923	3.356	1.068	0.000	0.479	0.318	0.351
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:02:46	485.900	5420.000	0.000	49300.000	48100.000	49890.000	101.778%	100.300
2	00:03:12	488.100	5486.000	0.000	49370.000	48740.000	50830.000	103.285%	99.740
3	00:03:39	491.800	5425.000	0.000	49140.000	48750.000	50790.000	104.559%	103.000
x		97.716%	108.879%	0.000	98.543%	97.061%	101.001%	103.207%	101.028%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.392%	n/a
%RSD		0.608	0.674	0.000	0.238	0.771	1.049	1.349	1.721
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:02:46	96.610	97.090	465.100	24580.000	23390.000	97.460	98.380	97.270
2	00:03:12	97.730	98.300	476.800	24840.000	23860.000	98.800	99.850	100.600
3	00:03:39	97.480	98.110	472.800	24720.000	23850.000	98.140	100.600	99.640
x		97.271%	97.834%	94.312%	98.849%	94.809%	98.136%	99.594%	99.159%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.603	0.662	1.263	0.534	1.131	0.683	1.115	1.710
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:02:46	99.480	95.330	95.580	95.790	100.400	99.080	0.000	97.190
2	00:03:12	101.300	100.500	101.800	101.700	102.300	100.000	0.000	98.700
3	00:03:39	98.210	100.600	97.170	98.940	101.500	100.600	0.000	99.820
x		99.667%	98.819%	98.192%	98.800%	101.375%	99.905%	0.000	98.568%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.560	3.057	3.302	2.982	0.923	0.768	0.000	1.338
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:02:46	103.325%	97.210	99.060	99.554%	96.190	96.270	96.810	93.800
2	00:03:12	104.438%	102.100	101.400	102.324%	96.970	96.580	96.900	96.200
3	00:03:39	106.593%	102.300	103.400	102.921%	97.700	95.920	97.620	95.850
x		104.785%	100.541%	101.280%	101.600%	96.955%	96.256%	97.109%	95.282%
σ		1.662%	n/a	n/a	1.797%	n/a	n/a	n/a	n/a
%RSD		1.586	2.869	2.134	1.768	0.778	0.342	0.459	1.359
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:02:46	100.269%	97.990	99.760	100.600	100.500	98.260	97.616%	103.450%
2	00:03:12	101.517%	99.730	100.000	100.900	101.700	99.620	98.849%	105.848%
3	00:03:39	103.529%	102.000	100.900	101.300	101.900	100.700	101.556%	107.306%
x		101.772%	99.915%	100.228%	100.957%	101.368%	99.521%	99.340%	105.534%
σ		1.645%	n/a	n/a	n/a	n/a	n/a	2.016%	1.947%
%RSD		1.616	2.025	0.584	0.371	0.710	1.221	2.029	1.845
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:02:46	94.620	96.840	94.600	97.550	94.000	115.156%		
2	00:03:12	97.500	99.800	96.830	99.830	97.100	114.198%		
3	00:03:39	96.830	99.560	95.550	98.160	96.690	116.642%		
x		96.319%	98.732%	95.660%	98.514%	95.928%	115.332%		
σ		n/a	n/a	n/a	n/a	n/a	1.232%		
%RSD		1.565	1.666	1.167	1.197	1.756	1.068		

CCB1 4/9/2015 12:10:05 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	00:10:31	101.471%	-0.030	-0.734	-0.586	0.000	-12.630	1.466	1.605
2	00:10:57	102.222%	-0.167	-0.749	-0.761	0.000	-14.790	1.899	1.607
3	00:11:23	102.825%	-0.213	-0.376	-0.441	0.000	-13.250	0.263	1.095
x		102.173%	-0.136	-0.620	-0.596	0.000	-13.560	1.209	1.436
σ		0.678%	0.095	0.211	0.160	0.000	1.113	0.848	0.295
%RSD		0.664	69.790	34.050	26.920	0.000	8.208	70.090	20.540

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:10:31	-0.003	1.905	0.000	19.010	-13.460	1.764	103.854%	-0.199
2	00:10:57	-0.033	1.390	0.000	19.720	6.120	1.271	105.125%	0.028
3	00:11:23	-0.033	1.276	0.000	16.030	38.280	2.501	105.773%	0.050
x		-0.023	1.523	0.000	18.250	10.320	1.845	104.917%	-0.040
σ		0.017	0.335	0.000	1.959	26.120	0.619	0.976%	0.138
%RSD		74.680	21.990	0.000	10.730	253.200	33.550	0.931	343.400

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:10:31	0.043	0.020	0.013	12.330	11.750	0.004	-0.052	0.101
2	00:10:57	-0.003	0.009	0.021	11.180	9.997	-0.008	-0.156	0.107
3	00:11:23	0.084	0.034	0.006	9.547	3.313	0.007	-0.102	0.121
x		0.041	0.021	0.013	11.020	8.354	0.001	-0.103	0.110
σ		0.044	0.013	0.007	1.399	4.452	0.008	0.052	0.010
%RSD		105.900	59.830	52.910	12.690	53.290	936.000	49.900	9.395

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:10:31	-0.139	0.032	0.012	0.090	1.428	-0.970	0.000	-0.004
2	00:10:57	-0.088	0.033	0.106	-0.089	1.269	-0.594	0.000	0.003
3	00:11:23	-0.127	-0.015	-0.161	-0.126	0.519	-0.282	0.000	0.000
x		-0.118	0.016	-0.014	-0.041	1.072	-0.615	0.000	-0.000
σ		0.027	0.027	0.135	0.116	0.485	0.344	0.000	0.003
%RSD		22.530	166.900	934.700	279.400	45.270	55.960	0.000	4989.000

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:10:31	102.825%	0.284	0.376	101.678%	0.010	0.004	0.014	0.087
2	00:10:57	105.003%	0.360	0.375	104.982%	0.007	-0.001	-0.031	0.128
3	00:11:23	106.469%	0.445	0.412	105.147%	0.013	0.001	0.021	0.006
x		104.765%	0.363	0.388	103.936%	0.010	0.002	0.001	0.074
σ		1.834%	0.081	0.021	1.957%	0.003	0.003	0.028	0.062
%RSD		1.750	22.190	5.455	1.883	29.850	156.200	2024.000	83.910

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:10:31	100.679%	-0.455	-0.032	-0.046	-0.029	0.032	101.613%	101.565%
2	00:10:57	103.305%	-0.390	-0.030	-0.032	-0.083	0.008	101.481%	104.528%
3	00:11:23	103.396%	-0.415	-0.025	-0.008	0.009	-0.010	104.079%	104.669%
x		102.460%	-0.420	-0.029	-0.029	-0.034	0.010	102.391%	103.587%
σ		1.543%	0.033	0.004	0.019	0.046	0.021	1.464%	1.753%
%RSD		1.506	7.798	12.790	67.620	134.500	205.300	1.429	1.692

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:10:31	0.021	-0.001	-0.003	-0.010	-0.008	110.126%
2	00:10:57	0.008	0.006	-0.005	-0.001	0.002	107.262%
3	00:11:23	0.004	0.001	-0.014	0.022	-0.004	111.247%
x		0.011	0.002	-0.007	0.003	-0.004	109.545%
σ		0.009	0.004	0.006	0.016	0.005	2.055%
%RSD		81.720	160.100	76.780	472.300	139.000	1.876

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:49	90.749%	0.106	12.900	13.460	0.000	96330.000	23330.000	23460.000
2	00:15:16	92.298%	0.024	10.100	11.610	0.000	94570.000	23530.000	23500.000
3	00:15:43	89.540%	-0.145	11.640	13.160	0.000	97590.000	23900.000	23760.000
x		90.863%	-0.005	11.550	12.740	0.000	96160.000	23590.000	23570.000
σ		1.382%	0.128	1.403	0.990	0.000	1520.000	291.300	161.700
%RSD		1.522	2556.000	12.150	7.769	0.000	1.580	1.235	0.686

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:49	114.400	36760.000	0.000	132.200	538.300	818.900	95.125%	9.615
2	00:15:16	114.700	36720.000	0.000	124.100	550.700	801.800	95.746%	9.076
3	00:15:43	115.100	36960.000	0.000	125.000	554.500	793.900	94.372%	9.030
x		114.800	36810.000	0.000	127.100	547.800	804.900	95.081%	9.240
σ		0.359	130.600	0.000	4.457	8.488	12.760	0.688%	0.325
%RSD		0.313	0.355	0.000	3.506	1.549	1.585	0.724	3.521

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:49	1.532	1.486	5.482	60.020	39.990	0.056	1.130	1.731
2	00:15:16	1.624	1.711	5.330	58.290	41.050	0.097	1.234	2.053
3	00:15:43	0.672	1.711	5.506	59.080	36.750	0.056	1.338	1.892
x		1.276	1.636	5.439	59.130	39.260	0.070	1.234	1.892
σ		0.525	0.130	0.095	0.868	2.239	0.024	0.104	0.161
%RSD		41.160	7.954	1.755	1.469	5.703	33.870	8.460	8.499

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:49	1.552	2.507	2.534	0.503	-0.767	-1.307	0.000	2.019
2	00:15:16	1.348	2.401	2.776	1.517	-0.160	-0.478	0.000	2.178
3	00:15:43	1.763	2.706	2.863	-0.206	-0.422	-0.916	0.000	2.127
x		1.554	2.538	2.724	0.605	-0.450	-0.901	0.000	2.108
σ		0.208	0.155	0.170	0.866	0.304	0.415	0.000	0.081
%RSD		13.350	6.105	6.253	143.200	67.740	46.040	0.000	3.838

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:49	94.896%	1.454	1.607	91.505%	0.169	0.183	0.122	0.086
2	00:15:16	94.285%	1.575	1.650	92.346%	0.171	0.160	0.128	0.029
3	00:15:43	95.931%	1.615	1.430	91.927%	0.147	0.190	0.098	0.124
x		95.037%	1.548	1.562	91.926%	0.162	0.177	0.116	0.080
σ		0.832%	0.084	0.117	0.421%	0.013	0.016	0.016	0.048
%RSD		0.876	5.399	7.469	0.458	8.127	8.893	13.870	59.930

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:49	89.768%	-0.155	1.501	1.464	1.533	1.520	94.904%	95.978%
2	00:15:16	92.419%	-0.228	1.521	1.521	1.559	1.519	96.861%	96.862%
3	00:15:43	93.605%	-0.124	1.534	1.495	1.567	1.326	97.180%	98.235%
x		91.931%	-0.169	1.518	1.493	1.553	1.455	96.315%	97.025%
σ		1.965%	0.053	0.017	0.029	0.018	0.111	1.232%	1.137%
%RSD		2.137	31.690	1.099	1.922	1.136	7.659	1.279	1.172

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:49	0.013	0.012	8.124	7.641	7.703	102.869%
2	00:15:16	0.002	0.013	9.154	8.515	8.543	97.121%
3	00:15:43	0.029	0.004	7.974	7.762	7.645	103.785%
x		0.015	0.010	8.417	7.973	7.963	101.258%
σ		0.014	0.005	0.643	0.474	0.503	3.612%
%RSD		92.980	49.780	7.634	5.945	6.310	3.567

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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	00:19:04	90.578%	-0.121	12.080	11.630	0.000	93150.000	23010.000	23260.000
2	00:19:31	91.965%	-0.174	9.877	12.660	0.000	93350.000	23020.000	22970.000
3	00:19:57	89.939%	-0.095	11.430	12.880	0.000	94740.000	23570.000	23300.000
x		90.827%	-0.130	11.130	12.390	0.000	93750.000	23200.000	23180.000
σ		1.036%	0.041	1.134	0.666	0.000	868.300	317.300	183.000
%RSD		1.141	31.160	10.190	5.378	0.000	0.926	1.368	0.790
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:19:04	16.280	34300.000	0.000	86.750	139.700	381.000	93.529%	3.095
2	00:19:31	16.050	33820.000	0.000	87.370	104.400	382.900	94.156%	3.641
3	00:19:57	16.090	34110.000	0.000	82.600	95.560	378.500	94.538%	3.995
x		16.140	34080.000	0.000	85.570	113.200	380.800	94.074%	3.577
σ		0.124	239.500	0.000	2.593	23.330	2.243	0.509%	0.454
%RSD		0.768	0.703	0.000	3.031	20.610	0.589	0.541	12.680
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:19:04	2.178	1.648	1.590	49.070	25.720	0.077	1.416	2.008
2	00:19:31	2.642	1.661	1.663	45.010	23.860	0.055	1.418	2.048
3	00:19:57	2.187	1.608	1.627	44.860	24.320	0.039	1.151	1.961
x		2.336	1.639	1.627	46.320	24.630	0.057	1.328	2.006
σ		0.265	0.027	0.037	2.390	0.966	0.019	0.154	0.043
%RSD		11.350	1.677	2.258	5.161	3.922	33.130	11.560	2.166
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:19:04	1.800	4.535	4.582	1.119	0.133	-0.015	0.000	1.426
2	00:19:31	1.818	4.471	4.058	0.839	-1.075	0.154	0.000	1.404
3	00:19:57	1.638	4.514	5.392	0.371	-0.750	0.269	0.000	1.377
x		1.752	4.507	4.677	0.776	-0.564	0.136	0.000	1.402
σ		0.099	0.033	0.672	0.378	0.625	0.143	0.000	0.025
%RSD		5.654	0.729	14.370	48.720	110.800	105.000	0.000	1.760
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:19:04	92.076%	1.223	1.201	89.475%	0.010	0.022	0.054	0.087
2	00:19:31	94.695%	1.207	1.284	90.469%	0.041	0.041	0.139	0.064
3	00:19:57	94.856%	1.388	1.491	92.322%	0.025	0.011	0.049	0.111
x		93.876%	1.272	1.325	90.755%	0.025	0.025	0.081	0.087
σ		1.561%	0.100	0.149	1.445%	0.015	0.015	0.051	0.024
%RSD		1.663	7.867	11.260	1.593	59.490	60.200	63.070	27.070
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:19:04	89.416%	-0.334	1.464	1.435	0.400	0.574	94.785%	95.269%
2	00:19:31	92.217%	-0.406	1.467	1.356	0.468	0.624	95.856%	96.772%
3	00:19:57	93.911%	-0.448	1.450	1.449	0.536	0.588	97.294%	97.854%
x		91.848%	-0.396	1.460	1.413	0.468	0.595	95.978%	96.632%
σ		2.270%	0.058	0.009	0.050	0.068	0.026	1.259%	1.298%
%RSD		2.472	14.580	0.640	3.536	14.470	4.305	1.312	1.343
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:19:04	0.000	0.003	9.543	9.081	9.312	91.493%		
2	00:19:31	0.016	-0.001	9.883	9.074	9.432	92.011%		
3	00:19:57	0.009	0.005	9.235	9.278	9.246	94.721%		
x		0.008	0.002	9.554	9.144	9.330	92.742%		
σ		0.008	0.003	0.324	0.116	0.094	1.734%		
%RSD		93.510	132.600	3.395	1.268	1.009	1.869		

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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	00:23:19	88.214%	0.118	9.931	10.510	0.000	94640.000	20050.000	20130.000
2	00:23:46	89.508%	-0.093	10.940	11.260	0.000	94650.000	20490.000	20390.000
3	00:24:13	88.838%	-0.117	9.860	11.360	0.000	95470.000	20310.000	20350.000
x		88.853%	-0.031	10.250	11.040	0.000	94920.000	20280.000	20290.000
σ		0.647%	0.130	0.606	0.465	0.000	479.000	217.800	140.100
%RSD		0.728	420.700	5.916	4.206	0.000	0.505	1.074	0.691
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:19	12.480	24240.000	0.000	81.690	159.700	315.100	92.319%	2.909
2	00:23:46	12.200	24590.000	0.000	88.580	134.000	314.900	92.181%	2.268
3	00:24:13	12.930	24380.000	0.000	89.200	163.900	317.900	91.741%	2.367
x		12.540	24410.000	0.000	86.490	152.500	315.900	92.080%	2.515
σ		0.368	175.800	0.000	4.167	16.200	1.670	0.302%	0.345
%RSD		2.933	0.720	0.000	4.818	10.620	0.529	0.328	13.720
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:19	3.148	1.448	1.307	520.300	429.700	0.061	1.399	1.466
2	00:23:46	-0.245	1.234	1.274	534.500	451.300	0.032	1.201	1.918
3	00:24:13	1.864	1.373	1.319	529.100	462.800	0.065	1.419	1.785
x		1.589	1.352	1.300	527.900	448.000	0.053	1.340	1.723
σ		1.714	0.108	0.023	7.153	16.820	0.018	0.120	0.233
%RSD		107.800	8.012	1.788	1.355	3.755	34.260	8.978	13.500
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:19	1.408	2.640	3.240	-0.284	1.176	-0.569	0.000	1.211
2	00:23:46	1.419	3.001	3.465	0.997	-0.678	0.387	0.000	1.342
3	00:24:13	1.417	3.111	3.560	1.733	-2.089	0.285	0.000	1.261
x		1.415	2.918	3.422	0.815	-0.531	0.034	0.000	1.271
σ		0.006	0.246	0.164	1.021	1.638	0.525	0.000	0.066
%RSD		0.445	8.445	4.797	125.200	308.700	1529.000	0.000	5.216
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:19	90.093%	1.257	1.226	87.323%	0.078	0.069	0.056	0.038
2	00:23:46	90.731%	1.410	1.138	89.530%	0.075	0.064	0.063	0.092
3	00:24:13	92.286%	1.084	1.429	89.208%	0.077	0.085	0.101	0.101
x		91.037%	1.250	1.264	88.687%	0.077	0.073	0.073	0.077
σ		1.128%	0.163	0.149	1.192%	0.001	0.011	0.025	0.034
%RSD		1.239	13.020	11.800	1.344	1.798	15.520	33.500	44.320
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:23:19	88.011%	-0.478	1.195	1.245	0.415	0.433	91.241%	91.352%
2	00:23:46	90.304%	-0.380	1.204	1.222	0.308	0.395	93.475%	95.248%
3	00:24:13	91.688%	-0.410	1.182	1.158	0.336	0.395	94.557%	94.363%
x		90.001%	-0.423	1.194	1.208	0.353	0.408	93.091%	93.654%
σ		1.857%	0.050	0.011	0.046	0.055	0.022	1.691%	2.042%
%RSD		2.064	11.850	0.919	3.767	15.670	5.323	1.816	2.181
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:23:19	0.014	0.003	6.894	6.059	6.529	83.895%		
2	00:23:46	0.011	0.001	6.859	6.899	6.680	84.635%		
3	00:24:13	0.002	0.010	6.815	6.939	6.847	81.857%		
x		0.009	0.005	6.856	6.632	6.685	83.462%		
σ		0.006	0.005	0.039	0.497	0.159	1.439%		
%RSD		70.860	102.700	0.573	7.494	2.377	1.724		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:37	86.852%	-0.060	13.430	11.110	0.000	97820.000	23620.000	23740.000
2	00:28:03	87.169%	-0.140	11.720	11.890	0.000	98570.000	24080.000	24260.000
3	00:28:29	88.081%	-0.064	13.520	11.710	0.000	97990.000	23970.000	23800.000
x		87.368%	-0.088	12.890	11.570	0.000	98130.000	23890.000	23940.000
σ		0.638%	0.045	1.017	0.407	0.000	391.200	239.900	283.800
%RSD		0.730	51.400	7.892	3.520	0.000	0.399	1.004	1.186

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:37	15.770	28560.000	0.000	81.750	124.000	350.900	91.572%	2.785
2	00:28:03	15.750	28330.000	0.000	79.310	142.700	359.000	92.288%	2.874
3	00:28:29	15.490	28170.000	0.000	82.630	160.400	359.000	92.047%	2.939
x		15.670	28350.000	0.000	81.230	142.400	356.300	91.969%	2.866
σ		0.160	196.700	0.000	1.723	18.210	4.647	0.364%	0.077
%RSD		1.022	0.694	0.000	2.122	12.800	1.304	0.396	2.700

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:37	-0.414	1.492	1.636	642.500	543.400	0.024	1.274	2.035
2	00:28:03	3.370	1.529	1.697	652.300	540.500	0.031	1.491	1.943
3	00:28:29	2.374	1.398	1.758	656.500	541.700	0.042	1.658	1.924
x		1.777	1.473	1.697	650.400	541.900	0.033	1.474	1.968
σ		1.962	0.067	0.061	7.209	1.482	0.009	0.193	0.059
%RSD		110.400	4.577	3.598	1.108	0.274	28.410	13.060	3.022

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:37	1.745	3.713	3.664	0.520	-1.129	0.041	0.000	1.309
2	00:28:03	1.553	3.349	3.227	1.928	-0.473	-0.211	0.000	1.299
3	00:28:29	1.606	3.395	3.377	-0.302	-1.208	-1.156	0.000	1.286
x		1.635	3.486	3.423	0.715	-0.937	-0.442	0.000	1.298
σ		0.099	0.198	0.222	1.128	0.403	0.631	0.000	0.011
%RSD		6.046	5.683	6.487	157.700	43.060	142.700	0.000	0.868

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:37	92.183%	1.109	1.265	88.768%	0.081	0.077	0.024	0.120
2	00:28:03	94.231%	1.052	1.249	90.768%	0.078	0.060	0.070	-0.006
3	00:28:29	95.672%	1.318	1.202	91.668%	0.096	0.079	0.080	0.076
x		94.029%	1.160	1.239	90.401%	0.085	0.072	0.058	0.063
σ		1.753%	0.140	0.032	1.484%	0.010	0.010	0.030	0.064
%RSD		1.865	12.060	2.611	1.642	11.370	14.500	51.260	100.600

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:37	88.679%	-0.546	1.219	1.153	0.325	0.393	93.297%	95.053%
2	00:28:03	92.136%	-0.542	1.161	1.281	0.252	0.297	96.062%	97.445%
3	00:28:29	92.285%	-0.462	1.200	1.261	0.463	0.356	97.498%	99.336%
x		91.033%	-0.517	1.193	1.232	0.347	0.349	95.619%	97.278%
σ		2.040%	0.048	0.030	0.069	0.107	0.049	2.135%	2.146%
%RSD		2.241	9.190	2.482	5.597	30.930	13.980	2.233	2.206

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	00:27:37	0.009	0.002	8.615	8.153	8.116	93.324%
2	00:28:03	-0.002	0.006	9.036	8.350	8.481	93.869%
3	00:28:29	0.012	0.010	8.696	8.365	8.476	98.482%
x		0.006	0.006	8.782	8.289	8.358	95.225%
σ		0.007	0.004	0.223	0.119	0.209	2.834%
%RSD		118.600	68.590	2.543	1.430	2.502	2.976

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:52	87.780%	-0.089	8.496	12.570	0.000	106000.000	24470.000	24430.000
2	00:32:19	86.426%	0.126	11.970	12.470	0.000	108600.000	25230.000	25220.000
3	00:32:46	87.815%	-0.089	11.320	12.340	0.000	108100.000	25190.000	25190.000
x		87.340%	-0.017	10.600	12.460	0.000	107600.000	24970.000	24950.000
σ		0.792%	0.124	1.848	0.117	0.000	1417.000	430.300	450.200
%RSD		0.907	722.700	17.440	0.938	0.000	1.317	1.724	1.805
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:52	42.500	29730.000	0.000	76.940	136.900	333.500	92.247%	3.140
2	00:32:19	45.070	30260.000	0.000	78.000	167.400	344.000	92.826%	3.348
3	00:32:46	43.940	30040.000	0.000	82.480	124.900	350.000	92.530%	3.416
x		43.840	30010.000	0.000	79.140	143.100	342.500	92.534%	3.301
σ		1.290	262.900	0.000	2.940	21.930	8.368	0.289%	0.144
%RSD		2.943	0.876	0.000	3.715	15.320	2.443	0.313	4.353
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:52	1.132	1.684	1.745	715.700	602.400	0.049	1.139	1.777
2	00:32:19	1.045	1.753	1.664	730.100	613.600	0.042	1.303	1.614
3	00:32:46	3.555	1.754	1.730	739.600	624.200	0.029	1.348	1.629
x		1.911	1.731	1.713	728.400	613.400	0.040	1.263	1.673
σ		1.424	0.040	0.043	12.030	10.910	0.010	0.110	0.090
%RSD		74.550	2.316	2.516	1.651	1.778	25.490	8.729	5.401
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:52	1.185	4.085	4.101	0.437	-1.405	-0.379	0.000	1.418
2	00:32:19	1.299	4.406	4.089	2.103	-1.083	-0.492	0.000	1.349
3	00:32:46	1.398	4.425	4.314	1.192	-0.556	-0.146	0.000	1.412
x		1.294	4.306	4.168	1.244	-1.015	-0.339	0.000	1.393
σ		0.107	0.191	0.127	0.834	0.428	0.176	0.000	0.038
%RSD		8.245	4.434	3.042	67.070	42.220	52.050	0.000	2.726
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:52	93.363%	1.196	1.336	90.704%	0.236	0.204	0.111	0.006
2	00:32:19	95.269%	1.153	1.311	92.723%	0.227	0.195	0.067	-0.023
3	00:32:46	96.059%	1.477	1.220	93.854%	0.214	0.242	0.130	0.025
x		94.897%	1.275	1.289	92.427%	0.226	0.214	0.103	0.003
σ		1.386%	0.176	0.061	1.596%	0.011	0.025	0.032	0.024
%RSD		1.461	13.810	4.726	1.727	5.070	11.630	31.340	825.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:31:52	90.808%	-0.582	1.195	1.238	0.518	0.369	96.038%	97.953%
2	00:32:19	94.503%	-0.581	1.315	1.283	0.262	0.370	99.941%	100.787%
3	00:32:46	96.908%	-0.550	1.239	1.291	0.353	0.430	100.340%	101.630%
x		94.073%	-0.571	1.250	1.271	0.378	0.390	98.773%	100.123%
σ		3.073%	0.018	0.061	0.028	0.130	0.035	2.377%	1.926%
%RSD		3.266	3.145	4.844	2.229	34.470	8.964	2.407	1.924
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:31:52	-0.003	-0.001	8.711	8.207	8.332	106.063%		
2	00:32:19	0.004	0.003	9.242	8.876	8.931	106.622%		
3	00:32:46	0.023	0.002	9.676	9.079	9.267	104.898%		
x		0.008	0.001	9.210	8.721	8.844	105.861%		
σ		0.013	0.002	0.483	0.456	0.474	0.880%		
%RSD		166.900	186.700	5.245	5.230	5.355	0.831		

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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	00:36:10	89.491%	-0.273	16.460	15.110	0.000	91940.000	48.950	49.580
2	00:36:37	91.028%	-0.249	17.450	17.360	0.000	92560.000	49.640	49.510
3	00:37:03	91.468%	-0.098	14.790	16.130	0.000	93210.000	53.220	47.720
x		90.662%	-0.207	16.230	16.200	0.000	92570.000	50.600	48.940
σ		1.038%	0.095	1.343	1.125	0.000	638.800	2.293	1.056
%RSD		1.145	45.770	8.273	6.946	0.000	0.690	4.531	2.158
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:10	21.330	77420.000	0.000	60.520	178.500	713.700	95.111%	6.582
2	00:36:37	21.200	77460.000	0.000	63.450	156.900	720.000	95.957%	6.826
3	00:37:03	21.620	78030.000	0.000	59.800	118.900	699.600	95.514%	7.361
x		21.380	77640.000	0.000	61.260	151.400	711.100	95.527%	6.923
σ		0.214	337.500	0.000	1.936	30.180	10.440	0.423%	0.398
%RSD		1.001	0.435	0.000	3.161	19.930	1.468	0.443	5.751
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:10	3.183	1.230	2.324	76.820	48.970	0.062	1.327	2.119
2	00:36:37	0.990	1.351	2.362	75.080	50.420	0.076	1.288	2.047
3	00:37:03	1.554	1.453	2.407	73.920	49.130	0.062	1.274	2.124
x		1.909	1.345	2.364	75.270	49.510	0.067	1.296	2.097
σ		1.139	0.112	0.041	1.458	0.800	0.008	0.027	0.043
%RSD		59.650	8.312	1.754	1.937	1.616	11.700	2.096	2.049
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:10	1.700	2.228	2.095	1.442	-0.026	-0.268	0.000	1.717
2	00:36:37	1.810	2.305	2.641	0.416	-1.099	0.281	0.000	1.656
3	00:37:03	1.798	2.412	2.887	1.355	-1.204	0.607	0.000	1.742
x		1.769	2.315	2.541	1.071	-0.776	0.206	0.000	1.705
σ		0.060	0.092	0.406	0.569	0.652	0.442	0.000	0.045
%RSD		3.407	3.990	15.960	53.090	83.970	214.200	0.000	2.612
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:10	94.262%	1.076	1.057	91.196%	0.061	0.038	0.118	0.065
2	00:36:37	96.083%	0.899	1.173	93.998%	0.018	0.018	0.113	0.072
3	00:37:03	97.791%	1.195	1.112	95.191%	0.008	0.040	0.110	0.069
x		96.045%	1.057	1.114	93.462%	0.029	0.032	0.114	0.068
σ		1.765%	0.149	0.058	2.051%	0.028	0.012	0.004	0.003
%RSD		1.837	14.080	5.210	2.194	98.400	38.650	3.466	5.024
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:36:10	93.267%	-0.605	1.941	1.937	0.619	0.716	96.786%	98.044%
2	00:36:37	95.559%	-0.481	1.961	1.978	0.744	0.583	98.786%	100.272%
3	00:37:03	97.809%	-0.536	1.738	1.847	0.640	0.707	100.598%	101.486%
x		95.545%	-0.540	1.880	1.921	0.668	0.669	98.723%	99.934%
σ		2.271%	0.062	0.124	0.067	0.067	0.074	1.907%	1.746%
%RSD		2.377	11.490	6.579	3.500	10.080	11.090	1.931	1.747
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:36:10	0.001	-0.001	13.940	13.760	13.750	105.964%		
2	00:36:37	0.020	-0.003	14.770	14.290	14.150	107.419%		
3	00:37:03	0.004	-0.001	15.030	14.370	14.440	106.543%		
x		0.008	-0.002	14.580	14.140	14.110	106.642%		
σ		0.010	0.001	0.570	0.332	0.350	0.733%		
%RSD		121.700	79.980	3.911	2.344	2.479	0.687		

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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	00:40:31	88.406%	-0.091	15.480	16.170	0.000	99050.000	27.530	29.010
2	00:40:57	90.921%	0.004	19.050	15.810	0.000	98000.000	30.080	27.700
3	00:41:24	89.002%	0.010	15.490	16.380	0.000	99580.000	30.790	31.540
x		89.443%	-0.026	16.670	16.120	0.000	98880.000	29.460	29.410
σ		1.314%	0.057	2.055	0.289	0.000	806.300	1.715	1.957
%RSD		1.469	219.900	12.330	1.791	0.000	0.816	5.820	6.651
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:31	20.180	79540.000	0.000	67.070	133.400	740.700	95.403%	6.954
2	00:40:57	20.000	78100.000	0.000	60.890	170.100	707.400	96.231%	6.406
3	00:41:24	20.100	78480.000	0.000	61.040	157.800	712.900	96.912%	6.388
x		20.090	78710.000	0.000	63.000	153.800	720.300	96.182%	6.583
σ		0.091	745.500	0.000	3.526	18.700	17.830	0.755%	0.321
%RSD		0.454	0.947	0.000	5.597	12.160	2.476	0.785	4.883
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:31	1.349	1.291	2.173	49.960	25.010	0.043	1.316	1.792
2	00:40:57	2.891	1.290	2.110	46.190	23.910	0.034	1.375	2.034
3	00:41:24	3.475	1.254	2.308	45.790	21.430	0.049	1.360	1.991
x		2.572	1.278	2.197	47.320	23.450	0.042	1.351	1.939
σ		1.098	0.021	0.101	2.299	1.834	0.007	0.031	0.129
%RSD		42.710	1.652	4.596	4.858	7.819	17.390	2.267	6.661
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:31	1.575	4.763	4.534	2.849	-1.386	-0.087	0.000	1.738
2	00:40:57	1.620	4.783	4.664	1.585	-2.164	-0.512	0.000	1.698
3	00:41:24	1.753	4.323	5.028	0.890	-1.430	-0.947	0.000	1.770
x		1.649	4.623	4.742	1.774	-1.660	-0.515	0.000	1.735
σ		0.092	0.260	0.256	0.993	0.437	0.430	0.000	0.036
%RSD		5.608	5.618	5.397	55.970	26.330	83.470	0.000	2.081
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:31	95.460%	1.151	1.067	92.713%	0.016	0.019	0.040	0.201
2	00:40:57	98.566%	1.119	1.228	95.888%	0.017	0.031	0.188	0.134
3	00:41:24	98.182%	1.115	1.013	96.070%	0.037	0.012	0.110	0.075
x		97.403%	1.129	1.103	94.891%	0.023	0.021	0.113	0.137
σ		1.694%	0.020	0.112	1.888%	0.012	0.010	0.074	0.063
%RSD		1.739	1.760	10.130	1.989	50.120	46.700	65.690	46.040
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:31	92.557%	-0.607	1.864	1.947	1.124	1.046	99.768%	98.625%
2	00:40:57	95.161%	-0.587	1.977	1.911	0.972	1.127	102.048%	101.974%
3	00:41:24	97.585%	-0.619	2.025	1.878	1.026	1.046	103.227%	104.009%
x		95.101%	-0.604	1.955	1.912	1.041	1.073	101.681%	101.536%
σ		2.514%	0.016	0.082	0.034	0.077	0.047	1.758%	2.719%
%RSD		2.644	2.701	4.208	1.800	7.374	4.335	1.729	2.678
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:40:31	0.012	-0.005	14.600	13.340	13.870	101.206%		
2	00:40:57	0.003	0.005	14.770	13.730	13.990	106.177%		
3	00:41:24	0.002	0.006	14.370	13.710	13.970	107.805%		
x		0.005	0.002	14.580	13.590	13.940	105.063%		
σ		0.005	0.006	0.197	0.221	0.066	3.438%		
%RSD		95.820	284.100	1.354	1.629	0.472	3.272		

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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	00:44:48	90.470%	-0.223	16.980	16.390	0.000	100700.000	26.030	28.120
2	00:45:15	90.915%	-0.047	14.600	16.560	0.000	102200.000	28.700	27.780
3	00:45:42	91.481%	-0.174	16.360	16.210	0.000	101700.000	26.830	29.600
x		90.955%	-0.148	15.980	16.390	0.000	101600.000	27.190	28.500
σ		0.507%	0.091	1.239	0.172	0.000	755.500	1.368	0.968
%RSD		0.557	61.560	7.752	1.052	0.000	0.744	5.033	3.397
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:48	20.470	48660.000	0.000	62.730	132.200	475.400	95.850%	5.172
2	00:45:15	21.620	49320.000	0.000	64.870	107.500	489.700	95.688%	4.274
3	00:45:42	21.250	48780.000	0.000	64.670	151.900	488.800	95.686%	4.553
x		21.110	48920.000	0.000	64.090	130.500	484.600	95.742%	4.666
σ		0.586	352.000	0.000	1.182	22.210	8.019	0.094%	0.460
%RSD		2.775	0.720	0.000	1.844	17.020	1.655	0.098	9.851
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:48	1.898	1.336	2.133	1341.000	1090.000	0.038	1.083	1.709
2	00:45:15	2.127	1.363	2.267	1381.000	1121.000	0.058	1.293	2.004
3	00:45:42	0.574	1.295	2.056	1398.000	1138.000	0.051	1.023	2.066
x		1.533	1.331	2.152	1373.000	1116.000	0.049	1.133	1.926
σ		0.838	0.034	0.107	29.630	24.420	0.010	0.142	0.190
%RSD		54.670	2.560	4.962	2.157	2.188	20.400	12.510	9.879
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:48	1.405	0.829	1.127	0.298	-0.609	-1.043	0.000	1.555
2	00:45:15	1.608	1.032	1.014	0.112	-1.889	-0.606	0.000	1.621
3	00:45:42	1.514	1.024	1.283	1.002	-0.405	-0.464	0.000	1.557
x		1.509	0.962	1.141	0.471	-0.968	-0.704	0.000	1.578
σ		0.102	0.115	0.135	0.469	0.804	0.302	0.000	0.037
%RSD		6.740	11.930	11.830	99.690	83.110	42.840	0.000	2.375
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:48	96.430%	1.044	1.050	93.713%	0.070	0.101	0.151	0.071
2	00:45:15	98.825%	1.060	1.150	95.843%	0.116	0.107	0.139	0.003
3	00:45:42	99.901%	0.998	1.044	97.332%	0.072	0.101	0.175	-0.040
x		98.385%	1.034	1.081	95.630%	0.086	0.103	0.155	0.011
σ		1.777%	0.032	0.060	1.819%	0.026	0.003	0.019	0.056
%RSD		1.806	3.084	5.545	1.902	30.010	3.001	11.950	500.300
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:44:48	95.998%	-0.639	1.469	1.376	0.376	0.317	100.690%	100.694%
2	00:45:15	96.458%	-0.602	1.527	1.427	0.358	0.388	103.675%	102.399%
3	00:45:42	96.375%	-0.675	1.552	1.520	0.408	0.356	105.195%	103.692%
x		96.277%	-0.639	1.516	1.441	0.381	0.354	103.187%	102.262%
σ		0.245%	0.037	0.043	0.073	0.025	0.035	2.292%	1.504%
%RSD		0.255	5.775	2.803	5.058	6.670	10.010	2.221	1.470
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:44:48	-0.004	-0.001	7.490	7.537	7.398	116.452%		
2	00:45:15	0.000	0.001	8.742	8.323	8.400	108.085%		
3	00:45:42	-0.003	0.003	8.852	8.421	8.545	108.016%		
x		-0.002	0.001	8.361	8.094	8.114	110.851%		
σ		0.002	0.002	0.757	0.485	0.625	4.851%		
%RSD		101.500	270.300	9.049	5.991	7.698	4.376		

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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	00:49:08	90.526%	-0.147	15.800	15.340	0.000	90230.000	27.630	28.240
2	00:49:35	91.069%	-0.198	14.400	13.090	0.000	90020.000	28.600	29.600
3	00:50:01	90.473%	-0.046	12.630	15.720	0.000	90920.000	30.310	28.200
x		90.689%	-0.130	14.280	14.720	0.000	90390.000	28.850	28.680
σ		0.330%	0.078	1.589	1.421	0.000	470.400	1.355	0.800
%RSD		0.364	59.690	11.130	9.655	0.000	0.520	4.697	2.788
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:49:08	21.120	75820.000	0.000	53.580	147.400	691.600	96.522%	7.005
2	00:49:35	20.820	76200.000	0.000	44.990	186.900	700.200	97.249%	6.830
3	00:50:01	21.220	75920.000	0.000	54.410	136.400	682.700	96.539%	7.134
x		21.050	75980.000	0.000	50.990	156.900	691.500	96.770%	6.990
σ		0.207	196.300	0.000	5.213	26.530	8.744	0.415%	0.153
%RSD		0.984	0.258	0.000	10.220	16.910	1.264	0.429	2.181
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:49:08	2.939	1.228	2.178	54.400	31.450	0.045	1.037	1.715
2	00:49:35	-0.060	1.234	2.171	51.530	28.060	0.057	0.910	1.774
3	00:50:01	3.114	1.353	2.257	51.040	28.100	0.063	1.468	1.885
x		1.997	1.272	2.202	52.330	29.200	0.055	1.138	1.791
σ		1.784	0.070	0.048	1.815	1.948	0.009	0.293	0.087
%RSD		89.320	5.522	2.163	3.468	6.670	16.280	25.720	4.830
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:49:08	1.376	3.291	2.872	2.085	-1.073	-0.413	0.000	1.631
2	00:49:35	1.395	3.426	3.019	1.515	-1.786	-0.364	0.000	1.587
3	00:50:01	1.664	2.833	2.890	2.234	-1.087	0.403	0.000	1.463
x		1.479	3.183	2.927	1.945	-1.315	-0.125	0.000	1.560
σ		0.161	0.311	0.080	0.380	0.408	0.457	0.000	0.087
%RSD		10.900	9.761	2.748	19.520	31.010	367.000	0.000	5.594
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:49:08	97.171%	1.057	1.031	95.013%	0.033	0.032	0.105	0.054
2	00:49:35	100.229%	0.909	1.044	95.692%	0.037	0.019	0.072	0.166
3	00:50:01	99.864%	1.203	0.964	96.284%	0.050	0.037	0.107	0.016
x		99.088%	1.057	1.013	95.663%	0.040	0.029	0.095	0.079
σ		1.670%	0.147	0.043	0.636%	0.009	0.009	0.020	0.078
%RSD		1.685	13.930	4.236	0.665	21.390	31.220	20.600	99.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:49:08	94.346%	-0.648	1.755	1.942	0.363	0.526	98.900%	100.068%
2	00:49:35	98.260%	-0.728	1.957	1.994	0.524	0.521	102.898%	101.759%
3	00:50:01	99.599%	-0.628	1.813	2.011	0.465	0.702	103.402%	103.927%
x		97.402%	-0.668	1.842	1.983	0.451	0.583	101.733%	101.918%
σ		2.730%	0.053	0.104	0.036	0.081	0.103	2.467%	1.934%
%RSD		2.802	7.904	5.668	1.800	18.010	17.680	2.425	1.898
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:49:08	0.016	0.005	14.790	14.290	14.200	106.036%		
2	00:49:35	-0.004	0.002	14.350	13.540	13.930	112.634%		
3	00:50:01	0.008	0.000	13.980	13.720	13.410	117.765%		
x		0.007	0.002	14.380	13.850	13.850	112.145%		
σ		0.010	0.002	0.407	0.390	0.404	5.880%		
%RSD		145.500	99.930	2.830	2.816	2.920	5.243		

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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	00:53:26	89.388%	-0.222	16.730	16.080	0.000	91700.000	22.040	23.360
2	00:53:52	91.229%	-0.048	13.350	16.160	0.000	90640.000	21.630	21.980
3	00:54:19	93.294%	-0.128	16.680	14.430	0.000	90530.000	25.540	22.470
x		91.304%	-0.133	15.590	15.560	0.000	90960.000	23.070	22.600
σ		1.954%	0.087	1.939	0.976	0.000	645.200	2.147	0.701
%RSD		2.140	65.620	12.440	6.274	0.000	0.709	9.310	3.101
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:26	17.800	76060.000	0.000	52.200	140.700	681.500	97.208%	6.398
2	00:53:52	18.570	75760.000	0.000	50.260	143.000	644.000	98.681%	6.926
3	00:54:19	17.680	75370.000	0.000	45.150	153.600	651.200	98.615%	6.461
x		18.020	75730.000	0.000	49.200	145.800	658.900	98.168%	6.595
σ		0.484	345.300	0.000	3.638	6.896	19.910	0.832%	0.289
%RSD		2.687	0.456	0.000	7.394	4.731	3.021	0.848	4.376
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:26	1.585	1.187	2.023	43.040	18.500	0.054	1.062	1.726
2	00:53:52	3.425	1.222	2.030	42.510	18.110	0.040	0.854	1.979
3	00:54:19	2.308	1.106	1.986	40.320	17.310	0.049	0.900	1.861
x		2.439	1.172	2.013	41.960	17.980	0.048	0.939	1.855
σ		0.927	0.059	0.024	1.441	0.606	0.007	0.110	0.127
%RSD		37.990	5.051	1.167	3.434	3.371	14.560	11.670	6.835
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:26	1.761	3.586	3.969	0.238	-0.286	-1.561	0.000	1.608
2	00:53:52	2.068	3.753	3.959	1.292	-0.874	-0.275	0.000	1.619
3	00:54:19	1.662	3.450	3.545	2.047	-0.695	-1.311	0.000	1.579
x		1.830	3.596	3.824	1.192	-0.619	-1.049	0.000	1.602
σ		0.212	0.152	0.242	0.909	0.302	0.682	0.000	0.020
%RSD		11.560	4.226	6.328	76.220	48.760	64.970	0.000	1.276
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:26	97.718%	0.977	1.008	94.547%	0.017	0.015	0.113	0.016
2	00:53:52	98.441%	1.120	0.953	95.926%	0.050	0.030	0.182	-0.004
3	00:54:19	99.866%	0.892	0.977	98.147%	0.027	0.021	0.154	0.060
x		98.675%	0.997	0.979	96.207%	0.031	0.022	0.149	0.024
σ		1.093%	0.115	0.028	1.817%	0.017	0.008	0.035	0.033
%RSD		1.107	11.560	2.825	1.888	53.390	34.550	23.360	133.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:53:26	95.764%	-0.666	1.681	1.791	0.587	0.847	99.518%	100.655%
2	00:53:52	98.614%	-0.663	1.910	1.813	0.880	0.728	103.539%	103.542%
3	00:54:19	98.086%	-0.645	1.833	1.883	0.619	0.661	103.273%	104.719%
x		97.488%	-0.658	1.808	1.829	0.695	0.745	102.110%	102.972%
σ		1.516%	0.012	0.117	0.048	0.161	0.094	2.249%	2.091%
%RSD		1.555	1.769	6.468	2.638	23.090	12.600	2.202	2.031
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	00:53:26	0.006	-0.000	12.910	12.280	12.290	111.250%		
2	00:53:52	0.004	0.001	13.440	13.220	13.090	110.742%		
3	00:54:19	-0.004	-0.000	12.990	12.580	12.620	114.413%		
x		0.002	0.000	13.110	12.690	12.660	112.135%		
σ		0.005	0.001	0.285	0.480	0.402	1.989%		
%RSD		272.700	1941.000	2.177	3.784	3.177	1.774		

CCV 1487954 4/9/2015 1:00:42 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	01:01:08	91.030%	96.230	97.550	101.300	0.000	49070.000	48790.000	48480.000
2	01:01:35	93.984%	100.100	95.700	97.120	0.000	48500.000	48490.000	48170.000
3	01:02:01	90.868%	104.500	99.310	100.700	0.000	49310.000	49580.000	49070.000
x		91.961%	100.264%	97.519%	99.708%	0.000	97.921%	97.908%	97.149%
σ		1.754%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.907	4.127	1.848	2.269	0.000	0.849	1.144	0.942
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:01:08	473.300	5433.000	0.000	48590.000	46430.000	48130.000	97.745%	96.130
2	01:01:35	475.400	5457.000	0.000	49100.000	48410.000	50440.000	97.561%	96.850
3	01:02:01	486.700	5511.000	0.000	48590.000	48720.000	50130.000	99.064%	96.900
x		95.691%	109.344%	0.000	97.522%	95.707%	99.133%	98.123%	96.627%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.820%	n/a
%RSD		1.515	0.733	0.000	0.606	2.594	2.531	0.835	0.445
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:01:08	96.230	95.040	460.600	24240.000	22890.000	96.570	98.220	96.450
2	01:01:35	95.680	97.420	469.600	24650.000	23520.000	97.280	98.260	98.660
3	01:02:01	96.740	97.000	469.000	24390.000	23550.000	97.250	99.380	97.620
x		96.217%	96.485%	93.280%	97.703%	93.278%	97.035%	98.622%	97.576%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.554	1.314	1.080	0.866	1.584	0.414	0.664	1.135
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:01:08	98.480	97.550	97.050	97.350	100.800	102.900	0.000	99.170
2	01:01:35	97.800	99.140	95.700	99.830	97.360	99.330	0.000	97.520
3	01:02:01	97.060	98.960	97.970	95.010	99.850	97.980	0.000	98.560
x		97.780%	98.550%	96.903%	97.400%	99.325%	100.063%	0.000	98.414%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.727	0.882	1.179	2.474	1.776	2.522	0.000	0.849
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:01:08	96.498%	95.840	96.530	94.323%	96.990	95.710	94.900	93.550
2	01:01:35	99.926%	97.750	99.230	95.810%	99.420	97.940	98.310	99.530
3	01:02:01	100.000%	101.100	102.300	95.237%	96.710	95.940	96.990	96.080
x		98.808%	98.242%	99.366%	95.124%	97.706%	96.530%	96.732%	96.387%
σ		2.001%	n/a	n/a	0.750%	n/a	n/a	n/a	n/a
%RSD		2.025	2.731	2.922	0.789	1.529	1.270	1.782	3.116
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:01:08	95.633%	96.670	98.680	98.340	96.240	95.560	98.560%	99.982%
2	01:01:35	95.575%	99.620	100.600	101.100	97.230	97.280	102.007%	101.868%
3	01:02:01	99.058%	97.530	99.860	99.150	96.060	96.430	102.606%	102.606%
x		96.755%	97.939%	99.706%	99.525%	96.509%	96.423%	101.058%	101.485%
σ		1.994%	n/a	n/a	n/a	n/a	n/a	2.184%	1.353%
%RSD		2.061	1.550	0.960	1.417	0.654	0.892	2.161	1.333
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:01:08	92.250	92.310	89.560	94.240	90.270	106.973%		
2	01:01:35	96.130	96.770	96.510	97.590	97.190	103.191%		
3	01:02:01	90.470	94.430	89.600	94.530	90.350	109.057%		
x		92.948%	94.500%	91.892%	95.455%	92.604%	106.407%		
σ		n/a	n/a	n/a	n/a	n/a	2.974%		
%RSD		3.115	2.360	4.353	1.943	4.290	2.794		

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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	01:08:54	96.678%	-0.039	-0.374	-0.377	0.000	-6.131	4.164	4.517
2	01:09:20	96.276%	-0.038	-1.319	-0.371	0.000	0.981	2.929	5.825
3	01:09:47	99.133%	0.047	-1.351	-0.722	0.000	-3.478	3.722	5.113
x		97.362%	-0.010	-1.015	-0.490	0.000	-2.876	3.605	5.152
σ		1.547%	0.050	0.555	0.201	0.000	3.594	0.626	0.655
%RSD		1.589	509.600	54.750	41.010	0.000	125.000	17.350	12.710
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:08:54	0.337	27.820	0.000	-16.030	10.300	6.610	99.247%	-0.186
2	01:09:20	0.304	32.400	0.000	-11.470	13.350	4.504	98.759%	-0.103
3	01:09:47	0.334	34.730	0.000	-11.930	26.140	10.350	99.320%	-0.051
x		0.325	31.650	0.000	-13.140	16.600	7.153	99.108%	-0.113
σ		0.019	3.512	0.000	2.513	8.409	2.959	0.305%	0.068
%RSD		5.721	11.100	0.000	19.120	50.670	41.370	0.308	60.340
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:08:54	-0.086	0.040	0.039	22.520	3.551	0.006	-0.052	-0.197
2	01:09:20	0.196	0.059	0.063	23.060	-2.105	0.016	-0.123	-0.139
3	01:09:47	0.020	0.063	0.038	23.070	3.242	0.002	-0.063	-0.157
x		0.043	0.054	0.046	22.880	1.562	0.008	-0.079	-0.165
σ		0.142	0.013	0.014	0.318	3.180	0.007	0.038	0.029
%RSD		329.600	23.510	30.340	1.389	203.500	92.510	48.090	17.920
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:08:54	-0.160	0.261	0.065	0.177	-0.713	-0.090	0.000	0.018
2	01:09:20	-0.080	0.042	-0.029	-0.254	-0.725	-0.341	0.000	0.009
3	01:09:47	-0.088	-0.031	-0.093	0.171	-0.018	-0.136	0.000	0.011
x		-0.109	0.091	-0.019	0.031	-0.485	-0.189	0.000	0.013
σ		0.044	0.152	0.079	0.247	0.405	0.134	0.000	0.005
%RSD		40.080	167.200	420.400	788.100	83.440	70.720	0.000	37.690
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:08:54	97.538%	-0.027	0.014	97.197%	-0.006	0.014	0.017	-0.031
2	01:09:20	100.253%	-0.057	0.021	99.138%	0.029	-0.006	0.054	0.036
3	01:09:47	99.377%	-0.019	0.068	99.864%	0.011	0.020	0.034	-0.021
x		99.056%	-0.034	0.034	98.733%	0.011	0.009	0.035	-0.005
σ		1.386%	0.020	0.029	1.379%	0.018	0.014	0.019	0.036
%RSD		1.399	59.490	85.440	1.396	153.700	146.400	53.550	718.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:08:54	97.999%	-0.553	-0.041	-0.035	-0.046	-0.001	96.305%	97.921%
2	01:09:20	96.461%	-0.450	-0.040	-0.013	-0.036	0.005	99.528%	98.760%
3	01:09:47	98.600%	-0.503	-0.021	0.001	0.040	-0.007	96.900%	99.005%
x		97.687%	-0.502	-0.034	-0.016	-0.014	-0.001	97.578%	98.562%
σ		1.103%	0.052	0.011	0.018	0.047	0.006	1.715%	0.568%
%RSD		1.129	10.290	33.410	118.300	333.600	741.000	1.757	0.577
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:08:54	0.006	0.001	-0.021	0.007	0.002	98.054%		
2	01:09:20	0.005	0.009	0.023	-0.001	0.006	90.311%		
3	01:09:47	0.005	0.007	-0.013	0.021	0.006	92.665%		
x		0.005	0.006	-0.004	0.009	0.005	93.676%		
σ		0.001	0.004	0.023	0.011	0.003	3.969%		
%RSD		12.760	71.760	628.400	117.000	55.160	4.237		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:12	92.540%	0.074	5.136	5.805	0.000	96310.000	7029.000	6964.000
2	01:13:38	90.576%	-0.172	4.123	5.019	0.000	98070.000	7226.000	7183.000
3	01:14:05	91.941%	-0.024	4.753	5.148	0.000	97840.000	7254.000	7154.000
x		91.686%	-0.041	4.671	5.324	0.000	97410.000	7169.000	7100.000
σ		1.006%	0.124	0.511	0.422	0.000	959.000	122.700	118.600
%RSD		1.098	305.600	10.950	7.920	0.000	0.985	1.711	1.670
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:12	3.555	4748.000	0.000	77.390	67.250	101.700	92.439%	0.682
2	01:13:38	3.753	4876.000	0.000	79.960	89.940	114.300	92.689%	0.504
3	01:14:05	3.652	4811.000	0.000	73.050	87.670	120.400	92.232%	0.538
x		3.653	4812.000	0.000	76.800	81.620	112.200	92.453%	0.575
σ		0.099	63.770	0.000	3.493	12.500	9.532	0.228%	0.095
%RSD		2.721	1.325	0.000	4.548	15.310	8.498	0.247	16.490
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:12	1.565	1.666	0.329	28.260	5.727	0.051	1.226	1.113
2	01:13:38	2.902	1.550	0.297	25.390	6.576	0.042	0.929	1.429
3	01:14:05	-1.190	1.560	0.359	24.500	7.783	0.022	1.100	1.318
x		1.092	1.592	0.328	26.050	6.695	0.038	1.085	1.287
σ		2.086	0.064	0.031	1.964	1.033	0.015	0.149	0.160
%RSD		191.000	4.033	9.356	7.538	15.430	39.220	13.730	12.460
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:12	0.949	3.895	4.293	1.566	-0.931	-1.662	0.000	1.072
2	01:13:38	0.991	3.754	4.016	2.012	-0.241	-0.432	0.000	1.091
3	01:14:05	1.029	4.045	3.996	1.329	-0.443	0.648	0.000	1.083
x		0.990	3.898	4.101	1.636	-0.538	-0.482	0.000	1.082
σ		0.040	0.146	0.166	0.347	0.355	1.156	0.000	0.010
%RSD		4.038	3.739	4.045	21.230	65.890	239.800	0.000	0.884
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:12	92.427%	1.146	1.193	89.184%	0.052	0.075	0.035	0.028
2	01:13:38	94.105%	1.091	1.321	90.097%	0.092	0.074	0.003	0.031
3	01:14:05	93.849%	1.291	1.209	91.120%	0.054	0.038	0.011	-0.052
x		93.460%	1.176	1.241	90.134%	0.066	0.062	0.016	0.002
σ		0.904%	0.103	0.070	0.969%	0.022	0.021	0.017	0.047
%RSD		0.967	8.779	5.619	1.075	34.010	34.410	103.000	1923.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:13:12	87.458%	-0.433	1.317	1.238	0.414	0.576	92.330%	90.653%
2	01:13:38	89.755%	-0.321	1.333	1.392	0.549	0.533	95.147%	93.626%
3	01:14:05	94.403%	-0.399	1.202	1.266	0.593	0.490	96.237%	95.495%
x		90.539%	-0.384	1.284	1.299	0.518	0.533	94.571%	93.258%
σ		3.538%	0.057	0.072	0.082	0.093	0.043	2.016%	2.442%
%RSD		3.908	14.960	5.587	6.301	18.030	8.057	2.132	2.618
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:13:12	-0.001	-0.003	0.282	0.246	0.255	83.914%		
2	01:13:38	0.009	-0.002	0.272	0.250	0.258	81.581%		
3	01:14:05	0.007	0.002	0.257	0.240	0.220	90.714%		
x		0.005	-0.001	0.270	0.245	0.244	85.403%		
σ		0.005	0.003	0.013	0.005	0.021	4.745%		
%RSD		103.500	258.100	4.683	2.071	8.673	5.556		

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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	01:17:26	89.381%	-0.144	6.849	5.323	0.000	90760.000	6880.000	6842.000
2	01:17:53	91.485%	-0.198	4.928	5.115	0.000	91150.000	6995.000	6892.000
3	01:18:19	92.152%	-0.099	4.316	4.989	0.000	90810.000	6951.000	6902.000
x		91.006%	-0.147	5.365	5.142	0.000	90910.000	6942.000	6879.000
σ		1.447%	0.050	1.322	0.169	0.000	214.000	57.800	32.280
%RSD		1.590	33.760	24.640	3.281	0.000	0.235	0.833	0.469
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:26	4.447	4436.000	0.000	61.940	67.720	94.790	92.265%	0.568
2	01:17:53	4.169	4490.000	0.000	65.930	87.480	94.760	92.379%	0.799
3	01:18:19	4.247	4485.000	0.000	63.190	25.250	104.700	91.417%	0.429
x		4.288	4470.000	0.000	63.690	60.150	98.090	92.020%	0.599
σ		0.144	30.120	0.000	2.042	31.800	5.747	0.526%	0.187
%RSD		3.348	0.674	0.000	3.206	52.870	5.858	0.571	31.270
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:26	1.490	1.580	0.251	18.450	0.758	0.014	1.021	1.183
2	01:17:53	0.262	1.494	0.227	17.450	-3.477	0.037	0.815	1.252
3	01:18:19	0.073	1.764	0.257	16.870	1.242	0.035	1.117	1.264
x		0.608	1.613	0.245	17.590	-0.493	0.029	0.984	1.233
σ		0.769	0.138	0.016	0.799	2.596	0.013	0.155	0.044
%RSD		126.400	8.543	6.600	4.544	527.100	43.900	15.710	3.535
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:26	0.909	3.195	3.019	0.092	-0.500	-0.506	0.000	1.074
2	01:17:53	1.124	3.326	3.309	0.130	-0.441	-0.535	0.000	0.974
3	01:18:19	1.130	3.309	3.486	1.526	-0.157	-0.418	0.000	1.024
x		1.055	3.277	3.272	0.583	-0.366	-0.486	0.000	1.024
σ		0.126	0.072	0.236	0.817	0.184	0.061	0.000	0.050
%RSD		11.970	2.187	7.218	140.200	50.140	12.510	0.000	4.884
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:26	91.491%	1.051	1.033	87.765%	0.018	0.030	0.014	-0.014
2	01:17:53	93.773%	0.898	0.964	90.873%	0.000	0.015	0.063	0.042
3	01:18:19	94.215%	1.035	1.084	90.209%	0.027	0.024	-0.017	-0.033
x		93.160%	0.995	1.027	89.616%	0.015	0.023	0.020	-0.002
σ		1.462%	0.084	0.060	1.637%	0.013	0.008	0.040	0.039
%RSD		1.569	8.452	5.840	1.827	89.130	34.340	202.000	2198.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:17:26	88.974%	-0.608	1.168	1.147	0.516	0.441	91.859%	90.527%
2	01:17:53	89.806%	-0.555	1.163	1.107	0.388	0.406	94.775%	93.295%
3	01:18:19	90.316%	-0.475	1.198	1.338	0.373	0.448	95.370%	93.873%
x		89.699%	-0.546	1.177	1.197	0.425	0.432	94.002%	92.565%
σ		0.678%	0.067	0.019	0.123	0.079	0.023	1.879%	1.788%
%RSD		0.755	12.340	1.601	10.270	18.480	5.222	1.999	1.932
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:17:26	0.001	0.009	0.296	0.255	0.266	84.341%		
2	01:17:53	0.013	0.010	0.298	0.218	0.271	76.897%		
3	01:18:19	0.012	0.008	0.305	0.260	0.279	79.769%		
x		0.009	0.009	0.300	0.244	0.272	80.335%		
σ		0.007	0.001	0.005	0.023	0.007	3.754%		
%RSD		72.560	11.350	1.543	9.504	2.405	4.673		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:41	87.636%	0.068	6.717	5.319	0.000	95620.000	8006.000	7923.000
2	01:22:07	91.783%	-0.023	5.624	6.199	0.000	94220.000	7930.000	7851.000
3	01:22:34	91.245%	-0.047	4.659	4.948	0.000	95030.000	8045.000	7943.000
x		90.221%	-0.001	5.667	5.489	0.000	94960.000	7994.000	7906.000
σ		2.255%	0.061	1.029	0.643	0.000	702.900	58.250	48.400
%RSD		2.499	11500.000	18.170	11.710	0.000	0.740	0.729	0.612
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:41	9.359	4083.000	0.000	77.130	33.120	101.400	92.475%	0.507
2	01:22:07	9.325	4015.000	0.000	73.250	50.320	104.200	92.262%	0.742
3	01:22:34	9.250	4053.000	0.000	76.070	107.900	98.840	92.224%	0.450
x		9.311	4050.000	0.000	75.480	63.770	101.500	92.320%	0.566
σ		0.056	34.010	0.000	2.003	39.140	2.674	0.135%	0.155
%RSD		0.601	0.840	0.000	2.654	61.380	2.636	0.146	27.350
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:41	2.306	1.624	0.210	27.280	9.630	0.049	1.042	1.336
2	01:22:07	1.244	1.559	0.263	25.880	8.184	0.012	1.071	1.380
3	01:22:34	0.658	1.507	0.183	26.570	6.349	0.027	1.038	1.395
x		1.403	1.563	0.219	26.580	8.054	0.029	1.050	1.370
σ		0.835	0.058	0.041	0.701	1.645	0.019	0.018	0.031
%RSD		59.540	3.734	18.630	2.637	20.420	63.270	1.707	2.268
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:41	1.119	3.075	3.175	0.233	-1.281	-0.596	0.000	0.999
2	01:22:07	1.394	2.752	2.859	1.458	-2.102	-0.939	0.000	0.991
3	01:22:34	1.060	2.904	2.751	-1.013	-0.597	0.454	0.000	1.014
x		1.191	2.910	2.928	0.226	-1.327	-0.361	0.000	1.001
σ		0.179	0.162	0.220	1.236	0.754	0.726	0.000	0.012
%RSD		14.990	5.550	7.527	547.400	56.790	201.300	0.000	1.153
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:41	92.348%	1.141	1.112	89.955%	0.034	0.037	0.003	0.027
2	01:22:07	94.188%	1.150	1.131	91.504%	0.028	0.052	-0.009	-0.017
3	01:22:34	95.150%	1.251	1.144	93.165%	0.049	0.047	0.040	0.020
x		93.895%	1.181	1.129	91.541%	0.037	0.045	0.011	0.010
σ		1.424%	0.061	0.016	1.605%	0.011	0.008	0.026	0.024
%RSD		1.516	5.191	1.414	1.754	28.920	16.950	227.700	232.900
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:21:41	90.866%	-0.652	1.124	1.170	0.226	0.259	93.358%	94.847%
2	01:22:07	94.742%	-0.685	1.142	1.231	0.143	0.332	97.666%	97.117%
3	01:22:34	92.528%	-0.577	1.274	1.371	0.261	0.306	97.017%	98.476%
x		92.712%	-0.638	1.180	1.258	0.210	0.299	96.013%	96.813%
σ		1.945%	0.055	0.082	0.103	0.060	0.037	2.322%	1.834%
%RSD		2.098	8.689	6.927	8.201	28.710	12.330	2.419	1.894
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:21:41	0.008	-0.002	0.277	0.205	0.208	89.183%		
2	01:22:07	-0.003	-0.005	0.200	0.228	0.190	100.250%		
3	01:22:34	0.021	0.009	0.177	0.257	0.207	91.357%		
x		0.008	0.001	0.218	0.230	0.202	93.597%		
σ		0.012	0.008	0.053	0.026	0.010	5.863%		
%RSD		137.800	1284.000	24.120	11.450	5.065	6.264		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:54	89.324%	-0.170	3.468	6.848	0.000	98720.000	7604.000	7565.000
2	01:26:20	91.239%	0.003	4.505	7.057	0.000	98350.000	7712.000	7573.000
3	01:26:47	89.729%	-0.171	7.100	6.039	0.000	100600.000	7791.000	7734.000
x		90.097%	-0.113	5.024	6.648	0.000	99210.000	7702.000	7624.000
σ		1.009%	0.100	1.871	0.538	0.000	1178.000	94.160	95.350
%RSD		1.120	89.160	37.240	8.087	0.000	1.187	1.223	1.251
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:54	2.412	4939.000	0.000	69.530	88.660	107.500	93.582%	0.553
2	01:26:20	2.299	4949.000	0.000	75.310	94.220	101.500	93.540%	0.898
3	01:26:47	2.366	4971.000	0.000	73.860	55.150	106.200	93.119%	0.499
x		2.359	4953.000	0.000	72.900	79.340	105.000	93.414%	0.650
σ		0.057	16.210	0.000	3.006	21.130	3.174	0.256%	0.216
%RSD		2.418	0.327	0.000	4.124	26.640	3.021	0.274	33.300
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:54	0.899	1.429	0.217	28.830	6.224	0.025	1.097	1.279
2	01:26:20	2.682	1.232	0.251	27.180	6.458	0.040	1.216	1.345
3	01:26:47	3.227	1.373	0.253	27.020	6.463	0.015	1.069	1.318
x		2.269	1.344	0.241	27.680	6.382	0.027	1.127	1.314
σ		1.218	0.102	0.020	0.999	0.137	0.012	0.078	0.033
%RSD		53.660	7.554	8.427	3.610	2.145	46.170	6.918	2.522
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:54	0.972	3.873	3.813	1.796	-0.155	-0.526	0.000	1.023
2	01:26:20	1.147	3.663	3.868	0.678	-0.048	-0.299	0.000	1.010
3	01:26:47	1.059	4.171	3.743	0.453	-0.418	0.784	0.000	1.015
x		1.059	3.902	3.808	0.976	-0.207	-0.013	0.000	1.016
σ		0.087	0.255	0.063	0.719	0.190	0.700	0.000	0.007
%RSD		8.257	6.533	1.646	73.710	91.780	5221.000	0.000	0.645
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:54	93.452%	1.229	0.963	91.720%	0.026	0.016	0.041	0.013
2	01:26:20	96.570%	1.045	1.035	93.413%	0.020	0.025	0.067	-0.036
3	01:26:47	96.312%	1.309	1.194	93.865%	0.031	0.051	0.067	-0.097
x		95.445%	1.194	1.064	92.999%	0.026	0.031	0.058	-0.040
σ		1.731%	0.135	0.118	1.131%	0.006	0.018	0.015	0.055
%RSD		1.813	11.340	11.120	1.216	21.790	57.800	26.000	136.700
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:25:54	92.156%	-0.667	1.357	1.407	0.139	0.215	96.026%	96.890%
2	01:26:20	94.433%	-0.673	1.389	1.550	0.163	0.128	99.564%	99.089%
3	01:26:47	94.839%	-0.617	1.519	1.377	0.108	0.213	99.002%	100.319%
x		93.809%	-0.653	1.422	1.445	0.137	0.185	98.197%	98.766%
σ		1.446%	0.031	0.086	0.093	0.028	0.050	1.902%	1.737%
%RSD		1.541	4.730	6.066	6.410	20.150	26.940	1.937	1.759
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:25:54	-0.001	-0.003	0.152	0.136	0.144	102.850%		
2	01:26:20	0.011	-0.005	0.162	0.109	0.144	103.136%		
3	01:26:47	-0.001	-0.002	0.151	0.202	0.161	100.718%		
x		0.003	-0.003	0.155	0.149	0.150	102.235%		
σ		0.007	0.001	0.006	0.048	0.010	1.321%		
%RSD		220.800	45.860	3.814	32.080	6.543	1.292		

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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	01:30:09	89.495%	-0.093	5.667	5.943	0.000	105700.000	7076.000	6978.000
2	01:30:36	91.049%	-0.122	4.238	6.068	0.000	105600.000	7069.000	7012.000
3	01:31:02	90.517%	-0.223	8.926	5.558	0.000	107100.000	7249.000	7068.000
x		90.354%	-0.146	6.277	5.856	0.000	106100.000	7131.000	7019.000
σ		0.790%	0.068	2.403	0.266	0.000	865.500	101.900	45.340
%RSD		0.874	46.560	38.280	4.536	0.000	0.816	1.429	0.646
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:30:09	3.273	4817.000	0.000	74.640	47.850	104.200	92.040%	0.306
2	01:30:36	3.200	4808.000	0.000	75.810	72.940	102.800	92.549%	0.593
3	01:31:02	3.340	4831.000	0.000	74.830	79.770	116.000	91.833%	0.247
x		3.271	4819.000	0.000	75.090	66.850	107.700	92.141%	0.382
σ		0.070	11.750	0.000	0.626	16.810	7.225	0.369%	0.185
%RSD		2.144	0.244	0.000	0.834	25.140	6.710	0.400	48.380
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:30:09	2.530	1.802	0.310	42.600	18.930	0.039	0.615	0.666
2	01:30:36	0.148	1.684	0.355	42.640	15.750	0.037	0.581	0.666
3	01:31:02	2.277	1.647	0.356	40.660	22.890	0.012	0.549	0.717
x		1.651	1.711	0.340	41.970	19.190	0.029	0.581	0.683
σ		1.309	0.081	0.026	1.133	3.577	0.015	0.033	0.030
%RSD		79.230	4.732	7.681	2.700	18.640	52.200	5.683	4.322
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:30:09	0.213	2.405	2.584	0.943	-1.212	-0.555	0.000	1.138
2	01:30:36	0.280	2.212	2.454	2.217	-0.454	0.722	0.000	1.149
3	01:31:02	0.415	2.620	2.470	0.816	-1.558	-0.418	0.000	1.017
x		0.302	2.413	2.502	1.326	-1.075	-0.083	0.000	1.101
σ		0.103	0.204	0.071	0.775	0.565	0.701	0.000	0.073
%RSD		34.050	8.460	2.827	58.450	52.530	840.700	0.000	6.657
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:30:09	94.042%	0.955	1.138	91.272%	0.233	0.234	0.069	0.013
2	01:30:36	94.663%	1.023	1.246	92.860%	0.184	0.256	0.020	-0.026
3	01:31:02	97.601%	1.160	1.218	93.723%	0.237	0.246	0.068	-0.015
x		95.435%	1.046	1.201	92.619%	0.218	0.245	0.052	-0.009
σ		1.901%	0.105	0.056	1.243%	0.030	0.011	0.028	0.020
%RSD		1.992	9.994	4.654	1.342	13.690	4.386	53.030	219.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:30:09	93.100%	-0.688	1.410	1.368	0.564	0.313	96.453%	97.534%
2	01:30:36	93.134%	-0.616	1.331	1.291	0.475	0.502	100.248%	99.155%
3	01:31:02	93.846%	-0.672	1.407	1.385	0.426	0.400	100.977%	100.377%
x		93.360%	-0.659	1.382	1.348	0.488	0.405	99.226%	99.022%
σ		0.422%	0.038	0.045	0.050	0.070	0.095	2.429%	1.426%
%RSD		0.452	5.755	3.246	3.698	14.350	23.350	2.448	1.440
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:30:09	-0.007	-0.005	0.182	0.199	0.177	104.479%		
2	01:30:36	0.002	0.001	0.170	0.222	0.206	95.385%		
3	01:31:02	0.004	0.001	0.206	0.219	0.206	98.632%		
x		-0.000	-0.001	0.186	0.214	0.196	99.499%		
σ		0.006	0.003	0.018	0.013	0.017	4.608%		
%RSD		1167.000	308.900	9.689	5.872	8.492	4.632		

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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	01:34:24	90.709%	-0.096	13.530	13.790	0.000	100800.000	12.110	11.130
2	01:34:50	89.404%	-0.144	13.880	13.420	0.000	101800.000	11.570	10.710
3	01:35:17	85.613%	-0.217	12.870	14.650	0.000	105700.000	13.410	10.360
x		88.575%	-0.153	13.420	13.950	0.000	102800.000	12.360	10.730
σ		2.647%	0.061	0.515	0.628	0.000	2580.000	0.945	0.387
%RSD		2.989	39.960	3.833	4.498	0.000	2.510	7.641	3.610
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:34:24	5.020	5576.000	0.000	84.750	138.300	158.900	92.794%	0.445
2	01:34:50	5.176	5639.000	0.000	83.410	123.900	162.700	92.948%	0.326
3	01:35:17	7.821	5789.000	0.000	89.330	122.500	161.200	92.427%	0.913
x		6.006	5668.000	0.000	85.830	128.200	160.900	92.723%	0.561
σ		1.574	109.300	0.000	3.108	8.776	1.922	0.268%	0.310
%RSD		26.210	1.928	0.000	3.621	6.844	1.194	0.289	55.240
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:34:24	1.677	1.422	0.437	73.950	43.280	0.060	1.340	1.676
2	01:34:50	2.594	1.458	0.485	72.520	48.910	0.042	1.188	1.810
3	01:35:17	2.227	1.415	0.459	72.210	46.720	0.065	1.105	1.580
x		2.166	1.432	0.460	72.900	46.300	0.055	1.211	1.689
σ		0.462	0.023	0.024	0.929	2.838	0.012	0.119	0.115
%RSD		21.310	1.607	5.294	1.274	6.130	21.660	9.823	6.821
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:34:24	1.271	3.951	4.406	1.256	-0.812	0.743	0.000	1.310
2	01:34:50	1.415	4.118	4.484	2.291	0.048	0.046	0.000	1.369
3	01:35:17	1.379	4.037	4.370	0.472	-1.453	-0.586	0.000	1.336
x		1.355	4.035	4.420	1.340	-0.739	0.068	0.000	1.338
σ		0.075	0.084	0.058	0.912	0.753	0.665	0.000	0.029
%RSD		5.542	2.070	1.322	68.080	101.800	984.600	0.000	2.204
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:34:24	93.908%	1.098	1.119	92.522%	0.079	0.090	0.136	-0.057
2	01:34:50	96.274%	1.372	1.019	94.425%	0.116	0.116	0.048	-0.043
3	01:35:17	97.514%	1.285	1.159	94.758%	0.090	0.125	0.027	-0.038
x		95.899%	1.252	1.099	93.902%	0.095	0.110	0.070	-0.046
σ		1.832%	0.140	0.072	1.207%	0.019	0.019	0.058	0.010
%RSD		1.910	11.170	6.529	1.285	20.260	16.800	82.180	22.110
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:34:24	93.428%	-0.674	1.437	1.294	0.315	0.318	96.601%	97.637%
2	01:34:50	94.099%	-0.622	1.481	1.380	0.429	0.305	99.297%	99.675%
3	01:35:17	97.096%	-0.694	1.428	1.444	0.308	0.279	100.861%	101.143%
x		94.874%	-0.663	1.449	1.373	0.351	0.301	98.920%	99.485%
σ		1.953%	0.037	0.028	0.075	0.068	0.020	2.155%	1.760%
%RSD		2.059	5.592	1.959	5.499	19.430	6.585	2.178	1.769
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:34:24	0.019	-0.007	0.815	0.738	0.822	105.185%		
2	01:34:50	0.017	-0.006	0.948	0.852	0.896	105.056%		
3	01:35:17	0.026	-0.003	0.973	0.872	0.900	106.054%		
x		0.021	-0.005	0.912	0.820	0.873	105.432%		
σ		0.005	0.002	0.085	0.072	0.044	0.543%		
%RSD		24.440	34.620	9.319	8.822	5.071	0.515		

180-42580-L-1-A@10 4/9/2015 1:38:13 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	01:38:39	91.417%	-0.174	13.900	14.400	0.000	80930.000	87.790	82.860
2	01:39:06	94.281%	-0.129	11.920	13.490	0.000	80990.000	87.350	85.450
3	01:39:32	94.622%	0.015	13.940	14.990	0.000	81630.000	91.400	84.690
x		93.440%	-0.096	13.250	14.290	0.000	81180.000	88.850	84.330
σ		1.760%	0.099	1.155	0.758	0.000	386.700	2.226	1.332
%RSD		1.884	103.200	8.720	5.305	0.000	0.476	2.505	1.579
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:39	62.850	39300.000	0.000	122.600	146.600	433.900	98.212%	5.200
2	01:39:06	65.190	39990.000	0.000	125.900	157.100	453.000	98.180%	5.141
3	01:39:32	64.430	40970.000	0.000	126.500	206.700	462.300	98.837%	4.887
x		64.160	40090.000	0.000	125.000	170.100	449.700	98.410%	5.076
σ		1.192	841.200	0.000	2.053	32.100	14.440	0.371%	0.166
%RSD		1.857	2.098	0.000	1.642	18.870	3.210	0.377	3.273
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:39	1.349	0.473	7.959	161.300	117.300	0.080	0.769	2.495
2	01:39:06	1.031	0.522	8.221	166.300	130.300	0.079	0.613	2.581
3	01:39:32	1.322	0.511	8.425	168.000	128.600	0.090	1.036	2.693
x		1.234	0.502	8.202	165.200	125.400	0.083	0.806	2.590
σ		0.177	0.026	0.233	3.525	7.096	0.006	0.214	0.099
%RSD		14.300	5.147	2.844	2.133	5.659	6.905	26.550	3.833
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:39	2.559	2.104	2.423	8.433	-0.845	0.324	0.000	0.397
2	01:39:06	2.322	2.292	2.599	8.225	-1.779	-0.427	0.000	0.363
3	01:39:32	2.658	2.113	2.486	8.013	-0.852	-1.383	0.000	0.404
x		2.513	2.170	2.503	8.224	-1.159	-0.495	0.000	0.388
σ		0.173	0.106	0.089	0.210	0.537	0.856	0.000	0.022
%RSD		6.867	4.904	3.575	2.549	46.340	172.700	0.000	5.671
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:39	98.981%	1.547	1.623	94.625%	0.017	0.026	0.102	0.089
2	01:39:06	101.596%	1.602	1.625	97.900%	0.016	0.030	0.126	0.100
3	01:39:32	101.299%	1.518	1.580	99.240%	0.022	0.034	0.169	0.063
x		100.625%	1.556	1.609	97.255%	0.018	0.030	0.132	0.084
σ		1.432%	0.042	0.026	2.374%	0.003	0.004	0.034	0.019
%RSD		1.423	2.722	1.596	2.441	17.480	11.970	25.790	22.480
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:39	96.725%	-0.715	2.674	2.727	1.295	1.086	102.182%	101.934%
2	01:39:06	98.698%	-0.722	2.857	2.766	1.287	1.162	104.325%	103.229%
3	01:39:32	99.222%	-0.750	2.897	2.890	1.107	1.308	103.685%	105.851%
x		98.215%	-0.729	2.809	2.794	1.229	1.185	103.397%	103.672%
σ		1.317%	0.019	0.119	0.085	0.106	0.113	1.100%	1.996%
%RSD		1.341	2.591	4.227	3.040	8.613	9.514	1.064	1.925
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:38:39	0.007	-0.008	2.150	2.090	2.075	112.850%		
2	01:39:06	0.010	0.001	2.332	2.092	2.188	108.406%		
3	01:39:32	0.002	0.002	2.387	2.345	2.283	109.395%		
x		0.006	-0.001	2.289	2.176	2.182	110.217%		
σ		0.004	0.006	0.124	0.147	0.104	2.333%		
%RSD		61.960	385.200	5.419	6.745	4.777	2.117		

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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	01:42:55	92.392%	-0.126	19.060	19.280	0.000	107100.000	71.440	72.600
2	01:43:21	94.585%	-0.131	20.800	19.980	0.000	107400.000	71.670	72.670
3	01:43:48	96.182%	-0.205	20.320	19.000	0.000	107200.000	68.990	71.550
x		94.386%	-0.154	20.060	19.420	0.000	107300.000	70.700	72.280
σ		1.903%	0.044	0.897	0.504	0.000	160.000	1.484	0.628
%RSD		2.016	28.820	4.469	2.593	0.000	0.149	2.098	0.869

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:55	52.370	76960.000	0.000	106.900	394.300	957.300	100.898%	7.889
2	01:43:21	53.910	77310.000	0.000	105.200	418.100	922.500	101.922%	7.747
3	01:43:48	53.350	78030.000	0.000	109.800	499.900	970.000	101.640%	7.605
x		53.210	77430.000	0.000	107.300	437.400	949.900	101.486%	7.747
σ		0.778	545.600	0.000	2.322	55.390	24.590	0.529%	0.142
%RSD		1.463	0.705	0.000	2.165	12.660	2.588	0.521	1.831

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:55	0.687	0.409	10.780	134.500	99.770	0.124	2.060	3.179
2	01:43:21	0.897	0.394	11.420	137.600	108.400	0.124	2.217	3.203
3	01:43:48	0.555	0.385	11.650	135.900	103.200	0.156	2.575	3.238
x		0.713	0.396	11.280	136.000	103.800	0.135	2.284	3.207
σ		0.172	0.012	0.452	1.533	4.358	0.019	0.264	0.030
%RSD		24.190	3.028	4.008	1.127	4.198	14.000	11.560	0.926

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:55	2.897	2.370	2.495	2.273	-1.534	0.310	0.000	1.171
2	01:43:21	2.983	2.371	1.805	2.003	-0.463	-1.164	0.000	1.106
3	01:43:48	3.019	2.144	2.455	1.818	-1.977	-0.376	0.000	1.140
x		2.967	2.295	2.252	2.031	-1.325	-0.410	0.000	1.139
σ		0.063	0.131	0.387	0.229	0.778	0.738	0.000	0.033
%RSD		2.117	5.700	17.200	11.250	58.740	179.900	0.000	2.864

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:55	100.219%	1.768	1.687	96.583%	0.021	0.005	0.202	0.154
2	01:43:21	102.443%	1.694	1.866	99.284%	0.017	0.013	0.201	0.196
3	01:43:48	103.778%	1.823	1.890	99.904%	0.006	0.017	0.368	0.056
x		102.147%	1.762	1.814	98.590%	0.015	0.012	0.257	0.135
σ		1.798%	0.065	0.111	1.766%	0.008	0.006	0.096	0.072
%RSD		1.760	3.673	6.123	1.791	51.420	50.700	37.270	53.280

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:55	97.147%	-0.761	0.916	0.872	1.178	1.055	103.173%	103.377%
2	01:43:21	101.599%	-0.724	0.888	0.868	1.193	1.186	104.001%	105.819%
3	01:43:48	102.230%	-0.692	0.858	0.983	1.094	1.215	106.163%	106.590%
x		100.325%	-0.726	0.887	0.908	1.155	1.152	104.446%	105.262%
σ		2.771%	0.034	0.029	0.065	0.053	0.086	1.544%	1.678%
%RSD		2.762	4.731	3.229	7.204	4.610	7.430	1.478	1.594

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:42:55	0.011	0.001	16.190	15.770	15.780	112.147%
2	01:43:21	-0.000	0.006	16.380	15.910	15.980	113.759%
3	01:43:48	-0.002	0.003	16.750	16.000	16.210	116.546%
x		0.003	0.003	16.440	15.890	15.990	114.150%
σ		0.007	0.003	0.285	0.117	0.211	2.226%
%RSD		253.800	91.350	1.733	0.736	1.317	1.950

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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	01:47:09	87.707%	-0.272	47.410	43.470	0.000	218800.000	2687.000	2646.000
2	01:47:36	88.748%	-0.118	46.700	45.690	0.000	219900.000	2727.000	2656.000
3	01:48:02	89.935%	-0.248	48.160	45.930	0.000	219500.000	2687.000	2666.000
x		88.797%	-0.213	47.420	45.030	0.000	219400.000	2700.000	2656.000
σ		1.114%	0.083	0.730	1.356	0.000	528.600	22.980	10.200
%RSD		1.255	38.960	1.540	3.012	0.000	0.241	0.851	0.384

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:09	410.700	95160.000	0.000	1764.000	10670.000	10930.000	96.637%	17.500
2	01:47:36	413.400	94480.000	0.000	1795.000	11130.000	11110.000	97.326%	15.890
3	01:48:02	409.600	92580.000	0.000	1800.000	10910.000	11280.000	97.015%	16.230
x		411.200	94070.000	0.000	1786.000	10900.000	11110.000	96.993%	16.540
σ		1.951	1335.000	0.000	19.250	228.200	172.900	0.345%	0.848
%RSD		0.474	1.420	0.000	1.078	2.093	1.556	0.356	5.125

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:09	4.184	3.261	25.270	1219.000	1052.000	0.402	5.108	10.600
2	01:47:36	4.866	3.199	25.490	1246.000	1077.000	0.404	4.393	10.230
3	01:48:02	5.660	3.202	25.860	1272.000	1095.000	0.423	4.759	10.130
x		4.903	3.221	25.540	1246.000	1075.000	0.410	4.753	10.320
σ		0.739	0.035	0.296	26.760	21.830	0.012	0.357	0.245
%RSD		15.070	1.080	1.161	2.148	2.032	2.845	7.518	2.370

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:09	9.912	13.480	12.840	6.365	-0.141	-0.481	0.000	39.420
2	01:47:36	9.807	13.170	14.000	7.674	-1.171	0.909	0.000	40.410
3	01:48:02	10.140	13.460	13.590	6.642	-0.096	-0.463	0.000	40.210
x		9.952	13.370	13.480	6.893	-0.469	-0.012	0.000	40.010
σ		0.168	0.169	0.587	0.690	0.608	0.797	0.000	0.520
%RSD		1.689	1.264	4.354	10.010	129.600	6742.000	0.000	1.300

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:09	96.723%	6.350	6.162	92.471%	0.035	0.025	0.318	0.197
2	01:47:36	99.197%	6.496	6.648	94.657%	0.028	0.019	0.378	0.378
3	01:48:02	100.486%	6.496	6.869	95.992%	0.019	0.014	0.358	0.341
x		98.802%	6.447	6.560	94.374%	0.027	0.020	0.351	0.305
σ		1.912%	0.084	0.362	1.777%	0.008	0.006	0.031	0.096
%RSD		1.936	1.308	5.514	1.883	29.180	28.000	8.691	31.330

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:09	93.962%	-0.665	2.699	2.805	16.350	15.770	100.437%	101.397%
2	01:47:36	98.357%	-0.725	2.657	2.710	16.290	16.200	103.110%	104.464%
3	01:48:02	98.260%	-0.690	2.742	2.837	15.910	15.930	104.998%	105.939%
x		96.860%	-0.693	2.699	2.784	16.180	15.970	102.848%	103.933%
σ		2.510%	0.030	0.043	0.066	0.242	0.217	2.292%	2.317%
%RSD		2.591	4.302	1.583	2.377	1.494	1.359	2.228	2.229

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:47:09	0.007	0.005	28.040	26.740	27.110	114.153%
2	01:47:36	0.006	0.006	29.350	28.440	28.440	111.839%
3	01:48:02	0.009	0.009	29.320	28.910	28.420	114.558%
x		0.007	0.007	28.900	28.030	27.990	113.517%
σ		0.002	0.002	0.752	1.146	0.763	1.467%
%RSD		22.530	29.070	2.601	4.088	2.726	1.292

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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	01:51:25	93.766%	-0.153	8.497	8.288	0.000	44930.000	543.600	545.300
2	01:51:51	92.410%	-0.101	10.050	8.471	0.000	45810.000	568.400	563.000
3	01:52:18	93.581%	-0.054	8.093	9.048	0.000	45670.000	567.900	554.400
x		93.252%	-0.103	8.880	8.602	0.000	45470.000	560.000	554.200
σ		0.735%	0.049	1.034	0.397	0.000	475.200	14.190	8.837
%RSD		0.788	47.880	11.640	4.614	0.000	1.045	2.533	1.595

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:25	84.930	19260.000	0.000	331.400	2260.000	2328.000	97.887%	4.032
2	01:51:51	87.570	19520.000	0.000	328.300	2209.000	2334.000	98.544%	3.043
3	01:52:18	87.720	19480.000	0.000	332.400	2513.000	2398.000	98.205%	3.216
x		86.740	19420.000	0.000	330.700	2327.000	2354.000	98.212%	3.430
σ		1.572	140.600	0.000	2.111	162.600	38.760	0.328%	0.528
%RSD		1.812	0.724	0.000	0.638	6.985	1.647	0.334	15.400

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:25	1.012	0.710	5.392	253.400	210.400	0.104	0.750	2.028
2	01:51:51	0.421	0.724	5.425	258.900	219.400	0.108	1.364	2.271
3	01:52:18	1.112	0.758	5.540	259.600	220.000	0.088	0.911	2.180
x		0.848	0.731	5.452	257.300	216.600	0.100	1.008	2.160
σ		0.373	0.025	0.077	3.409	5.398	0.011	0.319	0.123
%RSD		44.030	3.395	1.418	1.325	2.492	10.630	31.580	5.695

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:25	1.898	3.356	3.492	1.128	-1.001	-0.146	0.000	8.121
2	01:51:51	2.334	3.534	3.954	0.822	-1.339	-0.597	0.000	8.287
3	01:52:18	1.911	3.610	3.800	0.966	-1.598	-0.431	0.000	8.532
x		2.048	3.500	3.749	0.972	-1.313	-0.391	0.000	8.314
σ		0.248	0.130	0.236	0.153	0.299	0.228	0.000	0.207
%RSD		12.130	3.719	6.282	15.750	22.810	58.280	0.000	2.488

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:25	99.762%	1.251	1.051	97.932%	0.009	0.014	0.070	0.055
2	01:51:51	101.371%	1.260	1.393	99.345%	0.017	-0.002	0.175	-0.073
3	01:52:18	103.078%	1.255	1.241	100.792%	0.004	0.015	0.059	0.004
x		101.404%	1.255	1.229	99.356%	0.010	0.009	0.101	-0.005
σ		1.658%	0.004	0.172	1.430%	0.007	0.010	0.064	0.065
%RSD		1.635	0.351	13.960	1.439	65.290	108.000	63.260	1307.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:25	99.848%	-0.765	0.535	0.528	3.604	3.422	102.715%	102.654%
2	01:51:51	101.579%	-0.761	0.498	0.579	3.478	3.306	104.501%	106.054%
3	01:52:18	100.994%	-0.767	0.581	0.621	3.379	3.361	106.322%	107.510%
x		100.807%	-0.764	0.538	0.576	3.487	3.363	104.513%	105.406%
σ		0.881%	0.003	0.042	0.046	0.113	0.058	1.803%	2.492%
%RSD		0.874	0.402	7.742	8.014	3.230	1.736	1.725	2.364

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	01:51:25	0.012	0.000	6.060	5.845	5.834	118.504%
2	01:51:51	-0.003	-0.006	6.387	6.083	6.044	119.457%
3	01:52:18	0.003	-0.002	6.578	6.214	6.148	119.030%
x		0.004	-0.003	6.342	6.047	6.008	118.997%
σ		0.007	0.003	0.262	0.187	0.160	0.477%
%RSD		180.900	105.400	4.133	3.093	2.667	0.401

CCV 1487954 4/9/2015 1:58:35 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	01:59:01	88.600%	100.200	91.760	97.350	0.000	49120.000	48660.000	48760.000
2	01:59:28	90.902%	102.400	98.230	99.730	0.000	48600.000	48860.000	48820.000
3	01:59:55	90.725%	100.900	98.160	96.740	0.000	48830.000	48780.000	48350.000
x		90.075%	101.176%	96.052%	97.940%	0.000	97.705%	97.535%	97.291%
σ		1.281%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.422	1.152	3.866	1.616	0.000	0.533	0.202	0.528
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:59:01	476.300	5445.000	0.000	48540.000	47190.000	48130.000	96.397%	95.770
2	01:59:28	481.600	5486.000	0.000	48550.000	47220.000	49440.000	97.991%	95.360
3	01:59:55	472.900	5375.000	0.000	48250.000	47700.000	48980.000	97.519%	95.950
x		95.386%	108.700%	0.000	96.886%	94.742%	97.700%	97.302%	95.696%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.819%	n/a
%RSD		0.923	1.033	0.000	0.350	0.608	1.360	0.842	0.318
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:59:01	93.830	94.220	454.300	24010.000	22670.000	95.310	96.080	95.510
2	01:59:28	94.770	95.930	459.500	24200.000	23040.000	95.360	97.850	95.660
3	01:59:55	94.960	94.990	464.900	24350.000	23210.000	96.550	98.290	97.270
x		94.519%	95.048%	91.912%	96.751%	91.908%	95.743%	97.405%	96.146%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.639	0.902	1.151	0.709	1.196	0.732	1.204	1.018
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:59:01	97.310	93.230	94.010	95.050	97.650	95.170	0.000	96.260
2	01:59:28	95.520	98.860	97.130	96.760	94.760	96.490	0.000	98.460
3	01:59:55	98.960	97.610	96.780	96.180	98.880	97.480	0.000	98.360
x		97.264%	96.570%	95.973%	95.995%	97.097%	96.382%	0.000	97.693%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.770	3.061	1.780	0.906	2.179	1.203	0.000	1.275
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:59:01	96.964%	93.510	95.400	93.387%	97.410	96.220	95.860	95.610
2	01:59:28	98.667%	96.680	99.220	94.984%	96.430	96.200	97.510	94.200
3	01:59:55	99.690%	99.170	101.600	96.316%	97.900	96.000	97.550	96.370
x		98.440%	96.455%	98.731%	94.896%	97.245%	96.141%	96.973%	95.394%
σ		1.377%	n/a	n/a	1.466%	n/a	n/a	n/a	n/a
%RSD		1.399	2.940	3.158	1.545	0.768	0.129	0.991	1.151
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:59:01	93.920%	98.270	97.770	99.870	97.280	95.990	100.092%	100.885%
2	01:59:28	97.641%	96.900	99.410	98.700	98.510	96.140	101.856%	102.986%
3	01:59:55	97.703%	98.250	99.950	99.610	98.460	97.790	102.723%	104.242%
x		96.421%	97.808%	99.044%	99.395%	98.085%	96.640%	101.557%	102.705%
σ		2.167%	n/a	n/a	n/a	n/a	n/a	1.341%	1.696%
%RSD		2.247	0.802	1.149	0.616	0.708	1.037	1.320	1.651
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	01:59:01	94.980	97.350	93.350	96.640	94.250	108.247%		
2	01:59:28	97.540	99.370	96.790	99.700	96.840	108.068%		
3	01:59:55	99.250	101.100	98.040	100.400	98.700	108.673%		
x		97.256%	99.277%	96.059%	98.908%	96.595%	108.329%		
σ		n/a	n/a	n/a	n/a	n/a	0.311%		
%RSD		2.211	1.897	2.529	2.011	2.314	0.287		

CCB3 4/9/2015 2:06:17 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	02:06:44	97.833%	-0.277	-0.934	-0.995	0.000	-4.694	6.427	6.308
2	02:07:10	98.451%	-0.114	-0.944	-1.115	0.000	0.234	5.460	5.249
3	02:07:37	96.543%	-0.253	-0.915	-1.333	0.000	6.648	8.353	6.560
x		97.609%	-0.215	-0.931	-1.148	0.000	0.729	6.747	6.039
σ		0.974%	0.088	0.014	0.172	0.000	5.687	1.473	0.696
%RSD		0.998	41.060	1.556	14.950	0.000	780.000	21.830	11.520
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:06:44	0.296	22.100	0.000	-7.778	29.040	7.100	99.129%	0.059
2	02:07:10	0.316	25.700	0.000	-13.210	-8.590	5.766	99.492%	-0.106
3	02:07:37	0.327	28.730	0.000	-12.020	-11.190	9.541	99.479%	-0.323
x		0.313	25.510	0.000	-11.000	3.088	7.469	99.367%	-0.123
σ		0.015	3.319	0.000	2.856	22.520	1.915	0.206%	0.191
%RSD		4.942	13.010	0.000	25.960	729.200	25.640	0.207	155.200
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:06:44	-0.041	0.009	0.066	22.320	-2.365	0.018	0.004	-0.180
2	02:07:10	0.075	0.055	0.040	20.050	-1.985	0.012	0.136	-0.191
3	02:07:37	-0.018	0.044	0.035	18.960	0.897	-0.006	0.050	-0.105
x		0.005	0.036	0.047	20.440	-1.151	0.008	0.064	-0.159
σ		0.061	0.024	0.016	1.718	1.784	0.012	0.067	0.047
%RSD		1153.000	66.390	34.910	8.405	155.000	148.900	105.200	29.600
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:06:44	-0.149	0.206	-0.064	-0.144	-1.401	0.296	0.000	0.025
2	02:07:10	-0.116	0.107	0.010	0.041	1.938	-0.783	0.000	0.017
3	02:07:37	-0.169	0.096	-0.106	-0.190	1.010	-0.421	0.000	0.021
x		-0.145	0.136	-0.053	-0.098	0.515	-0.303	0.000	0.021
σ		0.027	0.060	0.059	0.122	1.724	0.549	0.000	0.004
%RSD		18.450	44.470	110.500	125.200	334.400	181.200	0.000	18.910
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:06:44	100.434%	-0.027	0.030	100.472%	0.011	0.000	0.061	0.070
2	02:07:10	102.694%	0.141	0.036	102.559%	-0.001	0.008	0.022	-0.006
3	02:07:37	103.575%	-0.003	-0.016	104.141%	0.012	0.008	0.013	0.035
x		102.235%	0.037	0.017	102.391%	0.007	0.005	0.032	0.033
σ		1.620%	0.091	0.029	1.841%	0.007	0.005	0.026	0.038
%RSD		1.585	245.900	169.000	1.798	94.000	83.050	80.360	115.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:06:44	98.600%	-0.542	-0.040	-0.044	-0.006	0.010	101.150%	103.342%
2	02:07:10	102.551%	-0.504	-0.059	-0.022	-0.001	0.076	104.162%	104.192%
3	02:07:37	102.970%	-0.538	-0.038	0.005	0.009	0.025	104.167%	104.913%
x		101.374%	-0.528	-0.046	-0.020	0.001	0.037	103.160%	104.149%
σ		2.411%	0.021	0.012	0.025	0.008	0.035	1.740%	0.786%
%RSD		2.378	4.025	25.810	122.300	950.700	94.550	1.687	0.755
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:06:44	0.002	0.010	-0.000	0.021	0.005	112.842%		
2	02:07:10	0.014	0.007	-0.006	0.012	0.008	114.226%		
3	02:07:37	0.005	0.005	0.013	0.015	0.007	113.920%		
x		0.007	0.007	0.003	0.016	0.007	113.663%		
σ		0.007	0.002	0.010	0.005	0.002	0.727%		
%RSD		91.630	29.870	382.800	28.900	29.310	0.639		

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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	02:11:01	88.496%	0.090	41.930	43.030	0.000	238000.000	635.100	618.000
2	02:11:28	91.041%	-0.198	39.190	41.670	0.000	238000.000	644.700	630.100
3	02:11:54	90.645%	-0.097	40.050	42.110	0.000	240700.000	632.300	626.700
x		90.061%	-0.068	40.390	42.270	0.000	238900.000	637.400	624.900
σ		1.370%	0.146	1.401	0.695	0.000	1559.000	6.468	6.208
%RSD		1.521	214.400	3.470	1.644	0.000	0.653	1.015	0.993

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:11:01	201.200	79230.000	0.000	1011.000	3343.000	3568.000	94.727%	16.200
2	02:11:28	204.900	79000.000	0.000	1005.000	3098.000	3656.000	95.482%	15.800
3	02:11:54	203.800	79240.000	0.000	1024.000	3304.000	3656.000	96.078%	15.610
x		203.300	79160.000	0.000	1013.000	3249.000	3626.000	95.429%	15.870
σ		1.918	133.100	0.000	9.910	131.700	50.980	0.677%	0.298
%RSD		0.943	0.168	0.000	0.978	4.055	1.406	0.709	1.881

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:11:01	6.154	2.972	33.050	586.000	509.200	0.712	7.918	7.972
2	02:11:28	4.842	3.198	34.700	600.100	518.300	0.719	7.729	8.311
3	02:11:54	6.448	3.155	34.320	607.500	514.200	0.727	8.289	8.214
x		5.815	3.108	34.020	597.900	513.900	0.719	7.979	8.166
σ		0.855	0.120	0.864	10.950	4.551	0.007	0.285	0.175
%RSD		14.700	3.866	2.539	1.832	0.886	1.000	3.567	2.139

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:11:01	7.569	9.521	10.460	7.223	-1.365	0.512	0.000	10.360
2	02:11:28	8.163	9.423	9.515	8.339	-0.598	0.318	0.000	10.480
3	02:11:54	7.827	10.600	10.550	7.159	-0.115	0.441	0.000	10.540
x		7.853	9.847	10.170	7.574	-0.692	0.424	0.000	10.460
σ		0.298	0.651	0.571	0.663	0.630	0.098	0.000	0.091
%RSD		3.792	6.614	5.616	8.760	91.030	23.230	0.000	0.871

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:11:01	96.216%	5.541	5.748	90.351%	0.062	0.031	0.431	0.509
2	02:11:28	97.966%	5.726	5.796	92.767%	0.039	0.039	0.497	0.534
3	02:11:54	99.571%	5.586	5.890	94.717%	0.054	0.039	0.417	0.439
x		97.918%	5.618	5.811	92.611%	0.052	0.036	0.448	0.494
σ		1.678%	0.097	0.072	2.187%	0.012	0.005	0.043	0.049
%RSD		1.714	1.723	1.239	2.362	22.580	12.530	9.577	9.985

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:11:01	92.808%	-0.497	2.122	2.181	7.248	6.968	97.634%	97.243%
2	02:11:28	94.630%	-0.524	2.196	2.384	7.638	7.120	102.350%	101.933%
3	02:11:54	94.898%	-0.415	2.235	2.412	8.206	7.618	104.060%	103.457%
x		94.112%	-0.479	2.184	2.326	7.697	7.235	101.348%	100.878%
σ		1.137%	0.057	0.057	0.126	0.482	0.340	3.328%	3.239%
%RSD		1.209	11.860	2.624	5.411	6.255	4.702	3.284	3.211

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:11:01	0.016	0.011	18.970	17.760	18.040	114.847%
2	02:11:28	0.038	0.013	19.910	19.310	19.330	114.410%
3	02:11:54	0.028	0.019	21.940	20.370	20.930	106.042%
x		0.028	0.014	20.270	19.140	19.430	111.766%
σ		0.011	0.004	1.518	1.312	1.448	4.962%
%RSD		39.780	31.330	7.487	6.853	7.453	4.440

MB 180-137213/1-A 4/9/2015 2:18:44 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	02:19:11	90.499%	-0.172	-1.385	-1.141	0.000	36.880	2.496	2.332
2	02:19:37	94.169%	-0.153	-0.727	-1.346	0.000	39.310	1.801	3.401
3	02:20:04	94.486%	-0.080	-0.174	-1.348	0.000	39.480	3.625	2.729
x		93.052%	-0.135	-0.762	-1.278	0.000	38.560	2.641	2.821
σ		2.216%	0.048	0.606	0.119	0.000	1.452	0.921	0.540
%RSD		2.382	35.840	79.570	9.310	0.000	3.765	34.870	19.150

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:19:11	0.335	35.430	0.000	-21.080	4.305	6.817	92.451%	-0.165
2	02:19:37	0.122	37.760	0.000	-25.770	29.400	10.030	92.984%	-0.138
3	02:20:04	0.106	39.640	0.000	-27.500	15.110	5.154	93.041%	-0.080
x		0.188	37.610	0.000	-24.780	16.270	7.333	92.825%	-0.127
σ		0.128	2.107	0.000	3.323	12.590	2.477	0.325%	0.043
%RSD		67.960	5.602	0.000	13.410	77.360	33.780	0.351	33.870

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:19:11	0.641	0.749	0.024	13.380	-8.134	-0.011	0.043	-0.044
2	02:19:37	1.787	0.764	0.019	13.330	-0.840	-0.013	0.028	-0.182
3	02:20:04	1.252	0.719	0.020	10.820	-8.466	0.009	0.018	-0.220
x		1.227	0.744	0.021	12.510	-5.813	-0.005	0.030	-0.148
σ		0.573	0.023	0.003	1.464	4.310	0.013	0.012	0.093
%RSD		46.730	3.066	12.210	11.700	74.140	247.000	41.870	62.450

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:19:11	-0.182	0.113	0.052	-0.882	-1.745	-0.618	0.000	-0.007
2	02:19:37	-0.061	-0.049	0.152	0.063	-1.394	-0.109	0.000	0.011
3	02:20:04	-0.210	0.084	0.155	0.554	0.389	-0.699	0.000	0.007
x		-0.151	0.049	0.120	-0.088	-0.917	-0.475	0.000	0.004
σ		0.079	0.087	0.059	0.730	1.144	0.320	0.000	0.010
%RSD		52.640	176.200	48.930	825.200	124.800	67.290	0.000	272.500

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:19:11	94.911%	-0.067	-0.108	94.458%	-0.005	-0.013	-0.009	-0.040
2	02:19:37	97.276%	-0.116	-0.114	95.631%	-0.001	0.019	0.018	-0.037
3	02:20:04	97.716%	-0.149	-0.103	96.913%	-0.006	0.017	0.008	0.004
x		96.634%	-0.111	-0.108	95.667%	-0.004	0.008	0.006	-0.024
σ		1.509%	0.041	0.006	1.228%	0.003	0.018	0.014	0.024
%RSD		1.561	37.380	5.110	1.284	63.140	225.100	242.100	99.920

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:19:11	93.684%	-0.704	-0.067	-0.057	-0.044	-0.012	97.245%	97.087%
2	02:19:37	96.506%	-0.675	-0.079	-0.069	-0.058	0.017	98.533%	99.699%
3	02:20:04	96.557%	-0.661	-0.050	-0.032	-0.047	0.053	100.041%	100.611%
x		95.582%	-0.680	-0.065	-0.053	-0.050	0.019	98.606%	99.132%
σ		1.644%	0.022	0.015	0.019	0.007	0.032	1.399%	1.829%
%RSD		1.720	3.213	22.210	36.090	13.880	166.800	1.419	1.845

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:19:11	0.005	-0.005	-0.007	0.004	-0.001	119.305%
2	02:19:37	-0.013	-0.002	-0.005	0.010	0.008	113.294%
3	02:20:04	0.012	-0.003	-0.015	0.034	-0.005	109.414%
x		0.001	-0.003	-0.009	0.016	0.001	114.004%
σ		0.013	0.002	0.005	0.016	0.007	4.984%
%RSD		1123.000	57.050	58.630	99.330	914.700	4.371

LCS 180-137213/2-A 4/9/2015 2:23:02 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	02:23:28	97.847%	48.960	984.800	957.200	0.000	48090.000	45530.000	44790.000
2	02:23:55	101.159%	49.220	959.700	932.600	0.000	47960.000	45340.000	44430.000
3	02:24:21	99.724%	46.830	960.200	952.300	0.000	48440.000	45150.000	44770.000
x		99.576%	48.340	968.300	947.400	0.000	48170.000	45340.000	44660.000
σ		1.661%	1.312	14.370	13.000	0.000	249.600	186.300	206.400
%RSD		1.668	2.713	1.484	1.372	0.000	0.518	0.411	0.462
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:23:28	1828.000	9172.000	0.000	49940.000	47670.000	50150.000	92.165%	983.500
2	02:23:55	1828.000	9136.000	0.000	49790.000	49330.000	51280.000	93.756%	997.300
3	02:24:21	1841.000	9179.000	0.000	50070.000	50320.000	51440.000	94.366%	1006.000
x		1833.000	9163.000	0.000	49930.000	49110.000	50960.000	93.429%	995.700
σ		7.174	23.030	0.000	138.000	1342.000	700.900	1.136%	11.510
%RSD		0.392	0.251	0.000	0.276	2.733	1.375	1.216	1.156
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:23:28	533.200	206.400	462.900	1065.000	1103.000	487.800	486.200	244.600
2	02:23:55	538.900	209.800	468.900	1079.000	1117.000	493.100	495.300	246.300
3	02:24:21	547.700	210.400	472.400	1089.000	1114.000	495.500	494.700	248.600
x		539.900	208.800	468.000	1078.000	1111.000	492.100	492.100	246.500
σ		7.313	2.158	4.769	11.980	7.166	3.946	5.065	2.001
%RSD		1.354	1.033	1.019	1.111	0.645	0.802	1.029	0.812
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:23:28	247.800	479.500	481.600	41.090	9.040	9.738	0.000	1040.000
2	02:23:55	248.700	487.900	490.600	44.850	8.219	9.139	0.000	993.200
3	02:24:21	251.900	489.100	492.100	38.030	10.370	11.080	0.000	1006.000
x		249.500	485.500	488.100	41.320	9.211	9.987	0.000	1013.000
σ		2.195	5.211	5.670	3.412	1.087	0.996	0.000	23.910
%RSD		0.880	1.073	1.162	8.258	11.800	9.970	0.000	2.360
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:23:28	93.043%	1043.000	1069.000	90.416%	49.890	49.560	51.160	41.970
2	02:23:55	97.349%	1060.000	1085.000	92.799%	49.400	49.900	51.720	41.450
3	02:24:21	97.495%	1063.000	1088.000	93.923%	49.600	50.350	51.890	40.030
x		95.962%	1055.000	1081.000	92.379%	49.630	49.930	51.590	41.150
σ		2.529%	10.710	10.150	1.791%	0.246	0.396	0.385	1.007
%RSD		2.635	1.015	0.939	1.938	0.495	0.794	0.746	2.447
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:23:28	91.356%	2152.000	517.100	516.800	1951.000	1959.000	97.002%	97.812%
2	02:23:55	94.026%	2209.000	529.700	532.600	2002.000	1997.000	99.897%	99.144%
3	02:24:21	94.058%	2253.000	529.000	533.500	2034.000	2024.000	98.993%	99.805%
x		93.147%	2205.000	525.300	527.600	1996.000	1993.000	98.631%	98.920%
σ		1.551%	50.980	7.070	9.375	41.640	32.720	1.481%	1.015%
%RSD		1.665	2.313	1.346	1.777	2.086	1.642	1.502	1.026
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:23:28	48.870	50.390	20.080	20.880	20.230	90.523%		
2	02:23:55	50.020	51.060	20.570	21.270	20.640	92.506%		
3	02:24:21	51.100	52.350	20.910	21.430	20.900	90.950%		
x		50.000	51.270	20.520	21.190	20.590	91.326%		
σ		1.115	0.994	0.413	0.286	0.341	1.044%		
%RSD		2.229	1.939	2.013	1.351	1.656	1.143		

LCSD 180-137213/3-A 4/9/2015 2:27:17 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	02:27:44	97.181%	46.210	930.600	948.400	0.000	47310.000	44880.000	43920.000
2	02:28:10	98.939%	48.390	928.200	926.400	0.000	47320.000	44620.000	43940.000
3	02:28:37	98.888%	48.600	940.400	922.300	0.000	47300.000	45260.000	43880.000
x		98.336%	47.730	933.100	932.400	0.000	47310.000	44920.000	43910.000
σ		1.001%	1.323	6.469	14.050	0.000	8.819	320.300	30.440
%RSD		1.018	2.773	0.693	1.506	0.000	0.019	0.713	0.069
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:44	1802.000	9016.000	0.000	48370.000	47170.000	48650.000	91.392%	961.000
2	02:28:10	1815.000	8959.000	0.000	48890.000	48470.000	49740.000	91.677%	977.400
3	02:28:37	1813.000	9032.000	0.000	48980.000	48260.000	50920.000	92.323%	985.300
x		1810.000	9002.000	0.000	48740.000	47970.000	49770.000	91.798%	974.600
σ		7.058	38.070	0.000	327.900	699.200	1134.000	0.477%	12.440
%RSD		0.390	0.423	0.000	0.673	1.458	2.279	0.519	1.277
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:44	518.600	203.500	454.800	1047.000	1088.000	477.800	478.100	241.400
2	02:28:10	526.800	207.000	466.700	1071.000	1144.000	489.800	492.600	247.700
3	02:28:37	517.900	208.000	469.400	1071.000	1110.000	488.100	487.700	243.100
x		521.100	206.200	463.600	1063.000	1114.000	485.200	486.100	244.100
σ		4.946	2.388	7.796	13.970	27.760	6.482	7.358	3.276
%RSD		0.949	1.159	1.682	1.315	2.492	1.336	1.514	1.342
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:44	244.300	475.000	478.600	41.850	10.180	10.860	0.000	1040.000
2	02:28:10	248.900	487.500	489.500	45.400	8.551	10.170	0.000	1062.000
3	02:28:37	243.400	489.300	482.100	39.100	8.256	10.130	0.000	1051.000
x		245.500	483.900	483.400	42.120	8.995	10.390	0.000	1051.000
σ		2.961	7.801	5.552	3.159	1.034	0.408	0.000	10.970
%RSD		1.206	1.612	1.149	7.502	11.500	3.932	0.000	1.044
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:44	91.739%	1025.000	1035.000	88.105%	48.790	49.290	49.320	39.000
2	02:28:10	94.131%	1041.000	1059.000	90.299%	48.400	47.760	50.930	38.360
3	02:28:37	95.548%	1051.000	1074.000	89.953%	48.320	48.420	49.880	40.540
x		93.806%	1039.000	1056.000	89.452%	48.500	48.490	50.040	39.300
σ		1.925%	12.880	19.530	1.180%	0.252	0.764	0.815	1.123
%RSD		2.052	1.240	1.849	1.319	0.519	1.575	1.628	2.857
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:27:44	90.046%	2117.000	503.800	507.100	1949.000	1938.000	94.266%	94.768%
2	02:28:10	93.951%	2137.000	504.600	504.300	1950.000	1947.000	95.963%	96.809%
3	02:28:37	94.249%	2148.000	515.700	503.300	1947.000	1936.000	98.706%	97.212%
x		92.748%	2134.000	508.100	504.900	1949.000	1941.000	96.311%	96.263%
σ		2.345%	15.920	6.660	1.969	1.334	5.876	2.241%	1.310%
%RSD		2.529	0.746	1.311	0.390	0.068	0.303	2.326	1.361
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:27:44	49.190	49.850	19.570	20.850	20.250	83.681%		
2	02:28:10	47.100	48.810	19.130	20.150	19.120	90.231%		
3	02:28:37	47.120	49.610	19.110	19.830	19.170	90.581%		
x		47.800	49.430	19.270	20.280	19.510	88.164%		
σ		1.199	0.547	0.264	0.521	0.639	3.887%		
%RSD		2.508	1.107	1.370	2.568	3.273	4.409		

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:47	97.285%	-0.181	16.320	15.740	0.000	34150.000	19600.000	19320.000
2	02:36:14	97.043%	-0.133	13.760	15.170	0.000	34470.000	19870.000	19460.000
3	02:36:40	96.470%	-0.156	19.480	14.920	0.000	34140.000	19660.000	19240.000
x		96.933%	-0.157	16.520	15.280	0.000	34250.000	19710.000	19340.000
σ		0.418%	0.024	2.863	0.422	0.000	188.300	142.700	110.300
%RSD		0.431	15.390	17.330	2.763	0.000	0.550	0.724	0.570

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:47	94.640	6122.000	0.000	4146.000	101900.000	104900.000	88.487%	3.320
2	02:36:14	95.510	6137.000	0.000	4231.000	106500.000	108300.000	88.105%	3.519
3	02:36:40	94.860	6077.000	0.000	4183.000	105500.000	106900.000	88.827%	3.759
x		95.000	6112.000	0.000	4187.000	104600.000	106700.000	88.473%	3.533
σ		0.451	31.240	0.000	42.690	2396.000	1678.000	0.361%	0.220
%RSD		0.475	0.511	0.000	1.020	2.290	1.572	0.408	6.220

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:47	20.380	15.980	58.100	777.800	1140.000	0.676	1.793	0.708
2	02:36:14	6.570	14.820	59.500	806.600	1143.000	0.670	1.737	0.727
3	02:36:40	13.070	14.430	59.230	799.000	1145.000	0.679	1.522	0.742
x		13.340	15.080	58.950	794.500	1143.000	0.675	1.684	0.725
σ		6.909	0.808	0.744	14.940	2.583	0.005	0.143	0.017
%RSD		51.800	5.359	1.262	1.881	0.226	0.709	8.513	2.357

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:47	0.856	11.730	12.280	4.031	-1.809	-0.991	0.000	213.100
2	02:36:14	0.967	12.380	12.490	0.338	-2.524	-0.147	0.000	217.700
3	02:36:40	0.846	11.950	12.080	1.363	-1.353	-0.011	0.000	222.100
x		0.890	12.020	12.280	1.911	-1.896	-0.383	0.000	217.700
σ		0.067	0.334	0.208	1.907	0.590	0.531	0.000	4.516
%RSD		7.530	2.777	1.697	99.780	31.140	138.700	0.000	2.075

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:47	91.854%	1.022	0.970	85.263%	0.022	0.006	0.069	-0.107
2	02:36:14	91.897%	0.771	0.833	87.095%	0.021	0.016	-0.016	0.013
3	02:36:40	92.954%	0.886	0.826	89.138%	0.010	0.010	0.143	-0.019
x		92.235%	0.893	0.876	87.165%	0.018	0.011	0.065	-0.038
σ		0.623%	0.126	0.081	1.938%	0.007	0.005	0.079	0.062
%RSD		0.675	14.070	9.208	2.224	36.630	43.900	122.000	165.700

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:47	86.005%	6.298	0.107	0.184	41.370	41.370	90.398%	89.634%
2	02:36:14	88.640%	4.240	0.149	0.195	42.750	42.310	93.603%	92.459%
3	02:36:40	90.391%	3.063	0.149	0.201	43.710	42.520	94.229%	95.441%
x		88.345%	4.534	0.135	0.193	42.610	42.060	92.743%	92.511%
σ		2.208%	1.638	0.024	0.008	1.173	0.611	2.055%	2.904%
%RSD		2.499	36.120	17.940	4.402	2.753	1.452	2.216	3.139

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:35:47	0.056	0.046	0.369	0.343	0.359	75.808%
2	02:36:14	0.052	0.032	0.333	0.325	0.329	77.951%
3	02:36:40	0.070	0.031	0.340	0.247	0.288	85.525%
x		0.060	0.036	0.347	0.305	0.325	79.761%
σ		0.010	0.009	0.019	0.051	0.036	5.105%
%RSD		16.240	24.130	5.433	16.870	10.980	6.401

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:40:02	93.400%	-0.076	66.280	60.910	0.000	41000.000	19180.000	18880.000
2	02:40:28	92.051%	-0.224	58.680	63.890	0.000	41910.000	19530.000	19130.000
3	02:40:54	91.808%	-0.098	62.730	59.720	0.000	42470.000	19970.000	19370.000
x		92.419%	-0.133	62.570	61.510	0.000	41790.000	19560.000	19130.000
σ		0.858%	0.080	3.803	2.151	0.000	741.800	392.800	244.400
%RSD		0.928	60.150	6.079	3.497	0.000	1.775	2.008	1.278
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:40:02	189.100	4319.000	0.000	7106.000	91500.000	94940.000	87.556%	4.593
2	02:40:28	191.600	4307.000	0.000	7190.000	94300.000	93470.000	89.743%	5.460
3	02:40:54	191.600	4389.000	0.000	7273.000	94450.000	97870.000	87.640%	4.270
x		190.800	4339.000	0.000	7190.000	93420.000	95430.000	88.313%	4.774
σ		1.417	44.460	0.000	83.720	1665.000	2237.000	1.239%	0.615
%RSD		0.743	1.025	0.000	1.164	1.782	2.344	1.403	12.890
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:40:02	9.581	13.840	307.300	765.100	1076.000	0.804	2.367	0.918
2	02:40:28	8.254	13.480	308.400	772.000	1084.000	0.834	2.394	1.059
3	02:40:54	10.440	13.360	312.800	785.800	1087.000	0.812	2.279	1.069
x		9.426	13.560	309.500	774.300	1082.000	0.817	2.347	1.015
σ		1.102	0.253	2.929	10.550	5.422	0.016	0.060	0.085
%RSD		11.690	1.865	0.947	1.362	0.501	1.921	2.571	8.344
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:40:02	1.085	74.770	73.510	2.457	1.135	-0.779	0.000	250.200
2	02:40:28	1.086	75.420	74.950	8.215	-2.011	0.142	0.000	251.100
3	02:40:54	1.071	74.210	75.340	5.361	-2.470	-0.183	0.000	247.200
x		1.081	74.800	74.600	5.344	-1.116	-0.273	0.000	249.500
σ		0.008	0.607	0.966	2.879	1.962	0.467	0.000	2.046
%RSD		0.740	0.812	1.294	53.870	175.900	170.800	0.000	0.820
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:40:02	90.162%	0.741	0.794	86.790%	0.006	0.008	0.024	0.037
2	02:40:28	92.680%	0.659	0.657	89.335%	0.020	0.012	0.102	-0.067
3	02:40:54	95.201%	0.756	0.694	89.027%	0.022	0.053	0.090	0.080
x		92.681%	0.718	0.715	88.384%	0.016	0.025	0.072	0.017
σ		2.519%	0.052	0.071	1.389%	0.009	0.025	0.042	0.076
%RSD		2.718	7.290	9.911	1.571	53.920	101.800	58.310	449.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:40:02	89.892%	0.215	0.070	0.150	55.600	54.200	94.088%	94.323%
2	02:40:28	91.107%	0.363	0.107	0.200	57.170	55.750	95.780%	96.392%
3	02:40:54	92.967%	0.373	0.093	0.169	57.460	55.720	98.266%	98.194%
x		91.322%	0.317	0.090	0.173	56.740	55.220	96.045%	96.303%
σ		1.549%	0.089	0.019	0.025	1.005	0.888	2.101%	1.937%
%RSD		1.696	28.000	20.670	14.610	1.770	1.608	2.188	2.011
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:40:02	0.039	0.024	0.478	0.391	0.429	96.412%		
2	02:40:28	0.044	0.032	0.527	0.533	0.487	89.563%		
3	02:40:54	0.028	0.022	0.443	0.459	0.451	100.508%		
x		0.037	0.026	0.483	0.461	0.456	95.494%		
σ		0.008	0.005	0.042	0.071	0.030	5.530%		
%RSD		21.840	19.700	8.775	15.420	6.485	5.791		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:44:14	89.230%	-0.091	8085.000	8305.000	0.000	196900.000	49820.000	48890.000
2	02:44:40	88.375%	-0.115	8333.000	8531.000	0.000	200400.000	51200.000	50060.000
3	02:45:07	87.276%	-0.087	8453.000	8634.000	0.000	201000.000	51630.000	50080.000
x		88.294%	-0.098	8290.000	8490.000	0.000	199400.000	50880.000	49680.000
σ		0.980%	0.015	187.500	168.200	0.000	2225.000	947.100	680.300
%RSD		1.109	15.830	2.261	1.982	0.000	1.116	1.861	1.369

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:44:14	14.700	5168.000	0.000	11550.000	111300.000	114300.000	85.455%	1.753
2	02:44:40	14.480	5227.000	0.000	11740.000	114800.000	117700.000	86.522%	1.227
3	02:45:07	14.520	5255.000	0.000	11740.000	115900.000	117900.000	86.882%	1.682
x		14.570	5217.000	0.000	11680.000	114000.000	116600.000	86.287%	1.554
σ		0.119	44.400	0.000	109.900	2394.000	2033.000	0.742%	0.286
%RSD		0.814	0.851	0.000	0.941	2.100	1.743	0.860	18.380

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:44:14	1.337	12.340	6271.000	7097.000	6853.000	1.937	316.300	1.416
2	02:44:40	7.252	12.250	6333.000	7163.000	7019.000	1.983	324.500	1.494
3	02:45:07	15.080	11.880	6318.000	7175.000	6962.000	2.082	321.700	1.421
x		7.890	12.160	6307.000	7145.000	6944.000	2.000	320.800	1.443
σ		6.894	0.243	32.270	41.910	84.330	0.074	4.178	0.044
%RSD		87.380	1.997	0.512	0.587	1.214	3.713	1.302	3.019

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:44:14	1.436	4.759	4.816	0.265	-1.701	0.804	0.000	159.600
2	02:44:40	1.532	5.005	5.210	1.542	-0.692	1.569	0.000	163.400
3	02:45:07	1.513	4.854	4.410	-0.719	-2.425	-0.073	0.000	158.900
x		1.493	4.873	4.812	0.362	-1.606	0.767	0.000	160.600
σ		0.051	0.124	0.400	1.134	0.870	0.822	0.000	2.431
%RSD		3.387	2.547	8.317	312.800	54.200	107.200	0.000	1.513

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:44:14	88.598%	0.259	0.288	85.521%	0.978	1.088	0.005	0.001
2	02:44:40	90.463%	0.193	0.230	86.900%	0.970	0.944	0.055	-0.016
3	02:45:07	93.701%	0.258	0.168	88.138%	0.942	0.958	0.143	-0.016
x		90.921%	0.236	0.229	86.853%	0.963	0.997	0.068	-0.010
σ		2.582%	0.038	0.060	1.309%	0.019	0.079	0.070	0.010
%RSD		2.840	16.010	26.190	1.507	1.959	7.949	103.400	98.870

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:44:14	88.237%	22.730	0.008	0.033	83.000	83.510	91.631%	92.610%
2	02:44:40	88.903%	23.770	0.025	0.054	85.580	86.050	93.688%	94.562%
3	02:45:07	90.625%	22.790	0.041	0.082	86.460	84.070	96.315%	97.621%
x		89.255%	23.100	0.025	0.056	85.020	84.540	93.878%	94.931%
σ		1.232%	0.585	0.017	0.025	1.796	1.334	2.347%	2.526%
%RSD		1.381	2.534	67.530	43.670	2.113	1.578	2.501	2.661

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:44:14	0.026	0.023	0.643	0.605	0.567	89.995%
2	02:44:40	0.022	0.012	0.612	0.586	0.581	95.128%
3	02:45:07	0.030	0.016	0.635	0.520	0.564	96.008%
x		0.026	0.017	0.630	0.570	0.571	93.710%
σ		0.004	0.005	0.016	0.044	0.009	3.248%
%RSD		15.840	31.380	2.547	7.800	1.642	3.466

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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	02:48:29	92.324%	-0.074	163.200	166.500	0.000	42130.000	22600.000	22270.000
2	02:48:56	90.202%	0.136	171.600	168.900	0.000	43500.000	23220.000	22710.000
3	02:49:22	89.899%	-0.042	163.100	167.200	0.000	43380.000	23400.000	22890.000
x		90.808%	0.007	166.000	167.500	0.000	43000.000	23080.000	22620.000
σ		1.321%	0.113	4.905	1.248	0.000	758.800	416.500	320.200
%RSD		1.455	1645.000	2.955	0.745	0.000	1.764	1.805	1.415

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:48:29	3.329	4552.000	0.000	9879.000	118200.000	122300.000	87.171%	1.152
2	02:48:56	3.485	4679.000	0.000	10100.000	121700.000	124200.000	87.922%	0.862
3	02:49:22	3.312	4650.000	0.000	10110.000	122500.000	123000.000	88.468%	1.675
x		3.375	4627.000	0.000	10030.000	120800.000	123200.000	87.854%	1.230
σ		0.095	66.370	0.000	130.700	2293.000	938.300	0.651%	0.412
%RSD		2.824	1.434	0.000	1.303	1.898	0.762	0.741	33.510

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:48:29	7.126	11.930	115.800	480.900	980.500	0.791	2.180	0.686
2	02:48:56	18.050	11.530	118.700	493.200	964.100	0.820	2.203	0.576
3	02:49:22	6.456	11.470	118.700	491.800	978.200	0.763	2.008	0.460
x		10.550	11.640	117.700	488.600	974.200	0.791	2.130	0.574
σ		6.512	0.248	1.640	6.723	8.840	0.028	0.107	0.113
%RSD		61.750	2.132	1.393	1.376	0.907	3.586	5.020	19.700

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:48:29	0.657	5.377	4.954	4.251	-2.799	-0.094	0.000	321.200
2	02:48:56	0.895	5.132	5.412	7.659	-2.288	0.635	0.000	330.100
3	02:49:22	0.960	5.481	5.792	1.680	-1.207	-0.150	0.000	336.300
x		0.837	5.330	5.386	4.530	-2.098	0.130	0.000	329.200
σ		0.160	0.179	0.420	2.999	0.813	0.438	0.000	7.623
%RSD		19.080	3.356	7.789	66.210	38.730	336.300	0.000	2.316

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:48:29	90.739%	0.100	0.185	86.945%	0.013	0.001	0.014	0.011
2	02:48:56	93.002%	0.104	0.105	89.556%	-0.002	0.037	0.043	0.066
3	02:49:22	93.554%	0.073	0.177	91.260%	0.012	0.011	0.078	0.028
x		92.432%	0.092	0.155	89.254%	0.008	0.016	0.045	0.035
σ		1.491%	0.017	0.044	2.173%	0.008	0.019	0.032	0.028
%RSD		1.614	18.190	28.450	2.435	107.100	115.000	71.120	80.520

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:48:29	89.733%	-0.068	0.067	0.113	49.510	47.330	95.797%	94.231%
2	02:48:56	89.633%	-0.098	0.070	0.072	50.960	50.620	97.214%	95.656%
3	02:49:22	94.229%	-0.096	0.095	0.092	52.000	49.410	96.747%	98.625%
x		91.198%	-0.087	0.077	0.092	50.830	49.120	96.586%	96.171%
σ		2.625%	0.017	0.015	0.020	1.248	1.665	0.722%	2.242%
%RSD		2.878	19.220	19.810	21.980	2.455	3.389	0.747	2.331

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	02:48:29	0.151	0.139	0.112	0.124	0.117	97.697%
2	02:48:56	0.155	0.150	0.131	0.177	0.134	94.721%
3	02:49:22	0.164	0.154	0.083	0.081	0.091	102.225%
x		0.157	0.148	0.109	0.128	0.114	98.214%
σ		0.007	0.008	0.024	0.048	0.022	3.778%
%RSD		4.275	5.243	21.830	37.660	19.110	3.847

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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	02:52:45	93.678%	-0.102	12.410	11.850	0.000	4969.000	3318.000	3251.000
2	02:53:11	91.066%	-0.147	13.680	13.160	0.000	5110.000	3454.000	3378.000
3	02:53:38	92.920%	-0.001	12.820	12.600	0.000	5113.000	3458.000	3301.000
x		92.554%	-0.083	12.970	12.540	0.000	5064.000	3410.000	3310.000
σ		1.344%	0.075	0.644	0.658	0.000	82.560	79.530	63.880
%RSD		1.452	89.670	4.967	5.247	0.000	1.630	2.332	1.930
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:52:45	253.800	4680.000	0.000	1842.000	47800.000	48130.000	89.812%	6.295
2	02:53:11	270.200	4819.000	0.000	1852.000	48190.000	50190.000	89.328%	8.552
3	02:53:38	264.200	4771.000	0.000	1879.000	49030.000	50620.000	89.341%	6.231
x		262.700	4757.000	0.000	1858.000	48340.000	49650.000	89.494%	7.026
σ		8.298	70.100	0.000	18.750	626.600	1329.000	0.276%	1.322
%RSD		3.159	1.474	0.000	1.009	1.296	2.677	0.308	18.820
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:52:45	10.260	12.060	32.030	807.400	906.100	0.426	0.581	0.664
2	02:53:11	15.550	12.320	33.140	834.700	940.300	0.477	0.351	0.958
3	02:53:38	13.680	11.740	33.980	834.900	932.800	0.514	0.423	0.909
x		13.160	12.040	33.050	825.700	926.400	0.473	0.452	0.844
σ		2.687	0.289	0.976	15.850	17.980	0.044	0.118	0.157
%RSD		20.410	2.402	2.954	1.920	1.941	9.322	26.020	18.650
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:52:45	0.799	5.297	5.559	1.885	-0.768	-0.725	0.000	103.000
2	02:53:11	1.023	5.385	5.487	2.354	-2.152	-0.041	0.000	105.300
3	02:53:38	0.851	5.266	5.327	-1.950	-2.172	-0.578	0.000	104.900
x		0.891	5.316	5.458	0.763	-1.697	-0.448	0.000	104.400
σ		0.118	0.062	0.119	2.361	0.805	0.360	0.000	1.233
%RSD		13.190	1.159	2.175	309.400	47.420	80.380	0.000	1.182
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:52:45	92.726%	0.001	0.013	90.282%	0.010	0.014	0.061	-0.067
2	02:53:11	95.106%	0.064	0.048	90.897%	0.037	0.011	0.009	0.065
3	02:53:38	95.433%	0.008	-0.001	92.130%	0.016	0.027	0.066	-0.039
x		94.421%	0.024	0.020	91.103%	0.021	0.018	0.046	-0.014
σ		1.477%	0.035	0.025	0.941%	0.014	0.009	0.032	0.069
%RSD		1.565	143.200	127.000	1.033	68.310	49.040	69.220	502.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:52:45	91.513%	-0.417	-0.008	-0.029	20.330	20.220	94.836%	96.204%
2	02:53:11	97.230%	-0.347	0.012	-0.013	19.840	19.830	96.825%	99.333%
3	02:53:38	96.121%	-0.349	-0.033	0.036	20.750	19.980	99.258%	98.733%
x		94.955%	-0.371	-0.010	-0.002	20.310	20.010	96.973%	98.090%
σ		3.032%	0.040	0.023	0.034	0.460	0.197	2.215%	1.661%
%RSD		3.193	10.700	230.200	1523.000	2.265	0.985	2.284	1.693
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:52:45	0.017	-0.002	0.532	0.398	0.452	96.806%		
2	02:53:11	0.019	0.006	0.489	0.404	0.417	110.478%		
3	02:53:38	0.010	0.008	0.494	0.420	0.458	106.476%		
x		0.016	0.004	0.505	0.407	0.442	104.587%		
σ		0.005	0.006	0.024	0.012	0.022	7.029%		
%RSD		29.210	144.900	4.712	2.828	5.002	6.721		

180-42504-B-6-A SD@5 4/9/2015 2:56:33 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	02:56:59	88.167%	-0.011	6.400	4.803	0.000	1013.000	693.200	680.400
2	02:57:26	86.554%	0.021	6.848	5.133	0.000	1042.000	712.600	691.500
3	02:57:52	88.047%	-0.037	5.664	5.926	0.000	1030.000	699.300	689.700
x		87.589%	-0.009	6.304	5.287	0.000	1028.000	701.700	687.200
σ		0.899%	0.029	0.598	0.577	0.000	14.430	9.909	5.962
%RSD		1.026	319.000	9.481	10.920	0.000	1.403	1.412	0.868
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:59	53.660	926.400	0.000	343.100	9470.000	9194.000	89.315%	1.144
2	02:57:26	54.630	937.100	0.000	341.300	9323.000	9408.000	89.805%	1.074
3	02:57:52	53.490	930.000	0.000	343.400	9714.000	9663.000	89.350%	1.051
x		53.930	931.200	0.000	342.600	9502.000	9421.000	89.490%	1.090
σ		0.618	5.453	0.000	1.113	197.500	234.600	0.274%	0.049
%RSD		1.145	0.586	0.000	0.325	2.078	2.491	0.306	4.456
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:59	3.231	2.368	6.762	159.200	185.800	0.087	0.439	0.029
2	02:57:26	4.069	2.451	6.766	160.800	188.600	0.095	0.385	0.022
3	02:57:52	4.435	2.673	6.663	160.300	184.900	0.058	0.155	-0.072
x		3.912	2.497	6.731	160.100	186.500	0.080	0.326	-0.007
σ		0.617	0.158	0.058	0.785	1.951	0.020	0.151	0.056
%RSD		15.780	6.318	0.868	0.490	1.046	24.480	46.190	829.400
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:59	0.117	1.171	1.359	-0.743	-1.237	-1.422	0.000	20.010
2	02:57:26	0.158	1.042	1.311	-1.762	-1.081	-0.316	0.000	21.070
3	02:57:52	0.172	0.947	1.350	0.595	-1.102	-1.167	0.000	20.660
x		0.149	1.053	1.340	-0.637	-1.140	-0.968	0.000	20.580
σ		0.029	0.113	0.025	1.182	0.085	0.579	0.000	0.532
%RSD		19.440	10.690	1.894	185.700	7.440	59.780	0.000	2.587
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:59	91.966%	-0.116	-0.117	90.922%	0.024	-0.000	0.080	0.048
2	02:57:26	93.797%	-0.051	-0.119	93.246%	0.009	0.011	0.105	0.064
3	02:57:52	95.117%	-0.073	-0.069	92.881%	0.016	0.006	0.047	0.009
x		93.627%	-0.080	-0.102	92.350%	0.016	0.006	0.077	0.040
σ		1.583%	0.033	0.028	1.250%	0.008	0.006	0.029	0.028
%RSD		1.690	41.140	27.800	1.353	47.160	100.700	37.280	71.040
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:56:59	92.577%	-0.745	-0.079	-0.042	3.840	3.990	94.120%	94.271%
2	02:57:26	94.926%	-0.714	-0.080	-0.038	4.114	4.229	96.813%	98.038%
3	02:57:52	95.707%	-0.737	-0.047	-0.020	3.954	3.982	99.581%	98.890%
x		94.403%	-0.732	-0.069	-0.033	3.969	4.067	96.838%	97.066%
σ		1.629%	0.016	0.019	0.011	0.138	0.140	2.731%	2.458%
%RSD		1.726	2.226	27.000	34.110	3.467	3.444	2.820	2.533
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	02:56:59	0.017	0.001	0.071	0.079	0.068	104.022%		
2	02:57:26	0.010	0.002	0.059	0.079	0.054	110.631%		
3	02:57:52	0.010	0.002	0.101	0.044	0.066	111.115%		
x		0.012	0.002	0.077	0.067	0.063	108.589%		
σ		0.004	0.001	0.022	0.021	0.007	3.962%		
%RSD		35.510	60.250	28.270	30.640	11.450	3.649		

CCV 1487954 4/9/2015 3:04:13 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	03:04:39	92.154%	98.750	102.900	101.600	0.000	48540.000	47710.000	47600.000
2	03:05:06	91.248%	99.180	99.540	103.400	0.000	49240.000	48850.000	48510.000
3	03:05:32	92.320%	103.300	99.470	102.400	0.000	49160.000	48720.000	48180.000
x		91.907%	100.399%	100.638%	102.452%	0.000	97.959%	96.851%	96.196%
σ		0.577%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.628	2.482	1.948	0.867	0.000	0.785	1.291	0.954
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:04:39	461.600	5210.000	0.000	49000.000	47040.000	48980.000	94.531%	96.370
2	03:05:06	467.900	4878.000	0.000	49220.000	48530.000	49830.000	95.762%	98.660
3	03:05:32	469.400	5260.000	0.000	49060.000	47750.000	50070.000	97.120%	97.340
x		93.260%	102.318%	0.000	98.187%	95.543%	99.255%	95.804%	97.456%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.295%	n/a
%RSD		0.890	4.060	0.000	0.233	1.564	1.151	1.352	1.181
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:04:39	95.460	94.500	457.900	24390.000	22860.000	94.640	97.990	95.760
2	03:05:06	98.160	97.840	468.600	24780.000	23450.000	97.390	100.700	99.300
3	03:05:32	95.950	97.050	466.500	24660.000	23580.000	96.580	97.850	99.520
x		96.523%	96.466%	92.865%	98.444%	93.196%	96.203%	98.855%	98.197%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.492	1.809	1.223	0.798	1.640	1.467	1.632	2.149
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:04:39	96.560	96.840	96.090	96.920	94.710	98.020	0.000	96.850
2	03:05:06	99.000	98.310	97.360	98.930	102.000	99.740	0.000	99.180
3	03:05:32	99.480	97.260	98.900	97.710	99.240	100.800	0.000	97.270
x		98.348%	97.472%	97.451%	97.855%	98.642%	99.530%	0.000	97.768%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.589	0.777	1.446	1.035	3.719	1.428	0.000	1.272
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:04:39	96.195%	93.300	94.330	93.240%	95.820	95.200	95.140	92.490
2	03:05:06	97.798%	95.930	98.150	95.932%	97.160	96.080	97.940	94.800
3	03:05:32	99.460%	99.460	100.600	96.900%	97.070	97.200	99.580	95.640
x		97.818%	96.231%	97.691%	95.357%	96.681%	96.162%	97.554%	94.310%
σ		1.633%	n/a	n/a	1.897%	n/a	n/a	n/a	n/a
%RSD		1.669	3.215	3.233	1.989	0.776	1.044	2.297	1.727
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:04:39	96.007%	95.530	97.080	97.780	96.470	93.300	97.313%	98.647%
2	03:05:06	97.475%	98.520	98.670	99.810	97.540	96.130	100.362%	101.042%
3	03:05:32	96.853%	99.470	99.860	102.500	99.740	98.330	101.345%	102.662%
x		96.779%	97.839%	98.535%	100.030%	97.920%	95.921%	99.673%	100.784%
σ		0.737%	n/a	n/a	n/a	n/a	n/a	2.102%	2.020%
%RSD		0.761	2.102	1.420	2.367	1.701	2.628	2.109	2.004
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:04:39	95.090	98.680	94.090	97.490	94.620	109.013%		
2	03:05:06	96.640	99.580	97.940	100.900	98.070	109.591%		
3	03:05:32	97.700	101.200	97.230	101.700	98.420	109.622%		
x		96.476%	99.823%	96.421%	100.032%	97.040%	109.409%		
σ		n/a	n/a	n/a	n/a	n/a	0.343%		
%RSD		1.363	1.284	2.126	2.235	2.165	0.314		

CCB4 4/9/2015 3:11:58 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	03:12:24	100.263%	-0.233	2.823	2.421	0.000	-33.510	7.773	8.221
2	03:12:51	102.369%	-0.189	2.593	2.397	0.000	-33.210	6.914	8.779
3	03:13:17	103.284%	-0.034	2.807	2.037	0.000	-33.430	8.174	9.024
x		101.972%	-0.152	2.741	2.285	0.000	-33.380	7.620	8.675
σ		1.549%	0.104	0.128	0.215	0.000	0.154	0.644	0.412
%RSD		1.519	68.560	4.681	9.419	0.000	0.461	8.450	4.749

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:24	0.391	2.198	0.000	5.200	20.610	7.546	102.793%	-0.039
2	03:12:51	0.535	2.395	0.000	5.444	-13.150	7.611	103.147%	-0.145
3	03:13:17	0.471	1.946	0.000	1.067	22.760	10.630	103.157%	0.011
x		0.466	2.179	0.000	3.904	10.070	8.594	103.032%	-0.058
σ		0.072	0.225	0.000	2.460	20.140	1.759	0.207%	0.080
%RSD		15.550	10.330	0.000	63.010	199.900	20.470	0.201	138.800

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:24	-0.040	0.046	0.108	6.782	7.417	0.010	0.057	-0.051
2	03:12:51	0.149	-0.010	0.108	5.367	6.352	0.007	0.061	-0.152
3	03:13:17	0.077	-0.014	0.100	5.384	3.446	-0.010	0.118	-0.196
x		0.062	0.007	0.105	5.844	5.739	0.002	0.079	-0.133
σ		0.095	0.033	0.005	0.812	2.055	0.011	0.034	0.074
%RSD		153.300	459.000	4.466	13.890	35.820	434.200	43.540	55.890

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:24	-0.066	0.078	-0.137	-0.156	-0.479	-0.981	0.000	0.029
2	03:12:51	-0.070	0.011	0.098	0.127	-0.841	0.446	0.000	0.023
3	03:13:17	-0.156	-0.024	0.011	-0.085	-0.311	-0.350	0.000	0.021
x		-0.097	0.022	-0.009	-0.038	-0.544	-0.295	0.000	0.024
σ		0.051	0.052	0.119	0.147	0.271	0.715	0.000	0.004
%RSD		52.270	242.100	1292.000	388.200	49.790	242.200	0.000	16.280

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:24	103.149%	0.041	-0.041	103.172%	-0.001	0.004	-0.004	0.031
2	03:12:51	105.316%	0.034	-0.016	106.076%	0.009	0.016	0.002	-0.062
3	03:13:17	105.192%	-0.038	0.020	107.150%	-0.008	0.017	0.028	0.071
x		104.552%	0.012	-0.012	105.466%	0.000	0.012	0.009	0.013
σ		1.217%	0.044	0.031	2.058%	0.008	0.007	0.017	0.068
%RSD		1.164	351.500	248.300	1.952	4466.000	58.490	188.500	514.500

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:24	100.336%	-0.457	-0.033	-0.033	0.002	0.056	102.192%	101.409%
2	03:12:51	105.968%	-0.477	-0.006	-0.017	0.008	0.018	103.249%	104.427%
3	03:13:17	105.747%	-0.487	-0.023	-0.023	-0.034	0.000	106.246%	106.382%
x		104.017%	-0.474	-0.021	-0.024	-0.008	0.025	103.896%	104.072%
σ		3.190%	0.015	0.014	0.008	0.023	0.028	2.103%	2.505%
%RSD		3.066	3.205	67.130	32.330	279.900	113.800	2.024	2.407

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	03:12:24	0.019	0.006	0.028	0.045	0.034	109.840%
2	03:12:51	0.015	0.015	0.014	0.015	0.018	112.606%
3	03:13:17	0.020	0.007	-0.008	0.049	0.014	114.037%
x		0.018	0.009	0.011	0.036	0.022	112.161%
σ		0.003	0.005	0.018	0.018	0.011	2.134%
%RSD		15.600	52.010	158.400	50.230	47.910	1.903

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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	03:16:44	88.550%	-0.142	51.330	45.760	0.000	74950.000	20780.000	20400.000
2	03:17:11	89.192%	-0.247	47.080	48.310	0.000	75430.000	20800.000	20460.000
3	03:17:37	89.757%	-0.016	45.960	47.490	0.000	75610.000	20780.000	20390.000
x		89.166%	-0.135	48.120	47.190	0.000	75330.000	20780.000	20420.000
σ		0.604%	0.115	2.832	1.301	0.000	340.500	9.678	37.790
%RSD		0.677	85.300	5.885	2.757	0.000	0.452	0.047	0.185
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:44	33.420	3962.000	0.000	8528.000	88390.000	91520.000	90.033%	1.758
2	03:17:11	33.340	3967.000	0.000	8663.000	89910.000	90410.000	91.205%	1.729
3	03:17:37	34.090	3991.000	0.000	8771.000	90850.000	91360.000	90.497%	1.982
x		33.620	3973.000	0.000	8654.000	89720.000	91100.000	90.578%	1.823
σ		0.412	15.920	0.000	121.600	1239.000	599.800	0.590%	0.139
%RSD		1.227	0.401	0.000	1.405	1.381	0.659	0.652	7.606
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:44	6.298	21.900	8.064	130.200	540.500	0.384	0.553	1.023
2	03:17:11	6.465	21.750	8.671	131.300	512.900	0.353	0.498	1.037
3	03:17:37	4.064	22.400	8.618	132.000	513.800	0.375	0.900	1.109
x		5.609	22.020	8.451	131.100	522.400	0.371	0.651	1.056
σ		1.340	0.341	0.336	0.929	15.680	0.016	0.218	0.046
%RSD		23.890	1.550	3.976	0.708	3.002	4.223	33.530	4.396
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:44	0.801	13.150	13.960	2.738	-0.736	-0.517	0.000	235.200
2	03:17:11	0.801	14.260	13.590	3.908	-1.775	1.323	0.000	244.100
3	03:17:37	1.151	14.680	14.220	3.402	-1.600	-0.084	0.000	246.600
x		0.918	14.030	13.920	3.349	-1.371	0.241	0.000	242.000
σ		0.202	0.786	0.320	0.587	0.556	0.962	0.000	6.027
%RSD		22.000	5.600	2.298	17.510	40.580	399.500	0.000	2.491
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:44	94.646%	0.631	0.547	88.543%	0.020	0.015	0.062	-0.005
2	03:17:11	95.831%	0.639	0.557	91.539%	0.011	0.021	0.010	0.018
3	03:17:37	96.979%	0.695	0.635	92.712%	0.007	0.037	-0.009	-0.023
x		95.819%	0.655	0.580	90.931%	0.013	0.024	0.021	-0.003
σ		1.167%	0.035	0.048	2.150%	0.007	0.012	0.037	0.020
%RSD		1.218	5.298	8.296	2.365	53.490	47.680	173.700	597.700
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:44	91.710%	2.780	0.149	0.128	62.030	62.930	96.849%	96.616%
2	03:17:11	94.603%	2.647	0.121	0.095	63.680	64.400	99.146%	99.092%
3	03:17:37	94.223%	2.443	0.092	0.170	65.880	64.560	99.725%	100.734%
x		93.512%	2.624	0.121	0.131	63.870	63.960	98.573%	98.814%
σ		1.572%	0.170	0.028	0.037	1.932	0.899	1.521%	2.073%
%RSD		1.681	6.466	23.490	28.500	3.025	1.405	1.543	2.098
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:16:44	0.051	0.042	0.160	0.153	0.158	107.916%		
2	03:17:11	0.036	0.024	0.185	0.151	0.166	105.525%		
3	03:17:37	0.041	0.039	0.188	0.178	0.173	107.344%		
x		0.043	0.035	0.178	0.161	0.166	106.928%		
σ		0.008	0.009	0.015	0.015	0.007	1.248%		
%RSD		17.560	27.070	8.475	9.551	4.497	1.167		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:59	93.354%	-0.076	8.103	7.839	0.000	6946.000	711.100	680.700
2	03:21:26	91.569%	-0.148	6.536	8.101	0.000	7033.000	708.100	703.000
3	03:21:53	92.641%	-0.025	9.866	7.604	0.000	7065.000	712.900	698.800
x		92.521%	-0.083	8.168	7.848	0.000	7014.000	710.700	694.100
σ		0.899%	0.062	1.666	0.249	0.000	61.450	2.415	11.860
%RSD		0.971	74.320	20.400	3.169	0.000	0.876	0.340	1.709
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:59	57.800	3428.000	0.000	10120.000	11560.000	11380.000	87.442%	1.670
2	03:21:26	59.980	3445.000	0.000	10200.000	11790.000	11540.000	89.108%	1.993
3	03:21:53	60.410	3475.000	0.000	10260.000	11920.000	11540.000	89.108%	2.083
x		59.400	3450.000	0.000	10190.000	11760.000	11490.000	88.553%	1.915
σ		1.400	23.940	0.000	70.750	181.000	94.620	0.962%	0.217
%RSD		2.357	0.694	0.000	0.694	1.539	0.824	1.086	11.320
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:59	7.624	11.430	4.699	95.680	134.300	0.181	0.955	2.823
2	03:21:26	11.240	11.400	4.739	91.580	135.500	0.159	0.529	2.806
3	03:21:53	8.583	11.430	4.795	92.570	132.300	0.171	0.816	3.056
x		9.150	11.420	4.744	93.280	134.000	0.170	0.767	2.895
σ		1.875	0.017	0.048	2.135	1.635	0.011	0.217	0.140
%RSD		20.490	0.152	1.017	2.289	1.220	6.333	28.300	4.818
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:59	3.067	17.260	16.120	2.895	-1.167	-0.223	0.000	77.550
2	03:21:26	2.972	16.430	16.290	5.141	-2.026	0.450	0.000	79.450
3	03:21:53	2.787	17.240	17.460	8.327	-1.368	-0.260	0.000	80.240
x		2.942	16.970	16.620	5.455	-1.521	-0.011	0.000	79.080
σ		0.142	0.475	0.735	2.729	0.449	0.400	0.000	1.380
%RSD		4.832	2.799	4.420	50.040	29.530	3732.000	0.000	1.745
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:59	91.645%	5.761	5.614	90.934%	0.003	0.005	0.179	0.053
2	03:21:26	93.141%	6.660	5.984	92.090%	0.021	0.019	0.176	0.013
3	03:21:53	93.942%	5.834	6.062	93.055%	0.011	0.023	0.182	0.168
x		92.910%	6.085	5.887	92.026%	0.012	0.015	0.179	0.078
σ		1.166%	0.500	0.240	1.062%	0.009	0.009	0.003	0.080
%RSD		1.255	8.210	4.070	1.154	79.930	61.860	1.574	103.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:20:59	91.639%	-0.110	1.239	1.225	5.353	4.895	95.110%	95.410%
2	03:21:26	92.648%	-0.225	1.255	1.371	5.314	4.966	96.643%	97.845%
3	03:21:53	94.542%	-0.242	1.396	1.232	5.514	5.858	97.345%	97.896%
x		92.943%	-0.193	1.297	1.276	5.394	5.240	96.366%	97.050%
σ		1.474%	0.072	0.086	0.082	0.106	0.537	1.143%	1.420%
%RSD		1.585	37.370	6.650	6.458	1.965	10.250	1.186	1.464
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:20:59	0.009	0.008	0.764	0.731	0.716	103.464%		
2	03:21:26	0.013	0.006	0.701	0.669	0.699	105.965%		
3	03:21:53	0.026	0.002	0.669	0.607	0.649	107.866%		
x		0.016	0.005	0.711	0.669	0.688	105.765%		
σ		0.009	0.003	0.048	0.062	0.035	2.208%		
%RSD		55.540	57.320	6.732	9.236	5.115	2.087		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:18	89.232%	-0.221	296.100	305.300	0.000	50120.000	15520.000	15180.000
2	03:25:45	88.564%	-0.012	313.100	301.700	0.000	50610.000	15790.000	15620.000
3	03:26:11	87.873%	-0.009	312.100	298.300	0.000	51000.000	15930.000	15650.000
x		88.556%	-0.081	307.100	301.800	0.000	50570.000	15750.000	15490.000
σ		0.679%	0.121	9.550	3.538	0.000	443.600	212.300	263.500
%RSD		0.767	150.600	3.110	1.172	0.000	0.877	1.348	1.701
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:18	6.502	5005.000	0.000	9740.000	120800.000	125700.000	85.405%	1.281
2	03:25:45	6.885	5055.000	0.000	9696.000	123900.000	126200.000	86.810%	0.942
3	03:26:11	6.944	5019.000	0.000	9766.000	125400.000	128400.000	86.886%	1.156
x		6.777	5026.000	0.000	9734.000	123400.000	126800.000	86.367%	1.126
σ		0.240	25.840	0.000	35.260	2315.000	1460.000	0.834%	0.171
%RSD		3.538	0.514	0.000	0.362	1.876	1.152	0.966	15.220
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:18	7.756	98.150	0.899	30.940	600.500	0.822	1.414	0.625
2	03:25:45	2.745	99.750	0.995	30.510	596.200	0.820	1.891	0.560
3	03:26:11	0.590	99.750	0.975	29.620	580.400	0.816	1.792	0.658
x		3.697	99.220	0.956	30.350	592.300	0.819	1.699	0.614
σ		3.676	0.924	0.051	0.673	10.580	0.003	0.252	0.050
%RSD		99.440	0.931	5.317	2.216	1.786	0.379	14.820	8.121
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:18	0.988	4.204	4.501	0.241	-1.232	0.008	0.000	242.300
2	03:25:45	0.903	4.420	4.606	0.550	-2.003	0.614	0.000	250.900
3	03:26:11	0.860	4.355	4.995	2.382	-1.331	0.823	0.000	247.400
x		0.917	4.326	4.701	1.058	-1.522	0.481	0.000	246.900
σ		0.065	0.111	0.260	1.157	0.419	0.423	0.000	4.321
%RSD		7.076	2.565	5.536	109.400	27.540	87.930	0.000	1.750
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:18	89.023%	0.093	0.104	84.556%	0.004	0.024	-0.006	0.068
2	03:25:45	90.783%	0.064	0.105	86.902%	0.021	-0.002	0.064	0.080
3	03:26:11	93.348%	0.115	0.154	87.215%	0.013	0.010	0.083	0.045
x		91.051%	0.091	0.121	86.225%	0.013	0.011	0.047	0.064
σ		2.175%	0.025	0.029	1.453%	0.008	0.013	0.046	0.018
%RSD		2.389	27.950	23.610	1.685	64.790	121.700	98.900	27.350
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:25:18	88.972%	-0.490	0.054	0.107	49.280	48.960	92.955%	92.345%
2	03:25:45	90.717%	-0.435	0.044	0.063	49.700	48.550	93.593%	94.796%
3	03:26:11	91.588%	-0.303	0.064	0.108	50.200	49.060	96.356%	95.426%
x		90.425%	-0.409	0.054	0.093	49.730	48.860	94.302%	94.189%
σ		1.332%	0.096	0.010	0.026	0.462	0.271	1.808%	1.628%
%RSD		1.473	23.520	18.270	27.870	0.930	0.554	1.917	1.728
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:25:18	0.016	0.016	0.062	0.087	0.066	91.659%		
2	03:25:45	0.018	0.001	0.073	0.064	0.066	93.901%		
3	03:26:11	-0.004	0.009	0.066	0.094	0.074	95.399%		
x		0.010	0.009	0.067	0.082	0.069	93.653%		
σ		0.012	0.008	0.006	0.015	0.005	1.882%		
%RSD		125.900	88.400	8.412	18.880	6.707	2.010		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:29:37	90.903%	-0.121	3.716	3.599	0.000	1279.000	1490.000	1468.000
2	03:30:04	91.153%	0.107	2.679	3.921	0.000	1284.000	1541.000	1473.000
3	03:30:30	91.098%	0.107	5.578	3.607	0.000	1290.000	1513.000	1489.000
x		91.051%	0.031	3.991	3.709	0.000	1285.000	1514.000	1477.000
σ		0.131%	0.131	1.469	0.184	0.000	5.814	25.530	11.240
%RSD		0.144	423.000	36.810	4.959	0.000	0.453	1.686	0.761

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:29:37	3.647	7046.000	0.000	5568.000	2027.000	2010.000	86.118%	0.826
2	03:30:04	3.521	7028.000	0.000	5590.000	1971.000	2052.000	86.832%	1.249
3	03:30:30	3.542	7052.000	0.000	5557.000	2101.000	2047.000	87.662%	1.018
x		3.570	7042.000	0.000	5571.000	2033.000	2036.000	86.871%	1.031
σ		0.068	12.630	0.000	16.800	64.960	23.190	0.773%	0.212
%RSD		1.892	0.179	0.000	0.301	3.195	1.139	0.890	20.520

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:29:37	7.303	8.529	334.500	9.194	14.700	2.122	2.181	2.635
2	03:30:04	14.800	8.843	344.200	7.783	16.050	2.073	2.177	2.850
3	03:30:30	6.768	9.010	344.900	6.551	10.870	2.161	2.108	2.907
x		9.622	8.794	341.200	7.843	13.870	2.119	2.155	2.797
σ		4.489	0.244	5.793	1.323	2.692	0.044	0.041	0.144
%RSD		46.650	2.775	1.698	16.860	19.400	2.096	1.922	5.131

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:29:37	3.261	9.131	9.616	1.862	-2.085	-0.218	0.000	35.780
2	03:30:04	3.036	8.960	9.582	2.188	-2.283	-0.931	0.000	36.870
3	03:30:30	3.059	9.686	10.650	3.161	-1.798	-0.846	0.000	36.800
x		3.119	9.259	9.949	2.403	-2.055	-0.665	0.000	36.480
σ		0.124	0.380	0.606	0.676	0.244	0.389	0.000	0.609
%RSD		3.967	4.099	6.094	28.130	11.860	58.540	0.000	1.669

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:29:37	93.313%	-0.109	-0.138	89.373%	-0.009	0.008	0.033	0.007
2	03:30:04	94.324%	-0.152	-0.101	90.779%	-0.002	0.007	0.101	0.127
3	03:30:30	94.757%	-0.180	-0.118	91.743%	0.012	0.007	0.079	0.006
x		94.131%	-0.147	-0.119	90.632%	0.000	0.007	0.071	0.047
σ		0.741%	0.035	0.019	1.192%	0.010	0.000	0.034	0.069
%RSD		0.787	24.030	15.680	1.315	7357.000	6.874	48.380	149.100

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:29:37	89.625%	-0.596	-0.043	-0.053	324.400	324.500	92.638%	92.412%
2	03:30:04	91.440%	-0.509	-0.058	-0.032	331.300	326.600	93.899%	94.190%
3	03:30:30	93.408%	-0.489	-0.045	-0.054	329.300	326.900	95.936%	95.779%
x		91.491%	-0.531	-0.049	-0.046	328.300	326.000	94.158%	94.127%
σ		1.892%	0.057	0.008	0.012	3.565	1.294	1.664%	1.684%
%RSD		2.068	10.690	16.800	26.650	1.086	0.397	1.767	1.789

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	03:29:37	0.108	0.098	1.799	1.679	1.770	92.487%
2	03:30:04	0.097	0.062	1.851	1.818	1.846	93.947%
3	03:30:30	0.066	0.084	1.947	1.893	1.848	96.512%
x		0.090	0.082	1.866	1.796	1.821	94.315%
σ		0.022	0.018	0.075	0.108	0.044	2.038%
%RSD		23.790	21.730	4.003	6.036	2.442	2.161

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:33:56	89.295%	-0.040	3.227	3.117	0.000	840.700	378.700	360.700
2	03:34:22	90.734%	-0.146	4.453	3.573	0.000	847.800	374.200	370.100
3	03:34:49	92.719%	0.000	4.597	3.282	0.000	834.400	375.000	364.600
x		90.916%	-0.062	4.092	3.324	0.000	840.900	376.000	365.100
σ		1.719%	0.076	0.753	0.231	0.000	6.704	2.390	4.748
%RSD		1.891	122.300	18.400	6.949	0.000	0.797	0.636	1.300
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:33:56	220.500	8390.000	0.000	5758.000	280.500	371.000	85.784%	5.610
2	03:34:22	224.700	8372.000	0.000	5839.000	289.800	373.300	86.476%	5.651
3	03:34:49	219.100	8318.000	0.000	5773.000	268.000	380.300	87.331%	5.492
x		221.400	8360.000	0.000	5790.000	279.500	374.800	86.530%	5.584
σ		2.895	37.810	0.000	43.030	10.940	4.814	0.775%	0.083
%RSD		1.308	0.452	0.000	0.743	3.916	1.284	0.896	1.481
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:33:56	12.730	10.820	6.284	397.100	346.000	0.752	2.692	59.990
2	03:34:22	11.990	10.940	6.420	408.000	356.300	0.734	2.266	59.800
3	03:34:49	9.582	11.130	6.423	405.300	352.000	0.749	2.446	59.500
x		11.430	10.960	6.376	403.500	351.400	0.745	2.468	59.770
σ		1.647	0.157	0.080	5.687	5.145	0.009	0.214	0.248
%RSD		14.400	1.431	1.249	1.409	1.464	1.234	8.654	0.415
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:33:56	59.880	13.270	13.190	4.373	-1.872	0.235	0.000	11.310
2	03:34:22	61.360	12.880	12.970	2.662	-2.309	-0.500	0.000	11.550
3	03:34:49	60.610	13.320	14.200	2.386	-3.126	-0.874	0.000	11.280
x		60.620	13.160	13.450	3.140	-2.435	-0.380	0.000	11.380
σ		0.742	0.240	0.660	1.076	0.637	0.564	0.000	0.148
%RSD		1.224	1.822	4.908	34.270	26.150	148.600	0.000	1.301
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:33:56	88.243%	-0.105	-0.118	88.327%	0.003	-0.002	0.065	0.063
2	03:34:22	89.955%	-0.093	-0.089	90.306%	0.007	-0.000	0.042	-0.012
3	03:34:49	93.297%	-0.138	-0.096	91.314%	-0.007	0.017	0.032	0.029
x		90.498%	-0.112	-0.101	89.982%	0.001	0.005	0.046	0.027
σ		2.570%	0.023	0.015	1.520%	0.007	0.010	0.017	0.037
%RSD		2.840	20.750	14.630	1.689	555.200	210.100	36.560	139.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:33:56	88.375%	-0.606	-0.022	-0.008	133.700	130.300	90.676%	91.254%
2	03:34:22	91.483%	-0.624	-0.052	-0.035	132.300	130.700	92.934%	93.567%
3	03:34:49	90.498%	-0.610	0.004	-0.009	134.100	133.800	95.720%	94.401%
x		90.119%	-0.614	-0.023	-0.017	133.300	131.600	93.110%	93.074%
σ		1.588%	0.009	0.028	0.015	0.957	1.928	2.526%	1.630%
%RSD		1.762	1.527	120.800	88.180	0.717	1.465	2.713	1.752
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:33:56	0.066	0.047	4.932	4.751	4.875	91.547%		
2	03:34:22	0.041	0.039	5.206	5.017	5.019	92.288%		
3	03:34:49	0.050	0.044	5.650	4.905	5.198	90.773%		
x		0.052	0.043	5.263	4.891	5.031	91.536%		
σ		0.013	0.004	0.362	0.134	0.162	0.758%		
%RSD		24.510	9.884	6.884	2.731	3.215	0.828		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:10	86.136%	-0.244	4.352	3.491	0.000	3881.000	4752.000	4619.000
2	03:38:37	86.954%	-0.112	2.923	2.696	0.000	3863.000	4811.000	4638.000
3	03:39:03	85.884%	-0.109	4.518	3.203	0.000	3910.000	4799.000	4705.000
x		86.325%	-0.155	3.931	3.130	0.000	3885.000	4787.000	4654.000
σ		0.559%	0.077	0.877	0.403	0.000	24.060	31.410	44.950
%RSD		0.648	49.650	22.310	12.860	0.000	0.619	0.656	0.966
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:10	3.921	7006.000	0.000	8557.000	7330.000	6882.000	83.579%	0.962
2	03:38:37	4.378	7023.000	0.000	8609.000	7268.000	7122.000	84.051%	1.369
3	03:39:03	4.397	7004.000	0.000	8618.000	7159.000	7081.000	84.239%	0.822
x		4.232	7011.000	0.000	8595.000	7252.000	7028.000	83.956%	1.051
σ		0.270	10.320	0.000	33.320	86.280	128.300	0.340%	0.284
%RSD		6.369	0.147	0.000	0.388	1.190	1.825	0.405	27.050
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:10	5.110	8.550	5261.000	30020.000	27430.000	367.700	18.020	1.701
2	03:38:37	4.163	8.151	5350.000	30780.000	28450.000	380.700	18.610	1.984
3	03:39:03	3.814	7.295	5383.000	30740.000	28480.000	377.800	19.130	1.936
x		4.362	7.999	5331.000	30520.000	28120.000	375.400	18.590	1.873
σ		0.670	0.641	62.740	427.500	594.300	6.845	0.556	0.152
%RSD		15.370	8.014	1.177	1.401	2.113	1.824	2.992	8.090
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:10	1.995	10.050	9.706	7.095	-1.631	-1.339	0.000	93.380
2	03:38:37	2.234	10.390	10.970	8.859	-2.524	-0.517	0.000	96.820
3	03:39:03	2.121	10.870	10.370	9.180	-3.061	-0.485	0.000	96.530
x		2.117	10.440	10.350	8.378	-2.405	-0.780	0.000	95.580
σ		0.120	0.412	0.630	1.123	0.722	0.484	0.000	1.907
%RSD		5.646	3.948	6.091	13.400	30.040	62.030	0.000	1.995
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:10	91.003%	-0.055	-0.049	85.229%	0.002	0.006	0.016	0.029
2	03:38:37	92.414%	-0.022	0.025	86.200%	0.014	0.008	-0.006	0.067
3	03:39:03	94.424%	0.009	-0.049	87.123%	0.013	-0.002	0.034	-0.022
x		92.613%	-0.023	-0.024	86.184%	0.010	0.004	0.015	0.024
σ		1.719%	0.032	0.042	0.947%	0.007	0.006	0.020	0.044
%RSD		1.856	140.200	173.900	1.099	69.770	129.300	132.600	181.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:38:10	86.103%	-0.590	-0.044	-0.017	1130.000	1125.000	89.625%	91.748%
2	03:38:37	88.152%	-0.548	-0.033	0.015	1139.000	1136.000	93.550%	93.687%
3	03:39:03	89.915%	-0.457	-0.062	-0.011	1143.000	1130.000	94.722%	94.947%
x		88.057%	-0.532	-0.046	-0.004	1137.000	1130.000	92.632%	93.461%
σ		1.908%	0.068	0.014	0.017	6.740	5.813	2.670%	1.611%
%RSD		2.167	12.760	31.120	384.600	0.593	0.514	2.882	1.724
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:38:10	0.312	0.266	0.300	0.257	0.281	89.520%		
2	03:38:37	0.242	0.272	0.259	0.282	0.269	100.105%		
3	03:39:03	0.188	0.248	0.255	0.317	0.273	102.978%		
x		0.247	0.262	0.271	0.286	0.274	97.534%		
σ		0.062	0.013	0.025	0.030	0.006	7.088%		
%RSD		25.090	4.894	9.206	10.470	2.290	7.267		

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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	03:42:25	89.206%	0.039	3.248	3.648	0.000	1886.000	861.400	849.100
2	03:42:52	89.834%	0.036	2.753	2.932	0.000	1908.000	883.400	854.300
3	03:43:19	89.424%	-0.014	3.952	3.326	0.000	1925.000	888.000	854.800
x		89.488%	0.020	3.318	3.302	0.000	1907.000	877.600	852.700
σ		0.319%	0.030	0.603	0.358	0.000	19.500	14.180	3.138
%RSD		0.356	148.400	18.170	10.860	0.000	1.023	1.615	0.368

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:25	225.900	7183.000	0.000	6623.000	1015.000	1099.000	83.603%	5.469
2	03:42:52	229.200	7160.000	0.000	6590.000	1084.000	1113.000	86.018%	6.206
3	03:43:19	228.000	7180.000	0.000	6616.000	1053.000	1131.000	86.616%	6.690
x		227.700	7174.000	0.000	6609.000	1051.000	1114.000	85.412%	6.121
σ		1.696	12.110	0.000	17.430	34.590	15.980	1.595%	0.615
%RSD		0.745	0.169	0.000	0.264	3.292	1.434	1.867	10.040

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:25	7.308	9.621	8.871	369.500	341.800	0.543	1.360	2.757
2	03:42:52	1.228	9.720	8.973	359.200	319.400	0.535	1.504	2.811
3	03:43:19	9.312	10.590	9.057	357.700	327.900	0.514	1.784	3.000
x		5.949	9.978	8.967	362.200	329.700	0.531	1.549	2.856
σ		4.210	0.535	0.093	6.419	11.300	0.015	0.216	0.128
%RSD		70.760	5.360	1.039	1.772	3.428	2.813	13.920	4.479

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:25	3.324	5.358	6.001	0.053	-2.313	-0.292	0.000	26.700
2	03:42:52	3.355	6.134	5.414	-0.060	-2.597	-0.491	0.000	26.480
3	03:43:19	3.315	5.641	6.221	-0.742	-1.529	-0.212	0.000	27.730
x		3.331	5.711	5.879	-0.250	-2.147	-0.332	0.000	26.970
σ		0.021	0.393	0.417	0.430	0.553	0.144	0.000	0.664
%RSD		0.621	6.879	7.095	172.300	25.760	43.350	0.000	2.460

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:25	89.123%	0.085	0.017	89.479%	0.010	0.020	0.104	0.042
2	03:42:52	92.891%	-0.028	-0.006	91.244%	0.007	-0.003	0.041	-0.058
3	03:43:19	92.851%	-0.030	-0.031	93.629%	0.044	0.006	0.020	0.082
x		91.622%	0.009	-0.006	91.451%	0.020	0.008	0.055	0.022
σ		2.164%	0.066	0.024	2.083%	0.020	0.011	0.043	0.072
%RSD		2.362	754.700	372.100	2.277	98.980	143.700	78.860	330.000

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:25	89.419%	-0.625	-0.048	-0.059	252.100	245.900	92.965%	93.457%
2	03:42:52	91.843%	-0.556	-0.059	-0.044	254.000	252.600	96.759%	96.699%
3	03:43:19	92.750%	-0.574	-0.040	-0.031	254.800	252.800	96.378%	97.586%
x		91.337%	-0.585	-0.049	-0.045	253.600	250.500	95.367%	95.914%
σ		1.722%	0.036	0.009	0.014	1.398	3.925	2.089%	2.174%
%RSD		1.885	6.168	19.340	31.580	0.551	1.567	2.191	2.266

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	03:42:25	0.083	0.075	0.243	0.203	0.245	105.719%
2	03:42:52	0.068	0.068	0.248	0.277	0.241	109.136%
3	03:43:19	0.114	0.069	0.297	0.219	0.230	111.476%
x		0.088	0.071	0.263	0.233	0.239	108.777%
σ		0.023	0.004	0.030	0.039	0.007	2.895%
%RSD		26.550	5.812	11.300	16.840	3.131	2.662

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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	03:46:41	84.768%	-0.079	10.230	11.610	0.000	33250.000	44330.000	43410.000
2	03:47:07	84.403%	-0.079	11.330	11.980	0.000	33010.000	44200.000	43580.000
3	03:47:34	84.649%	-0.025	11.600	11.100	0.000	33470.000	44760.000	43360.000
x		84.607%	-0.061	11.060	11.560	0.000	33240.000	44430.000	43450.000
σ		0.186%	0.031	0.726	0.441	0.000	233.200	292.700	119.000
%RSD		0.220	51.030	6.562	3.814	0.000	0.702	0.659	0.274
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:41	123.200	3424.000	0.000	13410.000	169900.000	175100.000	82.011%	3.083
2	03:47:07	120.500	3409.000	0.000	13160.000	169500.000	176200.000	84.386%	2.790
3	03:47:34	120.000	3404.000	0.000	13150.000	168900.000	177300.000	84.988%	3.272
x		121.200	3413.000	0.000	13240.000	169400.000	176200.000	83.795%	3.048
σ		1.743	10.190	0.000	148.200	536.300	1097.000	1.574%	0.243
%RSD		1.438	0.299	0.000	1.119	0.317	0.623	1.878	7.969
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:41	3.383	7.588	17720.000	8615.000	8430.000	164.500	2.595	1.528
2	03:47:07	0.051	7.259	17730.000	8566.000	8423.000	164.500	2.604	1.468
3	03:47:34	4.087	6.845	17710.000	8554.000	8423.000	164.400	2.327	1.446
x		2.507	7.231	17720.000	8579.000	8425.000	164.500	2.509	1.481
σ		2.156	0.372	6.915	32.430	4.317	0.095	0.158	0.042
%RSD		85.980	5.150	0.039	0.378	0.051	0.058	6.276	2.860
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:41	2.160	5.090	4.714	3.539	-1.379	-0.153	0.000	379.400
2	03:47:07	2.214	5.272	5.131	1.013	-2.748	-0.183	0.000	377.000
3	03:47:34	2.494	5.366	5.283	3.393	-0.749	-0.338	0.000	382.200
x		2.289	5.243	5.043	2.648	-1.625	-0.224	0.000	379.600
σ		0.179	0.140	0.295	1.418	1.022	0.099	0.000	2.599
%RSD		7.828	2.676	5.839	53.540	62.850	44.110	0.000	0.685
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:41	92.458%	0.058	0.024	84.392%	0.010	0.020	0.051	0.133
2	03:47:07	96.254%	0.007	0.030	86.282%	0.024	0.016	0.044	0.043
3	03:47:34	96.847%	0.033	-0.028	86.699%	0.013	0.055	0.083	-0.028
x		95.186%	0.033	0.008	85.791%	0.016	0.030	0.059	0.049
σ		2.381%	0.025	0.032	1.229%	0.007	0.021	0.021	0.081
%RSD		2.502	77.060	377.200	1.433	44.680	71.000	35.050	163.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:41	83.084%	-0.450	-0.049	0.016	49.120	48.550	93.475%	93.264%
2	03:47:07	89.869%	-0.537	-0.011	-0.005	50.900	47.800	96.205%	96.020%
3	03:47:34	91.334%	-0.428	-0.050	0.043	48.380	48.610	97.777%	97.791%
x		88.096%	-0.472	-0.037	0.018	49.470	48.320	95.819%	95.692%
σ		4.402%	0.058	0.022	0.024	1.295	0.454	2.177%	2.281%
%RSD		4.997	12.210	61.120	135.600	2.619	0.940	2.272	2.384
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:46:41	0.664	0.640	0.519	0.550	0.524	98.425%		
2	03:47:07	0.603	0.569	0.505	0.527	0.492	108.966%		
3	03:47:34	0.605	0.648	0.531	0.545	0.505	112.249%		
x		0.624	0.619	0.519	0.541	0.507	106.547%		
σ		0.035	0.043	0.013	0.012	0.016	7.222%		
%RSD		5.546	6.989	2.568	2.284	3.091	6.779		

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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	03:50:55	86.323%	0.076	4.312	3.715	0.000	17380.000	5677.000	5522.000
2	03:51:22	86.554%	-0.111	5.054	4.089	0.000	17520.000	5850.000	5685.000
3	03:51:49	86.035%	-0.164	4.324	3.527	0.000	17600.000	5845.000	5656.000
x		86.304%	-0.066	4.563	3.777	0.000	17500.000	5791.000	5621.000
σ		0.260%	0.126	0.425	0.286	0.000	107.900	98.030	87.060
%RSD		0.301	189.500	9.306	7.583	0.000	0.617	1.693	1.549
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:55	58.730	4990.000	0.000	9256.000	16980.000	16980.000	86.771%	1.780
2	03:51:22	59.720	5104.000	0.000	9304.000	17400.000	17400.000	87.038%	1.768
3	03:51:49	60.820	4743.000	0.000	9389.000	17490.000	17460.000	87.874%	1.687
x		59.750	4946.000	0.000	9316.000	17290.000	17280.000	87.228%	1.745
σ		1.047	184.200	0.000	67.100	271.300	261.600	0.575%	0.051
%RSD		1.751	3.724	0.000	0.720	1.569	1.514	0.660	2.906
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:55	3.942	7.074	66.860	88.350	167.700	6.311	8.566	17.910
2	03:51:22	7.008	7.298	67.940	84.480	159.400	6.319	8.859	18.330
3	03:51:49	5.251	7.201	67.540	80.900	150.900	6.202	9.070	18.570
x		5.400	7.191	67.450	84.580	159.300	6.277	8.832	18.270
σ		1.539	0.112	0.544	3.723	8.382	0.065	0.253	0.329
%RSD		28.490	1.558	0.807	4.402	5.261	1.042	2.869	1.803
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:55	18.260	16.880	15.720	-0.314	-0.715	0.858	0.000	55.310
2	03:51:22	18.370	16.300	15.610	0.779	-0.396	2.169	0.000	54.810
3	03:51:49	19.230	16.090	15.000	-3.021	-1.409	0.415	0.000	55.760
x		18.620	16.420	15.440	-0.852	-0.840	1.147	0.000	55.290
σ		0.528	0.413	0.387	1.956	0.518	0.912	0.000	0.473
%RSD		2.833	2.513	2.508	229.700	61.650	79.490	0.000	0.856
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:55	91.487%	0.209	0.155	91.055%	-0.012	0.004	0.021	0.111
2	03:51:22	95.945%	0.234	0.158	92.407%	0.014	0.009	0.067	0.077
3	03:51:49	95.909%	0.137	0.222	94.742%	0.004	0.008	0.028	0.026
x		94.447%	0.193	0.178	92.735%	0.002	0.007	0.039	0.071
σ		2.564%	0.051	0.038	1.865%	0.013	0.002	0.025	0.043
%RSD		2.714	26.210	21.290	2.012	710.300	33.140	65.270	60.010
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:50:55	93.278%	-0.321	-0.034	0.024	49.170	48.430	96.324%	97.153%
2	03:51:22	94.654%	-0.315	-0.044	-0.016	49.990	50.070	98.327%	99.394%
3	03:51:49	96.084%	-0.357	-0.046	-0.008	51.380	49.320	101.248%	100.771%
x		94.672%	-0.331	-0.041	0.000	50.180	49.270	98.633%	99.106%
σ		1.403%	0.022	0.006	0.021	1.118	0.821	2.476%	1.826%
%RSD		1.482	6.794	15.220	21430.000	2.229	1.666	2.510	1.843
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:50:55	0.065	0.060	2.575	2.439	2.508	110.493%		
2	03:51:22	0.051	0.082	2.579	2.540	2.571	114.771%		
3	03:51:49	0.055	0.077	2.658	2.557	2.550	118.268%		
x		0.057	0.073	2.604	2.512	2.543	114.511%		
σ		0.007	0.011	0.047	0.064	0.032	3.894%		
%RSD		12.510	15.750	1.794	2.538	1.251	3.401		

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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	03:55:11	92.824%	-0.100	2.592	2.513	0.000	1031.000	456.400	440.900
2	03:55:37	90.284%	-0.043	1.988	3.588	0.000	1067.000	461.400	452.900
3	03:56:04	90.206%	-0.196	1.254	2.801	0.000	1065.000	463.800	439.900
x		91.105%	-0.113	1.944	2.967	0.000	1054.000	460.500	444.500
σ		1.489%	0.078	0.670	0.556	0.000	19.850	3.772	7.233
%RSD		1.635	68.620	34.460	18.750	0.000	1.883	0.819	1.627

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:11	16.220	5496.000	0.000	2852.000	-5053.000	1037.000	87.359%	1.486
2	03:55:37	17.770	5698.000	0.000	2887.000	-5720.000	1030.000	87.603%	0.927
3	03:56:04	17.290	5612.000	0.000	2872.000	981.000	1066.000	88.838%	1.784
x		17.090	5602.000	0.000	2870.000	-3264.000	1044.000	87.933%	1.399
σ		0.792	101.000	0.000	17.350	3691.000	19.390	0.793%	0.435
%RSD		4.634	1.803	0.000	0.604	113.100	1.857	0.902	31.120

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:11	4.528	8.153	5.910	14.530	18.880	0.156	0.386	0.371
2	03:55:37	0.684	8.859	6.243	14.270	16.550	0.180	0.605	0.405
3	03:56:04	3.194	8.567	6.165	12.770	16.210	0.126	0.413	0.443
x		2.802	8.526	6.106	13.860	17.210	0.154	0.468	0.406
σ		1.952	0.355	0.174	0.950	1.453	0.027	0.120	0.036
%RSD		69.670	4.165	2.855	6.855	8.440	17.580	25.540	8.959

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:11	0.403	4.064	4.269	-3.862	-1.323	-0.650	0.000	5.603
2	03:55:37	0.664	4.296	4.543	1.551	-1.751	-1.062	0.000	5.819
3	03:56:04	0.452	4.220	4.332	5.475	-2.527	-1.274	0.000	5.764
x		0.506	4.194	4.381	1.054	-1.867	-0.995	0.000	5.729
σ		0.139	0.118	0.144	4.688	0.610	0.317	0.000	0.112
%RSD		27.430	2.822	3.283	444.600	32.700	31.890	0.000	1.961

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:11	93.047%	-0.159	-0.191	94.353%	0.022	0.011	0.049	-0.079
2	03:55:37	94.965%	-0.161	-0.109	95.930%	-0.003	0.006	0.009	0.001
3	03:56:04	96.750%	-0.149	-0.126	96.205%	0.015	0.006	0.074	-0.067
x		94.921%	-0.156	-0.142	95.496%	0.011	0.007	0.044	-0.048
σ		1.852%	0.007	0.043	0.999%	0.013	0.003	0.033	0.043
%RSD		1.951	4.230	30.310	1.046	118.000	42.040	74.970	88.380

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:11	92.987%	-0.527	-0.021	-0.034	37.140	37.900	97.029%	97.677%
2	03:55:37	95.785%	-0.613	-0.060	-0.001	40.300	38.260	98.458%	99.559%
3	03:56:04	96.224%	-0.494	-0.023	-0.032	39.540	38.440	99.676%	100.857%
x		94.999%	-0.545	-0.035	-0.022	38.990	38.200	98.388%	99.364%
σ		1.756%	0.061	0.022	0.018	1.648	0.277	1.325%	1.599%
%RSD		1.848	11.220	63.390	81.860	4.227	0.725	1.347	1.609

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	03:55:11	0.015	0.029	0.084	0.084	0.068	113.457%
2	03:55:37	0.021	0.027	0.043	0.077	0.074	117.609%
3	03:56:04	0.021	0.024	0.082	0.070	0.068	117.074%
x		0.019	0.027	0.070	0.077	0.070	116.047%
σ		0.004	0.002	0.023	0.007	0.003	2.258%
%RSD		19.160	8.517	33.210	9.544	4.455	1.946

CCV 1487954 4/9/2015 3:59:02 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	03:59:28	89.447%	95.370	94.660	98.410	0.000	48800.000	47710.000	47400.000
2	03:59:55	93.146%	95.970	94.180	92.910	0.000	48370.000	47360.000	47040.000
3	04:00:22	93.924%	98.750	101.800	95.640	0.000	48590.000	48210.000	47560.000
x		92.172%	96.699%	96.868%	95.650%	0.000	97.170%	95.526%	94.667%
σ		2.392%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		2.595	1.862	4.381	2.875	0.000	0.446	0.895	0.563
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:59:28	456.900	5140.000	0.000	49520.000	47450.000	48860.000	92.922%	98.460
2	03:59:55	460.900	5138.000	0.000	49210.000	48020.000	49840.000	95.400%	98.300
3	04:00:22	462.700	5250.000	0.000	49530.000	48480.000	50380.000	96.291%	100.200
x		92.031%	103.520%	0.000	98.838%	95.966%	99.385%	94.871%	98.997%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.745%	n/a
%RSD		0.646	1.241	0.000	0.368	1.078	1.552	1.840	1.084
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:59:28	94.800	95.000	456.600	24370.000	22800.000	94.610	96.170	96.580
2	03:59:55	97.400	97.080	464.100	24650.000	23170.000	96.410	94.480	96.450
3	04:00:22	96.420	98.410	469.000	24890.000	23440.000	96.130	97.460	97.720
x		96.205%	96.829%	92.644%	98.544%	92.550%	95.717%	96.037%	96.915%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.368	1.772	1.344	1.064	1.376	1.009	1.560	0.719
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:59:28	96.610	94.930	95.560	96.790	98.990	99.240	0.000	97.490
2	03:59:55	97.120	96.490	97.530	96.110	98.650	97.690	0.000	98.760
3	04:00:22	98.000	96.030	96.420	97.880	97.530	99.990	0.000	97.740
x		97.244%	95.818%	96.503%	96.925%	98.393%	98.974%	0.000	97.995%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.720	0.835	1.024	0.922	0.777	1.188	0.000	0.685
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:59:28	95.674%	93.150	94.610	94.013%	96.210	96.440	96.070	94.450
2	03:59:55	98.610%	98.930	99.200	97.170%	96.250	95.760	95.220	95.500
3	04:00:22	101.133%	97.840	99.200	99.219%	97.340	95.920	97.080	95.750
x		98.472%	96.639%	97.669%	96.801%	96.600%	96.040%	96.121%	95.235%
σ		2.732%	n/a	n/a	2.623%	n/a	n/a	n/a	n/a
%RSD		2.774	3.179	2.708	2.709	0.664	0.374	0.971	0.722
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:59:28	94.687%	96.330	97.940	99.020	96.200	95.150	98.837%	99.027%
2	03:59:55	98.617%	97.850	98.800	99.180	98.320	96.860	102.309%	102.800%
3	04:00:22	99.399%	98.720	100.500	100.900	99.340	97.540	102.837%	104.365%
x		97.567%	97.633%	99.089%	99.700%	97.951%	96.518%	101.328%	102.064%
σ		2.525%	n/a	n/a	n/a	n/a	n/a	2.173%	2.744%
%RSD		2.588	1.239	1.331	1.049	1.635	1.276	2.145	2.689
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	03:59:28	94.610	97.790	93.780	96.400	93.970	115.623%		
2	03:59:55	95.060	99.270	95.570	97.520	95.760	118.586%		
3	04:00:22	97.270	99.630	97.140	100.200	96.760	118.855%		
x		95.649%	98.898%	95.494%	98.051%	95.500%	117.688%		
σ		n/a	n/a	n/a	n/a	n/a	1.793%		
%RSD		1.488	0.987	1.763	2.006	1.480	1.524		

CCB5 4/9/2015 4:06:45 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	04:07:11	99.280%	-0.139	0.885	0.453	0.000	-43.260	7.430	8.139
2	04:07:37	103.069%	-0.056	0.389	0.214	0.000	-43.530	7.178	7.222
3	04:08:04	102.723%	0.034	1.932	0.575	0.000	-43.810	6.284	8.506
x		101.691%	-0.054	1.069	0.414	0.000	-43.530	6.964	7.955
σ		2.095%	0.087	0.788	0.183	0.000	0.274	0.602	0.662
%RSD		2.060	161.200	73.710	44.320	0.000	0.630	8.645	8.316
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:11	0.448	-0.494	0.000	13.050	12.120	10.620	103.913%	-0.226
2	04:07:37	0.429	-0.179	0.000	13.430	-8.404	9.408	103.869%	-0.148
3	04:08:04	0.432	1.505	0.000	12.410	11.760	9.030	104.228%	-0.097
x		0.436	0.278	0.000	12.960	5.159	9.687	104.003%	-0.157
σ		0.010	1.075	0.000	0.516	11.750	0.832	0.196%	0.065
%RSD		2.297	387.200	0.000	3.981	227.700	8.592	0.188	41.160
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:11	0.102	0.097	0.200	4.979	8.077	0.018	0.051	-0.099
2	04:07:37	-0.119	0.027	0.107	4.609	8.259	0.023	-0.024	-0.135
3	04:08:04	-0.088	0.095	0.150	2.230	5.262	0.019	0.119	-0.071
x		-0.035	0.073	0.152	3.939	7.199	0.020	0.048	-0.101
σ		0.120	0.040	0.047	1.492	1.680	0.003	0.071	0.032
%RSD		342.200	54.750	30.660	37.870	23.340	13.150	147.200	31.660
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:11	-0.136	-0.026	-0.043	-0.421	-0.942	-1.608	0.000	0.036
2	04:07:37	-0.152	0.085	-0.141	0.067	-0.498	-0.748	0.000	0.028
3	04:08:04	-0.077	-0.066	0.023	0.141	-0.185	-0.694	0.000	0.033
x		-0.121	-0.002	-0.054	-0.071	-0.542	-1.017	0.000	0.032
σ		0.039	0.078	0.082	0.305	0.381	0.513	0.000	0.004
%RSD		32.520	4001.000	153.500	431.000	70.290	50.430	0.000	13.310
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:11	105.001%	0.036	-0.003	105.264%	0.024	0.025	0.004	0.074
2	04:07:37	106.168%	-0.003	-0.017	106.561%	-0.008	0.018	0.053	0.045
3	04:08:04	107.527%	0.042	-0.022	107.208%	0.021	0.021	-0.023	0.057
x		106.232%	0.025	-0.014	106.344%	0.012	0.021	0.011	0.059
σ		1.264%	0.024	0.010	0.990%	0.017	0.004	0.039	0.015
%RSD		1.190	97.790	68.730	0.931	141.100	16.650	347.100	25.100
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:07:11	103.511%	-0.471	-0.032	-0.023	-0.093	0.042	102.479%	103.379%
2	04:07:37	105.882%	-0.423	-0.037	-0.005	0.006	0.023	105.459%	106.564%
3	04:08:04	106.361%	-0.499	-0.048	-0.011	0.025	0.000	106.448%	106.883%
x		105.251%	-0.464	-0.039	-0.013	-0.021	0.022	104.795%	105.609%
σ		1.526%	0.038	0.008	0.009	0.064	0.021	2.066%	1.937%
%RSD		1.450	8.271	21.530	67.880	307.700	96.280	1.972	1.834
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:07:11	0.008	0.018	0.027	0.011	0.014	110.957%		
2	04:07:37	0.012	0.019	0.023	0.036	0.020	116.265%		
3	04:08:04	0.016	0.013	0.023	0.033	0.018	113.396%		
x		0.012	0.017	0.024	0.027	0.017	113.540%		
σ		0.004	0.003	0.002	0.014	0.003	2.657%		
%RSD		36.290	16.910	9.805	51.600	18.640	2.340		

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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	04:11:29	91.781%	-0.098	19.940	21.830	0.000	4067.000	5231.000	5105.000
2	04:11:56	89.954%	-0.145	21.250	22.930	0.000	4151.000	5315.000	5199.000
3	04:12:22	90.288%	-0.017	20.440	21.720	0.000	4143.000	5319.000	5188.000
x		90.674%	-0.086	20.540	22.160	0.000	4120.000	5288.000	5164.000
σ		0.973%	0.064	0.658	0.666	0.000	46.760	49.570	50.980
%RSD		1.073	74.540	3.203	3.005	0.000	1.135	0.937	0.987

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:29	8.664	3111.000	0.000	5621.000	34190.000	34790.000	87.447%	1.362
2	04:11:56	7.879	3150.000	0.000	5670.000	35340.000	35930.000	86.922%	1.525
3	04:12:22	7.607	3138.000	0.000	5654.000	34810.000	35770.000	86.820%	1.249
x		8.050	3133.000	0.000	5648.000	34780.000	35490.000	87.063%	1.379
σ		0.549	19.680	0.000	24.880	580.200	619.600	0.336%	0.139
%RSD		6.814	0.628	0.000	0.441	1.668	1.746	0.386	10.080

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:29	6.905	8.156	96.950	33.800	196.700	0.606	0.569	0.495
2	04:11:56	0.141	8.558	99.260	29.540	189.700	0.606	0.411	0.431
3	04:12:22	1.691	8.298	99.380	29.480	188.800	0.591	0.391	0.321
x		2.913	8.337	98.530	30.940	191.700	0.601	0.457	0.416
σ		3.544	0.204	1.367	2.476	4.322	0.009	0.097	0.088
%RSD		121.700	2.442	1.387	8.003	2.254	1.454	21.310	21.120

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:29	0.595	2.008	2.130	0.322	-1.173	-1.038	0.000	131.600
2	04:11:56	0.506	2.134	2.129	7.143	-1.526	-0.693	0.000	133.600
3	04:12:22	0.524	1.964	2.302	-0.758	-1.996	0.248	0.000	135.300
x		0.541	2.035	2.187	2.236	-1.565	-0.494	0.000	133.500
σ		0.047	0.088	0.100	4.284	0.413	0.666	0.000	1.839
%RSD		8.669	4.339	4.567	191.600	26.390	134.700	0.000	1.377

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:29	92.574%	-0.012	0.097	89.121%	0.005	0.007	0.031	0.073
2	04:11:56	94.490%	-0.024	0.039	91.711%	0.016	0.009	0.118	0.051
3	04:12:22	94.475%	-0.011	0.029	92.063%	0.009	-0.001	0.020	0.014
x		93.846%	-0.015	0.055	90.965%	0.010	0.005	0.056	0.046
σ		1.102%	0.007	0.037	1.606%	0.006	0.005	0.054	0.030
%RSD		1.175	47.540	66.980	1.766	55.580	98.190	94.890	65.410

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:29	93.170%	0.651	0.027	0.028	122.100	121.300	95.234%	95.421%
2	04:11:56	92.901%	0.305	0.024	0.058	128.200	123.800	97.554%	98.145%
3	04:12:22	93.894%	0.102	0.042	0.087	127.600	125.800	96.951%	98.941%
x		93.322%	0.353	0.031	0.057	126.000	123.600	96.580%	97.502%
σ		0.513%	0.277	0.010	0.030	3.323	2.276	1.204%	1.846%
%RSD		0.550	78.600	31.500	51.640	2.638	1.841	1.246	1.893

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:11:29	0.246	0.243	0.053	0.012	0.037	109.310%
2	04:11:56	0.270	0.262	0.011	0.060	0.035	110.873%
3	04:12:22	0.316	0.264	0.029	0.016	0.023	112.036%
x		0.278	0.257	0.031	0.029	0.031	110.739%
σ		0.036	0.012	0.021	0.027	0.008	1.368%
%RSD		12.890	4.489	68.900	90.680	24.510	1.235

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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	04:15:47	89.366%	0.012	10.470	9.722	0.000	9390.000	1840.000	1793.000
2	04:16:13	90.493%	0.161	14.840	10.360	0.000	9443.000	1849.000	1811.000
3	04:16:39	90.266%	0.136	8.871	10.920	0.000	9522.000	1899.000	1801.000
x		90.042%	0.103	11.390	10.330	0.000	9452.000	1862.000	1802.000
σ		0.596%	0.080	3.090	0.598	0.000	66.290	31.570	9.280
%RSD		0.662	77.600	27.130	5.789	0.000	0.701	1.695	0.515

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:47	12.200	2404.000	0.000	3745.000	6061.000	6015.000	86.069%	1.296
2	04:16:13	12.760	2400.000	0.000	3818.000	6054.000	6105.000	86.805%	0.847
3	04:16:39	13.110	2406.000	0.000	3830.000	6245.000	6259.000	87.135%	0.964
x		12.690	2403.000	0.000	3798.000	6120.000	6126.000	86.670%	1.035
σ		0.459	2.712	0.000	45.930	108.500	123.300	0.546%	0.233
%RSD		3.616	0.113	0.000	1.209	1.773	2.013	0.630	22.480

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:47	3.906	8.377	125.600	0.294	27.280	0.467	1.072	1.280
2	04:16:13	10.150	8.442	128.100	-0.350	32.220	0.508	0.868	1.593
3	04:16:39	6.885	8.560	128.900	-1.767	27.910	0.524	0.926	1.710
x		6.980	8.460	127.500	-0.608	29.140	0.500	0.955	1.528
σ		3.123	0.092	1.750	1.054	2.687	0.029	0.105	0.223
%RSD		44.740	1.092	1.372	173.500	9.223	5.797	10.980	14.580

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:47	1.493	3.400	3.354	4.234	-1.726	-1.281	0.000	36.030
2	04:16:13	1.759	3.896	3.958	2.031	-2.084	-0.387	0.000	36.760
3	04:16:39	1.630	3.644	3.067	1.387	-2.885	0.198	0.000	36.370
x		1.628	3.647	3.460	2.551	-2.232	-0.490	0.000	36.390
σ		0.133	0.248	0.455	1.493	0.593	0.745	0.000	0.365
%RSD		8.163	6.810	13.140	58.540	26.590	152.000	0.000	1.004

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:47	93.321%	-0.151	-0.082	89.842%	0.003	0.017	0.031	0.084
2	04:16:13	93.998%	-0.105	-0.140	92.075%	-0.007	0.035	0.049	0.016
3	04:16:39	96.570%	-0.055	-0.079	93.240%	0.016	0.025	0.019	-0.006
x		94.630%	-0.103	-0.100	91.719%	0.004	0.026	0.033	0.031
σ		1.714%	0.048	0.034	1.727%	0.011	0.009	0.015	0.047
%RSD		1.812	46.580	34.270	1.883	315.100	36.230	45.140	151.800

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:47	93.889%	-0.584	-0.045	-0.029	145.100	140.900	94.683%	94.801%
2	04:16:13	94.024%	-0.600	-0.039	-0.051	148.900	148.300	98.008%	99.109%
3	04:16:39	94.539%	-0.412	-0.023	-0.041	149.600	150.800	98.375%	100.056%
x		94.150%	-0.532	-0.036	-0.040	147.900	146.700	97.022%	97.989%
σ		0.343%	0.105	0.012	0.011	2.413	5.111	2.034%	2.801%
%RSD		0.364	19.670	32.240	28.180	1.631	3.485	2.096	2.858

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:47	0.046	0.038	-0.001	0.007	-0.001	114.496%
2	04:16:13	0.055	0.038	-0.015	0.011	-0.005	115.144%
3	04:16:39	0.069	0.035	-0.000	0.002	0.009	113.088%
x		0.057	0.037	-0.005	0.007	0.001	114.243%
σ		0.011	0.002	0.008	0.005	0.007	1.051%
%RSD		20.020	4.971	162.100	71.780	545.500	0.920

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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	04:20:04	87.548%	-0.034	2.130	1.695	0.000	261.200	9.586	12.990
2	04:20:31	91.526%	-0.097	1.650	1.676	0.000	263.000	11.810	11.050
3	04:20:58	93.460%	-0.076	1.427	1.759	0.000	249.900	9.469	11.010
x		90.845%	-0.069	1.735	1.710	0.000	258.000	10.290	11.680
σ		3.014%	0.032	0.359	0.044	0.000	7.070	1.317	1.133
%RSD		3.318	46.200	20.700	2.562	0.000	2.740	12.810	9.697

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:04	5.493	26.270	0.000	164.600	150.300	140.200	84.926%	0.624
2	04:20:31	5.301	24.270	0.000	158.000	103.600	146.300	86.381%	1.040
3	04:20:58	5.537	25.660	0.000	151.100	165.500	143.000	87.193%	1.058
x		5.444	25.400	0.000	157.900	139.800	143.200	86.167%	0.907
σ		0.126	1.025	0.000	6.780	32.260	3.066	1.149%	0.246
%RSD		2.308	4.036	0.000	4.294	23.070	2.141	1.333	27.070

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:04	11.550	9.874	1.001	27.780	26.030	0.005	0.204	1.103
2	04:20:31	3.963	9.875	0.997	26.820	24.900	0.018	0.441	1.200
3	04:20:58	4.781	10.010	0.922	25.380	21.040	0.032	0.158	1.134
x		6.765	9.921	0.974	26.660	23.990	0.018	0.267	1.146
σ		4.165	0.079	0.045	1.206	2.618	0.014	0.152	0.049
%RSD		61.570	0.799	4.579	4.525	10.910	74.480	56.780	4.311

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:04	1.409	4.437	4.746	1.130	-0.699	2.009	0.000	0.138
2	04:20:31	1.156	4.197	4.812	1.076	-2.214	-0.717	0.000	0.135
3	04:20:58	1.148	4.641	4.655	0.820	-0.742	0.043	0.000	0.134
x		1.238	4.425	4.738	1.008	-1.218	0.445	0.000	0.136
σ		0.149	0.222	0.079	0.165	0.863	1.407	0.000	0.002
%RSD		12.010	5.023	1.668	16.380	70.810	316.000	0.000	1.387

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:04	90.341%	-0.059	-0.111	90.099%	0.015	0.010	0.082	0.077
2	04:20:31	93.364%	-0.152	-0.153	93.449%	-0.003	0.011	0.059	0.033
3	04:20:58	93.329%	-0.098	-0.140	93.127%	-0.003	-0.003	0.039	0.029
x		92.345%	-0.103	-0.135	92.225%	0.003	0.006	0.060	0.046
σ		1.735%	0.047	0.021	1.848%	0.010	0.008	0.022	0.027
%RSD		1.879	45.760	15.840	2.004	324.300	130.600	35.870	57.710

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:04	90.295%	-0.413	-0.053	-0.034	0.240	0.210	92.703%	94.660%
2	04:20:31	93.046%	-0.283	-0.060	-0.020	0.125	0.231	96.754%	97.020%
3	04:20:58	93.430%	-0.263	-0.037	-0.009	0.159	0.181	96.378%	97.636%
x		92.257%	-0.320	-0.050	-0.021	0.174	0.207	95.278%	96.439%
σ		1.710%	0.082	0.012	0.012	0.059	0.025	2.238%	1.571%
%RSD		1.854	25.490	24.140	58.440	33.830	12.060	2.349	1.629

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:04	-0.001	-0.005	0.199	0.218	0.200	106.156%
2	04:20:31	0.006	-0.003	0.174	0.204	0.198	108.405%
3	04:20:58	0.004	0.002	0.185	0.230	0.210	113.679%
x		0.003	-0.002	0.186	0.218	0.203	109.413%
σ		0.004	0.004	0.013	0.013	0.007	3.862%
%RSD		131.300	183.400	6.760	5.888	3.224	3.529

MB 180-137426/1-A 4/9/2015 4:27:47 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	04:28:13	93.903%	0.018	-0.309	-0.034	0.000	-56.590	-0.483	-0.161
2	04:28:40	95.101%	-0.107	0.910	0.123	0.000	-55.160	0.421	0.265
3	04:29:06	94.529%	-0.130	0.927	-0.194	0.000	-54.380	0.797	0.628
x		94.511%	-0.073	0.509	-0.035	0.000	-55.380	0.245	0.244
σ		0.599%	0.080	0.709	0.158	0.000	1.118	0.658	0.395
%RSD		0.634	109.800	139.200	451.700	0.000	2.019	268.300	162.000

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:28:13	0.289	-1.898	0.000	2.116	9.746	5.616	96.411%	-0.150
2	04:28:40	0.151	-1.569	0.000	2.420	31.840	5.156	96.252%	-0.289
3	04:29:06	0.268	-1.717	0.000	0.372	4.048	4.270	96.669%	-0.318
x		0.236	-1.728	0.000	1.636	15.210	5.014	96.444%	-0.252
σ		0.074	0.165	0.000	1.105	14.680	0.684	0.210%	0.090
%RSD		31.500	9.536	0.000	67.570	96.500	13.650	0.218	35.700

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:28:13	0.268	0.119	0.054	-3.095	0.229	0.001	0.112	-0.141
2	04:28:40	0.205	0.129	0.093	-3.764	2.015	-0.005	-0.049	-0.105
3	04:29:06	0.056	0.116	0.085	-5.268	-5.448	0.015	0.053	-0.069
x		0.177	0.121	0.077	-4.042	-1.068	0.004	0.039	-0.105
σ		0.109	0.007	0.021	1.113	3.897	0.010	0.081	0.036
%RSD		61.550	5.602	26.620	27.530	364.800	273.700	209.700	34.590

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:28:13	-0.034	0.371	0.405	-0.126	0.052	0.011	0.000	0.002
2	04:28:40	-0.075	0.624	0.199	-0.056	-0.149	-0.259	0.000	0.009
3	04:29:06	-0.064	0.403	0.310	-0.118	0.669	-0.729	0.000	0.014
x		-0.058	0.466	0.305	-0.100	0.191	-0.326	0.000	0.008
σ		0.021	0.138	0.103	0.038	0.426	0.375	0.000	0.006
%RSD		37.240	29.560	33.830	37.960	223.100	115.000	0.000	74.320

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:28:13	98.696%	-0.138	-0.152	98.828%	0.005	0.007	0.053	-0.004
2	04:28:40	100.733%	-0.178	-0.158	101.308%	0.008	0.013	0.042	0.009
3	04:29:06	102.064%	-0.160	-0.159	102.351%	-0.005	-0.000	-0.021	-0.024
x		100.498%	-0.159	-0.156	100.829%	0.003	0.007	0.025	-0.007
σ		1.696%	0.020	0.003	1.810%	0.007	0.007	0.040	0.017
%RSD		1.688	12.550	2.149	1.795	234.800	99.090	163.600	256.900

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:28:13	97.228%	-0.733	-0.086	-0.083	-0.026	0.035	100.162%	99.185%
2	04:28:40	99.642%	-0.771	-0.069	-0.084	0.110	-0.002	101.425%	100.318%
3	04:29:06	100.566%	-0.763	-0.082	-0.051	-0.061	-0.020	102.572%	102.981%
x		99.145%	-0.755	-0.079	-0.073	0.007	0.004	101.386%	100.828%
σ		1.724%	0.020	0.009	0.019	0.090	0.028	1.205%	1.949%
%RSD		1.739	2.674	11.210	25.900	1212.000	712.000	1.189	1.933

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	04:28:13	0.006	-0.006	-0.009	-0.002	-0.005	121.796%
2	04:28:40	0.004	-0.006	0.002	0.027	-0.002	123.549%
3	04:29:06	0.001	-0.005	-0.016	-0.003	-0.008	123.459%
x		0.004	-0.005	-0.008	0.007	-0.005	122.934%
σ		0.003	0.000	0.009	0.017	0.003	0.987%
%RSD		76.030	7.610	115.300	233.100	67.150	0.803

CRI 1525173 4/9/2015 4:36:25 AM QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:36:51	98.256%	0.777	20.360	18.260	0.000	513.900	500.000	484.700
2	04:37:18	99.498%	0.927	19.580	19.870	0.000	520.200	501.000	490.600
3	04:37:45	99.974%	1.013	20.260	19.920	0.000	516.100	507.300	484.000
x		99.243%	90.596%	401.365%	387.037%	0.000	645.952%	502.767%	486.433%
σ		0.887%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.894	13.170	2.107	4.871	0.000	0.616	0.782	0.743
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:36:51	29.890	469.200	0.000	505.200	519.600	487.300	98.379%	5.604
2	04:37:18	30.090	469.700	0.000	520.100	535.000	480.800	97.984%	5.179
3	04:37:45	29.610	470.100	0.000	512.000	473.800	498.200	98.814%	4.942
x		99.550%	93.929%	0.000	512.415%	509.490%	488.775%	98.392%	104.832%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.415%	n/a
%RSD		0.811	0.104	0.000	1.456	6.247	1.798	0.422	6.403
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:36:51	0.911	1.892	4.707	49.730	51.030	0.500	1.121	2.021
2	04:37:18	1.344	2.094	5.059	50.850	49.330	0.519	1.039	2.100
3	04:37:45	1.141	2.008	4.714	49.260	49.930	0.482	0.808	1.914
x		113.180%	99.906%	96.534%	99.888%	100.192%	100.021%	98.926%	100.573%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		19.150	5.081	4.162	1.641	1.730	3.758	16.360	4.642
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:36:51	2.179	5.406	5.076	0.899	4.975	4.691	0.000	5.026
2	04:37:18	2.124	5.062	5.467	0.906	3.381	5.023	0.000	4.932
3	04:37:45	1.849	5.351	4.938	1.249	2.844	5.048	0.000	5.148
x		102.523%	105.462%	103.199%	101.792%	74.661%	98.418%	0.000	100.708%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		8.632	3.500	5.319	19.660	29.690	4.054	0.000	2.145
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:36:51	98.336%	4.896	4.788	99.854%	1.002	1.028	1.099	1.085
2	04:37:18	101.611%	4.569	4.764	101.965%	0.989	1.061	0.942	0.706
3	04:37:45	101.838%	4.842	4.926	103.404%	1.032	0.915	1.007	0.938
x		100.595%	95.384%	96.526%	101.741%	100.785%	100.129%	101.588%	90.952%
σ		1.960%	n/a	n/a	1.785%	n/a	n/a	n/a	n/a
%RSD		1.948	3.670	1.807	1.755	2.188	7.688	7.767	21.010
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:36:51	102.745%	5.486	1.811	1.784	9.623	9.135	99.851%	100.488%
2	04:37:18	104.102%	8.404	1.764	1.806	9.994	9.466	101.384%	102.388%
3	04:37:45	105.303%	5.351	1.763	1.970	9.560	10.070	102.102%	102.921%
x		104.050%	128.275%	88.962%	92.666%	97.260%	95.586%	101.112%	101.932%
σ		1.280%	n/a	n/a	n/a	n/a	n/a	1.150%	1.279%
%RSD		1.230	26.900	1.559	5.478	2.410	4.983	1.137	1.255
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:36:51	0.927	1.011	0.970	1.112	0.970	113.451%		
2	04:37:18	1.049	1.045	1.061	1.065	1.029	116.045%		
3	04:37:45	0.976	0.986	1.092	1.007	1.010	113.421%		
x		98.413%	101.382%	104.103%	106.117%	100.316%	114.306%		
σ		n/a	n/a	n/a	n/a	n/a	1.506%		
%RSD		6.206	2.919	6.119	4.937	2.977	1.318		

LCS 180-137426/2-A 4/9/2015 4:40:43 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	04:41:09	87.584%	50.100	967.700	971.600	0.000	48980.000	47390.000	46690.000
2	04:41:36	90.563%	49.110	945.800	953.200	0.000	48920.000	47420.000	47440.000
3	04:42:02	90.874%	48.050	950.300	954.900	0.000	48360.000	46890.000	46100.000
x		89.674%	49.080	954.600	959.900	0.000	48750.000	47230.000	46740.000
σ		1.816%	1.025	11.560	10.140	0.000	341.200	294.200	669.900
%RSD		2.025	2.088	1.211	1.057	0.000	0.700	0.623	1.433
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:41:09	1947.000	9399.000	0.000	49490.000	48470.000	49490.000	90.988%	959.200
2	04:41:36	1967.000	9525.000	0.000	49870.000	48780.000	50350.000	91.254%	984.700
3	04:42:02	1925.000	9334.000	0.000	49770.000	48450.000	50400.000	92.352%	970.200
x		1946.000	9420.000	0.000	49710.000	48570.000	50080.000	91.531%	971.400
σ		20.950	97.080	0.000	196.800	185.900	512.600	0.723%	12.820
%RSD		1.076	1.031	0.000	0.396	0.383	1.024	0.790	1.320
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:41:09	491.400	192.800	454.400	1027.000	1099.000	486.400	489.800	242.200
2	04:41:36	499.000	195.500	464.500	1062.000	1122.000	492.800	491.900	245.500
3	04:42:02	492.900	195.100	464.400	1056.000	1093.000	488.700	498.200	246.700
x		494.500	194.500	461.100	1048.000	1105.000	489.300	493.300	244.800
σ		4.051	1.456	5.768	18.560	15.780	3.205	4.352	2.329
%RSD		0.819	0.749	1.251	1.771	1.428	0.655	0.882	0.951
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:41:09	245.600	483.500	486.300	39.670	9.945	10.900	0.000	992.900
2	04:41:36	247.500	490.000	488.300	39.200	10.530	8.709	0.000	1073.000
3	04:42:02	248.400	493.900	487.400	37.900	10.140	10.130	0.000	1070.000
x		247.200	489.100	487.400	38.920	10.210	9.913	0.000	1045.000
σ		1.455	5.249	1.002	0.920	0.300	1.111	0.000	45.160
%RSD		0.589	1.073	0.206	2.363	2.936	11.210	0.000	4.322
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:41:09	93.316%	950.300	958.800	90.917%	48.800	48.220	50.170	39.270
2	04:41:36	95.768%	989.300	1007.000	93.686%	48.630	48.320	50.630	40.500
3	04:42:02	95.669%	1016.000	1031.000	93.951%	49.460	48.150	50.900	40.130
x		94.918%	985.100	999.200	92.851%	48.960	48.230	50.570	39.960
σ		1.388%	32.910	37.020	1.680%	0.437	0.085	0.370	0.630
%RSD		1.463	3.340	3.705	1.810	0.893	0.177	0.731	1.576
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:41:09	91.537%	2137.000	508.500	503.000	1974.000	1972.000	96.983%	98.086%
2	04:41:36	93.393%	2180.000	512.700	516.800	1977.000	1991.000	99.919%	99.232%
3	04:42:02	94.388%	2214.000	522.900	520.700	2021.000	1992.000	98.849%	100.634%
x		93.106%	2177.000	514.700	513.500	1991.000	1985.000	98.584%	99.318%
σ		1.447%	38.820	7.413	9.282	26.420	11.360	1.486%	1.276%
%RSD		1.554	1.783	1.440	1.807	1.327	0.572	1.507	1.285
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:41:09	43.130	44.900	17.350	17.940	17.460	122.271%		
2	04:41:36	46.800	48.150	19.000	19.510	18.950	115.964%		
3	04:42:02	47.270	48.830	19.530	19.310	19.210	115.038%		
x		45.730	47.290	18.630	18.920	18.540	117.758%		
σ		2.265	2.097	1.138	0.854	0.942	3.936%		
%RSD		4.953	4.434	6.109	4.515	5.080	3.342		

LCSD 180-137426/3-A 4/9/2015 4:45:00 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	04:45:27	88.634%	48.830	933.600	940.800	0.000	48050.000	46640.000	45970.000
2	04:45:53	90.294%	47.740	910.600	935.500	0.000	47940.000	46300.000	45860.000
3	04:46:20	88.097%	51.350	962.100	955.900	0.000	48810.000	47590.000	47080.000
x		89.009%	49.310	935.400	944.100	0.000	48270.000	46840.000	46300.000
σ		1.146%	1.851	25.770	10.590	0.000	474.800	669.600	674.600
%RSD		1.287	3.753	2.755	1.121	0.000	0.984	1.430	1.457
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:27	1849.000	9202.000	0.000	48860.000	47390.000	48250.000	89.449%	949.300
2	04:45:53	1867.000	9147.000	0.000	48780.000	47570.000	48890.000	89.919%	959.300
3	04:46:20	1921.000	9299.000	0.000	49100.000	48270.000	49410.000	90.703%	972.700
x		1879.000	9216.000	0.000	48910.000	47740.000	48850.000	90.024%	960.400
σ		37.580	76.850	0.000	166.800	463.900	580.200	0.633%	11.780
%RSD		2.000	0.834	0.000	0.341	0.972	1.188	0.703	1.227
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:27	478.900	190.000	446.900	1034.000	1109.000	478.300	476.200	241.100
2	04:45:53	486.100	192.100	454.700	1047.000	1114.000	484.800	485.400	242.500
3	04:46:20	490.600	194.100	457.500	1058.000	1119.000	485.300	486.100	241.500
x		485.200	192.100	453.000	1046.000	1114.000	482.800	482.600	241.700
σ		5.919	2.055	5.515	12.040	5.126	3.906	5.552	0.696
%RSD		1.220	1.070	1.217	1.150	0.460	0.809	1.151	0.288
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:27	240.300	478.500	478.500	38.010	8.857	10.150	0.000	1008.000
2	04:45:53	242.900	480.200	484.200	38.870	9.447	9.882	0.000	980.400
3	04:46:20	243.500	485.500	484.900	38.330	10.590	9.439	0.000	1055.000
x		242.200	481.400	482.500	38.400	9.631	9.822	0.000	1015.000
σ		1.705	3.655	3.521	0.436	0.880	0.357	0.000	37.890
%RSD		0.704	0.759	0.730	1.136	9.137	3.636	0.000	3.734
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:27	92.067%	942.300	960.800	88.696%	47.860	47.190	49.000	38.440
2	04:45:53	93.480%	989.000	1001.000	91.526%	47.800	47.700	51.170	41.560
3	04:46:20	94.169%	1008.000	1023.000	91.629%	48.220	47.660	50.860	38.490
x		93.239%	979.700	994.600	90.617%	47.960	47.520	50.340	39.500
σ		1.072%	33.670	31.310	1.665%	0.223	0.284	1.175	1.790
%RSD		1.150	3.437	3.147	1.837	0.466	0.599	2.335	4.531
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:45:27	90.642%	2120.000	497.300	500.100	1907.000	1913.000	97.318%	96.787%
2	04:45:53	91.658%	2136.000	505.300	499.100	1929.000	1947.000	97.986%	98.770%
3	04:46:20	94.077%	2163.000	507.400	509.300	1968.000	1963.000	96.730%	100.260%
x		92.126%	2140.000	503.400	502.900	1935.000	1941.000	97.345%	98.606%
σ		1.765%	21.760	5.344	5.635	30.890	25.320	0.629%	1.743%
%RSD		1.916	1.017	1.062	1.121	1.597	1.304	0.646	1.767
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:45:27	45.270	45.410	17.970	18.360	17.870	113.851%		
2	04:45:53	45.910	46.960	18.060	19.400	18.280	114.102%		
3	04:46:20	46.840	48.250	18.870	19.590	18.960	112.665%		
x		46.010	46.870	18.300	19.120	18.370	113.539%		
σ		0.786	1.420	0.497	0.661	0.550	0.768%		
%RSD		1.707	3.031	2.714	3.456	2.994	0.676		

600-109057-C-1-A@10 4/9/2015 4:49:18 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	04:49:44	90.189%	0.134	25.050	23.840	0.000	193200.000	69.400	70.120
2	04:50:11	92.842%	-0.151	19.110	20.360	0.000	190700.000	71.010	66.760
3	04:50:38	91.593%	-0.048	24.510	22.680	0.000	193900.000	66.850	67.520
x		91.541%	-0.022	22.890	22.290	0.000	192600.000	69.090	68.130
σ		1.327%	0.144	3.286	1.771	0.000	1690.000	2.100	1.763
%RSD		1.450	659.700	14.360	7.945	0.000	0.877	3.040	2.587
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:44	6.490	88.020	0.000	305.100	11010.000	10680.000	94.854%	1.220
2	04:50:11	6.569	84.360	0.000	310.400	11400.000	11030.000	94.590%	1.224
3	04:50:38	6.502	89.080	0.000	305.400	11250.000	10990.000	95.258%	1.127
x		6.521	87.150	0.000	307.000	11220.000	10900.000	94.901%	1.191
σ		0.043	2.476	0.000	2.949	196.600	195.300	0.336%	0.055
%RSD		0.653	2.841	0.000	0.961	1.752	1.791	0.355	4.620
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:44	1.040	0.236	0.610	17.400	63.850	0.161	1.080	0.788
2	04:50:11	1.410	0.343	0.627	14.930	67.020	0.097	1.216	0.808
3	04:50:38	0.869	0.317	0.563	10.950	59.310	0.116	1.203	0.961
x		1.106	0.298	0.600	14.430	63.390	0.125	1.166	0.852
σ		0.276	0.056	0.033	3.257	3.877	0.033	0.075	0.095
%RSD		24.960	18.700	5.493	22.570	6.115	26.230	6.469	11.120
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:44	0.201	2.689	2.729	0.317	-0.530	0.017	0.000	12.160
2	04:50:11	0.153	2.768	2.971	0.305	0.552	0.437	0.000	12.400
3	04:50:38	0.132	2.880	2.542	0.272	-0.116	-0.097	0.000	12.310
x		0.162	2.779	2.747	0.298	-0.032	0.119	0.000	12.290
σ		0.036	0.096	0.215	0.023	0.546	0.281	0.000	0.122
%RSD		21.940	3.448	7.818	7.816	1730.000	236.500	0.000	0.990
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:44	96.462%	11.850	11.630	93.122%	0.013	0.013	0.086	0.012
2	04:50:11	97.241%	10.040	9.880	95.422%	0.015	0.008	0.073	-0.024
3	04:50:38	98.372%	8.021	8.519	96.370%	0.019	0.003	0.017	0.015
x		97.358%	9.972	10.010	94.971%	0.016	0.008	0.059	0.001
σ		0.961%	1.917	1.557	1.670%	0.003	0.005	0.036	0.022
%RSD		0.987	19.220	15.560	1.759	18.570	63.050	62.240	2026.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:49:44	95.065%	13.280	2.286	2.320	2.870	2.925	98.093%	99.368%
2	04:50:11	97.696%	12.130	2.055	1.963	2.861	2.769	101.102%	101.313%
3	04:50:38	97.381%	11.760	1.762	1.765	3.061	2.894	100.990%	102.667%
x		96.714%	12.390	2.034	2.016	2.931	2.863	100.061%	101.116%
σ		1.437%	0.791	0.262	0.281	0.113	0.083	1.705%	1.658%
%RSD		1.486	6.385	12.900	13.950	3.857	2.884	1.704	1.640
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:49:44	0.024	0.027	0.016	0.023	0.022	120.715%		
2	04:50:11	0.020	0.018	0.012	0.003	0.010	120.634%		
3	04:50:38	0.012	0.014	0.000	0.036	0.024	116.630%		
x		0.019	0.020	0.009	0.021	0.019	119.326%		
σ		0.006	0.007	0.008	0.017	0.008	2.336%		
%RSD		31.990	35.060	86.910	78.910	40.860	1.958		

600-109057-C-1-A SD@50 4/9/2015 4:53:36 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	04:54:02	97.896%	-0.089	4.846	4.919	0.000	38280.000	10.970	12.190
2	04:54:29	95.255%	-0.011	6.128	5.022	0.000	39430.000	11.130	12.150
3	04:54:55	95.902%	-0.084	9.372	5.106	0.000	39560.000	12.230	12.610
x		96.351%	-0.061	6.782	5.016	0.000	39090.000	11.450	12.320
σ		1.377%	0.044	2.333	0.094	0.000	703.600	0.687	0.254
%RSD		1.429	71.550	34.400	1.866	0.000	1.800	6.001	2.064
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:02	1.271	16.470	0.000	60.950	2174.000	2143.000	98.358%	0.146
2	04:54:29	1.405	16.470	0.000	64.950	2244.000	2191.000	98.742%	0.143
3	04:54:55	1.454	17.960	0.000	69.400	2292.000	2235.000	97.792%	0.341
x		1.377	16.970	0.000	65.100	2237.000	2189.000	98.298%	0.210
σ		0.095	0.864	0.000	4.230	59.240	45.910	0.478%	0.114
%RSD		6.871	5.089	0.000	6.497	2.649	2.097	0.486	54.170
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:02	0.084	0.109	0.159	7.124	16.060	0.020	0.688	0.060
2	04:54:29	0.547	0.053	0.168	5.866	13.680	0.000	0.381	0.168
3	04:54:55	0.358	0.116	0.209	4.797	13.340	0.011	0.347	0.099
x		0.330	0.093	0.179	5.929	14.360	0.011	0.472	0.109
σ		0.233	0.035	0.027	1.165	1.478	0.010	0.188	0.055
%RSD		70.530	37.500	14.870	19.640	10.290	95.090	39.770	49.850
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:02	0.088	0.720	0.832	-0.506	0.498	-1.110	0.000	2.447
2	04:54:29	0.107	0.704	0.487	-0.261	0.439	-0.058	0.000	2.473
3	04:54:55	0.098	0.774	0.681	0.257	0.004	-0.023	0.000	2.447
x		0.098	0.733	0.667	-0.170	0.314	-0.397	0.000	2.456
σ		0.010	0.037	0.173	0.389	0.270	0.618	0.000	0.015
%RSD		10.040	4.999	25.930	228.900	85.920	155.600	0.000	0.626
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:02	99.439%	1.581	1.434	97.705%	0.003	-0.008	0.000	0.048
2	04:54:29	100.061%	1.658	1.529	99.159%	0.000	0.016	-0.011	0.038
3	04:54:55	101.835%	1.507	1.659	100.852%	0.000	0.012	-0.002	0.083
x		100.445%	1.582	1.541	99.239%	0.001	0.007	-0.004	0.056
σ		1.243%	0.075	0.113	1.575%	0.002	0.013	0.006	0.024
%RSD		1.238	4.763	7.317	1.587	126.000	193.600	146.800	42.220
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:54:02	92.781%	3.287	0.433	0.470	0.709	0.748	100.262%	100.784%
2	04:54:29	96.692%	3.575	0.405	0.507	0.640	0.611	102.058%	104.083%
3	04:54:55	95.715%	3.497	0.383	0.356	0.611	0.667	102.426%	104.219%
x		95.063%	3.453	0.407	0.444	0.653	0.675	101.582%	103.029%
σ		2.035%	0.149	0.025	0.079	0.050	0.069	1.158%	1.945%
%RSD		2.141	4.319	6.181	17.730	7.722	10.180	1.140	1.888
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	04:54:02	0.006	0.001	0.003	0.011	0.010	120.645%		
2	04:54:29	-0.008	-0.000	0.016	0.023	0.016	121.280%		
3	04:54:55	0.005	0.005	0.019	0.039	0.039	119.825%		
x		0.001	0.002	0.012	0.024	0.022	120.583%		
σ		0.008	0.003	0.008	0.014	0.015	0.730%		
%RSD		799.700	153.600	67.210	58.010	70.260	0.605		

CCV 1487954 4/9/2015 5:01:15 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	05:01:42	92.894%	97.870	96.240	99.310	0.000	49020.000	48460.000	48620.000
2	05:02:08	94.885%	100.200	95.200	97.140	0.000	48800.000	48900.000	48930.000
3	05:02:35	94.525%	99.810	95.770	99.500	0.000	49510.000	49180.000	48980.000
x		94.102%	99.285%	95.737%	98.653%	0.000	98.215%	97.698%	97.689%
σ		1.061%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.128	1.249	0.547	1.328	0.000	0.739	0.738	0.398
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:42	469.100	5269.000	0.000	49280.000	47980.000	49820.000	95.495%	99.410
2	05:02:08	478.500	5351.000	0.000	49730.000	48000.000	49850.000	96.966%	100.200
3	05:02:35	480.100	5375.000	0.000	49260.000	47530.000	50020.000	97.362%	98.340
x		95.179%	106.633%	0.000	98.847%	95.674%	99.793%	96.608%	99.331%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.983%	n/a
%RSD		1.247	1.043	0.000	0.544	0.552	0.218	1.018	0.962
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:42	94.980	95.770	460.200	24450.000	22690.000	95.010	97.070	96.710
2	05:02:08	96.700	96.930	468.200	25020.000	23390.000	97.680	97.410	98.310
3	05:02:35	98.090	97.550	468.700	24840.000	23490.000	96.610	98.050	98.340
x		96.591%	96.747%	93.135%	99.071%	92.761%	96.436%	97.508%	97.788%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.613	0.935	1.029	1.168	1.881	1.395	0.512	0.956
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:42	96.860	96.850	95.580	96.170	96.020	98.830	0.000	95.570
2	05:02:08	97.590	96.290	97.600	98.940	97.320	103.500	0.000	100.700
3	05:02:35	98.460	98.860	97.260	96.970	93.300	98.450	0.000	98.530
x		97.636%	97.334%	96.814%	97.361%	95.548%	100.261%	0.000	98.274%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.821	1.392	1.118	1.461	2.145	2.802	0.000	2.637
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:42	97.112%	92.570	94.970	94.541%	96.640	97.160	95.470	94.470
2	05:02:08	98.263%	98.420	98.010	96.467%	97.940	96.630	95.950	96.310
3	05:02:35	100.546%	98.760	100.400	97.439%	96.990	96.030	97.490	94.430
x		98.640%	96.584%	97.808%	96.149%	97.188%	96.606%	96.302%	95.069%
σ		1.748%	n/a	n/a	1.475%	n/a	n/a	n/a	n/a
%RSD		1.772	3.600	2.801	1.534	0.694	0.588	1.095	1.129
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:42	92.838%	99.430	99.220	99.880	96.850	95.140	99.734%	99.247%
2	05:02:08	95.756%	103.000	100.300	100.900	97.410	97.060	100.817%	101.538%
3	05:02:35	99.794%	99.160	98.260	99.970	97.590	94.330	102.499%	103.964%
x		96.130%	100.532%	99.249%	100.256%	97.284%	95.509%	101.017%	101.583%
σ		3.493%	n/a	n/a	n/a	n/a	n/a	1.393%	2.358%
%RSD		3.634	2.135	1.007	0.579	0.400	1.464	1.379	2.322
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:01:42	96.190	97.810	94.630	96.490	94.960	110.998%		
2	05:02:08	99.770	101.400	100.000	101.900	100.400	109.969%		
3	05:02:35	97.420	99.850	96.280	99.420	96.810	114.199%		
x		97.793%	99.697%	96.986%	99.259%	97.379%	111.722%		
σ		n/a	n/a	n/a	n/a	n/a	2.206%		
%RSD		1.863	1.816	2.860	2.715	2.828	1.974		

CCB6 4/9/2015 5:08:55 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	05:09:22	99.981%	-0.002	0.087	0.365	0.000	-38.220	7.944	8.263
2	05:09:48	100.001%	-0.117	2.320	0.615	0.000	-38.040	9.708	8.424
3	05:10:14	101.494%	-0.052	0.699	-0.110	0.000	-35.230	5.151	7.200
x		100.492%	-0.057	1.035	0.290	0.000	-37.170	7.601	7.962
σ		0.868%	0.058	1.154	0.368	0.000	1.680	2.298	0.665
%RSD		0.864	101.800	111.500	126.900	0.000	4.519	30.230	8.353

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:09:22	0.716	2.609	0.000	19.710	-6.265	6.277	100.017%	-0.081
2	05:09:48	0.633	-0.625	0.000	17.340	24.800	9.817	100.854%	-0.084
3	05:10:14	0.535	-1.261	0.000	19.530	-1.447	12.780	100.732%	-0.244
x		0.628	0.241	0.000	18.860	5.695	9.623	100.534%	-0.137
σ		0.090	2.076	0.000	1.317	16.720	3.254	0.452%	0.094
%RSD		14.390	861.100	0.000	6.981	293.500	33.810	0.450	68.540

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:09:22	0.120	0.061	0.081	5.193	11.170	0.025	-0.049	-0.083
2	05:09:48	0.047	-0.001	0.099	2.500	8.995	-0.004	-0.046	-0.063
3	05:10:14	0.026	-0.013	0.128	2.446	8.657	0.007	0.104	-0.112
x		0.064	0.016	0.103	3.380	9.607	0.009	0.003	-0.086
σ		0.050	0.039	0.024	1.570	1.363	0.015	0.088	0.025
%RSD		77.150	253.100	23.020	46.460	14.190	160.200	2902.000	28.710

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:09:22	-0.099	0.129	-0.024	-0.183	-0.839	-1.535	0.000	0.040
2	05:09:48	0.004	0.083	-0.117	0.023	-1.406	-0.530	0.000	0.018
3	05:10:14	-0.069	0.118	0.026	0.109	-0.848	-0.799	0.000	0.032
x		-0.055	0.110	-0.039	-0.017	-1.031	-0.955	0.000	0.030
σ		0.053	0.024	0.072	0.150	0.325	0.520	0.000	0.011
%RSD		97.030	21.710	187.700	889.200	31.530	54.500	0.000	35.800

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:09:22	100.688%	0.072	0.177	101.076%	0.021	0.013	0.051	0.125
2	05:09:48	103.364%	0.145	0.237	103.042%	0.033	0.006	0.030	0.083
3	05:10:14	103.819%	0.289	0.209	103.389%	0.022	0.019	0.022	0.087
x		102.624%	0.169	0.208	102.502%	0.026	0.013	0.034	0.098
σ		1.692%	0.110	0.030	1.247%	0.006	0.006	0.015	0.023
%RSD		1.649	65.400	14.460	1.217	24.910	51.110	43.290	23.850

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:09:22	99.442%	0.104	0.033	0.031	-0.007	0.069	100.880%	101.095%
2	05:09:48	102.802%	0.273	0.021	0.039	-0.052	0.054	103.212%	104.984%
3	05:10:14	102.158%	0.337	0.034	0.067	0.041	0.042	103.673%	103.923%
x		101.467%	0.238	0.029	0.046	-0.006	0.055	102.588%	103.334%
σ		1.784%	0.120	0.007	0.019	0.047	0.013	1.497%	2.011%
%RSD		1.758	50.430	23.650	42.050	812.800	24.020	1.459	1.946

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	05:09:22	0.036	0.005	0.039	0.030	0.028	111.458%
2	05:09:48	0.023	0.016	0.006	0.040	0.020	118.262%
3	05:10:14	0.021	0.018	0.021	0.036	0.020	116.767%
x		0.027	0.013	0.022	0.035	0.023	115.496%
σ		0.008	0.007	0.016	0.005	0.004	3.576%
%RSD		30.690	54.350	74.600	14.890	19.600	3.096

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:42	85.508%	-0.109	87.200	87.020	0.000	71900.000	15770.000	15770.000
2	05:14:09	84.162%	-0.023	91.070	86.510	0.000	72250.000	16120.000	15890.000
3	05:14:35	83.883%	-0.215	89.570	90.860	0.000	72630.000	16060.000	15960.000
x		84.518%	-0.116	89.280	88.130	0.000	72260.000	15980.000	15870.000
σ		0.869%	0.096	1.949	2.375	0.000	364.300	186.500	98.990
%RSD		1.028	82.860	2.182	2.694	0.000	0.504	1.167	0.624
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:42	84.790	5446.000	0.000	3143.000	179000.000	180400.000	85.612%	20.290
2	05:14:09	83.050	5458.000	0.000	2892.000	178700.000	183100.000	84.908%	19.810
3	05:14:35	84.260	5470.000	0.000	2902.000	186100.000	184000.000	85.421%	20.800
x		84.030	5458.000	0.000	2979.000	181300.000	182500.000	85.314%	20.300
σ		0.893	11.560	0.000	141.900	4148.000	1864.000	0.364%	0.494
%RSD		1.062	0.212	0.000	4.763	2.288	1.022	0.427	2.432
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:42	1.965	1.030	26.750	105.500	961.800	0.550	7.525	2.560
2	05:14:09	2.541	1.148	27.580	105.800	954.200	0.605	8.165	2.541
3	05:14:35	1.057	1.250	27.490	106.400	963.400	0.610	7.750	2.484
x		1.854	1.143	27.270	105.900	959.800	0.589	7.813	2.528
σ		0.748	0.110	0.457	0.430	4.933	0.033	0.324	0.039
%RSD		40.340	9.648	1.675	0.407	0.514	5.635	4.152	1.551
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:42	2.477	9.976	9.684	3.776	0.137	0.549	0.000	242.000
2	05:14:09	2.496	9.256	9.301	3.762	-0.076	2.774	0.000	247.200
3	05:14:35	2.640	9.445	9.873	3.637	0.094	1.091	0.000	248.600
x		2.538	9.559	9.619	3.725	0.052	1.471	0.000	245.900
σ		0.089	0.373	0.291	0.076	0.113	1.160	0.000	3.436
%RSD		3.512	3.902	3.028	2.050	218.400	78.850	0.000	1.397
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:42	88.159%	2.836	2.660	85.367%	0.017	0.024	0.067	0.084
2	05:14:09	89.476%	3.089	3.056	86.296%	0.017	0.027	0.016	0.042
3	05:14:35	89.480%	2.882	2.907	86.724%	0.021	0.011	0.116	-0.004
x		89.038%	2.935	2.874	86.129%	0.018	0.020	0.066	0.041
σ		0.762%	0.135	0.200	0.694%	0.003	0.009	0.050	0.044
%RSD		0.856	4.601	6.967	0.806	13.860	41.770	75.620	108.000
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:42	88.196%	0.690	0.165	0.121	11.490	10.700	92.587%	93.401%
2	05:14:09	86.492%	0.898	0.176	0.157	11.600	11.480	94.118%	94.567%
3	05:14:35	89.213%	0.925	0.138	0.126	11.630	11.720	95.324%	95.220%
x		87.967%	0.838	0.160	0.134	11.580	11.300	94.009%	94.396%
σ		1.375%	0.128	0.020	0.019	0.072	0.536	1.372%	0.921%
%RSD		1.563	15.320	12.210	14.520	0.619	4.740	1.459	0.976
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:13:42	-0.002	0.001	0.196	0.269	0.226	121.298%		
2	05:14:09	0.017	0.003	0.230	0.273	0.271	113.541%		
3	05:14:35	0.004	0.003	0.284	0.226	0.279	112.081%		
x		0.006	0.003	0.237	0.256	0.259	115.640%		
σ		0.010	0.001	0.044	0.026	0.029	4.954%		
%RSD		161.400	37.120	18.700	10.160	11.110	4.284		

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Run	Time	6Li	9Be	10B	11B	13C	23Na	25Mg	26Mg
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:18:00	85.222%	-0.108	25.710	22.130	0.000	17880.000	6572.000	6541.000
2	05:18:27	84.620%	0.220	19.080	24.270	0.000	17950.000	6729.000	6628.000
3	05:18:53	80.972%	-0.126	24.160	25.650	0.000	18470.000	6904.000	6737.000
x		83.605%	-0.005	22.980	24.020	0.000	18100.000	6735.000	6635.000
σ		2.300%	0.195	3.470	1.775	0.000	319.400	166.300	98.280
%RSD		2.751	4272.000	15.100	7.391	0.000	1.765	2.469	1.481

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:18:00	560.000	2644.000	0.000	1517.000	24010.000	24000.000	85.551%	5.812
2	05:18:27	569.800	2675.000	0.000	1506.000	24860.000	24620.000	84.624%	5.557
3	05:18:53	593.400	2721.000	0.000	1525.000	24340.000	24620.000	84.470%	6.302
x		574.400	2680.000	0.000	1516.000	24400.000	24420.000	84.882%	5.890
σ		17.150	38.360	0.000	9.684	428.300	357.000	0.585%	0.379
%RSD		2.985	1.431	0.000	0.639	1.755	1.462	0.689	6.434

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:18:00	1.206	1.618	209.100	1762.000	1573.000	2.414	6.356	3.213
2	05:18:27	1.614	1.701	216.000	1812.000	1610.000	2.552	6.244	3.564
3	05:18:53	0.915	1.681	216.600	1841.000	1621.000	2.714	6.328	3.431
x		1.245	1.667	213.900	1805.000	1601.000	2.560	6.309	3.403
σ		0.351	0.043	4.184	39.600	25.490	0.150	0.059	0.177
%RSD		28.220	2.594	1.956	2.194	1.592	5.859	0.929	5.196

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:18:00	3.900	16.040	15.420	0.293	-0.743	-1.584	0.000	128.900
2	05:18:27	3.493	16.790	17.010	1.897	-0.674	-0.982	0.000	131.900
3	05:18:53	3.693	16.710	16.660	0.395	0.507	-1.949	0.000	133.400
x		3.695	16.510	16.360	0.862	-0.303	-1.505	0.000	131.400
σ		0.204	0.411	0.835	0.898	0.702	0.488	0.000	2.281
%RSD		5.507	2.489	5.101	104.200	231.400	32.460	0.000	1.736

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:18:00	89.053%	0.574	0.621	87.196%	0.016	0.026	0.127	0.145
2	05:18:27	90.122%	0.792	0.688	87.935%	0.003	0.008	0.113	0.131
3	05:18:53	89.345%	0.701	0.575	88.783%	0.005	0.015	0.043	0.255
x		89.506%	0.689	0.628	87.972%	0.008	0.016	0.094	0.177
σ		0.552%	0.109	0.057	0.794%	0.007	0.009	0.045	0.068
%RSD		0.617	15.870	9.071	0.903	82.570	56.620	47.960	38.400

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:18:00	88.505%	0.168	0.041	0.044	41.460	41.060	92.298%	93.664%
2	05:18:27	90.936%	0.261	0.043	0.065	41.180	40.840	95.671%	96.274%
3	05:18:53	91.071%	0.218	0.060	0.073	41.760	40.530	95.887%	96.489%
x		90.171%	0.216	0.048	0.060	41.470	40.810	94.619%	95.476%
σ		1.444%	0.047	0.011	0.015	0.289	0.265	2.013%	1.573%
%RSD		1.601	21.680	21.720	24.630	0.696	0.648	2.127	1.647

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	05:18:00	0.007	0.006	1.927	1.724	1.757	116.686%
2	05:18:27	0.016	0.014	1.959	1.842	1.783	118.425%
3	05:18:53	0.027	0.016	1.997	1.796	1.825	116.151%
x		0.017	0.012	1.961	1.787	1.788	117.087%
σ		0.010	0.005	0.035	0.060	0.034	1.189%
%RSD		60.630	43.660	1.793	3.338	1.908	1.015

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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	05:22:15	82.868%	-0.297	18.080	22.450	0.000	16830.000	5700.000	5599.000
2	05:22:41	81.153%	-0.126	21.560	21.130	0.000	17360.000	5954.000	5818.000
3	05:23:07	82.245%	-0.156	21.140	20.000	0.000	17370.000	5871.000	5847.000
x		82.089%	-0.193	20.260	21.190	0.000	17190.000	5842.000	5754.000
σ		0.868%	0.091	1.900	1.227	0.000	310.300	129.600	135.500
%RSD		1.058	47.180	9.377	5.787	0.000	1.805	2.218	2.355
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:22:15	54.930	2013.000	0.000	1368.000	21150.000	21290.000	83.738%	0.030
2	05:22:41	57.640	2041.000	0.000	1407.000	22450.000	22150.000	83.124%	0.940
3	05:23:07	57.050	2086.000	0.000	1416.000	22530.000	22180.000	82.235%	0.267
x		56.540	2047.000	0.000	1397.000	22040.000	21870.000	83.033%	0.412
σ		1.428	36.470	0.000	25.660	778.100	504.500	0.756%	0.472
%RSD		2.526	1.782	0.000	1.837	3.530	2.306	0.910	114.500
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:22:15	1.624	0.829	13.430	120.100	226.600	0.099	2.340	4.360
2	05:22:41	1.172	0.915	13.900	123.100	219.600	0.139	2.096	4.439
3	05:23:07	0.539	0.823	13.960	122.500	219.600	0.136	2.040	4.524
x		1.112	0.856	13.760	121.900	221.900	0.124	2.159	4.441
σ		0.545	0.051	0.289	1.577	4.036	0.022	0.160	0.082
%RSD		49.040	6.005	2.103	1.294	1.819	18.010	7.397	1.855
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:22:15	4.492	8.953	8.782	1.194	-0.464	0.886	0.000	114.800
2	05:22:41	5.044	8.771	8.931	-0.616	0.222	0.399	0.000	116.600
3	05:23:07	4.651	9.092	9.265	-1.199	-1.688	-0.942	0.000	117.200
x		4.729	8.939	8.993	-0.207	-0.644	0.114	0.000	116.200
σ		0.284	0.161	0.247	1.248	0.968	0.947	0.000	1.218
%RSD		6.008	1.804	2.747	602.500	150.400	829.800	0.000	1.049
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:22:15	86.180%	0.354	0.342	85.799%	0.024	0.039	0.109	0.115
2	05:22:41	87.320%	0.419	0.367	86.758%	0.019	0.029	0.035	0.011
3	05:23:07	87.785%	0.322	0.373	87.243%	0.009	0.006	0.024	0.027
x		87.095%	0.365	0.361	86.600%	0.017	0.024	0.056	0.051
σ		0.826%	0.050	0.016	0.735%	0.008	0.017	0.046	0.056
%RSD		0.948	13.580	4.534	0.849	46.470	70.470	81.930	110.500
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:22:15	87.294%	-0.249	0.019	-0.001	32.930	31.560	91.125%	92.180%
2	05:22:41	88.150%	-0.137	0.001	-0.023	32.580	32.020	93.630%	93.732%
3	05:23:07	89.390%	-0.040	0.024	0.025	31.840	32.020	92.681%	94.665%
x		88.278%	-0.142	0.015	0.000	32.450	31.870	92.479%	93.526%
σ		1.054%	0.104	0.012	0.024	0.556	0.270	1.265%	1.255%
%RSD		1.194	73.520	83.400	10530.000	1.713	0.846	1.368	1.342
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:22:15	0.003	-0.001	0.493	0.520	0.501	117.141%		
2	05:22:41	0.000	0.010	0.507	0.514	0.536	111.748%		
3	05:23:07	0.004	0.000	0.611	0.506	0.580	109.394%		
x		0.003	0.003	0.537	0.513	0.539	112.761%		
σ		0.002	0.006	0.064	0.007	0.040	3.971%		
%RSD		82.150	185.900	11.940	1.435	7.366	3.522		

PB 180-137594/1-B 4/9/2015 5:29:55 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	05:30:21	89.015%	-0.066	1.149	-0.401	0.000	-42.080	-1.951	-1.879
2	05:30:48	88.912%	-0.195	-0.621	-0.303	0.000	-39.800	-3.737	-2.418
3	05:31:14	88.842%	-0.117	-0.029	-0.399	0.000	-37.580	-2.859	-2.042
x		88.923%	-0.126	0.166	-0.367	0.000	-39.820	-2.849	-2.113
σ		0.087%	0.065	0.901	0.056	0.000	2.253	0.893	0.276
%RSD		0.098	51.700	542.600	15.180	0.000	5.658	31.350	13.080
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:21	0.251	-3.814	0.000	1.442	21.410	1.961	89.392%	-0.093
2	05:30:48	0.277	-2.842	0.000	4.768	24.940	5.579	88.798%	0.091
3	05:31:14	0.258	-1.813	0.000	-3.503	33.090	3.670	89.569%	0.086
x		0.262	-2.823	0.000	0.902	26.480	3.737	89.253%	0.028
σ		0.013	1.000	0.000	4.162	5.989	1.810	0.404%	0.105
%RSD		4.961	35.440	0.000	461.200	22.620	48.440	0.453	373.900
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:21	-0.131	0.047	0.248	4.407	3.680	-0.008	0.404	-0.049
2	05:30:48	-0.454	0.008	0.261	1.682	1.432	0.017	0.395	-0.095
3	05:31:14	0.163	0.042	0.263	0.826	-0.621	0.009	0.553	-0.060
x		-0.141	0.032	0.257	2.305	1.497	0.006	0.451	-0.068
σ		0.309	0.021	0.008	1.870	2.151	0.013	0.089	0.024
%RSD		219.600	64.350	3.035	81.120	143.700	221.400	19.730	35.340
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:21	0.023	0.209	0.236	-0.380	0.300	-1.446	0.000	-0.004
2	05:30:48	0.071	0.108	-0.099	-0.509	-0.015	-2.539	0.000	0.013
3	05:31:14	-0.059	0.018	-0.136	-0.357	-0.302	-1.629	0.000	0.006
x		0.012	0.112	0.001	-0.415	-0.006	-1.872	0.000	0.005
σ		0.066	0.096	0.205	0.082	0.302	0.586	0.000	0.009
%RSD		565.500	85.640	28860.000	19.750	5246.000	31.290	0.000	174.300
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:21	90.003%	-0.093	-0.089	90.326%	0.019	0.007	-0.027	0.111
2	05:30:48	94.098%	-0.051	-0.094	92.754%	-0.003	-0.005	-0.018	0.010
3	05:31:14	92.939%	-0.051	-0.077	93.919%	0.004	0.006	0.030	0.010
x		92.347%	-0.065	-0.087	92.333%	0.007	0.003	-0.005	0.044
σ		2.111%	0.024	0.008	1.833%	0.011	0.007	0.031	0.058
%RSD		2.286	37.210	9.775	1.985	160.800	247.700	603.500	132.700
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:21	90.823%	-0.540	-0.069	-0.048	0.017	0.022	92.921%	93.346%
2	05:30:48	92.169%	-0.457	-0.070	-0.056	-0.009	0.008	95.890%	96.093%
3	05:31:14	92.749%	-0.380	-0.051	-0.050	-0.032	0.039	96.290%	97.597%
x		91.914%	-0.459	-0.063	-0.051	-0.008	0.023	95.034%	95.679%
σ		0.988%	0.080	0.011	0.004	0.025	0.015	1.840%	2.155%
%RSD		1.075	17.440	16.880	7.063	317.600	68.290	1.937	2.253
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:30:21	-0.002	-0.005	0.017	0.013	0.011	112.266%		
2	05:30:48	-0.002	-0.002	0.002	0.010	0.005	113.775%		
3	05:31:14	-0.000	-0.003	-0.017	0.028	0.006	113.424%		
x		-0.001	-0.003	0.001	0.017	0.007	113.155%		
σ		0.001	0.002	0.017	0.010	0.004	0.789%		
%RSD		82.760	50.480	1849.000	58.220	47.630	0.698		

MB 180-137855/1-A 4/9/2015 5:34:12 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	05:34:39	91.211%	-0.274	0.489	-0.433	0.000	-46.000	-2.860	-3.441
2	05:35:05	89.441%	-0.118	-0.634	-0.062	0.000	-41.770	-2.063	-2.379
3	05:35:32	90.869%	-0.198	0.352	-0.801	0.000	-39.850	-3.580	-3.297
x		90.507%	-0.197	0.069	-0.432	0.000	-42.540	-2.834	-3.039
σ		0.939%	0.078	0.613	0.369	0.000	3.147	0.758	0.576
%RSD		1.037	39.540	885.800	85.510	0.000	7.397	26.760	18.950
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	-0.154	-3.792	0.000	3.794	26.820	3.784	89.808%	-0.035
2	05:35:05	-0.149	-4.842	0.000	4.644	0.337	1.182	89.855%	-0.185
3	05:35:32	-0.074	-3.628	0.000	-0.282	17.360	4.156	90.545%	-0.098
x		-0.126	-4.087	0.000	2.719	14.840	3.040	90.069%	-0.106
σ		0.045	0.659	0.000	2.633	13.420	1.620	0.412%	0.076
%RSD		35.660	16.120	0.000	96.860	90.440	53.290	0.458	71.120
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	0.136	-0.069	0.006	-0.877	4.589	0.003	0.434	-0.172
2	05:35:05	0.088	-0.003	0.038	-0.993	-0.212	0.011	0.204	-0.152
3	05:35:32	0.142	0.002	0.033	-1.376	-2.939	0.011	0.236	-0.155
x		0.122	-0.023	0.026	-1.082	0.479	0.008	0.292	-0.159
σ		0.029	0.039	0.017	0.261	3.812	0.004	0.125	0.011
%RSD		24.160	170.300	66.250	24.150	795.200	52.490	42.810	6.700
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	-0.139	-0.040	-0.062	-0.225	0.103	-2.403	0.000	-0.006
2	05:35:05	-0.110	-0.004	-0.048	-0.202	-1.233	-1.220	0.000	0.001
3	05:35:32	-0.193	0.062	-0.037	0.222	-0.360	0.713	0.000	0.000
x		-0.147	0.006	-0.049	-0.068	-0.496	-0.970	0.000	-0.002
σ		0.042	0.052	0.012	0.252	0.679	1.573	0.000	0.004
%RSD		28.850	824.000	24.880	368.100	136.700	162.100	0.000	224.900
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	91.500%	-0.123	-0.117	92.048%	-0.007	-0.003	0.060	0.110
2	05:35:05	93.421%	-0.092	-0.115	93.647%	0.006	-0.003	-0.009	0.028
3	05:35:32	94.112%	-0.086	-0.095	94.413%	0.006	0.011	0.019	0.077
x		93.011%	-0.101	-0.109	93.369%	0.002	0.002	0.023	0.072
σ		1.353%	0.020	0.012	1.207%	0.008	0.008	0.035	0.041
%RSD		1.455	19.880	11.240	1.293	430.000	488.500	148.200	57.340
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:34:39	92.258%	-0.549	-0.072	-0.047	-0.030	0.008	93.103%	94.910%
2	05:35:05	93.635%	-0.494	-0.080	-0.037	-0.045	0.000	97.568%	96.967%
3	05:35:32	94.659%	-0.466	-0.078	-0.049	-0.034	-0.012	96.917%	97.645%
x		93.517%	-0.503	-0.077	-0.044	-0.036	-0.001	95.863%	96.507%
σ		1.205%	0.042	0.004	0.006	0.008	0.010	2.412%	1.424%
%RSD		1.288	8.453	5.270	13.950	20.860	957.700	2.516	1.475
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:34:39	-0.000	0.000	0.004	-0.007	0.002	115.596%		
2	05:35:05	-0.001	-0.005	0.002	0.002	0.006	118.702%		
3	05:35:32	-0.001	-0.005	0.004	-0.003	0.009	118.155%		
x		-0.000	-0.003	0.003	-0.003	0.005	117.484%		
σ		0.000	0.003	0.001	0.004	0.003	1.658%		
%RSD		43.200	97.070	39.030	164.400	59.430	1.411		

LCS 180-137855/2-A 4/9/2015 5:38:27 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	05:38:54	75.555%	48.620	946.300	955.400	0.000	48030.000	46770.000	46530.000
2	05:39:21	74.910%	50.660	941.700	965.100	0.000	48630.000	47490.000	47060.000
3	05:39:47	76.032%	48.040	941.700	954.400	0.000	48550.000	48090.000	47180.000
x		75.499%	49.110	943.200	958.300	0.000	48400.000	47450.000	46920.000
σ		0.563%	1.376	2.669	5.908	0.000	325.600	661.400	343.700
%RSD		0.746	2.802	0.283	0.617	0.000	0.673	1.394	0.733
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:38:54	1867.000	9268.000	0.000	48710.000	47180.000	47490.000	76.218%	952.200
2	05:39:21	1915.000	9414.000	0.000	49180.000	47910.000	49230.000	76.930%	981.900
3	05:39:47	1913.000	9406.000	0.000	49480.000	49580.000	49940.000	76.600%	982.700
x		1899.000	9363.000	0.000	49120.000	48220.000	48890.000	76.583%	972.200
σ		27.330	82.340	0.000	390.100	1235.000	1264.000	0.357%	17.340
%RSD		1.440	0.879	0.000	0.794	2.561	2.586	0.466	1.783
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:38:54	479.200	189.600	449.300	1022.000	1118.000	479.700	484.500	243.600
2	05:39:21	488.100	192.600	457.300	1039.000	1111.000	485.700	497.100	244.000
3	05:39:47	490.700	196.300	463.700	1055.000	1149.000	491.200	499.100	248.600
x		486.000	192.800	456.800	1038.000	1126.000	485.500	493.600	245.400
σ		6.014	3.335	7.223	16.600	19.910	5.746	7.896	2.771
%RSD		1.237	1.730	1.581	1.599	1.768	1.183	1.600	1.129
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:38:54	244.700	482.500	481.100	40.430	9.476	10.230	0.000	1038.000
2	05:39:21	248.400	485.800	477.900	40.050	9.269	10.480	0.000	1038.000
3	05:39:47	245.300	489.400	488.400	37.980	8.185	9.052	0.000	1049.000
x		246.100	485.900	482.500	39.490	8.977	9.919	0.000	1041.000
σ		1.968	3.466	5.375	1.317	0.693	0.761	0.000	6.163
%RSD		0.799	0.713	1.114	3.336	7.722	7.676	0.000	0.592
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:38:54	77.170%	936.600	948.900	77.144%	47.130	47.000	51.020	41.930
2	05:39:21	79.577%	979.000	995.100	78.417%	48.130	47.790	49.420	40.980
3	05:39:47	80.373%	1011.000	1025.000	78.638%	48.540	47.970	49.660	41.190
x		79.040%	975.400	989.600	78.066%	47.930	47.590	50.030	41.370
σ		1.668%	37.150	38.220	0.806%	0.727	0.518	0.860	0.501
%RSD		2.110	3.808	3.863	1.033	1.516	1.089	1.719	1.212
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:38:54	77.196%	2077.000	504.800	505.800	1940.000	1892.000	84.457%	87.031%
2	05:39:21	78.850%	2125.000	508.800	511.000	1946.000	1923.000	87.409%	87.725%
3	05:39:47	79.521%	2146.000	514.100	514.000	1983.000	1960.000	86.513%	89.794%
x		78.522%	2116.000	509.200	510.300	1956.000	1925.000	86.126%	88.184%
σ		1.197%	35.120	4.631	4.142	23.700	34.330	1.513%	1.437%
%RSD		1.525	1.660	0.909	0.812	1.212	1.783	1.757	1.630
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:38:54	42.940	43.350	17.160	17.370	17.160	105.787%		
2	05:39:21	44.760	47.040	18.690	18.780	18.290	100.707%		
3	05:39:47	46.480	47.300	18.760	19.930	18.940	100.008%		
x		44.730	45.890	18.200	18.700	18.130	102.168%		
σ		1.772	2.207	0.905	1.282	0.903	3.154%		
%RSD		3.963	4.810	4.970	6.855	4.981	3.087		

LCSD 180-137855/3-A 4/9/2015 5:42:45 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	05:43:12	74.338%	49.300	929.300	946.900	0.000	47620.000	46120.000	46280.000
2	05:43:38	75.385%	49.800	924.000	960.300	0.000	47970.000	46740.000	46150.000
3	05:44:04	75.812%	49.650	924.800	945.600	0.000	47760.000	47160.000	46600.000
x		75.178%	49.580	926.000	950.900	0.000	47780.000	46670.000	46340.000
σ		0.758%	0.257	2.851	8.161	0.000	178.300	520.300	231.100
%RSD		1.009	0.518	0.308	0.858	0.000	0.373	1.115	0.499
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:12	1868.000	9202.000	0.000	48240.000	47220.000	47550.000	76.794%	940.100
2	05:43:38	1879.000	9241.000	0.000	48770.000	47960.000	48610.000	76.025%	963.100
3	05:44:04	1904.000	9315.000	0.000	48400.000	47740.000	48460.000	76.794%	967.600
x		1884.000	9252.000	0.000	48470.000	47640.000	48210.000	76.538%	956.900
σ		18.210	57.270	0.000	274.200	378.300	576.600	0.444%	14.720
%RSD		0.967	0.619	0.000	0.566	0.794	1.196	0.580	1.538
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:12	474.000	189.700	443.900	1013.000	1115.000	475.500	483.200	240.900
2	05:43:38	482.600	192.800	456.200	1046.000	1122.000	484.300	488.000	245.600
3	05:44:04	483.900	194.300	455.500	1043.000	1113.000	484.900	489.100	242.900
x		480.200	192.300	451.900	1034.000	1116.000	481.600	486.800	243.100
σ		5.349	2.337	6.939	18.030	4.686	5.247	3.140	2.381
%RSD		1.114	1.215	1.536	1.744	0.420	1.090	0.645	0.979
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:12	240.900	472.500	482.000	37.090	10.490	9.744	0.000	1009.000
2	05:43:38	247.600	489.200	484.200	38.970	9.362	10.060	0.000	1026.000
3	05:44:04	246.500	488.300	483.900	38.850	10.820	9.124	0.000	1037.000
x		245.000	483.300	483.400	38.300	10.220	9.644	0.000	1024.000
σ		3.619	9.364	1.177	1.055	0.764	0.477	0.000	13.990
%RSD		1.477	1.937	0.244	2.755	7.475	4.951	0.000	1.366
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:12	77.959%	930.500	945.700	77.580%	47.590	47.580	50.210	40.670
2	05:43:38	79.383%	981.700	986.300	79.068%	47.180	47.460	49.200	41.100
3	05:44:04	79.841%	999.500	1011.000	79.114%	48.420	47.730	50.080	40.520
x		79.061%	970.600	981.000	78.587%	47.730	47.590	49.830	40.760
σ		0.981%	35.810	33.020	0.872%	0.628	0.134	0.553	0.300
%RSD		1.241	3.690	3.366	1.110	1.316	0.282	1.110	0.737
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:43:12	76.602%	2082.000	499.400	499.300	1909.000	1919.000	85.710%	86.864%
2	05:43:38	76.918%	2135.000	508.600	515.200	1928.000	1920.000	87.769%	88.777%
3	05:44:04	78.300%	2159.000	512.200	504.100	1938.000	1926.000	88.349%	89.096%
x		77.273%	2125.000	506.700	506.200	1925.000	1921.000	87.276%	88.246%
σ		0.903%	39.180	6.550	8.157	14.900	3.697	1.387%	1.207%
%RSD		1.168	1.843	1.293	1.611	0.774	0.192	1.589	1.368
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:43:12	44.850	45.960	18.250	18.220	18.040	98.416%		
2	05:43:38	46.460	46.740	18.300	19.240	18.520	99.527%		
3	05:44:04	46.680	47.820	18.700	19.040	18.590	98.971%		
x		46.000	46.840	18.420	18.830	18.380	98.971%		
σ		0.997	0.935	0.246	0.542	0.303	0.556%		
%RSD		2.167	1.995	1.333	2.880	1.650	0.561		

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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	05:47:29	82.066%	-0.017	34.630	33.290	0.000	166500.000	208.100	197.900
2	05:47:56	85.090%	-0.027	35.260	32.680	0.000	164900.000	189.300	195.000
3	05:48:22	84.353%	-0.052	27.750	33.400	0.000	166400.000	206.300	196.500
x		83.836%	-0.032	32.550	33.120	0.000	165900.000	201.200	196.400
σ		1.577%	0.018	4.167	0.387	0.000	861.200	10.370	1.451
%RSD		1.881	56.940	12.800	1.168	0.000	0.519	5.152	0.739

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:47:29	17.000	215.200	0.000	387.100	2685.000	2680.000	86.452%	1.355
2	05:47:56	16.140	215.600	0.000	387.100	2872.000	2757.000	87.273%	1.490
3	05:48:22	16.550	214.400	0.000	391.900	2787.000	2748.000	88.175%	1.104
x		16.560	215.000	0.000	388.700	2781.000	2728.000	87.300%	1.316
σ		0.428	0.620	0.000	2.740	93.210	42.070	0.862%	0.196
%RSD		2.585	0.288	0.000	0.705	3.351	1.542	0.987	14.890

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:47:29	0.740	0.922	3.131	138.900	135.500	0.230	1.842	1.772
2	05:47:56	0.221	0.931	3.158	137.900	133.000	0.196	2.035	2.019
3	05:48:22	0.035	0.919	3.332	135.800	128.400	0.166	2.006	2.051
x		0.332	0.924	3.207	137.500	132.300	0.197	1.961	1.947
σ		0.366	0.006	0.109	1.593	3.604	0.032	0.104	0.153
%RSD		110.200	0.660	3.409	1.158	2.725	16.290	5.294	7.851

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:47:29	1.487	1.765	1.508	5.197	9.193	8.853	0.000	9.605
2	05:47:56	1.610	2.053	1.890	5.488	5.884	9.451	0.000	9.958
3	05:48:22	1.669	1.515	1.988	4.591	3.678	9.722	0.000	9.714
x		1.589	1.778	1.796	5.092	6.252	9.342	0.000	9.759
σ		0.093	0.270	0.254	0.458	2.776	0.444	0.000	0.181
%RSD		5.862	15.160	14.120	8.987	44.400	4.757	0.000	1.850

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:47:29	88.248%	11.320	11.150	85.308%	0.027	0.019	0.005	-0.042
2	05:47:56	90.838%	9.444	9.562	87.491%	0.035	0.020	0.063	-0.164
3	05:48:22	91.222%	7.888	7.865	89.712%	0.012	0.015	0.062	0.004
x		90.103%	9.551	9.526	87.504%	0.025	0.018	0.043	-0.067
σ		1.618%	1.720	1.643	2.202%	0.012	0.003	0.033	0.087
%RSD		1.795	18.010	17.250	2.517	46.460	16.450	76.250	129.200

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:47:29	87.556%	14.730	0.718	0.664	1.741	1.645	92.562%	93.190%
2	05:47:56	90.595%	14.150	0.691	0.683	1.571	1.812	96.288%	96.615%
3	05:48:22	91.556%	12.840	0.607	0.766	1.438	1.432	96.038%	97.564%
x		89.902%	13.910	0.672	0.704	1.583	1.630	94.963%	95.789%
σ		2.088%	0.968	0.058	0.054	0.152	0.190	2.082%	2.300%
%RSD		2.322	6.962	8.614	7.713	9.621	11.680	2.193	2.402

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	05:47:29	0.131	0.139	0.293	0.342	0.311	107.464%
2	05:47:56	0.156	0.137	0.315	0.326	0.300	110.158%
3	05:48:22	0.156	0.134	0.301	0.279	0.284	108.585%
x		0.147	0.137	0.303	0.316	0.298	108.736%
σ		0.014	0.003	0.011	0.033	0.013	1.353%
%RSD		9.782	2.033	3.763	10.410	4.454	1.245

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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	05:51:50	84.669%	-0.243	20.040	22.910	0.000	120600.000	380.100	382.900
2	05:52:17	85.932%	-0.057	24.020	23.440	0.000	121400.000	383.100	390.300
3	05:52:43	84.977%	-0.054	24.150	23.010	0.000	122900.000	392.700	381.400
x		85.193%	-0.118	22.730	23.120	0.000	121700.000	385.300	384.900
σ		0.659%	0.108	2.333	0.280	0.000	1147.000	6.592	4.770
%RSD		0.773	91.780	10.260	1.209	0.000	0.943	1.711	1.239
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:50	9.187	178.000	0.000	312.000	2971.000	2687.000	88.893%	0.243
2	05:52:17	9.346	178.500	0.000	320.200	2980.000	2788.000	88.922%	0.212
3	05:52:43	9.839	181.600	0.000	317.500	2925.000	2812.000	88.450%	0.276
x		9.457	179.400	0.000	316.600	2958.000	2762.000	88.755%	0.243
σ		0.340	1.936	0.000	4.168	29.510	66.030	0.265%	0.032
%RSD		3.597	1.079	0.000	1.317	0.998	2.390	0.298	13.190
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:50	0.135	0.057	22.560	28.230	34.410	0.361	2.785	0.754
2	05:52:17	-0.037	0.112	23.460	28.110	32.260	0.342	3.244	1.049
3	05:52:43	0.071	0.131	23.650	25.540	32.720	0.402	2.737	0.986
x		0.056	0.100	23.220	27.300	33.130	0.368	2.922	0.930
σ		0.087	0.039	0.582	1.518	1.135	0.031	0.280	0.155
%RSD		155.000	38.720	2.508	5.560	3.425	8.337	9.567	16.680
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:50	0.479	1.339	1.094	0.610	3.832	4.941	0.000	10.670
2	05:52:17	0.494	1.401	1.574	0.906	3.852	4.678	0.000	10.890
3	05:52:43	0.379	1.540	1.538	0.447	2.128	5.700	0.000	10.820
x		0.450	1.427	1.402	0.654	3.271	5.107	0.000	10.790
σ		0.063	0.103	0.268	0.233	0.990	0.531	0.000	0.112
%RSD		13.940	7.235	19.080	35.600	30.250	10.390	0.000	1.038
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:50	90.672%	1.625	1.421	88.930%	-0.004	-0.007	0.073	0.026
2	05:52:17	92.635%	1.395	1.415	89.853%	0.005	0.017	0.042	0.111
3	05:52:43	93.377%	1.416	1.513	90.583%	0.003	0.010	0.012	-0.066
x		92.228%	1.479	1.449	89.789%	0.001	0.007	0.043	0.024
σ		1.398%	0.128	0.055	0.828%	0.005	0.012	0.031	0.089
%RSD		1.516	8.628	3.809	0.923	383.400	190.500	71.880	376.600
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:51:50	90.008%	4.082	0.125	0.121	2.175	1.932	95.093%	95.260%
2	05:52:17	90.824%	4.176	0.116	0.110	1.848	1.815	97.012%	97.792%
3	05:52:43	91.407%	4.123	0.177	0.173	1.887	1.955	98.115%	98.129%
x		90.746%	4.127	0.139	0.135	1.970	1.901	96.740%	97.061%
σ		0.703%	0.047	0.033	0.034	0.179	0.075	1.529%	1.568%
%RSD		0.774	1.134	23.850	25.010	9.088	3.940	1.581	1.616
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	05:51:50	0.008	0.029	0.013	0.005	-0.001	111.743%		
2	05:52:17	0.017	0.032	0.003	0.017	0.008	111.095%		
3	05:52:43	0.025	0.035	0.006	0.009	0.006	110.518%		
x		0.017	0.032	0.007	0.010	0.004	111.118%		
σ		0.009	0.003	0.005	0.006	0.004	0.613%		
%RSD		51.860	8.380	64.830	56.020	100.400	0.552		

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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	05:56:10	82.443%	-0.018	24.600	25.000	0.000	144000.000	440.900	430.900
2	05:56:36	84.662%	-0.026	20.710	22.510	0.000	143100.000	436.400	441.900
3	05:57:02	83.294%	0.034	29.670	23.130	0.000	143800.000	432.200	434.700
x		83.466%	-0.003	24.990	23.550	0.000	143600.000	436.500	435.800
σ		1.119%	0.032	4.491	1.298	0.000	493.100	4.311	5.559
%RSD		1.341	956.800	17.970	5.510	0.000	0.343	0.988	1.276

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:10	12.730	223.900	0.000	383.100	4425.000	4409.000	87.444%	0.101
2	05:56:36	12.980	227.300	0.000	388.500	4574.000	4447.000	87.010%	0.072
3	05:57:02	12.750	226.000	0.000	386.400	4517.000	4477.000	88.170%	-0.058
x		12.820	225.700	0.000	386.000	4505.000	4445.000	87.541%	0.038
σ		0.138	1.710	0.000	2.716	75.250	34.030	0.586%	0.084
%RSD		1.076	0.758	0.000	0.704	1.670	0.766	0.670	219.800

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:10	0.194	0.154	21.310	19.840	39.290	0.268	0.759	0.647
2	05:56:36	0.192	0.188	21.610	18.870	39.950	0.314	0.869	0.581
3	05:57:02	0.121	0.112	21.810	17.670	38.570	0.340	1.130	0.699
x		0.169	0.151	21.570	18.800	39.270	0.307	0.920	0.642
σ		0.042	0.038	0.250	1.085	0.691	0.036	0.191	0.059
%RSD		24.680	25.130	1.159	5.770	1.759	11.830	20.760	9.154

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:10	0.140	4.873	5.126	1.388	25.950	28.050	0.000	12.100
2	05:56:36	0.162	5.498	5.433	1.819	25.250	26.210	0.000	12.150
3	05:57:02	0.229	5.492	5.559	1.202	23.150	27.790	0.000	12.350
x		0.177	5.287	5.372	1.470	24.780	27.350	0.000	12.200
σ		0.046	0.359	0.223	0.316	1.454	0.998	0.000	0.134
%RSD		26.170	6.792	4.146	21.520	5.867	3.649	0.000	1.101

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:10	89.320%	0.505	0.612	86.331%	0.009	0.018	0.056	0.019
2	05:56:36	91.020%	0.692	0.724	88.574%	0.003	0.003	0.053	0.062
3	05:57:02	91.840%	0.637	0.614	88.929%	0.010	0.010	0.023	0.049
x		90.727%	0.611	0.650	87.945%	0.007	0.010	0.044	0.043
σ		1.285%	0.096	0.064	1.409%	0.004	0.008	0.018	0.022
%RSD		1.417	15.740	9.898	1.602	50.890	75.860	41.260	50.340

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:10	88.424%	2.024	0.109	0.096	0.196	0.536	93.501%	92.952%
2	05:56:36	90.577%	2.063	0.048	0.094	0.177	0.345	95.324%	96.917%
3	05:57:02	90.351%	2.220	0.055	0.077	0.414	0.374	97.063%	97.615%
x		89.784%	2.102	0.071	0.089	0.262	0.419	95.296%	95.828%
σ		1.183%	0.104	0.034	0.011	0.132	0.103	1.781%	2.515%
%RSD		1.318	4.950	47.320	12.070	50.370	24.590	1.869	2.624

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	05:56:10	0.023	0.005	0.040	0.028	0.041	110.987%
2	05:56:36	0.011	0.003	0.024	0.059	0.045	112.363%
3	05:57:02	0.013	0.008	0.036	0.043	0.042	112.420%
x		0.016	0.005	0.033	0.043	0.043	111.924%
σ		0.006	0.003	0.008	0.016	0.002	0.811%
%RSD		40.210	46.270	24.550	36.160	5.122	0.725

CCV 1487954 4/9/2015 6:00:02 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	06:00:28	83.746%	103.700	96.770	104.300	0.000	49990.000	50200.000	50070.000
2	06:00:54	85.135%	102.300	99.470	100.100	0.000	49450.000	49840.000	50180.000
3	06:01:21	85.351%	98.950	113.200	101.000	0.000	50040.000	50430.000	50180.000
x		84.744%	101.678%	103.131%	101.815%	0.000	99.651%	100.314%	100.283%
σ		0.871%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		1.028	2.427	8.515	2.181	0.000	0.659	0.594	0.122
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:28	482.700	5424.000	0.000	50000.000	48170.000	49160.000	88.085%	99.200
2	06:00:54	484.600	5365.000	0.000	49880.000	48370.000	49410.000	89.508%	96.640
3	06:01:21	485.500	5397.000	0.000	50040.000	49200.000	49900.000	89.941%	101.200
x		96.856%	107.908%	0.000	99.942%	97.156%	98.974%	89.178%	99.006%
σ		n/a	n/a	0.000	n/a	n/a	n/a	0.971%	n/a
%RSD		0.300	0.555	0.000	0.171	1.123	0.756	1.089	2.295
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:28	95.570	96.570	466.200	24940.000	23190.000	95.440	99.130	97.050
2	06:00:54	96.980	97.980	470.600	25090.000	23450.000	97.330	100.600	98.810
3	06:01:21	98.680	97.630	469.500	25160.000	23820.000	97.700	99.510	98.830
x		97.076%	97.393%	93.751%	100.262%	93.954%	96.822%	99.732%	98.228%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		1.604	0.755	0.496	0.453	1.352	1.251	0.736	1.042
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:28	97.970	97.230	98.370	97.080	100.300	99.540	0.000	96.720
2	06:00:54	98.340	98.360	97.170	97.330	99.850	98.090	0.000	98.670
3	06:01:21	100.700	99.570	98.250	98.130	96.730	97.560	0.000	97.430
x		99.013%	98.388%	97.929%	97.513%	98.945%	98.397%	0.000	97.605%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		1.513	1.186	0.677	0.561	1.952	1.037	0.000	1.011
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:28	90.672%	96.520	96.230	88.387%	97.230	96.440	96.030	95.500
2	06:00:54	92.367%	98.680	98.210	90.073%	96.070	95.010	96.120	95.710
3	06:01:21	93.075%	101.600	102.000	89.950%	98.370	96.780	97.790	96.540
x		92.038%	98.925%	98.822%	89.470%	97.220%	96.074%	96.646%	95.917%
σ		1.235%	n/a	n/a	0.940%	n/a	n/a	n/a	n/a
%RSD		1.342	2.564	2.976	1.051	1.185	0.979	1.024	0.570
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:28	87.971%	100.500	99.040	100.600	97.260	96.060	94.552%	95.878%
2	06:00:54	90.149%	101.000	101.300	102.200	94.950	95.430	95.761%	96.382%
3	06:01:21	90.843%	101.900	99.760	101.400	97.390	96.290	96.745%	97.742%
x		89.654%	101.167%	100.017%	101.398%	96.531%	95.926%	95.686%	96.667%
σ		1.499%	n/a	n/a	n/a	n/a	n/a	1.098%	0.964%
%RSD		1.672	0.705	1.127	0.770	1.423	0.465	1.148	0.997
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:00:28	89.880	92.190	89.110	92.570	89.410	114.041%		
2	06:00:54	95.450	96.680	93.940	97.080	94.530	110.691%		
3	06:01:21	94.350	98.160	96.330	95.800	94.680	110.111%		
x		93.229%	95.676%	93.129%	95.151%	92.875%	111.614%		
σ		n/a	n/a	n/a	n/a	n/a	2.122%		
%RSD		3.164	3.252	3.946	2.440	3.232	1.901		

CCB7 4/9/2015 6:07:44 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	06:08:10	91.676%	-0.023	0.038	0.599	0.000	-12.080	8.691	8.362
2	06:08:37	92.276%	-0.125	-0.691	0.158	0.000	-11.260	5.545	7.174
3	06:09:04	92.752%	-0.175	0.291	0.540	0.000	-10.110	8.196	7.928
x		92.235%	-0.108	-0.121	0.433	0.000	-11.150	7.477	7.821
σ		0.539%	0.078	0.510	0.239	0.000	0.990	1.692	0.601
%RSD		0.585	72.220	422.900	55.320	0.000	8.879	22.620	7.681

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:08:10	0.830	-1.084	0.000	22.250	-1.079	7.626	91.847%	-0.162
2	06:08:37	0.772	-1.209	0.000	18.380	1.798	15.940	91.824%	-0.309
3	06:09:04	0.713	0.908	0.000	20.930	35.130	13.380	93.028%	0.008
x		0.772	-0.462	0.000	20.520	11.950	12.310	92.233%	-0.155
σ		0.059	1.187	0.000	1.967	20.130	4.259	0.688%	0.158
%RSD		7.598	257.100	0.000	9.584	168.400	34.580	0.746	102.600

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:08:10	0.086	-0.017	0.189	5.068	14.230	0.009	-0.005	-0.064
2	06:08:37	0.032	-0.090	0.137	3.957	12.230	0.026	0.000	-0.131
3	06:09:04	-0.045	0.014	0.191	2.858	8.875	0.012	-0.004	-0.018
x		0.024	-0.031	0.172	3.961	11.780	0.015	-0.003	-0.071
σ		0.066	0.054	0.031	1.105	2.707	0.009	0.003	0.057
%RSD		268.800	173.500	17.730	27.900	22.980	59.290	96.060	79.980

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:08:10	-0.045	0.086	-0.019	0.120	0.485	-0.621	0.000	0.049
2	06:08:37	-0.067	-0.010	-0.017	0.108	0.021	-1.596	0.000	0.046
3	06:09:04	-0.190	0.102	0.176	-0.621	0.013	-2.720	0.000	0.041
x		-0.101	0.059	0.047	-0.131	0.173	-1.645	0.000	0.045
σ		0.078	0.061	0.112	0.424	0.270	1.051	0.000	0.004
%RSD		77.540	102.900	240.000	323.400	156.200	63.850	0.000	9.553

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:08:10	91.265%	0.186	0.186	92.165%	0.007	0.007	0.012	0.062
2	06:08:37	94.043%	0.231	0.187	93.390%	0.013	0.037	0.039	0.063
3	06:09:04	94.462%	0.140	0.199	94.779%	0.031	0.020	0.010	0.036
x		93.257%	0.186	0.191	93.445%	0.017	0.021	0.020	0.054
σ		1.737%	0.045	0.007	1.308%	0.013	0.015	0.016	0.016
%RSD		1.863	24.470	3.770	1.399	73.110	70.860	81.160	28.850

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:08:10	91.655%	0.355	-0.030	-0.021	0.017	0.047	92.577%	94.050%
2	06:08:37	93.329%	0.393	-0.032	0.002	-0.021	0.026	95.953%	96.422%
3	06:09:04	93.569%	0.408	-0.006	-0.009	-0.055	0.013	95.800%	96.796%
x		92.851%	0.385	-0.023	-0.009	-0.020	0.029	94.777%	95.756%
σ		1.043%	0.027	0.014	0.011	0.036	0.017	1.906%	1.490%
%RSD		1.123	7.038	62.150	122.600	182.700	59.510	2.011	1.556

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	06:08:10	0.024	0.015	0.014	0.023	0.017	101.786%
2	06:08:37	0.034	0.024	0.017	0.024	0.020	100.724%
3	06:09:04	0.026	0.022	0.016	0.028	0.022	102.286%
x		0.028	0.021	0.016	0.025	0.020	101.599%
σ		0.006	0.005	0.002	0.003	0.003	0.798%
%RSD		20.190	22.000	10.200	11.700	13.560	0.785

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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	06:12:30	83.521%	0.006	24.130	22.600	0.000	142000.000	431.600	433.800
2	06:12:57	86.070%	-0.137	22.960	21.760	0.000	141600.000	448.900	432.800
3	06:13:24	84.117%	0.003	20.990	22.340	0.000	142900.000	455.100	436.200
x		84.569%	-0.043	22.690	22.230	0.000	142200.000	445.200	434.300
σ		1.333%	0.082	1.588	0.429	0.000	663.500	12.170	1.737
%RSD		1.577	191.500	6.996	1.930	0.000	0.467	2.733	0.400

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:12:30	10.600	224.700	0.000	395.000	4271.000	4190.000	87.162%	-0.052
2	06:12:57	10.550	226.100	0.000	396.900	4405.000	4387.000	87.393%	0.039
3	06:13:24	11.170	226.400	0.000	398.000	4484.000	4293.000	87.502%	-0.023
x		10.770	225.700	0.000	396.600	4387.000	4290.000	87.352%	-0.012
σ		0.345	0.892	0.000	1.506	107.800	98.590	0.173%	0.047
%RSD		3.200	0.395	0.000	0.380	2.457	2.298	0.198	385.400

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:12:30	0.066	0.189	21.310	12.680	43.190	0.337	0.954	0.717
2	06:12:57	0.158	0.213	22.090	12.050	41.750	0.377	0.970	1.038
3	06:13:24	0.307	0.161	21.730	10.600	38.100	0.295	0.974	1.192
x		0.177	0.188	21.710	11.780	41.010	0.336	0.966	0.983
σ		0.121	0.026	0.392	1.065	2.623	0.041	0.010	0.242
%RSD		68.630	13.970	1.806	9.042	6.395	12.200	1.065	24.650

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:12:30	0.095	1.227	0.894	1.235	26.750	28.120	0.000	11.820
2	06:12:57	0.072	1.229	0.930	1.464	24.210	25.070	0.000	12.060
3	06:13:24	0.229	1.243	0.954	1.486	22.200	26.320	0.000	11.920
x		0.132	1.233	0.926	1.395	24.390	26.500	0.000	11.930
σ		0.085	0.009	0.030	0.139	2.280	1.533	0.000	0.121
%RSD		64.500	0.710	3.268	9.980	9.350	5.785	0.000	1.014

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:12:30	88.004%	0.044	0.096	84.698%	0.010	-0.001	0.048	0.059
2	06:12:57	89.802%	0.145	0.161	86.532%	0.006	0.001	-0.006	0.064
3	06:13:24	90.430%	0.022	0.167	87.108%	-0.009	0.003	0.045	0.024
x		89.412%	0.070	0.141	86.113%	0.002	0.001	0.029	0.049
σ		1.259%	0.066	0.040	1.258%	0.010	0.002	0.030	0.022
%RSD		1.408	93.340	28.010	1.461	397.700	251.600	103.800	44.530

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:12:30	86.152%	0.196	0.039	0.087	0.371	0.357	91.898%	91.059%
2	06:12:57	88.480%	0.380	0.037	0.100	0.388	0.214	91.624%	93.630%
3	06:13:24	88.401%	0.352	0.059	0.073	0.172	0.419	93.729%	94.618%
x		87.678%	0.309	0.045	0.086	0.311	0.330	92.417%	93.102%
σ		1.322%	0.099	0.012	0.014	0.120	0.105	1.145%	1.837%
%RSD		1.507	32.060	27.450	15.610	38.760	31.870	1.239	1.973

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	06:12:30	0.031	0.002	0.003	0.013	0.012	99.505%
2	06:12:57	-0.001	0.001	0.031	-0.003	0.011	100.438%
3	06:13:24	-0.003	0.004	0.030	0.013	0.017	98.712%
x		0.009	0.002	0.021	0.008	0.013	99.552%
σ		0.019	0.002	0.016	0.009	0.003	0.864%
%RSD		203.200	64.760	75.550	119.100	22.900	0.868

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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	06:16:48	83.651%	0.005	20.950	21.050	0.000	138700.000	429.300	417.000
2	06:17:15	83.783%	-0.105	18.730	23.090	0.000	140100.000	442.200	430.400
3	06:17:41	84.621%	-0.134	25.350	21.430	0.000	139800.000	426.500	421.100
x		84.019%	-0.078	21.680	21.860	0.000	139500.000	432.600	422.900
σ		0.526%	0.073	3.367	1.087	0.000	736.800	8.372	6.851
%RSD		0.626	94.090	15.530	4.971	0.000	0.528	1.935	1.620

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:16:48	9.960	218.900	0.000	383.300	4268.000	4086.000	87.544%	-0.054
2	06:17:15	10.330	222.400	0.000	391.500	4231.000	4184.000	87.354%	-0.053
3	06:17:41	10.380	218.000	0.000	380.300	4592.000	4178.000	87.919%	0.128
x		10.220	219.800	0.000	385.000	4364.000	4149.000	87.606%	0.007
σ		0.228	2.294	0.000	5.805	198.800	55.070	0.288%	0.105
%RSD		2.229	1.044	0.000	1.508	4.556	1.327	0.328	1558.000

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:16:48	-0.137	0.115	21.080	11.790	39.250	0.306	0.868	1.513
2	06:17:15	0.128	0.125	21.920	11.250	40.520	0.360	1.182	1.627
3	06:17:41	0.026	0.135	21.500	9.424	31.680	0.347	1.287	1.988
x		0.006	0.125	21.500	10.820	37.150	0.338	1.112	1.709
σ		0.134	0.010	0.422	1.240	4.776	0.028	0.218	0.248
%RSD		2429.000	7.830	1.965	11.460	12.860	8.237	19.610	14.490

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:16:48	0.251	3.161	3.065	1.523	20.500	26.880	0.000	11.660
2	06:17:15	0.204	3.015	2.511	0.607	23.580	27.300	0.000	11.600
3	06:17:41	0.198	3.073	3.014	1.020	22.530	25.840	0.000	11.840
x		0.218	3.083	2.863	1.050	22.200	26.670	0.000	11.700
σ		0.029	0.074	0.306	0.459	1.565	0.751	0.000	0.125
%RSD		13.240	2.386	10.690	43.690	7.050	2.815	0.000	1.072

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:16:48	88.936%	0.013	0.012	84.988%	0.009	0.019	0.037	0.044
2	06:17:15	90.347%	0.037	0.119	86.680%	0.004	0.029	-0.026	0.046
3	06:17:41	91.561%	0.019	0.061	88.307%	0.018	0.003	-0.007	0.000
x		90.281%	0.023	0.064	86.658%	0.010	0.017	0.001	0.030
σ		1.314%	0.013	0.054	1.659%	0.007	0.013	0.032	0.026
%RSD		1.455	54.990	83.840	1.915	67.130	78.220	2617.000	85.310

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:16:48	87.282%	-0.035	0.019	0.043	0.321	0.514	91.379%	91.638%
2	06:17:15	87.328%	0.056	0.006	0.060	0.361	0.452	94.535%	93.315%
3	06:17:41	90.753%	0.152	0.057	0.020	0.292	0.384	94.763%	96.460%
x		88.454%	0.057	0.027	0.041	0.325	0.450	93.559%	93.804%
σ		1.991%	0.093	0.026	0.020	0.035	0.065	1.891%	2.448%
%RSD		2.251	162.700	96.400	49.330	10.650	14.380	2.021	2.609

Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	06:16:48	0.006	0.008	0.023	0.014	0.014	97.269%
2	06:17:15	0.015	0.009	0.031	0.021	0.010	97.096%
3	06:17:41	0.003	0.002	0.032	0.000	0.011	105.302%
x		0.008	0.006	0.029	0.012	0.012	99.889%
σ		0.006	0.004	0.005	0.010	0.002	4.689%
%RSD		77.750	57.150	17.120	87.910	17.000	4.694

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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	06:21:06	79.306%	-0.064	22.920	25.470	0.000	179500.000	10300.000	10280.000
2	06:21:33	78.671%	-0.003	25.250	24.820	0.000	181200.000	10520.000	10580.000
3	06:22:00	78.577%	-0.149	24.140	26.370	0.000	180900.000	10520.000	10400.000
x		78.851%	-0.072	24.100	25.560	0.000	180500.000	10450.000	10420.000
σ		0.396%	0.073	1.164	0.781	0.000	925.800	131.500	150.400
%RSD		0.503	101.500	4.831	3.056	0.000	0.513	1.259	1.443
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:21:06	162.800	2144.000	0.000	11560.000	53400.000	55350.000	82.345%	1.805
2	06:21:33	165.200	2168.000	0.000	11590.000	54330.000	56120.000	83.026%	2.044
3	06:22:00	158.500	2156.000	0.000	11670.000	54330.000	56590.000	82.220%	3.017
x		162.200	2156.000	0.000	11610.000	54020.000	56020.000	82.530%	2.289
σ		3.438	12.110	0.000	55.530	536.800	623.100	0.434%	0.642
%RSD		2.120	0.562	0.000	0.478	0.994	1.112	0.526	28.040
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:21:06	0.160	1.304	160.300	483.600	714.200	1.406	2.078	16.360
2	06:21:33	0.575	1.234	159.700	493.900	726.400	1.376	2.092	16.760
3	06:22:00	1.449	1.161	161.600	505.000	730.500	1.375	1.867	17.060
x		0.728	1.233	160.500	494.200	723.700	1.386	2.012	16.730
σ		0.658	0.072	0.969	10.690	8.485	0.017	0.126	0.352
%RSD		90.410	5.800	0.604	2.164	1.172	1.258	6.251	2.107
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:21:06	13.590	35.460	36.860	0.213	1.904	1.110	0.000	264.500
2	06:21:33	13.590	35.280	35.880	0.172	1.386	0.119	0.000	270.700
3	06:22:00	13.710	36.510	37.100	2.136	0.679	1.408	0.000	268.600
x		13.630	35.750	36.620	0.840	1.323	0.879	0.000	267.900
σ		0.073	0.668	0.649	1.122	0.615	0.675	0.000	3.139
%RSD		0.534	1.869	1.771	133.600	46.450	76.800	0.000	1.172
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:21:06	85.376%	34.470	35.720	81.936%	0.100	0.090	0.084	0.001
2	06:21:33	87.113%	35.890	37.210	84.223%	0.094	0.056	0.112	0.008
3	06:22:00	87.504%	37.420	37.060	84.262%	0.091	0.110	0.111	0.033
x		86.664%	35.930	36.660	83.474%	0.095	0.085	0.102	0.014
σ		1.133%	1.477	0.820	1.332%	0.004	0.027	0.016	0.017
%RSD		1.307	4.111	2.238	1.596	4.554	31.940	15.950	123.800
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:21:06	83.734%	0.308	0.354	0.412	57.780	58.220	89.891%	92.356%
2	06:21:33	85.206%	0.314	0.345	0.411	60.410	57.820	92.827%	93.358%
3	06:22:00	86.039%	0.602	0.345	0.430	59.400	59.310	92.849%	93.101%
x		84.993%	0.408	0.348	0.418	59.200	58.450	91.856%	92.938%
σ		1.167%	0.168	0.005	0.011	1.326	0.771	1.701%	0.521%
%RSD		1.373	41.130	1.516	2.595	2.239	1.319	1.852	0.560
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:21:06	0.036	0.019	0.556	0.620	0.561	111.734%		
2	06:21:33	0.040	0.028	0.643	0.529	0.589	108.204%		
3	06:22:00	0.023	0.023	0.721	0.678	0.689	105.771%		
x		0.033	0.023	0.640	0.609	0.613	108.570%		
σ		0.009	0.004	0.082	0.075	0.067	2.998%		
%RSD		27.220	18.350	12.890	12.380	10.970	2.761		

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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	06:25:24	83.361%	-0.159	3.731	4.375	0.000	35880.000	2002.000	1963.000
2	06:25:51	84.828%	-0.162	4.710	4.934	0.000	36110.000	2030.000	2020.000
3	06:26:17	84.266%	-0.215	5.071	4.616	0.000	36070.000	2036.000	2009.000
x		84.152%	-0.179	4.504	4.642	0.000	36020.000	2022.000	1997.000
σ		0.740%	0.032	0.693	0.281	0.000	120.900	17.970	30.110
%RSD		0.879	17.680	15.390	6.045	0.000	0.336	0.888	1.508
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:24	23.650	411.600	0.000	2408.000	10390.000	10160.000	88.740%	0.397
2	06:25:51	29.930	411.500	0.000	2431.000	10590.000	10480.000	89.246%	0.270
3	06:26:17	30.940	412.100	0.000	2441.000	11190.000	10670.000	88.508%	0.367
x		28.170	411.700	0.000	2427.000	10720.000	10440.000	88.831%	0.345
σ		3.951	0.362	0.000	17.100	417.900	258.300	0.377%	0.066
%RSD		14.020	0.088	0.000	0.705	3.897	2.475	0.425	19.220
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:24	0.037	0.198	31.030	98.670	137.700	0.249	0.634	3.023
2	06:25:51	0.106	0.167	32.240	98.450	143.500	0.274	0.646	3.116
3	06:26:17	0.214	0.188	31.640	122.600	148.000	0.261	0.528	3.181
x		0.119	0.184	31.640	106.600	143.100	0.261	0.602	3.107
σ		0.089	0.016	0.605	13.910	5.189	0.012	0.065	0.080
%RSD		75.100	8.631	1.912	13.050	3.627	4.699	10.730	2.565
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:24	2.802	7.745	7.321	0.129	-2.168	-1.507	0.000	52.860
2	06:25:51	2.944	7.471	7.695	0.225	-1.299	-0.996	0.000	53.640
3	06:26:17	2.807	8.084	7.669	-0.026	1.368	-1.430	0.000	53.460
x		2.851	7.766	7.562	0.109	-0.699	-1.311	0.000	53.320
σ		0.081	0.307	0.209	0.127	1.843	0.276	0.000	0.409
%RSD		2.837	3.952	2.758	116.400	263.500	21.010	0.000	0.767
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:24	88.886%	7.377	7.548	88.229%	0.026	0.011	0.004	0.067
2	06:25:51	91.154%	7.564	7.612	90.064%	0.039	0.029	0.012	-0.033
3	06:26:17	91.906%	7.713	7.633	89.757%	0.017	0.019	0.071	0.036
x		90.649%	7.551	7.598	89.350%	0.027	0.020	0.029	0.023
σ		1.572%	0.168	0.044	0.983%	0.011	0.009	0.036	0.051
%RSD		1.734	2.227	0.581	1.100	39.990	47.070	125.200	219.400
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:25:24	88.162%	-0.260	0.024	0.035	12.130	11.760	93.295%	95.156%
2	06:25:51	91.659%	-0.144	0.013	0.018	11.720	11.510	95.746%	96.914%
3	06:26:17	92.284%	-0.208	0.012	0.068	11.640	12.070	96.152%	97.657%
x		90.702%	-0.204	0.017	0.040	11.830	11.780	95.064%	96.576%
σ		2.221%	0.058	0.006	0.025	0.263	0.283	1.546%	1.284%
%RSD		2.449	28.490	37.760	62.200	2.226	2.399	1.626	1.330
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:25:24	-0.004	0.006	0.171	0.147	0.131	112.809%		
2	06:25:51	0.013	0.006	0.135	0.149	0.134	114.256%		
3	06:26:17	0.003	0.002	0.159	0.118	0.132	117.429%		
x		0.004	0.005	0.155	0.138	0.133	114.831%		
σ		0.008	0.003	0.018	0.017	0.001	2.363%		
%RSD		202.400	54.740	11.790	12.480	0.822	2.058		

CCV 1487954 4/9/2015 6:29:15 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	06:29:42	83.832%	98.630	99.270	98.000	0.000	48880.000	48600.000	48690.000
2	06:30:08	84.782%	101.800	104.800	100.200	0.000	49550.000	49770.000	49530.000
3	06:30:35	84.204%	101.800	103.800	100.600	0.000	49510.000	49190.000	48850.000
x		84.272%	100.715%	102.622%	99.594%	0.000	98.618%	98.368%	98.050%
σ		0.479%	n/a	n/a	n/a	0.000	n/a	n/a	n/a
%RSD		0.568	1.789	2.868	1.395	0.000	0.762	1.191	0.914
Run	**Time**	**27Al**	**28Si**	**37Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:42	469.400	5253.000	0.000	50020.000	47730.000	49450.000	87.333%	98.160
2	06:30:08	480.400	5329.000	0.000	49990.000	49090.000	50300.000	88.293%	98.140
3	06:30:35	475.600	5309.000	0.000	49530.000	48010.000	49260.000	90.302%	94.660
x		95.021%	105.943%	0.000	99.692%	96.552%	99.335%	88.643%	96.984%
σ		n/a	n/a	0.000	n/a	n/a	n/a	1.515%	n/a
%RSD		1.166	0.740	0.000	0.556	1.483	1.112	1.709	2.078
Run	**Time**	**51V**	**52Cr**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**63Cu**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:42	96.240	95.380	461.200	24670.000	22720.000	96.150	97.560	98.560
2	06:30:08	95.980	98.150	470.200	25070.000	23400.000	97.660	97.450	98.950
3	06:30:35	97.210	95.970	462.300	24760.000	23410.000	96.480	98.770	97.240
x		96.475%	96.501%	92.910%	99.349%	92.712%	96.764%	97.927%	98.251%
σ		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
%RSD		0.677	1.515	1.055	0.849	1.725	0.822	0.750	0.909
Run	**Time**	**65Cu**	**66Zn**	**68Zn**	**75As**	**78Se**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:42	98.240	96.740	95.310	96.710	95.680	98.960	0.000	95.620
2	06:30:08	98.150	98.740	99.840	100.000	102.500	99.080	0.000	98.790
3	06:30:35	99.540	96.580	97.050	98.530	98.220	99.660	0.000	99.900
x		98.645%	97.355%	97.397%	98.411%	98.799%	99.235%	0.000	98.106%
σ		n/a	n/a	n/a	n/a	n/a	n/a	0.000	n/a
%RSD		0.786	1.239	2.349	1.674	3.489	0.380	0.000	2.267
Run	**Time**	**89Y**	**95Mo**	**98Mo**	**103Rh**	**107Ag**	**109Ag**	**111Cd**	**114Cd**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:42	90.962%	94.370	95.350	88.282%	97.380	96.810	96.980	96.570
2	06:30:08	91.591%	99.030	99.490	89.726%	98.390	97.620	97.590	97.480
3	06:30:35	93.075%	100.300	99.390	91.901%	96.490	95.500	98.850	93.510
x		91.876%	97.885%	98.073%	89.970%	97.423%	96.644%	97.807%	95.852%
σ		1.085%	n/a	n/a	1.821%	n/a	n/a	n/a	n/a
%RSD		1.181	3.174	2.408	2.024	0.975	1.104	0.978	2.169
Run	**Time**	**115In**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**165Ho**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:42	87.142%	98.800	99.420	100.400	95.580	95.760	96.579%	95.657%
2	06:30:08	89.700%	99.860	101.700	101.900	99.420	96.700	98.441%	98.793%
3	06:30:35	93.045%	99.410	99.030	101.400	99.850	97.890	96.594%	99.178%
x		89.962%	99.356%	100.064%	101.270%	98.283%	96.786%	97.205%	97.876%
σ		2.960%	n/a	n/a	n/a	n/a	n/a	1.070%	1.931%
%RSD		3.290	0.533	1.465	0.764	2.395	1.104	1.101	1.973
Run	**Time**	**203Tl**	**205Tl**	**206Pb**	**207Pb**	**208Pb**	**209Bi**		
		ppb	ppb	ppb	ppb	ppb	ppb		
1	06:29:42	94.390	96.790	94.560	95.400	93.950	112.125%		
2	06:30:08	92.620	95.790	91.360	94.470	92.430	118.387%		
3	06:30:35	95.620	97.560	94.770	97.040	94.660	116.368%		
x		94.208%	96.715%	93.563%	95.636%	93.680%	115.627%		
σ		n/a	n/a	n/a	n/a	n/a	3.196%		
%RSD		1.601	0.916	2.038	1.358	1.215	2.764		

CCB8 4/9/2015 6:37:00 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	06:37:26	90.496%	0.006	-0.659	0.099	0.000	1.267	8.899	9.618
2	06:37:53	89.768%	-0.094	0.377	-0.294	0.000	1.712	7.919	10.310
3	06:38:19	90.267%	-0.019	0.362	-0.488	0.000	3.801	10.010	10.800
x		90.177%	-0.035	0.026	-0.228	0.000	2.260	8.943	10.240
σ		0.372%	0.052	0.594	0.299	0.000	1.353	1.047	0.596
%RSD		0.413	146.800	2246.000	131.300	0.000	59.880	11.700	5.815

Run	Time	27Al	28Si	37Cl	39K	43Ca	44Ca	45Sc	47Ti
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:37:26	0.841	-1.103	0.000	15.980	21.590	13.590	92.358%	-0.018
2	06:37:53	0.912	1.069	0.000	15.860	1.204	11.770	92.840%	0.008
3	06:38:19	0.823	-0.277	0.000	17.600	-4.542	12.770	92.863%	-0.021
x		0.859	-0.104	0.000	16.480	6.084	12.710	92.687%	-0.010
σ		0.047	1.096	0.000	0.973	13.730	0.910	0.285%	0.016
%RSD		5.519	1058.000	0.000	5.902	225.700	7.156	0.308	158.900

Run	Time	51V	52Cr	55Mn	56Fe	57Fe	59Co	60Ni	63Cu
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:37:26	0.023	-0.020	0.168	4.749	17.900	0.041	0.210	-0.041
2	06:37:53	-0.037	-0.014	0.178	4.339	12.300	0.029	0.042	-0.098
3	06:38:19	0.080	-0.001	0.140	3.433	9.913	0.025	0.112	-0.026
x		0.022	-0.011	0.162	4.173	13.370	0.032	0.121	-0.055
σ		0.058	0.010	0.020	0.674	4.102	0.008	0.085	0.038
%RSD		267.100	86.170	12.290	16.140	30.680	26.530	69.820	69.790

Run	Time	65Cu	66Zn	68Zn	75As	78Se	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:37:26	-0.084	0.117	0.126	-0.205	0.035	-1.856	0.000	0.066
2	06:37:53	-0.143	0.102	-0.040	0.026	-0.066	-0.979	0.000	0.051
3	06:38:19	0.044	0.156	0.124	-0.278	-1.439	-2.357	0.000	0.032
x		-0.061	0.125	0.070	-0.152	-0.490	-1.731	0.000	0.050
σ		0.096	0.028	0.096	0.159	0.823	0.698	0.000	0.017
%RSD		157.200	22.310	136.600	104.500	168.000	40.310	0.000	33.680

Run	Time	89Y	95Mo	98Mo	103Rh	107Ag	109Ag	111Cd	114Cd
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:37:26	93.678%	0.029	0.053	93.513%	0.025	0.028	0.011	0.078
2	06:37:53	94.801%	0.064	0.101	95.748%	0.019	0.045	0.141	0.082
3	06:38:19	96.267%	-0.025	0.097	96.879%	0.026	0.033	-0.001	0.047
x		94.915%	0.023	0.084	95.380%	0.023	0.035	0.050	0.069
σ		1.298%	0.045	0.027	1.713%	0.003	0.009	0.079	0.019
%RSD		1.367	194.800	31.980	1.796	14.800	25.160	156.800	27.860

Run	Time	115In	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	165Ho
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:37:26	92.598%	-0.148	-0.031	-0.022	0.059	0.052	95.508%	96.517%
2	06:37:53	95.117%	-0.171	-0.002	-0.009	-0.012	0.135	97.600%	98.972%
3	06:38:19	96.321%	-0.156	-0.060	-0.007	-0.025	0.023	99.559%	99.887%
x		94.679%	-0.158	-0.031	-0.013	0.007	0.070	97.556%	98.459%
σ		1.900%	0.012	0.029	0.008	0.045	0.058	2.026%	1.742%
%RSD		2.007	7.598	92.700	64.440	625.800	83.090	2.077	1.770

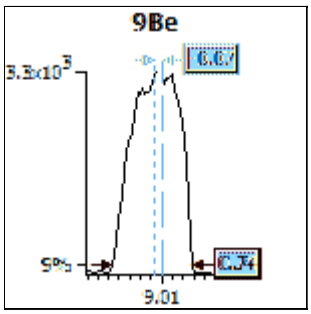
Run	Time	203Tl	205Tl	206Pb	207Pb	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	06:37:26	0.007	0.016	0.029	0.012	0.016	118.083%
2	06:37:53	0.021	0.030	0.026	0.047	0.034	119.183%
3	06:38:19	0.017	0.019	0.008	0.009	0.013	119.962%
x		0.015	0.022	0.021	0.023	0.021	119.076%
σ		0.007	0.007	0.012	0.021	0.011	0.944%
%RSD		48.920	33.130	55.190	93.080	53.850	0.793

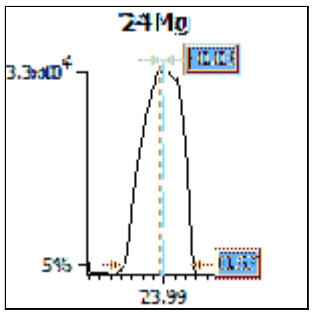
Performance Report

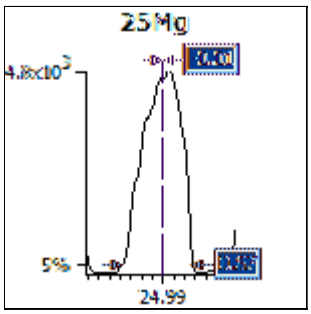
Sample details
Sample name : ITUNE
Acquired at : 4/8/2015 3:25:31 PM
Report name : EPA ILM05.2 / 6020A 2.1 [8/10/2014 1:06:06 PM]

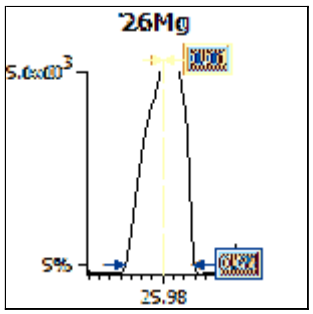
Mass Calibration verification

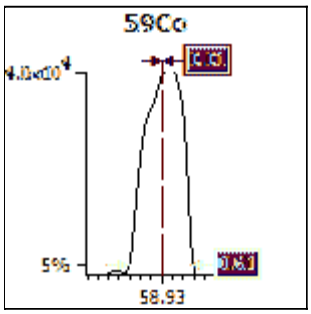
Acquisition parameters
Sweeps : 50
Dwell : 1.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 5% of the peak maximum

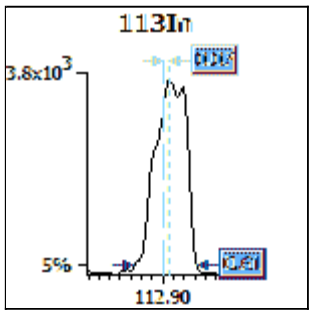


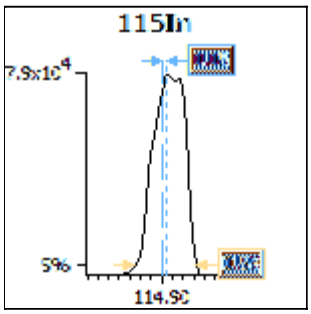


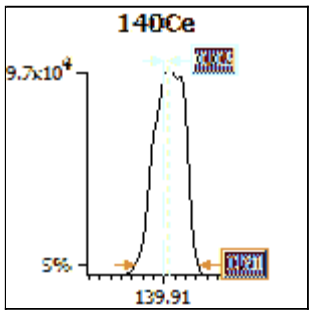


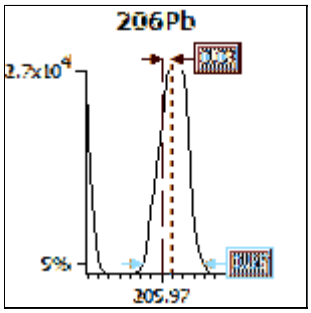


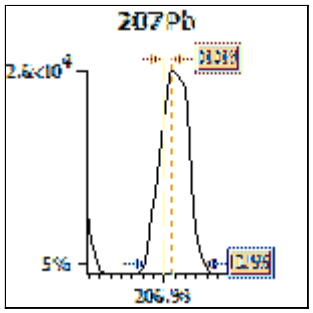


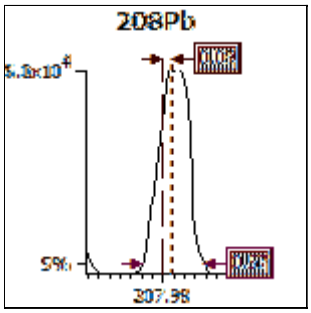












Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.90	0.40	0.10	0.74	-0.07
24Mg	0.90	0.40	0.10	0.67	-0.03
25Mg	0.90	0.40	0.10	0.67	-0.01
26Mg	0.90	0.40	0.10	0.65	0.01
59Co	0.90	0.40	0.10	0.61	0.01
113In	0.90	0.40	0.10	0.61	0.07
115In	0.90	0.40	0.10	0.59	0.05
140Ce	0.90	0.40	0.10	0.61	0.05
206Pb	0.90	0.40	0.10	0.57	0.09
207Pb	0.90	0.40	0.10	0.55	0.09
208Pb	0.90	0.40	0.10	0.57	0.09

Sample details
Sample name : ITUNE
Acquired at : 4/8/2015 3:25:31 PM
Report name : EPA ILM05.2 / 6020A 2.1 [8/10/2014 1:06:06 PM]

Tune conditions

Major	
Extraction	-184
Lens 1	-3.2
Focus	23.1
D1	-27.5
Pole Bias	0.0
Hexapole Bias	-3.4
Nebuliser	0.84
Sampling Depth	200

Minor	
Lens 2	-32.9
Lens 3	-179.6
Forward power	1400
Horizontal	49
Vertical	500
D2	-121
DA	-80.0
Cool	14.0
Auxiliary	0.80

Global	
Standard resolution	n/a
High resolution	n/a
Analogue Detector	n/a
PC Detector	n/a

Add. Gases	
CCT1	0.00
CCT2	0.00

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	3:26:19 PM	26	3191	32588	4662	5469	41461	3317	76090
2	3:27:31 PM	28	3198	32929	4791	5479	41903	3373	77221
3	3:28:43 PM	28	3181	32574	4755	5466	41896	3437	77144
4	3:29:55 PM	26	3140	32874	4718	5498	42146	3440	77321
5	3:31:07 PM	26	3234	32642	4634	5490	41956	3524	77485
x		27	3189	32721	4712	5480	41872	3418	77052
σ		1.18	33.63	167.71	64.63	13.73	251.40	77.89	552.82
%RSD		4.428	1.055	0.513	1.372	0.251	0.600	2.279	0.717

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	3:26:19 PM	99613	1642	23280	20760	48886	27
2	3:27:31 PM	100850	1627	23896	20991	49461	27
3	3:28:43 PM	100477	1632	23802	21317	49404	28
4	3:29:55 PM	101648	1643	24119	21401	50166	28
5	3:31:07 PM	101586	1658	24191	21258	50344	25
x		100835	1640	23858	21145	49652	27
σ		843.68	11.93	360.04	264.36	597.39	1.39
%RSD		0.837	0.727	1.509	1.250	1.203	5.149

Ratio results

Run	Time	156Ce O/140Ce
Ratio limits		<0.0600
1	3:26:19 PM	0
2	3:27:31 PM	0
3	3:28:43 PM	0
4	3:29:55 PM	0
5	3:31:07 PM	0
x		0.0163
σ		0.00
%RSD		0.8624

Result : The performance report passed.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Batch Number: 137213 Batch Start Date: 04/01/15 11:35 Batch Analyst: Baikadi, Ashwin

Batch Method: 3005A Batch End Date: 04/01/15 15:35

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAPITTICPMS 00020	MTAPITTMSA 00023	MTAPITTMSC 00029	
MB 180-137213/1		3005A, 6020A		50 mL	50 mL				
LCS 180-137213/2		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCSD 180-137213/3		3005A, 6020A		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
180-42504-B-2	HD-MW-127-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42504-B-3	HD-MW-97-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42504-B-4	HD-CW-18-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42504-B-5	HD-MW-114-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42504-B-6	HD-MW-132-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42504-B-7	HD-MW-75D-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42504-B-8	HD-MW-51D-0/1-0	3005A, 6020A	T	50 mL	50 mL				
180-42504-B-9	HD-MW-50S-0/1-0	3005A, 6020A	T	50 mL	50 mL				

Batch Notes	
Batch Comment	Metals A7
First End time	15:35
Lot # of hydrochloric acid	2.5 ml 1452459
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	11:35
ID number of the thermometer	IP2-14 CF=0.0 F3
Digestion Tube/Cup Lot #	1408268
Uncorrected Temperature	95 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-42504-1

SDG No.:

Project: Harley Davidson

Client Sample ID	Lab Sample ID
HD-MW-127-0/1-0	180-42504-2
HD-MW-97-0/1-0	180-42504-3
HD-CW-18-0/1-0	180-42504-4
HD-MW-114-0/1-0	180-42504-5
HD-MW-132-0/1-0	180-42504-6
HD-MW-75D-0/1-0	180-42504-7
HD-MW-51D-0/1-0	180-42504-8
HD-MW-50S-0/1-0	180-42504-9

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-MW-127-0/1-0 Lab Sample ID: 180-42504-2

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 10:45

Reporting Basis: WET Date Received: 03/28/2015 09:30

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-97-0/1-0 Lab Sample ID: 180-42504-3

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 08:45

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	220	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	220	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-CW-18-0/1-0 Lab Sample ID: 180-42504-4

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 09:37

Reporting Basis: WET Date Received: 03/28/2015 09:30

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-114-0/1-0 Lab Sample ID: 180-42504-5

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 13:22

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	200	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	200	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-MW-132-0/1-0 Lab Sample ID: 180-42504-6

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 12:30

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	140	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	140	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-MW-75D-0/1-0 Lab Sample ID: 180-42504-7

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 10:33

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	260	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	260	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-MW-51D-0/1-0 Lab Sample ID: 180-42504-8

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 13:30

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	21	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	21	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: HD-MW-50S-0/1-0 Lab Sample ID: 180-42504-9

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG ID.:

Matrix: Water Date Sampled: 03/27/2015 11:40

Reporting Basis: WET Date Received: 03/28/2015 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Alkalinity as CaCO3 to pH 4.5	200	5.0	0.41	mg/L		B	1	SM 2320B
	Bicarbonate Alkalinity as CaCO3	200	5.0	0.41	mg/L		B	1	SM 2320B
	Carbonate Alkalinity as CaCO3	5.0	5.0	0.41	mg/L	U		1	SM 2320B

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Analyst: CLL Batch Start Date: 04/06/2015

Reporting Units: mg/L Analytical Batch No.: 137549

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
13	CCV	05:52	Total Alkalinity as CaCO3 to pH 4.5	134	125	107	80-120		WALK125PPMCCV_00083
14	CCB	05:52	Total Alkalinity as CaCO3 to pH 4.5	4.12				J	
			Bicarbonate Alkalinity as CaCO3	4.12				J	
			Carbonate Alkalinity as CaCO3	5.0				U	
25	CCV	05:52	Total Alkalinity as CaCO3 to pH 4.5	132	125	105	80-120		WALK125PPMCCV_00083
26	CCB	05:52	Total Alkalinity as CaCO3 to pH 4.5	4.12				J	
			Bicarbonate Alkalinity as CaCO3	4.12				J	
			Carbonate Alkalinity as CaCO3	5.0				U	

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 137549 Date: 04/06/2015 05:52							
SM 2320B	MB 180-137549/2	Total Alkalinity as CaCO3 to pH 4.5	4.12	J	mg/L	5.0	1
SM 2320B	MB 180-137549/2	Bicarbonate Alkalinity as CaCO3	4.12	J	mg/L	5.0	1
SM 2320B	MB 180-137549/2	Carbonate Alkalinity as CaCO3	5.0	U	mg/L	5.0	1

FORM III-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 137549 Date: 04/06/2015 05:52								
SM 2320B	HD-MW-50S-0/1-0	180-42504-9	Total Alkalinity as CaCO3 to pH 4.5	200	mg/L			
SM 2320B	HD-MW-50S-0/1-0	180-42504-9 DU	Total Alkalinity as CaCO3 to pH 4.5	198	mg/L	3	20	
SM 2320B	HD-MW-50S-0/1-0	180-42504-9	Bicarbonate Alkalinity as CaCO3	200	mg/L			
SM 2320B	HD-MW-50S-0/1-0	180-42504-9 DU	Bicarbonate Alkalinity as CaCO3	198	mg/L	3	20	
SM 2320B	HD-MW-50S-0/1-0	180-42504-9	Carbonate Alkalinity as CaCO3	5.0	mg/L			U
SM 2320B	HD-MW-50S-0/1-0	180-42504-9 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.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 137549 Date: 04/06/2015 05:52											
						LCS Source: WALK250PPMPi_00092					
SM 2320B	LCS 180-137549/1	Total Alkalinity as CaCO3 to pH 4.5	266		mg/L	250	106	80-120			

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

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-42504-1

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 CaCO3		5	0.4111
Carbonate Alkalinity as CaCO3		5	0.4111
Total Alkalinity as CaCO3 to pH 4.5		5	0.4111

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh Job Number: 180-42504-1

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 CaCO3		5	0.4111
Carbonate Alkalinity as CaCO3		5	0.4111
Total Alkalinity as CaCO3 to pH 4.5		5	0.4111

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Pittsburgh   Job No.: 180-42504-1

SDG No.:

Instrument ID: NOEQUIP   Analysis Method: SM 2320B

Start Date: 04/06/2015 05:52   End Date: 04/06/2015 05:52

Lab Sample Id	D/F	Type	Time	Analytes		
				Alk	BALKCC	CarAlk
LCS 180-137549/1	1	T	05:52	X		
MB 180-137549/2	1	T	05:52	X	X	X
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
180-42504-2	1	T	05:52	X	X	X
180-42504-3	1	T	05:52	X	X	X
180-42504-4	1	T	05:52	X	X	X
180-42504-5	1	T	05:52	X	X	X
180-42504-6	1	T	05:52	X	X	X
180-42504-7	1	T	05:52	X	X	X
180-42504-8	1	T	05:52	X	X	X
CCV 180-137549/13	1		05:52	X		
CCB 180-137549/14	1		05:52	X	X	X
180-42504-9	1	T	05:52	X	X	X
180-42504-9 DU	1	T	05:52	X	X	X
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
CCV 180-137549/25	1		05:52	X		
CCB 180-137549/26	1		05:52	X	X	X
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
ZZZZZZ			05:52			
CCV 180-137549/32			05:52			
CCB 180-137549/33			05:52			

Prep Types:
T = Total/NA

FORM XIII-IN

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Alk#040615Alk

PITTSBURGH
ALKALINITY LOGSHEET
Method 2320B
NB-2015-018

Analyst: CHahnyde **Date:** 4-6-15

Reviewed By: SeeDCC **Date:** Cu 4-6-15

pH Meter ID: AccumetXL S/N#94102132 **AD Batch:** 137549

pH 4 Start: 4.01 **pH 4 End:** 4.04

Job Number(s): 42473-42504-42508-42680.

Calculations:

$$\text{Alkalinity as } CaCO_3 \text{ mg/L} = \frac{(\text{mL of } H_2SO_4)(N)(50{,}000)}{\text{mL of Sample}}$$

Alkalinity Relationships:

P = Phenolphthalein Alkalinity (pH 8.3)

T = Total Alkalinity

OH^- = Hydroxide Alkalinity as $CaCO_3$

CO_3^{2} = Carbonate Alkalinity as $CaCO_3$

HCO_3 = Bicarbonate Concentration as $CaCO_3$

Results	OH^-	CO_3^{2}	HCO_3	Results	OH^-	CO_3^{2}	HCO_3
P = 0	0	0	T	P = ½T	0	2P	0
P < ½T	0	2P	T-2P	P > ½T	2P-T	2(T-P)	0
				P = T	T	0	0

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pittsburgh
ALKALINITY LOGSHEET
Method 2320B
NB-2015-018

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	11.02	50	6.6	12.9	.0206	265.74				
MB	5.71		0	0.2		4.12				
180-42473-1	7.61		0			QM 4-6-15				
2 1:1	5.64		0	2.5		51.5				
2X	5.88		0	2.8		57.68				
180-42504-2	7.13		0	13.1		269.86				
3	7.22		0	10.5		216.3				
4	7.03		0	14.7		302.82				
5	7.21		0	9.6		197.76				
6	7.09		0	6.8		140.08				
7	7.29		0	12.8		263.68				
8	6.19		0	1.0		20.6				
CCV	10.23		3.2	6.5		133.9				
CCB	5.79		0	0.2		4.12				
180-42504-9	7.29		0	9.9		203.94				
9X	7.32		0	9.6		197.76				
180-42680-1	8.53		11.5			QM 4-6-15				
3	8.60		3.0							
5	8.50			QM 4-6-15						
7	8.51									
9	8.48									
11	8.49									
13	8.23		QM 4-6-15							
15 8.38	8.28	QM 4-6-15	QM 4-6-15 4.1	31.7		653.02				
CCV	10.68		3.2	6.4		131.84				
CCB	5.67		0	0.2		4.12				

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Pittsburgh
ALKALINITY LOGSHEET
Method 2320B
NB-2015-018

Sample ID	pH	Sample Volume	mL to pH 8.3	Ttl mL pH 4.5	N	T	P	OH^-	CO_3^{2}	HCO_3
180-42508-7	6.19	50	0	18.7	.1026	385.22				
8	5.83		0	1.9		39.14				
8X	5.81		0	2.0		41.2				
10	6.00		0	4.2		86.52				
11	5.29		0	1.1		22.66				
CCV	10.77		3.1	6.4		131.84				
CCB	5.67		0	0.1		2.06				

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-42504-1

SDG No.:

Batch Number: 137549 Batch Start Date: 04/06/15 05:52 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 180-137549/1		SM 2320B		50 mL	11.02 SU	0 mL	6.6 mL	6.6 mL	0 mL
MB 180-137549/2		SM 2320B		50 mL	5.71 SU	0 mL	0 mL	0 mL	0 mL
180-42504-A-2	HD-MW-127-0/1-0	SM 2320B	T	50 mL	7.13 SU	0 mL	0 mL	0 mL	0 mL
180-42504-A-3	HD-MW-97-0/1-0	SM 2320B	T	50 mL	7.22 SU	0 mL	0 mL	0 mL	0 mL
180-42504-A-4	HD-CW-18-0/1-0	SM 2320B	T	50 mL	7.03 SU	0 mL	0 mL	0 mL	0 mL
180-42504-A-5	HD-MW-114-0/1-0	SM 2320B	T	50 mL	7.21 SU	0 mL	0 mL	0 mL	0 mL
180-42504-A-6	HD-MW-132-0/1-0	SM 2320B	T	50 mL	7.09 SU	0 mL	0 mL	0 mL	0 mL
180-42504-A-7	HD-MW-75D-0/1-0	SM 2320B	T	50 mL	7.29 SU	0 mL	0 mL	0 mL	0 mL
180-42504-A-8	HD-MW-51D-0/1-0	SM 2320B	T	50 mL	6.19 SU	0 mL	0 mL	0 mL	0 mL
CCV 180-137549/13		SM 2320B		50 mL	10.73 SU	0 mL	3.2 mL	3.2 mL	0 mL
CCB 180-137549/14		SM 2320B		50 mL	5.79 SU	0 mL	0 mL	0 mL	0 mL
180-42504-A-9	HD-MW-50S-0/1-0	SM 2320B	T	50 mL	7.29 SU	0 mL	0 mL	0 mL	0 mL
180-42504-A-9 DU	HD-MW-50S-0/1-0	SM 2320B	T	50 mL	7.32 SU	0 mL	0 mL	0 mL	0 mL
CCV 180-137549/25		SM 2320B		50 mL	10.68 SU	0 mL	3.2 mL	3.2 mL	0 mL
CCB 180-137549/26		SM 2320B		50 mL	5.67 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 180-137549/1		SM 2320B		6.3 mL	6.3 mL	Case 4	259.56 mg/L	6.18000000000001 mg/L	0 mg/L
MB 180-137549/2		SM 2320B		0.2 mL	0.2 mL	Case 1	0 mg/L	0 mg/L	4.12 mg/L
180-42504-A-2	HD-MW-127-0/1-0	SM 2320B	T	13.1 mL	13.1 mL	Case 1	0 mg/L	0 mg/L	269.86 mg/L
180-42504-A-3	HD-MW-97-0/1-0	SM 2320B	T	10.5 mL	10.5 mL	Case 1	0 mg/L	0 mg/L	216.3 mg/L
180-42504-A-4	HD-CW-18-0/1-0	SM 2320B	T	14.7 mL	14.7 mL	Case 1	0 mg/L	0 mg/L	302.82 mg/L
180-42504-A-5	HD-MW-114-0/1-0	SM 2320B	T	9.6 mL	9.6 mL	Case 1	0 mg/L	0 mg/L	197.76 mg/L
180-42504-A-6	HD-MW-132-0/1-0	SM 2320B	T	6.8 mL	6.8 mL	Case 1	0 mg/L	0 mg/L	140.08 mg/L
180-42504-A-7	HD-MW-75D-0/1-0	SM 2320B	T	12.8 mL	12.8 mL	Case 1	0 mg/L	0 mg/L	263.68 mg/L
180-42504-A-8	HD-MW-51D-0/1-0	SM 2320B	T	1.0 mL	1 mL	Case 1	0 mg/L	0 mg/L	20.6 mg/L
CCV 180-137549/13		SM 2320B		3.3 mL	3.3 mL	Case 2	131.84 mg/L	0 mg/L	2.06 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.: 180-42504-1

SDG No.:

Batch Number: 137549 Batch Start Date: 04/06/15 05:52 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 180-137549/14		SM 2320B		0.2 mL	0.2 mL	Case 1	0 mg/L	0 mg/L	4.12 mg/L
180-42504-A-9	HD-MW-50S-0/1-0	SM 2320B	T	9.9 mL	9.9 mL	Case 1	0 mg/L	0 mg/L	203.94 mg/L
180-42504-A-9 DU	HD-MW-50S-0/1-0	SM 2320B	T	9.6 mL	9.6 mL	Case 1	0 mg/L	0 mg/L	197.76 mg/L
CCV 180-137549/25		SM 2320B		3.2 mL	3.2 mL	Case 3	131.84 mg/L	0 mg/L	0 mg/L
CCB 180-137549/26		SM 2320B		0.2 mL	0.2 mL	Case 1	0 mg/L	0 mg/L	4.12 mg/L

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	WALK125PPMCCV 00083	WALK250PPMPi 00092	
LCS 180-137549/1		SM 2320B		135.96 mg/L	265.74 mg/L	50 mL		50 mL	
MB 180-137549/2		SM 2320B		0 mg/L	4.12 mg/L	50 mL			
180-42504-A-2	HD-MW-127-0/1-0	SM 2320B	T	0 mg/L	269.86 mg/L	50 mL			
180-42504-A-3	HD-MW-97-0/1-0	SM 2320B	T	0 mg/L	216.3 mg/L	50 mL			
180-42504-A-4	HD-CW-18-0/1-0	SM 2320B	T	0 mg/L	302.82 mg/L	50 mL			
180-42504-A-5	HD-MW-114-0/1-0	SM 2320B	T	0 mg/L	197.76 mg/L	50 mL			
180-42504-A-6	HD-MW-132-0/1-0	SM 2320B	T	0 mg/L	140.08 mg/L	50 mL			
180-42504-A-7	HD-MW-75D-0/1-0	SM 2320B	T	0 mg/L	263.68 mg/L	50 mL			
180-42504-A-8	HD-MW-51D-0/1-0	SM 2320B	T	0 mg/L	20.6 mg/L	50 mL			
CCV 180-137549/13		SM 2320B		65.92 mg/L	133.9 mg/L	50 mL	50 mL		
CCB 180-137549/14		SM 2320B		0 mg/L	4.12 mg/L	50 mL			
180-42504-A-9	HD-MW-50S-0/1-0	SM 2320B	T	0 mg/L	203.94 mg/L	50 mL			
180-42504-A-9 DU	HD-MW-50S-0/1-0	SM 2320B	T	0 mg/L	197.76 mg/L	50 mL			
CCV 180-137549/25		SM 2320B		65.92 mg/L	131.84 mg/L	50 mL	50 mL		
CCB 180-137549/26		SM 2320B		0 mg/L	4.12 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.: 180-42504-1

SDG No.:

Batch Number: 137549 Batch Start Date: 04/06/15 05:52 Batch Analyst: Loheyde, Cheryl

Batch Method: SM 2320B Batch End Date:

Batch Notes	
Batch Comment	PH 4 START: 4.01 PH 4 END: 4.04
pH Buffer 1 ID	1179927
pH Buffer 2 ID	1282792
pH Buffer 3 ID	1393069
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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jennifer S. Reese	Site Contact: Jennifer S. Reese	DateSubmitted: 3/27/2015	COC No: TAP2015032701
Groundwater Sciences Corporation	Tel/Fax: 717-901-8181 / (717) 657-1611	Lab Contact: Carrie Gamber	Carrier: FEDEX	1 of 1 COCs
2601 Market Place St. Suite 310	Analysis Turnaround Time			Job No. 10012.16.0005
Harrisburg, PA 17110	Calendar (C) or Work Days (W) _____			
(717) 901-8180 Phone	TAT if different from Below: Standard			Container No. 1
(717) 657-1611 FAX	■ 2 weeks			
Project Name: Start Up Sampling Event 11	☐ 1 week			
Site: Harley-Davidson, York PA	☐ 5 days			
Quote # 18000557	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	VOCs (8260C)	Alkalinity (Carb/Bicarb), SO4, CL, NO3 2320B/300.0	Total Na, Ca, K, and Mg (SW846 6020A)
HD-QC7-0/1-2	3/27/15	12:00	Trip Blank	Water	2	X		
HD-MW-127-0/1-0	3/27/15	10:45	Groundwater	Water	5	X	X	X
HD-MW-97-0/1-0	3/27/15	8:45	Groundwater	Water	5	X	X	X
HD-CW-18-0/1-0	3/27/15	9:37	Groundwater	Water	5	X	X	X
HD-MW-114-0/1-0	3/27/15	13:22	Groundwater	Water	5	X	X	X
HD-MW-132-0/1-0	3/27/15	12:30	Groundwater	Water	5	X	X	X
HD-MW-75D-0/1-0	3/27/15	10:33	Groundwater	Water	5	X	X	X
HD-MW-51D-0/1-0	3/27/15	13:30	Groundwater	Water	5	X	X	X
HD-MW-50S-0/1-0	3/27/15	11:40	Groundwater	Water	5	X	X	X
					Number of Containers	3	1	1
					Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Unpreserved 7=Zinc Acetate & NaOH	2	1	4
					Field Filter	N	N	N

180-42504 Chain of Custody

cific Notes:

Possible Hazard Identification
■ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ■ *Disposal By Lab* ☐ *Ve For _____ Months*

Special Instructions/QC Requirements & Comments: **CLP Like Deliverables**

Relinquished by (Print and Sign):	Company: GSC	Date/Time: 3/27/15 1405	Received by:	Company: TAL KOP	Date/Time: 3/27/15 1405
Relinquished by:	Company: TAKP	Date/Time: 3/27/15 1635	Received by: Helene Watson	Company: TAP	Date/Time: 3-28-15 9:30
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:


ORIGIN ID:KPDA (610) 337-9992
SAMPLE RECEIPT
TEST AMERICA
1008 WEST 9TH AVE
KING OF PRUSSIA, PA 19406
UNITED STATES US
SHIP DATE: 27MAR15
ACTWGT: 53.0 LB
CAD: 8490299/INET3610
TO SAMPLE RECEIPT
TEST AMERICA
301 ALPHA
PITTSBURGH
(412) 963-7058
180-42504 Waybill
FedEx
Express
TRK# 0201 7732 3706 8677
SATURDAY 12:00P
PRIORITY OVERNIGHT
XO AGCA
15238
PA-US PIT
Uncorrected temp
Thermometer ID
2.0 °C
#6
CF 0.0
Initials M.E.
PT-WI-SR-001 effective 7/26/13
Part # 156287-435 REV2 11/14
537J1/879A/EE48
J151215022301uv

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-42504-1

Login Number: 42504

List Source: TestAmerica Pittsburgh

List Number: 1

Creator: Watson, Debbie

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	